DOCUMENT RESUME Released 6/5/78

01749 - [A0590845] [redacted]

The Investment Decisionmaking Process in Two Colorado Public Employee Retirement Plans. HRD-77-30; B-164292. December 29, 1976. 44 pp.

Report to Sen. Harrison A. Williams, Jr., Chairman, Senate Committee on Labor and Public Welfare; Sen. Jacob K. Javits; by Elmer B. Staats, Comptroller General.

Issue Area: Income Security Programs: Program Monitoring and Administration (1303).
Contact: Human Resources Div.
Budget Function: Income Security: General Retirement and Disability Insurance (601).
Congressional Relevance: Senate Committee on Labor and Public Welfare. Sen. Jacob K. Javits.
Authority: Employee Retirement Income Security Act of 1974.

Case studies on the Public Employees' Retirement Association (PERA) of Colorado and the Denver Public School Employees' Pension and Benefit Association (DPSEPBA), give details of the framework for managing investments, investment experience, and detailed financial statements. Information on the decisionmaking process was gathered from summary data and interviews with cognizant officials. Findings/Conclusions: The PERA had fiscal year '76 assets of $1.2 billion. It was established by State statute, and its structure includes a retirement board, investment committee, and executive secretary responsible for managing the plan. For fiscal year '75, the rate of return including realized gains and losses, but excluding market fluctuations on securities owned, was 7.80 percent. The DPSEPBA had year-end assets of $166 million, and its structure includes an investment committee, a chief investment officer, and a local bank which handles stock transactions. Year-end '75 assets were $166 million, and the net accrual return for fiscal year '75 was 6.5 percent. (DJM)

REPORT TO THE SENATE COMMITTEE ON LABOR AND PUBLIC WELFARE

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

The Investment Decisionmaking Process In Two Colorado Public Employee Retirement Plans

This report is the fourth in a series of seven studies requested by the committee.

It contains case studies on the Public Employees' Retirement Association of Colorado and the Denver Public School Employees' Pension and Benefit Association, giving details of the structure and operations of the plans.

HRD-77-30

DEC. 29, 1976

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-164292

To the Chairman and
Ranking Minority Member
Committee on Labor and
Public Welfare
United States Senate

In response to your June 14, 1976, letter, we are making a series of case studies of fiduciary standards and conduct of public employee pension plans maintained by State and local governments in Colorado, New Jersey, Georgia, Tennessee, Michigan, Virginia, and New York.

In Colorado, we studied the Public Employees' Retirement Association of Colorado and the Denver Public School Employees' Pension and Benefit Association. Case studies of these plans are included as appendixes I and II; case studies of New Jersey, Georgia, and Tennessee plans have previously been provided; and case studies for the other three States will be provided later.

Based on discussions with your office, we developed a framework for the case studies to provide the information needed to help the Committee fulfill its statutory obligation to study governmental retirement plans. The Employee Retirement Income Security Act of 1974 directed the Committee to undertake such studies and provided that the results should be reported to the Senate not later than December 31, 1976.

Because of time limitations, it was agreed that we would obtain information on the investment decisionmaking process from summary data and interviews with cognizant officials. We did not verify the information obtained, and we are not commenting on the adequacy of procedures and practices followed by the plans.

The Public Employees' Retirement Association of Colorado is the largest of 343 retirement systems for public employees in Colorado. Of the 343 systems, about 295 had less than 21 participants. As of June 30, 1976, the plan had 82,420 active members and assets of about $1.2 billion.

This plan is the result of a State statute. A retirement board administers the plan and is responsible for its investments. An investment committee is responsible for reviewing investment activity and making recommendations on matters associated with the investment portfolio. An executive secretary manages the operations of the plan, including the investment of plan funds.

The Denver Public School Employees' Pension and Benefit Association was established in accordance with State statutes. As of December 30, 1975, it had about 7,200 active members and assets of about $166 million.

The Denver Board of Education created a retirement board with responsibility for the general administration of the plan. An investment committee consisting of board of education and plan members was also established. An investment officer appointed by the board of education makes investment decisions for bond transactions and monitors institutions servicing mortgage investments. A local bank makes decisions on stock transactions. Both are subject to prior approval of the investment committee, which is also primarily responsible for making decisions on mortgage investments. All investment policies and decisions are subject to approval by the board of education, which has ultimate responsibility for all aspects of the plan.

The investment decisionmaking processes are discussed in detail in the case studies. As directed by your office, we prepared this report without waiting for formal written comments from plan officials. However, we discussed the case studies with plan officials, who agreed with the facts presented. Where appropriate, their comments have been included in the case studies. We have requested formal written comments, which we will send to you when we receive them.

Elmer B. Staats

Comptroller General
of the United States

APPENDIX I

CASE STUDY

ON

THE PUBLIC EMPLOYEES'

RETIREMENT ASSOCIATION

OF

COLORADO

Contents

		Page
CHAPTER		
1	BACKGROUND	5
	Membership requirements	5
	Funding	5
	Benefits	6
	Normal retirement benefits	6
	Disability retirement and death benefits	7
	Deferred retirement benefits	8
	Cost-of-living annuity increases	8
2	FRAMEWORK FOR MANAGING INVESTMENTS	9
	Organizational structure	9
	Retirement board	10
	Investment committee	10
	Office of the Executive Secretary	11
	Making and implementing investment policy	11
	Investment policies	12
	Implementing investment policy	13
	Management and control of pension plan assets	15
	Money management techniques	15
	Monitoring investment performance	15
	Disclosure statements	16
	Audit and disclosure of investment activities	16
	Scope of annual audits	16
	Reports issued on retirement plan activities	17
3	INVESTMENT EXPERIENCE	19
	Annual rate of return	19
	Pension plan assets	19
	Funds in non-interest-bearing accounts	20
	Operating costs	21
FINANCIAL STATEMENT		
Schedule		
1	The Public Employees' Retirement Association of Colorado, comparative statement of assets as of June 30, 1972, 1973, 1974, 1975, and 1976	22

CHAPTER 1

BACKGROUND

The Public Employees' Retirement Association of Colorado (hereafter referred to as the Plan) was established in 1931 by the Public Employees' Retirement Act of Colorado (Title 24, Article 51, Colorado Revised Statutes 1973), as amended. It is the largest public retirement plan in Colorado. As of June 30, 1976:

--the Plan had 82,420 active members with 313 political subdivisions (employers) contributing to the fund;

--13,543 retirees and beneficiaries received monthly payments amounting to about $3.7 million; and

--Plan assets totaled about $1.2 billion.

Responsibility for the proper operation of the Plan is vested by the enabling legislation in a retirement board. The law also establishes that the Plan be composed of four separate funds, referred to as divisions. The divisions are the (1) Municipal Employees' Division, (2) School Employees' Division, (3) State Employees' Division, and (4) Judges' Division.

MEMBERSHIP REQUIREMENTS

The Plan provides retirement, disability, and survivor benefit coverage for employees of the State of Colorado; all school districts in the State, except the Denver Public School system; and several municipalities, public health departments, and other local governmental agencies.

Membership is mandatory for all full-time employees of political subdivisions that have elected to be covered by the Plan. Temporary or part-time employees are not required to become Plan members, but they may do so by applying to the retirement board. No counties in the State participate in the Plan; nor do some of the larger cities (for example, Denver, Aurora, and Grand Junction).

FUNDING

Benefits are paid from the funds of the employee's division. Employer contributions to each fund are determined on an actuarial basis. When necessary, the State legislature adjusts the rates. As of June 30, 1976, the employee and employer contribution rates applied to gross wages, by divisions, were as follows:

	Contribution rate percentages by division			
	Municipal	School	State	Judges
Employee	7.75	7.75	7.75	7
Employer	9.86	12.10	10.65	12

BENEFITS

The Plan provides its members or beneficiaries with a guaranteed retirement income for life and financial protection in the event of disability or death.

Normal retirement benefits

Normal retirement may occur at age 60 with 20 or more years of covered service, or at age 55 with 30 years of covered service, except for members of the School Employees' Division, who must have 35 years of service to retire at age 55. Benefits are calculated by multiplying 2.5 percent of the employee's final average salary (defined as the average salary of the highest 5 consecutive years) times the number of years of service, not to exceed 20 years, plus 1 percent of the final average salary for each year of service after July 1, 1969, beyond 20 to a maximum of 40 years. The maximum retirement benefit is 70 percent of the employee's final average salary.

Early retirement for all Plan members is permitted if the person is 55 years old with 20 or more years of service. Normal benefits are reduced by 6 percent for each year the person is under age 60. Early retirement is also permitted if the person is 60 years old with 5 or more years but less than 20 years of service with normal benefits reduced by 6 percent for each year the retiree is under age 65.

The Judges' Division retirement age requirements and benefit percentage of final average salary formulas, depending on years of service, differ from those for other employees covered by the Plan. About 220 individuals are covered under the Judges' Division benefits.

Retirees of all four divisions have the following retirement options which may result in different monthly benefits. However, all the options are actuarially equivalent.

--A single life ordinary annuity, payable for the life of the annuitant.

--A joint annuity with one-half of the benefit payable to a surviving beneficiary. Unde this option, if the designated beneficiary dies before the retiree, the amount paid to the retiree remains unchanged. However, if the retiree dies, the benefit paid to the beneficiary is reduced by one-half.

--A joint and survivor annuity, which pays a monthly benefit for as long as either the retiree or beneficiary lives. The benefit amount does not change if either person dies.

--A joint annuity with one-half to either survivor. Under this option, the monthly retirement benefit is reduced by one-half when either the retiree or the beneficiary dies.

In each of the above options where a beneficiary is designated, the beneficiary must have an insurable interest in the life of the retiree and the choice of beneficiary cannot be changed after retirement. Also, if benefit payments to the retiree or the beneficiary under any of the above options do not deplete the member's contributions to the Plan, the remaining contributions are paid to the survivor's estate.

Disability retirement
and death benefits

Disability benefits are payable to members with at least 5 years of employment who become permanently disabled. The basic benefit for a member with 20 years or less of service is a maximum of 50 percent of the member's final average salary, computed as if he had been able to work to age 65. However, the benefits are increased by 1 percent for every year of service over 20 years.

Survivor benefits are payable after a member has 1 year of service. However, if a member dies as a result of a job-related incident, the 1 year of service requirement is waived. A spouse receives a percentage of the deceased member's final average salary depending on the number of eligible children. A spouse with no children receives an added amount if the deceased member had over 20 years of service. In no case where the spouse has dependent children will the benefit be less than $250 per month. Survivor benefits paid to a spouse cease upon remarriage.

Eligible children receive survivor benefits if there is no spouse or the spouse remarries. Eligible children are defined as those under age 18 or under 23 if unmarried and enrolled in an accredited school. The amount of such benefits varies from 25 to 50 percent of the deceased's final average salary, depending on the number of children. The annuity must be at least $250 per month for three or more children or $100 per month for each child if there are less than three children.

Dependent parents can also receive benefits if no benefits are payable to a spouse or eligible children. One dependent parent receives 25 percent of the deceased member's final average salary; two dependent parents share 40 percent of the final average salary. Such benefits are paid until death or remarriage.

Deferred retirement benefits

A Plan member with 5 or more years of service whose employment is terminated may leave his contributions in the Plan and qualify for benefits at age 65. The benefits are determined in the same manner as for normal retirements. An employee who elected a deferred annuity may receive an annuity between ages 55 and 65 if he had at least 20 years of service or between ages 60 and 65 if he had at least 5 years of service. If benefits are paid earlier than age 65, they are reduced 6 percent for each year under age 65. A member whose employment is terminated may withdraw his accumulated contributions without interest.

Cost-of-living annuity increases

All annuities are increased yearly to reflect cost-of-living increases. However, the increases are limited to 3 percent. The increases, which are applied against the original retirement annuities, are based on changes in the Consumer Price Index.

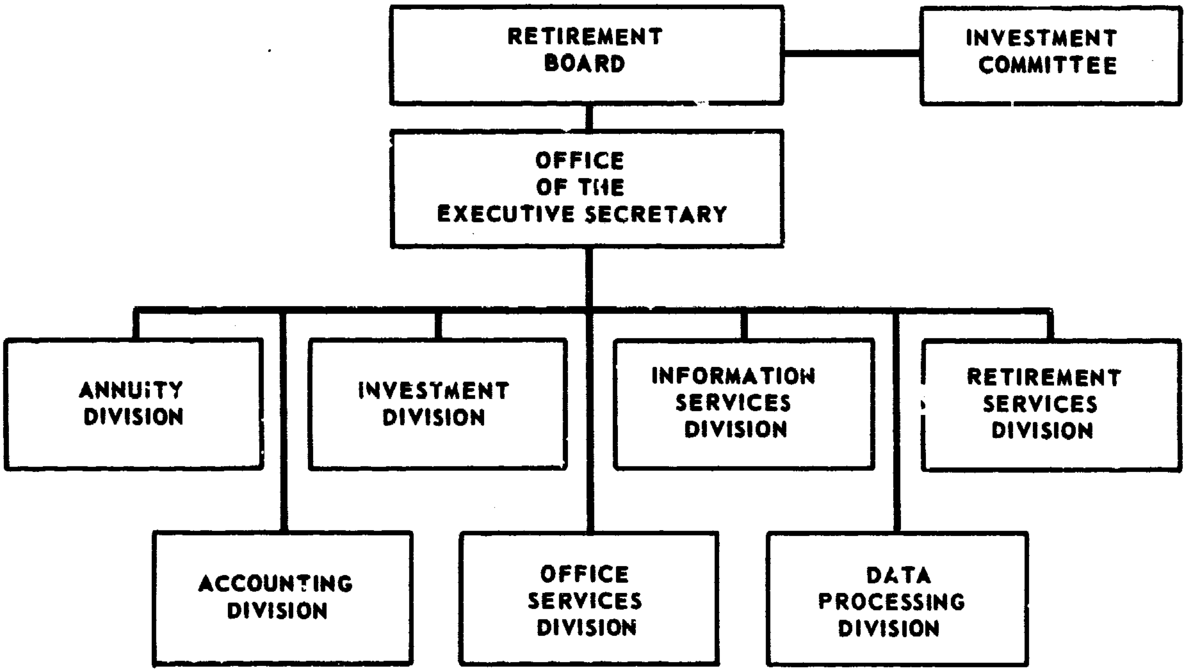
CHAPTER 2

FRAMEWORK FOR MANAGING INVESTMENTS

Responsibility for Plan management is placed by legislation in the retirement board. The legislation also specifies the board's composition. The board is permitted by law to hire employees needed to operate the Plan. The Plan uses no outside money managers.

ORGANIZATIONAL STRUCTURE

The following chart shows the structure established to manage and control Plan activities.



Retirement board

The board has 14 members: 2 municipal employees, 5 school employees, 4 State employees, 1 retired member, the State auditor, and the State treasurer. The State auditor is appointed by the State general assembly, and the State treasurer is elected by the people. The 11 board members representing the various types of employees are elected by the membership of their respective groups. The retired membership elects the retired board member. The elected members serve 4-year staggered terms. Board members are not paid but are reimbursed for any necessary expenditures.

Judges are not directly represented on the board. According to the Plan's executive secretary, this is partly the result of a desire to avoid a possible conflict of interest if a court ruling were needed involving the Plan. Also, the number of judges was small in relation to the number of other Plan members.

The board is the trustee of the Plan and has discretionary power and authority to invest and reinvest those funds not immediately required for the payment of refunds or annuities. Investments are governed by the policy described on page 11. Under Colorado law, Plan officials are to exercise the same discretion and intelligence that a prudent man would exercise when acquiring or retaining investments for his own account.

Investment committee

The investment committee presently consists of the Plan's executive secretary and six board members. The chairman of the board appoints the committee members subject to board approval. According to the Plan's executive secretary, there is no requirement that committee members be drawn from the board, and anyone approved by the board could be a member. Members are chosen because of their knowledge of the investment field and their interest in and willingness to do the work.

The investment committee is responsible for reviewing investment activities and for making recommendations to the board concerning all matters associated with the investment portfolio.

Office of the Executive Secretary

Colorado law authorizes the board to appoint an executive secretary. The Office of the Executive Secretary is responsible for managing the Plan's daily operations. Four people are employed in this office. The executive secretary said his responsibilities include implementing the policies adopted by the board, managing administrative staff, and notifying the board of Plan investment activities.

Investment Division

The Investment Division is under the Office of the Executive Secretary. The division is responsible for investing Plan funds with the objective of obtaining maximum benefit possible while safeguarding assets and maintaining a diversity of investments within the limitations imposed by law and board policy. The division is also responsible for suggesting changes in investment policy to the investment committee and the board. The division employs six persons.

Other administrative divisions

Other divisions under the Office of the Executive Secretary include the (1) Annuity Division, (2) Information Services Division, (3) Accounting Division, (4) Data Processing Division, (5) Retirement Services Division, and (6) Office Services Division.

These divisions are responsible for the Plan's administrative functions, such as preparing annuity checks, providing counseling to Plan members, and computing benefits. About 57 people are engaged in these activities. Their salaries, together with those of other personnel under the Office of the Executive Secretary, are paid from Plan funds.

MAKING AND IMPLEMENTING INVESTMENT POLICY

By law the board has discretionary power and authority to invest the Plan's moneys subject to certain limitations, including:

--Corporate stock held shall not exceed 30 percent of the book value of Plan assets.

--No more than 5 percent of the book value of Plan assets can be invested in the stock of any corporation.

--No more than 7 percent of the outstanding stock and bonds of any corporation can be acquired by the Plan.

By law disbursements from Plan funds are made by authorized Plan officials, subject to approval of the board, only for payment of expenses, refunds to members, retirement annuities, and investment purposes. All disbursements for investment purposes must be countersigned by the State treasurer, who is custodian of Plan funds. According to the executive secretary, State or local governments cannot borrow or appropriate Plan funds.

Investment policies

The Plan's current investment policy provides guidance for the purchase of stocks and bonds and requires that the board approve all investments. The policy also requires the board to maintain a balanced portfolio, that is, diversification in stocks, corporate bonds, U.S. Government-guaranteed investments, mortgages, and commercial paper. The overall philosophy guiding the establishment of the policy is: preservation of capital. Yield, income, and appreciation are secondary considerations. Speculative or excessive trading operations are discouraged.

The executive secretary said the Plan's current investment policy was basically formulated in 1964. The board formulated the policy after consulting with brokerage firms and considering the opinions of the investment committee and an investment counselor.

According to the Plan's investment officer (chief of the Investment Division), investments are made in businesses located in the State only when such investments are equal to or greater than alternative investments in quality, credit, and yield.

The Plan's current policy is directed specifically to investments in common stocks, bonds, and mortgages as follows:

Stocks

The Plan will gradually accumulate common stocks until the value of such stocks equals 30 percent of the Plan's assets. Funds can be invested only in common stocks of domestic corporations which have paid a cash dividend for not less than 5 years before purchase. The stocks must be on a list approved by the board, and no more than $10 million can be invested in any corporation.

Bonds

Investments may be made in corporate bonds and in obligations guaranteed by the U.S. Government or its agencies. Any investment in corporate bonds is restricted to bonds having the three highest ratings established by any two national investment services. Convertible corporate bonds may be purchased with lower ratings if deemed advisable by the board.

U.S. direct obligations and high-grade Colorado municipal bonds may be purchased as the board deems advisable, taking into consideration yield, price, and long-term appreciation.

Mortgages

Mortgage investments may be made, but individual home loans may not. Funds can be invested in guaranteed participation agreements covering a group of individual home loans. These agreements consist of a group of home mortgages arranged with an insurance company, whereby the insurance company guarantees a minimum interest rate as well as the principal. Loans may also be made for commercial or industrial purposes through qualified mortgage bankers.

Implementing investment policy

The Investment Division is responsible for managing day-to-day investment activities in accordance with State law and the investment policy. The division handles transactions involving stocks, bonds, and other investments authorized under the policy. The investment committee and the board must approve a decision to deal in a given stock or bond. The decision to actually invest in an approved stock or bond is made by the Investment Division without the need for further approval. However, all such transactions are subject to review and reversal by the committee and the board. The investment officer said he had never had a transaction reversed by the committee or the board.

To assist the division and the board in making investments in stocks, the Plan has made an agreement with an investment service firm. The firm is to provide advice and expertise in the area of common stocks, including recommendations for portfolio changes. Periodic economic analysis and limited advice on the bond market is also provided. The firm must prepare a quarterly inventory of the Plan's portfolio and make a counselor available to meet with the board quarterly.

Experience of investment decisionmaking staff

The Investment Division employs the following three professional staff members.

Investment officer--The incumbent has held this position since 1969. He was previously employed for about 12 years by the Colorado National Bank, where he worked in investment analysis and portfolio management positions. He holds a bachelor's degree in accounting.

Fixed income analyst and portfolio manager--The incumbent has held this position since 1973. Before that he worked for two brokerage houses and a mutual fund. He holds a bachelor's degree in mechanical engineering and business.

Equity analyst and portfolio manager--The incumbent has held the position since 1974. He has 17 years of experience in investments through employment with the Colorado National Bank and a mutual fund. He holds a bachelor's degree in accounting and a master's degree in business and finance.

Selection of brokers

The Plan's policy directs that stock transactions be handled by firms which charge no more than standard commission or service rates and are members of recognized national exchanges. The investment officer said he attempts to use several different brokers for stock transactions in order to obtain different viewpoints.

Bond transactions must be placed with investment firms that provide the most advantageous offerings and service. Many different firms are used. The decision to use a specific firm is dictated mainly by which firm has the bonds the Plan wishes to purchase.

During the first 6 months of 1976, the Plan paid about $99,000 in commissions on stock transactions to 11 brokerage firms. The largest amount of commissions, about $16,000, was paid to a brokerage firm with which the Plan had a "soft-dollar" arrangement. (See below.) During this period, Plan records show estimated commissions of about $79,000 paid to 34 investment firms for bond transactions. The largest amount paid to any firm was about $12,000.

MANAGEMENT AND CONTROL OF PENSION PLAN ASSETS

The investment Division manages the Plan's investments. Some controls devised to insure prompt investment in securities with adequate earnings are presented below.

Money management techniques

Plan funds are initially deposited in an account controlled by the State treasurer, who is also the Plan's ex-officio treasurer. All contributions due the Plan must be paid by the employer by the 10th day of the month following the payment of salary to the member. The Plan's enabling legislation allows interest at the rate of 0.5 percent per month to be charged against any unpaid amount due the Plan. The interest is paid by the employer. The Plan is notified by the depository bank when Plan funds are deposited in the State treasurer's account. When the Plan needs funds to either pay expenses or make an investment, a request is sent to the State treasurer to transfer funds to the Plan's checking accounts.

The investment officer said the Plan generally knows how much money will be available for investment each month. As a result, his division strives to keep track of new bond issues and stock market conditions so it can immediately invest the available funds. If, in the opinion of the investment officer, attractive investment opportunities are not available, the funds will be invested in short-term investments, usually commercial paper (fixed income obligation with maturity of less than 1 year at time of purchase).

Monitoring investment performance

Plan performance is monitored by comparing the investment performance of the Plan with the performance of other retirement plans with assets of $50 million or more. Performance is measured by a brokerage firm under an agreement with the Plan. The monitoring service is provided in exchange for commission business. This is referred to as a "soft-dollar" arrangement. Quarterly reports and a yearend report are produced by the firm based on data furnished by the Plan.

Plan performance is compared to the performance of about 600 other plans. Comparisons are made of the total performance as well as the performance of various categories of investments, such as stocks and fixed income investments.

Disclosure statements

According to the executive secretary, the Plan does not require its employees or the board members to file disclosure statements which would show potential conflicts of interest. He believed such statements would be of questionable value. He said he knew of no one on the board or on the Plan's staff who has a conflict of interest.

AUDIT AND DISCLOSURE OF INVESTMENT ACTIVITIES

The Plan uses independent certified public accountants to audit the Plan's financial statements annually. The Plan's executive secretary said there is no legal requirement for an annual audit; however, he believes such an audit is desirable.

Scope of annual audits

A Denver certified public accounting firm has made the annual audits for the past 3 years. The last was for the period ended June 30, 1975. The audit reports for the years 1973-1975 show that the combined balance sheets, covering the State Employees', School Employees', Municipal Employees', and Judges' Divisions, were examined. The combined statements of revenue and administrative expense and changes in reserve accounts were also examined. Representatives of the certified public accounting firm said the audits included

--a 100-percent verification of securities owned by the Plan,

--a verification that the Plan received all dividends and interest due and a verification of the correctness of the Plan's amortization schedules,

--a random sample of the Plan's active membership to determine whether proper contributions were being received,

--a random sample of the Plan's annuitants to determine whether they should be receiving benefits, and

--a review to determine whether investments held violated the legal restrictions concerning the amount of stocks and bonds the Plan can acquire.

The auditors said that during their audit for the period ended June 30, 1976, they would verify the work of the actuary. Previously, they had relied on the actuary's statement for the amount of the employers' estimated obligation for prior service, which is shown on the Plan's financial statements.

Reports issued on retirement plan activities

The law governing the Plan requires the board to report annually to the Governor and the general assembly on the manner in which it discharges its responsibilities. The board fulfills this obligation by providing independently audited financial statements and three actuarial valuation reports. These reports provide information for the Plan as a whole and for each of its four divisions. Information provided includes:

1. Financial position.

2. Revenues and expenses.

3. Changes in its reserve accounts.

4. Summary of investments and a comparison of their values at cost and at market.

5. Reserve liabilities for annuities being paid annuitants on the rolls and for annuities to be paid deferred annuitants.

6. A recalculation of assumed future experience, taking into account all past differences between actual and assumed experiences.

7. A determination of the portion of gain or loss that is attributable to each risk area.

The Plan's primary responsibility is to its members. Accordingly, the following information is available to them.

--Annual and special reports which present the Plan's balance sheet, operations, and retirement benefits and legislative activities affecting the Plan. (Mailed to all members.)

--A newsletter published 4 to 5 times yearly. (Mailed to payroll, personnel, and administrative offices of employers.)

--A yearly evaluation of the Plan's investment portfolio performance by a national brokerage firm which is a leader in fund evaluation services. (Available to members on request.)

--Independently audited financial statements. (Available to members on request.)

--A combined summary of the actuarial valuation, financial statements, portfolio evaluation, investment policy, financial principles, benefits provided, fixed income securities, and common stocks held; the names of the people who operate the Plan; and a description of Plan operations. (Available to members on request.)

In addition, the Plan conducts seminars, lectures, and regional field meetings with employer or employee groups in which various aspects of the Plan are discussed.

CHAPTER 3

INVESTMENT EXPERIENCE

ANNUAL RATE OF RETURN

Since 1969, rates of return have been computed by a national brokerage firm. For the purpose of computing rates of return, cash plus investments comprise the total Plan assets. The Plan generates two rates of return. One includes realized gains and losses in its formula as well as the effects of market fluctuations on securities held but not sold. The other also includes realized gains and losses in its formula but excludes the effect of market fluctuations on securities owned. The Plan does not compute rates of return excluding gains and losses, and such data was not readily available.

The following table shows the Plan's rates of return for fiscal years 1971-75, as computed by the brokerage firm:

Fiscal year	Annual rate of return: Including market fluctuations	Annual rate of return: Excluding market fluctuations
1971	17.76	6.92
1972	12.49	6.47
1973	5.10	6.23
1974	-4.71	6.66
1975	11.19	7.80

PENSION PLAN ASSETS

The amounts of Plan assets at the end of the last 5 fiscal years are shown in the following table.

Fiscal year	Assets
1972	$ 590,619,230
1973	694,361,633
1974	821,689,121
1975	988,095,267
1976	1,175,842,062

A comparison of the Plan's assets by category for the 5-year period is shown in the schedule on page 22. During that period, about 89 to 91 percent of the Plan's assets were invested in stocks, bonds, and mortgages.

FUNDS IN NON-INTEREST-BEARING ACCOUNTS

The Plan currently maintains two non-interest-bearing commercial checking accounts and one non-interest-bearing account with the State treasurer. The account maintained by the State treasurer earns interest. However, no interest is allocated to the Plan, and the Plan's executive secretary did not know why. One of the Plan's commercial checking accounts, known as the operating account, is used to pay annuities, salaries, and day-to-day operating expenses. The second commercial checking account, known as the investment clearing account, is used for investment transactions.

Balances in the Plan's operating and investment accounts normally represent outstanding checks. The balances are the result of the procedure whereby money is requested from the State treasurer when there is a need to pay expenses or make an investment. Balances in the account maintained by the State treasurer result from a procedure of the State treasurer's office which does not permit employee deductions and employer contributions to be withdrawn until 48 hours after deposit.

The following table shows the average monthly cash balances and expenditures from the Plan's two commercial non-interest-bearing checking accounts for the last 6 months of fiscal year 1976. Also shown are the Plan's average monthly cash balances, which were maintained by the State treasurer.

	Operating account		Investment account		
Month	Average monthly balances	Monthly expenditures	Average monthly balances	Monthly expenditures	State treasurer account--average monthly balance
January	$1,948,968	$4,793,006	$ 58,826	$25,672,268	$1,425,897
February	203,843	4,807,734	59,036	32,455,198	1,178,755
March	196,890	4,640,719	1	47,984,265	1,033,160
April	291,214	4,960,366	86	85,010,675	1,245,840
May	222,203	4,800,495	86	31,568,987	854,091
June	23,794	5,145,866	1,104,974	56,850,317	1,037,885
6-month average	481,152	4,858,031	203,834	46,590,285	1,129,265
Average daily balance	770,775		133,555		2,581,598

We computed the average monthly balances by adding the beginning monthly balance to the ending monthly balance and dividing by two. The average daily balance was computed by totaling the balances for each day of the 6-month period and dividing the sum by the number of days in that period (182).

The investment officer said he does not believe that the account balances are unreasonable, considering the size of the Plan and the number of daily transactions.

OPERATING COSTS

The operating costs incurred by the Plan are paid from a $5 membership fee charged an employee upon employment and from a portion of the Plan's investment income. The membership fee was established by law when the Plan was created in order to finance Plan operations. Administrative expenses are allocated proportionately to the Plan's four divisions on the basis of the number of members in each division. Administrative expenses include employee salaries and benefits; fees for professional services, such as investment counsel, independent auditors, actuaries, and medical examinations; rental of equipment and office space; and such other costs as depreciation, stationery, and postage. Administrative expenses do not include broker commissions or other servicing agent fees because such fees are included in the cost of an investment.

A comparison between the Plan's administrative expenses and net employer and employee contributions for the last 5 fiscal years is shown below.

Fiscal year	Administrative expenses	Net contributions	Expenses as a percent of net contributions
1972	$ 703,302	$ 83,144,679	0.85
1973	755,029	101,727,808	.74
1974	957,616	124,292,243	.77
1975	1,182,875	149,634,984	.79
1976	1,401,695	176,978,928	.79

SCHEDULE 1

THE PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION OF COLORADO

COMPARATIVE STATEMENT OF ASSETS AS OF

JUNE 30, 1972, 1973, 1974, 1975, AND 1976 (note a)

(Amounts--000 omitted)

Assets	1972 Amount	1972 Percent	1973 Amount	1973 Percent	1974 Amount	1974 Percent	1975 Amount	1975 Percent	1976 Amount	1976 Percent
Cash	$ 3,741	0.63	$ 2,311	0.33	$ 1,337	0.16	$ 2,036	0.21	$ 1,348	0.12
U.S. securities	52,547	8.90	54,830	7.90	54,006	6.57	49,424	5.00	82,702	7.03
Corporate bonds	322,999	54.69	403,927	58.17	498,089	60.62	619,758	62.72	724,151	61.59
Common stock	75,035	12.70	107,062	15.42	127,867	15.56	152,959	15.48	174,028	14.80
Mortgages	126,289	21.38	119,401	17.20	113,434	13.81	122,611	12.41	158,192	13.45
Other	10,008	1.70	6,810	.98	26,956	3.28	41,307	4.18	35,421	3.01
Total	$590,619	100.00	$694,361	100.00	$821,689	100.00	$988,095	100.00	$1,175,842	100.00

a/Data obtained from independent certified public accountants' audit reports and financial statements of the Plan.

APPENDIX II

CASE STUDY

ON

DENVER PUBLIC SCHOOL EMPLOYEES'

PENSION AND BENEFIT ASSOCIATION

Contents

CHAPTER		Page
1	BACKGROUND	27
	Membership requirements	27
	Funding	27
	Benefits	28
	Normal retirement benefits	28
	Disability retirement and death benefits	29
	Deferred retirement benefits	30
	Cost-of-living annuity increases	30
2	FRAMEWORK FOR MANAGING INVESTMENTS	31
	Organizational structure	31
	Board of education	31
	Retirement board	31
	Investment committee	32
	Investment officer	32
	Custodial banks	33
	Making and implementing investment policy	33
	Investment policies	34
	Implementing investment policy	36
	Management and control of pension plan assets	38
	Money management techniques	38
	Monitoring investment performance	38
	Disclosure statements	39
	Audit and disclosure of investment activities	39
	Scope of annual audits	39
	Reports issued on retirement plan activities	40
3	INVESTMENT EXPERIENCE	41
	Annual rate of return	41
	Pension plan assets	41
	Funds in non-interest-bearing accounts	42
	Operating costs	43

Page

FINANCIAL STATEMENT

Schedule

1 Denver Public School Employees' Pension and Benefit Association, comparative statement of assets as of December 31, 1971, 1972, 1973, 1974, and 1975 44

CHAPTER 1

BACKGROUND

The Denver Public School Employees' Pension and Benefit Association (hereafter referred to as the Plan) was established December 1, 1945, in accordance with the School District Retirement System Act (Title XXIV, article 64, of the Colorado Revised Statutes). This law provides that certain school districts in the State can set up their own retirement program. The only qualifications of the statute are: (1) minimum benefits must be $50 per month for retired teachers, (2) funding must be through the general fund levy of the district or gifts and bequests, and (3) all investments must be made in accordance with the "prudent man" philosophy.

The Plan was adopted by the Board of Education of School District Number 1 in the city and county of Denver, Colorado. It has been amended periodically since it became effective in 1945. Under Colorado law, the operation and administration of the Plan is vested with the local board of education through its retirement board. As of December 31, 1975, the Plan had 7,238 active members and assets totaling about $166 million. The Plan also had 1,596 retired members and beneficiaries who received annual benefits totaling about $7 million.

MEMBERSHIP REQUIREMENTS

All full-time employees hired on or after December 1, 1945, are automatically enrolled in the Plan as contributing members. Full-time employees hired before that date had the option of joining the Plan. Those who joined have full membership; those who did not are considered associate members and receive only $3 for each year of service with a maximum of $75 per month at retirement. Part-time employees who have applied for membership and have been accepted are considered affiliate members. Except for some minor differences, they receive the same benefits as full-time employees.

FUNDING

The Plan is funded jointly by the board of education and employees who are regular or affiliate members of the Plan. Associate members do not contribute to the Plan. Participating employees currently contribute 6 percent of their gross monthly salary plus an annual $1 charge for administrative expenses. These amounts are collected by the school district through regular payroll deductions and paid to the Plan monthly.

Employer contributions are provided by the board of education in an amount determined to keep the Plan actuarially sound. Currently, the employer's contribution is 9 percent of regular salaries. The Plan's investment officer said this money is part of the district's property tax levy and is collected by the city treasurer and turned over to the Plan monthly. All money is accounted for in three separate funds: the Employees' Contribution Fund, the Employer' Contribution Fund, and the Pension Assessment Fund. The Pension Assessment Fund is made up of moneys collected for charges levied against members to defray administrative expenses.

BENEFITS

The Plan provides retirement, death, and disability benefits to its members. Retirement benefits are determined on the basis of age, years of service, and average salary.

Normal retirement benefits

Employees are eligible for normal retirement at age 56 with at least 25 years of service. The amount of annual benefits is 1-2/3 percent for each year of service times the average of the 5 highest years' salaries (called final average salary).

For example, if a person at age 56 had 36 years of service with a final average salary of $15,000, his annual retirement benefit--unless reduced to provide benefits for a beneficiary upon the retiree's death--would be $9,018 annually (0.0167 x 36 x $15,000).

A retiring employee can choose to receive benefits under one of five options:

Option A: Benefits, as computed above, are paid monthly to the retiree until death.

Option B: A guaranteed total amount of benefits is established at retirement. Monthly payments are paid to the retiree until his death and then to his designated beneficiary or his estate until the guaranteed amount is paid.

Option C: Payments are made to the retiree until his death and then to a spouse or child beneficiary until the beneficiary's death.

Option D: A guaranteed total amount of benefits is established at retirement. Monthly payments are paid to the retiree until his death, and then his designated beneficiary receives any balance in a lump sum.

Option E: Monthly payments are made to the retiree until his death, and then half the amount is paid monthly to a designated beneficiary until the beneficiary's death.

The retirement allowances for options B, C, D, and E are smaller than that for option A, but they are actuarially equivalent to it.

Disability retirement and death benefits

If an employee becomes permanently disabled after completing a minimum of 5 years of service, he can retire immediately. The same formula for determining normal retirement benefits is used to determine disability benefits, but no minimum age is required.

If the employee dies before retirement but has fulfilled the retirement requirements, his beneficiaries receive whatever benefits they would have received under the option selected by the employee had the employee died after taking normal retirement.

Survivor benefits for beneficiaries of employees who are not eligible for retirement but die while still in active service are paid as follows:

--If the employee had less than 5 years of service, his beneficiary is entitled to his contributions plus interest currently compounded at 3 percent annually.

--If the employee had at least 5 but less than 15 years of service, the surviving spouse and children under 18 are eligible for a maximum of $360 per month ($120 for each child under 18 and balance of up to $360 to spouse). A spouse who does not have custody of children under 18 and who has attained age 60 will receive $180 per month or 25 percent of the final average salary, whichever is smaller. If there is no eligible spouse or children, an eligible dependent parent may receive $120 per month.

--If the employee had 15 or more years of service, the benefits are the same as for 5 to 15 years of service except for a spouse with no dependent children. A spouse who has reached age 50 receives 25 percent of the final average salary. If the employee has completed 25 years of service, the surviving spouse will receive an additional 1 percent of the final average salary for each year of service over 25.

Deferred retirement benefits

A deferred retirement benefit is provided a member who terminates employment after at least 10 years of active service, leaves his contributions in the Plan, and indicates his intent to apply for deferred benefits. The amount of the benefits is determined in the same manner as normal retirement benefits. Generally, a member who resigns is entitled to receive a refund of his contributions with 3-percent interest accumulated thereon until date of resignation.

Cost-of-living annuity increases

The Plan provides for a 2-percent annual increase, effective January 1, in benefits of contributing members that have been in effect for at least 1 full calendar year. The amount of increase is based on the original benefit.

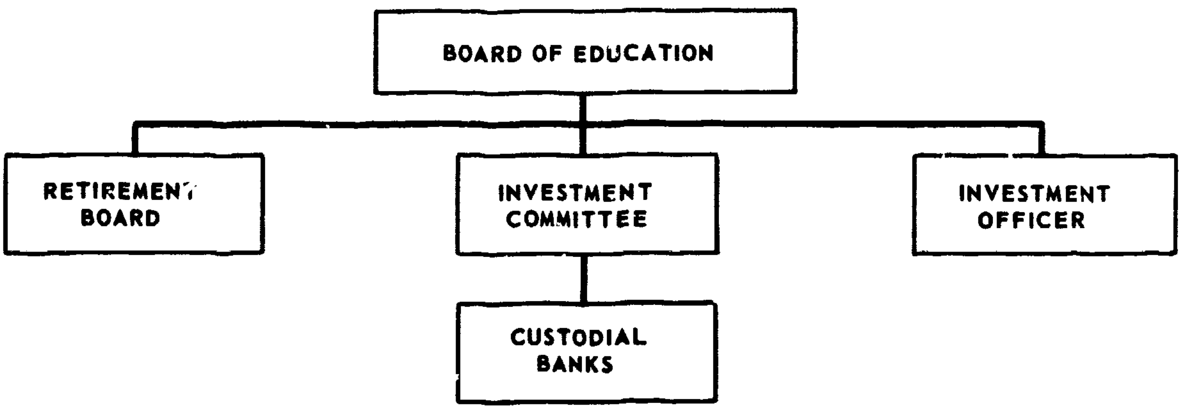
CHAPTER 2

FRAMEWORK FOR MANAGING INVESTMENTS

In authorizing school districts to establish their own retirement plans, Colorado laws left control of decisions on the operation and administration to the local board of education through its retirement board. The law did require that all investment decisions be made applying the "judgment and care under the circumstances then prevailing which men of prudence, discretion, and intelligence exercise in the management of their own affairs."

ORGANIZATIONAL STRUCTURE

The following chart shows the structure established to manage and control the Plan.



Board of education

The board of education operates as the Plan's trustees and maintains final authority over all aspects of the Plan. According to Plan officials, members of the board of education are elected to 6-year staggered terms by the people of the city and county of Denver. The only qualifications for holding the office are that the person be at least 21 years old and live within the school district.

Retirement board

Subject to the approval of the board of education, responsibility for the general administration and the proper operation of the Plan is vested in a board of managers, known as the retirement board. The retirement board is made up of 15 members. Eleven are elected by the membership for 4-year terms from the following classifications:

--1 administrator.

--7 pupil contact employees (such as teachers).

--1 office employee.

--1 building operating employee.

--1 supportive services employee.

Of the remaining four members, one retired employee is appointed by the Denver Public Schools Retired Employees' Association, two are board of education members appointed by its president, and one is the superintendent of schools or his designated representative. Board members are not paid but are reimbursed for necessary expenses.

Investment committee

The investment committee is composed of 5 people: 3 board of education members appointed by the board of education and 2 contributing Plan members appointed by the retirement board. Committee members serve at the appointing board's discretion. Plan officials said no special criteria are used in making the appointments other than the appointee's interest. The investment committee is responsible for setting investment policy subject to the board of education's approval.

According to the assistant superintendent, the committee meets monthly to discuss policy, monitor investment transactions, and prepare reports to the board of education and the retirement board.

Investment officer

The investment officer is appointed by and responsible to the board of education. The investment policy is implemented primarily by the investment officer and his assistant. He outlined his duties and responsibilities as follows:

--He places orders for corporate bonds and U.S. securities to be purchased or traded and selects the agents to handle such transactions.

--He monitors institutions who service the mortgage investments approved by the investment committee and the stock transactions handled by a local bank.

--He provides quarterly reports to the retirement board, board of education, and treasurer of the district and monthly reports to the investment committee. These reports detail transactions made during the month and account for the balances in Plan funds.

In addition, the investment officer is custodian of Plan funds; he arranges safekeeping of purchased securities and investment of available cash on a temporary basis.

Custodial banks

Officials said that the Plan has negotiated agency agreements with six local banks to service its real estate investments. These banks submit applications for real estate loans that meet specific guidelines directly to the investment committee. If the committee approves, the banks collect the loan payments and deposit the money in the Plan's checking account. The Plan maintains cash accounts in three banks selected by the investment committee. Two of these banks together with another are used for safekeeping security certificates.

One of the custodial banks is also authorized to manage all stock investments. This bank proposes purchases and sales and, upon receiving approval from the investment committee, places the order and maintains custody of the certificates.

MAKING AND IMPLEMENTING INVESTMENT POLICY

The board of education has the legislative authority to invest Plan funds in:

--Securities in which trustees are permitted to invest funds under the laws of Colorado.

--Retirement income plans of life insurance companies admitted to do business in Colorado.

--Bonds or notes of the United States or the State of Colorado or bonds of any other State.

--General obligation bonds of any city, town, or school district in the United States, the assessed valuation of which equals or exceeds $2 million in the year preceding the year of purchase.

--Property, bonds, debentures, and other corporate obligations; stocks; and securities of management-type investment companies or investment trusts and common trust funds which men of prudence, discretion, and intelligence would acquire for their own account.

Investment policies

The investment committee and the investment officer follow a conservative policy in carrying out the daily investment activities. The following guidelines established by the board of education limit the type and percentage of investments.

Corporate bonds

Acquisitions of corporate bonds are limited to bonds rated A or better by a national rating agency. In practice, purchases of AA and A bonds can be made only if AAA bonds are unavailable and the investment committee gives prior approval. The aggregate purchase price of corporate bonds must be less than 60 percent of the Plan's total assets.

Capital stock

Only the Employees' Contribution Fund is authorized to purchase the common or preferred stock of any corporation organized under U.S. laws. However, not more than 1 percent of the fund may be in the stock of any company. Stocks must not be more than 25 percent of the fund's total assets.

First deed mortgages

These investments are acceptable if the applicant makes a down payment of 25 percent of the purchase price. The amount of the loan cannot be more than 75 percent of the appraised value. The Plan makes loans for all types of real estate, including home loans to members, but all loan applications must meet the same criteria.

State and municipal bonds

The board of education has resolved that this type of investment is allowable for the Plan. The investment officer said he has declined buying such bonds because of their low yield.

U.S. Government securities

The Plan is allowed to purchase direct obligations of the United States or obligations issued, guaranteed, or insured by any agency or instrumentality of the United States.

The Plan does not invest in State and local government securities. The Plan has no policy requiring or giving preference to investments in Colorado-based corporations, but it does have obligations of some Colorado-based corporations in its portfolio.

Plan officials defined mortgage investments as first trust deed loans on real property and single family dwellings guaranteed by the Federal Housing Administration or the Veterans Administration.

The total authorized book value of U.S. securities and mortgages varied by fund. The total value of these securities must be not less than 40 percent in the Employer's Contribution Fund and not less than 15 percent in the Employees' Contribution Fund. Investments in U.S. securities have made up about 13 to 18 percent of total fund assets over the past 3 years. They provide an alternative investment when better yielding corporate bonds are unavailable.

The Plan's major criterion for investing is conservatism and protection of principal. The Plan does not sell holdings to realize immediate gains. Most investments are held until maturity, although some are exchanged if a better yield can be obtained. The close scrutiny of real estate loans, coupled with a large down payment requirement, tends to limit the number of loans available for purchase, but it also decreases the likelihood of forfeitures.

Plan officials believe that this conservative attitude may change soon. The board of education's present goal seems to be maintaining stable contribution rates while maintaining or increasing benefits. To accomplish this and to keep ahead of inflation, a more liberal approach to investment policy will have to be taken.

There is no requirement for periodically reevaluating the investment policy. The committee's monthly meetings include a discussion of planned investments and policy guidelines. Officials from local banking institutions are consulted occasionally on market practices.

The assistant controller, Denver Public Schools, said the law prohibits State or local governments from appropriating Plan funds for their own purposes. The law provides that funds shall not be assignable either in law or in equity or be subject to levy, attachment, garnishment, or other legal process.

Implementing investment policy

The investment policy is actually implemented by three different groups. U.S. securities and corporate bonds are researched, purchased, and traded by the investment officer and his staff, subject to investment guidelines and percentage limitations. The only exceptions are corporate bonds rated below AAA, which require prior approval by the investment committee. The investment officer is required to handle cash transfers to pay for investments. This includes investing surplus cash in a temporary interest-bearing account until it is needed for a permanent investment.

The investment committee makes final real estate investment decisions. The committee reviews loan applications at its monthly meetings and instructs the investment officer to release funds based on its decisions. The applications are received (1) from certain local banks which are authorized to submit loans for purchase and (2) from employee members, who can apply for a home loan at reduced interest rates and closing costs. Once a loan has been purchased, the submitting bank is responsible for servicing it. According to the committee chairman, most of these loans are approved because the banks are aware of the Plan's conservative attitude and send only reliable applications. Loans have been made to about 6 percent of employee members. Although employees receive special rates, they are still required to meet the same criteria established for bank applications.

An agreement has been negotiated with the trust department of one of the Plan's six custodial banks to transact all common and preferred stock business. All transactions recommended by the bank must be submitted to the investment committee for approval. Once a decision has been made, the bank is responsible for selecting a broker, negotiating the transaction, and maintaining custody of the certificates. Plan officials do not believe that the delay caused by requiring prior committee approval results in untimely purchases and sales because the stocks chosen are usually not volatile.

Experience of investment decisionmaking staff

The investment office staff consists primarily of the investment officer and his assistant. The investment officer has worked for the Denver Public Schools in positions of fiscal responsibility for about 30 years. He holds a bachelor's degree in accounting and a master's degree in finance. He served as assistant investment officer before assuming his present position.

The assistant investment officer has held the position for less than a year. He has a bachelor's degree in business administration and 8 years of experience in a Portland, Oregon, bank--5 years as an analyst and 3 years as a portfolio manager. He is a Chartered Financial Analyst. Both officers are bonded.

Selection of brokers and banks

According to the investment officer, both the investment office and the bank handling stock investments deal with brokerage firms for security transactions. He said the Plan has no actual control over which firms the bank handling stock investments uses when executing security transactions.

The Plan's policy for selecting brokers handling corporate bond or U.S. Government securities is more explicit. The board of education has directed that the investment officer use local firms whenever possible. The fees charged by various firms are comparable, but the board feels it is appropriate to spend the fees in the area from which its tax-based income is derived. However, although he gives preference to local firms, the investment officer also maintains accounts with firms throughout the country because they can provide access to bond markets that may not be available locally. For U.S. Government issues, he deals exclusively with New York firms because they set the prices and are in daily contact with Government officials in Washington.

For custodial, real estate, and stock transaction services, the Plan uses Denver banks. They were selected by the investment officers from a list of 24 banks provided by the board of education. The board prepared the list from banks that have applied for the Plan's business. The board based its selection decision primarily on location, but it also considered services, rates, and willingness to offer protection for the Plan's assets by obtaining high employee security bonds. During 1975, the Plan paid $6,822 in commissions to six different brokerage firms.

MANAGEMENT AND CONTROL OF PENSION PLAN ASSETS

Plan assets are managed primarily by the investment officer and a local bank. Some controls established to insure constant and proper investments are presented below.

Money management techniques

The investment officer's practice is to invest money, as soon as it becomes available, directly in long-term investments. However, when no suitable long-term investment is immediately available, the funds are placed in a short-term bank account, which pays daily interest, until they can be invested permanently. In all cases, the investment officer is responsible for obtaining the maximum return possible.

The Plan holds bonds until maturity rather than selling them to realize gains. Occasionally, they will trade bonds to obtain a more favorable yield if no loss will be realized. The investment officer has sole authority to make these trades within established guidelines.

Monitoring investment performance

As previously noted, a local bank handles all stock investments. Its investment performance is monitored as follows:

--The bank must obtain prior approval from the investment committee before completing any transaction. This results in a constant check against rapid turnover to generate fees and a control of the quality of investments.

--The assistant investment officer has recently started to evaluate the bank's performance by reviewing its proposals on a transaction-by-transaction basis.

--Statements from the bank handling stock investments and the other five banks that the Plan uses are submitted to the investment officer and the school district's controller for reconciliation. The investment officer also maintains records of dividends, interest, loans, stock transactions, and cash payable to the Plan, which are checked against bank statements.

Internally, the Plan relies on a system of periodic reports to monitor performance. The investment officer is required to submit investment reports monthly to the investment committee and quarterly to the retirement board and board of education. The retirement board and the investment committee are required to prepare similar periodic reports to the board of education.

Disclosure statements

There is no requirement for anyone associated with the Plan to file a disclosure statement showing possible conflicts of interest. The Plan's internal and external auditors have suggested that such a practice be adopted, but so far the board of education has not felt it was needed. Recently, one board of education member made conflict-of-interest charges against two other members. The local newspapers reported the story, and the superintendent of schools requested a special audit by a certified public accounting firm to decide the issue. It was later reported that the charges proved to be unfounded.

AUDIT AND DISCLOSURE OF INVESTMENT ACTIVITIES

The board of education uses an independent certified public accounting firm to annually audit the Plan. The same national accounting firm has made the audit for the last 5 years. The last report was for the year ended December 31, 1975.

The school district also maintains an internal audit staff. According to an official of that staff, the staff works with the outside auditors on the Denver Public Schools' audit. However, on the review of the Plan, the staff's effort is limited primarily to checking reconciliation and payroll analysis.

Scope of annual audits

The certified public accounting firm makes a financial audit of both the Plan and the school district. A separate report and accompanying management letter is issued for each audit. The audits included an examination of the Plan's assets and liabilities and the changes in fund balances.

The audits were basically financial in scope and included

--confirming cash, stocks, bonds, and mortgages maintained by the banks;

--reviewing internal controls and practices for reasonableness; and

--testing purchases and sales of investments, employee and employer contributions, dividends, interest, and cash transactions.

Reports issued on
retirement plan activities

The school district controller's office annually prepares a financial report containing a complete list of the Plan's investment holdings in addition to the usual financial statements. The report categorizes the holdings by type and shows the purchase date and price, yield, current year's beginning and ending book values, cost, amortization, sale price (if applicable), and the income for each investment. The Plan's controller said these statements are prepared from the Plan's records. The reports are distributed to members of the board of education, the retirement board, and the investment committee; the investment officer; and various district administrators.

Independent actuaries evaluate the Plan every 3 years. The latest report is dated January 1, 1976. The Plan's executive secretary said that the actuary's statement, along with the independent auditor's financial statements, is distributed every September in a pamphlet to all Plan members. This pamphlet also contains information on membership and assets and the annual investment committee report. Accompanying the annual report to all members is a description of the retirement program, including a description of benefits available, tables for calculating the member's personal benefits, and instructions for obtaining additional information.

CHAPTER 3

INVESTMENT EXPERIENCE

ANNUAL RATE OF RETURN

The following table shows the annual rate of return on investments for fiscal years 1971-75, as provided by Plan officials.

Fiscal year	Percent return: Gross cash return	Percent return: Net accrual return
1971	5.23	5.23
1972	5.81	5.81
1973	5.69	6.09
1974	6.25	6.10
1975	6.64	6.50

The gross cash return figures include only income actually received. The net accrual return includes all income earned but not received minus expenses. Both calculations include gains and losses from stock transactions. The Plan does not compute a rate of return excluding gains and losses. According to the assistant investment officer, such a rate of return would not vary significantly from the above rates because stocks are a small percentage of investments and securities are generally held until maturity.

PENSION PLAN ASSETS

The values of the Plan's assets at the end of calendar years 1971-75 were as follows:

1971	$106,795,094
1972	119,626,220
1973	133,515,034
1974	148,271,130
1975	166,116,248

A comparison of the Plan's assets by category for the 5-year period is shown in the schedule on page 44. During that period, about 98 to 99 percent of the Plan's assets were invested in U.S. Government securities, stocks, bonds, and mortgages.

FUNDS IN NON-INTEREST-BEARING ACCOUNTS

The Plan maintains separate non-interest-bearing checking accounts with six local banks. Three banks provide custodial services for the Plan's bond and stock certificates and most checking services. All six banks service the Plan's mortgages, and deposit collections into the checking accounts used by the investment officer for investments. The following table summarizes the average monthly balances and expenditures for the Plan's non-interest-bearing accounts for the first 6 months of 1976.

Month	Average monthly balance	Monthly expenditures
January	$ 441,063	$4,393,739
February	891,870	4,411,576
March	1,194,580	9,516,866
April	905,848	3,581,772
May	1,285,799	5,363,591
June	1,365,589	8,458,663
Monthly average for 6 months	1,014,125	5,954,368
Daily average for 6 months	970,729	-

The average monthly balances were computed by adding the beginning and ending checking account balances from bank statements for each month and dividing by two. The 6-month averages were computed by adding the monthly averages and dividing by six.

The average daily balance was computed by totaling the daily balance of all accounts from bank statements and dividing by the number of days in each month, including weekends and holidays. The balance used for weekends and holidays was the balance shown at the close of the previous workday. The daily average for 6 months is computed by dividing the total daily balances by 182 days.

Although the bank's average daily balance for the 6-month period was $970,000, the investment officer said the average balance according to his books was about $100,000. He explained that when a check is written, it immediately reduces the book balance, but the bank balance may be very high for several days until the check clears. At the time of our review, we were unable to obtain book balances because the records were being audited.

The Plan's accountant said that the checking accounts are used exclusively for investments and expenses. All benefit payments are made by the school district when it prepares the monthly payroll. The district then deducts the amount paid for benefits from its monthly contribution. This practice allows the Plan to maintain less cash in its accounts than it would if it paid benefits directly. The possibility of needing to liquidate investments at a loss to pay benefits is also eliminated.

OPERATING COSTS

Administrative expenses, such as salaries, office expenses, travel, management, and legal fees, are charged against Plan funds. Brokerage fees for stocks are added directly to the cost of investments.

The following table shows the Plan's administrative expenses for calendar years 1971-75 and a comparison of expenses to the net contributions for providing retirement benefits.

Calendar year	Administrative expenses	Net contributions	Expenses as a percent of net contributions
1971	$171,061	$10,365,875	1.7
1972	191,467	11,126,324	1.7
1973	216,380	11,650,879	1.9
1974	231,863	12,617,715	1.8
1975	260,099	14,486,389	1.8

According to the school district's controller, the administrative expenses include only those directly involved in the Plan's operation. Indirect costs, such as controller and accountant's salaries, office space, utilities, and materials, are not charged to the Plan. They are absorbed directly by the school district.

SCHEDULE 1

DENVER PUBLIC SCHOOL EMPLOYEES' PENSION AND BENEFIT ASSOCIATION

COMPARATIVE STATEMENT OF ASSETS AS OF

DECEMBER 31, 1971, 1972, 1973, 1974, AND 1975 (note a)

(Amounts--000 omitted)

Assets	1971		1972		1973		1974		1975	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Cash	$ 450	0.4	$ 526	0.4	$ 640	0.5	$ 616	0.4	$ 686	0.4
U.S. Government securities	23,472	21.9	23,984	20.0	23,540	17.6	22,617	15.3	22,076	13.3
Corporate bonds	56,531	52.9	62,061	51.8	71,578	53.6	80,030	54.0	96,695	58.2
Stocks	4,233	4.0	5,585	4.7	5,943	4.5	5,348	3.6	4,606	2.8
Mortgages	21,268	19.9	26,181	21.9	30,584	22.9	38,725	26.1	41,179	24.8
Other assets	841	.8	1,289	1.1	1,230	.9	936	.6	875	.5
Total	$106,795	100.0	$119,626	100.0	$133,515	100.0	$148,271	100.0	$166,116	100.0

a/Data obtained from annual school district Office of the Controller Statement of Assets, Liabilities, and Reserves.