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Public Employees Retirement Assn.

Public Employees Retirement Association

SUPPLEMENTAL ACTUARIAL  
VALUATION REPORT AND SURVEY

November 9, 1973

A. S. Hansen, inc.

P/R 88.11

Public Employees Retirement Association

Supplemental Actuarial Valuation Report and Survey

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## Valuation Report

Public Employees Retirement Association

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Public Employees Retirement Association

SUMMARY SHEET  
(Census as of June 30, 1973)

	<u>General</u>	<u>Police and Fire</u>
<u>MEMBERSHIP</u>		
Retired Members and Beneficiaries	10,735	458
Annual Benefit Payments	\$ 14,179,695	\$ 736,734
Active Members	72,981	3,105
Participating Payroll	<u>\$459,146,137</u>	<u>\$ 30,192,486</u>

<u>FUNDED STATUS</u>		
Value of Benefits Earned to Date	\$478,489,266	\$ 51,833,540
Assets	349,259,698	38,959,178
Funding Ratio	<u>73.0%</u>	<u>75.2%</u>

<u>ADEQUACY OF CONTRIBUTIONS*</u>		
Member/Employer	9.500%	20.000%
Actuarial Requirement	8.973%	18.702%
Margin	<u>0.527%</u>	<u>1.298%</u>

\*Assumes Basic Member additional will be funded over their remaining working lifetime.

# A. S. Hansen, inc.

ACTUARIES AND CONSULTANTS

150 North Wacker Drive  
Chicago, Illinois 60606  
Telephone 312-641-0141

October 9, 1973

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 for the year ended June 30, 1973, 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 is the first report based on the new law which became effective on July 1, 1973. Because of the sweeping nature of the changes, and because computing the old law benefits would not have served any useful purpose, this report does not contain an analysis of the experience gains and losses as distinguished from the increase in obligation due to the new benefits. It is our intention to again provide an analysis of the gains and losses in future years, when the figures for two successive years will be based on the same set of benefits.

A second modification of prior report lies in the inclusion of exhibits showing the financial condition and status of funding the program. The obligation in these exhibits represent the amount which would be required to provide for all of the benefits earned to date; i.e., the amount of benefit based on the member's service and earnings to date and payable at normal retirement. The ratio of the assets to this obligation indicates that the general fund is 73%, and the police and fire fund is 75%, funded. It is expected that these percentage funding ratios will increase in subsequent years.

The unfunded obligation for liabilities earned to date should be carefully distinguished from the entry age normal level contribution requirements accumulated to date, referred to in the law as the accrued liability. This figure is shown on page 10 for the General, and page 18 for the Police and Fire, Fund. The amount of accumulated entry age normal contribution requirements accumulated to date is \$220,852,315 for the general fund and \$12,754,531 for the police and fire fund.

A. S. Hansen, inc.

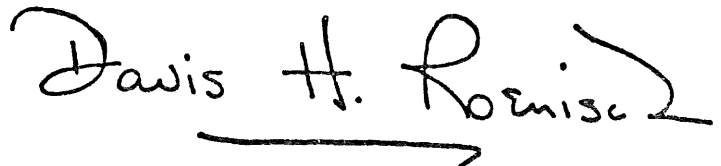
Board of Trustees  
Public Employees Retirement Association  
October 9, 1973  
Page Two

Finally, it should be observed that the actuarial requirement for the general fund members, stated as a percentage of payroll, is on a conservative basis. The requirement for the benefits payable to the basic members in excess of the coordinated formula has been computed on the assumption that these benefits will be completely funded over the remaining working lifetime of these members. As shown by Exhibit 8 (page 13), the new program will still be fully funded in approximately 36 years even under these conditions.

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 Retirement Study Commission for the year ended June 30, 1973.

Respectfully submitted,

A. S. HANSEN, INC.

A handwritten signature in dark ink, reading "Davis H. Roenisch". The signature is written in a cursive style with a long horizontal line extending from the end of the name.

Davis H. Roenisch  
Fellow, Society of Actuaries

DHR:lh  
1366-01-83

Public Employees Retirement Association

GLOSSARY OF TERMS

Considered Payroll

Annual Compensation of the Members included in the Association.

Entry Age Normal Level Contribution Requirements

The level percentage of payroll which, if paid from the average age at entry of a Member into the Association to retirement age, will accumulate to the sum required to provide for the benefits earned by his service.

Interest Requirement on Unfunded Obligation

The amount of interest that is earned each year on the unfunded obligation. Failure to pay the full interest requirement results in a corresponding increase in the unfunded obligation.

Prior Entry Age Normal Contribution Requirements  
Accumulated to Date Remaining to be Financed

The amount in excess of the current asset balance that would have been accumulated on June 30, 1973 if the entry age normal cost method had always been employed and the entry age normal contributions for past years had been paid as scheduled.

Present Value of All Benefits

The single sum amount which, if accumulated in a fund in accordance with the actuarial assumptions, would be sufficient to pay all benefits expected to be earned by present members for past and future service as they fall due.

Funding Objective

The primary funding objective is to accumulate sufficient assets, in the event the Association is terminated, to continue benefit payments to retirees and their beneficiaries; to guarantee payment of all benefits earned to date for all Members or to return their accumulated contribution balances, whichever is greater.

Unfunded Obligation

The portion of the present value of benefits earned to date which was not funded on June 30, 1973.



### Benefits Earned to Date

Benefits earned to June 30, 1973 by active Members even though a Member may leave the Association voluntarily prior to normal or early retirement or eligibility for a Deferred Vested Benefit. The figure shown represents the present value of his benefit earned to date payable at normal retirement or his accumulated contribution balance, whichever is greater.

- Member contribution balances are fully vested from the date of entry into the Association and are credited with interest at 3-1/2% per year after the third year of membership.
- Benefits earned in addition to Member contribution balances are fully vested after 10 years of membership.

Public Employees Retirement Association

General Fund

STATEMENT OF FINANCIAL CONDITION AND  
STATUS OF FUNDING  
AS OF JUNE 30, 1973

This section is designed to show the financial condition of the retirement system by comparing the assets on hand to the value of the benefits earned to date; to derive the unfunded past service obligation; and to show the trend of the ratio of assets to the funding objective, i.e., the present value of benefits earned to date.

Public Employees Retirement AssociationGeneral FundSTATEMENT OF FINANCIAL CONDITION  
(Year Ended - June 30, 1973)ASSETS

Cash and Investments (Net)	\$349,259,698
Benefits Earned to Date Remaining to be Financed by Members and Employers	<u>129,229,568</u>
<u>Total</u>	<u>\$478,489,266</u>

LIABILITIES

Benefits Payable to Retired Members and Their Beneficiaries	\$140,382,076
Deferred Vested Benefits Payable to Inactive Members	1,424,756
Benefits Earned to Date by Active Members	<u>336,682,434</u>
<u>Total</u>	<u>\$478,489,266</u>

Public Employees Retirement AssociationGeneral FundANALYSIS OF FUNDED STATUS  
(Year Ended - June 30, 1973)

	<u>Assets</u>	<u>Obligation</u>	<u>Unfunded Obligation</u>
Retired Members and Beneficiaries	\$140,382,076	\$140,382,076	\$ -0-
Deferred Vested Inactive Members	1,424,756	1,424,756	-0-
Active Members	<u>207,452,866</u>	<u>336,682,434</u>	<u>129,229,568</u>
<u>Total</u>	<u>\$349,259,698</u>	<u>\$478,489,266</u>	<u>\$129,229,568</u>
Ratio of Assets to Obligation	<u>73.0%</u>		

Public Employees Retirement Association

General Fund

ACTUARIAL BASIS FOR DETERMINATION OF  
THE ENTRY AGE NORMAL LEVEL FINANCING  
REQUIREMENT (AS A PERCENTAGE OF PAYROLL)  
OF THE PROGRAM

This section is designed to illustrate the adequacy of the Employer/Member contribution rate by comparing it to the level actuarial requirement, expressed as a percentage of payroll.

Public Employees Retirement Association

General Fund

ACTUARIAL BALANCE SHEET  
(Year Ended - June 30, 1973)

RESOURCES

	<u>Residual Benefit</u>	<u>Integrated Plan</u>	<u>Total</u>
Cash and Investments (Net)	\$216,508,675	\$132,751,023	\$349,259,698
Present Value of All Remaining Benefits to be Funded by Future Contributions	<u>127,579,002</u>	<u>449,985,597</u>	<u>577,564,599</u>
<u>Total</u>	<u>\$344,087,677</u>	<u>\$582,736,620</u>	<u>\$926,824,297</u>

LIABILITIES AND RESERVES

Benefits Payable to Retired Members and Their Beneficiaries	\$ 75,605,303	\$ 64,776,773	\$140,382,076
Deferred Vested Benefits Payable to Inactive Members	453,171	971,585	1,424,756
Active Members	<u>268,029,203</u>	<u>516,988,262</u>	<u>785,017,465</u>
<u>Total</u>	<u>\$344,087,677</u>	<u>\$582,736,620</u>	<u>\$926,824,297</u>

Public Employees Retirement AssociationGeneral FundANALYSIS OF ACTUARIAL OBLIGATION(Census as of June 30, 1973)Retired Members

Service Retirement (Payable from Minnesota Adjustable Fixed Benefit Fund)	\$104,014,248	
Disability	3,032,050	
Survivor	22,800,002	
Reserve for Future Old Law Survivors	<u>10,535,776</u>	\$140,382,076

Deferred Vested Benefits

1,424,756

Active Members

Retirement	\$606,852,222	
Disability	40,606,895	
Survivor	34,126,817	
Vested - Retirement	74,315,073	
- Refund	<u>29,116,458</u>	<u>785,017,465</u>

Total Obligation\$926,824,297

Public Employees Retirement AssociationGeneral Fund

DETERMINATION OF THE PRIOR ENTRY AGE  
NORMAL CONTRIBUTION REQUIREMENTS  
 (Census as of June 30, 1973)

	<u>Residual Benefit</u>	<u>Integrated Plan</u>	<u>Total</u>
Total Obligation	\$344,087,677	\$582,736,620	\$926,824,297
Net Assets on Hand	<u>216,508,675</u>	<u>132,751,023</u>	<u>349,259,698</u>
Obligation to be Funded in the Future	\$127,579,002	\$449,985,597	\$577,564,599
Present Value of Future Attained Age Normal Contribution	127,579,002	Not Applicable	127,579,002
Present Value of Future Entry Age Normal Level Contribution Requirements	<u>Not Applicable</u>	<u>229,133,282</u>	<u>229,133,282</u>
Prior Entry Age Normal Level Contribution Requirements <u>Accumulated to Date</u>	<u>\$ -</u>	<u>\$220,852,315</u>	<u>\$220,852,315</u>



Public Employees Retirement AssociationGeneral Fund

INTEREST REQUIREMENT ON THE  
PRIOR ENTRY AGE NORMAL REQUIREMENTS  
 (Census as of June 30, 1973)

	<u>Residual Benefit</u>	<u>Integrated Plan</u>	<u>Total</u>
Prior Entry Age Normal Level Contribution Requirements Accumulated to Date	\$ -	\$220,852,315	\$220,852,315
Interest Requirement on Accumulated Net Prior Requirement	\$ -	\$ 11,042,616	\$ 11,042,616
Considered Payroll	\$184,094,937	\$459,146,137	\$459,146,137
Interest Requirement as Percentage of Considered Payroll	0.000%	2.405%	2.405%

Public Employees Retirement AssociationGeneral FundENTRY AGE NORMAL LEVEL CONTRIBUTION REQUIREMENTS  
(Census as of June 30, 1973)

	<u>Residual Benefit</u>	<u>Integrated Plan</u>
Present Value of Future Entry Age Normal Level Contribution Requirements	\$ 127,579,002	\$ 229,133,282
Present Value of Future Payroll of Current Members of the Association	\$1,453,063,800	\$3,669,373,900
Attained Age Normal Level Contribution Rate *	8.780%	Not Applicable
Entry Age Normal Level Contribution Rate at Beginning of the Year *	Not Applicable	6.244%
Normal Level Contribution Rate Adjusted for Mid-Year Receipt	<u>9.000%</u>	<u>6.400%</u>

\*Future Requirements ÷ Future Payroll

Public Employees Retirement AssociationGeneral Fund

ACTUARIAL BALANCE EXPRESSED AS A  
PERCENTAGE OF COVERED PAYROLL  
 (Census as of June 30, 1973)

	<u>Residual Benefit</u>	<u>Integrated Plan</u>
Member Contribution Rate	4.000%	4.000%
Employer Contribution Rate	<u>5.000%</u>	<u>5.500%</u>
<u>Total</u>	<u>9.000%</u>	<u>9.500%</u>
Attained Age Normal Contribution Requirement	9.000%	
Entry Age Normal Level Contribution Rate		6.400%
Interest Requirement on Prior Level Requirements		2.405%
Expense Allowance		<u>0.168%</u>
Total Level Requirement	<u>9.000%</u>	<u>8.973%</u>
<u>Actuarial Balance Contribution Rate Less Level Requirement</u>	<u>0.000%</u>	<u>0.527%*</u>

\*If the excess were applied to the Prior Entry Age Normal Level Contribution Requirement Accumulated to Date, it would amortize such balance over approximately 36 years.

Public Employees Retirement Association

Police and Fire Fund

STATEMENT OF FINANCIAL CONDITION AND  
STATUS OF FUNDING  
AS OF JUNE 30, 1973

This section is designed to show the financial condition of the retirement system by comparing the assets on hand to the value of the benefits earned to date; to derive the unfunded past service obligation; and to show the trend of the ratio of assets to the funding objective, i.e., the present value of benefits earned to date.

Public Employees Retirement AssociationPolice and Fire FundSTATEMENT OF FINANCIAL CONDITION  
(Year Ended - June 30, 1973)ASSETS

Cash and Investments (Net)	\$38,959,178
Benefits Earned to Date Remaining to be Financed by Members and Employers	<u>12,874,362</u>
<u>Total</u>	<u>\$51,833,540</u>

LIABILITIES

Benefits Payable to Retired Members and Their Beneficiaries	\$ 8,638,010
Deferred Vested Benefits Payable to Inactive Members	242,864
Benefits Earned to Date by Active Members	<u>42,952,666</u>
<u>Total</u>	<u>\$51,833,540</u>

Public Employees Retirement AssociationPolice and Fire FundANALYSIS OF FUNDED STATUS  
(Year Ended - June 30, 1973)

	<u>Assets</u>	<u>Obligation</u>	<u>Unfunded Obligation</u>
Retired Members and Beneficiaries	\$ 8,638,010	\$ 8,638,010	\$ -0-
Deferred Vested Inactive Members	242,864	242,864	-0-
Active Members	<u>30,078,304</u>	<u>42,952,666</u>	<u>12,874,362</u>
<u>Total</u>	<u>\$38,959,178</u>	<u>\$51,833,540</u>	<u>\$12,874,362</u>
Ratio of Reserves to Liabilities	<u>75.2%</u>		

Public Employees Retirement Association

Police and Fire Fund

ACTUARIAL BASIS FOR DETERMINATION OF  
THE ENTRY AGE NORMAL LEVEL FINANCING  
REQUIREMENT (AS A PERCENTAGE OF PAYROLL)  
OF THE PROGRAM

This section is designed to illustrate the adequacy of the Employer/Member contribution rate by comparing it to the level actuarial requirement, expressed as a percentage of payroll.

Public Employees Retirement AssociationPolice and Fire FundACTUARIAL BALANCE SHEET  
(Year Ended - June 30, 1973)RESOURCES

Cash and Investments (Net)	\$ 38,959,178
Present Value of All Remaining Benefits to be Funded by Future Contributions	<u>71,205,064</u>
<u>Total</u>	<u>\$110,164,242</u>

LIABILITIES AND RESERVE

Benefits Payable to Retired Members and Their Beneficiaries	\$ 8,638,010
Deferred Vested Benefits Payable to Inactive Members	242,864
Active Members	<u>101,283,368</u>
<u>Total</u>	<u>\$110,164,242</u>



Public Employees Retirement AssociationPolice and Fire FundANALYSIS OF ACTUARIAL OBLIGATION  
(Census as of June 30, 1973)Retired Members

Service Retirement (Payable from Minnesota Adjustable Fixed Benefit Fund)	\$ 6,795,361	
Disability	145,539	
Survivor	1,205,575	
Reserve for Future Old Law Survivors	<u>491,535</u>	\$ 8,638,010

Deferred Vested Benefits

242,864

Active Members

Retirement	\$63,373,420	
Disability	20,550,545	
Survivor	8,643,827	
Vested - Retirement	6,693,125	
- Refund	<u>2,022,451</u>	<u>101,283,368</u>

Total Obligation\$110,164,242

Public Employees Retirement Association

Police and Fire Fund

DETERMINATION OF THE PRIOR ENTRY AGE  
NORMAL CONTRIBUTION REQUIREMENTS  
(Census as of June 30, 1973)

Total Obligation	\$110,164,242
Net Assets on Hand	<u>38,959,178</u>
Obligation to be Funded in the Future	\$ 71,205,064
Present Value of Future Entry Age Normal Level Contribution Requirements	<u>58,450,533</u>
<u>Prior Entry Age Normal Level Contribution Requirements Accumulated to Date</u>	<u>\$ 12,754,531</u>

Public Employees Retirement Association

Police and Fire Fund

INTEREST REQUIREMENT ON THE  
PRIOR ENTRY AGE NORMAL REQUIREMENTS  
(Census as of June 30, 1973)

Prior Entry Age Normal Level Contribution Requirements Accumulated to Date	\$12,754,531
Interest Requirement on Accumulated Net Prior Requirement	637,727
Considered Payroll	30,192,486
Interest Requirement as Percentage of Considered Payroll	<u>2.122%</u>

Public Employees Retirement AssociationPolice and Fire FundENTRY AGE NORMAL LEVEL CONTRIBUTION REQUIREMENTS  
(Census as of June 30, 1973)

Present Value of Future Entry Age Normal Level Contribution Requirements	\$ 58,450,533
Present Value of Future Payroll of Current Members	363,707,200
Entry Age Normal Level Contribution Rate at Beginning of the Year *	<u>16.071%</u>
Entry Age Normal Level Contribution Rate Adjusted for Mid-Year Receipt	<u>16.473%</u>

\* Future Requirements ÷ Future Payroll

Public Employees Retirement AssociationPolice and Fire Fund

ACTUARIAL BALANCE EXPRESSED AS A  
 PERCENTAGE OF COVERED PAYROLL  
(Census as of June 30, 1973)

Member Contribution Rate	8.000%
Employer Contribution Rate	<u>12.000%</u>
<u>Total</u>	<u>20.000%</u>
Entry Age Normal Level Contribution Rate	16.473%
Interest Requirement on Prior Level Requirement	2.122%
Allowance for Expenses	<u>0.107%</u>
Total Level Requirement	<u>18.702%</u>
Actuarial Balance Contribution <u>Rate Less Level Requirement*</u>	<u>1.298%</u>

\* If the excess were applied to the Prior Entry Age Normal Level Contribution Requirement accumulated to date, it would amortize such balance over approximately 20 years.

General Fund

FINANCIAL STATISTICS

Public Employees Retirement Association

General Fund

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Public Employees Retirement AssociationGeneral FundFINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1973)

<u>ASSETS</u>			
Cash - On Hand	\$ 50.00		
On Deposit and In Transit	<u>718,169.99</u>	\$ 718,219.99	
Minnesota Adjustable Fixed Benefit Fund		104,014,247.51	
Deferred Yield Adjustment		<u>1,167,373.17</u>	
Accounts Receivable:			
M.S. 1971, Sec. 353.36,			
Subd. 2, 8, and 9	\$ 305,031.90		
Employer Contributions	193,582.73		
Interest	2,258,703.46		
Dividends	283,817.36		
From Police and Fire Fund	38,577.90		
Social Security Vote	231.43		
From MSRS and TRA	19,768.04		
Other	<u>2,563.38</u>	<u>3,102,276.20</u>	\$109,002,116.87
Current Liabilities:			
Accounts Payable	\$ 88,186.56		
Penalties Refundable	4,266.75		
Donations Suspense	601,551.45		
Members Contribution - Suspense	166.37		
Omitted Deductions - Suspense	<u>7,080.96</u>		<u>701,252.09</u>
<u>Net Current Assets</u>			<u>\$108,300,864.78</u>

<u>INVESTMENTS</u>			
Bonds			
U.S. Government	\$ 10,273,000.00		
Municipal	6,652,000.00		
Corporate	97,892,993.16		
Canadian Government Insured	18,476,998.22		
Common Stocks	<u>107,633,387.72</u>	\$240,928,379.10	
Miscellaneous			
Office Equipment (Less Depreciation)	\$ 25,497.71		
Other	<u>4,956.75</u>	<u>30,454.46</u>	<u>\$240,958,833.56</u>
<u>Total Assets</u>			<u>\$349,259,698.34</u>

Members Accumulated Contributions - \$105,981,441.23



Public Employees Retirement AssociationGeneral FundSOURCES AND USES OF FUNDS(July 1, 1972 - June 30, 1973)

<u>Sources</u>		<u>Uses</u>	
<u>Employee Contributions</u>	\$ 17,652,706.14	<u>Refunds</u>	
<u>Employer Contributions</u>	25,601,022.43	Employee Contributions	\$ 4,541,905.93
<u>Various Accounts Receivable</u>	70,762.70	Employer Contributions	31,478.76
<u>Investment Income</u>	10,866,696.60	<u>Penalties Refunded</u>	297.37
<u>Minnesota Adjustable Fixed Benefit Fund</u>	1,240,449.87	<u>Donations Refunded</u>	14,452.16
<u>Transfers from Police and Fire Fund</u>	20,912.86	<u>Benefits Paid</u>	
<u>Investment Sales and Redemptions</u>		Retirement	10,422,266.35
Bonds	104,363,441.10	Survivor	2,622,231.20
Stocks	5,979,777.65	Disability	348,268.28
<u>Cancelled Warrants</u>	81,305.19	<u>Direct Expense</u>	779,765.98
<u>Interest on Omitted Deductions, Back Payments and Refunds Repaid</u>	289,823.35	<u>Investment Purchases</u>	
<u>Miscellaneous Income</u>	3,425.22	Bonds	120,721,355.87
	<u>\$166,170,323.11</u>	Stocks	22,567,509.96
		<u>Payments to Minnesota Adjustable Fixed Benefit Fund</u>	3,727,691.31
		<u>Interest Paid on Refunds</u>	61,626.46
		<u>Increase in Cash Accounts</u>	331,473.48
			<u>\$166,170,323.11</u>
Cash Balance, June 30, 1973	\$ 718,169.99		
Cash Balance, June 30, 1972	<u>386,696.51</u>		
Increase in Cash Balance	\$ 331,473.48		

Public Employees Retirement AssociationGeneral FundACCOUNTING STATEMENT OF INCOME AND EXPENSES  
(July 1, 1972 to June 30, 1973)Income

Employer Contributions	\$25,804,926.11	
Employee Contributions	17,808,594.85	
Investment Income	11,298,703.50	
Other Income	307,513.98	
Minnesota Adjustable Fixed Benefit Fund Income	<u>11,779,940.82</u>	
Total Income		\$66,999,679.26

Expenses

Benefits	\$13,313,749.54	
Refund of Contributions	4,598,873.45	
Transfer to Police and Fire Fund	53,538.79	
Expense - General	<u>770,053.85</u>	
Total Expenses		<u>18,736,215.63</u>

<u>Excess of Income over Expenses</u>	<u>\$48,263,463.63</u>
---------------------------------------	------------------------

Public Employees Retirement AssociationGeneral FundRECONCILIATION OF ASSET BALANCES

(June 30, 1973)

Asset Balance, July 1, 1972			\$300,996,234.71
Add:			
Employer Contributions		\$25,399,601.83	
Employee Contributions		17,652,706.14	
Employee and Employer Contributions Transferred from Police and Fire Fund		6,216.09	
Minnesota Adjustable Fixed Benefit Fund Income		11,779,940.82	
Investment Earnings		11,079,301.39	
Gain on Sales of Stock		219,402.11	
Unit Matching Contributions		405,324.28	
Adjustments to MAFB, Members Accounts, and Benefits Reserve		1,828,497.04	
Other Income		<u>307,513.98</u>	
Total Additions			<u>68,678,503.68</u>
			\$369,674,738.39
Deduct:			
Benefits Paid			
Retirement	\$10,373,285.65		
Survivor	2,601,748.33		
Disability	<u>338,715.56</u>	\$13,313,749.54	
Refunds		4,537,246.99	
Transfers to Police and Fire Fund		59,754.88	
Interest Paid on Refunds		61,626.46	
Adjustments to Members Active Accounts		1,672,608.33	
Administrative Expenses		<u>770,053.85</u>	
Total Deductions			<u>20,415,040.05</u>
			\$349,259,698.34
Current Liabilities and Accounts Payable			<u>701,252.09</u>
<u>Asset Balance, June 30, 1973</u>			<u>\$349,960,950.43</u>

Public Employees Retirement AssociationASSET ALLOCATION  
(July 1, 1973)

	<u>Basic Fund</u>	<u>Coordinated Fund</u>	<u>General Fund Total</u>
Net Assets, July 1, 1972	\$255,536,509.59	\$ 45,459,725.12	\$300,996,234.71
Accounts Payable	<u>386,934.25</u>	<u>68,835.27</u>	<u>455,769.52</u>
<u>Total Assets, July 1, 1972</u>	<u>\$255,923,443.84</u>	<u>\$ 45,528,560.39</u>	<u>\$301,452,004.23</u>
1. Employer Contributions	\$ 15,384,260.94	\$ 10,420,665.17	\$ 25,804,926.11
2. Employee Contributions	10,860,701.94	6,947,892.91	17,808,594.85
3. Transfers to Police and Fire Fund	-53,538.79	-	-53,538.79
4. Benefits Paid			
(i) Survivor	-2,601,748.33	-	-2,601,748.33
(ii) Disability	-303,654.88	-35,060.68	-338,715.56
5. Refunds	<u>-2,165,623.35</u>	<u>-2,433,250.10</u>	<u>-4,598,873.45</u>
6. Net - 1 plus 2 minus 3, 4 and 5	<u>\$ 21,120,397.53</u>	<u>\$ 14,900,247.30</u>	<u>\$ 36,020,644.83</u>
7. Benefits Paid from MAFBF	\$ -9,608,351.93	\$ -764,933.72	\$ -10,373,285.65
8. Income from MAFBF	10,911,279.31	868,661.51	11,779,940.82
9. Investment Income	9,465,155.13	2,141,062.35	11,606,217.48
10. Administrative Expenses	-627,997.81	-142,056.04	-770,053.85
Excess of Income over Expenses	<u>31,260,482.23</u>	<u>17,002,981.40</u>	<u>48,263,463.63</u>
Total 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>Asset Balance, July 1, 1973</u>	<u>\$287,368,880.11</u>	<u>\$ 62,592,070.32</u>	<u>\$349,960,950.43</u>
Estimated Allocation Minnesota Adjustable Fixed Benefit Fund	<u>\$ 94,518,786.85</u>	<u>\$ 9,495,460.66</u>	<u>\$104,014,247.51</u>

Basic Members

Public Employees Retirement Association

Basic Members

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Public Employees Retirement AssociationFINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1973)Basic MembersRESERVES

## Entry Age Normal Reserves

Retirement	\$457,993,257
Vesting	55,056,406
Disability	30,794,303
Survivors	34,126,817
Refund	<u>7,653,044</u>

\$585,623,827

Less Value of Benefits to be  
Earned in the Future176,025,879      \$409,597,948

## Vested Members

1,045,333

## Retired Members

Retirements Payable from  
Minnesota Adjustable  
Fixed Benefit Fund

\$ 94,518,787

Disability      2,644,561

Survivors      22,800,002

Reserve for Future  
Old Law Survivors10,535,776130,499,126

\$541,142,407

## Unfunded Obligation

254,345,415

## Funded Obligation

\$286,796,992

Public Employees Retirement AssociationACTUARIAL REQUIREMENTS  
(July 1, 1973)Basic MembersAMORTIZATION RATE REQUIREMENT

Present Value of Benefit (For Both Past and Future Service)		\$717,168,286
Obligation for Service		
Rendered to Date	\$ 541,142,407	
Net Assets	286,796,992	
Accrued Unfunded Obligation	254,345,415	
Funding Ratio		53%
Amortization (24-Year) Requirement	18,432,412	
Covered Payroll	184,094,937	
Amortization (24-Year) Rate Requirement		<u>10.0%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned in the Future	\$ 176,025,879	
Present Value of Future Payroll	1,453,063,800	
Normal Cost Rate Requirement	12.11%	
Employee Contribution Rate	<u>8.00</u>	
Employer Normal Cost Rate Requirement		<u>4.11%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		10.50%
Amortization (24-Year) Rate Requirement	10.01%	
Normal Cost Rate Requirement	4.11	
Allowance for Expenses	<u>0.17</u>	
Total Requirement		14.29%
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		<u>(3.79%)</u>



Public Employees Retirement AssociationACTUARIAL REQUIREMENTS

(July 1, 1973)

Basic MembersAMORTIZATION RATE REQUIREMENT

	Period			
	10-Year	20-Year	30-Year	40-Year
Accrued Unfunded Obligation	\$254,345,415	\$254,345,415	\$254,345,415	\$254,345,415
Amortization Requirement	32,938,896	20,409,332	16,545,536	14,822,783
Covered Payroll	184,094,937	184,094,937	184,094,937	184,094,937
Amortization Rate Requirement	17.89%	11.09%	8.99%	8.05%

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, 1973)

Revenue:

Employer Contributions	\$15,384,260.94	
Member Contributions	10,860,701.94	
Investment Income	9,465,155.13	
Minnesota Adjustable Fixed Benefit Fund Income	<u>10,911,279.31</u>	
Total Revenue		\$46,621,397.32

Expenditure:

Benefits	\$12,513,755.14	
Refund of Contributions	2,165,623.35	
Administrative Expense	627,997.81	
Transfer to Police and Fire Fund	<u>53,538.79</u>	
Total Expenditures		<u>15,360,915.09</u>

Increase in Assets (1973)	<u>\$31,260,482.23</u>
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Public Employees Retirement AssociationRECONCILIATION OF CHANGE IN ACTUARIAL RESERVESBasic MembersALLOCATION OF CHANGE IN ACTUARIAL RESERVES

	<u>Increase</u>	<u>Decrease</u>	
Increase in Assets			\$ 31,260,482
Amortization Payment		\$ 2,369,846	
Excess Interest (2.18% x Average Invested Assets)		5,922,180	
Estimated Excess in Rate		1,910,724	
Contribution Requirement Applied to Smaller Payroll	\$ 534,004		
Increases in Compensation and Low Turnover	21,256,240		
Change in Actuarial Assumptions Effect of Amendment to Plan	<u>181,042,059</u>	31,290,599	
Totals	<u>\$202,832,303</u>	<u>\$41,493,349</u>	
Expected Decrease (Increase) in Unfunded			<u>(161,338,954)</u>
Net Change in Reserves			\$192,599,436
Experience Variation Gain (Loss)			<u>284,597</u>
Total			<u>\$192,314,839</u>
1973 Actuarial Reserve			\$541,142,407
1972 Actuarial Reserve			<u>348,827,568</u>
Increase (Decrease)			<u>\$192,314,839</u>

Public Employees Retirement AssociationRECONCILIATION OF ACTIVE MEMBERSBasic Members

As of July 1, 1972	25,829
New Entrants	25
Reinstated	161
Transfers	<u>5</u>
<u>Total</u>	<u>26,020</u>

## Separations:

a. With Refund of Contributions	
(i) Death	116
(ii) Withdrawal	1,204
b. With Deferred Annuity	63
c. With Disability Annuity	69
d. With Normal Retirement Annuity	480
e. With Survivor Annuity	191
f. With Disability Survivor Annuity	<u>16</u>
<u>Total</u>	<u>2,139</u>

Active as of July 1, 1973	<u>23,881</u>
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## Public Employees Retirement Association

RECONCILIATION OF ANNUITANTSBasic MembersNormal Retirement Annuitants

As of July 1, 1972	5,663
Additions During Year	543
Deletions During Year	-271
<u>Total as of July 1, 1973</u>	<u>5,935</u>
Annual Annuity - July 1, 1972	\$ 9,031,461
- July 1, 1973	\$10,195,587

Disability Annuitants

As of July 1, 1972	197
Additions During Year	69
Deletions During Year	-34
<u>Total as of July 1, 1973</u>	<u>232</u>
Annual Annuity - July 1, 1972	\$ 267,339
- July 1, 1973	\$ 344,320

Survivor Annuitants

## (a) Spouse Only

As of July 1, 1972	2,410
Additions During Year	178
Deletions During Year	-112
<u>Total as of July 1, 1973</u>	<u>2,476</u>
Annual Annuity - July 1, 1972	\$ 1,798,142
- July 1, 1973	\$ 1,945,161

## (b) Survivor with Children

As of July 1, 1972	494
Additions During Year	29
Deletions During Year	-1
<u>Total as of July 1, 1973</u>	<u>522</u>
Annual Annuity - July 1, 1972	\$ 368,582
- July 1, 1973	\$ 397,200

## (c) Children

As of July 1, 1972	628
Additions During Year	38
Deletions During Year	-67
<u>Total as of July 1, 1973</u>	<u>599</u>
Annual Annuity - July 1, 1972	\$ 398,232
- July 1, 1973	\$ 401,157

Deferred Vested Members

As of July 1, 1972	709
Additions During Year	63
Deletions During Year	-20
<u>Total as of July 1, 1973</u>	<u>752</u>

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

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
60	1	\$ 144.66	2	\$ 306.59
61	3	229.09	4	278.79
62	9	1,422.76	11	1,315.76
63	9	1,687.46	16	2,221.18
64	20	3,290.80	20	2,261.52
65	26	5,225.50	18	2,910.97
66	47	9,788.33	26	4,520.05
67	41	8,515.29	35	5,886.66
68	56	11,593.13	29	5,180.22
69	66	14,537.05	33	5,685.24
70	67	14,181.19	31	5,752.48
71	71	14,160.60	52	9,345.80
72	103	21,540.71	48	8,678.54
73	97	20,748.32	52	9,099.76
74	112	23,680.95	53	8,602.24
75	88	17,832.31	63	11,762.61
76	117	20,578.74	57	9,855.79
77	155	29,499.87	65	10,475.00
78	139	25,498.98	60	8,370.27
79	150	27,363.14	56	7,825.77
80	117	18,649.50	43	5,044.78
81	122	18,665.87	52	5,227.93
82	113	16,454.02	41	5,110.62
83	73	11,331.03	45	5,171.17
84	94	15,169.46	43	4,967.25
85	65	9,595.52	48	5,167.97
86	52	6,841.91	26	3,094.42
87	51	6,769.88	16	2,130.62
88	31	4,539.39	17	1,162.90
89	26	3,985.20	13	1,771.04
90	25	2,874.96	6	604.61
91	9	1,408.19	12	1,430.21
92	10	1,399.46	4	388.83
93	5	440.01	2	173.62
94	6	846.27	1	55.02
95	5	715.56	1	28.78
96	1	89.50	1	148.48
98	1	124.61	1	117.40
99	2	258.73	-	-
100	1	103.96	-	-
<u>Total</u>	<u>2,186</u>	<u>\$391,781.91</u>	<u>1,103</u>	<u>\$162,130.89</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	1	\$ 130.87	-	\$ -
59	1	169.66	4	249.98
60	2	198.68	2	126.52
61	4	343.45	4	297.09
62	4	420.96	5	553.69
63	14	1,481.84	11	1,054.94
64	17	2,574.70	6	859.12
65	54	9,785.92	40	5,026.14
66	155	24,165.65	111	11,550.42
67	135	20,877.81	113	11,201.50
68	129	17,322.72	93	8,891.63
69	97	13,062.80	96	9,550.70
70	111	15,110.90	100	9,076.58
71	122	16,454.40	91	8,065.55
72	131	16,856.11	66	5,042.76
73	95	9,784.47	62	4,738.33
74	87	8,629.58	70	5,491.05
75	90	9,227.04	41	2,687.45
76	69	5,628.25	43	3,325.09
77	60	5,258.68	39	2,402.46
78	39	3,516.05	31	2,462.59
79	41	4,192.63	22	2,151.62
80	23	2,522.04	18	1,830.20
81	17	1,978.01	10	1,495.95
82	6	632.82	7	676.08
83	6	525.69	3	252.12
84	4	911.39	4	953.18
85	1	223.43	1	26.49
86	2	374.03	-	-
87	1	27.78	2	455.79
89	-	-	2	266.36
90	1	40.01	-	-
91	1	21.90	-	-
<u>Totals</u>	<u>1,520</u>	<u>\$192,450.27</u>	<u>1,097</u>	<u>\$100,761.38</u>

Public Employees Retirement AssociationBasic MembersRetired Under Combination of Law in Force Prior and Subsequent to July 1, 1957Payable 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>
64	1	\$ 8.19	-	\$ -
66	2	238.82	-	-
67	1	264.22	-	-
68	2	239.15	-	-
69	-	-	3	435.50
70	-	-	1	25.50
71	1	48.21	1	97.81
73	4	251.16	-	-
74	2	111.38	2	184.64
75	2	78.64	-	-
76	1	35.76	-	-
77	1	36.81	-	-
78	3	390.80	-	-
79	-	-	1	25.59
89	1	35.59	-	-
<u>Totals</u>	<u>21</u>	<u>\$1,738.73</u>	<u>8</u>	<u>\$769.04</u>



Public Employees Retirement AssociationBasic MembersBeneficiaries 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>
54	1	\$110.93	-	\$ -
55	-	-	1	36.72
61	-	-	1	33.75
63	-	-	2	250.95
64	-	-	2	172.56
65	-	-	1	100.93
66	-	-	2	107.49
67	-	-	1	37.95
68	-	-	1	148.03
69	-	-	3	239.38
70	-	-	5	835.26
71	-	-	1	72.08
72	-	-	2	145.52
73	-	-	2	315.65
74	-	-	1	78.99
75	-	-	1	74.19
76	-	-	3	276.03
77	-	-	3	670.99
78	-	-	1	50.13
80	1	108.91	-	-
82	-	-	1	111.60
<u>Totals</u>	<u>2</u>	<u>\$219.84</u>	<u>34</u>	<u>\$3,758.20</u>

Annuities Payable for a Certain Period Not Dependent on Age

<u>Number</u>	<u>Monthly Annuity</u>
<u>10</u>	<u>\$1,437.14</u>

Public Employees Retirement AssociationBasic MembersDisability Retirements

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
37	1	\$ 127.29	-	\$ -
46	1	102.80	-	-
48	1	130.91	2	299.52
49	4	497.92	-	-
50	2	377.53	1	107.60
51	5	549.67	8	867.39
52	1	155.58	3	173.32
53	5	652.75	2	142.84
54	6	704.36	-	-
55	5	1,014.71	-	-
56	4	526.36	7	862.46
57	5	507.64	3	260.64
58	6	920.10	4	280.32
59	11	2,091.97	6	428.56
60	18	2,566.72	11	794.67
61	14	1,430.96	4	353.70
62	14	1,830.91	2	227.27
63	15	1,921.82	2	135.58
64	20	2,808.30	14	1,832.20
65	15	2,082.06	10	926.88
<u>Totals</u>	<u>153</u>	<u>\$21,000.36</u>	<u>79</u>	<u>\$7,692.95</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	-	\$ -	6	\$ 438.97
61	-	-	14	1,168.55
62	-	-	12	903.60
63	-	-	16	1,228.54
64	-	-	20	1,624.64
65	-	-	18	1,430.89
66	-	-	28	1,906.97
67	-	-	37	2,409.93
68	-	-	54	3,803.94
69	-	-	51	3,497.13
70	-	-	61	4,496.57
71	1	84.01	77	5,636.22
72	-	-	71	5,014.59
73	-	-	60	4,359.97
74	1	18.55	67	4,456.11
75	1	73.91	87	5,895.61
76	1	62.16	78	4,923.29
77	-	-	81	5,762.49
78	1	48.24	80	5,216.19
79	1	12.80	75	4,970.97
80	-	-	81	5,062.01
81	-	-	74	4,402.14
82	1	42.49	66	3,779.72
83	1	20.61	49	2,743.39
84	-	-	58	3,366.51
85	2	82.61	41	2,728.69
86	1	58.86	39	2,436.19
87	-	-	28	1,415.12
88	1	77.82	21	1,035.61
89	-	-	21	918.20
90	1	9.45	14	889.03
91	-	-	13	639.66
92	-	-	6	320.87
93	-	-	4	219.76
94	-	-	5	230.75
95	-	-	3	146.00
96	-	-	1	40.00
97	-	-	1	55.00
99	-	-	2	108.30
<u>Totals</u>	<u>13</u>	<u>\$591.51</u>	<u>1,520</u>	<u>\$99,682.12</u>

Public Employees Retirement AssociationBasic MembersSurvivor AnnuitiesFemale

<u>Age</u>	<u>Number</u>	<u>Monthly Annuity</u>	<u>Age</u>	<u>Number</u>	<u>Monthly Annuity</u>
31	1	\$ 65.00	64	57	\$ 3,647.48
35	1	65.00	65	48	2,989.11
36	3	195.00	66	56	3,675.25
37	2	130.00	67	55	3,530.90
38	1	65.00	68	39	2,515.14
39	2	130.00	69	47	2,943.83
40	5	325.00	70	44	2,589.04
41	4	260.00	71	39	2,424.64
42	5	325.00	72	37	2,518.12
43	6	390.00	73	38	2,581.88
44	10	650.00	74	27	1,810.62
45	9	585.00	75	28	1,870.29
46	15	961.64	76	21	1,216.98
47	16	1,040.00	77	18	1,134.95
48	13	845.00	78	19	1,244.07
49	17	1,105.00	79	13	846.77
50	22	1,392.47	80	7	543.98
51	34	2,275.00	81	7	506.23
52	31	1,941.62	82	14	902.19
53	33	2,104.83	83	5	406.58
54	40	2,523.86	84	6	377.82
55	28	1,820.00	85	7	589.56
56	50	3,105.46	86	4	249.96
57	42	2,610.96	87	2	108.14
58	60	3,631.54	88	1	23.97
59	51	3,192.65	89	2	215.00
60	69	4,020.61	90	2	130.00
61	65	3,830.64	91	1	65.00
62	59	3,406.75	94	1	148.66
63	71	4,217.34			
			<u>Totals</u>	<u>1,410</u>	<u>\$89,016.53</u>

Public Employees Retirement AssociationBasic MembersSurvivor AnnuitiesMale

<u>Age</u>	<u>Number</u>	<u>Monthly Annuity</u>
55	1	\$ 57.94
60	1	65.00
68	2	83.86
69	1	65.00
75	2	130.00
76	1	65.00
78	<u>1</u>	<u>24.57</u>
<u>Totals</u>	<u>9</u>	<u>\$491.37</u>

Children

<u>Number</u>	<u>Total Monthly Annuity</u>
599	\$33,429.73

## Public Employees Retirement Association

## Basic Members

## CONSIDERED EARNINGS

Active Female Employees  
(Age and Service as of July 1, 1973)

## YEARS OF SERVICE

Age	Under 1		1 to 2		2 to 4		5 to 9	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	1	\$ 3,621	1	\$ 4,590	25	\$ 145,730	68	\$ 399,983
25 to 29	1	6,896	2	4,643	28	168,791	270	1,907,654
30 to 34	-	-	1	7,896	22	130,585	291	1,924,377
35 to 39	1	2,107	1	2,919	53	199,132	469	2,388,080
40 to 44	1	155	3	10,185	71	271,125	830	4,012,027
45 to 49	3	6,798	6	19,542	97	338,635	1,175	5,721,074
50 to 54	1	700	4	21,020	78	275,588	1,147	5,451,361
55 to 59	2	1,125	4	11,175	60	217,544	854	3,858,094
60 to 64	2	4,674	6	12,758	20	61,899	399	1,581,016
65 to 69	-	-	2	3,071	7	12,764	71	189,238
70 & Up	-	-	-	-	1	1,860	30	89,696
<b>Total</b>	<b>12</b>	<b>\$ 26,076</b>	<b>30</b>	<b>\$ 97,799</b>	<b>462</b>	<b>\$ 1,823,653</b>	<b>5,604</b>	<b>\$27,522,600</b>

## YEARS OF SERVICE

Age	10 to 14		15 to 19		20 to 24		25 to 29	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 29	32	220,532	-	-	-	-	-	-
30 to 34	109	811,705	14	90,377	-	-	-	-
35 to 39	107	742,258	46	352,324	10	70,489	-	-
40 to 44	220	1,319,893	68	484,642	37	284,669	8	72,461
45 to 49	434	2,454,940	114	807,689	66	572,885	34	291,728
50 to 54	643	3,666,410	230	1,521,791	104	781,321	31	283,485
55 to 59	686	3,725,402	302	1,879,623	141	1,100,680	60	510,563
60 to 64	341	1,637,284	252	1,449,433	137	1,031,441	62	564,755
65 to 69	63	241,877	34	177,190	14	92,373	11	93,362
70 & Up	14	36,084	-	-	3	21,078	1	5,795
<b>Total</b>	<b>2,649</b>	<b>\$14,856,385</b>	<b>1,060</b>	<b>\$ 6,763,069</b>	<b>512</b>	<b>\$ 3,954,936</b>	<b>207</b>	<b>\$ 1,822,149</b>

## YEARS OF SERVICE

Age	30 to 34		35 to 39		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	95	\$ 553,924
25 to 29	-	-	-	-	-	-	333	2,308,516
30 to 34	-	-	-	-	-	-	437	2,964,940
35 to 39	-	-	-	-	-	-	687	3,757,309
40 to 44	-	-	-	-	-	-	1,238	6,455,157
45 to 49	1	8,286	-	-	-	-	1,930	10,221,577
50 to 54	15	146,493	4	33,192	-	-	2,257	12,181,361
55 to 59	33	412,981	14	159,900	2	87,959	2,158	11,965,046
60 to 64	23	236,144	12	149,941	7	89,775	1,261	6,819,120
65 to 69	3	19,931	1	7,819	2	19,048	208	856,673
70 & Up	-	-	-	-	-	-	49	154,513
<b>Total</b>	<b>75</b>	<b>\$ 823,835</b>	<b>31</b>	<b>\$ 350,852</b>	<b>11</b>	<b>\$ 196,782</b>	<b>10,653</b>	<b>\$58,238,136</b>

## Public Employees Retirement Association

## Basic Members

## CONSIDERED EARNINGS

Active Male Employees  
(Age and Service as of July 1, 1973)

## YEARS OF SERVICE

Age	Under 1		1 to 2		2 to 4		5 to 9	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	2	\$ 9,066	2	\$ 6,515	8	\$ 59,354	11	\$ 98,782
25 to 29	4	14,512	6	16,685	17	132,042	286	2,639,093
30 to 34	2	14,097	5	24,017	11	86,683	618	5,923,299
35 to 39	4	23,458	7	31,753	10	61,696	651	6,138,405
40 to 44	6	28,833	8	74,919	15	66,035	595	5,647,684
45 to 49	4	20,468	24	118,164	20	114,539	630	5,428,245
50 to 54	3	13,025	12	72,481	11	50,732	633	5,252,985
55 to 59	5	19,445	7	38,204	14	71,512	507	3,815,978
60 to 64	5	32,605	11	40,939	4	11,347	227	1,886,986
65 to 69	2	6,914	2	2,100	6	10,925	63	276,122
70 & Up	-	-	4	8,624	4	5,276	67	305,472
<b>Total</b>	<b>37</b>	<b>\$ 182,423</b>	<b>88</b>	<b>\$ 434,401</b>	<b>120</b>	<b>\$ 670,141</b>	<b>4,288</b>	<b>\$37,413,051</b>

## YEARS OF SERVICE

Age	10 to 14		15 to 19		20 to 24		24 to 29	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 29	12	107,443	-	-	-	-	-	-
30 to 34	215	2,172,159	19	189,688	-	-	-	-
35 to 39	459	4,708,691	238	2,564,052	26	272,969	-	-
40 to 44	513	5,116,188	444	4,759,016	148	1,637,497	13	120,374
45 to 49	613	5,861,405	546	5,563,892	417	4,736,149	73	779,182
50 to 54	644	5,993,450	470	4,763,949	450	4,945,962	159	2,514,937
55 to 59	538	4,558,156	531	4,762,123	483	4,763,698	217	2,294,197
60 to 64	291	2,214,130	269	2,314,296	298	2,667,141	141	1,494,219
65 to 69	50	331,298	51	378,451	38	290,335	27	274,514
70 & Up	17	88,298	19	159,543	15	151,654	4	38,056
<b>Total</b>	<b>3,352</b>	<b>\$31,151,218</b>	<b>2,587</b>	<b>\$25,455,010</b>	<b>1,875</b>	<b>\$19,465,405</b>	<b>634</b>	<b>\$ 7,515,479</b>

## YEARS OF SERVICE

Age	30 to 34		35 to 39		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	23	\$ 173,717
25 to 29	-	-	-	-	-	-	325	2,909,775
30 to 34	-	-	-	-	-	-	870	8,409,943
35 to 39	-	-	-	-	-	-	1,395	13,801,024
40 to 44	-	-	-	-	-	-	1,742	17,450,546
45 to 49	1	2,440	-	-	-	-	2,328	22,624,484
50 to 54	14	176,351	2	20,040	-	-	2,398	23,803,912
55 to 59	55	640,140	20	289,404	1	11,423	2,378	21,264,280
60 to 64	67	1,116,445	39	657,699	15	209,778	1,367	12,645,585
65 to 69	9	104,556	6	89,347	4	78,873	258	1,843,435
70 & Up	7	66,594	4	67,208	3	39,375	144	930,100
<b>Total</b>	<b>153</b>	<b>\$ 2,106,526</b>	<b>71</b>	<b>\$ 1,123,698</b>	<b>23</b>	<b>\$ 339,449</b>	<b>13,228</b>	<b>\$125,856,801</b>

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, village, borough, town, school district within the state, or a department or unit of the state or any other public body employing any person who is a public employee as defined by the law.

4. Employees Included

All full time 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 2½% 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 prior to date of separation from public 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 \$400 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.

#### 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  $3\frac{1}{2}\%$  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.

Coordinated Members

Public Employees Retirement Association

Coordinated Members

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Public Employees Retirement AssociationFINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1973)Coordinated MembersRESERVES

## Entry Age Normal Reserves

Retirement	\$148,858,965
Vested	19,258,667
Disability	9,812,592
Refund	<u>21,463,414</u>
	\$199,393,638

Less Value of Benefits to be  
Earned in the Future139,751,784      \$59,641,854

## Vested Members

379,423

## Retired Members

Retirements Payable from  
Minnesota Adjustable  
Fixed Benefit Fund

\$ 9,495,461

Disability

387,489

Survivors

-9,882,950

\$69,904,227

## Unfunded Obligation

7,441,521

## Funded Obligation

\$62,462,706

Public Employees Retirement AssociationACTUARIAL REQUIREMENTS  
(July 1, 1973)Coordinated MembersAMORTIZATION RATE REQUIREMENT

Present Value of Benefits (For Both Past and Future Service)		\$209,656,011
Obligation for Service		
Rendered to Date	\$ 69,904,227	
Net Assets	62,462,706	
Accrued Unfunded Obligation	7,441,521	
Funding Ratio		89%
Amortization (24-Year) Requirement	539,287	
Covered Payroll	275,051,200	
Amortization (24-Year) Rate Requirement		<u>0.20%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned in the Future	\$ 139,751,784	
Present Value of Future Payroll	2,216,310,100	
Normal Cost Rate Requirement	6.31%	
Employee Contribution Rate	<u>4.00</u>	
Employer Normal Cost Rate Requirement		<u>2.31%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		5.50%
Amortization (24-Year) Rate Requirement	0.20%	
Normal Cost Rate Requirement	2.31	
Allowance for Expenses	<u>0.17</u>	
Total Requirement		2.68%
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		<u>2.82%</u>

Public Employees Retirement AssociationACTUARIAL REQUIREMENTS  
(July 1, 1973)Coordinated MembersAMORTIZATION RATE REQUIREMENT

	Period			
	10-Year	20-Year	30-Year	40-Year
Accrued Unfunded Obligation	\$ 7,441,521	\$ 7,441,521	\$ 7,441,521	\$ 7,441,521
Amortization Requirement	963,711	597,127	484,082	433,678
Covered Payroll	275,051,200	275,051,200	275,051,200	275,051,200
Amortization Rate Requirement	<u>0.35%</u>	<u>0.22%</u>	<u>0.18%</u>	<u>0.16%</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	0.35%	0.22%	0.18%	0.16%
Normal Cost Rate Requirement	2.31	2.31	2.31	2.31
Allowance for Expenses	<u>0.17</u>	<u>0.17</u>	<u>0.17</u>	<u>0.17</u>
Total Requirement	<u>2.83%</u>	<u>2.70%</u>	<u>2.66%</u>	<u>2.64%</u>
Excess (Deficit of Employer Contribution Rate Set by Law and Total Requirement	<u>2.67%</u>	<u>2.80%</u>	<u>2.84%</u>	<u>2.86%</u>



Public Employees Retirement AssociationCoordinated Members

STATEMENT OF REVENUE, EXPENDITURES,  
CHANGES IN RESERVES AND EXPERIENCE GAIN (LOSS)  
(Year Ending June 30, 1973)

Revenue:

Employer Contributions	\$10,420,665.17	
Member Contributions	6,947,892.91	
Investment Income	2,141,062.35	
Minnesota Adjustable Fixed Benefit Fund Income	<u>868,661.51</u>	
Total Revenue		\$20,378,281.94

Expenditure:

Benefits	\$ 799,994.40	
Refund of Contributions	2,433,250.10	
Administrative Expense	<u>142,056.04</u>	
Total Expenditures		<u>3,375,300.54</u>

Increase in Assets (1973)	<u><u>\$17,002,981.40</u></u>
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Public Employees Retirement AssociationRECONCILIATION OF CHANGE IN ACTUARIAL RESERVESCoordinated MembersALLOCATION OF CHANGE IN ACTUARIAL RESERVES

	<u>Increase</u>	<u>Decrease</u>	
Increase in Assets			\$17,002,981
Amortization Payment		\$ 278,834	
Excess Interest (2.18% x Average Invested Assets)		1,178,515	
Estimated Excess in Rate		4,235,845	
Contribution Requirement Applied to Larger Payroll		1,237,609	
Increases in Compensation	\$3,097,165		
Change in Actuarial Assumptions		9,439,349	
Effect of Amendment to Plan	<u>2,966,358</u>		
Totals	<u>\$6,063,523</u>	<u>\$16,370,152</u>	
Expected Decrease (Increase) in Unfunded			<u>10,306,629</u>
Net Change in Reserves			\$ 6,696,352
Experience Variation Gain (Loss)			<u>615,300</u>
Total			<u>\$ 7,311,652</u>
1973 Actuarial Reserve			\$69,904,227
1972 Actuarial Reserve			<u>62,592,575</u>
Increase (Decrease)			<u>\$ 7,311,652</u>

Public Employees Retirement AssociationRECONCILIATION OF ACTIVE MEMBERSCoordinated Members

As of July 1, 1972	45,044
New Entrants	13,494
Reinstated	2,676
Transfers	<u>-5</u>
Total	<u>61,209</u>

## Separations:

a. With Refund of Contributions	
(i) Death	114
(ii) Withdrawal	11,751
b. With Deferred Annuity	14
c. With Disability Annuity	34
d. With Normal Retirement Annuity	194
e. With Survivor Annuity	<u>2</u>
Total	<u>12,109</u>

Active as of July 1, 1973	<u>49,100</u>
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Public Employees Retirement AssociationRECONCILIATION OF ANNUITANTSCoordinated MembersNormal Retirement Annuitants

As of July 1, 1972	716
Additions During Year	208
Deletions During Year	<u>-23</u>
<u>Total as of July 1, 1973</u>	<u>901</u>
Annual Annuity - July 1, 1972	\$635,797
- July 1, 1973	\$842,885

Disability Annuitants

As of July 1, 1972	39
Additions During Year	34
Deletions During Year	<u>-15</u>
<u>Total as of July 1, 1973</u>	<u>68</u>
Annual Annuity - July 1, 1972	\$ 25,209
- July 1, 1973	\$ 51,767

Survivor Annuitants

Spouse Only	
As of July 1, 1972	2
Additions During Year	-
Deletions During Year	<u>-</u>
<u>Total as of July 1, 1973</u>	<u>2</u>
Annual Annuity - July 1, 1972	\$ 1,534
- July 1, 1973	\$ 1,619

Deferred Vested Members

As of July 1, 1972	37
Additions During Year	14
Deletions During Year	<u>-2</u>
<u>Total as of July 1, 1973</u>	<u>49</u>

Public Employees Retirement AssociationCoordinated MembersRetired - Laws 1967, Chapter 687Payable 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>
62	-	\$ -	1	\$ 138.02
63	2	189.39	2	135.88
64	4	292.55	5	591.73
65	29	2,081.03	14	1,423.65
66	87	6,281.66	36	2,878.14
67	94	7,155.02	32	2,676.18
68	101	7,417.07	34	2,352.85
69	84	5,841.32	28	1,845.05
70	80	6,047.59	27	2,786.97
71	40	2,801.01	24	1,255.08
72	28	1,794.34	11	897.48
73	26	2,303.68	12	1,519.23
74	14	1,199.91	13	1,395.48
75	10	781.86	5	202.04
76	8	1,179.63	3	356.58
77	11	623.59	3	133.32
78	3	684.42	3	391.73
79	5	407.67	-	-
80	2	203.52	2	321.99
81	4	203.48	2	256.29
82	3	300.24	3	314.54
83	2	224.12	1	147.07
84	1	69.22	-	-
85	-	-	1	72.78
87	1	38.40	-	-
<u>Totals</u>	<u>639</u>	<u>\$48,120.72</u>	<u>262</u>	<u>\$22,092.08</u>

Survivor AnnuitiesFemales

<u>Age</u>	<u>Number</u>	<u>Monthly Annuity</u>
68	1	\$ 29.93
87	1	104.96
<u>Totals</u>	<u>2</u>	<u>\$134.89</u>

Annuities Payable for Certain Period Not Dependent on Age

<u>Number</u>	<u>Monthly Annuity</u>
1	\$27.66

Public Employees Retirement AssociationCoordinated MembersDisability Retirements

<u>Age</u>	<u>Male</u>		<u>Female</u>	
	<u>Number</u>	<u>Monthly Annuity</u>	<u>Number</u>	<u>Monthly Annuity</u>
41	1	\$ 58.90	-	\$ -
46	1	70.55	-	-
49	-	-	1	28.55
50	1	32.91	-	-
52	1	44.91	-	-
54	3	168.07	2	143.52
55	1	88.30	-	-
56	5	285.71	-	-
57	2	182.43	-	-
58	3	536.33	-	-
59	4	220.16	-	-
60	5	131.02	-	-
61	4	285.22	-	-
62	3	182.28	1	21.13
63	7	253.16	2	119.72
64	9	450.41	1	9.72
65	10	941.07	1	59.84
<u>Totals</u>	<u>60</u>	<u>\$3,931.43</u>	<u>8</u>	<u>\$382.48</u>

## Public Employees Retirement Association

## Coordinated Members

## CONSIDERED EARNINGS

## Active Female Employees

(Age and Service as of July 1, 1973)

## YEARS OF SERVICE

Age	Under 1		1 to 2		2 to 4		5 to 9	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	2,704	\$10,724,388	1,420	\$ 6,953,148	1,361	\$ 7,499,240	89	\$ 523,915
25 to 29	1,147	4,833,926	779	4,039,243	1,324	8,473,535	272	1,958,946
30 to 34	1,084	3,458,828	763	2,636,446	1,261	5,709,812	227	1,537,426
35 to 39	1,073	3,091,121	867	2,704,974	1,760	6,546,123	251	1,339,345
40 to 44	853	2,571,004	789	2,431,989	1,892	7,271,537	337	1,873,195
45 to 49	644	1,920,592	613	2,008,515	1,765	7,752,188	396	2,245,236
50 to 54	496	1,506,372	457	1,426,177	1,401	5,248,676	382	2,063,392
55 to 59	314	841,540	349	1,134,092	1,034	3,680,439	382	1,955,545
60 to 64	87	263,939	127	323,265	488	1,592,731	238	1,079,824
65 to 69	29	57,837	36	54,898	104	179,377	58	160,861
70 & Up	32	94,029	51	161,159	48	120,046	12	41,137
<u>Total</u>	<u>8,463</u>	<u>\$29,363,576</u>	<u>6,251</u>	<u>\$23,873,906</u>	<u>12,438</u>	<u>\$54,073,704</u>	<u>2,644</u>	<u>\$14,778,822</u>

## YEARS OF SERVICE

Age	10 to 14		15 to 19		20 to 24		25 to 29	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 29	2	15,483	-	-	-	-	-	-
30 to 34	21	159,427	2	12,591	-	-	-	-
35 to 39	11	102,653	9	65,039	-	-	-	-
40 to 44	20	192,596	11	94,632	7	71,940	-	-
45 to 49	47	352,037	20	248,915	10	240,899	8	64,222
50 to 54	58	502,021	28	246,025	15	161,733	11	103,518
55 to 59	98	591,007	39	228,484	20	150,008	4	42,180
60 to 64	70	420,122	53	347,929	20	167,042	15	149,649
65 to 69	22	88,267	10	39,662	2	2,302	1	7,609
70 & Up	1	15,992	-	-	1	5,701	-	-
<u>Total</u>	<u>350</u>	<u>\$ 2,439,605</u>	<u>172</u>	<u>\$ 1,283,277</u>	<u>75</u>	<u>\$ 799,625</u>	<u>39</u>	<u>\$ 367,178</u>

## YEARS OF SERVICE

Age	30 to 34		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	5,574	\$ 25,700,691
25 to 29	-	-	-	-	-	-	3,524	19,321,133
30 to 34	-	-	-	-	-	-	3,358	13,514,530
35 to 39	-	-	-	-	-	-	3,971	13,849,255
40 to 44	-	-	-	-	-	-	3,909	14,506,893
45 to 49	3	16,973	-	-	-	-	3,506	14,849,577
50 to 54	3	25,739	-	-	-	-	2,851	11,283,653
55 to 59	7	67,200	2	23,939	-	-	2,249	8,714,434
60 to 64	6	75,899	10	123,197	2	19,090	1,116	4,562,687
65 to 69	-	-	-	-	-	-	262	590,813
70 & Up	-	-	-	-	-	-	145	438,064
<u>Total</u>	<u>19</u>	<u>\$ 185,811</u>	<u>12</u>	<u>\$ 147,136</u>	<u>2</u>	<u>\$ 19,090</u>	<u>30,465</u>	<u>\$127,331,730</u>

## Public Employees Retirement Association

## Coordinated Members

## CONSIDERED EARNINGS

## Active Male Employees

(Age and Service as of July 1, 1973)

## YEARS OF SERVICE

Age	Under 1		1 to 2		2 to 4		5 to 9	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	1,223	\$ 6,389,556	696	\$ 4,509,836	397	\$ 2,956,524	14	\$ 120,255
25 to 29	768	4,961,421	738	5,587,430	1,140	10,088,265	226	2,197,213
30 to 34	400	2,677,038	378	3,060,689	823	7,567,020	322	3,413,874
35 to 39	294	1,998,803	289	2,225,976	749	6,406,682	285	3,102,106
40 to 44	285	1,884,418	318	2,368,698	696	5,810,181	290	3,070,168
45 to 49	290	1,933,412	309	2,097,932	708	5,630,035	368	3,401,736
50 to 54	261	1,494,658	266	1,769,472	745	5,676,821	401	3,573,866
55 to 59	204	1,088,577	214	1,417,146	627	4,436,580	432	3,496,137
60 to 64	95	433,745	131	655,970	348	2,198,894	306	2,391,626
65 to 69	44	129,069	37	99,381	121	438,331	73	430,497
70 & Up	31	105,274	28	100,921	70	176,986	22	61,147
<u>Total</u>	<u>3,895</u>	<u>\$23,095,971</u>	<u>3,404</u>	<u>\$23,893,451</u>	<u>6,424</u>	<u>\$51,386,319</u>	<u>2,739</u>	<u>\$25,258,625</u>

## YEARS OF SERVICE

Age	10 to 14		15 to 19		20 to 24		25 to 29	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 29	-	-	-	-	-	-	-	-
30 to 34	36	429,392	1	17,680	-	-	-	-
35 to 39	120	1,537,218	21	215,696	2	20,253	-	-
40 to 44	117	1,570,626	73	981,146	13	156,916	1	7,040
45 to 49	141	1,612,945	86	1,110,716	59	796,366	11	128,051
50 to 54	180	1,812,920	117	1,261,177	73	891,692	19	265,190
55 to 59	200	1,892,832	128	1,194,060	74	729,239	17	879,189
60 to 64	241	2,122,558	162	1,499,283	101	1,001,469	41	443,884
65 to 69	40	317,455	20	164,978	17	162,224	3	37,695
70 & Up	10	73,309	7	50,242	4	34,881	-	-
<u>Total</u>	<u>1,085</u>	<u>\$11,369,255</u>	<u>615</u>	<u>\$ 6,494,978</u>	<u>343</u>	<u>\$ 3,793,040</u>	<u>92</u>	<u>\$ 1,761,049</u>

## YEARS OF SERVICE

Age	30 to 34		35 to 39		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	2,330	\$ 13,976,171
25 to 29	-	-	-	-	-	-	2,872	22,834,329
30 to 34	-	-	-	-	-	-	1,960	17,165,693
35 to 39	-	-	-	-	-	-	1,760	15,506,734
40 to 44	-	-	-	-	-	-	1,793	15,849,193
45 to 49	-	-	-	-	-	-	1,972	16,711,193
50 to 54	2	13,324	-	-	-	-	2,064	16,759,120
55 to 59	8	163,881	1	22,818	-	-	1,905	15,320,459
60 to 64	10	162,103	6	71,087	1	16,990	1,442	10,997,609
65 to 69	5	56,435	3	139,517	-	-	363	1,975,582
70 & Up	1	7,927	-	-	1	12,700	174	623,387
<u>Total</u>	<u>26</u>	<u>\$ 403,670</u>	<u>10</u>	<u>\$ 233,422</u>	<u>2</u>	<u>\$ 29,690</u>	<u>18,635</u>	<u>\$147,719,470</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, village, borough, town, school district within the state, or a department or unit of the state or any other public body employing any person who is a public employee as defined by the law.

4. Employees Included

All full time 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  $1\frac{1}{2}\%$  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 prior to date of separation from public 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 disabled person 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.

#### 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  $3\frac{1}{2}\%$ , 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.

Police and Fire Fund

Public Employees Retirement Association

Police and Fire Fund

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Public Employees Retirement AssociationPolice and Fire FundFINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1973)ASSETS

Cash - On Hand	\$ -		
On Deposit and in Transit	70,309.60	\$	70,309.60
Minnesota Adjustable Fixed Benefit Fund			6,795,360.84
Deferred Yield Adjustment			200,128.69
Accounts Receivable			
M.S. 1971, Section 353.36	\$ 6,686.98		
M.S. 1971, Section 353.36, Subd. 9	1,001.80		
Employer Contributions	4,549.15		
Interest	288,718.97		
Dividends	42,190.64		
From Regular Fund	59,799.96		
Others	<u>1,108.37</u>	<u>404,055.87</u>	\$ 7,469,855.00
Less Current Liabilities			<u>88,599.78</u>
Net Current Assets			\$ 7,381,255.22

INVESTMENTS

Bonds			
U. S. Government	\$ 1,751,000.00		
Municipal	-		
Corporate	12,835,782.68		
Canadian Government Insured	<u>2,604,242.29</u>		
Stocks			
Common	14,386,897.59		
Preferred	-		
Prepaid Interest	<u>-</u>		<u>31,577,922.56</u>
<u>Total Assets</u>			<u>\$38,959,177.78</u>

Members accumulated contributions \$9,250,907.99.

Public Employees Retirement AssociationPolice and Fire FundSOURCES AND USES OF FUNDS(July 1, 1972 - June 30, 1973)

<u>Sources</u>		<u>Uses</u>	
Employee Contributions	\$ 2,035,728.16	Refunds	
Employer Contributions	3,497,718.70	Employee Contributions	\$ 340,106.55
Minnesota Adjustable Fixed Benefit Fund	11,342.14	Employer Contributions	12,628.12
Police and Fire State Aid	576,861.00	Payments to Minnesota Adjustable Fixed Benefit Fund	875,602.54
Various Accounts Receivables	1,316.32	Annuities Paid	
Investment Income	1,536,295.85	Retirement	523,002.80
Investment Sales and Receipts		Survivor	144,594.35
Bonds	11,094,397.65	Disability	7,675.65
Stocks	423,472.63	Investment Purchases	
Cancelled Warrants	4,017.55	Bonds	13,283,443.61
Interest on Omitted Deductions, Back Payments and Repaid Refunds	14,204.67	Stocks	4,006,145.00
Supplemental Payments Receivable	33.49	Transfer to Regular Fund	20,912.86
Decrease in Cash Balance	22,833.42	Interest Paid on Refunds	2,939.80
	\$19,218,221.58	Direct Expense	1,170.30
Cash Balance, 6/30/73	70,309.60		<u>\$19,218,221.58</u>
Total (Statements of Receipts and Disbursements)	<u>\$19,288,531.18</u>		

Public Employees Retirement AssociationPolice and Fire FundRECONCILIATION OF ASSET BALANCES

(June 30, 1973)

Asset Balance - July 1, 1972	\$31,490,335.30
------------------------------	-----------------

## Add:

Employer Contributions	\$3,470,919.63
Employee Contributions	2,035,728.16
Transfers from Regular Fund	59,754.88
Investment Earnings	1,457,682.69
Minnesota Adjustable Fixed	
Benefit Fund Income	723,906.56
Gain on Sale of Stocks and Bonds	123,340.52
Police State Aid	576,861.00
Adjustment to Benefit Reserves	171,617.28
Other Income	<u>36,147.55</u>

## Total Additions

8,655,958.27

\$40,146,293.57

## Deduct:

Benefits Paid	
Retirement	\$525,690.94
Survivor	142,614.98
Disability	<u>9,749.19</u>
	\$ 675,055.11

Refunds	340,068.62
Transfers to Regular Fund	6,216.09
Interest Paid on Refunds	2,939.80
Adjustments to Minnesota Adjustable	
Fixed Benefit Fund	6,373.72
Adjustments to Members' Active Accounts	124,102.16
Administrative Expenses	<u>32,360.29</u>

## Total Deductions

1,187,115.79

\$38,959,177.78

Current Liabilities and Accounts Payable

88,599.78Asset Balance, June 30, 1973\$39,047,777.56



Public Employees Retirement AssociationFINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1973)Police and Fire FundRESERVES

## Entry Age Normal Reserves

Retirement	\$ 63,373,420
Disability	20,550,545
Survivors	8,643,827
Vested	
Retirement	6,693,125
Refund	<u>2,022,451</u>
	\$101,283,368

Less Value of Benefits to be  
Earned in the Future58,450,533      \$42,832,835

## Vested Members

242,864

## Retired Members

Retirements - Payable from  
Minnesota Adjustable  
Fixed Benefit Fund  
Disability  
Survivors  
Reserve for Future  
Old Law Survivors

\$ 6,795,361  
145,539  
1,205,575

491,5358,638,010

\$51,713,709

## Unfunded Obligation

12,754,531

## Funded Obligation

\$38,959,178

Public Employees Retirement AssociationACTUARIAL REQUIREMENTS  
(July 1, 1973)Police and Fire FundAMORTIZATION RATE REQUIREMENT

Present Value of Benefits (For Both Past and Future Service)		\$110,164,242
Obligation for Service Rendered to Date	\$ 51,713,709	
Net Assets	38,959,178	
Accrued Unfunded Obligation	12,754,531	
Funding Ratio		75%
Amortization (24-Year) Requirement	924,321	
Covered Payroll	30,192,486	
Amortization (24-Year) Rate Requirement		<u>3.06%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned in the Future	\$ 58,450,533	
Present Value of Future Payroll	363,707,200	
Normal Cost Rate Requirement	16.07%	
Employee Contribution Rate	<u>8.00</u>	
Employer Normal Cost Rate Requirement		<u>8.07%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		12.00%
Amortization (24-Year) Rate Requirement	3.06%	
Normal Cost Rate Requirement	8.07	
Allowance for Expenses	<u>0.11</u>	
Total Requirement		11.24%
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		<u>0.76%</u>

Public Employees Retirement AssociationACTUARIAL REQUIREMENTS  
(July 1, 1973)Police and Fire FundAMORTIZATION RATE REQUIREMENT

	Period			
	10-Year	20-Year	30-Year	40-Year
Accrued Unfunded Obligation	\$12,754,531	\$12,754,531	\$12,754,531	\$12,754,531
Amortization Requirement	1,651,770	1,023,457	829,701	743,311
Covered Payroll	30,192,486	30,192,486	30,192,486	30,192,486
Amortization Rate Requirement	<u>5.47%</u>	<u>3.39%</u>	<u>2.75%</u>	<u>2.46%</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	5.47%	3.39%	2.75%	2.46%
Normal Cost Rate Requirement	8.07	8.07	8.07	8.07
Allowance for Expenses	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>
Total Requirement	<u>13.65%</u>	<u>11.57%</u>	<u>10.93%</u>	<u>10.64%</u>
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	<u>(1.65%)</u>	<u>0.43%</u>	<u>1.07%</u>	<u>1.36%</u>

Public Employees Retirement AssociationPolice and Fire FundACCOUNTING STATEMENT OF INCOME AND EXPENSES

(July 1, 1972 to June 30, 1973)

Income

Employer Contributions	\$3,490,898.30	
Member Contributions	2,076,869.56	
Special Income from Police State Aid	576,861.00	
Investment Income	1,581,023.21	
Other Income	16,168.88	
Transfer from General Fund	53,538.79	
Increase in Reserve Account	21,535.89	
Minnesota Adjustable Fixed Benefit Fund Income	<u>723,906.56</u>	
Total Income		\$8,360,849.30

Expenses

Benefits	\$ 675,055.11	
Refund of Contributions	343,008.42	
Expense - General	<u>32,360.29</u>	
Total Expenses		<u>1,050,423.82</u>

<u>Excess of Income over Expenses</u>	<u>\$7,310,425.48</u>
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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			\$ 7,310,425
Amortization Payment		\$ 62,990	
Excess Interest (2.34% x Average Invested Assets)		826,113	
Estimated Excess in Rate		487,784	
Contribution Requirement Applied to Larger Payroll		219,955	
Other Income		576,861	
Increases in Compensation	\$ 1,585,742		
Change in Actuarial Assumptions		3,010,129	
Effect of Amendment to Plan	<u>14,527,692</u>		
Totals	<u>\$16,113,434</u>	<u>\$5,183,832</u>	
Expected Decrease (Increase) in Unfunded			<u>(10,929,602)</u>
Net Change in Reserves			\$18,240,027
Experience Variation Gain (Loss)			<u>621,101</u>
Total			<u>\$17,618,926</u>
1973 Actuarial Reserve			\$51,713,709
1972 Actuarial Reserve			<u>34,094,783</u>
Increase (Decrease)			<u>\$17,618,926</u>

Public Employees Retirement AssociationRECONCILIATION OF ACTIVE MEMBERSPolice and Fire Fund

As of July 1, 1972	3,027
New Entrants	373
Reinstated	<u>59</u>
<u>Total</u>	<u>3,459</u>

## Separations:

a. With Refund of Contributions	
(i) Death	22
(ii) Withdrawal	274
b. With Deferred Annuity	2
c. With Disability Annuity	4
d. With Normal Retirement Annuity	43
e. With Survivor Annuity	<u>9</u>
<u>Total</u>	<u>354</u>

Active as of July 1, 1973	<u>3,105</u>
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RECONCILIATION OF ANNUITANTSPolice and Fire FundNormal Retirement Annuitants

As of July 1, 1972	216
Additions During Year	45
Deletions During Year	-10
<u>Total as of July 1, 1973</u>	<u>251</u>
Annual Annuity - July 1, 1972	\$455,420
- July 1, 1973	\$568,234

Disability Annuitants

As of July 1, 1972	5
Additions During Year	4
Deletions During Year	-3
<u>Total as of July 1, 1973</u>	<u>6</u>
Annual Annuity - July 1, 1972	\$ 8,163
- July 1, 1973	\$ 15,960

Survivor Annuitants(a) Spouse Only

As of July 1, 1972	57
Additions During Year	9
Deletions During Year	-1

Total as of July 1, 1973 65

Annual Annuity - July 1, 1972	\$ 49,269
- July 1, 1973	\$ 57,994

(b) Survivors with Children

As of July 1, 1972	48
Additions During Year	4
Deletions During Year	-

Total as of July 1, 1973 52

Annual Annuity - July 1, 1972	\$ 33,711
- July 1, 1973	\$ 44,651

(c) Children

As of July 1, 1972	87
Additions During Year	7
Deletions During Year	-10

Total as of July 1, 1973 84

Annual Annuity - July 1, 1972	\$ 52,692
- July 1, 1973	\$ 49,895

Deferred Annuitants

As of July 1, 1972	11
Additions During Year	2
Deletions During Year	-

Total as of July 1, 1973 13

Public Employees Retirement AssociationPolice and Fire FundRetired Under the Law in Force Prior to July 1, 1957Payable From Adjustable Fixed Benefit Fund

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
65	3	\$ 910.73	-	\$ -
66	2	614.91	-	-
67	5	1,236.67	-	-
68	10	2,582.75	-	-
69	6	1,231.79	1	135.36
70	7	1,186.13	-	-
71	10	2,137.33	-	-
72	10	2,593.47	1	177.82
73	10	2,257.73	-	-
74	9	1,947.93	1	48.38
75	4	882.72	1	184.75
76	5	1,100.85	-	-
77	6	1,349.18	-	-
78	4	880.46	-	-
79	3	483.38	-	-
80	2	374.16	-	-
81	1	218.58	-	-
82	1	118.65	-	-
84	1	170.50	-	-
85	1	37.65	-	-
<u>Totals</u>	<u>100</u>	<u>\$22,315.57</u>	<u>4</u>	<u>\$546.31</u>

Retired Under 1971 Laws, Chapter 297

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
55	1	\$ 726.67	-	\$ -
56	3	305.53	-	-
57	4	1,042.20	-	-
58	5	1,005.58	-	-
59	3	1,050.18	-	-
60	5	998.48	-	-
61	2	437.38	-	-
62	1	139.19	-	-
63	7	1,686.55	-	-
64	5	1,331.39	-	-
65	2	444.44	1	288.07
66	13	2,455.07	-	-
67	11	2,420.56	1	168.93
68	1	228.46	-	-
69	3	672.01	-	-
70	3	809.37	1	120.05
71	1	181.87	-	-
80	1	75.68	-	-
<u>Totals</u>	<u>71</u>	<u>\$16,010.61</u>	<u>3</u>	<u>\$577.05</u>



Public Employees Retirement AssociationPolice and Fire FundRetired Under Law in Force July 1, 1957 and SubsequentPayable From Adjustable Fixed Benefit Fund

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
59	-	\$ -	1	\$102.48
60	2	151.67	-	-
61	5	662.15	-	-
62	1	183.53	-	-
63	3	597.64	-	-
64	7	1,351.11	-	-
65	5	720.61	-	-
66	2	109.07	-	-
67	2	276.72	-	-
68	4	395.50	1	70.57
69	5	289.83	1	27.42
70	3	275.28	-	-
71	6	645.82	-	-
72	4	402.86	-	-
73	4	222.54	-	-
74	3	148.47	-	-
75	1	219.40	-	-
76	4	327.27	-	-
77	2	211.72	-	-
78	2	142.06	-	-
79	2	150.07	-	-
80	1	57.21	-	-
87	1	44.01	-	-
<u>Totals</u>	<u>69</u>	<u>\$7,584.54</u>	<u>3</u>	<u>\$200.47</u>

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

Age	Male	
	Number	Monthly Annuity
73	1	\$118.32

Survivor Annuities

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
57	-	\$ -	1	\$184.37
64	-	-	1	194.55
68	1	120.05	-	-
77	-	-	1	28.83
<u>Totals</u>	<u>1</u>	<u>\$ 120.05</u>	<u>3</u>	<u>\$407.75</u>

Public Employees Retirement AssociationPolice and Fire FundSurvivor 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>Monthly Annuity</u>
35	3	\$ 398.11	61	4	\$ 295.00
38	1	65.00	62	3	254.86
40	3	182.80	63	3	195.00
41	1	65.00	64	6	390.00
42	3	195.00	65	5	405.66
43	1	65.00	66	2	130.00
44	3	195.00	67	3	195.00
45	1	107.48	68	4	324.79
46	2	130.00	69	2	130.00
47	4	342.22	70	1	44.74
48	1	90.32	71	2	165.00
49	2	130.00	73	2	143.84
50	2	130.00	74	7	507.35
53	1	65.00	75	2	122.40
54	3	195.00	76	1	100.00
55	7	455.00	77	2	170.19
56	4	260.00	78	2	150.05
57	5	325.00	82	2	99.14
59	4	260.00	83	1	65.00
60	6	390.00	85	2	91.98
			<u>Totals</u>	<u>113</u>	<u>\$8,025.93</u>

<u>Children</u>	
<u>Number</u>	<u>Total Monthly Annuity</u>
84	\$4,157.91

<u>Disability Retirement Annuities</u>		
<u>Age</u>	<u>Number</u>	<u>Monthly Annuity</u>
46	1	\$ 162.30
47	1	280.01
53	1	289.28
56	1	418.87
58	2	179.53
<u>Totals</u>	<u>6</u>	<u>\$1,329.99</u>

## Public Employees Retirement Association

## Police and Fire Fund

## CONSIDERED EARNINGS

## Active Female Employees

(Age and Service as of July 1, 1973)

## YEARS OF SERVICE

Age	Under 1		1 to 2		2 to 4		5 to 9	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	2	\$ 12,646	3	\$ 20,368	2	\$ 13,453	-	\$ -
25 to 29	3	17,867	2	12,301	4	28,184	-	-
30 to 34	1	8,947	2	13,198	8	62,267	2	14,308
35 to 39	2	5,867	1	5,474	2	16,515	1	11,711
40 to 44	1	1,680	2	14,679	7	51,437	3	31,552
45 to 49	1	3,629	1	7,157	4	25,694	2	16,237
50 to 54	1	6,123	-	-	3	27,753	6	33,903
55 to 59	-	-	-	-	-	-	7	64,520
60 to 64	-	-	-	-	-	-	4	33,324
65 to 70	-	-	-	-	-	-	-	-
70 & Up	-	-	-	-	-	-	-	-
<u>Total</u>	<u>11</u>	<u>\$ 56,759</u>	<u>11</u>	<u>\$ 73,177</u>	<u>30</u>	<u>\$225,303</u>	<u>25</u>	<u>\$205,555</u>

## YEARS OF SERVICE

Age	10 to 14		15 to 19		20 to 24		25 to 29	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 29	-	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	-	-	-
35 to 39	-	-	-	-	-	-	-	-
40 to 44	1	12,875	1	8,868	-	-	-	-
45 to 49	3	17,966	-	-	-	-	-	-
50 to 54	-	-	-	-	-	-	-	-
55 to 59	1	11,632	-	-	-	-	-	-
60 to 64	-	-	-	-	1	5,563	-	-
65 to 69	-	-	-	-	-	-	-	-
70 & Up	-	-	-	-	-	-	-	-
<u>Total</u>	<u>5</u>	<u>\$ 42,473</u>	<u>1</u>	<u>\$ 8,868</u>	<u>1</u>	<u>\$ 5,563</u>	<u>-</u>	<u>\$ -</u>

## YEARS OF SERVICE

Age	30 to 34		35 to 39		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	7	\$ 46,467
25 to 29	-	-	-	-	-	-	9	58,352
30 to 34	-	-	-	-	-	-	13	98,720
35 to 39	-	-	-	-	-	-	6	39,567
40 to 44	-	-	-	-	-	-	15	121,091
45 to 49	-	-	-	-	-	-	11	70,683
50 to 54	-	-	-	-	-	-	10	67,779
55 to 59	-	-	-	-	-	-	8	76,152
60 to 64	-	-	-	-	-	-	5	38,887
65 to 69	-	-	-	-	-	-	-	-
70 & Up	-	-	-	-	-	-	-	-
<u>Total</u>	<u>-</u>	<u>\$ -</u>	<u>-</u>	<u>\$ -</u>	<u>-</u>	<u>\$ -</u>	<u>84</u>	<u>\$617,698</u>

## Public Employees Retirement Association

## Police and Fire Fund

## CONSIDERED EARNINGS

Active Male Employees  
(Age and Service as of July 1, 1973)

## YEARS OF SERVICE

Age	Under 1		1 to 2		2 to 4		5 to 9	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	129	\$ 916,250	99	\$ 757,301	62	\$ 544,857	-	\$ -
25 to 29	94	690,990	126	970,934	284	2,836,173	98	1,061,735
30 to 34	45	333,572	41	343,003	194	1,964,323	244	2,684,810
35 to 39	28	203,091	26	199,497	115	1,055,414	161	1,708,153
40 to 44	14	82,864	19	114,667	63	624,510	82	841,603
45 to 49	10	65,128	9	47,323	44	389,417	65	623,018
50 to 54	6	53,504	6	26,384	27	238,663	63	604,377
55 to 59	4	25,950	6	46,627	17	153,801	55	415,429
60 to 64	1	1,500	2	8,640	10	63,080	22	195,168
65 to 69	-	-	1	1,560	2	4,911	5	28,140
70 & Up	2	13,606	1	5,230	-	-	2	20,704
<u>Total</u>	<u>333</u>	<u>\$ 2,386,455</u>	<u>336</u>	<u>\$ 2,521,166</u>	<u>818</u>	<u>\$ 7,875,149</u>	<u>797</u>	<u>\$ 8,183,137</u>

## YEARS OF SERVICE

Age	10 to 14		15 to 19		20 to 24		25 to 29	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 29	-	-	-	-	-	-	-	-
30 to 34	21	252,390	-	-	-	-	-	-
35 to 39	77	913,034	12	141,192	-	-	-	-
40 to 44	70	842,082	65	814,052	9	115,291	-	-
45 to 49	69	795,546	66	775,346	20	237,535	6	76,671
50 to 54	47	517,367	34	374,154	29	311,303	11	274,310
55 to 59	32	297,819	39	437,440	29	306,197	16	205,102
60 to 64	20	188,720	17	172,674	13	135,249	9	114,142
65 to 69	3	30,791	1	11,815	1	10,258	1	9,333
70 & Up	3	25,175	-	-	-	-	1	9,790
<u>Total</u>	<u>342</u>	<u>\$ 3,862,924</u>	<u>234</u>	<u>\$ 2,726,673</u>	<u>101</u>	<u>\$ 1,115,833</u>	<u>44</u>	<u>\$ 689,348</u>

## YEARS OF SERVICE

Age	30 to 34		35 to 39		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	290	\$ 2,218,408
25 to 29	-	-	-	-	-	-	602	5,559,832
30 to 34	-	-	-	-	-	-	545	5,578,098
35 to 39	-	-	-	-	-	-	419	4,220,381
40 to 44	-	-	-	-	-	-	322	3,435,069
45 to 49	1	11,298	-	-	-	-	290	3,021,282
50 to 54	4	55,527	-	-	-	-	227	2,455,589
55 to 59	2	25,555	2	20,311	1	9,868	203	1,944,099
60 to 64	-	-	3	43,141	-	-	97	922,314
65 to 69	1	20,412	2	27,991	-	-	17	145,211
70 & Up	-	-	-	-	-	-	9	74,505
<u>Total</u>	<u>8</u>	<u>\$ 112,792</u>	<u>7</u>	<u>\$ 91,443</u>	<u>1</u>	<u>\$ 9,868</u>	<u>3,021</u>	<u>\$29,574,788</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, village, 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 prior to date of separation from public 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 \$400 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  $3\frac{1}{2}\%$ , 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.

Actuarial Survey



Public Employees Retirement Association

Actuarial Survey

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Public Employees Retirement Association  
Information for the Year Ending June 30, 1973

GENERAL FUND

		<u>Basic</u>	<u>Coordinated</u>
5(1)	Normal Cost of Program		
	Percentage	12.11%	6.31%
	Annual Dollar Amount	\$ 22,293,897	\$ 17,355,731
	Present Value of Benefits (For Past and Future Service)	717,168,286	209,656,011
	Value of Benefits to be Earned in the Future	176,025,879	139,751,784
	Net Assets	286,796,992	62,462,706
	Accrued Unfunded Obligation	254,345,415	7,441,521
5(2)	Not Applicable		
5(3)	Interest Assumption	5%	5%
5(4)	Actuarial Assumptions		
	Mortality	1965 Group Annuity	
	Retirement Age	65 for members who have less than 30 years of service. For members 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	3-1/2% per year	

Public Employees Retirement AssociationGeneral FundMale EmployeesMORTALITY 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 AssociationGeneral FundFemale EmployeesMORTALITY 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 AssociationGeneral FundAll 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 AssociationGeneral FundMale EmployeesSEPARATION 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		



5(5)

Public Employees Retirement AssociationGeneral FundFINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1973)ASSETS

Cash - On Hand	\$ 50.00		
On Deposit and In Transit	<u>718,169.99</u>	\$ 718,219.99	
Minnesota Adjustable Fixed Benefit Fund		104,014,247.51	
Deferred Yield Adjustment		<u>1,167,373.17</u>	
Accounts Receivable:			
M.S. 1971, Sec. 353.36,			
Subd. 2, 8, and 9	\$ 305,031.90		
Employer Contributions	193,582.73		
Interest	2,258,703.46		
Dividends	283,817.36		
From Police and Fire Fund	38,577.90		
Social Security Vote	231.43		
From MSRS and TRA	19,768.04		
Other	<u>2,563.38</u>	<u>3,102,276.20</u>	\$109,002,116.87
Current Liabilities:			
Accounts Payable	\$ 88,186.56		
Penalties Refundable	4,266.75		
Donations Suspense	<u>601,551.45</u>		
Members Contribution - Suspense	166.37		
Omitted Deductions - Suspense	<u>7,080.96</u>		<u>701,252.09</u>
<u>Net Current Assets</u>			<u>\$108,300,864.78</u>

INVESTMENTS

Bonds			
U.S. Government	\$ 10,273,000.00		
Municipal	6,652,000.00		
Corporate	97,892,993.16		
Canadian Government Insured	18,476,998.22		
Common Stocks	<u>107,633,387.72</u>	\$240,928,379.10	
Miscellaneous			
Office Equipment (Less Depreciation)	\$ 25,497.71		
Other	<u>4,956.75</u>	<u>30,454.46</u>	<u>\$240,958,833.56</u>
<u>Total Assets</u>			<u>\$349,259,698.34</u>

Members Accumulated Contributions - \$105,981,441.23

5(5)

Public Employees Retirement AssociationGeneral FundFINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1973)RESERVES

	<u>Basic</u>	<u>Coordinated</u>
Accrued Assets	\$286,796,992	\$ 62,462,706
<u>Accrued Liabilities</u>		
<u>Active</u>		
Retirement	\$457,993,257	\$148,858,965
Disability	30,794,303	9,812,592
Refund	7,653,044	21,463,414
Survivors	34,126,817	--
Deferred Vesting	55,056,406	19,258,667
Total	\$585,623,827	\$199,393,638
<u>Terminated</u>		
Prior Deferred (Incl. Refunds)	\$ 1,045,333	\$ 379,423
<u>Retired</u>		
Retirement	\$ 94,518,787	\$ 9,495,461
Disability	2,644,561	387,489
Widows and Children	22,800,002	--
Future Old Law Survivors	10,535,776	--
Total	\$130,499,126	\$ 9,882,950
<u>Total Accrued Liabilities</u>	<u>\$717,168,286</u>	<u>\$209,656,011</u>
<u>Unfunded Accrued Liability</u>	<u>\$254,345,415</u>	<u>\$ 7,441,521</u>

Public Employees Retirement Association  
Information for the Year Ending June 30, 1973

General Fund  
(Continued)

	<u>Basic</u>	<u>Coordinated</u>
5(6) Unfunded Accrued Liability	\$254,345,415	\$ 7,441,521
Annual Requirement to Amortize Unfunded Accrued Liability by 1997 (24 years)	18,432,412	539,287
Covered Payroll	184,094,937	275,051,200
Amortization Rate Requirement	10.01%	0.20%
5(7) The prior Exhibits are based on the benefits under the funds as ammended effective July 1, 1973		
5(8) See Actuarial Balance Sheet		
5(9) Average Entry Age	<u>Basic and Coordinated</u>	
(a) All actives July 1, 1973	36.8	
(b) New Entrants		
July 1, 1969	35.9	
July 1, 1970	35.4	
July 1, 1971	35.4	
July 1, 1972	34.6	
July 1, 1973	33.9	
5(10) Average Retirement Age		
(a) All Retirees July 1, 1973	66.4	
(b) New Retirees		
July 1, 1968 to June 30, 1969	66.6	
July 1, 1969 to June 30, 1970	66.0	
July 1, 1970 to June 30, 1971	66.9	
July 1, 1971 to June 30, 1972	65.9	
July 1, 1972 to June 30, 1973	66.2	

Public Employees Retirement Association  
Information for the Year Ending June 30, 1973

General Fund  
(Continued)

	<u>Basic</u>	<u>Coordinated</u>
5(11) Expenses	\$ 308,756	\$ 461,298
Level Normal Cost	22,293,897	17,355,731
Payroll	184,094,937	275,051,200
% of Payroll		
Expenses	0.17%	0.17%
Normal Cost	12.11	6.31

5(12) The earnings progression assumption is based on a 3-1/2% increase per year (see Item (4) ).

Public Employees Retirement Association  
Information for the Year Ending June 30, 1973

POLICE AND FIRE FUND

5(1)	Normal Cost of Program	
	Percentage	16.07%
	Annual Dollar Amount	\$ 4,851,933
	Present Value of Benefits (For Past and Future Service)	110,164,242
	Value of Benefits to be Earned in the Future	58,450,533
	Net Assets	38,959,178
	Accrued Unfunded Obligation	12,754,531
5(2)	Not Applicable	
5(3)	Interest Assumption	5%
5(4)	Actuarial Assumptions	
	Mortality	1965 Group Annuity
	Retirement Age	62
	Disability	See Following Table
	Turnover	See Following Table
	Salary Scale	3-1/2% per year

Age 62 was used as the average age at retirement to allow for the lowering of the earliest retirement age from 58 to 55. Prior to this change age 64 was the retirement age assumption.

Public Employees Retirement AssociationPolice and Fire FundAll EmployeesMORTALITY 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 AssociationPolice and Fire FundAll EmployeesDISABILITY 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 AssociationPolice and Fire FundAll EmployeesSEPARATION 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 AssociationPolice and Fire FundAll EmployeesEARNINGS 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 AssociationPolice and Fire FundFINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1973)ASSETS

Cash - On Hand	\$ -		
On Deposit and in Transit	70,309.60	\$ 70,309.60	
Minnesota Adjustable Fixed Benefit Fund		6,795,360.84	
Deferred Yield Adjustment		200,128.69	
Accounts Receivable			
M.S. 1971, Section 353.36	\$ 6,686.98		
M.S. 1971, Section 353.36, Subd. 9	1,001.80		
Employer Contributions	4,549.15		
Interest	288,718.97		
Dividends	42,190.64		
From Regular Fund	59,799.96		
Others	1,108.37	404,055.87	\$ 7,469,855.00
Less Current Liabilities			<u>88,599.78</u>
Net Current Assets			\$ 7,381,255.22

INVESTMENTS

Bonds			
U. S. Government	\$ 1,751,000.00		
Municipal	-		
Corporate	12,835,782.68		
Canadian Government Insured	2,604,242.29		
Stocks			
Common	14,386,897.59		
Preferred	-		
Prepaid Interest	-		<u>31,577,922.56</u>
<u>Total Assets</u>			<u>\$38,959,177.78</u>

Members accumulated contributions \$9,250,907.99.

5(5)

Public Employees Retirement AssociationPolice and Fire FundFINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1973)RESERVES

Accrued Assets \$ 38,959,178

Accrued LiabilitiesActive

Retirement	\$63,373,420	
Disability	20,550,545	
Refund	2,022,451	
Survivors	8,643,827	
Deferred Vesting	6,693,125	
Total		\$101,283,368

Terminated

Prior Deferred (Incl. Refunds) \$ 242,864

Retired

Retirement	\$ 6,795,361	
Disability	145,539	
Widows and Children	1,205,575	
Future Old Law Survivors	491,535	
Total		\$ 8,638,010

Total Accrued Liabilities \$110,164,242Unfunded Accrued Liability \$ 12,754,531

Public Employees Retirement Association  
Information for the Year Ending June 30, 1973  
Police and Fire Fund  
(Continued)

5(6)	Unfunded Accrued Liability	\$12,754,531
U	Annual Requirement to Amortize Unfunded Accrued Liability by 1997 (24 years)	924,321
	Covered Payroll	30,192,486
	Amortization Rate Requirement	3.06%
5(7)	The prior Exhibits are based on the benefits under the funds as ammended effective July 1, 1973.	
5(8)	See Actuarial Balance Sheet	
5(9)	Average Entry Age	
	(a) All actives July 1, 1973	31.1
	(b) New Entrants	
	July 1, 1969	31.5
	July 1, 1970	32.3
	July 1, 1971	32.4
	July 1, 1972	29.5
	July 1, 1973	29.2
5(10)	Average Retirement Age	
	(a) All Retirees July 1, 1973	64.2
	(b) New Retirees	
	July 1, 1968 to June 30, 1969	65.2
	July 1, 1969 to June 30, 1970	65.3
	July 1, 1970 to June 30, 1971	64.4
	July 1, 1971 to June 30, 1972	63.5
	July 1, 1972 to June 30, 1973	63.6

Public Employees Retirement Association  
Information for the Year Ending June 30, 1973

Police and Fire Fund  
(Continued)

5(11)	Expenses	\$ 32,360
	Level Normal Cost	4,851,933
	Payroll	30,192,486
	% of Payroll	
	Expenses	0.11%
	Normal Cost	16.07
5(12)	The earnings progression assumption is based on a 3-1/2% increase per year (see Item (4) ).	