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ROBERT E. BLIXT

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Room 105, MEA Building 55 Sherburne Avenue Saint Paul 55155

October 7, 1977

Members of the Legislature of the State of Minnesota:

- THE REPORT IN BRIEF -

The Minnesota State Board of Investment manages many State funds for various constituents. The trust funds, retirement funds, highway funds, endowment funds and the Treasurer's general account all involve individual statutes and policies. The paragraphs following this introduction detail the Board activities and investment objectives. A complete listing of all securities transactions during fiscal 1977 is found starting on page 51. A resume is provided as to the reasons for placing business with various securities firms.

WHAT IS THE SIZE OF THE MINNESOTA STATE FUNDS?

On June 30, 1977, Minnesota's total investment portfolio amounted to \$3,313,580,190.00. Of this amount, \$269,031,044.00 represented the permanent trust funds invested for the benefit of school students. Total retirement and welfare funds amounted to \$2,078,660,779.00. Many other individual accounts, including the Invested Treasurer's Cash Fund, three constitutionally dedicated highway funds, the proceeds from various bond sales, and numerous endowments and departmental accounts comprised the remaining \$965,888,367.00. It has been estimated that the State Board of Investment handles approximately 80 to 100 accounts, some amounting to hundreds of millions of dollars and others representing small bequests by individuals for educational or welfare institutions.

TO WHAT EXTENT ARE THE INVESTMENTS DIVERSIFIED?

Statutes require that the funds be invested appropriately for the needs of the individual accounts. For example, the Invested Treasurer's Cash Fund, the current tax receipts, is invested entirely in short-term money market instruments — obligations of the U.S. Treasury and agencies or short-term notes of corporations. Short-term interest rates have fluctuated widely, from over 12% in late 1974 to less than 5% during fiscal 1977.

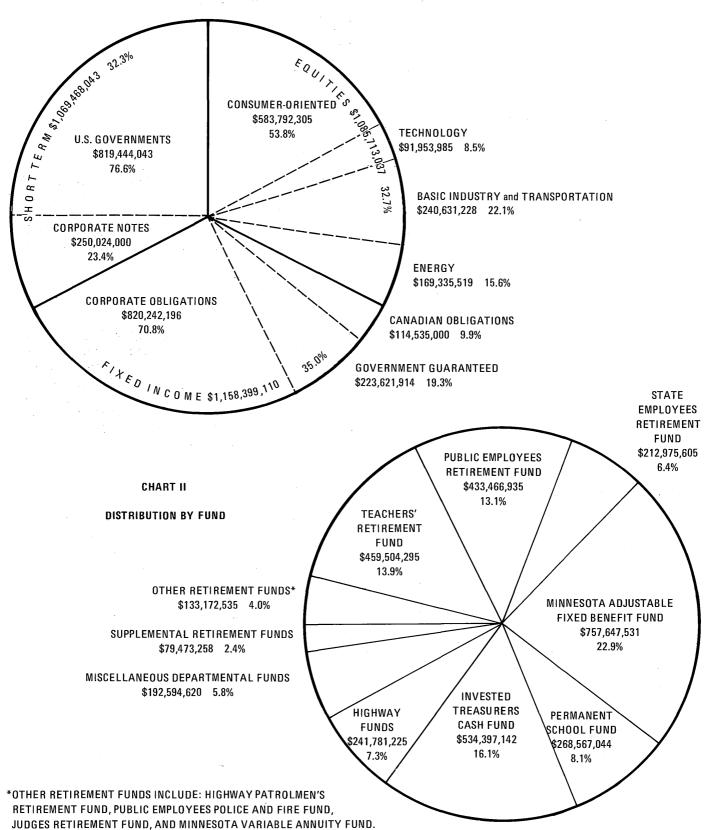
The Permanent School Fund is held for perpetuity with the income allocated to educational needs. This fund may participate in equities to the extent of 20% of the book value; 40% may be invested in corporate bonds; and the balance is invested in U.S. Treasury and agency obligations.

The various retirement funds are invested in accordance with individual statutes. Equity participations generally vary from 40% to 50%. One account which meets specialized retirement needs is invested entirely in common stocks; others emphasize fixed-income securities; one is wholly invested in bonds. The investments authorized for these various funds, as well as the actual portfolios, are listed in the main body of this report, and illustrated by the following charts.

DISTRIBUTION OF \$3,313,580,190 OF INVESTMENTS MANAGED BY THE STATE BOARD OF INVESTMENT JUNE 30, 1977

CHART I

DISTRIBUTION BY ASSET TYPE



WHAT WAS THE ACTUAL RATE OF RETURN, OR YIELD, RECEIVED BY THE VARIOUS FUNDS DURING FISCAL 1977?

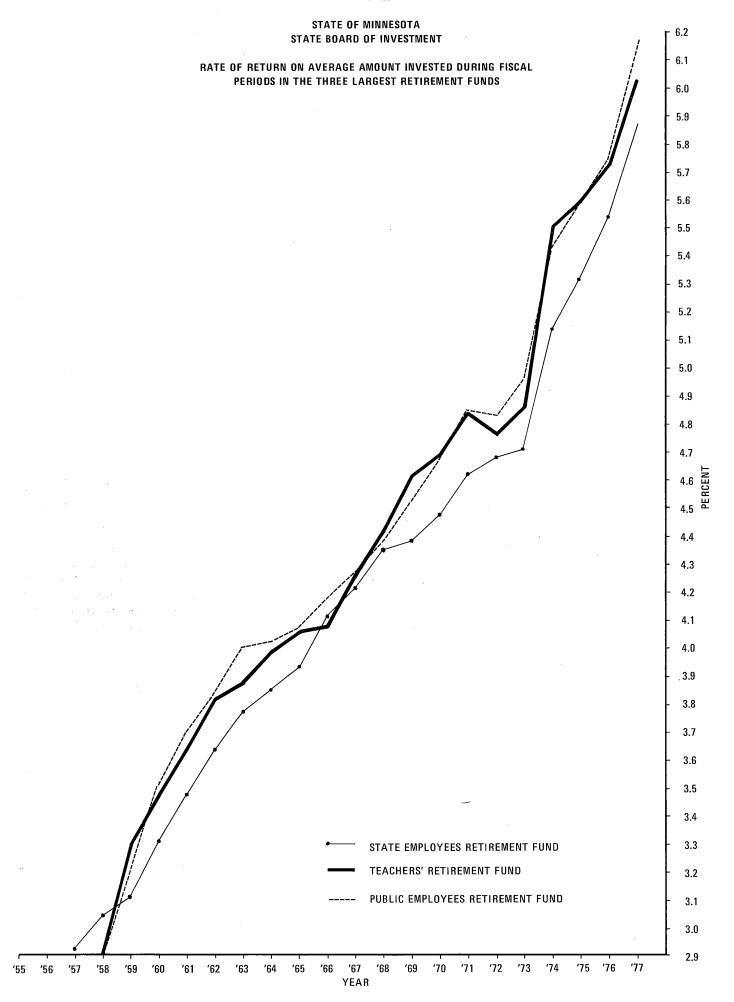
The rate of return is sometimes computed to include the gains and losses in securities prices. Wide variations in annual yield result from combining price fluctuations with dividend and interest income. It may be more appropriate to consider the actual income to the account during the year. Such computations may be made on the basis of the actual dollars received (as a numerator) divided by the amount of money and investments in the account, as averaged from three dates of the fiscal year — the preceding June 30, December 31, and the concluding June 30 — (as a denominator). The approximate yields on the various accounts for fiscal 1977 were:

ACCOUNT	YIELD_
The Invested Treasurer's Cash Fund (all in short-term money market securities)	6.06%
The Permanent School Fund (after an allowance for a transfer to principal	
to compensate for losses due to securities sales over a period of years)	5.63%
The Highway Funds:	
Trunk Highway Fund	5.55%
County State Aid Highway Fund	5.74 %
Municipal State Aid Street Fund	5.89%
The Minnesota Adjustable Fixed Benefit Fund	6.00%
The "Basic" Retirement Funds:	
Highway Patrolmen's Retirement Fund	6.26%
Judges Retirement Fund	8.23%
State Employees Retirement Fund	5.86%
Public Employees Retirement Fund (includes Public Employees Police and Fire Fund)	6.14%
Teacher's Retirement Fund	6.02%
The Supplemental Retirement Fund:	
Fixed Return Account	8.29%
Growth Share Account	3.13%
Income Share Account	6.78%
The Minnesota Variable Annuity Fund	4.78%
(Because of valuations over a two-year period, this account showed a gain of	
15.9463% for fiscal 1977, which became a "Rate of Return" for participants.)	

The 6.00% yield to the Adjustable Fixed Benefit Fund may be misleading in that pensions are based on a two-year moving average of "total return" (as to stock prices), often supplemented by legislative directives to increase pensions further. Pre-1973 retirees now receive pension benefits approximately 40-45% higher than originally authorized. Of this, 30% was mandated by legislation, including the use of "reserves" during the early 1970's, a portion of which was previously earned through the operation of the Fund, but remained as an integral portion of the account. The balance was due to the performance of the fund above the 5% actuarially-assumed rate.

Chart III illustrates, on a historical basis, the rate of return for the three largest retirement funds.

CHART III



The net income to the trust and retirement funds, in total and as a percentage of the amount invested, was higher than during any previous year. It must be emphasized that these yields are based on actual income and do not include theoretical gains or losses determined by market valuations of securities. Bonds currently offer the highest yields to the investor, approximately 8%, while the common stock portfolio yields only 4%; nevertheless, the stocks show a profit above cost despite recent market declines and a Dow Jones Industrial Average of 847.11 on September 30, 1977. The State's bond holdings still show a slight book loss due to purchases, in previous years, of bonds yielding 4% to 7%. The average of the 8% return received on bonds and the 4% on common stocks approximates the 6% earned on the funds listed. It is evident that a higher current yield could be received from a greater participation in fixed income securities, but any potential gain through dividend increases and higher equity prices would thereby be diminished. Dividend increases declared by corporate managements on common stocks during calendar 1977, through October 7, 1977, when this report was being written, had already totaled \$4,683,845.00 on the shares presently owned by the State accounts. This continuing increase of dividend income, compared with decreases in net yields to bondholders due to "calls" and refunding at lower interest rates, provides the major reason for equity investments.

ACTIVITIES OF THE ADVISORY COUNCIL AND THE BOARD DURING FISCAL 1977

At meetings of both the Investment Advisory Council and the State Board of Investment, "quality" was emphasized on all investment purchases. Some common stock sales were made when the Dow Jones Industrial Average was in the high 900's and over 1000. Cash flow into the retirement accounts totaled \$296,926,129.00. Of this amount, \$192,736,582.00 was placed in equity securities, the remaining amount was invested in governmental and corporate bonds. During the year, the Government National Mortgage Association mortgage-backed securities were more attractive from a yield standpoint than corporate debt obligations. Therefore, these securities were purchased in quantity as investments for the Permanent School Fund and various retirement accounts. The Board increased its investment activity as to securities in the "current" funds — represented by tax receipts, the highway funds, and various other accounts. Purchases and sales of U.S. Treasury obligations and short-term corporate notes amounted to \$10.72 billion during the fiscal year.

INVESTMENT BOARD POLICIES

The Investment Board took two major actions to emphasize its social, ethical, and governmental responsibilities during this past year. To minimize the possibility of governmental officials attempting to use private business associations as a means of selling securities to the State or in other ways acting in their self interest, the Board unanimously passed the following resolution on November 20, 1976:

"The Executive Secretary requests that purchases and sales of securities not be made through firms which authorize one or more brokers or other sales representatives — who are also holders of public office or officials in a position to influence legislation — to deal either with the accounts handled by the State Board of Investment or with other public funds in the State of Minnesota. The purpose of this policy is to avoid any possible conflict of interest between the Board and any person in an administrative or legislative position within state or local government who may profit through the placement of securities business by various public funds.

"This policy statement is not meant to include general, overall "year-end" bonuses or other payments made to the entire staff of a securities firm on the basis of total commissions received from all customers."

A copy of the resolution was sent to each investment dealer in Minnesota with whom the Investment Board conducts transactions. Each replied, signifying notice of the Board's position.

It is hoped that this resolution will eliminate the possibility of favoritism by any of the State's retirement accounts, including those managed by the State Board of Investment, through the placement of securities orders with officials in a position to influence legislation or administration.

After several years of discussion regarding the voting of proxies, the Board decided to cast its votes (which had been withheld since a corporate controversy in 1972) for or against management in accordance with a definite resolution regarding policy. The statement unanimously passed by the Board on March 25, 1977, is as follows:

RESOLUTION

STATEMENT OF GENERAL POLICY GUIDANCE REGARDING THE VOTING OF PROXIES BY THE STATE BOARD OF INVESTMENT

WHEREAS, the Investment Board recognizes that when performing their duty of investing the trust funds (pension and other funds) for which they are custodian, their primary responsibility is the prudent and responsible investment of the assets of the funds for the economic benefit of the beneficiaries of the funds; and

WHEREAS, it has become increasingly apparent that the standards of prudence and responsibility should be considered in light of this additional criterion; the social and environmental policies of the corporation in which the State owns or contemplates owning investment; and

WHEREAS, the investing in an enterprise which is flagrantly violating the law or stubbornly ignoring public policy constitutes implicit endorsement of those policies, and the Investment Board is of the opinion that government cannot in good faith support such activity without abrogating its duties to the citizens; and

WHEREAS, it is the Investment Board's Opinion that corporations which do not take the welfare of society and its members into consideration, jeopardize their own financial stability, and in today's world risk depreciation of their investment value,

NOW, THEREFORE, BE IT RESOLVED that the following guideline be adopted: The Investment Board shall not knowingly invest or maintain holdings in those corporations which are in flagrant violation of the law or in stubborn disregard of the social welfare of society, or do not recognize environmental responsibilities in their corporate actions, and are not taking reasonable steps to overcome the situation; and

BE IT FURTHER RESOLVED that the following measures be instituted in the matter:

- A. Policy Regarding Contemplated Investments: The Investment Board will not knowingly invest the trust funds or any other funds of the State in those corporations which are found in violation of the guidelines set forth above.
- B. Policy After Investment: In the case that a corporation in which the State owns securities is found to violate the guidelines above, all or some of the following actions will be taken:
 - 1. The Investment Board will discuss the problem with a representative of the corporation in question for the purpose of:
 - a. expressing the view that, as a shareholder, the State of Minnesota is opposed to such policies.
 - b. being informed as to the progress underway in ameliorating the problem.

- 2. If voting stock in such corporation is held by trust funds administered by the Investment Board, it may be voted in a manner calculated to ameliorate the existing problem.
 - While it is recognized that it is the Investment Board's responsibility to vote all stocks, the Investment Board may solicit recommendations from a sub-committee of the Board concerning the manner of voting stock of a corporation in violation of the guidelines set forth above.
 - b. When deemed necessary to protect the State's interest in the fund and in grave cases, the Investment Board may, upon recommendation of said sub-committee, institute procedures for a shareholder's proposal for the purpose of committing the corporation toward correcting the policy in question.
- 3. In the instance that no recourse mentioned above is available and/or it is shown that the corporation is not taking steps reasonably calculated to ameliorate the problem in question within a reasonable period of time, the Investment Board may sell the State's investment in the corporation, if sale is consistent with sound investment policy for the affected funds.

Much of this statement is based on similar action by the State of Connecticut. The final sentence was added so as to minimize the possibility of action detrimental to investment portfolios through any possible "forced sales".

Governor Rudy Perpich has presided at all Board meetings since Governor Wendell R. Anderson resigned in December, 1976. The meetings have included a comprehensive review of State policies and securities transactions. The valuable advice from the Investment Advisory Council has been presented at Board meetings through the transaction listings and policy resumes by the Executive Secretary. A complete review of investment procedures follows.

* * * *

The Advisory Council was formed in 1961, at the time the statutes first authorized equity investments in Minnesota's retirement funds. Most of the members originally appointed still serve on the Council. Their investment expertise, based on their responsibilities and work as leaders of Minnesota's investment community, is enhanced by this long period of service and their knowledge of retirement legislation and investment problems during the past 16 years. It is to be noted that, despite the unquestioned expertise of these members, their service is offered without compensation. Every member of this Council is, or has been, a portfolio manager or research director of a major Minnesota institution.

The accounts supervised by the State Board of Investment are divided into several groups, each governed by individual statutes and managed under different policies. The fund groupings, together with their approximate book valuations as of June 30, 1977, are as follows:

Invested Treasurer's Cash Fund, \$534.4 million. This fund includes tax receipts. Since 1969, prime quality corporate notes have been eligible for use in this account, in addition to U.S. Treasury and agency obligations maturing within three years.

Highway Funds, \$241.8 million. These accounts include U.S. Treasury obligations, debt instruments issued by U.S. Government agencies and short-term corporate notes due within 270 days of the time of purchase. The monies are used for the building and maintenance of highways, roads and streets throughout the state.

Miscellaneous Welfare, Departmental and Temporary Funds, \$186.9 million. These funds are invested according to the terms of particular statutes or applicable policies, primarily in U.S. Treasury securities. The major portion of these accounts consists of proceeds from bond sales; the monies will be used within a comparatively short period of time for state building needs. Also included are endowment funds and trust accounts held for various institutions. During the past three fiscal years, these funds have been increased through the investment of proceeds from securities issued by the Minnesota Housing Finance Agency. This investment total varies according to the needs of the agency in providing housing assistance to Minnesota residents.

Minnesota Adjustable Fixed Benefit Fund, \$757.6 million. This account, administered by the State Board of Investment, may include a maximum of 50% in stocks with the remainder in fixed-income securities. Retirement benefits are paid to all retired employees from the principal and earnings of this fund. A two-year average "total return" from this fund, in excess of the 5% actuarial assumption, has been used to augment pension benefits. Earnings and market appreciation during the early 1970's resulted in an increase in the pensions paid by the various participating retirement funds from 2% to 4% at the beginning of the 1972 calendar year; increases of 4½% to 5½% were paid at the beginning of the 1973 calendar year. The Legislature provided for an additional 25% increase which was paid in two installments — in July, 1973, and January, 1974. This adjustment was made at the time the statutes applicable to the retirement systems of Minnesota were modified to provide benefits based on salaries paid during the "five-high years" of employment. Because of this complete statutory revision, the reserves accumulated during the early 1970's were used to provide very substantial increases for those previously retired. Despite the lower stock and bond markets experienced in 1973-1975, recent portfolio results indicate additional pension increases in the near future. A onetime \$250 additional pension amount has been provided for the pre-1973 retirees and a general pension increase of up to 4% is possible for 1978.

Basic Retirement Funds, \$1,195.4 million. Six State-managed retirement funds, invested separately for employee groups, include U.S. Treasury, municipal and other governmental securities, U.S. Government-guaranteed obligations, corporate bonds, short-term corporate notes, and common stocks.

Supplemental Retirement Fund, \$79.5 million. This fund was established in 1967 for employees of the State College Board and State Junior College Board. The fund consists of three accounts, one of which may be invested up to 100% in equities, emphasizing potential growth with the accompanying market risks. The second includes long-term bonds and stocks oriented toward current income. The third — the Fixed Return Account — was initiated on July 1, 1974, and includes only bond investments; it provides an interest yield over a period of time commensurate with the average life and call protection inherent in the bonds purchased. Legislatures since 1969 have made one or more of these accounts available for use by police and fire fighter relief associations throughout the state, various county employees, those members of the State service who are "unclassified" and do not have the benefits of tenure, and State employees who wish to participate in a deferred income plan through which a portion of their salaries may be taxed at the rates in effect at the time of their retirement.

Minnesota Variable Annuity Fund, \$43.7 million. This fund was established by the 1969 Legislature and was made effective in early summer, 1970. The account now includes a diversified list of common stocks, some fixed-income instruments, and reserves of short-term securities. The participants are teachers who chose this type of program, which provides retirement benefits based on long-term investment performance. Because of the many advantages inherent in the new "five-high year" plan, the Variable Annuity may not now be opted by new teachers but is still available to present members of the State's educational system.

Trust Funds, \$269.0 million. The Permanent School Fund, invested for the benefit of the school children of Minnesota, includes U.S. Treasury securities and Government-guaranteed obligations, corporate bonds of long and short maturities, and common stocks. The Internal Improvement Land Fund includes only U.S. Treasury obligations.

Because of the differing investment policies applicable to these funds, a short review of the history and needs of the various accounts is provided along with a listing of securities.

INVESTED TREASURER'S CASH FUND

During late summer, 1974, it was evident that tax receipts were somewhat higher than the amounts necessary for immediate State expenditures. This "surplus" was invested in U.S. Treasury, government agency, and high quality corporate securities during late 1974 and early 1975, resulting in substantial investment income for fiscal 1975 and 1976. As this "surplus" was identified in late 1974, securities in an amount exceeding \$100 million were extended in maturity from a few days to a range from nine months to three years. Investments at fiscal year-end 1975 totaled \$607.8 million and declined to \$580.9 million on June 30, 1976. By June 30, 1977, the fund further declined to \$534.4 million; nevertheless, a substantial surplus was still evident in the Invested Treasurer's Cash Fund. Earnings of the State's "current" accounts have shown a wide variance due to differences in both the amount invested and in short-term interest rates. During recent years, such earnings have varied from \$4.2 million in fiscal 1972 to a high of \$37.5 million in fiscal 1975. Earnings declined to \$35.0 million for fiscal 1976 and \$24.8 million for fiscal 1977. The declines were due both to somewhat lesser fund totals throughout the year and lower short-term interest rates.

Although it is very difficult to estimate average yields in this account because of variances in the amount invested, yields earned by this fund approximated 8.68% in fiscal 1975, 6.83% in fiscal 1976, and 6.06% in fiscal 1977.

Under the terms of 1973 legislation, the investment department buys and sells according to oral certification of cash available by the staff of the State Treasurer and the Department of Finance. In recent years, there has been an increase in the use of repurchase agreements and of short-term instruments so that funds may earn money over the shortest of periods — sometimes one day or over a weekend. Statutes require that securities in the Invested Treasurer's Cash account extend no longer than three years in maturity.

THE HIGHWAY FUNDS

The funds held for street, road and highway uses in Minnesota may be invested in bonds eligible for purchase by the Permanent School Fund and commercial paper used in the retirement accounts. At present, these funds own short-term U.S. Treasury and agency securities, repurchase agreements backed by U.S. Treasury or agency obligations, short-term corporate notes and securities guaranteed by the U.S. Government through the Government National Mortgage Association. The Commissioner of Transportation certifies the amounts not needed in the immediate future; these sums are invested in maturities approximating the expected disbursement schedule of the Transportation Department. The program includes considerable reinvestment and adjustment of maturity schedules because of the time necessary for planning, purchase of right-of-way and construction of highways. The amount of highway funds invested fluctuates throughout each fiscal year. They varied from a low of \$134.0 million in fiscal 1975 to a high of \$208.5 million in fiscal 1974 and from \$183.5 million to \$241.8 million during fiscal 1977.

The earnings from these accounts increased from \$1.7 million in fiscal 1959 to \$13.8 million in fiscal 1974. Earnings declined to \$12.5 million in fiscal 1975, and \$11.0 million in fiscal 1976. They totaled \$12.1 million in fiscal 1977.

The income earned from these highway fund investments benefits the counties and municipalities in Minnesota directly through the County State Aid Highway Fund and the Municipal State Aid Street Fund. Earnings from the Trunk Highway Fund are used for the overall state highway program.

STATE COLLEGES, WELFARE AND DEPARTMENT OF CORRECTIONS

The State Board of Investment is responsible for the investment of individual and pooled endowment accounts applicable to scholarships and the support of state institutions, certain funds designated for welfare purposes, and patient and inmate accounts in both welfare and correctional institutions. Pur-

chases are limited to U.S. Treasury obligations, except in instances where individual gifts or bequests provide for the use of other investments.

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Schedule I reviews the short-term corporate notes and the U.S. Government and agency obligations held by the Invested Treasurer's Cash Fund, the highway funds, and the miscellaneous departmental funds on June 30, 1977. As has been indicated in previous paragraphs, the investment department has substantially increased its activity in the use of these short-term debt obligations. In order to maximize yields and, thereby, increase the income to the accounts. The money market securities division of the investment department supervised short-term securities totaling over \$965 million on June 30, 1977. In addition to those listed on Schedule I, there were substantial short-term investments held by the retirement funds and the Permanent School Fund.

THE MINNESOTA ADJUSTABLE FIXED BENEFIT FUND

The Minnesota Adjustable Fixed Benefit Fund includes the assets representing the reserves from which pensions are paid to individuals who have retired; these recipients are members of various public funds including the six basic retirement funds managed by the State Board of Investment and the fund administered by the Municipal Employees Retirement Board of Minneapolis. There has been a substantial revision in this portfolio during the past five years because of the many different holdings transferred into the account during the 1969-70 fiscal year. Although substantial reserves were accumulated to make possible the continuation of a high level of pensions during years of stock price downturn, these reserves were distributed to retirees during 1974 to compensate partially for the higher pensions now being paid under the "five-high year" plan. Because the 1973 and 1974 downturn in the stock market coincided with a higher rate of inflation, there is some impetus to use the increased yield generated through the price appreciation of both bonds and stocks to provide a basis for adjusting pensions as a compensation for inflationary pressures. In this way, the employer group - the State, municipality, county or school board - would face the risks of long term market fluctuations, whereas the individual would receive benefits more dependent upon actual changes in the cost of living. Concern has been expressed, however, that this account would lose its "complete funding" and become less sound from an actuarial standpoint if long-term benefit improvements were based on the cost of living rather than on actual investment performance. Favorable income gains were apparent during the past two years. It is probable that these increases will justify further benefit improvements in early 1978.

Under the provisions of 1971 legislation, the net return to the Minnesota Adjustable Fixed Benefit Fund was determined on the basis of income and an average of the cost-to-market relationships of stocks taken bi-monthly over a two-year period. This interpretation of investment results meant that a substantial contribution toward the cost of the increased pensions in the State-managed funds was met from this "total return" during the period through 1973; the portion attributable to the Municipal Employees Retirement Board of Minneapolis was used toward higher pensions and increased reserves. In recent years, whenever an increase was granted, the Legislature established a "new base" below which pensions may not decline.

Common stocks may comprise up to 50% of this portfolio, with convertible debentures limited to an additional 10%. On June 30, 1977, the percentage committed to common stock investments, on a net original cost basis, was 47.27% of the portfolio. This fund increased in value by \$94.6 million during the fiscal year.

THE BASIC RETIREMENT FUNDS

The State Investment Board manages six accumulation retirement accounts which include both employer and employee contributions during the employee's working period; at the time of retirement, the assets are transferred to the Adjustable Fixed Benefit Fund. Common stocks may total 50% of these accumulation accounts. At the time of this writing, equities comprise approximately 49% of each fund on

a net original cost basis, with the remainder invested in fixed-income securities of the U.S. Government, its agencies, Canadian governmental units, and corporations.

The 1969 Legislature made it possible for each fund to include a small portion of unrealized market gains in the income portion of the account through a procedure which applies after the market valuations of equities exceed the original cost by 15% for six consecutive two-month periods — or one year. At such a time, an amount equal to 3% of the cost of the equities could be added to the retirement fund for actuarial and accounting purposes. The first such increase occurred on October 31, 1972; this was followed by a second increase on December 31, 1972. Because of the probability that such market increases would not continue, it was decided that each of these increases would be added to the income accounts in three equal installments during three successive fiscal years. The first increase applied during fiscal 1972, 1973 and 1974, while the second increase was applicable in fiscal 1973, 1974 and 1975.

The 1973 Legislature modified the law to provide for such an increase or decrease whenever the market valuation of equities varied from the revised cost figure by 10% for six consecutive two-month periods. The market downturn during 1973 and 1974 resulted in the first 3% downward revision on February 28, 1975. A second decrease applied to several of the retirement funds on April 30, 1975. Because the 1973 statute authorized the computation of such yield declines over a five-year period, it is anticipated that the net effect of such calculations will be minimal when computing fund yield performance on a long-term basis.

By early calendar 1975, because of rising stock prices, it was evident that there would be no further downward adjustment in the statutory valuation of equities for an extended period. Schedule III indicates the net yield accruing to the three largest basic retirement funds during the period 1957 through 1977. During these 21 years, the yield has increased from less than 3% to approximately 6%. Footnotes 14 and 15, following Schedule III, explain the effect of the statute relating equity valuations to the stock market.

Schedule IV lists the securities held in the largest basic retirement funds on June 30, 1977. Because of the identical purpose for which these accounts are established, it has been investment department policy to use the same securities in each account, whenever funds have been available. Differing flows of new money, however, have resulted in varying cost and a somewhat different overall composition of these three accounts.

The Public Employees Police & Fire Fund was established during the early 1960's in order to provide an investment vehicle for the smaller police and fire fighter organizations throughout the state as well as for larger organizations which chose to participate in this retirement plan. Schedule V includes the fixed-income securities in this account on June 30, 1977, and Schedule VII lists the equity portfolio. This account showed a sizable increase in value — from \$57.5 million to \$66.6 million — during the past fiscal year.

The Highway Patrolmen's Retirement Fund resulted from the merger in 1969 of the State Police Officers' Retirement Association and the Highway Patrolmen's Retirement Association. Because the two previous accounts were quite small and had limited and unpredictable flows of new money, the new merged account appears to be more manageable; this has benefited both groups. Schedule VI includes the fixed-income securities in this account on June 30, 1977, and Schedule VII lists the equity portfolio.

State, municipal and school district bonds comprised over 71.0% of total investments in these retirement funds as recently as the late 1950's; such holdings declined to 0.3% by June 30, 1977. This decline was due to the sale and maturity of bonds, as well as the placement of all new money in other types of securities. Because most of the remaining "municipals" consist of odd lots that carry either no rating or a low rating by the services, it is presumed that a large portion of these bonds must be held to maturity.

The Judges Retirement Fund was established in 1974; no permanent investments were purchased until the 1975 fiscal year. Because of statutory limitations, the percentage of funds invested in equities may be increased by only 5% of total investments each year. During the 1977 fiscal period, the fund was subject to a 15% equity limitation. Schedule VIII lists the investments as of June 30, 1977.

THE MINNESOTA SUPPLEMENTAL RETIREMENT FUND

The three accounts of the Minnesota Supplemental Retirement Fund are invested in accordance with three different philosophies in order to meet the individual needs and desires of the participants. The income share account, limited to 50% in common stock, consists primarily of high quality corporate bonds and emphasizes comparatively higher yielding equities of well-known companies. The growth share account, on the other hand, may participate in the equity market up to 100% of total assets and includes stocks of companies offering a low current yield and representing firms which may have significant long-term potential from the standpoint of earnings growth. These stocks tend to fluctuate in price to a far greater extent than those in the income share account. The fixed return account, invested entirely in bonds, is not subject to market fluctuations. The amounts contributed each year into this account, however, will earn varying interest rates depending upon the existing yield structure.

The growth share and income share accounts were established on a unit basis on October 1, 1967, with each unit worth \$10.00 on that date; due to a two-for-one split on June 30, 1973, the current units had a net worth of \$5.00 on inception date. A summary of the market valuations experienced by the two accounts since the beginning of the program in 1967 is as follows (as adjusted for the two-for-one split):

	Income Sha	re Account	Growth Sha	are Account
	High	Low	High	Low
Oct. '67 — Dec. '68	\$5.52 (Nov. '68)	\$4.98 (Oct. '67)	\$5.44 (Nov. '68)	\$4.52 (Feb. '68)
1969	5.40 (Jan.)	4.99 (Dec.)	5.32 (Oct.)	4.71 (July)
1970	5.69 (Dec.)	4.81 (Jan.)	4.94 (Feb.)	3.73 (June)
1971	6.30 (Dec.)	5.86 (Jan.)	6.21 (Dec.)	5.09 (Jan.)
1972	7.11 (Dec.)	6.36 (Jan.)	7.92 (Dec.)	6.47 (Jan.)
1973	7.15 (Sept.)	6.69 (Nov.)	7.53 (Jan.)	5.29 (Dec.)
1974	6.80 (Feb.)	5.31 (Sept.)	5.35 (Jan.)	3.21 (Sept.)
1975	7.12 (Dec.)	6.26 (Jan.)	5.17 (June)	3.95 (Jan.)
1976	8.84 (Dec. <u>)</u>	7.58 (Jan.)	5.72 (Dec.)	5.28 (May)
Jan. — June '77	8.84 (June)	8.51 (Mar.)	5.36 (June)	5.07 (May)

Schedule IX lists the assets in the income share account on June 30, 1977. Both equity and bond valuations have declined since calendar year-end 1976. Nevertheless, the stocks in the income share account have held their value particularly well due to the market's new emphasis on "yield securities". The comparative "safety" of this portfolio, due to the type of stock used and the diversification between fixed-income and equity securities, has resulted in its use by most retirement organizations eligible to participate in the Supplemental Retirement Fund. It is anticipated that the results, over a period of years, will never be spectacular, but will tend to be satisfactory from the standpoints of safety, yield and long-term growth.

Schedule X consists of a listing of the securities in the growth share account on June 30, 1977. Under the terms of the Prospectus for the growth share account, it is a policy of the department to maintain a steady investment in stocks of companies which evidence growth potential. It has also been an established policy to avoid extreme "buy" or "sell" programs which could result in a high cash position for a brief period of time. Such a program can be disastrous if the market makes unanticipated moves. This means that the account is in a reasonably fully-invested position at all times and will continue to be subject to significant changes in market values, particularly during periods of stock market increases, as in 1972, and during times of market uncertainty and decline, such as during 1973 and 1974. Although the securities in this account have shown market gains during the recovery that began in 1975, these stocks have not experienced the acceptance evidenced by the higher-yielding shares in the income share account.

The assets in the fixed return account, established on July 1, 1974, are listed in Schedule XI. Unit valuations do not change; they are arbitrarily set at \$5.00 per unit. The return from this fund is based entirely upon the rate of interest received from the bonds purchased in the account.

Under the provisions of the applicable statutes, the Investment Board establishes an "indicated rate" of return for the coming fiscal year on July 1. On July 1, 1974, this rate was set at 8.50%. The bonds purchased during the fiscal period provided a yield somewhat higher than that anticipated. The participants — then consisting only of individual retirement funds — received 9.10% on all contributions made during the 1975 fiscal year. During fiscal 1976, the plan was broadened in scope to include individuals who wish to participate in a fixed-return investment under various retirement or deferred income plans. The return to individual participants was set at 8.9% for those contributions received during the 1976 fiscal year; in July, 1977, the return for individuals was established at 8.3% for 1977 fiscal contributions.

The amounts received from the various retirement organizations were invested at a rate which may, presumably, be applicable for the year of contribution plus an additional nine years. This extended period of "guaranteed" income is due primarily to the "call" and "refund" protection received on the bonds purchased. The participating retirement organizations received 8.8% for a ten-year period on those contributions received during fiscal 1976 and 8.1% for those received in fiscal 1977. The slightly lower rate attributed to the institutional participants is due to the fact that a portion of the income will be set aside in the form of reserves to provide for any possible future diminution of income. Because of the uncertainties in the economy, an assumed rate for the 1978 fiscal year has been established at 7.0%. Participants will be paid a higher rate of return if the securities purchased during the coming year warrant such payments.

There is a substantial amount of interest in the fixed-return account because of the investment uncertainties made evident by the 1973-74 decline in both the stock and bond markets. The idea of a definite interest earnings — with no dependence upon stock or bond market fluctuations — apparently has great appeal to many fund participants. Because of the response to this new account, the assets increased from \$4.2 million to \$8.6 million during the 1977 fiscal year. The significant influx of contributions to this account has resulted in considerable reserves being held in short-term investments. These monies will be placed in securities of longer maturity for which commitments are being made. It is the intent of the investment department that over 40 issues of fixed-income securities comprise the account, so that the fund may be assured of adequate industry diversification. It is emphasized that the bonds purchased are concentrated in the AAA and AA quality levels. This will add to the safety applicable to the fund contributions and should minimize the chance of losses.

MINNESOTA VARIABLE ANNUITY FUND

The Minnesota Variable Annuity Fund was advocated prior to the adoption of the "five-high year" plan by the Teachers Retirement Association. The participants received a net return of 5.4500% in fiscal 1971, 9.1670% for fiscal 1972, and 6.2393% for fiscal 1973. During fiscal 1974, the participants suffered a decline of 4.1478%, followed by another decrease of 17.9638% during fiscal 1975, and a decline of 0.0101% for the fiscal year ended June 30, 1976. The laws applicable to valuations and computation of net return dictate that a two-year period be used in calculating increases or decreases to the fund. As has previously been indicated in this report, the stock and bond market "lows" of 1974 were used in these calculations through fiscal 1976. Because the two most recent fiscal years have evidenced higher stock prices, the 1977 fiscal results showed an increase of 15.946%. Cost-to-market ratios already applicable to the June, 1978, computations indicate a probable minor positive net return for the next fiscal year.

Although most variable plans are based entirely on participation in equity investments, the wide-spread use of this fund and the fluctuations in the stock market since the account's inception have caused the investment department to adopt a policy which includes approximately 25% to 35% in fixed-income investments.

The option for the Variable Annuity was terminated during fiscal 1974. Therefore, the fund will continue only as an investment medium for those teachers who have already chosen to have a portion of their retirement monies invested in accordance with the Variable Annuity concept. The securities in this fund on June 30, 1977, are listed on Schedule XII.

THE PERMANENT TRUST FUNDS

The State's permanent trust funds showed their greatest rate of growth during the 1940's and 1950's. Until a constitutional amendment was passed in 1956, half of the receipts from the iron ore occupation tax accrued to the principal of the permanent trust funds, which were invested for the benefit of the schools, the University of Minnesota and other state institutions. In recent years, the entire receipts from this tax have been applied directly toward meeting the State's current educational needs.

During the years immediately following the adoption of the constitutional amendment, long-term low-coupon U.S. Treasury bonds were sold from the Permanent School Fund, with the proceeds being invested in higher-yielding corporate securities. In accordance with this amendment, corporate bonds were purchased to the approximate maximum of 40% of the fund. During the past several years, however, mortgage-backed securities guaranteed by the U.S. Government and issued through private organizations in cooperation with the Government National Mortgage Association have offered a yield comparable to, or greater than, that received from corporate bonds of similar quality. These mortgage-backed securities were purchased during the summer months of 1974 at yields as high as 10.14%. Because of the lack of inflow of new cash into this fund, the gradual return of principal offered by this type of investment has been very attractive; we have thus been able to maintain a cash flow for current investment needs.

Arrangements between the State Board of Investment and the Minnesota Banker's Association have resulted in a program through which the Permanent School Fund has purchased those portions of Small Business Administration loans which are guaranteed by the United States Government. These loans are arranged through various banks in Minnesota and are "pooled" through the facilities of the Summit State Bank of Richfield. This program, initiated through the cooperation of the Governor, the State Treasurer and the Minnesota Banker's Association, appears to offer a unique opportunity to achieve a satisfactory yield and an adequate cash flow to this permanent trust fund. It also marks a unique opportunity for following prudent investment principles in achieving an appropriate yield, while aiding the development of businesses in Minnesota.

Because of the comparative attractiveness of United States Government-backed securities, the corporate bond portfolio has been reduced to 28.9% of the book value of the Permanent School Fund; it is anticipated that the holdings of high-quality debt securities will be increased as more appropriate yield spreads become prevalent. United States Government and Government-guaranteed obligations constitute 47.3% of the book value of this account; common stock investments are maintained near the 20% limit.

Schedule XIII indicates that the investment changes have resulted in an increase in net yield from 2.68% during the late 1950's to 5.63% during the 1977 fiscal year. A marked increase in return during the past six years was possible because of the use of United States Government-guaranteed obligations. A portion of the income will be transferred on an annual basis to the principal of the account to replenish the book losses taken through the sale of long-term United States Treasury and corporate fixed-income obligations during the past 16 years.

Schedule XIV lists the securities in the Permanent School Fund on June 30, 1977.

* * * *

A review of policies concerning the placement of business, together with a summary of transactions completed during the fiscal year from July 1, 1976, through June 30, 1977, follows the schedules described above.

* * * * *

The investment results achieved in fiscal 1976 and 1977 have been satisfactory. The cooperation and advice received from the members of the State Board of Investment and the Advisory Council on State Trust Funds played a most important part in achieving these results. It is now evident that the funds benefited considerably through the significant purchase program completed during late 1974 and 1975. Considering the size of the fund and varying interest rates, earnings of the Invested Treasurer's Cash Fund have been increased due to the attention given to current bank balances by the Treasurer's and Finance offices.

The many Minnesota investment accounts must be managed under widely different investment policies and procedures. The Advisory Council has been of great help in determining the objectives for the various funds. It is hoped that each of these investment accounts may be managed for the lasting benefit to all of Minnesota — both the retirement beneficiaries and the State's citizens.

Respectfully submitted,

Robert E. Blixt, C.F.A.

Executive Secretary

SCHEDULE I

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

SHORT-TERM CORPORATE NOTES AND U.S. GOVERNMENT OBLIGATIONS HELD BY VARIOUS FUNDS June 30, 1977

		Me. II			
	Invested Treasurer's		County	Municipal	Miscellaneous Departmental
Security SHORT-TERM CORPORATE NOTES	Cash Fund	Trunk	State Aid	State Aid	Funds
Maturity less than 30 days	\$103,500,000 54,000,000	\$ 16,166,000 15,700,000	\$17,861,000 10,350,000	\$ 6,056,000 7,135,000	_
Maturity 30-270 days Total Short-Term Corporate Notes	\$157,500,000	\$ 31,866,000	\$28,211,000	\$13,191,000	
· · · · · · · · · · · · · · · · · · ·					
U.S. TREASURY SECURITIES AND GOVERNMENT AGENCY SECURITIES	S				
Bills					
Maturity less than 30 days Maturity 30-90 days	\$ 1,225,000	\$ 2,490,000	\$ 425,000 1,200,000	\$ 1,510,000	\$ 3,950,000
Maturity 3-6 Months Maturity 6-12 Months		_	2,050,000 —	2,050,000 —	26,915,000 525,000
Total Bills	\$ 1,225,000	\$ 2,490,000	\$ 3,675,000	\$ 3,560,000	\$ 31,390,000
Repurchase Agreements					
Maturity less than 30 days Maturity 30-45 days	\$ 67,100,000 -	\$ 19,500,000 5,200,000	\$ 6,967,000 -	\$ 300,000 -	\$ 20,081,000 500,000
Total Repurchase Agreements	\$ 67,100,000	\$ 24,700,000	\$ 6,967,000	\$ 300,000	\$ 20,581,000
Government Agency Securities	¢ cc 100 000	ė 4 000 000	\$ 7,000,000	\$ 4,000,000	\$ 14,080,000
Maturity less than 30 days Maturity 30-90 days	\$ 66,100,000 8,800,000	\$ 4,000,000 12,400,000	6,400,000	4,000,000	28,270,000
Maturity 91-180 days Maturity 6 months-1 year	119,775,000 23,000,000	2,500,000 5,000,000	9,000,000 8,000,000	7,000,000 7,950,000	32,000,000 25,003,000
Maturity over 1 year	8,000,000	4,000,000		2,000,000	20,035,000
Total Government Agency Securities	\$225,675,000	\$ 27,900,000	\$32,400,000	\$24,950,000	\$119,388,000
Federal Housing Administration Certificates					•
8.00% River Crossing Apartments due 11-30-78	\$ 647,142	_	_	_	-
Total Federal Housing	S 647,142				
Administration Certificates	S 647,142	_	_	_	_
Government National Mortgage Association, Guaranteed Mortgage					
Backed Securities 6.50% IDS Mortgage Corp. due					
9-15-88 #1168 6.50% IDS Mortgage Corp. due	-	\$ 125,000	-	_	-
10-15-88 #1169	_	300,000	-	_	-
6.50% IDS Mortgage Corp. due 5-15-90 #2290	-	1,075,000	_	_	_
6.50% IDS Mortgage Corp. due 6-15-90 #2291	_	1,275,000	_	_	_
6.50% IDS Mortgage Corp. due 7-15-90 #2424	_		\$ 1,325,000	_	_
Total Government National Mortgage			* */		
Association, Guaranteed Mortgage Backed Securities	_	\$ 2,775,000	\$ 1,325,000	_	-
U.S. Government-Guaranteed					
Obligations 6.25% Export-Import Bank due 8-2-77	_	\$ 5,000,000	\$ 1,000,000	\$ 1,000,000	_
6.875% FHA Insured Notes due 8-31-77	_	4,984,552	998,155	-1,498,518	_
6.45% SEDCO Maritime, Inc. due 12-31-77	_	1,500,000		500,000	_
Total U.S. Government-Guaranteed					
Obligations	_	\$ 11,484,552	\$ 2,498,155	\$ 2,990,010	_
U.S. Treasury Notes and Bonds 8.25% Notes due 8-31-77	\$ 5,000,000	-			-
8.375% Notes due 9-30-77 7.25% Notes due 12-31-77	5,000,000 3,000,000	_	\$ 3,000,000 1,630,000	\$ 1,200,000 1,000,000	_ \$ 3,045,000
6.375% Notes due 1-31-78	5,000,000	-	´- ˙	· - ·	_ 123,000
6.25% Notes due 2-15-78 7.125% Notes due 5-15-78		_	_	_	60,000
7.875% Notes due 5-15-78 7.125% Notes due 5-31-78	15,000,000 6,000,000	_	_	_	40,000 —
Total Maturities less than 1 year	\$ 39,000,000	-	\$ 4,630,000	\$ 2,200,000	\$ 3,268,000
6.875% Notes due 7-31-78	\$ 8,000,000	-	_	-	-
6.625% Notes due 8-31-78 6.25% Notes due 9-30-78	5,000,000 —	_	\$ 660,000	_	
5.875% Notes due 10-31-78 6.00% Notes due 11-15-78	_	- \$ 2,000,000	3,000,000	- \$ 1,000,000	
5.25% Notes due 12-31-78 5.875% Notes due 2-28-79	10,000,000	_	=	_	15,000 -
6.00% Notes due 3-31-79 6.125% Notes due 5-31-79	7,250,000	_	-	_	215,000 11,000,000
6,875% Notes due 8-15-79	8,000,000	2,000,000	2,000,000	3,000,000	
6.25% Notes due 8-15-79 7.00% Notes due 11-15-79		_	_	_	196,000 13,000
6.50% Notes due 2-15-80 4.00% Notes due 2-15-80	5,000,000 —	_	_	_	40,000 28,500
6.875% Notes due 5-15-80	\$ 43,250,000	¢ 4 nnn nn		<u> </u>	2,000 \$ 11,621,500
Total Maturities 1-3 years	φ _. 43,250,000	\$ 4,000,000	, a a,aau,uuu	, 5 4,000,000	₩ 11,021,000

	Invested	. н	os	Miscellaneous		
Security	Treasurer's Cash Fund	Trunk	County State Aid	Municipal State Aid	Departmental Funds	
9.00% Notes due 8-15-80	_	_	_	_	\$	49,000
3.50% Bonds due 11-15-80	_	_		_		5,000
7.75% Notes due 11-15-81	-	_		_		7,000
6.375% Bonds due 2-15-82	_	-	_	-		9,000
Total Maturities 3-5 years	_				\$	70,000
7.875% Notes due 11-15-82	_	_	_	_	\$	34,000
8.00% Notes due 2-15-83	_		_	_		2,000
3.25% Bonds due 6-15-83	-	_	_	_		50,500
6.375% Bonds due 8-15-84	_	-	-	-		74,000
4.25% Bonds due 5-15-85	-	-	-	-		19,000
7.875% Notes due 5-15-86	-	_	_			245,000
8.00% Notes due 8-15-86	_	-	_	_		90,000
Total Maturities 5-10 years					\$	514,500
3.50% Bonds due 11-15-98	_	_	_	-	\$	50,000
Total Maturities more than 10 years					\$	50,000
Total U.S. Treasury Notes and Bonds	\$ 82,250,000	\$ 4,000,000	\$10,290,000	\$ 6,200,000	\$ 1	5,524,000
Total U.S. Treasury, Government Agency, and Government Guaranteed Securities	\$376,897,142	\$ 73,349,552	\$57,155,155	\$38,008,518	\$18	6,883,000
Total Short-Term Corporate Notes and U.S. Government Obligations Held By Various Funds	\$534,397,142	\$105,215,552	\$85,366,155	\$51,199,518	\$18	6,883,000

Note: "The above mentioned short-term corporate notes and U.S. Government obligations total \$963,061,367.00. If the short-term corporate notes and U.S. Treasury and agency security investments owned by the retirement funds and Permanent School Fund are included, a total of \$1,056,940,367.00 face value of investment securities were managed by the Money Market Securities Division of the Investment Department on June 30, 1977."

SCHEDULE II

MINNESOTA ADJUSTABLE FIXED BENEFIT FUND

June 30, 1977

RESUME OF ASSETS IN ACCOUNT

CASH CERTIFIED FOR INVESTMENT	\$ 74,419.45
MONEY MARKET SECURITIES	
Bills Maturities up to 28 days	\$ 3,435,000.00
Repurchase Agreements Maturities up to 7 days	\$ 20,000,000.00
Short-Term Corporate Notes Maturities up to 153 days	\$ 12,263,000.00
UNITED STATES GOVERNMENT-GUARANTEED OBLIGATIONS (See Listing Below)	\$ 56,953,927.70
UNITED STATES GOVERNMENT AGENCY OBLIGATIONS (See Listing Below)	\$ 3,000,000.00
CANADIAN GOVERNMENTAL OBLIGATIONS (See Listing Below)	\$ 27,760,000.00
CORPORATE BOND OBLIGATIONS (See Listing Below)	\$261,829,876.76
CONVERTIBLE DEBENTURES (See Listing Below)	\$ 5,294,375.00
DEFERRED YIELD ADJUSTMENT ACCOUNT*	\$ 5,416,754.24
COMMON STOCKS (See Listing Below) TOTAL ASSETS IN ACCOUNT (for actuarial purposes; not indicative of true market value)	\$361,620,177.67 \$757,647,530.82

^{*}This account signifies an amount equal to the discount at which fixed-income securities have been sold at less than amortized cost; the entire amount is being accumulated over a term equal to the average maturity of the bonds sold.

Note: Bond investments are listed at face value; convertible debentures and common stocks are listed at market value.

SCHEDULE II continued

UNITED STATES GOVERNMENT-GUARANTEED AND AGENCY BONDS, CANADIAN GOVERNMENTAL OBLIGATIONS AND CORPORATE BOND HOLDINGS

June 30, 1977

	Tues of	M-Auria.	Caupon	Average	Total
Company	Type of Security	Maturity Date (a)	Rate 	Yield %	Amount (000) (b)
UNITED STATES GOVERNMENT- GUARANTEED OBLIGATIONS					
GOVERNMENT NATIONAL MORTGA ASSOCIATION, GUARANTEED MORTGAGE-BACKED SECURITIES	GE				
Advance Mortgage Corp.	Mtg. Backed Cert.	02-15-2006	8.500	8.666	\$ 1,880
American Mortgage Co.	Mtg. Backed Cert.	07-15-2006	8.000	8.173	963
Atlantic Mortgage Corp. Baker Mortgage Co.	Mtg. Backed Cert.	09-15-2004	8.500	9.695	990
Banco Mortgage Co.	Mtg. Backed Cert. Mtg. Backed Cert.	08-15-2006 05-15-2006	8.000 8.250	8.173 8.491	993 3,830
Barnes, James T.	Mtg. Backed Cert.	05-15-2004	8.000	9.684	829
Calif. Federal Mortgage	Mtg. Backed Cert.	04-15-2006	8.250	8.491	1,898
Calif. Federal Mortgage Cameron-Brown South	Mtg. Backed Cert. Mtg. Backed Cert.	10-15-2006 05-15-2006	8.000 8.250	8.162 8.511	483 974
Citizens Mortgage	Mtg. Backed Cert.	03-15-2006	8.250	8.501	1,861
Colonial Mtg. Alabama	Mtg. Backed Cert.	09-15-2004	9.000	10.138	849
Colonial Mtg. Alabama Colwell Co.	Mtg. Backed Cert. Mtg. Backed Cert.	10-15-2006 11-15-2006	8.000 8.000	8.162 8.173	1,999
Commerce Mortgage	Mtg. Backed Cert.	10-15-2004	8.250	8.522	984 824
Curry, Chartes F. Co.	Mtg. Backed Cert.	07-15-2006	8.000	8.173	1,002
First Mortgage Corp.	Mtg. Backed Cert.	11-15-2004	9.000	10.148	869
Fort Wayne Mortgage Foundation Mortgage	Mtg. Backed Cert. Mtg. Backed Cert.	04-15-2004 09-15-2006	8.000 8.000	9.684 8,173	1,715 951
Glenn Justice	Mtg. Backed Cert.	10-15-2004	9.000	10.138	791
Guild Mortgage Co.	Mtg. Backed Cert.	10-15-2004	9.000	9.798	2,558
Homestead Savings International Mortgage	Mtg. Backed Cert. Mtg. Backed Cert.	01-15-2007 02-15-2006	8.000 8.500	8.173	1,005
Kissell Company	Mtg. Backed Cert.	10-15-2004	9.000	9.695	893 2,405
Lumbermans Investment	Mtg. Backed Cert.	05-15-2006	8.000	8.173	983
Mortgage Associates	Mtg. Backed Cert.	07-15-2005	8.000	8.173	930
Mortgage Investment Co. Northland Mortgage Co.	Mtg. Backed Cert. Mtg. Backed Cert.	10-15-2006 10-15-2006	8.000 8.000	8.162 8.260	970
Pfefferkorn Co.	Mtg. Backed Cert.	08-15-2006	8.000	8.173	1,991 993
Progress Mortgage Co.	Mtg. Backed Cert.	06-15-2006	8.000	8.173	1,004
Regional Investment Co. Rubiola, Jacob	Mtg. Backed Cert. Mtg. Backed Cert.	10-15-2006	8.000	8.162	996
Seattle Mortgage Co.	Mtg. Backed Cert.	01-15-2007 10-15-2006	8,000 8,000	8.162 8.162	1,005 497
Security Pacific Mtg.	Mtg. Backed Cert.	01-15-2006	8.500	8.645	963
Suburban Coastal Co.	Mtg. Backed Cert.	02-15-2006	8.500	8.645	926
Timber Investment Co. Valley Mortgage Co.	Mtg. Backed Cert. Mtg. Backed Cert.	09-15-2006 07-15-2006	8.000 8.000	8.260 8.260	983
Valley Mortgage Co.	Mtg. Backed Cert.	08-15-2006	8.000	8.260	987 996
Western Pacific Fin.	Mtg. Backed Cert.	09-15-2006	8.000	8.162	1,969
Western Pacific Fin.	Mtg. Backed Cert.	12-15-2006	8.000	8.162	1,992
TOTAL GOVERNMENT NATIONAL GUARANTEED MORTGAGE-BACK		UN,		8.650%	\$ 49,751
GOVERNMENT-GUARANTEED					
MERCHANT MARINE BONDS					
American Pres. Lines States Steamship Co.	Government Guar. Bond Government Guar. Bond	11-01-1991 03-31-1993	4.800 5.100	5.610 5.100	\$ 1,405 2,400
U.S. Line Co. of N.J.	Government Guar. Bond	10-01-1987	5.000	5.000	1,809
U.S. Line Co. of N.J.	Government Guar, Bond	11-01-1986	4.375	5.990	1,584
TOTAL GOVERNMENT-GUARANT	EED MERCHANT MARINE	BONDS		5.370%	\$ 7,198
TOTAL UNITED STATES GOVERN	MENT-GUARANTEED OB	LIGATIONS		8.235%	\$ 56,949
UNITED STATES GOVERNMENT AGENCY OBLIGATION	.NC				
Fed. Natl. Mortgage Assoc.	Debenture	10-11-1982	8.600	8.600%	\$ 3,000
	Depontate	10 11 1002	0.000	0.00070	0 3,000
CANADIAN GOVERNMENTAL PROVINCIAL OBLIGATIONS					
Alberta Govt. Tel. Com.	Debenture	06-15-1994	8.000	8.171	\$ 3,000
British Columbia Hydro	Bond	07-15-1996	9.625	9.625	\$ 3,000 5,150
Manitoba Hydro Elec. Bd.	Debenture	10-15-1997	7.650	7.650	4,940
Manitoba, Province of	Debenture C/F Debenture	04-01-1994	7.875	7.900	1,020
Nova Scotia Power Comm. Ontario Hydro	S/F Debenture Note	03-15-1997 03-15-1996	7.750 9.500	7.800 9.500	3,500 5,150
TOTAL PROVINCIAL OBLIGATION		30 10 1000	0.500	8.618%	\$ 22,760
CANADIAN AGENCY					
Export Development TOTAL CANADIAN GOVERNMEN	Note FAL OBLIGATIONS	07-15-1981	8.500	8.500% 8.597%	\$ 5,000 \$ 27,760
CORPORATE BOND OBLIGATIONS				0.00776	0 27,700
PUBLIC UTILITY OBLIGATIONS					
ELECTRIC Central Power & Light	First Man. D.c	00.01.2001	0.075	0.044	A
Central Power & Light Citizens Utilities	First Mtg. Bond First Mtg. Coll. Trust	06-01-2004 12-31-1991	9.375 4.800	9.811 4.800	\$ 5,000 1,000
Hawaiian Electric Co.	First Mtg. Bond	04-01-1991	4.650	4.650	1,550
Long Island Lighting	First Mtg. Bond	04-01-1993	4.400	4.400	1,000
Minnesota Power & Light Minnesota Power & Light	First Mtg. Bond First Mtg. Bond	08-01-2005 09-01-2006	10.500 8.700	10.500 8.700	5,000 5,000
Montana-Dakota Util.	S/F Debenture	07-01-1984	4.625	5.491	5,000 1,600
Philadelphia Electric	First & Ref. Mtg. Bond	10-15-1980	11.000	11.000	1,000
Public Serv. Indiana	First Mtg. Bond	01-01-2007	7.625	7.710	5,000

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount (000) (b)
Public Serv. ElecGas	First & Ref. Mtg. Bond	09-01-1994	4.625	6.004	2,415
Public Serv. ElecGas Southern Calif. Edison	First & Ref. Mtg. Bond First & Ref. Mtg. Bond	06-01-2007 09-01-1985	8.250 4.375	8.226 5.772	5,000 1,260
Southern Calif. Edison	First & Ref. Mtg. Bond	03-01-1989	4.375	7.164	1,600
Utah Power & Light Total Electric	First Mtg. Bond	09-01-1990	4.875	4.800	1,290
				7.964%	\$ 37,715
GAS Brooklyn Union Gas	First Mts. Dand	04.01.1000	4 025	4.500	A 1.175
Columbia Gas System	First Mtg. Bond Debenture	04-01-1990 01-01-1988	4.625 4.375	4.560 6.822	\$ 1,175 1,650
Mountain Fuel Supply Southern Union Gas Co.	Debenture	09-01-1986	4.875	4.800	1,228
Washington Gas Light	First Mtg. Bond First Mtg. Bond	10-01-1986 03-01-1991	4.800 5.200	6.201 6.400	883 1,000
Total Gas				5.793%	\$ 5,936
TELEPHONE					
Bell Tele. Co. of Canada	First Mtg. Bond	06-01-2004	9.500	9.500	\$ 5,000
General Tel. Co. (Fla.) General Tel. Co. of the Midwest	First Mtg. Bond First Mtg. Bond	05-01-1993 05-01-1999	4.500 7.750	6.400 7.750	1,000 2,500
N.Y. Telephone Co.	Refunding Mtg. Bond	07-15-2008	8.000	8.494	5,000
Rochester Telephone Southern Bell Telephone &	First Mtg. Bond	09-01-1993	4.750	6.074	1,110
Telegraph Co.	Debenture	03-15-2013	7.625	8.185	5,000
Total Telephone				8.333%	\$ 19,610
TOTAL PUBLIC UTILITY OBLIGAT	TIONS			7.875%	\$ 63,261
FINANCE OBLIGATIONS	Mana	01.01.1004			
American Investment Beneficial Corp.	Note Note	01-01-1991 03-01-1989	5.250 4.600	5.250 7.286	\$ 628 2,725
Deere (John) Credit	Debenture	10-31-1990	5.000	6.877	1,650
Family Finance Corp. First Bank System	Senior Note Note	05-15-1990 06-30-1983	4.750 8.750	4.840 8.750	1,300 5,000
Ford Motor Credit Co.	Debenture	04-01-1999	8.700	8.956	5,000
General Acceptance General Elec. Credit	Senior Note Note	03-01-1985 10-31-1982	4.875 4.625	6.888 4.625	650 1,500
Honeywell Finance Inc.	S/F Debenture	12-15-1998	8.200	8.200	5,000
Northwest Bancorp. Northwest Bancorp.	S/F Debenture Note	03-15-2003 09-15-1986	7.750 7.875	7.750 7.892	4,000 5,000
Talcott (James), Inc.	Senior Note	10-01-1985	5.000	5.000	287
TOTAL FINANCE OBLIGATIONS				7.747%	\$ 32,740
INDUSTRIAL OBLIGATIONS					
AMAX, Inc. AMAX, Inc.	Senior Note Note	08-01-1988 03-15-1997	4.500 8.750	7.564 8.750	S 2,100 5,000
Archer-Daniels Midland	Promissory Note	03-01-1988	4.875	7.884	1,728
Armco Steel Corp. Ashland Oil & Refining	Note S/F Debenture	12-15-1996 02-15-1988	7.875 4.725	7.875 6.344	4,000 1,570
Atlantic Richfield Co.	Guaranteed Note	07-15-1996	9.250	9.250	5,000
Beatrice Foods Co. Burroughs Corp.	S/F Debenture S/F Debenture	09-15-1994 07-01-1988	7.875 4.500	7.900 5.611	3,000 2,600
CIBA Geigy Corp.	Note	06-01-2000	9.500	9.500	5,000
Crown Zellerbach (S.T.) Dow Chemical	General Mtg. Bond Note	08-01-1994 01-15-1990	8.125 4.500	8.125 5.917	4,869 1,734
FMC Corp. Firestone Tire & Rubber	S/F Debenture Debenture	01-15-2000	9.500	9.603	4,850
Ford Motor Co.	Debenture	12-01-2004 07-15-1994	9.250 9.250	9.333 9.277	5,000 1.850
Ford Motor Co. Gould, Inc.	Guaranteed Note S/F Bond	12-01-1996		8.625	5,000
Louisiana Land & Expl.	Note	02-15-1995 12-01-1994	9.250 8.250	9.513 8.250	2,697 2,550
MacMillan Bloedel, Ltd. MacMillan Bloedel, Ltd.	Debenture	10-01-1990 07-01-1994	5.450	4.950	350
Marathon Oil Co.	Debenture S/F Debenture	02-01-1994	8.750 8.500	8.750 8.563	5,200 3,000
Olympic Pipeline Co. Owens-Illinais, Inc.	Note Note	09-01-2001 02-01-1991	8.850 5.000	8.850 8.312	5,000
Ralston Purina	Guaranteed Note	11-01-1989	8.750	8.750	3,650 2,600
Ralston Purina Raytheon Co.	Note S/F Debenture	12-31-1982 07-01-1996	8.000 8.250	8.000	3,450
Scovill Mfg. Co.	Note	09-15-1990	4.800	8.406 6.383	5,000 1,554
Shell Canada, Ltd. Shell Oil Co.	Debenture Debenture	01-01-1994 03-15-1991	7.500 5.000	7.532 5.000	1,900
Sinclair Oil Corp.	S/F Debenture	12-15-1988	4.600	6.780	1,150 3,275
Sprague Electric Co. Standard Oil of Calif.	S/F Debenture First Pref. Ship. Mtg. Bd.	09-01-1988 03-30-1997	4.375 7.700	4.378 7.700	450 1,400
Standard Oil of Calif.	First Pref. Ship. Mtg. Bd.	03-02-1997	7.700	7.700	1,300
Standard Oil of Calif. Standard Oil of Calif.	First Pref, Ship. Mtg. Bd. Note	02-10-1997 04-01-1991	7.700 5.100	7.700 5.100	1,300 700
Standard Oil of Calif.	First Pref. Ship. Mtg. Bd.	07-02-1999	8.500	8.500	5,150
Standard Oil (Indiana) Standard Oil (Indiana)	Note Note	11-01-1999 10-01-2000	8.250 7.500	8.250 7.500	3,000 1,750
Standard Oil Co. (Ohio)	Debenture	01-01-2000	8.500	8.703	4,400
Sun Oil Co. Tenneco West	Note Promissory Note	07-01-1991 09-01-1989	5.750 4.650	5.750 5.826	1,026 1,400
Texaco, Inc.	Note	12-01-2001	7.750	7.750	3,763
Union Tank Car Witco Chemical Corp.	S/F Debenture Note	08-01-1986 12-01-1984	5.000 4.650	5.000 5.890	1,550 1,650
Youngstown Sheet Tube	First Mtg. S/F Bond	07-01-1995	4.600	4.600	79
TOTAL INDUSTRIAL OBLIGATION	IS			8.141%	\$123,595
TRANSPORTATION DEBT OBLIGATI Atlantic Richfield Co.		12.01.2001	0 750	0.750	A 252-
Burlington Northern	First Pref. Ship. Mtg. Bd. First & Ref. Mtg. Bond	12-01-2001 02-01-1978	8.750 4.375	8.750 4.375	\$ 3,000 306
Greyhound Corp. Seaboard Coast Line RR	Senior Note	05-15-1984	6.000	6.826	1,662
Southern Railway	First Mtg. Bond First & Gen. Mtg. Bond	12-01-1988 06-01-1988	4.625 4.625	5.772 7.820	2,725 2,586
TOTAL TRANSPORTATION DEBT	-			7.285%	\$ 10,279

hedule II continued	ł						Market	- 1
14 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)			Coupon Avera	ge Total	Common Stock	Shares	Price 6-30-77	Market Value
Company	Type of	Maturity	Rate Yield	l Amount	CONSUMER-ORIENTED AUTOS — AUTO PARTS			
AILROAD EQUIPMENT OBLIGATIONS	Security	Date (a)		(000) (b)	Ford Motor Company	85,000	\$ 46.88	\$ 3,984,375.00
CF Industries, Inc.	quipment Trust Cert.				General Motors Corporation Genuine Parts Company	77,600 90,800	69.38 33.88	5,383,500.00 3,075,850.00
	quipment Trust Cert. Quipment Trust Cert.				Goodyear Tire & Rubber Company (The)	147,500	20.13	2,968,437.50
	Conditional Sale Agree	e. 07-01-1977/			Total Autos — Auto Parts			\$ 15,412,162.50
lying Tiger Corp. E	quipment Trust Cert.	01-01-1985 . 09-01-1977	4.650 4.650		CONSUMER DURABLES			
lying Tiger Corp. E	quipment Trust Cert. Equipment Trust Cert.				Sunbeam Corporation	90,000	\$ 23.50	\$ 2,115,000.00
	Conditional Sale Agree				Whirlpool Corporation	80,100	24.50	1,962,450.00
	Conditional Sale Agree Conditional Sale Agree				Total Consumer-Durables			\$ 4,077,450.00
	Conditional Sale Agree	e. 10-10-1982/			CONSUMER-NONDURABLES			
outhern Pacific Trans. C	Conditional Sale Agree	04-01-1992 e. 03-01-1982/	91 9.500 9.500	2,804	Avon Products Inc.	92,900	\$ 50.50	\$ 4,691,450.00
	quipment Trust Cert.				Eastman Kodak Company Minnesota Mining and Manufacturing Co.	60,300 81,000	59.50 49.38	3,587,850.00 3,999,375.00
TOTAL RAILROAD EQUIPMENT.OBL	IGATIONS.		8.94	\$ 31,954	Procter & Gamble Company (The)	42,000	80.13	3,365,250.00
OTAL CORPORATE OBLIGATIONS	•		8.092	2% \$261,829	Revion, Incorporated	86,000	41.25	3,547,500.00
OTAL UNITED STATES GOVERNMEN					Total Consumer-Nondurables			\$ 19,191,425.00
ANADIAN GOVERNMENTAL AND CO	APURATE OBLIGAT	TIONS	8.159	\$349,539	CONSUMER MISCELLANEOUS			
					Disney (Walt) Productions Holiday Inns Incorporated	45,955 34,800	\$ 36.88 14.13	\$ 1,694,590.63 491,550.00
Most corporate issues have substantial		n average life far sh	orter than the stated	I maturity date.	McDonald's Corporation	50,000	46.00	2,300,000.00
) Column may not add, due to rounding				•	Total Consumer-Miscellaneous	•		\$ 4,486,140.63
CONVER	TIBLE DEBE	NTURE HO	LDINGS		DRUGS			
	June 30,	, 1977			American Home Products Corporation	89,800	\$ 28.75	\$ 2,581,750.00
the state of the s	Face	Total	Market	Total	Johnson & Johnson	35,000	70.63	2,471,875.00
Issue	Amount Held	Cost	Price	Market Value	Medtronic, Inc. Merck & Co., Inc.	48,100 45,900	25.63 55.75	1,232,562.50 2,558,925.00
rex Corporation, Limited, 4 7/8%	\$1,000,000.00	\$ 605,610.00	73 3/4	\$ 737,500.00	Pfizer Incorporated	95,200	26.00	2,475,200.00
Convertible Subordinated Debentures, due 1-15-94					Schering-Plough Corporation Warner-Lambert Company	56,000 76,000	36.38 28.63	2,037,000.00 2,175,500.00
*					Total Drugs	. 5,000	20.00	\$ 15,532,812.50
edio Corporation of America, 4 1/2% Convertible Subordinated Debentures,	3,500,000.00	2,683,550.00	77 5/8	2,716,875.00	1			
due 8-1-92					FOODS-BEVERAGES CPC International, Inc.	62,000	\$ 50.25	\$ 3,115,500.00
•	0.000.000.00	10400:= :-	6.5	1.040.000	Coca-Cola Company (The)	100,000	37.25	3,725,000.00
nerwin-Williams Co., 6 1/4% Convertible Subordinated Debentures.	2,000,000.00	1,912,915.00	92	1,840,000.00	General Foods Corporation General Mills, Incorporated	117,100	33,38	3,908,212.50
due 3-1-95					Kraft, Inc.	105,000 31,600	29.50 49.13	3,097,500.00 1,552,350.00
DTALS	\$6,500,000.00	\$5,202,075.00		\$5,294,375.00	Norton Simon, Incorporated	118,943	17.75	2,111,238.25
			_	=	PepsiCo, Inc.	60,000	22.50	1,350,000.00
COM	IMON STOCK	HOLDING	S		Total Foods-Beverages			\$ 18,859,800.75
		Market		Total	RETAIL SALES	05.000	A 07	A 64456
Common Stock	Shares	Price 6-30-77	Market Value	% Market	Federated Department Stores, Incorporated K mart Corporation	85,000 47,127	\$ 37.00 28.50	\$ 3,145,000.00 1,343,119.50
TILITIES	Qual 63		value	market	Penney (J.C.) Company, Incorporated	89,400	34.88	3,117,825.00
LECTRIC			_		Sears, Roebuck and Company Southland Corporation (The)	60,000 79,800	58.00 23.63	3,480,000.00 1,885,275.00
ommonwealth Edison Company orida Power & Light Company	113,000 133,300	\$ 30.88 27.13	S 3,488,875.00 3,615,762.50		Total Retail Sales	10,000	43.03	\$ 12,971,219.50
ouston Industries Incorporated	97,600	33.88	3,306,200.00		TOTAL CONSUMER-ORIENTED			\$ 12,971,219.30
iddle South Utilities Incorporated	183,800	16.50	3,032,700.00					\$ 50,001,010.00
innesota Power & Light Company orthern States Power Company (Minn.)	20,000 124,500	22.25 28.75	445,000.00 3,579,375.00		TECHNOLOGY ELECTRONICS			
cific Gas and Electric Company	95,300	24.00	2,287,200.00		Hewlett-Packard Company	37,000	\$ 79.00	\$ 2,923,000.00
exas Utilities Company Irginia Electric and Power Company	170,000 144,200	21.50 15.13	3,655,000.00 2,181,025.00		OFFICE EQUIPMENT			•
Total Electric	. 17,200		\$ 25,591,137.50	7.08%	Burroughs Corporation	60,400	\$ 62.38	\$ 3,767,450.00
			,,		Control Data Corporation	34,000	21.63	735,250.00
ATURAL GAS Duston Natural Gas Corporation	80,000	\$ 32.25	\$ 2,580,000.00		Digital Equipment Corporation Honeywell, Inc.	72,300 47,777	46.88 53.88	3,389,062.50 2,573,985.88
inhandle Eastern Pipe Line Company	100,000	48.88	4,887,500.00		International Business Machines Corporation	62,006	264.00	16,369,584.00
oples Gas Company	35,000	50.75	1,776,250.00		Xerox Corporation	57,850	48.75	2,820,187.50
Total Natural Gas			\$ 9,243,750.00	2.56%	Total Office Equipment			\$ 29,655,519.88
DMMUNICATIONS					TOTAL TECHNOLOGY			\$ 32,578,519.88
merican Telephone & Telegraph Company eneral Telephone & Electronics Company		\$ 63.50 32.50	\$ 13,017,500.00		BASIC INDUSTRY			
eneral Telephone & Electronics Company Total Communications	130,000	32.30	6,175,000.00 \$ 19,192,500.00	5.31%	AEROSPACE Boeing Company (The)	60,000	\$ 57.88	\$ 3,472,500.00
TOTAL UTILITIES			\$ 54,027,387.50	14.95%	United Technologies Corporation	125,000	\$ 57.88 40.00	\$ 3,472,500.00 5,000,000.00
INIME MITTIES			o 04,UZ1,381.5U	14.93%	Total Aerospace			\$ 8,472,500.00
		•			·			, ,
NANCIAL SERVICES	167,000	\$ 24.25	\$ 4,049,750.00		BUILDING & FOREST PRODUCTS Georgia-Pacific Corporation	59,559	\$ 31.25	\$ 1,861,218.75
ANKS	144,400	27.38	3,952,950.00		Masonite Corporation	109,000	17.00	1,853,000.00
ANKS ankAmerica Corporation ticorp		36.63	3,567,275.00 2,023,312.50		Owens-Corning Fiberglas Corporation Weyerhaeuser Company	41,000 78,300	67.13 35.63	2,752,125.00 2,789,437.50
ANKS ankAmerica Corporation ticorp rst Bank System Incorporated	97,400				Total Building & Forest Products	10,000	33.03	\$ 9,255,781.25
ANKS interpretation ticorp rst Bank System Incorporated rst International Bancshares, Inc. orthwest Bancorporation	97,400 49,500 178,000	40.88 24.13	4,294,250.00		-			5 5,200,101,20
ANKS nkAmerica Corporation ticorp rst Bank System Incorporated rst International Bancshares, Inc. orthwest Bancorporation curity Pacific Corporation	97,400 49,500		2,798,995.28		A CHESTICAL C			
ANKS interpretation ticorp rst Bank System Incorporated rst International Bancshares, Inc. orthwest Bancorporation	97,400 49,500 178,000	24.13		5.71%	CHEMICALS Air Products and Chamicals Incorporated	01 000	¢ 24 25	¢ 2 220 400 FF
ANKS nkAmerica Corporation ticorp rst Bank System Incorporated rst International Bancshares, Inc. orthwest Bancorporation curity Pacific Corporation	97,400 49,500 178,000	24.13	2,798,995.28	5.71%	Air Products and Chemicals, Incorporated Dow Chemical Company (The)	91,802 50,000	\$ 24.25 34.13	\$ 2,226,198.50 1,706,250.00
ANKS nakAmerica Corporation ticorp rst Bank System Incorporated rst International Bancshares, Inc. orthwest Bancorporation curity Pacific Corporation Total Banks INANCE ousehold Finance Corporation	97,400 49,500 178,000 94,679	24.13 29.56 \$ 19.88	2,798,995.28 \$ 20,686,532.78 \$ 2,152,462.50	5.71%	Air Products and Chemicals, Incorporated Dow Chemical Company (The) du Pont (E.I.) de Nemours and Company	50,000 25,000	34,13 116.00	1,706,250.00 2,900,000.00
ANKS nhkAmerica Corporation ticorp st Bank System Incorporated sts International Bancshares, Inc. orthwest Bancorporation curity Pacific Corporation Total Banks INANCE ousehold Finance Corporation GIC Investment Corporation	97,400 49,500 178,000 94,679	24.13 29.56	2,798,995.28 \$ 20,686,532.78 \$ 2,152,462.50 714,375.00		Air Products and Chemicals, Incorporated Dow Chemical Company (The) du Pont (E.I.) de Nemours and Company Hercules Incorporated	50,000 25,000 110,000	34,13 116.00 18.38	1,706,250.00 2,900,000.00 2,021,250.00
ANKS nakAmerica Corporation ticorp rst Bank System Incorporated rst International Bancshares, Inc. orthwest Bancorporation curity Pacific Corporation Total Banks INANCE ousehold Finance Corporation	97,400 49,500 178,000 94,679	24.13 29.56 \$ 19.88	2,798,995.28 \$ 20,686,532.78 \$ 2,152,462.50	5.71% 0.79%	Air Products and Chemicals, Incorporated Dow Chemical Company (The) du Pont (E.I.) de Nemours and Company	50,000 25,000	34,13 116.00	1,706,250.00 2,900,000.00
ANKS nhkAmerica Corporation ticorp st Bank System Incorporated sts International Bancshares, Inc. orthwest Bancorporation curity Pacific Corporation Total Banks INANCE ousehold Finance Corporation GIC Investment Corporation	97,400 49,500 178,000 94,679	24.13 29.56 \$ 19.88	2,798,995.28 \$ 20,686,532.78 \$ 2,152,462.50 714,375.00		Air Products and Chemicals, Incorporated Dow Chemical Company (The) du Pont (E.l.) de Nemours and Company Hercules Incorporated Monsanto Company	50,000 25,000 110,000 20,000	34.13 116.00 18.38 69.88	1,706,250.00 2,900,000.00 2,021,250.00 1,397,500.00
ANKS InkAmerica Corporation ticorp rst Bank System Incorporated rst International Bancshares, Inc. oothwest Bancorporation courity Pacific Corporation Total Banks INANCE ousehold Finance Corporation GIC Investment Corporation Total Finance ISURANCE etna Life & Casualty Company	97,400 49,500 178,000 94,679 108,300 45,000	24.13 29.56 \$ 19.88 15.88	2,798,995.28 \$ 20,686,532.78 \$ 2,152,462.50 714,375.00 \$ 2,866,837.50 \$ 2,309,500.00		Air Products and Chemicals, Incorporated Dow Chemical Company (The) du Pont (E.I.) de Nemours and Company Hercules Incorporated Monsanto Company Union Carbide Corporation	50,000 25,000 110,000 20,000	34.13 116.00 18.38 69.88	1,706,250.00 2,900,000.00 2,021,250.00 1,397,500.00 3,616,750.00
ANKS InkAmerica Corporation ticorp Ist Bank System Incorporated Ist International Bancshares, Inc. orthwest Bancorporation curity Pacific Corporation Total Banks INANCE Ousehold Finance Corporation Total Finance ISURANCE ISURANCE ISURANCE ISURANCE ISURANCE ISURANCE ISURANCE General Insurance Corporation	97,400 49,500 178,000 94,679 108,300 45,000	24.13 29.56 \$ 19.88 15.88 \$ 37.25 54.38	2,798,995.28 \$ 20,686,532.78 \$ 2,152,462.50 714,375.00 \$ 2,866,837.50 \$ 2,309,500.00 3,518,062.50		Air Products and Chemicals, Incorporated Dow Chemical Company (The) du Pont (E.I.) do Nemours and Company Hercules Incorporated Monsanto Company Union Carbide Corporation Total Chemicals ELECTRICAL EQUIPMENT Emerson Electric Co.	50,000 25,000 110,000 20,000 74,000	34.13 116.00 18.38 69.88 48.88	1,706,250.00 2,900,000.00 2,021,250.00 1,397,500.00 3,616,750.00 \$ 13,867,948.50 \$ 3,169,375.00
ANKS ankAmerica Corporation ticorp st Bank System Incorporated sts International Bancshares, Inc. orthwest Bancorporation curity Pacific Corporation Total Banks INANCE ousehold Finance Corporation GIC Investment Corporation Total Finance ISUNANCE etna Life & Casualty Company onnecticut General Insurance Corporation fferson-Pilot Corporation	97,400 49,500 178,000 94,679 108,300 45,000 62,000 64,700 55,500 110,600	24.13 29.56 \$ 19.88 15.88 \$ 37.25 54.38 30.13 21.50	2,798,995.28 \$ 20,686,532.78 \$ 2,152,462.50 714,375.00 \$ 2,866,837.50 \$ 2,309,500.00 3,518,062.50 1,671,937.50 2,377,900.00		Air Products and Chemicals, Incorporated Dow Chemical Company (The) du Pont (E.I.) de Nemours and Company Hercules Incorporated Monsanto Company Union Carbide Corporation Total Chemicals ELECTRICAL EQUIPMENT Emerson Electric Co. General Electric Company	50,000 25,000 110,000 20,000 74,000 92,200 93,000	34.13 116.00 18.38 69.88 48.88 5 34.38 56.50	1,706,250.00 2,900,000.00 2,021,250.00 1,397,500.00 3,616,750.00 \$ 13,867,948.50 \$ 3,169,375.00 5,254,500.00
ANKS ninkAmerica Corporation ticorp st Bank System Incorporated sts International Bancshares, Inc. orthwest Bancorporation curity Pacific Corporation Total Banks INANCE ousehold Finance Corporation GIC Investment Corporation Total Finance ISURANCE etna Life & Casualty Company onnecticut General Insurance Corporation fiferson-Pilot Corporation orthogonetic General Insurance Corporation fiferson-Pilot Corporation AFECO Corporation	97,400 49,500 178,000 94,679 108,300 45,000 62,000 64,700 55,500 110,600 74,400	24.13 29.56 \$ 19.88 15.88 \$ 37.25 54.38 30.13 21.50 47.13	2,798,995.28 \$ 20,686,532.78 \$ 2,152,462.50 714,375.00 \$ 2,866,837.50 \$ 2,309,500.00 3,518,062.50 1,671,937.50 2,377,900.00 3,506,100.00		Air Products and Chemicals, Incorporated Dow Chemical Company (The) du Pont (E.I.) de Nemours and Company Hercules Incorporated Monsanto Company Union Carbide Corporation Total Chemicals ELECTRICAL EQUIPMENT Emerson Electric Co. General Electric Company Gould, Inc.	50,000 25,000 110,000 20,000 74,000	34.13 116.00 18.38 69.88 48.88	1,766,250,00 2,900,000,00 2,021,250.00 1,337,500.00 3,616,750.00 \$ 13,867,948.50 \$ 3,169,375.00 5,254,500.00 3,487,500.00
ANKS ankAmerica Corporation ticorp st Bank System Incorporated sts International Bancshares, Inc. orthwest Bancorporation curity Pacific Corporation Total Banks INANCE ousehold Finance Corporation GIC Investment Corporation Total Finance ISUNANCE etna Life & Casualty Company onnecticut General Insurance Corporation fferson-Pilot Corporation	97,400 49,500 178,000 94,679 108,300 45,000 62,000 64,700 55,500 110,600	24.13 29.56 \$ 19.88 15.88 \$ 37.25 54.38 30.13 21.50	2,798,995.28 \$ 20,686,532.78 \$ 2,152,462.50 714,375.00 \$ 2,866,837.50 \$ 2,309,500.00 3,518,062.50 1,671,937.50 2,377,900.00		Air Products and Chemicals, Incorporated Dow Chemical Company (The) du Pont (E.I.) de Nemours and Company Hercules Incorporated Monsanto Company Union Carbide Corporation Total Chemicals ELECTRICAL EQUIPMENT Emerson Electric Co. General Electric Company	50,000 25,000 110,000 20,000 74,000 92,200 93,000	34.13 116.00 18.38 69.88 48.88 5 34.38 56.50	1,706,250.00 2,900,000.00 2,021,250.00 1,397,500.00 3,616,750.00 \$ 13,867,948.50 \$ 3,169,375.00 5,254,500.00

40,000 55,000 75,100	39.75 62.13 37.75	1,590,000.00 3,416,875.00		OIL-INTERNATIONAL				
		2,835,025.00 S 11,740,025.00	3.25%	Exxon Corporation Gulf Oil Corporation Standard Oil Company of California Texaco Inc.	205,000 145,000 120,000 138,300	\$ 53.50 28.00 41.75 29.13	\$ 10,967,500.00 4,060,000.00 5,010,000.00 4,027,987,50	
52,000 100,169 88,000	\$ 53.00 28.88 34.13	\$ 2,756,000.00 2,892,379.88 3,003,000.00 \$ 8,651,379.88	2.39%	Total Oil-International ENERGY-RELATED Dresser Industries, Inc. Halliburton Company	70,000 71,000	\$ 45.75 66.75	\$ 24,065,487.50 \$ 3,202,500.00	6.65%
50,000 35,000	\$ 51.50 54.25	\$ 2,575,000.00 1,898,750.00		Williams Companies (The) Total Energy-Related TOTAL ENERGY	86,000	23.13	1,988,750.00 \$ 9,930,500.00 \$ 58,820,362.50	2.75% 16.27%
35,400 78,400	\$ 67.38 35.88	\$ 2,385,075.00	1.24%	TRANSPORTATION AIRLINES Northwest Airlines, Incorporated	133,368	\$ 25.25	\$ 3,367.542.00	0.93%
10,100	55.55	\$ 5,197,675.00 \$ 73,570,434.63	1.44% 20.34%	Southern Railway Company Union Pacific Corporation	63,000 56,400	\$ 58.38 57.25	\$ 3,677,625.00 3,228,900.00	
109,000 80,000 64,000 148,000 107,700 20,000	\$ 60.50 33.88 52.63 31.00 53.75 88.75	\$ 6,594,500.00 2,710,000.00 3,368,000.00 4,588,000.00 5,788,875.00 1,775,000.00		TOTAL TRANSPORTATION TOTAL COMMON STOCKS			\$ 6,906,525.00 \$ 10,274,067.00 \$361,620,177.67*	2.84% 100.00%
	100,169 88,000 50,000 35,000 35,400 78,400 109,000 80,000 64,000 148,000	100,169 28.88 88,000 34.13 50,000 \$ 51.50 35,000 \$ 67.38 78,400 \$ 67.38 78,400 35.88 109,000 \$ 60.50 80,000 33.88 64,000 52.63 148,000 31.00 107,700 \$ 53.75	100,169 28.88 2,892,379.88 88,000 34.13 3,003,000.00 \$ 8,651,379.88 \$ 8,651,379.88 50,000 \$ 51.50 \$ 2,575,000.00 35,000 \$ 4.25 1,898,750.00 \$ 4,473,750.00 \$ 4,473,750.00 35,800 \$ 67.38 \$ 2,385,075.00 78,400 \$ 55.88 2,812,600.00 \$ 5,197,675.00 \$ 73,570,434.63 109,000 \$ 60.50 \$ 6,594,500.00 80,000 33.88 2,710,000.00 80,000 52.63 3,368,000.00 44,000 31.00 4,588,000.00 107,700 53.75 5,788,875.00	100,169 28,88 2,892,379,88 3,003,000.00 88,000 34.13 3,003,000.00 2,39% 50,000 \$ 51.50 \$ 2,575,000.00 35,000 54.25 1,898,750.00 1,24% 35,400 \$ 67.38 \$ 2,385,075.00 1,24% 35,400 \$ 67.38 \$ 2,385,075.00 2,812,600.00 78,400 35.88 2,812,600.00 1,44% \$ 73,570,434.63 20.34% 109,000 \$ 60.50 \$ 6,594,500.00 80,000 33.88 2,710,000.00 64,000 52.63 3,388,000.00 107,700 53.75 5,788,875.00 20,000 88.75 1,775,000.00	Total Oil-International S 2,756,000.00 S 2,888 2,882,379.88 S 3,003,000.00 S 8,651,379.88 2.39% Williams Company Williams Company Williams Companies (The)	Total Oil-International Solution Solut	Total Dil-International Society	Total Oil-International Society Society

SCHEDULE III

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

RATE OF RETURN ON AVERAGE AMOUNT INVESTED DURING FISCAL PERIODS IN THE THREE LARGEST RETIREMENT FUNDS

June 30, 1977

	PUBL	IC EMPLOYEES	RETIREMENT FUI	<u>VD</u>	STATI	STATE EMPLOYEES RETIREMENT FUND			TEACHERS' RETIREMENT FUND			1 10	
	Book Value (1,5)	Average Book Value for Year Ending (2,11)	Income for Year Ending (3)	Yield (4)	Book Value (1)	Average Book Value for Year Ending (2,11)	Income for Year Ending (3,6)	Yield (4)	Book Value (1)	Average Book Value for Year Ending (2,11)	Income for Year Ending (3)	Yield (4)	- 1
June 30, 1957 December 31, 1957	\$ 19,301,750 \$ 20,588,750		-	_	\$ 36,797,000 \$ 39,577,500	\$ 34,859,833 —	\$1,016,556.48 —	2.92%	\$ 31,853,900 \$ 34,149,700	_	_	_	
June 30, 1958 December 31, 1958	\$ 23,625,000 \$ 27,515,000	\$ 21,171,833 -	\$ 614,096.77 —	2.90%	\$ 39,715,500 \$ 41,985,500	 \$ 40,426,167	_ \$1,225,833.46	3.03%	\$ 37,242,200 \$ 42,777,200	\$ 34,415,267 -	\$ 1,018,014.26 —	2.90%	
June 30, 1959 December 31, 1959	\$ 31,563,000 \$ 35,414,500	\$ 27,567,667 	\$ 880,223.48 -	3.19%	\$ 44,659,000 \$ 46,911,500	_ \$ 44,518,667	_ \$1,378,022.98	_ 3.10%	\$ 48,523,300 \$ 54,313,000	\$ 42,847,567 —	\$ 1,409,995.45 —	3.29% —	
June 30, 1960 December 31, 1960	\$ 41,548,500 \$ 46,935,500	\$ 36,175,333 —	\$ 1,211,061.33 —	3.35% —	\$ 49,816,500 \$ 51,967,000	\$ 49,565,000	_ \$1,631,458.61	3.29%	\$ 55,243,300 \$ 59,160,300	\$ 52,693,300 —	\$ 1,823,482.03 —	3.46%	
June 30, 1961 December 31, 1961	\$ 54,183,680 \$ 61,433,745	\$ 47,555,893 —	\$ 1,753,679.00 —	3.69% -	\$ 54,499,050 \$ 56,830,438	_ \$ 54,432,163	_ \$1,885,692.64	_ 3.46%	\$ 63,098,540 \$ 67,775,429	\$ 59,167,380 -	\$ 2,140,761.22 —	3.62% _	
June 30, 1962 December 31, 1962	\$ 68,132,958 \$ 75,195,593	\$ 61,250,128 —	\$ 2,340,665.00 —	3.82%	\$ 59,843,686 \$ 62,517,119	_ \$ 59,730,414	_ \$2,168,821.46	3.63%	\$ 73,187,108 \$ 77,813,737	\$ 68,020,359 —	\$ 2,587,612.53 —	3.80%	
June 30, 1963 December 31, 1963	\$ 81,436,890 \$ 92,347,700	\$ 74,921,814 —	\$ 2,990,070.00 —	3.99% -	\$ 65,432,932 \$ 68,922,451	_ \$ 65,624,167	_ \$2,466,206.57	3.76%	\$ 82,990,550 \$ 88,480,685	\$ 77,997,132 -	\$ 3,011,190.37 —	3.86% -	
June 30, 1964 December 31, 1964	\$ 96,311,091 \$103,667,519	\$ 90,031,894 —	\$ 3,613,002.65 —	4.01% -	\$ 72,100,574 \$ 75,485,635	_ \$ 72,169,553	_ \$2,771,915.82	3.84%	\$ 96,529,180 \$100,413,219	\$ 89,333,472 —	\$ 3,546,799.82 —	3.97% -	
June 30, 1965 December 31, 1965	\$110,234,510 \$120,809,744	\$103,404,373 —	\$ 4,193,536.65 —	4.06% —	\$ 79,128,448 \$ 83,578,973	_ \$ 79,397,685	- \$3,104,510.00	3.91%	\$109,221,619 \$113,680,813	\$102,054,673 —	\$ 4,124,491.25 —	4.04% -	
June 30, 1966 December 31, 1966	\$126,016,044 \$136,773,265	\$119,034,099 —	\$ 4,961,041.08 —	4.17% -	\$ 87,477,671 \$ 92,210,804	* 87,755,816	_ \$3,599,529.00	4.10%	\$122,392,368 \$129,037,233	\$115,098,267 —	\$ 4,677,205.58 —	4.06% —	
June 30, 1967 December 31, 1967	\$143,519,881 \$155,763,172	\$135,436,396 —	\$ 5,766,018.44 —	4.26%	\$ 97,375,985 \$103,557,821	\$ 97,714,870	_ \$4,103,671.00	- 4.20%	\$141,805,453 \$156,865,901	\$131,078,351 —	\$ 5,553,970.00 —	4.24% _	
June 30, 1968 December 31, 1968	\$158,378,261 \$177,587,167	\$152,553,771 —	\$ 6,670,944.32 —	4.37% -	\$110,073,169 \$117,517,899	_ \$110,382,963	_ \$4,792,334.00	4.34%	\$182,931,287 \$192,423,593	\$160,534,214 -	\$ 7,057,974.94 —	4.40% —	

(Continued on following page)

Schedule III continued

	PUBLIC EMPLOYEES RETIREMENT FUND STATE EMPLOYEES RETIREMENT FUND				ND	TEACHERS' RETIREMENT FUND						
	Book Value (1,5)	Average Book Value for Year Ending (2,11)	income for Year Ending (3)	Yield (4)	Book Value (1)	Average Book Value for Year Ending (2,11)	Income for Year Ending (3,6)	Yield (4)	Book Value (1)	Average Book Value for Year Ending (2,11)	Income for Year Ending (3)	Yield (4)
June 30, 1969 ⁽⁷⁾ July 1, 1969 ⁽⁸⁾ December 31, 1969 ⁽⁷⁾	\$198,774,684 \$158,760,588 \$165,049,959	\$178,246,704 — —	\$ 8,062,078.73 - -	4.52% _ _ _	\$123,331,969 \$103,331,969 \$102,604,272	_ _ \$114,484,713	- - \$5,001,736.00	- 4.37%	\$213,781,373 \$193,781,373 \$195,989,623	\$196,378,751 — —	\$ 9,032,190.00 _ _	4.60%
June 30, 1970 December 31, 1970	\$169,853,573 \$182,469,105	\$164,554,706 ^{(§} -	⁽¹⁾ \$ 7,662,334.32	4.66%	\$ 97,283,570 \$102,940,417	\$101,073,270 ⁽⁵ —	⁹⁾ \$4,504,934.00 ⁽¹ —	⁰⁾ 4.46% —	\$196,291,329 \$216,272,996	\$195,354,108 ⁽⁹ —	⁾ \$ 9,121,447.52 —	4.67%
June 30, 1971 December 31, 1971	\$198,648,628 \$215,397,783	\$183,657,102 —	\$ 8,865,744.99 —	4.83% —	\$110,406,203 \$115,613,762	\$103,543,397 —	\$4,777,705.29 —	4.61% —	\$228,603,985 \$237,806,108	\$213,722,770 —	\$10,304,556.77 —	4.82%
June 30, 1972 December 31, 1972	\$235,121,349 \$252,126,109	\$216,883,656 -	\$11,436,490.83 —	5.27% ⁽¹¹⁾ -	\$122,880,191 \$128,806,667	\$116,694,447 —	\$5,962,135.03 —	5.11% ⁽¹¹⁾ -	\$270,163,035 \$284,498,463	\$245,694,851 —	\$12,847,901.01 —	5.23% ⁽¹¹⁾
June 29, 1973 December 31, 1973	\$273,046,696 \$287,353,546	\$254,798,887 —	\$14,551,663.44 —	5.71% ⁽¹²⁾ -	\$137,205,300 \$135,513,840	\$131,240,981 —	\$7,162,366.90 —	5.46% ⁽¹²⁾ -	\$316,053,836 \$309,496,542	\$292,401,786 —	\$16,356,914.07 —	5.59% ⁽¹²⁾
June 28, 1974 December 31, 1974	\$309,196,034 \$334,570,948	\$292,211,130 —	\$17,649,265.82 —	6.04% ⁽¹³⁾	\$141,710,195 \$146,138,047	\$140,432,514 —	\$7,956,692.25 —	5.67% ⁽¹³⁾	\$320,407,712 \$342,430,164	\$319,347,515 —	\$19,412,083.53 —	6.08% ⁽¹³⁾
June 30, 1975 December 31, 1975	\$361,246,511 \$386,284,485	\$338,578,130 —	\$18,269,672.38 —	5.40% ⁽¹⁴⁾	\$156,682,776 \$159,830,045	\$151,063,112 -	\$7,330,288.44 —	4.85% ⁽¹⁴⁾	\$354,065,482 \$378,807,003	\$344,189,919 —	\$17,700,237.24 —	5.14% ⁽¹⁴⁾
June 30, 1976 December 31, 1976	\$419,494,658 \$452,320,559	\$392,240,328 —	\$20,824,777.11 -	5.31%(15) -	\$175,741,657 \$190,646,104	\$166,671,562 —	\$7,885,551.18 —	4.73% ⁽¹⁵⁾	\$400,948,006 \$433,593,429	\$382,701,609 —	\$19,085,633.30 —	4.99% ⁽¹⁵⁾
June 30, 1977	\$489,471,372	\$457,765,516	\$26,310,580.65	5.75%(15)	\$206,605,963	\$194,256,348	\$10,010,057.00	5.15%(15)	\$458,263,666	\$436,393,569	\$23,231,478.69	5.32%(15)

- (1) Book value figures based on those shown on Treasurer's General Report on State Finances on date listed, with adjustments for calls, maturities and investments committed for but not yet received.
- (2) Computed by averaging book value of fund on last three report dates, ending with the date listed.
- (3) Income figures obtained from the secretaries or directors of the respective
- (4) Computed by dividing income of fund for fiscal period by average book value of fund during period.
- (5) Includes the Public Employees Police & Fire Fund for periods after July 1, 1960, when it was established
- (6) In 1970, State Employees Retirement Fund changed from calendar-year to a fiscal-year basis.
- (7) Book value figures for June 30, 1969, are listed before the transfer of bonds on that date from these basic retirement accounts to the Minnesota Adjustable Fixed Benefit Fund. The decline in book value figures during subsequent months indicates this transfer of bonds and the transfers of stocks during the next fiscal year. These basic retirement accounts own assets representing the major portion of the Minnesota Adjustable Fixed Benefit Fund; the extent of this ownership is not calculated for purposes of this table because of the varying participations by the funds
- (8) Book value figure is adjusted for the July 1, 1969, transfer of bonds, stocks and cash to the Minnesota Adjustable Fixed Benefit Fund.
- (9) This figure was computed by using the July 1, 1969, book value.
 (10) Actual six months receipts annualized.
- (11) Computation of income for fiscal 1972 differed from that described in footnote (4) in two respects: first, the average book value for the year was increased by the amount of the deferred yield adjustment account, established by the 1971 Legislature (Minnesota Statutes 1971, Section 356.20, Subdivision 5), and secondly, an increase in equity portfolio valuation under the provisions of Minnesota Statutes 1971, Section 11.16, Subdivision 13, resulted in a 3% increase in the value of the equity portion as of October 31, 1972. One-third of the amount of this increase was applied to the income for each of the fiscal years 1972, 1973,
- (12) Computation of income for fiscal 1973 and 1974 includes allowance for the two factors mentioned in footnote (11) plus an additional one-third of the 3% increase in the value of the equity portfolios as of December 31, 1972. This second increase

will also be applied to the income for fiscal 1975. Therefore, income for fiscal 1973 and 1974 includes two such amounts, each representing one-third of 3% increases applied to the equity portfolios under the provisions of Minnesota Statutes 1971, Section 11.16, Subdivision 13.

- (13) Computation of income for fiscal 1974 includes allowance for the factors mentioned in footnotes (11) and (12).
- (14) Computation of income for fiscal 1975 includes one-third of the 3% increase as of December 31, 1972, as mentioned in (12). Under the provisions of a 1973 amendment to Subdivision 13, as of February 28, 1975, a 3% decrease in the value of the equity portfolio of each fund was indicated because of lower stock prices during the previous year. On April 30, 1975, another 3% decrease in the value of the equity portfolios of the Teachers' Retirement Fund, the State Employees Retirement Fund and the Police and Fire portion of the Public Employees Retirement Fund resulted from the application of the indicated statutory provision. One-fifth of each of these valuation adjustments was deducted from the income of the appropriate funds and is, therefore, reflected in the yield computations for 1975.
- (15) Computation of income for fiscal 1976 and 1977 includes the February 28, 1975 3% decrease in value of the equity portfolios of each fund and the April 30, 1975, 3% decrease in value of the equity portfolios of the Teachers' Retirement Fund, the State Employees Retirement Fund and the Police and Fire portion of the Public Employees Retirement Fund resulting from the provisions of a 1973 amendment to Subdivision 13. One-fifth of each of these valuation adjustments was deducted from the income of the appropriate funds and is, therefore, reflected in the yield computations for 1976 and 1977.

Note: Yields computed as indicated in footnote number (4) for 1972 through 1976, in the manner used in prior years, would be:

	PERF	SERF	TRF
1972	4.82%	4.67%	4.75%
1973	4.95%	4.70%	4,85%
1974	5.43%	5.13%	5.48%
1975	5.57%	5.30%	5.58%
1976	5.73%	5.53%	5.71%
1977	6.14%	5.86%	6.02%

SCHEDULE IV

PUBLIC EMPLOYEES RETIREMENT FUND STATE EMPLOYEES RETIREMENT FUND TEACHERS' RETIREMENT FUND June 30, 1977

RESUME OF ASSETS IN ACCOUNTS

	Public Employees Retirement Fund		State Employees Retirement Fund	Teachers' Retirement Fund		
CASH CERTIFIED FOR INVESTMENT*	\$ (563,860.47)*	\$	(170,087.82)*	\$	810.37	
MONEY MARKET SECURITIES						
Bills Maturities up to 98 days	\$ 6,030,000.00	\$	2,690,000.00	\$	4,270,000.00	
Repurchase Agreements Maturities up to 29 days	\$ 123,000.00	\$	1,886,000.00	\$	1,618,000.00	
Short-Term Corporate Notes Maturities up to 29 days	\$ 4,112,000.00	\$	1,754,000.00	\$	975,000.00	
STATE AND LOCAL OBLIGATIONS	\$ 1,624,000.00	\$	2,119,000.00	\$	2,493,000.00	
UNITED STATES GOVERNMENT- GUARANTEED OBLIGATIONS (See Listing Below)	\$ 12,948,696.15	\$	5,483,188.28	\$	11,028,908.05	
UNITED STATES GOVERNMENT AGENCY OBLIGATIONS (See Listing Below)	\$ 2,745,000.00		_		-	
CANADIAN GOVERNMENTAL OBLIGATIONS (See Listing Below)	\$ 28,600,000.00	\$	14,925,000.00	\$	30,000,000.00	
CORPORATE BOND OBLIGATIONS (See Listing Below)	\$ 158,145,815.28	\$	76,896,356.02	\$	177,276,284.03	
DEFERRED YIELD ADJUSTMENT ACCOUNT**	\$ 3,572,819.94	\$	3,258,440.29	\$	5,458,534.79	
COMMON STOCKS (See Listing Below)	\$ 216,129,464.59	\$	104,133,708.68	\$	226,383,757.65	
TOTAL ASSETS IN ACCOUNT (for actuarial purposes; not indicative of true mar	433,466,935.49 value)	\$2	212,975,605.45	S	159,504,294.89	

^{*}A negative cash balance indicates purchase of securities prior to fiscal year end for which payment was not made until early July 1977.

Note: Bond investments are listed at face value; common stocks are listed at market value.

UNITED STATES GOVERNMENT-GUARANTEED AND AGENCY BONDS, CANADIAN GOVERNMENTAL OBLIGATIONS AND CORPORATE BOND HOLDINGS June 30, 1977

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Public Employees Retirement Fund (000) (b)	State Employees Retirement Fund (000) (b)	Teachers' Retirement Fund (000) (b)	Total Amount (000) (b)
UNITED STATES OF								
GOVERNMENT NA GUARANTEED MO Amortibanc								
Investment	Mtg. Backed Cert.	09-15-2005	8.000	8.193	\$ 887	_	_	\$ 887
Banco Mtg. Co.	Mtg. Backed Cert.		8.000	8.275		_	\$ 1.981	1.981
Collateral Investment	Mtg. Backed Cert.		8.000	8.260	_	_	996	996
First Fed. Savings/								
Loan	Mtg. Backed Cert.		8.000	8.260	-	_	2,015	2,015
First Fidelity Mtg.	Mtg. Backed Cert.		8.000	8.193	_	\$ 995	_	995
Fort Worth Mtg.	Mtg. Backed Cert.	07-15-2006	8.000	8.260	488	_	471	959
Guild Mortgage Co.	Mtg. Backed Cert.	06-15-2005	8.000	8.193	899	_	· -	899
Hancock Mtg. Co.	Mtg. Backed Cert.	06-15-2006		8.296	_	-	975	975
Hartzier Mtg. Co. Home Federal	Mtg. Backed Cert.			8.193	-	1,006	-	1,006
Savings	Mtg. Backed Cert.	01-15-2007	8.000	8.183	-	_	1,996	1,996
Keystone Financial Mid-Island	•			8.296	998	-	-	998
Equities Ohio Savings	Mtg. Backed Cert.	12-15-2006	8.000	8.296	-	999	-	999
Assoc.	Mtg. Backed Cert.	10-15-2006	8.000	8.193,	_	_	988	988
Schumacher Mtg.	Mtg. Backed Cert.	11-15-2006	8.000	8.193	1,015	_	_	1,015
United California Bank	Mtg. Backed Cert.	11-15-2006	8.000	8.275	_	984	_	984
Utah Mtg. Loan								
Corp. Utah Mtg. Loan	Mtg. Backed Cert.	10-15-2006	8.000	8.260	1,985	-	-	1,985
Corp.	Mtg. Backed Cert.	06-15-2006	8.000	8.296	-	-	979	979

	Type of	Maturity	Rate	Yield	Re	tirement Fund	Employees Retirement Fund	Fund	Total Amount
Company	Security	Date (a)			_(()00) (b)	(000) (b)	(000) (P)	(000) (b)
Vanguard Holding Co.	Mtg. Backed Cert.	10-15-2006	8.000	8.260		1,007	_	_	1,007
Wachovia Mtg. Co.	Mtg. Backed Cert.	11-15-2006	8.000	8.296 8.296		985	996	-	996 985
Waterfield Mtg. Weyerhaeuser Mtg.	Mtg. Backed Cert. Mtg. Backed Cert.		8.000 8.000	8.275		2,015	_	_	2,015
	NMENT NATIONA GUARANTEED M RITIES		GE	8.250%	\$	10.281	\$ 4,982	\$ 10,404	\$ 25,668
							•	*	
GOVERNMENT-GU Delta Steamship	JAKAN I EED WEI	TCHANT WA	HINEB	2010					
Lines Grace Line, Inc.	GovtGuar. Bond GovtGuar. Bond		5.500 4.200	5.500 4.200	\$	448 855	-	_	\$ 448 855
Grace Line, Inc.	GovtGuar. Bond		5.100	5.100		738	_	_	738
Moore-McCormack Lines	GovtGuar. Bond	04-01-1987	5.750	5.750		625	\$ 501	\$ 624	1,750
	NMENT-GUARAN				-				
MERCHANT MA				5.244%	\$	2,666	\$ 501	\$ 624	\$ 3,791
TOTAL UNITED	STATES Guaranteed o	RUGATION	s	7.863%	\$	12,947	\$ 5,483	\$ 11,028	\$ 29,459
					•	,,	¥ 0,100	V 11,020	+ 20,100
UNITED STATES (Federal Home	GOVERNMENT A	GENCY OBL	IGATIO	VS					
Loan Bank	Bond	08-27-1984	7.850	7.836%	\$	2,745	-	-	\$ 2,745
CANADIAN GOVE	RNMENTAL								
PROVINCIAL OBL	IGATIONS								
British Columbia Hydro	Bond	07-15-1996	9.625	9.625	\$	2,700	\$ 2,500	\$ 2,000	\$ 7,200
Manitoba Hydro	Deboatura	10-15-1997	7.650	7.724		3,500	1 076	2 500	0 075
Elec. Bd. Manitoba,	Debenture	10-13-1337	7.000	1.124		3,300	1,875	3,500	8,875
Province of N. Brunswick	Debenture	11-01-1993	6.875	6.900		800	-	1,200	2,000
Elec. Pwr.	S/F Debenture	04-01-1998	7.875	7.875		3,500	2,000	3,500	9,000
N. Brunswick Elec. Pwr.	S/F Debenture	11-15-1991	6,000	6,160		500	400	500	1,400
N. Brunswick			•	•		300			
H. Educ. Nova Scotia	S/F Debenture	04-15-1993	7.000	7.260		-	300	550	850
Power Comm.	S/F Debenture	07-15-1998	8.125	8.150		1,500	1,500	1,650	4,650
Nova Scotia Power Comm.	S/F Debenture	03-15-1997	7.750	7.800		1,500	_	1,500	3,000
Nova Scotia,							700		•
Province of Ontario Hydro	S/F Debenture Note	08-01-1993 03-15-1996	7.250 9.500	7.200 9.500		800 4,100	700 2,500	1,000 4,100	2,500 10,700
Ontario,									
Province of Ontario,	Debenture	12-01-1997	0.073	7.160		700	250	400	1,350
Province of Ontario,	Debenture	05-15-2001	7.850	7.850		1,500	-	2,000	3,500
Province of	Debenture	12-15-2002	7.300	7.300		3,500	_	3,500	7,000
Ontario, Province of	Debenture	04-15-1997	5.625	5.625		_	400	600	1,000
	ICIAL OBLIGATIO				\$	24,600	\$12,425	\$ 26,000	\$ 63,025
CANADIAN AGEN	iev								
Export	161								
Development	Note	07-15-1981	8.500	8.500%	-		\$ 2,500	\$ 4,000	\$ 10,500
TOTAL CANAD	IAN GOVERNME	NTAL OBLIC	ATION	S 8.179%	\$	28,600	\$14,925	\$ 30,000	\$ 73,525
CORPORATE BON	ID OBLIGATIONS								
PUBLIC UTILITY ELECTRIC	OBLIGATIONS								
Arizona Public Serv.	First Mtg. Bond	09-01-1997	6.250	6.331		_	\$ 500	\$ 750	
Calif. Elec. Pwr. Citizens Utilities	First Mtg. Bond First Mtg. Coll.	05-01-1990	5.125	5.104	\$	400	300	500	1,200
Citizens Othities	Trust	10-01-1992	4.625	5.406		-	_	800	`800
Commonwealth Edison	First Mtg. Bond	11-01-1996	5.750	5.834		750	500	650	1,900
Consolidated	First & Ref. Mtg.					,,,,	000		
Edison Consolidated	Bond Equipment Trust	10-15-1994	4.600	6.450		-	_	1,100	1,100
Edison	Cert.	01-01-1996	9.250	9.250		1,466	-	1,711	3,177
Dayton Power & Light	First Mtg. Bond	06-01-1993	4.450	4.450		500	400	600	1,500
Kansas Power	-	06-01-2007		8,168		2 000			•
& Light Louisiana Power	First Mtg. Bond	00-01-2007	8.125	0.100		3,000	_	-	3,000
& Light Philadelphia Elec.	First Mtg. Bond First & Ref. Mtg.	04-01-1990	5.000	5.009		350	200	500	1,050
	Bond Bond	10-15-1980	11.000	11.000		-	-	1,200	1,200
Public Serv. Indiana	First Mtg. Bond	01-01-2007	7.625	7.725		4,000	1,600	3,490	9,090
Public Serv.	First & Ref. Mtg.								
Elec. Gas Rochester Gas &	Bond	06-01-2007	8.250	8.226		4,250	2,500	4,250	11,000
Elec.	First Mtg. Bond	07-01-1998	6.700	6.700		800	-	1,000	1,800
Tucson Gas & Electric	First Mtg. Bond	02-01-1996	4.875	4.875		600	400	600	1,600
Total Electric	•				6 5	3 16,116	\$ 6,400	\$ 17,151	
GAS									
Gas Service Co.	First Mtg. Bond	05-01-1983	3 4.400	5.066		\$ 540	\$ 288	S 324	\$ 1,152
Louisiana Gas Service	First Mtg. Bond	06-01-1987	7 4.500	4.700		500	500	400	1,400
MichWisc. Pipe Line	First Mtg. Bond	07-15-198	3 4.875	4.700		495	395	495	1,385
Northwest Natura	1								
Gas	First Mtg. Bond	01-01-1989	9 4.750	4.720		600	400	600	1,600

^{**}This account signifies an amount equal to the discount at which fixed-income securities have been sold at less than amortized cost; the entire amount is being accumulated over a term equal to the average maturity of the bonds sold.

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Public Employees Retirement Fund (000) (b)	State Employees Retirement Fund (000) (b)	Teachers' Retirement Fund (000) (b)	Total Amour (000) (1
Springfield Gas							(000) (0)	
Light Transcont'l Gas	Note	01-15-1987	4.875	4.875	406	243	_	64
Pipe Line Transcont'l Gas	First Mtg. Bond	11-01-1981	. 5.000	5.080	502	413	522	1,43
Pipe Line	First Mtg. Bond	11-01-1982	4.875	4.820	287	281	-	56
Trunkline Gas Co. Total Gas	First Mtg. Bond	01-01-1982	5.000	5.000 4.856%	229 S 3,559	\$ 2,749	\$ 2,570	s 8,8
TELEPHONE American Tel.								
& Tel.	Debenture	10-01-1996	4.375	4.300	\$ 500	\$ 400	\$ 600	\$ 1,5
Bell Tel. Co. Canada	First Mtg. Bond	09-17-1998	6.900	6.900	800	700	500	2,0
Bell Tel. Co. Canada	First Mtg. Bond	06-01-2004	9.500	9.500	4,000	2,000	4,000	10,0
General Tel. Co. (III.)	First Mtg. Bond	09-01-1995	4.875	4.875	.,	400	500	
General Tel. Co.	Ť				_			9
(Ind.) General Tel. Co.	First Mtg. Bond	08-01-1995	4.700	4.700	-	400	500	9
N.W. N.Y. Tel. Co.	First Mtg. Bond Refunding Mtg.	06-01-1999	7.125	7.324	900	700	1,000	2,6
	Bond	07-15-2008	8.000	8.842	3,500	1,500	4,000	9,0
Southern Bell T & T Co.	Debenture	03-15-2013	7.625	8.152	4,500	2,000	4,500	11,0
United Tel. Co. Ohio	First Mtg. Bond	07-01-1998	6.875	6.875	736	644	920	2,3
United Tel. Co.				6.625	730	044		
ra. Total Telephone	First Mtg. Bond	11-01-1998	6.625	8.116%	\$ 14,936	\$ 8,744	1,150 \$ 17,670	1,1 \$ 41,3
WATER Indianapolis Water	First Mta. Bond	01-01-1992	4.750	4.700	\$ 400	\$ 300	\$ 300	\$ 1,0
Indianapolis Water		08-01-1997	5.875	5.875			600	6
Total Water	IITII ITV ODLIC	TIONS		5.141%		S 300	\$ 900	\$ 1,6
	UTILITY OBLIGA	1110113		7.466%	\$ 35,011	\$18,193	\$ 38,291	\$ 91,4
American Invest-	ATTUNS							
ment American Invest-	Senior Note	11-01-1986	6.750	6.750	\$ 500	\$ 400	\$ 500	\$ 1,4
ment	Note	01-01-1991	5.250	5.250	-	432	576	1,0
CIT Financial Corp.	Debenture	10-01-1986	6.375	6.593	_	750	1,000	1,7
Deere (John) Credit	Debenture	04-30-1998	7.500	7.666	3,750	2,250	4,000	10,0
First Bank System	Note	06-30-1983		8.861	1,842	-	1,843	3,6
Ford Motor Credit Co. GRC Realty Corp. Honeywell	S/F Debenture Note	07-15-2000 12-31-1998		9.724 7.700	4,000 3,000	2,500 -	4,100 3,000	10,6 6,0
Finance Inc.	S/F Debenture	12-15-1998		8.396	4,000	-	4,000	8,0
Household Finance Household Finance		01-01-1990 09-15-1993		7.417 4.910	900	400 450	500 550	1,8 1,0
Northwest Bancorp.	S/F Debenture	03-15-2003	7.750	7.750	4,000	2,500	4,000	10,5
Northwest Bancorp.	Note	09-15-1986	7.875	7.892	4,000	2,500	4,000	10,5
Wells Fargo & Co. TOTAL FINANO	Promissory Note CE OBLIGATIONS	11-01-1998	8.125	8.125	2,500 \$ 28,492	1,500 \$13,682	2,500 \$ 30,569	6,5 \$ 72,7
INDUSTRIAL OBL Akzona, Inc.	IGATIONS Debenture	02-15-1997	7.500	7.500	\$ 2,000		\$ 2,500	\$ 4,5
Aluminum Co. of America	Promissory Note	.03-31-1988	4.375	4.375	302	\$ 240	358	9 4,5
Aluminum Co. of Canada	S/F Debenture	03-01-1995	9.500	9.634	3,860	1,744	4,000	9,6
American Sterilizer Armco Steel Corp.	Note	08-01-1977	4.875	4.875 7.959	20	22	-	
Armour-Dial, Inc. Ashland Oil &	Note	12-15-1996 01-15-2003	7.900	7.900	2,200 3,500	_	2,800 3,500	5,0 7,0
Refining Atlantic Richfield	S/F Debenture	09-01-2000	10.000	10.000	1,950	-	1,950	3,9
Co.	Guaranteed Note	07-15-1996	9.250	9.250	4,000	2,500	4,000	10,5
Bendix Corp. Cities Service Co. Cities Service	S/F Debenture Debenture	12-01-1992 11-01-1997	6.625 6.125	6.630 6.486	. 850 –	600 650	1,000 1,000	2,4 1,6
Gas Co. Continental Oil	Debenture Note	06-01-1991 12-01-2000	8.250 9.000	8.250 9.015	1,450 1,049	1,000 874	2,000 1,442	4,4 3,3
Crown Zeller- bach (S.T.)	General Mtg. Bond	08-01-1994		8.125	•	1,872	3,839	
Cummins Engine					3,839	1,072		9,5
Co. Dow Chemical	Note Note	07-15-1990 04-01-1991	4.600 5.000	5.330 5.125	350 396	_ 288	700 396	1,0 1,0
Dresser Industries FMC Corp.	Note S/F Debenture	05-15-1985 01-15-2000	8.650	8.578 9.603	1,057 3,800	2,400	1,057 3,800	2,1 10,0
Firestone Tire								
& Rubber Ford Motor Co.	Debenture Guaranteed Note	12-01-2004 12-01-1996	8.625	9.268 8.625	4,000 4,000	2,100 2,500	4,100 4,000	10,2 10,5
B.F. Goodrich Co. Gulf Oil Corp.		11-15-1992 06-15-1993	6.500	6.500 6.625	500 800	500 690	1,000 1,000	2,0 2,4
Internat'l.	-							
Multifoods	S/F Note	03-01-1988	4.500	4.500	359	_	359	7
MacMillan	1 .							
MacMillan Bloedel, Ltd. Marathon Oil Co. Moore Business	Debenture S/F Debenture	07-01-1994 02-01-2000		8.750 8.671	4,150 4,000	2,500 1,000	4,150 -	10,8 5,0

	Type of	Maturity	Coupon Rate	Average Yield	Public Employees Retirement Fund	State Employees Retirement Fund	Teachers' Retirement Fund	Total Amount
Company	Security	Date (a)	%		(000) (b)	(000) (b)	(000) (b)	(000) (b)
Phelps Dodge Corp Plantation Pipe	o. Note	06-01-1985	8.500	8.575	4,000	2,500	4,000	10,500
Line Shell Canada, Ltd.	Guaranteed Note	10-01-2001 01-01-1994	7.875 7.500	7.973 7.500	3,000	1,250	3,500	7,750 1,200
Shell Oil Co.	Note	04-15-1990	4.500	6.440	_	_	1,200 733	733
Sprague Electric Co.	S/F Debenture	09-01-1988	4.375	4.400		_	550	550
Standard Oil of Calif.	First Pref. Ship. Mtg. Bd.	03-30-1997	7.700	7.700	600	_	700	
Standard Oil of					000			1,300
Calif. Standard Oil of	Promissory Note First Pref. Ship.	12-01-1992	6.000	6.120	-	160	800	960
Calif. Standard Oil of	Mtg. Bd. First Pref. Ship.	03-02-1997	7.700	7.700	700	-	700	1,400
Calif. Standard Oil of	Mtg. Bd. First Pref. Ship.	02-10-1997	7.700	7.700	700	-	600	1,300
Calif.	Mtg. Bd.	09-07-1997	7.700	7.700	500	1,400	500	2,400
Standard Oil of Calif.	First Pref. Ship. Mtg. Bd.	09-08-1997	7.700	7.700	500	550	500	1,550
Standard Oil of Calif.	First Pref. Ship. Mtg. Bd.	11-06-1997	7.700	7.700	500	550	500	1,550
Standard Oil of	First Pref. Ship.							
Calif. Standard Oil	Mtg. Bd.	07-02-1999	8.500	8.500	2,000	2,000	2,000	6,000
(Indiana) Standard Oil	Note	10-01-2000	7.300	7.300	1,500	1,500	2,000	5,000
(Indiana) Standard Oil	Debenture	01-15-1998	6.000	6.070	400	400	1,000	1,800
(Indiana) Standard Oil	Note	10-01-2000	9.000	9.000	1,500	1,000	1,500	4,000
(Indiana)	Note	10-01-2000	7.500	7.500	1,500	500	1,500	3,500
Standard Oil Co. Ohio	Note	07-15-1990	4.550	4.550		_	288	288
Stauffer Chemical Co.	Note	03-15-1997	7.500	7.500	2,000		2,000	
Sun Oil Co.	Note	07-01-1991	5.750	5.750		304		4,000 304
Swift & Co. Swift & Co.	Debenture S/F Debenture	06-01-1986 08-01-1992	4.875 6.300	5.715 6.622	278 	223 480	607 480	1,108 960
Texaco, Inc. Uarco, Inc.	Note Note	12-01-2001 05-01-1988	7.750 6.500	7.750 6.500	1,881 489	1,411	2,352 815	5,644 1,304
Union Oil Co. of Calif.	Note	12-01-1988	6.500					
Youngstown	First Mtg.			6.500	484	-	605	1,090
Sheet Tube	S/F Bond FRIAL OBLIGATIO	07-01-1995 DNS	4.600	5.536	566 \$ 74,531	36,115	1,375 S 82,757	2,347 S193,404
TRANSPORTATIO				0.222/0	3 /4,931	330,113	3 02,737	3193,404
Atchison, Topeka	General Gold							
& Santa Fe Atlantic Coast	Bond	10-01-1995	4.000	4.400	-	-	\$ 500	\$ 500
Line Railroad Atlantic Richfield	First Mtg. Bond First Pref. Ship.	10-01-1988	4.750	4.750	\$ 481	S 387	480	1,348
Co. Delaware Lacka-	Mtg. Bd. Refunding	12-01-2001	8.750	8.750	2,000	1,200	2,000	5,200
wanna & Wst.	Mtg. Bond*	05-01-1985	4.500	4.500	-	6	-	6
Louisville & Nashville	Collateral Trust Bond	12-01-1987	4.875	4.950	500	400	450	1,350
Western Maryland RR	First Mtg. Bond	10-01-1989	4.850	4.850	480	384	480	1,344
TOTAL TRANS	PORTATION							
DEBT OBLIGAT				6.907%	S 3,461	\$ 2,377	\$ 3,910	\$ 9,748
RAILROAD EQUI								
Inc. ACF Industries,	Cert. Equipment Trust	81	5.625	5.625	\$ 85	\$ 80	-	\$ 165
Inc.	Cert.	84	7.625	7.625	210	140	\$ 700	1,050
ACF Industries, Inc.	Equipment Trust Cert.	04-01-1978/ 85	9.500	9.500	720	480	800	2,000
ACF Industries, Inc.	Equipment Trust Cert.	03-01-1982/ 91	9.000	9.000	3,000	1,000	3,000	7,000
ACF Industries, Inc.	Equipment Trust Cert.	02-01-1978/ 91	8.000	8.000			4.000	4,000
Burlington	Conditional Sale	05-01-1978/					•	
Northern Burlington	Agree. Conditional Sale	86 10-01-1977/	8.600	8.600	_	-	1,119	1,119
Northern Chesapeake &	Agree. Conditional Sale	87 08-15-1977/	9.625	9.625	1,100	-	1,100	2,200
Ohio RR Chicago,	Agree.	02-15-1983	6.875	6.926	363	330	462	1,157
Milwaukee, St.	0 100	07.45.4077/						
Paul & Pacific Railroad Co.	Conditional Sale Agree.	07-15-1977/ 01-15-1982	6.375	6.375	87	87	87	262
Chicago, Milwaukee, St.								
Paul & Pacific Railroad Co.	Conditional Sale Agree.	12-01-1977/ 06-01-1981	5.375	5.375	120	100	116	220
Delaware &			3.373	3.373	120	100	110	338
Hudson (Guar. GE)	Conditional Sale Agree.	03-01-1978/ 09-01-1985	10.500	10.500	877	_	_	877
Flying Tiger Corp.	Equipment Trust Cert.	10-15-1977	4.500	4.500	40	34	40	114
Fruit Growers Express	Equipment Trust Cert.	11-15-1977/ 81	6.000	6.000	150	125	150	425
Fruit Growers	Equipment Trust	06-15-1978/		•	100			
Express Illinois Central RR		85 02-15-1978/	9.750	9.750	-	640	640	1,280
Louisville &	Agree. Conditional Sale	83 01-15-1978/	6.875	6.875	295	253	422	971
Nashville Louisville &	Agree, Conditional Sale	86 10-20-1982/	6.875	7.027	540	396	720	1,656
Nashville	Agree.	91	9.000	9.000	1,333	-	-	1,333

Schedule IV continued

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Public Employees Retirement Fund (000) (b)	State Employees Retirement Fund (000) (b)	Teachers' Retirement Fund (000) (b)	Total Amount (000) (b)
Louisville &	Conditional Sale	10-20-1983/ 04-20-1992	8.375	8.375	2 202	1 121	2 202	E 007
Nashville N.Y. Central	Agree. Equipment Trust	04-20-1992	0.3/0	6.375	2,383	1,121	2,383	5,887
Railroad	Cert.	10-01-2013	4.500	4.510	-	20	-	20
Norfolk & Western Ry.	Conditional Sale Agree.	08-01-1977/ 83	7.250	7.250	420	350	630	1,400
St. Louis-San	Conditional Sale	01-01-1978/						
Francisco Ry.	Agree.	83	6.750	6.750	-	240	360	600
St. Louis-San	Conditional Sale	12-15-1977/						
Frisco Ry.	Agree.	83	7.250	7.250	373	-	326	700
Southern Pacific	Conditional Sale	03-01-1978/						
Co.	Agree.	84	7.625	7.625	350	280	490	1,120
Southern Pacific	Conditional Sale	10-01-1978/						
Trans.	Agree.	92	8.250	8.250	1,200	850	1,200	3,250

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Public Employees Retirement Fund (000)	State Employees Retirement Fund (000)	Teachers' Retirement Fund (000)	Total Amount (000)
Union Tank Car	Equipment Trust Cert.	12-15-1982/ 95	9.500	9.500	3,000	_	3,000	6,000
TOTAL RAILR	OAD EQUIPMENT	OBLIGATIO	NS	8.488%	\$ 16,650	\$ 6,528	\$ 21,748	\$ 44,926
TOTAL CORPOR	ATE OBLIGATION	S		8.026%	\$158,145	\$76,896	\$177,276	\$412,318
	STATES GOVERNI CANADIAN GOVEI E OBLIGATIONS			8.037%	\$202,438	\$97,304	\$218,305	\$518,047

⁽a) Most corporate issues have substantial sinking funds and an average life far shorter than the stated maturity date. (b) Columns may not add, due to rounding.

COMMON STOCK HOLDINGS

		Market		lic Employees tirement Fund		Employees ement Fund		Teachers' rement Fund		Total
Common Stock	Total Shares	Price 6-30-77	Shares	Market Value	Shares	Market Value	Shares	Market Value	Total Market Value	% Market
UTILITIES	. —									
ELECTRIC Central and South West Corporation Cincinnati Gas & Electric Company (The) Commonwealth Edison Company Florida Power & Light Company Houston Industries Incorporated Middle South Utilities Corporation Minnesota Power & Light Company Northern States Power Company (Minn.) Pacific Gas and Electric Company Public Service Company of Indiana, Inc. Southern California Edison Company Southern Company (The) Texas Utilities Company Virginia Electric and Power Company	139,400 65,000 114,272 144,400 86,600 173,500 125,000 117,500 67,400 152,000 108,300 153,000 97,498	\$ 16.13 24.75 30.88 27.13 33.88 16.50 22.25 28.75 24.00 29.25 25.13 17.25 21.50 15.13	55,400 28,000 46,862 51,600 29,000 71,400 40,000 47,500 27,000 60,500 48,300 65,000 33,833	\$ 893,325.00 693,000.00 1,446,864.25 1,399,650.00 982,375.00 1,178,100.00 648,000.00 1,769,625.00 766,312.50 833,175.00 1,397,500.00 511,724.13	26,000 12,000 24,321 29,400 16,500 29,800 25,000 22,000 11,000 26,500 13,000 16,500 33,000 19,166	\$ 419,250.00 297,000.00 750,910.88 797,475.00 558,937.50 491,700.00 632,500.00 264,000.00 775,125.00 326,625.00 284,625.00 284,625.00 289,885.75	58,000 25,000 43,089 63,400 41,100 72,300 60,000 48,000 29,400 65,000 25,500 43,500 55,000 44,499	\$ 935,250.00 618,750.00 1,330,372.88 1,719,725.00 1,392,262.50 1,192,950.00 1,335,000.00 705,600.00 1,901,250.00 640,687.50 750,3750.00 1,182,500.00 673,047.38	\$ 2,247,825.00 1,608,750.00 3,528,148.01 3,916,860.00 2,933,575.00 2,862,750.00 2,781,250.00 4,446,000.00 1,733,625.00 1,868,175.00 3,289,500.00 1,474,657.26	
Total Electric				\$ 14,775,275.88		\$ 7,153,784.13		\$ 15,757,770.26	\$ 37,686,830.27	6.89%
NATURAL GAS Houston Natural Gas Corporation Panhandle Eastern Pipe Line Company Peoples Gas Company Total Natural Gas	100,000 151,648 59,000	\$ 32.25 48.88 50.75	37,000 62,510 25,000	\$ 1,193,250.00 3,055,176.25 1,268,750.00 \$ 5,517,176.25	20,000 30,214 12,000	\$ 645,000.00 1,476,709.25 609,000.00 \$ 2,730,709.25	43,000 58,924 22,000	\$ 1,386,750.00 2,879,910.50 1,116,500.00 \$ 5,383,160.50	\$ 3,225,000.00 7,411,796.00 2,994,250.00 \$ 13,631,046.00	2.49%
COMMUNICATIONS American Telephone & Telegraph Company General Telephone & Electronics Corporation United Telecommunications, Inc. Total Communications TOTAL UTILITIES	276,720 235,300 220,200	\$ 63.50 32.50 20.50	106,710 91,300 96,200	\$ 6,776,085.00 2,967,250.00 1,972,100.00 \$ 11,715,435.00 \$ 32,007,887.13	54,500 49,000 29,000	\$ 3,460,750.00 1,592,500.00 594,500.00 \$ 5,647,750.00 \$ 15,532,243.38	115,510 95,000 95,000	\$ 7,334,885.00 3,087,500.00 1,947,500.00 \$ 12,369,885.00 \$ 33,510,815.76	\$ 17,571,720.00 7,647,250.00 4,514,100.00 \$ 29,733,070.00 \$ 81,050,946.27	5.45% 14.83%
FINANCIAL SERVICES										
BANKS Citicorp Continental Illinois Corporation First Bank System, Incorporated First International Bancshares, Inc. Manufacturers Hanover Corporation J.P. Morgan & Co., Incorporated Northwest Bancorporation Security Pacific Corporation Valley National Bank of Arizona Total Banks	148,432 187,272 113,500 68,300 61,000 63,016 167,400 75,609 90,582	\$ 27.38 26.75 36.63 40.88 37.50 50.38 24.13 29.56 16.63	50,600 87,272 49,700 32,300 21,500 23,540 60,000 25,886 32,702	\$ 1,385,175.00 2,334,526.00 1,820,262.50 1,320,262.50 806,250.00 1,185,827.50 1,447,500.00 765,267.82 543,670.75	28,932 28,000 19,200 9,400 7,000 13,176 34,400 11,721 15,896	\$ 792,013.50 749,000.00 703,200.00 384,225.00.00 663,741.00 829,900.03 46,507.92 264,271.00 \$ 4,995,358.42	68,900 72,000 44,600 26,600 32,500 26,300 73,000 38,002 41,984	\$ 1,886,137.50 1,926,000.00 1,633,475.00 1,087,275.00 1,218,750.00 1,324,862.50 1,761,125.00 1,123,453.13 697,984.00 \$ 12,659,062.13	\$ 4,063,326.00 5,009,526.00 4,156,937.50 2,791,762.50 2,287,500.00 3,174,431.00 4,038,525.00 2,235,228.87 1,505,925.75 \$ 29,263,162.62	5.35%
FINANCE Beneficial Corporation Household Finance Corporation MGIC Investment Corporation Total Finance	101,845 174,500 86,800	\$ 23.88 19.88 15.88	31,875 71,300 34,800	\$ 761,015.63 1,417,087.50 552,450.00 \$ 2,730,553.13	19,245 28,900 15,000	\$ 459,474.38 574,387.50 238,125.00 \$ 1,271,986.88	50,725 74,300 37,000	\$ 1,211,059.38 1,476,712.50 587,375.00 \$ 3,275,146.88	\$ 2,431,549.39 3,468,187.50 1,377,950.00 \$ 7,277,686.89	1.33%
INSURANCE Aetna Life & Casualty Company The Chubb Corporation Connecticut General Insurance Corporation INA Corporation NLT Corporation Northwestern National Life Insurance Co. SAFECO Corporation The Sf. Paul Companies, Inc. Travelers Corporation (The) United States Fidelity & Guaranty Company Total Insurance TOTAL FINANCIAL SERVICES	129,200 70,500 49,000 111,700 205,600 56,800 40,700 106,900 72,400 72,000	\$ 37.25 41.50 54.38 45.88 25.75 21.50 47.13 36.38 34.25 39.38	46,700 26,700 18,000 57,000 86,700 22,100 15,800 37,400 24,700	\$ 1,739,575.00 1,108,050.00 978,750.00 2,614,875.00 2,232,525.00 475,150.00 744,575.00 1,360,425.00 845,975.00 945,000.00 \$ 13,044,900.00 \$ 27,384,195.20	22,500 12,900 8,500 16,700 38,200 5,600 7,500 17,000 15,500 16,500	\$ 838,125.00 535,350.00 462,187.50 766,112.50 983,650.00 120,400.00 353,437.50 618,375.00 530,875.00 \$ 5,858,200.00 \$ 12,125,545.30	60,000 30,900 22,500 38,000 80,700 29,100 17,400 52,500 32,200 31,500	\$ 2,235,000.00 1,282,350.00 1,223,437.50 1,743,250.00 2,078,025.00 625,650.00 819,975.00 1,909,687.50 1,102,850.00 \$ 14,260,537.50 \$ 30,194,746.51	\$ 4,812,700.00 2,925,750.00 2,664,375.00 5,124,237.50 5,294,200.00 1,917,987.50 3,888,487.50 2,479,700.00 \$ 33,163,637.50 \$ 69,704,487.01	6.07% 12.75%

^{*}Purchased 1930-1951.

Schedule IV continued

		Market	Public Employees Retirement Fund			e Employees ement Fund		Teachers' irement Fund		Total
Common Stock	Total Shares	Price 6-30-77	Shares	Market Value	Shares	Market Value	Shares	Market Value	Total Market Value	% Market
CONSUMER-ORIENTED AUTOS — AUTO PARTS Ford Motor Company General Motors Corporation Genuine Parts Company Goodyear Tire & Rubber Company (The) Total Autos — Auto Parts	115,000 120,500 79,600 203,500	\$ 46.88 69.38 33.88 20.13	45,000 50,000 33,000 74,500	\$ 2,109,375.00 3,468,750.00 1,117,875.00 1,499,312.50 \$ 8,195,312.50	22,500 23,500 14,500 34,000	\$ 1,054,687.50 1,630,312.50 491,187.50 684,250.00 \$ 3,860,437.50	47,500 47,000 32,100 95,000	\$ 2,226,562.50 3,260,625.00 1,087,387.50 1,911,875.00 \$ 8,486,450.00	\$ 5,390,625.00 8,359,687.50 2,696,450.00 4,095,437.50 \$ 20,542,200.00	3.76%
CONSUMER-DURABLES Sunbeam Corporation Whirlpool Corporation Total Consumer-Durables	165,049 126,400	\$ 23.50 24.50	63,050 53,600	\$ 1,481,675.00 1,313,200.00 \$ 2,794,875.00	27,999 24,000	\$ 657,976.50 588,000.00 \$ 1,245,976.50	74,000 48,800	\$ 1,739,000.00 1,195,600.00 \$ 2,934,600.00	\$ 3,878,651.50 3,096,800.00 \$ 6,975,451.50	1.28%
CONSUMER-NONDURABLES Avon Products, Inc. Colgate-Palmolive Company Eastman Kodak Company Minnesota Mining and Manufacturing Co. Procter & Gamble Company (The) Revion, Incorporated Total Consumer-Nondurables	116,500 216,500 73,180 107,400 54,000 132,400	\$ 50.50 24.75 59.50 49.38 80.13 41.25	46,500 90,500 28,000 43,000 22,000 54,000	\$ 2,348,250.00 2,239,875.00 1,666,000.00 2,123,125.00 1,762,750.00 2,227,500.00 \$ 12,367,500.00	24,000 35,500 17,180 23,600 9,000 24,000	\$ 1,212,000.00 878,625.00 1,022,210.00 1,165,250.00 721,125.00 990,000.00 \$ 5,989,210.00	46,000 90,500 28,000 40,800 23,000 54,400	\$ 2,323,000.00 2,239,875.00 1,666,000.00 2,014,500.00 1,842,875.00 2,244,000.00 \$ 12,330,250.00	\$ 5,883,250.00 5,538,375.00 4,354,210.00 5,302,875.00 4,326,750.00 5,461.500.00 \$ 30,686,960.00	5.62%
CONSUMER-MISCELLANEOUS Disney (Walt) Productions Holiday Inns, Incorporated McDonald's Corporation Warner Communications, Inc. Total Consumer-Miscellaneous	95,679 67,600 83,200 63,600	\$ 36.88 14.13 46.00 30.38	35,897 23,300 35,200 23,900	\$ 1,323,701.88 329,112.50 1,619,200.00 725,962.50 \$ 3,997,976.88	17,346 14,000 14,000 15,700	\$ 639,633.75 197,750.00 644,000.00 476,887.50 \$ 1,958,271.25	42,436 30,300 34,000 24,000	\$ 1,564,827.50 427,987.50 1,564,000.00 729,000.00 \$ 4,285,815.00	\$ 3,528,163.13 954,850.00 3,827,200.00 1,931,850.00 \$ 10,242,063.13	1.87%
DRUGS American Home Products Corporation Johnson & Johnson Medtronic, Inc. Merck & Co., Inc. Pfizer Incorporated Schering-Plough Company Warner-Lambert Company Total Drugs	113,800 47,000 85,000 75,000 144,100 70,600 146,500	\$ 28.75 70.63 25.63 55.75 26.00 36.38 28.63	52,000 20,000 30,000 26,000 55,100 25,000 60,500	\$ 1,495,000.00 1,412,500.00 768,750.00 1,449,500.00 1,432,600.00 909,375.00 1,731,812.50 \$ 9,199,537.50	21,400 10,000 15,000 13,500 30,500 14,000 26,000	\$ 615,250.00 706,250.00 384,375.00 752,625.00 793,000.00 509,250.00 744,250.00 \$ 4,505,000.00	40,400 17,000 40,000 35,500 58,500 31,600 60,000	\$ 1,161,500.00 1,200,625.00 1,025,000.00 1,979,125.00 1,521,000.00 1,149,450.00 1,717,500.00 \$ 9,754,200.00	\$ 3,271,750.00 3,319,375.00 2,178,125.00 4,181,250.00 3,746,600.00 2,568,075.00 4,193,562.50 \$ 23,458,737.50	4.29%
FOODS-BEVERAGES CPC International, Inc. Coca-Cola Company (The) Consolidated Foods Corporation General Foods Corporation General Mills, Incorporated Norton Simon, Incorporated PepsiCo, Inc. Pillsbury Company (The) Total Foods-Beverages	105,000 115,200 119,500 90,200 134,200 132,092 165,786 102,500	\$ 50.25 37.25 25.88 33.38 29.50 17.75 22.50 38.25	45,000 46,200 57,200 36,600 49,200 51,800 57,000 35,400	\$ 2,261,250.00 1,720,950.00 1,480,050.00 1,221,525.00 1,451,400.00 919,450.00 1,282,500.00 1,354,050.00 \$ 11,691,175.00	18,000 21,000 24,800 12,000 29,000 22,766 30,300 23,700	\$ 904,500.00 782,250.00 641,700.00 400,500.00 855,500.00 404,096.50 681,750.00 906,525.00 \$ 5,676,821.50	42,000 48,000 37,500 41,600 56,000 57,526 78,486 43,400	\$ 2,110,500.00 1,788,000.00 970,312.50 1,388,400.00 1,652,000.00 1,021,086.50 1,765,935.00 1,660,050.00 \$ 12,356,284.00	\$ 5,276,250.00 4,291,200.00 3,092,062.50 3,010,425.00 3,958,900.00 2,344,633.00 3,730,185.00 3,920,625.00 \$ 29,624,280.50	5.42%
PRINTING PUBLISHING Donnelley (R.R.) and Sons Company Dun & Bradstreet Companies, Inc. Harcourt Brace Jovanovich, Inc. Total Printing-Publishing	84,243 82,100 36,000	\$ 24.25 29.50 32.50	28,876 34,300 14,050	\$ 700,243.00 1,011,850.00 456,625.00 \$ 2,168,718.00	19,246 15,000 8,100	\$ 466,715.50 442,500.00 263,250.00 \$ 1,172,465.50	36,121 32,800 13,850	\$ 875,934.25 967,600.00 450,125.00 \$ 2,293,659.25	\$ 2,042,892.75 2,421,950.00 1,170,000.00 \$ 5,634,842.75	1.03%
RETAIL SALES Dayton Hudson Corporation Federated Department Stores, Incorporated Penney (J.C.) Company, Incorporated Sears, Roebuck and Company Southland Corporation (The) Total Retail Sales TOTAL CONSUMER-ORIENTED TECHNOLOGY	167,700 113,500 115,100 84,000 138,500	\$ 34.38 37.00 34.88 58.00 23.63	61,600 54,000 45,700 32,000 51,050	\$ 2,117,500.00 1,998,000.00 1,593,787.50 1,856,000.00 1,206,056.25 \$ 8,771,343.75 \$ 59,186,438.63	38,500 19,000 19,300 20,000 26,600	\$ 1,323,437.50 703,000.00 673,087.50 1,160,000.00 628,425.00 \$ 4,487,950.00 \$ 28,796,132.25	67,600 40,500 50,100 32,000 60,850	\$ 2,323,750.00 1,498,500.00 1,747,237.50 1,856,000.00 1,437,581.25 \$ 8,863,068.75 \$ 61,304,327.00	\$ 5,764,687.50 4,199,500.00 4,014,112.50 4,872,000.00 3,272,062.50 \$ 22,122,362.50 \$149,286,897.88	4.04% 27.31%
ELECTRONICS Hewlett-Packard Company	20,000	\$ 79.00	8,000	\$ 632,000.00	4,000	S 316,000.00	8,000	\$ 632,000.00	\$ 1,580,000.00	0.29%
OFFICE EQUIPMENT Burroughs Corporation Control Data Corporation Digital Equipment Corporation Honeywell, Inc. International Business Machines Corporation Xerox Corporation Total Office Equipment TOTAL TECHNOLOGY	95,800 43,000 44,400 58,200 102,403 59,020	\$ 62.38 21.63 46.88 53.88 264.00 48.75	35,400 14,000 22,500 22,800 41,400 23,500	\$ 2,208,075.00 302,750.00 1,054,687.50.00 1,028,350.00 10,929,600.00 1,145,625.00 \$ 16,869,087.50 \$ 17,501,087.50	17,200 8,000 5,400 12,000 20,400 11,260	\$ 1,072,850.00 173,000.00 253,125.00 646,500.00 5,385,600.00 548,925.00 \$ 8,080,000.00 \$ 8,396,000.00	43,200 21,000 16,500 23,400 40,603 24,260	\$ 2,694,600.00 454,125.00 773,437.50 1,260,675.00 10,719,192.00 1,182,675.00 \$ 17,084,704.50 \$ 17,716,704.50	\$ 5,975,525.00 929,875.00 2,081,250.00 3,135,525.00 27,034,392.00 2,877,225.00 \$ 42,033,792.00 \$ 43,613,792.00	7.69% 7.98%
BASIC INDUSTRY AEROSPACE Boeing Company (The) United Technologies Corporation Total Aerospace	94,500 116,000	\$ 57.88 40.00	38,000 43,000	\$ 2,199,250.00 1,720,000.00 \$ 3,919,250.00	17,500 24,000	\$ 1,012,812.50 960,000.00 \$ 1,972,812.50	39,000 49,000	\$ 2,257,125.00 1,960,000.00 \$ 4,217,125.00	\$ 5,469,187.50 4,640,000.00 \$ 10,109,187.50	1.85%
BUILDING & FOREST PRODUCTS Georgia-Pacific Corporation Masonite Corporation	122,181 150,400	\$ 31.25 17.00	47,015 70,400	\$ 1,469,218.75 1,196,800.00	24,348 31,000	\$ 760,875.00 527,000.00	50,818 49,000	\$ 1,588,062.50 833,000.00	\$ 3,818,156.25 2,556,800.00	

Schedule IV continued

		Market		lic Employees irement Fund		Employees ement Fund		Teachers' rement Fund		Total
Common Stock	Total Shares	Price 6-30-77	Shares	Market Value	Shares	Market Value	Shares	Market Value	Total Market Value	% Market
Owens-Corning Fiberglas Corporation	72,100	67.13	28,100	1,886,212.50	14,000	939,750.00	30,000	2,013,750.00	4,839,712.50	
Weyerhaeuser Company Total Building & Forest Products	76,500	35.63	27,000	961,875.00 \$ 5,514,106.25	13,400	\$ 2,705,000.00	36,100	1,286,062.50 \$ 5,720,875.00	2,725,312.50 \$ 13,939,981.25	2.55%
CHEMICALS	105 035	A 24.25	20.002	A 020 205 25	20.000	ф гол сог го	45.000	A 1 100 120 00	A 2540,000,75	
Air Products and Chemicals, Incorporated Dow Chemical Company (The)	105,075 83,528	\$ 24.25 34.13	38,693 31,192	\$ 938,305.25 1,064,427.00	20,686 17,980	\$ 501,635.50 613,567.50	45,696 34,356	\$ 1,108,128.00 1,172,398.50	\$ 2,548,068.75 2,850,393.00	
du Pont (E.I.) de Nemours and Company Hercules Incorporated	45,500 165,000	116.00 18.38	19,000 68,000	2,204,000.00	9,500	1,102,000.00 496,125.00	17,000 70,000	1,972,000.00 1,286,250.00	5,278,000.00 3,031,875.00	
Monsanto Company	45,236	69.88	16,236	1,249,500.00 1,134,490.50	27,000 10,000	698,750.00	19,000	1,327,625.00	3,160,865.50	
Union Carbide Corporation	88,100	48.88	38,000	1,857,250.00	18,100	884,637.50	32,000	1,564,000.00	4,305,887.50	
Total Chemicals				\$ 8,447,972.75		\$ 4,296,715.50		\$ 8,430,401.50	\$ 21,175,089.75	3.87%
ELECTRICAL EQUIPMENT	105.000	6.04.00	50.000	4 1710.750.00	25 000	A AFA 33F AA		A 2.002.500.00	A 4 040 00F 00	
Emerson Electric Co. General Electric Company	135,000 125,000	\$ 34.38 56.50	50,000 50,000	\$ 1,718,750.00 2,825,000.00	25,000 24,000	\$ 859,375.00 1,356,000.00	60,000 51,000	\$ 2,062,500.00 2,881,500.00	\$ 4,640,625.00 7,062,500.00	
Gould, Inc.	135,000	31.00	55,000	1,705,000.00	25,000	775,000.00	55,000	1,705,000.00	4,185,000.00	
Westinghouse Electric Corporation Total Electrical Equipment	63,000	21.50	23,100	496,650.00 \$ 6,745,400.00	12,200	\$ 3,252,675.00	27,700	595,550.00 \$ 7,244,550.00	1,354,500.00 \$ 17,242,625.00	3.15%
MACHINERY				0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0,202,010.00		0 : 1,=11,000.00	4 ,,_,_	
Caterpillar Tractor Co.	74,600	\$ 57.75	27,100	\$ 1,565,025.00	14,500	\$ 837,375.00	33,000	\$ 1,905,750.00	\$ 4,308,150.00	
Clark Equipment Company Combustion Engineering, Incorporated	71,100 86,000	39.75 62.13	27,100 40,000	1,077,225.00 2,485,000.00	15,000 16,000	596,250.00 994.000.00	29,000 30,000	1,152,750.00 1,863,750.00	2,826,225.00 5,342,750.00	
Trans Union Corporation	99,000	37.75	38,000	1,434,500.00	18,000	679,500.00	43,000	1,623,250.00	3,737,250.00	
Total Machinery				\$ 6,561,750.00		\$ 3,107,125.00		\$ 6,545,500.00	\$ 16,214,375.00	2.97%
METALS										
Aluminum Company of America Pittston Company (The)	63,000 119,640	\$ 53.00 28.88	23,000 45,511	\$ 1,219,000.00 1,314,130.13	11,000 30,570	\$ 583,000.00 882,708.75	29,000 43,559	\$ 1,537,000.00 1,257,766.13	\$ 3,339,000.00 3,454,605.01	
St. Joe Minerals Corporation	124,500	34.13	49,000	1,672,125.00	23,000	784,875.00	52,500	1,791,562.50	4,248,562.50	
Total Metals				\$ 4,205,255.13		\$ 2,250,583.75		\$ 4,586,328.63	\$ 11,042,167.51	2.02%
PAPER International Paper Company	83.500	\$ 51.50	22.000	¢. 1 coo eoo oo	15 500	\$ 700.250.00	25.000	£ 1002 F00 00	e 420025000	
Union Camp Corporation	55,000	54.25	33,000 23,000	\$ 1,699,500.00 1,247,750.00	15,500 12,000	\$ 798,250.00 651,000.00	35,000 20,000	\$ 1,802,500.00 1,085,000.00	\$ 4,300,250.00 2,983,750.00	and the second
Total Paper				\$ 2,947,250.00		\$ 1,449,250.00		\$ 2,887,500.00	\$ 7,284,000.00	1.33%
TEXTILES Burlington Industries, Incorporated	31,200	\$ 24.00	11,200	\$ 268,800.00	7,000	\$ 168,000.00	13,000	\$ 312,000.00	\$ 748,800.00	0.14%
MISCELLANEOUS										
Corning Glass Works	38,900	\$ 67.38	16,000	\$ 1,078,000.00	7,500	\$ 505,312.50	15,400	\$ 1,037,575.00	\$ 2,620,887.50	
International Telephone & Telegraph Corp.	129,800	35.88	50,600	1,815,275.00	25,600	918,400.00	53,600	1,922,900.00	4,656,575.00	4.00
Total Miscellaneous TOTAL BASIC INDUSTRY				\$ 2,893,275.00 \$ 41,503,059.13		\$ 1,423,712.50 \$ 20,625,874.25		\$ 2,960,475.00 \$ 42,904,755.13	\$ 7,277,462.50 \$105,033,688.51	1.33% 19,21%
ENERGY				0 11,000,000110		0 20,020,074.20			4100,000,000.01	7512170
OIL-DOMESTIC								*.		
Atlantic Richfield Company Continental Oil Company (Del.)	120,000 206.200	\$ 60.50 33.88	47,000 81,000	\$ 2,843,500.00 2,743.875.00	21,000 35,200	\$ 1,270,500.00 1,192,400.00	52,000 90,000	\$ 3,146,000.00 3.048.750.00	\$ 7,260,000.00 6,985,025.00	
Marathon Oil Company	97,000	52.63	38,000	1,999,750.00	21,000	1,105,125.00	38,000	1,999,750.00	5,104,625.00	
Phillips Petroleum Company Standard Oil Company (Indiana)	234,000 109,000	31.00 53.75	98,000 40,000	3,038,000.00 2,150,000.00	40,000 25,900	1,240,000.00 1,392,125.00	96,000 43,100	2,976,000.00 2,316,625.00	7,254,000.00 5,858,750.00	
Total Oil-Domestic	,	•	,	\$ 12,775,125.00	20,000	\$ 6,200,150.00	10,100	\$ 13,487,125.00	\$ 32,462,400.00	5.94%
OIL-INTERNATIONAL										
Exxon Corporation Gulf Oil Corporation	238,044 205,100	\$ 53.50 28.00	89,016 85,100	\$ 4,762,356.00	44,416	\$ 2,376,256.00	104,612	\$ 5,596,742.00	\$ 12,735,354.00	
Mobil Corporation	98,400	68.00	33,800	2,382,800.00 2,298,400.00	43,000 17,800	1,204,000.00 1,210,400.00	77,000 46,800	2,156,000.00 3,182,400.00	5,742,800.00 6,691,200.00	
Standard Oil Company of California Texaco Inc.	176,500 171,490	41.75 29.13	75,000 67,100	3,131,250.00 1,954,287.50	35,000 31,040	1,461,250.00 904,040.00	66,500 73,350	2,776,375.00 2,136,318.75	7,368,875.00 4,994,646.25	
Total Oil-International	171,430	20.10	07,100	\$ 14,529,093.50	31,040	\$ 7,155,946.00	73,330	\$ 15,847,835.75	\$ 37,532,875.25	6.87%
ENERGY-RELATED										
Dresser Industries, Inc.	128,000	\$ 45.75	60,000	\$ 2,745,000.00	16,000	\$ 732,000.00	52,000	\$ 2,379,000.00	\$ 5,856,000.00	
Halliburton Company Williams Companies (The)	43,500 137,000	66.75 23.13	14,000 53,000	934,500.00 1,225,625.00	10,500 26,000	700,875.00 601,250.00	19,000 58,000	1,268,250.00 1,341,250.00	2,903,625.00 3,168,125.00	
Total Energy-Related			,	\$ 4,905,125.00	,	\$ 2,034,125.00		\$ 4,988,500.00	\$ 11,927,750.00	2.18%
TOTAL ENERGY				\$ 32,209,343.50		\$ 15,390,221.00		\$ 34,323,460.75	\$ 81,923,025.25	14.99%
TRANSPORTATION										
AIRLINES Delta Air Lines, Incorporated	55,400	\$ 35.75	18,500	\$ 661,375.00	8,800	\$ 314,600.00	28,100	\$ 1,004,575.00	\$ 1,980,550.00	
Northwest Airlines, Incorporated	92,626	25.25	36,714	927,028.50	16,770	423,442.50	39,142	988,335.50	2,338,806.50	
UAL, Inc. Total Airlines	24,300	20.38	9,000	183,375.00 \$ 1,771,778.50	7,000	142,625.00 \$ 880.667.50	8,300	169,112.50 \$ 2,162,023.00	495,112.50 \$ 4,814,469.00	0.88%
				⊕ 1,//1,//6.5U		φ 00U.00/.0U		φ c,10c,0c3.00	φ ¬,014,403.00	U.05%
RAILROADS Burlington Northern Incorporated	76,800	\$ 50.25	28,000	\$ 1,407,000.00	13,100	\$ 658,275.00	35,700	\$ 1,793,925.00	\$ 3,859,200.00	
Southern Railway Company Union Pacific Corporation	39,000 88,800	58.38 57.25	19,000 35,800	1,109,125.00 2,049,550.00	10,000 20,000	583,750.00 1,145,000.00	10,000 33,000	583,750.00 1,889,250.00	2,276,625.00 5,083,800.00	
Total Railroads	50,000	31.23	53,000	\$ 4,565,675.00	20,000	\$ 2,387,025.00	55,000	\$ 4,266,925.00	\$ 11,219,625.00	2.05%
TOTAL TRANSPORTATION				\$ 6,337,453.50		\$ 3,267,692.50		\$ 6,428,948.00	\$ 16,034,094.00	2.93%
TOTAL COMMON STOCKS				\$216,129,464.59	1	\$104,133,708.68 ^t	1	\$226,383,757.65 ^c	\$546,646,930.92 ⁰	100.00%

a Net original cost of equities on June 30, 1977, was \$203,416,314.91.
b Net original cost of equities on June 30, 1977, was \$ 99,706,395.33.
c Net original cost of equities on June 30, 1977, was \$217,482,772.99.
d Net original cost of equities on June 30, 1977, was \$520,605,483.23.

. SCHEDULE V

PUBLIC EMPLOYEES POLICE AND FIRE FUND June 30, 1977

RESUME OF ASSETS IN ACCOUNT

CASH CERTIFIED FOR INVESTMENT*	\$ (23,212.62)
MONEY MARKET SECURITIES	
Bills Maturities up to 98 days	\$ 910,000.00
Repurchase Agreements Maturities up to 7 days	\$ 90,000.00
Short-Term Corporate Notes Maturities up to 29 days	\$:-
UNITED STATES GOVERNMENT GUARANTEED OBLIGATIONS (See Listing Below)	\$ 2,008,420.93
UNITED STATES GOVERNMENT AGENCY OBLIGATIONS (See Listing Below)	\$ 105,000.00
CANADIAN GOVERNMENTAL OBLIGATIONS (See Listing Below)	\$ 3,950,000.00
CORPORATE BOND OBLIGATIONS (See Listing Below)	\$26,505,590.45
DEFERRED YIELD ADJUSTMENT ACCOUNT*	\$ 430,499.87
COMMON STOCKS (See Listing Below) TOTAL ASSETS IN ACCOUNT (for actuarial purposes; not indicative of true market value)	\$32,594,372.00 \$66,570,670.63

^{*}A negative cash balance indicates purchase of securities prior to fiscal year end for which payment was not made until early July 1977.

Note: Bond investments are listed at face value; common stocks are listed at market value.

UNITED STATES GOVERNMENT-GUARANTEED AND AGENCY BONDS, CANADIAN GOVERNMENTAL OBLIGATIONS AND CORPORATE BOND HOLDINGS June 30, 1977

Counan Avarage

	Type of	Maturity	. Coupon Rate	Average Yield	Total Amount
Company	Security	Date (a)	* %	%	(000) (b)
UNITED STATES GOVER	NMENT-GUARANTEED OBL	IGATIONS			
	AL MORTGAGE ASSOCIATIO	N,			
	GE-BACKED SECURITIES	•			
	Mtg. Backed Cert.	11-15-2006	8.000	8.193	\$ 959
Weaver Bros. Inc.	Mtg. Backed Cert.	09-15-2006	8.000	8.260	743
TOTAL GOVERNMENT	NATIONAL				
MORTGAGE ASSOCIAT	ION			8.222%	\$ 1,702
GOVERNMENT.GIIARAN	TEED MERCHANT MARINE	PONDS			
Grace Line, Inc.	Government Guar, Bond	02-01-1992	5.100	5:100	\$ 100
Moore-McCormack Lines	Government Guar, Bond	04-01-1987	5.750	5.750	125
U.S. Lines Co. of N.J.	Government Guar, Bond	11-01-1986	4.375	4:375	81
	-GUARANTEED MERCHANT			5.174%	\$ 306
TOTAL UNITED STATE	S GOVERNMENT-GUARANT	TEED OBLIGATIO	INS	7.758%	\$ 2,008
					,
Federal Home Loan Bank	NMENT AGENCY OBLIGATI		7.050	7.0500/	A 405
rederal Home Loan Bank	Bond	08-27-1984	7.850	7.850%	\$ 105
CANADIAN GOVERNMEN	TAL PROVINCIAL OBLIGA	TIONS			
British Columbia Hydro	Bond -	07-15-1996	9.625	9.625	\$ 800
Manitoba Hydro Elec. Bd.	Debenture	10-15-1997	7.650	7.650	500
New Brunswick Elec. Pwr.	S/F Debenture	04-01-1998	7.875	7.875	500
New Brunswick H. Educ.	S/F Debenture	04-15-1993	7.000	7.260	200
Nova Scotia, Province of	S/F Debenture	08-01-1993	7.250	7.200	250
Ontario Hydro	Note	03-15-1996	9.500	9.500	800
Ontario, Province of	Debenture	05-15-2001	7.850	7.850	300
Ontario, Province of	Debenture	12-15-2002	7.300	7.300	500
Ontario, Province of	Debenture	04-15-1997	5.625	5.625	100
TOTAL PROVINCIAL O	BLIGATIONS		,	8.325%	\$ 3,950
TOTAL CANADIAN GO	VERNMENTAL OBLIGATION	NS		8.325%	\$ 3,950

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount (000) (b)
CORPORATE BOND OBL	GATIONS				
PUBLIC UTILITY OBLIGA	ATIONS				
ELECTRIC Commonwealth Edison Consolidated Edison Kansas Power & Light	First Mtg. Bond Equipment Trust Cert. First Mtg. Bond	11-01-1996 01-01-1996 06-01-2007	5.750 9.250 8.125	5.750 9.250 8.168	\$ 100 244 750
Minnesota Power & Light Philadelphia Electric Public Serv. Indiana	First Mtg. Bond First & Ref. Mtg. Bond First Mtg. Bond	09-01-2006 10-15-1980 01-01-2007	8.700 11.000 7.625	8.700 11.000 7.704	800 800 540
Rochester Gas & Elec. Total Electric	First Mtg. Bond	07-01-1998	6.700	6.700 8.831%	\$ 3,384
GAS Louisiana Gas Service MichWisc. Pipe Line	First Mtg. Bond First Mtg. Bond	06-01-1987 07-15-1983	4.500 4.875	4.615 4.700	\$ 100 73
Transcont'l Gas Pipe Line Total Gas	First Mtg. Bond	11-01-1982	4.875	4.691%	\$ 227
TELEPHONE American Telephone & Telegraph	Debenture	10-01-1996	4.375	4,300	\$ 100
Bell Telephone Co. Canada	First Mtg. Bond	06-01-2004	9.500	9.500	800
N.Y. Telephone Co. Southern Bell Tele- phone & Telegraph Co.	Refunding Mtg. Bond Debenture	07-15-2008 03-15-2013	8.000 7.625	8.510 8.838	800 800
Total Telephone TOTAL PUBLIC UTILIT				8.763% 8.649%	\$ 2,500 \$ 6,111
FINANCE OBLIGATIONS					+ -,,,,
American Investment American Investment	Senior Note Note	11-01-1986 01-01-1991	6.750 5.250	6.750 5.250	\$ 100 96
Deere (John) Credit Ford Motor Credit Co.	Debenture S/F Debenture	04-30-1998 07-15-2000	7.500 9.700	7.540	500
Northwest Bancorp.	S/F Debenture	03-15-2003	7.750	9.724 7.750	800 500
Northwest Bancorp. Wells Fargo & Co.	Note Promissory Note	09-15-1986 11-01-1998	7.875 8.125	7.892 8.125	800 800
TOTAL FINANCE OBL				8.180%	\$ 3,596
INDUSTRIAL OBLIGATION Akzona, Inc.	INS Debenture	02-15-1997	7.500	7.500	\$ 500
Aluminum Co. of Canada	S/F Debenture	03-01-1995	9.500	10.016	800
Armco Steel Corp. Atlantic Richfield Co.	Note Guaranteed Note	12-15-1996 07-15-1996	7.875 9.250	7.875 9.250	500 800
Cities Service Gas Co.	Debenture	06-01-1991	8.250	8.250	300
Continental Oil Crown Zellerbach (S.T.)	Note General Mtg. Bond	12-01-2000 08-01-1994	9.000 8.125	9.000 8.125	218 749
FMC Corp. Firestone Tire & Rubber	S/F Debenture Debenture	01-15-2000 12-01-2004	9.500 9.250	9.603 9.250	800 800
Ford Motor Co.	Guaranteed Note	12-01-1996	8.625	8.625	800
Gulf Oil Corp. MacMillan Bloedel, Ltd.	First Mtg. Bond Debenture	06-15-1993 07-01-1994	6.625 8.750	6.625 8.750	200 800
Marathon Oil Co. Moore Business Forms	S/F Debenture Senior Note	02-01-2000 10-01-1996	8.500 7.900	8.563 7.90ນ	. 800 500
Phelps Dodge Corp.	Note	06-01-1985	8.500	8.623	800
Plantation Pipe Line Standard Oil of Calif.	Guaranteed Note First Pref. Ship. Mtg. Bd.	10-01-2001 03-30-1997	7.875 7.700	7.875 7.700	300 150
Standard Oil of Calif.	Promissory Note	12-01-1992	6.000	6.120	121
Standard Oil of Calif. Standard Oil of Calif.	First Pref. Ship. Mtg. Bd. First Pref. Ship. Mtg. Bd.	03-02-1997 02-10-1997	7.700 7.700	7.700 7.700	150 200
Standard Oil of Calif. Standard Oil of Calif.	First Pref. Ship. Mtg. Bd. First Pref. Ship. Mtg. Bd.	09-07-1997 09-08-1997	7.700 7.700	7.700 7.700	100 100
Standard Oil of Calif.	First Pref. Ship. Mtg. Bd.	11-06-1997	7.700	7.700	100
Standard Oil (Indiana) Standard Oil (Indiana)	Note Note	10-01-2000 10-01-2000	7.300 9.000	7.300 9.000	300 250
Standard Oil (Indiana) Stauffer Chemical Co.	Note Note	10-01-2000 03-15-1997	7.500 7.500	7.500 7.500	250 500
Swift & Co.	Debenture	06-01-1986	4.875	6.540	140
Union Oil Co. of Calif. Youngstown Sheet Tube	Note First Mtg. S/F Bond	12-01-1988 07-01-1995	6.500 4.600	6.500 7.300	91 176
TOTAL INDUSTRIAL O				8.438%	\$12,295
TRANSPORTATION DEB Atlantic Richfield Co.	First Pref. Ship. Mtg. Bd.	12-01-2001	8.750	8.750	\$ 700
Louisville & Nashville Western Maryland RR	Collateral Trust Bond First Mtg. Bond	12-01-1987 10-01-1989	4.875 4.850	4.950 4.850	50 72
	TION DEBT OBLIGATIONS			8.177%	\$ 822
ACE Industries, Inc.	Equipment Trust Cert.	04-15-1978/81	5.625	5.625	\$ 48
ACF Industries, Inc. ACF Industries, Inc. Burlington Northern	Equipment Trust Cert. Equipment Trust Cert. Conditional Sale Agree.	04-01-1978/85 03-01-1982/91 05-01-1978/86	9.500 9.000 8.600	9.500 9.000 8.600	120 800 223
Chesapeake & Ohio Railway Chicago, Milwaukee, St.	Conditional Sale Agree.	09-15-1977/ 03-15-1989 07-15-1977/	8.750	8.750	294
Paul & Pacific Rail- road Co. Chicago, Milwaukee, St.	Conditional Sale Agree.	07-15-1977/ 01-15-1982	6.375	6.375	26
Paul & Pacific Rail- road Co. Delaware & Hudson	Conditional Sale Agree.	12-01-1977/ 06-01-1981 03-01-1978/	5.375	5.375	60
(Guar. GE) Flying Tiger Corp.	Conditional Sale Agree.	09-01-1985 10-15-1977	10.500 4.500	10.500 4.500	177
Fruit Growers Express Fruit Growers Express	Equipment Trust Cert. Equipment Trust Cert. Equipment Trust Cert.	11-15-1977/81 06-15-1978/85	6.000 9.750	6.000 9.750	6 50 120

^{**}This account signifies an amount equal to the discount at which fixed-income securities have been sold at less than amortized cost; the entire amount is being accumulated over a term equal to the average maturity of the bonds sold.

Schedule V continued

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount (000) (b)
Louisville & Nashville	Conditional Sale Agree.	10-20-1982/91	9.000	9.000	487
St. Louis-San Francisco					
Railway	Conditional Sale Agree.	01-01-1978/83	6.750	6.750	60
Seaboard Coast Line		10-01-1982/			
Railroad	Conditional Sale Agree.	04-01-1992	9.000	9.000	787
Southern Pacific Co.	Conditional Sale Agree.	03-01-1978/84	7.625	7.625	70
Southern Pacific Trans.	Conditional Sale Agree.	10-01-1978/92	8.250	8.250	350
TOTAL RAILROAD E	QUIPMENT OBLIGATIONS			8.764%	\$ 3,680
TOTAL CORPORATE BO	ND OBLIGATIONS			8.489%	\$26,505
	GOVERNMENT-GUARANT NTAL AND CORPORATE O		,	8.422%	\$32,569

⁽a) Most corporate issues have substantial sinking funds and an average life far shorter than the stated maturity date. (b) Column may not add, due to rounding.

SCHEDULE VI

HIGHWAY PATROLMEN'S RETIREMENT FUND June 30, 1977

RESUME OF ASSETS IN ACCOUNT

CASH CERTIFIED FOR INVESTMENT	\$	198.03
MONEY MARKET SECURITIES		
Repurchase Agreements Maturities up to 7 days	\$	392,000.00
Short-Term Corporate Notes Maturities up to 29 days	\$	152,000.00
STATE AND LOCAL OBLIGATIONS	\$	213,000.00
UNITED STATES GOVERNMENT-GUARANTEED OBLIGATIONS (See Listing Below)	\$	521,476.25
CANADIAN GOVERNMENTAL OBLIGATIONS (See Listing Below)	\$	1,250,000.00
CORPORATE BOND OBLIGATIONS (See Listing Below)	\$	8,116,193.46
DEFERRED YIELD ADJUSTMENT ACCOUNT*	\$	121,198.38
COMMON STOCKS (See Listing Below)	\$1	0,394,419.26
TOTAL ASSETS IN ACCOUNT (for actuarial purposes; not indicative of true market value)	\$2	1,160,485.38

^{*}This account signifies an amount equal to the discount at which fixed-income securities have been sold at less than amortized cost; the entire amount is being accumulated over a term equal to the average maturity of the bonds sold.

UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN GOVERNMENTAL OBLIGATIONS AND CORPORATE BOND HOLDINGS June 30, 1977

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount (000) (b)
UNITED STATES GOVERNMEN	T-GUARANTEED OBLIGATIO	NS			
GOVERNMENT NATIONAL MOI GUARANTEED MORTGAGE BA	CKED SECURITIES				
Weaver Bros. Inc.	Mtg. Backed Cert.	09-15-2006	8.000	8.260%	\$ 396
GOVERNMENT-GUARANTEED Moore-McCormack Lines	MERCHANT MARINE BONDS Government Guar. Bond	04-01-1987	5.750	5.750%	125
TOTAL UNITED STATES GOVE OBLIGATIONS	RNMENT-GUARANTEED			7.658%	S 521
CANADIAN GOVERNMENTAL F	PROVINCIAL OBLIGATIONS				
British Columbia Hydro	Bond	07-15-1996	9.625	9.625	\$ 400
New Brunswick Elec. Power	S/F Debenture	04-01-1998	7.875	7.875	300
Nova Scotia, Province Of	S/F Debenture	08-01-1993	7.250	7.200	150
Ontario Hydro	Note	03-15-1996	9.500	9.500	400
TOTAL PROVINCIAL OBLIGA	ATIONS			8.874%	\$1,250
TOTAL CANADIAN GOVERN	MENTAL OBLIGATIONS			8.874%	\$1,250

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount (000) (b)
CORPORATE BOND OBLIGATIONS					
PUBLIC UTILITY OBLIGATIONS ELECTRIC California Electric Power Kansas Power & Light Public Service of Indiana Rochester Gas & Electric	First Mtg. Bond First Mtg. Bond First Mtg. Bond First Mtg. Bond	05-01-1990 06-01-2007 01-01-2007 07-01-1998	5.125 8.125 7.625 6.700	5.060 8.168 7.734 6.700	\$ 40 400 320 50
Total Electric				7.753%	S 810
GAS Louisiana Gas Service Transcont'i, Gas Pipe Line Total Gas	First Mtg. Bond First Mtg. Bond	06-01-1987 11-01-1982	4.500 4.875	4.700 4.820 4.778%	\$ 50 94 \$ 144
TELEPHONE					•
Bell Telephone Co, of Canada N.Y. Telephone Co. Total Telephone	First Mtg. Bond Refunding Mtg. Bond	06-01-2004 07-15-2008	9.500 8.000	9.500 8.416 8.958%	\$ 400 400 \$ 800
TOTAL PUBLIC UTILITY OBLIGA	TIONS			8.058%	\$1,754
FINANCE OBLIGATIONS CIT Financial Corp.	Debenture	10-01-1986	6.375	6.420	\$ 150
Ford Motor Credit Co. Northwest Bancorp. Wells Fargo & Co.	S/F Debenture S/F Debenture Promissory Note	07-15-2000 03-15-2003 11-01-1998	9.700 7.750 8.125	9.724 7.750 8.125	400 300 250
TOTAL FINANCE OBLIGATIONS				8.372%	\$1,100
INDUSTRIAL OBLIGATIONS Aluminum Co. of Canada Atlantic Richfield Co. Crown Zellerbach (S.T.) FMC Corp. Firestone Tire & Rubber Gulf Oil Corp. MacMillan Bloedel, Ltd.	S/F Debenture Guaranteed Note General Mtg. Bond S/F Debenture Debenture First Mtg. Bond Debenture	03-01-1995 07-15-1996 08-01-1994 01-15-2000 12-01-2004 06-15-1993 07-01-1994	9.500 9.250 8.125 9.500 9.250 6.625 8.750	9.370 9.250 8.125 9.603 9.250 6.625 8.750	\$ 150 400 280 400 400 150 300
Marathon Oil Co. Olympic Pipeline Co. Phelps Dodge Corp. Plantation Pipe Line	S/F Debenture Note Note Guaranteed Note	02-01-2000 09-01-2001 06-01-1985 10-01-2001	8.500 8.850 8.500 7.875	8.570 8.850 8.638 7.875	400 150 300 300
Standard Oil of Calif. Standard Oil of Calif. Standard Oil of Calif. Standard Oil (Indiana) Standard Oil (Indiana)	First Pref. Ship. Mtg. Bd. First Pref. Ship. Mtg. Bd. First Pref. Ship. Mtg. Bd. Debenture Note	09-07-1997 09-08-1997 11-06-1997 01-15-1998 10-01-2000	7.700 7.700 7.700 7.700 6.000 9.000	7.700 7.700 7.700 6.070 9.000	200 100 100 50 150
Union Oil Co. of Calif.	Note	12-01-1988	6.500	6.500	60
TOTAL INDUSTRIAL OBLIGATIO	NS			8.579%	\$3,891
TRANSPORTATION DEBT OBLIGAT Atlantic Coast Line RR Louisville & Nashville Railroad Co. Western Maryland RR	TIONS First Mtg. Bond Collateral Trust Bond First Mtg. Bond	10-01-1988 12-01-1987 10-01-1989	4.750 4.875 4.850	4.750 4.950 4.850	\$ 49 100 72
TOTAL TRANSPORTATION DEBT	OBLIGATIONS			4.873%	S 221
RAILROAD EQUIPMENT OBLIGATI Burlington Northern Chesapeake & Ohio Ry.	Conditional Sale Agree.	05-01-1978/86 03-15-1978/	8.600	8.600	\$ 223
Chicago, Milwaukee, St. Paul and	Conditional Sale Agree. Conditional Sale Agree.	03-15-1989 07-15-1977/	8.750	8.750	196
Pacific Railroad Co. Fruit Growers Express Fruit Growers Express	Equipment Trust Cert. Equipment Trust Cert.	01-15-1982 11-15-1977/81 06-15-1978/85	6.375 6.000 9.750	6.375 6.000 9.750	17 25 80
Illinois Central RR Seaboard Coast Line RR	Conditional Sale Agree. Conditional Sale Agree.	02-15-1977/83 10-01-1982/ 04-01-1992	9.000	6.875 9.000	63 393
Southern Pacific Trans. TOTAL RAILROAD EQUIPMENT	Conditional Sale Agree.	10-01-1978/92	8.250	8.250	150
TOTAL CORPORATE OBLIGATIONS				8.612% 8.342%	\$1,149
TOTAL CORPORATE OBLIGATIONS TOTAL UNITED STATES GOVERNM CANADIAN GOVERNMENTAL AND	MENT-GUARANTEED,	DNS .		8.373%	\$8,116

⁽a) Most corporate issues have substantial sinking funds and an average life far shorter than the stated maturity date. (b) Column may not add, due to rounding.

Note: Bond investments are listed at face value; common stocks are listed at market value.

SCHEDULE VII

HIGHWAY PATROLMEN'S RETIREMENT FUND PUBLIC EMPLOYEES POLICE AND FIRE FUND COMMON STOCK HOLDINGS

June 30, 1977

		Market		way Patrolmen's tirement Fund		mployees Police Fire Fund		Total
Common Stock	Total Shares	Price 6-30-77	Shares	Market Value	Shares	Market Value	Total Market Value	% Market
UTILITIES ELECTRIC								Markot
Central and South West Corporation Commonwealth Edison Company	8,600 15,000	\$ 16.13 30.88	8,600 4,000	\$ 138,675.00 123,500.00	11,000	_ \$ 339,625.00	\$ 138,675.00 463,125.00	
Florida Power & Light Company Houston Industries Incorporated	17,000 7,500	27.13 33.88	-	. .	17,000	461,125.00	461,125.00	
Middle South Utilities, Incorporated	27,100	16.50	7,100	117,150.00	7,500 20,000	254,062.50 330,000.00	254,062.50 447,150.00	
Pacific Gas and Electric Company Public Service Company of Indiana, Inc.	7,700 6,050	24.00 29.25	6,050	_ 176,962.50	7,700 	184,800.00	184,800.00 176,962.50	
Southern California Edison Company	10,000	25.13	3,700	92,962.50	6,300	158,287.50	251,250.00	
Southern Company (The) Texas Utilities Company	3,500 16,000	17.25 21.50	3,500 —	60,375.00 —	16,000	_ 344,000.00	60,375.00 344,000.00	
Virginia Electric and Power Company	6,400	15.13	-	<u> </u>	6,400	96,800.00	96,800.00	
Total Electric				\$ 709,625.00		\$ 2,168,700.00	\$ 2,878,325.00	6.70%
NATURAL GAS Houston Natural Gas Corporation	8,900	\$ 32.25	1,600	\$ 51,600.00	7 200	Ф. 200 420 00	6 207 025 00	
Panhandle Eastern Pipe Line Company	16,500	48.88	4,500	219,937.50	7,300 12,000	\$ 235,425.00 586,500.00	\$ 287,025.00 806,437.50	
Total Natural Gas			1.15	\$ 271,537.50		\$ 821,925.00	\$ 1,093,462.50	2.54%
COMMUNICATIONS			, *					
American Telephone & Telegraph Company General Telephone & Electronics Corporation	22,936 27,500	\$ 63.50 32.50	4,500 9,000	\$ 285,750.00 292,500.00	18,436 18,500	\$ 1,170,686.00 601,250.00	\$ 1,456,436.00 893,750.00	
Total Communications	27,000	02.00	5,000	\$ 578,250.00	10,300	\$ 1,771,936.00	\$ 2,350,186.00	5.47%
TOTAL UTILITIES				\$ 1,559,412.50		\$ 4,762,561.00	\$ 6,321,973.50	14.71%
FINANCIAL SERVICES	*							
BANKS	7.000	4 04 05	7.000					
BankAmerica Corporation Citicorp	7,000 17,900	\$ 24.25 27.38	7,000 6,000	\$ 169,750.00 164,250.00	11,900	_ 325,762.50	\$ 169,750.00 490,012.50	
First Bank System, Incorporated Manufacturers Hanover Corporation	11,300 12,000	36.63 37.50	=	<u>-</u>	11,300	413,862.50	413,862.50	
Northwest Bancorporation	19,800	24.13	6,000		12,000 13,800	450,000.00 332,925.00	450,000.00 477,675.00	2.5
Security Pacific Corporation Valley National Bank of Arizona	7,000 6,618	29.56 16.63	- 6,618	110,024.25	7,000 	206,941.00	206,941.00 110,024.25	
Total Banks	0,010	10.00	0,010	\$ 588,774.25		\$ 1,729,491.00	\$ 2,318,265.25	5.39%
FINANCE				·				
Beneficial Corporation	13,380	\$ 23.88	4,000	\$ 95,500.00	9,380	\$ 223,947.50	\$ 319,447.50	
MGIC Investment Corporation Total Finance	12,200	15.88	2,600	41,275.00 \$ 136,775.00	9,600	152,400.00 \$ 376,347.50	193,675.00 \$ 513,122.50	1.19%
				. 130,773.00		\$ 370,347.30	9 313,122.30	1.13/0
INSURANCE Aetna Life & Casualty Company	15,000	\$ 37.25	4,000	\$ 149,000.00	11,000	\$ 409,750.00	\$ 558,750.00	
INA Corporation NLT Corporation	8,400 30,100	45.88 25.75	7,700	 198,275.00	8,400 22,400	385,350.00 576,800.00	385,350.00 775,075.00	
Northwestern National Life Insurance Co.	8,200	21.50	2,000	43,000.00	6,200	133,300.00	176,300.00	
The St. Paul Companies, Inc.	13,000	36.38	5,000	181,875.00	8,000	291,000.00	472,875.00	5.51%
Total Insurance TOTAL FINANCIAL SERVICES				\$ 572,150.00 \$ 1,297,699.25		\$ 1,796,200.00 \$ 3,902,038.50	\$ 2,368,350.00 \$ 5,199,737.75	12.09%
				• 1,201,000.20		V 0,002,000.00	¥ 2,100,101110	
CONSUMER-ORIENTED AUTOS — AUTO PARTS								
Ford Motor Company General Motors Corporation	10,375 9,700	\$ 46.88 69.38	3,125 2,300	\$ 146,484.38 159,562.50	7,250 7,400	\$ 339,843.75 513,375.00	\$ 486,328.13 672,937.50	
Genuine Parts Company	8,700	33.88	2,700	91,462.50	6,000	203,250.00	294,712.50	
Goodyear Tire & Rubber Company (The) Total Autos — Auto Parts	10,000	20.13	- ·	\$ 397,509.38	10,000	201,250.00 \$ 1,257,718.75	201,250.00 \$ 1,655,228.13	3.85%
				337,303.00		¥ 1,237,710.73	ψ 1,000,220.70	0.0070
CONSUMER-DURABLES Whirlpool Corporation	19,000	\$ 24.50	5,000	\$ 122,500.00	14,000	\$ 343,000.00	\$ 465,500.00	1.08%
CONSUMER-NONDURABLES		A #F				A	A 705	
Avon Products, Inc. Colgate-Palmolive Company	14,500 16,000	\$ 50.50 24.75	4,500 5,000	\$ 227,250.00 123,750.00	10,000 11,000	\$ 505,000.00 272,250.00	\$ 732,250.00 396,000.00	
Eastman Kodak Company Minnesota Mining and Manufacturing Co.	6,800 11,000	59.50 49.38	1,800	107,100.00	5,000 8,500	297,500.00 419,687.50	404,600.00 543,125.00	
Procter & Gamble Company (The)	4,000	49.38 80.13	2,500 —	123,437.50	4,000	320,500.00	320,500.00	
Total Consumer-Nondurables				\$ 581,537.50		\$ 1,814,937.50	\$ 2,396,475.00	5.57%
CONSUMER-MISCELLANEOUS	0 = 2 2	A 05 22	0.007			A 046 100 TO	A 050 000 40	
Disney (Walt) Productions Holiday Inns, Incorporated	9,599 8,800	\$ 36.88 14.13	2,835 3,100	\$ 104,540.63 43,787.50	6,764 5,700	\$ 249,422.50 80,512.50	\$ 353,963.13 124,300.00	
McDonald's Corporation	8,200	46.00	2,000	92,000.00	6,200	285,200.00	377,200.00	4
Total Consumer-Miscellaneous				\$ 240,328.13		\$ 615,135.00	\$ 855,463.13	1.99%
						*		

Schedule VII continued

		Market		way Patrolmen's tirement Fund		nployees Police Fire Fund		Total
Common Stock	Total Shares	Price 6-30-77	Shares	Market Value	Shares	Market Value	Total Market Value	% Market
DRUGS American Home Products Corporation Johnson & Johnson Medtronic, Inc. Merck & Co., Inc. Pfizer Incorporated Schering-Plough Corporation Total Drugs	11,500 4,700 8,000 8,600 16,100 3,000	\$ 28.75 70.63 25.63 55.75 26.00 36.38	- 3,000 2,200 5,000 3,000	\$ 76,875.00 122,650.00 130,000.00 109,125.00 \$ 438,650.00	11,500 4,700 5,000 6,400 11,100 —	\$ 330,625.00 331,937.50 128,125.00 356,800.00 288,600.00 — \$ 1,436,087.50	\$ 330,625.00 331,937.50 205,000.00 479,450.00 418,600.00 109,125.00 \$ 1,874,737.50	4.37%
FOODS-BEVERAGES CPC International, Inc. Consolidated Foods Corporation General Mills Incorporated Norton Simon, Incorporated PepsiCo, Inc. Pillsbury Company (The) Total Foods-Beverages	14,000 16,000 14,900 8,124 22,500 3,500	\$ 50.25 25.88 29.50 17.75 22.50 38.25	4,000 2,900 6,000 3,500	\$ 201,000.00 85,550.00 135,000.00 133,875.00 \$ 555,425.00	10,000 16,000 12,000 8,124 16,500	\$ 502,500.00 414,000.00 354,000.00 144,201.00 371,250.00	\$ 703,500.00 414,000.00 439,550.00 144,201.00 506,250.00 133,875.00 \$ 2,341,376.00	5.45%
PRINTING PUBLISHING Donnelly (R.R.) and Sons Company	8,859	\$ 24.25		· —	8,859	\$ 214,830.75	\$ 214,830.75	0.50%
RETAIL SALES Federated Department Stores, Incorporated Penney (J.C.) Company, Incorporated Sears, Roebuck and Company Southland Corporation (The) Total Retail Sales TOTAL CONSUMER-ORIENTED TECHNOLOGY ELECTRONICS	8,700 12,800 9,000 18,364	\$ 37.00 34.88 58.00 23.63	3,800 3,000 4,154	\$ 132,525.00 174,000.00 98,138.25 \$ 404,663.25 \$ 2,740,613.26	8,700 9,000 6,000 14,210	\$ 321,900.00 313,875.00 348,000.00 335,711.25 \$ 1,319,486.25 \$ 8,787,146.75	\$ 321,900.00 446,400.00 522,000.00 433,849.50 \$ 1,724,149.50 \$11,527,760.01	4.01% 26.82%
Hewlett-Packard Company	1,700	\$ 79.00	_	=	1,700	\$ 134,300.00	\$ 134,300.00	0.31%
OFFICE EQUIPMENT Burroughs Corporation Control Data Corporation Honeywell, Inc. International Business Machines Corporation Xerox Corporation Total Office Equipment TOTAL TECHNOLOGY	9,000 4,000 4,800 8,150 6,100	\$ 62.38 21.63 53.88 264.00 48.75	2,500 - 2,000 2,400	\$ 155,937.50 	6,500 4,000 4,800 6,150 3,700	\$ 405,437.50 86,500.00 258,600.00 1,623,600.00 180,375.00 \$ 2,554,512.50 \$ 2,688,812.50	\$ 561,375.00 86,500.00 258,600.00 2,151,600.00 297,375.00 \$ 3,355,450.00 \$ 3,489,750.00	7.81% 8.12%
BASIC INDUSTRY AEROSPACE								
Boeing Company (The) United Technologies Corporation Total Aerospace	5,000 13,000	\$ 57.88 40.00	5,000	\$ 200,000.00 \$ 200,000.00	5,000 8,000	\$ 289,375.00 320,000.00 \$ 609,375.00	\$ 289,375.00 520,000.00 \$ 809,375.00	1.88%
BUILDING & FOREST PRODUCTS Owens-Corning Fiberglas Corporation Weyerhaeuser Company Total Building & Forest Products	10,900 10,700	\$ 67.13 35.63	2,000 3,200	\$ 134,250.00 114,000.00 \$ 248,250.00	8,900 7,500	\$ 597,412.50 267,187.50 \$ 864,600.00	\$ 731,662.50 381.187.50 \$ 1,112,850.00	2.59%
CHEMICALS Air Products and Chemicals, Incorporated Dow Chemical Company (The) du Pont (E.I.) de Nemours and Company Hercules Incorporated Monsanto Company Union Carbide Corporation Total Chemicals	11,363 4,000 4,660 22,500 4,500 3,500	\$ 24.25 34.13 116.00 18.38 69.88 48.88	4,000 600 4,500 — 3,500	\$ 136,500.00 69,600.00 82,687.50 171,062.50 \$ 459,850.00	11,363 4,060 18,000 4,500	\$ 275,552.75 470,960.00 330,750.00 314,437.50 	\$ 275,552.75 136,500.00 540,560.00 413,437.50 314,437.50 171,062.50 \$ 1,851,550.25	4.31%
ELECTRICAL EQUIPMENT Emerson Electric Co. General Electric Company Gould, Inc. Westinghouse Electric Corporation Total Electrical Equipment	15,000 6,200 15,500 3,200	\$ 34.38 56.50 31.00 21.50	5,500 _ 4,000 _	\$ 189,062.50 124,000.00 	9,500 6,200 11,500 3,200	\$ 326,562.50 350,300.00 356,500.00 68,800.00 \$ 1,102,162.50	\$ 515,625.00 350,300.00 480,500.00 68,800.00 \$ 1,415,225.00	3.28%
MACHINERY Caterpillar Tractor Co. Clark Equipment Company Combustion Engineering, Incorporated Trans Union Corporation Total Machinery	2,250 7,600 7,000 11,000	\$ 57.75 39.75 62.13 37.75	2,100 - 5,000	\$ 83,475.00 	2,250 5,500 7,000 6,000	\$ 129,937.50 218,625.00 434,875.00 226,500.00 \$ 1,009,937.50	\$ 129,937.50 302,100,00 434,875.00 415,250.00 \$ 1,282,162.50	2.98%
METALS Aluminum Company of America Pittston Company (The) Total Metals	5,200 18,818	\$ 53.00 28.88	1,400 4,434	\$ 74,200.00 128,031.75 \$ 202,231.75	3,800 14,384	\$ 201,400.00 415,338.00 \$ 616,738.00	\$ 275,600.00 543,369.75 \$ 818,969.75	1.91%
PAPER International Paper Company Union Camp Corporation Total Paper	6,500 4,000	\$ 51.50 54.25	1,500 1,000	\$ 77,250.00 54,250.00 \$ 131,500.00	5,000 3,000	\$ 257,500.00 162,750.00 \$ 420,250.00	\$ 334,750.00 217,000.00 \$ 551,750.00	1.28%

Schedule VII continued

	.	Market		way Patrolmen's tirement Fund		mployees Police 3 Fire Fund		Total
Common Stock	Total Shares	Price 6-30-77	Shares	Market Value	Shares	Market Value	Total Market Value	% Market
MISCELLANEOUS Corning Glass Works International Telephone & Telegraph Corp. Total Miscellaneous	3,800 9,200	\$ 67.38 35.88	1,000 2,200	\$ 67,375.00 78,925.00 \$ 146,300.00	2,800 7,000	\$ 188,650.00 251,125.00 \$ 439,775.00	\$ 256,025.00 330,050.00 \$ 586,075.00	1.36%
TOTAL BASIC INDUSTRY				\$ 1.973.419.25		\$ 6,454,538.25	\$ 8,427,957.50	19.60%
ENERGY OIL-DOMESTIC Continental Oil Company (Del.) Marathon Oil Company Phillips Petroleum Company Standard Oil Company (Indiana) Total Oil-Domestic	18,000 9,800 32,000 14,100	\$ 33.88 52.63 31.00 53.75	5,000 1,800 8,000 4,100	\$ 169,375.00 94,725.00 248,000.00 220,375.00 \$ 732,475.00	13,000 8,000 24,000 10,000	\$ 440,375.00 421,000.00 744,000.00 537,500.00 \$ 2,142,875.00	\$ 609,750.00 515,725.00 992,000.00 757,875.00 \$ 2,875,350.00	6.69%
OIL-INTERNATIONAL Exxon Corporation Gulf Oil Corporation Mobil Corporation Standard Oil Company of California Texaco Inc. Total Oil-International	20,700 15,000 9,600 12,000 11,500	\$ 53.50 28.00 68.00 41.75 29.13	7,700 _ 5,100 _ _	\$ 411,950.00 346,800.00 - \$ 758,750.00	13,000 15,000 4,500 12,000 11,500	\$ 695,500.00 420,000.00 306,000.00 501,000.00 334,937.50 \$ 2,257,437.50	\$ 1,107,450.00 420,000.00 652,800.00 501,000.00 334,937.50 \$ 3,016,187.50	7.02%
ENERGY-RELATED Oresser Industries, Inc. Halliburton Company Williams Companies (The) Total Energy-Related TOTAL ENERGY	8,500 2,500 16,500	\$ 45.75 66.75 23.13	2,500 5,500	\$ 114,375.00 127,187.50 \$ 241,562.50 \$ 1,732,787.50	6,000 2,500 11,000	\$ 274,500.00 166,875.00 254,375.00 \$ 695,750.00 \$ 5,096,062.50	\$ 388,875.00 166,875.00 381,562.50 \$ 937,312.50 \$ 6,828,850.00	2.18% 15.89%
TRANSPORTATION AIRLINES Delta Air Lines, Incorporated Northwest Airlines, Incorporated UAL, Inc. Total Airlines	2,600 7,900 1,500	\$ 35.75 25.25 20.38	1,100 2,700 ,	\$ 39,325.00 68,175.00 \$ 107,500.00	1,500 5,200 1,500	\$ 53,625.00 131,300.00 30,562.50 \$ 215,487.50	\$ 92,950.00 199,475.00 30,562.50 \$ 322,987.50	0.75%
RAILROADS Burlington Northern Incorporated Southern Railway Company Union Pacific Corporation Total Railroads TOTAL TRANSPORTATION TOTAL COMMON STOCKS	6,300 3,200 6,400	\$ 50.25 58.38 57.25	1,800 1,600	\$ 90,450.00 91,600.00 \$ 182,050.00 \$ 289,550.00 \$10,394,419.26 ³	4,500 3,200 4,800	\$ 226,125.00 186,800.00 274,800.00 \$ 687,725.00 \$ 903,212.50 \$32,594,372.00	\$ 316,575.00 186,800.00 366,400.00 \$ 869,775.00 \$ 1,192,762.50 \$42,988,791.26 ^c	2.02% 2.77% 100.00%

SCHEDULE VIII

JUDGES RETIREMENT FUND June 30, 1977

RESUME OF ASSETS IN ACCOUNT

CASH CERTIFIED FOR INVESTMENT	\$ 416.20
MONEY MARKET SECURITIES	
Repurchase Agreements Maturities up to 29 days	\$ 104,000.00
UNITED STATES GOVERNMENT-GUARANTEED OBLIGATIONS (See Listing Below)	\$ 290,678.57
UNITED STATES GOVERNMENT AGENCY OBLIGATIONS (See Listing Below)	\$ 175,000.00
CORPORATE BOND OBLIGATIONS (See Listing Below)	\$ 900,000.00
DEFERRED YIELD ADJUSTMENT ACCOUNT*	\$ (7,071.00)
COMMON STOCKS (See Listing Below)	\$ 266,762.50
TOTAL ASSETS IN ACCOUNT (for actuarial purposes; not indicative of true market value)	\$ 1,729,786.27

^{*}This account signifies an amount equal to the discount at which fixed-income securities have been sold at less than amortized cost; the entire amount is being accumulated over a term equal to the average maturity of the bonds sold.

Bond investments are listed at face value; common stocks are listed at market value. Note:

UNITED STATES GOVERNMENT-GUARANTEED AND AGENCY BONDS, AND CORPORATE BOND HOLDINGS

	June 30, 197	7			
Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount (000) (b)
UNITED STATES GOVERNMENT-GUAR	ANTEED OBLIGATIONS				
GOVERNMENT NATIONAL MORTGAGE GUARANTEED MORTGAGE-BACKED SI Weaver Bros. Inc.		09-15-2006	8.000	8.260%	\$ 148
					*
GOVERNMENT-GUARANTEED MERCHA Puget Sound Tug & Barge TOTAL UNITED STATES GOVERNME	Government Guar. Bond	02-15-2001	9.125	9.125%	<u>\$ 142</u>
GUARANTEED OBLIGATIONS	1V 1 -			8.863%	\$ 290
UNITED STATES GOVERNMENT AGEN Federal Home Loan Bank Federal Home Loan Bank	Bond Bond	02-26-1979 11-26-1979	9.450 8.150	9,450 8,150	\$ 100
TOTAL UNITED STATES GOVERNME	NT AGENCY OBLIGATION	ONS		8.893%	\$ 175
CORPORATE BOND OBLIGATIONS					
PUBLIC UTILITY OBLIGATIONS					
Pacific Gas & Electric	First & Ref. Mtg. Bond	06-01-1985	9.500	9.577%	\$ 100
TELEPHONE Southern Bell Telephone & Telegraph Co. TOTAL PUBLIC UTILITY OBLIGATIO	Debenture NS	03-15-2013	7.625	9.699% 9.638%	\$ 100 \$ 200
FINANCE OBLIGATIONS Northwest Bancorporation	Note	09-15-1986	7.875	7.892	\$ 100
INDUSTRIAL OBLIGATIONS Atlantic Richfield Co. du Pont (E.I.) de Nemours	Guaranteed Note Debenture	07-15-1996 11-15-2004	9.250 8.450	9.250 8.895	\$ 100 100

a Net original cost of equities on June 30, 1977, was \$10,079,121.24. b Net original cost of equities on June 30, 1977, was \$31,839,264.54. c Net original cost of equities on June 30, 1977, was \$41,918,385.78.

Schedule VIII continued

Company	Type of Security	Maturity Date (a)	Coupon Rate <u>%</u>	Average Yield %	Total Amount (000) (b)
Exxon Pipeline Company	S/F Bond	10-15-2000	8.875	8.899	100
Ford Motor Co.	Debenturè	07-15-1994	9.250	9.294	100
Olympic Pipeline Co.	Note	09-01-2001	8.850	8.850	100
TOTAL INDUSTRIAL OBLIGATIONS				9.038%	\$ 500
RAILROAD EQUIPMENT OBLIGATIONS Canadian Pacific, Ltd.	Equipment Trust Cert.	01-15-1983/92	8.625	8.625%	\$ 100
TOTAL CORPORATE OBLIGATIONS				8.998%	\$ 900
TOTAL UNITED STATES GOVERNMENT AND CORPORATE OBLIGATIONS	-GUARANTEED			8.917%	\$1,365

(a) Most corporate issues have substantial sinking funds and an average life far shorter than the stated maturity date. (b) Column may not add, due to rounding.

COMMON STOCK HOLDIN	STUCK HULDINGS
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		Market		Total
Common Stock	Shares	Price 6-30-77	Market Value	% Market
UTILITIES				
ELECTRIC Northern States Power Company (Minn.)	300	\$ 28.75	\$ 8,625.00	
Texas Utilities Company	400	21.50	8,600.00	
Total Electric			S 17,225.00	6.46%
NATURAL GAS Panhandle Eastern Pipe Line Company	200	\$ 48.88	\$ 9,775.00	3.66%
COMMUNICÁTIONS				
American Telephone & Telegraph Company	300	\$ 63.50	\$ 19,050.00	7.14%
TOTAL UTILITIES			S 46,050.00	17.26%
CONSUMER-ORIENTED CONSUMER-DURABLES				
Sunbeam Corporation	300	\$ 23.50	\$ 7,050.00	2.64%
CONSUMER-NONDURABLES				
Eastman Kodak Company	100 200	\$ 59.50 49.38	\$ 5,950.00	
Minnesota Mining and Manufacturing Company Total Consumer-Nondurables	200	49.38	9,875.00 \$ 15,825.00	5.93%
•			0 10,020.00	3.33%
DRUGS Schering-Plough Corporation	100	\$ 36.38	\$ 3,637.50	1.36%
FOODS-BEVERAGES				
CPC International, Inc.	200	\$ 50.25	\$ 10,050.00	
Coca-Cola Company (The)	200	37.25	7,450.00	C F.C0/
Total Foods-Beverages			\$ 17,500.00	6.56%
RETAIL SALES Federated Department Stores, Incorporated	100	\$ 37.00	\$ 3,700.00	
Penney (J.C.) Company, Incorporated	200	34.88	6,975.00	
Total Retail Sales			\$ 10,675.00	4.00%
TOTAL CONSUMER-ORIENTED			\$ 54,687.50	20.49%
TECHNOLOGY				
OFFICE EQUIPMENT International Business Machines Corporation	100	\$264.00	\$ 26,400.00	9.90%
TOTAL TECHNOLOGY			\$ 26,400.00	9.90%
BASIC INDUSTRY				
AEROSPACE Boeing Company (The)	200	\$ 57.88	\$ 11,575.00	4.34%
	200	\$ 57.00	\$ 11,373.00	4.34/0
BUILDING & FOREST PRODUCTS Georgia-Pacific Corporation	102	\$ 31.25	\$ 3,187.50	1.19%
CHEMICALS			, ,,,,,,,,	
Dow Chemical Company (The)	300	\$ 34.13	\$ 10,237.50	3.84%
ELECTRICAL EQUIPMENT				
General Electric Company Gould, Inc.	300 300	\$ 56.50 31.00	\$ 16,950.00 9,300.00	
Total Electrical Equipment	300	31.00	S 26.250.00	9.85%
METALS			,	
Aluminum Company of America	200	\$ 53.00	\$ 10,600.00	3.97%
TOTAL BASIC INDUSTRY			\$ 61,850.00	23.19%
ENERGY				
OIL-DOMESTIC Atlantic Richfield Company	400	\$ 60,50	\$ 24,200.00	
Continental Oil Company (Del.)	200	33.88	6,775.00	
Total Oil-Domestic			\$ 30,975.00	11.61%
OIL-INTERNATIONAL				
Exxon Corporation	400	\$ 53.50	\$ 21,400.00	8.02%
ENERGY RELATED				
Dresser Industries, Inc. TOTAL ENERGY	300	\$ 45.75	\$ 13,725.00	5.15%
TOTAL ENERGY			\$ 66,100.00	24.78%

Common Stock	Shares	Market Price 6-30-77	Market Value	Total % Market
TRANSPORTATION RAILROADS Southern Railway Company	200	\$ 58.38	\$ 11,675.00	4.38%
TOTAL TRANSPORTATION			\$ 11,675.00	4.38%
TOTAL COMMON STOCKS			\$266,762.50	100.00%

^{*}Net original cost of equities on June 30, 1977, was \$247,658.81.

SCHEDULE IX

SUPPLEMENTAL RETIREMENT FUND — INCOME SHARE ACCOUNT June 30, 1977

RESUME OF ASSETS IN ACCOUNT

CASH CERTIFIED FOR INVESTMENT*	\$	(144,003.25)
MONEY MARKET SECURITIES		
Bills Maturities up to 98 days	\$	635,000.00
Repurchase Agreements Maturities up to 7 days	\$	311,000.00
UNITED STATES GOVERNMENT-GUARANTEED OBLIGATIONS (See Listing Below)	\$	1,689,796.24
CANADIAN GOVERNMENTAL OBLIGATIONS (See Listing Below)	\$	4,500,000.00
CORPORATE BOND OBLIGATIONS (See Listing Below)	\$1	9,043,395.67
COMMON STOCKS (See Listing Below)	\$2	7,834,831.25
TOTAL ASSETS IN ACCOUNT	\$5	3,870,019.91

^{*}A negative cash balance indicates purchase of securities prior to fiscal year end for which payment was not made until early July 1977.

Note: Bond investments are listed at face value; common stocks are listed at market value.

UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN GOVERNMENTAL OBLIGATIONS AND CORPORATE BOND HOLDINGS June 30, 1977

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %_	Total Amount (000) (b)
UNITED STATES GOVERNMEN	T-GUARANTEED OBLIGA	ATIONS			
GOVERNMENT NATIONAL MOI GUARANTEED MORTGAGE-BA					
Nebraska Federal Weaver Bros. Inc.	Mtg. Backed Cert. Mtg. Backed Cert.	12-15-2006 09-15-2006	8.000 8.000	8.183 8.260	\$ 996 693
TOTAL GOVERNMENTAL NA GUARANTEED MORTGAGE- TOTAL UNITED STATES GOV	BACKED SECURITIES	·		8.215% 8.215%	\$ 1,689 \$ 1,689
CANADIAN GOVERNMENTAL PROVINCIAL OBLIGATIONS					
British Columbia Hydro Manitoba Hydro Electric Board New Brunswick Electric Power	Bond Debenture S/F Debenture	07-15-1996 10-15-1997 04-01-1998	9.625 7.650 7.875	9.625 7.650 7.875	\$ 800 500 800
Nova Scotia Power Comm. Ontario Hydro Ontario, Province of	S/F Debenture Note Debenture	07-15-1998 03-15-1996 05-15-2001	8.125 9.500 7.850	8.150 9.500 7.850	800 800 300
Ontario, Province of	Debenture	12-15-2002	7.300	7.300	500
TOTAL PROVINCIAL OBLIG				8.433%	\$ 4,500
TOTAL CANADIAN GOVERN	MENTAL UBLIGATIONS			8.433%	\$ 4,500
CORPORATE BOND OBLIGATI	DNS				
PUBLIC UTILITY OBLIGATION GAS					
Minnesota Gas Company	Debenture	11-15-1981	9.250	9.362%	\$ 800
TELEPHONE Bell Telephone Co. of Canada N.Y. Telephone Co.	First Mtg. Bond Refunding Mtg. Bond	06-01-2004 07-15-2008	9.500 8.000	9.500 8.664	\$ 800 800
Total Telephone TOTAL PUBLIC UTILITY OB	LIGATIONS			9.082% 9.176%	\$ 1,600 \$ 2,400

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount (000) (b
INANCE OBLIGATIONS					(0007 (8)
-INANCE OBLIGATIONS Deere (John) Credit	Debenture	04-30-1998	7.500	7.540	\$ 500
Ford Motor Credit Co.	Debenture	04-30-1998	8.700	7.540 8.917	\$ 500
Ford Motor Credit Co.	S/F Debenture	07-15-2000	9.700	9.724	800
Honeywell Finance Inc.	S/F Debenture	12-15-1998	8.200	8.367	800
Vorthwest Bancorporation	S/F Debenture	03-15-2003	7.750	7.750	800
Vorthwest Bancorporation	Note	09-15-1986	7.875	7.892	800
Vells Fargo & Co.	Promissory Note	11-01-1998	8.125	8.125	800
TOTAL FINANCE OBLIGATI	•			8.375%	\$ 5,300
NDUSTRIAL OBLIGATIONS					
Aluminum Co. of Canada	S/F Debenture	03-01-1995	9.500	9.694	\$ 800
Atlantic Richfield Co.	Guaranteed Note	07-15-1996	9.250	9.250	800
Cities Service Gas Co.	Debenture	06-01-1991	8.250	8.250	400
Dresser Industries	Note	05-15-1985	8.650	8.564	400
MC Corp.	S/F Debenture	01-15-2000	9.500	9.603	800
ord Motor Co.	Guaranteed Note	12-01-1996	8.625	8.625	701
Marathon Oil Co.	S/F Debenture	02-01-2000	8.500	8.580	800
Noore Business Forms	Senior Note	10-01-1996	7.900	7.900	500
helps Dodge Corp.	Note	06-01-1985	8.500	8.570	400
lantation Pipe Line	Guaranteed Note	10-01-2001	7.875	7.875	400
Rohm & Haas Company	Note	04-15-1985	9.000	9.000	500
tandard Oil of California	First Pref. Ship. Mtg. Bd.	03-30-1997	7.700	7.700	150
tandard Oil of California	First Pref. Ship. Mtg. Bd.	03-02-1997	7.700	7.700	150
Standard Oil of California	First Pref. Ship. Mtg. Bd.	02-10-1997	7.700	7.700	200
tandard Oil of California	First Pref. Ship. Mtg. Bd.	09-07-1997	7.700	7.700	101
tandard Oil of California	First Pref. Ship. Mtg. Bd.	09-08-1997	7.700	7.700	101
tandard Oil of California	First Pref. Ship. Mtg. Bd.	11-06-1997	7.700	7.700	100
tandard Oil (Indiana)	Note	10-01-2000	7.500	7.766	800
Stauffer Chemical Co.	Note	03-15-1997	7.500	7.500	500
TOTAL INDUSTRIAL OBLIG	ATIONS			8.560%	\$ 8,600
RAILROAD EQUIPMENT OBLI		04 04 4070/05	0.500	0.500	
ACF Industries, Inc.	Equipment Trust Cert.	04-01-1978/85	9.500	9.500	\$ 12
ACF Industries, Inc. Jurlington Northern	Equipment Trust Cert. Conditional Sale Agree.	02-01-1978/91 05-01-1978/86	8.000 8.600	8.000 8.600	50 18
Surlington Northern	Conditional Sale Agree.	10-01-1977/87	9.625	9.625	183
arrington Northern Fanadian Pacific, Ltd.	Equipment Trust Cert.	01-15-1983/92	8.625	8.625	50
thesapeake & Ohio Railway	Conditional Sale Agree.	09-15-1977/	0.020	0.020	304
mesapeake & Onto Hanway	Conditional Sale Agree.	03-15-1989	8.750	8.750	490
Delaware & Hudson (Guar. GE)	Conditional Sale Agree.	03-01-1978/	0.730	0.730	431
Jelaware & Hudson (Juan. JE)	Conditional date Agree.	09-01-1985	10.500	10.500	154
ruit Growers Express	Equipment Trust Cert.	06-15-1978/85	9.750	9.750	120
ouisville & Nashville	Conditional Sale Agree.	10-20-1982/91	9.000	9.000	48
TOTAL RAILROAD EQUIPM	•	70 20 7002701	0.000	8.859%	\$ 2,74
OTAL CORPORATE OBLIGAT				8.629%	\$19,04
TOTAL UNITED STATES GOVI					
CANADIAN GOVERNMENTAL	AND CORPORATE OBLIGA	ATIONS		8.566%	\$25,23

(a) Most corporate issues have substantial sinking funds and an average life far shorter than the stated maturity date. (b) Column may not add, due to rounding.

COMMON STOCK HOLDINGS

		Market Price		Total %
Common Stock	Shares	6-30-77	Market Value	Market
UTILITIES				
ELECTRIC		·		
Commonwealth Edison Company	17,000	\$ 30.88	\$ 524,875.00	
Minnesota Power & Light Company	20,200	22.25	449,450.00	
Northern States Power Company (Minn.)	18,000	28.75	517,500.00	
Public Service Company of Indiana, Inc.	8,000	29.25	234,000.00	
Texas Utilities Company	23,800	21.50	511,700.00	
Total Electric			\$ 2,237,525.00	8.03%
NATURAL GAS				
Houston Natural Gas Corporation	3,000	\$ 32.25	\$ 96,750.00	
Panhandle Eastern Pipe Line Company	14,000	48.88	684,250.00	
Peoples Gas Company	7,500	50.75	380,625.00	
Total Natural Gas			\$ 1,161,625.00	4.18%
COMMUNICATIONS				
American Telephone & Telegraph Company	19,000	\$ 63.50	\$ 1,206,500.00	
General Telephone & Electronics Corporation	22,000	32.50	715,000.00	
Total Communications			\$ 1,921,500.00	6.90%
TOTAL UTILITIES			\$ 5,320,650.00	19.11%
FINANCIAL SERVICES BANKS				
Continental Illinois Corporation	18,000	\$ 26.75	\$ 481,500,00	
Manufacturers Hanover Corporation	11,000	37.50	412,500.00	
Northwest Bancorporation	20,000	24.13	482,500.00	4.0
Total Banks	,		\$ 1,376,500.00	4.95%
FINANCE				
Household Finance Corporation	22,000	\$ 19.88	\$ 437,250.00	1.57%
INSURANCE				
INA Corporation	10,000	\$ 45.88	\$ 458,750.00	
NLT Corporation	11,000	25.75	283,250.00	
United States Fidelity & Guaranty Company	13,200	39.38	519,750.00	
Total Insurance			\$ 1,261,750.00	4.53%
TOTAL FINANCIAL SERVICES			\$ 3,075,500.00	11.05%

		Market		Total %
Common Stack	Shares	Price 6-30-77	Market Value	% Market
CONSUMER-ORIENTED AUTOS – AUTO PARTS				
Ford Motor Company	9,500	\$ 46.88	\$ 445,312.50	
General Motors Corporation Goodyear Tire & Rubber Company (The)	7,000 11,500	69.38 20.13	485,625.00 231,437.50	
Total Autos Auto Parts			\$ 1,162,375.00	4.18%
CONSUMER-DURABLES				
Sunbeam Corporation	14,000	\$ 23.50	\$ 329,000.00	1.18%
CONSUMER-NONDURABLES	10.000	ė F0 F0	ф <u>Бог</u> 000 00	
Avon Products, Inc. Colgate-Palmolive Company	10,000 9,000	\$ 50.50 24.75	\$ 505,000.00 222,750.00	
Minnesota Mining and Manufacturing Company	10,000	49.38	493,750.00	A 000'
Total Consumer-Nondurables			\$ 1,221,500.00	4.39%
CONSUMER MISCELLANEOUS McDonald's Corporation	2,000	\$ 46.00	\$ 92,000.00	0.33%
•	2,000	ψ -τυ,υυ	¥ 52,000.00	0.33/0
DRUGS American Home Products Corporation	5,000	\$ 28.75	\$ 143,750.00	
Pfizer Incorporated Warner-Lambert Company	16,000 14,000	26.00 28.63	416,000.00 400,750.00	
Total Drugs	14,000	20,03	\$ 960,500.00	3.45%
-				
FOODS-BEVERAGES CPC International, Inc.	10,000	\$ 50.25	\$ 502,500.00	
Consolidated Foods Corporation General Foods Corporation	12,000 15,000	25.88 33.38	310,500.00 500,625.00	
PepsiCo, Inc.	19,800	22.50	445,500.00	
Total Foods-Beverages			\$ 1,759,125.00	6.32%
RETAIL SALES				
Federated Department Stores, Incorporated Penney (J.C.) Company, Incorporated	11,000 5,000	\$ 37.00 34.88	\$ 407,000.00 174,375.00	
Sears, Roebuck and Company	7,500	58.00	435,000.00	
Total Retail Sales			\$ 1,016,375.00	3.65%
TOTAL CONSUMER-ORIENTED			\$ 6,540,875.00	23.50%
TECHNOLOGY				
OFFICE EQUIPMENT International Business Machines Corporation	4,800	\$264.00	\$ 1,267,200.00	4.55%
TOTAL TECHNOLOGY	•		\$ 1,267,200.00	4.55%
BASIC INDUSTRY				
AEROSPACE .	10.000	¢ 40.00	¢ F30 000 00	4 070/
United Technologies Corporation	13,000	\$ 40.00	\$ 520,000.00	1.87%
BUILDING & FOREST PRODUCTS	15.052	¢ 21.25	\$ 498,531.25	
Georgia-Pacific Corporation Masonite Corporation	15,953 4,000	\$ 31.25 17.00	\$ 498,531.25 68,000.00	
Total Building & Forest Products			\$ 566,531.25	2.04%
CHEMICALS				
Dow Chemical Company (The) du Pont (E.i.) de Nemours and Company	4,000 3,500	\$ 34.13 116.00	\$ 136,500.00 406,000.00	
Monsanto Company	3,000	69.88	209,625.00	
Union Carbide Corporation	9,500	48.88	464,312.50	
Total Chemicals			\$ 1,216,437.50	4.37%
ELECTRICAL EQUIPMENT General Electric Company	5,000	\$ 56.50	\$ 282,500.00	
Gould, Inc.	30,000	31.00	930,000.00	
Total Electrical Equipment			\$ 1,212,500.00	4.35%
MACHINERY				
Clark Equipment Company Combustion Engineering, Incorporated	4,000 8,000	\$ 39.75 62.13	\$ 159,000.00 497,000.00	
Trans Union Corporation	8,000	37.75	302,000.00	
Total Machinery			\$ 958,000.00	3.44%
METALS				
St. Joe Minerals Corporation	13,000	\$ 34.13	\$ 443,625.00	1.59%
PAPER	0.000	Ø E1 E0	ф A03 F00 00	
International Paper Company Union Camp Corporation	9,000 3,000	\$ 51.50 54.25	\$ 463,500.00 162,750.00	
Total Paper			\$ 626,250.00	2.25%
MISCELLANEOUS				
International Telephone & Telegraph Corp.	12,000	\$ 35.88	\$ 430,500.00	1.55%
TOTAL BASIC INDUSTRY			\$ 5,973,843.75	21.46%
ENERGY				
OIL-DOMESTIC Continental Oil Company (Del.)	22,000	\$ 33.88	\$ 745,250.00	
Marathon Oil Company	11,000	52.63	578,875.00	
Standard Oil Company (Indiana)	12,000	53.75	645,000.00	7 000/
Total Oil-Domestic			\$ 1,969,125.00	7.08%
OIL-INTERNATIONAL Exxon Corporation	23,000	\$ 53.50	\$ 1,230,500.00	
Mobil Corporation	12,500	68.00	850,000.00	
Texaco Inc.	17,000	29.13	495,125.00	0.0504
Total Oil International			\$ 2,575,625.00	9.25%
ENERGY-RELATED Dresser Industries, Inc.	9,000	\$ 45.75	\$ 411,750.00	
Williams Companies (The)	6,000	23.13	138,750.00	
Total Energy-Related			\$ 550,500.00	1.98%
TOTAL ENERGY			\$ 5,095,250.00	18.31%

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Common Stock	Shares	Market Price 6-30-77	Market Value	Total % Market
TRANSPORTATION RAILROADS Southern Railway Company Union Pacific Corporation	5,500 4,200	\$ 58.38 57.25	\$ 321,062.50 240,450.00	
Total Railroads			S 561,512.50	2.02%
TOTAL TRANSPORTATION			\$ 561,512.50	2.02%
TOTAL COMMON STOCKS			\$27,834,831.25	100.00%

^{*}Net original cost of equities on June 30, 1977, was \$25,337,326.69.

SCHEDULE X

SUPPLEMENTAL RETIREMENT FUND – GROWTH SHARE ACCOUNT June 30, 1977

RESUME OF ASSETS IN ACCOUNT

CASH CERTIFIED FOR INVESTMENT*	S	(665.14)
MONEY MARKET SECURITIES		
Repurchase Agreements Maturities up to 7 days	S	380,000.00
COMMON STOCKS (See Listing Below) TOTAL ASSETS IN ACCOUNT	_	6,583,717.63 6,963,052.49

 $^{^{*}}$ A negative cash balance indicates purchase of securities prior to fiscal year end for which payment was not made until early July 1977.

Note: Money market securities are listed at face value; common stocks are listed at market value.

COMMON STOCK HOLDINGS

		Market		Total
Common Stock	Shares	Price 6-30-77	Market Value	% Market
	Shares	0.30.77	Wildliket Value	William
UTILITIES ELECTRIC				
Florida Power & Light Company	17,000	\$ 27.13	\$ 461,125.00	
Texas Utilities Company	18,000	21.50	387,000.00	
Total Electric			S 848,125.00	5.11%
NATURAL GAS				
Houston Natural Gas Corporation	8,000	\$ 32.25	\$ 258,000.00	1.56%
COMMUNICATIONS				
American Telephone & Telegraph Company	4,800	\$ 63.50	\$ 304,800.00	
United Telecommunications, Inc.	17,800	20.50	364,900.00	
Total Communications			\$ 669,700.00	4.04%
TOTAL UTILITIES			\$ 1,775,825.00	10.71%
FINANCIAL SERVICES BANKS				
Bank America Corporation	5.000	\$ 24.25	\$ 121,250.00	
First Bank System, Incorporated	6,000	36.63	219,750.00	
Valley National Bank of Arizona	7,500	16.63	124,687.50	
Total Banks			\$ 465,687.50	2.81%
FINANCE				
Household Finance Corporation	10,000	\$ 19.88	\$ 198,750.00	
MGIC Investment Corporation	6,000	15.88	95,250.00	
Total Finance			\$ 294,000.00	1.77%
INSURANCE				
INA Corporation	6,000	\$ 45.88	\$ 275,250.00	
NLT Corporation	10,400	25.75 47.13	267,800.00	
SAFECO Corporation	3,400	47.13	160,225.00	
Total Insurance			\$ 703,275.00	4.24%
TOTAL FINANCIAL SERVICES			\$ 1,462,962.50	8.82%
CONSUMER-ORIENTED				
AUTOS — AUTO PARTS Genuine Parts Company	19,500	\$ 33.88	\$ 660,562.50	3.98%
Genuine Parts Company	15,500	\$ 33.00	\$ 600,302.30	3.30%
CONSUMER-DURABLES				
Sunbeam Corporation	9,000	\$ 23.50	\$ 211,500.00	1.28%
CONSUMER-NONDURABLES				
Avon Products, Inc.	5,000	\$ 50.50	\$ 252,500.00	
Clorox Company (The) Colgate-Palmolive Company	6,500 6,000	13.00 24.75	84,500.00 148,500.00	
Eastman Kodak Company	4,400	59.50	261,800.00	
Minnesota Mining and Manufacturing Company	6,000	49.38	296,250.00	
Revion, incorporated	8,000	41.25	330,000.00	
Total Consumer-Nondurables			\$ 1,373,550.00	8.29%
CONSUMER-MISCELLANEOUS				
ARA Services, Incorporated	1,800	\$ 41.75	\$ 75,150.00	
Disney (Walt) Productions	5,197	36.88	191,639.38	

		Market Price		Total %
Common Stock	Shares	6-30-77	Market Value	Market
Holiday Inns, Incorporated McDonald's Corporation	4,200 5,000	14.13 46.00	59,325.00 230,000.00	
Total Consumer-Miscellaneous	5,000	40.00	\$ 556,114.38	3.35%
DRUGS	7 000	A 20.75	A 901 350 00	
American Home Products Corporation Johnson & Johnson	7,000 3,500	\$ 28.75 70.63	\$ 201,250.00 247,187.50	
Medtronic, Inc. Schering-Plough Corporation	7,000 4,500	25.63 36.38	179,375.00 163,687.50	
Total Drugs	4,500	30.30	\$ 791,500.00	4.77%
FOODS-BEVERAGES				
General Mills, Incorporated PepsiCo, Inc.	7,000 16,500	\$ 29.50 22.50	\$ 206,500.00 371,250.00	
Pillsbury Company (The)	5,000	38.25	191,250.00	4 540/
Total Foods-Beverages			\$ 769,000.00	4.64%
American Greetings Corporation	13,000	\$ 10.81	\$ 140,569.00	
K mart Corporation Penney (J.C.) Company, Incorporated	6,500 6,000	28.50 34.88	185,250.00 209,250.00	
Southland Corporation (The)	6,150	23.63	145,293.75	
Total Retail Sales TOTAL CONSUMER-ORIENTED			\$ 680,362.75 \$ 5.042,589.63	4.10% 30.41%
TECHNOLOGY			0 0,012,000.00	00.4176
ELECTRONICS Hewlett-Packard Company	4,000	\$ 79.00	\$ 316,000.00	1.90%
OFFICE EQUIPMENT	,555		- 2.0/000,00	1.50/0
Burroughs Corporation	2,000	\$ 62.38	\$ 124,750.00	
Digital Equipment Corporation Honeywell, Inc.	6,000 4,000	46.88 53.88	281,250.00 215,500.00	
International Business Machines Corporation Xerox Corporation	3,512 3,700	264.00 48.75	927,168.00 180,375.00	
Total Office Equipment			\$ 1,729,043.00	10.43%
TOTAL TECHNOLOGY			\$ 2,045,043.00	12.33%
BASIC INDUSTRY AEROSPACE				
Boeing Company (The)	7,000	\$ 57.88	\$ 405,125.00	2.44%
BUILDING & FOREST PRODUCTS	0.000	0.01.05	A 350 000 00	
Georgia-Pacific Corporation Masonite Corporation	8,000 11,000	\$ 31.25 17.00	\$ 250,000.00 187,000.00	
Total Building & Forest Products			\$ 437,000.00	2.64%
CHEMICALS	0.070	A 04.05	A 040 047 50	
Air Products and Chemicals, Incorporated Dow Chemical Company (The)	8,670 4,500	\$ 24.25 34.13	\$ 210,247.50 153,562.50	
du Pont (E.I.) de Nemours and Company Total Chemicals	2,100	. 116.00	\$ 607,410.00	3.65%
ELECTRICAL EQUIPMENT			3 007,410.00	3.05%
Emerson Electric Co.	11,000	\$ 34.38	\$ 378,125.00	
Gould, Inc. Total Electrical Equipment	6,500	31.00	\$ 579,625.00	3.50%
MACHINERY				
Clark Equipment Company	4,000 3,500	\$ 39.75	\$ 159,000.00 132,125,00	
Trans Union Corporation Total Machinery	3,300	37.75	132,125.00 S 291,125.00	1.76%
METALS				
Hanna Mining Company (The) St. Joe Minerals Corporation	6,500 6,500	\$ 49.00 34.13	\$ 318,500.00 221,812.50	
Total Metals	0,000	01.10	S 540,312.50	3.26%
PAPER				
International Paper Company	4,300	\$ 51.50	\$ 221,450.00	1.34%
MISCELLANEOUS International Telephone & Telegraph Corp.	6,000	\$ 35.88	\$ 215,250.00	1.29%
TOTAL BASIC INDUSTRY			\$ 3,297,297.50	19.88%
ENERGY				
OIL DOMESTIC Atlantic Richfield Company	5,000	\$ 60.50	S 302,500.00	
Louisiana Land and Exploration Company (The) Marathon Oil Company	10,000 8,000	27.50 52.63	275,000.00 421,000.00	
Total Oil-Domestic	-,		\$ 998,500.00	6.02%
OIL-INTERNATIONAL				
Exxon Corporation	15,500	\$ 53.50	S 829,250.00	5.00%
ENERGY-RELATED Baker International Corporation	8,000	S 52.88	S 423,000.00	
Halliburton Company Williams Companies (The)	6,000 6,800	66.75 23.13	400,500.00 157,250.00	
Total Energy-Related			S 980,750.00	5.92%
TOTAL ENERGY			S 2,808,500.00	16.94%
TRANSPORTATION AIRLINES				
Northwest Airlines, Incorporated	6,000	\$ 25.25	\$ 151,500.00 \$ 151,500.00	0.91%
TOTAL TRANSPORTATION TOTAL COMMON STOCKS			S 151,500.00 S16,583,717.63*	0.91% 100.00%

SCHEDULE XI

SUPPLEMENTAL RETIREMENT FUND — FIXED-RETURN ACCOUNT June 30, 1977

RESUME OF ASSETS IN ACCOUNT

CASH CERTIFIED FOR INVESTMENT	\$	535.81
MONEY MARKET SECURITIES		
Repurchase Agreements Maturities up to 7 days	\$	367,000.00
UNITED STATES GOVERNMENT AGENCY OBLIGATIONS (See Listing Below)	\$	200,000.00
CANADIAN GOVERNMENTAL OBLIGATIONS (See Listing Below)	\$	750,000.00
CORPORATE BOND OBLIGATIONS (See Listing Below)	\$7	7,337,685.29
DEFERRED YIELD ADJUSTMENT ACCOUNT*	\$	(15,034.62)
TOTAL ASSETS IN ACCOUNT	Si	3,640,186.48

^{*}This account signifies an amount equal to the premium at which fixed-income securities have been sold at more than amortized cost; the entire amount is being accumulated over a term equal to the average maturity of the bonds sold.

UNITED STATES GOVERNMENT AGENCY BONDS, CANADIAN GOVERNMENTAL OBLIGATIONS AND CORPORATE BOND HOLDINGS June 30, 1977

Coupon Average Total

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount (000) (b)
					(000) (0)
UNITED STATES GOVERNMENT AGEN Federal Home Loan Mtg.	Mtg. Backed Cert.	03-15-2007	8.050	8.093%	\$ 200
CANADIAN GOVERNMENTAL PROVINCIAL OBLIGATIONS					
British Columbia Hydro	Bond	07-15-1996	9.625	9.625	150
Manitoba Hydro Electric Bd.	Bond	10-01-1985	9.500	9.500	150
Ontario Hydro	Note	03-15-1996	9.500	9.500	150
Ontario, Province of	Debenture	06-15-2005	9.125	9.248	150
TOTAL PROVINCIAL OBLIGATIONS				9.468%	\$ 600
CANADIAN AGENCY OBLIGATIONS	Note	07-15-1981	8.500	0 5000/	\$ 150
Export Development TOTAL CANADIAN GOVERNMENTA	Note I	07-13-1861	0.000	8.500% 9.275%	\$ 750
CORPORATE BOND OBLIGATIONS	-				
PUBLIC UTILITY OBLIGATIONS ELECTRIC					
Duquesne Light	First Mtg. Bond	04-01-2007	8.375	8.348	\$ 250
Houston Lighting & Power	First Mtg. Bond	10-01-2006	8.375	8.420	250 250
Iowa-Illinois Gas & Electric	First Mtg. Bond First Mtg. Bond	01-15-2007 06-01-2007	8.250 8.125	8.316 8.168	250 350
Kansas Power & Light Minnesota Power & Light	First Mtg. Bond	08-01-2005	10.500	10.500	150
Minnesota Power & Light	First Mtg. Bond	09-01-2006	8.700	8.700	100
Pacific Gas & Electric	First & Ref. Mtg. Bond	12-01-2005	7.750	7.999	250
Public Service of Indiana	First Mtg. Bond	01-01-2007	7.625	7.853	250
Public Service Elec. Gas	First & Ref. Mtg. Bond	06-01-2007	8.250	8.226	350
Texas Power & Light Co.	First Mtg. Bond	02-01-2007	8,250	8.261	250
Total Electric	·			8.360%	\$2,450
TELEPHONE		07.45.0000	0.000	0.000	A 250
N.Y. Telephone Co.	Refunding Mtg. Bond	07-15-2008	8.000	9.082	\$ 250
Pacific Telegraph & Telephone	Debenture	03-01-2007 03-15-2013	7.800 7.625	7.788 8.524	250 250
Southern Bell Telephone & Telegraph Co.	Debenture	03-13-2013	7.023		
Total Telephone				8.465%	\$ 750
TOTAL PUBLIC UTILITY OBLIGATION	INS			8.385%	\$3,200
FINANCE OBLIGATIONS					
Ford Motor Credit Co.	S/F Debenture	07-15-2000	9.700	9.724	\$ 150
Northwest Bancorporation	Note	09-15-1986	7.875	7.892	250
TOTAL FINANCE OBLIGATIONS				8.579%	\$ 400
INDUSTRIAL OBLIGATIONS					
AMAX, Inc.	S/F Debenture	03-01-2001	8.625	8.699	\$ 150
Ashland Oil & Refining	S/F Debenture	09-01-2000	10.000	10.000	150
Atlantic Richfield Co.	Guaranteed Note	07-15-1996	9.250	9.250	150
du Pont (E.I.) de Nemours Company	Debenture	11-15-2004	8.450	8.537	150
Exxon Pipeline Company	Debenture	03-01-2001	8.250	8.382	250
FMC Corporation	S/F Debenture Debenture	01-15-2000 12-01-2004	9.500 9.250	9.603 9.286	150 150
Firestone Tire & Rubber Ford Motor Co.	Debenture Debenture	07-15-1994	9.250	9.286	150
Olympic Pipeline Co.	Note	09-01-2001	8.850	8.850	250
Plantation Pipe Line	Guaranteed Note	10-01-2001	7.875	8,152	250
Raiston Purina	Note	12-31-1982	8.000	8.000	250
Standard Oil of California	First Pref. Ship Mtg. Bd.	07-02-1999	8.500	8.500	150
Standard Oil (Indiana)	S/F Debenture	07-15-2004	9.200	9.059	150

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount (000) (b
	Debenture	01-15-2001	8.850	8.850	150
Union Oil Co. of California	S/F Debenture	03-01-2006	8.625	8.615	250
TOTAL INDUSTRIAL OBLIGATIONS				8.785%	\$2,750
RAILROAD EQUIPMENT OBLIGATIONS					
ACF Industries, Inc.	Equipment Trust Cert.	03-01-1982/91	9.000	9.000	\$ 150
ACF Industries, Inc.	Equipment Trust Cert.	02-01-1978/91	8.000	8.000	100
Canadian Pacific, Ltd.	Equipment Trust Cert.	01-15-1983/92	8.625	8.625	250
Louisville & Nashville	Conditional Sale Agree.	10-20-1982/91	9.000	9.000	146
Louisville & Nashville	Conditional Sale Agree.	10-20-1983/			
		04-20-1992	8.375	8.375	95
Seaboard Coast Line Railroad	Conditional Sale Agree.	10-01-1982/			
	-	04-01-1992	9.000	9.000	246
TOTAL RAILROAD EQUIPMENT OBL	IGATIONS			8.744%	\$ 987
TOTAL CORPORATE OBLIGATIONS				8.594%	\$7,337
TOTAL UNITED STATES GOVERNMENT CANADIAN GOVERNMENTAL AND COF		S		8.643%	\$8,287

⁽a) Most corporate issues have substantial sinking funds and an average life far shorter than the stated maturity date. (b) Column may not add, due to rounding.

SCHEDULE XII

MINNESOTA VARIABLE ANNUITY FUND June 30, 1977

RESUME OF ASSETS IN ACCOUNT

CASH CERTIFIED FOR INVESTMENT*	\$ (237,704.79)
MONEY MARKET SECURITIES	
Bills Maturities up to 98 days	\$ 590,000.00
CANADIAN GOVERNMENTAL OBLIGATIONS (See Listing Below)	\$ 2,800,000.00
CORPORATE BOND OBLIGATIONS (See Listing Below)	\$ 8,208,860.45
COMMON STOCKS (See Listing Below)	\$32,350,437.63
TOTAL ASSETS IN ACCOUNT (for accounting purposes; not indicative of true market value)	\$43,711,593.29

^{*}A negative cash balance indicates purchase of securities prior to fiscal year end for which payment was not made until early July 1977.

Note: Bond investments are listed at face value; common stocks are listed at market value.

CANADIAN GOVERNMENTAL OBLIGATIONS AND CORPORATE BOND HOLDINGS June 30, 1977

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount (000) (b)
CANADIAN GOVERNMENTAL PROVINCIAL OBLIGATIONS British Columbia Hydro Manitoba Hydro Elec. Bd. New Brunswick Electric Power Nova Scotla Power Comm.	Bond Debenture S/F Debenture S/F Debenture	07-15-1996 10-15-1997 04-01-1998 07-15-1998	9.625 7.650 7.875 8.125	9.625 7.650 7.875 8.150	\$ 500 400 400 500
Ontario Hydro TOTAL PROVINCIAL OBLIGATIONS	Note	03-15-1996	9.500	9.500 8.629%	\$ 2,300
CANADIAN AGENCY OBLIGATIONS Export Development TOTAL CANADIAN GOVERNMENTAL	Note L OBLIGATIONS	07-15-1981	8.500	8.500 8.606%	\$ 500 \$ 2,800
CORPORATE BOND OBLIGATIONS					
PUBLIC UTILITY OBLIGATIONS ELECTRIC Kansas Power & Light Montana Power Company Public Serv. Elec. Gas Total Electric	First Mtg. Bond First Mtg. Bond First & Ref. Mtg. Bond	06-01-2007 12-01-1981 06-01-2007	8.125 8.750 8.250	8.168 8.750 8.225 8.381%	\$ 500 500 500 \$ 1,500
GAS Minnesota Gas Company	Debenture	11-15-1981	9.250	9.250%	\$ 500
TELEPHONE Southern Bell Telephone & Telegraph Co. TOTAL PUBLIC UTILITY OBLIGATIO	Debenture NS	03-15-2013	7.625	8.240 8.527%	\$ 500 \$ 2,500
FINANCE OBLIGATIONS First Bank System Ford Motor Credit Co. Honeywell Finance Inc. Northwest Bancorporation TOTAL FINANCE OBLIGATIONS	Note S/F Debenture S/F Debenture S/F Debenture	06-30-1983 07-15-2000 12-15-1998 03-15-2003	8.750 9.700 8.200 7.750	8.829 9.724 8.200 7.750 8.626%	\$ 500 500 500 500 \$ 2,000

Note: Bond investments are listed at face value.

Schedule	XII	continued
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Company	Type of Security	Maturity Date (a)	Coupon Rate <u>%</u>	Average Yield %	Total Amount (000) (b)
INDUSTRIAL OBLIGATIONS					
Crown Zellerbach (S.T.)	General Mtg. Bond	08-01-1994	8.125	8.125	\$ 468
Firestone Tire & Rubber	Debenture	12-01-2004	9.250	9.426	500
MacMillan Bloedel, Ltd.	Debenture	07-01-1994	8.750	8.750	500
Phelps Dodge Corp.	Note	06-01-1985	8.500	8.618	250
Standard Oil of California	First Pref. Ship Mtg. Bd.	09-07-1997	7.700	7.700	200
Standard Oil of California	First Pref. Ship Mtg. Bd.	09-08-1997	7.700	7.700	150
Standard Oil of California	First Pref. Ship Mtg. Bd.	11-06-1997	7.700	7.700	150
TOTAL INDUSTRIAL OBLIGATIO	NS			8.519%	\$ 2,218
RAILROAD EQUIPMENT OBLIGATION	ONS				
ACF Industries, Inc.	Equipment Trust Cert.	03-01-1982/91	9.000	9.000	\$ 500
ACF Industries, Inc.	Equipment Trust Cert.	02-01-1978/91	8.000	8.000	400
Canadian Pacific, Ltd.	Equipment Trust Cert.	01-15-1983/92	8.625	8.625	480
Delaware & Hudson (Guar. GE)	Conditional Sale Agree.	03-01-1978/			
		09-01-1985	10.500	10.500	110
TOTAL RAILROAD EQUIPMENT (DBLIGATIONS			8.722%	\$ 1,490
TOTAL CORPORATE OBLIGATIONS				8.584%	\$ 8,208
TOTAL CANADIAN GOVERNMENTA	AL.				
AND CORPORATE OBLIGATIONS				8.590%	\$11,008

⁽a) Most corporate issues have substantial sinking funds and an average life far shorter than the stated maturity date. (b) Column may not add, due to rounding.

COMMON STOCK HOLDINGS

33		Market		Total
		Price		%
Common Stock	Shares	6-30-77	Market Value	Market
UTILITIES				
ELECTRIC	10.000	0.00.00	S 494.000.00	
Commonwealth Edison Company Florida Power & Light Company	16,000 19,000	S 30.88 27.13	S 494,000.00 515,375.00	
Texas Utilities Company	30,000	21.50	645,000.00	
Total Electric			S 1,654,375.00	5.12%
NATURAL GAS Panhandle Eastern Pipe Line Company	12,000	S 48.88	S 586,500.00	1.80%
COMMUNICATIONS				
American Telephone & Telegraph Company	13,300	\$ 63.50	\$ 844,550.00	
General Telephone & Electronics Company	14,500	32.50	471,250.00	
Total Communications			S 1,315,800.00	4.07%
TOTAL UTILITIES			S 3,556,675.00	10.99%
FINANCIAL CEDVICES				
FINANCIAL SERVICES BANKS				
Citicorp	9,000	\$ 27.38	\$ 246,375.00	
First Bank System, Incorporated	3,000	36.63	109,875.00	
First International Bancshares, Inc.	6,600	40.88	269,775.00	
Northwest Bancorporation	11,000	24.13	265,375.00	
Total Banks			S 891,400.00	2.76%
FINANCE				
Household Finance Corporation	16,000	\$ 19.88	\$ 318,000.00	0.98%
INSURANCE				
INA Corporation	5,000	\$ 45.88	\$ 229,375.00	
Jefferson-Pilot Corporation	9,000	30.13	271,125.00	
NLT Corporation	13,700	25.75	352,775.00	
The St. Paul Companies, Inc.	4,000	36.38	145,500.00	
Total Insurance			S 998,775.00	3.09%
TOTAL FINANCIAL SERVICES			S 2,208,175.00	6.83%
CONSUMER-ORIENTED				
AUTOS – AUTO PARTS				
Ford Motor Company	5,625	\$ 46.88	\$ 263,671.88	
General Motors Corporation Genuine Parts Company	6,700 16,000	69.38 33.88	464,812.50 542,000.00	
· ·	10,000	33.00		2 020/
Total Autos — Auto Parts			S 1,270,484.38	3.93%
CONSUMER-DURABLES				
Whirlpool Corporation	15,000	\$ 24.50	\$ 367,500.00	1.14%
CONSUMER-NONDURABLES				
Avon Products, Inc.	6,000	\$ 50.50	\$ 303,000.00	
Colgate-Palmolive Company	15,000	24.75 59.50	371,250.00	
Eastman Kodak Company Minnesota Mining and Manufacturing Company	8,000 12,000	· 49.38	476,000.00 592,500.00	
Revion, Incorporated	16,000	41.25	660,000.00	
Total Consumer-Nondurables	,		S 2,402,750.00	7.43%
			, ,	
CONSUMER-MISCELLANEOUS Disney (Walt) Productions	8,000	\$ 36.88	\$ 295,000.00	
McDonald's Corporation	15,000	\$ 36.66 46.00	690,000.00	
Total Consumer-Miscellaneous	10,000	10.00	\$ 985,000.00	3.04%
			5 505,000.00	J.U-1/8
DRUGS Johnson & Johnson	4 000	\$ 70.63	\$ 282,500.00	
Medtronic, Inc.	4,000 6,000	\$ 70.63 25.63	153,750.00	
Merck & Co., Inc.	5,000	55.75	278,750.00	
Pfizer Incorporated	11,000	26.00	286,000.00	
Schering-Plough Corporation	7,000	36.38	254,625.00	
Warner-Lambert Company	11,000	28.63	314,875.00	
₹otal Drugs			S 1,570,500.00	4.85%

		Market		Total
Common Stock	Shares	Price 6-30-77	Market Value	% Market
FOODS-BEVERAGES CPC International, Inc.	6,000	\$ 50.25	\$ 301,500.00	
Coca-Cola Company (The) General Foods Corporation	19,000 7,000	37.25 33.38	707,750.00 233,625.00	
Norton Simon, Incorporated	23,953	17.75	425,165.75	
Total Foods-Beverages			S 1,668,040.75	5.16%
RETAIL SALES Federated Department Stores, Incorporated	8,000	\$ 37.00	\$ 296,000.00	
K mart Corporation Sears, Roebuck and Company	13,000 6,000	28.50 58.00	370,500.00 348,000.00	
Southland Corporation (The)	14,710	23.63	347,523.75	
Total Retail Sales TOTAL CONSUMER∙ORIENTED			\$ 1,362,023.75	4.21%
			S 9,626,298.88	29.76%
TECHNOLOGY ELECTRONICS				
Hewlett-Packard Company	8,000	\$ 79.00	\$ 632,000.00	1.95%
OFFICE EQUIPMENT Burroughs Corporation	7,500	\$ 62.38	\$ 467,812.50	
Digital Equipment Corporation International Business Machines Corporation	19,000 7,793	46.88 264.00	890,625.00 2,057,352.00	
Total Office Equipment	7,700	201.00	\$ 3,415,789.50	10.56%
TOTAL TECHNOLOGY			\$ 4,047,789.50	12.51%
BASIC INDUSTRY				
AEROSPACE Boeing Company (The)	14,000	\$ 57.88	\$ 810,250.00	2.50%
BUILDING & FOREST PRODUCTS				
Masonite Corporation Weyerhaeuser Company	24,000 14,000	\$ 17.00 35.63	\$ 408,000.00 498,750.00	
Total Building & Forest Products	.,,		S 906,750.00	2.80%
CHEMICALS				
Air Products and Chemicals, Incorporated Dow Chemical Company (The)	10,201 12,000	\$ 24.25 34.13	\$ 247,374.25 409,500.00	
du Pont (E.I.) de Nemours and Company	5,000	116.00	580,000.00	2 020/
Total Chemicals			\$ 1,236,874.25	3.83%
ELECTRICAL EQUIPMENT Emerson Electric Co.	9,000	\$ 34.38	\$ 309,375.00	
General Electric Company Gould, Inc.	8,000 7,000	56.50 31.00	452,000.00 217,000.00	
Total Electrical Equipment			\$ 978,375.00	3.02%
MACHINERY		4 53 35		
Caterpillar Tractor Co. Combustion Engineering, Incorporated	3,100 7,000	\$ 57.75 62.13	\$ 179,025.00 434,875.00	
Trans Union Corporation Total Machinery	8,000	37.75	302,000.00 \$ 915,900.00	2.83%
•			3 513,500.00	2,03/8
METALS Aluminum Company of America	4,500	\$ 53.00	\$ 238,500.00	
Hanna Mining Company (The) St. Joe Minerals Corporation	10,000 8,000	49.00 34.13	490,000.00 273,000.00	
Total Metals			S 1,001,500.00	3.11%
PAPER International Paper Company	4,500	\$ 51.50	\$ 231,750.00	
Union Camp Corporation	5,000	54.25	271,250.00	
Total Paper			\$ 503,000.00	1.55%
MISCELLANEOUS Corning Glass Works	2,200	\$ 67.38	S 148,225.00	
International Telephone & Telegraph Corp.	7,000	35.88	251,125.00	1 0 20/
Total Miscellaneous TOTAL BASIC INDUSTRY			S 399,350.00 S 6.751,999.25	1.23% 20.87%
ENERGY				
OIL-DOMESTIC Atlantic Richfield Company	10,000	S 60.50	S 605,000.00	
Continental Oil Company (The) Louisiana Land and Exploration Company (The)	11,000 16,000	33.88 27.50	372,625.00 440,000.00	
Marathon Oil Company Standard Oil Company (Indiana)	8,000 7,000	52.63 53.75	421,000.00 376,250.00	
Total Oil-Domestic	1,000	55.75	S 2,214,875.00	6.84%
OIL-INTERNATIONAL				
Exxon Corporation Mobil Corporation	17,500 7,000	\$ 53.50 68.00	\$ 936,250.00 476,000.00	
Total Oil-International			\$ 1,412,250.00	4.37%
ENERGY RELATED				
Baker International Corporation Halliburton Company	11,000 13,000	\$ 52.88 66.75	\$ 581,625.00 867,750.00	
Williams Companies (The)	18,000	23.13	416,250.00	£ 779/
Total Energy-Related TOTAL ENERGY			\$ 1,865,625.00 \$ 5,492,750.00	5.77% 16.98%
TRANSPORTATION			•	
AIRLINES Northwest Airlines, Incorporated	6,000	\$ 25.25	\$ 151,500.00	0.47%
RAILROADS	0,000	- 20,23	+ 101,000.00	U.71/0
Union Pacific Corporation	9,000	\$ 57.25	\$ 515,250.00	1.59%
TOTAL TRANSPORTATION TOTAL COMMON STOCKS			\$ 666,750.00 \$32,350,437.63*	2.06% 100.00%
TOTAL COMMON STOCKS			932,330,437.03	100.00%

SCHEDULE XIII

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

PERMANENT SCHOOL FUND

RATE OF RETURN ON AVERAGE AMOUNT INVESTED DURING FISCAL PERIODS June 30, 1977

	Book Value (1)	Average Book Value for Year Ending (2)	Total Investment Income for Year Ending (3,4)	Yield (5)			
June 30, 1957 December 31, 1957	\$244,700,475.47 \$248,558,062.99	\$242,386,448.84	\$ 6,486,999.20	2.68%			
June 30, 1958 December 31, 1958	\$249,513,238.84 \$252,324,357.47	\$247,590,592.43 —	\$ 6,512,261.41 —	2.63%			
June 30, 1959 December 31, 1959	\$253,243,896.53 \$225,520,490.05	\$251,693,830.95 	\$ 7,005,142.92 —	2.78%			
June 30, 1960 December 31, 1960	\$256,276,151.72 \$259,324,537.57	\$255,013,512.77 —	\$ 7,116,641.31 —	2.79% —			
June 30, 1961 December 31, 1961	\$260,019,901.33 \$261,981,702.84	\$258,540,196.87 —	\$ 7,978,635.92 —	3.09%		•	
June 30, 1962 December 31, 1962	\$262,388,564.04 \$264,203,940.11	\$261,463,389.40 —	\$ 8,610,672.52* -	3.29%* -			
June 30, 1963 December 31, 1963	\$264,631,949.36 \$263,710,744.23	\$263,741,484.50 —	\$ 8,048,170.78* -	3.05%*	Less	Net Investment	Net
June 30, 1964 December 31, 1964	\$263,552,120.96 \$264,704,185.42	\$263,964,938.18 —	\$ 8,579,156.81 —	3.25%	Transfer to Principal (6)	Income for Year Ending (3)	Yield (7)
June 30, 1965 December 31, 1965	\$262,170,084.20 \$262,324,844.32	\$263,475,463.53 —	\$ 9,186,790.66 —	3.49%	\$ 76,936.86	\$ 9,109,853.80	3.46%
June 30, 1966 December 31, 1966	\$261,686,901.05 \$263,433,844.16	\$262,060,609.86 —	\$ 9,647,417.30 -	3.68%	\$ 329,472.90 —	\$ 9,317,944.40 —	3.56% —
June 30, 1967 December 31, 1967	\$263,816,276.40 \$264,303,404.43	\$262,979,007.20 —	\$10,215,172.70 -	3.88%	\$ 856,275.93 —	\$ 9,358,896.77 —	3.56%
June 30, 1968 December 31, 1968	\$264,578,182.47 \$266,225,867.42	\$264,232,621.10 —	\$10,511,771.10 	3.98%	\$1,016,014.48 _	\$ 9,495,756.62 —	3.59%
June 30, 1969 December 31, 1969	\$264,122,329.06 \$264,797,800.95	\$264,975,459.65 	\$10,512,970.80 —	3.97%	\$1,100,277.41 	\$ 9,412,693.39 —	3.55%
June 30, 1970 December 31, 1970	\$259,550,484.67 \$248,210,564.03	\$262,823,538.23 —	\$11,324,161.11 —	4.31%	\$1,034,987.16 	\$10,289,173.95 —	3.91%
June 30, 1971 December 31, 1971	\$248,077,642.59 \$250,918,742.94	\$251,946,230.43 —	\$12,380,084.17 —	4.91% —	\$1,435,834.16 	\$10,944,250.01 	4.34% -
June 30, 1972 December 31, 1972	\$251,249,760.37 \$251,129,595.01	\$250,082,048.63 —	\$13,691,318.87 —	5.47% -	\$1,937,452.41 —	\$11,753,866.46 —	4.70% —
June 30, 1973 December 31, 1973	\$249,010,960.05 \$252,105,340.61	\$250,463,438.48	\$14,348,252.97 —	5.73% —	\$2,361,011.68 —	\$11,987,241.29 —	4.79% —
June 30, 1974 December 31, 1974	\$256,282,207.38 \$254,000,064.12	\$252,466,169.35 —	\$14,947,257.78 —	5.92% -	\$2,445,336.93 —	\$12,501,920.85 	4.95% —
June 30, 1975 December 31, 1975	\$254,252,908.35 \$258,709,589.62	\$254,845,059.95 —	\$15,993,845.27 —	6.28%	\$2,784,257.93 —	\$13,209,587.34 —	5.18% -
June 30, 1976 December 31, 1976	\$259,305,894.51 \$263,345,172.22	\$257,422,797.49 	\$17,048,127.54 —	6.62% —	\$2,793,175.78 —	\$14,254,951.76 —	5.54%
June 30, 1977	\$259,744,015.36	\$260,798,360.70	\$17,767,902.49	6.81%	\$3,093,125.10	\$14,674,777.39	5.63%

⁽¹⁾ Book value figures based on those shown on Treasurer's General Report on State Finances on date listed, with adjustments for calls, maturities and investments committed for but not yet received.

Beginning December 31, 1974, book value was taken from State Board of Investment ledgers.

⁽²⁾ Computed by averaging book value of fund on last three report dates, ending with date listed.

⁽³⁾ Income figures obtained from the State Department of Finance. Beginning June 30, 1975, income figures are from State Board of Investment ledgers.

⁽⁴⁾ Includes investment income from the Swamp Land Fund which was combined into the Permanent School Fund after passage of a Constitutional Amendment in 1962.

⁽⁵⁾ Computed by dividing total investment income of fund for fiscal period by average book value of fund. Yield figures beginning on June 30, 1975, reflect the fact that income was taken from the State Board of Investment ledgers, which are computed on an accrual basis, whereas the figures formally obtained from the State Department of Finance were on a cash basis.

⁽⁶⁾ The transfer of a portion of the income to the principal of the account is called for under the Minnesota Constitution, Article VIII, Section 4, as amended in 1962, and implemented by Minnesota Statutes 1974, Section 11.015, Subdivision 7, in order that the difference between the sales price and original cost of securities be returned to the principal of the account. Sales of low coupon U.S. Treasury securities at less than cost resulted in the transfers during recent years.

⁽⁷⁾ Computed by dividing net investment income of fund for fiscal period by average book value of fund.

^{*}The income received during fiscal 1962 and 1963 was subjected to accounting adjustments which tended to overstate the 1962 figures, due to the accumulation of discounts on bonds purchased (Minnesota Statutes 1976, Section 11.05, Subdivision 2) and understate the 1963 results, due to the combining of the Swamp Land Fund into the Permanent School Fund during that fiscal year.

SCHEDULE XIV

PERMANENT SCHOOL FUND June 30, 1977

RESUME OF ASSETS IN ACCOUNT

CASH CERTIFIED FOR INVESTMENT	\$		43,696	.07
MONEY MARKET SECURITIES				
Bills Maturities up to 98 days	\$	5	,000,000	.00
Repurchase Agreements Maturities up to 7 days	\$	5	,479,000	.00
STATE AND LOCAL OBLIGATIONS	\$		317,000	.00
UNITED STATES GOVERNMENT-GUARANTEED OBLIGATIONS (See Listing Below)	\$1	24	,323,821.	.56
CORPORATE BOND OBLIGATIONS (See Listing Below)	\$	75	,982,138.	.44
COMMON STOCKS (See Listing Below)	\$	57	,421,387	.76
TOTAL ASSETS IN ACCOUNT (for accounting purposes; not indicative of true market value)	\$2	68	,567,043.	.83

Note: Bond investments are listed at face value; common stocks are listed at market value.

UNITED STATES GOVERNMENT-GUARANTEED BONDS AND CORPORATE BOND HOLDINGS June 30, 1977

Average Yield Coupon Total Type of Rate Company Security Date (a) % % (000) (b) UNITED STATES GOVERNMENT-GUARANTEED OBLIGATIONS FARMERS HOME ADMINISTRATION U.S. Dept. of Agriculture U.S. Dept. of Agriculture 8.900 8.900 S 2,997 Insured Note 07-31-1985 8 625 8.625 2,995 TOTAL FARMERS HOME ADMINISTRATION 8 753% S 5,993 GOVERNMENT NATIONAL MORTGAGE ASSOCIATION GOVERNMENT NATIONAL MONTIGAGE ASSOCIATION
GUARANTEED MORTGAGE-RACKED SECURITIES
California Mortgage Service
Citizens Mortgage
First National Bank (Mpls.)
Mtg. Backed Cert.
First National Bank (Mpls.)
Mtg. Backed Cert.
Mtg. Backed Cert. 07-15-2004 12-15-2000 12-15-2000 02-15-2001 02-15-2004 07-15-2004 8.250 9.612 S 800 8.000 8.000 8.000 8.730 8.650 8.500 1,374 1,028 1,014 8.000 8.250 8.522 9.478 Guild Mortgage Co. Mtg. Backed Cert. Heritage Mortgage International Mortgage Mtg. Backed Cert. 1.810 1,703 2,503 2,502 Mtg. Backed Cert. 04-15-2004 8.000 8 522 IDS Mortgage Corp.
IDS Mortgage Corp.
IDS Mortgage Corp. Mtg. Back. Serial Note Mtg. Back. Serial Note 12-15-2001 11-15-2001 7.125 7.125 6.500 6.500 8.920 8.940 8.730 Mtg. Backed Cert. 02-15-2000 7.000 1,814 1,239 IDS Mortgage Corp.
IDS Mortgage Corp. Mtg. Backed Cert. Mtg. Backed Cert. 06-15-2000 07-15-2000 1,395 1,342 1,225 8.000 Mtg. Backed Cert. Mtg. Backed Cert. 10-15-2000 11-15-2000 8.000 8.000 8.730 8.650 01-15-2001 1,330 544 Mtg. Backed Cert. 8 000 8 570 Mtg. Backed Cert. Mtg. Backed Cert. 02-15-2001 03-15-2001 8.000 7.500 7.400 731 7.340 7.340 7.340 7.540 3,004 3,007 Mtg. Back. Serial Note 03-15-2003 6.500 IDS Mortgage Corp. 04-15-2003 04-15-2003 Mtg. Backed Cert. 6.500 3,003 2,482 4,245 1,663 Mtn. Back, Serial Note 6 500 IDS Mortgage Corp. IDS Mortgage Corp. IDS Mortgage Corp. Mtg. Backed Cert. Mtg. Backed Cert. 06-15-2003 07-15-2003 6.500 6.500 7.890 Mtg. Backed Cert. Mtg. Backed Cert. Mtg. Backed Cert. 11-15-2003 11-15-2003 04-15-2004 8.000 8.553 8.550 IDS Mortgage Corp.
IDS Mortgage Corp. 2,533 8.000 8.470 2,495 1,112 12-15-2000 02-15-2001 12-15-2005 Mtg. Backed Cert. Mtg. Backed Cert. 8,000 8,000 Iowa Securities Co. Iowa Securities Co. Lomas & Nettlet 1.088 8.100 8.296 9.612 899 1,681 Mtg. Backed Cert. 8.000 Lumbermans Investment Modern American Mtg. Molton, Allen & Wms. 07-15-2004 06-15-2006 02-15-2004 Mtg. Backed Cert. Mtg. Backed Cert. Mtg. Backed Cert. 8.250 8.250 967 882 8.470 8.000 8.250 8.522 8.470 Mtg. Backed Cert. Mortgage Associates National Homes Acceptance Mtg. Backed Cert 07-15-2006 994 1,316 1,351 1,410 Mtg. Back. Serial Note 05-15-2000 7.000 8.920 National Homes Acceptance Mtg. Back. Serial Note Mtg. Back. Serial Note 09-15-2000 07-15-2000 8.000 8.000 8.750 8.800 8.800 National Homes Acceptance Our Lady of Victory 165 1,547 1,826 Construction Loan 01-01-2002 8 861 11-15-2004 07-15-2004 09-15-2004 Peoples Mortgage Co. Mtg. Backed Cert. Mtg. Backed Cert. 9.000 9.921 8.861 Steed (W.S.) Virginia Mtg. & Inv. Co. 8.000 Mtg. Backed Cert. Mtg. Backed Cert. Mtg. Back. Serial Note 836 1,020 1,467 9.000 9 890 Wells Fargo Mortgage Percy Wilson Mortgage & Finance Co. 08-01-2000 8.000 8.940 TOTAL GOVERNMENT NATIONAL MORTGAGE ASSOCIATION, **GUARANTEED MORTGAGE-BACKED SECURITIES** 8.358% S 65,017 GOVERNMENT-GUARANTEED MERCHANT MARINE BONDS American Mail Line American Pres, Lines 03-01-1993 Government Guar. Bond s 1,470 1,000 1,470 1,750 Government Guar, Bond 5.600 11-01-1992 5 600 American Pres. Lines Construction Aggregate Government Guar. Bond 11-01-1991 4.800 7.500 4.800 7.500 06-01-1991 Government Guar. Bond Delta Steamship Lines Eagle Terminal Tankers 5.500 6.000 895 3,030 Government Guar, Bond 03-01-1986 5 500 Government Guar. Bond 6.000 El Paso Columbia Tank. Government Guar, Deb. 12-15-2001 9 250 9 250 3,000 Farrell Lines, Inc. Government Guar. Bond 09-20-1998

Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount (000) (b)
Farrell Lines, Inc.	Government Guar, Bond	06-29-1997	9.000	9.000	206
Farrell Lines, Inc.	Government Guar. Bond	11-27-1997	9.000	9.000	208
Farrell Lines, Inc.	Government Guar. Bond	02-28-1998	9.000	9.000	210
Farrell Lines, Inc. Grace Line, Inc.	Government Guar, Bond Government Guar, Bond	04-01-1988 02-01-1992	8,050 5,100	8.050 5.100	1,551 1,467
Ingram Ocean Systems	Government Guar. Bond	02-01-1989	8.750	8.750	1,165
Intercontinental Bulktank	Government Guar. Bond	09-01-1990	7.800	7.800	1,155
Marlin Drilling Co. Matson Navigation Co.	Government Guar, Bond Government Guar, Bond	01-01-1991 11-10-1994	8.900 7.500	8.900 7.500	2,898 984
Moore-McCormack Leasing	Government Guar, Bond	07-15-2001	8.875	8.875	2,607
Moore-McCormack Lines	Government Guar. Bond	04-01-1987	5.750	5.872	1,249
Overseas Bulk Tank Pacific Far East Line	Government Guar, Bond Government Guar, Bond	12-01-1990 02-01-1997	7.800 8.750	7.800 8.750	1,192 2,001
Penn Tanker Co.	Government Guar, Bond	10-01-1989	6.000	6.000	1,211
Prudential Lines, Inc.	Government Guar. Bond	11-01-1995	6.000	6.000	2,168
Puget Sound Tug & Barge States Steamship Co.	Government Guar, Bond Government Guar, Bond	02-15-2001 03-31-1993	9.125 5.100	9.125 5.100	2,814 1,500
U.S. Line Co. of New Jersey	Government Guar, Bond	10-01-1987	5.000	5.000	1,275
U.S. Lines	Government Guar, Bond	03-01-1991	8.625	8.625	1,820
Western Co. of North America Zapata Off-Shore Co.	Government Guar, Bond Government Guar, Bond	06-01-1990 06-15-1996	9,250 8.625	9.250 8.625	3,000 3,000
TOTAL GOVERNMENT-GUARANTE			0.023	7.566%	\$ 46,510
NEW COMMUNITY ACT DEBENTURES	3				
Cedar Riverside Land	New Community Deb.	12-15-1991	7.200	7.200	\$ 2,500
Jonathan Development	New Community Deb.	10-01-1990	8.500	8.500	2,500
TOTAL NEW COMMUNITY ACT DE	BENTURES			7.850%	S 5,000
MALL BUSINESS ADMINISTRATION BA Guaranteed Loan	Government Guar, Bond	08-22-1985	9.250	9.324	S 451
BA Guaranteed Loan	Government Guar, Bond	04-27-1985	9.250 9.250	9.324	\$ 451 465
SBA Guaranteed Loan	Government Guar. Bond	02-22-1997	8.500	8.500	497
BA Guaranteed Loan	Government Guar. Bond	02-23-1984	9.000	9.000	66
BA Guaranteed Loan TOTAL SMALL BUSINESS ADMINIS	Government Guar, Bond	05-25-1984	8.250	8.285	315
TOTAL UNITED STATES GOVERNN		LIGATIONS		8.899% 8.069%	S 1,795 S124,316
ORPORATE BOND OBLIGATIONS				5.555/8	3127,310
PUBLIC UTILITY OBLIGATIONS					
LECTRIC					
Duke Power Co. Hawaiian Electric Co.	First & Ref. Mtg. Bond	02-01-1995	4.500	4.470	\$ 1,500
owa Power & Light Co.	First Mtg. Bond S/F Bond	07-01-1993 04-01-1989	4.450 4.625	4.450 4.570	1,000 1,200
Cansas Power & Light	First Mtg. Bond	06-01-2007	8.125	8.168	4,000
ong Island Lighting	First Mtg. Bond	06-01-1995	4.550	4.724	1,700
Total Electric				6.100%	S 9,400
GAS Consolidated Natural Gas	Dehantura	00 01 1007	0 105	0.140	6 4000
Consolidated Natural Gas Gas Service Co.	Debenture First Mtg. Bond	06-01-1997 06-01-1985	8.125 4.650	8.149 4.650	\$ 4,000 912
Peoples Gas Light Coke	First & Ref. Mtg. Bond	07-15-1991	5.375	5.375	1,281
Total Gas				7.060%	S 6,193
ELEPHONE				1.	
Bell Telephone Co. of Canada	First Mtg. Bond	09-01-1995	4.850	5.530	\$ 2,500
Bell Telephone Co. of Canada	First Mtg. Bond	06-01-2004	9.500	9.500	3,000
General Telephone Co. (Illinois) General Telephone Co. (Indiana)	First Mtg. Bond First Mtg. Bond	09-01-1995 08-01-1995	4.875 4.700	4.875 4.700	1,200
Nichigan Bell Telephone Co.	Debenture	06-01-2015	8.125	4.700 8.149	1,200 2,500
Southern Bell Telephone &					
Telegraph Co.	Debenture	03-15-2013	7.625	8.418	4,000
Total Telephone				7.490%	S 14,400
TOTAL PUBLIC UTILITY OBLIGAT	IONS			6.966%	S 29,993
FINANCE OBLIGATIONS	Canital Note	00.01.1000	4.750	4.750	0 700
Sulf Life Insurance Forthwest Bancorporation	Capital Note Debenture	06-01-1989 10-15-1990	4.750 4.750	4.750 4.780	\$ 720
Forthwest Bancorporation	S/F Debenture	03-15-2003	4.750 7.750	4.780 7.750	1,500 1,500
orthwest Bancorporation	Note	09-15-1986	7.875	7.892	3,500
TOTAL FINANCE OBLIGATIONS				6.909%	S 7,270
NDUSTRIAL OBLIGATIONS					
Aluminum Co. of America	Promissory Note	03-31-1988	4.375	4.500	\$ 912
Aluminum Co. of Canada	S/F Debenture	03-01-1995	9.500	9.370	1,000
Armour-Dial, Inc. Atlantic Richfield Co.	Note Guaranteed Note	01-15-2003	7.900	7.900	3,817
Cummins Engine Co.	Guaranteed Note Note	07-15-1996 07-15-1990	9.250 4.600	9.250 4.600	3,000 840
Diamond Shamrock Corp.	Note	05-01-1989	4.650	5.260	900
Jow Chemical FMC Corp.	Debenture S/F Debenture	09-15-1988 01-15-2000	4.350	4.350	1,000
General Cable Corp.	S/F Note	01-01-1989	9.500 4.875	9.603 4.875	3,000 680
Honeywell, Inc.	Note	04-01-1990	4.550	5.782	1,802
Ingersoll-Rand Co. Shell Oil Co.	Note Note	01-01-1991 04-15-1990	4.750 4.500	4.750	920
Sprague Electric Co.	S/F Debenture	09-01-1988	4.500	4.500 4.400	- 1,100 1,000
Standard Oil of California	First Pref. Ship Mtg. Bd.	09-07-1997	7.700	7.700	1,000
Standard Oil of California Standard Oil of California	First Pref. Ship Mtg. Bd. First Pref. Ship Mtg. Bd.	09-08-1997	7.700	7.700	1,000
Standard Oil Of California Standard Oil (Indiana)	Note	11-06-1997 10-01-2000	7.700 7.300	7.700 7.300	1,000 4,000
Standard Oil Co. (Ohio)	Note	07-15-1990	4.550	4.550	1,008
Swift & Co.	S/F Debenture	08-01-1992	6.300	6.300	1,200
Texaco, Inc. Jnion Carbide Corp.	Note Note	12-15-1989 12-31-1996	4.500 4.500	4.500 4.470	1,200 937
Youngstown Sheet Tube	First Mtg. S/F Bond	07-01-1995	4.600	4.600	1,221
TOTAL INDUSTRIAL OBLIGATION	,			6.769%	\$ 32,538
FRANSPORTATION DEBT OBLIGATION	ONS				
Atchison, Topeka & Santa Fe	General Gold Bond	10-01-1995	4.000	4.400	\$ 1,500
Atlantic Richfield Co. TOTAL TRANSPORTATION DEBT (First Pref. Ship Mtg. Bd.	12-01-2001	8.750	8.750	2,000
I WIME INMINORUNIATION DEBT	PREIOWIION2			6.886%	\$ 3,500

Coupon Average

Total

Schedule XIV continued Coupon Average Rate Yield % Total Maturity Сотрапу RAIL ROAD EQUIPMENT OBLIGATIONS Canadian Pacific, Ltd. Ec Flying Tiger Corp. Ec Flying Tiger Corp. Ec Illinois Central Railroad CC Kansas City Southern Railway Co. Cc NS Equipment Trust Cert. Equipment Trust Cert. Equipment Trust Cert. Equipment Trust Cert. Conditional Sale Agree. Conditional Sale Agree. 01-15-1983/92 09-01-1977 09-01-1977/78 02-15-1978/83 01-15-78/ 07-15-78 8.625 4.650 4.650 8.625 4.650 4.650 \$ 1,500 200 200 6.875 6.875 633 4.450 4.450 147 TOTAL RAILROAD EQUIPMENT OBLIGATIONS 7.389% \$ 2,681 TOTAL CORPORATE OBLIGATIONS 6.887% \$ 75,982 TOTAL UNITED STATES GOVERNMENT-GUARANTEED, CANADIAN GOVERNMENTAL AND CORPORATE OBLIGATIONS 7.621% \$200,298

(a) Most corporate issues have substantial sinking funds and an average life far shorter than the stated maturity date. (b) Column may not add, due to rounding.

COMMON STOCK HOLDINGS

JON.III.ON	0.001(1	Market		Total
		Price		%
Common Stock	Shares	6-30-77	Market Value	Market
UTILITIES ELECTRIC				
Central and South West Corporation	23,000	S 16.13	\$ 370,875.00	
Cincinnati Gas & Electric Company (The)	24,000	24.75 30.88	594,000.00 663,781.63	
Commonwealth Edison Company Florida Power & Light Company	21,499 25,400	27.13	688,975.00	
Houston Industries Incorporated	16,500	33.88	558,937.50	
Middle South Utilities Incorporated	34,000	16.50	561,000.00	
Minnesota Power & Light Company Northern States Power Company (Minn.)	32,000 21,500	22.25 28.75	712,000.00 618,125.00	
Pacific Gas and Electric Company	21,500	24.00	516,000.00	
Public Service Company of Indiana, Inc.	28,150	29.25	823,387.50	
Southern California Edison Company Southern Company (The)	20,000 24,000	25.13 17.25	502,500.00 414,000.00	
Texas Utilities Company	28,000	21.50	602,000.00	
Virginia Electric and Power Company	18,000	15.13	272,250.00	
Total Electric			\$ 7,897,831.63	13.76%
NATURAL GAS				
Panhandle Eastern Pipe Line Company	20,000	\$ 48.88 50.75	\$ 977,500.00	
Peoples Gas Company	5,000	50.75	\$ 1,231,250.00	2.14%
Total Natural Gas			\$ 1,231,200.00	2.14/0
COMMUNICATIONS American Telephone & Telegraph Company	32,000	\$ 63,50	\$ 2,032,000.00	
General Telephone & Electronics Corporation	40,800	32.50	1,326,000.00	
Total Communications			\$ 3,358,000.00	5.85%
TOTAL UTILITIES			\$12,487,081.63	21.75%
			, ,	
FINANCIAL SERVICES BANKS				
BankAmerica Corporation	33,000	\$ 24.25	\$ 800,250.00	
Citicorp First Bank System, Incorporated	29,112 21.500	27.38 36.63	796,941.00 787,437,50	
J.P. Morgan & Co., Incorporated	16,920	50.38	852,345.00	
Northwest Bancorporation	54,000	24.13	1,302,750.00	
Total Banks			\$ 4,539,723.50	7.91%
FINANCE				
Beneficial Corporation	17,925	\$ 23.88	\$ 427,959.38	
Household Finance Corporation	26,000	19.88	516,750.00	4.050/
Total Finance			\$ 944,709.38	1.65%
INSURANCE			4 704 007 50	
INA Corporation Northwestern National Life Insurance Company	15,300 25,300	\$ 45.88 21.50	\$ 701,887.50 543,950.00	
SAFEC.O Corporation	15,800	47.13	744,575.00	
The St. Paul Companies, Inc.	32,000	36.38	1,164,000.00	
United States Fidelity & Guaranty Company	25,500	39.38	1,004,062.50	
Total Insurance			\$ 4,158,475.00	7.24%
TOTAL FINANCIAL SERVICES			\$ 9,642,907.88	16.80%
CONSUMER ORIENTED				
AUTOS AUTO PARTS Ford Motor Company	23,250	\$ 46.88	\$ 1,089,843.75	
General Motors Corporation	21,200	69.38	1,470,750.00	
Goodyear Tire & Rubber Company (The)	33,000	20.13	664,125.00	
Total Autos — Auto Parts			\$ 3,224,718.75	5.62%
CONSUMER-DURABLES				
Sunbeam Corporation	14,000 22,200	\$ 23.50 24.50	\$ 329,000.00 543,900.00	
Whirlpool Corporation Total Consumer-Durables	22,200	24.30	\$ 872,900.00	1.52%
			+,000,00	
CONSUMER-NONDURABLES Eastman Kodak Company	7,350	\$ 59.50	\$ 437,325.00	
Minnesota Mining and Manufacturing Company	18,000	49.38	888,750.00	
Procter & Gamble Company (The) Revion, Incorporated	7,700 16,000	80.13 41.25	616,962.50 660,000.00	
Total Consumer-Nondurables	10,000	71,40	\$ 2,603,037.50	4.53%
i orgi conzantal-läonaantsinez			5 2,003,037.00	7.33/0

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		Market Price		Total %
Common Stock	Shares	6-30-77	Market Value	Market
DRUGS American Home Products Corporation	22,800	\$ 28.75	\$ 655,500.00	
Merck & Co., Inc.	10,000	55.75	557,500.00	
Pfizer Incorporated	30,000	26.00	780,000.00 \$ 1,993,000.00	3.47%
Total Drugs			\$ 1,955,000.00	3.4770
FOODS-BEVERAGES CPC International, Inc.	8,000	\$ 50.25	\$ 402,000.00	
Coca-Cola Company (The)	16,000	37.25	596,000.00	
General Foods Corporation General Mills, Incorporated	35,000 30,000	33.38 29.50	1,168,125.00 885,000.00	
Total Foods-Beverages		20.00	\$ 3,051,125.00	5.31%
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RETAIL SALES Federated Department Stores, Incorporated	18,000	\$ 37.00	\$ 666,000.00	
Penney (J.C.) Company, Incorporated	10,800 12,000	34.88 58.00	376,650.00 696,000.00	
Sears, Roebuck and Company Total Retail Sales	12,000	30.00	\$ 1,738,650.00	3.03%
TOTAL CONSUMER-ORIENTED			\$13,483,431.25	23.48%
TECHNOLOGY OFFICE EQUIPMENT				
Burroughs Corporation	11,600 10,000	\$ 62.38 53.88	\$ 723,550.00 538,750.00	
Honeywell, Inc. International Business Machines Corporation	12,535	264.00	3,309,240.00	
Xerox Corporation	6,440	48.75	313,950.00	
Total Office Equipment			\$ 4,885,490.00	8.51%
TOTAL TECHNOLOGY			\$ 4,885,490.00	8.51%
BASIC INDUSTRY BUILDING & FOREST PRODUCTS				
Weyerhaeuser Company	17,800	\$ 35.63	\$ 634,125.00	1.10%
CHEMICALS				
Dow Chemical Company (The)	12,000	\$ 34.13	\$ 409,500.00	
du Pont (E.I.) de Nemours and Company Monsanto Company	7,000 4,000	116.00 69.88	812,000.00 279,500.00	
Union Carbide Corporation	11,700	48.88	571,837.50	
Total Chemicals			\$ 2,072,837.50	3.61%
ELECTRICAL EQUIPMENT				
General Electric Company	16,200	\$ 56.50	\$ 915,300.00	1.59%
MACHINERY				
Caterpillar Tractor Co. Trans Union Corporation	15,150 10,400	\$ 57.75 37.75	\$ 874,912.50 392,600.00	
Total Machinery	,	*****	\$ 1,267,512.50	2.21%
METALS Aluminum Company of America	12,000	\$ 53.00	\$ 636,000.00	
St. Joe Minerals Corporation	10,000	34.13	341,250.00	4.500
Total Metals			\$ 977,250.00	1.70%
PAPER	8,000	\$ 51.50	\$ 412,000.00	
International Paper Company Union Camp Corporation	5,000	54.25	271,250.00	
Total Paper			\$ 683,250.00	1.19%
TOTAL BASIC INDUSTRY			\$ 6,550,275.00	11.40%
ENERGY				
OIL-DOMESTIC	10,000	c co co	¢ 000 000 00	
Atlantic Richfield Company Continental Oil Company (Del.)	16,000 20,000	S 60.50 33.88	\$ 968,000.00 677,500.00	
Marathon Oil Company Standard Oil Company (Indiana)	7,000 24,000	52.63 53.75	368,375.00 1,290,000.00	
Total Oil-Domestic	24,000	33.73	\$ 3,303,875.00	5.76%
			,,	
OIL-INTERNATIONAL Exxon Corporation	47,816	\$ 53.50	\$ 2,558,156.00	
Mobil Corporation Texaco Inc.	21,300 34,000	68.00 29.13	1,448,400.00 990,250.00	
Total Oil-International	01,000	20.10	\$ 4,996,806.00	8.70%
TOTAL ENERGY			\$ 8,300,681.00	14.46%
TRANSPORTATION				
TRANSPORTATION AIRLINES	-			
Northwest Airlines, Incorporated	16,884	\$ 25.25	\$ 426,321.00	0.73%
RAILROADS	40	4		
Burlington Northern Incorporated Union Pacific Corporation	13,600 16,800	\$ 50.25 57.25	\$ 683,400.00 961,800.00	
Total Railroads	. 0,000	37.20	\$ 1,645,200.00	2.87%
TOTAL TRANSPORTATION			\$ 2,071,521.00	3.60%
TOTAL COMMON STOCKS			\$57,421,387.76*	100.00%
•				

^{*}Net original cost of equities on June 30, 1977, was \$51,940,406.93.

MEMBERS OF BOARD:

GOVERNOR RUDY PERPICH STATE AUDITOR ROBERT W. MATTSON STATE TREASURER JIM LORD SECRETARY OF STATE JOAN ANDERSON GROWE ATTORNEY GENERAL WARREN SPANNAUS



ROBERT E. BLIXT EXECUTIVE SECRETARY

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Room 105, MEA Building 55 Sherburne Avenue Saint Paul 55155

October 7, 1977

TO:

Members of the Minnesota Legislature

Investment Underwriters, Brokers and Dealers

FROM: Robert E. Blixt, C.F.A., Executive Secretary

Since the office of the Executive Secretary of the Minnesota State Board of Investment was established in 1960, it has been the policy of the department to list the recipients of all securities orders and to explain the reasons for the distribution of business. Although this review may be somewhat lengthy and too detailed, we believe it mandatory because of the many considerations which are so obvious in reviewing the business practices of any public fund holding over \$3 billion of securities. Orders are placed for several billion dollars of securities each year. Securities firms and organizations with differing specialties and located throughout the United States and Canada deal with the investment department. As Congress, the Securities and Exchange Commission and governmental groups throughout the nation have become more interested in reviewing the "prudence" demanded in the management of public funds, it has become even more necessary and appropriate that recipients of these orders be mentioned and that explanations be provided to the citizens of Minnesota.

The members of the Advisory Council have been particularly cognizant of avoiding any possible "conflict of interest" as to their business and professional life as related to their advisory capacity with the State Board of Investment. Important considerations include:

- 1. No appointee has been associated with a brokerage house, "government bond" sales department of a bank, or any other organization which could profit from securities orders by the Investment Board. In those instances in which Minnesota banks have sold U.S. Treasury and agency obligations to the Board, transactions have been handled on a competitive basis and are through departments having no direct association with the bank's trust department or portfolio management division whose members may serve on the Advisory Council.
- 2. No member of the Advisory Council votes as to the purchase or sale of stock representing a company of which he is an officer or employee.
- 3. It is presumed that several or all of the Council members may own these stocks in their official capacities, since they represent investment departments of financial institutions. In fact, we prefer owning investments which are also held by major Minnesota institutions so that we know such securities are being followed from a financial and quality standpoint by the staffs of those serving on the Council. In instances pertaining to situations where local institutions own substantial amounts of any one stock, the Council member working for such an institution fully discloses the relationship and does not vote as to "buy", "sell" or "hold" the particular issue.
- 4. No purchases or sales are made on the basis of a simple majority of the Council members present at any particular meeting. Instead, we ask that the unanimous opinion of those voting be expressed concerning the purchase or sale of a particular security.
- 5. In recent years, since the investment department has received appropriations with which to maintain analysts and specialists, the specific recommendations to buy and sell have been made by State investment staff members.

Therefore, any possible conflict of interest appears to be minimal or nonexistent in that Council decisions and actions come in the form of leading and directing lines of discussion, comparing economic thoughts, and setting policy as to types of purchases and sales under probable future economic and market conditions.

It should be stressed that the State funds do own common stocks and fixed-income securities of firms whose officers serve or have served on the Advisory Council. These organizations include: The First Bank System (Gaylord W. Glarner, Senior Vice President, First Trust Company, St. Paul, and John M. Harris, Investment Counsel, Northern City National Bank of Duluth), Northwest Bancorporation (James C. Harris, Vice Chairman of the Board of Directors, Northwestern National Bank of Minneapolis; Peter A. Heegaard, C.F.A., Senior Vice President, Trust Investment Department, Northwestern National Bank of Minneapolis, and LeRoy F. Piche, C.F.A., Senior Vice President, Investments, Northwest Bancorporation), The Northwestern National Life Insurance Company (Donald E. Jondahl, Executive Vice President of Finance), The St. Paul Companies, Inc. (Robert S. Davis, C.F.A., Executive Vice President of Finance), and Medtronic, Inc. (Dale R. Olseth, President). Mr. Olseth was formerly President of Tonka Corporation.

The investment department has been informed of only two members of the legislature who work for brokerage houses which deal with the State of Minnesota and therefore may present appearance of a "conflict of interest". In the case of Dain, Kalman & Quail, the State's business is divided between representatives of the former J.M. Dain organization (Paul Stoner of St. Paul) and the previous Kalman group (Stan Aby of Minneapolis). Senator Mel Frederick is employed by the Rochester office of this firm and received no direct commissions from State business. Likewise, some business is placed with the institutional division of Piper, Jaffray & Hopwood in Minneapolis (Dan Lastavich), with a portion of the commissions going toward the Leuthold Service, consisting of statistical information valuable to investors. Again, an account representative, Senator Eugene E. Stokowski, has no direct benefit from the State account. We have been informed of no other Minnesota elected or appointed official who is associated with the brokerage business. There may be some criticism of dealings with Piper and Dain in that the general economic well-being of the firms and possible long-term profit sharing and bonus plans could be affected by the State business. We feel this to be too minimal to be of any significance.

The Advisory Council and the investment staff sincerely believe that there has been no "conflict of interest" in our placement of business among the various securities firms.

The following schedules detail the securities orders placed during the twelve-month period from July 1, 1976, through June 30, 1977. It is to be emphasized that the Executive Secretary of the State Board of Investment takes full responsibility for the methods and procedures used in this allocation of securities business. It is recognized that the commissions on the shares of stock purchased and sold over major exchanges and the profits — as well as losses — from dealings with the investment department in bonds, unlisted stocks and short-term money market instruments, may be very significant. It is certainly a credit to Minnesota's constitutional officers who have served on the State Board of Investment since this program was initiated in 1960 that none have asked that business go to friends or political supporters. Likewise, pressures from other Minnesota citizens and officials have been comparatively minimal. Nevertheless, there may have been evidences of proposed changes in investment organization and policies because of our insistence that politics play no part in the placement of securities business. It is hoped that such pressures, which have been evident during the past two years, may be minimized.

Certain firms both within Minnesota and outside the state have questioned our procedures and have asked whether they are receiving their "fair share". There is no "fair share" for any individual or firm. It would be no more logical to "give business" to every securities firm in Minnesota — or throughout the nation — than to buy groceries to fulfill the needs of the State's institutions and schools from every small grocery store throughout the state. The changes witnessed by the securities industry in recent years — the new degree of competition, the merger and consolidation of many securities firms, the problems of "May Day" 1975 with the accompanying negotiated commission rates, the new questions as to whether securities research should be "unbundled" from the package that once was included in total commission rates — have all affected the ways and methods in which the investment department places securities orders.

Since the department was established, all transactions have been a matter of public record. Each

purchase and sale, along with the indicated commission or probable profit in the case of a net transaction, is reported to the Board members at each meeting. Members of the press may be in attendance and receive lists of this information.

The department has been appreciative of the economic, general business and securities research which has been provided by many firms. It is evident that the State's investment department may have limited use of research oriented primarily toward those individuals or funds which speculate in the market. Moreover, it may be inappropriate for comparatively conservative portfolios such as those represented by public trust and retirement funds to invest in securities of smaller companies. It has usually been found that the quick action necessary to time such purchases and sales is often difficult under State investment procedures. It is recognized that firms handling such equities and fixed-income instruments aid the State's securities industry through the investment banking process. They also provide markets for securities of new businesses. Nevertheless, there appears little relationship between the specialization in these securities and servicing the needs of large institutional accounts.

These considerations, together with the economic pressures suffered by many brokerage organizations during the extreme market fluctuations from 1969 through 1977, have caused the investment department's personnel to review the allocations and methods of handling our transactions so as to achieve the best possible results for the State funds. The accompanying paragraphs point out the extent to which Minnesota's investment department has used "soft dollars" — commissions on securities business transacted over a major exchange — to pay for specific investment services. The introduction of "negotiated rates" by member firms of the stock exchanges, however, may decrease — or perhaps eliminate — the use of such "soft dollars" for these services.

Many individuals familiar with the securities industry believed that the use of "soft dollars" to pay for information and services would be eliminated after "May Day" 1975. Since that date, the State Board of Investment has received these services through "soft dollar" commissions at rates from 25% to 45% less than those previously in effect. Some firms have completed transactions at even far greater discount. Nevertheless, we are somewhat fearful of the quality of the execution to be expected through such transactions and hope to continue the receipt of investment information and research materials. Many types of service are now being purchased through "soft dollar" commissions at these prevailing lower commission rates. The investment department has found that competition is intense.

During the past years, some "soft dollar" commissions were paid to Paine, Webber, Jackson & Curtis, Inc., for work regarding a data processing system which had been first suggested by them. Most of this fee, however, is now covered by legislative appropriations. This service, operated by Gibbons Associates, Inc., provides the State's retirement administrators and financial officials — as well as the investment staff — with information concerning our portfolios and details regarding the securities transactions. The system makes possible some research analysis and a complete portfolio listing.

During fiscal 1976, a "bidding process" was initiated to determine which firms, of known trading capabilities, could participate in "soft dollar" arrangements for a performance measurement contract with Standard Valuations, a subsidiary of LFK, Inc. This procedure has been continued during 1977; the Milwaukee Company now handles the transactions.

Other research services are paid through securities orders placed with investment firms chosen by the research organization. Commission business to Mesirow & Company pays for research service provided by the Harris Bank and Trust Company of Chicago. Compensation for investment advice received from the Bank of New York is handled by business placed through DeHaven Townsend, Crouter & Bodine. Other particular investment information is provided on a commission basis through Jessup & Lamont; Morgan Olmstead, Kennedy & Gardner; Merrill Lynch, Pierce, Fenner & Smith; Shearson Hayden Stone; Smith Barney, Harris Upham; Cowen & Co.; and Wertheim & Co.

During fiscal 1977, the State Board of Investment and the investment staff have shown renewed interest in ideas, opinions, and services which have not been emphasized in the past. For example, each member of the State Board of Investment, as well as the investment office, now receives copies of Investor Responsibility Research Center, Inc., publications which offer complete information concerning the voting of proxies. This service, provided by Investment Information, Inc., on the basis of business placed through Morgan, Olmstead, Kennedy & Gardner, also makes possible participation in symposiums regarding the role of stockholders in corporate decisions. Other programs and conferences have been

sponsored in recent years by: Merrill Lynch, Pierce, Fenner & Smith, Inc.; Smith, Barney, Harris Upham; Sutro & Co.; Jefferies & Co.; and Salomon Brothers. These firms provide "free" tuition or conference fees, if any exist. On the other hand, the department is dependent upon its legislative appropriations for all travel and hotel expenses for these meetings. It is our opinion that pertinent meetings and discussions are having a greater value than the stacks of written materials which previously were regarded as the limits of research.

The accompanying schedules in this report list the number of shares purchased or sold, or the face value in the case of bond transactions. This listing is not necessarily indicative of the commissions involved because of the impossibility of determining the exact profit or loss associated with any transaction handled on a competitive or a net price basis. After a review of departmental operations by a legislative commission, the 1965 Legislature passed a bill, now Minnesota Statutes 1976, Section 11.13, which reads as follows:

"All securities purchased or sold by the State Board of Investment, except stocks listed or traded on a major United States stock exchange, securities bound by underwriting restrictions, or securities classified as private placements and offered only to a limited number of institutional investors, shall be purchased or sold on the basis of competitive offerings or bids received from at least two firms known to specialize in the securities being traded and likely to position these securities in relevant quantities."

Except in the instances mentioned above — where there is a type of specialized service or evidence of proven trading ability — we have allocated securities business on the basis of continuing long-term research. It has been found, even prior to the initiation of negotiated rates, that the distribution of business on a price basis is sometimes very effective. In such instances, dealings are handled by the "third market" firms or over the "Instinet System" through which institutions trade directly with each other. The investment department accepts competitive offerings and bids from dealers who are either prime market makers or are known to position these particular securities in quantities desired for the State funds. During recent years, price has been the dominant factor in transactions involving U.S. Treasury securities, unlisted stocks, corporate bonds purchased after the termination of underwriting syndicates, and a significant percentage of listed stocks. We have found definite disadvantages in the use of open competitive offerings and bids in transactions involving large blocks of stocks. It appears that it is preferable to deal with one lead broker or dealer in these instances; under Minnesota law, however, we must check with other firms to be assured of a satisfactory price.

A number of dealers often provide the same merchandise at identical prices. This applies particularly to corporate bonds still in syndicate and to stocks that are purchased over a major exchange. The State's purchase of bonds at the time of original issuance has declined in recent years. This was partially due to the apparent attractiveness of bonds on the secondary market, particularly when the market was declining so rapidly that underwriters found it almost impossible to establish viable offering prices for new bond issues. During the past four years, there was a continued increase in the use of Government-guaranteed mortgage-backed securities. "Private placements", or fixed-income issues sold to a comparatively small number of customers, were used to a considerable extent until the past fiscal year. We have felt, in recent months, that there is a comparatively small yield differential between that offered by these securities and that which could be obtained through more marketable issues.

The dealers used in completing transactions for the State often change along with investment policies; certain firms specialize in particular stocks or bonds or are more active in the underwriting of certain securities issues. Factors involved in the placement of securities orders when there is no price distinction include the extent of participation by various dealers in the bond syndicates; the value of stock, bond and economic research provided by these firms; and, in the instance of corporate bonds, some preference is given to Minnesota dealers who are members of the bond syndicates and have committed their funds to the underwriting. There has been a tendency during recent years for firms to divide their bond and stock departments into separate organizations with little apparent coordination or relationship as to service. It is, therefore, becoming increasingly difficult to compensate for stock information through bond orders or, likewise, for bond service through stock transactions.

The distribution of public fund business has been somewhat complicated in recent years due to the establishment of institutional departments in many securities firms. The employees and sales representatives working in these departments receive a somewhat lower commission than is usual for brokers. The

obvious reason is that institutional accounts make greater use of the research departments and can place orders in larger volume. Therefore, it is only appropriate that a far greater portion of the commission be used for the securities firm to enhance the quality of the research department. Whenever possible, the Minnesota State Board of Investment has dealt with the "institutional" department or with individuals assigned the institutional accounts. In several instances, securities business for bonds, stocks, U.S. Treasury obligations and commercial paper are all assigned to different specialists or sales departments. Because of the various capabilities of these sales personnel, there are limited instances in which more than one individual handles the State account. We believe it most inappropriate to deal with more than one office of the same securities firm merely to distribute business to additional salesmen.

A listing is available showing the names of individuals handling the account of the Minnesota State Board of Investment by various securities firms as of fiscal year-end 1977. In numerous cases, particularly involving firms underwriting large bond issues, dealings are handled through the "bond department", or "order desk", with no particular individual designation.

We have been most disappointed with a tendency on the part of some larger securities firms to place the Minnesota investment account in the hands of "eager" sales personnel who know nothing about the history or needs of the department, sometimes replacing individuals who have long-term associations with our investment program. The merger of securities firms during the past few years has resulted in significant changes in personnel. In this process, we have sometimes lost the opportunity to deal with experienced investment experts who have proved to be of great assistance over the past years. We are particularly disturbed when one well-informed expert may be replaced by several sales-oriented individuals who wish to ask questions and "push merchandise" being promoted at that particular time. It is our opinion that there is little to gain by the securities industry in fostering such sales practices. Those of us in the Minnesota investment department hope we can continue to deal with "low pressure" organizations which recognize the whole program, not potential opportunities for many individual salesmen.

We have been questioned concerning the possible loss which could result from the bankruptcy of any organization dealing with the State. It is presumed that the accounts would be protected in such an instance because the State pays for the securities only after they are received, in good form, by banks in New York, Chicago, or the Twin Cities, acting for the State of Minnesota.

The following resumes outline the policies of the State in distributing securities business; the listings show the firms with which the State completed specific transactions. It is to be emphasized that this supplement in no way signifies approval, endorsement, or license of such firms by any State agency. The regulation of securities and dealers in Minnesota is handled by the Securities Division of the Department of Commerce. The investment department, on the other hand, concerns itself with completion of securities transactions at the best possible price, consistent with the receipt of necessary research materials and services.

Section 1. U.S. Treasury Securities Transactions

All purchases and sales of U.S. obligations are placed on a competitive basis. In transactions of larger size and longer maturity, in which cases it is possible that Minnesota banks do not position the securities in appropriate quantities, offerings or bids have been sought from two or three Minnesota banks and from various prime market dealers. If a Minnesota bank contacted is able to equal the best price quoted by any other dealer, the purchase or sale is completed through that particular bank. Repurchase agreements are negotiated on a competitive basis through those banks and investment firms which have expressed an interest in providing this type of security. These transactions consist simply of the purchase of U.S. Government or agency securities, with a simultaneous sale of such securities to the same dealer at some later date. In this way, the amount of net income is set at the time of the initial purchase. During fiscal 1974, the volume of purchases and sales nearly doubled; there was an additional increase of 50% in fiscal 1975. During the past two fiscal years, there have been further increases in activity. Renewed attempts have been made to maximize earnings through investing a higher portion of funds available in the State's major pooled account for tax receipts — The Invested Treasurer's Cash Fund. A surplus in tax receipts above earlier expectations was evident in late summer, 1974. Although the legislature has appropriated these funds to be used since that date, balances still exist to a degree somewhat higher than those on hand prior to the past three years. Additional monies for investment made possible the use of longer maturities, with higher yields.

Section 2. Purchases and Sales of Short-Term Corporate Notes

The use of short-term corporate notes of prime quality has increased since 1969 legislation authorized a broader use of these securities in many of the State funds; purchases and sales doubled in volume during fiscal 1974, increased by an additional 50% in fiscal 1975, remained stable during fiscal 1976, and were reduced by 30% during 1977. The financial condition of corporations is now somewhat better than in 1974; therefore, issuing firms find it unnecessary to pay the previous "premium" for these funds. Because of this factor, the State uses U.S. Government repurchase agreements to a greater extent at a somewhat higher yield. The investment department uses corporate notes of only well-known, marketable names. There are agreements with the vendors that they will repurchase the notes if the State needs cash. These credit instruments have the advantage of complete flexibility as to maturity, combined with a very fine degree of service offered by the companies issuing these securities.

Section 3. Purchases of U.S. Government-Guaranteed Obligations

Beginning in early 1970, the Government National Mortgage Association approved a program whereby major mortgage bankers could issue securities representing groups of mortgages and backed by the full faith and credit of the U.S. Government. Minnesota's investment department had worked closely with IDS Mortgage Corporation in explaining to the Department of Housing and Urban Development the need for this type of security in funds such as Minnesota's Permanent School Fund — a portion of which must be invested in government obligations under Constitutional provisions. After lengthy negotiations, the Treasury Department approved these securities late in 1969. They have been used in the Permanent School Fund since that time during periods of attractive yields. During the past five fiscal years, commitments have been made in the Minnesota Adjustable Fixed Benefit Fund; shorter maturities have been purchased for the highway trust funds. During fiscal 1977, Government National Mortgage Association certificates were used in the larger basic retirement funds; they offered a yield somewhat higher than that obtainable through corporate bond investments of lesser quality. During recent years, most of these certificates have been purchased on the open market at the lowest offering price as of the time of commitment.

The only purchase of Merchant Marine (Title XI) bonds, guaranteed in full by the United States Government, during 1977 was in an instance in which the State already owned a substantial quantity of an issue. There may be certain price benefits from additional commitments in this security at the time these bonds are called for "sinking fund" purposes.

A third type of United States Government-guaranteed obligation used during fiscal 1977 consisted of securities guaranteed by the Small Business Administration. Under a procedure developed in cooperation with the Minnesota Banker's Association, the bank handling such loans retains the 10% not guaranteed by the United States Government and sells the remaining 90% to the State Board of Investment. The Summit State Bank of Richfield, Minnesota, has been designated as the organization to pool the various loans placed by Minnesota banks.

Section 4. Private Placements of Fixed-Income Securities

Certain fixed-income issues of leading national corporations, other than bonds offered to the general public, are used by the investment department if they have received a rating of "A" or better by a recognized service and have met definite statutory requirements. Because of the quality and size of these issues, their value is ascertainable from current market conditions and a degree of marketability is assured. Such transactions must be completed through the investment firms handling the issue for the particular corporation desiring the funds. In order to avoid being the sole determinant as to interest rate, the investment department has followed the policy of purchasing only a portion of an individual issue, with other recognized institutional buyers participating at the same price and interest rate. Private placements are used only if there appears to be an adequate spread in interest rates between such securities and bonds available on the open market. This differential has varied considerably during the past few years. Private placements purchased during the 1960's were found to be particularly advantageous during the periods of high interest rates since 1970 in that the pro-rata sinking fund provisions resulted in a portion of these securities being retired by the issuer at face value. The amounts received from these mandatory prepayments were far in excess of the market values of bonds with similar coupons.

Section 5. Fixed-Income Obligations Purchased at Time of Offering on a Designated Basis

Bonds in the amounts indicated were bought at the time of offering when the issues were readily available from members of the syndicate. The orders were placed only with those firms that assumed the underwriting risk and held the bonds. The largest individual order was placed with the managing underwriter in those cases when this particular firm had sufficient bonds available; this syndicate leader was asked to provide the billings and deliveries for all members of the underwriting group.

There have been requests from several securities firms to be included in bond purchases made at the time of original offering because of participation in a "selling group". Such participation simply signifies that the firm would receive a portion of the commission on the bonds sold through the State's order even though such firm assumes no part of the underwriting risk. Because Minnesota's accounts have benefited greatly through the services offered by underwriters at a time when bond issues have been "tight" — with the new issues difficult to obtain — it is felt to be very unfair to allocate profits to firms not taking the underwriting risk at a time when bonds are easy to obtain.

As this is being written in late 1977, certain adjustments are being made in purchase policies for fixed-income obligations because of renewed interest in bond investments. The comparatively low level of stock commissions, due to "discounts" by various firms, has resulted in a portion of the general economic and equity research information being paid through orders for new issues of corporate bonds. To an increased degree, the original underwriters of bond issues are willing to "designate" commissions on a portion of such sales to their research departments for the general service provided to institutional customers.

Section 6. Fixed-Income Obligations Purchased at or after Time of Offering through Dealers Having Bonds Available

This schedule includes a listing of orders for bonds placed on the basis of availability, with consideration, when possible, of the factors mentioned previously. In certain instances, such purchases were of issues in great demand by institutional investors; in other cases, the decision to buy the bonds was made after a large portion had been sold by the members of the syndicate. These transactions were completed on the basis of offerings to our department or through firms known to have unsold balances of the issues involved.

The investment staff is particularly appreciative of the attempts by leading underwriters to obtain bonds for the State accounts at the times certain new issues, in great demand, were sold to investors.

Section 7. Corporate Bonds Purchased through Secondary Offerings

The investment department has purchased bonds on the secondary market in recent years for various reasons, usually as additions to previous commitments. These purchases were completed by calling several dealers, practically always including the manager of the original syndicate, those firms known to position the issue, and organizations likely to maintain a market for the securities. The purchases were made at the best price.

Section 8. Sale of Fixed-Income Securities

A substantial number of corporate bonds was sold from the retirement funds during the past eight years. In the early 1970's, sales consisted of small holdings inherited into the various funds. During the past two fiscal years, certain convertible debenture issues have been sold in an effort to increase portfolio quality. Certificates issued by the Government National Mortgage Association and Canadian provincial obligations were sold during the 1977 fiscal year to take advantage of attractive prices and to balance portfolio maturities. Although it is unlikely that the State Board of Investment will engage actively in bond trading for small theoretical income advantages, it is apparent that there are attractive opportunities for significant portfolio improvements through exchanges of fixed-income obligations.

Section 9. Common Stock Purchases Allocated by Investment Department

Until May 1, 1975, stock purchases completed through a major exchange, or at the time of a secondary distribution, were allocated on the basis of service received by the investment department. Those firms providing the most useful research material or, to a lesser extent, the investment bankers furnishing attractive private placements of fixed-income securities and bonds in appropriate quantities

received favorable consideration. As has been previously indicated, the department also allocated stock orders to those firms providing specialized services in the fields of portfolio comparisons and in computer applications helpful for research and listings of security holdings. During fiscal 1977, negotiations and "competitive bidding" completed with several firms resulted in particular payments for various research and performance measurement services.

The introductory paragraphs of this memorandum regarding the distribution of brokerage business indicated that any placement of securities orders on the basis of "service" or "research" leads to inequities in the case of public funds. Due to time and staff limitations, we have found it necessary to be dependent primarily upon the reports from those firms which have provided particularly valuable information over the years. During the 1969-77 period, there were many personnel changes in brokerage and investment banking organizations. It was often difficult to determine whether the research and investment service had been due to the individual or the general quality of the firm. The continuing mergers and consolidations of investment firms cause ever-increasing problems as competent representatives of several former competitors find themselves working for one organization.

Representatives of several outstanding firms have suggested that their research be used to a greater extent; however, it is impossible for us to use the volume of written materials presented to us. We feel it may be inappropriate to compensate for this material with securities orders when we do not have the procedural flexibility, nor statutory or Board approval to use many of the issues advocated. Nevertheless, written research materials and discussions with analysts have been most beneficial.

The value of certain telephone calls regarding future securities offerings, current earnings, up-to-theminute financial news and continuing order solicitations is definitely questioned by the Executive Secretary and the investment staff. The legislature has appropriated funds for the necessary electronic equipment to provide current market data and information regarding securities. As a whole, the market price of the stocks owned in the State's accounts is little affected by minor changes in earnings estimates or actual earnings amounting to only a few cents a share. Even in the instance of more significant developments, it is doubtful whether the accounts could either buy or sell — quickly — in quantities which could make any difference to the overall investment performance.

It has been our continuing hope that we could reduce the number of firms with whom we conduct stock transactions. Not only would records be simplified, but we would be able to concentrate our business with organizations which have demonstrated their effectiveness in working with us. Because of the State's needs for specialized information and service in many fields, however, the list of dealers handling State transactions will continue to be longer than that deemed appropriate by most private funds. The size of the investment department staff has increased in recent years; therefore, it was logical that individuals, with new preferences as to analysts and research departments, requested that even more firms receive a portion of the department's securities business. It appears appropriate that the department deal primarily with those firms which have serviced the State accounts for substantial periods of years and through which specific "soft dollar" services are received. During the past three years, an attempt has been made to concentrate research commission dollars with firms which have serviced the State account in a particularly meaningful manner over the many years since the common stock program was initiated.

In certain instances, it is noted that many individual securities firms provide stocks to the State accounts. In the case of the Minnesota Power and Light Company common stock, for example, purchases during fiscal 1977 were completed through thirty different securities organizations. This was because of two new offerings of the stock, as the company needed new funds for expansion purposes. The investment department tries to divide these orders among a number of firms because of the somewhat higher commissions applicable to the underwriters. The largest orders are usually placed with the managers of such issues; these higher commissions are considered in the distribution of other securities business throughout the year.

It has been previously indicated in this report that "negotiated rates" is a misnomer. It is not known whether or not the execution was well handled until after the order is completed. At that point, there is only one firm with which the customer can negotiate. It would appear illogical for a State to negotiate "harder" with one firm than another. It is probable that difficulties could be encountered if rates negotiated for transactions related to one of the many funds handled by the investment board were

lower than those applicable to other funds. Although some firms have offered to complete sizable transactions for only nominal amounts, it is apparent that future higher commissions are anticipated in order to pay for such services.

It must be emphasized, however, that significant research and securities information is worth more than the saving of all or a portion of a commission. The interest in "negotiated rates" and net prices seems to be unrealistic if investors try to save a fraction of one per cent of the price of securities in the commission rate while discounting the value of advice through research that could lead to very substantial appreciation in the securities purchased — or, just as important, the minimizing of losses.

Therefore, the investment department is continuing to distribute securities orders on the basis of service received. At the time of this writing, firms which are members of the New York Stock Exchange — and other major exchanges — are requested to complete the transactions at commission rates lower than those in effect prior to May 1, 1975, by 45%. It appears that such a "standard reduction" is typical within the industry. Total annual commissions are limited to the amounts believed appropriate for the research materials and services gained by the department.

During the summers of 1976 and 1977, investment personnel visited the research departments of several firms with Minnesota offices. These New York interviews revealed a high degree of competence on the part of analysts and research personnel. The extreme turnover evidenced by many research departments during the past three years, however, has made it somewhat difficult for any institutional investor to maintain a set list of firms with which transactions are completed. It is apparent that the department's analysts and portfolio managers will still find it necessary to maintain contacts with and receive information from analysts in firms throughout North America. There will be an even greater attempt by department personnel, however, to use the research services available through the larger securities organizations which have Minnesota offices.

Section 10. Common Stock Purchases Placed on the Basis of Lowest Available Price — in Instances of Over-the-Counter Securities, on the "Third Market", or through Direct Dealings with Other Institutions

During recent years, no purchases nor sales were made of over-the-counter stocks until the offerings and bids had been checked with two or more dealers. We attempted to contact organizations specializing in the particular stocks to be bought.

Substantial blocks of stocks were purchased from several large firms that buy and sell securities at a net price. This usually results in a definite saving to the customer when compared with the latest quotations on the major exchanges, including the standard commissions. The off-board, or "third market", has proven to be very helpful, especially in obtaining stocks that show comparatively low trading activity on the major exchanges. Prior to "May Day" 1975, our experience over one decade indicated that net commission savings on "third market" transactions approximated 3/8 to 1/2 of a point per share, or \$375 to \$500 per thousand shares. During the past 30 months, the department has dealt, to a great degree, with stock exchange member firms because of the "soft dollar" commitments for various services and due to the lower commission rates. Although we continue to be very impressed with the ability of the "third market" organizations to provide well-known quality stocks at all times, it appears that leading members of the New York Stock Exchange are also attempting to make markets for various securities. The methods of trading stocks, prevalent until recent months, appear to be changing; the answers are not yet definitive. The "third market" appears to offer a competitive price and is often able to handle blocks of securities at a price more favorable than possible on a major stock exchange, even considering the discounts.

The apparent advantage still applicable to an off-board trade is that the entire transaction is completed with no appreciable effect on the price of the stock. Negotiations on such transactions may be completed before the actual trade. This is in marked contrast to the situation involving "negotiated rates" on the major stock exchanges — which may apply to a wide range of prices applicable to the various shares purchased or sold through one order.

It is not our intent to become unduly concerned with the relative merits of the major exchanges versus the "third market"; we are simply pointing out the advantages of using all recognized markets —

major exchanges, over-the-counter market, the "third market", and the "fourth market" (a direct meeting of buyers and sellers) - for the benefit of the State funds. In dealing with firms which are not members of major exchanges, all trades are handled on a competitive basis so that the comparative prices may be checked.

Since early 1970, the investment department has received the services of the AutEx organization, which provides detailed, current, televised information concerning blocks of stocks which may be of interest to us. Since 1973, the investment staff has also used the Institutional Networks Corporation in handling trades; this makes possible direct transactions between institutions and among other large holders of stocks - while withholding the identity of the buyers and sellers. Several very successful transactions have been completed through this system.

Section 11. Common Stock Sales

Sales of common stocks during fiscal 1977 were made primarily to balance the portfolio and to take advantage of what appeared to be attractive market prices. A portion of the more successful holdings, when relatively high priced, were sometimes sold for a profit to offset losses on other stocks. It is anticipated that this process of investment upgrading will continue in order to make the equity portfolio more appropriate for the purposes of the funds. The stocks listed were sold through the markets which appeared to be appropriate at the time of the transactions. When the "over-the-counter", "third market" or the "fourth market" were used, bids were checked so as to assure a proper price. Commission business was allocated as described for stock purchases.

A favorable and equitable allocation of securities business has become increasingly difficult as financial difficulties have plagued the industry, especially as analysts have moved to different firms and have been replaced by sales personnel somewhat less attentive to the needs of State retirement and trust funds. Nevertheless, we are impressed with the progress of many leading securities organizations as to the quality of their research.

The members of the State Board of Investment, acting through the investment department, are trustees for the beneficiaries of the retirement funds, for the State's educational institutions, and for the people living in Minnesota. This responsibility continues to be recognized.

There are many possible equitable ways of allocating and dividing the State's securities business. It is felt, however, that the confidence of Minnesota citizens can be retained only if these orders are placed on a reasonable basis and if the ultimate good of the State is placed above all other considerations.

Respectfully submitted,

Robert E. Blixt, C.F.A.

Executive Secretary

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

PURCHASES AND SALES OF U.S. TREASURY OBLIGATIONS AND GOVERNMENT AGENCY SECURITIES

July 1, 1976 - June 30, 1977 (000 Omitted)

Dealer	Purchases and Sales 1-90 days	Purchases and Sales over 90 days	Repurchase Agreements 1-45 days	Total Volume
Banco Mortgage Company Bank of America Bankers Trust Company A.G. Becker & Company Briggs Schaedle & Company, Inc.	\$ 57,600 400 15,850	S 647 32,325 26,480 49,100 6,535	- \$ 262,899 - 8,000	\$ 647 89,925 289,779 64,950 14,535
Carroll McEntee & McGinley, Inc. Chemical Bank, New York Citibank, New York Continental Illinois National Bank Discount Corporation	- 6,000 2,000 10,000	14,835 11,000 18,000 8,945 9,000	170,347 409,204 168,468 136,761	185,182 420,204 192,468 147,706 19,000
Donaldson Lufkin First Boston Corporation First National Bank, Chicago First National Bank, Minneapolis First National Bank, St. Paul	- - - 9,100 18,590	- 3,500 1,000 41,030 125,975	93,704 - - 1,129,580 1,004,943	93,704 3,500 1,000 1,179,710 1,149,508
Goldman Sachs & Company Hutton, (E.F.) & Co., Inc. Aubrey G. Lanston & Company, Inc. Lehman Government Securities, Inc. Merrill Lynch, Pierce, Fenner & Smith	13,985 - - 11,040 15,345	141,665 7,000 8,325 35,330 30,420	35,000 - 9,700 -	155,650 42,000 8,325 56,070 45,765
Morgan Guaranty Trust Co. New York Hanseatic Northwestern National Bank, Minneapolis Northwestern National Bank, St. Paul John Nuveen & Company	3,725 3,000 1,425 — 320	78,380 24,500 42,766 — 19,550	618,320 3,784,170 11,556 38,940	700,425 27,500 3,828,361 11,556 58,810
Salomon Brothers Security Pacific National Bank United California Bank Weeden & Company TOTALS	5,350 	32,200 27,000 11,010 23,425 \$829,943	362,280 14,000 \$8,257,872	37,550 27,000 389,690 39,425 \$9,279,945

SECTION 2

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

PURCHASES AND SALES OF SHORT-TERM CORPORATE NOTES July 1, 1976 — June 30, 1977 (000 Omitted)

Cales

lssuer/Dealer	Purchases 1-90 days	Purchases 21-270 days	Prior to Maturity Date	Total Volume
Associates Corp. of North America	\$ 115,839	\$ 19,399		\$ 135,238
Beneficial Corp.	27,900	9,500	_	37,400
Borg Warner Acceptance Corp./Goldman Sachs	28,459	44,221	_	72,680
CIT Financial Corp.	90,885	17,704	-	108,589
Dow Chemical Co./Goldman Sachs	-	5,600	-	5,600
First Bank System/First Boston Corp.	1,000	-	_	1,000
Ford Motor Credit Co.	60,908	14,254	_	75,162
General Electric Credit Corp.	59,879	12,497	-	72,376
General Motors Acceptance Corp.	64,151	17,008	_	81,159
General Motors Acceptance Corp./Salomon Brothers	10,000	-	_	10,000
Walter E. Heller & Co.	194,916	18,723	_	213,639
Honeywell Finance Inc./John Sowarby Associates Inc.	30,523	600	_	31,123
Household Finance Corp.	90,966	6,185	\$2,000	99,151
International Harvester Credit Co.	184,343	13,773	_	198,116
Montgomery Ward Credit Corp.	74,414	3,298	-	77,712
Northwest Bancorporation	6,023	1,310	-	7,333
J.C. Penney Financial Corp.	32,866	14,633	7,760	55,259
Sears Roebuck Acceptance Corp.	62,968	15,668	-	78,636
Texaco, Inc./Goldman Sachs	_	5,600	_	5,600
Transamerica Financial Corp.	68,122	6,824	-	74,946
TOTALS	\$1,204,162	\$226,797	\$9,760	\$1,440,719

SECTION 3

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

PURCHASES OF U.S. GOVERNMENT GUARANTEED OBLIGATIONS AND GOVERNMENT AGENCY SECURITIES

July 1, 1976 - June 30, 1977

A. GOVERNMENT NATIONAL MORTGAGE ASSOCIATION

Amount (000)	Dealer or Issuer
\$12,859	First Boston Corporation
1,996	First National City Bank
9,808	Goldman, Sachs & Company
2,009	Jesup & Lamont Company
15,962	Merrill Lynch, Pierce, Fenner & Smith, Inc.
12,862	Paine, Webber, Jackson & Curtis, Inc.
10,136	Salomon Brothers

B. MERCHANT MARINE (TITLE XI)

Face	
Amount	
(000)	Dealer or Issuer
\$ 871	Hambrecht & Quist, Inc.

C. SMALL BUSINESS ADMINISTRATION GUARANTEED

Face	
Amount	
(000)	Dealer or Issuer
S 882	Summit Bank of Richfield Minnesota

D. GOVERNMENT AGENCY SECURITIES

Face	
Amount (000)	Dealer or Issuer
S 300	Salomon Brothers

SECTION 4

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

PURCHASES OF PRIVATE PLACEMENT FIXED-INCOME SECURITIES July 1, 1976 - June 30, 1977

Face Amount (000)	Dealer
\$ 6,915	Aines (A.E.) & Company
8,750	Bache, Halsey, Stuart & Co., Inc.
10,900	Blyth Eastman Dillon & Co., Inc.
3,000	First Boston Corporation
20,700	Goldman, Sachs & Company
3,000	Kuhn, Loeb & Company
5,000	Lehman Brothers, Inc.
3,000	McLeod, Young, Weir, Inc.
5,500	Morgan Stanley & Co., Inc.
39,266	Salomon Brothers
8,075	Wood Gundy, Inc.

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

DEBT OBLIGATIONS PURCHASED AT TIME OF OFFERING ON A DESIGNATED BASIS

July 1, 1976 - June 30, 1977

h, Incorporated
nal, Inc.
inc.
c.

SECTION 6

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

DEBT OBLIGATIONS PURCHASED AT OR AFTER TIME OF OFFERING THROUGH DEALERS HAVING BONDS AVAILABLE

July 1, 1976 - June 30, 1977

Face Amount (000)	Dealer
\$1,000	Bernstein (Sanford C.) & Co., Inc.
3,000	Blyth Eastman Dillon & Co., Inc.
1,000	Donaldson, Lufkin & Jenrette Securities Corp.
1,075	Drexel Burnham & Co., Inc.
1,000	Edwards, (A.G.) & Sons, Inc.
1,525	Goldman, Sachs & Company
500	Hornblower & Weeks — Hemphill, Noyes
500	Hutton, (E.F.) & Co., Inc.
4,025	Kidder, Peabody & Co., Inc.
500	Loeb Rhoades & Co., Inc.
2,500	Merrill Lynch, Pierce, Fenner & Smith, Inc.
1,100	Morgan Stanley & Co., Inc.
400	Paine, Webber, Jackson & Curtis Incorporated
3,350	Salomon Brothers
1,000	Smith, Barney & Co.
1,500	Thomson McKinnon Securities, Inc.
1,000	Weeden & Company
1,500	Wertheim & Co., Inc.
2,025	White, Weld & Company
1,550	Witter, Dean & Co.

SECTION 7

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

CORPORATE BONDS PURCHASED THROUGH SECONDARY OFFERINGS

July 1, 1976 - June 30, 1977

Face Amount (000)	Dealer
\$350	First Boston Corporation
750	Goldman Sachs & Company
250	Kidder, Peabody & Co., Inc.
650	Salomon Brothers

SECTION 8

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

SALE OF FIXED INCOME SECURITIES

July 1, 1976 - June 30, 1977

A. GOVERNMENT NATIONAL MORTGAGE ASSOCIATION

Face	
Amount (000)	Dealer
\$ 1,234	Hambrecht & Quist, Inc.
1,600	Merrill Lynch, Pierce, Fenner & Smith, Inc.
6,856	Paine, Webber, Jackson & Curtis, Inc.

B. CANADIAN GOVERNMENTAL OBLIGATIONS

Face Amount	
(000)	Dealer
\$13,200	Salomon Brothers

C. CORPORATE OBLIGATIONS

Face Amount (000)	<u>Dealer</u>
\$ 2,375	Bernstein (Sanford C.) & Co., Inc.
2,600	Blyth Eastman Dillon & Co., Inc.
550	Edwards, (A.G.) & Sons, Inc.
3,315	Goldman, Sachs & Company
1,200	Hutton, (E.F.) & Co., Inc.
6,316	Merrill Lynch, Pierce, Fenner & Smith, Inc
6,512	Morgan Stanley & Co., Inc.
23,727	Salomon Brothers
1,500	Thomson McKinnon Securities, Inc.
13,143	Weeden & Company
684	White, Weld & Company

SECTION 9

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

COMMON STOCK PURCHASES ALLOCATED BY INVESTMENT DEPARTMENT July 1, 1976 – June 30, 1977

Total Shares	Issue and Vendor	Total Shares		Issue and Vendor
UTILITIES			6600	Goldman Sachs
Electric			2200	Hornblower Weeks
12000	Commonwealth Edison Company		2200	E.F. Hutton
	1000 Paine Webber		2700	Kidder Peabody
	11000 Wainwright Securities		2200	Merrill Lynch
116700	Minnesota Power & Light Company		1200	Milwaukee & Co.
	1000 Allison-Williams		1000	Novick & Co.
	1400 Robert Baird		6300	Paine Webber
	4100 Bache Halsey		15600	Piper Jaffray
	31000 Blyth Eastman		3700	Reynolds Securities
	100 Caldwell Phillips		900	Reinholdt & Gardner
	1000 Craig-Hallum		900	Robinson Humphrey
	8300 Dain Kalman		1400	L.F. Rothschild
	3000 A.G. Edwards		2600	Salomon Bros.
	1600 First Boston		3200	Shearson Hayden

Total Shares		Issue and Vendor	Total Shares		Issue and Vendor	Total Shares		Issue and Vendor	Total Shares		Issue and Vendor
	1000	Shields Model	Consumer-Dur	ables			3000	Sanford Bernstein	40090	Interna	tional Business Machines Corp.
	3200 900	Smith Barney Sutro & Co.	84900		Corporation		5000	Drexel Burnham	10000	2000	Robert Baird
	1400	Thomson & McKinnon		21000	Blyth Eastman		8000 8000	Hornblower Weeks Shields Model		500 1400	Sanford Bernstein Legg Mason
	3200	White Weld		10200 5000	F. Eberstadt Hornblower Weeks		8000	Salomon Bros.		5300	Legg Mason Lipper Analytical
31500	2800 Norther	Dean Witter n States Power Company (Minn.)		12700	E.F. Hutton	69600		ola Company (The)		13630	Milwaukee & Co.
0.0	10000	DeHaven Townsend		6000 29000	Mesirow & Co. Shearson Hayden	}	37200 2000	Sanford Bernstein Goldman Sachs		6500 4700	Morgan Olmstead Piper Jaffray
3000	21500 Pacific (Goldman Sachs Gas and Electric Company		1000	White Weld	1	13000	Milwaukee & Co.		300	W.H. Reaves
3000		Jesup & Lamont	11000		Corporation		7400	Smith Barney		2960	Smith Barney
57500	Public S	ervice Company of Indiana, Inc.		1000 2000	Hardy & Co. Milwaukee & Co.	53000	10000 Consoli	Spencer Trask dated Foods Corporation		2200 600	Shields Model Wainwright Securities
	33500 10000	First Boston First Manhattan		8000	Smith Barney		2000	Sanford Bernstein	10200		Corporation
	10000	Goldman Sachs	Consumer-None	łuzaklas			5000 14000	First Boston		6200	De Haven Townsend
	2000	Morgan Olmstead	50500		lusts bes		2000	Merrill Lynch Paine Webber	BASIC INDUS	4000 TRV	Shearson Hayden
31100	2000 Texas U	L.F. Rothschild tilities Company	30300		ducts, Inc. Brown Bros.		1000	W.H. Reaves	Aerospace		
*****	5000	Jesup & Lamont		4500	Conning & Co.	ł	18000 7000	Salomon Bros. White Weld	173000	Boeing	Company (The)
	2000 1000	Neuberger & Berman			E.F. Hutton Morgan Ołmstead		4000	Wood Struthers		51500	Brown Bros.
	6000	Reynolds Securities Shearson Hayden			Paine Webber	21400	General 4000	Mills, Incorporated		2000 34000	Dain Kalman First Boston
	13000	Shields Model			W.H. Reaves	ł	3400	Paine Webber Reynolds Securities		10200	Lehman Bros.
	3100 1000	Smith Barney Wood Struthers			Shearson Hayden Dean Witter		11000	W.H. Reaves		61300	Paine Webber
	1000	Annon Strutusis	36500	Colgate-Pa	almolive Company	33000	3000 Norton	Wainwright Securities		6000 8000	Salomon Bros. Smith Barney
Natural Gas					Dain Kalman	33000	1000	Simon, Incorporated Bache Halsey	76300		Technologies, Inc.
184400		Natural Gas Corporation			Drexel Burnham Hornblower Weeks	•	12000	Merrill Lynch		13000	DeHaven Townsend
	1000 8000	Bache Halsey		2000	Paine Webber	91800	20000 PepsiCo	Paine Webber		1000 10000	Keefe Bruyette Merrill Lynch
	37500	Robert Baird Dain Kalman	40200		Wainwright Securities Codak Company	31000	7500	A.G. Edwards		15000	Morgan Stanley
	1300	Donaldson Lufkin	40200		Codak Company DeHaven Townsend		6000	Legg Mason		500	Paine Webber
	17100 44500	First Boston		5800	Hornblower Weeks	1	30000 15300	Morgan Olmstead Paine Webber		7000 2000	Reynolds Securities Roulston & Co.
	10000	Milwaukee & Co. M.H. Novick			E.F. Hutton	ł	18000	Piper Jaffray		5000	Shearson Hayden
	4500	Paine Webber			Legg Mason Paine Webber		15000	Shearson Hayden		10000	Shields Model
	10000 12500	Piper Jaffray White Weld		1000	Piper Jaffray	12000	Pillsbur 5000	y Company (The)		12800	Smith Barney
	38000	Wm. Witter			W.H. Reaves	1	2000	Wm. Blair E.F. Hutton	Building & For	est Produc	ets
5000		le Eastern Pipe Line Company	60200		Shearson Hayden Mining and Manufacturing Co.		5000	Wertheim & Co.	49940		-Pacific Corporation
	500 2500	Paine Webber Shields Model		3500	Caldwell Phillips	Retail Sales				10200 3000	Dain Kalman
	2000	White Weld			Dain Kalman Merrili Lynch	2000	Navton	Hudson Corporation		9180	Hardy & Co. Jesup & Lamont
58300		Gas Company			Milwaukee & Co.	2000	2000	Caldwell Phillips		3060	Milwaukee & Co.
	5000 17800	Wm. Blair Hornblower Weeks		24000	Paine Webber	57600		ed Department Stores, Inc.		8000 2000	Paine Webber L.F. Rothschild
	6500	Merrill Lynch	6000		Robinson Humphrey Gamble Company (The)		11000 10200	Brown Bros. Donaldson Lufkin		5000	Shearson Hayden
	11000	Oppenheimer & Co.	0000		Brown Bros.	i	2000	First Boston	61000	9500	Smith Barney
	13000 5000	Dean Witter Salomon Bros.			First Manhattan		5000	Mesirow & Co.	61000	7000	e Corporation Wm. Blair
			28000		Sterling Grace scorporated		13000 4000	Morgan Olmstead Reynolds Securities		6000	E.F. Hutton
Communicati	_		2000	6000	Donaldson Lufkin		12400	Salomon Bros.		23000 6000	Merrill Lynch
129400	America 14600	n Telephone & Telegraph Co. Cowen & Co.			Hornblower Weeks	20200		Corporation		10000	Neuberger Berman Paine Webber
	5000	Cyrus Lawrence			Merrill Lynch Milwaukee & Co.	1	2000 8200	Bache Halsey E.F. Hutton		9000	Smith Barney
	1000	Dain Kalman		4000	M.H. Novick		1000	Paine Webber	10000	Owens-0	Corning Fiberglas Corporation
	11000 11500	E.F. Hutton Lipper Analytical		1000	Reynolds Securities		1000 6000	Piper Jaffray		1000	Cyrus Lawrence Salomon Bros,
	17000	Mesirow & Co.	Consumer-Misco	llaneous		ł	2000	Reynolds Securities L.F. Rothschild	11500	Weyerha	seuser Company
	46800	Milwaukee & Co.	22626		alt) Productions	23100	Penney	(J.C.) Company, Incorporated		1500 4000	Bache Halsey Caldwell Phillips
	6000 5500	Mitchell Hutchins Roulston & Co.			Faulkner Dawkins		5000 5000	First Manhattan Cyrus Lawrence		3000	Drexel Burnham
	11000	Shearson Hayden			Hornblower Weeks Neuberger Berman	1	1000	W.H. Reaves		1000	Morgan Olmstead
149500	General 35000	Telephone & Electronics Corp.			M.H. Novick	1	1000	Reynolds Securities		1000 1000	Spencer Trask Wainwright Securities
	14000	A.G. Becker Dain Kalman			Paine Webber	1	4000 7100	Smith Barney Shearson Hayden		1000	wanninging decarrenes
	6000	Lipper Analytical	66500		Dean Witter 's Corporation	161405		nd Corporation (The)	Chemicals		
	22000 25500	Milwaukee & Co.	55000	5000	Bache Halsey		13596	A.G. Becker	31320		lucts and Chemicals, Inc.
	10000	Mitchell Hutchins Morgan Olmstead			First Boston	ł	10500 23278	First Boston Goldman Sachs		5000 9180	Bache Halsey Merrill Lynch
	30000	Paine Webber			Hornblower Weeks E.F. Hutton		20000	Jesup & Lamont		3000	Neuberger Berman
119000	7000	Shields Model Felecommunications, Inc.			Merrill Lynch		4000	Merrill Lynch		13120	Reynolds Securities
	2000	Hardy & Co.			Milwaukee & Co.		9695 15450	Paine Webber Robinson Humphrey	16500	1020 Dow Ch	Wainwright Securities emical Company (The)
	10000	E.F. Hutton			Morgan Olmstead Reynolds Securities	ì	54586	Rotan Mosle		2000	Caldwell Phillips
	15000 82000	Keefe Bruyette Milwaukee & Co.		5500	Robinson Humphrey	j	10300	Shields Model		2000 6000	Goldman Sachs Kidder Peabody
	10000	Sutro & Co.			Wainwright Securities Dean Witter	TECHNOLOGY				500	Reynolds Securities
FINANCIAL	er pylere			12000	Dean Witter	Electronics				6000	Shearson Hayden
Banks	2E H VILES		Drugs			44900		Packard Company	21700	du Pont 6000	(E.I.) de Nemours and Company E.F. Hutton
3000	First Int	ernational Bancshares, Inc.	8000	American	Home Products Corporation	1	8900 2000	Goldman Sachs Hornblower Weeks		2200	Keefe Bruyette
	1000	Hornblower Weeks			Bache Halsey		12500	E.F. Hutton		1600	Legg Mason
1000	2000	Milwaukee & Co.			Oppenheimer & Co. Robinson Humphrey	1	1700	Keefe Bruyette		3000 500	Lehman Bros. Milwaukee & Co.
1600		est Bancorporation Merrill Lynch	21700	Johnson 8	Johnson		500 2000	Kidder Peabody		800	Paine Webber
	1000	Merrin Lynch			Brown Bros.		2000	Legg Mason Lehman Bros.		2100	Reynolds Securities
Finance					Mesirow & Co. Sterling Grace	İ	11700	Merrill Lynch	45200	5500	Wainwright Securities s Incorporated
1600		old Finance Corporation	6900	Merck & (Co., Inc.		1600 2000	Paine Webber	43200	10000	First Boston
	1600	Cyrus Lawrence			Dain Kalman First Manhattan	j	2000	Reynolds Securities		6000	Kidder Peabody
Insurance					E.F. Hutton	Office Equipme	nt			8000 1000	Merrill Lynch Morgan Olmstead
6000	INA Cor	poration		1000	Paine Webber	38100	Burroug	hs Corporation		1500	Paine Webber
	2000	Milwaukee & Co.	11000	Pfizer Inc 5000			4500	DeHaven Townsend		11700	Smith Barney
	4000	Paine Webber			Cyrus Lawrence Merrill Lynch	1	7000 22100	Mesirow & Co. Milwaukee & Co.	10500	7000	Spencer Trask
ONSUMER-	ORIENTED	•	2500	Schering-	Plough Corporation	1	3500	Salomon Bros.	10300	5000	to Company Neuberger Berman
utomobiles					Hornblower Weeks	22100	1000	Shearson Hayden		3000	Salomon Bros.
44000	Genuine	Parts Company	25000		Reynolds Securities ambert Company	32100	Digital E	quipment Corporation Paine Webber	ESENO	2500	Wertheim & Co.
	1000	Caldwell Phillips		4000	First Boston	1	2000	Piper Jaffray	53500	Union (5000	Carbide Corporation Brown Bros.
	5000	Cyrus Lawrence Kidder Peabody			Legg Mason Marrill Lynch	i	16500	Shields Model		8000	First Boston
	1000	www.roubbby		13000	Merrill Lynch	1	4500	Sterling Grace		1000	Legg Mason
	1000 25700	Robinson Humphrey				ì	8100	Wertheim & Co			
			Food-Beverage			19500	8100 Honeyw 19500	Wertheim & Co. ell, Inc. Milwaukee & Co.		6000 7000	Merrill Lynch Milwaukee & Co.

Total Shares	Issue and Vendor	Total Shares	Issue and Vendor
	10000 Shearson Hayden		4000 Morgan Olmstead
	4500 Sutro & Co. 9000 Dean Witter	•	10500 Paine Webber 21500 Smith Barney
Electrical Equi	pment	ENERGY	
35500	Emerson Electric Co.	Oil-Domestic	
	14000 Morgan Olmstead 11800 Smith Barney	25200	Atlantic Richfield Company 6000 Bache Halsey
	9700 Dean Witter		6000 Bache Halsey 4000 Hornblower Weeks
20600	General Electric Company 6000 E.F. Hutton		5000 Kidder Peabody 6000 Robinson Humphrey
	8100 Kidder Peabody		4200 Wainwright Securities
	3500 Milwaukee & Co. 3000 Wertheim & Co.	13000	Continental Oil Company (The) 1000 First Boston
279800	Gould, Inc.		6000 Hornblower Weeks
	46100 Bear Stearns 40350 Wm. Blair		1000 Lipper Analytical 5000 Morgan Olmstead
	3000 Hornblower Weeks	9000	Louisiana Land and Exploration Co. (The)
	121950 Kidder Peabody 13500 Merrill Lynch		2000 DeHaven Townsend 1000 Hornblower Weeks
	15000 Reynolds Securities 5400 Robinson Humphrey		2000 Morgan Stanley 3000 Paine Webber
	34500 Wainwright Securities		1000 Piper Jaffray
Machinery		153400	Marathon Oil Company 18000 Bache Halsey
2500	Caterpillar Tractor Co.		11600 Donaldson Lufkin
	2500 Paine Webber		5700 Drexel Burnham 3000 First Boston
112400	Clark Equipment Company 20000 Wm. Blair		3000 Hornblower Weeks
	21500 Merrill Lynch		8000 Kidder Peabody 8000 Cyrus Lawrence
	22000 Paine Webber 15600 Rotan Mosle		4000 Legg Mason
	10500 Salomon Bros.		7000 Merrill Lynch 15000 Mesirow & Co.
	14500 Wertheim & Co. 8300 White Weld		9000 Morgan Olmstead
28000	Combustion Engineering, Incorporated 1000 Sanford Bernstein		6500 Paine Webber 4000 Piper Jaffray
	1000 Caldwell Phillips		8000 W.H. Reaves
	900 Drexel Burnham 5000 Mitchell Hutchins		5000 Reynolds Securities 10000 Shearson Hayden
	11000 Salomon Bros.		2500 Shields Model 2000 Wertheim & Co.
14000	9100 White Weld Trans Union Corporation		2000 Wertheim & Co. 5000 White Weld
71000	1500 Salomon Bros.	44000	18100 Dean Witter Phillips Petroleum Company
	4500 Smith Barney 8000 White Weld	44000	6000 DeHaven Townsend
			2000 Jesup & Lamont 10000 Mesirow & Co.
Metals	Haran Mining Communi (The)		26000 Wainwright Securities
6500	Hanna Mining Company (The) 2000 Spencer Trask	41600	Standard Oil Company (Indiana) 4000 First Boston
	3500 White Weld 1000 Wood Struthers		2000 E.F. Hutton
39226	Pittston Company (The)		6500 Kidder Peabody 13600 Morgan Olmstead
	10506 Dain Kalman 2400 E.F. Hutton		500 Paine Webber
	15996 Paine Webber		5000 Shearson Hayden 10000 Wheat First
	4000 White Weld 4488 Dean Witter	12000	Standard Oil Company (The) (Ohio)
	1836 Sutro & Co.		12000 Wertheim & Co.
155000	St. Joe Minerals Corporation 21000 First Manhattan	Oil-Internationa	
	8000 Hornblower Weeks	50200	Exxon Corporation 19800 Brown Bros.
	10000 E.F. Hutton 21000 Kuhn Loeb		1800 Caldwell Phillips
	7000 Merrill Lynch		8500 Lipper Analytical 5000 Merrill Lynch
	2000 Mitchell Hutchins 2000 Paine Webber		1500 Paine Webber
	5000 Reynolds Securities 10300 Robinson Humphrey		3100 Smith Barney 10500 Wainwright Securities
	16200 Shearson Hayden	22000	Gulf Oil Corporation 2000 Caldwell Phillips
	13000 Sutro & Co. 34000 Wainwright Securities		10000 Mesirow & Co.
	5500 Dean Witter	8000	10000 Paine Webber Mobil Corporation
Paper		0000	1500 Jesup & Lamont
35000	International Paper Company		2000 Legg Mason 2000 Milwaukee & Co.
	3000 Caldwell Phillips		2500 Morgan Olmstead
	10000 First Manhattan 3900 Merrill Lynch	86500	Standard Oil Company of California 5000 Bache Halsey
	6500 Milwaukee & Co.		23300 Brown Bros.
	2500 Paine Webber 6100 Piper Jaffray		7700 Hardy & Co. 8000 Jesup & Lamont
70500	3000 Shearson Hayden		14500 Keele Bruyette
79500	Union Camp Corporation 2500 Sanford Bernstein		2000 Neuberger Berman 10000 M.H. Novick
	4300 Caldwell Phillips		6000 Paine Webber
	6000 First Boston 4200 Goldman Sachs	52000	10000 W.H. Reaves Texaco, Inc.
	1000 Hornblower Weeks 3000 Keefe Bruyette	02000	7000 Robert Baird
	13500 Milwaukee & Co.		20000 Milwaukee & Co. 18000 Paine Webber
	7000 Oppenheimer & Co. 7000 Piper Jaffray		7000 Sutro & Co.
	1000 Reynolds Securities	Energy-Related	
	5000 L.F. Rothschild 25000 Wood Struthers	3000	Baker International Corporation
	50000 MOOR Structures		1000 First Boston
Miscellaneous		3000	2000 Salomon Bros. Dresser Industries, Inc.
73000	International Telephone & Telegraph Corp. 5000 Robert Baird		2000 Morgan Olmstead
	4000 Caldwell Phillips	49600	Halliburton Company
	7000 A.G. Edwards 2000 E.F. Hutton	•	3000 Robert Baird
	LOOU L.I. HULLON		18500 Sanford Bernstein
	9000 Lipper Analytical 10000 Milwaukee & Co.		5000 Brown Bros. 5500 Mitchell Hutchins

Total Shares	Issue and Vendor	Total Shares	Issue and Vendor
43800	3500 Morgan Stanley 5000 W.H. Reaves 9100 Shields Model Williams Companies (The) 4000 Dain Kalman 2000 Goldman Sachs 13800 Hornblower Weeks 7000 Milwaukee & Co. 4000 Salomon Bros. 11000 Shearson Hayden 2000 Spencer Trask	42600	5000 Legg Mason 5000 Piper Jaffray 2000 Smith Barney Southern Railway Company 1000 Bache Halsey 5000 Colin Hochstin 1100 First Boston 5000 First Manhattan 5000 Goldman Sachs 14500 Salomon Bros. 11000 Wainwright Securities
TRANSPORT Railroads 12000	TATION Burlington Northern Incorpora		2000 Merrill Lynch

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

COMMON STOCK PURCHASES PLACED ON THE BASIS OF LOWEST AVAILABLE PRICE — IN INSTANCES OF OVER-THE-COUNTER SECURITIES, ON THE "THIRD MARKET," OR THROUGH DIRECT DEALINGS WITH OTHER INSTITUTIONS

July 1, 1976 — June 30, 1977

Total Shares	Issue and Vendor	Total Shares	Issue and Vendor
UTILITIES Electric		Consumer-No	ndurables
9000	Commonwealth Edison Company	2000	Avon Products, Inc.
	6000 Jefferies & Co.		2000 Jefferies & Co.
	3000 Weeden & Co.	17500	Colgate-Palmolive Company
14900	Northern States Power Company (Minn.)		2500 Institutional Networks
	1500 Institutional Networks 300 Jefferies & Co.	1700	15000 Jones & Associates Eastman Kodak Company
	13100 Weeden & Co.	1700	1200 Institutional Networks
11000	Public Service Co. of Indiana, Inc.		500 Weeden & Co.
11000	5000 Institutional Networks	2400	Minnesota Mining and Manufacturing (
	6000 Weeden & Co.		1000 Jefferies & Co.
9500	Texas Utilities Company		1400 Weeden & Co.
	3000 Institutional Networks	3000	Revion, Incorporated
	500 Jefferies & Co.		3000 Jefferies & Co.
	6000 Weeden & Co.	C	
		Consumer-Mis	
Natural Gas		5030	Disney (Walt) Productions
15500	Houston Natural Gas Corporation		4030 Institutional Networks
	15000 Jefferies & Co.	11200	1000 Weeden & Co. McDonald's Corporation
	500 Kall & Co.	11200	10200 Institutional Networks
5500	Panhandle Eastern Pipe Line Company 500 American Securities		1000 Weeden & Co.
	500 American Securities 2500 Institutional Networks		1000 Weedell & Co.
	2500 Weeden & Co.	Drugs	
48200	Peoples Gas Company	4500	American Home Products Corporation
	36200 American Securities	4300	1000 Institutional Networks
	6000 Institutional Networks		3500 Jefferies & Co.
	3000 Jefferies & Co.	200	Merck & Co., Inc.
	3000. Weeden & Co.	200	200 Institutional Networks
		2000	Pfizer Incorporated
Communicati			2000 Institutional Networks
24800	American Telephone & Telegraph Co.		
	500 American Securities	Food-Beverag	e_
	12300 Institutional Networks	38000	CPC International, Inc.
	1000 Jefferies & Co. 10000 Jones & Associates		6800 Institutional Networks
	10000 Jones & Associates 1000 Kall & Co.		28200 Jefferies & Co.
1500	General Telephone & Electronics Corp.		3000 Weeden & Co.
1550	500 Institutional Networks	4000	Coca-Cola Company (The)
	1000 Jefferies & Co.		2000 Institutional Networks
		12500	2000 Jefferies & Co. General Mills, Incorporated
FINANCIAL	SERVICES	12300	3500 Institutional Networks
Banks			9000 Jones & Associates
1000	Citicorp	5700	PepsiCo, Inc.
.000	1000 Institutional Networks		4200 Institutional Networks
3000	First Bank System, Incorporated		1500 Weeden & Co.
	500 First Boston	12000	Pillsbury Company (The)
	500 Keefe Bruyette		10000 Jefferies & Co.
	500 Piper Jaffray		2000 Weeden & Co.
	1500 Salomon Bros.		
850	Valley National Bank of Arizona	Retail Sales	
	850 Keefe Bruyette	7000	Dayton Hudson Corporation
1			7000 Jefferies & Co.
Insurance		13700	Federated Department Stores, Inc.
1000	INA Corporation		7600 Institutional Networks 6100 Jefferies & Co.
	1000 Weeden & Co.	1500	6100 Jefferies & Co. K mart Corporation
CONCUME	-ORIENTED	1 300	1000 Institutional Networks
	-URIENTED & Automotive Parts		500 Jefferies & Co.
		100	Penney (J.C.) Company, Incorporated
19700	Genuine Parts Company		100 Jefferies & Co.
	6200 Institutional Networks	96119	Southland Corporation (The)
	10500 Jefferies & Co. 3000 Weeden & Co.		7000 Robert Brandt
	SUUU Weeden & CO.		6000 Institutional Networks
			83119 Jefferies & Co.

7400

Sunbeam Corporation 7400 Jefferies & Co.

			-
Total Shares	Issue and Vendor	Total Shares	Issue and Vendor
TECHNOLOG	Υ	Metals	
Electronics		39518	Pittston Company (The)
3200	Hewlett-Packard Company		6834 Robert Brandt 17892 Jefferies & Co.
	700 Jefferies & Co.		14792 Kall & Co.
	200 Kall & Co.	95000	St. Joe Minerals Corporation
	2300 Weeden & Co.		6000 Robert Brandt
Office Equipm	ent		3000 Institutional Networks 80000 Jefferies & Co.
500	Burroughs Corporation		6000 Jones & Associates
	500 Jefferies & Co.		
1000	Digital Equipment Corporation	Paper	
25.00	1000 Jefferies & Co.	2500	International Paper Company
2500	International Business Machines Corp. 1700 Institutional Networks		1500 Institutional Networks 1000 Kall & Co.
	400 Jefferies & Co.	27500	Union Camp Corporation
	400 Weeden & Co.	27000	1000 Jefferies & Co.
1000	Xerox Corporation		26500 Weeden & Co.
	1000 Institutional Networks	No	
BASIC INDUS	TRY	Miscellaneous	
Aerospace		1500	International Telephone & Telegraph Corp. 1000 Institutional Networks
7700	Boeing Company (The)		1000 Institutional Networks 500 Kall & Co.
	700 Institutional Networks		Num a do.
3700	7000 Kall & Co. United Technologies, Inc.	ENERGY	
3700	3200 Institutional Networks	Oil-Domestic	
	500 Weeden & Co.	2200	Atlantic Richfield Company
	_	1000	2200 Jefferies & Co.
Building & For		1000	Continental Oil Company (Del.) 1000 Institutional Networks
7752	Georgia-Pacific Corporation	3000	Louisiana Land and Exploration Co. (The)
	6222 Institutional Networks 1530 Kall & Co.		2000 Institutional Networks
15000	Masonite Corporation	51400	1000 Weeden & Co.
15555	15000 Robert Brandt	51400	Marathon Oil Company 15000 Robert Brandt
4700	Weyerhaeuser Company		12700 Institutional Networks
	2200 Institutional Networks		7700 Jefferies & Co.
	2000 Jefferies & Co. 500 Weeden & Co.	20000	16000 Weeden & Co.
	Weeden & St.	20000	Phillips Petroleum Company 20000 Robert Brandt
Chemicals			20000 Hobbit Brandt
700	du Pont (E.I.) de Nemours and Company	Oil-Internation	nal
	500 Institutional Networks	4300	Exxon Corporation
6300	200 Weeden & Co.		3100 Institutional Networks
6300	Hercules Incorporated 6300 Jefferies & Co.		1000 Jefferies & Co. 200 Weeden & Co.
5900	Monsanto Company	2500	Mobil Oil Corporation
	1000 Institutional Networks		500 Institutional Networks
	3400 Jefferies & Co.		2000 Weeden & Co.
9000	1500 Weeden & Co. Union Carbide Corporation	12000	Standard Oil Company of California 10000 Institutional Networks
0000	3000 Jefferies & Co.		1000 Jefferies & Co.
	6000 Weeden & Co.		1000 Kall & Co.
Etassiasi Fau	·		
Electrical Equ		Energy-Related	-
15000	Emerson Electric Co. 10000 Kall & Co.	2000	Dresser Industries, Inc.
	5000 Weeden & Co.	5400	2000 Jefferies & Co. Halliburton Company
1500	General Electric Company	3400	1900 Institutional Networks
	1000 Institutional Networks 500 Weeden & Co.		1500 Jefferies & Co.
	500 Weeden & Co.		2000 Kall & Co.
Machinery		4200	Williams Companies (The) 4200 Jefferies & Co.
2000	Caterpillar Tractor Co.		7200 JETIETIES Q UU,
	2000 Institutional Networks	TRANSPORT	ATION
14300	Clark Equipment Company	Railroads	
	1300 Jefferies & Co.	29300	Southern Railway Company
7500	13000 Weeden & Co. Trans Union Corporation		2200 Institutional Networks 11000 Jefferies & Co.
. 300	7500 Jefferies & Co.		16100 Jefferies & Co. 16100 Weeden & Co.

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

COMMON STOCK SALES July 1, 1976 — June 30, 1977

Total Shares	Issue and Vendor	T otal Shares	Issue and Vendor
15100	Aluminum Company of America	52600	Continental Illinois Corporation
	15100 Oppenheimer & Co.		200 E.F. Hutton
25000	American Greetings Corporation		26000 Institutional Networks
	17500 Drexel Burnham		14600 Kidder Peabody
	7500 Jefferies & Co.		11800 Morgan Stanley
16200	Bank America Corporation	62500	Dresser Industries, Inc.
	8000 Drexel Burnham		5000 First Boston
	1000 Insittutional Networks		2000 Institutional Networks
	6000 L.F. Rothschild		2000 Jefferies & Co.
	1200 Smith Barney		3000 Merrill Lynch
17000	CPC International, Inc.		28000 Oppenheimer & Co.
	8000 Robert Brandt		10000 Paine Webber
	4000 Salomon Bros.		12500 Shields Model
	5000 Dean Witter	10200	Federated Department Stores, Inc.
10000	Clorox Company (The)		10200 Smith Barney
10000	3000 E.F. Hutton	16000	General Foods Corporation
	7000 Jefferies & Co.		2000 E.F. Hutton
5000	Connecticut General Insurance Corp.		5000 Jefferies & Co.
3000	5000 Goldman Sachs		2000 Kidder Peabody

Total Shares	Issue and Vendor	Total Shares	Issue and Vendor
	5000 Merrill Lynch	11400	Owens-Corning Fiberglas Corporation
	2000 Paine Webber		4000 Jefferies & Co.
200	Hewlett-Packard Company		7400 Merrill Lynch
	200 Jefferies & Co.	8000	Penney (J.C.) Company, Incorporated
42000	Hoerner Waldorf Corporation		8000 Merrill Lynch
	16000 Merrill Lynch	12000	Phillips Petroleum Company
	2000 Roulston & Co.		12000 Dain Kalman
	16000 Salomon Bros.	45814	Pittston Company (The)
	8000 White Weld		7920 Jefferies & Co.
3800	Holiday Inns, Incorporated		30094 Merrill Lynch
	3800 White Weld		7800 Paine Webber
31000	Kraft, Inc.	13000	The St. Paul Companies, Inc.
	8000 Institutional Networks		13000 Smith Barney
	10000 Kall & Co.	8700	Southern California Edison Company
	13000 Smith Barney		8700 American Securities
53000	Louisville Gas and Electric Company	32000	Tonka Corporation
	43000 Goldman Sachs		32000 Dain Kalman
	10000 Weeden & Co.	24000	United Technologies Corporation
52300	MGIC Investment Corporation		4000 Jefferies & Co.
	15000 Shields Model		10000 Milwaukee & Co.
	14700 Dean Witter		6000 Morgan Olmstead
	22600 White Weld		4000 Oppenheimer & Co.
20000	Middle South Utilities, Incorporated	36500	Standard Oil Company (The) (Ohio)
	20000 Smith Barney		4000 Institutional Networks
27000	Northwest Airlines, Incorporated		3500 Merrill Lynch
	2800 Institutional Networks		12500 Morgan Olmstead
	12200 Jefferies & Co.		10000 Shearson Hayden
	10000 Jesup & Lamont		6500 Wertheim & Co.
	2000 Smith Barney	8000	Xerox Corporation
			4000 Milwaukee & Co.
			4000 Shearson Hayden