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NOV 8 1974

Public Employees Retirement Assn.

Public Employees Retirement Association

ACTUARIAL VALUATION REPORT
(Based on a June 30, 1974 Census)

Public Employees Retirement Association

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A. S. Hansen, inc.

ACTUARIES AND CONSULTANTS

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

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NOV 8 1974

Public Employees Retirement Assn.

November 4, 1974

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, 1974, 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.

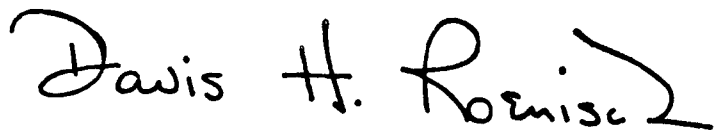
The results of our analysis are set forth in the following report. The basic financial and employee data are those submitted to us by the Association office; the summaries and actuarial figures are those prepared by us from such data.

This the earliest date we have been able to file our report. The preparation of these computations has been greatly expedited by receipt of the basic information on tape. This in turn is a result of the computerization of the data processing under the policies of the Association's Board of Trustees. Their actions encouraging improvements in the administration of the program have been a major factor in improving the timeliness and accuracy of these reports.

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, 1974.

Respectfully submitted,

A. S. HANSEN, INC.



Davis H. Roenisch
Fellow, Society of Actuaries

DHR:bm
1366-01-83

Public Employees Retirement Association

SUMMARY OF ACTUARIAL REQUIREMENTS
(July 1, 1974)

	<u>Basic Members</u> Exhibit 8 Page 18	<u>Coordinated</u> Members Exhibit 26 Page 39	<u>Police and</u> Fire Fund Exhibit 43 Page 63
<u>AMORTIZATION RATE REQUIREMENTS</u>			
Present Value of Benefit (For Both Past and Future Service)	\$ 771,632,913	\$ 275,971,048	\$ 127,533,469
Obligation for Service Rendered to Date	582,850,700	101,812,036	59,553,376
Net Assets	318,796,642	87,691,707	47,546,849
Accrued Unfunded Obligation	264,054,058	14,120,329	12,006,527
Funding Ratio	55%	86%	80%
Amortization (23-Year) Requirement Covered Payroll	\$ 19,576,128 184,845,879	\$ 1,046,836 322,104,803	\$ 890,125 35,270,010
Amortization (23-Year) Rate Requirement	<u>10.59%</u>	<u>0.32%</u>	<u>2.52%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned in the Future	\$ 188,782,213	\$ 174,159,012	\$ 67,980,093
Present Value of Future Payroll	1,380,061,700	2,586,736,400	430,307,600
Normal Cost Rate Requirement	13.68%	6.73%	15.80%
Employee Contribution Rate	8.00	4.00	8.00
Employer Normal Cost Rate Requirement	<u>5.68%</u>	<u>2.73%</u>	<u>7.80%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law	10.50%	5.50%	12.00%
Amortization (23-Year) Rate Requirement	10.59%	0.32%	2.52%
Normal Cost Rate Requirement	5.68	2.73	7.80
Allowance for Expenses	<u>0.16</u>	<u>0.16</u>	<u>0.10</u>
Total Requirement	<u>16.43%</u>	<u>3.21%</u>	<u>10.42%</u>
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	<u>(5.93%)</u>	<u>2.29%</u>	<u>1.58%</u>

Public Employees Retirement Association

General Fund

ACCOUNTING BALANCE SHEET
(June 30, 1974)

ASSETS

Cash			
On Hand	\$	50.00	
On Deposit and in Transit		<u>278,341.24</u>	\$ 278,391.24
Accounts Receivable			
Employer Contributions	\$	110,817.00	
M.S. 1971, Sec. 353.36, Subd. 2, as amended		66,967.43	
M.S. 1971, Sec. 353.27, Subd. 12		1,061.35	
From Minnesota State Retirement System and Teachers Retirement Association		23,847.16	
From Police and Fire Fund		38,693.70	
For Omitted Deductions		4,189.95	
For Interest on Late Employer Contributions and Delinquent Payrolls		32,202.89	
Minnesota General Revenue Fund (Supplemental Payments)		9,119.60	
Accrued Interest on Bonds		2,367,509.33	
Accrued Dividends		366,545.28	
Other		<u>1,570.90</u>	<u>3,022,524.59</u>
Total Current Assets			\$ 3,300,915.83
Investments			
Bonds at Amortized Cost			
U. S. Government	\$	10,378,631.10	
Municipal		3,153,000.00	
Corporate		113,154,687.91	
Canadian Government Insured		19,993,057.62	
Stock, Common - at Cost		<u>121,801,541.52</u>	268,480,918.15
Minnesota Adjustable Fixed Benefit Fund			133,311,816.48
Deferred Yield Adjustment			<u>2,021,597.67</u>
Miscellaneous			
Office Equipment - Less Accumulated Depreciation	\$	27,333.52	
Prepaid Expense		<u>21,227.28</u>	<u>48,560.80</u>
<u>Total Assets</u>			<u>\$407,163,808.93</u>
Members Accumulated Contributions			<u>\$122,217,293.09</u>

Public Employees Retirement Association

General Fund

ACCOUNTING BALANCE SHEET
(June 30, 1974)

CURRENT LIABILITIES AND RESERVES

Liabilities		
Accounts Payable		\$ 64,159.23
Accounts Payable to the Police and Fire Fund		19,373.56
Penalties Refundable		3,000.09
Donations Suspense		584,620.74
Members Contributions Suspense - 1969 vote, 1.8% shortage		116.37
Omitted Deductions Suspense		<u>4,189.95</u>
Total Liabilities		\$ 675,459.94
Reserves		
Members Accumulated Contributions	\$122,217,293.09	
Benefits Reserve	150,959,239.42	
Reserve for Participation in Minnesota Adjustable Fixed Benefit Fund	<u>133,311,816.48</u>	<u>406,488,348.99</u>
<u>Total Liabilities and Reserves</u>		<u>\$407,163,808.93</u>

Public Employees Retirement AssociationGeneral FundSOURCES AND USES OF FUNDS
(July 1, 1973 - June 30, 1974)

<u>Resources</u>		<u>Uses</u>	
<u>Employee Contributions</u>	\$ 24,954,675.44	<u>Refunds</u>	
<u>Employer Contributions</u>	33,612,133.56	Employee	\$ 4,391,888.71
<u>Various Accounts Receivable</u>	263,166.77	Employer	42,202.11
<u>Investment Income</u>	12,881,251.89	<u>Penalties Refunded</u>	5,305.24
<u>St. Paul Bureau of Health</u>	1,135,024.13	<u>Donations Refunded</u>	22,316.35
<u>Investment Sales and Redemptions</u>		<u>Benefits Paid</u>	
Bonds	202,128,264.78	Retirement	14,299,156.31
Stocks	4,967,649.20	Survivor	3,037,300.29
		Disability	482,806.62
<u>Cancelled Warrants</u>	109,008.34	<u>Direct Expense</u>	799,702.45
<u>Interest Other than</u>		<u>Social Security</u>	665.78
<u>Investment Interest</u>	413,298.62	<u>Investment Purchases</u>	
<u>Miscellaneous Income</u>	111,791.10	Bonds	215,092,295.07
<u>Increase in Cash Accounts</u>	439,828.75	Stocks	19,135,803.00
		<u>Payments to Minnesota</u>	
		<u>Adjustable Fixed Benefit</u>	
		<u>Fund</u>	23,482,634.12
		<u>Transfers to Police and</u>	
		<u>Fire Fund</u>	21,222.06
		<u>Interest Paid on Refunds</u>	202,794.47
Cash Balance, 6/30/74	\$281,016,092.58		
	278,341.24		
Total (Statement of Receipts and Disbursements)	<u>\$281,294,433.82</u>		<u>\$281,016,092.58</u>

Public Employees Retirement AssociationGeneral FundACCOUNTING STATEMENT OF INCOME AND EXPENSE
(July 1, 1973 to June 30, 1974)INCOME

Employer Contributions		
8% and 4% (73-74)	\$24,691,808.75	
6% and 3% (72-73)	120,954.27	
2½% and 1½%	<u>8,621,126.09</u>	\$33,433,889.11
Member Contributions		24,807,249.86
St. Paul Bureau of Health		1,465,024.13
Unit Matching Contributions		165,312.10
Transferred from Police and Fire Fund		
Member Contributions	\$ 2,381.78	
Employer Contributions	<u>507.50</u>	2,889.28
Earnings Credited from the Minnesota		
Adjustable Fixed Benefit Fund		5,814,943.50
Investment Earnings		13,834,357.12
Gain on Sale of Stocks and Bonds		191,388.76
Interest on Back Payments and Omitted Deductions		206,117.86
Interest on Refunds Repaid		89,889.74
Interest on Delinquent Employer		
Contributions and Late Payrolls		142,318.74
Other Income		<u>1,198.96</u>
<u>Total Income</u>		<u>\$80,154,579.16</u>

EXPENSE

Retirement Annuities (All paid from		
Minnesota Adjustable Fixed Benefit Fund)	\$14,112,791.72	
Survivor Benefits Paid		
Old Law Survivors	\$1,343,252.37	
With Children	577,168.27	
Without Children	<u>934,992.85</u>	2,855,413.49
Disability Benefits Paid		477,002.61
Disability Survivors Paid		
With Children	\$ 67,636.70	
Without Children	<u>95,099.53</u>	162,736.23

Public Employees Retirement Association

General Fund

ACCOUNTING STATEMENT OF INCOME AND EXPENSE

	<u>EXPENSE</u>	
Refunds of Deposits		
Active Members due to Withdrawal	\$3,753,116.12	
Active Members due to Death	<u>333,601.84</u>	\$ 4,086,717.96
Deferred Members due to Withdrawal	\$ 3,048.38	
Deferred Members due to Death	<u>9,512.65</u>	12,561.03
Annuitants to Survivors		76,238.97
Survivors to Beneficiaries		2,544.25
Disabilitants to Survivors		24,093.86
Donations (\$25.00 and under)		2,444.13
Transfers to Police and Fire Fund		
Member Contributions - Active	\$ 6,155.61	
Member Contributions - Deferred	4,207.70	
Employer Contributions	<u>9,010.25</u>	19,373.56
Adjustments for Prior Year Entries		82,593.95
Interest Paid on Refunds		202,364.73
Retroactive Social Security Payments		665.78
Administrative Expenses		
Salaries	\$ 505,303.08	
Rent		
Office Space	\$50,168.05	
Parking Space	43.11	
Data Processing Equipment	<u>51,549.45</u>	101,760.61
Maintenance Service Contracts		3,115.61
Medical		14,047.08
Actuarial Service		14,369.79
Telephone and Telegraph		5,462.88
Postage, Printing and Supplies		70,002.29
Travel		10,265.76
Employee Insurance and Hospitalization		13,142.80
Employer Social Security Taxes		14,189.81
Public Employees Retirement Association		
Employer Contributions, 1973-1974	41,920.67	
Depreciation - Equipment		4,610.66
Xerox Machine		3,956.88
Systems Analyst Services		941.45
Miscellaneous Expense	<u>5,296.87</u>	<u>808,386.24</u>
Excess of Income over Expense		<u>\$22,925,928.51</u>
for the Period ended June 30, 1974		<u>\$57,228,650.65</u>

Public Employees Retirement Association

General Fund

RECONCILIATION OF ASSET BALANCES
(June 30, 1974)

Asset Balance, July 1, 1973			\$349,259,698.34
Add			
Employer Contributions		\$33,433,889.11	
Employee Contributions		24,807,249.86	
St. Paul Bureau of Health		1,465,024.13	
Employer and Employee Contributions			
Transferred from Police and Fire Fund		2,889.28	
Minnesota Adjustable Fixed Benefit Fund Income		5,814,943.50	
Investment Earnings		13,834,357.12	
Gain on Sales of Stock and Bonds		191,388.76	
Unit Matching Contributions		165,312.10	
Interest on Back Payments, Refunds Repaid			
and Delinquent Employer Contributions		438,326.34	
Other Income		<u>1,198.96</u>	
Total Additions			<u>80,154,579.16</u>
			\$429,414,277.50
Deduct			
Benefits Paid			
Retirement	\$14,112,791.72		
Survivor	3,018,149.72		
Disability	<u>477,002.61</u>	\$17,607,944.05	
Refunds		4,204,600.20	
Transfers to Police and Fire Fund		19,373.56	
Adjustments for Prior Year Entries		82,593.95	
Interest Paid on Refunds		202,364.73	
Retroactive Social Security Payments		665.78	
Administrative Expenses		<u>808,386.24</u>	
Total Deductions			<u>22,925,928.51</u>
			\$406,488,348.99
Current Liabilities and Accounts Payable			<u>675,459.94</u>
<u>Asset Balance, June 30, 1974</u>			<u>\$407,163,808.93</u>

Public Employees Retirement Association

ASSET ALLOCATION
(July 1, 1974)

	<u>Basic Fund</u>	<u>Coordinated Fund</u>	<u>General Fund Total</u>
Net Assets, July 1, 1973	\$286,796,991.82	\$ 62,462,706.52	\$349,259,698.34
Accounts Payable	<u>571,888.29</u>	<u>129,363.80</u>	<u>701,252.09</u>
<u>Total Assets, July 1, 1973</u>	<u>\$287,368,880.11</u>	<u>\$ 62,592,070.32</u>	<u>\$349,960,950.43</u>
1. Employer Contributions	\$ 19,693,187.05	\$ 15,726,770.68	\$ 35,419,957.73
2. Employee Contributions	13,635,226.96	11,172,022.90	24,807,249.86
3. Transfers to Police and Fire Fund	-16,484.28	-	-16,484.28
4. Benefits Paid			
(i) Survivor	-3,017,912.20	-237.52	-3,018,149.72
(ii) Disability	-420,333.30	-56,669.31	-477,002.61
5. Refunds	<u>-546,441.47</u>	<u>-3,860,523.46</u>	<u>-4,406,964.93</u>
6. Net - 1 plus 2 minus 3, 4 and 5	<u>\$ 29,327,242.76</u>	<u>\$ 22,981,363.29</u>	<u>\$ 52,308,606.05</u>
7. Benefits Paid from MAFBF	\$-12,905,596.94	\$ -1,207,194.78	\$-14,112,791.72
8. Income from MAFBF	5,214,342.92	600,600.58	5,814,943.50
9. Investment Income	10,997,454.86	3,029,489.98	14,026,944.84
10. Administrative Expenses	-633,793.84	-174,592.40	-808,386.24
11. Social Security Payments	-	-665.78	-665.78
Excess of Income over Expenses	<u>31,999,649.76</u>	<u>25,229,000.89</u>	<u>57,228,650.65</u>
Total Net Assets, July 1, 1974	\$318,796,641.58	\$ 87,691,707.41	\$406,488,348.99
Accounts Payable	<u>492,678.18</u>	<u>182,781.76</u>	<u>675,459.94</u>
<u>Asset Balance, July 1, 1974</u>	<u>\$319,289,319.76</u>	<u>\$ 87,874,489.17</u>	<u>\$407,163,808.93</u>
Estimated Allocation Minnesota Adjustable Fixed Benefit Fund	<u>\$119,542,610.63</u>	<u>\$ 13,769,205.85</u>	<u>\$133,311,816.48</u>

Public Employees Retirement Association

General Fund

ACTUARIAL ASSUMPTIONS

The assumptions can be summarized as follows:

Interest:	5%
Mortality:	1965 Group Annuity
Retirement Age:	65 for employees who have less than 30 years of service. For employees with 30 or more years of service - 30% at age 62, 15% at ages 63 and 64, and 100% at age 65.
Disability:	PERA Experience
Turnover:	PERA Experience
Salary Scale:	3½% per year

A detailed statement of the mortality rates, disability rates, turnover factors, and salary scale is set out in the following Tables 1 through 4.

Public Employees Retirement Association

General Fund

Male Employees

MORTALITY RATES
(Per 1,000 Employees)

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	.517	45	3.002
21	.537	46	3.409
22	.558	47	3.856
23	.581	48	4.344
24	.607	49	4.869
25	.636	50	5.429
26	.667	51	6.027
27	.703	52	6.656
28	.742	53	7.321
29	.784	54	8.019
30	.831	55	8.751
31	.884	56	9.514
32	.941	57	10.312
33	1.005	58	11.154
34	1.074	59	12.057
35	1.152	60	13.043
36	1.237	61	14.143
37	1.331	62	15.390
38	1.435	63	16.828
39	1.550	64	18.504
40	1.677	65	20.475
41	1.838		
42	2.054		
43	2.322		
44	2.639		

Public Employees Retirement Association

General Fund

Female Employees

MORTALITY RATES
(Per 1,000 Employees)

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	.311	45	1.672
21	.330	46	1.819
22	.349	47	1.980
23	.369	48	2.158
24	.392	49	2.355
25	.415	50	2.574
26	.439	51	2.783
27	.466	52	3.016
28	.496	53	3.277
29	.527	54	3.570
30	.561	55	3.898
31	.597	56	4.278
32	.637	57	4.727
33	.681	58	5.253
34	.728	59	5.867
35	.780	60	6.572
36	.836	61	7.369
37	.898	62	8.258
38	.966	63	9.232
39	1.040	64	10.284
40	1.122	65	11.402
41	1.213		
42	1.311		
43	1.420		
44	1.540		

Public Employees Retirement Association

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

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 AssociationGeneral FundFemale EmployeesSEPARATION 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

General Fund

All Employees

EARNINGS PROGRESSION

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	.2127	45	.5026
21	.2201	46	.5202
22	.2278	47	.5384
23	.2358	48	.5572
24	.2440	49	.5767
25	.2526	50	.5969
26	.2614	51	.6178
27	.2706	52	.6394
28	.2800	53	.6618
29	.2898	54	.6849
30	.3000	55	.7089
31	.3105	56	.7337
32	.3213	57	.7594
33	.3326	58	.7860
34	.3442	59	.8135
35	.3563	60	.8420
36	.3687	61	.8714
37	.3817	62	.9019
38	.3950	63	.9335
39	.4088	64	.9662
40	.4231	65	1.0000
41	.4380		
42	.4533		
43	.4692		
44	.4856		

Public Employees Retirement AssociationFINANCIAL BALANCE SHEET
(Year Commencing July 1, 1974)Basic MembersRESERVES

Entry Age Normal Reserves			
Retirement	\$490,084,052		
Vesting	54,470,813		
Disability	29,239,647		
Survivors	31,909,534		
Refund	<u>5,831,497</u>		
	\$611,535,543		
Less Value of Benefits to be Earned in the Future	<u>188,782,213</u>	\$422,753,330	
Vested Members		1,219,023	
Retired Members			
Retirements Payable from Minnesota Adjustable Fixed Benefit Fund	\$119,542,611		
Disability	3,983,680		
Survivors	29,594,812		
Reserve for Future Old Law Survivors	11,718,711		
Less Receivable from Minnesota Adjustable Fixed Benefit Fund	<u>-5,961,467</u>	<u>158,878,347</u>	\$582,850,700
Unfunded Obligation			<u>264,054,058</u>
Funded Obligation			<u>\$318,796,642</u>

Public Employees Retirement Association

ACTUARIAL REQUIREMENTS
(July 1, 1974)

Basic Members

AMORTIZATION RATE REQUIREMENT

Present Value of Benefit (For Both Past and Future Service)		\$771,632,913	
Obligation for Service			
Rendered to Date	\$ 582,850,700		
Net Assets	318,796,642		
Accrued Unfunded Obligation	264,054,058		
Funding Ratio			55%
Amortization (23-Year) Requirement	\$ 19,576,128		
Covered Payroll	184,845,879		
Amortization (23-Year) Rate Requirement			<u>10.59%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned in the Future	\$ 188,782,213		
Present Value of Future Payroll	1,380,061,700		
Normal Cost Rate Requirement	13.68%		
Employee Contribution Rate	<u>8.00</u>		
Employer Normal Cost Rate Requirement			<u>5.68%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		10.50%
Amortization (23-Year) Rate Requirement	10.59%	
Normal Cost Rate Requirement	5.68	
Allowance for Expenses	<u>0.16</u>	
Total Requirement		16.43%
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		<u>(5.93%)</u>

Public Employees Retirement Association

ACTUARIAL REQUIREMENTS
(July 1, 1974)

Basic Members

AMORTIZATION RATE REQUIREMENT

	Period			
	10-Year	20-Year	30-Year	40-Year
Accrued Unfunded Obligation	\$264,054,058	\$264,054,058	\$264,054,058	\$264,054,058
Amortization Requirement	34,196,210	21,188,382	17,177,097	15,388,585
Covered Payroll	184,845,879	184,845,879	184,845,879	184,845,879
Amortization Rate Requirement	<u>18.50%</u>	<u>11.46%</u>	<u>9.29%</u>	<u>8.33%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law	<u>10.50%</u>	<u>10.50%</u>	<u>10.50%</u>	<u>10.50%</u>
Amortization Rate Requirement	17.89%	11.09%	8.99%	8.05%
Normal Cost Rate Requirement	4.11	4.11	4.11	4.11
Allowance for Expenses	<u>0.17</u>	<u>0.17</u>	<u>0.17</u>	<u>0.17</u>
Total Requirement	22.17%	15.37%	13.27%	12.33%
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	<u>(11.67%)</u>	<u>(4.87%)</u>	<u>(2.77%)</u>	<u>(1.83%)</u>

Public Employees Retirement AssociationBasic Members

STATEMENT OF REVENUE, EXPENDITURES,
CHANGES IN RESERVES AND EXPERIENCE GAIN (LOSS)
 (Year Ending June 30, 1974)

Revenue:

Employer Contributions	\$19,693,187.05	
Member Contributions	13,635,226.96	
Investment Income	10,997,454.86	
Minnesota Adjustable Fixed Benefit Fund Income	<u>5,214,342.92</u>	
Total Revenue		\$49,540,211.79

Expenditure:

Benefits	\$16,343,842.44	
Refund of Contributions	546,441.47	
Administrative Expense	633,793.84	
Transfer to Police and Fire Fund	<u>16,484.28</u>	
Total Expenditures		<u>17,540,562.03</u>

Increase in Assets (1974)		<u>\$31,999,649.76</u>
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Public Employees Retirement Association

RECONCILIATION OF CHANGE IN ACTUARIAL RESERVES

Basic Members

ALLOCATION OF CHANGE IN ACTUARIAL RESERVES

	<u>Increase</u>	<u>Decrease</u>	
Increase in Assets			\$31,999,650
Amortization Payment		\$ 5,715,141	
Excess Interest (1.08% x Average Invested Assets)		3,270,206	
Estimated Excess (Deficit) in Rate	\$ 6,977,198		
Other Income		5,961,467	
Increases in Compensation	<u>18,118,789</u>		
Totals	<u>\$25,095,987</u>	<u>\$14,946,814</u>	
Expected Decrease (Increase) in Unfunded			<u>(10,149,173)</u>
Net Change in Reserves			42,148,823
Experience Variation (Gain) Loss			<u>(440,530)</u>
Total			<u>\$41,708,293</u>
1974 Actuarial Reserve			\$582,850,700
1973 Actuarial Reserve			<u>541,142,407</u>
Increase (Decrease)			<u>\$41,708,293</u>

Basic Members

SUPPORTING EXHIBITS

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Public Employees Retirement AssociationRECONCILIATION OF ACTIVE MEMBERS
(June 30, 1974)Basic Members

As of July 1, 1973	23,881
New Entrants	55
Transfers	<u>-3</u>
Total	23,933
<u>Separations:</u>	
a. With Refund of Contributions	
(i) Death	75
(ii) Withdrawal	414
b. With Deferred Annuity	56
c. With Disability Annuity	81
d. With Normal Retirement Annuity	638
e. With Survivor Annuity	175
f. With Disability Survivor Annuity	<u>10</u>
Total	<u>1,449</u>
Active as of July 1, 1974	<u>22,484</u>

Public Employees Retirement AssociationRECONCILIATION OF ANNUITANTSBasic Members

<u>Normal Retirement Annuitants</u>	
As of July 1, 1973	5,935
Additions During Year	694
Deletions During Year	<u>-356</u>
<u>Total as of July 1, 1974</u>	<u>6,273</u>
Annual Annuity - July 1, 1973	\$10,195,587
- July 1, 1974	\$14,179,088
<u>Disability Annuitants</u>	
As of July 1, 1973	232
Additions During Year	81
Deletions During Year	<u>-62</u>
<u>Total as of July 1, 1974</u>	<u>251</u>
Annual Annuity - July 1, 1973	\$ 344,320
- July 1, 1974	\$ 516,250
<u>Survivor Annuitants</u>	
(a) Spouse Only as of July 1, 1973	2,426
Optional Survivors as of July 1, 1973	50
Additional Spouse Only During Year	140
Additional Optional Survivors During Year	20
Deletions During Year	<u>-144</u>
<u>Total as of July 1, 1974</u>	<u>2,492</u>
Annual Annuity - July 1, 1973	\$ 1,945,161
- July 1, 1974	\$ 2,376,265
(b) Survivor with Children	
As of July 1, 1973	522
Additions During Year	25
Deletions During Year	<u>-2</u>
<u>Total as of July 1, 1974</u>	<u>545</u>
Annual Annuity - July 1, 1973	\$ 397,200
- July 1, 1974	\$ 609,401
(c) Children	
As of July 1, 1973	599
Additions During Year	39
Deletions During Year	<u>-19</u>
<u>Total as of July 1, 1974</u>	<u>619</u>
Annual Annuity - July 1, 1972	\$ 401,157
- July 1, 1973	\$ 428,612
<u>Deferred Vested Members</u>	
As of July 1, 1973	752
Additions During Year	56
Deletions During Year	<u>-26</u>
<u>Total as of July 1, 1974</u>	<u>782</u>

Public Employees Retirement Association

Exhibit 14

Basic Members

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

Payable From Adjustable Fixed Benefit Fund

<u>Age</u>	<u>Male</u>		<u>Female</u>	
	<u>Number</u>	<u>Monthly Annuity</u>	<u>Number</u>	<u>Monthly Annuity</u>
60	1	\$ 34.26	1	\$ 25.67
61	1	180.83	4	595.73
62	5	808.55	7	724.50
63	11	2,136.61	13	1,791.70
64	10	2,387.54	18	3,069.80
65	20	4,113.51	21	2,910.09
66	26	6,533.07	17	3,123.08
67	44	11,535.17	28	5,650.11
68	37	9,608.05	35	7,358.38
69	55	14,313.99	31	6,845.31
70	66	17,433.20	34	6,965.66
71	65	16,565.67	33	6,918.02
72	68	16,983.54	51	11,469.95
73	96	24,930.54	48	10,535.90
74	89	23,657.67	50	10,885.68
75	105	28,040.92	53	10,721.12
76	84	21,353.28	62	14,000.10
77	98	21,338.80	57	12,262.25
78	140	33,075.41	63	12,332.03
79	120	27,474.83	56	10,000.62
80	133	29,198.22	52	8,906.90
81	106	20,751.19	40	5,795.91
82	100	19,022.82	48	5,939.88
83	102	18,569.38	40	6,168.99
84	61	12,045.44	43	5,975.04
85	86	16,632.65	37	5,120.55
86	50	8,018.96	41	5,354.75
87	43	7,192.79	24	3,617.76
88	44	7,000.52	13	2,547.91
89	27	4,531.18	14	1,249.30
90	20	3,794.23	9	1,490.05
91	22	2,945.71	5	730.18
92	8	1,297.93	9	1,474.29
93	7	1,488.51	3	316.40
94	3	289.91	2	213.28
95	5	919.68	-	-
96	3	617.69	-	-
97	1	111.88	1	181.85
99	1	155.76	1	143.00
100	1	121.90	-	-
101	1	126.20	-	-
<u>Totals</u>	<u>1,965</u>	<u>\$437,337.99</u>	<u>1,064</u>	<u>\$193,411.74</u>

Public Employees Retirement AssociationBasic MembersRetired Under Law in Force July 1, 1957 and SubsequentPayable From Adjustable Fixed Benefit Fund

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
58	2	\$ 467.74	1	\$ 133.09
59	2	765.49	2	905.52
60	6	1,612.37	6	922.56
61	5	622.96	9	3,220.87
62	17	6,609.63	10	2,700.18
63	31	11,970.13	19	5,861.30
64	47	16,040.98	31	7,158.47
65	93	30,629.47	58	11,731.73
66	173	48,163.37	137	24,668.84
67	190	39,241.66	146	21,340.74
68	150	29,789.86	127	15,717.54
69	140	25,435.29	98	11,640.31
70	95	16,513.67	99	12,151.48
71	122	23,978.34	103	11,450.21
72	120	20,149.81	93	10,382.07
73	136	23,325.32	69	6,870.40
74	98	12,222.32	61	5,781.42
75	85	10,629.90	70	6,972.35
76	84	10,742.43	42	3,335.73
77	66	6,770.72	42	4,109.18
78	54	5,956.16	38	2,563.98
79	35	4,022.66	30	2,782.40
80	38	4,565.82	24	2,685.84
81	20	2,896.26	17	2,059.47
82	14	1,934.64	10	1,869.92
83	4	703.83	7	845.12
84	5	515.54	3	315.16
85	4	1,135.50	4	1,188.51
86	1	279.29	-	-
87	2	467.55	-	-
88	1	34.72	1	306.38
90	-	-	1	284.65
91	1	50.01	-	-
<u>Totals</u>	<u>1,841</u>	<u>\$358,243.44</u>	<u>1,358</u>	<u>\$181,955.42</u>

Public Employees Retirement AssociationBasic MembersRetired Under Combination of Law in Force Prior and Subsequent to July 1, 1957Payable From Adjustable Fixed Benefit Fund

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
65	1	\$ 10.24	-	\$ -
67	1	283.43	-	-
68	1	331.88	-	-
69	2	298.93	-	-
70	-	-	2	393.85
71	-	-	1	31.88
72	1	60.27	1	122.27
74	4	313.95	-	-
75	2	139.23	2	230.80
76	2	98.29	-	-
77	1	44.70	-	-
78	1	46.02	-	-
79	2	379.10	-	-
80	-	-	1	31.99
90	1	44.49	-	-
<u>Total</u>	<u>19</u>	<u>\$2,050.53</u>	<u>7</u>	<u>\$ 810.79</u>

St. Paul Bureau of Health

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
53	-	\$ -	1	\$ 409.52
54	-	-	1	358.95
62	-	-	1	355.20
67	3	1,197.40	2	888.00
71	1	444.00	-	-
72	1	431.42	-	-
73	-	-	1	444.00
74	-	-	1	444.00
76	1	444.00	-	-
78	-	-	1	444.00
82	1	410.70	-	-
83	-	-	1	444.00
90	-	-	1	355.20
92	-	-	1	355.20
95	-	-	1	355.20
<u>Totals</u>	<u>7</u>	<u>\$2,927.52</u>	<u>12</u>	<u>\$4,853.27</u>

Public Employees Retirement Association

Basic Members

Beneficiaries Payable From Minnesota Adjustable Fixed Benefit Fund

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
38	1	\$ 41.98	-	\$ -
47	1	27.52	-	-
55	1	138.66	-	-
56	-	-	1	45.90
61	-	-	1	236.98
62	-	-	2	354.22
64	-	-	4	807.23
65	-	-	2	215.70
66	-	-	1	126.16
67	-	-	4	711.84
68	-	-	1	47.44
69	-	-	2	387.18
70	-	-	3	1,084.43
71	-	-	6	1,240.14
72	-	-	1	90.10
73	-	-	3	328.84
74	-	-	1	343.59
75	-	-	1	98.74
76	-	-	1	92.74
77	-	-	3	345.05
78	-	-	3	924.36
79	-	-	1	62.66
81	1	136.14	-	-
83	-	-	1	139.50
85	-	-	1	56.62
<u>Totals</u>	<u>4</u>	<u>\$ 344.30</u>	<u>43</u>	<u>\$7,739.42</u>

Annuities Payable for a Certain Period Not Dependent on Age

Number	Monthly Annuity
<u>9</u>	<u>\$1,247.93</u>

Public Employees Retirement Association

Basic Members

Disability Retirements

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
44	1	\$ 394.21	-	\$ -
47	1	128.50	-	-
49	4	1,054.88	2	226.60
50	4	622.20	-	-
51	3	630.58	4	568.70
52	5	687.09	9	1,156.46
53	1	194.48	4	415.37
54	7	1,348.46	3	354.05
55	8	2,176.07	-	-
56	7	1,566.75	1	208.03
57	5	1,145.86	6	1,078.09
58	4	489.57	4	440.08
59	14	2,709.64	7	677.49
60	14	2,703.85	7	635.13
61	21	4,141.32	14	1,867.61
62	15	1,982.76	6	754.78
63	21	4,303.86	3	427.31
64	18	2,874.99	3	322.79
65	15	2,703.68	10	2,029.58
<u>Totals</u>	<u>168</u>	<u>\$31,858.75</u>	<u>83</u>	<u>\$11,162.07</u>

Public Employees Retirement AssociationBasic MembersBeneficiaries Under Law in Force Prior to July 1, 1957

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
60	-	\$ -	1	\$ 117.53
61	-	-	14	1,388.28
62	-	-	17	1,722.29
63	-	-	16	1,557.61
64	-	-	18	1,713.03
65	-	-	22	2,161.21
66	-	-	20	1,937.50
67	-	-	44	3,302.08
68	-	-	44	3,248.70
69	-	-	68	5,354.69
70	-	-	63	4,838.47
71	-	-	72	5,752.82
72	-	-	89	7,719.02
73	-	-	79	6,582.28
74	-	-	70	5,802.33
75	1	23.19	76	5,709.62
76	1	61.66	95	7,312.27
77	1	77.70	88	6,803.20
78	-	-	84	7,062.90
79	1	60.30	92	7,024.58
80	1	16.00	83	6,318.52
81	-	-	87	6,315.41
82	-	-	81	5,363.28
83	-	-	74	4,843.49
84	1	25.76	56	3,334.67
85	-	-	62	3,832.53
86	1	45.34	42	2,863.90
87	1	73.58	34	2,323.53
88	1	28.74	25	1,637.32
89	-	-	19	1,178.75
90	-	-	13	733.64
91	1	11.81	9	748.50
92	-	-	10	708.81
93	-	-	4	239.50
94	-	-	4	274.71
95	-	-	3	212.19
96	-	-	3	182.50
97	-	-	1	50.00
100	-	-	2	135.38
<u>Totals</u>	<u>10</u>	<u>\$424.08</u>	<u>1,684</u>	<u>\$128,407.04</u>

Public Employees Retirement Association

Basic Members

Survivor Annuities

Female

<u>Age</u>	<u>Number</u>	<u>Monthly Annuity</u>	<u>Age</u>	<u>Number</u>	<u>Monthly Annuity</u>
29	1	\$ 300.00	65	55	\$ 4,604.67
32	1	81.25	66	46	3,892.34
36	1	81.25	67	54	4,594.08
37	3	232.70	68	46	4,191.05
38	3	432.05	69	38	3,237.38
40	3	321.77	70	43	3,598.55
41	6	706.25	71	37	3,073.80
42	4	325.00	72	35	2,949.56
43	4	325.00	73	33	3,099.30
44	6	706.25	74	35	2,992.33
45	9	717.92	75	23	2,100.79
46	10	1,031.25	76	22	2,094.11
47	13	1,039.55	77	17	1,358.73
48	17	1,527.07	78	15	1,337.45
49	12	1,160.55	79	14	1,297.28
50	18	1,848.73	80	7	627.22
51	23	2,236.86	81	7	679.98
52	30	2,787.00	82	6	551.54
53	32	2,656.53	83	8	859.00
54	35	3,389.45	84	3	353.79
55	41	3,315.71	85	6	472.28
56	31	3,464.24	86	7	736.95
57	49	3,917.55	87	2	129.50
58	47	4,792.74	88	2	135.18
59	62	5,782.17	89	1	29.96
60	52	4,291.41	91	1	81.25
61	66	5,617.87	95	1	185.83
62	63	5,414.77			
63	59	5,611.73			
64	67	5,679.24			
			<u>Totals</u>	<u>1,332</u>	<u>\$119,057.76</u>

Public Employees Retirement Association

Basic Members

Survivor Annuities

Male

<u>Age</u>	<u>Number</u>	<u>Monthly Annuity</u>
56	2	\$153.68
60	1	221.14
61	1	81.25
69	2	104.82
70	1	81.25
76	2	162.50
77	1	81.25
79	<u>1</u>	<u>30.71</u>
<u>Totals</u>	<u>11</u>	<u>\$916.60</u>

Children

<u>Number</u>	<u>Total Monthly Annuity</u>
619	\$35,717.67

Basic Members

CONSIDERED EARNINGS

Active Female Employees

(Age and Service as of July 1, 1974)

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	\$ 4,589	1	\$ 1,428	4	\$ 24,898	27	\$ 167,342
25 to 30	1	2,117	-	-	8	43,302	201	1,486,728
30 to 35	1	255	1	8,973	10	60,834	215	1,666,178
35 to 40	2	2,734	2	8,933	15	79,055	355	1,981,701
40 to 45	2	9,022	-	-	20	84,573	659	3,078,415
45 to 50	3	30,698	4	32,522	19	84,414	1018	4,714,653
50 to 55	4	31,612	4	29,649	20	77,654	1024	4,851,922
55 to 60	4	20,511	8	67,049	16	57,837	761	3,471,936
60 to 65	4	36,042	2	15,737	6	18,930	424	1,993,252
65 to 70	1	12,945	-	-	6	18,380	55	161,100
70 & Up	-	-	-	-	-	-	27	88,694
Total	24	\$ 150,525	22	\$ 164,291	124	\$ 549,877	4766	\$23,661,921

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	42	317,498	-	-	-	-	-	-
30 to 35	109	956,053	21	157,644	-	-	-	-
35 to 40	116	932,501	54	442,800	12	100,917	-	-
40 to 45	256	1,706,560	65	558,339	40	339,269	8	88,025
45 to 50	434	2,559,616	134	988,796	59	564,524	44	417,470
50 to 55	670	3,906,957	277	1,899,942	97	957,828	40	405,445
55 to 60	692	3,936,382	345	2,285,761	138	1,088,020	61	549,292
60 to 65	409	2,065,395	350	2,004,600	176	1,230,275	62	571,974
65 to 70	57	267,109	32	185,008	9	61,519	4	34,949
70 & Up	22	78,536	10	25,568	5	31,063	2	13,111
Total	2807	\$16,726,607	1288	\$ 8,548,458	536	\$ 4,373,415	221	\$ 2,080,266

YEARS OF SERVICE

Age	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	34	\$ 198,257
25 to 30	-	-	-	-	-	-	252	1,849,645
30 to 35	-	-	-	-	-	-	357	2,849,937
35 to 40	-	-	-	-	-	-	556	3,548,641
40 to 45	-	-	-	-	-	-	1050	5,864,203
45 to 50	8	69,783	-	-	-	-	1723	9,462,476
50 to 55	15	140,634	2	21,686	-	-	2153	12,323,329
55 to 60	46	439,387	20	208,429	2	24,478	2093	12,149,082
60 to 65	20	197,457	22	236,962	9	109,594	1484	8,480,218
65 to 70	6	40,003	1	6,475	4	50,139	175	837,627
70 & Up	1	10,165	1	11,587	-	-	68	258,724
Total	96	\$ 897,429	46	\$ 485,139	15	\$ 184,211	9945	\$57,822,139

Basic Members

CONSIDERED EARNINGS

Active Male Employees

(Age and Service as of July 1, 1974)

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	1	\$ 1,894	-	\$ -	1	\$ 2,589	1	\$ 10,387
25 to 30	3	26,964	1	6,948	12	70,101	186	1,832,907
30 to 35	2	5,522	-	-	9	49,960	457	4,636,571
35 to 40	2	15,097	4	40,219	9	38,345	512	5,035,131
40 to 45	4	31,173	6	27,905	11	124,541	475	4,378,291
45 to 50	1	5,220	6	33,354	21	126,102	479	4,283,463
50 to 55	3	17,636	2	12,637	11	43,261	474	4,064,074
55 to 60	8	35,833	1	21,918	11	59,407	434	3,422,832
60 to 65	11	114,847	5	32,448	6	35,347	222	1,688,136
65 to 70	1	2,109	2	9,067	7	14,653	60	392,227
70 & Up	1	1,849	-	-	2	6,520	54	233,878
Total	37	\$ 258,144	27	\$ 184,496	100	\$ 570,826	3354	\$ 29,977,897

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	6	67,928	-	-	-	-	-	-
30 to 35	227	2,381,776	13	155,977	-	-	-	-
35 to 40	477	5,288,731	241	2,766,031	32	369,300	-	-
40 to 45	507	5,587,198	459	5,239,586	158	1,793,716	12	135,265
45 to 50	581	5,901,217	528	5,835,838	420	5,050,731	115	1,394,787
50 to 55	661	6,682,258	497	5,425,831	456	5,107,906	212	2,586,488
55 to 60	533	4,969,928	529	5,240,810	455	5,052,068	284	3,147,535
60 to 65	351	3,040,906	364	3,382,206	340	3,321,285	173	1,768,500
65 to 70	35	248,286	44	353,726	23	173,551	17	178,311
70 & Up	20	89,017	14	73,545	11	141,701	6	52,151
Total	3398	\$34,257,245	2689	\$28,473,550	1895	\$21,010,258	819	\$ 9,263,037

YEARS OF SERVICE

Age	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	3	\$ 14,870
25 to 30	-	-	-	-	-	-	208	2,004,848
30 to 35	-	-	-	-	-	-	708	7,229,806
35 to 40	-	-	-	-	-	-	1277	13,552,854
40 to 45	-	-	-	-	-	-	1632	17,317,675
45 to 50	2	14,214	-	-	-	-	2153	22,644,926
50 to 55	18	230,728	2	27,497	-	-	2336	24,198,316
55 to 60	54	714,307	19	249,878	2	40,617	2330	22,955,133
60 to 65	56	818,374	34	498,727	11	151,493	1573	14,852,269
65 to 70	9	95,883	2	24,805	2	30,782	202	1,523,400
70 & Up	4	39,843	1	35,951	4	55,188	117	729,643
Total	143	\$ 1,913,349	58	\$ 836,858	19	\$ 278,080	12539	\$127,023,740

PUBLIC EMPLOYEES RETIREMENT ASSOCIATION

Basic Members

SUMMARY OF PLAN
(Effective July 1, 1973)

1. Name

Public Employees Retirement Association.

2. Type of Plan

Self-insured, managed by a 13-member Board of Trustees, ten elected and three appointed by three employer groups.

3. Employer Included

Any county, city, 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 and certain part time employees who did not elect coverage under Section 218(d) of the Social Security Act and who are not contributing to any other local retirement plan.

5. Allowable Service

All periods of public service during which salary deductions were made or for which payments in lieu of salary deductions were deposited, including authorized leaves of absence, sick leaves, military leaves or layoffs.

6. Considered Salary

Salary means the periodical total compensation of any public employee before deductions for deferred compensation or supplemental retirement plans, and also means wages and includes net income from fees.

7. Employee Contributions

After July 1, 1973, 8% of considered salary.

8. Employer Contributions

Amount equal to the Employee Contributions plus 2 $\frac{1}{2}$ % of considered salary.

9. Normal Retirement Annuity

After attainment of age 65 and completion of at least 10 years of allowable service.

"Average Salary" means an amount equivalent to the highest salary upon which contributions were paid for any five successive years of allowable service.

Annuity equal to:

- (a) 2% of "Average Salary" for each of the first 10 years of allowable service plus
- (b) $2\frac{1}{2}$ % of "Average Salary" for each year of service over 10 years.

10. Late Retirement Annuity

Annual Annuity determined as for Normal Retirement, considering allowable service and salary to actual retirement.

11. Early Retirement Annuity

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

Annual Annuity determined as for Normal Retirement considering allowable service and salary to actual retirement and reduced by $\frac{1}{2}$ of 1% for each month between actual retirement and attainment of age 65 if service is less than 30 years, and between actual retirement and age 62 if service is 30 or more years.

12. Special Early Retirement Annuity

After attainment of age 62 and completion of 30 years of allowable service.

Annual Annuity determined as for Normal Retirement considering allowable service and salary to actual retirement without reduction for such early retirement.

13. Disability Benefit

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

Annual Benefit payable to age 65 determined as for Normal Retirement, considering allowable service and salary to date of disablement, plus a supplement equal to \$5 for each year that age at disablement is less than 65, maximum supplement \$50. Total Benefit is limited to 100% of "Average Salary."

If disability continues to age 65, the disability benefit shall terminate and the person shall be deemed to be on retirement status and may elect to receive the greater of an annuity determined as for Normal Retirement or the disability benefit he was receiving prior to age 65, or he may select an optional annuity.

Any disabilitant attaining age 65 after July 1, 1973 shall have his annuity computed in accordance with the Normal Retirement Annuity formula above.

14. Survivor or Death Benefit

In event of death of an active member after 18 months of allowable service, or in the event of death of a disabilitant prior to age 65.

Annual Survivor Benefit to dependent spouse, of 30% of average salary during the last six months of allowable service, plus for each dependent child, 10% of such average salary. Maximum family benefit equal to \$450 per month. Minimum family benefit equal to 30% of such average Salary, subject to the maximum limitation.

In the event of death of a retired annuitant, the excess (if any) of his accumulated contributions without interest, minus annuity payments, shall be paid to his designated beneficiary.

Upon the death of an active member after age 58 and completion of 20 or more years of allowable service or if the member has made application for an annuity or disability benefit and dies prior to commencement of his benefit, the surviving spouse (in lieu of any other survivor benefit) may elect to receive an annuity equal to the 50% joint and survivor annuity the member could have qualified for on the date of his death.

In case of death of a member who has no eligible surviving dependents, his accumulated contributions shall be paid to his designated beneficiary with interest thereon at $3\frac{1}{2}\%$ per annum compounded annually.

15. Separation Benefit

In event of termination after 10 years of allowable service, a deferred vested annuity payable at age 65, or earlier if otherwise eligible, provided former member does not withdraw his contributions. (Said 10 years of allowable service need not represent PERA coverage only but may be in conjunction with service covered by other Minnesota funds such as those for state employees and teachers and others which have this same provision; deferred annuity is paid by each fund according to the number of years of allowable service in each fund.)

Annual Annuity determined as for Normal Retirement under the provisions of the Plan at date of termination considering allowable service and salary to date of such termination, augmented by interest at 5% compounded annually from first of the month following separation from service or from July 1, 1971, whichever is later, to the date annuity begins to accrue.

All former members shall be eligible to receive a refund of their accumulated contributions without interest for the first three years of membership and thereafter with interest at $3\frac{1}{2}\%$ compounded annually. (Such election is in lieu of any other benefits under the Plan.)

16. Increase for Retired Annuitants, Survivors and Disabilitants who were receiving payments on June 30, 1973

(1) All retired annuitants drawing annuities as of June 30, 1973 shall receive an increase of 25%, payable as follows:

- (a) Those included in the Minnesota Adjustable Fixed Benefit Fund shall have their annuities increased effective July 1, 1973, by the same ratio as the actuarially computed reserves at $3\frac{1}{2}\%$ interest bears to the actuarially computed reserves at 5% interest. (This increase amounted to 9.72%.)
- (b) Said annuitants shall receive the remainder of the 25% increase, or 15.28%, effective January 1, 1974.

(2) All survivors and disabilitants who were receiving benefits on June 30, 1973 shall receive an increase of 25% effective January 1, 1974.

17. Optional Annuities

A participant may elect to receive an equivalent actuarially reduced annuity in the form of either a 50% or 100% joint and survivor annuity.

18. Expenses

Paid by Association from retirement fund.

19. Actuarial Method

For purpose of reports to the Legislative Retirement Study Commission, costs for the Plan shall be determined on an "entry-age level normal cost" basis and 5% interest.

Public Employees Retirement AssociationFINANCIAL BALANCE SHEET
(Year Commencing July 1, 1974)Coordinated MembersRESERVES

Entry Age Normal Reserves			
Retirement	\$191,584,557		
Vested	23,584,556		
Disability	11,898,013		
Survivors	7,935,092		
Refund	<u>26,382,316</u>		
	\$261,384,534		
Less Value of Benefits to be Earned in the Future	<u>174,159,012</u>	\$87,225,522	
Vested Members		514,660	
Retired Members			
Retirements Payable from Minnesota Adjustable Fixed Benefit Fund	\$ 13,769,206		
Disability	493,433		
Survivors	10,969		
Less Receivable from Minnesota Adjustable Fixed Benefit Fund	<u>-201,754</u>	<u>14,071,854</u>	\$101,812,036
Unfunded Obligation			<u>14,120,329</u>
Funded Obligation			<u>\$ 87,691,707</u>

Public Employees Retirement AssociationACTUARIAL REQUIREMENTS
(July 1, 1974)Coordinated MembersAMORTIZATION RATE REQUIREMENT

Present Value of Benefits (For Both Past and Future Service)		\$275,971,048
Obligation for Service		
Rendered to Date	\$ 101,812,036	
Net Assets	87,691,707	
Accrued Unfunded Obligation	14,120,329	
Funding Ratio		86%
Amortization (23-Year) Requirement	1,046,836	
Covered Payroll	322,104,803	
Amortization (23-Year) Rate Requirement		<u>0.32%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned In the Future	\$ 174,159,012	
Present Value of Future Payroll	2,586,736,400	
Normal Cost Rate Requirement	6.73%	
Employee Contributions Rate	<u>4.00</u>	
Employer Normal Cost Rate Requirement		<u>2.73%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		5.50%
Amortization (23-Year) Rate Requirement	0.32%	
Normal Cost Rate Requirement	2.73	
Allowance for Expenses	<u>0.16</u>	
Total Requirement		3.21%
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		<u>2.29%</u>

Public Employees Retirement Association

ACTUARIAL REQUIREMENTS
(July 1, 1974)

Coordinated Members

AMORTIZATION RATE REQUIREMENT

	Period			
	10-Year	20-Year	30-Year	40-Year
Accrued Unfunded Obligation	\$ 14,120,329	\$ 14,120,329	\$ 14,120,329	\$ 14,120,329
Amortization Requirement	1,828,647	1,133,052	918,548	822,907
Covered Payroll	322,104,803	322,104,803	322,104,803	322,104,803
Amortization Rate Requirement	<u>0.57%</u>	<u>0.35%</u>	<u>0.29%</u>	<u>0.26%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law	<u>5.50%</u>	<u>5.50%</u>	<u>5.50%</u>	<u>5.50%</u>
Amortization Rate Requirement	0.57%	0.35%	0.29%	0.26%
Normal Cost Rate Requirement	2.73	2.73	2.73	2.73
Allowance for Expenses	<u>0.16</u>	<u>0.16</u>	<u>0.16</u>	<u>0.16</u>
Total Requirement	<u>3.46%</u>	<u>3.24%</u>	<u>3.18%</u>	<u>3.15%</u>
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	<u>2.04%</u>	<u>2.26%</u>	<u>2.32%</u>	<u>2.35%</u>

Public Employees Retirement AssociationCoordinated Members

STATEMENT OF REVENUE, EXPENDITURES,
CHANGES IN RESERVES AND EXPERIENCE GAIN (LOSS)
 (Year Ending June 30, 1974)

Revenue:

Employer Contributions	\$15,726,770.68	
Member Contributions	11,172,022.90	
Investment Income	3,029,489.98	
Minnesota Adjustable Fixed Benefit Fund Income	<u>600,600.58</u>	
Total Revenue		\$30,528,884.14

Expenditure:

Benefits	\$ 1,264,101.61	
Refund of Contributions	3,860,523.46	
Administrative Expense	174,592.40	
Social Security Payments	<u>665.78</u>	
Total Expenditures		<u>5,299,883.25</u>

Increase in Assets (1974)		<u>\$25,229,000.89</u>
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Public Employees Retirement Association

RECONCILIATION OF CHANGE IN ACTUARIAL RESERVES

Coordinated Members

ALLOCATION OF CHANGE IN ACTUARIAL RESERVES

	<u>Increase</u>	<u>Decrease</u>	
Increase in Assets			\$ 25,229,001
Amortization Payment		\$ 167,211	
Excess Interest (1.08% x Average Invested Assets)		810,833	
Estimated Excess (Deficit) in Rate		6,298,672	
Contribution Requirement Applied to Larger Payroll		2,235,046	
Other Income		201,754	
Increases in Compensation	\$10,715,406		
Effect of Amendment to Plan	<u>4,320,875</u>		
Totals	<u>\$15,036,281</u>	<u>\$9,713,516</u>	
Expected Decrease (Increase) in Unfunded			<u>(5,322,765)</u>
Net Change in Reserves			30,551,766
Experience Variation (Gain) Loss			<u>1,356,043</u>
Total			<u>\$ 31,907,809</u>
1974 Actuarial Reserve			\$101,812,036
1973 Actuarial Reserve			<u>69,904,227</u>
Increase (Decrease)			<u>\$ 31,907,809</u>

Coordinated Members

SUPPORTING EXHIBITS

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Public Employees Retirement Association

RECONCILIATION OF ACTIVE MEMBERS
(June 30, 1974)

Coordinated Members

As of July 1, 1973	49,100
New Entrants	14,842
Reinstated	2,668
Transfer	<u>3</u>
Total	66,613

Separations:

a. With Refund of Contributions	
(i) Death	129
(ii) Withdrawal	11,889
b. With Deferred Annuity	12
c. With Disability Annuity	18
d. With Normal Retirement Annuity	184
e. With Survivor Annuity	<u>2</u>
Total	<u>12,234</u>

Active as of July 1, 1974 54,379

Public Employees Retirement Association

RECONCILIATION OF ANNUITANTS

Coordinated Members

Normal Retirement Annuitants

As of July 1, 1973	901
Additions During Year	196
Deletions During Year	<u>-33</u>
<u>Total as of July 1, 1974</u>	<u>1,064</u>
Annual Annuity - July 1, 1973	\$ 842,885
- July 1, 1974	\$1,437,132

Disability Annuitants

As of July 1, 1973	68
Additions During Year	18
Deletions During Year	<u>-15</u>
<u>Total as of July 1, 1974</u>	<u>71</u>
Annual Annuity - July 1, 1973	\$ 51,767
- July 1, 1974	\$ 64,255

Survivor Annuitants

Spouse Only	
As of July 1, 1973	2
Additions During Year	5
Deletions During Year	<u>-1</u>
<u>Total as of July 1, 1974</u>	<u>6</u>
Annual Annuity - July 1, 1973	\$ 1,619
- July 1, 1974	\$ 6,339

Deferred Vested Members

As of July 1, 1973	49
Additions During Year	12
Deletions During Year	<u>-1</u>
<u>Total as of July 1, 1974</u>	<u>60</u>

Public Employees Retirement Association

Exhibit 32

Coordinated Members

Retired - Laws 1967, Chapter 687

Payable From Minnesota Adjustable Fixed Benefit Fund

<u>Age</u>	<u>Male</u>		<u>Female</u>	
	<u>Number</u>	<u>Monthly Annuity</u>	<u>Number</u>	<u>Monthly Annuity</u>
59	1	\$ 162.99	-	\$ -
60	1	187.91	-	-
61	1	32.29	-	-
62	-	-	1	139.01
63	2	462.92	5	1,750.45
64	14	2,986.07	3	211.40
65	41	6,392.63	10	1,406.41
66	97	12,971.49	34	5,903.32
67	96	9,736.29	42	4,223.33
68	95	10,342.64	35	3,511.63
69	100	10,869.62	35	2,990.07
70	82	7,357.97	28	2,356.99
71	78	7,529.63	29	3,614.54
72	40	3,655.39	22	1,534.59
73	29	2,210.65	10	1,227.03
74	26	2,799.68	10	1,742.88
75	14	1,499.91	14	1,908.52
76	11	977.36	5	252.56
77	8	1,248.95	3	445.74
78	9	668.84	3	166.65
79	3	855.53	3	489.67
80	4	480.03	-	-
81	3	328.63	2	402.50
82	4	254.36	1	261.04
83	3	375.31	2	232.59
84	2	280.16	1	183.84
86	-	-	1	90.97
88	1	48.00	-	-
<u>Totals</u>	<u>765</u>	<u>\$84,715.25</u>	<u>299</u>	<u>\$35,045.73</u>

Survivor Annuities

Females

<u>Age</u>	<u>Number</u>	<u>Monthly Annuity</u>
50	1	\$ 59.38
67	1	87.21
68	1	56.82
69	1	37.41
74	1	156.19
72	1	131.20
<u>Totals</u>	<u>6</u>	<u>\$528.21</u>

Annuities Payable for a Certain Period Not Dependent on Age

<u>Number</u>	<u>Monthly Annuity</u>
4	\$269.74

Public Employees Retirement Association

Coordinated Members

Disability Retirements

<u>Age</u>	<u>Male</u>		<u>Female</u>	
	<u>Number</u>	<u>Monthly Annuity</u>	<u>Number</u>	<u>Monthly Annuity</u>
42	1	\$ 73.63	-	\$ -
47	1	88.19	-	-
49	1	103.29	-	-
50	1	41.94	1	35.69
51	2	212.83	-	-
52	1	37.38	-	-
53	1	56.14	-	-
55	2	148.28	2	120.58
56	1	110.38	1	123.88
57	7	530.22	-	-
58	2	228.04	-	-
59	2	356.30	-	-
60	4	380.55	1	162.59
61	6	187.87	-	-
62	6	400.22	1	56.99
63	6	432.92	1	26.41
64	12	946.02	2	149.65
65	5	289.60	1	55.03
<u>Totals</u>	<u>61</u>	<u>\$4,623.80</u>	<u>10</u>	<u>\$ 730.82</u>

Coordinated Members

CONSIDERED EARNINGS

Active Female Employees

(Age and Service as of July 1, 1974)

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	3016	\$12,260,493	1664	\$ 8,092,892	1478	\$ 8,193,225	153	\$ 958,336
25 to 30	1326	5,534,965	903	4,701,258	1515	9,840,854	488	3,674,602
30 to 35	1197	3,933,154	828	3,267,224	1322	6,214,617	432	2,948,440
35 to 40	1082	3,292,221	903	2,860,654	1881	7,304,130	492	2,606,876
40 to 45	902	2,918,378	778	2,619,802	1956	7,662,724	686	4,417,510
45 to 50	707	2,323,257	602	2,062,427	1774	7,285,524	774	4,410,398
50 to 55	509	1,695,053	442	1,571,501	1368	5,377,371	713	3,948,136
55 to 60	295	944,353	287	907,778	978	3,811,734	603	3,136,581
60 to 65	109	286,185	94	288,653	492	1,833,038	388	1,875,020
65 to 70	35	93,102	22	38,041	102	314,321	80	363,892
70 & Up	46	173,583	19	79,189	72	218,805	18	66,570
<u>Total</u>	<u>9224</u>	<u>\$33,454,744</u>	<u>6542</u>	<u>\$26,489,419</u>	<u>12938</u>	<u>\$58,056,343</u>	<u>4827</u>	<u>\$ 28,406,361</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	-	\$ -	-	\$ -	-	\$ -	1	\$ 2,063
25 to 30	3	17,786	-	-	-	-	-	-
30 to 35	31	299,431	2	14,127	-	-	-	-
35 to 40	16	151,437	10	87,686	-	-	-	-
40 to 45	23	234,200	12	104,138	4	39,749	2	21,599
45 to 50	57	500,987	13	138,126	16	191,299	4	39,514
50 to 55	68	666,360	34	346,665	12	145,102	8	103,900
55 to 60	102	738,926	46	409,059	24	397,926	6	56,208
60 to 65	96	640,815	52	379,881	24	306,730	9	108,979
65 to 70	21	102,537	9	45,944	4	10,274	-	-
70 & Up	3	17,280	1	1,620	2	13,690	-	-
<u>Total</u>	<u>420</u>	<u>\$ 3,369,759</u>	<u>179</u>	<u>\$ 1,527,246</u>	<u>86</u>	<u>\$ 1,104,770</u>	<u>30</u>	<u>\$ 332,263</u>

YEARS OF SERVICE

Age	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	2	\$ 7,190	6314	\$ 29,514,199
25 to 30	-	-	-	-	2	9,173	4237	23,778,638
30 to 35	-	-	-	-	-	-	3812	16,676,993
35 to 40	-	-	-	-	-	-	4384	16,303,004
40 to 45	-	-	-	-	1	2,268	4364	18,020,368
45 to 50	1	10,316	-	-	1	7,433	3949	16,969,281
50 to 55	4	31,689	-	-	-	-	3158	13,885,777
55 to 60	7	64,458	2	25,236	1	285	2351	10,492,544
60 to 65	8	95,429	5	61,854	2	24,015	1279	5,900,599
65 to 70	-	-	1	1,621	-	-	274	969,732
70 & Up	-	-	-	-	-	-	161	570,737
<u>Total</u>	<u>20</u>	<u>\$ 201,892</u>	<u>8</u>	<u>\$ 88,711</u>	<u>9</u>	<u>\$ 50,364</u>	<u>34283</u>	<u>\$153,081,872</u>

Coordinated Members

CONSIDERED EARNINGS

Active Male Employees

(Age and Service as of July 1, 1974)

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	1376	\$ 7,230,213	629	\$ 3,978,472	570	\$ 4,390,987	32	\$ 278,556
25 to 30	909	5,946,301	689	5,337,345	1363	12,205,347	359	3,648,486
30 to 35	470	3,243,357	399	3,119,838	961	8,797,580	519	5,645,400
35 to 40	274	1,808,871	247	1,956,529	689	6,118,756	468	4,938,354
40 to 45	261	1,649,721	247	1,856,541	707	5,994,712	428	4,396,530
45 to 50	286	2,020,347	273	2,127,863	731	6,035,365	474	4,714,523
50 to 55	246	1,609,819	236	1,696,704	739	6,177,770	521	5,037,058
55 to 60	183	1,088,447	177	1,137,524	575	4,348,019	550	4,904,965
60 to 65	95	497,528	110	625,156	340	2,281,517	407	3,429,858
65 to 70	55	195,989	27	69,633	100	362,751	68	410,798
70 & Up	31	140,237	22	71,504	64	218,774	38	138,101
<u>Total</u>	<u>4186</u>	<u>\$25,430,830</u>	<u>3056</u>	<u>\$21,977,109</u>	<u>6839</u>	<u>\$56,931,578</u>	<u>3864</u>	<u>\$ 37,542,629</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	6	43,519	-	-	-	-	-	-
30 to 35	46	660,662	-	-	-	-	-	-
35 to 40	108	1,504,331	27	342,582	4	55,486	-	-
40 to 45	129	2,188,257	68	1,023,505	13	198,929	-	-
45 to 50	129	1,743,281	95	1,340,561	66	1,068,595	14	189,785
50 to 55	192	2,193,913	107	1,290,720	62	793,035	26	423,446
55 to 60	178	2,336,587	131	1,443,120	68	753,729	27	323,690
60 to 65	232	2,338,319	180	1,917,846	88	1,072,922	35	460,411
65 to 70	28	230,793	19	190,389	15	146,967	3	42,800
70 & Up	10	48,539	7	60,345	-	-	-	-
<u>Total</u>	<u>1058</u>	<u>\$13,288,201</u>	<u>634</u>	<u>\$ 7,609,068</u>	<u>316</u>	<u>\$ 4,089,663</u>	<u>105</u>	<u>\$ 1,440,132</u>

YEARS OF SERVICE

Age	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	2607	\$ 15,878,228
25 to 30	-	-	-	-	-	-	3326	27,180,998
30 to 35	-	-	-	-	1	1,182	2396	21,468,019
35 to 40	-	-	-	-	1	41	1818	16,724,950
40 to 45	1	7,955	-	-	-	-	1854	17,316,150
45 to 50	-	-	-	-	-	-	2068	19,240,320
50 to 55	2	16,720	-	-	-	-	2131	19,239,185
55 to 60	9	148,672	1	24,026	-	-	1899	16,508,779
60 to 65	10	361,600	3	43,696	4	55,334	1504	13,084,187
65 to 70	1	5,900	2	24,776	-	-	318	1,680,796
70 & Up	1	7,996	-	-	2	15,823	175	701,319
<u>Total</u>	<u>24</u>	<u>\$ 548,843</u>	<u>6</u>	<u>\$ 92,498</u>	<u>8</u>	<u>\$ 72,380</u>	<u>20096</u>	<u>\$169,022,931</u>

PUBLIC EMPLOYEES RETIREMENT ASSOCIATION

Coordinated Members

SUMMARY OF PLAN
(Effective July 1, 1973)

1. Name

Public Employees Retirement Association.

2. Type of Plan

Self-insured, managed by a 13-member Board of Trustees, ten elected and three appointed by three employer groups.

3. Employer Included

Any county, city, 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 and certain part time employees who either elected coverage under Section 218(d) of the Social Security Act, or were automatically so covered by reason of being new employees, and who are not contributing to any other local retirement plan.

5. Allowable Service

All periods of public service during which salary deductions were made or for which payments in lieu of salary deductions were deposited, including authorized leaves of absence, sick leaves, military leaves and layoffs.

6. Considered Salary

Salary means the periodical total compensation of any public employee before deductions for deferred compensation or supplemental retirement plans, and also means wages and includes net income from fees.

7. Employee Contributions

After July 1, 1973, 4% of considered salary.

8. Employer Contributions

Amount equal to the Employee Contributions plus 1½% of considered salary.

9. Normal Retirement Annuity

After attainment of age 65 and completion of at least 10 years of allowable service.

"Average Salary" means an amount equivalent to the highest salary upon which contributions were paid for any five successive years of allowable service.

Annuity equal to:

- (a) 1% of "Average Salary" for each of the first 10 years of allowable service plus
- (b) $1\frac{1}{2}$ % of "Average Salary" for each year of service over 10 years.

10. Late Retirement Annuity

Annual Annuity determined as for Normal Retirement, considering allowable service and salary to actual retirement.

11. Early Retirement Annuity

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

Annual Annuity determined as for Normal Retirement considering allowable service and salary to actual retirement and reduced by $\frac{1}{2}$ of 1% for each month between actual retirement and attainment of age 65 if service is less than 30 years, and between actual retirement and age 62 if service is 30 or more years.

12. Special Early Retirement Annuity

After attainment of age 62 and completion of 30 years of allowable service.

Annual Annuity determined as for Normal Retirement considering allowable service and salary to actual retirement without reduction for such early retirement.

13. Disability Benefit

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

Annual Benefit payable to age 65 determined as for Normal Retirement, considering allowable service and salary to date of disablement.

If disability continues to age 65, the disability benefit shall terminate and the person shall be deemed to be on retirement status and may elect to receive the greater of an annuity determined as for Normal Retirement or the disability benefit he was receiving prior to age 65, or he may select an optional annuity.

Any disabilitant attaining age 65 after July 1, 1973 shall have his annuity computed in accordance with the Normal Retirement Annuity formula above.

14. Death Benefit

In event of death of an active member, his accumulated contributions shall be paid to his designated beneficiary with interest thereon at $3\frac{1}{2}$ % per annum compounded annually.

In the event of death of a retired annuitant, the excess (if any) of his accumulated contributions without interest, minus annuity payments, shall be paid to his designated beneficiary.

Upon the death of an active member after age 58 and completion of 20 or more years of allowable service or if the member has made application for an annuity or disability benefit and dies prior to commencement of his benefit, the surviving spouse (in lieu of any other survivor benefit) may elect to receive an annuity equal to the 50% joint and survivor annuity the member could have qualified for on the date of his death.

15. Separation Benefit

In event of termination after 10 years of allowable service, a deferred vested annuity payable at age 65, or earlier if otherwise eligible, provided former member does not withdraw his contributions. (Said 10 years of allowable service need not represent PERA coverage only but may be in conjunction with service covered by other Minnesota funds such as those for state employees and teachers and others which have this same provision; deferred annuity is paid by each fund according to the number of years of allowable service in each fund.)

Annual Annuity determined as for Normal Retirement under the provisions of the Plan at date of termination considering allowable service and salary to date of such termination, augmented by interest at 5%, compounded annually from first of the month following separation from service or from July 1, 1971, whichever is later, to the date annuity begins to accrue.

All former members shall be eligible to receive a refund of their accumulated contributions without interest for the first three years of membership and thereafter with interest at $3\frac{1}{2}\%$ compounded annually. (Such election is in lieu of any other benefits under the Plan.)

16. Increase for Retired Annuitants and Disabilitants who were receiving payments on June 30, 1973

(1) All retired annuitants drawing annuities as of June 30, 1973 shall receive an increase of 25%, payable as follows:

- (a) Those included in the Minnesota Adjustable Fixed Benefit Fund shall have their annuities increased effective July 1, 1973, by the same ratio as the actuarially computed reserves at $3\frac{1}{2}\%$ interest bears to the actuarially computed reserves at 5% interest. (This increase amounted to 9.72%.)
- (b) Said Annuitants shall receive the remainder of the 25% increase, or 15.28%, effective January 1, 1974.

(2) All disabilitants who were receiving benefits on June 30, 1973, shall receive an increase of 25% effective January 1, 1974.

17. Optional Annuities

A participant may elect to receive an equivalent actuarially reduced annuity in the form of either a 50% or 100% joint and survivor annuity.

18. Expenses

Paid by Association from retirement fund.

19. Actuarial Method

For purpose of reports to the Legislative Retirement Study Commission, costs for the Plan shall be determined on an "entry-age level normal cost" basis and 5% interest.

Public Employees Retirement AssociationPolice and Fire FundACCOUNTING BALANCE SHEET

(June 30, 1974)

ASSETS

Cash - On Deposit and in Transit		\$	66,645.22
Accounts Receivable			
Employer Contributions (See Schedule A)	\$	1,904.65	
M.S. 1971, Sec. 353.36, Subd. 8		3,961.01	
From General Fund		19,373.56	
From State General Revenue Fund			
M.S. 1971, Sec. 353.83		33.49	
Interest on Late Employer Contributions and Delinquent Payrolls		1,888.47	
Accrued Interest on Investments		304,622.86	
Accrued Dividends		47,309.26	
			<u>379,093.30</u>
Total Current Assets		\$	445,738.52
Investments			
Bonds at Amortized Cost			
U. S. Government	\$	3,563,791.17	
Corporate		15,066,795.17	
Canadian Government Insured		2,603,992.92	
Stocks, Common - at Cost		16,783,883.21	
			<u>38,018,462.47</u>
Minnesota Adjustable Fixed Benefit Fund			8,814,830.93
Deferred Yield Adjustment			324,106.69
Prepayments			14,888.89
			<u>14,888.89</u>
<u>Total Assets</u>			<u>\$47,618,027.50</u>

CURRENT LIABILITIES AND RESERVES

Liabilities			
Accounts Payable		\$	62.97
Accounts Payable to Regular Fund			38,693.70
Donations Suspense			32,100.05
Omitted Deductions Suspense			321.60
			<u>321.60</u>
Total Liabilities		\$	71,178.32
Reserves			
Members Accumulated Contributions	\$	11,376,857.86	
Benefits Reserve		27,355,160.39	
Reserve for Participation in Minnesota Adjustable Fixed Benefit Fund		8,814,830.93	
			<u>47,546,849.18</u>
<u>Total Liabilities and Reserves</u>			<u>\$47,618,027.50</u>
Members Accumulated Contributions			<u>\$11,376,857.86</u>

Public Employees Retirement Association

Police and Fire Fund

SOURCES AND USES OF FUNDS
(July 1, 1973 - June 30, 1974)

<u>Sources</u>		<u>Uses</u>	
<u>Employee Contributions</u>	\$ 2,657,650.41	<u>Refunds</u>	
<u>Employer Contributions</u>	4,306,667.53	Employee Contributions	\$ 260,900.30
<u>Police and Fire State Aid</u>	621,794.49	Employer Contributions	6,693.33
<u>Various Accounts Receivable</u>	2,725.97	Payments to Minnesota Adjustable Fixed Benefit Fund	1,931,543.48
<u>Investment Income</u>	1,666,334.71	<u>Annuities Paid</u>	
<u>Transfers from Regular Fund</u>	21,222.06	Retirement	808,136.79
<u>Minnesota Adjustable Fixed Benefit Fund</u>	301,968.52	Survivor	190,283.95
<u>Investment Sales and Redemptions</u>		Disability	19,775.75
Bonds	30,248,863.63	<u>Investment Purchases</u>	
Stocks	662,346.62	Bonds	34,209,475.24
<u>Cancelled Warrants</u>	4,997.98	Stocks	3,077,856.37
<u>Interest on Omitted Deductions, Back Payments and Refunds Repaid</u>	11,319.25	<u>Interest Paid on Refunds</u>	4,978.40
<u>Miscellaneous Income</u>	368.39	<u>Direct Expense</u>	280.33
<u>Decrease in Cash Account</u>	3,664.38		
	\$40,509,923.94		<u>\$40,509,923.94</u>
Cash Balance June 30, 1974	66,645.22		
<u>Total (Statement of Receipts and Disbursements)</u>	<u>\$40,576,569.16</u>		

Police and Fire FundACCOUNTING STATEMENT OF INCOME AND EXPENSE
(July 1, 1973 to June 30, 1974)INCOME

Employer Contributions		\$4,014,225.55
Member Contributions		2,678,793.74
Special Income from Police State Aid		621,794.49
Fridley Fire Department		67,372.31
Cloquet Fire Department		204,980.34
Transfers from Regular Fund		
Member Contributions (Active)	\$ 10,363.31	
Employer Contributions	<u>9,010.25</u>	19,373.56
Earnings Credited from the Minnesota		
Adjustable Fixed Benefit Fund		389,289.24
Investment Earnings		1,904,083.88
Loss of Sale of Stocks and Bonds		(13,049.26)
Other Income		<u>14,022.09</u>
Total Income		\$9,900,885.94

EXPENSE

Retirement Annuities Paid from the Minnesota			
Adjustable Fixed Benefit Fund		\$805,114.29	
Survivor Benefits Paid			
Old Law Survivors	\$ 26,642.98		
With Children	99,210.49		
Without Children	<u>58,641.33</u>	184,494.80	
Disability Benefits Paid			18,836.10
Disability Survivors Paid			
With Children	\$ 1,755.00		
Without Children	<u>1,755.00</u>	3,510.00	
Refunds to Active Members			
Due to Withdrawal	\$238,029.46		
Due to Death	<u>4,627.41</u>	242,656.87	
Refunds to Deferred Members due to Withdrawal			3,049.23
Transfers to Regular Fund			
Member Contributions	\$ 2,381.78		
Employer Contributions	<u>507.50</u>	2,889.28	
Adjustment for Prior Year Entries			12,218.72
Interest Paid on Refunds			4,978.40
General Administrative Expense		<u>35,466.85</u>	<u>1,313,214.54</u>
Excess of Income over Expense			
<u>for the Period Ending June 30, 1974</u>			<u>\$8,587,671.40</u>

Public Employees Retirement AssociationPolice and Fire FundRECONCILIATION OF ASSET BALANCES

(June 30, 1974)

Asset Balance, July 1, 1973			\$38,959,177.78
Add			
Employer Contributions		\$4,014,225.55	
Employee Contributions		2,678,793.74	
Special Incomes			
Police State Aid	\$621,794.49		
Fridley Fire Department	67,372.31		
Cloquet Fire Department	<u>204,980.34</u>	894,147.14	
Employee and Employer Contributions Transferred from Regular Fund		19,373.56	
Minnesota Adjustable Fixed Benefit Fund Income		389,289.24	
Investment Earnings		1,904,083.88	
Loss on Sales of Stocks and Bonds		(13,049.26)	
Other Income		<u>14,022.09</u>	
Total Additions			<u>9,900,885.94</u>
			\$48,860,063.72
Deduct			
Benefits Paid			
Retirement	\$805,114.29		
Survivor	188,004.80		
Disability	<u>18,836.10</u>	\$1,011,955.19	
Refunds		245,706.10	
Transfers to Regular Fund		2,889.28	
Adjustment for Prior Years		12,218.72	
Interest Paid on Refunds		4,978.40	
General Administrative Expense		<u>35,466.85</u>	
Total Deductions			<u>1,313,214.54</u>
Current Liabilities and Accounts Payable			\$47,546,849.18
			<u>71,178.32</u>
<u>Asset Balance, June 30, 1974</u>			<u>\$47,618,027.50</u>

Public Employees Retirement Association

Police and Fire Fund

ACTUARIAL ASSUMPTIONS

The assumptions can be summarized as follows:

Interest:	5%
Mortality	1965 Group Annuity
Retirement Age:	62
Disability:	See Following Table
Turnover:	See Following Table
Salary Scale:	3½% per year

A detailed statement of the mortality rates, disability rates, turnover factors, and salary scale is set out in the following Table 1 through 4.

Public Employees Retirement Association

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	.517	45	3.002
21	.537	46	3.409
22	.558	47	3.856
23	.581	48	4.344
24	.607	49	4.869
25	.636	50	5.429
26	.667	51	6.027
27	.703	52	6.656
28	.742	53	7.321
29	.784	54	8.019
30	.831	55	8.751
31	.884	56	9.514
32	.941	57	10.312
33	1.005	58	11.154
34	1.074	59	12.057
35	1.152	60	13.043
36	1.237	61	14.143
37	1.331	62	15.390
38	1.435		
39	1.550		
40	1.677		
41	1.838		
42	2.054		
43	2.322		
44	2.639		

Public Employees' Retirement Association

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		
38	4.75		
39	5.25		
40	5.90		
41	6.60		
42	7.40		
43	8.30		
44	9.25		

Public Employees' Retirement Association

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

Police and Fire Fund

All Employees

EARNINGS PROGRESSION

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	.2358	45	.5572
21	.2440	46	.5767
22	.2526	47	.5969
23	.2614	48	.6178
24	.2704	49	.6394
25	.2800	50	.6618
26	.2898	51	.6849
27	.3000	52	.7089
28	.3015	53	.7337
29	.3213	54	.7594
30	.3326	55	.7860
31	.3442	56	.8135
32	.3563	57	.8420
33	.3687	58	.8714
34	.3817	59	.9019
35	.3950	60	.9335
36	.4088	61	.9662
37	.4231	62	1.0000
38	.4380		
39	.4533		
40	.4692		
41	.4856		
42	.5026		
43	.5202		
44	.5384		

Public Employees Retirement Association

FINANCIAL BALANCE SHEET
(Year Commencing July 1, 1974)

Police and Fire Fund

RESERVES

Entry Age Normal Reserves			
Retirement	\$ 70,852,143		
Disability	23,965,693		
Survivors	9,549,861		
Vested			
Retirement	8,392,765		
Refund	<u>2,622,742</u>		
	\$115,383,204		
Less Value of Benefits to be Earned in the Future	<u>67,980,093</u>	\$47,403,111	
Vested Members		356,934	
Retired Members			
Retirements Payable from Minnesota Adjustable Fixed Benefit Fund	\$ 8,814,831		
Disability	223,907		
Survivors	2,339,409		
Reserve for Future Old Law Survivors	537,962		
Less Receivable from Minnesota Adjustable Fixed Benefit Fund	<u>-122,778</u>	<u>11,793,331</u>	\$59,553,376
Unfunded Obligation			<u>12,006,527</u>
Funded Obligation			<u>\$47,546,849</u>

Public Employees Retirement Association

ACTUARIAL REQUIREMENTS
(July 1, 1974)

Police and Fire Fund

AMORTIZATION RATE REQUIREMENT

Present Value of Benefits (For Both Past and Future Service)		\$127,533,469
Obligation for Service Rendered to Date	\$ 59,553,376	
Net Assets	47,546,849	
Accrued Unfunded Obligation	12,006,527	
Funding Ratio		80%
Amortization (23-Year) Requirement	890,125	
Covered Payroll	35,270,010	
Amortization (23-Year) Rate Requirement		<u>2.52%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned in the Future	\$ 67,980,093	
Present Value of Future Payroll	430,307,600	
Normal Cost Rate Requirement	15.80%	
Employee Contribution Rate	<u>8.00</u>	
Employer Normal Cost Rate Requirement		<u>7.80%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		12.00%
Amortization (23-Year) Rate Requirement	2.52%	
Normal Cost Rate Requirement	7.80	
Allowance for Expenses	<u>0.10</u>	
Total Requirement		10.42%
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		<u>1.58%</u>

Public Employees Retirement Association

ACTUARIAL REQUIREMENTS
(July 1, 1974)

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	\$12,006,527	\$12,006,527	\$12,006,527	\$12,006,527
Amortization Requirement	1,554,900	963,435	781,042	699,718
Covered Payroll	35,270,010	35,270,010	35,270,010	35,270,010
Amortization Rate Requirement	<u>4.41%</u>	<u>2.73%</u>	<u>2.21%</u>	<u>1.98%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law	<u>12.00%</u>	<u>12.00%</u>	<u>12.00%</u>	<u>12.00%</u>
Amortization Rate Requirement	4.41%	2.73%	2.21%	1.98%
Normal Cost Rate Requirement	7.80	7.80	7.80	7.80
Allowance for Expenses	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>
Total Requirement	<u>12.31%</u>	<u>10.63%</u>	<u>10.11%</u>	<u>9.88%</u>
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	<u>(0.31%)</u>	<u>1.37%</u>	<u>1.89%</u>	<u>2.12%</u>

Public Employees Retirement AssociationRECONCILIATION OF CHANGE IN ACTUARIAL RESERVESPolice and Fire FundALLOCATION OF CHANGE IN ACTUARIAL RESERVES

	<u>Increase</u>	<u>Decrease</u>	
Increase in Assets			\$ 8,587,671
Amortization Payment		\$ 286,594	
Excess Interest (1.09% x Average Invested Assets)		471,458	
Estimated Excess in Rate		229,463	
Contribution Requirement Applied to Larger Payroll		391,127	
Other Income		744,572	
Increases in Compensation	<u>\$1,649,424</u>		
Totals	<u>\$1,649,424</u>	<u>\$2,123,214</u>	
Expected Decrease (Increase) in Unfunded			<u>473,790</u>
Net Change in Reserves			8,113,881
Experience Variation (Gain) Loss			(274,214)
Total			<u>\$ 7,839,667</u>
1974 Actuarial Reserve			\$59,553,376
1973 Actuarial Reserve			<u>51,713,709</u>
Increase (Decrease)			<u>\$ 7,839,667</u>

Police and Fire Fund

SUPPORTING EXHIBITS

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Public Employees Retirement Association

Police and Fire Fund

RECONCILIATION OF ACTIVE MEMBERS

As of July 1, 1973	3,105
New Entrants	515
Reinstated	<u>86</u>
<u>Total</u>	<u>3,706</u>
Separations:	
(a) With Refund of Contributions	
(i) Death	8
(ii) Withdrawal	237
(b) With Deferred Annuity	4
(c) With Disability Annuity	4
(d) With Normal Retirement Annuity	47
(e) With Survivor Annuity	<u>13</u>
<u>Total</u>	<u>313</u>
<u>Active as of July 1, 1974</u>	<u>3,393</u>

Public Employees Retirement AssociationRECONCILIATION OF ANNUITANTSPolice and Fire Fund

<u>Normal Retirement Annuitants</u>	
As of July 1, 1973	251
Additions During Year	47
Deletions During Year	<u>-8</u>
<u>Total as of July 1, 1974</u>	<u>290</u>
Annual Annuity - July 1, 1973	\$ 568,234
- July 1, 1974	\$ 906,494
<u>Disability Annuitants</u>	
As of July 1, 1973	6
Additions During Year	4
Deletions During Year	<u>-1</u>
<u>Total as of July 1, 1974</u>	<u>9</u>
Annual Annuity - July 1, 1973	\$ 15,960
- July 1, 1974	\$ 31,207
<u>Survivor Annuitants</u>	
(a) Spouse Only as of July 1, 1973	61
Optional Survivors as of July 1, 1973	4
Additional Spouse Only During Year	9
Additional Optional Survivors During Year	-
Deletions During Year	<u>-3</u>
<u>Total as of July 1, 1974</u>	<u>71</u>
Annual Annuity - July 1, 1973	\$ 57,994
- July 1, 1974	\$ 80,431
(b) Survivors with Children	
As of July 1, 1973	52
Additions During Year	7
Deletions During Year	<u>-1</u>
<u>Total as of July 1, 1974</u>	<u>58</u>
Annual Annuity - July 1, 1973	\$ 44,651
- July 1, 1974	\$ 103,337
(c) Children	
As of July 1, 1973	84
Additions During Year	8
Deletions During Year	<u>-6</u>
<u>Total as of July 1, 1974</u>	<u>86</u>
Annual Annuity - July 1, 1973	\$ 49,895
- July 1, 1974	\$ 69,619
<u>Deferred Annuitants</u>	
As of July 1, 1973	13
Additions During Year	4
Deletions During Year	<u>-</u>
<u>Total as of July 1, 1974</u>	<u>17</u>

Public Employees Retirement Association

Police and Fire Fund

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

Payable From Adjustable Fixed Benefit Fund

<u>Age</u>	<u>Male</u>		<u>Female</u>	
	<u>Number</u>	<u>Monthly Annuity</u>	<u>Number</u>	<u>Monthly Annuity</u>
66	3	\$ 1,138.42	-	\$ -
67	2	768.65	-	-
68	5	1,545.84	-	-
69	10	3,228.48	-	-
70	4	1,023.18	1	169.20
71	7	1,482.68	-	-
72	9	2,508.43	-	-
73	10	3,241.85	1	222.27
74	9	2,314.00	-	-
75	9	2,434.92	1	60.47
76	4	1,103.41	1	230.94
77	5	1,373.76	-	-
78	6	1,682.73	-	-
79	2	423.06	-	-
80	3	604.23	-	-
81	2	471.46	-	-
82	1	271.02	-	-
83	1	148.31	-	-
85	1	213.12	-	-
86	1	47.06	-	-
<u>Totals</u>	<u>94</u>	<u>\$26,024.61</u>	<u>4</u>	<u>\$682.88</u>

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

<u>Age</u>	<u>Male</u>	
	<u>Number</u>	<u>Monthly Annuity</u>
74	1	\$147.90

Public Employees Retirement Association

Police and Fire Fund

Retired Under Law in Force July 1, 1957 and Subsequent

Payable From Adjustable Fixed Benefit Fund

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
55	2	\$ 859.83	-	\$ -
56	4	1,934.45	-	-
57	6	1,693.38	-	-
58	11	4,371.51	-	-
59	7	1,467.04	-	-
60	7	3,617.17	1	128.10
61	10	2,437.22	-	-
62	11	3,661.91	-	-
63	6	1,615.24	-	-
64	12	3,553.28	1	178.57
65	15	3,849.42	-	-
66	13	3,754.67	1	360.09
67	16	3,944.96	-	-
68	13	3,371.59	1	211.16
69	6	873.34	1	88.21
70	9	1,674.17	1	34.28
71	6	1,355.82	-	-
72	8	1,144.59	-	-
73	4	503.60	-	-
74	4	278.17	-	-
75	2	78.61	-	-
76	1	274.16	-	-
77	4	591.78	-	-
78	2	264.65	-	-
79	2	177.57	-	-
80	2	187.58	-	-
81	1	94.61	-	-
88	1	55.02	-	-
<u>Totals</u>	<u>185</u>	<u>\$47,685.34</u>	<u>6</u>	<u>\$1,000.41</u>

Survivor Annuities

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
58	-	\$ -	1	\$ 230.46
65	-	-	1	243.19
69	1	150.06	-	-
78	-	-	1	36.04
<u>Totals</u>	<u>1</u>	<u>\$ 150.06</u>	<u>3</u>	<u>\$ 509.69</u>

Public Employees Retirement Association

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>
23	1	\$ 438.65	61	5	\$ 614.83
27	1	213.13	62	2	206.25
36	3	231.39	63	3	318.58
39	1	81.25	64	4	338.61
41	5	710.78	65	7	774.04
42	2	229.58	66	7	886.20
43	1	81.25	67	2	162.50
44	1	81.25	68	1	81.25
46	2	357.40	69	3	324.74
47	3	248.61	70	4	388.88
48	3	583.08	71	2	96.79
49	2	437.30	72	1	125.00
50	2	162.50	74	3	303.18
51	5	919.29	75	6	552.94
54	4	420.65	76	2	153.00
55	1	81.25	77	1	125.00
56	10	1,509.95	78	4	423.99
57	3	452.32	79	2	187.56
58	6	619.38	83	2	123.93
59	1	25.34	84	1	81.25
60	5	406.25	86	1	95.18
			<u>Totals</u>	<u>125</u>	<u>\$14,654.30</u>

Children

<u>Number</u>	<u>Total Monthly Annuity</u>
86	\$5,801.55

Disability Retirement Annuities

<u>Age</u>	<u>Number</u>	<u>Monthly Annuity</u>
30	1	\$ 309.45
38	1	300.60
42	1	200.51
44	1	193.68
47	1	202.88
48	1	350.01
52	1	199.98
54	2	843.45
<u>Totals</u>	<u>9</u>	<u>\$2,600.56</u>

Public Employees Retirement Association

Police and Fire Fund

CONSIDERED EARNINGS

Active Female Employees

(Age and Service as of July 1, 1974)

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	4	\$ 28,181	-	\$ -	1	\$ 5,820	-	\$ -
25 to 30	4	25,733	4	26,399	7	53,723	1	9,600
30 to 35	1	6,782	-	-	7	50,678	3	24,724
35 to 40	1	6,063	2	12,344	5	38,275	-	-
40 to 45	4	17,185	1	5,812	5	45,505	5	50,500
45 to 50	3	17,536	1	13,414	2	15,773	3	31,306
50 to 55	1	14,239	1	5,399	4	40,085	7	43,859
55 to 60	-	-	-	-	-	-	5	48,636
60 to 65	-	-	-	-	-	-	3	27,016
65 to 70	-	-	-	-	-	-	-	-
70 & Up	-	-	-	-	-	-	-	-
<u>Total</u>	<u>18</u>	<u>\$115,719</u>	<u>9</u>	<u>\$ 63,368</u>	<u>31</u>	<u>\$249,859</u>	<u>27</u>	<u>\$235,641</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	-	-	-	-	-	-	-	-
30 to 35	-	-	-	-	-	-	-	-
35 to 40	-	-	-	-	-	-	-	-
40 to 45	1	7,745	1	10,944	-	-	-	-
45 to 50	2	11,083	-	-	-	-	-	-
50 to 55	2	16,985	-	-	-	-	-	-
55 to 60	2	26,497	-	-	-	-	-	-
60 to 65	-	-	-	-	1	6,127	-	-
65 to 70	-	-	-	-	-	-	-	-
70 & Up	-	-	-	-	-	-	-	-
<u>Total</u>	<u>7</u>	<u>\$ 62,310</u>	<u>1</u>	<u>\$ 10,944</u>	<u>1</u>	<u>\$ 6,127</u>	<u>-</u>	<u>\$ -</u>

YEARS OF SERVICE

Age	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	5	\$ 34,001
25 to 30	-	-	-	-	-	-	16	115,455
30 to 35	-	-	-	-	-	-	11	82,184
35 to 40	-	-	-	-	-	-	8	56,682
40 to 45	-	-	-	-	-	-	17	137,691
45 to 50	-	-	-	-	-	-	11	89,112
50 to 55	-	-	-	-	-	-	15	120,567
55 to 60	-	-	-	-	-	-	7	75,133
60 to 65	-	-	-	-	-	-	4	33,143
65 to 70	-	-	-	-	-	-	-	-
70 & Up	-	-	-	-	-	-	-	-
<u>Total</u>	<u>-</u>	<u>\$ -</u>	<u>-</u>	<u>\$ -</u>	<u>-</u>	<u>\$ -</u>	<u>94</u>	<u>\$743,968</u>

Public Employees Retirement Association

Police and Fire Fund

CONSIDERED EARNINGS

Active Male Employees

(Age and Service as of July 1, 1974)

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	153	\$1,223,955	92	\$ 785,197	81	\$ 749,452	1	\$ 9,565
25 to 30	146	1,271,748	131	1,188,913	340	3,481,172	123	1,447,214
30 to 35	77	596,429	50	431,948	167	1,787,097	283	2,753,953
35 to 40	33	247,264	26	252,081	117	1,219,471	181	2,178,055
40 to 45	15	123,711	18	146,956	65	658,575	94	1,059,475
45 to 50	20	156,244	11	93,905	44	388,567	56	777,535
50 to 55	6	39,893	7	68,440	26	240,460	60	621,743
55 to 60	5	33,947	3	21,509	18	179,977	44	377,525
60 to 65	3	16,343	2	11,718	6	36,172	23	213,504
65 to 70	-	-	1	2,626	2	15,119	7	44,977
70 & Up	2	15,404	-	-	1	6,623	-	-
<u>Total</u>	<u>460</u>	<u>\$3,724,938</u>	<u>341</u>	<u>\$3,003,293</u>	<u>867</u>	<u>\$8,762,685</u>	<u>872</u>	<u>\$ 9,483,546</u>

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	1	14,969	-	-	-	-	-	-
30 to 35	23	301,004	-	-	-	-	-	-
35 to 40	82	1,055,243	17	225,458	-	-	-	-
40 to 45	85	1,112,590	46	608,764	9	145,089	-	-
45 to 50	59	740,541	68	953,723	31	409,070	7	93,354
50 to 55	51	582,233	46	533,279	35	427,547	10	164,120
55 to 60	32	303,206	35	396,397	25	300,514	11	148,095
60 to 65	20	226,910	17	192,941	18	212,457	6	73,650
65 to 70	3	28,122	1	15,790	1	11,197	-	-
70 & Up	5	46,823	-	-	-	-	-	-
<u>Total</u>	<u>361</u>	<u>\$4,411,641</u>	<u>230</u>	<u>\$2,926,352</u>	<u>119</u>	<u>\$1,505,874</u>	<u>34</u>	<u>\$ 479,219</u>

Age	YEARS OF SERVICE							
	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	327	\$ 2,768,169
25 to 30	-	-	-	-	-	-	741	7,404,016
30 to 35	-	-	-	-	-	-	600	5,870,431
35 to 40	-	-	-	-	-	-	456	5,177,572
40 to 45	-	-	-	-	-	-	332	3,855,160
45 to 50	1	14,133	-	-	-	-	297	3,627,072
50 to 55	3	44,322	1	18,429	-	-	245	2,740,466
55 to 60	-	-	-	-	2	24,539	175	1,785,709
60 to 65	3	40,587	2	20,991	-	-	100	1,045,273
65 to 70	1	22,230	2	43,263	-	-	18	183,324
70 & Up	-	-	-	-	-	-	8	68,850
<u>Total</u>	<u>8</u>	<u>\$ 121,272</u>	<u>5</u>	<u>\$ 82,683</u>	<u>2</u>	<u>\$ 24,539</u>	<u>3299</u>	<u>\$34,526,042</u>

PUBLIC EMPLOYEES POLICE AND FIRE FUND

SUMMARY OF PLAN
(Effective July 1, 1973)

1. Name

Public Employees Police and Fire Fund.

2. Type of Plan

Self-insured, managed by a 13-member Board of Trustees, ten elected and three appointed by three employer groups.

3. Employer Included

Any county, city, borough, town within the state.

4. Employees Included

All full time, and certain part time, police officers and fire fighters, who are not contributing to any other local retirement plan.

5. Allowable Service

All periods of public service during which salary deductions were made or for which payments in lieu of salary deductions were deposited, including authorized leaves of absence, sick leaves, military leaves and layoffs.

6. Considered Salary

Salary means the periodical total compensation of any public employee before deductions for deferred compensation or supplemental retirement plans, and also means wages and includes net income from fees.

7. Employee Contributions

After July 1, 1973, 8% of considered salary.

8. Employer Contributions

An amount equal to 12% of considered salary.

9. Normal Retirement Annuity

After attainment of age 55 and completion of at least 10 years of allowable service.

"Average salary" means an amount equivalent to the highest salary upon which contributions were paid for any five successive years of allowable service.

Annuity equal to:

- (a) $2\frac{1}{2}\%$ of "Average Salary" for each of the first 20 years of allowable service, plus
- (b) 2% of "Average Salary" for each year of service over 20 years.

10. Late Retirement Annuity

Annual Annuity determined as for Normal Retirement, considering allowable service and salary to actual retirement.

11. Disability Benefit

In event of disability, which renders member unable to perform the duties of a police officer or fire fighter, after not less than five years of allowable service.

Annual Benefit payable to age 55 determined as for Normal Retirement, considering allowable service and salary to date of disablement, except if service is under 10 years, the benefit shall be the same as though the member had 10 years service.

In the event of disability incurred in line of duty regardless of years of allowable service, the benefit shall be equal to 50% of "Average Salary" plus 2% of such salary for each year of allowable service in excess of 20 years.

If disability continues to age 55, the disability benefit shall terminate and the person shall be deemed to be on retirement status with an annuity in the same amount that he was previously receiving, or he may select an optional annuity.

12. Survivor or Death Benefit

In event of death of an active member, or in event of death of a disabilitant prior to age 55.

Annual Survivor Benefit to dependent spouse, of 30% of average salary during the last six months of allowable service, plus for each dependent child, 10% of such average salary. Maximum family benefit equal to \$450 per month. Minimum family benefit equal to 30% of such average salary, subject to the maximum limitation.

In the event of death of a retired annuitant, the excess (if any) of his accumulated contributions without interest, minus annuity payments, shall be paid to his designated beneficiary.

In case of death of a member who has no eligible surviving dependents, his accumulated contributions shall be paid to his designated beneficiary with interest thereon at $3\frac{1}{2}\%$ per annum compounded annually.

13. Separation Benefit

In event of termination after 10 years of allowable service, a deferred vested annuity payable at age 55, provided former member does not withdraw his contributions. (Said 10 years of allowable service need not represent PERA coverage only but may be in conjunction with service covered by other Minnesota funds such as those for state employees and teachers and others which have this same provision; deferred annuity is paid by each fund according to the number of years of allowable service in each fund.)

Annual Annuity determined as for Normal Retirement under the provisions of the Plan at date of termination considering allowable service and salary to date of such termination, augmented by interest at 5%, compounded annually from first of the month following separation from service or from July 1, 1971, whichever is later, to the date annuity begins to accrue.

All former members shall be eligible to receive a refund of their accumulated contributions without interest for the first three years of membership and thereafter with interest at $3\frac{1}{2}\%$ compounded annually. (Such election is in lieu of any other benefits under the Plan.)

14. Increase for Retired Annuitants, Survivors and Disabilitants who were receiving payments on June 30, 1973

(1) All retired annuitants drawing annuities as of June 30, 1973 shall receive an increase of 25%, payable as follows:

(a) Those included in the Minnesota Adjustable Fixed Benefit Fund shall have their annuities increased effective July 1, 1973, by the same ratio as the actuarially computed reserves at $3\frac{1}{2}\%$ interest bears to the actuarially computed reserves at 5% interest. (This increase amounted to 9.72%.)

(b) Said annuitants shall receive the remainder of the 25% increase, or 15.28%, effective January 1, 1974.

(2) All survivors and disabilitants who were receiving benefits on June 30, 1973 shall receive an increase of 25% effective January 1, 1974.

15. Optional Annuities

A participant may elect to receive an equivalent actuarially reduced annuity in the form of either a 50% or 100% joint and survivor annuity.

16. Expenses

Paid by Association from retirement fund.

17. Actuarial Method

For purpose of reports to the Legislative Retirement Study Commission, costs for the Plan shall be determined on an "entry-age Level normal cost" basis and 5% interest.

PERA VALUATION AS OF JUNE 30, 1974

(Police and Fire Fund)

The purpose of this memorandum is to discuss the valuation report of the PERA Police and Fire Fund, dated November 4, 1974, which was submitted to the Commission in accordance with Chapter 249 of Minnesota Laws 1967 and Chapter 289 of Minnesota Laws 1969. The valuation was made using the entry age normal cost method and assuming 5% interest. The 1974 and 1973 valuation reports were completed by Arthur Stedry Hansen, Consulting Actuaries.

This memorandum contains the following:

1. Statistical and Valuation Date
2. Discussion of Valuation Results
3. Conclusion

1. Statistical and Valuation Data

Results of the valuation report are shown below. Figures are rounded where necessary for simplicity of presentation.

	<u>As of</u> <u>June 30, 1973</u>	<u>As of</u> <u>June 30, 1974</u>
(1) <u>Membership</u>		
Active Members	3, 105	3, 393
Retired Members	251	290
Disabled Members	6	9
Survivors of Deceased Members	201	215
Deferred Annuitants	13	17
(2) <u>Payroll and Annuities Payable</u>		
Covered Payroll	\$ 30, 192, 486	\$ 35, 270, 010
Annuities Payable (annual)	746, 734	1, 191, 088
(3) <u>Valuation Balance Sheet</u>		
Accrued Liability	\$ 51.7 million	\$ 59.5 million
Assets	<u>38.9 million</u>	<u>47.5 million</u>
Unfunded Accrued Liability (Deficit)	\$ 12.8 million	\$ 12.0 million
Funding Ratio (Assets/ Accrued Liability)	75.3%	79.8%

	<u>As of</u> <u>June 30, 1973</u>	<u>As of</u> <u>June 30, 1974</u>
(4) <u>Normal Costs and Funding Costs</u>		
Normal Cost	16.07%	15.80%
Expenses	<u>0.11</u>	<u>0.10</u>
Normal Cost Plus Expenses	16.18%	15.90%
Normal Cost Plus Expenses	16.18%	15.90%
Interest on Deficit	<u>2.11</u>	<u>1.70</u>
Minimum Contribution	18.29%	17.60%
Normal Cost Plus Expenses	16.18%	15.90%
Amortization by 1997	<u>3.06</u>	<u>2.52</u>
Required Contribution	19.24%	18.42%
(5) <u>Statutory Contributions</u>		
Employee	8.0%	8.0%
Employer Regular	12.0	12.0
Employer Additional	<u>0.0</u>	<u>0.0</u>
Total	20.0%	20.0%

2. Discussion of Valuation Results

The change in the normal cost was minor and within the limits of reasonable fluctuations. Since the 1973 report indicated more than adequate funding, the amortization requirement in 1974 is less than in 1973, particularly when related to a larger payroll.

The deficit decreased from \$12,754,531 to \$12,006,527 which is a decrease of \$748,004. The PERA Actuary gives the following analysis of this change:

Decreases:

Excess Interest	\$ 471,458	
Amortization Contribution	907,184	
Mortality Gain - Retirees	744,572	
Other Actuarial Gains	<u>274,214</u>	
Total Decreases		\$ 2,397,428

Increase:

Salary Scale Loss	<u>\$ 1,649,424</u>	
Total Increase		<u>1,649,424</u>

Net Decrease		\$ 748,004
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3. Conclusion

The Report filed by PERA relative to the Police and Fire Fund conforms with the requirements of the various statutes.

The statutory contribution of 20% covers the required support. However, the sizeable increase in the deficit in 1973 plus the elimination of the Employer Additional contribution means that the financing of the deficit is now shared by Employees and Employer.

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PERA VALUATION AS OF JUNE 30, 1974

(General Fund)

The purpose of this memorandum is to discuss the Valuation Report of the Public Employees' Retirement Association, dated November 4, 1974, which was submitted to the Commission in accordance with Chapter 249 of Minnesota Laws 1967 and Chapter 289 of Minnesota Laws 1969. The valuation was made using the entry age normal cost method and assuming 5% interest. The 1974 and 1973 valuation reports were completed by Arthur Stedry Hansen, Consulting Actuaries.

This memorandum contains the following:

1. Statistical and Valuation Data
2. Discussion of Valuation Results
3. Conclusion

Separate discussions will be given of the Basic Group and the Coordinated Group as required by Section 355.301.

A. BASIC GROUP

1. Statistical and Valuation Data

Results of the valuation reports as of June 30, 1973 and June 30, 1974 are shown for comparative purposes. Figures are rounded where necessary for simplicity of presentation.

	<u>As of</u> <u>June 30, 1973</u>	<u>As of</u> <u>June 30, 1974</u>
(1) <u>Membership</u>		
Active Members	23,881	22,484
Retired Members	5,935	6,273
Disabled Members	232	251
Survivors of Deceased Members	3,597	3,656
Deferred Annuitants	752	782
(2) <u>Payroll and Annuities Payable</u>	(Millions of Dollars)	
Covered Payroll	\$ 184.1	\$ 184.8
Annuities Payable (annual)	13.3	18.1

	<u>As of</u> <u>June 30, 1973</u>	<u>As of</u> <u>June 30, 1974</u>
(3) <u>Valuation Balance Sheet</u>	(Millions of Dollars)	
Accrued Liability	\$ 541.1	\$ 582.9
Assets	<u>286.8</u>	<u>318.8</u>
Unfunded Accrued Liability (Deficit)	\$ 254.3	\$ 264.1
Funding Ratio (Assets/Accrued Liability)	53.0%	54.7%
(4) <u>Normal Cost and Funding Costs</u>		
Normal Cost	12.11%	13.68%
Expenses	<u>.17</u>	<u>.16</u>
Normal Cost Plus Expenses	12.28%	13.84%
Normal Cost Plus Expenses	12.28%	13.84%
Interest on Deficit	<u>6.91</u>	<u>7.14</u>
Minimum Contribution	19.19%	20.98%
Normal Cost Plus Expenses	12.28%	13.84%
Amortization by 1997	<u>10.01</u>	<u>10.59</u>
Required Contribution	22.29%	24.43%
(5) <u>Statutory Contributions</u>		
Employee	8.0%	8.0%
Employer Regular	8.0	8.0
Employer Additional	<u>2.5</u>	<u>2.5</u>
Total Contributions	18.5%	18.5%

2. Discussion of Valuation Results

The normal cost increased from 12.11% to 13.68% as a result of an amendment which improved a death benefit and also made an improvement in survivors' benefits which affected active participants at older ages. Since the Basic Group contains numerous participants at such ages, this change has a marked effect on costs.

It should be noted that the statutory regular contributions which total 16% exceed the normal cost plus expenses of 13.84%. On the other hand, the employer additional contribution of 2.5% falls far short of the required amortization contribution of 10.59%. This deficiency is not covered by the excess in the regular contributions, and the situation is worse than indicated by the figures themselves since the 2.5% will be applied to a declining payroll. This point will be discussed further at a later point.

The unfunded accrued liability increased by \$9,708,643. The PERA Actuary shows the following items to trace the change in the deficit.

Increases:

Salary Scale Loss	\$ 18,118,789
Deficiency in Contribution	<u>1,262,057</u>

Total Increases

\$ 19,380,846

Decreases:

Excess Interest	\$ 3,270,206
Mortality Gain - Retirees	5,961,467
Other Actuarial Gains	<u>440,530</u>

Total Decreases

9,672,203

Net Increase

\$ 9,708,643

B. COORDINATED GROUP

1. Statistical and Valuation Data

	<u>As of</u> <u>June 30, 1973</u>	<u>As of</u> <u>June 30, 1974</u>
(1) <u>Membership</u>		
Active Members	49,100	54,379
Retired Members	901	1,064
Disabled Members	68	71
Survivors of Deceased Members	2	6
Deferred Annuitants	49	60
(2) <u>Payroll and Annuities Payable</u>		(Millions of Dollars)
Covered Payroll	\$ 275.1	\$ 322.1
Annuities Payable (annual)	0.9	1.5
(3) <u>Valuation Balance Sheet</u>		(Millions of Dollars)
Accrued Liability	\$ 69.9	\$ 101.8
Assets	62.5	87.7
Unfunded Accrued Liability (Deficit)	\$ 7.4	\$ 14.1
Funding Ratio (Assets/Accrued Liability)	89.4%	86.1%
(4) <u>Normal Cost and Funding Costs</u>		
Normal Cost	6.31%	6.73%
Expenses	0.17	.16
Normal Cost Plus Expenses	6.48%	6.89%
Normal Cost Plus Expenses	6.48%	6.89%
Interest on Deficit	0.14	0.21
Minimum Contribution	6.62%	7.10%
Normal Cost Plus Expenses	6.48%	6.89%
Amortization by 1997	0.20	0.32
Required Contribution	6.68%	7.21%
(5) <u>Statutory Contributions</u>		
Employee	4.0%	4.0%
Employer Regular	4.0	4.0
Employer Additional	1.5	1.5
Total Contributions	9.5%	9.5%

2. Discussion of Valuation Results

The normal cost for the Coordinated Group increased for the reason mentioned in discussing the Basic Group, but since the Coordinated Group contains fewer older employees, the increase is much smaller (from 6.31% to 6.73%).

The unfunded accrued liability for the Coordinated Group increased by \$6,678,808 during the year. The PERA Actuary shows the following breakdown:

Increases:

Change in Benefits	\$ 4,320,875	
Salary Scale Loss	10,715,406	
Other Actuarial Losses	<u>1,356,043</u>	
Total Increases		\$ 16,392,324

Decreases:

Amortization Contribution	\$ 8,700,929	
Excess Interest	810,833	
Mortality Gain - Retirees	<u>201,754</u>	
Total Decreases		<u>9,713,516</u>

Net Increase \$ 6,678,808

C. CONSOLIDATED REPORT

Since the Basic Report shows a deficiency in financing and the Coordinated Report shows a surplus, the question arises as to whether the System as a whole is in balance. This question can be answered best by comparing the total requirement in dollars with the support in dollars.

	<u>Basic</u>	<u>Coordinated</u>	<u>Total</u>
Required Support			
Normal Cost plus Expense	\$ 25,582,670	\$ 22,193,021	\$ 47,775,691
Amortization	<u>19,576,128</u>	<u>1,046,836</u>	<u>20,622,964</u>
Total	\$ 45,158,798	\$ 23,239,857	\$ 68,398,655
Statutory Contributions			
Employee	\$ 14,787,670	\$ 12,884,192	\$ 27,671,862
Employer Regular	<u>14,787,670</u>	<u>12,884,192</u>	<u>27,671,862</u>
	\$ 29,575,340	\$ 25,768,384	\$ 55,343,724
Employer Additional	<u>4,621,147</u>	<u>4,831,572</u>	<u>9,452,719</u>
Total	\$ 34,196,487	\$ 30,599,956	\$ 64,796,443

The total regular contribution in each case exceeds the normal cost by a good margin. On the other hand, the Employer Additional contribution for the Basic Group is only one-fourth of the amortization requirement for the group.

A previous Commission adopted the principle that each group should stand on its own feet so far as normal cost and regular contributions are concerned but that any portion of the Employer Additional Coordinated contribution not needed for Coordinated amortization could be applied toward Basic amortization. In accordance with this principle, the following analysis has been prepared:

Basic Required Support		\$ 45,158,798
Basic Statutory Contribution		<u>34,196,487</u>
Gross Deficiency		\$ 10,962,311
Employer Additional		
Coordinated Contribution	\$ 4,831,572	
Coordinated Amortization		
Requirement	<u>1,046,836</u>	
Excess		<u>3,784,736</u>
Net Deficiency		\$ 7,177,575

3. Conclusion

The Report filed by PERA conforms with the statutes. Under the present laws and standards, the financing for the Coordinated Group appears to be more than adequate but that for the Basic Group is not sufficient to retire the Basic deficit by 1997.

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