STATE OF MINNESOTA

1971

REPORT

of

THE EXECUTIVE SECRETARY



Office of the Executive Secretary State Board of Investment Room 105, MEA Building 55 Sherburne Avenue Saint Paul, Minnesota 55155

December 17, 1971

MEMBERS OF THE

STATE BOARD OF INVESTMENT

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INVESTMENT DEPARTMENT PERSONNEL

Robert E. Blixt, B.A., M.S., J.D., C.F.A. Executive Secretary

> Constance Hove Administrative Assistant

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Grant A. Feldman, Jr., B.S. Portfolio Manager - Short-term Investments C. Robert Parsons, B.S. Portfolio Manager - Debt Securities

Lyle T. Ibeling, B.A. Assistant Portfolio Manager and Trader

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ROBERT E. BLIXT Executive Secretary

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Room 105, MEA Building 55 Sherburne Avenue Saint Paul 55103

December 17, 1971

Members of the Legislature of the State of Minnesota

Gentlemen:

This report reviews the policies and activities of the staff of the State Board of Investment in managing the various state portfolios during the 1970 calendar and fiscal year. As a result of the many new funds and the changes being made in the methods of accounting, some of the statements are dated December 31, 1970. These securities listings are already somewhat obsolete, but may be of use since they indicate the policies of the department. Several of the statistical tables show the results of fiscal year-end, June 30, 1971. The major common stock holdings in an individual fund -- that portion of the Minnesota Adjustable Fixed Benefit Fund invested in equities -- is compiled as of October 29, 1971. The equity portion of the Minnesota Variable Annuity Fund is also listed as of that date. Although the varying dates of the listings may be somewhat confusing to those reviewing this material, an attempt has been made to provide information as recent as possible so as to aid those firms servicing our account.

The 1971 Legislature passed a significant number of bills which apply directly to the investment department's operations. The Minnesota Adjustable Fixed Benefit Fund was revised so as to include a system of reserves which will minimize declines in pensions and provide more gradual increases in benefits once an increase has been declared. It appears likely, therefore, that the beneficiaries of the several state retirement systems will receive steady though gradual increases in retirement benefits beginning at the age of 65. It is hoped that these increases will offset the rising costs of living.

This report is being written at the time when the final calculations are being made regarding the operation of the Minnesota Adjustable Fixed Benefit Fund for the fiscal year ended June 30, 1970. It seems certain that increased retirement benefits ranging from 2% to 4% will be paid to the pension beneficiaries of the various funds beginning early in 1972. The investment results, in themselves, would apparently justify pension increases of 2-1/2% or above in all instances. The use of obsolete mortality tables by certain retirement associations, however, resulted in an inadequate transfer of assets by them into the Minnesota Adjustable Fixed Benefit Fund and a subsequent detrimental effect on pension benefits.

The Legislative Retirement Study Commission has continued to be most helpful. This group of Senators and Representatives meets regularly to discuss and review retirement and investment policies; they have contributed much to the work of the State Board of Investment. Although the personnel on the Investment Board changed significantly as a result of the 1971 election, there has been a definite continuity of purpose and a concerted effort to gain the best possible overall investment returns for the participants and beneficiaries of the various state funds.

It is practically impossible to value the fixed-income portion of the retirement funds because of the numerous issues of low-coupon municipal bonds which constitute a portion of these portfolios. Estimated valuations indicate a very favorable market performance for the state retirement accounts during the past three years. A major reason is that the uncertain economic outlook and extreme stock market fluctuations have caused investors to rely more heavily upon well-known quality stocks. This comparatively good stock performance combined with slightly lower interest rates, after a period of heavy bond purchases by the state during 1970 and early 1971, have aided the overall market valuations. The department is now reviewing its operations in hopes that an adequate record will be obtainable in periods of steady economic growth, when secondary quality stocks show better market performance. It is apparent, however, that the state cannot take the risks necessary in using large quantities of lower quality securities. These accounts will be managed as trust accounts; it is not intended that any attempt be made to out-perform the short-term market favorites.

The department very much appreciates the support it has received from various organizations which have introduced new types of securities. We have continued to use the mortgagebacked securities offered by various mortgage bankers, sponsored by the Government National Mortgage Association and fully guaranteed by the U. S. government. Several issues have been purchased for the Permanent School Fund; we are now able to buy the short-term notes in the highway funds and other current accounts.

The State Board of Investment, established by the Constitution, is responsible for investing all of the state's funds. The Board consists of the Governor, State Auditor, State Treasurer, Secretary of State, and Attorney General. The Executive Secretary advises the Board, recommends policies and handles the securities transactions. The Legislature has authorized a staff of 12 members to aid the Executive Secretary in securities and portfolio analysis, accounting and clerical tasks.

The Advisory Committee on Common Stocks, appointed by the Board in May 1961, has now been functioning for over ten years. Each of the original appointees is still a member of the Committee and has contributed greatly to the success of the state's investment program. The group meets for half a day every two months, reviews the stock portfolios in detail, and makes general recommendations regarding portfolio policies and procedures. The proposals are then submitted to the State Board of Investment.

The members of the Advisory Committee on Common Stocks include:

Hermon J. Arnott, Chairman of the Board, Farmers & Mechanics Savings Bank of Minneapolis Franklin Briese, Chairman of the Board, Minnesota Mutual Life Insurance Co., St. Paul Robert S. Davis, C.F.A., Financial Vice President, The St. Paul Companies, Inc. Gaylord W. Glarner, Senior Vice President, First Trust Company, St. Paul James C. Harris, Executive Vice President, Northwestern National Bank of Minneapolis John M. Harris, Vice President & Trust Investment Officer, Northern City National Bank, Duluth

Francis Hassing, Investment Counsel, University of Minnesota, Minneapolis Maxwell B. Hight, Section of Administration, Mayo Foundation, Rochester Donald E. Jondahl, Senior Vice President, Finance, Northwestern National Life Insurance

Company, Minneapolis

Norman Terwilliger, Investment Counsel to Minneapolis Teachers Retirement Association

The contribution of these financial experts to the state's investment program is very much appreciated by the Investment Board and the staff of the Department. Although these men are not compensated for their service, they have shown particular concern for the state's investment problems.

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 book value as of November 30, 1971, are as follows:

Trust funds, \$252 million. The Permanent School Fund, invested for the benefit of the school children of Minnesota, includes U. S. Treasury securities, corporate bonds of long and short maturity, and common stocks. The Internal Improvement Land Fund includes only U. S. Treasury obligations.

Basic retirement funds, \$564 million. Five 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.

<u>Minnesota Adjustable Fixed Benefit Fund, \$284 million.</u> This account, administered by the State Board of Investment, is comprised of up to 50% in equities with the remainder in debt securities. Retirement benefits will be paid to all former employees from the earnings of this fund. Earnings in excess of the 3-1/2% actuarial assumption or average stock market gains computed over a period of several dates will also augment pension benefits. This fund was accumulated during the 1969-70 fiscal year. The first increase in pensions resulting from its operation will be paid early in 1972, and will range from 2% to 4%, depending upon the mortality experience of the individual fund.

<u>Supplemental Retirement Fund, \$11 million.</u> This fund, established in 1967 for employees of the State College Board and State Junior College Board, is administered by the State Board of Investment and invested according to the preferences of the individual members. The fund consists of two accounts, one of which may be invested up to 100% in equities; the other includes long-term bonds and stocks which tend to emphasize current income. The 1969 and 1971 Legislatures made this fund available for use by police and firemen's 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 for state employees who wish to participate in a deferred income plan through which a portion of their salary will be taxed at the rates in effect at the time of their retirement.

Minnesota Variable Annuity Fund, §2.6 million. This fund was established by the 1969 Legislature and was made effective in early summer 1970. The account, administered by the State Board of Investment, now includes a diversified list of common stocks, a portion of long-term debt instruments, and reserves in the form of short-term fixed income securities. The participants are teachers who choose this type of program, which provides retirement benefits based on investment performance.

<u>Highway funds, \$151 million.</u> These accounts include U. S. Treasury obligations maturing within the next ten years, debt instruments issued by U. S. government agencies and short-term corporate notes due within 270 days of the time of purchase. The moneys are used for the building and maintenance of highways, roads and streets throughout the state.

Invested Treasurer's Cash Fund, \$99 million. This fund includes incoming 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.

<u>Miscellaneous welfare, departmental and temporary funds, \$77 million.</u> These funds are invested according to the terms of particular statutes or applicable policies, primarily in U. S. Treasury securities. Included in these accounts are proceeds from bond sales and endowment funds held for various institutions.

The office of the Executive Secretary was established under the terms of a 1959 statute. In 1961, the Legislature passed basic investment laws applicable to the retirement funds; these were reviewed and amended during each session through 1971. A constitutional amendment pertaining to the Permanent School Fund was initiated by the 1961 Legislature. The provisions of these statutes as they pertain to the specific funds will be reviewed later in this report. Previous reports for the years 1960 through 1970 provided resumes of the transactions and policies during those periods. This 1971 report includes the securities and statistical information for year-end 1970 and selected later dates.

The schedule on the following page reviews the composition of the trust funds and the retirement funds managed by the State Board of Investment.

COMPOSITION OF TRUST FUNDS AND RETIREMENT FUNDS December 31, 1970 (000)

			Inte	rnal		
	Perma	inent	Impro	vement	Combi	ned
	School	Fund	Land	Fund	Retiremen	t Funds
	Book		Book		Book	
Type of Security	Value	%	Value	%	Value	%
U. S. Treasury and						
guaranteed obligations	\$ 92,921	37.5%	\$ 439	98.9%	\$ 31,967	4.2%
State and municipal						
obligations	2,272	0.9	-	-	50,272	6.6
Short-term corporate						
obligations	-		-	-	16,907	2.2
Canadian Provincial					-	
obligations	-	-	-	-	21,122	2.8
Convertible obligations	-	-	·	-	6,919	0.9
Corporate debt obligations	103,696	41.9		-	329,003	43.3
Common stocks	48,684	19.7	-		304,166	40.0
Cash	4		5	1.1	*	
TOTAL	\$247,577	100.0%	\$ 444	100.0%	\$760,356	100.0%

* Percentages regarding retirement funds refer only to investments; cash balances and contributions in collection process are not included.

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.

Under the terms of a 1962 constitutional amendment, the State Board of Investment was given wider latitude as to the media to be used in managing assets in the Permanent School Fund. The Internal Improvement Land Fund, which is still restricted to the use of government obligations, also remains under the jurisdiction of the Board.

During the years immediately following the adoption of the constitutional amendment, longterm 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 have been maintained at the 40% level during the past five years. Common stocks, as of December 1971, approximated 19% of the book value of the fund, very near to the 20% constitutional limit. During the past two years, the portfolios of U. S. Treasury and government guaranteed obligations, approximating 40% of the book value of the fund, have been broadened to include mortgage-backed certificates guaranteed by the U. S. government and issued through organizations in cooperation with the Government National Mortgage Association. It is estimated that the net return to the Permanent School Fund because of these transactions will be sizeable. The spread between the securities sold and purchased has been from 1% to 2% in each instance.

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THE HIGHWAY FUNDS

The funds held for street, road and highway construction 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 contracts backed by U. S. Treasury obligations, and short-term corporate notes. The Commissioner of Highways certifies the amounts not needed in the immediate future, and these sums are invested in maturities approximating the expected disbursement schedule of the highway department. This may extend over a considerable period because of the time necessary for planning, purchase of right-of-way, and construction of highways. The amount of highway funds investments fluctuates throughout the year; they totaled \$167 million in face value on December 31, 1970 and \$199 million on June 30, 1971. These accounts have increased in size recently because of the sale of state highway bonds. Until these funds are needed to pay highway construction costs, the bond proceeds are invested so as to provide additional income for the state's highway needs. It appears that this fund will increase in size as the highway program expands its scope.

The earnings from these accounts increased from \$1.7 million in fiscal year 1958 to \$5.5 million in fiscal 1968, \$6.6 million in fiscal 1969, \$7.7 million in fiscal 1970 and \$9.5 million in fiscal 1971. This income 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.

INVESTED TREASURER'S CASH FUND

The interest earned in the Treasurer's cash account showed marked increases during the early 1960's due to a surplus in the General Fund and the Income Tax School Fund and because of the increasing interest rates in effect. The income from this fund reached a high in fiscal 1969 of \$14.8 million -- a sizable increase above the \$11.8 million in 1968, \$9.6 million in 1967, \$6.0 million in 1966, and lesser amounts in previous years. A smaller amount of current investments, due to an increase in expenditures for school aids and other state needs, caused a reduction in income to \$10.3 million in fiscal 1970, despite the very high short-term interest rates in effect during that fiscal year.

Total investments held in the Invested Treasurer's Cash Fund showed an increase at the end of each calendar year from \$51.6 million in 1964 to \$203.5 million in 1967. These investments declined to a total of \$157.7 million on December 31, 1968, \$81.1 million in 1969, and \$37 million in 1970. This calendar year-end 1970 figure would have been even less except for the postponement of school aids late in the year.

The June 30 fiscal year-end figures evidence the approximate high point in Treasurer's cash investments, in that the Spring tax receipts are included and the annual school aids have not yet been paid. These total investments showed a comparable increase from \$132.7 million on June 30, 1965 to \$321.0 million at fiscal year-end 1969. The 1969 figures, however, were somewhat distorted because of a shift in payments to state subdivisions from late June to July 1969. Since that time, there has been a steady decline in the totals in the Invested Treasurer's Cash Fund. The invested total amounted to \$159.6 million on June 30, 1971. In mid-December 1971, the investments totaled \$74 million, despite the fact that only approximately 9% of the foundation school aids had been paid by this date, as compared with 85% as recently as 1969.

During recent months, the state treasury has operated on a current basis with receipts needed immediately for school aids and other payments. Although lower interest rates have had an effect on the decline in the income from this fund in recent months, the reduced earnings are due primarily to the small amount invested; the previous "surplus" in the Invested Treasurer's Cash Fund has been used. The 1971 Legislature took these financial facts into consideration in arranging school aid payments for the next biennium. Approximately 13% of annual school aids will be paid each month during the remainder of the 1971-72 school year, with 10% of the school aids paid each school month during fiscal 1972-73. The investment department buys and sells according to oral certifications of cash available by the staff of the Treasurer. In recent years, there has been an increase in the use of repurchase agreements and of short-term bills so that funds may earn money over the shortest of periods -- sometimes one day or over a week-end. Statutes require that securities in the Invested Treasurer's Cash account extend no longer than three years.

STATE COLLEGES, WELFARE, AND DEPARTMENT OF CORRECTIONS

The State Board of Investment is responsible for the investment of individual 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. A pooled fund, established for various welfare needs, has made possible an increase in the percentage of these funds which may be invested. Purchases are limited to U. S. Treasury obligations.

THE RETIREMENT FUNDS

The newly formed Minnesota Adjustable Fixed Benefit Fund includes assets representing the reserves of all retired individuals who are members of various Minnesota retirement systems. On November 30, 1971, this investment portfolio had a value of \$284 million; it is now the fund from which all pensions are paid. Common stocks comprise over 46% of the portfolio, with the remainder in various types of debt securities. This fund may be invested up to 50% in equities; the basic retirement funds are limited to a 45% stock position.

As of November 30, 1971, Minnesota's basic retirement funds totaled \$578 million, of which 40% was invested in equities and 42% in corporate bonds. The remaining investments consisted of Canadian government obligations, municipals, securities guaranteed by the U. S. government and short-term corporate notes.

State, municipal and school district bonds comprised over 71% of total investments in these retirement funds as recently as the late 1950's; such holdings declined to 8% by November 30, 1971. This decline was due both to the sale of bonds and 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. In recent years, the municipal bond dealers and fiscal agents of the upper Midwest area have been most helpful in completing sales of a portion of these securities.

Legislatures, during recent sessions, have provided a wide range of retirement accounts so as to meet the needs of various employee groups and individuals. This report has already reviewed the Supplemental Retirement Fund and the Variable Annuity Fund. Apparently, the Legislature will make these funds available to other employee groups during coming sessions.

A review of the statutory provisions and investment policies applicable to the Minnesota Supplemental Retirement Fund is found in a separate prospectus available from the investment department.

REVIEW OF ACCOMPANYING SCHEDULES

Schedule I summarizes the composition of the Permanent School Fund and the basic retirement funds as of December 31, 1970. Because the Permanent School Fund has nearly reached its maximum authorized commitments in corporate bonds and common stocks, there was little change in overall portfolio make-up through year-end 1969. During 1970 and 1971, substantial investments have been completed in securities guaranteed by the U. S. government and particularly those issued with the cooperation of the Government National Mortgage Association. The basic retirement funds now consist primarily of corporate bonds and stocks. Insofar as the flow of incoming cash permits, an attempt is made to maintain an equal diversification among the five retirement funds. There is a difference in the rate of cash flow, however, and the transfers to the principal of the Minnesota Adjustable Fixed Benefit Fund during the 1969-70 fiscal year caused further variances in portfolio composition. During 1971, an attempt has been made to balance certain equity holdings which were distorted due to cash and stock transfers.

Schedule II shows the yield received on the three largest retirement funds during the past decade; it emphasizes the increased income earned because of higher interest rates and the use of corporate securities. Since 1958, retirement fund yields have increased from approximately 2.9% to over 4.6%. Due to the marked increase in interest rates during the 1966-71 period, the newer fixed income securities provide a yield far above this average return. Common stock commitments have tended to offset this high yield, however, in that we have considered long-term growth potential to a great degree in making equity purchases. It is expected that the use of stocks offering a low current income will continue, in the belief that the funds will achieve a higher overall return potential over a period of years due to such investments. Dividend increases from these stocks have already indicated their future value to the retirement funds and a favorable impact on yield figures. There may be a temporary decline in dividend increases due to the restrictions placed upon dividend payments by the federal government in mid-1971 in order to minimize inflationary pressures.

Schedule III reviews the Permanent School Fund for the period from June 30, 1957 through June 30, 1971. The schedule indicates that, due to a prevalence of low-coupon U. S. Treasury securities in the portfolio during the 1950's, the yield was only 2.68%. A portion of the income accruing to this fund since the 1965 fiscal year has been used to reimburse the principal of the account for losses taken through the sale of long-term U. S. Treasury obligations. Despite these sizable accounting entries, the net yield has shown a marked improvement since the securities rearrangements began in 1963.

Schedule IV summarizes the short-term corporate notes owned in the various state funds and lists U. S. Treasury obligations held in all accounts on December 31, 1970. Of the portfolios indicated, the Invested Treasurer's Cash Fund is the most liquid; the securities in it must be available for conversion into cash at any time so as to meet state needs. A portion of the highway accounts must be comparatively liquid; the remainder is held for construction projects in progress, but which may take a period of years for completion. Most of the U. S. Treasury obligations in the Permanent School Fund have been sold during 1970 and 1971.

Schedule V lists the bond holdings in the Minnesota Adjustable Fixed Benefit Fund at the end of its second fiscal year of operation, on June 30, 1971. The lengthy list and overdiversification of names was caused by the transfer procedure under which the bond portfolio was established. Because a large portion of all the bond holdings of the Municipal Employees Retirement Board (Minneapolis) was transferred into this account, many issues now being held by the investment board were not included in the previously managed accounts. During 1970, we instituted a program of consolidation of these bond names; during the past year there has been a substantial reduction of issues. We expect comparable rearrangements to be made during the next few years.

Schedule VI lists the convertible bond holdings in the Minnesota Adjustable Fixed Benefit Fund. Legislation passed in 1969 makes possible the use of this type of security to the extent of 10% of the book value of this account. The market value of these bonds is included in making the computations regarding appreciation and admitted value in the Minnesota Adjustable Fixed Benefit Fund.

Schedule VII lists the holdings of U. S. government guaranteed and corporate bonds in the Permanent School Fund on December 31, 1970. Corporate bond investments have now reached the approximate maximum authorized by the Minnesota Constitution.

Schedule VIII lists the corporate bond holdings of the basic retirement funds on December 31, 1970. Except for a nominal amount of railroad bonds previously owned, these securities were purchased since March 1960. A substantial number of debt issues purchased in recent years have been in the form of private placement, which are debt securities bought directly from the borrowing corporations by a group of institutional buyers, including insurance companies, public pension funds and bank trust departments. The Board uses only those private placements of sufficient size to be used by several buyers, so that the investment department is not in the position of setting the interest rate on any individual issue.

Schedule IX details the types of corporate debt obligations owned by the Permanent School Fund and the basic retirement funds on December 31, 1970, as well as the redemption features of the securities acquired during that year. Since the inception of our corporate investment program, we have stressed call protection and the use of securities offering at least a fiveyear non-refundable feature. During 1966 through 1971, when interest rates were considerably higher than prevalent early in the 1960's, purchases were concentrated in those fixed-income issues offering call or refunding protection of ten or more years. Because of these features, the present yield appears to be adequately protected against anticipated fluctuations in interest rates.

Schedule X lists the common stock holdings in the Permanent School Fund and in the basic retirement funds on December 31, 1970. Although the state's stock purchase program continues to be based on anticipated long-term performance, it is recognized that the stock portfolio would better serve the beneficiaries of the funds if the investments were concentrated into fewer names and if there were somewhat more frequent sales so as to emphasize the more desirable issues. During 1970 and 1971, we have initiated a program of consolidation which, over a period of time, should eliminate a substantial number of individual stock holdings.

Schedule XI lists the common stock holdings in the Minnesota Adjustable Fixed Benefit Fund as of October 29, 1971. These stocks were accumulated through transfer from other retirement accounts during the 1969-70 fiscal year, and through purchases during the past two fiscal years. Because this account is comparatively new, it evidences the department's present investment philosophy of using fewer stock names.

Schedule XII lists the common stock holdings in the Minnesota Variable Annuity Fund as of November 30, 1971. This account was established early in 1970 and offers an equity-based investment program to those teachers who choose the variable annuity concept. Because of the high yields available during the past year, some fixed-income securities are also held in this account. It is anticipated that future legislatures will authorize other public employees to participate in this fund.

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A review of policies concerning the placement of business, together with a summary of transactions completed during 1970, follows the schedules described above.

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During each of the legislative sessions during the past decade, laws were passed which resulted in more realistic investment management, yet assured the necessary restrictions as to investment media. The 1969 and 1971 legislatures, in particular, were very responsive to the need for revised investment statutes and new opportunities for the retirement fund beneficiaries. The fund members may now own, through various accounts, those securities and investment portfolios best suited to their needs. The Legislative Retirement Study Commission has been most cooperative in reviewing new concepts and ideas and in implementing them in the form of legislation. During 1971, changes were made in the structure of the Minnesota Adjustable Fixed Benefit Fund so as to minimize the pension fluctuations otherwise inherent in any program based on investment performance. The State Board of Investment and the staff of the investment department appreciate the cooperation that has been received from members of the Legislature and the retirement fund administrations as well as from investment dealers and brokers throughout the nation. The Advisory Committee on Common Stocks has been particularly helpful in implementing the many changes authorized in recent years. The higher current yield, the better portfolio balance, and the lesser dependence on fixed dollar investments will be of long-term benefit to the retirement fund members, our educational institutions, and the taxpayers of the state.

Respectfully submitted,

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

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STATE OF MINNESOTA STATE BOARD OF INVESTMENT COMPOSITION OF THE PERMANENT SCHOOL FUND AND RETIREMENT FUNDS* December 31, 1970

PERMANENT SCHOOL FU	ND		·····		Decembe	r 31, 1970)	RETI	REMENT FUNDS					
Book Value	7	Type of Security FIXED-INCOME OBLIGATIONS	Total Retirement Funds Book Value		Public Employees Retirement Fund Book Value	7	State Employees Retirement Fund Book Value	_7	Distribution Within V Teachers' Retirement Fund Book Value	<u></u>	Public Employees Police & Fire Fund Book Value	<u> </u>	Highway Patrolmen's Retirement Fund Book Value	<u></u>
75,303,705.20 3	7.1% 0.4 37.5%	U.S. Treasury U.S. Guaranteed Bonds Total Federal Obligations	\$ 18,860,000.00 6,677,000.00 \$ 25,537,000.00	3.7% <u>1.3</u> 5.0%	\$ 5,790,000.00 <u>4,523,000.00</u> \$ 10,313,000.00	3.6% 2.8 6.4%	\$ 1,145,000.00 555,000.00 \$ 1,700,000.00	1.1% 0.5 1.6%	\$ 10,015,000.00 693,000.00 \$ 10,708,000.00	4.7% 0.3 5.0%	\$ 1,475,000.00 768,000.00 \$ 2,243,000.00	7.4% <u>3.9</u> 11.3%	\$ 435,000.00 138,000.00 \$ \$73,000.00	6.8% 2.2 9.0%
_	0.9%	Minnesota State Minnesota Subdivisions Other States & Subdivisions Total State & Municipal Obligations	\$ 8,570,000.00** 40,869,500.00 832,000.00 \$ 50,271,500.00	1.7% 8.1 <u>0.2</u> 10.0%	\$ 2,725,000.00 11,288,000.00 <u>326,000.00</u> \$ 14,339,000.00	1.7% 7.0 0.2 8.9%	\$ 2,220,000.00 13,318,000.00 409,000.00 \$ 15,947,000.00	2.2% 13.0 <u>0.4</u> 75.6%	\$ 3,625,000.00 15,506,500.00 97,000.00 \$ 19,228,500.00	1.7% 7.2 			\$ 757,000.00 \$ 757,000.00	11.92
-	-	Short-term Corporate Obligations	\$ 15,682,000.00	3.17	\$ 8,450,000.00	5.3%	\$ 2,857,000.00	2.8%	\$ 3,000,000.00	1.4%	\$ 1,225,000.00	6.2%	\$ 150,000.00	2.4%
-	-	Canadian Provincial Obligations	\$ 9,700,000.00	1.9%	\$ 2,800,000.00	1.7%	\$ 2,000,000.00	1.9%	\$ 4,200,000.00	2.0%	\$ 550,000.00	2.8%	\$ 150,000.00	2.4%
8,648,000.00 10,400,000.00	8.3 % 3.5 4.2 	Long-term Corporate Obligations: Public Utility Electric Gas Telephone Water Total Public Utility	\$ 33,407,000.00 23,097,000.00 16,025,000.00 <u>1,600,000.00</u> \$ 74,129,000.00	6.6% 4.6 3.2 0.3 14.7%	7,558,000.00 4,334,000.00 400,000.00	6.1 % 4.7 2.7 <u>0.2</u> 13.7 %	\$ 6,574,000.00 6,555,000.00 3,786,000.00 <u>300,000.00</u> \$ 17,215,000.00	6.42 6.4 3.7 <u>0.3</u> 16.8%	\$ 15,677,000.00 8,183,000.00 7,505,000.00 900,000.00 \$ 32,265,000.00	7.3% 3.8 3.5 0.4 15.0%	\$ 1,133,000.00 484,000.00 300,000.00 \$ 1,917,000.00	5.7% 2.5 1.5 	\$ 269,000.00 317,000.00 100,000.00 \$ 686,000.00	4.27 5.0 1.6 10.87
$\begin{array}{r} 39,553,469.12 \\ 4,606,000.00 \\ \underline{16,186,084.05} \\ \$103,895,553.17 \\ - \end{array}$	1.5% 16.0 1.9 6.5 41.9%	Finance Industrial Transportation (excluding equipment) Railroad Equipment Total Long-term Corporate Obligations Preferred Stock (gift) <u>TOTAL FIXED-INCOME OBLIGATIONS</u>	\$ 9,700,000.00 85,966,186.64 6,529,000.00 <u>40,632,116.82</u> \$216,956,303.46 <u>700.00</u> \$318,147,503.46	$ \begin{array}{r} 1.92 \\ 17.0 \\ 1.3 \\ 8.1 \\ 43.03 \\ \hline 63.03 \end{array} $		$ \begin{array}{r} 1.27 \\ 15.6 \\ 1.3 \\ \underline{8.5} \\ 40.37 \\ \hline \overline{62.67} \end{array} $	\$ 3,005,000.00 16,935,008.93 1,606,000.00 <u>8,788,847.98</u> \$ 47,549,856.91 \$ 70,053,856.91	2.9% 16.5 1.6 <u>8.6</u> 46.4% - -	\$ 4,200,000.00 39,153,392.35 2,483,000.00 <u>16,117,709.64</u> \$ 94,219,101.99 <u>700.00</u> \$131,356,301.99	2.0% 18.1 1.1 7.5 43.7% - 61.0%	\$ 445,000.00 3,539,612.20 171,000.00 <u>1,797,617.27</u> \$ 7,870,229.47 \$ 11,888,229.47	2.2% 17.9 0.8 9.1 $39.7%$ $ 60.0%$	$\begin{array}{c} \$ & 150,000.00 \\ 1,176,741.46 \\ 221,000.00 \\ \hline 330,318.09 \\ \hline \$ & 2,564,059.55 \\ \hline \hline \$ & 4,194,059.55 \\ \hline \end{array}$	2.4% 18.5 3.5 5.2 40.4%
1,034,453.20 1,502,891.08	4.2 % 0.4 0.6 5.2 %	COMMON STOCKS CONSUMER-ORIENTED STOCKS: Utilities Electric Gas Telephone Total Utilities	\$ 31,613,578.43 4,856,054.00 5,425,185.31 \$ 41,894,817.74	6.37 0.9 <u>1.1</u> 8.32	\$ 10,393,289.90 1,579,095.99 <u>1,825,033.90</u> \$ 13,797,419.79	6.5% 1.0 <u>1.1</u> 8.6%	\$ 5,204,320.70 983,590.82 <u>468,401.16</u> \$ 6,656,312.68	5.02 1.0 0.5 6.5%	\$ 14,814,218.90 2,157,097.11 2,787,349.67 \$ 19,758,665.68	6.9% 1.0 <u>1.3</u> 9.2%	\$ 960,580.15 89,270.08 <u>301,843.26</u> \$ 1,351,693.49	4.8% 0.5 <u>1.5</u> 6.8%	\$ 241,168.78 47,000.00 <u>42,557.32</u> \$ 330,726.10	3.8 % 0.7 <u>0.7</u> 5.2%
1,033,039.29 2,439,810.56	2.0% 0.4 1.0 3.4%	Financial Services Banks Finance Insurance Total Financial Services	\$ 12,605,175.21 4,836,704.78 7,501,942.71 \$ 24,943,822.70	2.5% 0.9 <u>1.5</u> 4.9%	\$ 3,945,539.14 1,605,739.92 2,415,769.11 \$ 7,967,048.17	2.4% 1.0 <u>1.5</u> 4.9%	\$ 2,408,545.14 899,034.58 <u>1,118,449.89</u> \$ 4,426,029.61	2.3% 0.9 <u>1.1</u> 4.3%	\$ 5,523,589.66 2,122,718.97 <u>3,656,972.67</u> \$ 11,303,281.30	2.6% 1.0 <u>1.7</u> 5.3%	\$ 621,562.55 160,218.57 211,376.04 \$ 993,157.16	3.12 0.8 1.1 5.02	\$ 105,938.72 48,992.74 <u>99,375.00</u> \$ 254,306.46	1.7% 0.7 <u>1.6</u> 4.0%
527,331.09 1,109,441.27 510,340.47 991,839.46	0.6% 0.2 0.5 0.2 0.4 1.9%	Consumers Goods Food-Beverage Printing & Publishing Retail Trade Textiles Miscellaneous Total Consumers Goods	\$ 6,787,223.60 3,338,934.81 7,046,488.53 2,247,171.18 7,996,278.64 \$ 27,416,096.76	1.3% 0.7 1.4 0.4 <u>1.6</u> 5.4%	968,028.24 2,095,659.78 795,623.71 3,567,913.13	1.3% 0.6 1.3 0.5 2.2 5.9%	\$ 1,029,778.09 705,038.54 1,052,581.85 512,053.49 949,559.27 \$ 4,249,011.24	$ \begin{array}{r} 1.02 \\ 0.7 \\ 1.0 \\ 0.5 \\ 0.9 \\ \overline{4.12} \end{array} $	\$ 3,367,300.69 1,586,886.11 3,591,666.84 872,900.63 <u>2,930,214.06</u> \$ 12,348,968.33	1.5% 0.7 1.7 0.4 <u>1.4</u> 5.7%	\$ 219,996.48 78,981.92 250,466.22 66,593.35 <u>390,202.18</u> \$ 1,006,240.15	1.1% 0.4 1.3 0.3 2.0 5.1%	\$ 107,650.92 56,113.84 <u>158,390.00</u> \$ 322,154.76	1.7% 0.9 <u>2.5</u> 5.1%
\$ 26,056,370.12 1	10.5%	Total Consumer-Oriented Stocks	\$ 94,254,737.20	18.6%	\$ 31,254,190.24	19.4%	\$ 15,331,353.53	14.9%	\$ 43,410,915.31	20.2%	\$ 3,351,090.80	16.9%	\$ 907,187.32	14.3%
1,121,115.19 2,248,038.33 477,098.60 1,086,748.50	1.0% 0.5 0.9 0.2 0.4 3.0%	RESEARCH STOCKS: Chemical Drug Office Equipment Photography Miscellaneous Total Research Stocks	\$ 7,778,463.11 6,165,342.34 10,509,675.82 3,496,065.92 4,245,850.24 \$ 32,195,397.43	1.2 2.1 0.7 0.8	\$ 2,819,963.77 1,727,761.18 3,255,561.81 930,331.89 <u>1,562,492.16</u> \$ 10,296,110.81	1.77 1.1 2.0 0.6 1.0 6.47	\$ 1,523,348.61 864,376.94 1,992,356.77 635,575.75 797,743.66 \$ 5,813,401.73	1.5% 0.8 2.0 0.6 0.8 5.7%	\$ 2,998,766.29 3,195,359.01 4,559,245.06 1,692,627.30 <u>1,662,620.60</u> \$ 14,108,618.26	1.4% 1.5 2.1 0.8 0.7 6.5%	\$ 360,762.74 260,499.63 589,404.60 172,820.05 173,838.26 \$ 1,557,325.28	1.8% 1.3 3.0 0.9 0.9 7.9%	\$ 75,621.70 117,345.58 113,107.58 64,710.93 <u>49,155.56</u> <i>\$</i> 419,941.35	1.2% 1.8 1.0 0.8 6.6%
	1.67 1.67	NATURAL RESOURCES STOCKS Petroleum Total Natural Resources Stocks	<u>\$ 15,967,837.71</u> \$ 15,967,837.71	3.27	\$ 4,927,163.14 \$ 4,927,163.14	<u>3.1%</u> 3.1%	\$ 2,485,018.53 \$ 2,485,018.53	2.4%	<u>\$ 7,799,170.87</u> \$ 7,799,170.87	<u>3.6%</u>	\$ 639,305.69 \$ 639,305.69	3.2%	\$ 117,179.48 \$ 117,179.48	<u>1.9%</u>
1,454,603.17 2,756,897.29	1.2% 0.6 1.1 0.3	DURABLES STOCKS: Automobile & Automobile Parts Building & Construction Electrical & Electronic Equipment Steel Transportation & Transportation Equipment	\$ 10,423,722.05 7,844,499.30 11,434,045.99 1,245,072.49	2.1% 1.5 2.3 0.2	\$ 2,963,973.96 2,355,573.66 3,927,198.24 451,762.00	1.8% 1.5 2.5 0.3	\$ 2,262,613.12 1,220,864.56 2,149,197.93 319,968.93	2.2% 1.2 2.1 0.3	\$ 4,249,796.57 3,545,795.14 4,641,221.32 444,455.10	2.0% 1.6 2.2 0.2	\$ 781,238.36 601,401.52 545,859.78 28,886.46	3.9% 3.0 2.8 0.1	\$ 166,100.04 120,864.42 170,568.72 -	2.6% 1.9 2.7 -
986,188.88 1,861,826.36 136,126.53	0.2% 0.4 0.7 <u>0.1</u> 1.4%	Aircraft & Aerospace Airlines Railroads Railroad Equipment Total Transportation & Trans. Equip.	\$ 2,074,633.64 4,797,500.57 5,370,524.02 <u>1,281,391.36</u> \$ 13,524,049.59	0.42 0.9 1.1 <u>0.3</u> 2.72	\$ 550,002.74 1,404,486.68 1,599,714.65 <u>382,035.43</u> \$ 3,936,239.50	$ \begin{array}{r} 0.37 \\ 0.9 \\ 1.0 \\ 0.2 \\ 2.42 \end{array} $	\$ 518,673.18 993,215.39 1,187,876.27 288,986.42 \$ 2,988,751.26	0.5% 1.0 1.1 0.3 2.9%	\$ 898,764.48 2,154,470.63 2,340,520.65 533,648.79 \$ 5,927,404.55	0.4% 1.0 1.1 0.2 2.7%	$\begin{array}{c} \$ & 62,349.00 \\ 154,712.70 \\ 170,307.29 \\ 39,041.46 \\ \$ & 426,410.45 \end{array}$	0.370.80.90.22.27	\$ 44,844.24 90,615.17 72,105.16 <u>37,679.26</u> \$ 245,243.83	0.7% 1.4 1.2 0.6 3.9%
\$ 11,290,284.87	4.6%	Total Durables Stocks	\$ 44,471,389.42	8.8%	\$ 13,634,747.36	8.5%	\$ 8,941,395.80	8.7%	\$ 18,808,672.68	8.7%	\$ 2,383,796.57	12.0%	\$ 702,777.01	11.1%
	19.7%	TOTAL COMMON STOCKS	\$186,889,361.76		\$ 60,112,211.55	37.4%	\$ 32,571,169.59	31.6%	\$ 84,127,377.12	39.0%	\$ 7,931,518.34	40.0%	\$ 2,147,085.16	33.9%
\$247,572,939.41 10		TOTAL	\$505,036,865.22		\$160,767,267.09	100.0%	(200)))		\$215,483,679.11	100.0%	\$ 19,819,747.81	100.02	\$ 6,341,144.71	100.0%

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*This schedule includes only investments. Total assets of each fund are greater than indicated because of cash balances not yet certified for investment. **Minnesota State College Board obligations.

Schedule I

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

- 1

June 30, 1971

	PUBI	LIC EMPLOYEES RE	TIREMENT FUND		ST	ATE EMPLOYEES R	ETTREMENT FIND			TEACHERS' RETI	REMENT FUND	
		Average			01	Average			 	Average	INA IMIT FUND	
	Book Value(1,5)	Book Value for Year Ending (2)	Income for Year Ending (3)	Yield (4)	Book Value (1)	Book Value for Year Ending (2)	Income for Year Ending (3,6)	Yield (4)	Book Value (1)	Book Value for Year Ending (2)	Income for Year Ending (3)	Yield (4)
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	\$ 90,0 31,8 94 -	\$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%/ -
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(9 -	9)\$7,662,334.32 -	4.66%	\$ 97,283,570 \$102,940,417		9)\$4,504,934.00(1 -		\$196,291,329 \$216,272,996	\$195,354,108(-	9)\$ 9,121,447.52 -	4.67%
June 30, 1971	\$198,648,628	\$183,657,102	\$8,865,744.99 [.]	4.83%	\$110,406,203	\$103,543,397	\$4,777,705.29	4.61%	\$228,603,985	\$213,722.770	\$10,304,556.77	4.82%

(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 retirement funds
- (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.

PERMANENT SCHOOL FUND

RATE OF RETURN ON AVERAGE AMOUNT INVESTED DURING FISCAL PERIODS June 30, 1971

	Book Value (1)	Average Book Valu e for <u>Year Ending (2)</u>	Total Investment Income for Year Ending (3,4)	Yield (5)			
June 30, 1957	\$244,700,475.47	\$242,386,448.84	\$ 6,486,999.20	2.68%			
December 31, 1957	\$248,558,062.99	•	-	- .			
June 30, 1958	\$249,513,238.84	\$247,590,592.43	\$ 6,512,261.41	2.63%		-	
December 31, 1958	\$252,324,357.47	-	ļ-	-			
June 30, 1959	\$253,243,896.53	\$251,693,830.95	\$ 7,005,142.92	2.78%			
December 31, 1959	\$255,520,490.05	-	-	-			
June 30, 1960	\$256,276,151.72	\$255,013,512.77	\$ 7,116,641.31	2.79%			
December 31, 1960	\$259,324,537.57	-	-	-			
June 30, 1961	\$260,019,901.33	\$258,540,196.87	\$ 7,978,635.92	3.09%			
December 31, 1961	\$261,981,702.84	•	-	-			
June 30, 1962	\$262,388,564.04	\$261,463,389.40	\$ 8,610,672.52*	3.29%*			
December 31, 1962	\$264,203,940.11	-	-	-			
June 30, 1963	\$264,631,949.36	\$263,741,484.50	\$ 8,048,170.78*	3.05%*			
December 31, 1963	\$263,710,744.23	-	-	-			
June 30, 1964	\$263,552,120.96	\$263,964,938.18	\$ 8,579,156.81	3.25%	Less	Net Investment	Net
December 31, 1964	\$264,704,185.42	-	-	-	Transfer to Principal (6)	Income for Year Ending (3)	Yiel (7)
June 30, 1965	\$262,170,084.20	\$263,475,463.53	\$ 9,186,790.66	3.49%	\$ 76,936.86	\$ 9,109,853.80	3.46
December 31, 1965	\$262,324,844.32	•	-	-	-	-	-
June 30, 1966	\$261,686,901.05	\$262,060,609.86	\$ 9,647,417.30	3.68%	\$329,472.90	\$ 9,317,944.40	3.56
December 31, 1966	\$263,433,844.16	•	•	-	-		-
June 30, 1967	\$263,816,276.40	\$262,979,007.20	\$10,215,172.70	3.88%	\$856,275.93	\$ 9,358,896.77	3.56
December 31, 1967	\$264,303,404.43	i -	•	•	-	-	
June 30, 1968	\$264,578,182.47	\$264,232,621.10	\$10,511,771.10	3.98%	\$1,016,014.48	\$ 9,495,756.62	3.59
December 31, 1968	\$266,225,867.42	· -	-	-	-	-	-
June 30, 1969	\$264,122,329.06	\$264,975,459.65	\$10,512,970.80	3.97%	\$1,100,277.41	\$ 9,412,693.39	3.55
December 31, 1969	\$264,797,800.95	-		-	-	-	-
June 30, 1970	\$259,550,484.67	\$262,823,538.23	\$11,324,161.11	4.31%	\$1,034,987.16	\$10,289,173.95	3.91
December 31, 1970	\$248,210,564.03	-	-	-	. n	-	-
June 30, 1971	\$248,077,642.59	\$251,946,230.43	\$12,380,084.17	4.91%	\$1,435,834.16	\$10,944,250.01	4.34

(3) Income figures obtained from the State Auditor's office.

(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. (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 1971, 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 1971, 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.

U.S. GOVERNMENT OBLIGATIONS HELD BY VARIOUS FUNDS (ALSO INCLUDING SHORT-TERM CORPORATE NOTES)

December 31, 1970

			NT OTTAN TWIND			
· · · · · · · · · · · · · · · · · · ·	Invested	······································	HIGHWAY FUNDS			
、	Treasurer's		County	Municipal	Permanent	
	Cash Fund	Trunk	State Aid	State Aid	School Fund	
SHORT-TERM CORPORATE NOTES		•				-
Maturity less than 30 days	\$ 9,800,000	\$ 2,000,000	\$ 6,560,000	\$	*	
Maturity 30-90 days		9,000,000	1,920,000	4,128,000	*	
Maturity 91-180 days	-	10,000,000	4,820,000	2,703,000	*	
Maturity 181-270 days		15,435,000			*)	
TOTAL SHORT-TERM CORPORATE NOTES	\$ 9,800,000	\$ 36,435,000	\$ 13,300,000	\$ 7,331,000	*	
	* * *	* * * * * * * * * * *	* * * * * * * * *	* * * * * *	/	
· · · · · ·						į
.S. TREASURY SECURITIES AND GOVERNMENT AGEN	CY SECURITIES					1
BILLS					/	
Maturity less than 30 days	•	\$ 3,200,000	*	-		
Maturity 30-90 days	•	4,000,000	**	ş 940 , 000	\$ \ 600,000	
Maturity 3-6 months	•	5,400,000	*	•	\•	
Maturity 6-12 months	•		10		<u>\.</u>	
TOTAL BILLS		\$ 12,600,000	-	\$ 940,000	\$ 600,000	·
REPURCHASE AGREEMENTS	А. С.			x	· ·	
Maturity less than 30 days	\$ 9,145,000	-	-	-	1_	
Maturity 31-45 days	· · · · · · · · · · · · · · · · · · ·	-		-	[]	
TOTAL REPURCHASE AGREEMENTS	\$ 9,145,000		•	•		
GOVERNMENT AGENCY SECURITIES						
Maturity less than 30 days	•	\$ 1,000,000	\$ 3,550,0Ò0	\$ 2,320,000		
Maturity 31-90 days	\$ 2,000,000	2,715,000	2,615,000	700,000		
Maturity 91-180 days	-	14,800,000	4,480,000	2,380,000		
Maturity 6 months-1 year	5,000,000	11,010,000	-,-00,000	2,500,000		
Maturity over 1 year	-	-	-	-	- 1	
TOTAL GOVERNMENT AGENCY SECURITIES	\$ 7,000,000	\$ 29,525,000	\$ 10,645,000	\$ 5,400,000		
NOTES AND BONDS						
7 3/4% Notes due 2-15-71	\$ 11,200,000	· –	. •	-	_	
2 1/2% Bonds due 3-15-71/66	-	-	-	-	_	
5 1/4% Notes due 5-15-71	•	-	-	-	-	
8% Notes due 5-15-71	•	\$ 2,000,000	\$ 3,000,000	\$ 1,000,000	_	
4% Bonds due 8-15-71	-	-	•	*	_1	
8 1/4% Notes due 8-15-71	-	~	-	-	-	:
3 7/8% Bonds due 11-15-71				-	-	
Total maturities less than 1 year	\$ 11,200,000	\$ 2,000,000	\$ 3,000,000	\$ 1,000,000	-	
4 3/4% Notes due 5-15-72	-	-	-	-		
2 1/2% Bonds due 6-15-72/67	-	-			_	
4% Bonds due 8-15-72	-	-	-	-	Ĵ	
2 1/2% Bonds due 9-15-72/67	÷	•	-	-	1	
		A 7 700 000		A A 500 000	1	
7 3/4% Notes due 5-15-73	• .	\$5,500,000 ····	\$ 2,350,000	\$ 2,500.000		
4% Bonds due 8-15-73	•	\$ 5,500,000	\$2,350,000 2,000,000	\$ 2,500,000 2,000,000	ſ_	
· · · ·	•		\$2,350,000 2,000,000 2,000,000	\$ 2,000,000 2,000,000 1,000,000	[-	

1.9

130/7

Schedule IV



		<u>></u>	HIGHWAY FUNDS				
	Invested Treasurer's Cash Fund	Trunk	County State Aid	Municipal State Aid	Permanent / School Fund	Imp	ternal rovement nd Fund
U.S. TREASURY SECURITIES AND GOVERNMENT AGENC	Y SECURITIES		s ²				
NOTES AND BONDS (continued)					1		
4 1/8% Bonds due 2-15-74	*	\$ 1,000,000	\$ 1,200,000	\$ 500,000	• -		-
7 3/4% Notes due 2-15-74	*	3,500,000	500,000 -	-	-		-
4 1/4% Bonds due 5-15-74	*	4,500,000	-	1,000,000	-		_
7 1/4% Notes due 5-15-74	*	5,000,000	-		-		-
5 5/8% Notes due 5-15-74	*	-	-	-	_	7	-
3 7/8% Bonds due 11-15-74	*	-	-	-	-	. \$	126,500
5 3/4% Notes due 11-15-74	*	-	* _	-	_	Ŧ	5,000
5 3/4% Notes due 2-15-75	*	-		· _	_		
6% Notes due 5-15-75	*	_	_	_			_
	*	<u></u>	<u> </u>	<u> </u>		-	
Total maturities 3-5 years	*	\$ 14,000,000	\$ 1,700,000	\$ 1,500,000 ⁷	-	\$	131,500
6 1/2% Notes due 5-15-76	*	-	-	-	_	\$	50,000
7 1/2% Notes due 8-15-76	*	_	-	-	_	Ŧ	
7 3/4% Notes due 8-15-77	*	_	- 7	_	· _		_
4% Bonds due 2-15-80	*	_	_ 1	_	\$ 1,917,500		16,000
3 1/2% Bonds due 11-15-80	*			-	1,500,000		10,000
		·····	······································				
Total maturities 5-10 years	*	-	-	- .	\$ 3,417,500	\$	66,000
3 1/4% Bonds due 6-15-83/78	*	-	-	_	\$ 13,600,000	\$	50,000
3 1/4% Bonds due 5-15-85/75	*	-	-	-	-	•	-
3 1/2% Bonds due 2-15-90	*	-	-	-	-		-
3 1/2% Bonds due 11-15-98	*	<u> </u>			<u> </u>		50,000
Total maturities more than 10 years	*	,-	· _	-	\$ 13,600,000	\$	100,000
TOTAL U.S. TREASURY NOTES & BONDS	\$ 11,200,000	\$ 27,500,000	\$ 11,050,000	\$ 8,000,000	\$ 17,017,500	\$	439,000
TOTAL U.S. TREASURY AND GOVERNMENT AGENCY SECURITIES	\$ 27,345,000	\$ 69,625,000	\$ 21,695,000	\$ 14,340,000	\$ 17,617,500	\$	439,000
OBLIGATIONS GUARANTEED BY THE U.S. GOVERNMENT	2		•				
Average maturity about 100 years	*	•			\$ 75,304,000		
TOTAL U.S. GOVERNMENT OBLIGATIONS	\$127,345,000	\$ 69,625,000	\$ 21,695,000	\$ 14,340,000	\$ 92,921,500	\$	439,000

U.S. GOVERNMENT OBLIGATIONS HELD BY VARIOUS FUNDS (ALSO INCLUDING SHORT-TERM CORPORATE NOTES) December 31, 1970

* These securities are not eligible for purchase in these funds.

(a) Includes securities held by Supplemental Retirement Fund, Minnesota Variable Annuity Fund and Minnesota Adjustable Fixed Benefit Fund which do not appear in Schedule I.

Schedule IV Page 2

al ment <u>und</u>	Combined Retirement Funds	Miscellaneous Departmental Funds
	\$ 120,000	\$ 302,000
	40,000	242,000
26,500 5,000	_ 1,400,000 _ _	50,000 120,000 5,000 80,000
		50,000
31,500	\$ 1,560,000	\$ 849,000
60,000	-	\$ 169,000 10,000
.6,000	\$ 1,900,000 1,135,000	- 1,000 5,000
6,000	\$ 3 , 035 ,00 0	\$ 185 ,00 0
50,000	\$ 300,000 - 500,000	\$ 500 19,000 -
	\$ 800,000	
00,000	\$ 800,000	\$ 19,500
39,000	\$ 9,110,000	\$ 3,926,500
39,000	\$ 25,290,000 ^{(a}	.) \$ 46,206,500

<u>\$ 6,677,000</u> \$ 31,967,000 \$ 46,206,500

439,000

 \mathbf{i}

Total Amount

2,400,000.00

1,875,000.00

810,000.00

\$ 2,168,000.00

\$ 7,253,000.00

UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN PROVINCIAL OBLIGATIONS AND CORPORATE BOND HOLDINGS - MINNESOTA ADJUSTABLE FIXED BENEFIT FUND June 30, 1971

Coupon

Rate

4.80%

5.10

4 3/8

5

%

Average

Yield

%

4.80%

5.10

4.375

5.00

4.90%

Maturity Type of Security Company Date (a) U.S. GOVERNMENT-GUARANTEED OBLIGATIONS American President Lines Govt. Guar. 11-1-91 States Steamship Co. Govt. Guar. 3-31-93 United States Lines Govt. Guar. 11-1-86 United States Lines Govt. Guar. 10-1-87 Total U.S. Government-Guaranteed Obligations CANADIAN PROVINCIAL OBLIGATIONS

ISSUE

CANADIAN PROVINCIAL OBLIGATIONS					
Alberta Govt. Telephone Comm.	Deb.	12-15-91	6	6.00	\$ 250,000.00
Alberta Govt. Telephone Comm.	Deb .	8-15-90	4 3/4	4.75	500,000.00
Alberta Govt. Telephone Comm.	Deb.	6-15-94	8	8.19	2,900,000.00
Alberta Mun. Finance Corp.	Deb.	5-15-84	4 3/4	4.75	183,000.00
Alberta Mun. Finance Corp.	Deb.	12-15-84	5	5.00	91,000.00
Alberta Mun. Finance Corp.	Deb.	6-15-85	4 7/8	4.875	176,000.00
British Columbia Hydro Power					
Authority	Deb.	7-2-91	5 5/8	5.625	300,000.00
City of Montreal	Deb.	11-1-90	5	5.00	190,000.00
City of Quebec	Deb.	7-1-87	6 1/4	6.25	200,000.00
City of Saskatoon	Deb.	8-1-90	5	5.00	250,000.00
City of Sherbrooke	Deb.	3-1-87	6 3/4	6.75	250,000.00
City of Windsor	Deb.	10-31-78	7 1/4	7.25	33,000.00
City of Windsor	Deb.	10-31-81	7 1/4	7.25	48,000.00
City of Windsor	Deb.	10-31-84	7 1/4	7.25	59,000.00
City of Windsor	Deb.	10-31-86	7 1/4	7.25	68,000.00
City of Windsor	Deb.	10-31-88	7 1/4	7.25	42,000.00
City of Winnipeg, Manitoba	Deb.	10-15-85	5	5.00	300,000.00
Greater Vancouver Sewer and					
Drainage	Deb.	5-1-91	5 1/2	5.50	200,000.00
LaSalle Quebec Canada	Deb.	3-15-72	6	6.00	10,000.00
LaSalle Quebec Canada	Deb.	3-15-75	6	6.00	12,000.00
LaSalle Quebec Canada	Deb.	3-15-80	6	6.00	11,000.00
LaSalle Quebec Canada	Deb.	3-15-83	6	6.00	6,000.00
LaSalle Quebec Canada	Deb.	3-15-84	6	6.00	6,000.00
LaSalle Quebec Canada	Deb.	3-15-89	6	6.00	10,000.00
LaSalle Quebec Canada	Deb.	3-15-90	6	6.00	5,000.00
Manitoba Hydro Electric Board	Deb.	10-1-89	4 1/2	4.50	250,000.00
Manitoba Hydro Electric Board	Deb.	11-1-90	4 3/4	4.75	250,000.00
Metropolitan Corp. of Greater			· .		
Winnipeg, Canada	Deb.	5-1-88	7 1/4	7.25	200,000.00
Montreal Catholic School Comm.	Deb.	10-1-92	6 3/4	6.75	400,000.00
Province of Manitoba	Deb.	4-1-94	7 7/8	7.90	1,020,000.00
Province of New Brunswick	Deb.	2-1-85	5 3/8	5.375	82,000.00
Province of New Brunswick	Deb.	9-15-89	4 3/4	4.75	300,000.00
Province of New Brunswick	Deb.	10-1-91	6 7/8	6.875	90,000.00
Province of Nova Scotia	Deb.	2-1-92	5 7/8	5.875	500,000.00
Province of Nova Scotia	Deb.	11-15-93	7 1/4	7.25	165,000.00
Province of Ontario	Deb.	5-15-81	3 7/8	3.875	100,000.00
Province of Ontario	Deb.	5-1-83	4	4.00	65,000.00
Province of Ontario	Deb.	2-1-84	4 3/4	4.75	200,000.00
Province of Ontario	Deb.	2-15-99	7 3/8	7.375	200,000.00
Province of Saskatchewan	Deb.	10-1-90	4 7/8	4.875	300,000.00
Quebec Hydro Electric Comm.	Deb.		• -		
	Series N	1-1-81	3 1/2	3.50	100,000.00

UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN PROVINCIAL OBLIGATIONS AND CORPORATE BOND HOLDINGS - MINNESOTA ADJUSTABLE FIXED BENEFIT FUND June 30, 1971

ISSUE		• .			
	Type of	Maturity	Coupon Rate	Average Yield	
Company	Security	Date (a)	%	%	Total Amount
ANADIAN PROVINCIAL OBLIGATIONScontinue					
Quebec Hydro Electric Comm.	Deb. Series X	7-15-84	5	5.00	\$ 200,000.00
Quebec Hydro Electric Comm.	Deb.	7-13-64	5	5.00	\$ 200,000.00
Quebec hydro Erectric comm.	Series AS	6-15-85	4 5/8	4.625	100,000.00
Quebec Hydro Electric Comm.	Deb.	0-15-05	4 5/0	4.025	100,000.0
	Series AY	1-1-93	6 1/4	6.25	100,000.0
Vancouver British Columbia	Deb.	11-16-82	4 3/4	4.75	100,000.0
Vancouver British Columbia	Deb.	11-16-83	4 3/4	4.75	100,000.0
Vancouver British Columbia	Deb.	11-16-84	4 3/4	4.75	100,000.0
Total Canadian Provincial Obligations				6.44%	\$ 11,022,000.00
CORPORATE BOND OBLIGATIONS					,,,
PUBLIC UTILITY OBLIGATIONS ELECTRIC					
Alabama Power	lst Mtg.	3-1-91	4 1/2	4.40	\$ 50,000.0
Atlantic City Electric	lst Mtg.	3-1-91	4 1/2	4.37	600,000.0
Carolina Power & Light	lst Mtg.	4-1-90	4 7/8	4.85	500,000.0
Central Illinois Light	lst Mtg.	3-1-93	4 1/4	4.25	200,000.0
Central Power & Light	lst Mtg.	4-1-84	3 1/8	7.93	100,000.0
Central Maine Power	lst Mtg.	11-1-90	5 1/4	5.25	147,000.0
Cincinnati Gas & Electric	1st Mtg.	5-1-90	5	5.00	150,000.0
Citizens Utilities	lst Mtg. &				
	Coll. Tr.	12-31-91	4.80	4.80	1,000,000.0
Citizens Utilities	Coll. Tr.	10-1-92	4 5/8	4.625	200,000.0
Columbus & Southern Ohio Elec.	lst Mtg.	5-1-92	4 3/8	4.375	100,000.0
Commonwealth Edison	lst Mtg.	11-1-96	5 3/4	5.75	100,000.0
Consolidated Edison of N.Y.	lst & Ref.	10 1 00	1 5 10		700 000 0
0	Mtg.	12-1-93 6-1-84	4 5/8 3	4.54 3.00	700,000.00
Consumers Power Consumers Power	lst Mtg. lst Mtg.	2-1-90	3 1/4	3.25	50,000.0
Duke Power	lst & Ref.	2-1-90	5 1/4	5.25	
Duke rower	Mtg.	2-1-92	4 1/2	7.20	100,000.0
Florida Power	lst Mtg.	7-1-88	4 1/8	7.95	100,000.0
Florida Power & Light	lst Mtg.	6-1-89	5	5.00	300,000.0
Gulf States Utilities	lst Mtg.		-		
	Series A	12-1-89	5 1/4	7.44	100,000.0
Hawaiian Electric	lst Mtg.	4-1-91	4.65	4.65	1,550,000.0
Iowa-Illinois Gas & Electric	lst Mtg.	4-15-90	5	5.00	146,000.0
Jersey Central Power & Light	Deb.	10-1-88	4 5/8	4.56	1,584,000.0
Lake Superior District Power	lst Mtg.	2-1-91	4 5/8	4.60	500,000.0
Long Island Lighting	lst Mtg.	11-1-85	3 3/8	3.375	50,000.0
Long Island Lighting	lst Mtg.	4-1-93	4.40	4.40	1,000,000.0
Long Island Lighting	lst Mtg.	6-1-95	4.55	4.55	100,000.0
Massachusetts Electric	1st Mtg.	9-1-92	4 3/8	8.15	100,000.0
Metropolitan Edison	lst Mtg.	12-1-92	4 3/8	4.375	200,000.0
Missouri Power & Light	lst Mtg. S/F Deb.	7-1-92 7-1-84	4 1/2 4 5/8	7.65 4.61	100,000.0 1,102,000.0
Montana-Dakota Utilities	lst Mtg.	12-1-84	4 3/8	7.75	100,000.0
New England Power New England Power	lst Mtg.	16-1-26	- J/U	1.15	200,000.0
HEW BURTONG LOWEL	Séries E	6-1-82	3 1/4	8.03	100,000.0
New England Power	lst Mtg.	~ _ ~~	, ,		
	Series F	1-1-85	3 1/4	7.90	100,000.0
New York State Electric & Gas	lst Mtg.	5-1-91	4 5/8	7.35	200,000.0
Northern States Power	lst Mtg.				-
	Series K	12-1-90	5	7.47	250,000.0

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UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN PROVINCIAL OBLIGATIONS AND CORPORATE BOND HOLDINGS - MINNESOTA ADJUSTABLE FIXED BENEFIT FUND June 30, 1971

ISSUE					
			Coupon	Average	
	Type of	Maturity	Rate	Yield	
Company	Security	<u>Date (a)</u>	%	%	Total Amount
LIC UTILITY OBLIGATIONScontinued					
Otter Tail Power	lst Mtg.	8-1-88	4 3/4	4.75	\$ 100,000.0
Otter Tail Power	lst Mtg.	11-1-93	4 5/8	4.625	197,000.0
Pacific Gas & Electric	lst & Ref. Mtg.				
	Series HH	6-1-94	4 3/8	7.42	200,000.0
Pacific Power & Light	lst Mtg.	4-1-92	4 3/4	4.69	590,000.0
Pennsylvania Electric	lst Mtg.	5-1-91	4 5/8	7.48	100,000.0
Pennsylvania Power & Light	lst Mtg.	12-1-91	4 5/8	7.44	200,000.0
Philadelphia Electric	lst & Ref. Mtg.	1-1-82	3 1/4	7.90	100,000.0
Potomac Edison	lst & Coll.				
	Tr.	5-1-87	4 5/8	8.25	100,000.0
Public Service Electric & Gas	lst & Ref.				
	Mtg.	11-1-86	4 3/8	4.375	50,000.0
Public Service Electric & Gas	lst & Ref.				
	Mtg.	9-1-94	4 5/8	4.53	1,215,000.0
Public Service of Colorado	lst Mtg.	10-1-84	3 1/8	7.90	100,000.0
Public Service of Colorado	lst Mtg.	10-1-91	4 1/2	7.75	100,000.0
Public Service of Oklahoma	lst Mtg.	1-1-93	4 1/8	8.00	100,000.0
Puget Sound Power & Light	lst Mtg.	11-1-93	4 5/8	4.625	75,000.0
Rochester Gas & Electric	lst Mtg.	6-1-82	3 3/8	3.375	84,000.0
Rochester Gas & Electric	lst Mtg.	11-15-91	4 1/2	4.50	200,000.0
Southern California Edison	lst & Ref. Mtg.	9-1-85	4 3/8	4.47	760,000.0
Southern California Edison	lst & Ref.		4 1/4	4.25	
0. Manual October Bilder	Mtg.	11-1-87	4 I/4	4.23	100,000.0
Southern California Edison	lst & Ref.	2 1 00	1 2/0	4.375	100,000.0
Couthers at our Dublic Counting	Mtg.	3-1-89 2-1-91	4 3/8 4 1/2	4.50	62,000.0
Southwestern Public Service	lst Mtg.	1-1-93	4 3/8	4.30	99,000.0
Southwestern Public Service	lst Mtg.	9-1-85	3 5/8	8.35	100,000.0
Utah Power & Light	lst Mtg.		4 7/8	4.80	1,290,000.0
Utah Power & Light	lst Mtg.	9-1-90	4 1/2	4.80	200,000.0
Utah Power & Light	lst Mtg.	6-1-92 9-1-94	4 1/2	7.64	150,000.0
Washington Water Power	lst Mtg.	9-1-94 11-1-92	4 3/8	8.00	100,000.0
West Penn Power	lst Mtg.	5-1-92	4 3/8	8.00	100,000.0
Western Massachusetts Electric	lst Mtg.	5-1-92	4 3/0		····
Total Electric Utility Obligations				5.07%	\$ 18,351,000.0
AS Brooklyn Union Gas	lst Mtg.	4-1-90	4 5/8	4.56	\$ 1,175,000.0
Brooklyn Union Gas Columbia Gas System, Inc.	Deb.	1-1-88	4 3/8	4.30	450,000.0
Gas Service	lst Mtg.	5-1-83	4.40	4.40	252,000.0
Lakehead Pipeline	S/F Deb.	4-15-93	7 1/8	7.125	500,000.0
Michigan Consolidated Gas	lst Mtg.	6-1-89	4 3/4	4.60	100,000.0
Mountain Fuel Supply	Deb.	9-1-86	4 7/8	4.80	1,228,000.0
Panhandle Eastern Pipeline	Deb.	2-1-84	4.60	4.60	650,000.0
Sierra Pacific Power	lst Mtg.	6-1-92	4 7/8	4.75	500,000.0
Southern Union Gas	lst Mtg.	10-1-86	4.80	4.80	600,000.0
Suburban Propane Gas	Note	12-30-84	4 7/8	4.875	774,000.0
	lst Mtg.	3-1-91	5.20	5.20	600,000.0
Washington Gas Light	100 MES+	~ ~ / *		7.77	200,000.0

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Total Gas Utility Obligations

4.99% \$ 7,029,000.00

UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN PROVINCIAL OBLIGATIONS AND CORPORATE BOND HOLDINGS - MINNESOTA ADJUSTABLE FIXED BENEFIT FUND June 30, 1971

ISSUE						
Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %		Total Amount
TELEPHONE					_	
American Telephone & Telegraph	Deb.	4-1-82	2 3/4	2.75	\$	100,000.00
American Telephone & Telegraph	Deb.	9-15-84	3 1/4	3.25		200,000.00
Bell Telephone of Canada	lst Mtg.	9-1-95	4.85	4.85		500,000.00
Chesapeake & Potomac Tel. Md.	Deb.	12-1-93	4 1/8	7.50		115,000.00
Diamond State Telephone	Deb.	4-1-94	4 3/4	7.20		100,000.00
General Telephone of Florida	lst Mtg.	11-1-91	4 5/8	4.625		200,000.00
General Telephone of Florida	lst Mtg.	5-1-93	4 1/2	4.50		500,000.00
General Telephone Co. of the	• • • • •					
Midwest	lst Mtg.	5-1-99	7 3/4	7.75		2,500,000.00
New York Telephone	Ref. Mtg.	10-1-97	4 5/8	4.57		500,000.00
Northwestern Bell Telephone	Deb.	6-1-84	2 3/4	8.50		100,000.00
Pacific Tel. & Tel. Bachastar Talasbara	Deb.	11-15-89 9-1-93	3 1/8	7.45		100,000.00
Rochester Telephone	lst Mtg.		4 3/4	4.66		610,000.00
Southwestern Bell Telephone Southern Bell Tel.	Deb.	5-1-83 9-1-89	3 1/8 3 1/8	7.70 7.70		135,000.00
Southern New England Tel.	Deb. Deb.	9-1-89 6-1-89	3 1/8	3.25		100,000.00 200,000.00
_	Deb.	0-1-09	J 1/4			
Total Telephone Utility Obligations				6.15%	\$	5,960,000.00
INANCE OBLIGATIONS American Investment	Note	1-1-91	5 1/4	5.25	\$	650,000.00
Beneficial Finance	Deb.	6-1-88	4.45	4.45		50,000.00
Beneficial Finance	Note	3-1-89	4.60	4.60		325,000.00
Charter New York	Deb.	8-1-91	5 3/4	5.75		200,000.00
C.I.T. Financial	Deb.	1-1-79	4 5/8	4.625		225,000.00
C.I.T. Financial	Deb.	9-1-84	4 1/2	4.50		50,000.00
C.I.T. Financial	Deb.	5-1-89	4 5/8	7.25		300,000.00
Family Finance	Sr. Deb.	5-15-90	4 3/4	4.84		1,300,000.00
General Acceptance	Sr. Deb.	3-1-85	4 7/8	6.89		650,000.00
General Electric Credit	Prom. Note	10-31-82	4 5/8	4.625		1,500,000.00
Inter-American Development Bank	Bonds	12-15-82	4 1/4	4.25		100,000.00
John Deere Credit	Deb.	10-31-90	5	5.00		600,000.00
Macy Credit	Subord. Deb.		4 7/8	4.875		400,000.00
Marine Midland	Deb.	7-15-89	4 1/2	4.50		250,000.00
Montgomery Ward Credit	Deb.	7-1-80	4 7/8	4.875		200,000.00
Penney (J.C.) Credit	Deb.	7-1-84	4 1/2	4.50		170,000.00
Sears Roebuck Acceptance	Deb.	7-15-82	5	5.00		200,000.00
James Talcott, Inc.	Sr. Note	10-1-85	5	5.00		400,000.00
Total Finance Obligations				5.11%	\$	7,570,000.00
INDUSTRIAL OBLIGATIONS American Metal Climax	Note	8-1-88	4 1/2	4.50	\$	225,000.00
Archer-Daniels Midland	Prom. Note	3-1-88	4 3/8	4.375	. *	176,000.00
Ashland Oil & Refining	S/F Deb.	2-15-88	4.35	4.35		670,000.00
Beatrice Foods	S/F Deb.	9-15-94	7 7/8	7.90		3,000,000.00
Burroughs	S/F Deb.	7-1-88	4 1/2	4.52		1,100,000.00
Checkerboard Properties Inc.						
(Ralston-Purina)	Guar. Notes	11-1-89	8 3/4	8.75		3,000,000.00
Consolidated, Bathurst Ltd.	Deb.	4-15-91	5 5/8	5.625		250,000.00
Desoto Chemical	Note	12-1-85	5	5.00		1,500,000.00
Diamond-Alkali	Note	5-1-89	4.65	4.65		270,000.00
Dow Chemical	Note S/E Dat	1-15-90	4 1/2	4.50		1,380,000.00
	S/F Deb.	7-15-88	4 3/8	8.27 4.60		110,000.00
Eaton Mfg.	C/P n_L					
Ekco Products	S/F Deb.	8-1-87	4.60			
	S/F Deb. S/F Deb. Sr. Note	8-1-87 2-15-95 5-15-84	4.80 9 1/4 4 5/8	9.25		400,000.00 1,500,000.00 1,729,750.00

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UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN PROVINCIAL OBLIGATIONS AND CORPORATE BOND HOLDINGS - MINNESOTA ADJUSTABLE FIXED BENEFIT FUND June 30, 1971

ISSUE					
Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount
DUSTRIAL OBLIGATIONScontinued	<u> </u>	Date (a)			TOTAL AMOUNT
Kern County Land	Prom. Note	9-1-89	4.65	4.65	\$ 1,184,000.0
Lone Star Cement	S/F Deb.	7-1-90	4 7/8	4.875	1,260,000.0
Louisiana Land & Exploration	Note	12-1-94	8 1/4	8.25	3,000,000.0
MacMillan Bloedel Ltd.	Deb.		-		
	Series A	10-1-90	4.95	4.95	500,000.0
Marathon 011	S/F Deb.	2-1-2000	8 1/2	8.52	1,500,000.0
Martin Marietta	S/F Deb.	4-15-92	5 7/8	9.02	100,000.0
National Cash Register	S/F Deb.	4-1-87	4 3/8	7.70	219,000.0
Owens-Illinois	Note	2-1-91	5	8.75	2,500,000.0
Packaging Corp. of America	S/F Deb.	10-1-87	4 3/8	7.99	200,000.0
Research Properties, Inc.					
(Standard Oil, Indiana)	Note	11-1-99	8 1/4	8.25	3,000,000.0
Scovill Mfg.	Note	9-15-90	4.80	4.80	855,000.0
Shell Oil	Deb.	3-15-91	5	5.00	1,500,000.0
Shell Canada Ltd.	Sr. Deb.	1-1-94	7 1/2	7.50	1,850,000.0
Sinclair Oil Corp.	S/F Deb.	12-15-88	4.60	4.60	300,000.0
Spiegel, Inc.	Deb.	4-1-87	5	9.39	200,000.0
Sprague Electric	S/F Deb.	9-1-88	4 3/8	4.38	450,000.0
Standard Oil of Calif. (Chevron)	Note	4-1-91	5.10	5.10	1,000,000.0
Standard Oil of New Jersey	Deb.	11-1-97	6	6.00	700,000.0
Standard Oil of New Jersey	Deb.	7-15-98	6 1/2	6.50	800,000.0
Standard Oil of Ohio	Deb.	1-1-2000	8 1/2	8.52	1,500,000.00
Sun Oil	Note	7-1-91	5 3/4	5.75	1,350,000.0
Times Mirror	S/F Deb.	1-1-90	4 1/2	8.47	250,000.0
Union Tank Car	S/F Deb.	8-1-86	5	5.48	1,550,000.0
U.S. Steel	S/F Deb.	4-15-86	4 1/2	4.55	900,000.0
U.S. Steel	Subord.Deb.	1-1-96	4 5/8	7.21	200,000.00
Witco Chemical	Note	12-1-84	4.65	4.65	1,530,000.0
Youngstown Sheet & Tube	lst Mtg.	7-1-95	4.60	4.60	97,000.0
Total Industrial Obligations				6.80%	\$ 46,605,750.00
ANSPORTATION DEBT OBLIGATIONS					
Chicago Burlington & Quincy					
Railroad	lst & Ref.				
Great Northern Railway	Mtg. Gen. Mtg.	2-1-78	4 3/8	4.375	\$ 306,000.00
	Series N	1-1-90	3 1/8	3.125	100,000.00
Missouri Pacific Railroad	lst Mtg.	1-1-90	4 1/4	9.02	275,000.00
Pennsylvania Company	Coll. Tr.	6-1-85	5 1/4	8.22	100,000.0
Seaboard Airline Railroad	lst Mtg.	12-1-88	4 5/8	4.65	1,725,000.0
Southern Railway	lst Mtg.	6-1-88	4 5/8	4.625	245,000.0
Southern Railway	lst Mtg.	7-1-94	5	5.00	100,000.00
Total Transportation Debt Obligations				5.13%	\$ 2,851,000.00
LROAD EQUIPMENT OBLIGATIONS					
Atchison, Topeka & Santa Fe	Cond. Sale	7-15-71/	_	.	
		1-15-81		5.00	\$ 1,520,000.00
Atlantic Coast Line Railroad	Equip. Tr.	9-1-79	4 1/2	4.50	200,000.00
Chesapeake & Ohio Railway					
(Towson Equipment)	Cond. Sale	7-1-75/		•	
		1-1-85	8 1/2	8.50	2,966,313.45
Chicago Burlington & Quincy	0	(15 70/			
Railroad	Cond. Sale	6-15-72/			
		12-15-80	4 7/8	4.875	1,100,348.13

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Schedule V (Page 6)

UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN PROVINCIAL OBLIGATIONS AND CORPORATE BOND HOLDINGS - MINNESOTA ADJUSTABLE FIXED BENEFIT FUND June 30, 1971

ISSUE							
	Type of		 Maturity	Coupon Rate	Average Yield		
Company	Security	<u>y</u>	<u>Date (a)</u>	%	%	Te	otal Amount
AILROAD EQUIPMENT OBLIGATIONScontinue	ed						
Flying Tiger E.G.A.	Equip. 1	Tr.	9-30-80	6.60	9.39	\$	200,000.0
General American Transportation	Equip. 1	Tr.	7-15-84	4 5/8	4.59		1,593,000.0
New York Central Railroad	Equip. 1	ſr.	2-15-72/74	4 3/4	5.00		750,000.0
Norfolk & Western Railway Co. (New York, Chicago, St. Louis							
Railroad Company)	Cond. Sa	ale	11-15-71/ 5-15-79	4.55	4.55		1,440,000.0
Norfolk & Western Railway Co.	Cond. Sa	ale	12-15-71/				
			12-15-79	4 1/2	4.50		1,080,000.0
Norfolk & Western Railway Co.	Cond. Sa	ale	10-1-84	8 7/8	8.875		2,800,000.0
North American Car Corp.	Equip. 1	Tr.	9-1-71/73	4.55	4.55		75,000.0
North American Car Corp.	Equip. 1		9-1-74/78		4.65		125,000.0
Northern Pacific Railway	Cond. Sa		9-1-71/				-
			3-1-82	5.50	5.50		1,246,666.7
St. Louis-San Francisco Railway Co.	Cond, Sa	ale	1-15-76/85	5 9 3/8	9.375		1,717,500.0
Western Pacific Railway Co.	Cond. Sa	ale	3-15-72/80	4.55	4.55		1,500,000.0
Total Railroad Equipment Obligations					6.50%	\$ 18	8,313,828.3
TOTAL CORPORATE OBLIGATIONS					6.13%	<u>\$10</u>	6,680,578.3
TOTAL UNITED STATES GOVERNMENT-GUARAN AND CORPORATE OBLIGATIONS	TEED, CANA	ADIAN	PROVINCIAI		6.09%	\$124	4,955,578.3

a. Most corporate issues have substantial sinking funds and an average life far shorter than the stated maturity date.

CONVERTIBLE BOND HOLDINGS - MINNESOTA ADJUSTABLE FIXED BENEFIT FUND October 29, 1971

Issue	Face Amount Held	Total Cost
Baxter Laboratories, Inc., 4 3/4% Convertible Subordinated Debentures, due 3-1-90	\$ 1,150,000.00	\$ 1,150,000.00
FMC Corporation, 4 1/4% Convertible Subordinated Debentures, due 7-15-92	\$ 1,250,000.00**	\$ 985,812.50
W.T. Grant Company, 4 3/4% Convertible Subordinated Debentures, due 4-15-96	\$ 1,000,000.00	\$ 1,000,000.00
Kresge (S.S.) Company, 5% Convertible Subordinated Debentures, due 4-15-95	\$ 1,500,000.00	\$ 1,486,500.00
McGraw-Hill, 3 7/8% Convertible Subordinated Debentures, due 5-1-92	\$ 24,000.00*	\$ 17,700.00
Melville Shoe Corporation, 4 7/8% Convertible Subordinated Debentures, due 6-1-96	\$ 1,500,000.00	\$ 1,500,000.00
Owens-Illinois, Inc., 4 1/2% Convertible Subordinated Debentures, due 11-1-92	\$ 1,200,000.00	\$ 1,180,343.75
Purex Corporation, Limited, 4 7/8% Convertible Subordinated Debentures, due 1-15-94	\$ 500,000.00	\$ 435,000.00
Radio Corporation of America, 4 1/2% Convertible Subordinated Debentures, due 8-1-92	\$ 1,500,000.00	\$ 1,221,250.00
Ralston Purina Company, 4 7/8% Convertible Subordinated Debentures, due 12-1-92	\$ 1,520,000.00***	\$ 1,481,550.00
White Motor Corporation, 5 1/4% Convertible Subordinated Debentures, due 3-1-93	\$ 250,000.00*	\$ 219,375.00
Totals	\$11,394,000.00	\$10,677,531.25

* Issues transferred from Municipal Employees Retirement Board (Minneapolis) on September 2, 1969.

** Includes \$350,000 face amount of debentures transferred from Municipal Employees Retirement Board (Minneapolis) on September 2, 1969.

*** Includes \$120,000 face amount of debentures transferred from Municipal Employees Retirement Board (Minneapolis) on September 2, 1969.

UNITED STATES GOVERNMENT-GUARANTEED BONDS AND CORPORATE BOND HOLDINGS - PERMANENT SCHOOL FUND December 31, 1970

- Coupon 7 Rate	Average	
	Yield	
%	%	Total Amount
0.00%	0 00%	A 0.000 10/ 07
8,90%	8.90%	\$ 2,999,184.07
8 5/8	8.625	3,001,060.00
	8.76%	\$ 6,000,244.07
00 8%	8.73%	\$ 2,488,231.37
00 8	8.65	1,993,694.67
1 0 7	0 00	2 050 717 00
0 7	0,92	2,958,717.80
0 8	8,94	2,476,284.72
0 8	8.73	2,795,861.68
00 8	8.73	2,496,637.93
00 0	0 65	2 409 290 17
00 8	0.00	2,498,280.17
1 8	8,57	2,500,261.99
00 8	8.94	2,000,000.00
07	8.92	1,993,224.32
0 0	0 00	2,486,171.02
0 0	0.00	2,400,171.02
0 8	8.80	2,496,670.94
8	8.94	2,493,424.52
	8 70%	\$ 31,677,461.13
	0.130	01,077,901.10 و 10
6%	6.00%	\$ 1,470,000.00
4.80	4.80	1,470,000.00
		1,438,000.00
• .		2,500,000.00
		1,262,000.00
		4,065,000.00
		2,430,000.00
		1,000,000.00 1,500,000.00
		1,250,000.00
		1,000,000.00
5 3/4	5.87	1,678,000.00
7.80	7.80	1,250,000.00
	8 5/8 000 8% 000 8 000 9 000 9 000 9 1/2 5 <td>$8 5/8 \frac{8.625}{8.76\%}$ $8 5/8 \frac{8.625}{8.76\%}$ 8.76% 8.73% 8.73% 8.65 $0 7 8.92$ $0 8 8.94$ $0 8 8.73$ $0 0 8 8.80$ $0 8 8.94$ 8.79% $6\% 6.00\%$ $4.80 5.60$ $7.1/2 5.50$ 6.00 $8.05 9.00$ $5.10 5.10$ $7.80 7.80$ 7.50 $5.3/4 5.87$</td>	$8 5/8 \frac{8.625}{8.76\%}$ $8 5/8 \frac{8.625}{8.76\%}$ 8.76% 8.73% 8.73% 8.65 $0 7 8.92$ $0 8 8.94$ $0 8 8.73$ $0 0 8 8.73$ $0 0 8 8.73$ $0 0 8 8.73$ $0 0 8 8.73$ $0 0 8 8.73$ $0 0 8 8.73$ $0 0 8 8.80$ $0 8 8.80$ $0 8 8.80$ $0 8 8.80$ $0 8 8.80$ $0 8 8.80$ $0 8 8.80$ $0 8 8.80$ $0 8 8.80$ $0 8 8.94$ 8.79% $6\% 6.00\%$ $4.80 5.60$ $7.1/2 5.50$ 6.00 $8.05 9.00$ $5.10 5.10$ $7.80 7.80$ 7.50 $5.3/4 5.87$

UNITED STATES GOVERNMENT-GUARANTEED BONDS AND CORPORATE BOND HOLDINGS - PERMANENT SCHOOL FUND December 31, 1970

ISSUE					
Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount
U.S. GOVERNMENT-GUARANTEED OBLIGATIONS		<u></u>			
Pacific Far East Line, Inc.	Govt. Guar.	2-1-97	8 3/4%	8.75%	\$ 2,500,000.00
Penn Tanker Co.	Govt. Guar.	10-1-89	6	6.00	1,456,000.00
Prudential Lines, Inc.	Govt. Guar.	11-1-95	6	6.00	2,500,000.00
States Steamship Co.	Govt. Guar.	3-31-93	5.10	5.10	1,500,000.00
United States Lines, Inc.	Govt. Guar.	10-1-87	5.00	5.00	1,376,000.00
United States Lines, Inc.	Govt. Guar.	11-1-86	4 3/8	4.375	881,000.00
United States Lines, Inc.	Govt. Guar.	3-1-91	8 5/8	8.625	2,600,000.00
Total Merchant Marine Bonds				6.65%	\$ 35,126,000.00
NEW COMMUNITIES ACT DEBENTURES					
Jonathan Development Corp.	Govt. Guar.				
	Deb.	10-1-90	8 1/2%	8.50%	\$ 2,500,000.00
Total New Communities Act Debentures				8.50%	\$ 2,500,000.00
Total U.S. Government-Guaranteed Obli	igations			7.78%	\$ 75,303,705.20
CORPORATE BOND OBLIGATIONS PUBLIC UTILITY OBLIGATIONS					
ELECTRIC					
Duke Power Co.	lst & Ref.				
	Mtg.	2-1-95	4 1/2	4.47	\$ 1,500,000.00
Florida Power & Light Co.	lst Mtg.	4-1-94	4 5/8	4.50	1,200,000.00
Gulf Power Co.	lst Mtg.	9-1-71	3 1/8	4.55	1,348,000.00
Hawaiian Electric Co., Ltd.	lst Mtg.	7-1-93	4.45	4.45	1,000,000.00
Indiana & Michigan Electric Co.	lst Mtg.	8-1-93	4 3/8	4.42	1,000,000.00
Interstate Power Co.	lst Mtg.	5-1-93	4 3/8	4.39	1,000,000.00
Iowa Power & Light Co.	S/F Deb.	4-1-89	4 5/8	4.57	1,200,000.00
Jersey Central Power & Light Co.	Deb.	10-1-88	4 5/8	4.56	960,000.00
Long Island Lighting Co.	lst Mtg.	6-1-95	4.55	4.55	1,200,000.00
Massachusetts Electric Co.	lst Mtg.	12-1-93	4 5/8	4.55	1,100,000.00
Montana-Dakota Utilities Co.	S/F Bond	7-1-84	4 5/8	4.615	962,000.00
Northern States Power Co.	lst Mtg.	9-1-93	4 3/8	4.375	1,000,000.00
Otter Tail Power Co.	lst Mtg.	11-1-93	4 5/8	4.60	992,000.00
Potomac Edison Co.	lst Mtg. & Coll. Tr.	3-1-94	4 5/8	4.55	1,200,000.00
Public Service Co. of Indiana Public Service Electric & Gas Co.	lst Mtg.	7-1-82	3 3/8	4.38	1,100,000.00
rubile service Electric a Gas co.	lst & Ref. Mtg.	9-1-94	4 5/8	4.53	1,200,000.00
Southern California Edison Co.	lst & Ref.	J- <u>x</u> -J4	4 570	4.55	1,200,000.00
boutnern barrornia harson co.	Mtg.	3-1-89	4 3/8	4.44	1,500,000.00
Southwestern Public Service Co.	lst Mtg.	2-1-94	4 1/2	4.50	1,200,000.00
Total Electric Utility Obligations				4.50%	\$ 20,662,000.00
GAS					
Arkansas Louisiana Gas Co.	lst Mtg.	3-1-85	4 1/2	4.55	\$ 1,088,000.00
Columbia Gas System, Inc.	Deb.	5-1-89	4 5/8	4.64	1,200,000.00
The Gas Service Co.	lst Mtg.	6-1-85	4.65	4.65	1,080,000.00
Michigan Consolidated Gas Co.	lst Mtg.	6-1-89	4 3/4	4.60	1,200,000.00
Natural Gas Pipeline Co. of America	lst Mtg.	9-1-86	6 1/4	6.34	1,000,000.00
Panhandle Eastern Pipe Line Co.	Deb.	2-1-84	4.60	4.60	1,200,000.00
Peoples Gas Light & Coke Co.	lst & Ref.		F 0/0		
	Mtg.	7-15-91	5 3/8	5.375	1,104,000.00
Suburban Propane Gas Corp.	Note	12-30-84	4 7/8	4.875	776,000.00
Total Gas Utility Obligations				4.93%	\$ 8,648,000.00

UNITED STATES GOVERNMENT-GUARANTEED BONDS AND CORPORATE BOND HOLDINGS - PERMANENT SCHOOL FUND December 31, 1970

ISSUE					
Company PUBLIC UTILITY OBLIGATIONScontinued	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield <u>%</u>	Total Amount
TELEPHONE					
American Telephone & Telegraph Co.	Deb.	9-15-84	3 1/4	4.40	\$ 1,000,000.00
American Telephone & Telegraph Co.	Deb.	5-1-99	4 3/8	4.365	1,500,000.00
The Bell Telephone Co. of Canada	lst Mtg.	9-1-95	4.85	4.85	1,500,000.00
General Telephone Co. of Florida	lst Mtg.	6-1-95	4 5/8	4.687	1,000,000.00
General Telephone Co. of Illinois	lst Mtg.	9-1-95	4 7/8	4.875	1,200,000.00
General Telephone Co. of Indiana	lst Mtg.	8-1-95	4.70	4.70	1,200,000.00
New York Telephone Co.	Ref. Mtg.	1-1-2004	4 5/8	4.53	1,500,000.00
Pacific Northwest Bell Telephone Co.	Deb.	12-1-2000	4 1/2	4.49	1,500,000.00
Total Telephone Utility Obligations				4.61%	\$ 10,400,000.00
Total Public Utility Obligations				4.62%	\$ 39,710,000.00
FINANCE OBLIGATIONS					
Beneficial Finance Co.	Note	3-1-89	4.60	4.60	\$ 1,000,000.00
Gulf Life Insurance Co.	Capital Note	6-1-89	4 3/4	4.75	1,140,000.00
Northwest Bancorporation	Deb.	10-15-90	4 3/4	4.78	1,500,000.00
Total Finance Obligations				4.72%	\$ 3,640,000.00
				1.720	0 0,010,000.00
INDUSTRIAL OBLIGATIONS	Brow Note	2 21 00	1. 2/0	4 50	¢ 1 3/0 000 00
Aluminum Co. of America	Prom. Note S/F Deb.	3-31-88 3-1-95	4 3/8 9 1/2	4.50 9.37	\$ 1,340,000.00
Aluminum Co. of Canada, Ltd.	ýr Deb. Prom. Note	10-1-84	4. 70	9.37 4.70	1,000,000.00
American Greetings Corp. American Metal Climax, Inc.	Note	8-1-88	4.70	4.70	875,000.00 900,000.00
Burlington Industries	S/F Deb.	7-15-90	4 3/4	4.80	1,200,000.00
Burroughs Corp.	Deb.	7-1-88	4 1/2	4.53	1,000,000.00
Cincinnati Milling Machine Co.	Note	1-15-85	4.60	4.60	1,000,000.00
Cummins Engine Co., Inc.	Note	7-15-90	4,60	4.60	1,200,000.00
Diamond Alkali Corp.	Note	5-1-89	4.65	4.65	1,140,000.00
Diebold, Inc.	Note	9-15-85	4.80	4.80	941,666.67
Dow Chemical Co.	Deb.	9-15-88	4.35	4.35	1,000,000.00
Dow Chemical Co.	Note	1-15-90	4 1/2	4.50	240,000.00
General Cable Corp.	Note	1-1-89	4 1/2	4.50	960,000.00
General Mills, Inc.	S/F Deb.	8-1-90	4 5/8	4.625	1,500,000.00
Gould National Batteries, Inc.	Note	11-1-80	4.85	4.85	1,200,000.00
Honeywell, Inc.	Note	4-1-90	4.55	4.55	1,443,750.00
Ingersoll Rand Co.	Note	1-1-91	4 3/4	4.75	1,150,000.00
Kern County Land Co.	Prom. Note	9-1-89	4.65	4.65	912,000.00
Lone Star Cement Corporation	S/F Deb.	7-1-90	4 7/8	4.875	1,500,000.00
Mead Corp.	Note	6-1-78	6 1/8	5.67	956,000.00
Mead Johnson & Co.	Prom. Note	5-1-84	4 5/8	4.625	1,000,000.00
Pillsbury Co.	Prom. Note	12-1-88	5 1/8	4.98	874,545.62
Scovill Manufacturing Co.	Note	9-15-90	4.80	4.80	1,140,000.00
Shell Oil Co.	Note	4-15-90	4 1/2	4.50	1,450,000.00
Sinclair Oil Corp.	S/F Deb.	12-15-88	4.60	4.60	1,200,000.00
Sprague Electric Co.	S/F Deb.	9-1-88	4 3/8	4.40	1,000,000.00
Standard Oil Co. of Indiana	Prom. Note	4-1-71/79	2.90	4.67	900,000.00
Standard Oil Co. of Indiana	Prom. Note	12-1-71/	•		
	N	6-1-79	3	5.00	1,040,000.00
Standard Oil Co. of Ohio	Note	7-15-90	4.55	4.55	1,344,000.00
Sun Oil Co.	Deb.	11-15-90	4 5/8	4.69	1,500,000.00

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UNITED STATES GOVERNMENT-GUARANTEED BONDS AND CORPORATE BOND HOLDINGS - PERMANENT SCHOOL FUND December 31, 1970

ISSUE					
Company	Type of Security	Maturity Date (a)	Coupon Rate <u>%</u>	Average Yield %	Total Amount
NDUSTRIAL OBLIGATIONScontinued					
Swift & Co.	S/F Deb.	8-1-92	6.30	6.30	\$ 1,500,000.0
Texaco Inc.	Note	12-15-89	4 1/2	4.50	1,425,000.0
Union Carbide Corp.	Note	12-31-96	4 1/2	4.47	1,241,506.8
Witco Chemical Co., Inc.	Note	12-1-84	4.65	4.65	1,020,000.0
Youngstown Sheet & Tube Co.	lst Mtg.				
	S/F Bond	7–1–95	4.60	4.60	1,460,000.0
Total Industrial Obligations				4.84%	\$ 39,553,469.1
RANSPORTATION DEBT OBLIGATIONS					
Atchison, Topeka & Santa Fe					
Railway Co.	Gen. Gold				
	4's	10-1-95	4	4.40	\$ 1,500,000.0
The Greyhound Corp.	Sr. Note	5-15-84	6	5.63	1,122,000.0
Seaboard Air Line Railroad Co.	lst Mtg.	12-1-88	4 5/8	4.65	1,000,000.00
Southern Railway Co.	lst Mtg.	6-1-88	4 5/8	4.625	984,000.00
Total Transportation Debt Obligations				4.80%	\$ 4,606,000.0
AILROAD EQUIPMENT OBLIGATIONS					
ACF Industries, Inc.	Equip. Tr.	4-15-71/80) 4.55	4.55	\$ 1,500,000.0
Chesapeake & Ohio Railway Co.	Cond. Sale	6-1-71/78	4.40	4.40	764,526.4
Chicago, Burlington & Quincy					
Railroad Co.	Cond. Sale	6-15-71/			
		12-15-80	4 7/8	4.875	967,643.0
General American Transportation Corp.	Equip. Tr.	7-15-84	4 5/8	4.59	1,422,000.0
Illinois Central Railroad Co.	Cond. Sale	2-15-83	6 7/8	6.875	1,500,000.0
Kansas City Southern Railway Co.	Cond. Sale	1-15-71/			
		7-15-73	4.35	4.35	590,675.5
Kansas City Southern Railway Co.	Cond. Sale	1-15-74/			
		7-15-78	4.45	4.45	492,229.5
Kansas City Southern Railway Co.	Cond. Sale	4-1-71/75	4 5/8	4.625	1,500,000.0
Norfolk & Western Railway Co.	Cond. Sale	12-15-71/7	9 4 1/2	4.50	1,350,000.0
North American Car Corp.	Equip. Tr.	9-1-71/73	4.55	4.55	300,000.00
North American Car Corp.	Equip. Tr.	9-1-74/78	4.65	4.65	1,000,000.00
Seaboard Air Line Railroad Co.	Equip. Tr.	4-15-71/75	6 4 1/4	4.45	1,500,000.00
Southern Pacific Co.	Equip. Tr.	4-1-71/73	4 1/4	4.45	1,500,000.00
Southern Pacific Co.		12-15-71/8		4.80	799,009.50
Western Pacific Railroad Co.	Cond. Sale	3-15-71/80	4.55	4.55	1,000,000.00
Total Railroad Equipment Obligations				4.77%	\$ 16,186,084.05
TOTAL CORPORATE OBLIGATIONS				4.74%	\$103,695,553.17
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a. Most corporate issues have substantial sinking funds and an average life far shorter than the stated maturity date. Maturity dates for Penn Tanker Company and the second issue of Farrell Lines, Inc. are estimated as they are dependent upon final determination of the delivery dates of the vessels.

UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN PROVINCIAL OBLIGATIONS AND CORPORATE BOND HOLDINGS - RETIREMENT FUNDS

December 31, 1970

ISSUE	e 				•	Public	State		Public	Highway
Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount (000)	Employees Retirement Fund (000)	Employees Retirement Fund (000)	Teachers' Retirement Fund (000)	Employees Police & Fire Fund (000)	Patrolmen's Retirement Fund (000)
U.S. GOVERNMENT-GUARANTEED OBLIGATIONS										
American President Lines	Government-Guaranteed Bond	11-1-91	4.80	4.80	\$ 100	-	-	•	\$ 100	-
Delta Steamship Lines, Inc.	Government-Guaranteed Bond	3-1-86	5 1/2	5.50	631	ş 631	-	-	-	-
Grace Line Inc.	Government-Guaranteed Bond	12-1-87	4.20	4.20	1,004	913	-	-	91	-
Grace Line Inc.	Government-Guaranteed Bond	2-1-92	5.10	5.10	850	750	-	-	100	-
Gulf & South American	Government-Guaranteed Bond	12-31-88	4 1/4	4.25	382	382	-	•	-	•
Gulf & South American	Government-Guaranteed Bond	12-31-88	4.20	4.20	383	305	-	-	78	=
Moore-McCormack Lines, Inc.	Government-Guaranteed Bond	7-1-83	4.20	4.20	933	849	-	•	84	-
Moore-McCormack Lines, Inc.	Government-Guaranteed Bond	4-1-87	5 3/4	5.75	2,217	693	ş 555	ş 693	138	\$ 138
United States Lines	Government-Guaranteed Bond	10-1-87	5	5.00	88	• .	-	-	88	-
United States Lines	Government-Guaranteed Bond	11-1-86	4 3/8	4.375	89	•	-	•	89	
Total United States Government-Guaranteed (Obligations			4.98%	\$ 6,677	\$ 4,523	\$ 555	\$ 693	\$ 768	\$ 138
	-								• .	
CANADIAN PROVINCIAL OBLIGATIONS The New Brunswick Electric Power Commission	S/F Debenture	11-15-91	6	6.16	\$ 1,400	\$ 500	ş 400	\$ 500	-	-
New Brunswick Higher Education Commission	S/F Debenture	4-15-93	7	7.15	1,000	•	300	500	\$ 200	-
Province of Manitoba	Debenture	11-1-93	6 7/8	6.90	2,000	800	-	1,200	-	-
Province of Nova Scotia	S/F Debenture	8-1-93	7 1/4	7.20	2,900	800	700	1,000	250	\$
Province of Ontario	Debenture	4-15-97	5 5/8	5.625	1,100	-	400	600	100	-
Province of Ontario	Debenture	12-1-97	6 7/8	6.96	1,300	700	200	400	.	
Total Canadian Provincial Obligations				6.77%	\$ 9,700	\$ 2,800	\$ 2,000	\$ 4,200	\$ 550	\$ 150
CORPORATE BONDS									~	
PUBLIC UTILITY OBLIGATIONS ELECTRIC										
Alabama Power Co.	First Mortgage	4-1-90	5	5.01	ş 426	Ş 122	\$	\$	-	-
Alabama Power Co.	First Mortgage	3-1-91	4 1/2	4.40	800	350	300	150	-	•
Arizona Public Service Co.	First Mortgage	9-1-97	6 1/4	6.25	1,200	-	500	700	-	•
Atlantic City Electric Co.	First Mortgage	3-1-91	4 1/2	4.37	600	-	•	600	-	-
California Electric Power Co.	First Mortgage	5-1-90	5 1/8	5.10	1,240	400	300	500	-	\$ 40
Carolina Power & Light Co.	First Mortgage	4-1-90	4 7/8	4.85	350	350	-	. •	-	-
Central Illinois Light Co.	First Mortgage	3-1-90	4 7/8	4.90	1,000	250	250	500	•	-
Central Maine Power Co.	First Mortgage	11-1-90	5 1/4	5.10	684	-	294	293	\$58	39
Citizens Utilities Co.	Coll. Trust & First Mortgage	10-1-92	4 5/8	4.625	600	-	-	600	-	-
Commonwealth Edison Co.	First Mortgage	11-1-96	5 3/4	5.75	1,900	650	500	650	100	-
Consolidated Edison Co.	First & Refunding Mortgage	12-1-93	4 5/8	4.54	100	•	-	-	100	-
Consolidated Edison Co.	First & Refunding Mortgage	10-15-94	4.60	6.45	1,100	-	-	1,100	-	-
Consolidated Edison Co.	Equipment Trust	1-1-96	9 1/4	9.25	3,500	1,500		1,750	250	

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UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN PROVINCIAL OBLIGATIONS AND CORPORATE BOND HOLDINGS - RETIREMENT FUNDS - Decem

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	ISSUE									
Company	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield	Total Amount (000)	Public Employees Retirement Fund (000)	State Employees Retirement Fund (000)	Teachers' Retirement Fund (000)	Public Employees Police & Fire Fund (000)	Highway Patrolmen's Retirement Fund (000)
PUBLIC UTILITY OBLIGATIONS (Continued)										
Dayton Power & Light Co.	First Mortgage	6-1-93	4.45	4.45	\$ 1 ,50 0	\$	ş 400	\$ 600	•	-
Georgia Power Co.	First Mortgage	11-1-90	4 7/8	4.88	800	500	200	-	ş 60	\$ 40
Indiana & Michigan Electric Co.	First Mortgage	8-1-93	4 3/8	4.42	1,600	600	400	600	-	•
Interstate Power Co.	First Mortgage	5-1-93	4 3/8	4.39	1,000	-	400	500	50	50
Iowa-Illinois Gas & Electric Co.	First Mortgage	4-15-90	5	4.93	487	-	-	487	-	•
Jersey Central Power & Light Co.	Debenture	10-1-88	4 5/8	4.56	72	-	-	-	72	-
Long Island Lighting Co.	First Mortgage	6-1-95	4.55	4.55	400	-	400	-	-	-
Louisiana Power & Light Co.	First Mortgage	4-1-90	5	5.01	1,050	350	200	500	-	-
Metropolitan Edison Co.	First Mortgage	5-1-90	5	4.95	1,050	350	200	500	•	-
Montana-Dakota Utilities Co.	S/F Bond	7-1-84	4 5/8	4.605	48	-	•	-	48	-
Orange & Rockland Utilities Inc.	First Mortgage	4-15-91	4 7/8	4.80	1,400	500	350	550	-	-
Otter Tail Power Co.	First Mortgage	2-1-91	4 7/8	4.80	825	482	293	-	50	-
Otter Tail Power Co.	First Mortgage	11-1-93	4 5/8	4.625	25	-	-	-	25	-
Pacific Power & Light Co.	First Mortgage	4-1-92	4 3/4	4.69	460	-	-	400	60	-
Public Service Co. of New Hampshire	First Mortgage	7-1-92	4 5/8	4.54	650	300	350	•	•	· –
Public Service Electric & Gas Co.	First & Refunding Mortgage	9-1-90	4 3/4	4.73	560	-	-	500	60	-
Puget Sound Power & Light Co.	First Mortgage	2-1-91	4 5/8	4.65	500	250	250	-	-	-
Puget Sound Power & Light Co.	First Mortgage	11-1-93	4 5/8	4.60	1,200	350	250	600	-	-
Rochester Gas & Electric	First Mortgage	7-1-98	6.70	6.70	2,000	800	•	1,000	150	50
Sierra Pacific Power Co.	First Mortgage	6-1-92	4 7/8	4.75	930	400	-	430	50	50
Southern California Edison Co.	First & Refunding Mortgage	9-1-85	4 3/8	4.375	500	-		500	-	-
Southern California Edison Co.	First & Refunding Mortgage	4-1-86	4 1/2	4.42	550	1 50	250	1 50	-	
Southwestern Public Service Co.	First Mortgage	2-1-94	4 1/2	4.50	700	**	-	700	-	-
Tucson Gas & Electric Co.	First Mortgage	2=1-96	4 7/8	4.875	1,600	600	400	600	-	-
Total Electric Utility Obligations	TILSE MOLEGAGE	2-2-50	4 170	5.47%	\$ 33,407	\$ 9,754	\$ 6,574	\$ 15,677	\$ 1,133	\$ 269
GAS										
Arkansas Louisiana Gas Co.	First Mortgage	4-1-83	4 3/8	4.45	\$ 1,400	\$ 500	ş 400	ş 500	-	•
Arkansas Louisiana Gas Co.	First Mortgage	3-1-85	4 1/2	4.55	1,451	544	363	544	-	-
Columbia Gas System, Inc.	Debenture	1-1-88	4 3/8	4.375	1,200	600	-	600	-	-
Gas Service Co.	First Mortgage	5-1-83	4.40	4.40	1,118	387	344	387	•	-
Laclede Gas Co.	First Mortgage	7-1-85	4 7/8	4.80	468	233	189	•	ş 46	-
Louisiana Gas Service Co.	First Mortgage	6-1-87	4 1/2	4.70	1,550	500	500	400	100	ş 50
Michigan Consolidated Gas Co.	First Mortgage	6-1-89	4 3/4	4.60	1,175	-	400	700	. 75	-
Michigan-Wisconsin Pipe Line Co.	First Mortgage	7-15-83	4 7/8	4.70	1,458	495	395	495	73	-
Milwaukee Gas Light Co.	First Mortgage	5-15-87	4 5/8	4.50	5 39	-	-	48 9	-	50
Natural Gas Pipeline Co. of America	First Mortgage	10-1-80	5	5.00	872	436	218	218	*	-
Natural Gas Pipeline Co. of America	First Mortgage	9-1-86	6 1/4	6.34	500	-	300	-	100	100
Northern Natural Gas Co.	Debenture	11-1-81	4 7/8	4.80	975	475	•	477	-	23
Northwest Natural Gas Co.	First Mortgage	1-1-89	4 3/4	4.72	1,600	600	400	600	-	-
The Peoples Gas Light & Coke Co.	First & Refunding Mortgage	7-15-91	5 3/8	5.375	368	-	368	-	-	-
Southern Counties Gas Co. of California	First Mortgage	8-1-85	4 3/4	4.60	1,165	397	240	492	36	-
Southern Natural Gas Co.	First Mortgage	12-1-81	4 3/4	4.75	1,020	388	316	316	-	-
Southern Union Gas Co.	First Mortgage	10-1-86	4.80	4.80	600	-	-	600	-	-
Springfield Gas Light Co.	Note	1=15-87	4 7/8	4.875	744	465	279	•	-	-
Texas Eastern Transmission Corp.	First Mortgage	12-1-81	4 7/8	4.915	1,225	377	377	471	-	-
Transcontinental Gas Pipe Line Corp.	First Mortgage	11-1-81	5	5.08	1,437	502	413	522	-	-
Transcontinental Gas Pipe Line Corp.	First Mortgage	11-1-82	4.7/8	4.82	716	287	281	•	54	94
Trunkline Gas Co.	First Mortgage	1-1-82	5	5.00	1,116	372	372	372	-	-
Washington Gas Light Co.	First Mortgage	3-1-91	5.20	5.20	400		400	 	-	-
Total Gas Utility Obligations		<u> </u>		4.77%	\$ 23,097	\$ 7,558	\$ 6,555	\$ 8,183	\$ 484	\$ 317

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Schedule VIII (Page 2) UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN PROVINCIAL OBLIGATIONS AND CORPORATE BOND HOLDINGS - RETIREMENT FUNDS - December 31, 1970

	ISSUE						•	(Page 3)		
Company .	Type of Security	Maturity Date (a)	Coupon Rate %	Average Yield %	Total Amount (000)	Public Employees Retirement Fund (000)	State Employees Retirement Fund (000)	Teachers' Retirement Fund (000)	Public Employees Police & Fire Fund (000)	Highway Patrolmen's Retirement Fund (000)
PUBLIC UTILITY OBLIGATIONS (Continued) TELEPHONE										
American Telephone & Telegraph Co. The Bell Telephone Co. of Canada The Bell Telephone Co. of Canada	Debenture First Mortgage First Mortgage	10-1-96 9-1-95 9-17-98	4 3/8 4.85 6.90	4.30 4.85 6.90	\$ 1,600 500 2,000	\$ 500 - 800	\$ 400 700	\$ 600 500 500	\$ 100 - -	- -
General Telephone Co. of Florida	First Mortgage	5-1-93	4 1/2	4.50	500	-	400	500	-	-
General Telephone Co. of Illinois General Telephone Co. of Indiana	First Mortgage First Mortgage	9-1-95 8-1-95	4 7/8 4.70	4.875 4.70	900 900	-	400	500 500	-	-
General Telephone Co. of the Northwest, Inc.	First Mortgage	6-1-99	7 1/8	7.125	2,550	700	600	1,000	1 50	ş 100
Illinois Bell Telephone Co.	First Mortgage	7-1-97	4 7/8	4.75	500	250	200	-	50	-
New York Telephone Co.	Refunding Mortgage	1-1-2004	4 5/8	4.53	1,400	700	-	700	-	-
Pacific Northwest Bell Telephone Co. Rochester Telephone Corp.	Debenture First Mortgage	12-1-2000	4 1/2 4 3/4	4.49 4.65	1,000 500	600 ·	400	-	-	•
United Telephone Co. of Ohio	First Mortgage	9-1-93 7-1-98	4 3/4 6 7/8	4.05 6.875	2,450	784	- 686	980	-	-
The United Telephone Co. of Pennsylvania	First Mortgage	11-1-98	6 5/8	6.625	1,225	,04	-	1,225	•	-
Total Telephone Utility Obligations	· · · · · · · · · · · · · · · · · · ·		0 570	5.78%	\$ 16,025	\$ 4,334	\$ 3,786	\$ 7,505	Ş 300	\$ 100
WATER										
Indianapolis Water Co.	First Mortgage	1-1-92	4 3/4	4.70	\$ 1,000	ş 400	ş 300	\$ <u>300</u>	-	•
Indianapolis Water Co.	First Mortgage	8-1 - 97	5 7/8	5.875	600		\$ 300	600		*
Total Water Utility Obligations				5.14%	\$ 1,600	<u>\$ 400</u>	and the second se	<u>\$ 900</u>	<u> </u>	
Total Public Utility Obligations				5.31%	\$ 74,129	\$ 22,046	\$ 17,215	\$ 32,265	\$ 1,917	\$ 686
FINANCE OBLIGATIONS										
American Investment Co.	Note	1-1-91	5 1/4	5.25	\$ 1,150	ş -	ş 4 50	\$ 600	ş 100	-
American Investment Co.	Senior Note	11-1-86	6 3/4	6.75	1,500	500	400	500	100	•
Beneficial Finance Co.	Note	3-1-89	4.60	4.60	1,400	500	400	500	-	-
CIT Financial Corp.	Debenture	10-1-86	6 3/8	6.42	1,850	-	600	1,000	100	\$ 150
Household Finance Corp.	Debenture	9-15-93	4 7/8	4.91	1,000	-	450	550	-	-
Household Finance Corp. John Deere Credit Co.	Debenture Debenture	1-1-90 10-31-90	7 1/4 5	7.30	1,750	900	255 450	450 600	145	•
Total Finance Obligations	Debenture	10-31-90	5	<u>5.00</u> 5.92%	$\frac{1,050}{$9,700}$	\$ 1,900	\$ 3,005	\$ 4,200	\$ 445	\$ 150
· · · · · · · · · · · · · · · · · · ·										
INDUSTRIAL OBLIGATIONS Abbott Laboratories	S/F Debenture	1-15-93	6 1/4	6.29	\$ 1,135	- .	-	\$ 1,000	\$ 135	-
Aluminum Co. of America	Promissory Note	3-31-88	4 3/8	4.375	1,317	ş 440	\$ 3 52	525	•	-
Aluminum Co. of Canada, Ltd.	S/F Debenture	3-1-95	9 1/2	9.37	4,300 _b	1,400	1,000	1,500 _b	250	\$ 150
American Greetings Corp.	Promissory Note	10-1-84	4.70	7.40	438	-	-	438	-	-
American Metal Climax, Inc.	Note	8-1-88	4 1/2	6.43	2,025	1,215	- c	810	•	÷
American Sterilizer Co.	Note	8-1-77	4 7/8	4.875	429	200 [°]	229 ^c	-	-	-
Archer-Daniels-Midland Co. Ashland Oil & Refining Co.	Promissory Note S/F Debenture	3-1-88 2-15-88	4 3/8 4.35	5.13 4.35	2,300 900	598 500	41 4 400	1,150	138	•
Beckman Instruments, Inc.	Promissory Note	10-1-86	4.35	5.625	1,600	600	400	600	-	-
The Bendix Corp.	S/F Debenture	12-1-92	6 5/8	6.625	2,400	700	600	1,000	100	-
Burlington Industries, Inc.	S/F Debenture	7-15-90	4 3/4	4.80	1,040	-	400	500	100	.40
Burroughs Corp.	Debenture	7-1-88	4 1/2	4.53	500	-	-	500	•	•
Central Soya Co., Inc.	S/F Debenture	1-1-93	6 3/8	6.456	1,950	800	-	1,000	150	-
CIBA Corp.	Note	9-15-86	5.85	6.77	3,100	1,300	400	1,200	200	-
Cities Service Co.	Debenture	11-1-97	6 1/8	6.45	1,600	-	600	1,000	-	• <
Continental Oil Co.	Note	12-1-89	5 7/8	5.875	1,600	600	400	600	-	-
Cummins Engine Co. Diebold Inc.	Note	7-15-90	4.60	5 .33 4.80	1,500 471 ^d	500	-	1,000 471 ^d		•
Dow Chemical Co.	Note	9-15-85 1-15-90	4.80 4 1/2	4.80	768	-	-	672	- 96	-
		1 = 1] = 70	9 1/L		/00	-	-	072	70	-
						550	400	5.50	-	-
Dow Chemical Co. Ekco Products Co.	Note S/F Debenture	4-1-91 8-1-87	5 4.60	5.125 4.60	1,500	550 350	400 -	550 600	- 50	-

Schedule VIII (Page 3)

ISSUE

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	ISSUE									
Company	Type of Security	Maturity <u>Date (a)</u>	Coupon Rate %	Average Yield 2	Total Amount (000)	Public Employees Retirement Fund (000)	State Employees Retirement Fund (000)	Teachers' Retirement Fund (000)	Public Employees Police & Fire Fund (000)	Highway Patrolmen's Retirement Fund (000)
INDUSTRIAL OBLIGATIONS (Continued)									·	
Ford Motor Co.	Note	12-1-86	5 3/4	5.75	\$ 1 ,700	\$ 600	\$ 500	\$ 600	-	-
Goodrich-Gulf Chemicals, Inc.	Note	11-15-92	6 1/2	6.50	2,000	500	500	1,000	-	-
Gould, Inc.	S/F Debenture	2-15-95	9 1/4	9.25	1,340	1,340	-	-	-	-
Gould National Batteries, Inc.	Note	11-1-80	4.85	4.85	900	•	400	500		•
Gulf Oil Corporation	Debenture	6-15-93	6 5/8	6.625	2,840	800	690	1,000	\$ 200	\$
Halliburton Co.	Note	6-1-86	5.30	5.96	2,800	1,350	600	700	150	•
Hammond Corp.	Senior Note	1-15-90	8 3/4	8.75	200	•	554 ^f	, . f	200	-
Honeywell, Inc.	Note	4-1-90	4.55	7.16	1,035 ^r	-		481	-	-
International Milling Co.	Note	3-1-88	4 1/2	4.50	932	466	-	466	•	-
The Kroger Co.	Note	10-1-81	4.80	5.11	1,125	375	300	450	-	-
Marathon Oil Co.	S/F Debenture	2-1-2000	8 1/2	8.52	2,700	1,300	1,000	-	250	1 50
Mead Corp.	Note Description Notes	6-1-78	6 1/8	5.44	752	-	344	408	-	-
Mead Johnson & Co.	Promissory Note	5-1-84	4 5/8	4.625	584	-	440	500 500	42	42
Montgomery Ward & Co., Inc.	S/F Debenture Note	8-1-90 2-1-91	4 7/8	5.75	940	- 850	440	600	- 100	-
Owens-Illinois, Inc.	Note	-	5 6 1/4	5.38	1,950	550	400	600	100	100
Phillips Petroleum Co.		12-15-86	-	6.25	1,750 525 ⁸	220		525 ⁸	-	100
Pillsbury Co. Shamrock Oil & Gas Corp.	Promissory Note	12-1-88	5 1/8 4 1/2	4.98 4.50		425	- 340	425 ₁	85	-
Shell Oil Co.	Promissory Note Note	11-15-87 4-15-90	4 1/2	6.36	1,275 967 ^h	425	-	967 ^h	65	•
Shell Canada Ltd.	Debenture	1-1-94	7 1/2	7.50	1,200	-	-	1,200	-	-
Sinclair Oil Corp.	S/F Debenture	12-15-88	4.60	5.33	1,775	600	400	775	-	-
The Singer Co.	Note	8-1-86	5 5/8	5.90	2,100	600	400	1,100	-	-
Sprague Electric Co.	S/F Debenture	9-1-88	4 3/8	4.40	550	-	-	550	-	-
Standard Oil Co. (California)	Note	12-1-92	6	6.12	1,350	-	200	1,000	1 50	-
Standard Oil Co. (Indiana)	Promissory Note	4-1-71/79	2,90	4.67	600	-	270	330	150	-
Standard Oil Co. (Indiana)	Promissory Note	12-1-71/ 6-1-79	3	5.00	580	580	-	-	•	
Standard Oil Co. (Indiana)	Debenture	1-15-98	6	6.07	1,850	400	400	1,000	-	50
Standard Oil Co. (New Jersey)	Debenture	11-1-97	6	6.00	1,000	-		1,000	-	·
Standard Oil Co. (New Jersey)	Debenture	7-15-98	6 1/2	6.50	350	-	-	-	200	1 50
Standard Oil Co. (Ohio)	Note	7-15-90	4.55	4,55	384	-	-	384	-	
Standard Oil Co. (Ohio)	Debenture	1-1-2000	8 1/2	8,52	2,700	1,300	1,000	•	250	1 50
Sun Oil Co.	Note	7-1-91	5 3/4	5.75	400	-	400	•	-	-
Swift & Co.	S/F Debenture	8-1-92	6.30	6.30	1,150	-	500	550	-	100
Swift & Co.	Debenture	6-1-86	4 7/8	5.78	1,883	420	336	917	210	-
Uarco, Inc.	Note	5-1-88	6 1/2	6.50	1,600,	600,	-	1,000		•
Union Oil Co. of California	Note	12-1-88	6 1/2	6.50	1,942 ¹	758 ¹	-	947 ¹	142 ⁱ	95 ¹
United States Steel Corp.	S/F Debenture	4-15-86	4 1/2	4.55	500	-	•	500	-	•
Worthington Corp.	Note	7-1-81	5	5.00	888	296	220	37,2	-	. •
Youngstown Sheet & Tube Co.	First Mortgage	7-1-95	4.60	5.62	3,028	681	487	1,651	209	-
Total Industrial Obligations				6.23%	\$ 85,968	\$ 25,161	\$ 16,936	\$ 39,154	\$ 3,540	\$ 1,177
TRANSPORTATION DEBT OBLIGATIONS										
Atchison, Topeka & Santa Fe Railway Co.	General Gold 4's	10-1-95	4	4.40	\$ 500	-	-	ş 500	-	-
Atlantic Coast Line Railroad Co.	First Mortgage	10-1-88	4 3/4	4.75	1,397	\$	\$	480	-	ş 49
Louisville & Nashville Railroad Co.	Coll. Trust	12-1-87	4 7/8	4.95	1,500	500	400	450	\$	100
Southern Railway Co.	First Mortgage	6-1-88	4 5/8	4.625	1,602	587	393	573	49	-
Western Maryland Railway Co.	First Mortgage	10-1-89	4.85	4.85	1,488	480	384	480	72	72
Miscellaneous Railroad Bonds	Bond	Various	Various	4.31	42		42*		<u> </u>	<u> </u>
Total Transportation Debt Obligations	· · · · · ·			4.76%	\$ 6,529	\$ 2,048	\$ 1,606	\$ 2,483	\$ 171	\$ 221
RAILROAD EQUIPMENT OBLIGATIONS										
ACF Industries, Inc.	Equipment Trust	11-1-71/75	4 3/4	4.75	\$	ş 25 0	Ş 175	\$ 250	-	-
ACF Industries, Inc.	Equipment Trust	1-15-71/77	4 7/8	4.875	588	238	238	-	\$ 112	-
ACF Industries, Inc.	Equipment Trust	4-15-71/81	5 5/8	5.625	587	235	220	-	132	-
ACF Industries, Inc.	Equipment Trust	5-15-84	7 5/8	7.625	1,430	230	200	1,000	-	-
ACR Industrias Inc	Equipment Trust	4-1-85	9 1/2	9.50	3,975	1,350	900	1,500	225	_
ACF Industries, Inc. Burlington Northern, Inc.	Conditional Sale	10-1-73/87	9 5/8	9.625	3,000	1,500	300	1,500	225	-

Schedule VIII (Page 4)

UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN PROVINCIAL OBLIGATIONS AND CORPORATE BOND HOLDINGS - RETIREMENT FUNDS - Decemb

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Сощралу	ISSUE Type of Security	Maturity Date (a)	Coupon Rate Z	Average Yield %	Total Amount (000)	Public Employees Retirement Fund (000)	State Employees Retirement Fund (000)	Teachers' Retirement Fund (000)	Public Employees Police & Fire Fund (000)	Highway Patrolmen Retiremen Fund (000)
AILROAD EQUIPMENT OBLIGATIONS (Continued)	Type of Security	Date (d)			<u></u>				• <u>••••</u> ••	
Chesapeake & Ohio Railway Co.	Conditional Sale	11-1-71/78	4.55	4.55	ş 1,009 ^j	ş 373, ^j	ş 263, ^j	ş 373, ¹	•	-
Chesapeake & Ohio Railway Co.	Conditional Sale	2=15-83	6 7/8	6.875	1,696 ^k	499 ^k	499 ^k	698 ^k	• .	
Chicago, Milwaukee, St. Paul & Pacific	Conditional Sale	1-15-82	6 3/8	6.375	793 ¹	2261	227 ¹	227 ¹	\$ 68 ¹	\$ 45 ¹
Railroad Co.	condicional dale	1-15-02	0 5/0	0.575	.,,,				•	•
Chicago, Milwaukee, St. Paul & Pacific	Conditional Sale	12-1-71/	5 3/8	5.375	1,155 ^m	349 ^m	291 ^m	340 ^m	175 ^m	-
Railroad Co.	condicional sale	6-1-81	5 570	3.373	-,	•••		•		
	Conditional Sale	1-1-71/77	5 3/8	5.375	842 ⁿ	303 ⁿ	243 ⁿ	296 ⁿ	-	•
Chicago, Milwaukee, St. Paul & Pacific	condicional sale	1-1-/1///	5 570	5.575	042	545	2-72	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Railroad Co.	Conditional Sale	3-1-71/	10 1/2	10.50	1,424	1,185	-	-	239	-
Delaware & Hudson Railway Co.	conditional sale	9-1-85	10 172	10.50	1,424	1,105	-	-		
(General Electric Credit Corp.)	Faulament Truck	5-1-71/77	4.70	4.70	350	175	-	175	-	-
Fruit Growers Express Co.	Equipment Trust			4.75	835	250	250	250	50	35
Fruit Growers Express Co.	Equipment Trust	12-15-71/75				300	250	300	100	50
Fruit Growers Express Co.	Equipment Trust	11-15-72/81		6.00	1,000		600	1,000	100	1 50
Illinois Central Railroad Co.	Conditional Sale	2-15-83	6 7/8	6.875	2,450	700	293	316	-	150
Kansas City Southern Railway Co.	Conditional Sale	12-15-71/	4 1/2	4.50	925	316 ⁰	293	310	-	-
		6-15-76		a			- (0	1 1 00	1/0	
Louisville & Nashville Railroad Co.	Conditional Sale	1-15-86	6 7/8	6.875	2,520	700	560	1,120	140	-
New York Central Railroad Co.	Equipment Trust	6-1-73	4 7/8	5.15	50	-	•	•		50
Norfolk & Western Railway Co.	Conditional Sale	12-15-71/79		4.50	7 20	-	•	630	90	-
Norfolk & Western Railway Co.	Conditional Sale	6-1-72/81	5 1/2	5.50	1,000	300	300	300	100	-
Norfolk & Western Railway Co.	Conditional Sale	8-1-72/83	7 1/4	7.25	2,400	720	600	1,080	•	-
North American Car Corp.	Equipment Trust	4-15-71/ 10-15-72	4.40	4.40	240	80	68	80	12	-
North American Car Corp.	Equipment Trust	4-15-73/ 10-15-77	4 1/2	4.50	1,200	400	340	400	60	-
St. Louis-San Francisco Railway Co.	Conditional Sale	7-1-71/	4 3/4	4.75	843	312	220	311	-	-
		1-2-77			n	n	_		•	
St. Louis-San Francisco Railway Co.	Conditional Sale	12-1-71/	4 1/4	4.50	40 ^P	13 ^p	12 ^p	· 15P	-	
		6-1-72								
St. Louis-San Francisco Railway Co.	Conditional Sale	1-1-72/83	6 3/4	6.75	1,320	• •	480	720	1 20	-
St. Louis-San Francisco Railway Co.	Conditional Sale	12-15-83	7 1/4	7.25	1,300 ^q	693 ^q	-	607 ⁹	•	
Southern Pacific Co.	Equipment Trust	2-1-71/73	4 1/4	4.50	985_	450		500_	35	•
Southern Pacific Co.	Conditional Sale	12-15-71/80	4.80	4.80	599 ^r	•	300 ^r	299 ^r	•	-
Southern Pacific Co.	Conditional Sale	3-1-71/84	7 5/8	7.625	2,380	700	560	980	140	•
Western Fruit Express Co.	Equipment Trust	1-1-71/ 7-1-75	4.85	4.85	650	1 50	100	400	-	-
Western Fruit Express Co.	Equipment Trust	9-1-71/80	4.70	4.70	1,650	600	600	450	•	
Total Railroad Equipment Obligations	aquapment arost			6.78%	\$ 40,631	\$ 13,597	\$ 8,789	\$ 16,117	\$ 1,798	\$ 330
						A (1 700	0 /7 cc1	0.04.010	۵ 7 0 71	
TOTAL CORPORATE OBLIGATIONS				5.96%	<u> \$216,957</u>	<u>\$ 64,752</u>	<u>\$ 47,551</u>	<u>\$ 94,219</u>	<u>\$ 7,871</u>	<u>\$ 2,564</u>
TOTAL UNITED STATES GOVERNMENT-GUARANTEED, C	ANADIAN PROVINCIAL AND	CORPORATE OBLICA	TIONS	5.97%	\$ 233,3 34	\$ 72,075	\$ 50,106	\$ 99,112	\$ 9,189	\$ 2,852

(See page 6 for footnotes)

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FOOTNOTES FOR SCHEDULE VIII

UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN PROVINCIAL OBLIGATIONS AND CORPORATE BOND HOLDINGS - RETIREMENT FUNDS December 31, 1970

a. Most corporate issues have substantial sinking funds and an average life far shorter than the stated maturity date.

b.	Rounded to nearest thousand; actual holdings are as follows: Teachers' Retirement Fund Total	\$ 437,500.00 \$ 437,500.00
c.	Rounded to nearest thousand; actual holdings are as follows: Public Employees Retirement Fund State Employees Retirement Fund Total	\$ 200,000.00 228,571.43 \$ 428,571.43
d.	Rounded to nearest thousand; actual holdings are as follows: Teachers' Retirement Fund Total	\$ 470,833.33 \$ 470,833.33
e.	Rounded to nearest thousand; actual holdings are as follows: Teachers' Retirement Fund Public Employees Retirement Fund State Employees Retirement Fund Public Employees Police & Fire Fund Total	\$1,040,000.00 617,500.00 260,000.00 32,500.00 \$1,950,000.00
f.	Rounded to nearest thousand; actual holdings are as follows: Teachers' Retirement Fund State Employees Retirement Fund Total	\$ 481,250.00 553,437.50 \$1,034,687.50
g.	Rounded to nearest thousand; actual holdings are as follows: Teachers' Retirement Fund Total	\$ 524,727.38 \$ 524,727.38
h.	Rounded to nearest thousand; actual holdings are as follows: Teachers' Retirement Fund Total	\$ 966,667.00 \$ 966,667.00
1.	Rounded to nearest thousand; actual holdings are as follows: Teachers' Retirement Fund Public Employees Retirement Fund Public Employees Police & Fire Fund Highway Patrolmen's Retirement Fund Total	\$ 947,414.64 757,931.70 142,112.20 94,791.46 \$1,942,250.00
j.	Rounded to nearest thousand; actual holdings are as follows: Teachers' Retirement Fund Public Employees Retirement Fund State Employees Retirement Fund Total	\$ 373,333.35 373,333.31 262,943.76 \$1,009,610.42

FOOTNOTES FOR SCHEDULE VIII

Schedule VIII (Page 7)

UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN PROVINCIAL OBLIGATIONS AND CORPORATE BOND HOLDINGS - RETIREMENT FUNDS December 31, 1970 Rounded to nearest thousand; actual holdings are as follows: k. Teachers' Retirement Fund \$ 698,424.27 Public Employees Retirement Fund 498,874.48 State Employees Retirement Fund 498,874.48 Total \$1,696,173.23 1. Rounded to nearest thousand; actual holdings are as follows: Teachers' Retirement Fund \$ 226,590.67 Public Employees Retirement Fund 226,590.67 State Employees Retirement Fund 226,590.67 Public Employees Police & Fire Fund 67,977.14 Highway Patrolmen's Retirement Fund 45,318.09 Total 793,067.24 m. Rounded to nearest thousand; actual holdings are as follows: Teachers' Retirement Fund \$ 339,787.98 Public Employees Retirement Fund 349,246.41 State Employees Retirement Fund 291,038.54 Public Employees Police & Fire Fund 174,622.83 Total \$1,154,695.76 n. Rounded to nearest thousand; actual holdings are as follows: Teachers' Retirement Fund 296,363.30 Public Employees Retirement Fund 303,345.89 State Employees Retirement Fund 242,676.74 Total. \$ 842,385.93 Rounded to nearest thousand; actual holdings are as follows: 0. Teachers' Retirement Fund 315,874.48 \$ Public Employees Retirement Fund 315,874.48 State Employees Retirement Fund 293,061.35 Total 924,810.31 Rounded to nearest thousand; actual holdings are as follows: p. Teachers' Retirement Fund \$ 15,392.33 Public Employees Retirement Fund 12,339.83 State Employees Retirement Fund 12,339.84 40,072.00 Total Rounded to nearest thousand; actual holdings are as follows: q. Teachers' Retirement Fund \$ 606,666.66 Public Employees Retirement Fund 693,333.34 Total \$1,300,000.00 r. Rounded to nearest thousand; actual holdings are as follows: Teachers' Retirement Fund 299,628.60 State Employees Retirement Fund 299,628.60 Total 599,257.20

*Purchased 1930-1951

UNITED STATES GOVERNMENT-GUARANTEED BONDS, CANADIAN PROVINCIAL OBLIGATIONS AND CORPORATE BOND HOLDINGS PERMANENT SCHOOL FUND AND BASIC RETIREMENT FUNDS December 31, 1970

		UNITED STATES GOVERNMENT-GUARANTEED BONDS		
PERMANENT SCHOOL FUND			BASIC RETIREME	NT FUNDS
Dollar Amount (000) \$ 75,304	<u>%</u> 42.07%		Dollar Amount (000) \$ 6,677	<u> </u>
		CANADIAN PROVINCIAL OBLIGATIONS		
PERMANENT SCHOOL	_ FUND		BASIC RETIREME	NT FUNDS
Dollar Amount (000) -	<u> % </u>		Dollar Amount (000) \$ 9,700	<u></u> 4.16%
		CORPORATE BOND HOLDINGS		
PERMANENT SCHOOL	FUND		BASIC RETIREME	NT FUNDS
Dollar Amount (000)	<u> </u>	CLASSIFICATION BY CORPORATE TYPE Public Utility Obligations	Dollar Amount (000)	%
\$ 20,662	11.54%	Electric	\$ 33,407	14.32%
8,648	4.83	Gas pipeline & distribution	23,097	9.90
10,400	5.81	Telephone	16,025	6.87
		Water	1,600	0.68
\$ 39,710	22.18%	TOTAL PUBLIC UTILITY OBLIGATIONS	\$ 74,129	31.77%
		Other Obligations		
\$ 3,640	2.03%	Finance	\$ 9,700	4.16%
39,553	22.10	Industrial	85,966	36.84
4,606	2.58	Transportation	6,529	2.80
16,186	9.04	Railroad Equipment	40,632	17.41
\$ 63,985	35.75%	TOTAL OTHER OBLIGATIONS	\$142,827	61.21%
\$103,695	57.93%	TOTAL CORPORATE OBLIGATIONS	\$216,956	92.98%
\$178,999	100.00%	TOTAL UNITED STATES GOVERNMENT-GUARANTEED, CANADIAN PROVINCIAL AND CORPORATE OBLIGATIONS	\$233,333	100.00%
		DISTRIBUTION BY REDEMPTION FEATURE AT TIME OF PURCHASE BONDS PURCHASED - January 1 - December 31, 1970)	
PERMANENT SCHOOL	FUND	Sound Strong Strong Policity I Seconder 51; 151	BASIC RETIREMEN	IT FUNDS
Dollar Amount (000)	%		Dollar Amount (000)	
\$ 37,801	75.75%	Noncallable	\$ 8,405	36.31%
12,100	24.25	10-year or more call or refunding protection	14,740	63.69
\$ 49,901	100.00%	TOTALS	\$ 23,145	100.00%

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COMMON STOCKS HELD IN THE PERMANENT SCHOOL FUND AND RETIREMENT FUNDS

December 31, 1970

PERMANENT SCHOOL FUND				RETIREMENT FUNDS						
Shares	Cost	Company CONSUMER-ORIENTED STOCKS	Total <u>Shares</u>	Public Employees Retirement Fund	State Employees Retirement Fund	Teachers' Retirement Fund	Public Employees Police & Fire Fund	Highway Patrolmen's Retirement Fund	Total Cost	
		Utilities		L .						
		Electric								
12255	\$ 484,163.99	American Electric Power	56452	18000	12937	25515	-	•	\$ 1,896,528.05	
11500	522,901.25	Central & South West	50000	18000	11000	18500	1200	1 300	2,198,911.51	
16000	440,612.50	Cincinnati Gas & Electric	53500	18000	10500	25000	-	. •	1,455,449.63	
13545	660,413.09	Commonwealth Edison	26514	6875	4565	14172	902	•	1,171,661.72	
10900	506,650.84	Consumers Power	37020	13900	8000	14570	550	•	1,623,046.30	
11700	829,793.69	Florida Power & Light	24500	8300	-	14700	1500	•	1,694,626.74	
12420	414,275.12	General Public Utilities	30657	9789	6760	13484	624	` -	1,006,977.21	
14500	685,636.25	Houston Lighting & Power	33000	8400	-	23100	1500	=	1,422,713.37	
14277	382,974.33	Interstate Power	29458	10407	4547	13186	1318	•	752,019.75	
9800	404,228.80	Kansas City Power & Light	31700	10700	7000	12600	1400	•	1,223,505.66	
16000	540,222.50	Louisville Gas & Electric	53000	19000	8000	26000	-	-	1,772,303.95	
17000	392,087.50	Middle South Utilities	63800	18900	1 2000	29100	2200	1600	1,481,544.79	
11500	279,054.00	Minnesota Power & Light	37300	13600	8600	15100	•	-	872,380.21	
18500	628,460.78	Northern States Power	48500	11800	6000	28500	2200	•	1,512,210.13	
11500	312,233.80	Ohio Edison	57000	19500	13500	24000	-	-	1,456,058.41	
*	*	*Otter Tail Power Company	26600	8500	7600	9000	1500	•	632,825.00	
12500	420,247.55	Pacific Gas & Electric	38100	10000		25900	2200	-	1,298,988.70	
12100	554,252.13	Public Service of Indiana	46000	18000	6500	18800	1500	1 200	2,054,532.15	
13000	463,210.48	Southern California Edison	42500	12500	9000	18000	1300	1700	1,466,425.08	
14000	403,177.50	Southern Company	74800	31700	12500	26500	2600	1 500	1,957,279.13	
10000	580,268.50	Texas Utilities	23700	6000	4000	12500	1 200	-	1,288,890.41	
1 3000	437,599.22	Virginia Electric & Power	33898	7833	6166	17499	2400	•	1,057,339.87	
4000	83,426.00	Wisconsin Public Service	15500	6500	4000	5000	-	•	317,360.66	
	\$ 10,425,889.82	Total Electric							\$ 31,613,578.43	
		Gas								
9000	\$ 364,165.72	Arkansas-Louisiana Gas	27100	. 9100	5000	12000	1000	-	\$ 1,063,787.02	
*	*	*Minneapolis Gas	8700	3200	2500	2600	400	•	331,388.00	
•	-	Northern Illinois Gas	34000	8000	5500	19000	-	1500	1,122,237.50	
448	20,655.45	Northern Illinois Gas,								
		1.90 Convertible Preference	876	227	151	469	29	-	36,645.53	
7 500	270,095.41	Panhandle Eastern Pipe Line	39148	13600	8714	15924	910	-	1,463,254.57	
9125	379,536.62	Peoples Gas	19925	7225	4000	8700	-	•	838,731.38	
	\$ 1,034,453.20	Total Gas							\$ 4,856,054.00	
		Telephone-Telegraph								
1,4100	\$ 892,422.20	American Telephone-Telegraph	35556	11710	1700	17510	4636	-	\$ 1,928,969.72	
14800	610,468.88	General Telephone & Electronics	74900	24300	9000	38000	2200	1400	2,722,140.59	
-		United Utilities	30000	10000	-	20000	-	•	774,075.00	
	\$ 1,502,891.08	Total Telephone-Telegraph		·					\$ 5,425,185.31	

\$ 12,963,234.10

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Total Utilities

\$ 41,894,817.74
COMMON STOCKS HELD IN THE PERMANENT SCHOOL FUND AND RETIREMENT FUNDS - December 31, 1970

PERMANENT SCHOOL FUND

PERMANENT SCHOOL FUND									
Shares	Cost	Company	Total <u>Shares</u>	Public Employees Retirement Fund	State Employees Retirement Fund	Teachers' Retirement Fund	Public Employees Police & Fire Fund	Highway Patrolmen's Retirement Fund	Total Cost
		Financial Services		3					
10800	\$ 452,622.54	Banks Chase Manhattan	27075	9300	5775	11100	_	900	\$ 1,136,547.81
7612	\$ 452,622.54 107,756.99	Citizens & Southern National	33998	10850	9792	13356	-		479,635.23
11735	415,855.00	Conill Corp.	29301	11759	5323	10717	1 50 2		1,031,311.00
10300	418,403.75	First Bank System	23100	5100	3400	12200	2400	-	991,822.77
6328	363,616.30	First National City Corp.	15908	3040	2928	9040	900	-	950,508.27
6460	312,760.50	J.P. Morgan	17028	6020	3588	7420	•	-	834,726.96
11528	587,862.50	National City (Cleveland)	31096	10530	6281	11282	3003	-	1,538,811.50
21000	528,534.21	Northwest Bancorporation	42400	13000	8200	16000	5200	-	1,141,024.37
11066	408,013.46	Security Pacific National	23799	5572	3268	13669	1290	•	853,445.14
13725	298,341.41	Valley National (Arizona)	56475	20702	8896	25984	-	893	1,173,305.99
13175	605,893.93	Wells Fargo	30250	9625	5900	14225	500	-	1,311,288.08
11500	433,508.69	Western Bancorporation	33300	10500	8500	1 2000	1000	1300	1,162,748.09
	\$ 4,933,162.28	Total Banks							\$ 12,605,175.21
		Finance					· • • •		
7950	\$ 390,839.88	Beneficial Finance	33150	11250	4830	15150	920	1000	\$ 1,618,773.84
10000	323,652.73	Household Finance	41700	13000	9500	19200	-	-	1,533,968.37
8500	318,546.58	Investors Diversified Services "A"	39400	12200	7000	17500	2700	•	1,683,962.57
	\$ 1,033,039.19	Total Finance							\$ 4,836,704.78
4500	\$ 274,983.89	<u>Insurance</u> Aetna Life	13300	4500	2500	5500	800	_	\$ 755,543.17
6080	143,494.63	CNA Financial	17112	4992	5000	6800	320	-	400,724.62
	143,494.03	Connecticut General	13000	7000	-	6000		-	667,339.47
6000	263,848.75	INA Corp.	16400	7600	2200	6000	600	-	653,236.40
21 200	446,220.00	Northwestern National Life	39600	7000	5600	24000	1000	2000	817,715.00
10900	426,760.00	Safeco	19500	4900	3200	11400		•	872,350.00
1 2000	391,150.00	St. Paul Companies	37550	8200	5000	21150	2200	1000	1,297,102.25
9500	390,603.29	Travelers	22900	9200	5000	8700	•	-	828,024.80
4000	102,750.00	U. S. Fidelity & Guaranty	37000	13000	5000	18000	1000	-	1,209,907.00
	\$ 2,439,810.56	Total Insurance	•••••		••••				\$ 7,501,942.71
	\$ 8,406,019.03	Total Financial Services							\$ 24,943,822.70
		Consumers Goods							
		Food-Beverage							<u>^</u> (0) 7/7 00
7000	\$ 245,841.61	Campbell Soup	22200	5900	3800	10500	2000	-	\$ 681,747.39
5000	- 159,846.75	Coca-Cola	12800	4200	•	8600	•	-	638,389.23
7600	313,038.90	General Foods	12900	2500	2900	6700	800	-	1,016,789.70 1,026,841.94
6000	174,804.06	General Mills	32500	9900	4000	18600	•	-	1,020,841.94
4500	155,899.58	Green Giant	35700	14300	9000	12400 14032	1466	1200	1,155,327.57
8000 6400	239,483.90	PepsiCo	32262 28100	9432 8700	6132 3000	14500	900	1000	1,260,574.71
0400	<u>259,249.80</u> \$ 1,548,164.60	Pillsbury Total Food-Beverage	28100	8700	3000	14300	900	1000	\$ 6,787,223.60
		Printing-Fublishing							
14445	\$ 355,817.70	Donnelley (R.R.)	48157	11776	12946	22376	1059	•	\$ 1,038,224.74
-	•	Dun & Bradstreet	17800	4400	4000	9400	-	-	686,725.55
2450	171,513.39	Harcourt, Brace & Jovanovich	14550	5550	2000	6500	500	-	1,090,184.52
ii	*	*Western Publishing	20335	7 200	4885	7725	525	~ •	523,800.00
	\$ 527,331.09	Total Printing-Publishing							\$ 3,338,934.81

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RETIREMENT FUNDS

RETIREMENT FUNDS

PERMANENT	SCHOOL FUND			RETIREMENT FUNDS					
Shares	Cost	Company	Total <u>Shares</u>	Public Employees Retirement Fund	State Employees Retirement Fund	Teachers' Retirement Fund	Public Employees Police & Fire Fund	Highway Patrolmen's Retirement Fund	Total Cost
		Retail Trade				10000			\$ 436,950.23
*	*	*Dayton Hudson	16000	6000	-	10000 21200	•	•	1,806,654.17
3400	\$ 128,293.98	Federated Department Stores	51900	21 500	9200	26500	2600	-	1,720,223.90
1 3000	386,082.26	Penney (J.C.)	45600 34700	9500 9500	7000 3600	19000	1800	800	2,071,739.86
8200	451,518.34	Sears Roebuck	29400	8000	8500	11800	1100	-	1,010,920.37
3700	<u>143,546.69</u> \$ 1,109,441.27	Super Valu Total Retail Trade	29400	8000	0,00	11000	1100	_	\$ 7,046,488.53
	· · · · · · · · · · · · · · · · · · ·	Textiles		1	5000	10(00			\$ 1,138,096.64
6900	\$ 247,401.67	Burlington Industries	29400	11000	5800	12600 7000	1100	-	1,109,074.54
4600	<u>262,938.80</u> \$ 510,340.47	J. P. Stevens Total Textiles	20100	6700	5300	7000	1100	-	\$ 2,247,171.18
		<u>Miscellaneous</u>							
•	-	Avon Products	17700	8000	1000	6000	2000	700	\$ 1,361,582.23
4307	\$ 235,610.00	Columbia Broadcasting	27790	12673	5369	8573	1175	-	1,359,188.60
5625	134,393.08	Continental Can	30150	17400	4500	7800	450	-	836,775.50
•	-	Disney (Walt) Productions	7038	3060	-	3060	510	408	816,854.3
6500	224,180.35	Gillette	20200	5000	3500	10500	1 200	-	874,280.11
-	•	Holiday Inns	22500	7000	2000	12000	•	1 500	802,912.50 1,360,260.91
5800	226,561.44	Procter & Gamble	31600	16800	4400	10400	-	-	584,424.49
4600	<u>171,094.59</u> \$ 991,839.46	Scott Paper Total Miscellaneous	17800	7 500	3000	6300	1000	-	\$ 7,996,278.65
	\$ 4,687,116.89	Total Consumers Goods							\$ 27,416,096.77
	\$ 26,056,370.02	TOTAL CONSUMER-ORIENTED STOCKS							\$ 94,254,737.21
		RESEARCH STOCKS						· .	
		Chemicals							
8000	\$ 264,831.97	American Cyanamid	23300	8400	4400	8900	1600	•	\$ 739,899.30
5940	418,483.24	Dow Chemical	24094	9032	4930	9526	•	606	1,767,467.4
2300	483,453.58	du Pont (E.I.) de Nemours	10660	3600	1 500	4400	1160	•	1,670,656.0
9000	390,826.85	Hercules Incorporated	25400	9000	5000	9000	2400	-	1,113,915.8
7724	483,238.69	Monsanto	22521	7736	4682	8757	730	616	1,222,539.2
7500	451,647.36	Union Carbide	25000	10600	5100	8900	400	-	1,263,985.14 \$ 7,778,463.1
	\$ 2,492,481.69	Total Chemicals							\$ 7,770,403.17
7 500	\$ 268,620.17	<u>Drugs</u> American Home Products	24000	5500	5000	12500	1000	-	\$ 1,147,224.9
4700	227,003.06	Merck	18050	5500	3450	8400	700	-	1,057,337.6
18900	362,619.14	Pfizer, Inc.	74500	23000	10500	33000	5500	2500	1,809,207.7
-	-	Schering-Plough	23000	5000	2000	1 5000	-	1000	1,303,495.5
4500	262,872.82	Upjohn	16500	6000	3500	7000	-	-	848,076.4
	\$ 1,121,115.19	Total Drugs							\$ 6,165,342.3
2200	\$ 217,620.99	Office Equipment Burroughs	20460	7200	2560	9900	800	-	\$ 2,191,280.5
*	*	*Control Data	18000	5000	3000	7000	3000	-	1,117,212.6
3000	203,630.74	Honeywell	13800	3200	1900	8700		-	1,005,143.7
7388	1,324,824.50	International Business Machines	21 287	6806	5136	8066	940	339	4,492,693.5
6540	501,962.10	Xerox Corporation	20520	4500	5040	9420	900	660	1,703,345.4
	\$ 2,248,038.33	Total Office Equipment		_ · ·	-				\$ 10,509,675.8
1750		Photography	2000	90.50	61.00	16350	1100	900	\$ 1,947,961.4
47 50	\$ 205,950.90 271,1/7,70	Eastman Kodak	32880	8050	6480 2680	16350			1,548,104.49
2480	<u>271,147.70</u> \$ 477,098.60	Polaroid Total Photography	15432	4493	2680	7253	1006	•	\$ 3,496,065.92
	3 4//.040.00	IDIAL FOOLOGFADOV							J J 4720400J47/

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Schedule X (Page 3)

COMMON STOCKS HELD IN THE PERMANENT SCHOOL FUND AND RETIREMENT FUNDS - December 31, 1970

PERMANENT SCHOOL FUND

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RETIREMENT FUNDS

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PERMANENT	SCHOOL FUND		RETIREMENT FUNDS				FUNDS			
Shares	Cost	Company	Total <u>Shares</u>	Public Employees Retirement Fund	State Employees Retirement Fund	Teachers [®] Retirement <u>Fund</u>	Public Employees Police & Fire Fund	Highway Patrolmen's Retirement Fund	Total Cost	
2400	\$ 549,326.35	Miscellaneous Corning Glass Works	6680	2900	1300	2480	-	-	\$ 1,601,691.58	
6500	396,057.45	Minnesota Mining & Manufacturing	21450	8000	4000	8700	750	-	1,629,555.19	
3300	141,364.70	Universal Oil Products	25300	7000	5000	8500	3300	1 500	1,014,603.47	
5500	\$ 1,086,748.50	Total Miscellaneous	23300	7000	2000	0,00	5500	1500	\$ 4,245,850.24	
	\$ 7,425,482.31	TOTAL RESEARCH STOCKS							\$ 32,195,397.43	
		NATURAL-RESOURCES STOCKS								
		Petroleum							:	
3600	\$ 136,056.70	Continental Oil	66400	28800	12000	24000	1600	-	\$ 2,297,728.47	
21600	645,397.19	Gulf Oil	65600	19000	10000	34500	2100	-	2,014,219.60	
8500	402,077.73	Louisiana Land & Exploration	43700	12200	9700	20 500	1 300	-	2,517,396.30	
15300	640,448.00	Mobil Oil	61800	20800	12800	25000	1800	1 400	2,546,609.07	
14000	556,206.28	Standard Oil (Indiana)	39800	11300	5000	20000	2200	1300	1,801,253.38	
10908	844,577.98	Standard Oil (New Jersey)	32922	10008	3508	17206	2200	•	2,210,577.82	
18000	686,839.96	Texaco	69510	19100	7440	40350	2620	-	2,580,053.07	
	\$ 3,911,603.84	TOTAL NATURAL-RESOURCES STOCKS						-	\$ 15,967,837.71	
		DURABLES STOCKS								
		Automobiles & Automobile Parts								
10385	\$ 526,945.98	Chrysler	60140	15808	10385	25800	6847	1300	\$ 2,279,390.88	
13600	698,246.01	Ford Motor Company	49600	15300	8800	19900	4400	1 200	2,425,158.19	
14200	1,210,710.12	General Motors	47830	11050	14550	18100	3230	900	3,560,322.16	
18000	433,441.79	Goodyear Tire & Rubber	83500	27500	1 5000	35000	6000	•	2,158,850.82	
· · ·	\$ 2,869,343.90	Total Automobiles & Automobile Parts						· .	\$ 10,423,722.05	
		Building & Construction			<i></i>		- (0 0			
8000	\$ 305,892.48	Carrier	42200	11000	6000	21400	2600	1200	\$ 1,601,058.05	
15800	584,068.75	Caterpillar Tractor	55000	9500	1 2000	27500	6000	•	2,133,506.52	
4000	159,603.99	Georgia Pacific	45000	17854	6782	15016	4060	1288	1,899,798.03	
8000	284,982.77	NL Industries	30000	9700	6400	13900	-	•	1,030,677.70	
6000	120,055.18	Weyerhaeuser	35000	14200	3500	14500	2300	500	1,179,459.00	
	\$ 1,454,603.17	Total Building & Construction							\$ 7,844,499.30	
-	_	Electrical & Electronic Equipment Emerson Electric	6100	5000	-	-	-	1100	\$ 329,117.78	
10100	\$ 917,382.93	General Electric	34550	13100	6800	13850	800		2,968,447.50	
2000	112,416.69	International Tel. & Tel.	23700	8500	4000	9500	1000	700	1,340,496.97	
8500	392,187.50	International Tel. & Tel. Series N Preferred	14500	4000	4000	6000	500	700	669,337.50	
8749		Sunbeam					000	-	902,312.74	
	291,400.78		27300	10050	5250	1 2000	-	•		
2500	282,861.93	Texas Instruments	15150	5400	2500	6850	400	-	1,488,269.29	
7500	447,189.00	Westinghouse Electric	28800	7300	5300	15100	1100	-	1,776,971.01	
7400	<u>313,458.46</u> \$ 2,756,897.29	Whirlpool Total Electrical & Electronic Equipment	41000	13500	8000	12600	5500	1400	<u>1,959,093.20</u> \$ 11,434,045.99	
		<u>Steel</u>								
13000	\$ 432,297.16	Armco	20000	7400	5000	7000	600	-	\$ 654,290.13	
6000	263,594.16	Inland	14200	5000	4000	5000	200	-	590,782.36	
	\$ 695,891.32	Total Steel							\$ 1,245,072.49	
		Transportation Aircraft & Aerospace								
4000	\$ 323,302.98	Boeing	21900	8400	4100	7300	800	1 200	\$ 1,293,384.87	
2300	206,104.44	Doeing United Aircraft			2600	4800		1300		
2300	\$ 529,407.42	Total Aircraft & Aerospace	10000	2600	2000	4000	-	-	<u>781,248.77</u> \$ 2,074,633.64	
	y J27,40/,46	iotal Alterate & Aerospace							₹ ∠, 074,033.04	
									•	

Schedule X (Page 4) COMMON STOCKS HELD IN THE PERMANENT SCHOOL FUND AND RETIREMENT FUNDS - December 31, 1970

PERMANENT	SCHOOL FUND			- <u></u>	·····	RETIREMENT	FUNDS		
Shares	Cost	Company	Total <u>Shares</u>	Public Employees Retirement Fund	State Employees Retirement Fund	Teachers' Retirement Fund	Public Employees Police & Fire Fund	Highway Patrolmen's Retirement Fund	Total Cost
		Airlines		7000	2000	9500			\$ 641,939.91
5800	\$ 205,657.33	American Airlines	19500	7200	3800	8500	-	1 300	1,531,606.36
7000	261,206.95	Delta Air Lines	45700	15500	8300	19100	1500	1200	1,417,673.18
11884	334,458.20	Northwest Airlines	50196	7714	7770	32142 7100	1370 1500		1,206,281.12
3200	184,866.40	UAL, Incorporated	22600	7 500	6500	/100	1300	-	
	\$ 986,188.88	Total Airlines							\$ 4,797,500.57
		Railroads							
11400	ş 609,671.88	Burlington Northern	31600	8300	5400	16000	500	1400	\$ 1,530,614.84
2450	23,552.27	Burlington Northern 5 1/2% Preferred	4350	1200	1 200	1900	50	•	42,607.87
3200	379,929.11	Norfolk & Western	12750	4300	2800	5250	400	•	1,283,395.81
9500	371,067.38	Southern Pacific	19400	6400	5000	8000	-	-	729,893.85
6000	338,508.12	Southern Railway	19000	5600	4500	7 500	1400	-	1,024,107.57
3500	139,097.60	Union Pacific Corp.	20100	5700	4300	. 8700	800	600	759,904.08
	\$ 1,861,826.36	Total Railroads						-	\$ 5,370,524.02
		Railroad Equipment							
8750	\$ 136,126.53	Trans-Union	53500	15500	12500	22250	1750	1500	<u>§ 1,281,391.36</u>
	\$ 136,126.53	Total Railroad Equipment							\$ 1,281,391.36
	\$ 3,513,549.19	Total Transportation		,					\$ 13,524,049.59
	\$ 11,290,284.87	TOTAL DURABLES STOCKS							\$ 44,471,389.42
	\$ 48,683,741.04	TOTAL COMMON STOCKS							\$186,889,361.77
	283,090.82	Less profit on stocks sold							3,593,458.16
	\$ 48,400,650.22+	Net cost							\$183,295,903.61+
	· ··· · ··· · ··· · ··· · · · · · · ·								

* These stocks have not been approved for investment in the Permanent School Fund.

+ Market valuation, as of 12-31-70, \$50,880,145.03.

<u>+</u> Market valuation, as of 12-31-70, \$195,722,290.52.

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STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Schedule XI

COMMON STOCKS HELD IN THE MINNESOTA ADJUSTABLE FIXED BENEFIT FUND

October 29, 1971

Shares	Company	Total Cost
	CONSUMER-ORIENTED STOCKS <u>Utilities</u>	
71800	American Telephone & Telegraph	\$ 3,505,092.59
80000	Commonwealth Edison	2,870,688.20
47900	Florida Power & Light	3,097,297.88
73000	Houston Lighting & Power	2,957,413.15
111000	Middle South Utilities	2,735,375.00
92600	Northern Illinois Gas	2,865,331.17
102400	Northern States Power	2,495,621.88
82300	Pacific Gas & Electric	2,462,921.25
47000	Texas Utilities	2,508,187.50
123000	Virginia Electric & Power	2,692,112.29
	Total Utilities	\$ 28,190,040.91
	Financial Services <u>Banks</u>	
74200	First Bank System	\$ 2,102,587.50
73000	First National City Corp.	2,410,305.77
64600	Northwest Bancorporation	2,161,711.68
67400	Security Pacific National Bank	2,230,050.00
	Total Banks	\$ 8,904,654.95
	Insurance	
42800	Connecticut General	\$ 2,578,373.03
110600	Northwestern National Life	2,683,270.00
72000	Safeco Corp.	2,053,525.00
48600	St. Paul Companies	2,116,562.50
	Total Insurance	\$ 9,431,730.53
	Total Financial Services	\$ 18,336,385.48
	Consumer Goods & Services Food-Beverage	
23900	Coca-Cola	\$ 1,866,802.10
65800	General Foods	2,530,523.38
74800	General Mills	2,491,295.10
	Total Food-Beverage	\$ 6,888,620.58
	Retail Trade	
67000	Dayton-Hudson	\$ 2,056,545.55
38900	Penney (J.C.) Co., Inc.	2,099,988.47
33500	Sears Roebuck	$\frac{2,421,718.31}{\$ 6,578,252.33}$
	Total Retail Trade	\$ 6,578,252.33
	Miscellaneous	
24900	Avon Products	\$ 2,134,410.65
17480	Disney (Walt) Productions	1,429,205.04
34400	Holiday Inns	1,352,943.44
	Total Miscellaneous	\$ 4,916,559.13
	Total Consumer Goods & Services	\$ 18,383,432.04
	TOTAL CONSUMER-ORIENTED STOCKS	\$ 64,909,858.43

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Schedule XI (Page 2)

Shares_	Company	Total Cost
	RESEARCH STOCKS	
	Drugs	•
32800	American Home Products	\$ 2,044,879.87
19600	Merck & Company	1,925,714.45
59700	Pfizer, Incorporated	1,978,172.87
27000	Schering-Plough Corporation	1,623,663.48
	Total Drugs	\$ 7,572,430.67
	Electronics; Data Processing	
29000	Burroughs	\$ 3,790,015.18
29000	Control Data Corp.	2,648,918.96
34100	Emerson Electric Co.	1,948,625.47
28277	Honeywell	2,992,307.37
12432	International Business Machines	4,225,926.92
42000	International Telephone & Telegraph	2,188,292.68
	Total Electronics; Data Processing	\$ 17,794,086.58
	Technology	
38000	Eastman Kodak	\$ 2,816,827.49
25500	Minnesota Mining & Manufacturing	2,480,253.15
19200	Polaroid Corp.	1,613,301.39
29550	Xerox Corp.	2,887,479.56
	Total Technology	\$ 9,797,861.59
	TOTAL RESEARCH STOCKS	\$ 35,164,378.84
	NATURAL-RESOURCES STOCKS <u>Petroleum</u>	
106800	Gulf 011	\$ 3,227,692.61
62000	Standard Oil (Indiana)	3,079,077.74
49300	Standard Oil (New Jersey)	3,247,261.93
96300	Texaco	3,150,430.47
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	TOTAL NATURAL-RESOURCES STOCKS	\$ 12,704,462.75
	DURABLES STOCKS	
	Airlines	
78368	Northwest Airlines	<u>\$ 1,834,333.75</u> \$ 1,834,333.75
	Total Airlines	\$ 1,834,333.75
	Automobiles & Auto Equipment	
67800	Ford Motor Co.	\$ 3,215,285.36
45400	General Motors	3,346,372.83
96500	Goodyear Tire & Rubber Co.	<u>2,683,021.03</u> \$ 9,244,634.22
	Total Automobiles & Auto Equipment	\$ 9,244,634.22
	Building & Construction	
67800	Caterpillar Tractor	\$ 2,668,613.49
44300	Weyerhaeuser	
77500	Total Building & Construction	$\frac{1,842,307.83}{\$ 4,510,921.32}$
		\$ 15,589,889.29
	TOTAL DURABLES STOCKS	
	TOTAL APPROVED STOCKS	\$128,368,589.31

Common Stocks Held in the Minnesota Adjustable Fixed Benefit Fund Sch

Schedule XI (Page 3)

The following stocks were transferred from the Municipal Employees Retirement Board (Minneapolis) and are not currently being purchased.

Shares	Company	Total Cost*
5391 8800	Boise Cascade Kimberly-Clark	\$ 373,289.01 330,000.00
	Total Transferred Stocks	\$ 703,289.01
	TOTAL COMMON STOCKS	\$129,071,878.32

*Includes transfer of stocks on June 30, 1969, August 29, 1969, October 31, 1969, December 31, 1969, February 27, 1970 and April 30, 1970 closing, plus subsequent purchases.

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STATE OF MINNESOTA STATE BOARD OF INVESTMENT Schedule XII

COMMON STOCKS HELD IN THE MINNESOTA VARIABLE ANNUITY FUND

October 29, 1971

Shares	Company	Total Cost
	CONSUMER-ORIENTED STOCKS	
1200	American Telephone & Telegraph	\$ 56,363.25
700	Florida Power & Light	46,622.44
900	Texas Utilities	50,756.50
200	Coca-Cola	14,607.50
600	General Foods	22,834.23
1250	McDonald's Corp.	67,401.42
500	Avon Products	47,969.61
500	Sears Roebuck	41,487.76
704	Disney (Walt) Productions	67,165.01
700	Holiday Inns	25,566.50
600	Connecticut General Life	33,915.00
1100	Household Finance	50,324.85
1700	Northwest Bancorporation	56,589.75
600	St. Paul Companies	33,428.00
	TOTAL CONSUMER-ORIENTED STOCKS	\$615,031.82
	RESEARCH STOCKS	
300	duPont (E.I.) deNemours	\$ 40,356.28
800	Eastman Kodak	62,712.75
1200	Emerson Electric	80,437.98
355	International Business Machines	108,466.84
800	Pfizer Incorporated	27,129.16
1700	Union Carbide	73,411.70
	TOTAL RESEARCH STOCKS	\$392,514.71
	NATURAL-RESOURCES STOCKS	
1200	Louisiana Land & Exploration	\$ 42,296.87
1100	Mobil Oil	59,747.22
	TOTAL NATURAL-RESOURCES STOCKS	\$102,044.09
	DURABLES STOCKS	
700	Caterpillar Tractor	\$ 27,040.38
600	General Motors Corp.	44,564.53
1100	Goodyear Tire & Rubber Co.	31,728.45
300	Weyerhaeuser	14,082.72
	TOTAL DURABLES STOCKS	\$117,416.08
	TOTAL COMMON STOCKS	\$1,227,006.70

GOVERNOR WENDELL R. ANDERSON STATE AUDITOR ROLLAND F. HATFIELD STATE TREASURER VAL BJORNSON SECRETARY OF STATE ARLEN I. ERDAHL 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 55103

December 17, 1971

SUPPLEMENT TO 1971 REPORT OF THE INVESTMENT DEPARTMENT DISTRIBUTION OF SECURITIES BUSINESS

TO: Members of the Minnesota Legislature Investment Underwriters, Brokers and Dealers

FROM: Robert E. Blixt, Executive Secretary

The following schedules detail the distribution of securities business by Minnesota's State Board of Investment during 1970. We have found continued interest in this allocation by fund beneficiaries, elected officials, brokerage houses, investment bankers and the taxpayers in general.

We have made numerous changes in our methods of handling securities transactions during the past few years and expect that these adjustments will continue. We are increasing our use of block trades and are more dependent upon those firms which are competent in this type of transaction. We have also received specialized services from certain organizations, which we have repaid in the form of commissions. After negotiating with several firms over the past three years, we now have an arrangement whereby our office has a computer terminal connected with Paine, Webber, Jackson & Curtis; this offers portfolio and research information. There has been a substantial increase in our New York Stock Exchange business with this firm in order to compensate for the service. Recently, we have made arrangements with Merrill Lynch, Pierce, Fenner & Smith, Inc. whereby this firm will evaluate our various portfolios and point out the strengths and weaknesses in our policies and transactions. It is our intent that the commission business with this firm increase as this program benefits our investment program. Our future business will be concentrated with those firms which are able to provide the type of services which are needed by our department and which show an ability to give the type of research, over a long period of time, which will be most beneficial to us.

All details regarding the state's securities transactions are available to interested parties, and are provided to each member of the State Board of Investment and to the press at Board meetings.

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 1971, 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, specific research, or evidence of proven trading ability -- we have found the distribution of business on a price basis to be the most effective method. This consists of the acceptance of competitive offerings and bids from dealers who are either prime markets 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 to 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.

In many instances, a number of dealers may 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. Factors involved in the placement of these orders include: the extent of participation by various dealers in the bond syndicates, the location of the offices (Minnesota dealers given some preference), and the utility of research material provided by the firms.

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 securities only after they are received, in good form, by banks in either New York or the Twin Cities 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 only with obtaining debt securities and stocks at the lowest possible price, consistent with the receipt of necessary research materials and service.

Schedule 1. U. S. Treasury Securities Transactions

All purchases and sales of U. S. Treasury 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 security firms which have expressed an interest in providing this type of security. These transactions consist simply of the purchase of U. S. government 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.

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

Since 1969, the use of short-term corporate notes of prime quality has increased substantially because of enabling legislation that year. In previous years, these notes were bought for the highway and retirement funds on the basis of the highest yield available for the particular maturity date desired, consistent with the maintenance of adequate diversification of corporate credits. Securities issued by firms with assets of over \$500 million became eligible for use in the Invested Treasurer's Cash Fund in early 1969; large additional investments were made for this account. We have felt it necessary to use well-known, marketable names and to have prior agreements with the vendors that they will repurchase the notes if the state needs cash. The 1971 Legislature made it possible for the state to use the short-term corporate notes of subsidiaries of leading utilities, as well as the notes of bank holding companies. The nation-wide publicity given several nationally known corporations with liquidity problems, in mid-1970, caused the investment department to review its use of these notes. We have continued the purchase of prime quality issues, but have subjected these securities to even closer scrutiny.

Schedule 3. Purchases of Mortgage Backed Certificates

Beginning in early 1970, the Government National Mortgage Association approved a program whereby major mortgage bankers could issue securities, backed by the full faith and credit of the U. S. government, which were secured by groups of mortgages. 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. These securities were used in the Permanent School Fund because of the high interest rates prevalent during early 1970 and the attractive spread between the yields on the purchases and the securities sold. During this period, we used mortgage-backed securities sold by firms throughout the nation. Because of lower cash flow since that date, we have concentrated on securities issued by firms in the upper-midwest area.

Schedule 4. Private Placements of Fixed-Income Securities

Certain debt issues of leading national corporations 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 required 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 purchased only a portion of an individual issue, with other recognized institutional buyers participating at the same price and interest rate. The investment department prefers private placements only when 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, and was minimal at times during 1970, when yields on all fixedincome securities were at the highest levels in several decades. We found private placements purchased in past years to be particularly advantageous during this period, however, in that the pro rata sinking fund provisions resulted in a portion of these securities being called by the issuer at a price over face value. This was far in excess of the market value of bonds with similar coupons. Although the investment department recognizes the many advantages of marketable bonds, we expect to continue our program of using quality private placements when the yield appears to be appropriate.

Schedule 5. Debt 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 syndicates. 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 chief 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 account. The state accepts bonds in registered denominations of \$25,000, so as to provide the minimum handling expenses consistent with marketability. In the past, all bonds were delivered to the state in as large a denomination as possible. It was found, however, that this practice somewhat limited marketability at time of sale. In the ordering or placement of business for these securities, somewhat larger orders were given to major participants in the syndicates and to firms having offices in Minnesota.

Schedule 6. <u>Debt Obligations Purchased at or After Time of Offering</u> 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.

Schedule 7. Corporate Bonds Purchased Through Secondary Offerings

Additional bonds and portions of private placements of issues already owned by state funds were purchased on the basis of offerings made to the State Board of Investment. The price was checked with other firms likely to maintain a market for the same or similar securities.

Schedule 8. Corporate Bond Sales

A substantial number of corporate bonds were sold from the retirement funds during 1970. It is anticipated that such sales will continue as the department takes advantage of sinking fund bids and other opportunities to increase yields. Although it is not anticipated that the State Board of Investment will engage actively in bond trading for small theoretical income advantages, it is apparent that there are often opportunities which could result in significant portfolio improvements through exchanges of fixed-income obligations. Many bonds of comparatively small denomination were transferred to the Minnesota Adjustable Fixed Benefit Fund from the Municipal Employees Retirement Board (Minneapolis) at the time this new retirement program was established. Although these bonds were of good quality, they consisted of issues not held in other state accounts. The department has sold many of these bonds during the past two years and expects to continue this consolidation program.

Schedule 9. Common Stock Purchases Allocated by Investment Department

These 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. We favored those firms providing the most beneficial research material or, to a lesser extent, the investment bankers furnishing attractive private placements of fixed income securities and attractive bonds in useable quantities. As has been previously indicated, the department was also allocating 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.

The distribution of brokerage business on the basis of "service" or "research" leads to inequities in the case of public funds. During the past decade, we have been placed on the mailing list of practically every major investment banker and brokerage house in the United States. We do not have the time or staff to evaluate, file or read even a small portion of this material, and have found it necessary to confine attention primarily to the reports from those firms which have provided particularly valuable information over the years. During the 1969-71 period, in which many leading brokerage and investment banking organizations were faced with financial difficulties, there was a substantial movement of personnel. In some instances, the investment department found it desirable to do business with the new organization which employed individuals who had been particularly helpful to the department in the past. In many instances, it was thought to be impractical to withhold business from a firm with a history of a mutually beneficial relationship with the state simply because of a change in personnel. It was usually found that the leading companies maintained the quality of their research despite a significant turnover in the analytical staff. This has been a continuing problem throughout the field of investment management. We presume that there will be changes in the firms with which we deal during the next few years until conditions become more settled.

The recent entry of many state and public funds into the corporate securities market has resulted in greater interest in these accounts on the part of many research organizations. Several outstanding firms may believe that their research should be used to a greater extent; nevertheless, 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 this type of security. Written research materials, teletype messages and discussions with analysts have been most beneficial. Telephone calls regarding future securities offerings and our possible interest in forthcoming bond issues are discouraged.

It has been our hope for several years 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. Nevertheless, we are dependent upon the nation's securities industry as a whole for our private placements, and have needed the services of numerous organizations in obtaining bonds and specialized information. Consequently, the list of dealers will continue to be longer than that deemed appropriate by most private funds. We have appreciated the fact that brokers and dealers in Minnesota and elsewhere have understood the necessity for our dealing with numerous firms, regardless of geographical location.

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. The investment staff increased its use of this information during late 1970 and early 1971 and has found the data thus provided aided in the completion of transactions on a more reasonable and less complicated basis. It has been possible to avoid a substantial amount of accounting work by being able to complete the trades in large quantities rather than deal through many small transactions.

The distribution of business listed under Schedule 9 does not indicate any future allotment of common stock orders; this will vary with our degree of dependence upon the many securities organizations for research and service.

Schedule 10. Common Stock Purchases Negotiated or Ordered on the Basis of Lowest Available Price

During 1971, no purchases or 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.

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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. Our experience during the past nine years indicates that savings on these transactions may approximate 3/8 to 1/2 of a point per share, or \$375 to \$500 per thousand shares. We are most impressed with the ability of the "third" market organizations to provide a market in well-known quality stocks at all times -- even when specialists on the New York Stock Exchange appeared to have difficulty in doing so.

These off-board trades are handled on a competitive basis, with two to four dealers contacted simultaneously. Until recently, our trades generally ranged from 500 to 2000 shares. During 1969 and through 1971, numerous trades involving substantial blocks of stocks have taken place. This has meant the use of New York Stock Exchange firms specializing in "block trades" and of "third" market organizations which are known for their ability to match buyers and sellers. It is expected that future business will be allocated to these firms who have demonstrated their capability to handle such transactions efficiently.

The advantage of off-board transactions and "block trades" is that they allow the state to buy quantities of stock at one predetermined net price for the various accounts. These "third" market and "block" purchases also minimize the number of separate trades and the necessary accounting procedures.

It is not our intent to become unduely concerned with the relative merits of the major exchanges versus the "third" market; we are simply pointing out the advantages of using all three recognized markets -- major exchanges, over-the-counter market, and the "third" market -- for the benefit of the state funds.

Schedule 11. <u>Common Stock Sales</u>

The stocks listed were sold through the markets which appeared to be appropriate at the time of the transactions. When the "over-the-counter" or "third" markets were used, bids were checked with two or more dealers. Commission business was allocated as described for stock purchases. Several of the stocks indicated as sold during 1970 had not appeared in previous portfolio listings. This was due to the fact that these securities were transferred to the Minnesota Adjustable Fixed Benefit Fund, managed by the State Board of Investment, from the Municipal Employees Retirement Board (Minneapolis) and were not on the current purchase list of the Board. Therefore, in order to convert the holdings of the fund into a more manageable portfolio, it was decided to sell these stocks when such disposition appeared advantageous.

* * * * * * * * *

Suggestions by other public fund managers and institutional investors regarding the equitable distribution of our securities business have been most helpful; we continue to welcome this constructive interest and advice. During the 1971 legislative session, the department was contacted by several legislators interested in our methods and procedures concerning securities transactions. This interest was apparently caused by concern on the part of certain dealers, who had a decline in business during the 1970 and 1971 market drop, and renewed interest by many fund participants regarding efficient trades. The department has reviewed its procedures again and hopes that the distribution will be equitable in the future. 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 citizenry of Minnesota. This responsibility is recognized in conducting the securities business so as to retain the confidence of these groups. Their ultimate good must be placed ahead of all other considerations.

Respectfully submitted,

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

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PURCHASES AND	SALES OF U.	S. TREASURY	OBLIGATIONS	4	,
AND GO		ENCY SECURIT		د ز	1
Janua	ry 1 - Dece	mber 31, 197	0		ı
			· ~ ,	<u> </u>	
A. P	URCHASES (1	n thousands)	Asial	was So	(25 TUTA (
	Fire	hoson	REquirent		
· · ·	100		Al days-	Over	10 LOLON
Dealer	1-30, days	31-90 days	1 year	1 year	Total
	<u>1 20, 00, 2</u>	<u>, , , , ,</u>			
Bankers Trust Company	<u>`</u>	\$ 16,370.0	\$ 42,405.0	-	\$ 58,775.0
A.G. Becker & Company	-	7,835.0	38,465.0	·	46,300.0
Briggs & Schaedle Company, Inc.	-	-	500.0	-	500.0
Chemical Bank N.Y. Trust Company	-	-	-	\$ 1,000.0	1,000.0
Continental Illinois National Bank	-	400.0	15,830.0	1,000.0	17,230.0
Discount Corporation	-	-	14,120.0	-	14,120.0
Eastman Dillon Union Securities	-	-	2,780.0	490.0	3,270.0
First Boston Corporation		9,060.0	4,030.0	1,000.0	14,090.0
First National Bank, Chicago	-	14,680.0	17,245.0	-	31,925.0
First National Bank, Minneapolis	-	6,420.0	9,970.0	5,000.0	21,390.0
First National Bank, St. Paul	\$23,000.0	14,323.0	39,390.0	3,002.0	79,715.0
First National City Bank	-	-	1,000.0	_ ·	1,000.0
Goldman Sachs & Company	-	6,590.0	24,485.0	-	31,075.0
Harris Trust & Savings Bank (Chicago)	-	8,800.0	6,210.0	1,495.0	16,505.0
Aubrey G. Lanston & Company, Inc.	-	19,320.0	27,510.0	1,000.0	47,830.0
Lehman Commercial Paper, Inc.	-	13,450.0	27,465.0	1,000.0	41,915.0
Merrill Lynch, Pierce, Fenner & Smith	-	530.0	6,045.0	-	6,575.0
Morgan Guaranty Trust Company	-	400.0'	5,500.0	-	5,900.0
Morgan Stanley & Company	-	-	-	1,000.0	1,000.0
New York Hanseatic Corporation	-	-	• 4,640.0	-	4,640.0
Northwestern National Bank, Minneapoli	s 1,300.0	13,565.0	41,006.0	2.0	55,873.0
Chas. E. Quincey & Company	-	— '	1,000.0	-	1,000.0
Salomon Brothers		53,070.0	87,650.0	2,000.0	142,720.0
Totals	\$24,300.0	\$184,813.0	\$417,246.0	\$17,989.0	\$644,348.0

Totals

B. REPURCHASE AGREEMENTS (in thousands)

Dealer	<u>1-30 days</u>	<u>31-90 days</u>	
Chemical Bank N.Y. Trust Company	\$ 26,700.0	-	\$ 26,700.0
Continental Illinois National Bank	23,675.0	-	23,675.0
Discount Corporation	6,000.0	– '	6,000.0
First National Bank, Chicago	41,146.0	-	41,146.0
First National Bank, Minneapolis	112,673.0	\$ 5,400.0	118,073.0
First National Bank, St. Paul	124,932.0	12,470.0	137,402.0
First National City Bank	9,000.0	_	9,000.0
Morgan Guaranty Trust Company	47,000.0	-	47,000.0
Northwestern National Bank, Minneapolis	70,475.0	10,277.0	80,752.0
John Nuveen & Company	10,500.0		10,500.0
Totals	\$472,101.0	\$28,147.0	\$500,248.0

Purchases and Sales of U.S. Treasury Obligations

2

C. SALES (in thousands)

Dealer	<u>1-30 days</u>	<u>31-90 days</u>	91 days- <u>1 year</u>	Over (1 year	Total
Bankers Trust Company	\$ 7,650.0	\$ 5,270.0	-	\$ 4,100.0	\$ 17,020.0
Briggs & Schaedle Company, Inc.	4,105.0	230.0	-	-	4,335.0
Chemical Bank N.Y. Trust Company	-	~	-	1,000.0	1,000.0
Continental Illinois National Bank	200.0	2,700.0	· -	500.0	3,400.0
Discount Corporation	-	5,000.0	-	-	5,000.0
First Boston Corporation	-	-	-	1,000.0	1,000.0
First National Bank, Chicago	8,040.0	15,310.0	\$ 100.0	3,000.0	26,450.0
First National Bank, Minneapolis	2,393.0	13,745.0	3,675.0	4,160.0	23,973.0
First National Bank, St. Paul	14,219.0	40,735.0	12,715.0	5,047.0	72,716.0
First National City Bank	-	-	_	115.0	115.0
Harris Trust & Savings Bank (Chicago)	-	1,715.0	-	-	1,715.0
Lehman Commercial Paper, Inc.	250.0	-	-	-	250.0
Merrill Lynch, Pierce, Fenner & Smith	7,715.0	13,830.0	7,000.0	9,850.0	38,395.0
Morgan Guaranty Trust Company	-	-	-	20,200.0	20,200.0
Northwestern National Bank, Minneapolis	4,716.0	17,771.0	3,790.0	1,055.0	27,332.0
Salomon Brothers	-	1,250.0	200.0	16,085.0	17,535.0
Totals	\$49,288.0	\$117,556.0	\$27,480.0	\$66,112.0	\$260,436.0

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Schedule 2

PURCHASES AND SALES OF SHORT-TERM CORPORATE NOTES

	And the second s		a straight of the straight of			
_	APURC	HASES (in t	housands)	SA	CES	TUTAC
7	1-30	31-60	· 61-90	91-180	181-270	Lolume
Dealer	days	days i	days	days	days	Total
)				
Associates Corp. of North		<i>v</i>				
America	\$ 15,781.0	\$ 3,861.0	\$ 4,590.0	\$ 9,045.0	\$ 9,400.0	\$ 42,677.0
A.G. Becker & Co., Inc.:		-			•	62,358.0
G.A.C. Finance Inc.	12,160.0	7,990.0	7,814.0	10,015.0	7,300.0	
Gamble Inc.	3,195.0	4,675.0	5,900.0	3,309.0	-	
Chrysler Financial Corp.	11,665.0	5,600.0	2,500.0	4,758.0	2,900.0	27,423.0
CIT Financial Corp.	5,750.0	1,300.0	1,774.0	4,348.0	6,455.0	19,627.0
Commercial Credit Corp.	5,158.0	3,803.0	1,500.0	3,304.0	8,800.0	22,565.0
Ford Motor Credit Corp.	14,914.0	400.0	1,050.0	13,900.0	-	30,264.0
Goldman Sachs & Co.						4,105.0
J.I. Case Credit Corp.	-	1,700.0	375.0	1,700.0	330.0	·
International Harvester Credit	:					
Corp.	29,500.0	4,960.0	-	7,100.0	-	41,560.0
Lehman Commercial Paper, Inc.						76,003.0
AVCO Financial Services Inc.	10,050.0	6,205.0	2,225.0	8,328.0	10,135.0	
Caterpillar Tractor Co.	-	5,000.0	6,350.0	12,475.0	520.0	
U.S. Steel Finance Corp.	-	-	4,100.0	5,400.0	5,215.0	
Montgomery Ward Credit Corp.	5,000.0	11,235.0	3,700.0	8,960.0	2,150.0	31,045.0
J.C. Penney Financial Corp.	4,835.0	3,700.0	3,205.0	4,570.0	600.0	16,910.0
Sears Roebuck Acceptance Corp.	12,100.0	5,000.0	2,900.0	3,000.0	3,500.0	26,500.0
James Talcott, Inc.	17,956.0	4,702.0	4,300.0	11,223.0	8,530.0	46,711.0
Transamerica Financial Corp.	27,727.0	10,260.0	1,200.0	6,730.0	925.0	46,842.0
Westinghouse Credit Corp.	10,000.0	12,600.0	6,175.0	6,500.0	800.0	36,075.0
Totals	\$185,791.0	\$92,991.0	\$59,658.0	\$124,665.0	\$67,560.0	\$530,665.0

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Purchases and Sales of Short-Term Corporate Notes Schedule 2 (Page 2)

B. SALES (in thousands)

Dealer	1–30 days	31-60 days	61-90 days	91-180 days	181-270 	
Transamerica Financial Corp.				\$ 230.0		\$ 230.0
Totals	-	-	-	\$ 230.0	-	\$ 230.0

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Schedule 3

PURCHASES OF MORTGAGE BACKED CERTIFICATES January 1 - December 31, 1970

Face Amount	Dealer or Issuer				
\$ 1,993,694.67	First National Bank of Minneapolis (Issuer)				
15,796,090.67	IDS Mortgage Corporation (Issuer)				
2,000,000.00	Iowa Securities Company (Issuer)				
12,010,810.68	F.S. Smithers & Company (Dealer)*				

*F.S. Smithers & Company has acted as agent in the placement of these securities for the following companies: Citizens Mortgage Corporation - \$2,501,918.70; National Homes Acceptance Corporation - \$7,008,891.98; and Percy Wilson Mortgage & Finance Corporation - \$2,500,000.00.

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Schedule 4

PRIVATE PLACEMENTS OF FIXED-INCOME SECURITIES Purchased January 1 - December 31, 1970

Face Amount (000)	Dealer	Face Amount (000)	Dealer
1,718	Becker, A.G. & Co., Inc. Dick & Merle-Smith duPont, Glore Forgan Inc.	9,500	Halsey, Stuart and Company, Inc. Kidder, Peabody and Company, Inc. White, Weld & Company

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Schedule 5

DEBT OBLIGATIONS PURCHASED AT TIME OF OFFERING ON A DESIGNATED BASIS January 1 - December 31, 1970

Am	ace ount 000)	Dealer	Am	ace ount 000)	Dealer
\$	75	Allison-Williams Company	\$	400	Dain, Kalman & Quail, Inc.
	90	American Securities Corporation		620	Dean Witter & Company, Inc.
	130	Ames, A.E. & Co., Inc.		235	Dick & Merle-Smith
	320	Bache & Co., Inc.		140	Dillon, Read & Co., Inc.
	400	Bankers Trust Co.		60	Discount Corp.
	30	Barth, J. & Company		155	Dominick & Dominick, Inc.
	165	Bear Stearns & Co.		50	Dominion Securities Corp. (The)
	540	Becker, A.G. & Company, Inc.		140	Drexel Harriman Ripley, Inc.
	125	Bell, Gouinlock & Company, Inc.		620	Eastman Dillon, Union Securities & Co.
	140	Blair & Company, Inc.		75	Equitable Canada, Inc.
	165	Blair, William & Company		165	Equitable Securities, Morton & Co., Inc.
		Blyth & Company, Inc.		90	Estabrook & Co.
	30	Burnham & Co.		30	Faulkner, Dawkins & Sullivan Securities
	75	Burns Brothers & Denton, Inc.	2		First Boston Corp. (The)
	220	Clark, Dodge & Company, Inc.		440	Francis I. duPont, A.C. Allyn, Inc.

Debt Obligations Purchased at Time of Offering on a Designated Basis...cont...

Face Face Amount Amount (000) Dealer (000) Ŝ 30 Gairdner & Co., Inc. Glore Forgan, Wm. R. Staats Inc. 90 220 Goldman, Sachs & Co. 40 Goodbody & Co. 75 Greenshields & Company, Inc. 770 Halsey Stuart & Co., Inc. 205 Harris & Partners, Inc. 400 Harris Trust & Savings Bank 130 Hayden, Stone, Inc. 320 Hornblower & Weeks-Hemphill, Noyes 130 Hutton (E.F.) 30 Hutton (W.E.) 320 Kidder, Peabody & Company, Inc. 220 Kuhn, Loeb & Company 50 Langley (W.C.) & Co. 80 Lazard Freres & Co. 80 Lehman Brothers 140 Loeb, Rhoades & Co. 50 McLeod, Young, Weir, Inc. 1,790 Merrill Lynch, Pierce, Fenner & Smith 75 Midland Canadian Corporation 125 Mills, Spence & Company, Inc. 140 Milwaukee Company (The) 80 Model, Roland & Company, Inc.

(000)	Dealer
<u> </u>	
\$1,300	Morgan Stanley & Co.
80	Moseley (F.S.) & Company
75	Nesbitt Thompson Securities, Inc.
1,740	New York Hanseatic Corporation
200	Northwestern Nat'l Bank of Minneapolis
340	Nuveen, John & Company, Inc.
620	Paine, Webber, Jackson & Curtis
400	Piper, Jaffray & Hopwood, Inc.
290	Pressprich (R.W.) & Co., Inc.
220	Reynolds & Company
80	Robinson-Humphrey Co., Inc. (The)
1,375	• • •
320	
320	Smith, Barney & Co., Inc.
400	Smithers (F.S.) & Co.
70	Spencer Trask & Company, Inc.
80	Stone & Webster Securities Corp.
60	Tucker, Anthony & R.L. Day
60	Walker, G.H. & Co.
170	Walston & Company, Inc.
90	Weeden & Company, Inc.
365	Wertheim and Company
320	White, Weld & Co.
140	Wood, Gundy & Co., Inc.
30	Wood, Struthers & Winthrop Inc.
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STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Schedule 6

DEBT OBLIGATIONS PURCHASED AT OR AFTER TIME OF OFFERING THROUGH DEALERS HAVING BONDS AVAILABLE January 1 - December 31, 1970

Amo	ce unt 00)	Dealer	Face Amount (000)	Dealer
\$	50	American Securities Corp.	\$ 97	Dillon, Read & Co., Inc.
	7	Ames, A.E. & Co., Inc.	15	
	7	Arnhold and S. Bleichroeder, Inc.	47	Dominion Securities Corp., (The)
	15	Bache & Co., Inc.	48	Drexel Harriman Ripley, Inc.
	7	Bacon, Whipple & Co.	627	Eastman Dillon, Union Securities & Co.
		Baer Securities Corp.	3	Elkius, Morris, Stroud and Co.
	7	Baird, Robert W. & Co., Inc.	3	Emanuel, Deetjen & Co.
	3	Baker, Watts & Co.	55	Equitable Securities, Morton & Co., Inc.
	7	Ball, Burge & Kraus	60	Estabrook & Co.
	37	Barth, J. & Co.	3	Fahnestock & Co.
	55	Bear, Stearns & Co.	920	First Boston Corporation (The)
	15	Becker, A.G. & Co., Inc.	3	First California Co., Inc.
	80	Blair & Co., Inc.	37	First of Michigan Corp.
	47	Blair, William & Co.	7	First Southwest Co.
	7	Blunt Ellis & Simmons	260	Francis I. duPont, A.C. Allyn, Inc.
	163	Blyth & Co., Inc.	7	Fulton, Reid & Staples, Inc.
	3	Boettcher and Co.	7	Garratt, Robert & Sons, Inc.
	3	Bosworth, Sullivan & Co., Inc.	63	Glore Forgan, Wm. R. Staats, Inc.
	7	Bradford, J.C. & Co.	1,123	Goldman, Sachs & Co.
	10	Brown, Alex & Sons	15	Goodbody and Co.
		Burnham & Co.	7	Halle & Stieglitz
	3	Burns Bros. & Denton, Inc.	10	Hallgarten & Co.
	115	Clark, Dodge & Co., Inc.	173	Halsey, Stuart & Co., Inc.
	3	Cromwell, Weedon & Co.	47	Harris & Partners, Inc.
	287	Dain, Kalman & Quail, Inc.	15	Hayden, Stone Inc.
	23	Dean Witter and Co., Inc.	7	Hilliard, J.J.B., W.L. Lyons & Co.
		DeHaven & Townsend, Crouter & Bondine	10	Hirsch & Co., Inc.
	60	Dick & Merle-Smith	23	Hornblower & Weeks - Hemphill, Noyes

Schedule 5 (Page 2)

Dealer

- 760 Morgan Guaranty Trust Co.

Debt Obligations Purchased At or After Time of Offering Through Dealers Having Bonds Available

Schedule	6
(Page 2)

Face Amount (000)	Dealer	Face Amount (000)	Dealer
	Howe, Barnes & Johnson, Inc.		Prescott, Merrill, Turben & Co.
	Hutton, E.F. & Co.		Pressprich, R.W. & Co., Inc.
45	Hutton, W.E. & Co.		Putnam, Coffin & Burr-Doolittle, Inc.
	Illinois Co., Inc. (The)		Reinholdt & Gardner
3	Irving Lundborg & Co.	105	Reynolds & Co.
7			Riter & Co.
	Kidder, Peabody & Co., Inc.	37	Robinson-Humphrey Co., Inc. (The)
	Kuhn, Loeb, & Co.	3.	Rotan, Mosle-Dallas Union, Inc.
15	Ladenburg, Thalmann & Co.	15	Rothschild, L.F. & Co.
1,000	Laird Inc.	1,023	Salomon Brothers
60	Langley, W.C. & Co.	2	Scott & Stringfellow
73	Lazard Freres & Co.	365	Shearson, Hammill & Co., Inc.
97	Lehman Brothers	7	Shuman, Agnew & Co.
93	Loeb, Rhoades and Co.	7	Singer, Deane & Scribner
2	Masten, A.E. & Co.	48	
7	McDonald & Co.	15	Smithers, F.S. & Co.
47	McLeod, Young, Weir, Inc.	40	Spencer Trask & Co., Inc.
2	McMaster Hutchinson & Co.	3	Stein Bros. & Boyce Inc.
65	Merrill Lynch, Pierce, Fenner & Smith	7	Stern Brothers & Co.
	Milwaukee Company (The)	48	Stone & Webster Securities Corp.
47	Model, Roland & Co., Inc.	3	Swiss American Corp.
7	Moore, Leonard & Lynch, Inc.	3	Thomas & Co., Inc.
	Morgan Stanley & Co.	130	Thomson & McKinnon Auchincloss, Inc.
	Moseley, F.S. & Co.	40	Tucker, Anthony & R.L. Day
22	New York Hanseatic Corp.	3	Underwood, Newhaus & Co., Inc.
3	Newhard, Cook & Co.	45	
360	Nuveen, John & Co., Inc.	10	Walston & Co., Inc.
	Ohio Company (The)	7	Watling, Lerchen & Co.
	Paine, Webber, Jackson & Curtis	23	Wertheim and Co.
	Paribas Corp.	1,155	White, Weld & Co.
3	•	· · · ·	Wood, Gundy & Co., Inc.
3	Pforzheimer, Carl H. & Co.		Wood, Struthers & Winthrop
	Piper, Jaffray & Hopwood	3	
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7 Pollock, Wm. E. & Company, Inc.

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STATE OF MINNESOTA STATE BOARD OF INVESTMENT Schedule 7

CORPORATE BONDS PURCHASED THROUGH SECONDARY OFFERINGS January 1 - December 31, 1970

Face Amount (000)	Dealer	Face Amount (000)	Dealer
150	Allison-Williams Co. First of Michigan Corp. Goldman, Sachs & Co.	200	Mullaney, Wells & Co. Smith, Barney & Co., Inc. F.S. Smithers & Co., Inc.

STATE OF MINNESOTA STATE BOARD OF INVESTMENT Schedule 8

STATE BOARD OF INVESTMENT

CORPORATE BOND SALES January 1 - December 31, 1970

Face Amount (000)	Dealer	Face Amount (000)	Dealer
\$ 400	Burnham & Co.	\$750	Merrill Lynch, Pierce, Fenner & Smith
100	duPont Glore Forgan, Inc.	758	Paine, Webber, Jackson & Curtis, Inc.
1,496	Eastman Dillon, Union Securities & Co.	725	R.W. Pressprich & Co., Inc.
75	The First Boston Corporation	500	Salomon Brothers
129	First of Michigan Corporation	100	Shearson, Hammill & Co., Inc.
	Halsey, Stuart & Co., Inc.		F.S. Smithers & Co., Inc.

Schedule 9

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

COMMON STOCK PURCHASES ALLOCATED BY INVESTMENT DEPARTMENT January 1 - December 31, 1970

m1		m -+-1		m . 1	
Total Shares	Issue and Vendor	Total Shares	Teque and Vender	Total	Tagua and Vander
Shares	Issue and vendor	Shares	Issue and Vendor	Shares	Issue and Vendor
CONSUM	ER-ORIENTED STOCKS	Financ	e	Miscel	laneous
		5600	Beneficial Corp.	300	ARA Services
UTILIT	IES		600 Eppler Guerin		100 Merrill Lynch
Electr			5000 Smith Barney		200 Walston & Co.
200	Commonwealth Edison	6000	Household Finance	19900	Avon Products
	200 Blair & Co.		5900 Dean Witter		5100 Dean Witter
5000	Louisville Gas & Elec.		100 Smith Barney		1000 Hornblower Weeks
	5000 Bache & Co.	6700	Inv. Div. Serv. "A"		4000 E.F. Hutton
5000	Pacific Gas & Elec.		100 Blair & Co.		200 Lamson Bros.
	5000 Goldman Sachs		1000 Piper Jaffray		2400 Model Roland
200	Southern Calif. Edison		5600 Smith Barney		/3000 Morgan Stanley
	200 Blair & Co.		. · · · · · · · · · · · · · · · · · · ·		3000 Salomon Bros.
20000	Virginia Elec. & Power	Insura			1200 Smith Barney
	1000 Bache & Co.	5000	U.S. Fidelity & Guar.	12000	Disney (Walt) Prod.
	500 Blair & Co.		5000 Shearson Hammill		3300 Hornblower Weeks
	1000 Blyth & Co.				8700 H.C. Wainwright
	1000 Dain Kalman		ers Goods	6300	Gillette
	1000 Dean Witter		everage		100 Blair & Co.
	1000 duPont	5700	Coca Cola		5000 Faulkner, Dawkins
	1000 Eastman Dillon		2500 Clark Dodge		200 Harris Upham
	1000 Halsey Stuart		3000 Laird Bissell	1 000	1000 Woodard-Elwood
	1000 Hornblower Weeks 4500 Merrill Lynch	8200	200 Merrill Lynch General Foods	1800	Holiday Inns 1300 Blair & Co.
	500 Milwaukee Co.	0200	3200 Hornblower Weeks		500 Walston & Co.
	1000 Paine Webber		5000 Smith Barney		Joo waiston & co.
	1000 Piper Jaffray	26800	General Mills		
	500 Reynolds & Co.	20000	16800 Laird & Co.	RESEAR	CH STOCKS
	1000 Shearson Hammill		10000 Paine Webber	10001110	
	1000 Smith Barney	5100	PepsiCo		
	500 Thomson & McKinnon		700 Caldwell Phillips	Chemica	als
	500 Walston & Co.		300 Lamson Brothers	2300	Dow Chemical
	1000 White Weld		4100 H.C. Wainwright		2300 Loewi
		6000	Pillsbury	3100	duPont (E.I.)
Gas			5000 Dean Witter		1100 Caldwell Phillips
200	Northern Ill. Gas		1000 Eppler Guerin		2000 Laird Bissell
	200 Blair & Co.			4200	Union Carbide
13000	Panhandle Eastern P.L.		ng-Publishing		3200 Burnham & Co.
	6000 Paine Webber	8000	Donnelley (R.R.)		500 Dean Witter
	7000 Piper Jaffray		7000 Dean Witter		100 Harris Upham
		5000	1000 Milwaukee Co.		400 G.H. Walker
	one-Telegraph	5000	Dun & Bradstreet		
10200	American Tel. & Tel.		5000 Burnham & Co.	Davisa	•
	200 Blair & Co.	Pot of 1	Trada	Drugs 12000	American Home Prod.
100	10000 F.S. Smithers General Tel. & Elec.	Retail 62400		12000	4000 Eastman Dillon
100	100 Harris Upham		10000 Clark Dodge		3000 Merrill Lynch
	The transme aligned		7800 duPont		5000 Salomon Bros.
			32200 Goldman Sachs	16100	Merck
Financ:	ial Services		2000 Paine Webber		2100 Dean Witter
Banks			10000 Smith Barney		3200 Laird & Co.
700	Conill Corporation		400 Thomson & McKinnon		300 Merrill Lynch
	300 Harris Upham	16000	Penney (J.C.)		2000 Milwaukee Co.
	400 Thomson & McKinnon		9000 Burnham & Co.		2000 Paine Webber
6000	First Bank System		7000 Dean Witter		4000 Salomon Bros.
	4000 Dain Kalman	16000	Sears Roebuck		2500 Walston & Co.
	2000 Piper Jaffray		7000 Brown Bros.	45500	Pfizer, Inc.
7000	First National City		5000 Eastman Dillon		1000 A.G. Becker
	5000 Auerbach Pollak		4000 Reynolds & Co.		12000 Bache & Co.
11500	2000 Harris Upham	200	Zale Corporation		5000 Brown Bros.
11500	N.W. Bancorporation		200 Merrill Lynch		10400 Clark Dodge 1000 Loewi & Co.
	1000 Blair & Co. 5000 Dain Kalman	Textil	69		8000 Paine Webber
	5100 Dain Kaiman 5100 Piper Jaffray	4000	Burlington Industries		8000 Salomon Bros.
	400 Thomson & McKinnon	4000	4000 Smith Barney		100 G.H. Walker

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Common Stock Purchases Allocated By Investment Department...cont...

Schedule 9 (Page 2)

Total Shares	Issue and Vendor	Total <u>Shares</u>	Issue and Vendor	Total <u>Shares</u>	Issue and Vendor
43000	Schering-Plough	16580	Minn. Mining & Mfg.	47500	Goodyear Tire
	20000 Auerbach Pollak		30 Blair & Co.		10000 Burnham & Co.
	15000 Clark Dodge		3300 Dean Witter		10000 Drexel Firestone
	8000 Dean Witter		6000 Langley		100 Harris Upham
			2050 Merrill Lynch		16000 R.W. Pressprich
	Equipment		4200 Salomon Bros.		10700 H.C. Wainwright
17700	Burroughs		1000 Shearson Hammill		700 G.H. Walker
	100 Caldwell Phillips	1000	Univ. Oil Products		
	1000 Dain Kalman		1000 G.H. Walker	D	no § Construistion
	1000 Halsey Stuart 2000 Kiddor Boshody			41000	ng & Construction Carrier Corporation
	3000 Kidder Peabody 1500 Loewi & Co.	NATIRA	L RESOURCES STOCKS	41000	10000 Bache & Co.
	1000 Merrill Lynch				11000 Dean Witter
	1000 Piper Jaffray	Petrol	eum		10000 Laird & Co.
	2500 Smith Barney	20000			10000 H.C. Wainwright
	1500 Thomson & McKinnon		10000 Dean Witter	51000	Caterpillar Tractor
	3100 H.C. Wainwright		10000 Kidder Peabody		10000 Clark Dodge
	2000 White Weld	6600	Louisiana Land		21000 Dean Witter
23760	Control Data		2000 Estabrook & Co.		20000 H.C. Wainwright
	3000 Dain Kalman		200 Merrill Lynch	9000	0
	15460 Dean Witter	5700	4400 Shearson Hammill	800	9000 Dean Witter
	2000 Merrill Lynch 200 Shearson Hammill	5700	Mobil Oil 500 Blair & Co.	000	NL Industries 700 Dean Witter
	3100 White Weld		4800 Dick & Merle-Smith		100 Harris Upham
24400	Honeywell		100 Harris Upham	44500	Weyerhaeuser
24400	500 Caldwell Phillips		300 Smith Barney		10000 Auerbach Pollak
	6000 Clark Dodge	2 3000	Std. Oil (Indiana)		12400 Bache & Co.
	1000 Eastman Dillon	,	10000 Brown Bros.		800 Harris Upham
	4000 H.C. Wainwright		7000 Morgan Stanley		6200 Kidder Peabody
	12400 White Weld		6000 Piper Jaffray		10000 Paine Webber
	500 Woodard-Elwood	2500	Std. 011 (New Jersey)		5100 H.C. Wainwright
5755	Internat'l Bus. Mach.		2100 First Manhattan 400 Shearson Hammill		
	300 Blair & Co. 1500 Dain Kalman	11800	Texaco	Electr	ical & Electronic Equi
	1000 Estabrook & Co.	11000	10000 Bache & Co.	24880	Emerson Electric
	15 Harris Upham		100 Caldwell Phillips		500 Hornblower Weeks
	1140 Kidder Peabody		800 Dick & Merle-Smith		180 Merrill Lynch
	530 Merrill Lynch		300 Harris Upham		5000 Paine Webber
	1270 Sutro & Co.		300 Merrill Lynch		6000 Salomon Bros.
16160	Xerox		300 Smith Barney		8200 Shearson Hammil
	60 Caldwell Phillips				5000 G.H. Walker
	2000 Clark Dodge			2000	General Electric
	2000 E.F. Hutton	DUKABL	ES STOCKS	1400	2000 Hornblower Weeks Hewlett-Packard
	4000 Shearson Hammill	Automo	biles & Automobile Parts	1400	700 Lamson Bros.
	4000 Smith Barney 1000 Sutro & Co.	17500	Chrysler Corp.		700 Thomson & McKin
	100 H.C. Wainwright	1,000	7500 Auerbach Pollak	14200	Int'l Tel. & Tel.
	3000 White Weld		10000 H.C. Wainwright		2000 Bache & Co.
		51400	Ford Motor		200 Milwaukee Co.
			10500 Brown Bros.		6000 Salomon Bros.
Photog	raphy		13300 Dean Witter		6000 H.C. Wainwright
	Eastman Kodak		8000 First Manhattan	4000	Texas Instruments
21600			100 Harris Upham		3000 Merrill Lynch
	5800 Halsey Stuart				
	5800 Halsey Stuart 6500 Hornblower Weeks		8500 Hornblower Weeks	17500	1000 Paine Webber Whirlpool Corp
	5800 Halsey Stuart 6500 Hornblower Weeks 8300 Merrill Lynch		5000 Model Roland	17500	Whirlpool Corp.
21600	5800 Halsey Stuart 6500 Hornblower Weeks 8300 Merrill Lynch 1000 Smith Barney		5000 Model Roland 3000 Paine Webber	17500	
	5800 Halsey Stuart 6500 Hornblower Weeks 8300 Merrill Lynch	33100	5000 Model Roland	17500	Whirlpool Corp. 13500 Burnham & Co.
21600	5800 Halsey Stuart 6500 Hornblower Weeks 8300 Merrill Lynch 1000 Smith Barney Polaroid	33100	5000 Model Roland 3000 Paine Webber 3000 White Weld	17500	Whirlpool Corp. 13500 Burnham & Co.
21600	5800 Halsey Stuart 6500 Hornblower Weeks 8300 Merrill Lynch 1000 Smith Barney Polaroid 2000 A.G. Becker	33100	5000 Model Roland 3000 Paine Webber 3000 White Weld General Motors	Transp	Whirlpool Corp. 13500 Burnham & Co. 4000 Shearson Hammil ortation
21600	5800 Halsey Stuart 6500 Hornblower Weeks 8300 Merrill Lynch 1000 Smith Barney Polaroid 2000 A.G. Becker 6500 Dain Kalman	33100	5000 Model Roland 3000 Paine Webber 3000 White Weld General Motors 200 Blair & Co. 12000 Dean Witter 5000 Dick & Merle-Smith	Transp <u>Aircra</u>	Whirlpool Corp. 13500 Burnham & Co. 4000 Shearson Hammil ortation ft & Aerospace
21600	5800 Halsey Stuart 6500 Hornblower Weeks 8300 Merrill Lynch 1000 Smith Barney Polaroid 2000 A.G. Becker 6500 Dain Kalman 2000 Halsey Stuart 400 Lamson Brothers 1000 Langley	33100	5000 Model Roland 3000 Paine Webber 3000 White Weld General Motors 200 Blair & Co. 12000 Dean Witter 5000 Dick & Merle-Smith 200 Eppler Guerin	Transp	Whirlpool Corp. 13500 Burnham & Co. 4000 Shearson Hammil ortation <u>ft & Aerospace</u> Boeing
21600	5800 Halsey Stuart 6500 Hornblower Weeks 8300 Merrill Lynch 1000 Smith Barney Polaroid 2000 A.G. Becker 6500 Dain Kalman 2000 Halsey Stuart 400 Lamson Brothers	33100	5000 Model Roland 3000 Paine Webber 3000 White Weld General Motors 200 Blair & Co. 12000 Dean Witter 5000 Dick & Merle-Smith 200 Eppler Guerin 100 Harris Upham	Transp <u>Aircra</u>	Whirlpool Corp. 13500 Burnham & Co. 4000 Shearson Hammil ortation ft & Aerospace
21600	5800 Halsey Stuart 6500 Hornblower Weeks 8300 Merrill Lynch 1000 Smith Barney Polaroid 2000 A.G. Becker 6500 Dain Kalman 2000 Halsey Stuart 400 Lamson Brothers 1000 Langley 4100 Smith Barney	33100	5000 Model Roland 3000 Paine Webber 3000 White Weld General Motors 200 Blair & Co. 12000 Dean Witter 5000 Dick & Merle-Smith 200 Eppler Guerin 100 Harris Upham 2000 Merrill Lynch	Transp <u>Aircra</u> 1500	Whirlpool Corp. 13500 Burnham & Co. 4000 Shearson Hammil ortation <u>ft & Aerospace</u> Boeing 1500 Lamson & Co.
21600 16000 <u>Miscel</u>	5800 Halsey Stuart 6500 Hornblower Weeks 8300 Merrill Lynch 1000 Smith Barney Polaroid 2000 A.G. Becker 6500 Dain Kalman 2000 Halsey Stuart 400 Lamson Brothers 1000 Langley 4100 Smith Barney	33100	5000 Model Roland 3000 Paine Webber 3000 White Weld General Motors 200 Blair & Co. 12000 Dean Witter 5000 Dick & Merle-Smith 200 Eppler Guerin 100 Harris Upham 2000 Merrill Lynch 4700 Model Roland	Transp <u>Aircra</u> 1500 <u>Airlin</u>	Whirlpool Corp. 13500 Burnham & Co. 4000 Shearson Hammil ortation <u>ft & Aerospace</u> Boeing 1500 Lamson & Co. es
21600	5800 Halsey Stuart 6500 Hornblower Weeks 8300 Merrill Lynch 1000 Smith Barney Polaroid 2000 A.G. Becker 6500 Dain Kalman 2000 Halsey Stuart 400 Lamson Brothers 1000 Langley 4100 Smith Barney	33100	5000 Model Roland 3000 Paine Webber 3000 White Weld General Motors 200 Blair & Co. 12000 Dean Witter 5000 Dick & Merle-Smith 200 Eppler Guerin 100 Harris Upham 2000 Merrill Lynch	Transp <u>Aircra</u> 1500	Whirlpool Corp. 13500 Burnham & Co. 4000 Shearson Hammil ortation <u>ft & Aerospace</u> Boeing 1500 Lamson & Co.

Drexel Firestone Harris Upham R.W. Pressprich H.C. Wainwright G.H. Walker nstruction er Corporation Bache & Co. Dean Witter Laird & Co. H.C. Wainwright pillar Tractor Clark Dodge Dean Witter H.C. Wainwright ia-Pacific Dean Witter dustries Dean Witter Harris Upham haeuser Auerbach Pollak Bache & Co. Harris Upham Kidder Peabody Paine Webber H.C. Wainwright Electronic Equip. on Electric Hornblower Weeks Merrill Lynch Paine Webber Salomon Bros. Shearson Hammill G.H. Walker al Electric Hornblower Weeks tt-Packard Lamson Bros. Thomson & McKinnon Tel. & Tel. Bache & Co. Milwaukee Co. Salomon Bros. H.C. Wainwright Instruments Merrill Lynch Paine Webber pool Corp. Burnham & Co. Shearson Hammill

Common Stock Purchases Allocated By Investment Department...cont...

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Schedule 9 (Page 3)

					(8)
Total Shares	Issue and Vendor	Total <u>Shares</u>	Issue and Vendor	Total Shares	Issue and Vendor
59800	Northwest Airlines	Railroa	ads	1100	Union Pacific Corp.
	5000 J. Barth 500 Blair & Co.	6000	Burlington-Northern		500 Blair & Co. 500 Dean Witter
	26000 Dean Witter		5000 Clark Dodge		100 Harris Upham
	7800 duPont 5000 Kidder Peabody		1000 Dean Witter	Railro	ad Equipment
	500 Milwaukee Co.	400	Norfolk & Western	6000	Trans Union
	10000 Shearson Hammill 5000 Sutro & Co.		200 Dean Witter 200 Dick & Merle-Smith		5000 H.C. Wainwright 1000 G.H. Walker
	<i>Jood Datto a 00.</i>		LOO DICK & INTIC DELLA		1000 G.M. Walkel
		5	STATE OF MINNESOTA		Schedule 10
	COMMON STOCK		E BOARD OF INVESTMENT 5 NEGOTIATED OR ORDERED ON	THE DAC	
	COMMON STOCK		VEST AVAILABLE PRICE	INE DAS	15 OF
		January	7 1 - December 31, 1970		
Cotal Shares	Issue and Vendor	Total Shares	Teque and Vender	Total	Tagua and Vander
		Juares	Issue and Vendor	<u>Shares</u>	Issue and Vendor
ONSUME	ER-ORIENTED STOCKS	45667	Virginia Elec. & Pwr. 3000 Am. Securities	49600	Wells Fargo
TILITI	LES		3500 Am. Securities 3500 First Boston		6500 Blyth & Co. 10000 First Boston
lectri			39167 Weeden & Co.		10000 Keefe Bruyette
0000	American Elec. Power 20000 J.S. Strauss	Gas			9100 M.A. Schapiro 14000 Weeden & Co.
.0000	Central & Southwest	52700	Northern Ill. Gas	Finance	· · · · · · · · · · · · · · · ·
	9000 Blyth & Co. 1000 First Boston		21200 First Boston 31500 Weeden & Co.	11000	Household Finance
0000	Commonwealth Edison		SISOU weeden & Co.		1000 J.S. Strauss 10000 Weeden & Co.
	7500 Am. Securities		ne-Telegraph	Insura	nce
	21200 First Boston 21300 Weeden & Co.	39019	American Tel. & Tel. 13519 First Boston	41900	Connecticut General 11900 Blyth & Co.
5300	Florida Pwr. & Lgt.		100 N.Y. Hanseatic		2800 duPont
	11100 Am. Securities 4000 First Boston		7000 J.S. Strauss 18400 Weeden & Co.		4000 Eastman Dillon 200 Goldman Sachs
	10200 Weeden & Co.	17600	General Tel. & Elec.		16000 Jefferies & Co.
4000	Houston Lgt. & Pwr. 4000 Am. Securities		8000 Blyth & Co. 8600 Jefferies & Co.		1000 Merrill Lynch
	9000 First Boston		1000 Weeden & Co.	23000	6000 N.Y. Hanseatic Hartford Fire
	21000 Weeden & Co.	11000	United Utilities		5000 Blyth & Co.
6000	Louisville Gas & Elec. 1000 Am. Securities		11000 Weeden & Co.		1000 duPont 10000 Eastman Dillon
	5000 Weeden & Co.		al Services		7000 Salomon Bros.
8000	Middle So. Util. 8000 Weeden & Co.	<u>Banks</u> 450	Chase Manhattan	56000	N.W. National Life 8000 Dain Kalman
2091	Northern States Pwr.	×	450 Keefe Bruyette		5500 duPont
	500 Am. Securities	380	Conill Corp.		13000 Eastman Dillon
	31591 First Boston 10000 J.S. Strauss	15000	380 First Boston First Bank System		3000 Merrill Lynch 11000 N.Y. Hanseatic
0000	Ohio Edison		10000 Blyth & Co.		5000 Piper Jaffray
	2000 Am. Securities 3000 First Boston	10000	5000 Keefe Bruyette First National City		1300 Shields & Co. 4000 Smith Barney
	15000 J.S. Strauss	20000	5000 Am. Securities		5200 White Weld
1300	Pacific Gas & Elec.	11000	5000 Keefe Bruyette	7500	Safeco Corp.
	2000 Am. Securities 20000 First Boston	11000	Nat'l City Cleveland 5000 First Boston		1000 Blyth & Co. 1000 Dain Kalman
	17300 Jefferies & Co.	00/00	6000 Keefe Bruyette		5500 Merrill Lynch
2500	12000 J.S. Strauss Southern Calif. Edison	32600	N.W. Bancorporation 9000 Brokaw Schaenen	27200	St. Paul Companies 4000 Blyth & Co.
2000	2000 First Boston		13400 Jefferies & Co.		5800 Brokaw Schaenen
	500 Weeden & Co. Texas Utilities		10000 Keefe Bruyette		100 Dain Kalman
5100			200 Weeden & Co.		1500 duPont
5100	1000 Am. Securities	10000	Security Pacific		2500 Eastman Dillon
.5100			Security Pacific 10000 Jefferies & Co. Valley Nat'l Ariz.		2500 Eastman Dillon 6300 Merrill Lynch 5000 N.Y. Hanseatic

Common Stock Purchases Negotiated or Ordered on the Basis of Lowest Available Price...cont...

Total <u>Shares</u>	Issue and Vendor		
12000	U.S. Fidelity & Guar.		
	8000 Am. Securities		
	4000 First Boston		
Consumers Goods Food-Beverage			
5000	Coca Cola		
	5000 J.S. Strauss		
4000	General Foods		
	4000 Weeden & Co.		
15000	General Mills		
	15000 Weeden & Co.		

12000	General Mills	
	15000 Weeden & Co.	
1300	PepsiCo	
	1300 Weeden & Co.	

Retail Trade

2600	Dayton-Hudson			
	2600 Weeden & Co.			
4000	Fed. Dept. Stores			
	4000 Weeden & Co.			

Miscellaneous

2500	Economics Lab.
	1000 A.G. Becker
	1500 duPont
38400	Holiday Inns
	28300 Jefferies & Co.
	10100 Weeden & Co.

Total Shares	Issue and Vendor	
RESEARCH	I STOCKS	
Chemical	<u>L</u>	
190	duPont (E.I.)	
	190 Weeden & Co.	
Office H	Equipment	
1180	Internat'l Bus. Mach.	
	1000 Jefferies & Co.	
	180 Weeden & Co.	
Photogra	aphy	
4893	Polaroid	
	500 Am. Securities	
	4393 First Boston	
Miscellaneous		
3287	Minn. Mining & Mfg.	
	3287 Weeden & Co.	
NATURAL	RESOURCES STOCKS	

Petrol	eum
39000	Gulf 011
	10000 First Boston
	5000 N.Y. Hanseatic
	24000 Weeden & Co.
200	Mobil 0il
	200 Weeden & Co.
12500	Std. Oil (Indiana)
	2000 Am. Securities
	1000 J.S. Strauss
	9500 Weeden & Co.
21330	Std. 0il (New Jersey)
	21330 Weeden & Co.

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

STOCK SALES January 1 - December 31, 1970

Total		Total		Total	
Shares	Issue and Vendor	Shares	Issue and Vendor	Shares	Issue and Vendor
24300	ACF Industries	13543	Georgia-Pacific	10278	So. Carolina Elec.& Gas
24300	7700 Dahlgren Richardson	13343	13543 Weeden & Co.	10270	2000 Am. Securities
	16600 Jefferies & Co.	3000	Gerber Products		8278 Jefferies & Co.
E / 00		5000	3000 Jefferies & Co.	9200	Southern Natural Gas
5400	Addressograph-Multi.	3800	Illinois Power Co.	9200	9200 J.S. Strauss
	5400 Smith Barney	3000		3824	Std. 011 (Calif.)
4811	Allied Chemical	1000	3800 First Boston	2024	3824 Jefferies & Co.
	4811 Jefferies & Co.	1900	Louis. & Nashville R.R.	2/00	
<u>10</u> 500	Ariz. Pub. Serv.		1900 Laird & Co.	2400	Taft Broadcasting
	10500 First Boston	15320	Morgan (J.P.) & Co.		2400 Shearson Hammill
4500	Bankers Trust N.Y.		15320 Weeden & Co.	2500	Time, Incorporated
	4500 Keefe Bruyette	15600	NL Industries		2500 Merrill Lynch
5300	Burlington Northern Pfd.		15600 Weeden & Co.	6500	Union Oil Co. of Calif.
	3900 Bache & Co.	16650	Oklahoma Gas & Elec.		6500 First Boston
	1400 Merrill Lynch		16650 First Boston	300	United Aircraft
20000	Citizens & So. Nat'l	34400	Pan American		300 Blair & Co.
	10000 Keefe Bruyette		34000 Jefferies & Co.	900	U.S. Gypsum Co.
	10000 M.A. Schapiro		400 Merrill Lynch		900 Brown Bros.
316	Columbia Broadcasting	3000	Pittsburg Nat'l Corp.	6500	Warner-Lambert
520	316 Blair & Co.	••••	3000 Keefe Bruyette		6500 Jefferies & Co.
400	Communications Satellite	3500	Searle (G.D.)	27900	Weyerhaeuser Co.
400	400 Dean Witter	3300	3500 Brown Bros.		27900 Weeden & Co.
1200	Emerson Electric	4600	Smith Kline & French	4600	Zenith Radio Corp.
1300		4000	4600 Eastman Dillon	4000	4600 Jefferies & Co.
	1300 Weeden & Co.		4000 Lastman Dillon		4000 JETTETTES & CO.

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Total	•
Shares	Issue and Vendor
27510	Texaco
	10000 Blyth & Co.
	17510 Weeden & Co.
DIRARI.	ES STOCKS
	biles & Automobile Parts
12092	Chrysler
1-0/2	12092 Weeden & Co.
8175	Ford Motor
	8175 Jefferies & Co.
5375	General Motors
	100 N.Y. Hanseatic
	5275 Weeden & Co.
38000	Goodyear Tire & Rubber
	2000 N.Y. Hanseatic
	10000 J.S. Strauss
	26000 Weeden & Co.
	ng & Construction
8500	Caterpillar Tractor
	100 N.Y. Hanseatic
	8400 Weeden & Co.
2000	Weyerhaeuser
	2000 Weeden & Co.
Electr	ical & Electronic Equip.
7000	Internat'l Tel. & Tel.
	2000 Am. Securities
	5000 J.S. Strauss
7000	Westinghouse Electric

7000 Weeden & Co.

Schedule 11