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**PUBLIC
 EMPLOYEES'
 RETIREMENT
 ASSOCIATION
 OF COLORADO**



**Comprehensive Annual Financial Report
 for the fiscal year ending December 31, 1985**



The Public Employees' Retirement Association of Colorado provides retirement and survivor benefits for the employees of more than 300 state, school, and local government entities in Colorado. Founded in 1931, PERA has had a steady growth in its membership and its assets.

1985 Statistical Highlights:

- Active Members Contributing 98,315
- Benefit Recipients 26,197
- Service Retirements 1,653
- Disability Retirements 272
- Active Member Deaths 157
- Deaths After Retirement 717

- PERA Investment Assets \$5,610,637,000
- Benefits Paid 201,421,000
- Refunds 32,069,000
- Member Deposits 173,870,000
- Employer Contributions 263,200,000
- Investment Income 1,004,902,000

- Investment Rate of Return 21.5%

**Comprehensive
Annual Financial Report
of the
Public Employees'
Retirement Association of Colorado**

**For the fiscal year
ending December 31, 1985**

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Robert J. Scott, Executive Director



**1300 Logan Street
Denver, Colorado 80203
(303) 832-9550**

Prepared by the
PERA Communications Division

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Introductory Section

Letter of Transmittal



Public Employees' Retirement Association of Colorado
1300 Logan Street, Denver, Colorado 80203

June 18, 1986

Dear Members of the Retirement Board,

I am pleased to present the Comprehensive Annual Financial Report for the Public Employees' Retirement Association of Colorado for the year ended December 31, 1985.

This report consists of five sections. The Introductory Section contains this Letter of Transmittal; the Board Chairman's Report; information about the Retirement Board, the administrative organization, and the consulting services used by PERA; and a summary of the plan. The Financial Section contains the opinion of the independent certified public accountants, Arthur Andersen & Company, and the financial statements of the Association along with certain supporting schedules. An Investment Section is provided this year to present clearly all information regarding the fund's investments including the Investment Policy and Summary, information about the fund's performance, and a list of PERA holdings of common stock. The Actuarial Section contains the certification of the consulting actuary, Gabriel, Roeder, Smith & Company, along with the results of the annual actuarial valuation and other actuarial statistics. The Statistical Section contains statistical tables of significant data pertaining to the Association.

Accounting System and Reports

This report has been prepared in accordance with generally accepted accounting principles applied on a consistent basis as agreed upon by the Government Accounting Standards Board and the American Institute of Certified Public Accountants. The report is completed in accordance with guidelines promulgated by the Financial Accounting Standards Board (FASB 35). It will be forwarded to the Government Finance Officers Association for consideration for the Certificate of Achievement for Excellence in Financial Reporting award.

Transactions of the Public Employees' Retirement Association are reported on the accrual basis of accounting for assets, liabilities, revenues and expenses. Revenues for the Association are taken into account when earned without regard to the date of collection, and expenses are recorded when the corresponding liabilities are incurred, regardless of when payment was made. Fixed assets are recorded at cost and depreciated through charges to expense over the estimated useful lives of the assets. Contributions to the Association are based on the principles of level-cost financing with current service financed on a current basis. Prior service is amortized over varying periods depending upon the respective Division, i.e. 29 years for the State Division, 31 years for the School Division, 18 years for the Municipal Division, and 20 years for the Judges' Division.

Revenues

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through income on investments reported at market value.

Contributions and investment income including unrealized income for 1985 totaled \$1,441,972,000. This represents a 77.9% increase from the 1984 revenues, mainly as a result of an excellent investment return. Contribution rates from both employees and employers remained the same; however, there was an increase in overall contributions by employees and employers of approximately \$30,562,000 resulting from increases in the number of employees and the amount of their salaries.

Expenses

The primary expense of a retirement system relates to the purpose for which it is created; that is, the payment of retirement and survivor benefits. Consequently, recurring benefit payments, refunds of contributions to terminated employees, and the cost of administering the Association comprise the total expense. Expenses for 1985 totaled \$238,191,000, an increase of 9.9% over 1984 expenses. This increase in expenses resulted primarily from a growth in the number and the average size of benefit payment as well as from a cost of living adjustment. Revenues of \$1,441,972,000 exceeded expenses of \$238,191,000 by \$1,203,781,000 during 1985. Administrative expenses are controlled by an annual budget approved by the Retirement Board.

Value of Accumulated Plan Benefits (Reserves)

The total accumulated plan benefits as presented in our audited financial statements total \$4,235,618,000. This amount is calculated in accordance with FASB 35 which does not take into consideration the effect of future salary increases. For clarification, we also present in the Actuarial Section a summary of PERA's unfunded accrued liabilities which is calculated using assets on a historical cost basis and includes the effect of projected future salary increases on liabilities.

Investments

The investment portfolio is regarded as a major contributor to the Association. Realized income from both long-term and short-term investments amounted to \$615,152,000 which represents 58% of

total revenues. This far exceeded the approximate 17% and 25% of total revenue contributed by the employee members and the employers respectively. Changes in the composition of the total portfolio during the year are reflected in the Investment Summary on page 27. Proper funding and healthy investment returns are very important to the financial soundness of PERA. The high ratio of investment earnings to total revenues is evidence of PERA's strong financial management.

Funding

The bottom line for a retirement system is its level of funding. The better the level of funding, the larger the ratio of assets accumulated to total liabilities and the greater the investment income potential. Also, a better funding level gives the participants a higher degree of assurance that their pension benefits are secure. The advantage of a well-funded plan is that the participants can see assets which are irrevocably committed to the payment of promised benefits. Although the historical level of funding for PERA is very good, as illustrated by the Solvency Test on page 44, constant effort is being directed at improving that level. Funding levels are presented in the Actuarial Section of the Report.

Professional Services

Professional consultants are appointed by the Retirement Board to perform services essential to the efficient operation of PERA. A certification from the certified public accountant and the actuary are included in this report. The consultants providing services to PERA are listed on page 8.

Review of Operations

The PERA staff is dedicated to serving professionally and personally the Association's active and retired members and other benefit recipients. Counseling these members on their current or future benefits and assisting them in making personal data record changes receives much attention. During 1985 PERA staff counseled more than 2200 active and retired members individually in the PERA administrative offices and responded to more than 26,300 telephone inquiries and 19,500 letters regarding the plan. Also 127 member meetings were held around Colorado providing general information about plan benefits to more than 5500 members.

For the benefit of the PERA members, two new programs were initiated during 1985. The PERA Voluntary Investment Plan, a tax-deferred supplemental retirement plan, was developed and became available to the active PERA membership on July 1, 1985. Still in its infancy stage, on December 31, 1985, 350 members were

enrolled in the plan. Secondly, after the Colorado General Assembly passed Senate Bill 67, the PERA staff began developing the new PERA Retiree Health Care Program. This new benefit will help many retirees who have had no access to any group health insurance program. PERA will supplement the individual premiums of retirees and other benefit recipients depending upon the number of years of PERA service credit they have accrued. The new program begins covering retirees on July 1, 1986.

In May, Retirement Board elections were held. Ada Houck was elected to the Board to represent retirees; she had previously represented school employees. Edward Murrow was re-elected to the Board and J. Kim Natale was elected as a new Board member. Bill Maguire was appointed to fill the seat previously occupied by Captain Tom Lindquist who retired from the State Patrol.

Several staff changes were also made. Nancy Williams was appointed Deputy Executive Director for Benefits and In-House Legal Counsel, coming to PERA from the State Teachers Retirement System of Ohio where she had been general counsel for the prior four years. Also, in May 1985 Patricia Richards was named Director of Personnel, a new position at PERA. She was previously in the State Auditor's Office for six years. More recently, we appointed two new directors and a new internal auditor in March 1986. Lana Calhoun, the new Director of Retirement Services, came to PERA from Retirement Systems of Alabama where she had served eight years. Don Schaefer, previously with Denver's Department of Health & Hospitals, is the new Director of Communications. David Maurek, formerly with ARCO, is the new internal auditor.

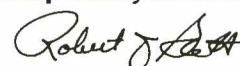
Acknowledgements

The compilation of this report reflects the combined effort of the PERA staff. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and as a means for determining responsible stewardship for assets contributed by the members and their employers.

This report is being mailed to all employer members of the system while a summary of it will be distributed to all active and retired PERA members in the Association's Member Report in August. The cooperation of PERA employers contributes significantly to the success of PERA. We trust that the employers and their employees will find this report informative.

I would like to express my gratitude to the staff, the consultants, the Board and to the many people who have worked diligently to assure the successful operation of the Association.

Respectfully submitted,



**Robert J. Scott
Executive Director**

Retirement Board

By state law, the management of the public employees' retirement fund is vested in the Retirement Board of the Public Employees' Retirement Association of Colorado.

The Board is comprised of 15 members including the State Auditor and the State Treasurer. The 13 representative members are elected by mail ballot of their employee group members to serve on the Board for a four-year term. Five members are from the School Division, four from the State Division, two from the Municipal Division and two are elected by the retired members. If a Board member resigns, the Board appoints a new member from the respective Division to complete the term left vacant by the resigning Board member.



Dr. Terry L. Lantry, Chairman of the Board

- Member since 1976
- Represents state employees
- Professor, Accounting & Business Law, Colorado State University
- Current term expires July 1, 1988



John Moreland, Vice Chairman

- Member since 1983; also served 1972-77
- Represents retired members
- Current term expires July 1, 1987

Roberta Altenbern

- Member since 1977
- Represents school employees
- Middle school media specialist, Adams County School District 14
- Current term expires July 1, 1987

Ada Houck

- Member since 1973
- Represents retired members
- Current term expires July 1, 1989

Bill "Mac" Maguire

- Member since 1985
- Represents state employees
- Personnel specialist, Colorado State Hospital
- Current term expires July 1, 1990

Suzanne S. Schulze

- Member since 1980
- Represents state employees
- Librarian, University of Northern Colorado
- Current term expires July 1, 1987

Frank V. Taulil

- Member since 1977
- Represents school employees
- Elementary school principal, Pueblo Public Schools #60
- Current term expires July 1, 1990

J. Kim Natale

- Member since 1985
- Represents school employees
- Math and science teacher, Jefferson County Public Schools
- Current term expires July 1, 1989

Edward W. Murrow

- Member since 1977
- Represents state employees
- Treasurer, University of Colorado
- Current term expires July 1, 1989

John Young

- Member since 1980
- Represents school employees
- Biology teacher, Jefferson County Public Schools
- Current term expires July 1, 1988

Wilborn S. Whitehead

- Member since 1970
- Represents municipal employees
- Manager, Buildings and Grounds Department, City of Arvada
- Current term expires July 1, 1990

Bernal Brooks

- Member since 1974
- Represented municipal employees
- Assistant Controller, Public Utilities Department, City of Colorado Springs
- Resigned May 1986

Gar McInnis

- Appointed to complete term of Mr. Brooks, May 1986
- Represents municipal employees
- Risk and Insurance Administrator City of Colorado Springs
- Current term expires July 1, 1987

Steven Brown

- Member since 1982
- Represents school employees
- Supervisor, Financial Services, St. Vrain Valley School District
- Current term expires July 1, 1988

Timothy M. O'Brien

- Member since 1985
- State Auditor
- Continuous term, ex-officio

Roy Romer

- Member since 1977
- State Treasurer
- Continuous term, ex-officio

Public Employees' Retirement Association of Colorado



1300 Logan Street Denver, Colorado 80203 (303) 832-9550

To all PERA members:

June 16, 1986

The 1985 Annual Financial Report of the Public Employees' Retirement Association illustrates the continued excellent growth of your retirement system and the generous benefits it provides to retired members. Through PERA, employees of more than 300 state, school and local governmental entities are promised future retirement benefits. To assure that these benefits will be payable, the Retirement Board remains dedicated to preserving PERA's sound growth through a strong financial management plan.

With this goal as paramount, the Retirement Board cautiously considers improvements to benefits. As you may expect, when members learn of PERA's admirable rate of return on investments and of the fund's steady growth, they frequently suggest benefit changes. Most of these changes would require an increase in current costs to employees and employers. As a policy, the Board will not recommend a benefit change that would require higher contributions to begin years later. Changes must be funded on a current basis. Only after a great deal of consideration by the PERA Legislative Committee and the Retirement Board is legislative action recommended. During 1985 two bills improving benefits were passed by the Colorado General Assembly.

Senate Bill 67 allowed PERA to establish a comprehensive health care program with a health care fund to subsidize premiums of retirees. Instead of increasing the cost to either employee or employer to fund this benefit, a small portion of the monthly employers' contribution to PERA was diverted to the health care fund. These funds are then invested to add to the money for premium supplements. The health insurance program starts on July 1, 1986, and, as of the writing of this letter, more than 10,000 retirees have enrolled.

The other legislation was House Bill 1110. It established the same benefit program for all surviving spouses of deceased members regardless of the year death occurred for the member.

These two benefit improvements will help many retired members and their family members. Assuredly the Board will work diligently with the staff and the Legislature whenever a change can provide other similar plan improvements.

Finally, on behalf of the Board and the PERA staff, I extend our thanks to you -- the Association's employers, advisors and retired and active members. Your continued support and interest in the PERA system will assure a financially secure retirement future for all PERA participants. With your involvement, the Board looks forward to another successful year of leading the Association.

Sincerely,

Terry Lantry, J.D., C.P.A.
Chairman, PERA Retirement Board

Administrative Organization

RETIREMENT BOARD



Robert J. Scott
Executive Director

Investments

Norman Jaskol

Deputy Executive Director

Norman Benedict

Assistant Director

Daryl Roberts

Director, Investment Operations

Benefits

Nancy Williams

Deputy Executive Director

Lana Calhoun*

Director, Member Services

Paula Westerdahl

Director, Retirement Services

Administration

Carl Wilkerson

Deputy Executive Director

Dennis Blake

Director, Information Systems

Don Clippinger

Director, Accounting

Ralph Doronzo

Director, Property Management

Patricia Richards

Director, Personnel

Rob Gray

Director, Government Relations

Donald Schaefer*

Director, Communications

David Maurek*

Internal Auditor

* Appointed to positions in March 1986

CONSULTANTS

Actuary

Gabriel, Roeder, Smith & Company
2090 First National Bank Building
Detroit, MI 48226

Auditor

Arthur Andersen & Company
Petro Lewis Tower
717 - 17th Street, Suite 1900
Denver, CO 80202

Investment Counsel

Bankers Trust Company
280 Park Avenue
New York, NY 10017

Provident National Bank
Broad and Chestnut
P.O. Box 7648
Philadelphia, PA 19101

Investment Performance Analysis

Merrill Lynch
1 Liberty Plaza
New York, NY 10006

Insurance Counsel

Byerly & Company
Hampden Point, Suite 300
3443 South Galena Street
Denver, CO 80231

The PERA Retirement Plan, established in 1931, began by covering state employees only. Since then the Plan has expanded greatly with membership now including employees of the State of Colorado, all Colorado school districts except Denver, and numerous municipalities, public health departments and other local governmental entities.

The Plan's purpose is to provide income to members and their families at retirement or in case of death or disability. Funding for the Plan operates on an actuarial reserve basis with money being set aside for retirement benefits while they are being earned and before they will be paid. The average active member pays only 15 percent of the amount he or she actually obtains in benefits. The remainder of the benefits are funded through employers' contributions and investment income.

Administration of the Plan

The authority to manage the Association is vested in the Public Employees' Retirement Board of Colorado which is comprised of 15 members including the State Auditor and the State Treasurer.

The Board appoints an executive director who is responsible for the daily operation of the Association. The legal advisor to the Board is the Colorado Attorney General. The Board appoints an actuary who makes annual actuarial valuations to determine the adequacy of the funding of retirement benefit liabilities accrued under the Plan. Additionally, the Board appoints various advisory sub-committees such as Investment, Audit, Legislative, and Rules.

Administrative expenses of the Association are paid from a \$5 membership fee charged each employee upon employment and from a small allocation from division trust funds.

The funds of the retirement system are invested primarily in corporate bonds, U.S. Treasury and agency securities, common stock of top-rated companies, real estate mortgages, and direct ownership of real estate properties. The law limits investments in common and preferred stocks and convertible bonds to 50 percent of the portfolio.

Member Contributions

Members contribute eight percent of their salaries to an individual account in the Association fund except for state highway troopers who contribute nine percent. The salary amount includes pay for overtime and additional duties but excludes reimbursement for expenses. The accumulated amount in each account will be used for the employee's benefit if the member remains in service.

Employer Contributions

While the member is contributing to the fund for his or her retirement, the member's employer also is making contributions on behalf of the employee. 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 benefit promised by the Association. Percentage rates for PERA divisions differ and are set by law as shown below:

State Division	12.2%	Municipal Division	10.2%
For State Troopers	13.2%	Judges' Division	15.0%
School Division	12.5%		

Resignation

A resigning member is entitled to a complete refund of all the deposits the member made to PERA. If the member has five or more years of service, he or she may leave the money on deposit and, without further payment, receive a monthly benefit payable as early as age 60 for the rest of the member's life.

Retirement

A member is eligible for a reduced retirement benefit as early as age 55 provided the member has at least 20 years of PERA service credit, or at age 60 with as few as five years of credited service.

Regular retirement benefits without any reduction are available to members at age 55 with at least 30 years of service, at age 60 with at least 20 years' service and at age 65 with at least five years' service.

PERA uses the member's Final Average Salary (FAS) to calculate benefits. FAS is the average of the three highest years of earnings within the member's career, usually the last three. Within the three years, any annual salary increase in excess of 15 percent over the previous year used is limited to 15 percent for the calculation.

The formula is used to compute regular retirement benefits with a reduction factor applied for reduced retirement benefits.

*2½% of FAS for each year up to 20 years of service.

*Additionally, 1% of FAS for each year from 21-40 years of service.

Maximum benefit is 70% of FAS.

Disability

Members with five or more years of earned service credit since the last date of membership may qualify for disability retirement if determined to be permanently disabled. The benefit is paid until the member recovers from the disability or for the rest of the member's life. Many disabled members receive 50 percent of FAS although certain exceptions exist.

Death Before Retirement

If a member dies before retirement, the member's eligible unmarried children will receive monthly benefits. Children are eligible until age 18 or, if enrolled in school, until age 23. If there are no eligible children or after benefits to the children have ceased, the member's widow or widower will receive a monthly benefit beginning when she or he reaches age 60. This benefit will begin earlier if the member has more than 10 years' service at the time of death. To be eligible for survivor benefits, the member 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 there are no eligible survivors for monthly benefits, the member's beneficiary will receive a refund of the amount of money the member has deposited with PERA.

**Financial
Section**

ARTHUR ANDERSEN & Co.
DENVER, COLORADO

To the Participants and Retirement Board of
The Public Employees' Retirement Association of Colorado:

We have examined the combined statements of net assets available for benefits and of accumulated plan benefits of the PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION OF COLORADO (a public association of the State of Colorado) as of December 31, 1985 and 1984, and the related combined statements of changes in net assets available for benefits and of changes in accumulated plan benefits for the years then ended. Our examinations were 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.

In our opinion, the financial statements referred to above present fairly the net assets and accumulated plan benefits of the Public Employees' Retirement Association of Colorado as of December 31, 1985 and 1984, and the changes in its net assets and accumulated plan benefits for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis after restatement for the change in the accounting treatment for future salary increases in determining the actuarial present value of credited projected benefits as discussed in Note 2 to the combined financial statements.

Arthur Andersen & Co.

Denver, Colorado,

June 5, 1986.

Combined Statements Of Net Assets Available For Benefits

As Of December 31, 1985 and 1984
(Amounts in Thousands)

Assets	1985	1984
Investments , at fair market value:		
U.S. Government obligations	\$ 736,543	\$1,038,095
Corporate bonds	413,749	419,709
Common stocks	2,306,523	1,412,144
Guaranteed note	106,700	93,350
Mortgages	790,062	684,509
Real estate	166,847	100,963
	4,520,424	3,748,770
Receivables:		
Employers	15,316	14,087
Employees	10,011	11,029
Interest and dividends	53,725	50,364
Other	874	9,063
	79,926	84,543
Cash and Short-Term Investments	1,090,213	650,392
Property and Equipment , at cost, net of accumulated depreciation of \$1,790 and \$1,592, respectively	4,232	3,977
Total assets	5,694,795	4,487,682
Liabilities and Reserve		
Refunds Payable and Other	14,155	11,099
Insurance Dividend Reserve	10,689	9,788
Total liabilities and reserve	24,844	20,877
Commitments		
Net Assets Available for Benefits	\$5,669,951	\$4,466,795

The accompanying notes to combined financial statements are an integral part of these statements.

Combined Statements of Changes in Net Assets Available for Benefits

For The Years Ended December 31, 1985 and 1984
(Amounts in Thousands)

	1985	1984
Investment Income:		
Realized gain on investments	\$ 246,511	\$ 108,837
Interest	288,241	282,250
Dividends	75,710	56,565
Unrealized appreciation (depreciation) in fair market value of investments	389,750	(46,121)
Real estate income, net	3,720	2,398
Other	970	60
Total Investment Income	<u>1,004,902</u>	<u>403,989</u>
Contributions:		
Employers	263,200	245,491
Employees	173,870	161,017
	<u>437,070</u>	<u>406,508</u>
Transfers:		
Benefits paid to annuitants	(193,936)	(172,185)
Benefits paid to survivors	(7,485)	(6,385)
Refunds of contributions	(32,069)	(34,519)
Other, net	1,211	1,482
	<u>(232,279)</u>	<u>(211,607)</u>
Administrative Expenses	<u>(5,912)</u>	<u>(5,083)</u>
Interest Credited to Insurance Dividend Reserve Net of Administrative Fees	(625)	(565)
Net Increase	<u>1,203,156</u>	<u>593,242</u>
Net Assets Available for Benefits:		
Beginning of year	<u>4,466,795</u>	<u>3,873,553</u>
End of year	<u>\$5,669,951</u>	<u>\$4,466,795</u>

*The accompanying notes to combined financial statements are an integral part of these statements.

Combined Statements of Accumulated Plan Benefits

As Of December 31, 1985 and 1984
(Amounts in Thousands)

Actuarial Present Value of Accumulated Plan Benefits:

	1985	1984 <small>(as restated - see note 2)</small>
Vested benefits		
Participants currently receiving benefits	\$1,784,440	\$1,423,166
Other participants	2,324,673	1,779,845
Total vested benefits	<u>4,109,113</u>	<u>3,203,011</u>
Nonvested benefits	126,505	124,207
Total Actuarial Present Value of Accumulated Plan Benefits	<u><u>\$4,235,618</u></u>	<u><u>\$3,327,218</u></u>

*The accompanying notes to combined financial statements are an integral part of these statements.

Combined Statements of Changes in Accumulated Plan Benefits

For The Years Ended December 31, 1985 and 1984
(Amounts in Thousands)

Actuarial Present Value of Accumulated Plan Benefits at Beginning of Year

Increase (Decrease) During The Year Attributable to:

	1985	1984 <small>(as restated - see note 2)</small>
Actuarial Present Value of Accumulated Plan Benefits at Beginning of Year	\$3,327,218	\$2,895,169
Change in actuarial assumptions	370,604	49,576
Benefits accumulated and interest amortization, net of refunds	739,217	561,043
Benefits paid	(201,421)	(178,570)
Actuarial Present Value of Accumulated Plan Benefits at End of Year	<u><u>\$4,235,618</u></u>	<u><u>\$3,327,218</u></u>

*The accompanying notes to combined financial statements are an integral part of these statements.

Notes to Combined Financial Statements

December 31, 1985 and 1984

(1) General Description of Plan

Organization

The Public Employees' Retirement Association of Colorado (the "Association") was established under Title 24, Article 51, Section 102 of the Colorado Revised Statutes, as amended. It was created in 1931 as a public association for the purpose of providing present and future retirement or survivor benefits for persons who are employed by public employers (and thus do not participate under the Social Security Act) located in the State of Colorado and affiliated with the Association. This is accomplished through its operations as a defined benefit pension plan (the "Plan"). Responsibility for the organization and administration of the Plan is vested in the Public Employees' Retirement Board.

Contributions and Participants' Accounts

Employer and participant contributions are defined under state statute. Participants, except State Patrol troopers, are required to contribute 8% of their annual salary to the Association. State Patrol troopers contribute 9%. Effective July 1, 1984, these contributions are tax-deferred for federal income tax purposes to the participants. Prior to that date, contributions were made on an after tax basis. These contributions are credited directly to their "active member" accounts. Participants' contributions are fully refundable, without interest, upon withdrawal from Association affiliated employers. If participants have at least five years of credited service, they may elect to receive a deferred annuity. Any refund of contributions paid waives all future rights to any benefits. However, eligible participants with one or more years of credited service who were previously refunded their contributions may be reinstated to the Association through lump sum or installment payments enabling them to participate in future benefits. Any participant of the Association who was not enrolled during service years prior to July 1, 1979, can elect, through a lump sum or an installment "buy-back" program to receive additional credited service which will increase their future retirement benefits. The Association's funding policy also requires contributions, by employers, ranging from 10.2% to 15% of participant salaries. These contributions are credited to the participants' division for the purpose of creating actuarial reserves for annuities, such that, each employee's benefits will be fully provided for upon retirement.

Benefits

Participants are eligible for retirement benefits upon reaching (a) age 65 with 5 or more years of credited service; (b) age 60 with 20 or more years of credited service; or (c) age 55 with 30 or more years of service. Such benefits are equivalent to 2.5% of their average annual earnings during their highest paid 3 years of service (defined as three periods of 12 consecutive months) prior to retirement, for each year of service up to 20 years, and 1% for each year over 20 years. The maximum benefit available is 70% of their average annual earnings. The Plan also permits early retirement after age 55 with 20 or more years of credited service or after age 60 with 5 or more years of credited service in a reduced amount. Participants may elect to receive their pension benefits in the form of joint or survivor annuities.

In addition to regular retirement benefits, the Plan provides for disability retirement and death benefits. Active employees who become permanently disabled with at least 5 years of credited service receive disability benefits that are comparable to the normal retirement benefits they have accumulated as of the time they become disabled. Disability benefits are the amount of normal retirement benefits accumulated, but not lower than 50% of average earnings unless the employee would not have attained that percentage had employment continued to age 65. Average earnings remain the same as at the time of disability. There are also provisions for a reduced disability benefit when the individual is disabled from regular but not comparable employment. If an active employee dies while employed, an annuity based upon the accumulated credited service as of the time of death and the number and relationship of family survivors is payable to such survivors.

Termination of the Association

The law, through House Bill 1256, provides that should the Association be terminated or partially terminated for any reason, the rights of all members and former members to all benefits accrued to the date of such termination, to the extent then funded, shall become nonforfeitable.

(2) Summary of Significant Accounting Policies

Fund Accounting

The financial activities of the Association are recorded in separate divisions (State, School, and Municipal Employees' and Judges) established by statute and in a Cost of Living Stabilization Fund, Retired Public Employees' Health Insurance Fund and Common Operating Fund. Each division maintains separate accounts, and all actuarial determinations are made on the basis of each division's separate actuarial information.

The Cost of Living Stabilization Fund (the "CLSF") was created on May 1, 1980 through the enactment of Senate Bill 62 to offset inflation by providing increased benefits payable to beneficiaries of the Association. The CLSF is funded by payments from employers equal to 2.0% of active member salaries. Such payments are collected by each division on behalf of the CLSF. The increased benefits to beneficiaries are paid directly by each division to the beneficiaries and then reimbursed by transfer from the CLSF.

The Retired Public Employees' Health Insurance Fund (the "HIF") was created on July 1, 1985, through the enactment of Senate Bill 67 to provide additional group health insurance to retired Association members. The HIF is funded by payments from employers equal to .8% of active member salaries. Such payments are collected by each division on behalf of the HIF. Beginning July 1, 1986, the HIF will contribute towards enrolled retirees and survivors health care premiums by making payments directly to insurance companies and health maintenance organizations selected for this program.

The Common Operating Fund (the "Fund") accounts for all administrative activities common to the divisions. Operating assets and liabilities, which are held for the benefit of all divisions, are also recorded in the Fund. The expenses incurred by the Association are allocated from the Fund 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.

The 1985 financial statements of the various divisions and funds have been presented on a combined basis. Certain balances as of December 31, 1984, have been reclassified to conform to the December 31, 1985, presentation. These reclassifications have no effect on 1985 or previously reported net assets available for benefits. All interfund balances and transactions have been eliminated in the combined financial statements.

Investments

Plan investments (excluding the guaranteed contract with an insurance company) are presented at fair market value. Securities which are traded on a national securities exchange are valued at the last reported sales price during the year. For other investments which do not have an established market, estimated fair values are presented. Corporate bonds are valued based on yields currently available on comparable securities of issuers with similar credit ratings. Mortgages are valued on the basis of their future principal and interest payments discounted at prevailing interest rates for similar instruments. The fair market value of real estate investments, principally rental property, has been estimated by independent appraisers.

In addition, the guaranteed Aetna Life and Casualty note (Note 4) is valued at contract value, representing principal plus accrued interest at the stated contract rate.

The change in the market value of investments during the year is reflected in the combined statement of changes in net assets available for benefits as unrealized appreciation or depreciation.

On October 1, 1985, plan investments (and investment related amounts) owned by the divisions were transferred to a combined investment fund (the "CIF"). Upon transfer, each division received ownership units in the CIF based upon the fair market value of the division's investment portfolio (and investment related amounts) held on September 30, 1985. Under this system, each division's ownership units in the CIF are adjusted upward or downward based upon the division's activity. Results of investment performance and the value of the CIF are allocated among the divisions based upon each division's ownership units as a percentage of the total units outstanding. As of December 31, 1985, the ownership units of each division are as follows:

	<u>Units</u>
State	40,422,904.787
School	54,649,785.576
Municipal	5,076,398.220
Judges	<u>588,226.189</u>
Total	<u>100,737,314.772</u>

Actuarial Valuation

Accumulated plan benefits are those future periodic payments, including lump-sum distributions, which are attributable under the Plan's provisions to the service employees who have rendered. Accumulated plan benefits include benefits expected to be paid to (a) retired or terminated employees or their beneficiaries, (b) beneficiaries of employees who have died, and (c) present employees or their beneficiaries.

The actuarial present value of accumulated plan benefits (Note 6) was determined by an actuary from Gabriel, Roeder, Smith and Company on the basis of the "entry age normal" cost method. The resulting amount adjusts accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements such as for death, disability, withdrawal or retirement) between the valuation date and the expected date of payment. Significant assumptions underlying the actuarial computations as of December 31, 1985 and 1984, include: (a) life expectancy of participants based upon the 1971 Group Annuity Mortality Table projected to 1984; (b) the assumed average retirement age, ranging from 61 to 66 for men and 59 to 60 for women; and (c) assumed average rates of investment return of 9.8% (12.1% in 1984) in the first year, decreasing uniformly to 7.0% in the eleventh year and thereafter, net of expenses associated with providing benefits.

The Association previously included future salary increases in determining the actuarial present value of credited projected benefits in its financial statements for the year ended December 31, 1984. However, in order to conform with Statement of Financial Accounting Standards No. 35, "Accounting and Reporting by Defined Benefit Pension Plans," the effect of future salary increases has been eliminated in the accompanying restated combined financial statements. The effect of this change is a decrease of \$1,332,859,000 in the actuarial present value of credited projected benefits as of December 31, 1984.

These actuarial assumptions are based on the presumption that the Association will continue. Were the Plan to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits.

Property and Equipment

Property and equipment are carried at cost. Costs of major additions and improvements are capitalized. Expenditures for maintenance and repairs are charged to operations as incurred. Depreciation is computed on the straight-line method using estimated lives ranging from 3 to 50 years.

Federal Income Tax Status

During the years ended December 31, 1985 and 1984, the Association continued to receive from the Internal Revenue Service a favorable determination for exemption from federal income taxes.

(3) Guaranteed Note

In 1980, the Association acquired a guaranteed note from the Aetna Life and Casualty Insurance Company for \$50,000,000. The note earns interest annually at a rate of 14.3% which is guaranteed through 1989.

(4) Investments

The table on the opposite page presents the fair market value of those investments held by the Association at December 31, 1985 and 1984.

(5) Commitments

At December 31, 1985, the Association was committed to the future purchase of investments at an aggregate cost of approximately \$90,400,000.

(6) Unfunded Actuarial Accrued Liabilities

The actuarial calculation compares the present value of future benefits less the divisions' assets. The accompanying financial statements reflect plan assets on a fair market value basis. If the plan assets had been presented on a historical cost basis, the unfunded actuarial accrued liabilities for the various divisions at December 31, 1985, would be as follows:

State	\$ 681,316,960
School	547,117,821
Municipal	39,548,104
Judges	5,808,735
Total	<u>\$1,273,791,620</u>

The actuarially computed periods for funding these liabilities are equivalent to amortization periods ranging from 18 to 31 years.

(7) Insurance Dividend Reserve

The Insurance Dividend Reserve is an accumulation of dividends received from an insurance company as a return of the premiums paid, adjusted for actual historical experience, by participating members. The reserve is used to purchase paid-up life insurance for eligible members when they retire and additional paid-up insurance for active insured members.

Interest is credited to the Insurance Dividend Reserve at the rate of 7% of the average reserve balance during the year. In addition, the reserve is also charged with an administrative fee based upon the number of policies in force.

Notes to Combined Financial Statements

Fair Market Value of Investments

	1985	1984
	(Amounts in Thousands)	
Investments at fair market value as determined by quoted market price:		
U.S. government obligations	\$ 736,543	\$ 553,401
Corporate bonds	272,629	302,402
Common stocks	2,306,523	1,412,144
	<u>3,315,695</u>	<u>2,267,947</u>
Investments at estimated fair market value:		
U.S. government obligations	—	484,694
Corporate bonds	141,120	117,307
Mortgages	790,062	684,509
Real estate	166,847	100,963
	<u>1,098,029</u>	<u>1,387,473</u>
Investments at contract value:		
Guaranteed note	106,700	93,350
	<u>\$4,520,424</u>	<u>\$3,748,770</u>

During the years ended December 31, 1985 and 1984, the Association's investments appreciated (depreciated) in value by \$389,767,000 and \$(46,121,000), respectively, as follows:

	1985	1984
	(Amounts in Thousands)	
Investments at fair market value as determined by quoted market price:		
U.S. government obligations	\$ 50,697	\$ (2,905)
Corporate bonds	8,558	42,610
Common stocks	250,285	(146,337)
	<u>309,540</u>	<u>(106,632)</u>
Investments at estimated fair market value:		
U.S. government obligations	(3,827)	26,007
Corporate bonds	31,796	4,433
Mortgages	55,847	32,216
Real estate	(3,606)	(2,145)
	<u>80,210</u>	<u>60,511</u>
Net appreciation (depreciation)	<u>\$389,750</u>	<u>\$ (46,121)</u>

**Supporting Schedules
For Financial Section***

Schedule Of Administrative Expenses

Years Ended December 31

	BUDGET AMOUNT	EXPENDITURES 1985	EXPENDITURES 1984
Personnel Services			
Salaries	\$ 2,961,584	\$ 2,940,074	\$ 2,507,633
Employee Benefits	697,360	697,299	602,203
Total Personnel Services	<u>\$ 3,658,944</u>	<u>\$ 3,637,373</u>	<u>\$ 3,109,836</u>
Staff Education			
Personal Improvement Program	\$ 13,990	\$ 21,573	\$ 8,359
PERA Required Education	24,925	17,229	6,582
Other	-0-	100	-0-
Total Staff Education	<u>\$ 38,915</u>	<u>\$ 38,902</u>	<u>\$ 14,941</u>
Professional Contracts			
Actuarial Contracts	\$ 75,500	\$ 87,800	\$ 88,480
Audits	55,000	54,100	50,800
Medical Exams	121,000	86,161	105,063
Investment Counsel	72,200	61,050	52,500
Legal Counsel	57,000	42,554	45,116
Field Superintendent	45,000	22,917	-0-
Health Insurance Consultant	5,000	8,105	8,060
Other	-0-	31,075	43,703
Total Professional Contracts	<u>\$ 430,700</u>	<u>\$ 393,762</u>	<u>\$ 393,722</u>
Other Contractual Contracts	<u>\$ 46,500</u>	<u>\$ 46,399</u>	<u>\$ 16,138</u>
Equipment Rental			
Computer	\$ 37,983	\$ 16,544	\$ 50,091
Investment Systems	179,000	129,127	149,303
Misc. Equipment	1,750	2,140	505
Total Equipment Rental	<u>\$ 218,733</u>	<u>\$ 147,811</u>	<u>\$ 199,899</u>
Equipment and Furniture Service			
Service Agreements	\$ 132,980	\$ 113,681	\$ 106,841
Repair and Cleaning	6,000	2,022	2,678
Moving Computer	3,500	2,298	-0-
Total Equipment & Furn. Serv.	<u>\$ 142,480</u>	<u>\$ 118,001</u>	<u>\$ 109,519</u>
Miscellaneous			
Memberships	\$ 9,642	\$ 9,576	\$ 7,492
Publications & Subscriptions	11,877	11,785	8,363
Travel and Local	63,550	63,259	41,438
Board Expense	72,000	71,915	79,013
Auto Expense	6,700	6,690	2,846
Telephone	90,248	61,075	54,841
Postage	187,325	166,918	153,917
Insurance	192,005	184,632	76,940
Printing	120,864	110,781	101,231
Office Supplies	76,184	75,216	51,976
Rent	425,909	425,909	387,190
Business Loss	2,000	1,999	524
Total Miscellaneous	<u>\$ 1,258,304</u>	<u>\$ 1,189,755</u>	<u>\$ 965,771</u>
Total Budgeted Expense	<u>\$ 5,794,576</u>	<u>\$ 5,572,003</u>	<u>\$4,809,826</u>
Depreciation Expense	<u>291,125</u>	<u>291,125</u>	<u>260,577</u>
Total Expense	<u>\$ 6,085,701</u>	<u>\$ 5,863,128</u>	<u>\$ 5,070,403</u>
Interfund Transactions		(49,000)	13,000
Total Administrative Expense	<u>6,085,701</u>	<u>5,912,128</u>	<u>5,083,000</u>
Allocation of Administrative Expense			
State Division		\$ 2,287,994	\$ 1,987,443
School Division		3,233,343	2,765,162
Municipal Division		371,873	315,146
Judges' Division		18,918	15,249
Total Allocation		<u>\$ 5,912,128</u>	<u>\$ 5,083,000</u>

___ Schedule Of Cash Receipts And Disbursements

Years Ended December 31
(In Thousands of Dollars)

	1985	1984
Cash balance at beginning of year	\$ 11,245	\$ 7,817
Add Cash Receipts:		
Investment Sales	8,326,593	6,160,062
Contributions:		
Members	173,335	160,812
Employers	211,321	203,672
Cost of Living Stabilization Fund	42,674	40,906
Interest and Dividends	591,069	420,768
Other Receipts	<u>7,015</u>	<u>(526)</u>
Total Cash Receipts	\$ <u>9,352,007</u>	\$ <u>6,985,694</u>
Less Cash Disbursements:		
Investment Purchases	\$ 9,106,341	\$ 6,767,523
Benefit Payments	201,375	178,171
Refunds	31,593	31,544
Administrative Expenses	<u>5,863</u>	<u>5,028</u>
Total Cash Disbursements	\$ <u>9,345,172</u>	\$ <u>6,982,266</u>
Cash Balance at End of Year	\$ <u>18,080</u>	\$ <u>11,245</u>

**Investments
Section**

PERA Investment Policy

Goal

The function of the Public Employees' Retirement Association is to provide present and future retirement or survivor benefits for its members. In keeping with that function, the preservation of capital is of paramount importance. Every effort is made to manage the portfolio so that benefits will be paid from regular income and not from contributions or anticipated appreciation of investments. A substantial improvement in the rate of return over a reasonable period of time should reduce unfunded accrued liabilities and allow consideration of improving benefits while maintaining a level contribution rate.

Investment Decisions

The fund is long-term in nature. The selection of investments is regulated by statutory limitations, limits of acceptable risk and the objective of maximizing total rate of return. Approval of all purchases and sales of investments is vested by law in the PERA Board. The deputy executive director in charge of investments is authorized to execute investment transactions on behalf of the Board, as permitted under prescribed policies and procedures.

Investment decisions shall be made within the framework of the goal established for the rate of return, limits of acceptable risk and fund objectives. At any point in time, certain types of investments have greater relative attractiveness than others. To maximize the realized rate of return, it is necessary to determine the relative values ascribed to differing types of investments within a given investment environment.

The Association believes that individual holdings should stand alone on merit as well as complement the entire group of holdings.

Diversification is considered as part of the effort to minimize liquidity risks, maximize total rate of return and limit exposure to unanticipated business risks. Since the portfolio is long-term in nature and is constructed to avoid the necessity of liquidating holdings to meet benefits payments, liquidity is not a first consideration; however, every reasonable effort will be made to provide protection for the portfolio in future deteriorating markets.

No holding will be considered a "permanent" part of the portfolio. Any security can be sold at any time either to maximize gains or to minimize losses. The portfolio shall be continuously monitored in order to identify over-valued or under-valued stocks as well as above or below average yielding bonds so appropriate action may be taken.

Colorado Investments

Preference will be given to Colorado investments, all other factors being equal. However, to provide adequate portfolio diversification by geographical location and asset classes, and to maintain fiduciary responsibility, investments located within the State of Colorado shall not exceed 20% of the combined portfolios at cost. Within the 20% limitation, every effort will be made to diversify within the available asset classes, Commercial Real Estate Mortgages, Common Stocks, Corporate Debt, Equity Real Estate, etc.

Investment in foreign securities shall not be considered; however, this does not preclude investments in securities of U.S. corporations doing business abroad.

In making investment decisions the Association shall avail itself of the highest caliber advice obtainable both internally and externally.

Generally Accepted Accounting Principles (GAAP) will be followed in accounting for the portfolio; however, GAAP should not restrict investment decisions. The completed transaction method will be used to account for gains and losses. Securities will be recorded at adjusted cost; market values will be reported to the Board quarterly and used for the annual statements. The firm preparing the annual audit shall be consulted when questions concerning accounting procedures arise.

Review

A periodic review will be conducted by a performance evaluation service. In addition the annual external audit and the annual actuarial valuations shall be reviewed in conjunction with the evaluations of investment performance. All evaluations will be related to the Association's stated goals. Because these goals are long-term, cumulative performance results are considered to be more important than performance in any one year.

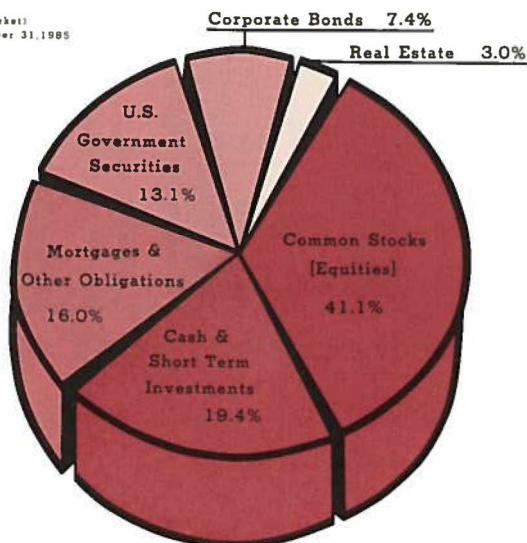
Investment Summary

(Expressed in thousands)

Type of Investment	January 1, 1985				December 31, 1985			
	Book Value	Market Value	Purchases	Sales and redemptions	Book Value	Market Value	% Total Market	Yield at Market
Cash & Short Term Investments	\$650,392	\$650,392	\$4,291,114	\$3,851,292	\$1,090,213	\$1,090,213	19.43%	7.81%
Fixed Income Securities								
Corporate Bonds:								
Public Util. & Communications	11,958	7,254			12,672	8,835	0.16%	7.51%
Public Util., Elec. & Gas	69,237	51,906			71,544	62,375	1.11%	9.31%
Industrial	105,149	101,410			102,729	109,650	1.95%	10.42%
Financial	146,010	141,834			88,311	91,770	1.64%	10.57%
Non-Publicly Traded Issues	131,271	117,306			142,697	141,120	2.52%	11.19%
Total Corporate Bonds	463,626	419,709			417,953	413,749	7.37%	10.49%
Government Securities:								
U.S. Bonds & Notes	543,267	546,998			587,348	629,340	11.22%	7.50%
U.S. Agency Obligations	489,172	491,097			100,271	107,203	1.91%	10.48%
Total Government Securities	1,032,438	1,038,095			687,619	736,543	13.13%	7.94%
Mortgages & Other Obligations:								
Mortgages & Notes	699,632	684,509			756,170	790,062	14.08%	11.20%
Guaranteed Investment Contracts	93,350	93,350			106,700	106,700	1.90%	14.30%
Total Mtge. & Other Obligations:	792,982	777,859			862,870	896,762	15.98%	11.57%
Total Fixed Income Securities:	\$2,289,046	\$2,235,663	\$1,385,914	\$1,723,981	\$1,968,442	\$2,047,054	36.49%	10.06%
Common Stocks	\$1,303,012	\$1,412,144	\$1,833,031	\$1,188,933	\$1,947,110	\$2,306,523	41.11%	3.50%
Real Estate	\$ 92,182	\$ 100,963	\$ 72,046	0	\$ 164,228	\$ 166,847	2.97%	4.00%
Total Investments	\$4,334,632	\$4,399,163	\$7,582,104	\$6,764,206	\$5,169,994	\$5,610,637	100.00%	6.75%

INVESTMENTS

(At Market)
As of December 31, 1985



Fund Performance Evaluation

PERA retained Merrill Lynch, the largest brokerage firm in the United States with a performance analysis division, to evaluate the PERA fund performance.

Following is a summary of the PERA composite fund performance results. Additionally four graphic exhibits are presented on the following pages to provide a profile of the PERA fund performance for 1985.

In its analysis, Merrill Lynch includes cash and accrued income and excludes guaranteed investment contracts. It also makes the calculations on pre-closing figures.

A. Asset Allocation. In concise form, this exhibit shows the percent of the fund invested in each investment category at the end of 1985. The asset allocation between equities, bonds, cash and short term securities, and mortgages and real estate is determined on an ongoing basis, depending upon the level of the respective markets and the total rate of return which can be reasonably expected to be derived from each category. The PERA Retirement Board has discretion subject to a statutory limit of no more than 50 percent of the fund in equities on a cost basis. The percentage allocation of the Merrill Lynch median public fund is provided for comparative purposes.

B. Total Portfolio Composite Results. This exhibit shows the performance of the PERA fund over each of the cumulative annual periods for the last five years. The Merrill Lynch median fund serves as an effective standard for determining a "reasonable" return for the terms shown.

C. Equities Only. This exhibit shows the performance of PERA equities versus the Standard and Poor 500, a measure of the performance of the stock market. In three of the past five years, PERA equities have outperformed or performed as well as the stock market as a whole. PERA equity investments tend to be a little less volatile than the market as a whole and that serves to dampen results in years when more speculative issues are in favor.

D. Bonds Only. This exhibit shows the performance of PERA bonds versus the Merrill Lynch bond index. During the early periods in the graph, PERA bonds did not do as well as the index because of a long maturity schedule. This was adjusted following the bond market rally in 1982. During the declining bond market of 1983, PERA bonds outperformed the index because of the significant adjustment in the maturity schedule. During the past two years the fixed income portfolio was slightly below the Merrill Index owing to the shorter maturity which tends to dampen volatility.

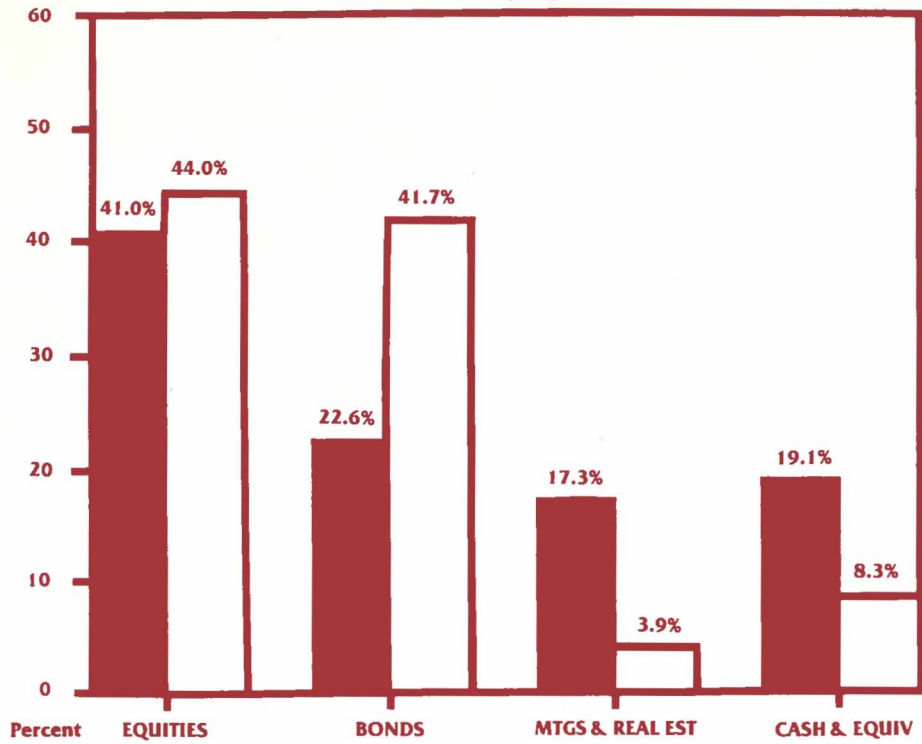
Annual Rate of Return

	1981	1982	1983	1984	1985	Annualized
Total PERA Portfolio:	0.0%	31.0%	12.2%	10.4%	21.5%	14.8%
Bonds & Equities only:	0.4	31.7	12.8	9.0	22.3	14.8
Equities (Common Stock):						
PERA	(3.3)	26.6	17.6	6.3	29.8	14.7
Standard & Poors 500	(4.9)	21.5	22.6	6.3	31.7	14.7
Bonds:						
PERA	3.5	38.6	8.6	13.2	20.9	16.3
Merrill Lynch Bond Index	7.0	29.8	7.8	15.1	21.8	16.0
Other PERA Assets:	(3.0)	27.1	9.0	17.9	17.4	13.2

Average Percent of Asset Allocation

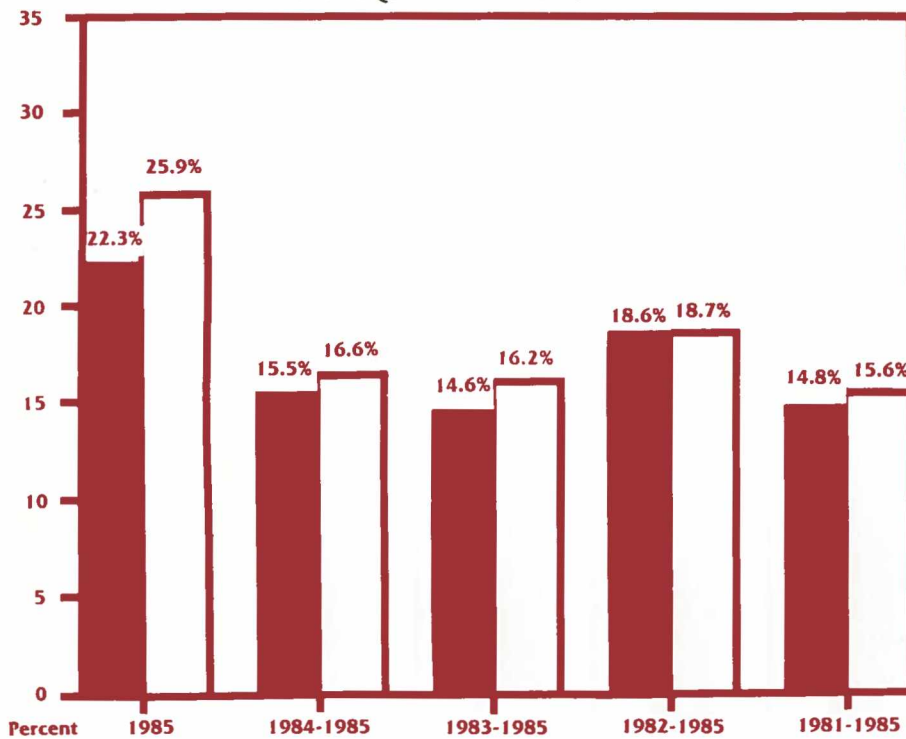
	1981	1982	1983	1984	1985	Annualized
Equities:	37.0%	38.4%	43.4%	36.8%	40.9%	39.3%
Bonds:	47.7	41.8	35.8	32.5	31.6	37.9
Other Assets:	13.1	15.0	14.3	15.7	15.7	14.8
Cash & Equivalents:	2.2	4.8	6.5	15.0	11.8	8.0
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

ASSET ALLOCATION As of 12/31/85



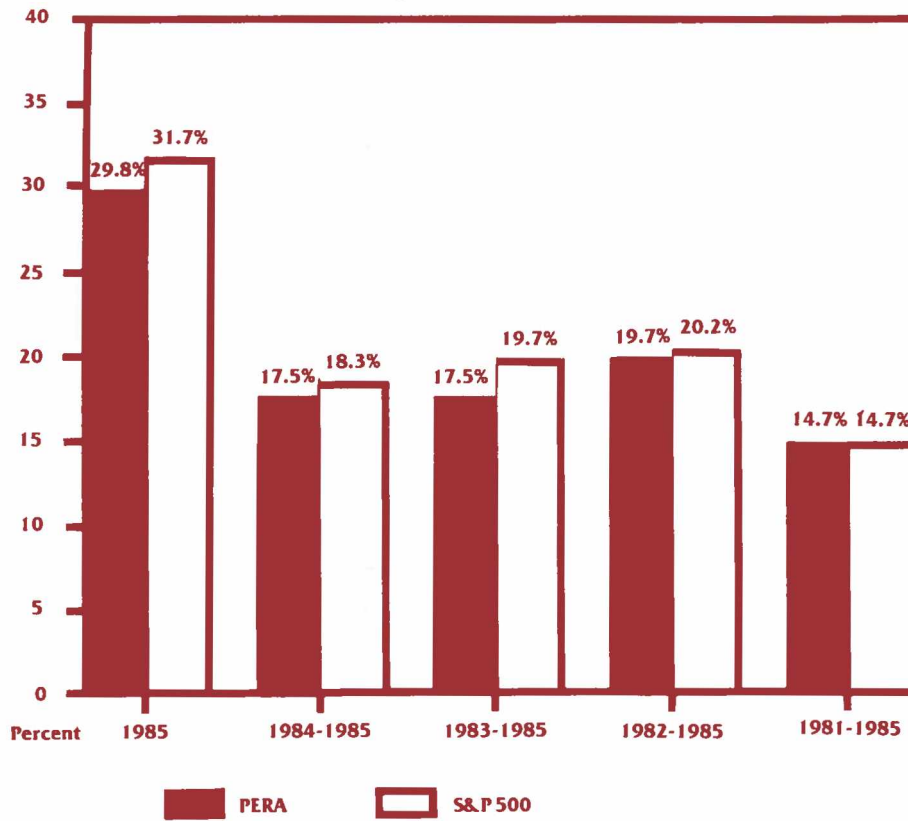
■ PERA □ MEDIAN PUBLIC FUND AS OF 9/30/85

TOTAL PORTFOLIO* ANNUAL EQUIVALENT RATES OF RETURN

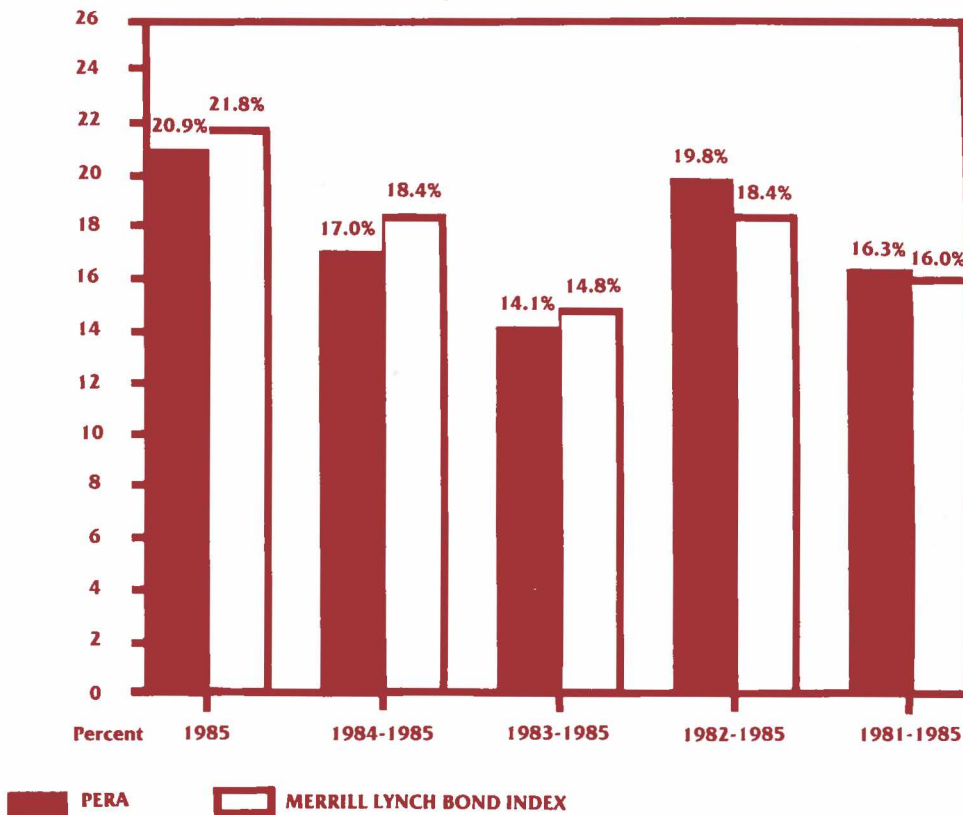


■ PERA □ MERRILL LYNCH MEDIAN FUND *Common Stock Equities & Fixed Income Only

EQUITIES ONLY
ANNUAL EQUIVALENT RATES OF RETURN



BONDS ONLY
ANNUAL EQUIVALENT RATES OF RETURN



BASIC PRODUCTS	SHARES HELD	COST	MARKET VALUE
AIR PRODUCTS & CHEMICALS INC	250,000	\$12,024,024	\$16,031,250
ALUMINUM COMPANY OF AMERICA	600,000	\$22,000,142	\$23,100,000
AMERICAN CYANAMID CO	450,000	\$20,274,059	\$25,875,000
AMOCO CORP	500,000	\$30,680,128	\$30,937,500
BOISE CASCADE CORP	315,000	\$12,408,650	\$14,805,000
CHEVRON CORP	550,000	\$20,106,903	\$20,968,750
DOVER CORP	524,200	\$18,327,124	\$21,164,575
DOW CHEMICAL CO	200,000	\$5,840,594	\$8,200,000
DU PONT E I DE NEMOURS & CO	225,000	\$12,399,260	\$15,271,875
EXXON CORP	600,000	\$30,167,072	\$33,075,000
GEORGIA PACIFIC CORP	1,350,000	\$35,307,864	\$35,775,000
GRACE W R & CO	850,600	\$39,190,236	\$40,722,475
HALLIBURTON CO	1,075,000	\$30,465,552	\$29,562,500
INTERNATIONAL PAPER CO	650,500	\$32,235,601	\$33,012,875
LOUISIANA LAND & EXPLORATION CO	485,000	\$16,698,388	\$14,671,250
MIDCON CORP	340,000	\$14,498,389	\$23,630,000
OWEN CORNING FIBERGLASS CORP	400,000	\$13,229,687	\$15,000,000
STANDARD OIL CO OHIO	597,200	\$29,675,150	\$29,785,350
UNION CAMP CORP	644,100	\$23,314,828	\$25,602,975
WEYERHAEUSER CO	1,063,000	\$33,669,346	\$32,687,250
TOTAL BASIC PRODUCTS		\$452,512,997	\$489,878,625

INDUSTRIAL PRODUCTS

AMP INC	700,000	\$21,868,728	\$25,200,000
AUTOMATIC DATA PROCESSING	500,000	\$20,654,432	\$29,500,000
BOEING CO	210,000	\$8,996,562	\$10,972,500
CATERPILLAR TRACTOR CO	900,000	\$37,065,800	\$37,800,000
CBI INDUSTRIES INC	400,000	\$16,449,600	\$7,950,000
COOPER INDS INC	400,000	\$12,801,324	\$16,800,000
C S X CORP	250,000	\$6,132,289	\$7,562,500
DIGITAL EQUIPMENT CORP	100,000	\$9,909,910	\$13,250,000
DRESSER INDS INC	900,000	\$20,220,596	\$16,312,500
EASTMAN KODAK CO	515,000	\$24,783,664	\$26,071,875
EATON CORP	300,000	\$15,103,546	\$19,237,500
EMERSON ELECTRIC CO	500,000	\$30,675,288	\$40,625,000
GENERAL ELECTRIC CO	850,000	\$38,672,056	\$61,837,500
GENERAL SIGNAL CORP	700,000	\$32,150,400	\$32,462,500
GOULD INC	800,000	\$18,672,608	\$24,500,000
HARRIS CORP	850,000	\$29,927,824	\$23,162,500
HEWLETT PACKARD CO	700,000	\$18,540,840	\$25,725,000
INTERNATIONAL BUSINESS MACHINES	395,000	\$40,252,632	\$61,422,500
ROCKWELL INTERNATIONAL CORP	296,000	\$9,250,734	\$10,582,000
TEXAS INSTRUMENTS	355,000	\$41,923,272	\$37,452,500
UNION PACIFIC CORP	650,400	\$32,894,664	\$35,040,300
UNITED TECHNOLOGIES CORP	480,000	\$17,241,573	\$21,000,000
WESTINGHOUSE ELECTRIC CORP	450,000	\$12,541,458	\$20,025,000
TOTAL INDUSTRIAL PRODUCTS		\$516,729,800	\$604,491,675

Common Stock

CONSUMER PRODUCTS	SHARES HELD	COST	MARKET VALUE
ABBOTT LABORATORIES	600,000	\$20,476,984	\$41,025,000
AMERICAN HOME PRODUCTS CORP	600,000	\$30,189,076	\$37,725,000
BAXTER TRAVENOL LABORATORIES INC	1,869,800	\$28,175,484	\$29,449,350
BRISTOL MYERS CO	650,000	\$27,878,284	\$43,062,500
CHESEBROUGH PONDS INC	300,000	\$11,577,488	\$12,712,500
COCA COLA CO	100,000	\$4,995,653	\$8,450,000
GENERAL MOTORS CORP	500,000	\$37,785,656	\$35,187,500
JOHNSON & JOHNSON	600,000	\$22,316,408	\$31,575,000
MCDONALDS CORP	150,000	\$6,593,708	\$12,131,250
MELVILLE CORP	350,000	\$14,317,692	\$17,675,000
MERCK & CO INC	250,000	\$23,640,256	\$34,250,000
MOTOROLA INC	700,000	\$23,223,624	\$27,212,500
PEPSICO INC	505,500	\$24,940,024	\$36,775,125
PFIZER INC	600,000	\$23,240,644	\$30,375,000
PHILIP MORRIS INC	415,000	\$30,747,192	\$36,675,625
PROCTOR & GAMBLE CO	250,000	\$12,341,599	\$17,437,500
R.J. REYNOLDS INDS INC	1,100,000	\$29,408,756	\$34,512,500
TOTAL CONSUMER PRODUCTS		\$371,848,528	\$486,231,350
RETAIL TRADE			
DAYTON HUDSON CORP	300,000	\$10,796,888	\$13,762,500
GENUINE PARTS CO	485,200	\$14,591,771	\$18,498,250
PENNEY J C INC	400,000	\$19,807,014	\$22,200,000
SEARS ROEBUCK & CO	900,000	\$32,025,982	\$35,100,000
SOUTHLAND CORP	250,000	\$7,658,241	\$11,000,000
TANDY CORP	900,000	\$32,483,272	\$36,675,000
TOTAL RETAIL TRADE		\$117,363,168	\$137,235,750
FINANCE			
AETNA LIFE & CASUALTY CO	650,000	\$23,321,632	\$34,775,000
AMERICAN EXPRESS CO	1,050,000	\$30,251,332	\$55,650,000
BANKAMERICA CORP	1,850,000	\$34,109,752	\$28,906,250
CITICORP	700,000	\$29,947,576	\$34,562,500
FIREMANS FUND	600,000	\$15,510,000	\$18,525,000
FIRST INTERSTATE BANCORP	650,000	\$28,746,680	\$34,368,750
GENERAL RE CORP	350,000	\$18,967,732	\$35,043,750
TRAVELERS CORP	500,000	\$20,314,592	\$24,000,000
USF & G CORP	600,000	\$22,619,013	\$23,400,000
TOTAL FINANCE		\$223,788,309	\$289,231,250
MISCELLANEOUS			
ALLIED SIGNAL INC	655,100	\$15,776,696	\$30,625,925
CENTENNIAL FUND	500,000	\$5,000,000	\$4,391,000
CENTENNIAL FUND II	200,000	\$2,000,000	\$1,936,600
CENTENNIAL FUND BUSINESS DEV	40,000	\$400,000	\$400,000
KNIGHT RIDDER NEWSPAPERS INC	300,000	\$9,560,502	\$11,962,500
MINNESOTA MINING & MANUFACTURING CO	275,000	\$21,397,786	\$24,681,250
S & P 500 SECURITIES	8,140,400	\$210,732,480	\$225,457,414
TOTAL MISCELLANEOUS		\$264,867,464	\$299,454,689
GRAND TOTAL EQUITY SECURITIES		\$1,947,110,226	\$2,306,523,339

**Actuarial
Section**

GABRIEL, ROEDER, SMITH & COMPANY

ACTUARIES & CONSULTANTS

2090 First National Building
Detroit, Michigan 48226
Area 313: 961-3346

May 29, 1986

The Retirement Board
Public Employees' Retirement Association of Colorado
1300 Logan Street
Denver, Colorado 80203

Ladies and Gentlemen:

The basic financial objective of PERA is to establish and receive contributions which, expressed as percents of active member payroll, will remain approximately level from generation to generation of Colorado citizens.



Annual actuarial valuations test how well the basic objective is being achieved and determine PERA present financial position. The last completed actuarial valuations were based upon data as of December 31, 1985. These valuations indicate that the contribution rates established by State law meet the basic objective.

Actuarial valuations are based upon assumptions of future experience in various financial risk areas. Assumptions are adopted by the Board after consulting with the actuary. The relationship between assumed experience and actual experience in each risk area is then observed annually by an actuarial gain/loss analysis.

In the last decade, actual experience was less favorable than assumed. The primary reasons were that the substantial gains from investment income that PERA was able to achieve were more than offset by inflation-generated salary increases. Since 1982 experience has been favorable, primarily as the result of historically high real rates of investment return. Overall, we continue to believe the assumptions used in the regular valuations produce results which are reasonable.

Based upon the valuation results, it is our opinion that the Public Employees' Retirement Association of Colorado continues in sound condition in accordance with actuarial principles of level cost financing.

Respectfully submitted,

Norman L. Jones

Richard G. Roeder

NLJ:ct

Once vested in the Plan, each PERA member acquiring a year of service credit is, in effect, given an "IOU" by PERA which says: "The Public Employees' Retirement Association of Colorado owes the member one year of retirement benefits to be paid when the member retires."

The law governing PERA financing intends that this year's members and taxpayers contribute the money to cover the IOU's being handed out this year. By following this principle, the contribution rates will remain approximately level from generation to generation.

An inevitable by-product of the level cost design is the accumulation of reserve assets and investment income from those assets. Invested assets increase as contributions accumulate and income is earned. Investment income then becomes a third contributor for benefits to retired members and is directly related to the contribution amounts required from employee and employers. The chart below depicts this level-cost design.

In actuarial terminology, this level-cost objective means that the contribution rates must total at least the current cost of the members' service being given this year and the interest on unfunded actuarial accrued liabilities (UAAL). UAAL is the difference between actuarial 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 and asset data furnished, the actuary determines the contribution rates to support the benefits by means of an actuarial valuation and funding method.

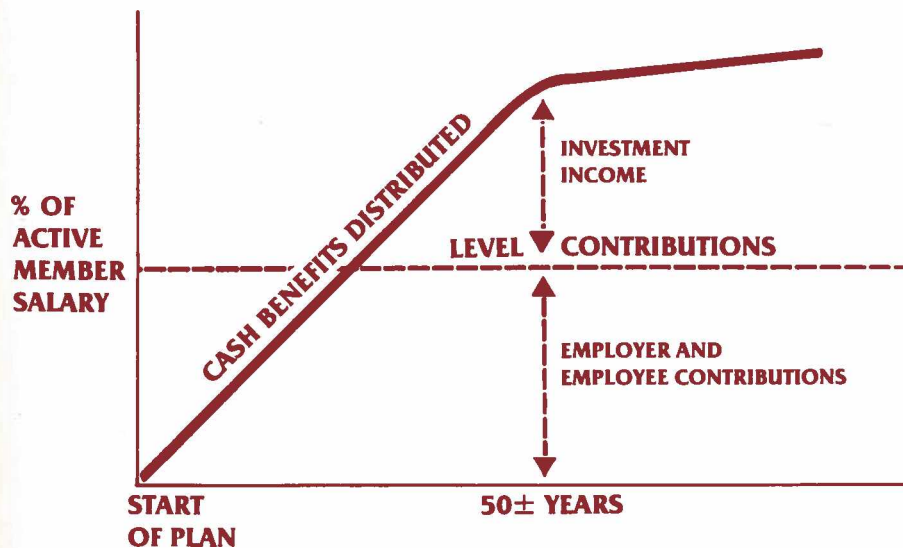
An actuarial valuation uses the rate of investment income which plan assets will earn; the rates of withdrawal of active members who leave covered employment before qualifying for any monthly benefit; the rates of mortality; the rates of disability; the rates of salary increases; and the assumed ages at actual retirement.

In making an actuarial valuation, assumptions must be made as to 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 and Actual Experience

Once actual experience has occurred and been observed, it will not coincide exactly with assumed experience, regardless of the wisdom of the assumptions or the skill of the actuary and the many calculations made. The future can be predicted with considerable precision, except for inflation, but not 100 percent accuracy.

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.



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

- Rate of withdrawal of active members (turnover)
- Rates of mortality
- Rates of disability
- Ages at actual retirement
- Rates of pay increases
- Investment income
- Change in active member group size

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 salary.

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

Summary of Actuarial Assumptions

The following economic and non-economic actuarial assumptions were adopted by the Retirement Board after consulting with the actuary following the December 31, 1981, actuarial valuation. The assumptions are reviewed in depth after a five-year period and are established to make projections for the Plan's experience decades into the future.

Economic Assumptions

The investment return rate used in making the valuations was seven percent per year compounded annually. The real rate of return is the portion of total investment return which is more than the inflation rate. Considering other financial assumptions, the seven percent investment return rate translates into an assumed real rate of return of 1.5 percent.

The overall active member payroll is assumed to increase 5.5 percent annually. Pay increase assumptions for individual active members are shown for sample ages in Exhibits A, B, C, and D. Part of the assumption for each age is for merit and/or seniority increase and the other 5.5 percent increase represents inflation.

The number of active members is assumed to continue at the present number.

Non-Economic Assumptions

The 1971 Group Annuity Mortality Table, projected to 1984, was used in evaluating the cost of benefits to be paid. The Table was set back six years for female retirees. Related values are shown in Exhibit E.

The probabilities of age and service retirement are shown in Exhibits G, H, I and J.

The probabilities of withdrawal from service, disability and death-in-service are shown for sample ages in Exhibits A, B, C and D. For disability retirement, impaired longevity was recognized by basing benefit values on an adjusted age mid-way between attained age and normal retirement age. For other withdrawal it was assumed that all members terminating before age 35 with less than five years of service and 25 percent of members terminating after 35 with over five years of service would withdraw their contributions and forfeit their entitlement to a monthly benefit at retirement age.

The entry age normal actuarial cost method of valuation was used in determining liabilities and normal cost. Differences in the past between assumed experience and actuarial experience ("actuarial gains and losses") become part of actuarial accrued liabilities. Unfunded actuarial accrued liabilities are amortized to produce payments (principal and interest) which are level percent of payroll contributions.

Employer contribution dollars were assumed to be paid in equal installments throughout the year.

Present assets (cash and investments) were used at book value.

The data about persons now covered and about present assets was furnished by PERA's administrative staff. Although examined for general reasonableness, the data was not audited by the actuary. The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (M.A.A.A.).

SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE RETIREMENT & INDIVIDUAL PAY INCREASE ASSUMPTIONS

Exhibit A - State Division

Sample Ages	Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions For An Individual Employee		
	Death		Withdrawal		Disability		Merit & Seniority	Base (Economy)	Increase Next Year
	Men	Women	Men	Women	Men	Women			
STATE DIVISION MEMBERS CONTRIBUTING 8%									
20	0.05%	0.04%	22.00%	24.00%	0.08%	0.08%	7.40%	5.50%	12.90%
25	0.06	0.04	17.00	18.00	0.08	0.08	5.00	5.50	10.50
30	0.07	0.05	11.42	13.70	0.08	0.08	3.40	5.50	8.90
35	0.10	0.07	8.45	10.66	0.08	0.08	2.20	5.50	7.70
40	0.15	0.10	6.66	8.69	0.20	0.20	1.40	5.50	6.90
45	0.27	0.14	5.72	7.46	0.26	0.26	0.90	5.50	6.40
50	0.49	0.24	5.34	6.68	0.49	0.49	0.60	5.50	6.10
55	0.78	0.44	5.20	6.03	0.89	0.89	0.50	5.50	6.00
60	1.21	0.72	5.00	5.20	1.41	1.41	0.30	5.50	5.80
65	1.95	1.10	-	-	-	-	-	5.50	5.50

STATE DIVISION MEMBERS CONTRIBUTING 9% (State Troopers)

20	0.05%	0.04%	7.94%	7.94%	0.06%	0.06%	7.40%	5.50%	12.90%
25	0.06	0.04	7.72	7.72	0.06	0.06	5.00	5.50	10.50
30	0.07	0.05	7.22	7.22	0.06	0.06	3.40	5.50	8.90
35	0.10	0.07	6.28	6.28	0.07	0.07	2.20	5.50	7.70
40	0.15	0.10	5.15	5.15	0.10	0.10	1.40	5.50	6.90
45	0.27	0.14	3.98	3.98	0.17	0.17	0.90	5.50	6.40
50	0.49	0.24	2.56	2.56	0.31	0.31	0.60	5.50	6.10
55	0.78	0.44	0.94	0.94	0.56	0.56	0.50	5.50	6.00
60	1.21	0.72	0.09	0.09	1.19	1.19	0.30	5.50	5.80
65	1.95	1.10	-	-	-	-	-	5.50	5.50

Exhibit B - School Division

Sample Ages	Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions For An Individual Employee		
	Death		Withdrawal		Disability		Merit & Seniority	Base (Economy)	Increase Next Year
	Men	Women	Men	Women	Men	Women			
20	0.05%	0.04%	20.00%	20.00%	0.06%	0.06%	5.00%	5.50%	10.50%
25	0.06	0.04	13.00	14.00	0.06	0.06	3.70	5.50	9.20
30	0.07	0.05	8.40	10.58	0.06	0.06	2.70	5.50	8.20
35	0.10	0.07	5.73	8.18	0.07	0.07	2.00	5.50	7.50
40	0.15	0.10	4.47	6.37	0.10	0.10	1.40	5.50	6.90
45	0.27	0.14	4.01	5.09	0.17	0.17	1.00	5.50	6.50
50	0.49	0.24	3.75	4.31	0.31	0.31	0.80	5.50	6.30
55	0.78	0.44	3.09	4.00	0.56	0.56	0.60	5.50	6.10
60	1.21	0.72	3.00	4.00	1.19	1.19	0.40	5.50	5.90
65	1.95	1.10	-	-	-	-	-	5.50	5.50

Exhibit C - Municipal Division

Sample Ages	Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions For An Individual Employee		
	Death		Withdrawal		Disability		Merit & Seniority	Base (Economy)	Increase Next Year
	Men	Women	Men	Women	Men	Women			
20	0.05%	0.04%	22.00%	24.00%	0.08%	0.08%	7.40%	5.50%	12.90%
25	0.06	0.04	17.00	18.00	0.08	0.08	5.00	5.50	10.50
30	0.07	0.05	11.42	13.70	0.08	0.08	3.40	5.50	8.90
35	0.10	0.07	8.45	10.66	0.08	0.08	2.20	5.50	7.70
40	0.15	0.10	6.66	8.69	0.20	0.20	1.40	5.50	6.90
45	0.27	0.14	5.72	7.46	0.26	0.26	0.90	5.50	6.40
50	0.49	0.24	5.34	6.68	0.49	0.49	0.60	5.50	6.10
55	0.78	0.44	5.20	6.03	0.89	0.89	0.50	5.50	6.00
60	1.21	0.72	5.00	5.20	1.41	1.41	0.30	5.50	5.80
65	1.95	1.10	-	-	-	-	-	5.50	5.50

Exhibit D - Judges' Division

Sample Ages	Death		Withdrawal		Disability		Merit & Seniority	Base (Economy)	Increase Next Year
	Men	Women	Men	Women	Men	Women			
20	0.05%	0.04%	5.00%	5.00%	0.06%	0.06%	5.00%	5.50%	10.50%
25	0.06	0.04	5.10	5.10	0.06	0.06	3.70	5.50	9.20
30	0.07	0.05	4.90	4.90	0.06	0.06	2.70	5.50	8.20
35	0.10	0.07	4.40	4.40	0.07	0.07	2.00	5.50	7.50
40	0.15	0.10	3.60	3.60	0.10	0.10	1.40	5.50	6.90
45	0.27	0.14	2.80	2.80	0.17	0.17	1.00	5.50	6.50
50	0.49	0.24	2.00	2.00	0.31	0.31	0.80	5.50	6.30
55	0.78	0.44	1.30	1.30	0.56	0.56	0.60	5.50	6.10
60	1.21	0.72	1.00	1.00	1.19	1.19	0.40	5.50	5.90
65	1.95	1.10	-	-	-	-	-	5.50	5.50

Single Life Retirement Values

Based on 1971 Group Annuity Mortality Projected to 1984 & 7% Interest

(Set Back 6 Years For Women)

Exhibit E - State, School, Municipal Divisions

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)		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		Men	Women	Men	Women	Men	Women
40..	\$156.16	\$162.36	\$206.77	\$218.52	36.69	42.42	65..	\$105.50	\$121.71	\$126.39	\$150.00	15.55	20.05
45..	149.28	157.34	194.54	208.95	32.01	37.64	70..	90.81	108.37	106.17	130.45	12.25	16.27
50..	140.91	150.78	180.35	197.16	27.53	32.93	75..	76.38	93.76	87.18	110.16	9.49	12.87
55..	131.00	142.70	164.31	183.34	23.28	28.41	80..	62.10	79.30	69.26	90.94	7.17	10.02
60..	119.19	133.12	146.21	167.68	19.27	24.11	85..	50.05	64.83	54.69	72.62	5.43	7.59

Exhibit F - Judges' Division

Ages	Present Value of \$1.00 Mo. the First Year Increasing \$.15 Yearly		Present Value of \$1.00 Mo. the First Year Increasing \$.15 Yearly		Ages	Present Value of \$1.00 Mo. the First Year Increasing \$.15 Yearly		Present Value of \$1.00 Mo. the First Year Increasing \$.15 Yearly	
	Men	Women	Men	Women		Men	Women	Men	Women
40..	\$156.16	\$162.36	\$181.46	\$190.44	65..	\$105.50	\$121.71	\$115.95	\$135.86
45..	149.28	157.34	171.91	183.15	70..	90.81	108.37	98.49	119.41
50..	140.91	150.78	160.63	173.97	75..	76.38	93.76	81.78	101.96
55..	131.00	142.70	147.66	163.02	80..	62.10	79.30	65.68	85.12
60..	119.19	133.12	132.70	150.40	85..	50.05	64.83	52.37	68.73

Percent of Eligible Active Members Retiring Next Year

Exhibit G-- State Division

Retirement Ages	Men	Women
55	10%	11%
56	10	11
57	10	11
58	10	11
59	10	11
60	12	13
61	12	13
62	15	17
63	15	17
64	15	17
65	60	60
66	40	40
67	50	50
68	60	60
69	80	80
70 & over.....	100	100

Exhibit H-- School Division

Retirement Ages	Men	Women
55	8%	12%
56	8	12
57	8	12
58	8	12
59	8	12
60	13	20
61	13	20
62	13	20
63	13	20
64	13	20
65	60	60
66	40	40
67	50	50
68	60	60
69	80	80
70 & over.....	100	100

Exhibit I-- Municipal Division

Retirement Ages	Men	Women
55	10%	11%
56	10	11
57	10	11
58	10	11
59	10	11
60	12	13
61	12	13
62	15	17
63	15	17
64	15	17
65	60	60
66	40	40
67	50	50
68	60	60
69	80	80
70 & over.....	100	100

Exhibit J-- Judges' Division

Retirement Ages	Men & Women
60	12%
61	12
62	15
63	15
64	15
65	60
66	40
67	50
68	60
69	80
70	100

Membership Statistics

	<u>State Division</u>	<u>School Division</u>	<u>Municipal Division</u>	<u>Judges' Division</u>	<u>Total</u>
Total Membership - December 31, 1985	47,987	68,104	8,051	370	124,512
Active Members.....	35,729	55,521	6,828	237	98,315
Retirees & Survivor Beneficiaries	12,258	12,583	1,223	133	26,197
New Members Accepted during 1985	3,186	5,291	953	1	9,431
Active Members Accounts Withdrawn	1,944	2,595	476	3	5,018

Retirement Statistics

<u>Categories</u>	<u>State Division</u>	<u>School Division</u>	<u>Municipal Division</u>	<u>Judges' Division</u>
Disability Retirements	138	105	29	0
Service Retirements	773	787	76	17
Total Retired During 1985	911	892	105	17
Total number receiving retirement benefits Dec. 31, 1984	11,022	11,400	1,035	105
Total number receiving retirement benefits during year	11,933	12,292	1,140	122
Cobeneficiaries continued upon the death of retiree	107	66	17	3
Returned to retirement rolls from suspension	10	15	1	0
Less: Retired members deceased during year	389	284	36	8
Suspended returned to active employment	16	13	1	0
Total Number Receiving Retirement Benefits-Dec. 31, 1985	11,645	12,076	1,121	117
Average monthly benefit on Dec. 31, 1985	\$ 711	\$ 649	\$ 588	\$ 1,116
Total paid in benefits in 1985	\$ 95,306,651	\$ 89,702,040	\$ 7,445,336	\$ 1,481,606
Average monthly benefit for members retired during 1985	\$ 878	\$ 791	\$ 786	\$ 1,364
Survivor Benefits added to rolls during 1985	72	75	10	0
Total Number of Survivor Benefits on Dec. 31, 1985	613	507	102	16
Total amount paid in Survivor Benefits during 1985	\$ 3,935,353	\$ 2,808,509	\$ 562,230	\$ 181,951
Retirement benefits-Deferred (Future at age 60 or 65)	393	800	32	3
Total future benefits (annually)	\$ 2,161,001	\$ 4,298,068	\$ 192,445	\$ 24,650
Survivor Benefits (future)	17	13	1	1
Total future benefits (annually)	\$ 39,562	\$ 29,523	\$ 5,910	\$ 7,110

Schedule of Active Member Valuation Data

<u>Date</u>	<u>Number Active Members</u>	<u>Annual Payroll</u>	<u>Annual Average Salary</u>	<u>% Increase in Average Pay</u>
1976	86,319	\$1,042,355,760	\$12,076	—
1977	88,243	1,141,555,008	12,936	7.13%
1978	89,783	1,237,221,852	13,780	6.52%
1979	91,131	1,361,116,764	14,936	8.39%
1980	93,741	1,518,107,964	16,195	8.43%
1981	91,672	1,649,921,520	17,998	11.13%
1982	92,076	1,802,596,767	19,577	8.77%
1983	92,346	1,923,936,063	20,834	6.42%
1984	94,766	2,091,707,220	22,072	5.94%
1985	98,315	2,270,948,105	23,092	4.62%

*Total of 306 employers in 1985; number of employers increased by six since 1982. Unable to obtain number of employers for previous years.

Schedule of Retirees and Beneficiaries Added to and Removed from Benefit Payroll

Year Ended	Added to Payroll		Removed from Payroll		Payroll - End of Year		Cost of Living Stabilization Fund	Increase in Annual Benefits	Average Annual Benefits
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits			
6/30/76	1,677	\$7,073,529	433	\$1,051,963	13,773	\$42,116,587	\$1,725,888	—	\$3,183
6/30/77	1,672	7,915,392	492	1,366,137	14,953	48,671,648	2,365,600	16.4%	\$3,413
7/1/77-									
12/31/77	1,048	4,883,337	219	668,998	15,782	52,942,700	2,792,076	9.2%	3,532
12/31/78	1,725	8,365,952	494	1,451,876	17,013	60,999,693	4,410,064	17.4%	3,845
12/31/79	1,634	9,730,250	497	1,540,411	18,150	69,189,637	5,363,952	14.0%	4,108
12/31/80	1,673	11,514,467	503	1,450,894	19,320	79,257,635	20,747,124	34.1%	5,176
12/31/81	1,595	11,760,232	599	2,174,169	20,316	88,843,513	20,057,160	8.9%	5,360
12/31/82	2,413	21,263,055	673	2,523,386	22,056	107,582,521	39,978,816	35.5%	6,690
12/31/83	2,202	21,365,407	736	3,048,446	23,522	125,899,802	38,624,028	11.5%	6,994
12/31/84	2,247	23,813,326	717	3,009,065	25,052	146,704,999	45,747,060	17.0%	7,682
12/31/85	2,275	27,050,513	567	3,565,127	26,760	170,190,060	42,286,322	10.4%	7,940

Active - Retired Member Comparison

The number of persons receiving monthly retirement benefits has grown steadily in relation to active membership. The trend will continue, with the number of persons receiving benefits increasing rapidly for many years into the future.

The level-cost financing principle assures that contribution rates will not have to be raised to meet the benefit load. The current percentages of salaries will be sufficient to meet the

increasing retirement payroll if the benefit provisions contained in state law are not changed. The retirement payroll shown in the right-hand column includes cost of living increases paid in years since 1970. Figures shown are for the State, School, and Municipal Divisions. Prior to 1981, figures are for years ending June 30.

Year	Number of retired members on 12/31	Number of Member accounts on 12/31	Retired members as % of active members on 12/31	Total benefits paid-yr. ending 12/31
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	13,115,234
1975	11,650	84,781	13.7	32,820,433
1980	17,301	96,473	17.9	71,289,456
1985	24,842	101,409	24.5	192,456,029

Active Members in Valuation

By Attained Age and Years of Service -- 12-31-85

School Division Active members included in the School Division valuation totaled 55,551, involving annual salaries totaling \$1,178,642,088.

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30+	No.	Valuation Payroll
Under 20	44							44	\$ 373,056
20-24	1,240	24						1,264	16,987,176
25-29	4,319	695	9					5,023	82,084,644
30-34	4,197	2,960	731	2				7,890	150,274,068
35-39	4,903	2,952	3,038	618				11,511	247,066,788
40-44	3,405	2,293	1,844	1,745	272	2		9,561	217,994,184
45-49	2,038	1,709	1,358	1,230	997	155		7,487	175,605,816
50-54	1,172	1,214	1,133	976	763	649	65	5,972	142,720,008
55-59	723	733	816	865	490	409	122	4,158	94,342,344
60-64	346	424	407	444	224	111	77	2,033	41,074,140
65-69	113	113	100	108	54	23	25	536	9,163,800
70 & Over	26	18	8	7	7	5	1	72	956,064
Totals	22,526	13,135	9,444	5,995	2,807	1,354	290	55,551	\$1,178,642,088

The median attained age for School Division members was 41.1 years, and the median service was 7.0 years. This assumes even distribution throughout the median interval.

State Division Active members included in the State Division valuation totaled 35,729, involving annual salaries totaling \$930,064,584.

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30+	No.	Valuation Payroll
Under 20	46							46	\$ 453,120
20-24	1,064	41						1,105	16,547,304
25-29	2,899	729	33					3,661	71,845,452
30-34	3,299	1,710	517	5				5,531	127,281,264
35-39	2,871	1,975	1,392	300	1			6,539	171,444,264
40-44	1,784	1,289	1,072	837	222	7		5,211	148,114,776
45-49	1,142	884	799	812	477	91	4	4,209	121,890,396
50-54	708	700	668	724	456	270	63	3,589	105,016,656
55-59	490	565	606	727	464	269	107	3,228	94,254,444
60-64	216	358	421	571	246	114	92	2,018	56,954,688
65-69	57	105	132	136	61	29	29	549	15,118,620
70 & Over	9	7	5	17	3		2	43	1,143,600
Totals	14,585	8,363	5,645	4,129	1,930	780	297	35,729	\$930,064,584

The median attained age for State Division members was 40.9 years, and the median service was 7.0 years. This assumes even distribution throughout the median interval.

Active Members in Valuation

By Attained Age and Years of Service -- 12-31-85

Municipal Division Active members included in the Municipal Division valuation totaled 6,828, involving annual salaries totaling \$151,476,509.

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 +	No.	Valuation Payroll
Under 20	15							15	\$ 116,376
20-24	365	13						378	5,211,556
25-29	830	227	2					1,059	19,314,470
30-34	805	378	144	1				1,328	28,408,868
35-39	638	382	252	55	1			1,328	31,259,252
40-44	362	251	170	97	33			913	22,644,650
45-49	176	140	111	80	44	12	1	564	14,204,168
50-54	118	115	113	81	36	26	11	500	12,950,445
55-59	85	75	97	70	28	21	14	390	9,193,785
60-64	46	54	62	61	16	17	6	262	6,400,299
65-69	13	11	15	14	6	9	2	70	1,568,091
70 & Over	7	8	2	2		2		21	204,549
Totals	3,460	1,654	968	461	164	87	34	6,828	\$151,476,509

The median attained age for Municipal Division members was 41.1 years, and the median service was 4.9 years. This assumes even distribution throughout the median interval.

Judges' Division Active members included in the Judges' Division valuation totaled 237, involving annual salaries totaling \$10,764,924.

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 +	No.	Valuation Payroll
Under 30								0	—
30-34	8							8	\$ 276,648
35-39	14	16	2					32	1,175,496
40-44	19	23	6					48	2,359,872
45-49	6	10	12	3				31	1,455,012
50-54	3	9	12	5	2	1		32	1,582,008
55-59	3	13	6	3	7	1		33	1,480,440
60-64	3	6	13	7	5			34	1,638,288
65-69		2	3	4	3			12	524,064
70 & Over		1	3	1	2			7	273,096
Totals	56	80	57	23	19	2		237	\$10,764,924

The median attained age for Judges' Division members was 50.0 years, and the median service was 7.9 years. This assumes even distribution throughout the median interval.

Solvency Test

The PERA funding objective is to be able to pay long-term benefit promises through contributions that remain approximately level from year to year as a percent of salaries earned by members. In this way, members and taxpayers in each year pay their fair share for retirement service accrued in that year by PERA members. Occasionally rates are increased, but only to add or improve benefit provisions.

If the retirement system follows level contribution rate financing principles, the system will pay all promised benefits when due--the ultimate test of financial soundness.

A short-term solvency test is one means of checking PERA's funding progress. In a short-term solvency test, the retirement plan's present assets (investments and cash) are compared with:
1) Active member contributions on deposit; 2) The liabilities for

future benefits to persons who have retired; and 3) The liabilities for service already rendered by active members. In a system that has been following the discipline of level contribution rate financing, the liabilities for active member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets except in rare circumstances.

In addition, the liabilities for service already rendered by active members (liability 3) will be partially covered by the remainder of present assets. Generally, if the system has been using level contribution rate financing, the funded portion of liability 3 will increase over time. Liability 3 being fully funded is very rare.

The schedule below illustrates the progress in funding liability 3 of PERA and is indicative of PERA's policy to follow the discipline of level contribution rate funding.

Valuation Date	Total Accrued Actuarial Liabilities		Active Members (Employer Financed Portion) (3)	Reported Assets	Portion of Accrued Actuarial Liabilities Covered by Reported Assets		
	Active Member Contributions (1)	Retirants and Beneficiaries (2)*			(1)	(2)	(3)
12-31-75	\$312,069,319	\$ 486,923,627	\$ 945,596,676	\$1,073,032,970	100%	100%	29.0%
12-31-76	362,667,690	558,464,069	1,169,709,064	1,274,730,330	100	100	30.2
12-31-77	421,131,834	626,256,830	1,364,206,936	1,539,589,373	100	100	36.1
12-31-78	475,439,269	686,029,604	1,395,583,599	1,769,105,963	100	100	43.5
12-31-79	536,381,823	798,562,567	1,579,233,427	2,090,081,827	100	100	47.8
12-31-80	600,657,499	926,253,210	1,978,725,621	2,438,498,055	100	100	46.1
12-31-81	674,778,335	1,039,344,715	2,236,428,561	2,731,317,956	100	100	45.5
12-31-82	752,901,555	1,261,240,932	2,527,282,001	3,199,623,171	100	100	46.9
12-31-83	843,058,135	1,505,814,909	2,751,961,085	3,752,861,340	100	100	51.0
12-31-84	937,173,328	1,753,309,252	3,084,444,755	4,393,831,995	100	100	55.2
12-31-85	1,042,574,126	2,020,932,989	3,405,202,669	5,194,918,164	100	100	62.6

* Liabilities for retirants and beneficiaries are as of the following June 30, for valuation dates through 12-31-76. Beginning in 1977, liabilities for both active and retired lives are figured as of December 31 of each year.

Summary of Unfunded Accrued Actuarial Liabilities

Unfunded accrued actuarial liabilities are the difference between actuarially calculated liabilities for service already rendered and the assets of the retirement fund. It is natural for unfunded liabilities to exist for PERA and other retirement plans.

The law governing PERA requires that these liabilities be financed systematically over future years. The period for amortizing unfunded accrued actuarial liabilities is currently under the 60-year limit specified in state law in all divisions of PERA. (The law requires that contribution rates be set at a level which, if actuarial experience matches plan assumptions, will pay off unfunded liabilities over 60 years or less.) The amortization periods have shown stability over the last decade.

Because of new legislation diverting 0.8% of salary to a separate fund for financing a portion of the cost of retirees' health care, amortization periods rose in 1985. The year end amortization periods were lower than expected, however, because actuarial experience for 1985 was more favorable than assumed.

Benefits to the retired are "full funded" - assets reserved for benefits currently being paid equal liabilities for those benefits. Liabilities for active employees are based on service rendered toward their retirement benefits which will be payable in the future. Unfunded accrued actuarial liabilities exist because liabilities for such service by

active members exceed assets currently on hand for such future benefits.

Because inflation continues in the economy, though at a much lower rate in the last few years, the value of dollars is decreasing. Looking at just the dollar amounts of assets, benefits paid, active member salaries, and unfunded accrued actuarial liabilities will be misleading.

While no one or two measures can fully describe the financial condition of the plan, unfunded accrued actuarial liabilities dollars divided by active employee salary dollars provides an index which helps understanding. The smaller the ratio, the stronger the system. Observation of this relative index over a period of years will give an indication of whether the system is becoming financially stronger or weaker.

This ratio has increased at times over the last decade, but the recent trend shows stability. This stability has come despite the fact that actuarial assumptions were strengthened in 1978, and that there was unusually high inflation during the late 1970's and early 1980's. Exceptionally high investment returns in the last two years have helped to increase assets, reduce unfunded accrued actuarial liabilities, and lower the ratio of unfunded liabilities to active member salaries.

Valuation Date	Total Accrued Actuarial Liabilities	Valuation Assets	Assets as a % of Accrued Liabilities	Unfunded Accrued Liabilities	Active Member Salaries	UAAL as a % of Active Member Salaries
12-31-75	\$1,744,589,622	\$1,073,032,970	61.5%	\$ 671,556,652	\$ 919,456,236	73.0%
12-31-76	2,090,840,823	1,274,730,330	61.0%	816,110,493	1,042,355,760	78.3%
12-31-77	2,411,595,600	1,539,589,373	63.8%	872,006,227	1,141,555,008	76.4%
12-31-78	2,557,052,472	1,769,105,963	69.2%	787,946,509	1,237,221,852	63.7%
12-31-79	2,914,177,817	2,090,081,827	71.7%	824,095,990	1,361,116,760	60.6%
12-31-80	3,505,636,330	2,438,498,055	69.6%	1,067,138,275	1,518,107,964	70.3%
12-31-81	3,950,551,611	2,731,317,956	69.1%	1,219,233,655	1,649,921,520	73.9%
12-31-82	4,541,424,488	3,199,623,171	70.5%	1,341,801,317	1,802,596,767	74.4%
12-31-83	5,100,834,129	3,752,861,340	73.6%	1,347,972,789	1,923,936,078	70.1%
12-31-84	5,774,927,335	4,393,831,995	76.1%	1,381,095,340	2,091,707,220	66.0%
12-31-85	6,468,709,784	5,194,918,164	80.3%	1,273,791,620	2,270,948,105	56.1%

Computed Employer Contribution Rate

Expressed as Percents of Active Member Payroll

	State Division	School Division	Municipal Division	Judges' Division
Contributions for Normal Cost:				
Age and Service Benefits	9.61%	12.03%	9.18%	12.91%
Disability Benefits	1.30	0.99	1.31	1.23
Survivor Benefits	0.54	0.54	0.57	0.94
Total	11.45	13.56	11.06	15.08
Member current contributions	8.03†	8.00	8.00	7.63***
(Future refunds)	(2.84)	(2.24)	(2.63)	(1.55)
Available for Benefits	5.19	5.76	5.37	6.08
Employer Normal Cost	6.26	7.80	5.69	9.00
Unfunded Actuarial Accrued Liabilities	3.16	1.90	1.71	3.20
(Amortization Period)	(29 years)	(31 years)	(18 years)	(20 years)
TOTAL EMPLOYER CONTRIBUTION RATE FOR ACTUARIALLY FUNDED BENEFITS				
	9.42%	9.70%	7.40%	12.20%
Cost of Living Stabilization Fund*	2.00	2.00	2.00	2.00
Health Care Reserve Fund**	0.80	0.80	0.80	0.80
STATUTORY EMPLOYER CONTRIBUTION RATE	12.22%	12.50%	10.20%	15.00%

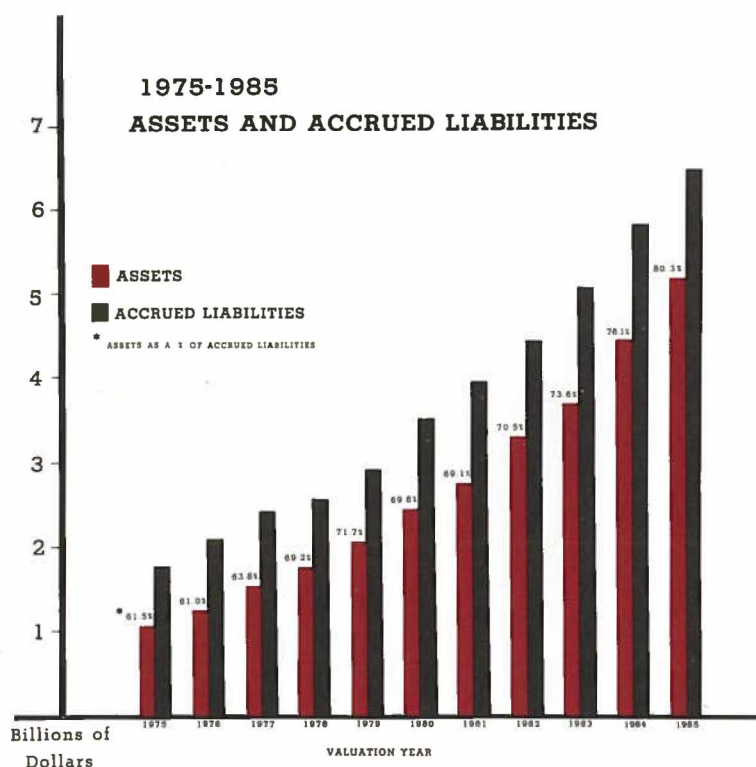
*Used to provide ad hoc increases to retired members and beneficiaries.

**Used to pay a portion of health care premium for retired members and beneficiaries.

† Weighted average of more than one statutory rate.

*** Equivalent rate to reflect refund of contributions which were made during the 17th and through the 20th years of service.

Dec. 31, 1985



**Statistical
Section**

Schedule of Expenditures By Function

(In Thousands of Dollars)

	<u>YEAR</u>	<u>REFUNDS</u>	<u>BENEFIT PAYMENTS</u>	<u>ADMINISTRATIVE EXPENSES</u>	<u>TOTAL EXPENSES</u>
STATE DIVISION	1976	\$ 7,585	\$ 21,217	\$ 1,018	\$ 29,820
	1977	9,724	24,425	1,076	35,225
	1978	9,522	28,131	862	38,515
	1979	13,435	32,293	1,030	46,758
	1980*	13,980	29,586	1,037	44,603
	1981	16,550	53,094	1,161	70,805
	1982	17,091	65,067	1,358	83,516
	1983	12,934	77,262	1,782	91,978
	1984	14,951	87,948	1,960	104,859
	1985	15,246	99,239	2,248	116,733
SCHOOL DIVISION	1976	8,074	19,729	1,143	28,946
	1977	8,650	22,864	1,436	32,950
	1978	10,448	26,333	1,163	37,944
	1979	12,240	29,958	1,385	43,583
	1980*	12,525	26,000	1,424	40,948
	1981	14,597	47,181	1,570	63,349
	1982	13,242	58,369	1,885	73,496
	1983	12,280	71,506	2,486	86,272
	1984	13,868	81,989	2,726	98,583
	1985	13,290	92,511	3,173	108,974
MUNICIPAL DIVISION	1976	1,135	1,597	108	2,840
	1977	904	1,878	137	2,919
	1978	1,666	2,185	115	3,966
	1979	2,136	2,555	142	4,833
	1980*	2,134	2,318	126	4,578
	1981	2,304	4,040	167	6,511
	1982	1,911	4,937	198	7,046
	1983	2,122	5,989	273	8,384
	1984	2,715	7,137	314	10,166
	1985	2,796	8,008	365	11,169
JUDGES' DIVISION	1976	16	273	6	295
	1977	10	398	8	416
	1978	14	499	6	519
	1979	13	618	8	639
	1980*	53	398	8	459
	1981	84	927	8	1,019
	1982	27	1,072	10	1,109
	1983	13	1,367	14	1,394
	1984	41	1,496	15	1,552
	1985	85	1,664	17	1,766

* The fiscal year was changed in 1980 to a calendar year.
Amounts prior to that time have been allocated on calendar-year basis.

Schedule of Revenues By Source

(In Thousands of Dollars)

	<u>YEAR</u>	<u>EMPLOYEE CONTRIBUTION</u>	<u>EMPLOYER CONTRIBUTION</u>	<u>INVESTMENT INCOME</u>	<u>MISC** INCOME</u>	<u>TOTAL REVENUES</u>
STATE DIVISION	1976	\$34,213	\$ 46,876	\$ 33,731	\$119	\$114,939
	1977	37,030	50,777	40,945	108	128,860
	1978	40,019	54,806	48,763	116	143,704
	1979	43,716	59,876	59,042	150	162,784
	1980*	48,140	68,435	75,553	141	192,269
	1981	53,153	83,369	50,932	158	187,612
	1982	58,995	89,973	114,948	117	264,033
	1983	61,865	94,148	146,782	26	302,821
	1984	66,838	101,341	178,807	26	347,012
	1985	71,777	108,263	251,086	34	431,160
SCHOOL DIVISION	1976	38,251	59,033	42,916	177	140,377
	1977	42,055	65,206	52,193	231	159,685
	1978	45,910	71,228	63,635	264	181,037
	1979	50,448	78,244	76,707	300	205,699
	1980*	56,083	87,375	98,027	235	241,720
	1981	62,747	100,234	64,749	259	227,989
	1982	67,985	110,520	148,913	255	327,673
	1983	74,736	118,813	192,869	56	386,474
	1984	80,604	126,826	243,906	30	451,366
	1985	89,181	138,009	329,785	49	557,024
MUNICIPAL DIVISION	1976	3,941	4,984	3,367	13	12,305
	1977	4,373	5,554	4,256	10	14,193
	1978	4,948	6,289	5,261	10	16,508
	1979	5,667	7,204	6,602	16	19,489
	1980*	6,542	8,329	8,088	10	22,969
	1981	7,438	9,762	4,774	18	21,992
	1982	8,882	11,347	13,867	14	34,110
	1983	9,888	12,604	18,493	10	40,995
	1984	10,977	13,938	21,744	8	46,667
	1985	12,033	15,305	30,812	7	58,157
JUDGES' DIVISION	1976	358	652	585	2	1,624
	1977	427	731	690		1,848
	1978	442	757	805		2,004
	1979	498	854	951		2,303
	1980*	533	971	1,203	3	2,710
	1981	476	1,224	749	1	2,450
	1982	722	1,366	1,882		3,970
	1983	736	1,380	2,541		4,657
	1984	874	1,476	2,831		5,091
1985	879	1,623	3,469		5,971	

* The fiscal year was changed in 1980 to a calendar year.
Amounts prior to that time have been allocated on calendar-year basis

** Membership fees not available for benefits.

Schedule Of Benefit Expenses By Type

<u>Year Ending</u>	<u>Retirement Benefits</u>	<u>Survivor Benefits</u>	<u>Refunds</u>	<u>Total</u>
6/30/76	\$ 37,837,649	\$ 1,670,184	\$ 13,167,865	\$ 52,675,698
6/30/77	43,631,214	1,942,447	15,623,166	61,196,827
6/30/78	50,841,544	2,314,932	22,638,988	75,795,464
6/30/79	58,377,599	2,660,528	24,370,168	85,408,295
6/30/80	66,703,494	2,986,778	29,453,643	99,143,915
7/1/80 -				
12/31/80*	47,184,080	1,946,233	14,921,395	64,051,708
12/31/81	101,108,479	4,134,018	32,794,421	138,036,918
12/31/82	124,493,900	4,951,049	27,733,000	157,177,949
12/31/83	150,377,677	5,745,810	28,843,000	184,966,487
12/31/84	171,980,180	6,385,495	34,519,000	212,884,675
12/31/85	194,228,213	7,450,567	31,416,641	233,095,421

* Fiscal year changed.

Schedule of Retirees & Survivors By Type Of Benefit

December 31, 1985

<u>Division</u>	<u>Number of Benefit Recipients</u>	<u>Type of Benefit</u>					
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
State	12,348	9,611	1,995	76	666	169	393
School	12,680	10,853	1,210	38	579	184	800
Municipal	1,240	889	228	5	118	32	32
Judges	133	105	10	2	16	6	3

		<u>Option Selected</u>				<u>Surviving retiree</u>	<u>Surviving cobeneficiary</u>
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>		
State	6,578	1,191	2,147	532	907	251	
School	8,312	1,119	1,530	356	502	244	
Municipal	555	148	227	58	112	17	
Judges'	22	11	47	8	19	8	

Benefit Types:

- 1 - Age and Service Retirement
- 2 - Disability Retirement
- 3 - Survivor payment-Option 3
- 4 - Survivor payment-Children, spouse, or dependent parent
- 5 - Surviving spouse with deferred future benefit.
- 6 - Former member with deferred future benefit.

Option Selection:

Age and service retirees and disability retirees select an option at retirement to provide death benefits. They are as follows:

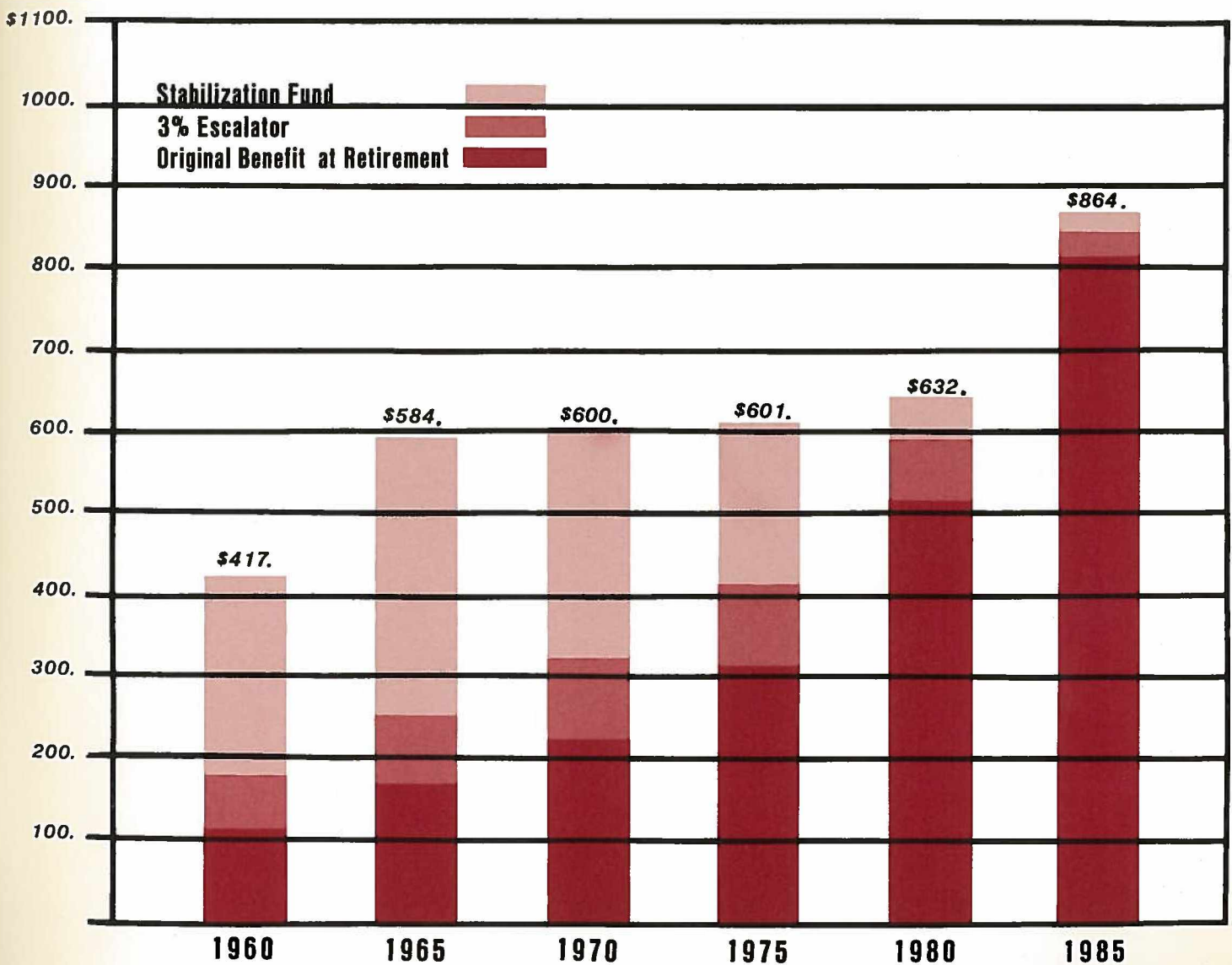
- 1 - Single Life Benefit
- 2 - Joint Benefit with 1/2 to Surviving Cobeneficiary
- 3 - Joint and Survivor Benefit
- 4 - Joint Benefit with 1/2 to Either Survivor
Surviving Retiree- Cobeneficiary has pre-deceased the retiree.
Surviving Cobeneficiary- Retiree has pre-deceased the cobeneficiary.

Schedule of Average Retirement Benefits Payable

<u>Date</u>	<u>Average Monthly Benefit</u>	<u>Average Age at Retirement</u>	<u>Average Current Age of Retirees</u>	<u>Average Years of Service at Retirement</u>
Dec. 31, 1981	\$457	62.7	70.2	16.4
Dec. 31, 1982	570	62.5	70.0	16.7
Dec. 31, 1983	596	62.3	70.0	17.0
Dec. 31, 1984	648	62.1	70.0	17.2
Dec. 31, 1985	676	61.8	70.1	17.4

Average Monthly Annuity by Year of Retirement

(12-31-85)



Schedule of Participating Employers

State Division

State of Colorado
 Colorado Water Resources & Power Authority
 Colorado State Fair
 Colorado Association of School Boards
 Public Employees' Retirement Association
 Special District Association of Colorado
 Moffat Tunnel Commission
 Colorado Medical Services Foundation
 Colorado High School Activities Assn.
 District Attorneys
 Fire and Police Pension Assn. Staff

Municipal Division

Alamosa, City of
 Alamosa Housing Authority
 Aurora Housing Authority
 Arvada, City of
 Bayfield
 Blanca/Ft. Garland Metro. Dist.
 Boulder, City of
 Cedaredge
 Colorado Housing Authority
 Carbon Valley Park & Rec. Dist.
 Colorado Springs City Hall
 Colorado Springs Memorial Hospital
 Colorado Springs Public Utilities
 Crawford, Town of
 Castle Pines Metropolitan Dist.
 Durango, City of
 Southwest Regional Library District
 Estes Park Town of
 Fremont Sanitation District
 Fairmont Fire Prot. District
 Lamar Housing Authority
 Lafayette, City of
 Fort Morgan, City of
 Longmont Housing Authority
 Lamar, City of
 Northeast Colorado Health
 Platteville, Town of
 Pueblo Health Department
 Pueblo Regional Library
 Eastern Rio Blanco Parks & Recreation District
 Pueblo, City of
 Rio Blanco Recreation District
 Meeker Regional Library District
 Tri-County Health Dept.
 Wray, Town of
 Weld County Health
 Windsor-Severance Library Dist.
 Yuma, Town of
 Housing Authority of Yuma
 Lakewood, City of
 South Lakewood Sanitation District
 East Larimer Water District
 Parker Water and Sanitation District
 Parker, Town of
 Center Housing Authority
 Costilla Housing Authority
 Milliken Sanitation District
 North Chafee County Reg. Library
 Manitou Springs, City of

Judges' Division

Denver County Court
 District Court
 Juvenile Court
 Superior Court

Probate Court
 County Courts

School Districts

Adams No. 1
 Adams No. 12
 Adams No. 14
 Adams No. 27 J
 Adams No. 28 J
 Adams No. 29 J
 Adams No. 31 J
 Adams No. 50
 Adams County BOCES¹
 Alamosa Re-11 J
 Alamosa Re-22 J
 San Luis Valley BOCES²
 Arapahoe No. 1
 Arapahoe No. 2
 Arapahoe No. 5
 Arapahoe No. 6
 Arapahoe No. 26 J
 Arapahoe No. 32 J
 SE Metro BOCES²
 Archuleta No. 50 Jt
 Baca Re-1
 Baca Re-3
 Baca Re-4
 Baca Re-5
 Baca Re-6
 Bent Re-1
 Bent Re-2
 Boulder Re-1 J
 Boulder Re-2
 N. Colo. BOCES¹
 Chaffee RE3
 Chaffee 32 J
 Cheyenne Re1
 Cheyenne Re5
 Clear Creek Re-1
 Conejos Re-1
 Conejos Re-6
 Conejos Re-10
 Costilla Re-1
 Costilla Re-30
 Crowley Re-1
 Custer C-1
 Delta Re-50(J)
 Delta-Montrose Voc. Tech Sch.
 Dolores Re-1
 Douglas Re-1
 Eagle Re-50
 Elbert C-1
 Elbert C-2
 Elbert 100 J
 Elbert 200
 Elbert 300
 El Paso Re 1
 El Paso No. 2
 El Paso No. 3
 El Paso No. 8
 El Paso No. 11
 El Paso No. 12
 El Paso No. 14
 El Paso No. 20
 El Paso No. 22
 El Paso No. 23 J
 El Paso No. 28
 El Paso No. 38
 El Paso No. 49

El Paso No. 54 J
 El Paso No. 60 Jt
 El Paso Pikes Peak BOCES²
 Fremont 1
 Fremont 2
 Fremont 3
 Garfield Re-1
 Garfield Re-2
 Garfield No. 16
 Colorado Mt. College
 Mountain BOCES²
 Gilpin Re-1
 Grand West No. 1
 Grand East No. 2
 Gunnison Re-1
 Hinsdale Re-1
 Huerfano Re-1
 Huerfano Re-2
 Jackson R-1
 Jefferson RE-1
 Kiowa Re-1
 Kiowa Re-2
 Kit Carson R-3
 Kit Carson R-4
 Kit Carson R-5
 Kit Carson Re-6
 Kit Carson Coop. Title 1
 Kit Carson R-1
 Lake R-1
 La Plata R9
 La Plata 10 Jt
 La Plata 11 Jt
 La Plata - San Juan BOCES²
 Larimer RE1
 Larimer RE2 (Poudre)
 Larimer RE3
 Larimer County Voc. Tech. Cen.
 Las Animas No. 1
 Las Animas R-2
 Las Animas R-3
 Las Animas R-6
 Las Animas R-82
 Las Animas R-88
 Lincoln Re-4 J
 Lincoln Re-1
 Lincoln Re-13
 Lincoln Re-23
 East Central BOCES²
 Logan N E Junior College
 Logan Re-1
 Logan Re-3
 Buffalo School Dist. Re-4
 Logan Re-5
 Mesa 49-5
 Mesa 50
 Mesa 51
 Mineral No. 1
 Moffat Re-1
 Montezuma Re-1
 Montezuma Re-4
 Montezuma Re-6
 Montezuma SW. BOCES²
 Montezuma Re-S.W. Voc. Tech.
 Montrose Re-1
 Montrose Re-2
 Morgan Re-2
 Morgan Re-3
 Morgan Re-20
 Morgan Re-50
 Morgan South Platte BOCES²

Otero R-1
 Otero R-2
 Otero R-3
 Otero R-4
 Otero 31
 Otero 33
 Otero Valley BOCES²
 Ouray R-1
 Ouray R-2
 Park Re-1
 Park Re-2
 Phillips Re-1
 Phillips Re-2
 Phillips Northeast BOCES²
 Pitkin No. 1
 Prowers Re-1
 Prowers Re-2
 Prowers Re-3
 Prowers Re-13
 Prowers Southeast BOCES²
 Pueblo No. 60
 Pueblo No. 70
 S. Central BOCES²
 Rio Blanco Re-1
 Rio Blanco Re-4
 Rio Blanco NW Community
 College
 Rio Blanco BOCES²
 Rio Grande 7
 Rio Grande 8
 Rio Grande 33
 Routt Re-1
 Routt Re-2
 Routt Re-3
 Routt Northwest BOCES²
 Saguache Re-1
 Saguache C2
 Saguache 26-Jt
 San Juan No. 1
 San Miguel R-1
 San Miguel R-2
 San Miguel No. 18
 Sedgwick Re-1
 Sedgwick Re-3
 Summit Re-1
 Teller Re-1
 Teller Re-2
 Washington R-1
 Washington R-2
 Washington R-3
 Washington 101
 Washington 104
 Weld Re-1
 Weld Re-2
 Weld Re-3
 Weld Re-4
 Weld Re-5
 Weld Re-6
 Weld Re-7
 Weld Re-8
 Weld Re-9
 Weld Re-10
 Weld Re-11
 Weld Re-12
 Weld Aims Junior College
 Weld BOCES²
 Weld Yuma R1
 Weld Yuma RJ1
 East Yuma R2

¹ Board of Cooperative Educational Services
² Board of Cooperative Services

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