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# Public Employees' Retirement Board

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Bernal Brooks .....	City of Colorado Springs
Walter Chilton .....	Retired
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Margarett Whilden .....	Jefferson County Public Schools
Wilborn S. Whitehead .....	City of Arvada
Sam Brown .....	State Treasurer
John Proctor .....	State Auditor

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Joseph P. Natale .....	Assistant Executive Secretary
William Auld .....	Data Processing
Kent Carsten .....	Office Services
Donald Clippinger .....	Accounting
Syble Cultra .....	Retirement Services
Allan Johnson .....	Information Services
Kenneth Peterson .....	Investments
Paula Westerdahl .....	Annuities

## Consulting Firms

Gabriel, Roeder, Smith & Company, Actuaries  
Peat, Marwick, Mitchell & Co., Certified Public Accountants  
Alliance Capital Management Corporation, Investment Counsel  
A.G. Becker & Co., Incorporated, Funds Evaluation Service



1975  
**STATISTICAL SUPPLEMENT**

To the Annual Report of  
**The Public Employees' Retirement Association  
Of Colorado**

1390 Logan - 4th Floor  
Denver, Colorado 80203

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# Introduction

This booklet is divided into two major parts: a financial report and an actuarial report. The purpose of this supplement is to supply the interested member with detailed investment, financial, and actuarial information used by the Retirement Board in managing the Public Employees' Retirement Association.

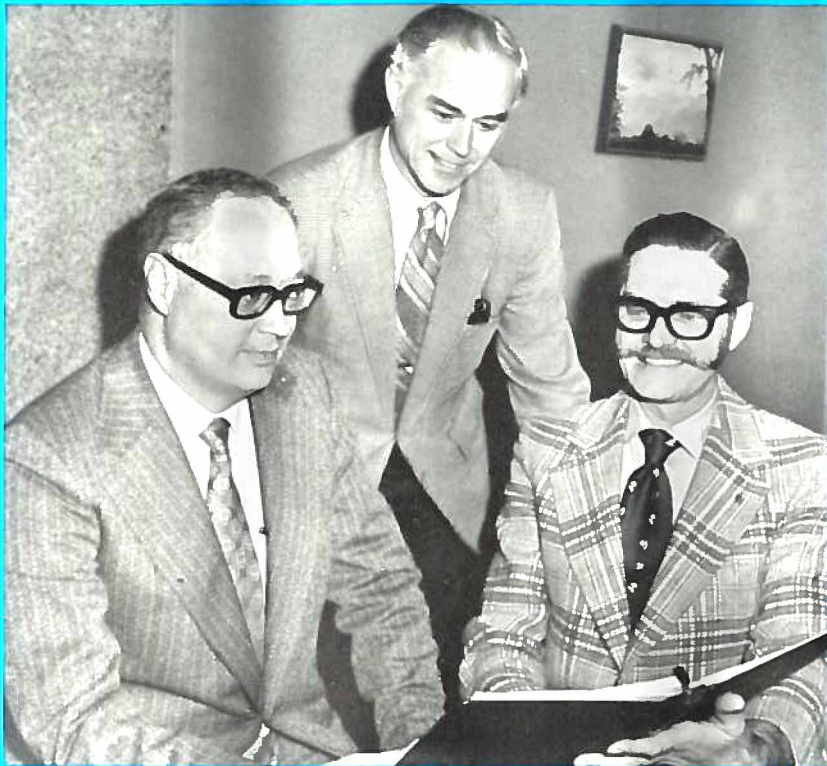
In the financial report, the June 30, 1975, audited financial reports are presented with accompanying auditor's statement and notes. This section also deals with the growth and composition of the asset structure of the fund. Investments of the portfolio are listed as of June 30, 1975.

The actuarial report deals with the fundamental reality facing PERA—the growth of PERA, in terms of both people and dollar assets, and the growth of claims on the fund, accumulating over the years through a statutory promise to pay benefits at retirement.

The Public Employees' Retirement Association has four funds—the State Division, School Division, Municipal Division, and Judges Division. Much of the data in this booklet is consolidated for all four divisions although each fund is separated from the others and is only used to pay claims against that division. Actuarial facts for active members of the Association are listed as of December 31, 1974. Data on retired lives is listed as of June 30, 1975.

Members contribute  $7\frac{3}{4}$  percent of salary paid. While this money is invested, the member's principal amount can only be used for the benefit of the individual member or his survivor. The employers' contributions vary according to Division. These contributions are determined on the basis of actuarial valuations to provide the amount of money needed, in addition to the employee's own contributions, to pay the allowances promised by the Association.

Explanatory materials including several graphs appear throughout to help explain the program. This is the second year for this Annual Statistical Supplement. Response to last year's booklet was good. We hope that this year's report will also be of interest to you and will be helpful in understanding and evaluating the program.



**PERA LEADERSHIP.** Pictured above, from left to right, Tom Lindquist, vice chairman of the Retirement Board; Jack Kennedy, executive secretary; and Carl Wilkerson, Board chairman.

**March 1, 1975**

**Public Employees' Retirement  
Board of Colorado**

**1390 Logan - 4th Floor  
Denver, Colorado 80203**



# How the Plan Operates

The PERA retirement plan was established in 1931, and began by covering only state employees. The plan has been greatly extended since that time and now includes employees of the State of Colorado, of all school districts in the state except Denver, and the employees of several municipalities, public health departments, and other local governmental agencies.

This plan is recognized as among the best in existence. Its purpose is to provide income to members and their families when they need it most — at retirement or in case of death or disability.

The Public Employees' Retirement Association is a joint-contributory retirement plan, operating on an actuarial reserve basis.

Here are a few facts regarding the retirement system:

**THE RETIREMENT ACT:** The law governing the Public Employees' Retirement Association of Colorado is Article 51 of Title 24, Colorado Revised Statutes, 1973, as amended. The last amendatory legislation was enacted in 1975.

Complete copies of the law are available at the Retirement Office.

**ADMINISTRATION OF SYSTEM:** The administration and responsibility for the proper operation of the Association are vested in the Public Employees' Retirement Board of Colorado which is made up of fourteen members, as follows:

Five representatives elected by members from the School Division.

Four representatives elected by members from the State Division.

Two representatives elected by members from the Municipal Division.



One representative elected by those retired under PERA.

The State Treasurer and State Auditor.

The members of the Association elect employee group representatives to the Board for four-year terms.

The legal advisor of the Retirement Board is the State Attorney General. An executive secretary is appointed by the Retirement Board to be secretary and administrative officer of the Association. He, in turn, is responsible for the activities of the staff.

The Board also appoints an actuary who makes annual actuarial valuations to determine the adequacy of the funding of retirement benefit liabilities accrued under the retirement program. The PERA Board submits an annual actuarial valuation report to the Legislative Audit Committee and the Joint Budget Committee of the Colorado General Assembly.

A Medical Advisor is appointed by the Board to study and make recommendations regarding applications for disability retirements. The Board also appoints an advisory Investment Committee and Legislative Committee.

Administrative expenses of the Association are paid from the \$5 membership fees charged the employee upon employment and from a small portion of investment income.

**INVESTMENTS:** The funds of the retirement system are invested primarily in public utility and corporate bonds, common and preferred stock of top-rated companies, and in real estate mortgages insured and guaranteed by agencies of the United States Government.

The law charges the PERA Board with the responsibility of investing the funds in a prudent and discretionary manner and limits investments in common and preferred stocks to 30 percent of the portfolio.

**CONTRIBUTIONS BY MEMBERS:** Effective July 1, 1973, members of the State, School, Municipal Divisions make deposits of 7- $\frac{3}{4}$ % of salary paid including pay for overtime and additional duties but excluding reimbursement of expenses. Deposits are posted to individual

accounts for each employee. The accumulated amount in each account will be used for the employee's benefit if he remains in service. If he leaves service, he may withdraw the amount of his contributions without interest, or he may, if he has five or more years of service, elect a deferred annuity providing a lifetime income at age 65 or in some cases earlier. If he dies before retirement and no other death benefits are payable, his beneficiary will receive his contributions.

**CONTRIBUTIONS BY EMPLOYER:** While members are saving for retirement, the Employer — State of Colorado, School District, Municipality, other political subdivision — will be making contributions on behalf of their employees. Rates for PERA Divisions differ. The Divisions include State Division, School Division, and Municipal Division.

The employer's contributions are determined on the basis of actuarial valuation and will provide the amount of money needed, in addition to the employee's own contributions, to provide the allowances promised by the Association. The average retired member pays only 15% of the amount he receives as an annuity. The remainder comes from the employer money and investment income.

Employer rates are as follows:

Division	Effective Date	% of Payroll
State	7-1-75	10.64%
School	1-1-76	12.10
Municipal	1-1-76	9.86

The employee rate for the Judges' Division is 7% of salary paid; the employer rate is 12% of payroll.

**WHERE TO WRITE FOR INFORMATION:** Any member who wishes information which is not given in this booklet may write for further information to:

**PUBLIC EMPLOYEES' RETIREMENT  
ASSOCIATION  
1390 Logan — 4th Floor  
Denver, Colorado 80203**



# Summary of PERA Benefits

The following is a brief description of the benefits of the Public Employees' Retirement Association in the State, School, and Municipal Divisions. The reader is reminded that this is only a brief explanation; complete details of the benefits and other aspects of the program may be found in the Law and in the Rules and Regulations of the Retirement Board.

**Final Average Salary (FAS) is a frequently used term describing PERA benefits. It means the average of the highest five consecutive years of earnings within the period of service being considered, usually the last five years.**

## If You Resign

You are entitled to a refund of your own deposits to PERA. In addition to this benefit, if you have five or more years of service, you may leave your money on deposit and without further payment you will be eligible for a monthly benefit payable for the rest of your life beginning when you are 60 to 65. This monthly benefit will be based on the amount of your PERA-covered service.

## If You Die

Your widow or widower will receive a monthly benefit until your youngest child is 18 years of age or until age 23 if the child is unmarried and in school. If you leave no eligible children or after benefits have been paid because of the children, your widow or widower will receive a monthly benefit beginning at his or her age of 60, earlier if you have more service. To be eligible for these survivor benefits you must have at least one year's service under PERA unless the death is service incurred in which case there is no service credit requirement. If you leave no eligible survivors for monthly benefits, your beneficiary will receive a refund of the amount of money you have deposited with PERA.

## If You Are Permanently Disabled

You will receive a maximum of 50 percent FAS. This could be higher if you have more than 20 years covered service. One percent of FAS would be added for each year over 20. If you were hired after age 45, the percentage of FAS would be less than 50 percent.

This benefit is payable for the rest of your life or until you recover from the disability. In order to qualify for this benefit, you must have had five years' of service credit under PERA since last date of employment.

## If You Retire

You can retire as early as age 55 provided you have at least 20 years of PERA service credit at that age. You can retire at age 60 with as few as five years of PERA service credit. Your benefit depends on your Final Average Salary, your service, and at what age you decide to retire. For example, a person retiring at age 60 with 20 years of credited service would receive a monthly annuity of 50 percent of Final Average Salary.

The formula used to compute your retirement benefits is:

- 2½% of Final Average Salary per year — 1st 20 years of service.
- 1% of Final Average Salary — 21-40 years of service.

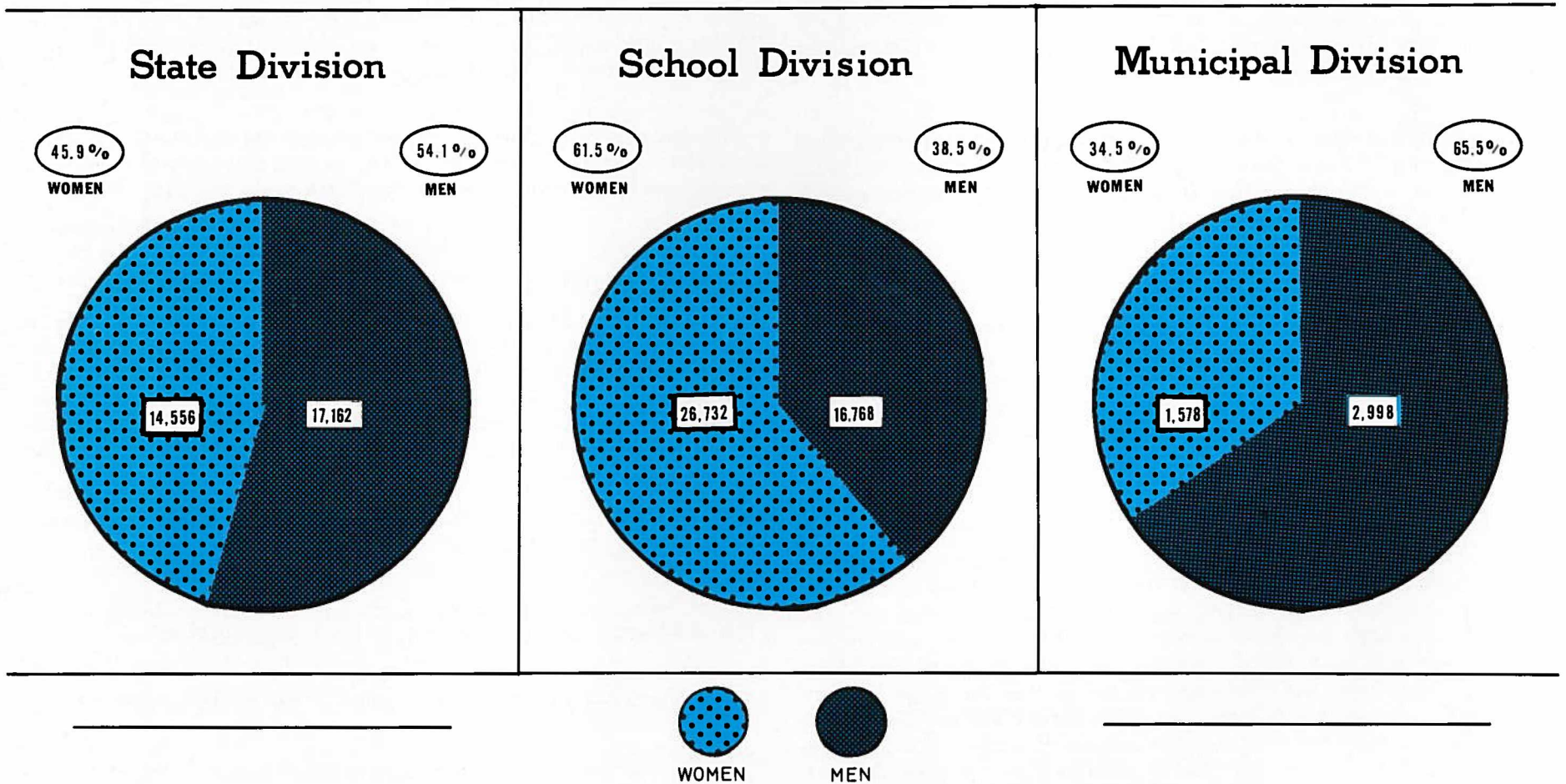
(1% is only applied to service after July 1, 1969, under current law.)

Maximum-70%

This formula is reduced in certain cases.

# NUMBERS OF ACTIVE MEMBERS BY DIVISION 12-31-74

*(Further Distribution According to Sex)*





PEAT, MARWICK, MITCHELL & CO.

CERTIFIED PUBLIC ACCOUNTANTS

1600 BROADWAY

DENVER, COLORADO 80202

The Retirement Board  
Public Employees' Retirement  
Association of Colorado:

We have examined the combining balance sheet of the Public Employees' Retirement Association of Colorado (consisting of State Employees', School Employees', Municipal Employees' and Judges' Divisions) as of June 30, 1975 and the related combining statements of revenue and administrative expense and changes in reserve accounts for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

The estimated obligation of employers for prior service based on the separate actuarial information of each division and aggregating \$582,509,667 is based on reserves required for member benefits accrued at December 31, 1974 and is presented in accordance with a certification submitted by the Association's consulting actuaries.

In our opinion, based upon our examination and relying upon the certification mentioned in the preceding paragraph, the aforementioned combining financial statements present fairly the combined and individual financial position of Public Employees' Retirement Association of Colorado (consisting of State Employees', School Employees', Municipal Employees' and Judges' Divisions) at June 30, 1975 and their combined and individual transactions for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

We have reported separately under date of August 22, 1975 on the financial statements of each of the divisions for the years ended June 30, 1975 and 1974.

*Peat, Marwick, Mitchell & Co.*

August 22, 1975

# Combining Balance Sheet

June 30, 1975  
with comparative combined totals for 1974

## Assets

	Municipal Employees' Division	School Employees' Division	Judges' Division	State Employees' Division	Combined total	
					1975	1974
Cash .....	\$ 153,719	1,310,503	47,240	524,805	2,036,267	1,337,121
Receivables:						
Member and employer contributions .....	679,233	5,241,345	68,777	5,629,347	11,618,702	9,982,165
Dividends and accrued interest on investments .....	611,054	7,101,147	107,084	5,613,089	13,432,374	10,177,334
Other .....	5,982	172,909	2,204	141,379	322,474	53,787
	<u>1,296,269</u>	<u>12,515,401</u>	<u>178,065</u>	<u>11,383,815</u>	<u>25,373,550</u>	<u>20,213,286</u>
Investments (note 2):						
Temporary investments, at cost .....	1,944,134	21,625,578	314,030	17,244,524	41,128,266	26,625,228
Corporate obligations, at amortized cost .....	26,759,480	308,420,230	4,389,211	251,016,219	590,585,140	479,432,244
Stocks, at cost .....	5,489,769	82,083,561	1,124,617	64,259,538	152,957,485	127,867,439
United States Government obligations, at amortized cost .....	1,792,744	28,164,108	349,447	18,852,790	49,159,089	53,653,871
First mortgages, at amortized cost .....	1,827,730	69,515,020	391,299	44,072,446	115,806,495	107,724,434
Colorado bonds, at cost .....	—	—	—	—	—	150,000
Total investments before unamortized yield adjustment .....	37,813,857	509,808,497	6,568,604	395,445,517	949,636,475	795,453,216
Unamortized yield adjustment .....	1,309,796	7,927,427	244,356	5,962,052	15,443,631	14,502,485
	<u>39,123,653</u>	<u>517,735,924</u>	<u>6,812,960</u>	<u>401,407,569</u>	<u>965,080,106</u>	<u>809,955,701</u>
Land, at cost .....	—	—	—	180,000	180,000	180,000
Building in process (note 4) .....	—	—	—	385,073	385,073	—
Equipment and fixtures, at cost, less accumulated depreciation of \$91,849 in 1975; \$77,807 in 1974 ...	—	—	—	59,978	59,978	52,588
Total Real Assets .....	40,573,641	531,561,828	7,038,265	413,941,240	993,114,974	831,738,696
Estimated obligation of employers for prior service (contra) .....	19,292,635	296,107,074	839,450	266,270,508	582,509,667	547,081,764
	<u>\$59,866,276</u>	<u>827,668,902</u>	<u>7,877,715</u>	<u>680,211,748</u>	<u>1,575,624,641</u>	<u>1,378,820,460</u>



## Liabilities and Reserves

	Municipal Employees' Division	School Employees' Division	Judges' Division	State Employees' Division	Combined total	
					1975	1974
Refunds and other liabilities payable.....	\$ 121,094	767,365	1,416	908,143	1,798,018	2,213,515
Reserve accounts:						
Contributions:						
Members' deposits.....	12,586,604	154,478,074	1,699,275	128,046,452	296,810,405	255,090,397
Employers':						
Accumulation .....	12,821,905	188,520,816	2,572,051	74,775,668	278,690,440	229,433,401
Actuarial requirements (contra) .....	<u>19,292,635</u>	<u>296,107,074</u>	<u>839,450</u>	<u>266,270,508</u>	<u>582,509,667</u>	<u>547,081,764</u>
	<u>44,701,144</u>	<u>639,105,964</u>	<u>5,110,776</u>	<u>469,092,628</u>	<u>1,158,010,512</u>	<u>1,031,605,562</u>
Annuity:						
Annuitants' retirement .....	13,404,108	176,571,886	2,117,513	192,336,115	384,429,622	318,853,504
Survivors' benefit .....	1,275,672	5,572,447	598,447	9,616,969	17,063,535	13,446,955
Deferred annuitants' .....	225,852	5,221,865	49,563	3,770,584	9,267,864	8,452,196
Deferred survivors' benefit .....	<u>138,406</u>	<u>429,375</u>	<u>—</u>	<u>746,415</u>	<u>1,314,196</u>	<u>1,057,260</u>
	<u>15,044,038</u>	<u>187,795,573</u>	<u>2,765,523</u>	<u>206,470,083</u>	<u>412,075,217</u>	<u>341,809,915</u>
Insurance dividend reserve (note 3).....	—	—	—	3,740,894	3,740,894	3,191,468
Total reserve accounts .....	59,745,182	826,901,537	7,876,299	679,303,605	1,573,826,623	1,376,606,945
Commitments (note 4)						
	<u>\$59,866,276</u>	<u>827,668,902</u>	<u>7,877,715</u>	<u>680,211,748</u>	<u>1,575,624,641</u>	<u>1,378,820,460</u>

See accompanying notes to combining financial statements.

## Combining Statement of Revenue and Administrative Expense

Year ended June 30, 1975  
with comparative combined totals for 1974

	Municipal Employees' Division	School Employees' Division	Judges' Division	State Employees' Division	Combined total 1975	1974
Revenue:						
Interest income:						
Corporate obligations .....	\$1,801,098	20,766,462	307,529	16,873,263	39,748,352	30,910,975
United States Government obligations .....	132,116	1,773,341	31,605	1,202,244	3,139,306	3,242,463
First mortgages .....	77,447	3,054,582	16,041	2,055,384	5,203,454	5,127,506
Temporary investments .....	109,229	1,311,913	17,684	1,089,204	2,528,030	1,595,437
Colorado bonds .....	—	—	—	—	—	5,500
Dividend income .....	154,365	2,438,848	34,274	1,931,482	4,558,969	3,780,286
Gain on sale of investments, net .....	44,762	531,360	8,348	408,361	992,831	990,489
Amortization of premiums and discounts on investments, net .....	119,557	1,242,703	25,623	936,080	2,323,963	1,897,644
Membership fees .....	6,765	44,680	90	34,740	86,275	87,033
Other, net .....	3,809	98,904	(160)	69,343	171,896	170,640
	<u>2,449,148</u>	<u>31,262,793</u>	<u>441,034</u>	<u>24,600,101</u>	<u>58,753,076</u>	<u>47,807,973</u>
Less amortization of yield adjustment .....	88,057	437,211	15,646	367,122	908,036	737,508
	<u>2,361,091</u>	<u>30,825,582</u>	<u>425,388</u>	<u>24,232,979</u>	<u>57,845,040</u>	<u>47,070,465</u>
Administrative expenses (note 5) .....	65,886	636,002	3,113	477,874	1,182,875	957,616
<b>Excess of revenue over expense distributed to reserve accounts .....</b>	<b><u>\$2,295,205</u></b>	<b><u>30,189,580</u></b>	<b><u>422,275</u></b>	<b><u>23,755,105</u></b>	<b><u>56,662,165</u></b>	<b><u>46,112,849</u></b>

See accompanying notes to combining financial statements.



## Combining Statement of Changes in Reserve Accounts

Year ended June 30, 1975  
with comparative combined totals for 1974

	Municipal Employees' Division	School Employees' Division	Judges' Division	State Employees' Division	Combined total	
					1975	1974
Contributions:						
Members .....	\$ 3,506,986	31,833,436	327,925	27,848,994	63,517,341	55,743,047
Employer .....	4,067,040	43,989,971	554,466	37,506,166	86,117,643	68,549,196
	<u>7,574,026</u>	<u>75,823,407</u>	<u>882,391</u>	<u>65,355,160</u>	<u>149,634,984</u>	<u>124,292,243</u>
Excess of revenue over expense .....	2,295,205	30,189,580	422,275	23,755,105	56,662,165	46,112,849
Cost of living adjustments appropriated by the Colorado State Legislature .....	19,598	228,417	—	373,447	621,462	655,199
Transfers for split annuities:						
From School Employees' Division to State Employees' Division .....	—	(658,300)	—	658,300	—	—
From Municipal Employees' Division to State Employees' Division .....	(42,154)	—	—	42,154	—	—
From School Employees' Division to Municipal Employees' Division .....	35,428	(35,428)	—	—	—	—
Refunds due to withdrawal of participating members .....	(594,307)	(5,278,578)	(4,853)	(5,144,387)	(11,022,125)	(11,438,440)
Benefits paid to annuitants .....	(1,230,697)	(15,759,631)	(230,229)	(17,231,667)	(34,452,224)	(28,635,898)
Increase (decrease) in estimated obliga- tion of employers for prior service adjusted to actuaries' certificates .....	(169,535)	17,841,495	(508,511)	18,264,454	35,427,903	146,306,361
Insurance dividends received net of paid-up insurance and administrative expenses (note 3) .....	—	—	—	347,513	347,513	263,965
<b>Net increase for the year</b> .....	<u>7,887,564</u>	<u>102,350,962</u>	<u>561,073</u>	<u>86,420,079</u>	<u>197,219,678</u>	<u>277,556,279</u>
Balance, beginning of year .....	<u>51,857,618</u>	<u>724,550,575</u>	<u>7,315,226</u>	<u>592,883,526</u>	<u>1,376,606,945</u>	<u>1,099,050,666</u>
<b>Balance, end of year</b> .....	<u>\$59,745,182</u>	<u>826,901,537</u>	<u>7,876,299</u>	<u>679,303,605</u>	<u>1,573,826,623</u>	<u>1,376,606,945</u>

See accompanying notes to combining financial statements.

# Notes to Combining Financial Statement

June 30, 1975

## **(1) Summary of Significant Accounting Policies** **Valuation of Reserve Accounts** **Basis of Combining Financial Statements**

The accompanying combining financial statements include the accounts of the State, School and Municipal Employees' and Judges' Division. Each division's accounts are separately maintained and all actuarial determinations are made on the basis of each division's separate actuarial information.

### **Employer Contributions**

The effective statutory employer contribution rates ranged from 9.86 to 12.10 percent of active member payroll. The Association's actuary uses the "entry age normal" ("attained age normal" for Judges' Division) actuarial method to determine annuity liabilities and normal costs. As of December 31, 1974, after considering current cost contributions, the actuarially computed number of years necessary to accumulate assets to fund the actuarial liability for prior service ranged from 18 to 41 years. Such computations exclude the undistributed net income earned by the divisions for the period July 1 to December 31 of each year and the December contributions not received until the following January.

The aggregate unfunded actuarial liability of \$582,509,667 computed as of December 31, 1974 is presented in the balance sheet as estimated obligation of employers for prior service and as an employer reserve titled "actuarial requirement."

### **Members' Deposits**

Members' contribution rates are established by state statute and are deducted from the members' salary and remitted by the various participating agencies.

### **Annuity and Deferred Annuity**

Annuity and deferred annuity accounts are recorded at amounts sufficient to reflect the actuarially computed discounted accrued liability of each reserve.

## **Investments**

Temporary investments, consisting of corporate notes, are shown at purchased cost. Maturities are generally less than 30 days. Income is recognized when the notes are sold.

Stock investments, principally common stock, are recorded at purchased cost. Dividend income is recognized when dividends are payable. Gains or losses on stocks sold are recognized on the basis of the average cost of the aggregate stock being sold.

First mortgages are presented at amortized cost. Discounts recorded at the time of purchase are amortized on a straight-line basis for guaranteed purchase agreements covering a group of individual mortgages and by the use of the "scientific method" for other mortgages. Income is recognized on a monthly basis over the various lives of the respective mortgages.

Other investments, principally corporate obligations, are reflected at amortized cost. Premiums and discounts recorded at the time of bond purchases are amortized to the call date and maturity date, respectively. Income is recorded as earned over the life of the investment.

Unamortized yield adjustment on bond exchanges reflects the deferral of gains and losses when bonds are exchanged for similar bonds to achieve a higher yield. These gains and losses are amortized to the respective earliest maturity date of the new bond acquired or the old bond exchanged. Losses of \$1,849,182 and \$763,787 on bond exchanges were deferred during the years ended June 30, 1975 and 1974, respectively.

### **Equipment and Fixtures**

Equipment and fixtures are stated at cost and carried on the State Employees' division books. Depreciation is provided using the straight-line method in order to apportion the cost of the depreciable assets over the various useful lives of from 2 to 10 years.

### **Administrative Expenses**

The expenses incurred by the Association are allocated to the various divisions on the basis of the relationship of the number of members in the division to the total membership in the Association.



## (2) Investments

A summary of investments as of June 30, 1975 with comparative combined totals is as follows:

	1975					Combined Market value	1974 Combined	
	Municipal Employees' Division	School Employees' Division	Judges' Division	State Employees' Division	Total		Total	Market value
Temporary investments, at cost:								
Face value	\$ 1,950,000	21,700,000	315,000	17,300,000	41,265,000	26,775,000		
Less discount	5,866	74,422	970	55,476	136,734	149,772		
	<u>\$ 1,944,134</u>	<u>21,625,578</u>	<u>314,030</u>	<u>17,244,524</u>	<u>41,128,266</u>	<u>41,128,266</u>	<u>26,625,228</u>	<u>26,625,228</u>
Corporate obligations, at amortized cost:								
Par value	\$28,947,077	323,213,314	4,752,548	262,846,115	619,759,054	498,089,067		
Less discount net	2,187,597	14,793,084	363,337	11,829,896	29,173,914	18,656,823		
	<u>\$26,759,480</u>	<u>308,420,230</u>	<u>4,389,211</u>	<u>251,016,219</u>	<u>590,585,140</u>	<u>516,367,698</u>	<u>479,432,244</u>	<u>403,740,299</u>
Stocks, at cost	\$ 5,489,769	82,083,561	1,124,617	64,259,538	152,957,485	162,715,085	127,867,439	113,946,685
United States Government obligations, at amortized cost:								
Par value	\$ 1,791,207	28,381,999	349,447	18,901,665	49,424,318	54,006,907		
Add premium, (less dis- counts), net	1,537	(217,891)	—	(48,875)	(265,229)	(353,036)		
	<u>\$ 1,792,744</u>	<u>28,164,108</u>	<u>349,447</u>	<u>18,852,790</u>	<u>49,159,089</u>	<u>40,943,205</u>	<u>53,653,871</u>	<u>43,644,960</u>
First mortgages, at amortized cost:								
Face value	\$ 1,988,813	73,194,606	444,842	46,981,807	122,610,068	113,433,586		
Less discount, net	161,083	3,679,586	53,543	2,909,361	6,803,573	5,709,152		
	<u>\$ 1,827,730</u>	<u>69,515,020</u>	<u>391,299</u>	<u>44,072,446</u>	<u>115,806,495</u>	<u>94,951,680</u>	<u>107,724,434</u>	<u>83,789,192</u>
Colorado bonds, at cost	\$ —	—	—	—	—	—	150,000	150,000

### (3) Insurance Dividend Reserve

An insurance dividend reserve is included in the records of the State Employees' Division. This reserve is being held for the benefit of all of the Association's participating members. The reserve represents dividends paid by the insurance company for excess life insurance premiums paid by the participating members. Such amount is used to purchase paid-up life insurance for eligible members when they retire and additional paid-up life insurance for active insured members. The changes in this reserve for the year ended June 30, 1975 and 1974 were as follows:

	1975	1974
Balance at beginning of year .....	\$3,191,468	2,763,215
Excess of revenue over expense allocable to insurance reserve .....	201,913	164,288
Dividends received from insurance company .....	572,315	408,452
Paid-up life insurance purchased .....	(194,553)	(119,487)
Reimbursement to divisions for ad- ministrative expenses relating to insurance program .....	(30,249)	(25,000)
<b>Balance at end of year .....</b>	<b><u>\$3,740,894</u></b>	<b><u>3,191,468</u></b>

### (4) Commitments

At June 30, 1975, the various divisions were committed to purchase investments at an aggregate cost of \$35,774,000.

The Association has an agreement to lease office space at a base cost of \$5,155 per month. The agreement expires on March 1, 1976.

During the year ended June 30, 1975, the Association entered into an agreement to construct an office building at a cost of approximately \$3,306,000 on which \$385,073 was expended prior to June 30, 1975. Construction is scheduled for completion during 1976.

### (5) Administrative Expenses

The following is a schedule of administrative expenses for the years ended June 30, 1975 and 1974:

	1975	1974
Salaries .....	\$ 637,363	512,562
Employee benefits .....	73,796	52,289
Professional services:		
Investment counsel .....	110,000	97,500
Actuarial .....	18,150	18,950
Accounting .....	25,000	23,000
Rent:		
Equipment .....	79,499	64,597
Office .....	62,775	54,502
Depreciation .....	17,226	15,749
Stationery, printing and office expenses .....	56,985	43,568
Postage .....	36,193	24,445
Telephone .....	10,139	10,482
Medical examination fees .....	42,298	26,714
Board member expenses .....	11,770	10,791
Other, net .....	31,930	27,467
	<u>1,213,124</u>	<u>982,616</u>
Less reimbursement by Group Insurance Department .....	30,249	25,000
	<b><u>\$1,182,875</u></b>	<b><u>957,616</u></b>



# PERA Investment Policy

The Board of Directors of the Public Employees' Retirement Association of Colorado hereby adopts the following policy with respect to the investment of retirement funds:

1. The gradual accumulation of common stocks up to the 30% legal limitation (at cost), at such pace as the Board may determine from time to time. The following tests for such securities shall be considered at the time of purchase:

- a. Paid a cash dividend for not less than five years prior to purchase
- b. Additional common stocks may be added or deleted from the Approved Common Stock List upon recommendation of investment counsel and concurrence of staff, subject to the Board of Directors approval.
- c. Stocks may be bought and sold as may be deemed in the best interest of the retirement fund upon recommendation of investment counsel.
- d. The principles of the modified theory of dollar average on common stock investments may be considered in purchase of equities.
- e. Investment in the common stock of an individual corporation shall be limited to 10 million dollars (\$10,000,000) total of all funds consolidated.

2. Inasmuch as the law limits purchases of equities, and the Board is charged with the responsibility for selection of common or preferred stock, no investment shall be made in mutual funds.

3. Investments may also be made in obligations guaranteed by the United States, or its agencies, and also corporate bonds — public utility or industrial. Any investment in corporate bonds shall be made only in bonds of investment quality (three highest ratings) as rated by any two national investment services as may be selected by the Board, provided convertible corporate bonds may be purchased with lower ratings as may be deemed advisable.

4. United States direct obligations and/or high grade Colorado Municipal bonds may be purchased from time to time as the Board

deems advisable taking into consideration yield, price and appreciation over a long term.

## 5. Mortgages

- a. No individual home loans shall be made but this shall not preclude guaranteed participation agreements covering a group of individual home loans.
- b. Loans may be made for commercial or industrial purposes through qualified mortgage bankers as may be deemed advisable.
- c. The Board may retain a professional advisor on mortgages when necessary.

6. Investment in foreign issues — stocks or bonds — shall not be made until further notice.

7. The Board shall endeavor to maintain a balanced portfolio, i.e., diversification in equities, corporate bonds, government guaranteed investments, mortgages, commercial paper, and miscellaneous investment sources, always emphasizing that the soundness and safety of principal should be the primary consideration, with yield, income and appreciation secondary, and as to equities, the long range prospects should be of primary consideration. Speculative or "trading" operations should be avoided.

8. All other investments permitted by law shall be made on a "per offering" basis, with each situation being examined on its own merits as to risk and yield.

9. To implement statistical data needed, the Board should subscribe to at least two investment service publications of national recognition which will furnish current information on investment quality and market cycles of corporate stocks and bonds. The Board shall retain investment counsel to provide information and investment opinion, advisability of acquisition of and advantageous timing relative to corporate bonds, common and preferred stock, together with recommendations for diversification of portfolio, etc.

10. All final decisions on purchases and sales of investments shall be made by the Retirement Board, but the investment sub-



committee and/or executive officer shall be authorized to make such purchases or sales on behalf of the Board as are permitted under Board policy. The responsibility of management of the portfolio is vested by law in the Board and such cannot be delegated.

11. Investments in the present portfolio heretofore acquired should not be disturbed, except when definite gains in capital appreciation or current yield can be unmistakably achieved by trading or refund operations, which may from time to time be available. All losses and/or gains in the equity portfolio shall be taken in toto in the fiscal year in which the transaction takes place. Gains and/or losses in the government or corporate bond portfolio shall be amortized on an annual basis to the earliest maturity date of the bond sold or purchased.

A modified accrual method of accounting shall be used with amortization of premiums and discounts on bonds purchased as follows:

- A. Premiums shall be amortized to the 1st call date.
- B. Discounts shall be amortized to maturity date.

12. At least semi-annually, the investment subcommittee shall report to the Retirement Board the operating results and trends, with any recommendations for changes in the investment policy as may be deemed advisable.

13. The purchase of general market securities shall be made from such investment firms as may make the most advantageous offerings and service, with due regard for distribution of the placements, and further that common stock orders shall be filled through investment firms who are members of recognized national exchanges, as may be determined by the Retirement Board, and are desirous of handling such business at not to exceed standard commissions and/or service charges and who demonstrate their ability to handle such business to the satisfaction of the executive officers, investment subcommittee and Retirement Board. The use of third market investment firms is also permissible when beneficial to the retirement fund.

## Investment Report

The fiscal year commenced with considerable concern for the national as well as the international economic environment.

At that juncture of time the degree of the economic adjustment,

which was just beginning to be recognized in statistical economic data, was not anticipated. In our last report we commented on the uncertainties in the areas of politics, inflation, energy, high interest rates, declining stock prices, and decreasing disposable personal income.

These adverse economic conditions deepened as the year progressed. We witnessed double digit inflation, the highest in years, which eroded real personal income significantly; excessive inventories were liquidated totaling billions of dollars; unemployment continued to increase; interest rates continued upward to a point where short-term rates exceeded 12 percent, and AA rated utility bonds were yielding 10½ percent; and common stocks declined to extremely depressed levels. What we all participated in was the worst recession since the 1930's.

As we begin a new fiscal year, it would appear that the worst of the recession is behind us, but remaining problems such as inflation, unemployment, lack of confidence in the future, the New York City financial problem, to name a few, have yet to be resolved.

On the positive side many excesses in our economy have been "washed-out" providing a base for solid real economic growth in future years. The actual Gross National Product is far below the potential Gross National Product. Industrial capacity in use remains below 70 percent, and inventories as a ratio to sales have improved considerably relative to historic norms. Inflation has subsided from lofty heights even though still considerably above the comfort zone, interest rates have declined substantially, and stocks have returned to reasonable valuations.

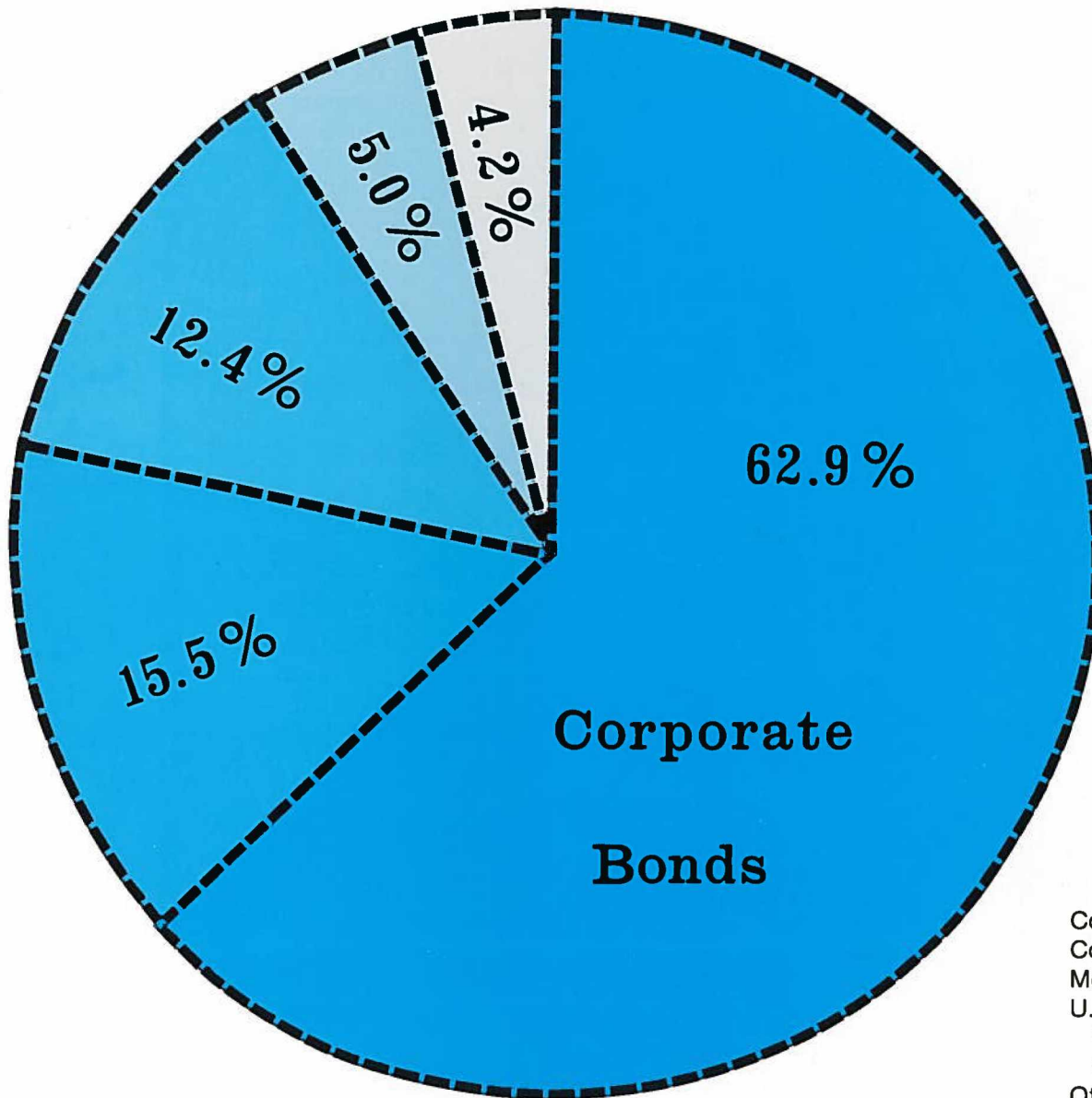
It is believed that the underlying resiliency of the U.S. economy is more than adequate to cope with and resolve current and future problems which must be dealt with in order to achieve sustainable real economic growth in order to provide reasonable investment opportunities and rates of return. These problems cannot be solved without substantial effort and a willingness by all concerned—the public, the corporate community, and government—to make some sacrifice in desires over the short-term in order to attain longer-term benefits.

Our continuing objective is to consistently achieve maximum long-term rates of return, without exposing the portfolio to undue risks and prudently preserving principal.

The results for our fiscal year ended 6/30/75, as measured by Becker Securities Corporation evaluation service, are presented on page 22 of this report.



# Investment Portfolio Distribution



(At Cost)  
As of June 30, 1975

Corporate Bonds .....	62.9%
Corporate Stocks .....	15.5
Mortgages .....	12.4
U.S. Government, U.S. Agency U.S. Guaranteed .....	5.0
Other Holdings .....	4.2
<b>Total .....</b>	<b>100.0%</b>

# Fixed Income Securities

	Par Value	Cost	Market Value June 30, 1975
<b>Short term investments - Less than 30 days</b> .....	\$ 41,265,000	\$ 41,128,266	\$ 41,128,266
<b>Corporate Obligations</b>			
Bonds			
Public Utilities - Telephone .....	111,597,000	101,684,532	78,041,022
Public Utilities - Electric & Gas .....	154,707,593	145,761,738	117,826,369
Public Utilities - Gas & Pipeline .....	9,350,000	9,112,203	8,153,625
Industrial .....	207,746,453	196,145,457	187,673,079
Transportation .....	72,698,899	71,697,988	64,648,153
Financial .....	<u>113,962,361</u>	<u>111,919,357</u>	<u>101,392,034</u>
Total Corporate Obligations .....	\$670,062,306	\$636,321,275	\$557,734,282
<b>Other Debt Obligations</b>			
Mortgages, Contracts & Notes .....	<u>120,731,133</u>	<u>111,414,903</u>	<u>93,678,294</u>
<b>Total Fixed Income Securities</b> .....	<b>\$832,058,439</b>	<b>\$788,864,444</b>	<b>\$692,540,842</b>

<b>Convertible Securities</b>			
Convertible Bonds .....	\$ 1,000,000	\$ 1,000,000	\$ 850,000
<b>Preferred Stock</b>			
Public Utilities .....	5,000 (shs)	\$ 500,000	\$ 208,750



# Common Stocks

	Shares Held	Cost	Market Value June 30, 1975
<b>Science &amp; Technology</b>			
<b>Business Equipment</b>			
Honeywell Inc. ....	16,700.....	\$ 1,538,189.....	\$ 668,000
International Business Machines Corporation .....	19,800.....	4,447,266.....	4,138,200
Xerox Corporation .....	19,700.....	1,939,429.....	1,381,463
<b>Total Science and Technology</b> .....		<b>\$ 7,924,884.....</b>	<b>\$ 6,187,663</b>
<b>Consumer Products &amp; Services</b>			
<b>Automotive</b>			
Ford Motor Company .....	66,400.....	\$ 4,343,946.....	\$ 2,730,700
General Motors Corporation .....	56,300.....	4,437,858.....	2,744,625
		\$ 8,781,804.....	\$ 5,475,325
<b>Broadcasting</b>			
CBS Inc. ....	155,000.....	\$ 6,321,926.....	\$ 8,021,250
<b>Building and Building Products</b>			
Armstrong Cork Company .....	56,800.....	\$ 2,120,319.....	\$ 1,562,000
<b>Drugs, Cosmetics and Hospital Supplies</b>			
American Home Products Corporation.....	94,400.....	\$ 2,066,211.....	\$ 3,941,200
Avon Products Incorporated .....	37,700.....	3,238,634.....	1,790,750
Bristol Myers Company .....	15,500.....	1,073,344.....	1,067,563
Johnson & Johnson .....	12,200.....	1,416,712.....	1,187,975
Pfizer Incorporated .....	84,400.....	2,891,774.....	2,827,400
Schering-Plough Corporation .....	81,000.....	4,943,255.....	4,718,250
Warner-Lambert Company .....	92,600.....	3,852,171.....	3,518,800
		\$19,482,101	\$19,051,938
<b>Food, Beverages and Tobacco</b>			
Borden Incorporated.....	85,600.....	\$ 2,419,762.....	\$ 2,033,000
General Mills Incorporated .....	71,000.....	3,912,543.....	3,558,875
Heublein Incorporated .....	109,800.....	4,718,092.....	5,023,350
Philip Morris Incorporated .....	119,400.....	4,437,160.....	6,372,975
Ralston Purina Company.....	89,100.....	3,469,560.....	4,009,500



	Shares Held	Cost	Market Value June 30, 1975
Reynolds (R.J.) Industries, Inc. ....	97,800	5,935,281	5,819,100
Royal Crown Cola Company .....	94,200	2,701,363	1,660,275
		\$27,593,761	\$28,477,075
<b>Photography</b>			
Eastman Kodak Company .....	51,400	\$ 4,492,253	\$ 5,307,050
<b>Retailing</b>			
Federated Department Stores, Inc.....	100,600	\$ 4,266,371	\$ 5,017,425
Penney (J.C.) Company.....	47,300	3,174,716	2,743,400
Sears, Roebuck & Company.....	45,500	3,742,548	3,338,563
		\$11,183,635	\$11,099,388
<b>Other</b>			
Zenith Radio Corporation .....	18,400	\$ 1,006,817	\$ 519,800
<b>Total Consumer Products &amp; Services</b> .....		<b>\$80,982,616</b>	<b>\$79,513,826</b>
<b>Financial Services</b>			
<b>Banking &amp; Credit</b>			
American Express Company .....	120,000	\$ 4,122,097	\$ 5,220,000
<b>Insurance</b>			
Aetna Life & Casualty Company .....	141,600	\$ 3,264,220	\$ 3,929,400
Travelers Corporation.....	130,900	2,654,278	3,583,388
		\$ 5,918,498	\$ 7,512,788
<b>Total Financial Services</b> .....		<b>\$10,040,595</b>	<b>\$12,732,788</b>
<b>Basic Industries</b>			
<b>Chemicals</b>			
American Cyanamid Company .....	70,500	\$ 2,516,022	\$ 1,947,563
Dow Chemical Company .....	81,000	2,799,216	7,269,750
Hercules Incorporated .....	88,000	2,184,149	2,816,000
Nalco Chemical Company .....	97,200	2,321,362	3,183,300
		\$ 9,820,749	\$15,216,613
<b>Electrical Equipment</b>			
General Electric Company .....	108,300	\$ 5,815,896	\$ 5,699,288
<b>Machinery</b>			
Caterpillar Tractor Company .....	55,000	\$ 3,507,378	\$ 3,678,125
Ingersoll-Rand Company.....	68,400	4,479,687	5,660,100
		\$ 7,987,065	\$ 9,338,225
<b>Oil &amp; Gas</b>			
Exxon Corporation .....	45,800	\$ 3,391,759	\$ 4,236,500
Kerr-McGee Corporation .....	33,500	1,899,899	3,061,063



	Shares Held	Cost	Market Value June 30, 1975
Panhandle Eastern Pipeline Company .....	82,500	2,891,750	2,670,938
Phillips Petroleum Company .....	69,000	3,028,501	4,105,500
Standard Oil Company of Indiana .....	40,000	1,657,238	1,975,000
Standard Oil Company of Ohio .....	66,500	3,485,862	5,087,250
		<u>\$16,355,009</u>	<u>\$21,136,251</u>
<b>Oil Services</b>			
Halliburton Company .....	26,500	\$ 3,164,912	\$ 4,968,750
<b>Total Basic Industries</b> .....		<b>\$43,143,631</b>	<b>\$56,359,127</b>
<b>Public Utilities</b>			
<b>Electric &amp; Gas</b>			
Consumers Power Company .....	4,700	\$ 211,031	\$ 84,600
Florida Power & Light Company .....	12,800	454,035	332,800
Gulf States Utilities Company .....	68,000	1,508,419	960,500
Illinois Power Company .....	66,500	2,347,051	1,720,688
Middle South Utilities Company .....	12,000	294,198	186,000
Northern Indiana Public Service Company .....	46,500	1,287,824	825,375
Public Service Company of Colorado .....	9,200	242,931	144,900
Tampa Electric Company .....	46,000	1,133,244	764,750
Texas Utilities Company .....	46,600	1,315,392	1,100,925
		<u>\$ 8,794,125</u>	<u>\$ 6,120,538</u>
<b>Telephone</b>			
American Telephone & Telegraph Company .....	31,300	\$ 1,571,644	\$ 1,592,388
<b>Total Public Utilities</b> .....		<b>\$10,365,769</b>	<b>\$ 7,712,926</b>
<b>Total Common Stocks</b> .....		<b>\$152,457,495</b>	<b>\$162,506,330</b>

## Summary

	Cost	Market Value June 30, 1975
Short Term Investments .....	\$ 41,128,266	\$ 41,128,266
Fixed Income Securities .....	747,736,178	651,412,576
Convertible Securities .....	1,000,000	850,000
Preferred Stock .....	500,000	208,750
Common Stocks .....	152,457,495	162,506,330
<b>Total Investment Portfolio</b> .....	<b>\$942,821,939</b>	<b>\$856,105,922</b>




# Becker Performance Evaluation

A. G. Becker & Company is the largest and a highly respected portfolio evaluation service in the United States and has evaluated PERA fund's performance since 1969.

A summary of the PERA fund's performance results, along with a brief description of issue to be considered in interpreting the results follow. Since the purpose of the summary is to provide an overview, the reader is cautioned against forming conclusions that may be premature. A number of important details of performance evaluation are not addressed here.

These five exhibits are reprinted from the PERA report; together, they provide a profile of the PERA fund's performance.

**A. Deployment of Assets.** In concise form, this exhibit shows the dollar value of each investment category of the PERA fund at the end of the last fiscal year, as well as the percent of the fund invested in that category. The policy decision to determine the fund's commitment to equities also is addressed here. A greater commitment to equity investments can offer the fund a potentially higher return. The reader should keep in mind, however, that such an investment would be subject to characteristic fluctuations in the equities market.

**B. Total Fund Cumulative Annual Rate of Return.** This exhibit shows how the PERA fund performed over multi-year periods compared with other funds of similar asset size. The boxes on the graph represent the range of performance results earned by all funds in the group. The PERA fund is highlighted by a diamond  and the line connecting the diamonds illustrates the trend of the fund's performance. The longest time period, 1965-1975, is displayed at the left. At the right, the reader can see performance results for last year only. The fund's return is tabulated under the graph, along with a segmentation of the group's results. Percent rank indicates what proportion of the group outperformed the fund; a low percent indicates a relatively higher return. With this exhibit, the reader can choose a time period of particular in-

terest and examine the return the PERA fund earned for that period. In the past, a market cycle has generally covered a four-year period. For any time period one chooses to examine, the median serves as an effective standard for determining what a "reasonable" return for that period would have been. (The median is that return which outranked 50 percent of the funds in the group and which was outranked by 50 percent of the funds.)

**C. Total Fund Annual Rate of Return.** The main purpose of this exhibit is to show which years have had the greatest impact on the multi-year performance of the PERA fund. Another purpose for displaying returns for individual years is to demonstrate how different securities markets affect fund performance. The variation of the median can be explained, in part, by rising and falling securities markets.

## **D. Equities Cumulative Annual Rate of Return and**

**E. Fixed Income Cumulative Annual Rate of Return.** These exhibits show how the equity and debt portions of the PERA fund performed over multi-year periods. Since the fund's total return is comprised of equity and fixed income rates of return, both have been included so that one can see the impact of their return on the entire fund's performance.

This summary should be regarded only as an introduction to evaluating the PERA fund's performance results. Nevertheless, it is hoped that this brief overview will be of some assistance.

**Definitions:** Percent Rank refers to the percent of funds with assets in excess of 50 million dollars evaluated by A. G. Becker which outperformed PERA. The number of funds evaluated as of June 30, 1975, in this category was over 600.

Population Percentile refers to the percent of total number of funds evaluated by A. G. Becker which outperformed PERA regardless of size. The number of funds evaluated as of June 30, 1975, in this category was about 3,300.



# DEPLOYMENT OF ASSETS

JUNE 30 ,1975

W1427

(IN THOUSANDS AT MARKET)

TOTAL FUND  
ASSETS  

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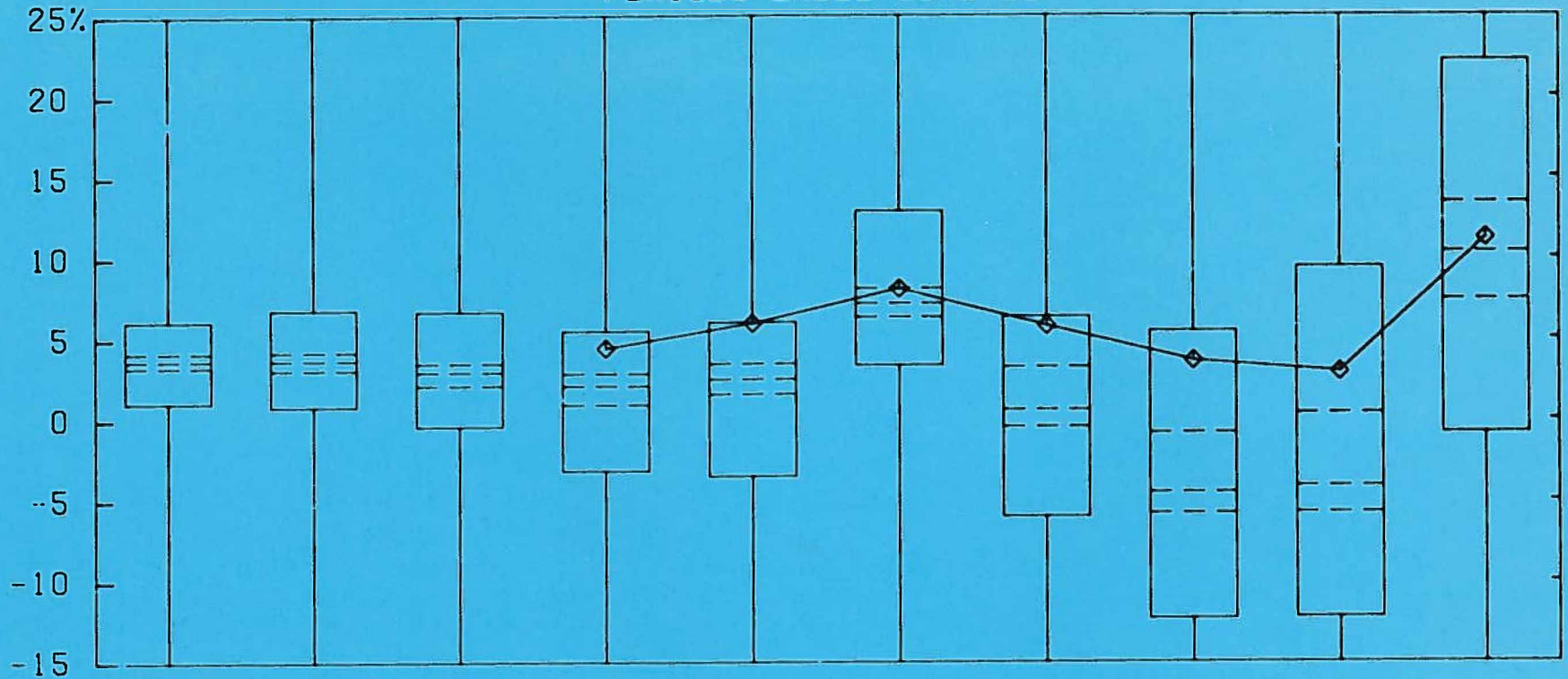
\$858,141

EQUITY  
ASSETS  
\$162,715  
19.0 %

FIXED INCOME  
ASSETS  
\$693,390  
80.8 %

LONG TERM  
\$562,734  
65.6 %  
SHORT TERM  
\$41,128  
4.8 %  
PRIVATE PLACEMENTS  
\$88,678  
10.3 %  
CONVERTIBLES  
\$850  
0.1 %

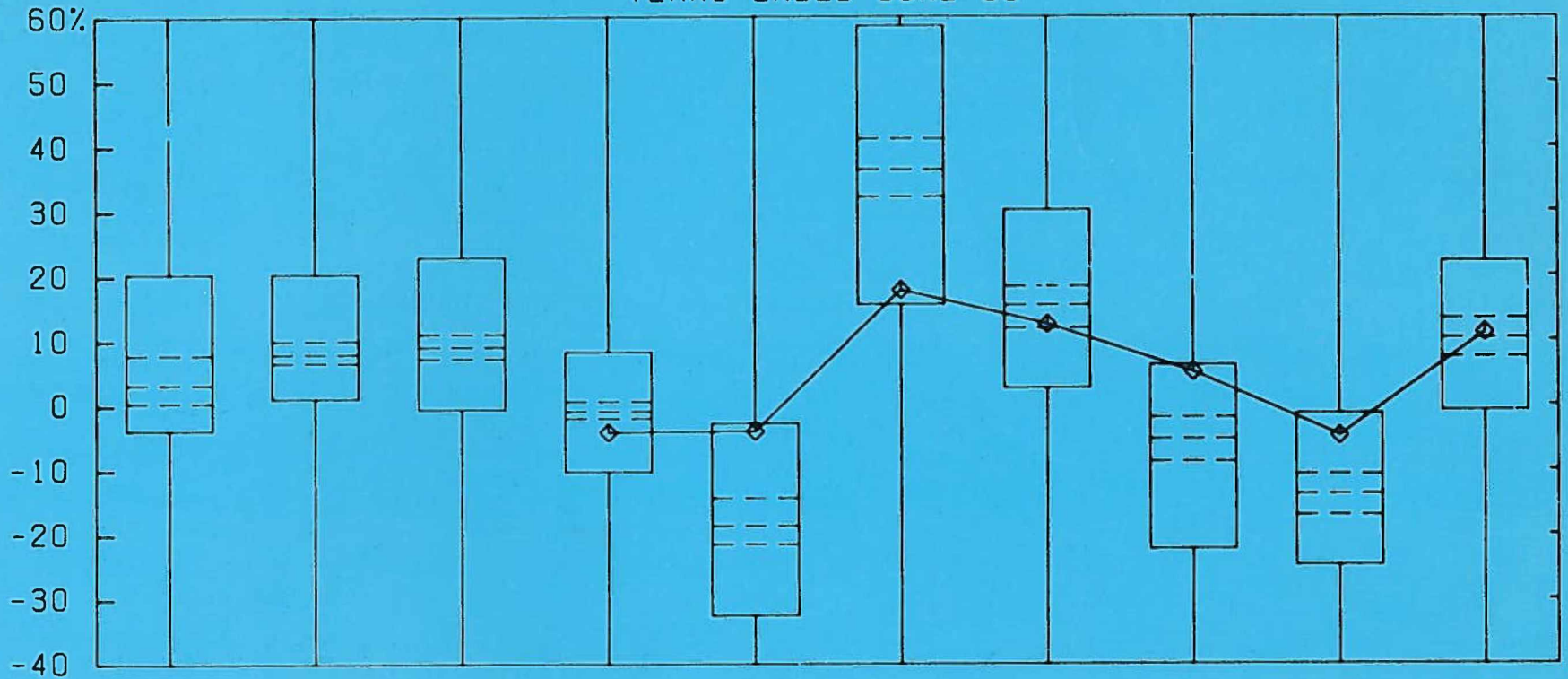
TOTAL FUND  
CUMULATIVE ANNUAL RATE OF RETURN  
PERIODS ENDED JUNE 30



	<u>1966-75</u>	<u>1967-75</u>	<u>1968-75</u>	<u>1969-75</u>	<u>1970-75</u>	<u>1971-75</u>	<u>1972-75</u>	<u>1973-75</u>	<u>1974-75</u>	<u>1975</u>
MAXIMUM	6.09%	6.80%	6.71%	5.53%	6.05%	12.88%	6.34%	5.47%	9.41%	22.18%
FIRST QUARTILE	4.17	4.21	3.51	2.88	3.48	8.12	3.26	-0.80	0.40	13.41
MEDIAN	3.70	3.70	2.97	2.12	2.51	7.18	0.61	-4.48	-4.10	10.36
THIRD QUARTILE	3.28	3.09	2.14	0.94	1.60	6.35	-0.43	-5.79	-5.73	7.42
MINIMUM	1.07	0.83	-0.39	-3.14	-3.48	3.38	-5.98	-12.30	-12.21	-0.82
YOUR FUND	0.0	0.0	0.0	4.46	5.97	8.08	5.79	3.65	2.93	11.19
PERCENT RANK	0	0	0	9	2	26	6	4	11	41

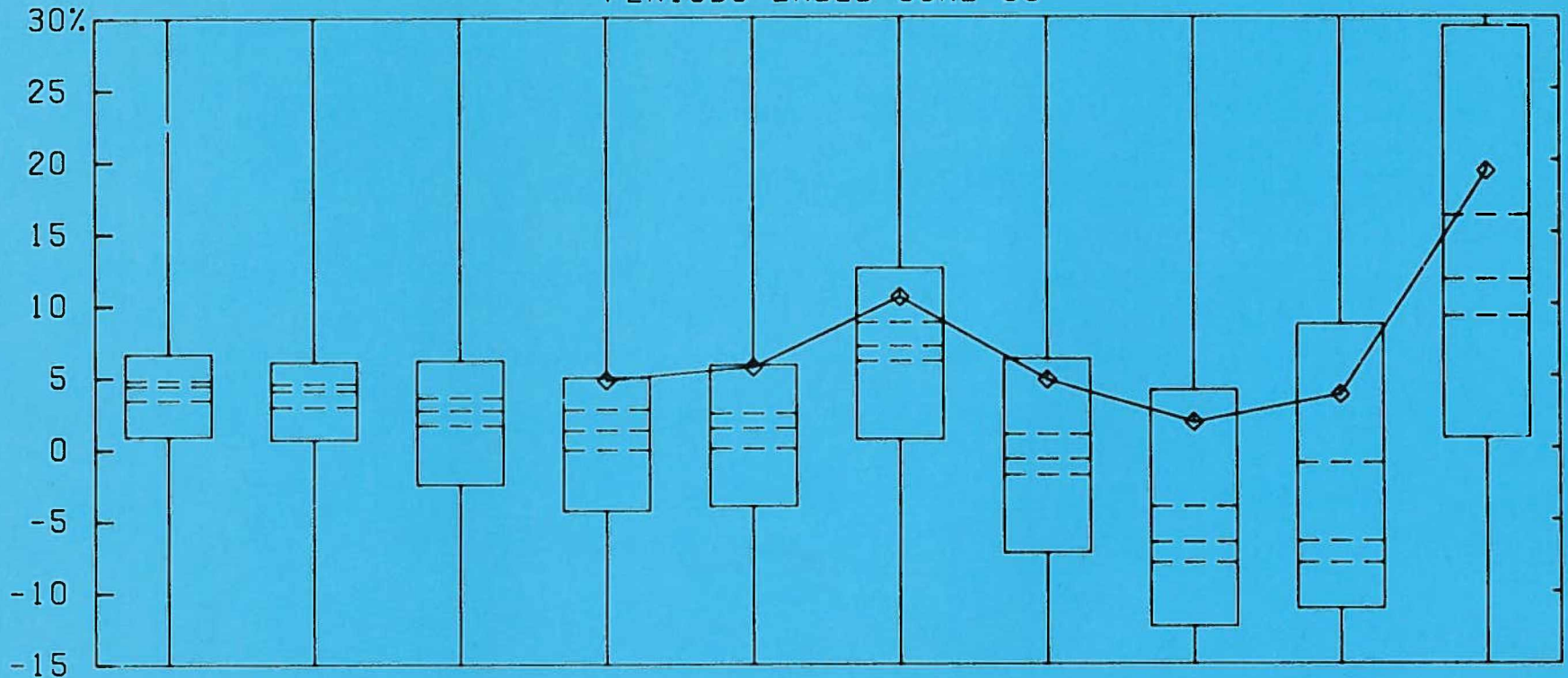


TOTAL FUND  
ANNUAL RATE OF RETURN  
YEARS ENDED JUNE 30



	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
MAXIMUM	20.28%	20.29%	22.85%	8.24%	-2.84%	58.53%	30.14%	6.16%	-1.32%	22.18%
FIRST QUARTILE	7.84	9.99	11.03	0.60	-14.31	41.13	18.31	-1.92	-10.67	13.41
MEDIAN	3.26	7.95	9.05	-0.91	-18.59	36.38	15.42	-5.25	-13.74	10.36
THIRD QUARTILE	0.41	6.56	7.24	-2.01	-21.47	32.20	11.86	-8.74	-16.99	7.42
MINIMUM	-3.80	1.07	-0.59	-10.22	-32.44	15.55	2.64	-22.23	-24.73	-0.82
YOUR FUND	0.0	0.0	0.0	-4.14	-4.02	17.76	12.49	5.10	-4.71	11.19
PERCENT RANK	0	0	0	92	2	98	71	2	5	41

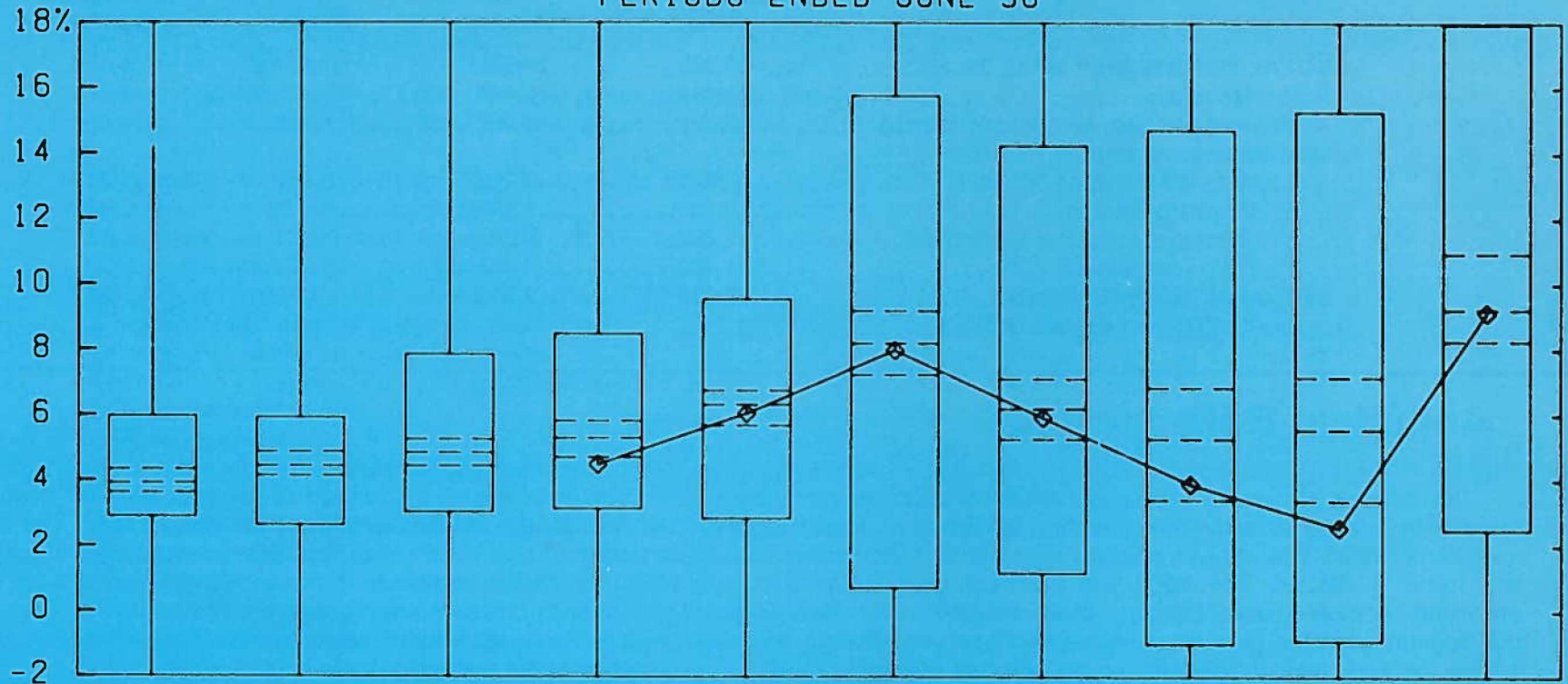
EQUITIES  
CUMULATIVE ANNUAL RATE OF RETURN  
PERIODS ENDED JUNE 30



	<u>1966-75</u>	<u>1967-75</u>	<u>1968-75</u>	<u>1969-75</u>	<u>1970-75</u>	<u>1971-75</u>	<u>1972-75</u>	<u>1973-75</u>	<u>1974-75</u>	<u>1975</u>
MAXIMUM	6.63%	6.06%	6.17%	4.94%	5.82%	12.52%	6.20%	4.04%	8.58%	29.33%
FIRST QUARTILE	4.82	4.56	3.59	2.73	2.45	8.77	0.98	-4.05	-1.04	16.15
MEDIAN	4.43	4.07	2.70	1.29	1.43	7.11	-0.73	-6.52	-6.48	11.70
THIRD QUARTILE	3.42	2.95	1.66	-0.07	0.03	6.08	-1.83	-7.96	-7.99	9.15
MINIMUM	0.89	0.67	-2.46	-4.30	-3.98	0.65	-7.23	-12.38	-11.14	0.70
YOUR FUND	0.0	0.0	0.0	4.76	5.65	10.53	4.77	1.81	3.70	19.23
PERCENT RANK	0	0	0	4	2	9	3	3	4	20



FIXED INCOME  
CUMULATIVE ANNUAL RATE OF RETURN  
PERIODS ENDED JUNE 30



	<u>1966-75</u>	<u>1967-75</u>	<u>1968-75</u>	<u>1969-75</u>	<u>1970-75</u>	<u>1971-75</u>	<u>1972-75</u>	<u>1973-75</u>	<u>1974-75</u>	<u>1975</u>
MAXIMUM	5.95%	5.92%	7.85%	8.48%	9.54%	15.77%	14.24%	14.71%	15.27%	17.96%
FIRST QUARTILE	4.33	4.88	5.26	5.82	6.75	9.19	7.11	6.84	7.16	10.94
MEDIAN	3.92	4.44	4.85	5.30	6.32	8.20	6.19	5.27	5.55	9.23
THIRD QUARTILE	3.63	4.15	4.44	4.71	5.68	7.24	5.26	3.42	3.38	8.27
MINIMUM	2.89	2.64	3.03	3.14	2.84	0.72	1.18	-0.99	-0.89	2.49
YOUR FUND	0.0	0.0	0.0	4.49	6.05	7.98	5.93	3.89	2.56	9.14
PERCENT RANK	0	0	0	82	62	58	58	68	84	55

## Membership Statistics

	Consolidated Totals	State Division	School Division	Municipal Division
<b>TOTAL MEMBERSHIP JUNE 30, 1975</b> .....	<b>97,065</b>	<b>39,783</b>	<b>51,813</b>	<b>5,469</b>
<i>Active Members</i> .....	84,781	33,700	46,120	4,961
<i>Annuitants and Survivor Benefit Members</i> .....	12,284	6,083	5,693	508
New Members Accepted				
July 1, 1974 to June 30, 1975 .....	17,546	7,268	8,950	1,328
Less: Members Deceased .....	(168)	(93)	(63)	(12)
Members' Accounts Withdrawn .....	(11,292)	(4,662)	(5,871)	(759)
Total Withdrawals .....	(11,460)	(4,755)	(5,934)	(771)
<b>NET GAIN IN MEMBERSHIP</b> .....	<b>6,086</b>	<b>2,513</b>	<b>3,016</b>	<b>557</b>
July 1, 1974 to June 30, 1975				

## Annuitant Rolls Increase

The number of persons receiving retirement annuities has grown steadily in relation to active membership, as shown in the table below. Since PERA has not yet reached maturity as a retirement plan, this trend is natural. The trend will continue, and the annuitants on rolls will increase rapidly, until members enrolled near the beginning of the plan reach retirement age and attrition begins among the annuitants, a relatively young group at present.

The level-cost financing principle assures that deduction rates will not have to be raised to meet the benefit load. The current percentages of pay will be sufficient to meet the increasing annuity payroll, if the benefit provisions contained in state law are not changed.

The steep growth in the dollar amount of the annuitant payroll is shown in the right-hand column of the table.

Year	Number of retired members on 6/30	Number of active members on 6/30	Retired members as %of active members on 6/30	Total annuities paid-yr. ending 6/30
1940	93	3,715	2.5%	\$ 72,588
1945	171	5,585	3.1	137,442
1950	280	11,853	2.4	237,866
1955	747	21,185	3.5	745,679
1960	1,775	33,068	5.4	2,055,139
1965	3,631	49,701	7.3	5,486,225
1970	6,308	65,586	9.6	12,366,658
1971	6,940	69,472	10.0	14,385,068
1972	7,892	72,530	10.9	17,208,013
1973	9,146	76,708	11.9	21,297,570
1974	10,408	80,529	12.9	26,740,570
1975	11,650	84,781	13.7	32,242,456



## Retirement Statistics:

Retirement annuities have been approved by the retirement board payable to retired members during the fiscal year as follows:

	State	School	Municipal
20 or more years service at age 55 (Patrol, Game & Fish)	4		
35 or more years service at age 55		1	
35 or more years service at any age	2		
30 or more years service at age 55	25		
20 or more years service at age 60	153	180	13
5 or more years service at age 65 (Fractional)	315	212	19
General disability after 5 years of service	126	82	12
Termination of service: Retained membership (Sec. 9)	15	16	
Survivor Benefits: Automatic	1	1	
Deferred (Age 65)	23	49	5
20 or more years service at age 55 (reduced)	21	29	
5 or more years service at age 60 (reduced)	105	109	7
<b>TOTAL RETIRED DURING FISCAL YEAR</b>	<b>790</b>	<b>679</b>	<b>56</b>
Returned to rolls from suspension		2	
Total number receiving retirement annuities 6/30/1974	5,105	4,902	401
Total number receiving retirement annuities during fiscal year	5,895	5,584	457
Co-Beneficiaries continued upon the death of annuitant	49	24	4
Less: Retired members deceased during fiscal year	199	141	13
Annuities temporarily suspended this year	4	5	
<b>TOTAL NUMBER RECEIVING RETIREMENT ANNUITIES 6/30/1975</b>	<b>5,741</b>	<b>5,461</b>	<b>448</b>
Average monthly rate 6/30/1975	\$ 229	\$ 220	\$ 203
Total paid in annuities 7/1/1974 to 6/30/1975 (12 months)	\$16,086,816	\$15,057,119	\$1,098,521
Average monthly rate for annuitants retired during year	\$ 301	\$ 296	\$ 278
Survivor Benefits added to rolls during fiscal year	57	36	10
Total Survivor Benefits 6/30/1975	342	232	60
Total paid in Survivor Benefits 7/1/1974 to 6/30/1975 (12 months)	\$ 766,009	\$ 516,603	\$ 115,777
Retirement annuities Deferred (Future at age 65)	437	753	31
Total future liability (annually)	\$ 929,485	\$ 1,275,246	\$ 55,947
Survivor Benefits (Future)	53	34	9
Total future liability (annually)	\$ 83,034	\$ 47,884	\$ 13,581

# State Division

## Active Members in Valuation By Attained Age Groups & Years of Credited Service - 12-31-74

Active members included in the STATE DIVISION\* valuation totaled 31,162, involving monthly salaries totaling \$29,159,990 (\$349,919,880 annually).

Attained Age Groups	Number With Indicated Years of Credited Service							Totals	Monthly Salaries
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up		
Under 20	246							246	\$ 110,981
20-24	2,661	35						2,696	1,543,794
25-29	4,340	560	8					4,908	3,732,443
30-34	2,664	1,139	301	6				4,110	3,883,198
35-39	1,683	1,084	471	119	2			3,359	3,455,927
40-44	1,384	1,045	513	287	55	3		3,287	3,483,085
45-49	1,289	1,093	594	336	158	88	1	3,559	3,766,042
50-54	1,049	1,081	661	418	232	155	7	3,603	3,736,414
55-59	747	889	611	419	253	170	38	3,127	3,169,596
60	78	141	105	78	36	26	12	476	494,254
61	74	147	102	60	29	23	9	444	442,238
62	56	127	86	61	25	19	8	382	363,691
63	62	98	65	53	27	20	14	339	329,439
64	39	81	56	56	20	15	15	282	288,159
65	20	59	54	42	6	17	5	203	204,797
66	13	19	14	10	1	1	3	61	71,058
67	6	11	9	9	1			36	36,302
68	2	12	6	1	3		1	25	29,408
69	4	1	1					6	6,702
70	2	1			1			4	3,370
71	1				1		1	3	4,455
72		1					1	2	900
73			1					1	1,758
74		1						1	593
75		1						1	866
76					1			1	520
<b>Totals</b>	<b>16,420</b>	<b>7,626</b>	<b>3,658</b>	<b>1,955</b>	<b>851</b>	<b>537</b>	<b>115</b>	<b>31,162</b>	<b>\$29,159,990</b>

\*This does not include figures as of December 31, 1974, for State Patrolmen and certain members of the Division of Wildlife, who have separate plans and rates. If both groups were included, the State Division would have totaled 31,718, involving salaries totaling \$29,734,898 (\$356,818,776 annually).

The median attained age for regular State Division members was 40.4 years, and the median service was 4.7 years. This assumes even distribution throughout the median interval.



# School Division

## Active Members in Valuation By Attained Age Groups & Years of Credited Service - 12-31-74

Active members included in the SCHOOL DIVISION valuation totaled 43,500, involving monthly salaries totaling \$33,584,887 (\$403,018,644 annually).

Attained Age Groups	Number With Indicated Years of Credited Service							Totals	Monthly Salaries
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up		
Under 20	148							148	\$ 59,715
20-24	3,194	5						3,199	1,795,396
25-29	7,360	976	2					8,338	5,962,486
30-34	4,029	2,221	351	5				6,606	5,328,161
35-39	3,061	1,500	1,072	197				5,830	4,756,881
40-44	2,427	1,328	928	622	43			5,348	4,404,720
45-49	1,762	1,272	768	563	308	14		4,687	3,866,245
50-54	1,212	947	770	472	340	70	5	3,816	3,059,034
55-59	800	688	599	600	254	83	20	3,044	2,374,197
60	143	120	100	95	67	14	5	544	413,838
61	95	101	97	116	46	22	2	479	380,916
62	70	94	97	89	62	19	5	436	359,251
63	74	64	63	91	50	11	2	355	287,301
64	41	58	64	95	35	13	1	307	254,725
65	25	34	53	58	28	15	6	219	187,280
66	9	13	8	10	3			43	28,358
67	9	10	4	5	6		1	35	22,667
68	5	4	4	5	2			20	13,038
69	2	2	4		4			12	8,892
70	3	3	1		2			9	5,125
71	2	2	1	2				7	4,502
72	2		2					4	2,283
73		2	3		2	1		8	5,935
74		1	1	3				5	3,141
75					1			1	800
<b>Totals</b>	<b>24,473</b>	<b>9,445</b>	<b>4,992</b>	<b>3,028</b>	<b>1,253</b>	<b>262</b>	<b>47</b>	<b>43,500</b>	<b>\$33,584,887</b>

The median attained age for School Division members was 38.0 years, and the median service was 4.4 years. This assumes even distribution throughout the median interval.

# Municipal Division

## Active Members in Valuation By Attained Age Groups & Years of Credited Service - 12-31-74

Active members included in the MUNICIPAL DIVISION valuation totaled 4,576, involving monthly salaries totaling \$3,593,251 (\$43,119,012 annually).

Attained Age Groups	Number With Indicated Years of Credited Service						Totals	Monthly Salaries	
	0-4	5-9	10-14	15-19	20-24	25-29			30 & Up
Under 20	66						66	\$ 28,618	
20-24	586	7					593	353,708	
25-29	835	85	4				924	685,833	
30-34	458	140	30				628	528,312	
35-39	238	120	46	16			420	365,350	
40-44	270	110	39	36	14	1	470	402,204	
45-49	191	121	46	30	16	10	415	345,360	
50-54	189	105	55	41	25	12	428	360,711	
55-59	119	89	56	36	27	20	349	291,636	
60	10	9	6	4	5	7	42	36,020	
61	14	19	9	12	2	1	58	50,973	
62	11	17	15	5	5		53	42,147	
63	11	6	13	2	4		36	30,049	
64	10	16	5	9	3	2	47	36,416	
65	4	4	2	5	1	1	17	13,498	
66	6	3	2		1	1	13	8,765	
67		1	2			1	4	4,085	
68	1	1	3				5	5,902	
69	1		1	1			3	1,331	
70	1	1	1				3	1,608	
71		2					2	725	
<b>Totals</b>	<b>3,021</b>	<b>856</b>	<b>335</b>	<b>197</b>	<b>103</b>	<b>56</b>	<b>8</b>	<b>4,576</b>	<b>3,593,251</b>

The median attained age for Municipal Division members was 35.9 years, and the median service was 3.8 years. This assumes even distribution throughout the median interval.



# Judges Division

## Active Members in Valuation By Attained Age Groups & Years of Credited Service - 12-31-74

Active members included in the JUDGES DIVISION valuation totaled 203, involving monthly salaries totaling \$381,774 (\$4,581,288 annually).

Attained Age Groups	Number With Indicated Years of Credited Service						Totals	Monthly Salaries
	0-4	5-9	10-14	15-19	20-24	25-29		
25-29	1						1	\$ 833
30-34	5						5	6,760
35-39	10	6	1				17	26,966
40-44	9	3	4				16	28,852
45-49	11	6	11				28	55,337
50-54	13	12	14	1			40	79,451
55-59	9	5	16	1	3		34	68,524
60	3	2	4	1			10	19,394
61	2	3	3	3			11	19,842
62		2	2	1			5	10,042
63	3		1				4	8,832
64	2	5					7	12,634
65		2	1				3	6,499
66	1		1	1		1	4	9,916
67	2	3	1				6	9,146
68		2				1	3	5,499
69		2	1				3	3,124
70		1	2	1	1		5	7,790
71						1	1	2,333
<b>Totals</b>	<b>71</b>	<b>54</b>	<b>62</b>	<b>9</b>	<b>4</b>	<b>3</b>	<b>203</b>	<b>\$381,774</b>

The median attained age for Judges Division members was 54.3 years, and the median service was 7.8 years. This assumes even distribution throughout the median interval.

# Principles

## Financial Principles and Operational Techniques of PERA

**Promises Made, and Eventually Paid.** As each year is completed, PERA in effect hands an "IOU" to each member then acquiring a year of service credit — the "IOU" says: "The Public Employees' Retirement Association of Colorado owes you one year's worth of retirement benefits, payments in cash commencing when you qualify for retirement."

The related **key financial questions** are:

**Which generation of taxpayers contributes the money to cover the IOU?**

**The present taxpayers**, who receive the benefit of the member's present year of service?

**Or the future taxpayers**, who happen to be in Colorado at the time the IOU becomes a cash demand?

**The law governing PERA financing intends that this year's taxpayers contribute the money to cover the IOUs being handed out this year.** By following this principle, **the employer contribution rate will remain approximately level from generation to generation** — our children and our grandchildren will contribute the same percents of active payroll we contribute now.

(There are systems which have a design for deferring contributions to future taxpayers, lured by a lower contribution rate now and putting aside the consequence that the contribution rate must then relentlessly grow much greater over decades of time — consume now, and let your children face your **financial pollution** after you retire.) See chart on next page.

An inevitable by-product of the level-cost design is the accumulation of reserve assets, for decades, and the income produced when the assets are invested. **Invested assets are a by-product and not the objective. Investment income becomes in effect the 3rd contributor** for benefits to employees, and is directly related to the contribution amounts required from employees and employers.

Translated to actuarial terminology, this level-cost objective means that the contribution rates must total at least the following:

Current cost (the cost of members' service being rendered this year) . . . plus . . .

Interest on Unfunded Accrued Liabilities (unfunded accrued liabilities are the difference between: liabilities for members' service already rendered; and the accrued assets of PERA).

**Computing Contributions to Support Fund Benefits.** From a given schedule of benefits and from the employee data and asset data furnished him, the actuary determines the contribution rates to support the benefits, by means of **an actuarial valuation and a funding method.**

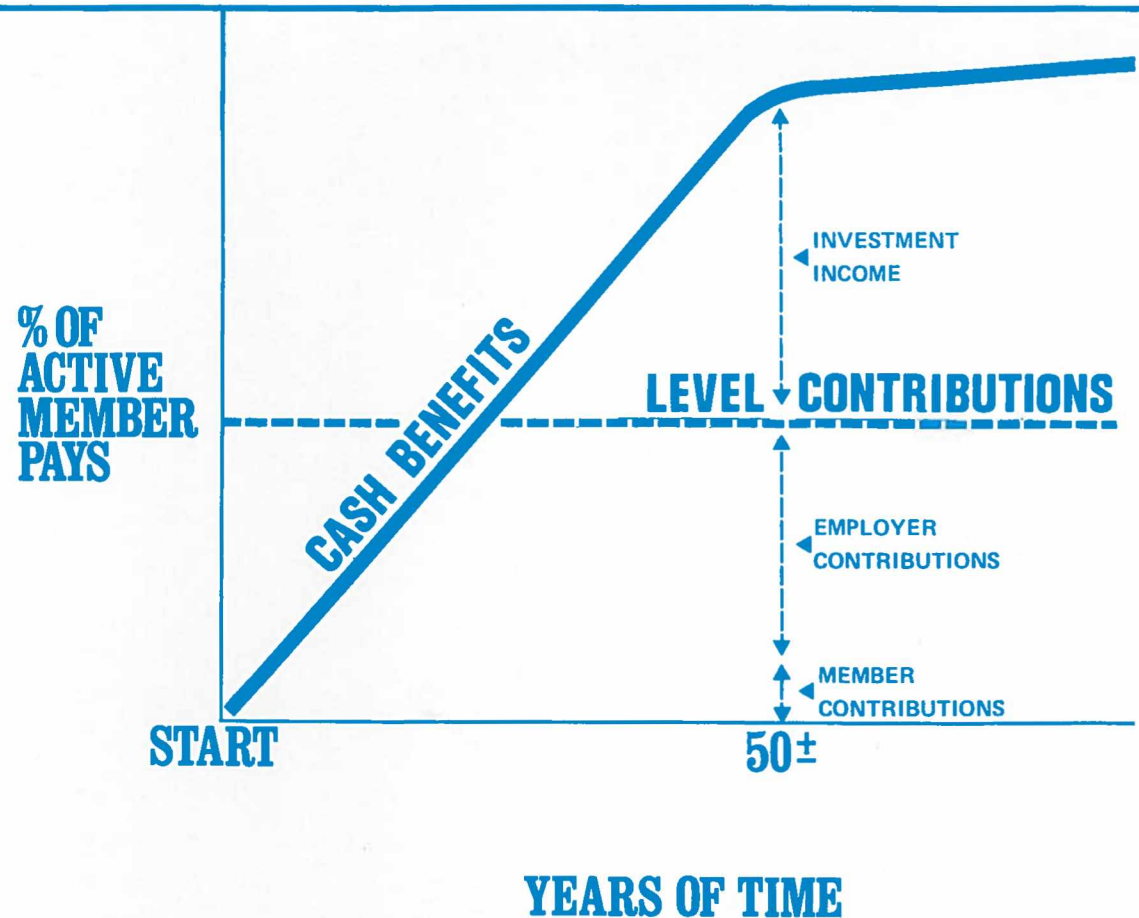
An actuarial valuation has a number of ingredients such as: the rate of investment income which plan assets will earn; the rates of withdrawal of active members who leave covered employment before qualifying for any monthly benefit; the rates of mortality; the rates of disability; the rates of salary increases; and the assumed age or ages at actual retirement.

In making an actuarial valuation the actuary must assume what the above rates will be, for the next year and for decades in the future. Only the subsequent actual experience of the plan can indicate the degree of accuracy of the assumptions.

**Reconciling Differences Between Assumed Experience and Actual Experience.** Once actual experience has occurred and been observed, it will not coincide exactly with assumed experience, regardless of the skill of the actuary and the millions of calculations he made. The future can be predicted with considerable but not 100 percent precision.

PERA copes with these continually changing differences by having annual actuarial valuations. Each actuarial valuation is a complete recalculation of assumed future experience, taking into account all past differences between assumed and actual experience. The result is **continuing adjustments in financial position.**





**Cash Benefits Line.** This relentlessly increasing line is the fundamental reality of retirement plan financing. As the ratio of retired to active, working members rises, the benefits paid rise as a percent of payroll.

The line increases over time even if new benefits aren't added. It increases regardless of the financing method being followed.

**Level Contribution Line.** Determining the level contribution line requires detailed assumptions concerning experiences in future decades, including:

- Rate of withdrawal of active members (turnover);
- Rate of mortality;
- Rate of disability;
- Age at actual retirement;
- Rate of pay increase;
- Investment income;
- Change in active member group size.

# Per Capita Reserves

Fiscal Years 1973-1975

		Present Retired Reserve	Members' Deposits	Future Retired Reserve
STATE DIVISION	June 30, 1973.....	\$30,203.....	\$3,128.....	\$1,404
	June 30, 1974.....	30,933.....	3,477.....	1,924
	June 30, 1975.....	33,502.....	3,800.....	2,219
SCHOOL DIVISION	June 30, 1973.....	\$29,893.....	\$2,743.....	\$2,972
	June 30, 1974.....	30,228.....	3,003.....	3,530
	June 30, 1975.....	32,333.....	3,349.....	4,088
MUNICIPAL DIVISION	June 30, 1973.....	\$25,442.....	\$2,084.....	\$1,980
	June 30, 1974.....	27,854.....	2,256.....	2,192
	June 30, 1975.....	29,920.....	2,537.....	2,585

The table above shows some important facts about the three main reserves in the PERA financial structure — reserves for presently retired, members' deposits, and the reserves for future retirees.

Using the State Division as an example on 6-30-75, if you divide the reserve established for those already receiving retirement annuities by the total number of those recipients, you end up with \$33,502 per retiree. If you divide the total individual deposits by the total active membership, the result is \$3,800 per active member. The reserve for future retired is used with active members' own deposits to finance the retirement of each retiring member. This reserve divided by the number of active members nets \$2,219 per member.

PERA annuities are fully funded. This means that once a member retires, there is enough money set aside to pay his annuity for the rest of his life without additional member or employer deductions. The Present Retired Reserve is the largest of the three on a per capita basis. Its growth in each Division from year to year indicates the higher retirement amounts being paid.

The member's personal deposits are only used for the member's own benefit or his survivor's benefit.

The Future Retired Reserve is a pooled fund containing employer deductions and interest within each Division. It helps fund benefits earned by active members over their careers. When an individual is granted a benefit at retirement, which is determined according to the provisions of state law, a portion of the Future Retired Reserve is combined with the member's deposits and placed in the Present Retired Reserve to pay his benefit.

NOTE: The figures presented above are per capita reserve figures based on the actuarial assumptions in effect on each date. Some of the figures presented in the table above are not identical to figures shown for the same items in last year's *Statistical Supplement*. The date used for that *Supplement* does not reflect the effect of the accounting entries which were made during the 1974-75 fiscal year.



# Assumptions Used By Actuary

(For State, School, and Municipal Divisions only)

1. **The interest rate** used in making the valuation was six percent per annum, compounded annually.
2. **The mortality table**, for post-retirement mortality, used in evaluating annuities to be paid, was the 1960 Group Annuity Mortality Table, set back no years for men and set back five years for women as shown below.

## Single Life Retirement Values

Based on 1960 Group Annuity Mortality & 6% Interest

Sample Attained Ages	Present Value of \$1.00 Monthly for Life		Present Value of \$1.00 Mo. the First Year Increasing \$.03 Yearly		Future Life Expectancy (Years)	
	Men	Women	Men	Women	Men	Women
40	\$172.11	\$179.59	\$229.21	\$243.31	35.48	40.21
45	162.79	172.11	212.69	229.21	30.85	35.48
50	151.92	162.79	194.33	212.69	26.44	30.85
55	139.60	151.92	174.49	194.33	22.30	26.44
60	125.60	139.60	153.11	174.49	18.43	22.30
65	109.70	125.60	130.23	153.11	14.80	18.43
70	92.95	109.70	107.39	130.23	11.58	14.80
75	75.97	92.95	85.47	107.39	8.79	11.58
80	60.20	75.97	66.11	85.47	6.54	8.79
85	47.51	60.20	51.11	66.11	4.98	6.54

3. **The salary scale**, showing present salary assumed to result in a salary of \$1,000 at age 60.

Sample Ages	Present Salary Resulting in Salary of \$1,000 at Age 60		
20	\$ 138	40	435
25	191	45	557
30	255	50	694
35	336	55	843
		60	1,000



**4. The probabilities of age and service retirement** for members eligible to retire. For State and Municipal Division members, eligibility for superannuation retirement was assumed to be age 55 and 30 years of service, or age 60 and 10 or more years of service. For School Division members, eligibility for superannuation retirement was assumed to be age 55 and 35 years of service, or age 60 with 10 or more years of service.

**Percent of Eligible Active Members**

Retirement Ages	Retiring Within Next Year — By Division		
	State	School	Municipal
55 .....	10%	15%	10%
56 .....	10	15	10
57 .....	10	15	10
58 .....	10	15	10
59 .....	10	15	10
60 .....	10	15	10
61 .....	10	15	10
62 .....	10	15	10
63 .....	10	15	10
64 .....	15	25	15
65 .....	80	60	40
66 .....	30	30	30
67 .....	40	40	40
68 .....	50	50	50
69 .....	90	60	90
70 .....	100	100	100

**5. The probabilities of separating from service** due to death or withdrawal. For State and Municipal Division members, the probabilities of withdrawal are applicable to active members under age 40 or with less than 10 years of service. For members over age 40 with 10 or more years of accrued service, the probabilities of withdrawal reduce to 50 percent of the values shown in the State Division, and to 20 percent in the Municipal Division.

In the School Division the probabilities of withdrawal are applicable to active members with less than 10 years of service. For members with 10 or more years of accrued service, the probabilities of withdrawal reduce to 10 percent of the values shown.



Sample Ages	Percent of Active Participants Separating Within Next Year					
	State		School		Municipal	
	Men	Women	Men	Women	Men	Women
20	31.31%	38.33%	30.63%	39.07%	31.31%	38.33%
25	16.53	34.10	16.11	30.81	16.53	34.10
30	12.10	21.04	11.83	22.75	12.10	21.04
35	8.48	11.27	8.58	14.31	8.48	11.27
40	6.46	7.76	6.00	10.65	6.46	7.76
45	4.18	5.86	5.14	6.86	4.18	5.86
50	4.48	4.85	4.52	5.56	4.48	4.85
55	4.04	3.78	4.17	4.25	4.04	3.78
60	3.98	3.83	3.94	3.55	3.98	3.83

6. The entry age normal cost method of valuation was used in determining superannuation annuity liabilities and normal cost.

7. In financing unfunded accrued liabilities, active member payroll was assumed to increase 3 percent a year.

## Actuarial Assumptions for Judges Division

1. The interest rate used in making the valuation was six percent per annum, compounded annually.

2. The mortality table, for post-retirement mortality, used in evaluating annuities to be paid, was the 1960 Group Annuity Mortality Table, set back no years for men and set back five years for women.

### Single Life Retirement Values

Based on 1960 Group Annuity Mortality & 6% Interest

Sample Attained Ages	Present Value \$1.00 Monthly for Life		Present Value of \$1.00 Mo. the First Year Increasing \$.015 Yearly		Future Life Expectancy (years)	
	Men	Women	Men	Women	Men	Women
	40	\$172.11	\$179.59	\$200.66	\$211.45	35.48
45	162.79	172.11	187.74	200.66	30.85	35.48
50	151.92	162.79	173.13	187.74	26.44	30.85
55	139.60	151.92	157.05	173.13	22.30	26.44
60	125.60	139.60	139.35	157.05	18.43	22.30
65	109.70	125.60	119.97	139.35	14.80	18.43
70	92.95	109.70	100.17	119.97	11.58	14.80
75	75.97	92.95	80.72	100.17	8.79	11.58
80	60.20	75.97	63.16	80.72	6.54	8.79
85	47.51	60.20	49.31	63.16	4.98	6.54



3. The salary scale, showing present salary assumed to result in a salary of \$1,000 at age 65.

Sample Ages	Present Salary Resulting in Salary of \$1,000 at Age 65	
	25 .....	\$ 164
30 .....	220	50 ..... 597
35 .....	289	55 ..... 725
40 .....	375	60 ..... 861
		65 ..... 1,000

4. The probabilities of age and service retirement for members eligible to retire. Eligibility for superannuation retirement was assumed to be age 65 with 10 or more years of service.

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year	
65 .....	40%	68 ..... 15
66 .....	20	69 ..... 25
67 .....	15	70 ..... 100

5. The probabilities of separating from service due to death or withdrawal. The probabilities of withdrawal are applicable to active members with accrued service less than 10 years. For members with 10 or more years of accrued service, the probabilities of withdrawal are zero.

Sample Ages	Percent of Active Members Separating Within the Next Year	
	Men	Women
25 .....	7.79%	7.78%
30 .....	7.31	7.29
35 .....	6.40	6.36
40 .....	5.33	5.27
45 .....	4.29	4.15
50 .....	3.14	2.88
55 .....	1.87	1.52
60 .....	1.48	1.02
65 .....	2.18	1.39

6. The attained age normal cost method of valuation was used in determining superannuation annuity liabilities and normal cost.

7. In financing unfunded accrued liabilities, active member payroll was assumed to increase 3 percent a year.



# Computed Employer Contribution Rate

## Computed Employer Contribution Rate

Expressed as Percents of Active Member Payroll  
 State                      School                      Municipal                      Judges

Contributions for  
 Current Cost:

Superannuation annuities .....	9.64%	10.75%	9.81%	14.78%
Disability annuities .....	1.05	0.85	1.20	0.50
Survivor Annuities .....	0.60	0.60	0.80	1.50
Total .....	11.29	12.20	11.81	16.78
Member current contributions				
(Future refunds) .....	(3.95)	(3.52)	(3.76)	(0.85)
Available for annuities .....	3.80	4.23	3.99	6.15
Employer Current Cost .....	7.49	7.97	7.82	10.63
Unfunded Accrued Liabilities .....	3.16	4.13	2.04	1.37
(Amortization period) .....	(41 years)	(26 years)	(36 years)	(18 years)
<b>TOTAL COMPUTED EMPLOYER          CONTRIBUTION RATE .....</b>	<b>10.65%</b>	<b>12.10%</b>	<b>9.86%</b>	<b>12.00%</b>
<b>STATUTORY RATE .....</b>	<b>10.65%</b>	<b>12.10%</b>	<b>9.86%</b>	<b>12.00%</b>

