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

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Case studies on the Tennessee Consolidated Retirement System (TCRS) and the Metropolitan Employee Benefit System (MEBS) of Nashville and Davidson County, Tennessee, 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. In 1972, seven separate pension plans were merged into the TCRS, which is operated by an independent board of trustees, managed by the State Treasurer, and invested by the State Treasury Department's Investment Section. Findings/Conclusions: For fiscal year 1976, the assets of the TCRS were about \$823 million and the rate of return (including net gains and losses) was 7.26 percent. Established in 1963, the MEBS, features an independent board of trustees and an investment committee which uses a local bank's trust department to manage investments. Fiscal year 1976 funds totaled about \$28 million; return with gains and losses was 5.22 percent. (DJM)

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**REPORT TO THE
SENATE COMMITTEE ON
LABOR AND PUBLIC WELFARE**

**BY THE COMPTROLLER GENERAL
OF THE UNITED STATES**



**The Investment
Decisionmaking Process
In Two Tennessee Public
Employee Retirement Plans**

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

It contains case studies on the Tennessee Consolidated Retirement System and the Metropolitan Employee Benefit System, giving details of the structure and operations of the plans.



COMPTROLLER GENERAL OF THE UNITED STATES

WASHINGTON, D.C. 20548

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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 Tennessee, New Jersey, Georgia, Colorado, Michigan, Virginia, and New York.

In Tennessee, we studied the Tennessee Consolidated Retirement System and the Metropolitan Employee Benefit System of Nashville and Davidson County, Tennessee. Case studies of these plans are included as appendixes I and II; case studies for New Jersey and Georgia have previously been provided; and case studies of the other four 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.

Prior to July 1972, the State of Tennessee administered seven separate pension plans. In July 1972, the Tennessee Legislature consolidated the seven plans into one system, the Tennessee Consolidated Retirement System. As of June 30, 1976, this plan had 155,308 active members and 26,757 pensioners with assets totaling about \$823 million.

An independent board of trustees is responsible for operations of the plan. The plan's activities are managed

by the State treasurer under the authority of the board of trustees. Investments are handled by the State Treasury Department's Investment Section, whose policies are established by an independent investment advisory council.

The city of Nashville and Davidson County, Tennessee, established the Metropolitan Employee Benefit System in April 1963. Prior to that date, the city and county separately administered pension plans for their respective employees. The former city and county pension plans were closed to new members when the new system was created. The plans, however, continue for employees who were members when the plans were closed. The plan covers about 8,400 active members and 438 pensioners. As of June 30, 1976, the plan had assets totaling about \$27.8 million.

An independent board of trustees is responsible for operating this plan. An investment committee is responsible for investment activities. The committee uses the trust department of a local bank to manage the plan's investments.

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

The chief investment officer of the Tennessee plan disagreed with our inclusion of gains and losses on the sale of investments in computing annual rates of return on investments, saying that such inclusions distort the earning rates. More details on this matter are included in the case study.



Comptroller General
of the United States

APPENDIX I
CASE STUDY
ON
THE TENNESSEE CONSOLIDATED
RETIREMENT SYSTEM

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CHAPTER 1

BACKGROUND

The Tennessee Consolidated Retirement System (hereafter referred to as the Plan) was established pursuant to Chapter 814 of the Tennessee Public Acts of 1972. The 1972 act merged seven separate State retirement systems and provided for uniform treatment of active members after July 1, 1972. The act provided that the Plan have the powers, privileges, and immunities of a corporation. As of June 30, 1976, the Plan had 155,308 active members with assets valued at about \$823 million. During June 1976, the Plan paid about \$6.2 million in benefits to its 26,757 retirees and beneficiaries.

The seven retirement systems were: (1) Tennessee Teachers Retirement System, (2) Tennessee State Retirement System, (3) State-Paid Judges Retirement System, (4) Attorneys General Retirement System, (5) County-Paid Judges Retirement System, (6) County Officials Retirement System, and (7) the Public Service Commissioners Retirement System. These retirement systems were enacted from 1945 through 1969. The 1972 act established a board of trustees to manage the Plan. The board delegated administrative and investment responsibilities to the State treasurer.

MEMBERSHIP REQUIREMENTS

The 1972 act required the board to classify members into the following three groups:

- Group I - Teachers and general employees.
- Group II - State policemen, game and fish officers, firemen and policemen.
- Group III - State and county judges, attorneys general, county officials, and public service commissioners.

Effective July 1, 1972, membership in the Plan became mandatory as a condition of employment for teachers not participating in a local plan. Membership is also mandatory as a condition of continued employment for general State employees employed more than 6 months. Group II employees as well as county judges, attorneys general, and certain political subdivision employees are also required to be members of the Plan. However, the law made membership optional for State judges, commissioners, county chairmen, assistant

attorneys general, criminal investigators, and elected or appointed members of the General Assembly. Members of superseded retirement systems automatically became members of the Plan as of June 30, 1972, except they had the option of retaining the benefit and contribution provisions of their former system.

FUNDING

Funds needed to finance the Plan are obtained primarily from contributions by members, employers, State appropriations, and earnings on investments. Actuaries periodically determine contribution rates necessary to keep the Plan financially sound. Contribution rates included in the June 30, 1975, actuarial valuation and in effect through June 30, 1976, were as follows:

<u>Employee group</u>	<u>Contribution rates</u>		
	<u>Employer</u> <u>(note a)</u>	<u>Member</u>	
		<u>Up to</u> <u>Social</u> <u>Security</u> <u>base</u> <u>(note b)</u>	<u>Excess of</u> <u>Social</u> <u>Security</u> <u>base</u> <u>(note b)</u>
(percent)			
Group I Teachers	11.62	4.5	5.0
General employees:			
State	5.29	4.5	5.0
Political subdivision	<u>c/3.24</u>	4.5	5.0
Group II State policemen, game and fish officers	8.39	5.5	7.0
Policemen and firemen	<u>c/7.42</u>	5.5	7.0
Group III Judges	10.84	5.5	7.0
Attorneys general	5.55	5.5	7.0
County judges	10.52	5.5	7.0

a/Employer contributions must cover cost-of-living adjustments for retired members.

b/Social Security base is amount of compensation subject to Social Security contributions.

c/Individual rates for each participating political subdivision are determined based on amortization of the accrued liability.

Plan members are covered by the Federal Social Security programs. In 1950, the Tennessee State Legislature permitted agreements between the State and the Federal Government to extend coverage to the employees of the State and political subdivisions and to their dependents and survivors.

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

Benefits available to Plan members vary for the three groups. Full benefits are provided to Group I members at age 60 regardless of the length of service or after 30 years of service regardless of age. Group II members retire with full benefits at age 60 regardless of the length of service or age 55 with 25 years of service. Group III members may retire at age 65 regardless of the length of service or age 55 with 24 years of service.

The formula for computing retirement benefits also varies for the three groups. For example, Group I applies a benefit rate of 1.5 percent against a member's average salary below the social security integration level and 1.75 percent above the social security integration level. The total of these two computations are multiplied by the member's years of service to arrive at annual retirement benefits. For purposes of benefit computation, Tennessee law established for persons retiring from 1976 through 1981 a social security integration level of \$6,600. The social security integration level is the average annual compensation on which social security benefits would be provided had the retiree earned annual compensation at least equal to the maximum amount subject to social security contributions.

For example, benefits computed for a Group I member are as follows. Assuming an average salary of \$9,000 for the 5 highest consecutive years of creditable service, a Group I member at age 60 with 25 years of service would receive yearly benefits of \$3,525 computed as follows:

Average salary below social security integration level multiplied by 1.5 percent ($\$6,600 \times .015$)	\$ <u>99.00</u>
Average salary above social security integration level multiplied by 1.75 percent [$(\$9,000 - \$6,600) \times .0175$]	\$ <u>42.00</u>
Sum of above multiplied by years of service [$(\$99 + \$42) \times 25$]	\$ <u>3,525.00</u>

Disability retirement
and death benefits

Disability benefits are available to members who

- (1) have completed 5 or more years of creditable service,
- (2) have been incapacitated for further performance of duty by a disability that is likely to be permanent, and
- (3) are recommended for retirement by the Plan's medical panel.

Nine-tenths of the normal service retirement benefit are available to disabled members if they are also receiving social security disability benefits. Otherwise, the disabled member receives 100 percent of the normal retirement benefits.

Members of Groups I and II who are totally and permanently incapacitated as a result of an accident or physical violence occurring while in the actual performance of duty are eligible for accidental benefits. This monthly benefit, equals 50 percent of the member's average compensation, divided by 12.

Five optional plans are available to members at least 30 days prior to retirement. The regular retirement plan--the Maximum Plan--provides for monthly benefits to a member for life, with all benefits ceasing at death, and any remaining accumulated contributions going to the designated beneficiary in a lump sum. All optional plans, upon the death of a member, provide for a monthly benefit to a surviving designated beneficiary for life. These allowances are reduced from the Maximum Plan on the basis of the age of the beneficiary and the age of the member at the time of retirement.

If a member dies before retirement, his contributions are refunded to his estate or designated beneficiary.

Deferred retirement benefits

A member who terminates his employment after establishing vesting rights may leave his contributions in the Plan and be eligible for an allowance at age 55. The amount of vested benefits are limited to a percentage of service retirement benefits depending on length of service. If employment is terminated before vesting rights are attained, a member may withdraw his contributions plus 4-percent interest. Group I employees attain vesting rights after 4 years, Group II after 10 years, and Group III after 8 years.

Cost-of-living annuity increases

The Plan provides for a cost-of-living increase of the initial retirement allowance. Such increase is to be effective July 1 of each year if the Consumer Price Index has increased by at least 1 percent during the previous calendar year. This increase could amount to a maximum of a 3 percent annual increase in the retirement allowance.

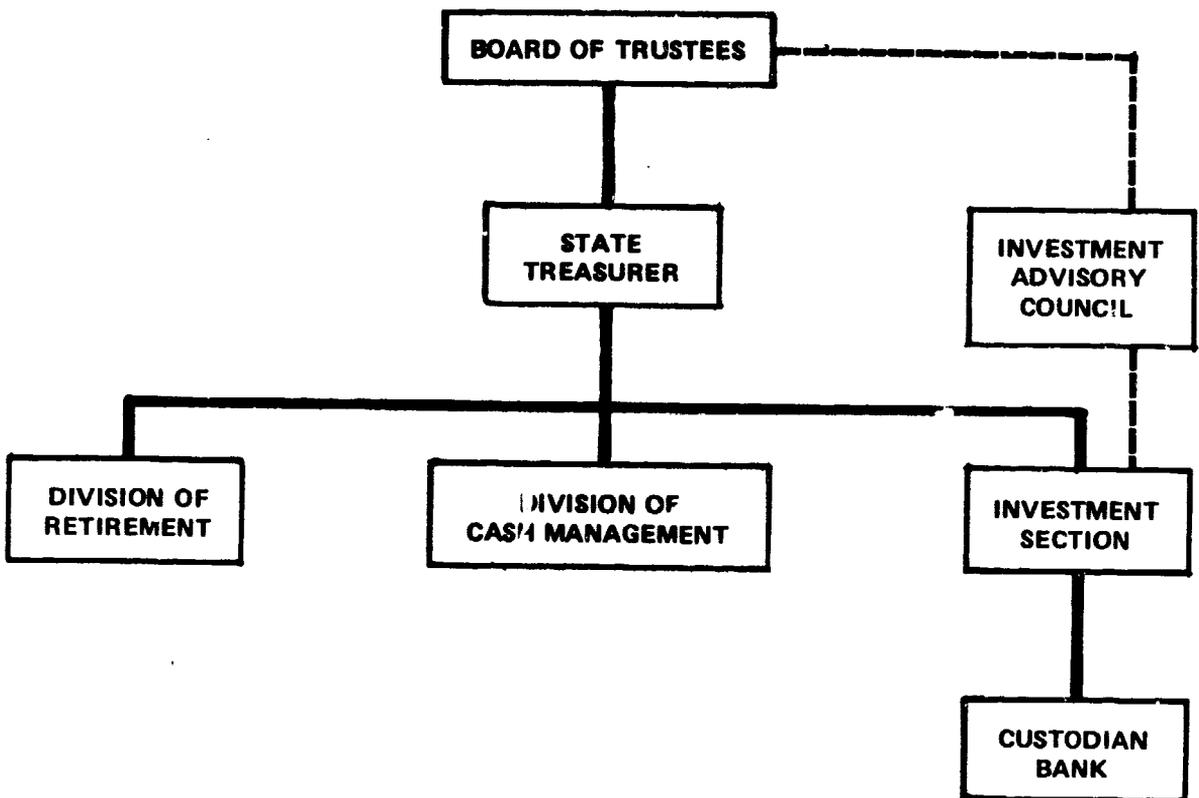
CHAPTER 2

FRAMEWORK FOR MANAGING INVESTMENTS

The responsibility for the general administration and proper operation of the Plan has been placed by legislation under an independent board of trustees. The legislation also provides that the board may delegate authority for managing Plan funds. Accordingly, the board has delegated authority for day-to-day administrative and investment activities of the Plan to the State treasurer. State employees are used to accomplish these activities. Neither the board nor the State treasurer uses outside money managers or analysts to assist in managing Plan funds.

ORGANIZATIONAL STRUCTURE

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



Board of trustees

The 1972 act provides that a 10-member board shall be the trustee of Plan funds. Under the act, the board is composed of five designated members who hold State office either by election or appointment, and five State employees who are Plan members. The members designated by the act include

- State treasurer, who is also designated chairman of the board;
- comptroller of the treasury;
- Commissioner of Finance and Administration;
- director, Division of Retirement, who is also designated as Secretary to the board; and
- Chief Justice of the Supreme Court.

The remaining five members include

- three members who are teachers and
- two members who are State employees from organizations not represented by members named in the act.

The State treasurer and comptroller of the treasury are elected to State office by the general assembly for 2-year terms. The Governor appoints the Commissioner of Finance and Administration for a 4-year term, and the State treasurer appoints the director, Division of Retirement, from a Department of Personnel list of eligibles. Judges of the Tennessee Supreme Court are elected by statewide popular vote for 8-year terms.

Members of the Tennessee Education Association elect teacher trustees, and members of the Plan--other than teachers--elect the State employee trustees. Trustees serve without compensation, but are reimbursed for all reasonable and necessary expenses they may incur through service to the board.

The 1972 act specifies that:

"All of its business shall be transacted,
all of its funds invested, all warrants for

money drawn, any payments made, and all of its cash and securities and other property shall be held in the name of the board, or in the name of its nominee, provided that nominees are authorized by retirement board resolution * * *."

The act also assigned to the board or its nominee:

"* * * full power to hold, purchase, sell, assign, transfer, or dispose of any of the securities or investments in which the funds created herein have been invested, including the purchasing and selling of stock options, as well as of the proceeds of such investments and any moneys belonging to said funds * * *."

State treasurer

The board, by resolution dated July 5, 1972, authorized the State treasurer to act on its behalf in discharging duties as necessary in managing investment activities of the Plan. This resolution also authorized the State treasurer to delegate investment activities to his investment staff. Accordingly, the treasurer delegates investment responsibilities to the Investment Section of the Department of the Treasury, and retirement plan contributions and benefit responsibilities to the Division of Retirement.

In accordance with the Plan's enabling legislation, the treasurer also appoints members of the investment advisory council to assist in developing investment policies for the Plan. Appointees are subject to the advice and consent of the board.

Investment Advisory Council

The council consists of five members appointed for 5 years by the State treasurer with the advice and consent of the board. At the time of their appointment, the persons must be primarily engaged in the management of investment portfolios. The council members do not receive salaries, but they are reimbursed for actual expenses incurred while performing their duties.

The council's primary responsibility is to establish investment policy for the Plan subject to review by the board.

Under enabling legislation, implementation of the policy so established and approved may be delegated by the board to the Investment Section. Subject to the council's recommendation, the Investment Section shall have full power to invest and reinvest such funds as created by the Plan.

Division of Retirement

The Division of Retirement is responsible for enrolling members in the Plan, collecting contributions, paying benefits, accounting for revenues and expenses, and generally for providing services and benefits to members as specified by the Plan.

Investment Section

The State treasurer has delegated authority for investment activities to the Investment Section. The section, headed by the chief investment officer, is primarily responsible for managing day-to-day investments of Plan assets in accordance with established investment policies. The section meets quarterly with the council and the board to review past performance and future plans. The investment decision-making process is described on page 15 under implementing investment policy.

Custodian bank

The board contracts with a Nashville bank to serve as custodian. The bank's services include maintaining physical control over the Plan's assets, transferring securities, and collecting interest and dividends on investments. The Plan has used the same bank for custodial services since 1972.

Division of Cash Management

The Division of Cash Management is responsible for managing and controlling all Plan cash as well as other State agencies' cash. An explanation of how cash is handled is included on page 17 under money management techniques.

MAKING AND IMPLEMENTING INVESTMENT POLICY

The board has the responsibility for reviewing and approving the Plan's investment policy. The board also has full power to invest and reinvest Plan assets. The council,

however, is to establish investment policy for the board's review and approval. The board or its nominee, in accordance with legislation, may not invest more than 50 percent of Plan's assets in common and preferred stocks.

The board's investment powers are subject to all the terms, conditions, limitations, and restrictions imposed by the laws of the State of Tennessee upon domestic life insurance companies. The State insurance code provides that life insurance companies may invest in bonds, debentures, notes, and common and preferred stocks. Some limitations of the insurance code on investments include the following:

- Bonds purchased may not be in default as to principal or interest.
- Common stock investments in any one institution shall not exceed 1 percent of the insurance company's assets or 5 percent of the voting stock of any banking or insurance company.
- Preferred stock investments in any one institution shall not exceed 2 percent of an insurance company's assets or 15 percent of the company's assets in all preferred stock or shares.

In accordance with legislation, Plan cash may not exceed 10 percent of the retirement fund assets. As of June 30, 1976, about 5 percent of the Plan's assets consisted of cash and receivables. (See p. 26.)

Investment policy

Other than requirements set forth in the enabling legislation, the Plan's current investment policy, which was approved by the board on April 9, 1976, is as follows:

- The council considers that due to the public nature of the fund, undue risks should be carefully avoided.
- An interim goal of 30 percent of total assets in stocks was to be reached about October 1976 and maintained.
- Bond investments will normally be confined to the top four rating categories established by national investment services and private placements of comparable quality.

--When market spreads are favorable, older low coupon bonds may be traded for bonds with higher yields.

Although the Plan's investment policy does not preclude investments in State and local government obligations, the chief investment officer said that he has purchased none during his 12-year tenure. Investment policy is not to give preferential treatment to the purchase of stocks or bonds of Tennessee-based companies. The chief investment officer estimated that 10 percent of the firms dealing with the Plan are in Tennessee. The chief investment officer told us that this policy is broad in scope and is not based on any specific studies, analyses, or advice. Rather, it is based on the investment experience and constant market observations of council members and the Investment Section staff. We were also told that, although there is no specified interval for policy reevaluation, in actual practice, the council and Investment Section reevaluate the policy during quarterly meetings.

Implementing investment policy

The Investment Section is responsible for managing day-to-day investment activities in accordance with applicable laws and established investment policy. The 1972 act states that subject to the recommendation of the council, the section has full power to invest and reinvest the retirement funds. The power of investment, however, is subject to the board's approval and other restrictions required by law.

To guide the Investment Section in making investment decisions, they hold formal meetings quarterly with the council to discuss proposed strategy and policy for the next quarter. The council is required by legislation to meet monthly; however, according to the chief investment officer, meetings are held quarterly because council members' employment responsibilities as professional portfolio managers do not permit monthly meetings. However, the chief investment officer said that his staff frequently telephones council members to discuss investment matters.

Formal meetings of the council precede the quarterly meetings of the board. At the board meetings, the chief investment officer presents the investment policy and strategy prepared during quarterly council meetings for board approval. The Investment Section uses the approved policy and strategy as a basis for day-to-day investment decisions.

The Plan presently does not employ any outside advisors, analysts, or money managers. However, prior to the 1972 act, the Plan did contract for the services of two outside advisors. One contract expired before the effective date of the consolidation. Plan officials dropped the other contract after June 1974. According to Plan officials, the contract was not renewed because (1) the cost of services the firm offered increased substantially and (2) the investment staff began to rely more on its own research and institutional research obtained free of charge.

Experience of investment decisionmaking personnel

The Investment Section consists of five employees. The chief investment officer and the assistant chief make all investment decisions. Prior to joining the State retirement system, the chief investment officer had 10 years experience--from 1952 to 1963--with two brokerage firms. During this period, he held the positions of stockbroker, regional representative, and regional manager. He has served as chief of the Investment Section since 1964. The assistant chief holds a master's degree in finance. Prior to joining the Plan in September 1975, the assistant chief served about 1 year as an investment analyst for an insurance company. The remaining three members consist of an executive assistant, accountant/auditor, and senior clerk.

Council members are required by legislation to be engaged primarily in the management of investment portfolios at the time of their appointment.

Selection of brokers

The Investment Section selects brokers for stock and bond transactions. The chief investment officer manages day-to-day stock transactions, and the assistant chief handles day-to-day bond transactions.

The chief investment officer said that he selects stockbrokers based on the broker's research and execution capabilities. He attempts to spread business around to several firms; however, he deals primarily with large firms because of the size of fund transactions. The investment officer further said that he uses local brokerage firms as much as possible, but he uses out-of-State firms if they can provide better execution.

The assistant chief told us that due to the nature of the bond market and the magnitude of Plan funds, he selects large New York firms for bond transactions. He also told us that small bond firms are usually not selected because they cannot give sufficient market coverage.

The chief investment officer told us the Plan does not allocate assets or brokerage fees to brokers. Rather, they place orders for specific transactions and pay for them as they are executed. The Investment Section used 29 brokerage firms, 13 of which were out-of-State, during the 7-month period--December 1, 1975, through June 18, 1976.

MANAGEMENT AND CONTROL OF PENSION PLAN ASSETS

Three State Treasury Department organizations manage and control Plan assets. These organizations are (1) the Division of Retirement, (2) the Division of Cash Management, and (3) the Investment Section. The Division of Retirement maintains an accounting system for recording all Plan transactions. Assets are recorded in three main accounts--cash, receivables, and investments. The chart of accounts includes detail subsidiary accounts disclosing the type and nature of individual transactions. The Division of Cash Management is responsible for managing and controlling all cash received from the various State agencies including Plan cash. The Investment Section manages Plan investments in the manner previously described.

Money management techniques

The State Treasury Department has established procedures to assure that incoming funds are invested immediately. State law requires that all funds received by the State treasurer be deposited in State bank accounts within 3 days, and that all idle cash be invested.

The Division of Cash Management daily monitors cash on deposit in State bank accounts--including Plan cash--and invests excess cash in short-term investments such as certificates of deposit. Based on the average daily cash balance during the month, the division distributes interest earned on the investment of idle cash to the Plan, as well as four other funds.

For example, the Plan earned the following interest income on idle cash invested during the fourth quarter of fiscal year 1976.

<u>Month</u>	<u>Average monthly cash balance</u>	<u>Interest earned</u>	<u>Percent return</u>
April	\$33,904,076	\$171,215	6.06
May	51,951,977	266,254	6.15
June	45,335,853	<u>227,435</u>	6.02
Total		<u>\$664,904</u>	

The Plan sells stock options as another technique for increasing its return on investments. The chief investment officer told us that he sells options on stock fully owned by the Plan to earn additional income and thereby increase the stock portfolio return rate. According to the chief investment officer, stock options may be written for a time period of a few days to as long as 9 months. We were told that options can be written on stocks listed by the Chicago Board Options Exchange, the American Stock Exchange, and several other regional exchanges. The chief investment officer told us that the exchanges list only about 49 of the 80 stocks which the Plan owns. The sale of options is limited to 10 percent of the stated value of the Plan depository bank's equity capital.

The Plan uses two local Nashville banks for trading stock options. The chief investment officer told us each bank has equity capital of about \$70 million. Consequently, the Plan is limited to about \$14 million in stock options. We were also told the Plan usually reaches that maximum by the end of each quarter.

Examples of Plan option transactions follow. On April 14, 1976, the Investment Section sold options on 100 blocks (100 shares per block) of a corporation's stock held in the Plan's portfolio for \$36,968. On April 21, 1976, it also sold options on another 100 blocks of the same corporation's stock for \$40,413. The corporation's stock did not reach the option price designated by the potential buyer prior to the option expiration date of July 16, 1976. Thus, the Plan earned a total of \$77,381 from the option sale and still retained the shares of the corporation's stock.

On January 22, 1976, the Investment Section sold options on 100 blocks of another corporation's stock for \$30,773.

The market value of the stock reached the designated option price on July 13, 1976, and they had to sell the stock to the option holder for \$98,787. The closing market price on that day was \$472,537 or \$73,750 more than the price at which the Investment Section sold the stock. Thus, the Plan lost the opportunity to earn an additional \$42,977 (\$73,750 less \$30,773).

During calendar year 1975, the Plan earned about \$586,800 by selling stock options, and during the period January through June 1976, the Plan earned about \$203,000.

Monitoring investment performance

The stock portfolio of the Plan is monitored through a contract with an out-of-State firm to provide the Investment Section with weekly reports showing

- cash and stock portfolio holdings by industry group;
- analyses of rates of return;
- a comparison of the Plan performance with Standard and Poor's Index, Dow-Jones Stock index, and other customers of the monitoring firm; and
- various other statistical analyses.

The contract costs \$10,000 a year. The chief investment officer told us that the firm was selected by the board to provide performance monitoring services because they provide weekly reports, whereas, other firms provide only quarterly reports.

According to the chief investment officer, the Plan presently does not have a formal monitoring system for evaluating bond investment performance because available services are expensive and are not very good.

Disclosure statements

According to the executive assistant to the State treasurer, legislation does not require disclosure statements for any State officials, employees, or outside advisors involved in administering the Plan. The 1972 act, however, does specify that:

"Except as otherwise herein provided, no trustee and no employee of the board of trustees shall

have any personal interest in the gains or profits of any investment made by the board; nor shall any trustee or employee of the board, directly or indirectly, for himself or as an agent, in any manner for himself, or as an agent, in any manner use the same except to make such current and necessary payments as are authorized by the board; nor shall any trustee or employee of the board become an indorser or surety, or in any manner an obligor, for money loaned to or borrowed from the board."

The director, Division of Retirement--who is also an attorney--told us that the above provisions should prevent using pension funds for purposes other than that called for in the Plan. He also told us if any official such as the Governor, State treasurer, chief investment officer, or any State employee used funds for purposes other than that specified in the act, that person would be in violation of the law. Furthermore, we were told the act specifically states that pension funds are held in "trust" for the specific purpose of providing retirement allowances and benefits.

Although the 1972 act does not require disclosure statements on Plan employees, we found that the 1972 Public Acts of Tennessee, Chapter 843, do require the following board members to file such statements with the Secretary of State.

- The State treasurer.
- The Chief Justice of the Supreme Court.
- The Commissioner of Finance and Administration.
- The comptroller of treasury.

The executive assistant told us he personally did not know if any business relationships existed among board members, Division of Retirement personnel, Investment Section employees, and members of the council.

AUDIT AND DISCLOSURE OF INVESTMENT ACTIVITIES

Tennessee law requires the comptroller of the treasury to conduct an annual audit of the Treasury Department including

the activities of the Plan. The Division of State Audit--an organization under the Compt-oller of the Treasury--conducts the annual audit of the Treasury Department.

Scope of annual audits

The audits are basically financial compliance reviews and include a physical inventory of Plan securities held by the custodian bank. The director, Division of State Audits, said the division is also responsible for certifying the accuracy of the State treasurer's annual financial report to the Governor.

In addition, the comptroller of the treasury told us that the division performs a biennial operational and management review of the Treasury Department's Division of Retirement. Since consolidation of pension plans in July 1972, the Division of State Audit has conducted only one audit of the Division of Retirement. The audit scope included a review of financial records for the 4-year period ended June 30, 1974.

The Plan's enabling legislation states that the board may provide for an audit once every 4 years by a reliable independent auditor. The original act stated that "The board of trustees shall provide for an audit to be made once in every four (4) years by a reliable independent auditor." The act was amended in July 1974, and "shall" was changed to "may." The board has not obtained an outside independent audit of the Plan. The comptroller of the treasury told us the State has not obtained an outside independent audit because it has adequate in-house audit capability.

Reports on pension plan activities

The Investment Section issues quarterly reports to the board disclosing investment activities of the preceding quarter. The reports include:

- A list of stocks purchased and sold during the quarter including number of shares, name of stock, price per share, and total price.
- A list of bonds purchased, sold, or swapped during the quarter including data on par amount, name of bond, coupon rate, maturity data, bond price, and ratings from Moody's Investor Service, Inc., and Standard and Poor's Corporation.

--Stock performance analysis reports from the monitoring firm.

In addition, the Investment Section also provides the board with a copy of its proposed investment strategy and policy statements for the next quarter.

The board is required to meet quarterly in January, April, July, and October, and to record all of its proceedings for public inspection. Minutes of these quarterly meetings show that the Investment Section staff presents an oral report on the past quarter's activities which usually includes rates of return.

Quarterly, the Division of Retirement submits the Plan's financial statements to the board. The statements contain a balance sheet, statement of changes in fund balance, schedule of revenue by source, schedule of disbursements by type, and statement of changes in financial position. These statements, except for the balance sheet, contain cumulative financial data for the fiscal year. The balance sheet is as of the end of the latest quarter.

In addition, the 1972 act requires the board to publish an annual report showing the fiscal transactions of the Plan including assets and liabilities, receipts and expenditures for the preceding year, and the latest balance sheet showing the financial condition of the retirement system by means of an actuarial valuation of assets and liabilities of the system.

Unless requested, the board does not submit reports on the Plan to members. However, the State treasurer submits an annual report on the State's financial condition to the Governor. Included in this report are comparative balance sheets of the Plan for the current and preceding fiscal years. This report also includes a statement of changes in fund balances, return on investment of idle cash, and an opinion by the director, Division of State Audit, on the fairness of the financial reports.

A report on the actuarial valuation of the Plan was also available for the period ended June 30, 1975. This report presents employer and employee contribution rates necessary to maintain the Plan on a sound actuarial basis.

CHAPTER 3

INVESTMENT EXPERIENCE

ANNUAL RATE OF RETURN

The average annual rate of return on investments since the Plan's inception including and excluding gains and losses on the sale of investments, is shown in the following table.

<u>Fiscal year</u>	<u>Percent return</u>	
	<u>Excluding gains and losses</u>	<u>Including gains and losses</u>
1973	6.17	5.85
1974	6.47	5.52
1975	6.65	4.88
1976	7.12	7.26

The Investment Section personnel computed the rates of return excluding gains and losses. We computed the rates of return including gains and losses.

The chief investment officer told us the Plan's computation of return on investments includes (1) income from sale of stock options, (2) dividends, (3) interest on bonds, and (4) interest from investing idle cash. Return rates do not include net gains and losses from the sale of investments because the chief investment officer believes that it distorts the portfolio earnings rate. Therefore, he objected to using return rates which include gains and losses on the sale of investments because persons with less knowledge of investments may draw inaccurate and misleading conclusions about the Plan's investment performance.

The chief investment officer told us that more than one-half of the losses on sales of securities resulted from swapping bonds. To illustrate his point, he provided the following example of a bond swap which involved the sale and purchase of bonds of the same face value, but improved the yield to maturity and shortened the maturity period--although the transaction resulted in a loss for accounting purposes.

In 1956, the Plan purchased \$500,000 of New York Telephone 3-3/8 bonds for \$502,150. The bonds had a due date of April 1, 1996, and a yield of 7.80 percent. The Plan sold these bonds for \$278,105, and at the same time purchased another \$500,000 of New York Telephone 4-1/8 bonds with a due

date of July 1, 1993 and a yield rate of 7.95 percent for \$322,470. Sale of the 3-3/8 bonds resulted in an accounting loss of \$224,045 (\$502,150 cost less \$278,105 sales proceeds). Although the bonds purchased cost \$44,365 more than the Plan received for the bonds sold, the bonds purchased pay \$3,750 more annually in interest. Thus, the increased cost of the bonds purchased will be offset in less than 12 years by the increased interest; thereafter the yield to the Plan will be increased as a result of the bond swap.

PENSION PLAN ASSETS

The value of Plan assets, as shown in the State treasurer's reports to the Governor for fiscal years 1973-76 is as follows:

<u>Fiscal year</u>	<u>Amount</u>
1973	\$565,876,021
1974	643,330,741
1975	727,817,534
1976	823,293,183

A comparison of the Plan's assets by category for the 4-year period is shown on the schedule on page 26.

During the 4-year period, most of the Plan's assets--about 90 to 93 percent--were invested in long-term securities such as bonds, stocks, and mortgages.

FUNDS IN NON-INTEREST-BEARING ACCOUNTS

The chief accountant of the Division of Retirement said that the only non-interest-bearing checking account the Plan maintains is a bank account for paying retirement benefits, and the account is entitled "Retired Payroll Bank Account."

The Division of Retirement makes a monthly deposit to cover the benefits payable during the month. Any daily balance in the account represents outstanding checks. The average daily balance of the account and monthly expenditures reported on bank statements for the months of January through June 1976 are shown on the following page.

<u>Month</u>	<u>Average daily balance</u>	<u>Monthly expenditure</u>
January	\$1,430,146	\$5,667,466
February	778,469	6,103,121
March	1,129,656	6,114,996
April	1,034,759	6,148,800
May	814,634	6,220,943
June	1,077,209	6,138,054
Average for 6 months	\$1,044,146	\$6,065,563

The Division of Retirement computed the average daily balance by totaling the daily bank balances for each month and dividing this total by the number of days in the month, including weekends and holidays. The bank balance for weekends and holidays is the account balance shown at the close of business for the previous workday.

OPERATING COSTS

The Tennessee Treasury Department does not maintain separate administrative cost records for operation of the Plan. The Treasury Department records show total administrative costs which include the Treasurer's Office, Cash Management Division, Investment Section, and Division of Retirement. A Division of Retirement budget official said that administrative expenses of the Plan are paid from general revenues which the legislature appropriates annually for this purpose. We were also told that Plan funds are not used to defray administrative costs.

Total administrative costs for the Treasury Department, and total contributions to the Plan for the last 4 years are as follows.

<u>Fiscal year</u>	<u>Total administrative costs</u>	<u>Total pension fund contributions</u>	<u>Administrative costs as a percent of contributions</u>
1973	\$ 947,800	\$ 84,317,033	1.12
1974	1,180,501	96,972,665	1.22
1975	1,384,143	120,284,998	1.15
1976	1,541,477	135,377,706	1.14

TENNESSEE CONSOLIDATED RETIREMENT SYSTEM

COMPARATIVE STATEMENT OF ASSETS AS OF

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

Assets	1973		1974		1975		1976	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Cash and receivables (note b)	\$ 35,196,299	6.22	\$ 30,065,376	4.67	\$ 33,635,543	4.62	\$ 40,039,680	4.86
Government securities (note c)	9,797,733	1.73	14,125,383	2.20	21,781,005	2.99	50,546,935	6.14
Corporate and foreign bonds	423,410,582	74.82	461,976,650	71.81	517,568,315	71.11	550,468,003	66.36
Common stocks	87,676,357	15.49	105,888,110	16.46	121,183,978	16.65	185,495,106	22.53
Mortgages	15,738,169	2.78	14,555,894	2.26	13,526,605	1.86	12,497,802	1.52
Other:								
Short-term in-								
vestments	5,000,000	.88	30,500,000	4.74	35,000,000	4.81	200,000	.02
Unamortized pre-	1,871,592	.33	2,705,021	.42	2,709,909	.37	3,283,511	.40
mium								
Unamortized dis-	-12,815,711	-2.25	-16,486,693	-2.56	-17,587,821	-2.41	-19,237,854	-2.33
counts								
Total	<u>\$565,876,021</u>	<u>100.00</u>	<u>\$643,330,741</u>	<u>100.00</u>	<u>\$727,817,534</u>	<u>100.00</u>	<u>\$823,293,183</u>	<u>100.00</u>

a/Data obtained from State treasurer's reports.

b/Receivables consist of employee and employer contributions, investment income, and political subdivision contributions.

c/Includes \$1,000 in State and local securities in 1973 and 1974. The balance is United States Government securities.

APPENDIX II
CASE STUDY
ON
THE METROPOLITAN EMPLOYEE
BENEFIT SYSTEM
OF
NASHVILLE AND DAVIDSON COUNTY, TENNESSEE

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FINANCIAL STATEMENT

Page

edule

1 **Metropolitan Employee Benefit System of
Nashville and Davidson County, Tennessee,
comparative statement of assets as of
June 30, 1972, 1973, 1974, 1975, and
1976**

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CHAPTER 1

BACKGROUND

By referendum on June 28, 1962, the city of Nashville and Davidson County, Tennessee, consolidated and adopted a charter entitled "Charter of the Metropolitan Government of Nashville and Davidson County" (hereafter referred to as the Charter), effective April 1, 1963. The Metropolitan Employee Benefit System (hereafter referred to as the Plan) was established as part of the Charter.

Prior to April 1, 1963, the city and county governments separately administered pension plans for their respective employees. The city government administered two separate pension plans that covered (1) city police and firemen and (2) other city employees. The county government also administered two separate plans for county employees--one for employees covered by the Federal Social Security program and one for employees not covered by Federal Social Security programs.

Article 13 of the Charter closed the former city and county pension plans to new members and enabled the metropolitan government to adopt a new system of employee benefit plans. The metropolitan government created and adopted a system of employee benefit plans to include disability, retirement, health, and life insurance, effective December 1, 1964. Article 13 of the Charter and the benefit plan adopted by the metropolitan government comprise the Plan's enabling charter and laws.

As of December 31, 1975, the Plan had 8,391 active members with 438 retirees, survivors, and disabled employees receiving benefits. As of June 30, 1976, assets were about \$27.8 million. Payment in fiscal year 1976 to retirees and other beneficiaries totaled about \$935,000, while contributions to the Plan totaled about \$5.4 million. The Charter created an eight-member board to administer, manage, and coordinate the employee benefit plans of the new government including the former separate city and county government plans.

MEMBERSHIP REQUIREMENTS

All persons hired after April 1, 1963, and after 6 months of service participate in the Plan as a condition of employment. The Charter provided that the former city and county

pension plans continue unimpaired for participants as of March 31, 1963. However, employees were given the choice of remaining in their plans or irrevocably transferring to the Plan. Participants who elected to transfer ceased to be members of their former plans, and all their contributions to the former plans were transferred to the new Plan. The Plan was reopened again on January 1, 1972, for participants to transfer from their former plans. The former plans are considered closed since they accept no new members. The Plan administrator told us very few former plan members transferred to the new system on the open dates. Members of the Plan are covered by Federal Social Security.

FUNDING

The Plan is financed by employer and employee contributions and earnings on investments. The Plan requires members to contribute 3 percent of their earnings subject to social security tax, and 6 percent of their earnings not so subject. The metropolitan government is required by the Charter to annually contribute to the Plan the smaller of (1) their prior fiscal year's contribution rate plus .03 percent or (2) a contribution rate which shall be actuarially determined. The actuarially determined contribution level shall be the sum of normal cost and a percentage of unfunded past service liabilities; such percentage to be determined by the board at a level at least equal to the actuarial valuation interest rate. The present employer contribution rate of 5.327 percent of payroll was actuarially determined.

BENEFITS

The Plan provides its members or survivors with retirement income and financial protection in the event of disability or death.

Normal retirement benefits

The normal retirement date for Plan members is the first day of the month following the member's attainment of age 65. Retirement may not be postponed beyond age 70. The annual benefit payable for life for normal retirement is 1 percent of the employer's average base earnings, plus 1.75 percent of average excess earnings multiplied by the years of credited service. Base earnings mean earnings in any calendar year as determined by the following table:

<u>Year of birth</u>	<u>Base earnings</u>
1903 or earlier	\$4,800
1904 - 1906	5,400
1907 - 1913	6,000
1914 - 1928	6,600
1929 - 1935	7,200
1936 or later	7,800

Average earnings are the highest average annual earnings for 5 consecutive calendar years. Excess earnings are earnings for any calendar year in excess of base earnings.

For example, an employee born in 1910 who retired after 25 years of service with average earnings of \$15,000 would have base earnings of \$6,000, excess earnings of \$9,000, and receive yearly benefits of \$5,437.50 $[(\$6,000 \times .01) + (\$9,000 \times .0175) = \$217.50 \times 25 = \$5,437.50.]$ The benefits are paid on a monthly basis.

Members are eligible for early retirement after 20 years of service and attainment of age 55. Members who are eligible for early retirement may receive a deferred normal retirement benefit at age 65 or immediately receive monthly pension benefits. Immediate monthly benefits are reduced so that they are the actuarial equivalent of a deferred monthly benefit at age 65, computed in the same manner as normal retirement.

Police and firemen are eligible for the same benefits as other employees except that:

- Normal retirement begins the first day of the month following attainment of age 55 and 20 years of service with retirement compulsory at age 60.
- Factors used to compute monthly benefits are higher (2 percent of average earnings--which includes both base and excess earnings--for each year of credited fire and police service not in excess of 25 years, and 1.75 percent of average earnings for each year of credited fire or police service exceeding 25 years).
- Early retirement is available to members after attaining age 50 and completing 20 years of service.

Disability retirement and death benefits

A member who becomes disabled after 10 years of service is eligible to receive a disability retirement benefit. A member who becomes disabled in the line of duty is eligible to receive a disability benefit upon completion of 6 months of service. Disabled members receive a disability pension until age 55. Thereafter, the disability pension ceases and the member receives a normal retirement pension with his period of disability included as service in computing monthly benefits, as though his earnings remained the same as prior to his disability.

The survivors of a disabled member who dies before age 65 receive a survivorship benefit. The survivorship benefit is payable to the widow until death or remarriage, and thereafter to the guardian of surviving dependent children. Surviving dependents of a member whose death occurred in line of duty are eligible for death benefits. The benefit is payable as though the member had died after receiving a disability pension benefit. An indemnity of \$50,000 is paid to the estate of an employee whose death is a direct result of hazardous duty, such as a policeman who is shot while on duty.

Deferred retirement benefits

Any member that terminates employment after completing 10 years of service, but before he is eligible for early or normal retirement, may leave his contribution in the plan and be eligible to receive a deferred monthly benefit beginning at age 65, computed on the same basis as normal retirement. If a member terminates employment after 3 years, but before 10 years of service or dies before becoming eligible for a death benefit, the member or his beneficiary is entitled to a refund of his contributions plus 3 percent interest. A member terminating with less than 3 years of service receives a refund of contributions with no interest.

Cost-of-living annuity adjustments

Retirees and beneficiaries receive a 5-percent cost-of-living increase after 1 year or a portion thereof, and yearly thereafter, if the Consumer Price Index has increased by at least 5 percent for the 12 months ending September 30 in the calendar year which precedes the year for which the escalation shall apply.

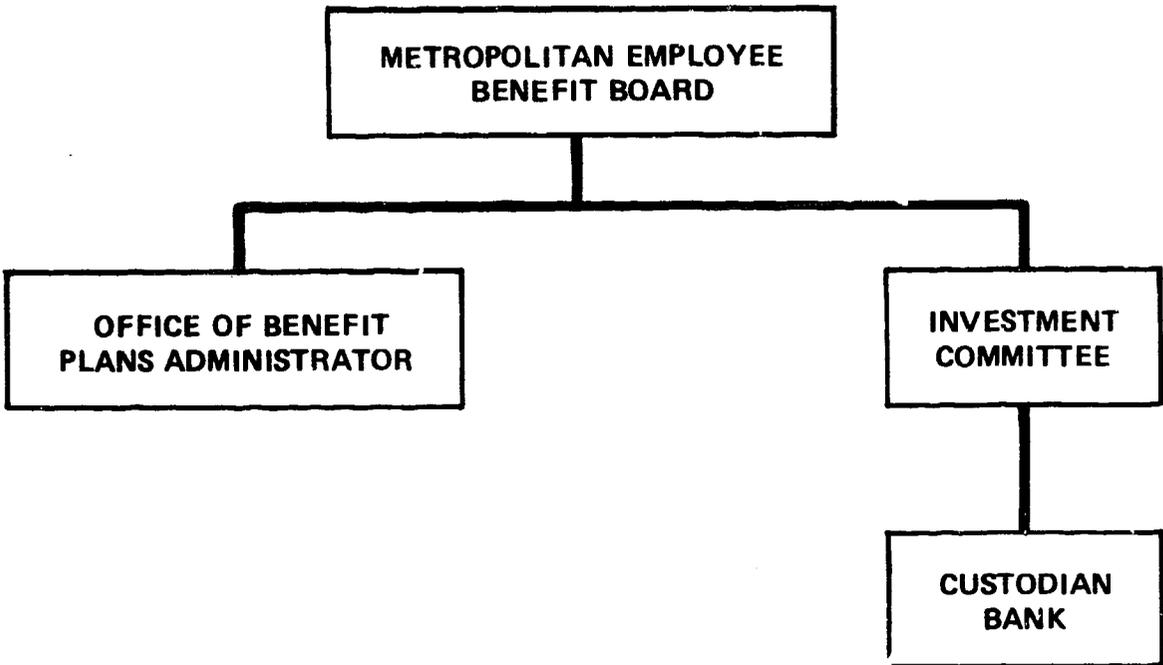
CHAPTER 2

FRAMEWORK FOR MANAGING INVESTMENTS

In accordance with the Charter, an eight-member Metropolitan Employee Benefit Board administers the Plan. The Charter places responsibility for controlling, regulating, and investing Plan funds in a three-member Investment Committee. This committee uses a local bank trust division to handle day-to-day investment decisions and activities.

ORGANIZATIONAL STRUCTURE

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



Metropolitan Employee Benefit Board

The board is responsible for administering, managing, and coordinating the provisions of the Plan. The board consists of eight members including the Director of Finance and Director of Personnel who are designated by the Charter. The mayor appoints another two members who are confirmed by the metropolitan council. The two mayoral appointees must possess an interest in benefit and retirement programs in the public service. Fellow metropolitan government employees elect the remaining four members. Of these four members, one represents the police department, another represents the fire department, and two are elected from all other government departments. An October 1972 amendment to the Charter added an eighth member to represent the Plan retirees and is elected by the retired employees.

All appointed or elected members serve 3-year terms. Appointed members cannot hold public office or be a member of any local, State, or national political committee. The mayor, with council confirmation, appoints the Director of Finance, who serves at the pleasure of the mayor and until a successor is qualified. The Metropolitan Government Civil Service Commission appoints the Director of Personnel subject to the civil service provisions of the Charter. This appointee cannot be terminated from service except for cause.

Principal officers of the board are the chairman and vice-chairman. Members of the board elect these officers at the beginning of each new term and at the first regular meeting. The administrator told us that board members are not compensated for their duties.

The Charter grants the board exclusive authority to approve normal retirement, disability, and widows' pensions and to determine eligibility and amounts of benefits. The Charter also requires the board to

- hold regular monthly meetings that are open to the public,
- coordinate and communicate the system of benefit plans to employees,
- manage and administer such plans,
- make necessary expenditures in fulfilling its duties,

- interpret any employee benefit plans adopted by the metropolitan government,
- adopt rules, regulations, and procedures necessary to discharge its duties, and
- advise the mayor and council of the financial requirements of each benefit plan adopted.

Office of Benefit Plans Administrator

The Office of Benefit Plans Administrator works under the direction of the board and is responsible for day-to-day administrative operations. This office consists of nine employees. The administrator told us that the general responsibility of this office is to administer the various metropolitan government fringe benefit programs.

In addition to pension plans, other programs include: (1) hospitalization, life insurance, hazardous duty benefits, major medical, and accidental death and dismemberment programs, (2) trust and annuity funds, (3) employee benefits education programs, (4) credit counseling program, (5) deferred compensation program, and (6) the preretirement counseling service. In addition, the office prepares operating budgets and maintains the financial records of the Plan including records of individual member's contributions.

The administrator is secretary to the board and represents the board on external contacts with Plan members; metropolitan government departments; and city, county, State, and Federal authorities.

Investment Committee and custodian bank

The Charter established the committee. It is composed of three board members. The Charter designated the Director of Finance and the two mayoral appointees to serve.

The Charter requires the committee to regulate and determine all matters dealing with investment of funds committed to the board. The Charter also grants the committee full and complete control over all investments. At least two of the three committee members must approve committee actions. Other board members do not have the authority to vote or participate in decisions dealing with investment of funds.

Since May 1965, the committee has employed the trust division of a Nashville bank to handle day-to-day investment activities. The bank also serves as the Plan custodian for pension trust funds and securities.

Although the Charter does not specify the frequency of committee meetings, the Director of Finance told us they have met quarterly with the bank for the last 2 years. Before this, the meetings were held semiannually. The administrator told us the committee selected the bank because, at the time of selection, the attitude of the metropolitan government was to keep local taxpayer and employee pension funds in a local bank and because they believed it had the best trust division of all local banks.

MAKING AND IMPLEMENTING INVESTMENT POLICY

The Charter provides that the committee "shall regulate and determine all matters dealing with investment of funds committed to the board and shall have full and complete control over all investments." The Charter further provides that the Plan shall make no investment except in securities and properties permitted by statute for investment of funds by fiduciaries in the State of Tennessee. The administrator told us the clause "fiduciaries in the State of Tennessee" refers to the prudent man rule, i.e. the judgment and intelligence used by a prudent man in managing his own affairs.

The Metropolitan Code authorizes and empowers the committee to invest and reinvest the principal and income of the Plan in any and all stocks, bonds, notes, debentures, mortgages, equipment trust certificates, investment trust certificates, insurance company group annuity contracts, and in any other property--real or personal. The code also authorizes investments of any kind, class or character, whether income producing or not as deemed suitable for the Plan. The committee may invest funds in any common trust fund of any bank or trust organized under the laws of Tennessee or the United States as State depositories. But, the committee is restricted to investing in properties and securities authorized by trustees or other fiduciaries under any present or future law. The committee may also maintain cash balances as deemed to be in the best interest of the Plan. The Charter does not place any other specific restrictions or limitations on policy formulation by the committee.

An attorney in the metropolitan government legal department told us that the Charter does not provide for making loans to members, metropolitan government officials, and State or local governments. He also told us there are no legal restrictions against making such loans.

Investment policies

As authorized by the Charter, the committee approves investment policy for the Plan. The policy is based largely upon recommendations by the committee's outside money manager--the bank. The Plan's current policy, as established by the bank and the committee, relates to the following portfolio structure.

<u>Type of investment</u>	<u>Percent of portfolio</u>
Equities (corporation stocks)	30 - 65
Fixed income (bonds, mortgages, and United States Government securities)	25 - 50
Cash (including demand notes and commercial paper)	5 - 30

Based on criteria which the bank provided on January 14, 1976, the committee adopted the investment objectives and ranked them in the following order of priority.

1. Consistency and total rate of return.
2. Capital preservation.
3. Capital appreciation.
4. Current income.
5. Liquidity.

In a May 26, 1976, meeting the committee changed the investment objectives to show that capital preservation should be the single most important investment objective. Also, the committee pointed out that while the present fixed income position is about 44 percent and is considered adequate for conservatism, the guidelines of up to 65 percent in equities would possibly be too aggressive for the Plan. The committee suggested that the Plan's current position is more in keeping with its long-range objectives.

In material provided to the committee, the bank defines each of the investment objectives as follows:

- Consistency is regarded as emphasizing the total rate of return in a reasonably predictable manner for the portfolio. The primary goal would be to minimize large fluctuations in market value. Therefore, investment in high-growth issues and long-term bonds would not be appropriate.
- Capital preservation is the achievement of an average risk level necessary to protect the principal amount of a given portfolio and to offset the decline in purchasing power resulting from inflation. A portfolio emphasizing this objective would likely be invested in relatively low-risk-level securities such as short-to-intermediate-term government issues, high-quality bank certificates of deposit, and mortgages. Such securities would not possess the growth potential inherent in alternative approaches; generally, they would not yield as much as some other investments, and there would not always be sufficient liquidity in such portfolios.
- Capital appreciation primarily involves growth through gains in market value of the portfolio.
- Current income involves a modest degree of growth primarily through reinvesting current income such as dividends and interest.
- Liquidity in a portfolio is interpreted to mean the extent to which immediate cash requirements are the primary consideration.

The bank account manager for the Plan told us the investment policy is based on the bank's proprietary system for translating specific objectives into portfolio balance guidelines. We were told that under this system, the bank classifies accounts into five categories based on the customer's risk and return objectives. The account manager further explained that the Plan is classified as an average conservative account with prudent growth and little risk. He told us the committee has not established a specific policy with regard to types of fixed income investments, but the bank's policy is to invest only in bonds rated "A" or better.

The Charter does not specify when the committee should reevaluate investment policy. However, the Director of Finance and the bank account manager told us the policy is reviewed quarterly.

Implementing investment policy

The bank is responsible for managing the day-to-day investment activities in accordance with the policy established.

Experience of investment decisionmaking staff

In responding to a June 1976 committee questionnaire, the bank reported that it has been in the investment management business since 1927, and is now the largest investment management group in Tennessee. The bank also reported that it (1) manages over \$560 million in trust assets including \$110 million in employee benefit assets which represent 400 employee benefit accounts, (2) employs seven portfolio managers that have over 75 years of collective money management experience, and (3) employs specialists to handle fixed income management, option writing, equity trading, and statistical analyses.

Of the two current mayoral committee appointees, one is an insurance company vice president and the other is an insurance company certified life underwriter and attorney.

The Director of Finance must have proven administrative ability and a well-founded reputation in public finance or a record of exceptional performance for at least 5 years as a comptroller or financial head of a large business.

Selection of brokers

The bank selects the brokerage firms that handle portfolio transactions. The bank account manager told us they select brokerage firms on the basis of the quality of investment services rendered, including the execution of security transactions and research and coverage by the institutional salesman. He also told us the bank performs a detailed evaluation of each broker twice a year. This evaluation includes such factors as (1) quality of economic research, (2) portfolio strategy, (3) industry and company analyses, (4) account coverage (written, verbal, and timeliness), and (5) trading capabilities and quality of executions. The account manager also told us the bank ranks and selects brokers based on an internal weighting scheme.

Further, the account manager for the Plan told us the bank does not segregate the brokerage fees and commissions

paid by individual trust accounts. Rather, records are kept of total fees paid by all accounts. Consequently, fees paid to brokers handling Plan transactions were not readily available. However, bank records show that 26 brokers handled Plan transactions during fiscal year 1976, 19 were out-of-State brokers.

MANAGEMENT AND CONTROL OF PENSION PLAN ASSETS

The committee uses the bank to manage and control investments of Plan assets and the Office of Benefit Plans Administrator to manage funds used to pay retirement benefits and other services which the Plan provides.

A committee member told us the bank provides a monthly statement of transactions to the committee. The committee members must sign the statement approving the transactions and return it to the bank. If a member disapproves a transaction, he must notify the bank. A committee member and the administrator told us the committee monitors and evaluates the bank transactions by (1) reviewing a monthly statement of transactions and other reports and (2) discussing transactions and investment strategy with bank officials at quarterly meetings.

The administrator and a committee member also told us the committee does not allow the bank to make loans or investments involving other bank customers. We were told, however, that formal controls have not been established to prevent such a practice or to prevent channeling of commissions to broker dealers who maintain large accounts with the bank.

The administrator told us that on one occasion the committee questioned investments the bank made in the bank's own holding company which it discovered by reviewing the monthly statement. He told us the bank subsequently sold the holding company stock.

A committee member told us the committee has contracted with an outside evaluation service to determine the feasibility of using more than one outside money manager. We were told the review will include a detailed evaluation of all bank transactions since fiscal year 1966. The objectives of this evaluation are discussed on page 45.

Money management techniques

The bank account manager for the Plan told us the bank manages and controls Plan funds through an income account and a principal account. The bank deposits all earned income and cash in the income account, and the Office of Benefit Plans Administrator deposits contributions in the principal account. Funds in the principal account are available for immediate investment. The bank transfers funds from the income account to the principal account once a month or when a minimum income of \$2,000 has accumulated.

Another money management technique is to purchase an annuity from an insurance company for each Plan member who elects normal retirement. The Plan administrator said the insurance company will pay the Plan a monthly annuity for the life of the pensioner or for at least 10 years even if the pensioner dies shortly after retirement. The purpose of buying the annuity is to transfer the mortality risk to the insurance company. Thus, the insurance company assumes the risk of the pensioner living to extreme old age. The Plan purchased a total of 238 annuities with a value of \$1,754,233 as of January 1, 1976.

Monitoring investment performance

The bank retains a performance measurement company from Louisville, Kentucky, to measure investment performance of the bank's 15 to 20 largest pension accounts. The account manager told us the firm is one of the foremost performance measurement companies in the southeast and uses a unique approach to measuring performance by sectors. He also told us the bank is currently developing its own in-house measurement system.

The performance report presents a statistical description of the trust fund performance for 12 and 60 months. It also shows the growth rate actually experienced by the fund and how well the fund was managed relative to the appropriate market index. The report contains an internal rate of return and a unit value rate of return which it uses to measure performance. The internal rate of return is discussed further on page 47. Using these rates, the report compares the bank's equity performance with Standard and Poor's 500, and fixed income with an assumed return from a Moody AA bond. The cash sector is measured against the yield on 3-month treasury bills.

The bank account manager told us the reports are presented and discussed with committee members during quarterly meetings.

Disclosure statements

The administrator told us the Charter and the Metropolitan Codes do not require disclosure statements of members of the board, the committee, or Office of Benefit Plans Administrator. The code prohibits board members from having personal interest in Plan investments. Board members and the metropolitan government commissions must also abide by a metropolitan ordinance on standards for ethical conduct.

The administrator also said that he knows of no business relationships between bank employees and individuals serving on the board or others employed by the Office of Benefit Plans Administrator. We were told the Plan has not established any formal controls to disclose potential conflicts of interest, except as set out in the conflict of interest ordinance.

AUDIT AND DISCLOSURE OF INVESTMENT ACTIVITIES

The administrator told us the Charter does not provide for an independent audit of the Plan. The Charter places responsibility on the committee for regulating and determining all matters dealing with investment of Plan funds, including audits. He also told us there has never been a thorough audit of the trust fund investment practices and controls. Recently, the committee hired a brokerage firm from Chicago, Illinois, to perform an independent evaluation and audit of the Plan trust fund. This audit began on August 23, 1976.

The Plan is included in the annual audit of the metropolitan government. The metropolitan government uses independent certified public accountants. A local firm has performed the audit for the last 2 years.

Scope of annual audits

The Metropolitan Code provides for an independent audit of accounts and financial transactions of the metropolitan government including every department, office, and agency. The code requires that the audit be performed by a certified public accounting firm and that the firm be chosen by a three-member audit board. The audit board consists of the

(1) presiding officer of the metropolitan council, (2) chairman of the metropolitan council finance committee, and (3) chairman of the metropolitan board of education. In addition, the code specifies that the firm chosen must not have any personal interest in the fiscal affairs of the government and must be thoroughly qualified by training and experience in governmental accounting.

A partner of the accounting firm performing the current audit told us the scope of their audit includes

- confirming investments made by the bank,
- confirming trust fund cash,
- tracing intransit revenue to subsequent deposit,
- confirming investment income,
- mailing pension checks to retirees with a questionnaire to confirm receipt, and
- testing revenue transactions.

We were told the annual audit does not include a review of the Plan investment practices and controls by the bank.

Scope of pension fund audit in progress

As previously noted, the committee entered into a contract with a brokerage firm in August 1976 to perform an independent audit of all trust fund transactions since fiscal year 1966.

A committee member told us the main audit objectives are to determine how well Plan assets have been managed and controlled, how well custodial services were performed, and the feasibility of using more than one money manager. In addition, the services are designed to determine (1) if all dividends and interest were credited, (2) if each security on the custodial document was priced and extended correctly, (3) if any sales or purchases were made outside the high or low range that day, (4) the amount of uninvested daily cash, and (5) if cash flows into the fund within 5 days after every trade date of security. The report is expected to be completed in December 1976.

Reports issued on retirement
plan activities

The Charter requires the committee to publish an annual report of the Plan operations. The report is required to show a detailed accounting of investments, income, and expenditures. The Charter further requires that the report be a public record, and that copies be furnished to any employee upon request and at his expense.

The committee satisfies the annual reporting requirement by including the required data in the metropolitan government's annual financial report. The Director of Finance prepares this report for the mayor and council and makes it available to the public and to the press. The report includes the Plan's balance sheet, statement of revenue, expenditures, and fund balances, as well as a detailed schedule showing each investment.

In October 1968 the board also prepared a booklet explaining the Plan. The booklet is made available to all employees.

CHAPTER 3

INVESTMENT EXPERIENCE

ANNUAL RATE OF RETURN

The bank provides the committee only one type of measurement showing the return on investments--referred to as an internal rate of return. The table below shows the bank's internal rate of return, as well as our computed return rates, excluding and including gains and losses on the sale of investments for fiscal years 1972-76.

<u>Fiscal year</u>	<u>Internal rate of return</u>	<u>Percent of return</u>	
		<u>Excluding gains and losses</u>	<u>Including gains and losses</u>
1972	15.35	4.44	4.25
1973	-2.69	4.29	2.75
1974	-10.41	4.73	4.31
1975	11.26	5.18	1.53
1976	6.16	5.17	5.22

The internal rate of return, according to bank officials, is a compounding rate which shows the actual growth of the fund during any particular period of time. The computation is designed to show the influence of timing and the magnitude of cash flows entering and leaving the fund over a given time-span. Bank officials told us the internal rate of return shows the actual disposition of all capital gains and losses, realized and unrealized, as well as investment income.

We computed return rates based on (1) total investment income and (2) investment income net of gains and losses. To compute the rate of return excluding gains and losses, we developed annual investment income figures from individual transaction ledgers and accounts maintained by the bank. These figures include dividends and interest actually received, less the cost of postage and handling of investments.

To compute the rate of return including gains and losses on the sale of investments, we used investment income figures shown in the Plan's audited annual financial statements. In addition to gains and losses, these figures also include income from annuities which we did not exclude because we could not identify the amounts in all cases.

PENSION PLAN ASSETS

The value of the Plan assets shown in the annual financial reports for fiscal years 1972-76 was as follows:

<u>Fiscal</u> <u>year</u>	<u>Amount</u>
1972	\$11,760,218
1973	14,097,375
1974	18,127,233
1975	22,310,121
1976	27,785,648

A comparison of the Plan's assets by category for the 5-year period is shown on the schedule on page 51. During the 5-year period, most of the Plan's assets--about 81 to 94 percent--were invested in common stock and corporate bonds. The Plan does not invest in State and local government securities. A bank account manager told us the bank does not attempt to direct investments to State or local businesses. Also, as of June 30, 1976, the Plan did not own any securities of firms based strictly in Tennessee or the Nashville area.

FUNDS IN NON-INTEREST-BEARING ACCOUNTS

The Plan currently maintains two non-interest-bearing checking accounts--a controlling pension plan trust account and a pension payroll clearing account. The controlling trust account is used to deposit contributions and to pay actuarial services, annuity purchases, other expenses, and to transfer funds to the bank for investment. The pension payroll clearing account is used solely to pay retirement benefits and refunds of employee contributions.

The following table shows the average daily balances and monthly expenditures reported on bank statements for the Plan's non-interest-bearing accounts for the last 6 months of fiscal year 1976:

	<u>Pension plan trust account</u>		<u>Pension payroll clearing account</u>	
	<u>Average daily balance</u>	<u>Monthly expenditures</u>	<u>Average daily balance</u>	<u>Monthly expenditures</u>
January	\$244,573	\$581,800	\$194,446	\$488,579
February	172,140	563,851	128,255	535,429
March	252,314	449,231	67,090	509,309
April	232,083	474,085	59,327	515,708
May	297,880	375,297	82,089	527,211
June	299,110	565,637	62,159	544,100
6-month average	\$250,393	\$501,650	\$ 96,846	\$520,056

We computed the average daily balance for each account by totaling the daily bank balances for each month, including weekends and holidays, and dividing the results by the total number of days in the period. The bank balance for weekends and holidays is the account balance shown at the close of business for the previous workday.

The chief accountant for the Department of Finance told us since only enough money is deposited in the pension payroll clearing account to cover the exact amount of the retirement benefits and refunds, any balance in that account represents outstanding checks. He also told us it would not be feasible to invest the idle cash in this account.

The chief accountant agreed that the average daily balance of the pension plan trust account is too high. He told us the current policy is to transfer idle money from this account to the bank for investment when the balance exceeds \$100,000 over the amount needed to pay the current month's obligations. The chief accountant also told us a task force is currently studying the possibility of making short-term investments of idle cash. However, he told us they will probably just transfer the excess monies to the bank for investment on a more frequent basis.

OPERATING COSTS

Administrative costs of the Plan which are paid by the metropolitan government from general revenues, include personal services, contractual services, supplies, and fixed charges. Administrative costs of the Plan, which are paid by the Plan include postage, consultants' services, and trustees' fees.

The following table shows the administrative expense by source of payment and contributions for fiscal years 1972-76.

Fiscal year	<u>Administrative costs</u>			Total Plan contri- butions	Administrative costs as a percent of <u>contributions</u>
	<u>Paid from general revenue</u>	<u>Paid from Plan funds</u>	<u>Total</u>		
1972	\$ 53,581	\$ 9,483	\$ 63,064	\$3,106,506	2.03
1973	76,430	23,532	99,962	3,464,305	2.89
1974	81,955	42,207	124,162	4,129,857	3.01
1975	101,850	60,355	162,205	5,013,394	3.24

METROPOLITAN EMPLOYEE BENEFIT SYSTEM OF NASHVILLE AND DAVIDSON COUNTY, TENNESSEE

COMPARATIVE STATEMENT OF ASSETS AS OF

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

Assets	1972		1973		1974		1975		1976	
	Amount	Percent								
Cash and savings account	\$ 2,296	0.02	\$ 254,292	1.80	\$ 1,015,109	5.60	\$ 15,851	0.07	\$ 200,455	0.72
United States Government securities	100,000	.85	700,000	4.97	966,571	5.33	750,345	3.36	732,256	2.64
Corporate and other bonds	4,025,787	34.23	3,981,797	28.25	4,698,129	25.92	7,008,287	31.42	11,143,194	40.10
Common stocks	7,081,806	60.22	8,771,358	62.22	9,955,072	54.92	11,469,808	51.41	12,190,168	43.87
Mortgages	59,329	.50	42,428	.30	82,322	.45	156,830	.70	147,575	.53
Other:										
Demand notes	491,000	4.18	347,000	2.46	210,000	1.16	709,000	3.18	3,172,000	11.42
Commercial paper	-	-	-	-	1,200,030	6.62	2,200,000	9.85	200,000	.72
Total	\$11,760,218	100.00	\$14,097,375	100.00	\$18,127,231	100.00	\$22,310,121	100.00	\$27,785,648	100.00

a/Data obtained from metropolitan government of Nashville and Davidson County annual financial reports.