

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

1964 REPORT
of
THE EXECUTIVE SECRETARY

Office of the Executive Secretary
Room 115, State Capitol
Saint Paul, Minnesota 55101

June 1, 1965

MEMBERS
of the
STATE BOARD OF INVESTMENT

HON. KARL F. ROLVAAG, GOVERNOR
HON. STAFFORD KING, STATE AUDITOR
HON. VAL BJÖRNSON, STATE TREASURER
HON. JOSEPH L. DONOVAN, SECRETARY OF STATE
HON. ROBERT W. MATTSON, ATTORNEY GENERAL
HON. WALTER F. MONDALE, ATTORNEY GENERAL *

* Attorney General Robert W. Mattson replaced Attorney General
Walter F. Mondale on the Board on December 30, 1964.

Investment Department Personnel

Robert E. Blixt, M.S., LL.B. Executive Secretary	Edmund H. Kase, Jr., Ph. D., LL.D. Senior Financial Analyst
Vernon E. Rude, B.S.B. Senior Securities Analyst	Roger A. Derksen, B.B.A. Senior Securities Analyst
Virginia M. Hayden -	Stenographer-Accountant
Frances R. Connolly -	Clerk-Stenographer
Ethel C. Larsen -	Clerk-Typist



ROBERT E. BLIXT
EXECUTIVE SECRETARY

MEMBERS OF BOARD:

GOVERNOR KARL F. ROLVAAG
STATE AUDITOR STAFFORD KING
STATE TREASURER VAL BJÖRNSSON
SECRETARY OF STATE JOSEPH L. DONOVAN
ATTORNEY GENERAL ROBERT W. MATTSO

**STATE OF MINNESOTA
STATE BOARD OF INVESTMENT**

115 STATE CAPITOL

SAINT PAUL 55101

June 1, 1965

Members of the Legislature of the State of Minnesota

Gentlemen:

During the five years since the Investment Department was established in April 1960, the Legislature has changed many of the statutes applicable to the work of the State Board of Investment and the investment media authorized for use in the various funds. This report, the fifth to be submitted, reviews the work of the Board during the calendar year 1964. We hope that this report, which is being sent to those firms conducting securities transactions with the State, as well as to legislators and public officials interested in our investment program, will answer many of the questions that are asked by investment dealers, brokers, and research organizations concerning the securities transactions and investment policies of the Board.

The 1965 Legislature, in Laws of Minnesota 1965, Chapter 113, revised the investment statutes applicable to the retirement funds by increasing the maximum participation in common stocks from 25 percent to 30 percent of the book value of the funds and by making possible the use of various additional types of fixed-income securities, including finance company bonds and debt guaranteed by parent corporations. This statute also authorizes the use of short-term corporate notes in other funds managed by the Investment Board. The 1965 Legislature, in addition, codified our procedures for purchasing securities and made possible more direct comparisons of investment results from a yield standpoint by prescribing more uniform accounting procedures for the various retirement funds.

Since the passage of a 1959 statute, which established the office of the Executive Secretary, the Legislature has rewritten most of Minnesota's investment laws. The 1961 Legislature passed a basic investment statute applicable to the retirement funds; this was revised in 1963 and 1965. A constitutional amendment applicable to the Permanent School Fund, initiated by the 1961 Legislature, was passed by the electorate in 1962, with implementing statutes provided by the 1963 Legislature. The Permanent School Fund is now authorized to hold 40 percent of its assets in corporate bonds and 20 percent in common stocks.

All investment policies pertaining to the various State funds are determined by the State Board of Investment, consisting of the Governor, State Auditor, State Treasurer, Secretary of State, and Attorney General. The Executive Secretary advises

the Board, recommends policies, and is responsible for handling the securities transactions. He has a staff of six members to aid in securities analysis, accounting, and secretarial work.

A résumé of investment transactions and policies during the years 1960, 1961, 1962, and 1963 may be found in the annual reports for those years.

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 current needs of the State's educational institutions.

The 1963 Legislature provided for the return of the investment management of the Permanent University Fund to the Regents of the University of Minnesota. The assets of this fund, approximating \$47 million in book value, were transferred to the University in July 1963.

Under the terms of the 1962 constitutional amendment, the assets of the Permanent School Fund and the Swamp Land Fund were combined into one \$264-million fund known as the Permanent School Fund. The State Board of Investment was given new latitude as to the media to be used in managing these assets. The Internal Improvement Land Fund, a comparatively small fund restricted to the use of government obligations, also remains under the jurisdiction of the State Board of Investment.

The following schedule reviews the composition of the trust funds managed by the State Board of Investment on December 31, 1964:

COMPOSITION OF TRUST FUNDS December 31, 1964

Type of Security	Permanent School Fund		Internal Improvement Land Fund	
	Book Value	%	Book Value	%
U.S. Treasury obligations	\$177,046,500.00	66.88%	\$420,000.00	99.83%
U.S. Government-guaranteed obligations	1,000,000.00	.38	-	-
Minnesota State obligations	157,500.00	.06	-	-
Obligations of Minnesota subdivisions	4,206,600.00	1.59	-	-
Corporate debt obligations	64,242,609.98	24.27	-	-
Common stocks	17,954,552.35	6.78	-	-
Cash	96,389.12	.04	700.62	.17
Totals	\$264,704,151.45	100.00%	\$420,700.62	100.00%

The trust funds managed by the State Board of Investment were worth approximately \$93.23 per \$100 invested on December 31, 1964. The market valuations of U.S. Treasury securities, corporate bonds, and common stocks were taken from yearend quotations on these securities. The estimated market values of obligations of the State of Minnesota and its subdivisions are based on the investment worth to the trust funds. The securities are valued at less than cost or face value because they carry interest rates lower than the general levels now prevailing. The current worth of the various classifications of securities owned by the trust funds on December 31, 1964 was as follows:

APPROXIMATE MARKET VALUE OF COMBINED TRUST FUNDS INVESTMENTS
December 31, 1964

<u>Type of Security</u>	<u>Face Value or Cost</u>	<u>Market Value</u>	<u>Value per \$100 invested</u>
U.S. Treasury and U.S. Government-guaranteed obligations	\$178,466,500.00	\$159,811,258.93	\$ 89.55
Minnesota State obligations	157,500.00	152,775.00	97.00
Obligations of Minnesota subdivisions	4,206,600.00	3,891,105.00	92.50
Corporate debt obligations	64,242,609.98	64,403,216.50	100.25
Common stocks	<u>17,954,552.35</u>	<u>18,828,913.38</u>	<u>104.87</u>
Totals and average value	\$265,027,762.33	\$247,087,268.81	\$ 93.23

During 1964, a portion of the U.S. Treasury obligations was sold, with reinvestments made in corporate bonds and common stocks. Many of these Treasury obligations consisted of short-term bills which had been purchased specifically for this purpose. Approximately \$38 million of Minnesota State obligations held by the trust funds was invested in short-term U.S. Treasury obligations, which, in turn, were sold during 1964 to make payment for permanent investments.

One factor which may contribute to a rather slow and gradual conversion of the assets in the Permanent School Fund is the fact that most of the Treasury securities still held by that fund consist of comparatively low-coupon issues maturing after 1980. These issues sell at a low price and provide a yield, based on the present market price, in excess of 4 percent. The low coupon and accompanying low price mean that these issues carry a substantial amount of call or refunding protection.

Because of the concentration in these issues, our sales of U.S. Treasury securities have been made to balance our maturity schedules and to eliminate some of the shorter issues, which may be converted to a greater yield advantage. We have also sold certain issues that are fully priced on the market because of institutional demand or particular tax considerations.

THE HIGHWAY FUNDS

Under the terms of a 1963 statute, modified by the 1965 Legislature, the State

Board of Investment may invest the highway funds in those bonds eligible for purchase by the Permanent School Fund and in commercial paper eligible for use in the retirement funds. At present, highway funds are invested in short-term U.S. Treasury securities and repurchase contracts. 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. Because of the time necessary for planning, purchase of right-of-way, and construction of highways, funds are available for investment for considerable periods. The amount of highway funds investments fluctuates throughout the year, but totaled \$85.8 million in face value on December 31, 1964.

During recent years, the highway department has carefully estimated its disbursement needs so as to keep its funds more fully invested. This has resulted in an increase in earnings, for all accounts, from \$1,663,323.05 as recently as fiscal 1958 to a total of \$2,771,427.08 in fiscal 1964.

INVESTED TREASURER'S CASH FUND

Accumulations in the treasurer's cash account have been invested in U.S. Treasury securities since 1949, when a statute was passed authorizing such an investment program. The earnings from the Invested Treasurer's Cash Fund were particularly significant during the period when there was a surplus in the two major State funds, the Income Tax School Fund and the General Revenue Fund. There have also been sizable earnings during recent years, primarily because of the investment of the proceeds from the sale of Minnesota debt issues. These proceeds are invested in short-term U.S. Treasury securities until the building projects are completed. The investments in the Invested Treasurer's Cash Fund are very substantial during the period from late spring until school aid payments are made during the late autumn months.

Securities held in the Invested Treasurer's Cash Fund totaled \$75.0 million on December 31, 1963 and \$51.6 million on December 31, 1964. These investments reached \$142.9 million at fiscal yearend, June 30, 1964, before payment of the initial school aid distribution.

Members of the State Board of Investment and legislators have recently expressed renewed interest in maximizing the earnings from this source. The investment staff has increased the use of U.S. Treasury repurchase agreements in this account during recent months, so that income can be earned on money available for only a few days.

Except for the securities held for the State's building program, practically all the U.S. Treasury obligations held in the Invested Treasurer's Cash Fund mature in less than 9 months from date of purchase. The statute requires that these investments mature within 3 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 correction institutions.

During 1963, a pooled fund was established for the patients of the various welfare institutions. As a result of this pooling arrangement, it was possible to increase substantially the percentage of these funds which could be invested. Although some municipal securities have been used in these funds in the past, we are limiting present purchases to U.S. Treasury obligations.

THE RETIREMENT FUNDS

Investments in various State retirement funds totaled approximately \$283.5 million in book value on December 31, 1964. These funds have been accumulated, for the most part, through payroll deductions affecting employees of the State, subdivisions of the State, and school districts. In recent years, however, the Legislature has greatly increased the contributions to these funds by the employers - the governmental units. As the result of a 1965 law, contributions to these funds will be substantially higher than in the past because of the raising of the maximum salary limits on which these contributions are paid. The basic investment law for retirement funds, passed in 1961, was revised by the 1963 and 1965 Legislatures so as to permit an increased percentage of corporate bond and stock investments.

Although State, municipal, and school district bonds once accounted for approximately 70 percent of the total investments in these retirement accounts, such holdings were reduced to approximately 25.5 percent of the total by December 31, 1964. This percentage decline was due primarily to the placement of all new money in other securities, but was partly accounted for by the sale of tax-exempt bonds during the past 4 years. Sales of such securities totaled \$4,167,000 in 1964. Although these tax-exempt bond sales will continue in future years, it appears that a large portion of the present holdings may be held until maturity. The remaining "municipals" consist primarily of small odd lots that carry either no rating or rating of "Ba" (or "BB") by the leading services. The municipal bond dealers and fiscal agents of the upper Midwest area have been most helpful in completing the sale of these securities. The re-funding of certain of these issues, made possible by action of the 1963 Minnesota Legislature, has increased the value of the affected holdings and may make them more marketable.

Corporate debt obligations now constitute the leading classification of securities in the retirement funds, accounting for 46.6 percent of total investments on a book-value basis. All these securities have been purchased since 1960 and were rated "A" or better, at the time of purchase, by at least one of the nationally recognized rating services - Fitch, Moody's, or Standard & Poor's. These corporate fixed-income investments, yielding 4.67 percent, provide a higher return to the retirement accounts than any other securities category.

The use of common stocks in the retirement funds was authorized by the 1961 Legislature. Under revised provisions passed in 1965, the State Board of Investment may purchase common stocks up to a maximum of 5 percent of the fund's book value in each of the years following 1961, until a maximum of 30 percent in common stocks is reached. By April 14, 1964, the third anniversary of the investment law, such investment accounted for almost 15 percent of the total value of each fund; this percentage increased to nearly 20 percent by April 14, 1965.

On December 31, 1964, the retirement funds held \$179.0 million of corporate secu-

rities, providing an average yield, at cost, of 4.35 percent. The current yield on investments purchased in 1964 decreased somewhat from that obtained during the early 1960's, because of the continuing high level of investment in common stocks. Bonds purchased during 1964 provided a somewhat higher yield than those purchased during the previous year.

The following schedule gives an approximate market valuation of the securities in the combined retirement accounts as of December 31, 1964:

APPROXIMATE MARKET VALUE OF COMBINED RETIREMENT FUNDS INVESTMENTS
December 31, 1964

<u>Type of Security</u>	<u>Face Value or Cost</u>	<u>Market Value</u>	<u>Value per \$100 invested</u>
U.S. Treasury and U.S. Government-guaranteed obligations	\$ 32,226,170.22	\$ 30,915,805.54	\$ 95.93
State College Board obligations	10,152,000.00*	9,441,360.00	93.00
Obligations of Minnesota subdivisions	62,133,500.00	57,473,487.50	92.50
Corporate debt obligations	132,119,162.53	135,091,843.69	102.25
Common stocks	<u>46,833,002.39</u>	<u>54,475,440.27</u>	<u>116.32</u>
Totals and average value	\$283,463,835.14	\$287,397,937.00	\$101.39

* Total includes small quantity of bonds of other states and their subdivisions.

The U.S. Treasury obligations have a market value less than cost because they were purchased during the period of lower interest rates in the late 1940's and early 1950's. The Minnesota State college securities are revenue issues sold to the retirement funds in connection with the financing of dormitories. These securities are listed at an estimated value based on their worth to the State retirement funds; they are not public issues and are not negotiable. The low market value assumed for these securities is due to their comparatively low interest rates. The 1965 Legislature provided for the refunding of the State college revenue issues presently held in the retirement funds. Such an arrangement could result in somewhat lower interest costs for the State College Board and would substantially increase income to the retirement funds.

The market value assigned to the municipal holdings is merely an estimate because of the impossibility of valuing this portfolio, which consists of numerous small holdings and hundreds of individual issues. If an attempt were made to sell these bonds in a short period of time, the price received would be substantially lower than that indicated, because of the difficulty of marketing, in a limited period, such a large number of municipal securities from a comparatively small geographical area. Most of these holdings were purchased in the mid-1950's and carry interest rates somewhat below those prevailing more recently.

The average yield of 4.67 percent provided by the corporate bond holdings is above the rate that could be obtained on comparable investments on December 31, 1964. For the most part, the market value of such securities can only be estimated, because many were issued in the form of private placements. The book profit in the corporate bond accounts reflects the lower interest rates prevailing at yearend 1964 than at

the times most of these bonds were purchased. The listed common stocks were valued from closing prices on the New York Stock Exchange. The prices of unlisted stocks were based on the bid prices appearing in the Wall Street Journal or in other leading financial publications.

REVIEW OF ACCOMPANYING SCHEDULES

Schedule I summarizes the composition of the Permanent School Fund and the retirement funds on December 31, 1964. The rearrangement of the securities in the Permanent School Fund was initiated in mid-1963; under the provisions in the 1962 constitutional amendment and 1963 legislation, this fund will eventually hold approximately 60 percent of its book value in corporate securities. Although the percentage of common stocks in this fund may eventually increase to 20 percent of total book value, the major portion of the account will continue to be invested in fixed-income securities.

The 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 approximately equal diversification among the six retirement funds.

Schedule II shows the yield received on the three largest retirement funds during the past 7 years and 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 percent to nearly 4 percent. It is believed that yield has not been unduly emphasized since 1960. Quality has been stressed in the purchase of bonds, and long-term growth potential in the making of common stock commitments. A continuation of the present purchase program would indicate a temporary plateau of yields at an approximate 4% level. Although high-quality corporate bonds provide a yield considerably higher than this figure, new commitments of common stocks provide an average current yield of approximately 3 percent. The use of certain stocks offering a low current yield has been continued; dividend increases from such stocks have already indicated their future value to the retirement funds and an eventual favorable impact on yield figures.

The different rates of growth experienced by the three major retirement funds account for the variance in the current yields on these funds. The Public Employees Retirement Fund and the Teachers' Retirement Fund have shown a growth rate considerably higher than that of the State Employees Retirement Fund in recent years. A larger part of the investments of the State Employees fund was purchased during the 1950's, at a time of lower bond yields. Future sales programs of Minnesota school and municipal bonds will emphasize the disposition of these securities held by the State Employees Retirement Fund so as to bring this account more in line with the investment diversification shown by the other major retirement funds. The higher percentage of municipal securities owned by the State Employees account has meant a smaller percentage to be invested in the higher yielding corporate fixed-income securities.

Another possible reason for the apparent variance in progress of the three funds during individual years may be the differing accounting procedures used by these associations. In each instance, the schedule shows the figures provided by the retirement fund administrations.

The basic investment policies regarding these three accounts have been identical

since 1960, but purchases of individual securities have varied because of the amounts of cash available and the timing of the contributions to the individual funds.

Schedule III provides a summary of the holdings of U.S. Treasury obligations in the major State accounts on December 31, 1964. Of the funds listed, 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 the payment of State obligations. A portion of the highway funds must be comparatively liquid, but the remainder is held for construction projects in progress, but which may take a period of years for completion. Most of the Treasury obligations in the retirement funds and the Permanent School Fund may be regarded as permanent investments. A portion of these securities, particularly those in the Permanent School Fund, however, are being sold so as to provide a higher ultimate yield to the funds.

Schedule IV lists the corporate bond holdings of the Permanent School Fund on December 31, 1964. At the time this report is being written, on June 1, 1965, corporate bond purchases and commitments total \$77,759,788 and provide an average yield to maturity of 4.52 percent.

Schedule V lists the corporate bond holdings of the retirement funds on December 31, 1964. Except for the nominal amount of railroad bonds previously owned, these securities were purchased since March 1960. On June 1, 1965 corporate bond purchases and commitments total \$141,557,738 and provide an average yield to maturity of 4.66 percent.

Most of the bonds listed as holdings in the retirement funds were purchased at the time of original offering, or soon thereafter, from members of the underwriting syndicates. During the past 2 years, however, both the Permanent School Fund and the retirement funds have purchased an increasing number of private placements, or issues purchased directly from the borrowing corporations by a group of institutional buyers, including public retirement funds and trust funds, insurance companies, and bank trust departments. The State Board of Investment has followed the policy of buying only those private placements that are of sufficient size to be purchased by several buyers, so that the investment department is not in the position of setting the interest rate on any particular issue. Commitments are made for privately placed issues only after they have been reviewed by both the Minnesota investment staff and at least one of the three nationally recognized rating agencies, and have been declared to be of "A" quality or above. During 1964, several bond issues were purchased on the secondary market. These issues were used primarily in the Permanent School Fund, where the added diversity of maturities and the call protection inherent in low-coupon issues were particularly desirable.

Schedule VI details the types of corporate debt obligations owned by the Permanent School Fund and the various retirement funds on December 31, 1964, as well as the redemption features of the securities. Because the Permanent School Fund will not evidence the growth expected in the retirement funds during the next few years, and because the U.S. Treasury securities presently owned by the Permanent School Fund are of very long maturities, a greater emphasis is expected on railroad equipment obligations and secondary market bonds of comparatively short maturity in the Permanent School account. The continuing flow of incoming cash into the retirement funds justifies the somewhat longer average maturity in those funds.

The Board has emphasized call protection on all bonds purchased during the past 5 years. Those securities listed as having call or refunding protection of less than 5 years were purchased prior to 1964 but had 5 or more years of such protection on the purchase date. Over 80 percent of the purchases since 1960 have been of securities that either are noncallable or had at least 5 years of call or refunding protection. Because of these noncallable or nonrefundable features, the portfolio appears to be adequately protected against anticipated fluctuations in interest rates.

The investment staff has been particularly cognizant of the redemption feature problem in the purchase of securities for the Permanent School Fund. Because of the inherent call protection existing in the present holdings of long-term low-coupon U.S. Treasury obligations, it is believed advisable that a degree of such protection be continued in the new securities purchased. It is to be noted, that, as of yearend 1964, all bonds purchased for the Permanent School Fund were protected against call or refunding to a degree in excess of the payment of 1 year's interest at the time of such call or refunding.

Schedule VII lists the common stock holdings in the Permanent School Fund and in the various retirement funds on December 31, 1964. All these securities meet the requirements stated in the applicable statutes and have been approved by the Advisory Committee on Common Stocks. This committee, which was appointed by the State Board of Investment in May 1961, has now served for 4 years and has made a significant contribution to the investment program of the State. The group meets for one afternoon every two months and reviews in detail the equity programs being followed in the Permanent School Fund and the retirement funds. The members of the Board and the staff of the investment department are very appreciative of the time and advice that have been contributed by the 10 members chosen from among the State's leading investment managers. The members of this advisory committee are as follows:

Hermon J. Arnott	President	Farmers & Mechanics Savings Bank of Minneapolis
Franklin Briesse	Executive Vice President	The The Minnesota Mutual Life Insurance Company
Robert S. Davis	Vice President and Investment Officer	St. Paul Fire & Marine Insurance Company
Gaylord W. Glarner	Vice President	First Trust Company of St. Paul
James C. Harris	Vice President	Northwestern National Bank of Minneapolis
John M. Harris	Trust Investment Officer	Northern City National Bank, Duluth
Francis H. Hassing	Investment Counsel	University of Minnesota
Maxwell B. Hight	Investment Section	Mayo Foundation, Rochester

Donald E. Jondahl Vice President - Finance Northwestern National Life Insurance
Company
Norman Terwilliger Executive Secretary Minneapolis Teachers Retirement
Association

Schedule VII indicates that at yearend 1964 the equities in the Permanent School Fund, costing \$17,939,362.51 had a value of \$18,828,913.38; by May 28, 1965, the equities in this account showed a total net cost of \$26,363,772.59 and had a market value of \$28,283,901.49, or a gain of 7.28 percent. This schedule also indicates that on December 31, 1964, the retirement funds owned common stocks costing \$46,833,002.39 and having a market value of \$54,475,440.27. By May 28, 1965, the stocks in the combined retirement funds portfolio had a market value of \$67,562,525.72, compared with a net investment in equities of \$59,043,667.63, thereby showing a gain of 14.43 percent.

It is anticipated that the equities now owned in the Permanent School Fund and the retirement funds will show substantial market fluctuations during future years. Although sales are being made from these accounts, the Board does not intend to use these funds as trading media, but hopes to establish a solid investment in American industry that will provide future income to the accounts. The recent high level of the stock market tends to emphasize the necessity of accepting market and economic downturns along with the more favorable trends, and of basing any stock purchase program on long-term earnings expectations. The stocks purchased for the retirement funds in 1961, which provided at the time of purchase a yield of less than 2.7 percent, now provide a yield of over 3.5 percent on the original cost basis, owing to dividend increases since the time of acquisition. The dividend increases declared during 1964 provided additional income of \$159,737.67 on the stocks owned by the funds during the past year. A comparable increase in income, though perhaps to a somewhat lesser degree, may be anticipated over a period of years as the nation's economy continues to grow.

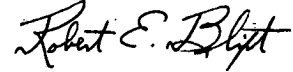
The Advisory Committee on Common Stocks and the State Board of Investment have emphasized such considerations as management factors and long-term growth potential, as well as current yield, in the selection of equity securities. All stocks suggested for inclusion in these funds are first discussed and approved by the Advisory Committee and then brought before the members of the State Board of Investment. The actual purchase program is subject to continuing advice and suggestions by the Advisory Committee on Common Stocks.

A review of policies concerning the placement of business, together with a summary of transactions completed during 1964, follows the schedules described above.

New legislation passed in 1961, 1963, and 1965 provides the framework around which successful investment portfolios may be built in the future. As yet, there remains a considerable amount of work to be done in the implementation of the statutes. As in the past, the investment department will cooperate with the Public Employees Retirement Systems Interim Commission and with the various fund administrations in arranging investment programs that will be most beneficial to the retirement fund members.

The State Board of Investment and the staff of the investment department appreciate the cooperation received from the Legislature in effecting investment changes that have resulted in improved portfolio balance and noticeably higher income during the past 5 years. Comments, suggestions, and criticisms from other public fund managers and members of the securities industry have also been helpful in managing the State's portfolios.

Respectfully submitted,



Robert E. Blixt
Executive Secretary

COMMON STOCKS

CONSUMER-ORIENTED STOCKS:

Utilities		Financial Services		Consumers Goods		Total Consumer-Oriented Stocks	
\$ 4,231,192.11	1.6%	\$ 10,496,022.45	3.7%	\$ 507,175.91	0.2%	\$ 27,610,475.59	9.8%
391,725.19	0.2	\$ 4,474,812.39	1.6%	1,973,242.31	0.7	\$ 9,536,000.58	9.8%
368,331.05	0.1	817,598.31	0.3	1,275,875.69	0.5	\$ 7,582,539.07	10.0%
\$ 4,991,248.35	1.9%	2,294,426.33	0.8	1,624,467.75	0.6	\$ 9,544,436.74	9.5%
		\$ 7,586,837.03	2.7%	1,027,049.23	0.3	\$ 2,205,508.05	2.1%
				\$ 6,407,810.89	2.3%	\$ 2,205,508.05	2.1%
						\$ 171,203.52	3.4%
						\$ 17,165.91	1.8%
						\$ 59,219.02	2.0%
						\$ 317,563.03	10.8%

RESEARCH STOCKS:

\$ 1,679,656.64	0.6%	\$ 4,401,391.08	1.5%	\$ 4,401,391.08	1.5%	\$ 1,273,557.06	1.7%	\$ 1,422,074.51	1.4%	\$ 74,391.97	1.5%	\$ 12,779.82	1.3%	\$ 39,661.51	1.3%
321,606.25	0.1	913,463.95	0.3	913,463.95	0.3	301,509.20	0.3	277,793.75	0.4	21,735.75	0.4	4,906.50	0.5	9,775.00	0.3
407,368.98	0.2	891,244.88	0.3	891,244.88	0.3	281,695.18	0.3	257,781.34	0.3	15,022.04	0.3	-	-	7,421.38	0.3
\$ 2,408,631.87	0.9%	\$ 6,206,099.91	2.1%	\$ 6,206,099.91	2.1%	\$ 1,809,132.15	2.4%	\$ 2,049,143.20	2.0%	\$ 111,149.76	2.2%	\$ 17,686.32	1.8%	\$ 56,857.89	1.9%

NATURAL-RESOURCES STOCKS:

\$ 1,996,068.98	0.7%	\$ 4,436,769.75	1.6%	\$ 4,436,769.75	1.6%	\$ 1,508,720.23	1.5%	\$ 1,271,041.02	1.7%	\$ 1,500,689.68	1.5%	\$ 82,763.79	1.7%	\$ 18,596.16	1.9%
\$ 1,996,068.98	0.7%	\$ 4,436,769.75	1.6%	\$ 4,436,769.75	1.6%	\$ 1,508,720.23	1.5%	\$ 1,271,041.02	1.7%	\$ 1,500,689.68	1.5%	\$ 82,763.79	1.7%	\$ 18,596.16	1.9%

DURABLES STOCKS:

\$ 710,586.83	0.3%	\$ 2,214,682.92	0.8%	\$ 2,214,682.92	0.8%	\$ 722,494.50	0.7%	\$ 712,264.79	1.0%	\$ 706,796.18	0.7%	\$ 32,897.37	0.7%	\$ 11,667.81	1.2%
418,497.88	0.2	1,042,799.58	0.4	1,042,799.58	0.4	343,221.47	0.4	266,905.37	0.4	385,781.63	0.4	19,268.96	0.4	3,691.53	0.4
569,395.38	0.2	1,020,175.65	0.3	1,020,175.65	0.3	347,676.67	0.4	311,844.05	0.4	325,327.65	0.3	30,597.34	-0.6	4,729.94	0.5
573,060.66	0.2	1,929,630.06	0.7	1,929,630.06	0.7	692,460.30	0.7	543,493.94	0.7	640,529.14	0.6	24,478.32	0.5	9,267.44	0.9
364,715.83	0.1	894,567.36	0.3	894,567.36	0.3	326,213.57	0.3	256,997.98	0.3	282,914.00	0.3	10,031.63	0.2	7,449.88	0.8
280,990.63	0.1	845,042.85	0.3	845,042.85	0.3	306,501.19	0.3	233,762.10	0.3	276,606.31	0.3	22,140.76	0.4	6,032.49	0.6
257,980.48	0.1	632,758.72	0.2	632,758.72	0.2	188,757.96	0.2	153,618.36	0.2	264,247.36	0.3	14,308.28	0.3	7,141.50	0.7
\$ 3,175,227.69	1.2%	\$ 8,579,657.14	3.0%	\$ 8,579,657.14	3.0%	\$ 2,927,325.66	3.0%	\$ 2,478,886.59	3.3%	\$ 2,882,202.27	2.9%	\$ 153,722.66	3.1%	\$ 49,980.59	5.1%
\$ 17,954,552.35	6.8%	\$ 46,833,002.39	16.5%	\$ 46,833,002.39	16.5%	\$ 16,134,177.06	16.5%	\$ 13,141,598.83	17.4%	\$ 15,976,471.89	15.9%	\$ 913,542.36	18.3%	\$ 150,293.09	15.4%

\$ 264,607,762.33	100.0%	\$ 283,474,364.92	100.0%	\$ 283,474,364.92	100.0%	\$ 98,673,357.70	100.0%	\$ 75,485,567.13	100.0%	\$ 100,413,185.48	100.0%	\$ 4,994,042.36	100.0%	\$ 978,293.09	100.0%

* Minnesota State College Board obligations.

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Schedule II

RATE OF RETURN ON AVERAGE AMOUNT INVESTED DURING FISCAL PERIODS
IN THE THREE LARGEST RETIREMENT FUNDS
December 31, 1964

	PUBLIC EMPLOYEES RETIREMENT FUND				STATE EMPLOYEES RETIREMENT FUND				TEACHERS' RETIREMENT FUND			
	Book Value (1)(6)	Average Book Value for Year Ending (2)	Income for Year Ending (3)	Yield (4)	Book Value (1)	Average Book Value for Year Ending (2)	Income for Year Ending (3,5)	Yield (4)	Book Value (1)	Average Book Value for Year Ending (2)	Income for Year Ending (3)	Yield (4)
June 30, 1956	\$ 17,357,500	-	-	-	\$32,872,500	-	-	-	\$ 27,471,100	-	-	-
December 31, 1956	\$ 18,286,750	-	-	-	\$34,910,000	-	-	-	\$ 29,748,400	-	-	-
June 30, 1957	\$ 19,301,750	-	-	-	\$36,797,000	\$34,859,833	\$1,016,556.48	2.92%	\$ 31,853,900	-	-	-
December 31, 1957	\$ 20,588,750	-	-	-	\$39,577,500	-	-	-	\$ 34,149,700	-	-	-
June 30, 1958	\$ 23,625,000	\$21,171,833	\$ 614,096.77	2.90%	\$39,715,500	-	-	-	\$ 37,242,200	\$34,415,267	\$1,018,014.26	2.90%
December 31, 1958	\$ 27,515,000	-	-	-	\$41,985,500	\$40,426,167	\$1,225,833.46	3.03%	\$ 42,777,200	-	-	-
June 30, 1959	\$ 31,563,000	\$27,567,667	\$ 880,223,48	3.19%	\$44,659,000	-	-	-	\$ 48,523,300	\$42,847,567	\$1,409,995.45	3.29%
December 31, 1959	\$ 35,414,500	-	-	-	\$46,911,500	\$44,518,667	\$1,378,022.98	3.10%	\$ 54,313,000	-	-	-
June 30, 1960	\$ 41,548,500	\$36,175,333	\$1,211,061.33	3.35%	\$49,816,500	-	-	-	\$ 55,243,300	\$52,693,300	\$1,823,482.03	3.46%
December 31, 1960	\$ 46,935,500	-	-	-	\$51,967,000	\$49,565,000	\$1,631,458.61	3.29%	\$ 59,160,300	-	-	-
June 30, 1961	\$ 54,183,680	\$47,555,893	\$1,753,679.00	3.69%	\$54,499,050	-	-	-	\$ 63,098,540	\$59,167,380	\$2,140,761.22	3.62%
December 31, 1961	\$ 61,433,745	-	-	-	\$56,830,438	\$54,432,163	\$1,885,692.64	3.46%	\$ 67,775,429	-	-	-
June 30, 1962	\$ 68,132,958	\$61,250,128	\$2,340,665.00	3.82%	\$59,843,686	-	-	-	\$ 73,187,108	\$68,020,359	\$2,587,612.53	3.80%
December 31, 1962	\$ 75,195,593	-	-	-	\$62,517,119	\$59,730,414	\$2,168,821.46	3.63%	\$ 77,813,737	-	-	-
June 30, 1963	\$ 81,436,890	\$74,921,814	\$2,990,070.00	3.99%	\$65,432,932	-	-	-	\$ 82,990,550	\$77,997,132	\$3,011,190.37	3.86%
December 31, 1963	\$ 92,347,700	-	-	-	\$68,922,451	\$65,624,167	\$2,466,206.57	3.76%	\$ 88,480,685	-	-	-
June 30, 1964	\$ 96,311,091	\$90,031,894	\$3,613,002.65	4.01%	\$72,100,574	-	-	-	\$ 96,529,180	\$89,333,472	\$3,546,799.82	3.97%
December 31, 1964	\$103,667,519	-	-	-	\$75,485,635	\$72,169,553	\$2,771,915.82	3.84%	\$100,413,219	-	-	-

- (1) Book value figures based on those shown on Treasurer's General Report on State Finances on date listed, with adjustments for 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 of the respective retirement funds.
- (4) Computed by dividing income of fund for fiscal period by average book value of fund during period.
- (5) In 1957, State Employees Retirement Fund changed from a fiscal-year to a calendar-year basis.
- (6) Includes the Public Employees Police & Fire Fund for periods after July 1, 1960, when it was established.

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Schedule III

U.S. GOVERNMENT OBLIGATIONS HELD BY VARIOUS FUNDS
December 31, 1964

	INVESTED TREASURER'S CASH FUND	HIGHWAY FUNDS			PERMANENT SCHOOL FUND	COMBINED RETIREMENT FUNDS
		TRUNK	COUNTY STATE AID	MUNICIPAL STATE AID		
U.S. TREASURY SECURITIES						
BILLS						
Maturity less than 30 days	-	\$ 600,000	-	-	-	\$ 2,460,000
Maturity 30-90 days	\$19,300,000	14,200,000	\$ 6,400,000	\$ 1,900,000	\$ 300,000	1,125,000
Maturity 3-6 months	2,000,000	-	-	700,000	-	-
Maturity 6-12 months	1,000,000	16,300,000	3,200,000	300,000	-	-
Total Bills	\$22,300,000	\$31,100,000	\$ 9,600,000	\$ 2,900,000	\$ 300,000	\$ 3,585,000
REPURCHASE AGREEMENTS						
Maturity less than 30 days	-	-	-	-	-	\$ 890,000*
NOTES AND BONDS						
Maturity less than 1 year	\$23,093,000	\$ 6,500,000	\$ 1,850,000	\$ 2,300,000	\$ 182,000	\$ 1,420,000
Maturity 1-3 years	6,200,000	-	-	-	3,660,000	1,387,000
Maturity 3-5 years	-	7,500,000	4,350,000	2,700,000	15,202,500	4,545,000
Maturity 5-10 years	-	9,500,000	4,500,000	3,000,000	41,984,500	12,495,000
Maturity more than 10 years	-	-	-	-	115,717,500	3,735,000
Total Notes and Bonds	\$29,293,000	\$23,500,000	\$10,700,000	\$ 8,000,000	\$176,746,500	\$23,582,000
OBLIGATIONS GUARANTEED BY THE U.S. GOVERNMENT						
Average maturity about 11 years	-	-	-	-	\$ 1,000,000	\$ 4,179,000
Total U.S. Government Obligations	\$51,593,000	\$54,600,000	\$20,300,000	\$10,900,000	\$178,046,500	\$32,236,000

* Face value of securities subject to repurchase agreements.

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Schedule IV

CORPORATE BOND HOLDINGS - PERMANENT SCHOOL FUND
December 31, 1964

ISSUE					
Company	Type of Security	Maturity Date (1)	Coupon Rate %	Average Yield %	Total Amount (000)
PUBLIC UTILITY OBLIGATIONS					
ELECTRIC					
Florida Power & Light Co.	First Mortgage	4-1-94	4 5/8	4.50	\$ 1,200
Gulf Power Co.	First Mortgage	9-1-71	3 1/8	4.55	1,348
Hawaiian Electric Co., Ltd.	First Mortgage	7-1-93	4.45	4.45	1,000
Indiana & Michigan Electric Co.	First Mortgage	8-1-93	4 3/8	4.42	1,000
Interstate Power Co.	First Mortgage	5-1-93	4 3/8	4.39	1,000
Iowa Power & Light Co.	S/F Debenture	4-1-89	4 5/8	4.57	1,200
Jersey Central Power & Light Co.	Debenture	10-1-88	4 5/8	4.56	980
Massachusetts Electric Co.	First Mortgage	12-1-93	4 5/8	4.55	1,100
Montana-Dakota Utilities Co.	S/F Bond	7-1-84	4 5/8	4.615	1,000
Northern States Power Co.	First Mortgage	9-1-93	4 3/8	4.375	1,000
Otter Tail Power Co.	First Mortgage	11-1-93	4 5/8	4.60	1,000
Potomac Edison Co.	First Mortgage	3-1-94	4 5/8	4.55	1,200
	& Coll. Trust				
Public Service Co. of Indiana	First Mortgage	7-1-82	3 3/8	4.38	1,100
Public Service Electric & Gas Co.	First & Refunding Mortgage	9-1-94	4 5/8	4.53	1,200
Southern California Edison Co.	First & Refunding Mortgage	3-1-89	4 3/8	4.44	1,500
Southwestern Public Service Co.	First Mortgage	2-1-94	4 1/2	4.50	1,200
Total Electric Utility Obligations				4.50%	\$18,028
GAS					
Columbia Gas System, Inc.	Debenture	5-1-89	4 5/8	4.64	\$ 1,200
Michigan Consolidated Gas Co.	First Mortgage	6-1-89	4 3/4	4.60	1,200
Panhandle Eastern Pipe Line Co.	Debenture	2-1-84	4.60	4.60	1,200
Peoples Gas Light & Coke Co.	First & Refunding Mortgage	8-1-66	3 1/4	4.15	1,500
Suburban Propane Gas Corp.	Note	12-30-84	4 7/8	4.875	1,000
Total Gas Utility Obligations				4.54%	\$ 6,100
TELEPHONE					
American Telephone & Telegraph Co.	Debenture	9-15-84	3 1/4	4.40	\$ 1,000
American Telephone & Telegraph Co.	Debenture	5-1-99	4 3/8	4.365	1,500
New York Telephone Co.	Refunding Mortgage	1-1-2004	4 5/8	4.53	1,500
Pacific Northwest Bell Telephone Co.	Debenture	12-1-2000	4 1/2	4.49	1,500
Total Telephone Utility Obligations				4.45%	\$ 5,500
<i>Total Public Utility Obligations</i>				4.50%	\$29,628
FINANCE OBLIGATIONS					
Beneficial Finance Co.	Note	3-1-89	4.60	4.60	\$ 1,000
<i>Total Finance Obligations</i>				4.60%	\$ 1,000
INSURANCE OBLIGATIONS					
Gulf Life Insurance Co.	Capital Note	6-1-89	4 3/4	4.75	\$ 1,200
<i>Total Insurance Obligations</i>				4.75%	\$ 1,200

ISSUE

Company	Type of Security	Maturity Date (1)	Coupon Rate %	Average Yield %	Total Amount (000)
INDUSTRIAL OBLIGATIONS					
American Greetings Corp.	Promissory Note	10-1-84	4.70	4.70	\$ 1,000
American Metal Climax, Inc.	Note	8-1-88	4.50	4.50	1,000
Burroughs Corp.	Debenture	7-1-88	4 1/2	4.53	1,000
Diamond Alkali Corp.	Note	5-1-89	4.65	4.65	1,200
Dow Chemical Co.	Debenture	9-15-88	4.35	4.35	1,000
General Cable Corp.	Note	1-1-89	4 1/2	4.50	1,000
Kern County Land Co.	Promissory Note	9-1-89	4.65	4.65	1,200
Mead Corp.	Note	6-1-78	4 1/4	4.45	1,400
Mead Johnson & Co.	Promissory Note	5-1-84	4 5/8	4.625	1,200
Pillsbury Co.	Promissory Note	12-1-88	4 3/8	4.40	1,000
Sinclair Oil Corp.	S/F Debenture	12-15-88	4.60	4.60	1,200
Sprague Electric Co.	S/F Debenture	9-1-88	4 3/8	4.40	1,000
Standard Oil Co. of Indiana	Promissory Note	4-1-65/79	2.90	4.67	1,500
Texaco Inc.	Note	12-15-89	4 1/2	4.50	1,500
Witco Chemical Co., Inc.	Note	12-1-84	4.65	4.65	1,200
<i>Total Industrial Obligations</i>				4.55%	\$17,400
TRANSPORTATION DEBT OBLIGATIONS					
Atchison, Topeka & Santa Fe Railway Co.	General Gold 4's	12-12-95	4	4.40	\$ 1,500
The Greyhound Corp.	Senior Note	5-15-84	4 5/8	4.625	1,200
Seaboard Air Line Railroad Co.	First Mortgage	12-1-88	4 5/8	4.65	1,000
Southern Railway Co.	First Mortgage	6-1-88	4 5/8	4.625	1,000
<i>Total Transportation Debt Obligations</i>				4.56%	\$ 4,700
RAILROAD EQUIPMENT OBLIGATIONS					
Chesapeake & Ohio Railway Co.	Cond. Sale	6-1-65/78	4.40	4.40	\$ 1,338 ^b
General American Transportation Corp.	Equipment Trust	7-18-84	4 5/8	4.59	1,500
Kansas City Southern Railway Co.	Cond. Sale	1-15-69/ 7-15-73	4.35	4.35	984 ^c
Kansas City Southern Railway Co.	Cond. Sale	1-15-74/ 7-15-78	4.45	4.45	492 ^d
Norfolk & Western Railway Co.	Cond. Sale	12-15-70/79	4.50	4.50	1,500
North American Car Corp.	Equipment Trust	9-1-69/73	4.55	4.55	500
North American Car Corp.	Equipment Trust	9-1-74/78	4.65	4.65	1,000
Seaboard Air Line Railroad Co.	Equipment Trust	4-15-71/75	4 1/4	4.45	1,500
Southern Pacific Co.	Equipment Trust	4-1-71/73	4 1/4	4.45	1,500
<i>Total Railroad Equipment Obligations</i>				4.46%	\$10,314
TOTAL CORPORATE OBLIGATIONS				4.52%	\$64,242

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

b. Figure shown is rounded to the nearest thousand; actual holding is as follows: \$1,337,921.20.

c. Figure shown is rounded to the nearest thousand; actual holding is as follows: \$ 984,459.19.

d. Figure shown is rounded to the nearest thousand; actual holding is as follows: \$ 492,229.59.

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

CORPORATE BOND HOLDINGS - RETIREMENT FUNDS

Schedule V

December 31, 1964

ISSUE		Maturity Date (1)	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)	State Police Officers Retirement Fund (000)	Highway Patrolmen's Retirement Fund (000)	
Company	Type of Security											
PUBLIC UTILITY OBLIGATIONS												
ELECTRIC												
Alabama Power Co.	First Mortgage	4-1-90	5	5.01	\$ 586	\$ 169	\$ 117	\$ 300	-	-	-	
Alabama Power Co.	First Mortgage	3-1-91	4 1/2	4.40	850	350	300	150	-	-	\$ 50	
Atlantic City Electric Co.	First Mortgage	3-1-91	4 1/2	4.37	1,200	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	850	350	-	500	-	-	-	
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	687	-	295	295	\$ 58	-	39	
Citizens Utilities Co.	First Mortgage	12-31-91	4.80	4.80	1,000	600	400	-	-	-	-	
Citizens Utilities Co.	Coll. Trust & First Mortgage	10-1-92	4 5/8	4.625	600	-	-	600	-	-	-	
Consolidated Edison Co.	First & Refunding Mortgage	12-1-93	4 5/8	4.54	800	700	-	-	-	-	-	
Dayton Power & Light Co.	First Mortgage	6-1-93	4.45	4.45	1,500	500	400	600	-	-	-	
Georgia Power Co.	First Mortgage	11-1-90	4 7/8	4.875	800	500	200	-	60	-	40	
Hawaiian Electric Co., Ltd.	First Mortgage	4-1-91	4.65	4.65	1,550	600	450	500	-	-	-	
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	495	-	-	495	-	-	-	
Jersey Central Power & Light Co.	Debenture	10-1-88	4 5/8	4.56	1,690	588	392	588	73	-	49	
Kansas Gas & Electric Co.	First Mortgage	4-1-70	3 3/8	4.50	1,000	-	500	500	-	-	-	
Lake Superior District Power Co.	First Mortgage	2-1-91	4 5/8	4.60	500	500	-	-	-	-	-	
Long Island Lighting Co.	First Mortgage	4-1-93	4.40	4.40	1,000	500	-	500	-	-	-	
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	1,200	550	-	550	50	-	50	
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	839	494	295	-	50	-	-	
Otter Tail Power Co.	First Mortgage	11-1-93	4 5/8	4.625	225	200	-	-	25	-	-	
Pacific Power & Light Co.	First Mortgage	4-1-92	4 3/4	4.69	1,050	500	-	400	60	40	50	
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	9-1-94	4 5/8	4.53	1,215	500	400	200	40	-	75	
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	4.60	500	250	250	-	-	-	-	
Puget Sound Power & Light Co.	First Mortgage	11-1-93	4 5/8	4.60	1,200	350	250	600	-	-	-	
Sierra Pacific Power Co.	First Mortgage	6-1-92	4 7/8	4.75	1,430	400	500	430	50	50	-	
Southern California Edison Co.	First & Refunding Mortgage	9-1-85	4 3/8	4.43	1,260	500	260	500	-	-	-	
Southern California Edison Co.	First & Refunding Mortgage	4-1-86	4 1/2	4.42	550	150	250	150	-	-	-	
Southwestern Public Service Co.	First Mortgage	2-1-94	4 1/2	4.50	700	-	-	700	-	-	-	
Utah Power & Light Co.	First Mortgage	9-1-90	4 7/8	4.80	1,290	500	260	500	-	-	30	
Total Electric Utility Obligations					4.66%	\$36,117	\$13,101	\$7,969	\$13,808	\$676	\$130	\$433
GAS												
Arkansas Louisiana Gas Co.	First Mortgage	4-1-83	4 3/8	4.45	\$ 1,400	\$ 500	\$ 400	\$ 500	-	-	-	
Columbia Gas System, Inc.	Debenture	1-1-88	4 3/8	4.375	1,650	600	400	600	-	-	\$ 50	
Gas Service Co.	First Mortgage	5-1-83	4.40	4.40	1,372	441	392	441	-	\$ 49	49	
Laclede Gas Co.	First Mortgage	7-1-85	4 7/8	4.80	478	237	195	-	\$ 46	-	-	
Louisiana Gas Service Co.	First Mortgage	6-1-87	4 1/2	4.70	1,550	500	500	400	100	-	50	
Michigan Consolidated Gas Co.	First Mortgage	6-1-89	4 3/4	4.60	1,275	-	400	700	74	50	50	
Michigan-Wisconsin Pipe Line Co.	First Mortgage	7-15-83	4 7/8	4.70	1,475	500	400	500	75	-	-	
Milwaukee Gas Light Co.	First Mortgage	5-15-87	4 5/8	4.50	539	-	-	489	-	-	50	
Mountain Fuel Supply Co.	Debenture	9-1-86	4 7/8	4.80	1,250	600	-	600	-	-	50	
Natural Gas Pipeline Co. of America	First Mortgage	10-1-80	5	5.00	904	452	226	226	-	-	-	

CORPORATE BOND HOLDINGS - RETIREMENT FUNDS - December 31, 1964

Schedule V
(continued)

ISSUE		Maturity	Coupon	Average	Total	Public Employees	State Employees	Teachers'	Public Employees	State Police Officers	Highway Patrolmen's
Company	Company	Date (1)	Rate	Yield	Amount	Retirement Fund	Retirement Fund	Retirement Fund	Police & Fire Fund	Retirement Fund	Retirement Fund
		Type of Security	%	%	(000)	(000)	(000)	(000)	(000)	(000)	(000)
GAS (continued)											
	Northern Natural Gas Co.	Debenture	11-1-81	4 7/8	4.80	1,002	488	-	490	-	24
	Northwest Natural Gas Co.	First Mortgage	1-1-89	4 3/4	4.72	1,600	600	400	600	-	-
	Panhandle Eastern Pipe Line Co.	Debenture	2-1-84	4.60	4.60	\$ 650	\$ 600	-	-	-	\$ 50
	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	1,260	484	388	\$ 388	-	-
	Southern Union Gas Co.	First Mortgage	10-1-86	4.80	4.80	1,200	600	-	600	-	-
	Springfield Gas Light Co.	Note	1-15-87	4 7/8	4.875	792	495	297	-	-	-
	Suburban Propane Gas Corp.	Note	12-30-84	4 7/8	4.875	1,000	600	400	-	-	-
	Texas Eastern Transmission Corp.	First Mortgage	12-1-81	4 7/8	4.915	1,251	385	385	481	-	-
	Transcontinental Gas Pipe Line Corp.	First Mortgage	11-1-81	5	5.08	1,481	518	425	538	-	-
	Transcontinental Gas Pipe Line Corp.	First Mortgage	11-1-82	4 7/8	4.82	1,031	295	289	293	56	\$ 49
	Trunkline Gas Co.	First Mortgage	1-1-82	5	5.00	1,428	476	476	476	-	49
	Total Gas Utility Obligations				4.73%	\$25,753	\$ 9,768	\$ 6,213	\$ 8,814	\$388	\$172
TELEPHONE											
	American Telephone & Telegraph Co.	Debenture	10-1-96	4 3/8	4.30	\$ 1,650	\$ 500	\$ 400	\$ 600	\$100	-
	General Telephone Co. of Florida	First Mortgage	5-1-93	4 1/2	4.50	1,000	500	-	500	-	-
	Illinois Bell Telephone Co.	First Mortgage	7-1-97	4 7/8	4.75	500	250	200	-	50	-
	New York Telephone Co.	Refunding Mortgage	10-1-97	4 5/8	4.57	500	500	-	-	-	-
	New York Telephone Co.	Refunding Mortgage	1-1-2004	4 5/8	4.53	1,400	700	-	700	-	-
	Pacific Northwest Bell Telephone Co.	Debenture	12-1-2000	4 1/2	4.49	1,000	600	400	-	-	-
	Rochester Telephone Corp.	First Mortgage	9-1-93	4 3/4	4.70	1,110	500	-	500	60	50
	Total Telephone Utility Obligations				4.50%	\$ 7,160	\$ 3,550	\$ 1,000	\$ 2,300	\$210	\$100
WATER											
	Indianapolis Water Co.	First Mortgage	1-1-92	4 3/4	4.70	\$ 1,000	\$ 400	\$ 300	\$ 300	-	-
	Total Public Utility Obligations				4.67%	\$70,030	\$26,819	\$15,482	\$25,222	\$1,274	\$302
FINANCE OBLIGATIONS											
	Beneficial Finance Co.	Note	3-1-89	4.60	4.60	\$ 1,475	\$ 500	\$ 400	\$ 500	\$ 75	-
	General Electric Credit Corp.	Promissory Note	10-8-82	4 5/8	4.625	1,500	500	400	600	-	-
	Total Finance Obligations				4.61%	\$ 2,975	\$ 1,000	\$ 800	\$ 1,100	\$ 75	-
INDUSTRIAL OBLIGATIONS											
	Aluminum Co. of America	Promissory Note	3-31-88	4 3/8	4.375	\$ 1,500	\$ 500	\$ 400	\$ 600	-	-
	American Metal Climax, Inc.	Note	8-1-88	4.50	4.50	600	-	-	600	-	-
	American Sterilizer Co.	Note	8-1-77	4 7/8	4.875	750	350	400	-	-	-
	Archer-Daniels-Midland Co.	Promissory Note	3-1-88	4 3/8	4.39	1,750	650	450	650	-	-
	Ashland Oil & Refining Co.	S/F Debenture	2-15-88	4.35	4.35	1,500	500	400	600	-	-
	Burroughs Corp.	Debenture	7-1-88	4 1/2	4.53	1,400	500	400	500	-	-
	Ekco Products Co.	S/F Debenture	8-1-87	4.60	4.60	1,400	350	400	600	\$ 50	-
	Emporium-Capwell Co.	Note	5-1-83	4.50	4.50	950	522.5	380	-	47.5	-
	Gimbel Brothers, Inc.	S/F Debenture	6-1-81	5	5.08	500	500	-	-	-	-
	International Milling Co.	Note	3-1-88	4 1/2	4.50	1,000	500	-	500	-	-
	Kern County Land Co.	Promissory Note	9-1-89	4.65	4.65	1,600	600	400	600	-	-
	The Kroger Co.	Note	10-1-81	4.80	4.80	1,500	500	400	600	-	-
	Mead Corp.	Note	6-1-78	4 1/4	4.45	1,100	-	500	600	-	-
	Mead Johnson & Co.	Promissory Note	5-1-84	4 5/8	4.625	700	-	-	600	50	\$ 50
	Pillsbury Co.	Promissory Note	12-1-88	4 3/8	4.40	600	-	-	600	-	-
	Shamrock Oil & Gas Corp.	Promissory Note	11-15-87	4 1/2	4.50	1,500	500	400	500	100	-
	Sinclair Oil Corp.	S/F Debenture	12-15-88	4.60	4.60	1,000	600	400	-	-	-
	Sprague Electric Co.	S/F Debenture	9-1-88	4 3/8	4.40	600	-	-	550	-	50
	Standard Oil Co. (Indiana)	Promissory Note	4-1-65/79	2.90	4.67	1,000	-	450	550	-	-
	Swift & Co.	Debenture	6-1-86	4 7/8	4.875	1,400	500	400	500	-	-
	Union Tank Car Co.	S/F Debenture	8-1-86	5	5.00	1,300	500	400	400	-	-
	United States Steel Corp.	S/F Debenture	4-15-86	4 1/2	4.55	1,400	500	400	500	-	-
	Witco Chemical Co., Inc.	Note	12-1-84	4.65	4.65	1,800	650	400	600	75	75
	Worthington Corp.	Note	7-1-81	5	5.00	1,200	400	300	500	-	-
	Total Industrial Obligations				4.61%	\$28,050	\$ 9,122.5	\$ 7,280	\$11,150	\$322.5	\$175

CORPORATE BOND HOLDINGS - RETIREMENT FUNDS - December 31, 1964

Schedule 1
(continued)

ISSUE		Maturity Date (1)	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)	State Police Officers Retirement Fund (000)	Highway Patrolmen's Retirement Fund (000)
TRANSPORTATION DEBT OBLIGATIONS											
Atchison, Topeka & Santa Fe Railway Co.	General Gold 4's	12-12-95	4	4.40	\$ 500	-	\$ -	\$ 500	-	-	-
Atlantic Coast Line Railroad Co.	First Mortgage	10-1-88	4 3/4	4.75	1,417	488	392	488	-	-	\$ 49
The Greyhound Corp.	Senior Note	5-15-84	4 5/8	4.625	1,600	600	400	600	-	-	-
Louisville & Nashville Railroad Co.	Coll. Trust	12-1-87	4 7/8	4.95	1,500	500	400	450	\$ 50	\$ 50	50
Seaboard Air Line Railroad Co.	First Mortgage	12-1-88	4 5/8	4.65	1,725	600	400	600	75	-	50
Southern Railway Co.	First Mortgage	6-1-88	4 5/8	4.625	1,685	600	400	585	50	50	-
Western Maryland Railway Co.	First Mortgage	10-1-89	4.85	4.85	1,550	500	400	500	75	-	75
Miscellaneous Railroad Bonds	Bond	Various	Various	4.31	42	-	42*	-	-	-	-
<i>Total Transportation Debt Obligations</i>				4.70%	\$10,019	\$ 3,288	\$ 2,434	\$ 3,723	\$250	\$100	\$224
RAILROAD EQUIPMENT OBLIGATIONS											
ACF Industries, Inc.	Equipment Trust	11-1-65/75	4 3/4	4.75	\$ 1,485	\$ 550	\$ 385	\$ 550	-	-	-
ACF Industries, Inc.	Equipment Trust	1-15-65/77	4 7/8	4.875	884	442	442	-	-	-	-
Chesapeake & Ohio Railway Co.	Cond. Sale	11-1-65/78	4.55	4.55	1,767 ^a	653 ^a	460 ^a	653 ^a	-	-	-
Chicago, Milwaukee, St. Paul & Pacific Railroad Co.	Cond. Sale	1-1-65/77	5 3/8	5.375	1,732 ^b	624 ^b	499 ^b	609 ^b	-	-	-
Fruit Growers Express Co.	Equipment Trust	5-1-65/67	4.40	4.40	150	75	-	75	-	-	-
Fruit Growers Express Co.	Equipment Trust	5-1-68/77	4.70	4.70	500	250	-	250	-	-	-
Fruit Growers Express Co.	Equipment Trust	12-15-65/75	4 3/4	4.75	1,537	450	450	450	\$110	-	\$ 77
General American Transportation Corp.	Equipment Trust	7-18-84	4 5/8	4.59	1,675	675	400	600	-	-	-
Kansas City Southern Railway Co.	Cond. Sale	12-15-65/6-15-76	4 1/2	4.50	2,020 ^c	690 ^c	640 ^c	690 ^c	-	-	-
New York Central Railroad Co.	Equipment Trust	2-15-71	4.75	5.00	950	500	450	-	-	-	-
New York Central Railroad Co.	Equipment Trust	6-1-73	4 7/8	5.15	50	-	-	-	-	-	50
New York, Chicago and St. Louis Railroad Co.	Cond. Sale	11-15-69/5-15-79	4.55	4.55	1,800	690	420	690	-	-	-
North American Car Corp.	Equipment Trust	4-15-68/10-15-72	4.40	4.40	600	200	170	200	30	-	-
North American Car Corp.	Equipment Trust	4-15-73/10-15-77	4.50	4.50	1,200	400	340	400	60	-	-
St. Louis-San Francisco Railway Co.	Cond. Sale	6-1-65/72	4 1/4	4.50	957 ^d	295 ^d	295 ^d	368 ^d	-	-	-
St. Louis-San Francisco Railway Co.	Cond. Sale	1-2-65/1-2-77	4 3/4	4.75	1,623 ^e	600 ^e	425 ^e	598 ^e	-	-	-
Southern Pacific Co.	Equipment Trust	2-1-71/73	4.25	4.50	985	450	-	500	35	-	-
Western Fruit Express Co.	Equipment Trust	1-1-63/7-1-75	4.85	4.85	1,130	330	220	580	-	-	-
<i>Total Railroad Equipment Obligations</i>				4.71%	\$21,045	\$ 7,874	\$ 5,596	\$ 7,213	\$235	-	\$127
TOTAL CORPORATE OBLIGATIONS				4.66%	\$132,119	\$48,103.5	\$31,592	\$48,408	\$2,156.5	\$402	\$1,457

a. Rounded to nearest thousand; actual holdings are as follows:

Public Employees Retirement Fund	\$653,333.33
State Employees Retirement Fund	\$460,151.58
Teachers' Retirement Fund	\$653,333.34
Total	\$1,766,818.25

b. Rounded to nearest thousand; actual holdings are as follows:

Public Employees Retirement Fund	\$623,686.21
State Employees Retirement Fund	\$498,948.97
Teachers' Retirement Fund	\$609,329.74
Total	\$1,731,964.92

c. Rounded to nearest thousand; actual holdings are as follows:

Public Employees Retirement Fund	\$690,000.00
State Employees Retirement Fund	\$640,166.67
Teachers' Retirement Fund	\$690,000.00
Total	\$2,020,166.67

d. Rounded to nearest thousand; actual holdings are as follows:

Public Employees Retirement Fund	\$294,791.10
State Employees Retirement Fund	\$294,791.08
Teachers' Retirement Fund	\$367,730.51
Total	\$957,312.69

e. Rounded to nearest thousand; actual holdings are as follows:

Public Employees Retirement Fund	\$424,910.00
State Employees Retirement Fund	\$599,870.00
Teachers' Retirement Fund	\$598,120.00
Total	\$1,622,900.00

* Purchased 1930-1951.

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Schedule VI

CORPORATE BOND HOLDINGS - PERMANENT SCHOOL FUND AND RETIREMENT FUNDS
December 31, 1964

<u>PERMANENT SCHOOL FUND</u>			<u>RETIREMENT FUNDS</u>	
<u>Dollar Amount</u> <u>(000)</u>	<u>%</u>	<u>CLASSIFICATION BY CORPORATE TYPE</u>	<u>Dollar Amount</u> <u>(000)</u>	<u>%</u>
		Public Utility Obligations		
\$18,028	28.06%	Electric	\$ 36,117	27.34%
6,100	9.50	Gas pipeline & distribution	25,753	19.49
5,500	8.56	Telephone	7,160	5.42
--	--	Water	<u>1,000</u>	<u>0.76</u>
<u>\$29,628</u>	<u>46.12%</u>	<i>Total Public Utility Obligations</i>	<u>\$ 70,030</u>	<u>53.01%</u>
		Other Obligations		
\$ 2,200	3.43%	Finance	\$ 2,975	2.25%
17,400	27.08	Industrial	28,050	21.23
4,700	7.32	Transportation	10,019	7.58
<u>10,315</u>	<u>16.05</u>	Railroad equipment	<u>21,045</u>	<u>15.93</u>
<u>\$34,615</u>	<u>53.88%</u>	<i>Total Other Obligations</i>	<u>\$ 62,089</u>	<u>46.99%</u>
<u>\$64,243</u>	<u>100.00%</u>	TOTALS	<u>\$132,119</u>	<u>100.00%</u>
		<u>DISTRIBUTION BY REDEMPTION FEATURE</u>		
\$10,315	16.06%	Noncallable	\$ 20,370	15.42%
23,200	36.11	5-year or more call or refunding protection	19,960	15.11
10,000	15.57	1-year to 5-year call or refunding protection	58,194	44.05
20,728	32.26	More than coupon at time of purchase	16,418	12.43
--	--	Coupon at time of purchase	16,995	12.86
--	--	Less than coupon at time of purchase and miscellaneous	182	.13
<u>\$64,243</u>	<u>100.00%</u>	TOTALS	<u>\$132,119</u>	<u>100.00%</u>

COMMON STOCKS HELD IN THE PERMANENT SCHOOL FUND AND RETIREMENT FUNDS - December 31, 1964

Schedule VII
(continued)

PERMANENT SCHOOL FUND

RETIREMENT FUNDS

PERMANENT SCHOOL FUND		RETIREMENT FUNDS								
Shares	Cost	Company	Total Shares	Public Employees Retirement Fund	State Employees Retirement Fund	Teachers' Retirement Fund	Public Employees Police & Fire Fund	State Police Officers Retirement Fund	Highway Patrolmen's Retirement Fund	Total Cost
		<u>Railroads</u>								
3100	\$ 187,676.59	Great Northern	7900	3000	2300	2400	-	100	100	\$ 481,340.07
900	106,907.48	Norfolk & Western	4900	1700	1300	1800	100	-	-	494,302.95
2500	157,938.99	Southern Railway	9600	3500	3000	3000	100	-	-	514,286.45
3000	120,537.60	Union Pacific	12600	4100	3500	4300	200	100	400	439,700.59
	\$ 573,060.66	Total Railroads								\$ 1,929,630.06
		<u>Railroad Equipment</u>								
1700	\$ 123,714.06	ACF Industries	3500	1500	1000	1000	-	-	-	\$ 251,461.84
1400	104,875.24	General American Transportation	4700	1600	1300	1600	-	-	200	336,467.34
3500	136,126.53	Union Tank Car	9400	3100	2700	3100	300	200	-	306,638.18
	\$ 364,715.83	Total Railroad Equipment								\$ 894,567.36
		<u>Steel</u>								
3500	\$ 237,108.25	Armco	6800	2500	2000	2000	200	100	-	\$ 446,291.65
1000	43,882.38	Inland	9700	3500	2500	3500	200	-	-	398,751.20
	\$ 280,990.63	Total Steel								\$ 845,042.85
		<u>Miscellaneous</u>								
5000	\$ 116,765.20	Ideal Cement	11100	3500	3000	3500	600	300	200	\$ 257,443.48
1900	141,215.28	National Lead	5200	1500	1200	2500	-	-	-	375,315.24
	\$ 257,980.48	Total Miscellaneous								\$ 632,758.72
	\$ 3,175,227.69	TOTAL DURABLES STOCKS								\$ 8,579,657.14
	\$17,954,552.35	TOTAL COMMON STOCKS								\$46,833,002.39
	15,189.84	Less profit on stocks sold								-
	\$17,939,362.51±	Net cost								\$46,833,002.39±

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

+ Market valuation, as of 12-31-64, \$18,828,913.38.

± Market valuation, as of 12-31-64, \$54,475,440.27.

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
115 State Capitol
St. Paul, Minnesota 55101

June 1, 1965

SUPPLEMENT TO 1964 ANNUAL REPORT
DISTRIBUTION OF SECURITIES BUSINESS

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

From: Robert E. Blixt, Executive Secretary -

This supplement to the 1964 Annual Report is being included with a review of our investment operations because of interest in our placement of securities business expressed both by many legislators and numerous individuals associated with securities firms. Details concerning each transaction are provided to Board members and representatives of the press at each monthly meeting. The attached schedules list the firms doing business with the State. Accompanying descriptions review general policies followed by the investment department.

Discussions with various public fund managers have indicated that the distribution of securities business is a major problem to all public investment departments. It appears that the ultimate recipients of the retirement funds and the beneficiaries of the State's school aids will be best served through the distribution of business on a price basis - meaning the acceptance of competitive offerings and bids, on securities to be purchased or sold, from dealers known to be prime markets or to position these securities in the quantities desired by the State funds. During 1964 and early 1965, price has been the dominant factor in the distribution of our business in U.S. Treasury securities, all unlisted stocks, all corporate bonds purchased after the termination of underwriting syndicates, and a significant percentage of our listed stocks.

There are many types of securities transactions, however, in which a large 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 size of participation by various dealers in the bond syndicates, the location of the offices of syndicate members (Minnesota dealers getting some preference), and the utility of research material provided by the various firms.

It is to be emphasized that the mention of any securities firm on a schedule in this supplement in no way signifies approval, endorsement, or license of such firm by any State agency. The regulation of securities and securities dealers in Minnesota is handled by the Securities Division, Department of Commerce, not by the State Board of Investment. This supplement is simply a listing of those firms with which the State conducted securities transactions during 1964.

We have been questioned concerning the possible loss which could result from the bankruptcy of any firm 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 St. Paul for the State of Minnesota.

Brief résumés of our policies regarding transactions detailed in the accompanying schedules are as follows:

Schedule 1. U.S. Treasury Securities Transactions

During 1964, all purchases of U.S. Treasury securities were made on a competitive basis. Competitive offerings from the two largest St. Paul banks were re-

ceived on all U.S. Treasury securities purchase transactions of small-to-moderate size and of short maturity. Since mid-1964, sales have been handled on a comparable basis. In transactions of larger size and longer maturity, in which cases it is probable that Minnesota banks do not position the securities in appropriate quantities, competitive offerings or bids are sought from one of several Minnesota bank dealers and from prime market dealers, including two that now have offices in Minnesota. It is our usual policy to request offerings and bids from the bank which holds the funds to be invested or where the funds will be needed; therefore, the State's major depository bank is called in most instances. If the Minnesota bank contacted is able to equal the best price quoted by any other dealer, the transaction is completed through the Minnesota bank.

Schedule 2. Private Placements of Fixed-Income Securities

These private placements, all of which must have received a rating of "A" or better by a recognized service, and which must meet definite statutory requirements, are negotiated and purchased through various investment bankers and dealers who are able to offer attractive issues. Such purchases must be made through the investment firms handling the placement for the particular corporation desiring the funds.

Schedule 3. Corporate Bonds Purchased at Time of Offering on a Designated Basis

Bonds in the amounts indicated on this schedule were purchased at times when the issues were readily available from the members of the winning syndicate or from those firms handling a negotiated issue. The right to sell most of these issues was won on a competitive basis; our orders were placed with those firms that took the underwriting risk and owned the bonds. Our allocations among these dealers were based on the usable research materials and other services provided the State's investment department, including the offerings of acceptable private placements, somewhat larger orders being placed with major participants in the syndicates, and with firms having offices in Minnesota.

Schedule 4. Corporate Bonds Purchased at or After Time of Offering Through Dealers Having Bonds Available

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

Schedule 5. Corporate Bonds Purchased After Termination of Underwriting Syndicate

In purchasing bonds in the amounts indicated on this schedule, price was the sole determining factor. Upon the termination of the syndicates in question, the price of the bonds dropped to a level determined by the free market. We attempted to contact firms having sizable unsold balances, and purchased the bonds offered at the lowest price. Upon learning of the termination of a syndicate, we contacted the leading underwriters and members of the syndicate that had offices in the State of Minnesota. Other offerings were often solicited before the actual purchases were made.

Schedule 6. Corporate Bonds Purchased Through Secondary Offerings

These issues were purchased on the basis of offerings made to the State Board

of Investment. In each instance, the offerings were checked as to price with other firms known to maintain a market in the same securities.

Schedule 7. Common Stock Purchases Allocated by Investment Department

These purchases, all of which were made over a major exchange or were completed in a secondary distribution, were allocated on the basis of service received by the State's investment department. In the placement of these orders, we favored those firms that provided research material most beneficial to our department or that furnished attractive private placements. During the past 4 years, we have been placed on the mailing list of practically every major investment banker and brokerage house in the United States. It is apparent that we do not have the time to evaluate, file, or read all this material; we have found it necessary to confine attention primarily to the reports from those firms that have provided particularly valuable information on a continuing basis during the past few years. Because the department is not of a size sufficient to handle the volume of incoming telephone calls that many investment firms would like to place, it has been necessary to discourage these calls and to place business on the basis of written and teletyped material and discussions with analysts. Orders are placed with smaller Minnesota firms and with certain securities dealers throughout the nation on the basis of specialized research materials and market information that appear to be of value to our program.

We should like to emphasize that the distribution of business listed under Schedule 7 does not indicate any future breakdown of common stock orders. As we compiled this listing, it was again apparent that several firms had not been adequately compensated for their services. We intend that future orders shall remedy these inequities.

Schedule 8. Common Stock Purchases Negotiated or Ordered on the Basis of Lowest Available Price

During 1964, no purchases were made of over-the-counter stocks until the offerings had been checked with two or more dealers. In handling these transactions, we attempted to contact organizations specializing in the particular stocks to be purchased.

This listing also includes several transactions that were executed on a major exchange. In these instances, we were notified of a particular block available at what appeared to be an attractive price and agreed to buy at a predetermined level.

The State funds also purchased substantial blocks of stocks from several large firms that buy and sell securities at a negotiated net price, usually at a definite saving to the customer when compared with the latest quotations on the major exchanges, including the standard commissions. This off-board, or "third" market, has proved to be very helpful, particularly in obtaining stocks that show comparatively low trading activity on the major exchanges. Our experience during 1964 and early 1965 indicates that savings on these transactions may approximate 3/8 of a point per share, or approximately \$375 per thousand shares. We realize that one reason for this may be the upward trend the market has experienced during 1964 and early 1965, with an accompanying tendency for stock orders to be executed at ever-increasing prices when placed on a major exchange. The indicated saving may not hold at a time of falling stock prices.

These off-board trades are handled on a competitive basis, 2-4 dealers being contacted simultaneously. We have noted that the dealers are practically always able to make markets in those stocks in which they specialize in the size needed by our State funds.

Another advantage of off-board transactions is that they allow the State to buy blocks of stock of appropriate size at one predetermined net price for all the various accounts. Because the State Board of Investment buys for the Permanent School Fund and six retirement funds, it is obviously advantageous to buy securities for several or all these funds at the same price. These transactions have also resulted in a saving in certain accounting procedures by minimizing the number of separate trades.

Although most of our common stock transactions will undoubtedly be placed with firms that are members of major exchanges, in return for the many investment services we receive, we intend to continue the use of the third market in those instances where a distinct price advantage is apparent. We believe this demonstrates our desire to gain, for the State funds, some of the price considerations other institutional buyers get through reciprocity, which apparently has become so prevalent in the securities business. We have attempted to avoid personal or political favoritism by compensating those firms that have provided us with a definite service and by placing the remainder of the orders on the basis of price.

Schedule 9. Common Stock Sales

The bank stock was sold on the basis of highest competitive price. The publishing stocks were sold on a designated basis.

Schedule 10. Minnesota Subdivision Bonds Sold

The municipal bonds listed on this schedule were sold on the basis of competitive bids after the blocks for sale were advertised in a national and a local financial publication.

We are continuing to review our policies regarding the purchase and sale of securities, so as to make them more equitable. On the basis of an analysis of our departmental operations by a Legislative Interim Commission on Public Employee Retirement Funds, the 1965 Legislature passed a bill (Laws of Minnesota 1965, Chapter 306), 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."

We welcome suggestions by legislators and by other public fund managers regarding the equitable distribution of our securities business. The members of the State Board of Investment, acting through the investment department, are trustees for the ultimate beneficiaries of the retirement funds, for the State's educational institutions, and for the citizenry of Minnesota. The ultimate good of these parties must be placed ahead of all other considerations.

Respectfully submitted,



Robert E. Blixt,
Executive Secretary

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Schedule 1

PURCHASES AND SALES OF U.S. TREASURY OBLIGATIONS
January 1 - December 31, 1964

A. PURCHASES (in thousands)

<u>Dealer</u>	<u>1-30 days</u>	<u>31-90 days</u>	<u>91 days- 1 year</u>	<u>Over 1 year</u>	<u>Total</u>
American National Bank, St. Paul	\$ 2,325.0	\$ 6,190.0	\$ 8,725.0	\$ 210.0	\$ 17,450.0
Bankers Trust Co.	19,200.0	16,500.0	10,600.0	-	46,300.0
Blyth & Co., Inc.	-	8,000.0	21,600.0	3,000.0	32,600.0
Briggs & Schaedle	-	-	5,000.0	-	5,000.0
C. F. Childs & Co., Inc.	-	2,000.0	-	-	2,000.0
Discount Corp.	-	3,600.0	3,500.0	-	7,100.0
First American National Bank, Duluth	-	-	3,000.0 ^b	-	3,000.0
First Boston Corp.	-	-	9,700.0	-	9,700.0
First National Bank, Minneapolis	6,400.0	-	-	-	6,400.0
First National Bank, St. Paul	46,320.0	51,625.0	55,260.0	598.5	153,803.5
First National City Bank	-	10,500.0	-	80.0	10,580.0
Aubrey G. Lanston & Co., Inc.	1,050.0	9,675.0	6,500.0	-	17,225.0
Marquette National Bank, Minneapolis	-	1,500.0	125.0	-	1,625.0
Merrill Lynch, Pierce, Fenner & Smith Inc.	-	900.0	6,000.0 ^a	-	6,900.0
Morgan Guaranty Trust Co.	-	1,600.0	11,600.0	-	13,200.0
New York Hanseatic Corp.	1,700.0	3,000.0	5,500.0	3,500.0	13,700.0
Northern City National Bank, Duluth	-	-	3,000.0 ^b	-	3,000.0
Salomon Brothers & Hutzler	-	18,180.0	23,200.0	-	41,380.0
Second District Securities Corp.	-	3,500.0	1,800.0	-	5,300.0
Totals	\$ 76,995.0	\$136,770.0	\$175,110.0	\$7,388.5	\$396,263.5

- a. Including \$1-million purchase from C. J. Devine & Co. before the merger of this firm with Merrill Lynch, Pierce, Fenner & Smith Inc.
- b. Purchase made through weekly auction of Bills conducted by U.S. Treasury.

Purchases and sales of U.S. Treasury obligations

Schedule 1
(continued)

B. SALES (in thousands)

<u>Dealer</u>	<u>1-30 days</u>	<u>31-90 days</u>	<u>91 days- 1 year</u>	<u>Over 1 year</u>	<u>Total</u>
American National Bank, St. Paul	\$ 7,300.0	\$ 2,000.0	-	-	\$ 9,300.0
Bankers Trust Co.	100.0	21,000.0	-	-	21,100.0
Blyth & Co., Inc.	10,000.0	-	-	\$ 400.0	10,400.0
First National Bank, St. Paul	116,788.0	35,940.0	\$ 14,331.0	7,742.0	174,801.0
First National City Bank	2,200.0	7,200.0	-	1,100.0	10,500.0
Aubrey G. Lanston & Co., Inc.	-	-	8,000.0	-	8,000.0
Merrill Lynch, Pierce, Fenner & Smith Inc.	1,800.0	15,000.0	-	3,200.0	20,000.0
Morgan Guaranty Trust Co.	10,400.0	5,000.0	-	-	15,400.0
New York Hanseatic Corp.	1,500.0	-	4,000.0	500.0	6,000.0
Salomon Brothers & Hutzler	3,000.0	-	2,000.0	3,300.0	8,300.0
Second District Securities Corp.	6,000.0	-	-	-	6,000.0
Totals	\$159,088.0	\$ 86,140.0	\$ 28,331.0	\$16,242.0	\$289,801.0

C. REPURCHASE AGREEMENTS (in thousands)

<u>Dealer</u>	<u>1-30 days</u>	<u>31-90 days</u>	<u>91 days- 1 year</u>	<u>Over 1 year</u>	<u>Total</u>
Blyth & Co., Inc.	\$ 10,000.0	-	-	-	\$ 10,000.0
First National Bank, St. Paul	15,189.0	\$ 299.0	-	-	15,488.0
First National City Bank	7,996.0	-	-	-	7,996.0
Morgan Guaranty Trust Co.	<u>10,000.0</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>10,000.0</u>
Totals	\$ 43,185.0	\$ 299.0	-	-	\$ 43,484.0

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Schedule 2

PRIVATE PLACEMENTS OF FIXED-INCOME SECURITIES
Purchased January 1 - December 31, 1964

Face amount	Company	Type of security	Int. rate	Maturity	Negotiated through
\$1,000,000	American Greetings Corp.	Promissory note	4.70%	10-1-84	Goldman, Sachs & Co.; McDonald & Co.
\$1,893,020 ^a	Chesapeake & Ohio Railway Co.	Conditional sale	4.55%	11-1-64/78	Salomon Brothers & Hutzler
\$1,200,000	Diamond Alkali Co.	Note	4.65%	5-1-89	The First Boston Corp.
\$2,250,000	Dow Chemical Co.	Note	4 1/2%	1-15-90	Smith, Barney & Co., Inc.
\$1,000,000	General Cable Corp.	Note	4 1/2%	1-1-89	Kidder, Peabody & Co., Inc.; Paine, Webber, Jackson & Curtis
\$2,800,000	Greyhound Corp.	Senior note	4 5/8%	5-15-84	Lehman Brothers
\$1,200,000	Gulf Life Insurance Co.	Capital note	4 3/4%	6-1-89	Courts & Co.
\$2,800,000	Kern County Land Co.	Promissory note	4.65%	9-1-89	Morgan Stanley & Co.; Dean Witter & Co.
\$1,900,000	Mead Johnson & Co.	Promissory note	4 5/8%	5-1-84	Goldman, Sachs & Co.
\$1,800,000	New York, Chicago & St. Louis Railroad Co.	Conditional sale	4.55%	11-15-69 /5-15-79	Halsey, Stuart & Co.
\$1,500,000 ^b	Norfolk & Western Railway Co.	Conditional sale	4 1/2%	12-15-70/79	R. W. Pressprich & Co.
\$2,000,000	Suburban Propane Gas Corp.	Note	4 7/8%	12-30-84	Eastman Dillon, Union Securities & Co.
\$1,500,000	Texaco Inc.	Note	4 1/2%	12-15-89	Morgan Stanley & Co.
\$1,550,000	Western Maryland Railway Co.	First mortgage	4.85%	10-1-89	R. W. Pressprich & Co.
\$3,000,000	Witco Chemical Co., Inc.	Note	4.65%	12-1-84	Smith, Barney & Co., Inc.; Goldman, Sachs & Co.

a. Rounded to nearest dollar; actual amount \$1,893,019.55.

b. An additional commitment of \$2 million was settled in 1965.

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

CORPORATE BONDS PURCHASED AT TIME OF OFFERING
ON A DESIGNATED BASIS

January 1 - December 31, 1964

Face amount (000)	Underwriting dealer	Face amount (000)	Underwriting dealer
\$ 50	American Securities Corp.	\$ 25	W. C. Langley & Co.
50	Bache & Co.	200	Lee Higginson Corp.
125	J. Barth & Co.	30	Legg & Co.
80	A. G. Becker & Co., Inc.	25	Lehman Brothers
25	William Blair & Co.	55	Irving Lundborg & Co.
550	Blyth & Co., Inc.	95	McDonnell & Co.
35	Burnham & Co.	175	Merrill Lynch, Pierce, Fenner & Smith Inc.
75	Caldwell Phillips, Inc.	300	The Milwaukee Co.
115	Clark, Dodge & Co., Inc.	65	Model, Roland & Co.
50	J. M. Dain & Co., Inc.	200	Morgan Stanley & Co.
30	Shelby Cullom Davis & Co.	30	Pacific Northwest Co.
25	Dick & Merle-Smith	200	Paine, Webber, Jackson & Curtis
200	Dominick & Dominick	40	Paribas Corp.
340	Drexel & Co.	200	Piper, Jaffray & Hopwood
300	Eastman Dillon, Union Securities & Co.	75	R. W. Pressprich & Co.
25	Equitable Securities Corp.	200	Reynolds & Co.
75	Estabrook & Co.	55	L. F. Rothschild & Co.
100	Faulkner, Dawkins & Sullivan	925	Salomon Brothers & Hutzler
400	The First Boston Corp.	50	Shearson, Hammill & Co.
325	Francis I. duPont, A. C. Allyn, Inc.	50	Shields' & Co.
75	Glore, Forgan & Co.	225	Smith, Barney & Co., Inc.
300	Goldman, Sachs & Co.	650	F. S. Smithers & Co.
80	Halle & Stieglitz	25	Spencer Trask & Co.
100	Halsey, Stuart & Co., Inc.	25	William R. Staats & Co.
75	Harriman Ripley & Co., Inc.	100	Stone & Webster Securities Corp.
125	Hayden, Stone & Co.	25	Tucker, Anthony & R. L. Day
175	Hemphill, Noyes & Co.	50	Walston & Co., Inc.
80	Hornblower & Weeks	400	White, Weld & Co., Inc.
150	Kalman & Co., Inc.	700	Dean Witter & Co.
350	Kidder, Peabody & Co.	70	Wood, Struthers & Winthrop
25	Kuhn, Loeb & Co.		

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Schedule 4

CORPORATE BONDS PURCHASED AT OR AFTER TIME OF OFFERING
THROUGH DEALERS HAVING BONDS AVAILABLE
January 1 - December 31, 1964

Face amount (000)	Dealer	Face amount (000)	Dealer
\$ 140	Allison-Williams Co.	\$ 172	Lee Higginson Corp.
36	American Securities Corp.	292	Lehman Brothers
6	Bache & Co.	75	McMaster, Hutchinson & Co.
25	Bacon, Whipple & Co.	176	Merrill Lynch, Pierce, Fenner & Smith Inc.
165	J. Barth & Co.	70	The Milwaukee Co.
787	Bear, Stearns & Co.	25	Model, Roland & Co.
76	A. G. Becker & Co.	104	Morgan Stanley & Co.
40	Blair & Co., Granbery, Marache, Inc.	165	Pacific Northwest Co.
25	William Blair & Co.	330	Paine, Webber, Jackson & Curtis
69	Blyth & Co.	70	Piper, Jaffray & Hopwood
40	Burnham & Co.	10	Wm. E. Pollock & Co., Inc.
50	Coffin & Burr	252	R. W. Pressprich & Co.
35	J. M. Dain & Co., Inc.	50	Rauscher, Pierce & Co., Inc.
50	Dempsey-Tegeler & Co., Inc.	70	Reynolds & Co.
300	R. S. Dickson & Co., Inc.	40	L. F. Rothschild & Co.
715	Dillon, Read & Co., Inc.	370	Salomon Brothers & Hutzler
161	Eastman Dillon, Union Securities & Co.	6	Schwabacher & Co.
280	Equitable Securities Corp.	100	Shaughnessy & Co., Inc.
104	The First Boston Corp.	241	Shearson, Hammill & Co.
282	Francis I. duPont, A. C. Allyn, Inc.	177	Shields & Co.
76	Glore, Forgan & Co.	219	Smith, Barney & Co., Inc.
201	Goldman, Sachs & Co.	40	F. S. Smithers & Co.
6	Goodbody & Co.	40	Spencer Trask & Co.
62	Hallgarten & Co.	106	William R. Staats & Co.
1,890	Halsey, Stuart & Co., Inc.	40	Stone & Webster Securities Corp.
96	Harriman, Ripley & Co.	275	Walston & Co., Inc.
172	Hemphill, Noyes & Co.	315	Weeden & Co., Inc.
16	Kidder, Peabody & Co.	16	Wertheim & Co.
675	Kuhn, Loeb & Co.	616	White, Weld & Co., Inc.
100	Ladenburg, Thalmann & Co.	106	Dean Witter & Co.
137	W. C. Langley & Co.	25	Woodard-Elwood & Co.
80	Lazard Freres & Co.		

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Schedule 5

CORPORATE BONDS PURCHASED AFTER TERMINATION OF UNDERWRITING SYNDICATES
(PURCHASES MADE ON THE BASIS OF OFFERINGS AT A REDUCED
COMMISSION OR LOSS TO THE UNDERWRITING DEALERS)
January 1 - December 31, 1964

Face amount (000)	Dealer	Face amount (000)	Dealer
\$1,400	Bear, Stearns & Co.	\$ 820	Lehman Brothers
100	Dick & Merie-Smith	500	McDonnell & Co.
250	R. S. Dickson & Co., Inc.	50	McMaster, Hutchinson & Co.
400	Francis I. duPont, A. C. Allyn, Inc.	1,300	Merrill Lynch, Pierce, Fenner & Smith Inc.
500	Eastman Dillon, Union Securities & Co.	50	New York Hanseatic Corp.
50	Freeman & Co.	100	R. W. Pressprich & Co.
875	Halsey, Stuart & Co., Inc.	50	Wm. E. Pollock & Co., Inc.
200	Hemphill, Noyes & Co.	50	L. F. Rothschild & Co.
130	Kalman & Co.	200	Shearson, Hammill & Co.
400	Ladenburg, Thalmann & Co.	300	Weeden & Co., Inc.

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Schedule 6

CORPORATE BONDS PURCHASED THROUGH SECONDARY OFFERINGS
January 1 - December 31, 1964

Face amount (000)	Dealer
\$2,000	Bear, Stearns & Co.
250	The First Boston Corp.
250	New York Hanseatic Corp.
6,948	Salomon Brothers & Hutzler
3,500	F. S. Smithers & Co.

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Schedule 7

COMMON STOCK PURCHASES ALLOCATED BY INVESTMENT DEPARTMENT
January 1 - December 31, 1964

<u>Total shares</u>	<u>Issue and vendor</u>	<u>Total shares</u>	<u>Issue and Vendor</u>	<u>Total shares</u>	<u>Issue and vendor</u>
CONSUMER-ORIENTED STOCKS					
		2700	Southern Calif. Edison 1000 Piper, Jaffray 1200 Reynolds		
			500 White, Weld		
		2500	Southern Company 500 Lee Higginson 500 Paine, Webber 500 Reynolds 500 Shaughnessy 500 Shearson, Hammill		
		3000	Texas Utilities 500 Clark, Dodge 500 Dempsey-Tegeler 1000 Donaldson, Lufkin 500 Kidder, Peabody 500 Merrill Lynch		
		1000	Virginia Electric & Power 1000 Harris, Upham		
		1000	Wisconsin Public Service 500 Lamson Brothers 500 White, Weld		
			<u>Gas</u>		
		1800	Arkansas Louisiana Gas 1800 A. G. Becker		
		4800	Panhandle Eastern P.L. 1000 Dean Witter 800 Harris, Upham 1000 Kidder, Peabody 1400 R. W. Pressprich 600 Smith, Barney		
		1500	Peoples Gas Light & Coke 500 Dominick & Dominick 1000 Van Alstyne		
		1000	United Gas 1000 Reynolds		
			<u>Telephone-Telegraph</u>		
		3800	American Tel. & Tel. 1000 Clark, Dodge 200 Francis I. duPont 1000 Lee Higginson 1600 H. C. Wainwright		
		4900	General Tel. & Elec. 1000 Caldwell Phillips 1000 Estabrook 500 Kidder, Peabody 500 Lamson Brothers 400 Piper, Jaffray 500 Thomson & McKinnon 1000 H. C. Wainwright		
UTILITIES					
<u>Electric</u>					
1300	Allegheny Power System 800 Bear, Stearns 500 Dominick & Dominick				
1500	American Electric Power 1500 Smith, Barney				
1500	Central & South West 500 Donaldson, Lufkin 1000 Reynolds				
1500	Commonwealth Edison 500 A. G. Becker 500 Brown Brothers 500 Smith, Barney				
2300	Consolidated Edison 1000 Drexel 800 Smith, Barney 500 Van Alstyne				
3100	Consumers Power 500 Eastman Dillon 1000 Model, Roland 500 Smith, Barney 1100 White, Weld				
900	Florida Power & Light 200 Goldman, Sachs 700 Shearson, Hammill				
500	General Public Utilities 500 Clark, Dodge				
1500	Houston Lighting & Power 1500 Glore, Forgan				
500	Kansas City Power & Light 500 Bear, Stearns				
1500	Middle South Utilities 1000 Paine, Webber 500 Woodard-Elwood				
500	Minnesota Power & Light 500 Brown Brothers				
1000	Northern States Power 1000 Kalman				
4000	Pacific Gas & Electric 1000 A. G. Becker 3000 Eastman Dillon				
3500	Public Serv. Co. (Colo.) 1500 Donaldson, Lufkin 2000 Hayden, Stone				
100	Public Serv. Co. (Ind.) 100 Paine, Webber				
FINANCIAL SERVICES					
<u>Banks</u>					
		1700	Northwest Bancorporation 200 Merrill Lynch 500 Piper, Jaffray 1000 White, Weld		
		6000	Western Bancorporation 100 Bache 1000 Blyth 2500 Brown Brothers 200 Caldwell Phillips 200 J. M. Dain 100 Dean Witter 100 Dempsey-Tegeler 100 Francis I. duPont 100 Hemphill, Noyes 100 Lee Higginson 100 Kidder, Peabody 100 Merrill Lynch 100 Paine, Webber 200 Piper, Jaffray 100 Milwaukee Co. 100 Reynolds 300 Shearson, Hammill 100 Smith, Barney 100 Walston 100 White, Weld 200 Woodard-Elwood		
<u>Finance</u>					
		5800	Beneficial Finance 500 Bache 1000 Dominick & Dominick 2000 Francis I. duPont 1000 Reynolds 800 Salomon Brothers 500 Van Alstyne		
CONSUMERS GOODS					
<u>Containers</u>					
		500	American Can 500 A. G. Becker		
		2000	Continental Can 500 Hayden, Stone 1000 W. C. Langley 500 McDonnell		

Total shares	Issue and vendor	Total shares	Issue and vendor	Total shares	Issue and vendor
	<u>Food-Beverage</u>	2400	Sears, Roebuck	2500	Searle (G. D.)
2900	Campbell Soup		600 Milwaukee Co.		500 Eastman Dillon
	400 Bache		300 Piper, Jaffray		1000 Merrill Lynch
	1000 Bear, Stearns		1500 Smith, Barney		1000 White, Weld
	1000 Milwaukee Co.		<u>Miscellaneous</u>	2600	Union Carbide
	500 R. W. Pressprich	3000	Gillette		300 Bache
4500	Corn Products		1500 A. G. Becker		400 Brown Brothers
	500 Brown Brothers		500 Francis I. duPont		400 Harris, Upham
	800 Drexel	2000	1000 Goldman, Sachs		500 Lamson Brothers
	500 Francis I. duPont		Procter & Gamble		600 Walston
	700 Harris, Upham		1500 Dean Witter		400 Woodard-Elwood
	500 Kidder, Peabody	1800	500 Drexel	4900	Upjohn
	1000 W. C. Langley		Scott Paper		1000 A. G. Becker
	500 Lehman Brothers		500 Faulkner, Dawkins		1600 Brown Brothers
5000	Frito-Lay		1300 H. C. Wainwright		1000 Clark, Dodge
	3000 Eppler, Guerin		<u>RESEARCH STOCKS</u>		500 Harris, Upham
	1000 Faulkner, Dawkins		<u>Chemical & Drug</u>		800 H. C. Wainwright
	1000 Piper, Jaffray	5900	American Cyanamid		
500	General Foods		700 Bache		<u>Office Equipment</u>
	500 Piper, Jaffray		500 Caldwell Phillips	1100	International Bus. Mach.
300	Coca-Cola		1500 J. M. Dain		100 Bache
	300 Courts		1000 Ebin, Robertson		500 Francis I. duPont
3700	Pepsi-Cola		400 R. W. Pressprich		100 Goldman, Sachs
	2000 Blyth	2500	1800 Smith, Barney		100 Hemphill, Noyes
	500 Merrill Lynch		American Home Products		100 Merrill Lynch
	200 Piper, Jaffray		1500 J. Barth		200 J. W. Sparks
	1000 R. W. Pressprich	4400	1000 H. C. Wainwright		
			Dow Chemical		
			500 Bache		
			500 Glore, Forgan		<u>Miscellaneous</u>
			400 E. F. Hutton	1500	Corning Glass Works
			1000 Kalman		200 Bache
			1500 Lee Higginson		500 J. M. Dain
		600	500 Salomon Brothers		400 Hayden, Stone
			duPont (E. I.) deNemours		200 Hemphill, Noyes
			600 A. G. Becker		200 Lee Higginson
4200	Prentice-Hall	1500	Eastman Kodak	1500	Minnesota Mining & Mfg.
	2200 Eastman Dillon		300 Bache		500 Merrill Lynch
	2000 White, Weld		800 Brown Brothers		1000 Milwaukee Co.
			400 E. F. Hutton		
		4000	Hercules Powder		
			500 Caldwell Phillips		<u>NATURAL-RESOURCES STOCKS</u>
			1500 Donaldson, Lufkin		<u>Petroleum</u>
			1000 McDonnell	6500	Gulf Oil
			1000 Reynolds		1000 Dean Witter
		2500	Monsanto		1400 Hemphill, Noyes
			500 J. M. Dain		500 Piper, Jaffray
			500 Francis I. duPont		600 Thomson & McKinnon
			200 Piper, Jaffray		2500 H. C. Wainwright
1000	Montgomery Ward		600 H. C. Wainwright		500 Woodard-Elwood
	1000 Paine, Webber		700 Woodard-Elwood	1000	Kern County Land
2500	Penney (J. C.)	5100	Pfizer (Chas.)		1000 Milwaukee Co.
	500 Kidder, Peabody		1100 Courts	4000	Louisiana Land
	500 Reynolds		1000 J. M. Dain		500 A. G. Becker
	500 Thomson & McKinnon		1000 Eastman Dillon		3000 Clark, Dodge
	1000 H. C. Wainwright		2000 Merrill Lynch		500 H. C. Wainwright

Total shares	Issue and vendor	Total shares	Issue and vendor	Total shares	Issue and vendor
4500	Socony Mobil 1500 Loeb Rhoades 500 Kalman 1000 W. C. Langley 500 Lehman Brothers 500 Merrill Lynch 500 Smith, Barney	2000	Gould-National Batteries 2000 Clark, Dodge	900	Norfolk & Western Ry. 400 A. G. Becker 500 Milwaukee Co.
3000	Standard Oil (Calif.) 500 Kalman 1000 McDonnell 1500 H. C. Wainwright		<u>Electrical & El. Equip.</u>	4100	Southern Railway 1000 Donaldson, Lufkin 500 W. C. Langley 1000 R. W. Pressprich 500 H. C. Wainwright
6700	Standard Oil (Ind.) 1000 Brown Brothers 1000 Goldman, Sachs 1500 Reynolds 2500 H. C. Wainwright 700 White, Weld	4400	General Electric 500 Bache 1000 Drexel 1000 Eastman Dillon 500 Estabrook 1000 Piper, Jaffray 400 L. F. Rothschild	2000	Union Pacific Railroad 1000 Brown Brothers 500 Kidder, Peabody 500 Reynolds
4400	Standard Oil (N.J.) 500 Brown Brothers 500 H. M. Byllesby 1000 Glore, Forgan 1000 Lee Higginson 1000 Paine, Webber 400 Smith, Barney	1300	Honeywell 200 Harris, Upham 400 Lamson Brothers 300 Shearson, Hammill 400 Smith, Barney		<u>Railroad Equipment</u>
6500	Texaco 1000 Dominick & Dominick 1000 Glore, Forgan 1000 Morgan Stanley 1500 Salomon Brothers 500 Thomson & McKinnon 500 H. C. Wainwright 1000 Walston		<u>Machinery</u>	5200	ACF Industries 500 Brown Brothers 1000 Courts 500 Harris, Upham 1000 Smith, Barney 2200 F. S. Smithers
	<u>DURABLES STOCKS</u>	5500	Caterpillar Tractor 1500 Donaldson, Lufkin 1000 Faulkner, Dawkins 1000 Merrill Lynch 500 L. F. Rothschild 1500 Smith, Barney	1200	General Amer. Trans. 600 Harris, Upham 600 H. C. Wainwright
	<u>Automobiles & Auto Parts</u>	4800	Clark Equipment 300 Lamson Brothers 1000 Lehman Brothers 1000 Merrill Lynch 500 Salomon Brothers 1000 Smith, Barney 1000 Spencer Trask	2000	Union Tank Car 500 Dick & M.-Smith 500 Salomon Brothers 1000 Shearson, Hammill
3900	Chrysler 500 J. Barth 1000 Goldman, Sachs 600 Kalman 800 Kuhn Loeb 500 Walston 500 White, Weld	5600	Deere 100 Clark, Dodge 1000 J. M. Dain 500 Drexel 800 Merrill Lynch 1300 J. W. Sparks 400 L. F. Rothschild 500 Salomon Brothers 1000 White, Weld		<u>Steel</u>
5200	Ford 1500 A. G. Becker 1000 Coffin & Burr 700 Goldman, Sachs 1000 Smith, Barney 1000 White, Weld		<u>Railroads</u>	2000	Armco Steel 1000 Clark, Dodge 500 Piper, Jaffray 500 Salomon Brothers
5564	General Motors 292 Allison-Williams 500 Brown Brothers 500 Burnham 776 Caldwell Phillips 548 Kalman 1500 Lehman Brothers 1000 Shearson, Hammill 448 Woodard-Elwood	11000	Great Northern Railway 2000 A. G. Becker 500 Brown Brothers 1000 Clark, Dodge 300 J. M. Dain 2500 Dick & M.-Smith 1000 Francis I. duPont 500 Goldman, Sachs 500 Paine, Webber 700 Piper, Jaffray 1000 R. W. Pressprich 1000 F. S. Smithers	2000	Inland Steel 1000 A. G. Becker 1000 Salomon Brothers
				7300	<u>Miscellaneous</u> Ideal Cement 500 Goldman, Sachs 500 Salomon Brothers 6300 Smith, Barney
				1700	National Lead 500 W. C. Langley 500 Salomon Brothers 700 Van Alstyne

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Schedule 8

COMMON STOCK PURCHASES NEGOTIATED OR ORDERED ON THE BASIS OF
LOWEST AVAILABLE PRICE
January 1 - December 31, 1964

<u>Total shares</u>	<u>Issue and vendor</u>	<u>Total shares</u>	<u>Issue and vendor</u>	<u>Total shares</u>	<u>Issue and vendor</u>
CONSUMER-ORIENTED STOCKS					
		5000	Middle South Utilities	7500	Wisconsin Public Service
			2500 American Securities		1000 American Securities
			1000 First Boston		6500 Weeden
			1500 Weeden		
					<u>Gas</u>
3000	Allegheny Power	500	Minnesota Power & Light	3000	Arkansas Louisiana Gas
	2500 American Securities		500 Harriman Ripley		1000 J. S. Strauss
	500 Weeden	1500	Northern States Power		2000 Weeden
5000	American Electric Power		1500 Weeden	500	Peoples Gas Light & Coke
	2000 American Securities	4000	Ohio Edison		500 Weeden
	1000 First Boston		500 American Securities	2500	United Gas
	2000 Weeden		2000 Blyth		2000 Blyth
1500	Central & South West		1000 First Boston		500 Weeden
	500 First Boston		500 Weeden		
	1000 Weeden	5500	Otter Tail Power		<u>Telephone-Telegraph</u>
9000	Cincinnati Gas & El.		5500 J. M. Dain		
	1000 American Securities	2600	Pacific Gas & Electric	1000	American Tel. & Tel.
	1000 Blyth		500 J. S. Strauss		1000 Weeden
	1000 First Boston	2500	2100 Weeden	1000	General Tel. & El.
	6000 Weeden		Public Service (Colo.)	1000	1000 New York Hanseatic
2000	Commonwealth Edison		1000 First Boston	2000	Western Power & Gas
	1000 American Securities		1500 Weeden		1000 Eastman Dillon
	1000 Weeden	5300	Public Service (Ind.)		500 Paine, Webber
600	Consolidated Edison		1000 American Securities		500 G. A. Saxton
	600 Weeden		2300 First Boston		
5500	Detroit Edison		2000 Weeden		FINANCIAL SERVICES
	3000 American Securities	6700	Southern Calif. Edison		<u>Banks</u>
	1000 First Boston		1000 American Securities	2000	Chase Manhattan
	1500 Weeden		500 Blyth		500 Salomon Brothers
3100	Florida Power & Light		200 First Boston		1400 M. A. Schapiro
	1000 American Securities		1000 J. S. Strauss	2400	Citizens & Southern N.B.
	500 First Boston	1500	4000 Weeden		1000 Keefe, Bruyette
	1600 Weeden		Southern Company		1400 M. A. Schapiro
4500	General Public Utilities		1000 Blyth	7000	Continental Illinois N.B.
	3000 American Securities		500 Weeden		3000 Keefe, Bruyette
	500 Blyth	2000	Texas Utilities		500 Merrill Lynch
	1000 Weeden		2000 Weeden		3500 M. A. Schapiro
2600	Houston Lighting & Power	4500	Tucson Gas & Electric	4000	First Bank Stock
	600 American Securities		4000 Blyth		500 Blyth
	2000 Weeden		500 First Boston		600 Keefe, Bruyette
5500	Indianapolis P. & L.	2000	Utah Power & Light		1000 Merrill Lynch
	1000 American Securities		2000 Weeden		1500 Piper, Jaffray
	4500 Weeden	8000	Virginia El. & Pwr.		400 M. A. Schapiro
3500	Interstate Power		5500 American Securities	1700	First N.B. (Boston)
	3500 Weeden		500 Blyth		500 Keefe, Bruyette
5500	Kansas City P. & L.		500 Piper, Jaffray		1200 M. A. Schapiro
	3000 American Securities		1500 Weeden		First Nat. City Bk. (N.Y.)
	2500 Weeden	1000	Washington Water Power	2100	800 Blyth
4500	Louisville Gas & El.		1000 American Securities		1000 Keefe, Bruyette
	1000 American Securities	2500	Wisconsin Power & Light		300 M. A. Schapiro
	3500 Weeden		2500 Blyth		

Total shares	Issue and vendor	Total shares	Issue and vendor	Total shares	Issue and vendor
1900	Morgan Guaranty Trust 500 First Boston 500 Keefe, Bruyette 500 Salomon Brothers 400 M. A. Schapiro	500	Insurance Co. of N. Am. 500 First Boston		<u>Miscellaneous</u>
2600	Nat. City Bank (Cleve.) 500 First Boston 1500 Keefe, Bruyette 600 M. A. Schapiro	5600	Northwestern Nat. Life 1200 Burnham 900 Cartwright, Valleau 300 J. M. Dain	2500	Gillette 2500 Weeden
3900	Northwest Bancorporation 3900 Weeden	1500	1000 R. S. Dickson 2200 Piper, Jaffray St. Paul Fire & Marine 500 Blyth	1000	Procter & Gamble 1000 J. S. Strauss
3000	Secur. First N.B. (L.A.) 500 First Boston 1500 Keefe, Bruyette 1000 M. A. Schapiro	2800	1000 Merrill Lynch Travelers 500 Blyth 800 Goldman, Sachs 1000 New York Hanseatic 500 Van Alstyne	1500	Scott Paper 500 J. S. Strauss 1000 Weeden
1900	Valley N.B. (Ariz.) 1100 Blyth 800 M. A. Schapiro				<u>RESEARCH STOCKS</u> <u>Chemical & Drug</u>
4700	Wells Fargo 1200 J. Barth 1000 Blyth 1000 Keefe, Bruyette 500 New York Hanseatic 1000 M. A. Schapiro		<u>CONSUMERS GOODS</u> <u>Containers</u> 1000 Continental Can 1000 American Securities		500 American Home Prod. 500 Weeden 800 Dow Chemical 800 Weeden 800 Eastman Kodak 800 Weeden
3500	Western Bancorporation 500 M. A. Schapiro 2000 J. S. Strauss 1000 Weeden		<u>Food-Beverage</u> 500 Campbell Soup 500 New York Hanseatic 500 Corn Products 500 Weeden	1750	Merck 300 Goldman, Sachs 1450 Weeden 500 Pfizer (Chas.) 500 Weeden 500 Searle (G. D.) 500 New York Hanseatic
	<u>Finance</u>		2100 Green Giant 1000 J. M. Dain 400 C. D. Mahoney 200 New York Hanseatic 500 Piper, Jaffray	1000	Union Carbide 1000 Weeden
7200	Investors Div. Serv. "A" 3800 J. M. Dain 600 Goldman, Sachs 500 Merrill Lynch 500 New York Hanseatic 1800 Piper, Jaffray	1400	Coca-Cola 1400 Weeden	1500	Upjohn 1500 Weeden
	<u>Insurance</u>		<u>Printing-Publishing</u> 500 Donnelley (R. R.) 500 Weeden 1500 Dun & Bradstreet 500 First Boston 1000 Shields 800 Prentice-Hall 800 Eastman Dillon		<u>Office Equipment</u> 25 Int. Bus. Machines 25 Weeden
4000	Continental Casualty 700 Blyth 200 Burnham 1200 Cartwright, Valleau 300 First Boston 300 Kalman 300 Merrill Lynch 1000 New York Hanseatic	2500	Western Publishing 1500 Goldman, Sachs 1000 G. A. Saxton		<u>Miscellaneous</u> 1000 Minnesota Mining 1000 Weeden
1200	General America Corp. 300 Cartwright, Valleau 500 Kalman 200 Merrill Lynch 200 Pacific Northwest		<u>Retail Trade</u> 1100 Great A. & P. Tea 1100 J. S. Strauss 500 Penney (J. C.) 500 Merrill Lynch 900 Sears, Roebuck 900 Weeden		<u>NATURAL-RESOURCES STOCKS</u> <u>Petroleum</u> 500 Gulf Oil 500 New York Hanseatic 1000 Socony Mobil 1000 Weeden 500 Standard Oil (Calif.) 500 Bache 1000 Standard Oil (Ind.) 1000 Weeden 700 Standard Oil (N.J.) 700 New York Hanseatic
2000	Hartford Fire 700 Blyth 800 Cartwright, Valleau 500 New York Hanseatic	4300	Super Valu 1000 J. M. Dain 2800 Piper, Jaffray 500 Smith, Barney	1000	Texaco 1000 New York Hanseatic

Common stock purchases, etc.

Schedule 8
(continued)

<u>Total shares</u>	<u>Issue and vendor</u>	<u>Total shares</u>	<u>Issue and vendor</u>	<u>Total shares</u>	<u>Issue and vendor</u>
<u>DURABLES STOCKS</u>		<u>Machinery</u>		1000	Union Pacific
<u>Automobiles & Auto Parts</u>		1000	Caterpillar Tractor		1000 American Securities
700	Chrysler		1000 Weeden	<u>Steel</u>	
	700 Weeden	3600	Deere	2500	Armco Steel
500	Ford		3100 New York Hanseatic		1000 New York Hanseatic
	500 Weeden		500 Weeden		1500 Weeden
<u>Electrical & El. Equip.</u>		1500	International Harvester	700	Inland Steel
			500 J. S. Strauss		700 Weeden
			1000 Weeden	<u>Miscellaneous</u>	
600	General Electric	<u>Railroads</u>		2000	National Lead
	600 Weeden	1000	Southern Railway		2000 Weeden
600	Honeywell		1000 Weeden		
	600 Weeden				

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Schedule 9

COMMON STOCK SALES
January 1 - December 31, 1964

<u>Total shares</u>	<u>Name of issue and dealer</u>
<u>BANKS</u>	
1500	First National Bank of Boston 1500 M. A. Schapiro
<u>PRINTING-PUBLISHING</u>	
750	*Charles E. Merrill Books, Inc. 750 Merrill Lynch
750	*Wadsworth Publishing Co., Inc. 750 Merrill Lynch

*Received in a stock distribution from Prentice-Hall, Inc.

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Schedule 10

SALES OF MINNESOTA SUBDIVISION BONDS
January 1 - December 31, 1964

I.S.D. No. 271 (Bloomington, Minnesota); \$715,000 face value of bonds, 3.10% - 3.30%,
due 1969-85, sold at \$93.38 on December 8, 1964.
Purchasing syndicate:

Paine, Webber, Jackson & Curtis, Manager	
Allison-Williams Co.	Kalman & Co.
American National Bank of St. Paul	Merrill Lynch, Pierce, Fenner & Smith Inc.
Caldwell Phillips, Inc.	Piper, Jaffray & Hopwood
J. M. Dain & Co., Inc.	E. J. Prescott & Co.
Francis I. du Pont & Co.	Shaughnessy & Co., Inc.
Juran & Moody, Inc.	Woodard-Elwood & Co.

I.S.D. No. 621 (Mounds View, Minnesota); \$1,065,000 face value of bonds, 3.00% - 3.10%,
due 1969-80, sold at \$91.36 on December 8, 1964.
Purchasing syndicate:

Juran & Moody, Inc., Manager
Other syndicate members same as above.

I.S.D. No. 281 (Robbinsdale, Minnesota); \$1,137,000 face value of bonds, 3.10% - 3.40%,
due 1970-86, sold at \$95.39 on December 8, 1964.
Purchasing syndicate:

American National Bank of St. Paul, Manager
Other syndicate members same as above.

I.S.D. No. 623 (Roseville, Minnesota); \$1,125,000 face value of bonds, 3.25%,
due 1973-82, sold at \$103.90 on December 8, 1964.
Purchasing syndicate:

Kalman & Co., Inc., Manager
Other syndicate members same as above.

Village of Hampton, Minnesota; \$40,000 face value of bonds, 5%,
due 1976-79, sold at \$105.75 on December 9, 1964.

Sold to Village of Hampton, Minnesota.