MINNESOTA STATE BOARD OF INVESTMENT

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1984 ANNUAL REPORT



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STATE BOARD OF INVESTMENT Governor Rudy Perpich State Auditor Arne H. Carlson Secretary of State Joan Anderson Growe State Treasurer Robert W. Mattson Attorney General Hubert H. Humphrey III INVESTMENT ADVISORY COUNCIL Judith W. Mares, Chair, Director Benefit Finance, General Mills Malcolm W. McDonald, Vice Chair, Director and Corporate Secretary, Space Center, Inc. Gordon M. Donhowe, Commissioner of Finance Paul L. Groschen, Executive Director, Minnesota State Retirement System Kenneth F. Gudorf, Sr. Vice President of Finance and Chief Financial Officer, Diversified Energies, Inc. Richard B. Hume, Sr. Vice President, F&M Marquette National Bank C. Michael McLaren, Executive Director, Public Employees Retirement Association Gary R. Norstrem, City Treasurer, St. Paul Michael I. Rosen, President, Michael I. Rosen & Associates, Inc. Joseph T. Rukavina, Active Employee Representative Harvey Schmidt, Executive Director, Teachers Retirement Association Raymond Vecellio, Retiree Representative Deborah W. Veverka, Manager, Pension Financial Planning & Control, Honeywell, Inc. Jan Yeomans, Manager, Pension Fund, 3M Company INVESTMENT DEPARTMENT PERSONNEL Howard J. Bicker Executive Director Jeff Bailey Assistant Executive Director FIXED INCOME Grant A. Feldman Fixed Income Manager, Short Term John T. Kinne Senior Portfolio Manager, Short Term N. Robert Barman Investment Analyst, Senior Arthur M. Blauzda Investment Analyst, Senior EQUITY Roger W. Henry Equity Manager Senior Portfolio Manager Mark Edwards John Griebenow Senior Portfolio Manager A. Arthur Kaese Senior Portfolio Manager C. Robert Parsons Investment Analyst, Senior Daralyn Peifer Investment Analyst Harold L. Syverson Head Security Trader ADMINISTRATIVE STAFF L. Michael Schmitt Administrative Director **Teresa Myers** Assistant to the Executive Director Mable E. Patrick Senior Accounting Officer Thomas L. Delmont Accounting Officer, Intermediate Nancy Wold Accounting Officer Deborah F. Griebenow Research Analyst, Intermediate Harriet Balian Office Services Supervisor II Kathy Leisz Computer Operator Charlene Olson Clerk Stenographer, Senior Linda M. Nadeau Clerk Typist II Lavern Jagg Clerk Typist I

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EXECUTIVE DIRECTOR HOWARD J. BICKER

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Room 105, MEA Building 55 Sherburne Avenue Saint Paul 55155 296-3328

The State Board of Investment is pleased to submit its annual report for the fiscal year ended June 30, 1984. Fiscal year 1984 was a period of significant change for the Board. In particular, the redesign of the Basic Retirement Funds' investment management structure, begun in 1983 with the hiring of external common stock managers, was essentially completed. During 1984, the Board hired a master custodian, constructed a common stock index fund, retained external bond managers, and continued to implement its alternative equity investment program.

The Basic Retirement Funds' 1984 total rate of return was a disappointing -5.5%. This result was due to both the inhospitable investment environment as well as to the disruptions caused by the investment management structure changes. While this one year's performance is not acceptable, the Board believes that the Basic Retirement Funds' total portfolio is now positioned to produce superior long-term performance.

The Post Retirement Investment Fund, on the other hand, performed well in fiscal year 1984. Due primarily to the income generated by its sizable, high-yielding bond portfolio, the Post Retirement Fund's investment earnings permitted a 6.9% benefit increase for its participants, well in excess of inflation.

In view of the changes that the Board's investment process has undergone, the format of the Board's annual report has been significantly revised. The new format presents a discussion of the investment objectives, asset allocation, management structure, and performance of each investment fund managed by the State Board of Investment. Also presented is a discussion of the major investment management structure changes implemented during the year. The appendix sections include a description of the external money managers retained by the Board, historical risk data on the external common stock managers, and schedules of all Board investments.

It is our hope that this new format will clearly communicate the investment objectives, management, and performance of Minnesota's public pension funds.

Sincerely,

Houmh Bicker

Howard J. Bicker Executive Director

AN EQUAL OPPORTUNITY EMPLOYER

INTRODUCTION

All investments undertaken by the State Board of Investment are governed by the common law prudent person rule and other standards codified in Chapter 11A of the Minnesota Statutes. The prudent person rule requires all members of the Board, Investment Advisory Council, and investment staff to "...act in good faith of judgment and care, under exercise that degree and circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived therefrom."

In addition to the prudent person rule, the Minnesota Statutes contain a specific list of asset classes available for investment, such as stocks, bonds, short term securities, real estate, venture capital, and resource programs. The statutes prescribe the percentage of fund assets that may be invested in each specific class, and contain specific restrictions to ensure the quality of the investments.

Within the requirements established in state law, the State Board of Investment, in conjunction with the Investment Advisory Council and investment staff, sets the asset allocation targets among stocks, bonds, cash, and alternative equity investments for each fund under management. The asset allocation is based on each fund's specific needs and objectives and thus may differ substantially from fund to fund. In addition, the Board determines the most appropriate investment management structure for each fund, structures which may include the use of external money managers and/or the internal investment staff.

During the last two fiscal years, the State Board of Investment has implemented a major restructuring of the investment program for the \$3.0 billion Basic Retirement Funds, the largest single portfolio of assets invested by the Board. The Basic Retirement Funds are the pension assets of the currently employed participants in six major statewide retirement funds. The long-term asset allocation and investment management structure of the Basic Retirement Funds has been totally revised. These revisions are discussed in detail in the subsequent section on the Basic Retirement Funds.

The Board, Advisory Council, and staff have commenced a review of the investment objectives, asset allocation, and management structure of the remaining retirement funds, starting with the \$1.9 billion Post Retirement Investment Fund. As discussed on the following pages, the changes implemented during the last year are of fundamental importance to the future direction of the investment of Minnesota's public pensions funds.

FUNDS MANAGED BY THE STATE BOARD OF INVESTMENT

BASIC RETIREMENT FUNDS

POST RETIREMENT INVESTMENT FUND

MINNESOTA SUPPLEMENTAL INVESTMENT FUND MINNESOTA VARIABLE ANNUITY FUND

STATE CASH ACCOUNTS

PERMANENT SCHOOL FUND



3

Basic Retirement Funds are the pension assets of The currently employed participants in six maior the statewide retirement funds:

Teachers Retirement Fund	\$		million
Public Employees Retirement Fund		942	million
State Employees Retirement Fund		610	million
Public Employees Police and Fire	Fund	211	million
Highway Patrol Retirement Fund		43	million
Judges Retirement Fund		3	million

POST RETIREMENT INVESTMENT FUND

The Post Retirement Investment Fund is composed of the reserves for retirement benefits to be paid to currently retired employees by seven funds. Permanent retirement benefit increases are based on dividends, interest, and net realized capital gains from the sale of equities.

MINNESOTA SUPPLEMENTAL INVESTMENT FUND

The Minnesota Supplemental Investment Fund includes the assets of the state deferred compensation supplemental benefit arrangements, various plan, retirement programs for local police and firefighters, unclassified employees of the state. and the Participants have a choice among four separate accounts with different investment emphases as authorized by law:

Growth Share Account - a portfolio of common stocks Fixed Return Account - a portfolio of short-to- intermediate debt investments Portfolio of longer	Income Share Account -	a balanced portfolio of stocks and bonds
maturity debt investments		a portfolio of short-to- intermediate debt investments a portfolio of longer

MINNESOTA VARIABLE ANNUITY FUND

The Variable Annuity Program is an investment option concentrating on common stocks which was historically to members of the Teachers' Retirement offered Association. It is not available to new members.

STATE CASH ACCOUNTS

These accounts are composed of short term investments maturing within three years. They include the Invested Treasurers Cash Fund, transportation funds, and various miscellaneous cash accounts.

PERMANENT SCHOOL FUND

The Permanent School Fund is a trust established for the benefit of Minnesota schools.

\$1.9 billion

\$221 million

\$96 million

\$3.0 billion

\$1.5 billion

\$277 million



The \$3.0 billion Basic Retirement Funds are composed of the retirement assets for currently employed participants in six major statewide retirement funds. The graph on the preceding page identifies the individual statewide retirement funds which comprise the Basic Retirement Funds. The Funds serve as accumulation pools in which the pension contributions of public employees and their employers are placed during the employees' years of active service. Approximately 250,000 public employees are participants in the Basic Retirement Funds.

INVESTMENT OBJECTIVES

The fundamental goal governing the investment of the Basic Retirement Funds is to earn total rates of return sufficient, over the long-term, to fund promised pension benefits at the lowest cost to the employers and employees. In setting the asset mix among stocks, bonds, and other investment alternatives, the Board pursues this fundamental goal by establishing three broad investment objectives. The first objective is to protect the principal of the Funds against a financial catastrophe which would result from a massive deflation or hyperinflation. The second is to control long-term total portfolio return volatility. Finally, the Board seeks to earn the highest possible real return subject to the first two objectives.

Based on the adequate funding levels and participant demographics of the Basic Retirement Funds, the investment time horizon of the Funds is long-term in nature, in excess of twenty years. Control of near-term portfolio return volatility and the generation of current income are not the Board's primary objectives. Rather, the Board focuses on the maximization of the long-term total rate of return, within the constraints described above.

ASSET ALLOCATION

The choice of a long-run allocation of assets among common stocks, bonds, cash equivalents, and alternative equity investments can have a dramatic impact on investment results. In fact, asset allocation decisions quite frequently overwhelm the impact of individual security selection within a total portfolio.

1984 FISCAL YEAR END ASSET MIX

PERCENT OF MARKET VALUE



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Based on the Basic Retirement Funds' investment objectives, the Board adopted the following long-term asset allocation, as recommended in a major study by the Investment Advisory Council:

Common Stocks	60.0%
Fixed Income	25.0%
(bonds and cash equivalents)	
Real Estate	10.0%
Resource Funds	2.5%
Venture Capital	2.5%

These new targets represent a major shift in the traditional asset allocation of the Basic Retirement Funds. Prior to 1983, these Funds had an average allocation of 45%, 42%, and 13% among equities, bonds, and cash equivalents, respectively. The graph on the preceding page presents the asset allocation of the Basic Retirement Funds at the end of the 1984 fiscal year. Historical data on the Funds' asset mix over the last five years are displayed in the graph on page 9 and the table on page 10.

As a result of the long-term investment time horizon of the Basic Retirement Funds and the advantageous long-term risk-return characteristics of common stocks, the majority of the Funds' assets are invested in this asset class. The Funds' emphasis on maximizing total returns, as opposed to current income, is consistent with the capital gains orientation of common stocks. While this strategy may result in a higher level of total portfolio return volatility than more conservative, higher fixed income allocation strategies, over a five to ten year period it is expected that the additional returns will more than compensate for the increased volatility.

The fixed income component of the Funds is utilized as a deflation hedge and as a means of dampening long-run portfolio return volatility. In the event of a major deflation, only high quality bonds will protect principal as well as generate sizable capital gains. Fixed income assets also serve as a diversifying element in the total portfolio, limiting return volatility. In addition, the fixed income portfolio serves to satisfy Minnesota statutes that limit equity investments to 75% of the total fund.

Alternative equity investments, such as real estate and resource funds, produce an inflation hedge that financial assets, such as stocks and particularly bonds, cannot provide. Hard assets can be expected to appreciate in value at least at a rate equal to inflation. Thus, by holding positions in these investments, the value of the total fund can be protected against catastrophic losses in the event of a sustained high inflation. Further, like fixed income assets, alternative equity investments also add diversification to the total portfolio, helping to prevent excessively volatile long-run returns.

HISTORICAL ASSET MIX

PERCENT OF MARKET VALUE

FISCAL YEAR END ALLOCATIONS



HISTORICAL ASSET MIX

PERCENT OF MARKET VALUE FISCAL YEAR END ALLOCATIONS

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-	· · ·		- , , ·		
• •		FIS	CAL YEAR	د	
	1984	1983	1982	1981	1980
· · · · ·					
Common Stocks			1 007	060	
<pre>\$ Million</pre>	1,696	1,872 59.5	1,037 - 47.5		789
Percent		J J •J	₽/•J	72.00	4340
· ·	•		-	*	بر
Bonds	829	970	922	831	734
<pre>\$ Million Percent</pre>	27.4	30.8	42.2	40.8	
reitent				4	
Cash Equivalents*			• _		
\$ Million	331	188	146	337	285
Percent	10.9	6.0	6.7	16.6	15.8
•					• .
Real Estate				•	
\$ Million	140 4.6	96 3.1	62 2.8	, 	
Percent	4.0	3.1	2.0	 '	•
Resource Funds					
\$ Million	23	19	18		
Percent	0.8	0.6	0.8		
Venture Capital					
\$ Million	4	• • •			
Percent	0.2		`		
Total Fund	•			-	
-\$ Million	3,023	3,145	2,185	2,036	
Percent	100.0	100.0	100.0	100.0	100.0

* Includes cash uncommitted to long-term assets plus cash held by all external managers.

INVESTMENT MANAGEMENT

Historically, the Basic Retirement Funds were managed completely by the SBI's investment staff. However, in conjunction with its asset mix restructuring, the Board chose to move to total external management. The transition from internal to external managers began in March, 1983 with the retention of eleven external common stock managers and was completed this year with the hiring of six fixed income managers. The following section is an overview of the investment management structure adopted for each asset class within the Basic Retirement Funds.

COMMON STOCKS

The SBI utilizes a two-part approach to the management of the Basic Retirement Funds' common stock portfolio, combining a \$1.3 billion core diversified passive portfolio (i.e., an index fund) with \$550 million in non-diversified actively managed portfolios.

An index fund is a well-diversified portfolio of common stocks designed to match the rate of return performance of a predetermined stock market index. The index fund utilized by the SBI tracks the Wilshire 5000, a broad-based equity market indicator composed of all common stocks, publicly traded in the U.S., for which daily prices are available. In effect, the Wilshire 5000 represents virtually the entire domestic common stock market.

The SBI's decision to utilize an index fund is based on the inherent difficulty of actively managing a multi-billion dollar common stock portfolio. Following the Investment Advisory Council's recommendations, the Board has chosen to accept market returns on a substantial portion of the portfolio through the utilization of an index fund. The SBI seeks above-market returns through the active management of the remaining assets.

The SBI has retained eleven aggressive equity managers for the actively managed segment of the common stock portfolio. | Each manager is expected to achieve a high single or low double digit real rate of return over a three to five year period. In addition, the managers are expected to produce portfolios within specific risk tolerances to ensure that they complement the core index fund portfolio by maintaining aggressive non-diversified postures. A review of the managers' investment performance is Discussion of the investment styles and found on pages 21-22. portfolio characteristics individual manager are of each contained in Appendix I.

BONDS

During the year, the SBI completed the move of the Basic Retirement Funds to external management with the retention of six managers for the \$700 million bond portfolio. The move to external bond management was designed to incorporate a diversity of investment styles and additional investment techniques in the management of the bond portfolio. The Board sought to retain managers who invest in high quality fixed income securities and who place at least as much emphasis on sector weighting and issue selection decisions as on interest rate anticipation.

In keeping with the objective of utilizing the bond portfolio as as deflation hedge, the managers are restricted regarding the minimum average life of their portfolios. This requirement is designed to prevent the Basic Retirement Funds' total bond portfolio from assuming an excessively short-lived position and thus, severely diluting its deflation hedge capacity. Further, the bond managers are permitted to hold only high quality (BAA or better) fixed income assets. In addition, to avoid extreme variability in total bond portfolio returns, the maximum average life of the managers' portfolios is also constrained.

A discussion of the bond manager selection process can be found on pages 46-48. A review of each manager's investment approach is presented in Appendix I.

CASH EQUIVALENTS

The long-term asset mix of the Basic Retirement Funds does not include an allocation to cash equivalents. Given the long-run objectives of the Funds, a permanent commitment to short-term investments is not appropriate. On the other hand, at any given point it is quite likely that cash reserves will compose five percent or more of the Funds' market value. Cash equivalent holdings are derived from two sources: first, new contributions provided by the retirement funds which have yet to be allocated to a specific long-term asset segment; and second, the external investment managers, who are permitted to hold cash as part of their own individual short-run asset mix strategies.

Cash reserves are invested in a short-term investment fund (STIF) managed by State Street Bank and Trust, the Basic Retirement Funds' master custodian. The STIF is a separate account invested under the same state statutes which guide SBI investment staff's short-term investments.

REAL ESTATE

The SBI has targeted 10%, or \$300 million, of the Basic Retirement Funds for investment in real estate. Under state law, the SBI is authorized to invest in real estate through commingled funds, limited partnerships, and trusts. The SBI does not invest in real estate through direct investments, separate accounts, or individual transactions. The SBI has adopted a three part program to implement the planned allocation: 30-40% of the real estate portfolio will be invested in open-end diversified commingled funds; 30-40% will be invested in closed-end diversified commingled funds; and, 20-30% will be placed in less diversified, more focused commingled funds.

The SBI has committed \$215 million to five commingled real estate funds designed for pension fund investors. These commingled funds offer broad diversification by property type, age, size, geographic location, and lease structure. Of \$215 million commitment, the Board has invested a total of \$120 million in three open-end commingled funds managed by the Aetna, Equitable and Prudential Insurance Companies. In 1984, the Board committed an additional \$75 million to the closed-end fund managed by the Rosenberg Real Estate Equity Funds (RREEF) and \$20 million to the closed-end fund managed by the Heitman Advisory Corporation.

During the upcoming year, the Board plans to implement the third phase of the real estate investment program, the selection of less diversified, more focused commingled fund managers. These funds offer the ability to enhance the return earned by the diversified core real estate portfolio, which is expected to earn market returns. Evaluations of potential real estate commingled funds focus on the managers' experience and performance history; personnel; proposed organizational structure; investment disposition processes; property acquisition and strategy; management capabilities; the size of the fund; and, other fund participants. The selection of managers is expected to be completed during the first half of 1985. The screening will be participants. conducted by the investment staff in conjunction with the Investment Advisory Council's Alternative Investment Committee and Evaluation Associates.

VENTURE CAPITAL

The SBI has allocated 2.5%, or \$75 million of the Basic Retirement Funds to investment in venture capital. Under state law, the Board is authorized to invest in venture capital through limited partnerships and corporations. The SBI's venture capital portfolio will be comprised of investments in limited partnerships that are diversified by industry type, stage of corporate development, and location.

During the year, the Board made its first investments in venture capital through the commitment of \$10 million to Norwest Venture Partners and \$25 million to Kohlberg, Kravis and Roberts, a leveraged buyout firm. It is anticipated that approximately \$40 million will be invested in three to five additional partnerships during the first half of 1985. Evaluations of potential venture capital partnerships focus on the managers' experience and performance history; organizational structure; staff; partnership agreement; investment strategy; portfolio company selection process; investment management; and, fund administration. The screening of potential managers will be conducted by the investment staff in conjunction with the Investment Advisory Council's Alternative Investment Committee and Venture Economics, Inc.

RESOURCE FUNDS

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The SBI has allocated 2.5%, or \$75 million, of the Basic Retirement Funds' assets for investment in oil and gas The Board invests in partnerships structured partnerships. specifically for tax-exempt investors. These partnerships concentrate their investments in producing properties and royalty diversified geographically and/or that interests are Evaluations of potential resource investments qeologically. focus on the managers' experience and performance history; organizational structure; personnel; proposed investment types; disposition processes; revenue acquisition, management and assumptions governing arrangements; and, return sharing expectations.

The SBI has committed \$52 million in three oil and gas partnerships sponsored by First Reserve and the Apache Corporation. Of this total, \$30 million was committed in 1984 to an investment managed by the Apache Corporation. The SBI was one of twelve institutional investors providing a total of \$200 million to finance offshore production facilities for Apache's joint ventures in the Gulf of Mexico with the Shell Oil Company. It is anticipated that \$30 million will be committed to one to two new oil and gas investments over the next one to two years. All investments will be screened by the investment staff in conjunction with the Investment Advisory Council's Alternative Investment Committee.

INVESTMENT PERFORMANCE

RISK-RETURN OBJECTIVES

The Board, on the recommendation of the Investment Advisory Council, has adopted performance objectives which are consistent with the needs of the Basic Retirement Funds and realistic in the sense that they are both attainable and measurable. The evaluation of performance outcomes relative to the objectives is an integral part of the SBI's investment management system. PERFORMANCE OF CAPITAL MARKETS

CUMULATIVE RETURNS



It should be emphasized that performance evaluation must be long-term in scope. Excessive attention to short-run performance is frequently counterproductive, in that it can result in investment strategies which are not in the best interest of either the plan participants or the employers. The SBI's performance evaluation time horizon is approximately three to five years. While performance is measured and reviewed quarterly, the primary objective of this analysis is to identify trends and to control extreme underperformance. Decisions regarding the effectiveness of a particular investment management structure should be made over a considerably longer period.

The Basic Retirement Funds' multiple manager configuration requires that investment performance be evaluated on two distinct levels: the total fund and the individual managers. The use of total fund risk-return targets ensures that long-run strategic decisions which affect the total performance of the Funds are developed and implemented in a manner consistent with the Funds' needs. Risk-return objectives for the individual asset managers are designed to ensure that the managers adhere to their assigned investment roles. In addition, the objectives permit evaluation of the value that the managers add to the investment process.

TOTAL FUND RISK-RETURN OBJECTIVES

To a significant degree, the risk level of the total fund is set implicitly when the long-term asset mix and investment management structure for the fund are determined. Given the adequate funding levels and long-term investment time horizons of the Basic Retirement Funds, the Board, on the advice of the Investment Advisory Council, has targeted an above average risk posture for the Funds. This goal is implemented through the sizable long-term commitment of the Funds' assets to equities and the adoption of an investment management structure which has an aggressive orientation.

The Funds' long-term rate of return performance is evaluated relative to four specific benchmarks. First, based on the Funds' long-term asset mix targets and the historical real returns offered by the various asset classes, the total portfolio is expected to achieve a real rate of return of 5%. Second, the returns produced by the total portfolio are expected to exceed those derived from a composite of asset class market indices. Because comprehensive data is available for only the stock and bond markets, the composite index is weighted 70% stocks, 30% bonds, the same relative proportions as the Basic Retirement Funds' total portfolio. Third, the Funds' portfolio is expected to outperform the median return produced by a representative sample of other tax-exempt balanced funds. Fourth, the return on the Funds' total portfolio should exceed that of its actuarial assumed return of 8%.

INDIVIDUAL MANAGER RISK-RETURN OBJECTIVES

Two primary risk objectives have been established for the Basic Retirement Funds' individual equity managers. The first objective is based on comparisons of the relative market volatility of the managers' equity portfolios. The second objective relates to the diversification level of their equity portfolios. The index fund manager is expected to hold a portfolio whose risk matches that of the equity market. The active equity managers, due to their aggressive management styles, are expected to construct portfolios which are more risky than the market, both in terms of relative market volatility and diversification.

The equity managers' returns are evaluated against two standards. The first benchmark is the performance of the Wilshire 5000, representing the equity market. The index fund manager is expected to closely track the Wilshire 5000's return. The active equity managers, because of their riskier portfolios, are expected to produce returns which exceed that of the Wilshire 5000 by at least two percentage points. Second, the equity managers' performances are expected to exceed those of the median manager from a sample of other equity managers with similar portfolio risk characteristics.

With respect to the bond managers, the risk of their portfolios is constrained in such a way as to ensure that they fulfill their deflation hedge and total fund diversification roles. The bond managers are restricted in terms of the average life (i.e., the durations) of their portfolios and in terms of the quality of their fixed income investments.

The bond managers' return objectives are similar to those set for the equity managers. Their returns are expected to exceed those of the Merrill Lynch Master Bond Index, which represents the performance of the bond market. Further, the bond managers are expected to outperform the median manager from a representative sample of other bond managers with similar risk.

At this time, specific performance objectives have not been established for the alternative investment managers. A lack of comprehensive data on the returns provided by the real estate, resource, and venture capital markets, and the general unavailability of data on the performance of a universe of individual managers within these asset classes precludes effective performance evaluation. In the future, as markets for these assets become more institutionalized, the Board hopes to be able to more fully integrate these assets into its performance analysis.

TOTAL FUND RISK-RETURN PERFORMANCE RESULTS

In terms of total fund risk objectives, the Board continues to make progress toward full implementation of the long-term asset mix targets established for the Basic Retirement Funds. During the fiscal year, the index fund was constructed and external bond managers were hired. Commitments to alternative investments proceeded on schedule. The current overweighting of fixed income assets should decline over the next year as alternative investments continue to be increased and funded by the liquidation of bonds and cash equivalents.

From a total rate of return perspective, fiscal year 1984 was a difficult period for institutional investors. In contrast to fiscal year 1983, when stocks and bonds performed exceptionally well, in 1984 investors became increasingly concerned by the strength of the economic recovery and rising interest rates. The vigorous bull market in stocks, which began in August 1982, peaked in June 1983. Stock prices then began a slow, persistent decline that continued throughout the fiscal year. Bond prices followed an irregular path, but also ended the year down.

this inhospitable investment environment, the Basic In aggregate portfolio generated a -5.5% total Retirement Funds' Relative to established long-run investment rate of return. disappointing year for the Basic objectives, 1984 was a Retirement Funds. The Funds' failed to meet the real rate of return target as well as the assumed actuarial return. Further, the Funds underperformed the median balanced tax-exempt fund. Finally, the Basic Retirement Funds slightly underperformed the 70%/30% stock-bond composite performance standard. Total fund performance data relative to performance standards, for the most recent fiscal year as well as the last five years, are presented on pages 19-20.

Over the long-term, such total portfolio performance results are clearly unacceptable. However, these poor fiscal year two important light of returns must be evaluated in considerations. First, the Funds' investment structure was in a period of major transition during the year. At the beginning of the year the active equity managers had recently been retained of implementing their investment midst and were in the addition, during the year the index fund was strategies. In constructed and the funding of the alternative investment managers continued. Finally, toward the end of the year, cash flows to the Funds began to be disrupted by the "Rule of 85" (see The second consideration is that the total pages 51-52). portfolio's common stock-oriented asset mix, combined with the smaller capitalization, growth stock emphasis of the active equity managers, was not conducive to satisfactory performance. Fiscal year 1984 was an exceptionally poor period for common stocks, particularly for small, growth company stocks.



INVESTMENT RETURNS RELATIVE TO PERFORMANCE STANDARDS

FISCAL YEAR

	1984 19	83 1982 1	981 1980	ANNUALIZED 3 YR. 5 YR.
TOTAL FUND: (incl. alt. assets)* (excl. alt. assets) Median Balanced Fund** Stock/Bond Composite*** Inflation	-6.3 42 -2.8 42 -5.6 54	.1 1.8 .1 -0.7 1	7.1 7.5 7.1 7.5 2.0 11.8 0.3 11.6 9.6 14.3	10.7 9.3 11.3 11.9
EQUITY SEGMENT Wilshire 5000		.1 -10.4 2 .4 -14.9 2		7.1 11.4 9.0 14.1
BOND SEGMENT ML Master Bond Index	2.2 37 1.7 28	.4 11.9 - .9 12.3 -	9.6 -0.5 4.2 4.1	16.3 7.2 13.7 .8.0

- * Alternative equity assets include real estate, venture capital and resource funds
- ** Wilshire Associates Trust Universe Comparison Service median tax-exempt balanced portfolio
- ***50/50 Wilshire 5000/Merrill Lynch Master Bond Index Composite through 6-30-81, 70/30 Wilshire 5000/Merrill Lynch Master Bond Index Composite 7-01-81 through 6-30-84

However, the factors discussed above are expected to be transitory. The Basic Retirement Funds' investment management structure changes are largely complete. Further, capital market history would argue against the frequent recurrence of common stock environments such as that witnessed in 1984.

INDIVIDUAL MANAGER RISK-RETURN PERFORMANCE RESULTS

For the most part, FOR THE MOST PART, THE EXTERNAL EQUITY MANAGERS WERE SUCCESSFUL in meeting their long-term risk objectives during the the external equity managers were fiscal year. All of the managers maintained market volatility levels in accordance with prescribed targets. Moreover, the large majority of equity the managers met the SBI's diversification guidelines. Those managers who continuously held overly diversified portfolios have been requested to rectify the Specific portfolio risk data on the individual situation. managers' portfolios are presented on pages 69-71.

The total portfolio returns produced by the individual equity managers were widely dispersed, as shown on page 22. Several of the active equity managers performed well, matching or exceeding the performance of their investment standards, the Wilshire 5000 and the median aggressively managed equity portfolio. On the other hand, the majority of the active equity managers produced poor returns. In aggregate, the active equity managers underperformed the returns of the Wilshire 5000 over the fiscal year, but performed roughly in line with the median manager from a sample of other equity managers with similar risk characteristics.

In general, the active equity managers, like most aggressive equity managers, were hampered by their orientation toward smaller capitalization, high growth, high volatility stocks. These types of stocks corrected more severely in the market downturn than did the slower growth, higher yielding stocks. The managers, in aggregate, remained consistently overweighted in the poorly performing Financial, Technology, and Transportation sectors of the economy and underweighted in the stronger Energy and Utilities sectors. Industry sector concentrations for the individual managers' portfolios are shown on pages 72-74.

The SBI's passive equity manager completed its index fund construction in mid-February. The index fund tightly tracked its target index, the Wilshire 5000, during the remainder of the fiscal year.

The six external bond managers were hired in July, 1984. Their performance will be discussed in the 1985 annual report. During the most recent fiscal year, the bond portfolio was managed solely by internal staff. As shown on page 20, over this period the bond portfolio's return exceeded that of its target, the Merrill Lynch Master Bond Index.

EQUITY MANAGER PERFORMANCE

FISCAL YEAR 1984

Managers	Total Portfolio Returns
Fred Alger	- 13.7%
Alliance Capital	- 15.5
Beutel Goodman	1.2
Forstmann Leff	- 9.0
Hellman Jordan	- 8.0
IDS	- 12.3
Investment Advisers	- 7.9
Loomis Sayles	- 20.3
Siebel Capital	- 11.6
Herbert R. Smith	- 19.0
Trustee & Investors	- 23.1
Total - External Active Managers	- 13.1
Iotai External Motivo Manajero	- <u> </u>
Wilshire Associates	NA
	н. - стана - м
Performance Standards	
Wilshire,5000	- 8.6%
S&P 500	- 4.6
TUCS Median Aggressive Manager	- 13.9
Consumer Price Index (Inflation)	4.3
•	

NA - assets under management for less than one year

The Post Retirement Investment Fund contains the pension assets of the retired public employees covered by the seven statewide retirement plans (i.e., the Basic Retirement Funds and the Legislative & Survivors Retirement Fund). The assets of the Fund are used to finance annuities paid to retirees. These annuities may be adjusted upwards based on the earnings of the Fund. As of the end of the 1984 fiscal year, the Post Retirement Investment Fund had a market value of \$1.9 billion. As of that date, approximately 45,000 eligible retirees were participants in the Fund.

INVESTMENT OBJECTIVES

The SBI pursues two primary investment goals for the Post Retirement Investment Fund: first, to produce annual earnings sufficient to maintain promised benefits at current levels; second, to generate additional earnings which allow benefits to be increased at a rate which compensates, to some degree, for inflation.

The Board recognizes that the demographics of the Fund and the Fund's legally mandated benefit calculation formula require a completely different investment approach from that utilized for the Basic Retirement Funds. The investment horizon of the retirees is considerably shorter than that of the active employees. With an average remaining life span of approximately eight years, the Fund's participants are much more sensitive to near-term performance volatility of the Fund than are active employees.

The ability of the Post Retirement Investment Fund to maintain current benefit levels and provide future benefit increases is dependent upon its earnings. As specified by statute, earnings for the Fund are defined as interest and dividend income as well as realized equity capital gains (or losses). Unrealized equity capital gains have no direct impact on the benefits paid out to retirees. Unrealized equity capital gains (or losses) are excluded from defined earnings in order to make benefit payments largely insensitive to near+term fluctuations in the capital markets. As a result, the Fund is not oriented toward long-term total rate of return maximization. Rather, the Board attempts to generate a high, consistent stream of earnings for the Fund which will produce increasing benefits over time.

1984 FISCAL YEAR END ASSET MIX

PERCENT OF MARKET VALUE



COMMON STOCKS-35.5%

• • • • • • • • • • • • • • • • • • • •	\$Million	Percent
Common Stocks	657	35.5
Bonds	951	51.4
Cash Equivalents	243	13.1
Total	1,851	100.0

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ASSET ALLOCATION

The asset mix of the Post Retirement Investment Fund is designed to generate the sizable, stable earnings stream referred to in the previous section. The Fund's year-end asset mix, as well as its historical asset allocation data, are presented on pages 26-27.

The majority of the Fund's assets are invested in intermediate to long-term, high quality bonds. Fixed income investments are ideal holdings for the Fund because they produce income flows which are highly predictable and thus can be matched against the Fund's well-defined liabilities. Further, because of extraordinarily high of real the levels (i.e., inflation-adjusted) interest rates in recent years, the Fund's fixed income investments have produced substantial interest income, which has permitted benefit increases well in excess of inflation.

While intermediate to long-term bonds represent the largest asset class in the Post Retirement Investment Fund's portfolio, common stocks also play a significant role. Common stocks provide the Fund with a source of long-run earnings growth not available from fixed income investments. In recent years, realized gains on common stocks have contributed importantly to the large benefit increases.

Cash equivalents make up the remainder of the Fund's portfolio. These assets provide the Fund with a certain amount of inflation protection, as their yields are highly inflation sensitive. Further, cash equivalents give the Fund the liquidity necessary to meet withdrawals required for benefit payments. In recent years, given the high levels of interest rates offered by longer-term fixed income investments, cash equivalents have been a relatively small portion of the total fund. Toward the end of the 1984 fiscal year, however, cash equivalent holdings rose temporarily due to an influx of contributions produced by the "Rule of 85" (see pages 51-52).

The Asset Allocation Committee of the Investment Advisory Council is currently reviewing the long-term asset allocation needs of the Post Retirement Investment Fund. The committee may not recommend major shifts in the Fund's asset mix. However, certain investment techniques which will enhance the Fund's ability to produce benefit increases over the long-span are likely to be recommended.

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HISTORICAL ASSET MIX

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PERCENT OF MARKET VALUE FISCAL YEAR END ALLOCATIONS

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Equities



Bonds



Cash Equivalents

HISTORICAL ASSET MIX

PERCENT OF MARKET VALUE FISCAL YEAR END ALLOCATIONS

		FIS	CAL YEAR		
	1984	1983	1982	1981	1980
Common Stocks					
<pre>\$ Million</pre>	657	693	382	461	471
Percent	35.5	39.5	32.7	37.3	43.2
Bonds	x	·			
<pre>\$ Million</pre>	951	903	692	475	455
Percent	51.4	51.5	59.3	38.4	41.7
Cash Equivalents					
\$ Million	243	157	93	301	165
Percent	13.1	9.0	8.0	24.3	15.1
Total Fund					
<pre>\$ Million</pre>	1,851	1,753	1,167	1,237	1,091
Percent	100.0	100.0	100.0	100.0	100.0

INVESTMENT MANAGEMENT

The Post Retirement Investment Fund is managed solely by the SBI's investment staff. This investment management structure is employed for two primary reasons. First, the investment objectives of the Fund present a situation that most money managment firms are ill-equipped to handle. Money managers tend to focus on maximizing total returns. However, as was discussed previously, this approach is not suited to the particular investment requirements of the Fund. The Fund's managers must be concerned with generating current income and avoiding realized losses on portfolio holdings. These are investment strategies that most managers are not comfortable implementing. Second, the investment staff has been viewed as more closely attuned to the risk-return preferences of the retirees.

COMMON STOCKS

The focus of the investment staff's common stock management is on long-term, value-based stock selection. The strategies implemented by the investment staff are less aggressive than those utilized by the Basic Retirement Funds' external equity managers. As the only common stock manager for the Post Retirement Investment Fund, the investment staff is cognizant of the diversification requirements of the Fund's stock portfolio. Further, staff is aware of the Fund's need to avoid investment strategies which generate high portfolio turnover and which may at times result in sizable realized losses.

The investment staff attempts to identify stocks that have attractive expected returns, yet do not possess significantly Recommendations generated by high levels of market volatility. quantitative valuation models are the primary source of investment candidates. In addition, selected recommendations of the Board's external equity managers are utilized if they fit the investment goals of the Fund. Based upon the recommendations from these two sources, the Fund's equity portfolio is specific constructed within portfolio diversification and turnover guidelines.

BONDS

As discussed, interest income from bonds is the Post Retirement Investment Fund's primary source of earnings to finance benefits payments. The investment staff utilizes primarily a buy-and-hold approach to bond management, concentrating on high quality issues with adequate call protection to lock in current high yields.

In recent years, the Post Retirement Investment Fund's bond portfolio has produced income well above that needed to fund the promised level of benefits. The excess interest earnings, combined with realized capital gains from the common stock portfolio, have been used to fund substantial benefit increases.

INVESTMENT PERFORMANCE

RISK-RETURN OBJECTIVES

Because of its focus on generating current income, the risk composition of the Post Retirement Fund's investment portfolio is conservatively structured. As noted, the majority of the Fund's assets are invested in high quality bonds. Further, the Fund's equity portfolio maintains a relatively high level of diversification and a moderate level of volatility.

In terms of long-term rate of return objectives, the Fund's investment results are compared to three standards. First, the Fund is required to generate a level of interest and dividend income, combined with realized equity capital gains, which meets the Fund's actuarial assumptions. Second, the Fund is expected to produce additional earnings sufficient to allow benefits to increase at a rate at least one-half of the inflation rate. Third, the Fund's total rate of return is expected to exceed that of the performance of a composite index weighted 40% stocks, 60% bonds. These weightings represent the Fund's current long-term asset mix targets.

RISK-RETURN PERFORMANCE RESULTS

The Post Retirement Investment Fund's total portfolio met all prescribed risk targets during the fiscal year. The Fund was approximately 60% invested in fixed income assets, with an average quality rating of AAA. The Fund's equity portfolio maintained a slightly above average level of relative market volatility and was consistently well-diversified.

Investment returns for the 1984 fiscal year met all established performance standards. The Fund generated income and realized equity capital gains in excess of the amount needed to fund promised benefits. The surplus earnings will permit a benefit increase of approximately 7.3%, considerably above the fiscal year 1984 inflation rate of 4.4%. Finally, the Fund's total return outperformed that of its composite performance standard, largely due to the relatively strong performance of the Fund's bond segment. Post Retirement Investment Fund performance data, for the most recent fiscal year as well as the last five years, are presented on pages 30-32.

BENEFIT INCREASES VERSUS INFLATION



FISCAL YEAR

1984 1983 1982 1981 1980

BENEFIT INCREASE

50% OF INFLATION RATE

	FISCAL YEAR					
•	1984	1983	1982	1981	1980	
Benefit Increase	6.9	7.5	6.9	7.4	3.2	
50% of Inflation Rate	2.2	1.3	3.6	4.8	7.2	

TOTAL FUND RETURNS

INVESTMENT RETURNS RELATIVE TO PERFORMANCE STANDARDS



INVESTMENT RETURNS RELATIVE TO PERFORMANCE STANDARDS

FISCAL YEAR

•	1984	1983	1982	1981 1	980	ANNUAL 3 YR.	
TOTAL FUND Stock/Bond Composite*		38.4 43.3	3.2 0.8	5.5 7.1 1		12.0 12.1	9.8 10.7
EQUITY SEGMENT Wilshire 5000				18.5 1 25.1 1			11.4 14.1
BOND SEGMENT ML Master Bond Index		34.0 28.9		-10.0 - - 4.2		15.0 13.7	6.4 8.0

*40/60 Wilshire 5000/Merrill Lynch Master Bond Index Composite

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MINNESOTA SUPPLEMENTAL INVESTMENT FUND

The \$221 million Minnesota Supplemental Investment Fund contains the assets of a number of retirement plans, supplemental benefit programs, and deferred compensation plans. Participants include police and firefighters, teachers, unclassified state employees, and employees of various other units of government. The State's deferred compensation plan and teachers' supplemental retirement plan have the largest participation in the Minnesota Supplemental Investment Fund at \$71 million and \$53 million, respectively.

Participants in the Supplemental Investment Fund have three different investment options: the Income Share Account, the Growth Share Account, or one of two debt-related accounts, the Fixed Return Account for individuals or the Bond Account for retirement plans. Most participants have the freedom to select the allocation of their investments among accounts that is appropriate for their needs, within the statutory requirements and rules established by the individual units of government.

INCOME SHARE ACCOUNT

Similar to the Basic Retirement Funds, the primary investment objective of the \$111 million Income Share Account is to achieve long-term high real rates of return while hedging against disastrous financial environments and protecting against excessively volatile long-term performance. To achieve these objectives, the Income Share Account is invested in a balanced portfolio of common stocks and fixed income securities. As discussed in the Basic Retirement Funds section of this report, common stocks provide the potential for significant long-term capital appreciation, while bonds provide a hedge against deflation and the diversification needed to limit excessive portfolio return volatility. The year-end asset mix and historical asset allocation data for the Income Share Account are presented on page 41.

Participation in the Income Share Account is structured similar to a mutual fund. The participants own shares in the Account which are priced monthly on a market value basis. Interest and dividend income is reinvested. Participants' investment returns are measured by changes in the Account's unit value, which in turn is a function of the income and capital appreciation (or depreciation) generated by the securities held

by the Account. Participants may buy or sell shares in the Account based upon the most recently calculated unit value.

The SBI's investment staff manages the entire fixed income component and the majority of the common stock assets. In March, 1983, the Board retained BMI Capital Management to manage approximately one-fifth of the Income Share Account common stock portfolio. The Board believes that the aggressive style of equity management utilized by BMI Capital provides an investment approach that it is not feasible for investment staff to replicate. However, due to the balanced investment goals of the Account, the percentage of the total portfolio assigned to aggressive external equity management has been kept at a relatively low level.

Similar to other SBI funds which utilize a multi-manager investment structure, the performance of the Income Share Account is evaluated on two levels: the total fund and the individual manager.

The total fund performance of the Income Share Account is expected to exceed the returns of a composite of market indices weighted 50% Wilshire 5000, 50% Merrill Lynch Master Bond Index. The composite's weightings represent the long-term asset mix targets established for the Income Share Account. The total fund returns are also expected to surpass the median performance of a sample of other balanced tax-exempt funds.

On the individual manager level, the performance of the Income Share Account's external and internal equity managers is expected to exceed the returns produced by the Wilshire 5000 as well as the median managers from representative samples of other equity managers with similar investment characteristics. BMI Capital is a more aggressive manager than the Income Share Account's investment staff manager. Therefore, BMI Capital's performance is compared against a sample of managers whose investment style is similarly more aggressive than the managers against which the investment staff's performance is compared. The internal bond manager is targeted to outperform both the Merrill Lynch Master Bond Index and the median performance among bond managers of similar investment risk.

During fiscal year 1984, the Income Share Account underperformed its performance objectives on a total fund level, due largely to the performance of its equity portfolio. The Account's total fund returns failed to surpass those of both the composite index and the median tax-exempt balanced fund manager. On the individual manager level, performance results were mixed. BMI Capital significantly underperformed both the Wilshire 5000 and the median manager from a sample of similar risk equity managers. The investment staff equity portfolio, on the other hand, marginally outperformed the Wilshire 5000, but slightly underperformed the median manager from a sample of similar risk equity managers. The Account's internal bond manager outperformed the Merrill Lynch Master Bond Index and approximately matched that of the median manager from a sample of bond managers of similar risk. Individual manager and total fund performance data are presented on pages 39 and 42, respectively.

GROWTH SHARE ACCOUNT

The \$54 million Growth Share Account is invested to provide participants with above-average capital appreciation. The Account is authorized to hold up to 100% of its market value in common stock investments. At times, cash equivalents may make up a large portion of the total portfolio, depending on the market outlook of the Account's managers. However, to achieve its investment objective, over the long-run the Account will hold a large, permanent equity commitment. The year-end asset mix and historical asset allocation data for the Account are presented on page 41. Because of its sizable common stock commitment, the Growth Share Account's returns likely will be more variable that those of the Income Share Account. However, it is anticipated that higher returns from the Growth Share Account's investments will compensate for the additional risk undertaken.

Participation in the Growth Share Account is structured in precisely the same manner as the Income Share Account.

Management of the Growth Share Account is split equally between external and internal management. Waddell & Reed was initally funded in March, 1983 and received additional funding in January, 1984. Waddell & Reed employs an aggressive equity management style which is complemented by investment staff's long-term value oriented investment approach.

The total fund performance of the Account is expected to exceed that of the Wilshire 5000. This standard represents the Account's long-run full allocation to common stocks. The total portfolio is also expected to perform above the median of a representative sample of tax-exempt, equity-only managers.

The Account's individual managers are likewise expected to outperform the Wilshire 5000. In addition, the external and internal managers are expected to produce returns that exceed those of the median managers from representative samples of other similar risk equity managers.

During fiscal year 1984, the Growth Share Account outperformed both of its total fund performance standards. On the individual manager level, Waddell & Reed performed extremely well, far outperforming the Wilshire 5000 and the median manager from a sample of equity managers of similar risk. Investment staff, however, underperformed both the Wilshire 5000 and the

median manager from a sample of similar risk equity managers. Individual manager and total fund performance data are presented on pages 39 and 42, respectively.

FIXED RETURN ACCOUNT

The Fixed Return Account is a \$59 million fund, whose investment objective is to generate high levels of current income by investing in quality debt securities. The Account's sole source of earnings is the interest income produced by its portfolio of securities. Participants experience minimal investment risk because all portfolio assets are held to maturity. Thus, there is little likelihood that the Account will realize capital losses (or gains) as a result of changes in the market value of the Account's assets.

Participation in the Fixed Return Account is structured similar to a money market mutual fund. The Account maintains a uniform value per share. Annual income is used to purchase additional shares in the Account. As currently established, the Account permits participation only by individual public employees as part of their authorized investment options. (Various retirement associations participate in a similar style of investment management through the Bond Account described below.)

The Fixed Return Account is managed entirely by investment staff. To maximize yields, yet maintain adequate liquidity for the Account, the investment staff maintains approximately a two-to-three year maturity target for new investments.

BOND ACCOUNT

The \$3 million Bond Account was established by the 1981 Legislature to provide a separate fixed return investment vehicle for police and fire fighter retirement organizations. Similar to the Fixed Return Account, the Bond Account is designed to offer a low risk investment option which earns a high level of current income from quality debt securities. Like the Fixed Return Account, the Bond Account is managed solely by investment staff. However, the average life of the Bond Account's investments is longer than that of the Fixed Return Account.

Participation in the Bond Account is offered to qualified retirement organizations only. Individuals do not participate in this Account. The Account is designed to offer participating organizations a fixed rate of return for a specified period of time. The length of time this guarantee is in effect depends on the average maturity of the Account's investments, usually in the range of six-to-eight years. Contributions to the Bond Account made by the participating retirement organizations are grouped by year, referred to as a class year. Depending on the available fixed income investment opportunities available at the initiation of a class year, a rate of return is guaranteed on the contributions made by the participants in the class year. This guarantee is in effect for the life of the class. If a retirement organization should chose to withdraw from the Bond Account, all unexpired class years will have their shares redeemed at market value.

MINNESOTA VARIABLE ANNUITY FUND

The Minnesota Variable Annuity Fund is an investment option formerly offered to members of the Teachers' Retirement Association. The Fund was designed as an alternative to the regular Teachers' retirement plan. The opportunity to enroll in the Fund is no longer offered to new Association members, although members enrolled prior to the cutoff date may retain their participation in the Fund and continue to make contributions.

The investment objective of the Fund is quite similar to that of the Minnesota Supplemental Investment Fund's Growth Share Account. The purpose of the Fund is to provide participants with above average long-run capital appreciation on their investments. a large long-term objective necessitates This investment commitment to common stocks. Like the Growth Share Account, the Minnesota Variable Annuity Fund is authorized to hold up to 100% of its market value in common stocks. However, the Fund's portfolio may contain a considerable cash equivalent component at any given time, depending on the near-term investment strategies The year-end asset mix and historical asset of its managers. allocation data for the Fund are presented on page 41.

Management of the Minnesota Variable Annuity Fund is split equally between external and internal investment managers. Norwest Bank Minneapolis and Lieber & Company offer Fund participants an aggressive equity approach. Investment staff utilizes a long-term value oriented investment style. Both external managers were funded in March, 1983. Lieber & Company received additional funding in January, 1984. Norwest Bank received additional funding in April, 1984.

Because of the Fund's 100% common stock long-term asset mix target, the Fund's total performance is expected to surpass that of the Wilshire 5000. Further, the Fund's total portfolio returns are expected to exceed those of the median manager within a representative sample of tax-exempt equity-only managers.

The Fund's individual managers are expected to outperform the Wilshire 5000 and the median managers from representative samples of similar risk managers.

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During the 1984 fiscal year, the Variable Annuity Fund underperformed both of its total fund performance standards. On the individual fund level, Lieber & Company approximately matched the Wilshire 5000's return and outperformed the median manager from a sample of similar risk equity managers. Norwest Bank and internal staff, on the other hand, underperformed both performance standards. Individual manager and total fund performance data are presented on pages 39 and 42, respectively.

MULTI-MANAGER FUNDS EQUITY MANAGER PERFORMANCE

FISCAL YEAR 1984

	Total Portfolio Returns
Income Share Account	
BMI Capital Internal Manager	-23.8% -8.4
Growth Share Account	
Waddell & Reed Internal Manager	-10.8 -13.1
Minnesota Variable Annuity Fund	
Norwest Bank Minneapolis Lieber & Company Internal Manager	-16.1 - 8.6 -13.4
Performance Standards	
Wilshire 5000 S&P 500 TUCS Median Aggressive Equity Manager TUCS Median Diversified Equity Manager Consumer Price Index (Inflation)	$ \begin{array}{r} - 8.68 \\ - 4.6 \\ - 13.9 \\ - 7.8 \\ 4.3 \end{array} $

PERMANENT SCHOOL FUND

The \$277 million Permanent School Fund is a trust created by the Minnesota Constitution for the benefit of Minnesota schools. Income derived from the investment of the Permanent School Fund is annually distributed to school districts throughout the state.

The primary investment objective of the Fund is to earn a high level of income while limiting the volatility of total portfolio returns. Only interest and dividend income and realized equity capital gains may be paid out to schools. Until the recent passage of a Constitutional Amendment, the State Constitution the Fund's investment, contained specific restrictions on including a 20% maximum limit on corporate stocks and a 40% To achieve its objectives maximum limit on corporate bonds. within these Constitutional restrictions, most of the Permanent School Fund has been invested in high quality fixed income The securities, primarily of U.S. Government and Agency issues. remaining assets have been invested in common stocks. The year-end asset mix and historical asset allocation data for the Permanent School Fund are presented on page 41.

The enacted amendment now permits the Permanent School Fund to be invested under the same restrictions which govern the retirement funds. With the passage of the amendment, it is likely that the asset mix of the Fund, as well as the composition of its investments, will be altered. It is anticipated that the Fund's new investment authority will result in a higher level of income.

Similar to the other yield-oriented funds, such as the Post Retirement Fund and Fixed Return Account, the Permanent School Fund is invested entirely by the SBI investment staff.

The total fund performance of the Permanent School Fund is expected to exceed the returns of a composite of market indices weighted 20% Wilshire 5000, 80% Merrill Lynch Master Bond Index. The composite weightings represent the long-term asset mix targets established for the Permanent School Fund. During the fiscal year 1984, this performance standard was exceeded, as shown on page 42.

RETIREMENT AND TRUST FUNDS HISTORICAL ASSET MIX

PERCENT OF MARKET VALUE FISCAL YEAR END ALLOCATIONS

	1984 \$ Million Percent		198 \$ Millior	33 n Percent	\$ Millic	82 n Percent		981 on Percent	1980 \$ Million Percent		
Income Share Account				·	* .						
Common Stocks Bonds Cash Equivalents	61 40 ' 10	55.0 36.0 9.0	70 37 7	61.4 32.5 6.1	37 33 9	46.8 41.8 11.4	33 '34 10	42.9 44.1 13.0	29 30 11	41.4 42.9 15.7	
Total	111	100.0	114	100.0	- <u></u> 79	100.0	77	100.0	70	100.0	
Growth Share Account Stocks Bonds Cash Equivalents Total	27 0 27 54	50.0 0.0 50.0 100.0	46 0 12 58	79.3 0.0 20.7 100.0	32 1 7 	80.0 2.5 17.5 100.0	27 0 12 39	69.2 0.0 30.8 100.0	25 0 6 31	80.7 0.0 19.3 100.0	
Fixed Return Account		100.0		100.0		100.0		100.0	· ·	100.0	
Bonds Cash Equivalents	45 8	85.5 14.5	40 5	89.4 10.6	22 10	67.0 33.0	16 8 	68.0 32.0	16 3	84.2	
Total	53	100.0	45	100.0	32	100.0	24	100.0	19	100.0	
Bond Account		•		*	т. Т			•	*		
Bonds Cash Equivalents	3	100.0	2, 0	100.0	1 0	100.0			 		
Total	3	100.0	2	100.0	1	100.0		. .			
Mn Variable Annuity Fund				• •							
Stocks Bonds Cash Equivalents	83 5 8	86.5 5.2 8.3	87 5 15	81.3 ⁻ 4.7 14.0	57 12 6	76.0 16.0 8.0	48 9 20	62.3 11.7 26.0	47 11 9	70.2 16.4 13.4	
Total	· 96	100.0	107	100.0	75	100.0	77	100.0	67 [•]	100.0	
Permanent_School_Fund (at book value)								• •		· · · · · · · · · · · · · · · · · · ·	
Stocks Bonds Cash Equivalents	49 232 53	14.7 69.5 15.8	46. 235 34	14.6 74.6 10.8	`53 220 33	17.3 71.9 10.8	50 223 21	17.0 75.9 7.1	53 215 9	19.1 77.6 3.3	
Total	334	100.0	315	100.0	306	100.0	294	100.0	277	100.0	

RETIREMENT AND TRUST FUNDS

INVESTMENT RETURNS RELATIVE TO PERFORMANCE STANDARDS

FISCAL YEAR

	1984	1983	1982	1981	1980 _,	ANNUALI 3 YR. 5	
INCOME SHARE ACCOUNT			· ,	•			
TOTAL FUND 50/50 Stock/Bond Composite						11.5 11.0	
EQUITY SEGMENT Wilshire 5000	-11.0 -8.6	53.7 66.4	-5.1 -14.9	20.1 25.1	14.8 19.2	9.1 9.0	12.3 14.1
BOND SEGMENT M.L. Master Bond Index	2.3 1.7	36.2 28.9	-12.1 12.3	-9.2 -4.2	-1.7 4.1	16.0 13.7	6.9 8.0
GROWTH SHARE ACCOUNT	• 			,			
TOTAL FUND Wilshire 5000 Median Equity-Only Fund	-8.6	66.4	-4.2 -14.9 -13.0	25.1	19.2	9.0	14.1 14.1
			- 9.4 -14.9				
MINNESOTA VARIABLE ANNUITY	FUND						
	-8.6	66.4		25.1	19.2	8.4 9.0 9.8	14.1
EQUITY SEGMENT Wilshire 5000						7.3 9.0	
PERMANENT SCHOOL FUND							
TOTAL FUND 20/80 Stock/Bond Composite						13.7 12.9	
EQUITY SEGMENT Wilshire 5000			-9.1 -14.9			9.4 9.0	
BOND SEGMENT M.L. Master Bond Index	1.4	33.7 28.9	13.6 12.3	-10.4 -4.2	1.6 4.1	15.5 13.7	7.0 8.0

STATE CASH ACCOUNTS

The \$1.5 billion cash assets of State agency accounts, trust funds, and retirement funds are invested to provide a high level of current income. These assets are invested in highly liquid, quality securities, which mature within at least 3 years. All cash investments are managed by the SBI investment staff. Short investments include U.S. Treasury and Agency issues, term and certificates of repurchase agreements, bankers acceptances, The maturity structure of each individual account's deposit. portfolio depends on the cash flow needs of the respective account. The largest short-term accounts are the \$850 million Invested Treasurers Cash; the \$350 million Highway Funds; and the \$200 million Debt Service Account. During the last fiscal year, short term transactions exceeded \$68.2 billion.

As part of the cash management program, the SBI administers a securities lending program in which U.S.Treasury and Government Agency securities held by the SBI are loaned to banks and government security dealers for a daily fee. These loans are fully collateralized. The Securities Lending Program has generated approximately \$1 million per year in additional income for its accounts.

The SBI also manages a certificate of deposit (CD) program in which it purchases CD's from Minnesota banks and savings and loan institutions. The Board receives a market rate of return on these investments, utilizing the average secondary CD market rate quoted by the New York Federal Reserve Bank. All investments are fully insured by the Federal Deposit Insurance Corporation or Federal Savings and Loan Insurance Corporation. The Minnesota Certificate of Deposit program provides a reliable source of capital to all Minnesota financial institutions, regardless of size, many of which do not have access to the national CD market. The SBI designed the loan process so that no single institution is favored in the allocation of assets. Since it began in 1980, the CD program has loaned over \$700 million to 365 financial institutions throughout the state.

1984 MAJOR DEVELOPMENTS

INDEX FUND CONSTRUCTION

Following the adoption of the asset allocation recommendations of the Investment Advisory Council's Asset Mix Committee, the SBI decided to invest a sizable portion of the Basic Retirement Funds' common stock portfolio in a passively managed index fund. These recommendations called for a long-term commitment of 60% of the Basic Retirement Funds' assets to common stocks, split one-third/two-thirds between active and passive management, respectively. The active external equity managers were funded in early 1983. The funding of the index fund in late 1983 represented the second stage of the SBI's move to complete external management of the Basic Retirement Funds.

An equity index fund is a portfolio designed to match the The Board believes that an performance of the stock market. index fund can provide a large pension plan, such as the Basic Retirement Funds, with many important investment advantages, including low management costs and the ability to absorb sizable assets. Most importantly, an index fund provides an efficient risk and return. means of managing total portfolio The two-thirds of the Basic Retirement Funds' common stock assets in the index fund serve as a diversified "core" portfolio, designed to complement the highly non-diversified investment styles of the Board's active equity managers. The index fund provides the total equity portfolio with adequate diversification, permitting focus on aggressive value-added active managers to the That is, the index fund protects against extreme management. variations in equity portfolio performance, allowing the active managers the opportunity to add incremental value over the long run through concentrated sector and stock selection decisions.

Many index funds use the S&P 500 as a target index. However, the case can be made that the S&P 500 is not sufficiently representative of the overall stock market. The S&P 500 tends to be concentrated in many of the larger industrial companies and underweighted in the smaller service companies. As a result, based on the recommendations of the Investment Advisory Council's Asset Mix Committee, the SBI selected the Wilshire 5000 as the target for its index fund. The Wilshire 5000 is composed of all domestic common stocks for which daily prices are available. Thus, it is virtually an all-inclusive representation of the U.S. stock market. By using the Wilshire 5000 as a target index, the Board can more effectively produce a return on its passively managed funds which tracks that of the entire stock market.

The SBI's search committee interviewed five nationally-recognized index fund managers. The committee analyzed a number of factors as it reviewed each candidate,

including: index fund management experience; organizational stability; dollars under current passive management; index fund design; techniques employed in actual index fund construction (focusing especially upon trading strategies); and, management The committee recommended that the SBI retain Wilshire fees. Associates to manage its index fund. Wilshire has a strong background in non-discretionary index fund management. It is the largest supplier of index fund computer software and support in country. While the SBI was to be Wilshire's first the discretionary client, the search committee believed that the firm's extensive advisory experience, combined with its strong dedication to the success of its first fund, would be a positive factor. Further, the combination of the depth, quality, and stability of Wilshire's top management was considered to be superior to that of the other managers. Finally, the committee impressed by Wilshire's innovativeness and research on was The fact that Wilshire Associates created passive management. and maintains information on the Wilshire 5000 index had little to do with its selection as index fund manager.

At its October 26, 1983 meeting, the SBI approved the hiring of Wilshire Associates to manage its index fund. The firm's management responsibilities began December 1, 1983. Wilshire received a diversified portfolio of common stocks. The firm's task was to buy and sell securities so that the original portfolio was transformed into a portfolio which closely The majority of the index fund resembled the Wilshire 5000. construction was done through a package trading process whereby large blocks of securities were bought and sold in single packages at prices guaranteed by a brokerage house. The remaining transactions were done primarily on a "best efforts" basis, whereby each stock was traded individually at the best price the index fund manager could find.

The index fund construction was highly successful. Although almost \$2 billion in transactions took place, the trading attracted little or no attention of stock market participants. The cost of the trading was extremely low. Including commissions, estimated market impact costs, and administrative expenses, the index fund trades cost an average of only 0.86% of principal.

Although the index fund is designed to match the returns offered by the stock market, in any given quarter the index fund's return may not precisely track that of the Wilshire 5000. This deviation is referred to as tracking error. It is the result of two factors. First, the index fund does not own all 5000-odd stocks in the Wilshire 5000, due to both administrative constraints and SBI policy restrictions. Second, there are certain minor costs of maintaining an index fund, including management fees and trading costs associated with periodic rebalancing. The index fund's expected tracking error is small. Further, it is largely unbiased, being positive in some quarters, negative in others. The expected maximum annual tracking error is approximately plus or minus 0.75 percentage points.

EXTERNAL BOND MANAGER SELECTION

As part of its investment management restructuring process, during fiscal year 1984 the Board retained six external bond managers to invest the long-term fixed income assets of the Basic Retirement Funds. While these managers were actually funded at the start of the 1985 fiscal year, the selection of the bond managers took place in fiscal year 1984.

The bond portfolio is an integral part of the Basic Retirement Funds' total investment portfolio. From a risk-return perspective, it is designed to complement the Basic Funds' investments in equities (both common stocks and alternative investments). The bond portfolio is intended to serve three primary purposes: first, to provide a deflationary hedge for the total portfolio; second, to produce a dampening effect on total portfolio variability of returns; and third, to satisfy the statutory requirements under which the Board invests.

In terms of the first objective, bonds in the Basic Retirement Funds' total portfolio serve as insurance against a major deflation. Only high quality bonds will preserve principal and, in fact, produce sizable capital gains in the event of a deflation. In such an economic environment, equity investments are likely to suffer substantial declines in value. The bond portfolio is designed to partially offset these losses, should they occur.

With respect to the second objective, bonds serve to reduce the volatility of total portfolio returns. As part of its long-run asset mix for the Basic Retirement Funds, the Board has allocated the majority of the Funds' assets to common stocks. Among the traditional common stocks have asset classes, highest returns, yet have also historically offered the generated the greatest investment risk, as measured by the variability of returns. Because bond returns are not perfectly positively correlated with stock returns, adding bonds to a portfolio of common stock creates a diversifying effect, dampening total portfolio return volatility.

Finally, the bond portfolio serves to meet statutory investment restrictions. By law, the Basic Retirement Funds cannot be more than 75% invested in equity assets. The Board's asset mix guidelines call for this maximum equity investment. The remaining assets must be invested in fixed income securities, the vast majority of which are the portfolios of the external bond managers.

In order to meet the investment policy objectives cited above, the SBI established investment guidelines for the external bond managers. First, the managers are required to invest solely in high quality fixed income investments. As noted above, only these assets provide an effective deflation hedge. Minnesota statutes specify fixed income investment quality guidelines which are sufficient to satisfy the Board's policy objectives. Second, the managers are required to maintain total portfolio durations within a three-to-seven year band. (Duration is a measure of the The lower end of the band average life of an investment.) prevents the managers from holding portfolios that are so shortlived as to reduce severely their deflation protection. The upper end of the band constrains managers from holding portfolios which are very sensitive to interest rate moves, and hence, exhibit excessive return volatility.

The SBI implemented a nationwide search for bond managers, similar to the search conducted for its common stock managers. Evaluation Associates, the Board's consultant, supplied a list of fifteen previously successful managers who could invest in long-term fixed income assets under the policy guidelines A search committee established by the established by the Board. SBI visited each of these firms at their place of business and conducted in-depth interviews. The search committee focused on the management firms' quality and stability of key personnel, investment philosophy and investment management approach, and historical risk-return data. The search committee recommended, and the Board approved at its May 23, 1984 meeting, the hiring of six bond managers. Those managers and their allocated assets are listed below:

Lehman Management	\$150	Million
Miller, Anderson & Sherrerd	150	
Morgan Stanley Asset Management	150	
Western Asset Management	150	-
Norwest Bank Minneapolis	75	
Investment Advisers	25	

The search committee identified a group of managers with a blend of investment styles to add diversification to the bond portfolio. That is, while almost all bond managers to some degree make portfolio decisions based upon expectations of interest rate moves, the managers hired by the Board place varying emphasis on this strategy. Further, these managers exhibit differences in the methods used to select securities and in the sectors of the market that they emphasize.

Prior to their July 2, 1984 funding, the bond managers were provided a list of current Basic Retirement Funds bond holdings. The managers selected bonds that fit their particular investment strategies. These bonds were transferred to the managers on July 2 as part of their initial allocation. SBI investment staff assigned issues not selected to the managers on an equitable basis.

MASTER CUSTODIAN SELECTION

The SBI's decision to reorganize the investment management structure of the Basic Retirement Funds necessitated the retention of a master custodian. Previously, when all assets were internally managed, the SBI's custodial relationship with First National Bank of St. Paul presented a cost effective means of administering the Basic Retirement Funds' investments. First St. Paul essentially provided an inexpensive trade settlement mechanism. Transaction accounting and cash management was handled by SBI staff. This system was simplified by the fact that all trades originated from one source, that is, SBI staff. Thus, control of trade settlements and accounting was a straight-forward process.

The use of multiple external managers for the Basic Retirement Funds, and, in particular, the utilization of an extended index fund, was expected to increase dramatically the volume and variety of securities trades. The combination of SBI staff accounting and First St. Paul trade settlement was not designed to deal with such a complex investment management configuration. Master custodial banks, on the other hand, have designed administrative systems specifically to handle large multi-manager pension plans. Therefore, prior to its funding of the index fund, the Board hired a master custodian.

Master custodians provide a wide range of investment administration services. From the SBI's perspective, several such services were essential: safekeeping of securities; settlement of security trades; income collection; securities lending; cash management; reporting of assets held and transactions; and, fail float credit. The Board was also interested in such ancillary services as performance measurement, passive equity management and on-line data access.

Developing custodial systems designed to handle the needs of big pension plans is extremely expensive, both in terms of equipment and personnel. Further, there are vast economies of scale in the master custodian business, as a large client base allows significant fixed costs to be spread out. As a result, the largest master custodians tend to dominate the business because they are able to provide the most effective, lowest cost service to big pension funds.

The Board's search committee, assisted by the Board's consultant, Evaluation Associates, was assigned the task of recommending a master custodian. The committee prepared a

comprehensive request-for-proposal (RFP) which delineated, in considerable detail, the Board's specifications for master custodial service. The RFP focused on ten primary considerations: accounting, reporting, cash management, transition process, bank personnel, computer systems, securities lending, passive management, performance measurement and fees.

Evaluation Associates supplied a list of the top U.S. master custodian banks. The RFP was sent to these banks as well as to three large Twin Cities banks. Following receipt of the banks' responses, each bank was interviewed at its place of business by the search committee. A follow-up interview was conducted with three finalist banks.

Based on the banks' responses to the RFP and the on-site interviews, the search committee recommended that State Street Bank of Boston be hired as the SBI's master custodian. The committee believed that State Street provided the best combination of experience, size, personnel, accurate and timely reporting, and dedication to client service. The bank was the originator of custody services to mutual funds in the 1920's. It was an early participant in the master custodian business in the early 1970's. State Street is the second largest custodian bank in the U.S. The search committee was impressed not only with the number, but also the quality of persons who would be assigned to the SBI's account. The bank's recordkeeping and reporting capabilities were viewed favorably in terms of accuracy and timeliness. Finally, the master custody business is by far the bank's most important profit center. Thus, the bank appears committed to maintaining its leading role in the rapidly changing master custody business by continually making the sizable required investments in people and equipment.

At its September 20, 1983 meeting, the Board approved the hiring of State Street as master custodian for the assets of the Basic Retirement Funds. (The remaining SBI assets, almost all of which remain under internal management, continue to be custodied at First St. Paul. Their status will be evaluated at a future date.) State Street's custodial responsibilities began effective November 1, 1983. SBI staff spent considerable time during the month of October with State Street personnel preparing for the conversion. Subjects handled by the transition teams included: locating and inventorying all assets to be transferred; clarifying accounting procedures; developing a method of and distributing pooled income; unitizing the asset pools notifying the Board's managers of the new trade settlement procedures; creating a short-term investment fund; developing securities lending procedures; preparing specifications for a monthly data transfer to the SBI's accounting system; and, specifying asset pricing procedures.

The conversion process proceeded quite smoothly. All assets were transferred on schedule and no lost income resulted from the transfer, problems which have been known to occur in other custodial conversions. Further, only one month after the transition, Wilshire Associates began construction of the SBI's index fund. State Street handled the index fund's massive trading volume without serious problems, reaffirming the quality of the bank's custodial operations.

INVESTMENT ADVISORY COUNCIL CHANGES

The Investment Advisory Council (IAC) was created by Minnesota Statutes 11A.08. Among its duties, the IAC is charged with the responsibility to "advise the state board and director on general policy matters relating to investments."

The Council consists of seventeen members. Ten of these members are required to be "experienced in general investment matters." These individuals are members of the Minnesota financial community and have extensive investment experience, either as money managers or as investment directors of pension plans. Other members of the IAC include the Commissioner of Finance, the executive directors of the three statewide retirement systems, a retiree representative and two currently employed public employee representatives.

The composition of the IAC has undergone a gradual but important evolution over the last several years. This shift has tended to reflect the changes in the SBI's investment management structure and, hence, changes in the Board's information needs.

Previously, when all of the Board's assets were managed internally, the private sector contingent of the IAC was composed largely of money managers. Their advice was useful in establishing investment strategies for the internally managed funds. As the SBI has moved to an emphasis on external management, the membership of the Council has changed to include a number of pension plan directors. These individuals, and the organizations which they represent, face decisions similar to those that now confront the SBI. Thus, their knowledge and experience is highly relevant to the Board's current and future decision-making needs.

The IAC has recently instituted significant changes in its organizational structure. The goal of these changes is to create a more effective means of analyzing important investment issues and communicating recommendations to the SBI. Five committees have been created and each IAC member has been assigned to one of the committees. The committees are organized around broad investment subjects relevant to the Board's decision-making. The five committees are: Administrative, Asset Allocation, Alternative Investments, Equity Managers, and Fixed Income Managers. The committees meet separately at least once per quarter to consider topics under their specific pervue. The committee chairpersons formally present their committees' conclusions at the quarterly IAC meetings. In turn, the full IAC discusses these recommendations and sends them on, possibly with modifications, to the Board. SBI staff attends all committee meetings and provides information and analysis upon request.

LEGISLATIVE REVIEW

Relatively few changes were made in the SBI's statutory investment authority during the 1984 legislative session. The Board's housekeeping bill contained the following changes in investment statutes:

- 1) The authority to create a combined investment fund for fixed income investments. This authority was needed in order to pool the bond portfolios of the Basic Retirement Funds, thereby simplifying the external bond management process and producing significant savings in custodial expenses;
- 2) The expanded authority to invest in financial futures contracts to include futures contracts traded on any contract market designated and regulated by a federal agency. Among other investments, this new authority will permit the purchase of stock market futures contracts. The Board anticipates that the expanded futures authority will be used primarily by its external managers as part of their short-run asset allocation strategies; and
- 3) The elimination of the deferred yield adjustment for the active lives retirement funds. For actuarial purposes, losses on bond sales will no longer be amortized over the remaining life of the bond, but rather will be immediately written off against current income. The deferred yield adjustment account continues to be utilized by the Post Retirement Investment Fund.

Legislation was also passed requiring that the Board and Investment Advisory Council meet at least four times each year, rather than the previously specified six.

Perhaps the most significant piece of investment legislation passed in 1984 did not directly involve the Board. The Legislature passed a bill known as the "Rule of 85." This legislation permits participants in the statewide retirement plans to retire if their years of service and age total at least 85. The exact number of early retirees and the timing of their retirements, produced by the "Rule of 85" cannot be forecasted accurately. It is certain, however, that a large number of public employees will take early retirement over the next two years that the "Rule of 85" is in effect. During this period, the Basic Retirement Funds will experience significant negative net contributions. Current estimates place the figure at roughly \$300 million. These cash flows will be transferred to the Post Retirement Investment Fund to fund annuities for the retirees.

From the Board's perspective, the significance of the "Rule of 85" is twofold. First, the sizable negative net contributions to the Basic Retirement Funds will necessitate modest temporary changes in the Funds' investment structures if the long-run allocations to alternative investments are to proceed as planned. Second, with the size of the Post Retirement Investment Fund expected to increase by almost two-thirds, to \$3 billion over the next two years, formal investment objectives and asset allocation targets will need to be developed for the Fund.

The Asset Allocation Committee of the Investment Advisory Council has addressed the first issue and recommended that:

- 1) The long-term asset allocation targets, adopted by the Board in August, 1983, should continue to be implemented as scheduled over the next two-to-three years.
- Specifically, investments in alternative assets should proceed as planned.
- 3) Cash to finance both the negative net contributions and the continued funding of alternative investments should be raised from four sources (presented in order of recommended use):
 - a. Dividends from the index fund should be diverted \prec for the next two years.
 - b. The private placement bond portfolio should be . liquidated.
 - c. The three-year-and-under maturity bond portfolio should be liquidated.
 - d. A small portion of the funds managed by external bond managers should be withdrawn.
- 4) Cash positions of at least \$50 million should be maintained on a continuous basis to protect against any significant unexpected cash outflows.

The Asset Allocation Committee is also considering the second issue of investment goals and asset allocation targets for the Post Retirement Investment Fund. The Committee is expected to make specific recommendations to the Board at its December 1984 meeting.

MINNESOTA SMALL BUSINESS FINANCE AGENCY PROGRAM

During the last year the Minnesota Small Business Finance Agency, in conjunction with the Minnesota State Board of Investment, has provided loans to small businesses throughout the This program, called the Minnesota Plan, provides U.S. state. government guaranteed, fixed rate, long-term Small Business Administration (SBA) loans Minnesota small businesses. to Generally, SBA loans are available only for a maximum term of seven years, at variable rates adjusted quarterly at a level 2 3/4% above prime. The Minnesota Plan, a pilot project approved by the U.S. Small Business Administration, is designed to give small businesses the stable debt service payments necessary to implement their long-term investment and operational plans by providing loans for up to twenty years at a fixed rate of interest.

In order to finance this program, the Minnesota Small Business Finance Agency (MSBFA) sells taxable business loan revenue bonds. The proceeds from the bond sales are used by MSBFA to purchase the U.S. government guaranteed portion of SBA loans issued by banks to Minnesota small businesses. In effect, the bonds issued by the MSBFA are backed by the guarantee of the U.S. Small Business Administration, a full faith and credit obligation of the U.S. government. Because of the sound characteristics of this proposal as well as the attractive return available, the SBI has committed to purchase the bonds issued by the MSBFA for investment by the Permanent School Fund, the trust whose earnings directly benefit Minnesota schools.

The MSBFA bonds provide a yield which exceeds that of ten-year U.S. Treasury bonds by 1.5 percentage points. The MSBFA bond yield is pegged to U.S. Treasury obligations because of the similarity in quality and risk of the two investments. In addition, the SBI receives from the MSBFA a commitment fee of 1/2 of 1% of the aggregate principal amount of the bonds not yet issued.

The MSBFA bonds are rated AA by the Standard and Poor's Corporation, which signals the quality of the instrument and offers liquidity in the event of the anticipated development of an active secondary market for these securities. The bonds have a twenty-year maturity with sinking fund payments in accordance with the actual loans in the underlying pool. As a result, the average life of the bonds is approximately ten years.

This innovative financing mechanism for small businesses is the result of extensive discussions between the staffs of the Minnesota Small Business Finance Agency and the State Board of Investment. The SBI anticipates that \$5.5 million, or approximately 2% of the Permanent School Fund, eventually will be invested in the Minnesota Plan.

PROXY VOTING

As a stockholder, the State Board of Investment is entitled to participate in corporate annual meetings, through direct attendance or casting its votes by proxy. Through proxy voting, the Board directs company representatives to vote its shares in a particular way on resolutions under consideration at annual meetings. In effect, as a shareholder the State Board of Investment can participate in shaping corporate policies and practices.

Resolutions prepared at annual meetings range from routine issues, such as those involving the election of corporate directors and ratification of auditors, to non-routine items involving such matters as merger proposals and corporate social responsibility issues. In order to identify the "non-routine" resolutions, the State Board of Investment utilizes the Investor Responsibility Research Center (IRRC), a non-partisan service which provides information and analyses of the issues under consideration at corporate annual meetings.

Due to the administrative difficulty involved in voting the proxies of over 1100 corporations owned by the Basic Retirement Funds, all routine matters are automatically voted in accordance with the recommendations of corporate management. This process is administered by the SBI's master custodian, State Street Bank and Trust Company. All non-routine issues highlighted by IRRC are screened by State Street and voted directly by the State Board of Investment. In addition, the shares of the approximately 150 companies owned by the Post Retirement Fund, the Supplemental Investment Fund, the Variable Annuity Fund and the Permanent School Fund are voted directly by the Board.

All non-routine issues are reviewed by a committee on proxy voting appointed by the State Board of Investment. The committee votes on the resolutions in accordance with the SBI's statement on investment responsibility (see page 46).

During the last fiscal year, the committee voted on fortynine shareholder resolutions pertaining to issues of corporate social responsibility. Of these forty-nine resolutions, the committee voted in favor of thirty-nine shareholder resolutions, in opposition to the recommendation of corporate management. The committee also has adopted policies in opposition to certain management proposals which discourage changes in corporate ownership to the potential financial detriment of shareholders.

RESOLUTION

REGARDING ADDITIONAL INVESTMENT CRITERIA

AND THE VOTING OF PROXIES

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

WHEREAS, it has become increasingly apparent that the standards of prudence and responsibility may, in limited circumstances, be considered in light of the social and environmental policies of the corporation in which the State owns or contemplates owning an investment; and

WHEREAS, investing in an enterprise which is flagrantly violating the law or stubbornly ignoring public policy may constitute implicit endorsement of those policies, and the Investment Board is of the opinion that government may abrogate its duties to its citizens by offering such implicit endorsement; and

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

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

BE IT FURTHER RESOLVED that, consistent with prudent and responsible investment policy, all or some of the following measures may be instituted when a corporation is found by the Board to be in violation of the aforementioned guideline:

- 1. The Investment Board will discuss the problem with a representative of the corporation in question for the purpose of:
 - a. expressing the view that, as a shareholder, the State of Minnesota is opposed to such policies.
 - b. being informed as to the progress underway in ameliorating the problem.

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

STATISTICAL DATA APPENDIX

EXTERNAL MANAGER INVESTMENT PHILOSOPHIES

COMMON STOCK MANAGERS

FRED ALGER

Fred Alger utilizes a micro investment approach, emphasizing individual stock selection rather than industry selection and/or market timing. The firm focuses primarily on two types of companies: those currently undergoing a positive life cycle change, and those creative companies whose products have high unit volume growth rates. Fred Alger expects these two types of companies to be characterized by substantially above-consensus earnings gains and thus, exhibit strong stock price performance. The firm's decision-making structure is relatively unique in that portfolio selections are made by the firm's highly motivated group of analysts. Except on rare occasions, the firm maintains a fully invested posture.

ALLIANCE CAPITAL

The Alliance Capital office system employs a macro investment approach. Investment strategy is developed on two levels. Macroeconomic considerations are analyzed on a centralized basis at the New York headquarters. Committees, composed of members from the regional and New York offices, develop economic forecasts, set asset allocation and industry weightings, and formulate an eligible list of attractive securities. Specific stock selection is conducted at the regional office level. The Minneapolis office tends to focus on companies with favorable ratios of P/E to forecasted earnings growth.

BMI CAPITAL

BMI employs a micro investment approach, emphasizing individual stock selection rather than industry selection and/or market timing. The firm focuses on two types of companies: first, misperceived companies that are in the process of undergoing dynamic change that will cause them to produce materially higher earnings over the near-term, but whose prospects are as yet unrecognized by the market; and second, small-to-medium sized companies that exhibit the potential for rapid future earnings growth. This second type of company dominates the BMI portfolios. The firm tends to take sizable positions in a relatively few stocks. BMI generally maintains a fully invested posture, with any cash positions a result of a lack of attractive investment opportunities.

BEUTEL GOODMAN

Beutel Goodman utilizes a modified micro investment style. The firm concentrates on stock selection but is sensitive to the impact of macroeconomic factors on the attractiveness of specific industries and companies. Stocks purchased by Beutel Goodman tend to be either companies whose stock prices are too low in comparison to their tangible book value (as estimated by Beutel Goodman analysts) or companies whose stocks possess low relative P/E's given their investment characteristics and forecasted earnings growth. The firm generally remains fully invested, with cash positions usually resulting from an immediate lack of attractive investment opportunities.

FORSTMANN LEFF

Forstmann Leff uses a macro investment approach, focusing on industry selection and market timing. The firm attempts to identify social and economic factors impacting the marketplace on a cyclical and secular basis. From this analysis the firm focuses on those sectors that will be positively and negatively affected by these forces. Stock selection is of secondary importance to the firm. Holdings tend to be concentrated in larger capitalization institutional favorites. Forstmann Leff is an active market timer willing to make sizable asset mix shifts at any point in the market cycle.

HELLMAN JORDAN

Hellman Jordan employs a modified macro investment approach, focusing on companies that it believes will be positively impacted by the firm's forecasted economic scenarios. The firm attempts to identify long-term trends in the economy and develop investment concepts related to these trends. Stock selection is considered to be of secondary importance to successful asset mix and sector rotation decisions. While this approach often leads the firm to focus on high growth, high P/E companies, when the firm is negative on the market it will move to high yield, lower growth, lower P/E defensive stocks. In either case, the firm tends to hold larger capitalization issues. Hellman Jordan is an active market timer, willing to make sharp, significant asset mix moves at any point over the market cycle.

IDS ADVISORY

IDS employs a macro investment approach, focusing on industry selection and limited market timing. The firm attempts to identify industries that will be positively and negatively impacted by forecasted broad economic trends. The firm actively rotates among these affected industries. Stock selection is of secondary importance to the firm. IDS tends to make moderate asset allocation moves gradually over a market cycle.

INVESTMENT ADVISERS

Investment Advisers utilizes a macro investment style, with a relatively equal emphasis placed on asset allocation, industry weighting, and stock selection. Through a committee structure, the firm attempts to identify the economy's position within the real economic and credit cycles. Based upon this analysis, Investment Advisers rotates its portfolios among industries and investment characteristics. Stock selection focuses on the recommendations of fundamental valuation and earnings momentum models. Holdings tend to be concentrated in large capitalization institutional favorites. The firm actively conducts market timing to take advantage of cyclical moves in the market.

LIEBER & CO.

Lieber & Co. seeks to identify investment concepts that are either currently profitable or likely to become so in the near future, yet whose prospects are not reflected in the stock prices of the companies associated with the concepts. The investment concepts upon which the firm focuses are related to both macroeconomic trends and specific product developments within particular industries or companies. Stocks purchased by Lieber tend to be those of well-managed, high growth and high return on equity, small-to-medium sized companies. The stocks may be undervalued due to the failure of investors to recognize fully either the value of new products or a successful turnaround situation. Particularly attractive to Lieber are small-to-medium sized takeover candidates. The firm generally is fully invested, with any cash positions the result of a lack of attractive investment concepts.

LOOMIS SAYLES

The Loomis aggressive equity management group employs a modified micro approach. Based upon the firm's economic forecast, the aggressive equity group identifies those industries and companies that are expected to experience significant cyclical or secular earnings gains. The Loomis portfolio tends to focus on stocks with relatively high P/E's and low yields and companies with highly variable, but successful patterns of historical earnings growth. The firm generally maintains a fully invested position, only rarely raising cash to significant levels.

NORWEST BANK

Norwest utilizes a modified micro investment style. The bank emphasizes stock selection in its aggressively managed funds, although asset mix is set for all bank funds by a strategy committee. The aggressive funds tend to focus on industries and companies experiencing a growing share of GNP, developing new, high growth products, and which are positively influenced by cyclical economic change. This approach leads to a concentration in small capitalization, emerging growth, and technology companies. The bank is a moderate market timer, willing to shift asset mix at any point in the market cycle.

SIEBEL CAPITAL

Siebel employs a modified micro investment style, concentrating on stock selection, but also considering the effect of macroeconomic factors on the prospects for specific industries and companies. The firm tends to purchase stocks of two principal types of companies: first, seasoned growth companies devising new products or creating new markets for old products which will significantly raise earnings growth and second, low P/E companies undergoing a potentially profitable redeployment of assets. Siebel is a moderate market timer, willing to alter asset mix at any point in the market cycle.

HERBERT R. SMITH

Herbert R. Smith utilizes a modified macro investment approach. The firm uses its economic and political outlook and its technical analysis of the marketplace to establish the asset mix for its portfolios. The firm is an aggressive market timer, willing to make sizable asset allocation moves at any point in the market cycle. Although asset allocation receives the firm's primary attention, the firm also emphasizes stock selection. Its stock selection is predicated upon both fundamental and technical analysis of individual securities. Herbert Smith searches for stocks with attractive relative P/E's and positive technical patterns.

TRUSTEE & INVESTORS

Trustee & Investors employs a highly disciplined, micro investment approach, emphasizing stock selection rather than industry selection and/or market timing. The firm analyzes potential purchase and sale candidates through the use of computerized data bases which screen such fundamental valuation parameters as price, earnings, and balance sheet and income statement data. Trustee & Investors searches for companies with unrecognized assets or earnings, or companies undergoing cyclical or operational turnarounds. The firm maintains a fully invested position at all times.

WADDELL & REED

Waddell & Reed, in its aggressively managed funds, employs a micro investment approach. While asset mix decisions are made for all Waddell & Reed funds at a committee level, the aggressive funds focus on stock selection almost entirely. Holdings are concentrated in small capitalization stocks with an orientation toward cyclical companies and immature growth companies, particularly technology companies. The Waddell & Reed organization is an active market timer willing to make significant asset mix shifts at any point in the market cycle.

INVESTMENT ADVISERS

Investment Advisers is a traditional top down bond manager. The firm's approach is oriented toward correct identification of the economy's position in the credit cycle. This analysis leads the firm to its interest rate forecast and maturity decisions, from which the firm derives most of its value-added. Investment Advisers is an active asset allocator, willing to make rapid, significant moves between cash and long maturity investments over the course of an interest rate cycle. Quality, sector and issue Quality and sector choices selection are secondary decisions. are made through yield spread analyses consistent with the interest rate forecasts. Individual security selection receives largely on specific bond very limited emphasis, focusing characteristics such as call provisions.

LEHMAN MANAGEMENT

Lehman's primary emphasis is on forecasting cyclical interest rate trends and positioning its portfolios in terms of maturity, quality and sectors, in response to its interest rate forecast. However, the firm avoids significant, rapidly changing interest rate bets. Instead, it prefers to shift portfolio interest rate sensitivity gradually over a market cycle, avoiding extreme positions in either long or short maturities. Individual bond selection is based on a quantitative valuation approach and the firm's internally-conducted credit analysis. High quality (A or better) undervalued issues are selected consistent with the desired maturity, quality and sector composition of the portfolios.

MILLER, ANDERSON & SHERRERD

Miller Anderson focuses its investments in misunderstood or under-researched classes of securities. Over the years this approach has led the firm to emphasize mortgage-backed securities in its portfolios. The firm rarely purchases corporate bonds. Based on its economic and interest rate outlook, the firm establishes a desired maturity level for its portfolios. This decision is instituted primarily through the selection of specific types of mortgage securities that have prepayment expectations consistent with the portfolio's desired maturity. The firm will also move in and out of cash, but generally only gradually over an interest rate cycle and never taking extremely high cash positions. Total portfolio maturity is always kept within an intermediate three-to-seven year duration band. Unlike many other firms that also invest in mortgage securities, Miller Anderson intensively researches and, even in some cases manages, the mortgage pools in which it invests.

MORGAN STANLEY

Morgan Stanley takes a very conservative approach to fixed income investing, emphasizing the preservation of capital through the generation of consistent real returns. This philosophy has led the firm to maintain a vast majority of its portfolio in short to intermediate maturity, high quality (A or better) securities. Large positions in maturities longer than ten years are held only temporary trading opportunities. These positions are as increased or reduced gradually as the firm's expectations of the cyclical level of interest rates changes. Issue selection is of secondary importance to maturity decisions. Further, the firm avoids short-run trades between qualities and sectors. Rather, given its maturity decisions, the firm prefers to make sizable investments in specific areas of the market where it believes persistent misvaluations are present.

NORWEST BANK

Norwest stresses consistency of fixed income portfolio relative returns. To accomplish this goal, the firm maintains a portfolio of high quality, liquid securities and a balance of maturity levels avoiding extreme exposures on either the long or short Further, Norwest will make only gradual moves between end. The firm's maturity, maturities over an interest rate cycle. quality and sector decisions are driven by both its economic forecasts and a quantitative analysis of the sensitivity of various classes of fixed income securities to different interest The firm also concentrates on exploring rate scenarios. misperceived fixed income securities, which has led the firm to make extensive use of mortgage-backed securities and floating rate notes.

WESTERN ASSET

Western recognizes the importance of interest rates changes on fixed income portfolio returns. However, the firm believes that successful interest rate forecasting, particularly short-run forecasting, is extremely difficult to accomplish consistently. Thus, the firm attempts to keep portfolio maturity in a narrow band near that of the market, making only relatively small, gradual shifts over an interest rate cycle. It prefers to add value primarily through appropriate sector decisions. Based on its economic analysis, Western will significantly overweight shifting these weights as economic particular sectors, selection, like its maturity expectations warrant. Issue decisions, are of secondary importance to the firm.

EQUITY MANAGER PORTFOLIO STATISTICS GLOSSARY

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1. 1. 1919 - 1. 195 the second of

• · 2. But the states In the table following this glossary, summary descriptions of the individual equity managers' portfolio risk characteristics are displayed. Some of the statistics presented are technical in nature. This glossary is designed to aid in understanding the terms that are introduced.

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- A Starter Starter . :

Equity Allocation

a first and get and the second second Yield stilling 1. 1. 1. 1. 3 4 × 1. the second market P/E

1. 1. ., 6 g. . A STATE SPECIAL 1 C. S. State .

Market Volatility

t i traves Ter destata e com (a) #145 #76

ELT JULIE GUILLE e sec y s The States I and 1 (Statog #

Diversification

·哈尔·马马马马登。 tikka tin a tit LAND ROTTING $\sim 10^{-1} G_{\odot}$

- Otr. Port. Turnover the manager's total equity asset sales during the quarter divided by the average value of the manager's equity assets over the quarter.
 - number of different issues held in the manager's stock portfolio.
 - percent of the manager's total portfolio invested in common and preferred stocks and convertible securities.
 - indicated annual dividend of the manager's stock portfolio divided by the market value of the manager's stock portfolio.
 - weighted average price per share of the managers' common stock portfolio divided by the weighted average trailing four quarter earnings per share of the manager's common stock portfolio.
 - movements in the stock market's return. By definition the market has a market volatility measure (referred to - degree to which the returns on the 1.0. Portfolios with values greater (less) than 1.0 have above (below) average sensitivity to market moves. The SBI's managers are required, over the long-term to hold portfolios with market volatility levels above 1.10. This measure does not include the impact of cash holdings on total portfolio volatility.
 - extent to which a manager's equity holdings statistically resemble the stock market. Low (high) diversification portfolios will experience returns which are not well (are well) correlated with those of the market. By definition, the market has а diversification measure of 1.0. The less a portfolio is diversified, the lower will be its diversification measure (referred to as R-squared). The SBI's managers are required, over the long-term, to hold portfolios with diversification levels less than .85.

Portfolio Risk Orientation

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- portfolio can be - the riskiness of а expressed in terms of its market volatility and diversification. A cómplementary approach is to break down a portfolio's risk into sensitivity to various fundamental factors. These factors, six of a which are used in this analysis, are related to various balance sheet, income statement and securities data on the stocks which make up a manager's portfolio. The sensitivity of a manager's portfolio to these factors is rated relative to the the stock market's sensitivity. Thus, the term ++ (--) indicates that a portfolio has a relatively very high (low) exposure to the factor. $\overline{A} + (-)$ indicates an above (below) average exposure. Α 0 indicates no 1 exposure.
- risk related to the historical variability of the prices of stocks in the portfolio. The more variable are the portfolio's securities' prices, the more risky is the portfolio. Items such as current stock price, twelve month price range, trading volume, and beta make up this measure.
- risk related to the variability of the earnings of those companies owned in the manager's portfolio. The more variable are the companies' earnings, the more risky is the portfolio. Items such as variance of accounting earnings, variance of cash flow, occurrence of extraordinary accounting items, and the correlation of companies' earnings with U.S. corporate earnings make up this measure.
 - risk related to the extent to which the earnings of companies owned by the portfolio have been recently low or negative. The poorer have been companies' earnings, the riskier is the portfolio. Items including return on equity, earnings growth, book/price ratio, dividend cuts, and tax rate make up this measure for iterase(G
 - risk related to the size and maturity of the companies held in the portfolio. The smaller and younger the companies, the more risky is the portfolio. Items such as total assets, market capitalization, gross plant/book value ratio, and company age make up this measure.

Price Variability

Earnings Variability

Earnings Success

Size

Growth * - risk related to the growth orientation of companies owned by the manager. The more growth-oriented are the companies, the - + 4. 4 riskier is the portfolio. Items such as dividend yield, E/P ratio, and growth in total assets make up this measure. the extent to which - risk related to Financial Leverage companies held in the portfolio have used debt to finance their operations. The more 12 28 48 47 2 13 19 29 49 49 1 1 leveraged are the companies, the riskier is the portfolio. Items such as debt/asset ratio, current asset/current liability with the * 🗘 : ratio, and uncovered fixed charges make up this ratio. C * * 04060H 380 . . 0000-100 2001-100 100 sign fren in in in geng fort e e e hang har in the nar to are へ<u>ひ</u>に みみに い およ N N N N N N かねえり * 8996949 80°. NORTH STREET a de la contrata de l iatigat Mitigat 一般の

EXTERNAL EQUITY MANAGERS

PORTFOLIO STATISTICS HISTORICAL SUMMARY

	MANAGER NAME	DATE	QTR. PORT. T/O	‡ of Stks	EQUITY ALLOC.	YIELD	P/E	MKT Volty	DIVRSFN	Price Var.	PORTFO Earn. Var.	LIO RIS Earn. Succ.		NTATION Growth	Fin. Lever.	
	AVG. EXT. MANAGERS	6/30/84	27	41	81	3.21	13.5	1.29	0.81	+	+	+		· •	,. 0	
	AVG. EXT. MANAGERS	3/31/84	25	41	83	3.05	13.5	1.25	0.82	+	· + ·	. 0	т _	· +	÷0	
*	AVG. EXT. MANAGERS	12/31/83	36	34	84	2.79	16.2	1.23	0.80	+	+	0	+ -	· •	0	
	AVG. EXT. MANAGERS	9/30/83	32	32	85	2.48	19.4	1.29	0.82	+	+ -	0	т Т	U +	- 0	
	AVG. EXT. MANAGERS	6/30/83	27	32	85	2.44	16.7	1.29	0.81	+	0	-	0	- -	. U	
	AVG. EXT. MANAGERS	3/31/83	NA	26	67	2.78	15.0	1.26	0.83	+	+	-	ŏ	· , +	0	
	FRED ALGER	6/30/84	16	32	. 93	2.92	13.1	1.22	0.86	+		0	<u>'</u> 0	•	0	
	FRED ALGER	3/31/84	19	33	91	2.82	14.8	1.19	0.86	+	+	+		0	0	
	FRED ALGER	12/31/83	23	32	95	2.64	15.9	1.18	0.88	+	++		0	. 0	° 0	
	FRED ALGER	9/30/83	27	32	91	2.63	17.5	1.24	0.88	+	++	0	0	0	0	
	FRED ALGER	6/30/83	8	35	94	2.10	18.7	1.33	0.88	++	++		+		++	
	FRED ALGER	3/31/83	NA	35	89	2.31	17.1	1.29	0.87	++	++ ()		+	<u>,</u> +	++	
	ALLIANCE CAPITAL	6/30/84	8	32	92	1.84	15.4	1 20	0 73					• •	÷.	
D	ALLIANCE CAPITAL	3/31/84	12	32	92	1.75	15.4	1.39 1.38	0.73 0.72	+	+	++	+	++		
2	ALLIANCE CAPITAL	12/31/83	14	33	92	1.47	19.7	1.30	0.72	+	+	U	+	++		
	ALLIANCE CAPITAL	9/30/83	22	27	87	1.55	20.4	1.37	0.72	+ `	++	-	0	++	• • •	
	ALLIANCE CAPITAL	6/30/83	17	30	91	1.72	20.9	1.35	0.75	+	++		; + , 0	· +- 과 · + ·	0	
	ALLIANCE CAPITAL	3/31/83	NA	30	84	1.68	20.3	1.40	0.81	++ `	++ `	<u> </u>	+	· ++ ·		
	BEUTEL GOODMAN	6/20/04		10	0.2								•		•	
	BEUTEL GOODMAN	6/30/84 3/31/84	11	18	92	4.14	14.9	1.18	0.79	0.	_+	0 ~	++	0	`++	
	BEUTEL GOODMAN		12	20	98	3.84	11.0	1.16	0.79	+	, +	+ •	++	0	+,+	
	BEUTEL GOODMAN	12/31/83 9/30/83	15	16	95	3.77	10.3	1.08	0.74	+	+	++ -	++	· 0	++	
	BEUTEL GOODMAN		6	16	99	3.47	10.5	1.14	0.75	+	+	++	++	0	++	
	BEUTEL GOODMAN	6/30/83	7	12	79	3.29	10.2	1.07	0.75	+	0	-	++	0	.++	
	DEUIEL GUUDMAN	3/31/83	NA	6	34	2.98	9.3	1.09	0.71	+	0	++	+	+	++	
	BMI CAPITAL	6/30/84	6	24	99	2.73	18.5	1.33	0.79	++	++	-	, ++	+		
	BMI CAPITAL	3/31/84	18	24	95	2.67	17.1	1.32	0.80	++	++	0	++	+		
	BMI CAPITAL	12/31/83	14	21	98	2.23	20.4	1.29	0.81	+	++	-	++	+	0	
	BMI CAPITAL	9/30/83	19	19	99	2.14	19.2	1.34	0.81	+	++		.j ++	+	0	
	BMI CAPITAL	6/30/83	0	20	96	2.26	16.6	1.31	0.80	+	0		2++	+	0	
	BMI CAPITAL	3/31/83	NA	13	53	2.35	13.7	1.36	0.80	++	++	}	*++	++	++	
	FORSTMANN-LEFF	6/30/84	31	31	54	3.64	11.4	1.26	0.81	+	+		-	0	++	
	PORSTMANN-LEFF	3/31/84			71	3.52	_ 12.4 _	1.17	0.82	0	+	•	<u>.</u> –	0	++	
	FORSTMANN-LEFF	12/31/83	41	39	81	3.23	15.7	1.10	0.70		0				7	
	FORSTMANN-LEFF	9/30/83	46.	28	83	2.59	20.7	1.14	0.72		0	++		0	~	
	FORSTMANN-LEFF	6/30/83	52	33	93	2.90	15.0	1.08	0.70			0 :				
	FORSTMANN-LEFF	3/31/83	NA	38	85	3.23	14.8	1.09	0.82	0	0	0	• •		·	

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•			QTR.		500700			MEM		Price	Earn.	Earn.	K ORIE	NTATION	Fin.
	MANAGER NAME	DATE	PORT. T/O	# OF STKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVRSFN		Var.	Succ.	Size	Growth	Lever.
	HELLMAN JORDAN	6/30/84	34	37	61	5.09	13.5	1.25	0.87	+	++	++	-	0	++
	HELLMAN JORDAN	3/31/84	30	34	58	4.94	12.9	1.16	0.87	+	++	+		0	+
	HELLMAN JORDAN	12/31/83	43	23	51	5.31	12.5	1.23	0.74	+	++	++	-	0	++ ++
	HELLMAN JORDAN	9/30/83	57	20	47	2.89	21.2	1.34	0.77	+	++	++	0	0	++
	HELLMAN JORDAN	6/30/83	38	18	56	2.37	16.1	1.30	0.77	+	++			+	+ +
	HELLMAN JORDAN	3/31/83	NA	14	53	3.18	15.9	1.30	0.72	+	++			т	т
	IDS ADVISORY	6/30/84	42	43	87	4.80	13.4	1.04	0.85	·	-		0	0	++
	IDS ADVISORY	3/31/84	41	39	82	4.31	11.2	1.09	0.80	0	+		-		0
	IDS ADVISORY	12/31/83	45	36	89	3.13	18.8	1.17	0.86	+	++	-	+	+	0
	IDS ADVISORY	9/30/83	79	34	86	2.40	25.0	1.24	0.86	· +	++	0	+	+	-
	IDS ADVISORY	6/30/83	42	49	94	2.19	19.9	1.30	0.81	+	+		-	+	-
	IDS ADVISORY	3/31/83	NA	48	88	3.17	15.3	1.19	0.84	+	+	-		+	-
	THUR CONFINE ADIT CEDC	6/30/84	8	43	98	4.19	10.0	1.21	0.89	0	0	++	-	0	++
	INVESTMENT ADVISERS		21	40	92	3.60	11.1	1.17	0.89	õ	+	++		0	++
· · · ·	INVESTMENT ADVISERS		16	39	89	3.11	13.5	1.13	0.86		+	++		0	0
	INVESTMENT ADVISERS		8	41	89	2.92	15.6	1.13	0.87		+	++		0	0
	INVESTMENT ADVISERS	6/30/83	7	37	78	3.19	15.9	1.08	0.89		0	0 .		0	0
	INVESTMENT ADVISERS	3/31/83	NA	34	47	3.35	13.4	1.06	0.85	0	0	-		-	0
		c / 2 0 / 0 /	10		0.5	2 66	12.0	1.33	0.81	++	0	0	++	++	[`]
7	LIEBER & COMPANY	6/30/84	10	117	95 93	2.66 2.63	12.0	1.37	0.85	+	õ		++	+	-
0	LIEBER & COMPANY	3/31/84	0	115	100	2.03	12.9	1.24	0.83	+	ŏ	-	++	+	-
	LIEBER & COMPANY	12/31/83	9	60 56	97	2.83	11.3	1.30	0.83	+	Ő	_	++	+	-
**	LIEBER & COMPANY	9/30/83	9 2	49	· 92	2.03	14.0	1.26	0.84	+	õ		++	+	-
	LIEBER & COMPANY LIEBER & COMPANY	6/30/83 3/31/83	2 NA	24	45	2.94	15.9	1.20	0.85	+	õ	-	++	+ '	
· · ·	LIEBER & COMPANI	3/ 31/ 63	NA .	27	45	2.51	2005								•
2	LOOMIS SAYLES	6/30/84	25	20	94	1.71	14.4	1.37	0.70	++	++	. –	+	++	0
	LOOMIS SAYLES	3/31/84	6	22	93	1.93	13.2	1.37	0.66	++	++		+	+	+
	LOOMIS SAYLES	12/31/83	39	19	81	1.79	18.0	1.38	0.70	++	++		+	+	0 0
4.	LOOMIS SAYLES	9/30/83	60	23	95	1.28	28.8	1.53	0.75	++	++		+	++	++
	LOOMIS SAYLES	6/30/83	49	19	97	1.21	17.3	1.64	0.75	++	++	`	+	++ ++	· —
	LOOMIS SAYLES	3/31/83	NA	20	98	1.62	18.2	1.44	0.85	++	++		U	тт	
	NORWEST BANK MPLS	6/30/84	26	56	89	1.96	17.4	1.39	0.83	++	++	++	++	++	-
	NORWEST BANK MPLS	3/31/84	66	47	87	1.65	19.2	1.28	0.82	++	++		++	++	-
	NORWEST BANK MPLS	12/31/83	92	41	83	1.88	19.0	1.23	0.87	+	0	· · -	+	+	
	NORWEST BANK MPLS	9/30/83	56	53	85	2.12	21.4	1.27	0.87	. +	0		+	++	
	NORWEST BANK MPLS	6/30/83	95	42	80	2.53	16.3	1.23	0.88	+		-		=	
	NORWEST BANK MPLS	3/31/83	NA	35	83	2.94	14.1	1.20	0.90	+		-	+	+	
	SIEBEL CAPITAL	6/30/84	47	36	63	3.22	12.3	1.27	0.88	+		++	++	+	. 0
	SIEBEL CAPITAL	3/31/84	28	42	78	3.07	11.5	1.25	0.88	+	0	+	+	+	0
	SIEBEL, CAPITAL	12/31/83	25	37	90	3.14	12.4	1.16	0.89	0.		. 0	0	_	++
	SIEBEL CAPITAL	9/30/83	26	35	83	3.28	12.6	1.15	0.88	0	0	++	0	0	0
	SIEBEL CAPITAL	6/30/83	27	36	91	3.24	13.5	1.17	0.86	+	0 .	0	0	0	++
	SIEBEL CAPITAL	3/31/83	NA	26	80	3.38	13.5	1.15	0.85	+	0			0	+

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MANAGER	QTR. PORT.	# OF	EOUITY		-	мкт		Price	PORTFC Earn.	LIO RIS Earn.	K ORIE	NTATION	Fin.
NAME DATE	т/о	STKS	ALLOC.	YIELD	P/E	VOLTY	DIVRSFN	Var.	Var.	Succ.	Size	Growth	Lever.
HERBERT R. SMITH 6/30/84		67	86	3.29	12.5	1.20	0.92	+	+	_	+	+	
HERBERT R. SMITH 3/31/84		68	84	3.12	13.9	1.22	0.91	+	+	0	+	+	Ó
HERBERT R. SMITH 12/31/83	46	60	80	2.14	18.9	1.33	0.85	++	++	_	++	+	++
HERBERT R. SMITH 9/30/83	40	46	65	2.68	19.4	1.44	0.87	+	++	_	++	+	++
HERBERT R. SMITH 6/30/83	13	48	65	2.36	18.2	1.46	0.83	++	++	~~	++	++	++
HERBERT R. SMITH 3/31/83	NA	18	20	2.74	13.7	1.45	0.77	++	++		+	+	++
TRUSTEE & INVESTORS 6/30/84	15	40	95	3.86	12.8	1.31	0.90	++	+	++ .	_	+	++
TRUSTEE & INVESTORS 3/31/84	25	41	98	3.30	14.4	1.27	0.89	++	+	++	0	+	++
TRUSTEE & INVESTORS 12/31/83	17	44	99	2.82	18.0	1.25	0.89	+	Ó	0	+	· +	++
TRUSTEE & INVESTORS 9/30/83	9	40	98	3.04	19.8	1.26	0.92	+	ō	++	+	+	++
TRUSTEE & INVESTORS 6/30/83	11	34	98	3.09	17.5	1.24	0.93	+	õ		+	÷	+
TRUSTEE & INVESTORS 3/31/83	NA	26	71	3.80	14.4	1.24	0.93	+	õ	- ,	+	0	• ++
WADDELL & REED 6/30/84	81	13	21	2.08	10.9	1.56	0.52	++	++	++	++	· ·+	+
WADDELL & REED 3/31/84	35	21	31	2.63	12.6	1.31	0.74	+	++	+	· +	' Ó	++
WADDELL & REED 12/31/83	103	10	31	2.45	17.2	1.36	0.72	++	+		++	++	
WADDELL & REED 9/30/83	9	17	73	1.41	27.4	1.41	0.73	++	Ô		++	+	
WADDELL & REED 6/30/83	38	16	75	1.51	21.0	1.48	0.74	++	õ		++	++	+
WADDELL & REED 3/31/83	NA	17	79	2.04	14.9	1.50	0.81	++	+	-	++	+	++

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EXTERNAL EQUITY MANAGERS

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SECTOR WEIGHTING HISTORICAL PROFILE

EOUITY SECTOR WEIGHTS

TOTAL PORTFOLIO MAT MANAGER MARKET CAP CONS CONS & DATE NDUR FINL NAME VALUE GDS DUR ENER SERV TECH TRAN UTIL AVG. EXT. MANAGERS 6/30/84 4.0 7.6 28.6 4.2 12.5 10.9 23.4 5.4 3.4 ---AVG. EXT. MANAGERS 3/31/84 5.2 7.6 24.0 5.7 13.2 13.3 22.7 5.1 3.1 _ _ _ 12/31/83 6.0 12.2 15.1 24.0 6.3 AVG. EXT. MANAGERS 6.4 23.5 3.0 3.5 AVG. EXT. MANAGERS 9/30/83 3.6 5.9 28.9 12.8 13.5 24.2 5.7 3.1 2.4 _ _ _ AVG. EXT. MANAGERS 6/30/83 3.7 6.1 30.2 15.1 11.7 21.2 5.8 2.5 3.6 2.8 15.2 11.4 23.5 4.9 AVG. EXT. MANAGERS 3/31/83 4.3 30.6 3.6 3.8 FRED ALGER 6/30/84 49,936,760 8.0 30.7 3.8 11.5 29.5 2.6 14.0 -----____ 28.8 18.3 31.9 FRED ALGER 3/31/84 51,737,228 13.3 4.3 ___ 3.4 ____ ____ 12/31/83 55,644,200 13.2 21.7 18.1 33.9 FRED ALGER 6.6 6.4 ___ ___ FRED ALGER 9/30/83 56,169,879 5.7 6.8 26.9 ___ 8.4 23.3 29.0 ----------FRED ALGER 6/30/83 58,138,999 4.9 8.5 35.0 3.5 8.2 18.0 21.9 ___ FRED ALGER 3/31/83 51,420,548 1.4 7.5 37.0 9.0 22.0 23.1 ___ ____ ____ ALLIANCE CAPITAL 6/30/84 48,457,996 ___ 8.1 51.6 6.9 23.5 9.9 _ _ _ ___ 47,427,119 48.0 2.7 5.6 25.1 10.4 ALLIANCE CAPITAL 3/31/84 ___ 8.3 -----____ 12/31/83 52,725,699 0.8 7.5 45.3 6.8 2.4 24.2 13.1 ____ ALLIANCE CAPITAL ____ 24.6 12.1 9/30/83 52,945,082 2.8 45.9 9.2 ALLIANCE CAPITAL 5.4 ___ -----8.2 7.5 22.7 12.4 6/30/83 57,538,354 2.2 4.7 42.3 ALLIANCE CAPITAL ___ ___ 51,037,067 49.9 6.7 23.5 10.0 ALLIANCE CAPITAL 3/31/83 ____ 3.5 2.7 3.6 _ _ _ 6.7 9.3 30.4 32.4 BEUTEL GOODMAN 6/30/84 55,295,358 ___ 21.1 ___ ____ ___ | 8.9 18.6 27.2 39.3 6.0 ---3/31/84 56,896,258 ____ BEUTEL GOODMAN ___ ___ 12/31/83 7.2 BEUTEL GOODMAN 57,233,781 9.8 20.2 11.2 46.2 5.4 --------. ____ 9/30/83 55,416,939 8.8 22.0 ____ 13.1 43.5 4.7 8.0 ___ BEUTEL GOODMAN ____ 6/30/83 54,835,808 11.0 ___ 18.5 ----17.4 42.4 ____ 10.6 -----BEUTEL GOODMAN 15.7 15.4 52.1 ---16.8 3/31/83 50,442,256 -----BEUTEL GOODMAN ____ ____ -----16.4 37.4 11.5 31.5 3.2 BMI CAPITAL 6/30/84 8,533,642 ___ ____ _ _ _ ____ 8,366,038 4.3 12.7 39.3 ____ 17.8 25.9 3/31/84 ----____ BMI CAPITAL ____ 6.6 19.0 26.4 12.1 28.4 -----BMI CAPITAL 12/31/83 9,784,767 7.4 ____ ----18.6 19.2 6.4 ---BMI CAPITAL 9/30/83 10,420,827 7.6 11.2 37.1 ___ 9.8 15.9 9.5 ____ BMI CAPITAL 6/30/83 11,285,353 7.9 12.7 44.2 ___ _ _ _ 12.3 22.0 11.8 ----10,081,983 10.6 8.1 35.3 ___ BMI CAPITAL 3/31/83 ____ 3.7 40.2 7.0 10.3 24.3 7.2 51,218,131 3.7 3.6 6/30/84 FORSTMANN-LEFF 2.8 3/31/84 52,083,507 7.6 3.0 37.0 ____ 6.0 14.5 23.1 6.0 FORSTMANN-LEFF 3.1 35.5 5.8 3.9 8.4 18.7 5.3 12/31/83 55,421,154 5.7 13.6 FORSTMANN-LEFF 52.3 4.5 5.3 15.1 4.8 ____ 55,775,736 ---14.6 3.3 FORSTMANN-LEFF .9/30/83 12.7 61.4 2.7 7.2 11.7 4.3 ----FORSTMANN-LEFF 6/30/83 56,471,479 ----___ 5.9 4.7 10.3 17.4 4.2 ___ 2.1 4.7 50.7 3/31/83 51,390,160 FORSTMANN-LEFF

EQUITY SECTOR WEIGHTS

			TOTAL										
	MANA GRAD	7	PORTFOLIO		00110	000			MAT				
	MANAGER		MARKET	CAP	CONS	CONS			&		i		
	NAME	DATE	VALUE	GDS	DUR	NDUR	ENER	FINL	SERV	TECH	TRAN	UTIL	
	HELLMAN JORDAN	6/30/84	47,929,367	1.8	12.4	13.8	1.2	16.4	21.2	12.6	11.1	9.6	
	HELLMAN JORDAN	3/31/84	49,895,127	~	12.4	19.5	6.4	15.7	15.7	4.3	8.8	17.2	
	HELLMAN JORDAN	12/31/83	50,182,761		14.8	30.0	6.0	16.5	10.4	2.1	3.0	17.2	
	HELLMAN JORDAN	9/30/83	50,713,576		15.0	47.4		19.5	3.5	3.3	4.7	6.5	,
	HELLMAN JORDAN	6/30/83	52,402,164		3.8	23.3		35.9		24.8		12.2	
	HELLMAN JORDAN	3/31/83	49,541,253			15.1		33.4	4.6	27.2		19.7	
		0.01.00			¢.	1011		5514	1.0	2702	· /	13.1	
	INVESTMENT ADVISER		50,388,386	5.5	5.9	26.3	6.2	18.8	9.1	20.6	3.7	3.9	
	INVESTMENT ADVISER	S 3/31/84	51,864,720	5.8	5.4	30.2	8.9	21.5	7.7	15.6	3.9	1.0	
	INVESTMENT ADVISER	S 12/31/83	54,533,402	6.3	6.3	25.0	5.8	21.9	9.7	15.7	6.1	3.2	
	INVESTMENT ADVISER	s 9/30/83	53,819,067	5.8	6.2	30.6	6.0	13.4	9.1	18.3	7.1	3.5	
	INVESTMENT ADVISER	S 6/30/83	54,812,985	6.5	6.6	24.7	11.7	9.7	9.8	16.9	10.3	3.9	
	INVESTMENT ADVISER	S 3/31/83	50,748,987	6.5	9.1	26.0	10.2	7.3	15.0	17.7	5.0	3.2	
	IDS ADVISORY	6/30/84	50 370 060		5.3	27.6	6 1	6.8	7.6	19.2	4.8	20.6	
			50,278,968				8.1					15.4	
	IDS ADVISORY	3/31/84	50,085,955	4.8	10.1	12.4	9.6	8.7	14.3	15.2	9.5		
	IDS ADVISORY	12/31/83	54,006,960	4.9	7.6	18.0		8.8	19.0	26.1	6.0	9.6	
	IDS ADVISORY	9/30/83	54,334,602		4.1	24.3	3.4	6.0	19.7	33.8	5.4	3.4	
	IDS ADVISORY	6/30/83	57,561,715	4.2	12.0	30.5	4.5		6.7	33.7	4.3		
	IDS ADVISORY	3/31/83	50,689,028	5.4	9.2	30.7	5.4	9.8	6.4	26.3		6.6	
5	LIEBER & COMPANY	6/30/84	23,927,529	2.6	3.3	34.8	3.5	21.1	16.7	15.3	1.8	0.8	
	LIEBER & COMPANY	3/31/84	24,261,218	3.6	6.4	32.3	4.9	17.3	16.8	16.3	1.8	0.7	
	LIEBER & COMPANY	12/31/83	11,159,936	7.7	4.5	33.7	3.5	16.7	22.3	6.1	5.6		
	LIEBER & COMPANY	9/30/83	11,016,060	6.5	3.5	31.0	4.7	18.0	25.4	5.4	5.5		
	LIEBER & COMPANY	6/30/83	11,233,248	6.4	5.0	33.3	5.0	16.5	23.9	3.3	6.6		
	LIEBER & COMPANY	3/31/83	10,063,917	8.3		23.1	3.9	11.6	41.0	5.6	6.4		
				1					,				
	LOOMIS SAYLES	6/30/84	43,613,462	7.6	12.8	16.1		4.9	8.8	33.8	16.0		
	LOOMIS SAYLES	3/31/84	45,336,835	11.2	15.1	3.4		5.1	12.8	38.2	14.3		
	LOOMIS SAYLES	12/31/83	49,181,570	11.6	16.1	3.3		5.2	14.0	33.5	16.4		
	LOOMIS SAYLES	9/30/83	50,182,549	3.5	14.5	13.3		10.6	5.2	44.9	8.0		
	LOOMIS SAYLES	6/30/83	55,042,543	3.1	9.0	12.1		34.6	10.8	20.4	9.9		
	LOOMIS SAYLES	3/31/83	50,105,254		4.8	19.8		25.4	9.1	30.7	10.1		
	NODURCE DANK MDIC	6/20/04		2 0	5.5	31.2	5.8	1.0	9.3	38.9	4.3	1.3	
	NORWEST BANK MPLS	6/30/84 3/31/84	24,546,941	2.8 3.6	4.4	23.1	8.5	1.1	7.2	45.5	5.4	1.1	
	NORWEST BANK MPLS	12/31/83	10,385,041	2.5	1.6	25.5	1.2	3.2	6.0	51.8	1.7	6.6	
	NORWEST BANK MPLS		11,215,761		1.0 	31.6		2.0	8.4	46.1	1.4	5.8	
	NORWEST BANK MPLS	9/30/83	11,816,270	1.2		36.4	3.3 5.2	8.9	4.8	33.0	2.9	3.3	
	NORWEST BANK MPLS	6/30/83	12,126,921	4.8				13.5	4.0	20.1	6.3		
	NORWEST BANK MPLS	3/31/83	10,417,512	7.0	1.8	47.1	4.2	13.5		20.1	0.5		
	SIEBEL CAPITAL	6/30/84	49,523,376	4.1	4.8	38.8		25.9	7.4	17.6	1.4		
	SIEBEL CAPITAL	3/31/84	49,328,007	3.6	1.3	26.4		25.8	11.4	29.2	2.4		
	SIEBEL CAPITAL	12/31/83	53,482,144	3.6	1.7	× 27.9		24.0	11.7	24.6	2.6	3.8	
	SIEBEL CAPITAL	9/30/83	54,520,467	3.5		32.7	2.8	25.1	7.2	19.3	5.0	4.4	
	SIEBEL CAPITAL	6/30/83	56,381,931	. 2.6		36.4	1.7	22.6	6.2	20.1	5.4	5.0	
	SIEBEL CAPITAL	3/31/83	51,621,595	4.6		28.8		18.5	5.3	30.0	6.7	6.2	
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EQUITY SECTOR WEIGHTS

	TOTAL PORTFOLIO		CONS	CONS			MAT &			
MANAGER NAME DATE	MARKET VALUE	CAP GDS	DUR	NDUR	ENER	FINL	SERV	TECH	TRAN	UTIL
	11402								· .	
HERBERT R. SMITH 6/30/84	42,860,060	2.4	0.3	24.4	25.5	10.6	7.5	20.9	7.4	1.1
HERBERT R. SMITH 3/31/84	44,150,474	3.3	0.2	10.1	28.8	16.9	12.8	18.6	9.1	
HERBERT R. SMITH 12/31/83	46,441,280	4.4	0.4	15.4	10.6	14.5	8.8	30.2	15.8	
HERBERT R. SMITH 9/30/83	48,910,462	2.2	0.6	12.7	9.4	22.1	15.6	23.2	9.4	4.8
HERBERT R. SMITH 6/30/83	53,176,398	2.0	0.6	15.5	5.2	17.6	13.9	29.4	7.3	6.7
HERBERT R. SMITH 3/31/83	50,198,982	4.8		32.6		20.5	'	34.7	7.4	
TRUSTEE & INVESTORS 6/30/84	44,119,650	2.5		9.9	11.9 .	17.6	9.4	38.8		10.0
	47,158,224	2.5		10.0	16.0	17.3	10.1	35.3		8.7
TRUSTEE & INVESTORS', 3/31/84 TRUSTEE & INVESTORS 12/31/83	50,974,369	2.4	, 	12.9	9.3	16.7	9.5	41.4		7.7
	53,062,524	2.5		15.6	10.5	17.1	8.8	38.4		7.1
TRUSTEE & INVESTORS 9/30/83	57,620,180	2.9	3.2	17.0	11.5	18.9	10.3	29.7		6.5
TURSTEE & INVESTORS 6/30/83		3.6	J•2	12.2	14.4	24.1	10.2	24.1		11.4
TRUSTEE & INVESTORS 3/31/83	50,154,412	5.0		12.2	1 1 1 1					
WADDELL & REED 6/30/84	25,495,564		29.0	25.7	·	15.7		17.8	11.8	
WADDELL & REED 3/31/84	25,833,644	5.2	32.1	21.4	÷	25.0		11.7	4.5	
WADDELL & REED 12/31/83	11,409,742	12.8	32.4			33.9		20.9		
WADDELL & REED 9/30/83	12,042,511	5.8	13.4	22.5		5.1		38.2	15.0	
WADDELL & REED 6/30/83	12,464,478	5.7	13.2	29.2	3.3	5.0		31.1	12.5	
WADDELL & REED 3/31/83	10,013,713	5.5	13.8	15.5	2.5	29.1		27.2	6.4	
				•			·			
WILSHIRE 5000 6/30/84		. 5.3	4.0	25.7	13.5	9.6	11.7	15.6	2.9	11.7
WILSHIRE 5000 3/31/84		5.4	3.9	23.6	16.1	9.8	12.1	15.3	2.9	11.1
WILSHIRE 5000 12/31/83		5.5	4.2	24.0	14.5	9.5	12.2	16.3	2.8	11.1
WILSHIRE 5000 9/30/83		5.2	4.0	24.3	14.8	9.4	11.8	16.3	2.9	11.3
WILSHIRE 5000 6/30/83		5.3	- 3.9	24.9	15.0	9.3	11.6	16.3	2.9	10.9
WILSHIRE 5000 3/31/83	* · ·	5.1	3.5	25.2	14.6	9.8	12.3	14.9	2.9	11.8
WITPUILUT 2000									•	

STATE OF MINNESOTA STATE BOARD OF INVESTMENT COMPOSITION OF STATE INVESTMENT PORTFOLIO'S BY TYPE OF INVESTMENT MARKET VALUE JUNE 30, 1984

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	CASH AND SHORT TERM SECURITIES	BON	DS EXTERNAL	STO INTERNAL	CKS EXTERNAL	ALTERNA IVE ASSETS	TOTAL
BASIC RETIREMENT FUNDS: TEACHERS RETIREMENT FUND	\$ 55,687 4.59%	\$ -0-	\$34 4,49 7. 28.37%	\$ -0-	\$ 725,783 59.76%	\$ 88,414 7.28%	\$1,214,381 100%
PUBLIC EMPLOYEES RETIRE. FUND	27,938 2.97%	-0-	268,023 28.45%	-0-	576,536 61.19%	69,630 7.39%	942,127 100%
STATE EMPLOYEES RETIRÉ. FUND	46,609 7.64%	-0-	171,171 28.06%	-0-	348,568 57.13%	43,778 7.17%	610,126 100%
PUBLIC EMP. POLICE & FIRE FUND	20,194 9.55%	-0-	58,629 27.74%	-0-	117,576 55.62%	14,987 7.09%	211,386 100%
HIGHWAY PATROL RETIRE. FUND	2,940 6.84%	-0-	11,475 26.70%	0-	25,445	3,109 7.24%	42,969 100%
JUDGES RETIREMENT FUND	230 7.73%	-0-	735 24.71%	-0-	1,779 59.80%	231 7.76%	2,975 100%
POST RETIREMENT FUND	278,092 15.30%	886,807 48.77%	-0	653,355 35.93%	-0-	-0-	. 1,818,254 100%
4INNESOTA SUPPLEMENTAL FUNDS: INCOME SHARE ACCOUNT	9,783 8.97%	38,294 35.12%	-0-	52,433 48.08%	8,534 7.83%	-0-	109,044 - 100%
GROWTH SHARE ACCOUNT	6,864 12.69%	-0-	-0-	21,740 40.18%	25,496 47.13%	-0-	54,100 100%
FIXED RETURN ACCOUNT	11,673 22.79%	39,546 77.21%	-0-	-0-	-0-	-0-	51,219 100%
BOND ACCOUNT	98 3.34%	2,841 96.66%	-0-	-0-	0-	-0-	2,939 100%
INNESOTA VARIABLE ANNUITY	8,920 9.38%	-0-	-0-	37,706 39.65%	48,474 50.97%	-0-	95,100 100%
TOTAL RETIREMENT FUNDS	\$ 469,028 9.10%	\$ 967,488 18.77%	\$854,530 16.58%	\$765,234 14.84%	\$1,878,191 36.44%	\$220,149 4.27%	\$5,154,620 100%
PERMANENT SCHOOL FUND	57,993 21.24%	169,691 62.17%	-0-	45,277 16.59%	-0-	-0-	272,961 100%
TREASURERS CASH	775,811 100%	-0-	-0-	-0- ·	-0-	-0-	775,811 100%
TRANSPORTATION FUNDS	392,344 100%	-0 	-0-	-0-	-0-	-0-	392,344 100%
STATE BUILDING FUNDS	116,506 100%	-0-	-0-	-0-	· -0-·	-0-	116,506 100%
HOUSING FINANCE AGENCY	158,220 100%	-0-	-0-	-0-	-0-	-0-	158,220 100%
MINNESOTA DEBT SERVICE FUND	162,379 100%	-0-	-0-	-0-	-0-	-0-	162,379 100%
MISCELLANEOUS ACCOUNTS	296,765 100%	-0-	-0-	-0-	-0-	-0-	296,765 100%
TACONITE AREA ENVIR. PROTECTION	12,313 100%	-0-	-0-	-0-	-0-	-0-	12,313 100%
N.E. MINNESOTA PROTECTION	43,720 100%	-0-	-0-	-0-	-0-	-0	43,720 100%
GRAND TOTAL	\$2,485,079 33.65%	\$1,137,179 15.40%	\$854,530 11.57%	\$810,511 10.97%	\$1,878,191 25.43%	\$220,149 2.98%	\$7,385,639 100%

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ecurity Description	Units Bought	Units Sold	Security Description	Units Bought	Units Sold
& M Food Services	41,800	0	Anixter Bros.	21,000	
. G. Edwards, Inc.	26,000	0	Apache Corp.	58,000	
bbott Labs	145,500	0	Apogee Enterprises	14,800 11,800	5,50 11,80
CCO World Corp.	2,800	0	Apollo Computer Inc.	44.000	25,00
CF Industries Inc.	14,600	5,000	Apple Computer Applied Circuit Tech.	13,000	23,00
dage Inc.	10,000	0	Applied Data Res.	20,600	7,00
dobe Oil & Gas	35,000 196,400	134,700	Applied Data res. Applied Magnetics	10,000	
dvanced Micro Dev.	21,500	3,500	Applied Materials Inc.	30,000	
dvanced Semi Conductor etna Life and Casualty Co.	75,400	0,000	ARA Services	18,200	
FG Inds Inc.	31,000	ŏ	Archer Daniels Midland Co.	1,251,050	1,180,10
gency Rent A Car	15,100	ō	Arizona Pub. Service Co.	50,100	•
hmanson H.F. Co.	91,000	124,000	Arkla incorporated	39,000	90,00
ir Midwest Inc.	39,900	0	Armco Inc.	39,000	
r Products & Chem. Inc.	132,000	327,500	Armstrong Ind. Inc.	24,800	
irborne Fght. Corp.	24,000	0	Arvin Inds. Inc.	27,000	
rCal Inc.	16,500	0	ASA Ltd.	22,100	7,10
aska Airlines Inc.	45,000	0	Asamera Inc.	71,000 34,200	5,50
ba Waldensian Inc.	10,000	10,000	Asarco Inc.	34,200	5,50
bertsons Inc.	26,000	0	Ashland Oil Inc.	25,000	
can Aluminum Ltd.	77,900	35,000	Ask Computer	26,100	2,60
co Standard Corp.	37,900	0	Assoc. Dry Goods	36,000	2,00
exander & Alexander	63,000	67,300	Atlantic Bancorportion Atlantic City Electric Co.	28,000	•
exander & Baldwin Inc.	12,000	0	Atlantic City Electric Co. Atlantic Research Corp.	7,600	7,60
leghany Corp.	11,000	0	Atlantic Richfield	767,500	1.344.9
legheny & Western Energy Corp.	500	0	Atlantic Richilelo Atwood Oceanics Inc.	1,000	
egheny Beverage Corp.	41,000	0	Augat Inc.	12,000	
legheny International	57,000	0	Augat Inc. Automatic Data Processing Inc.	27,300	•
legheny Power Sys. Inc.	35,600 8,000	0	Automatic Data Processing Inc. Auxton Comp. Enterprises	18,100	
len Group Inc.	55,866	ő	Avante Garde Corp.	7,000	7,0
liance Technology Fd. Inc.	250,001	32.252	Avantek Inc.	27,000	
lied Bancshares Inc. lied Corporation	163,000	39,250	Avco Corp.	631,100	1,028,0
lied Stores Corp.	15,800	0	Avery Intl. Corp.	20,000	6,0
llis Chalmers Corp.	40,000	ō	Avnet Inc.	27,000	
Itel Corp.	26,000	ō	Avon Products Inc.	417,200	604,9
pha industry Inc.	20,010	13,000	AVX Corp.	24,000	
uminum Co. of America	126,900	56,900	Axia Inc.	23,600	
nax Inc.	51,000	0	Aydin Corp.	23,500	
ndahl Čorp.	36,600	0	Bairnco Corp.	20,500	
mer. Bank Insurance Group	0	7,000	Baker International Corp.	75,200	23,0
mer, District Telegraph	44,200	15,200	Baldwin United Corp.	0	30,0
mer. Ecology Inc.	2,443	1,200	Bally Manufacturing Co.	32,800	
mer. General Corp. Pfd. 2.64	420,100	21,400	Baltimore Gas & Electric Co.	28,500	
mer. General Corp. Warrants	10,700	10,700	Banc One Corp.	29,000	
mer. General Corp.	54,650	13,450	BancOhio Corp.	30,000 11,000	
mer. International Group Inc.	185,000	60,200	Bandag Inc.	11,000	
mer. Medical Int'l.	198,000	4,200	Bank Boston Corp.	20,000	
merada Hess Corp.	346,200	377,800	Bank of NY Co. Inc.	12,600	
merican Brands Inc.	49,500	0	Bank VA Co. Bank America Corporation	111,600	89,2
merican Broadcasting Co.	31,800	0	BankAmerica Corporation	377,930	105,2
merican Can Corp.	21,800	0	Bankers Trust NY Corp.	17,000	37,0
merican Carriers	23,000	1,000	Bard C.R. Inc. Barnett Banks Fla.	20,000	57,0
merican Cyanamid	183,600	168,600		26,000	
merican Electric Power Inc.	137,400	0	Barry Wright Corp.	14,000	
merican Express Company	895,000	1,022,251	Bassett Furniture Inds. Inc. Bausch & Lomb Inc.	24,800	
merican Express Warrants	0	. 150		459,050	1,299,9
nerican Family Corp.	35,000	0 7 500	Baxter Travenol Labs	18,000	.,200,
nerican Greetings	93,200	7,500	· Baybanks Inc. Bayly Corp.	34,700	
nerican Home Products Corp.	19,300	79,300 49,400	Bayly Corp. Beatrice Foods Co.	92,100	
nerican Hospital Supply	96,700	49,400	Becton Dickinson & Co.	12,000	
nerican Mtr. Inns Inc.	19,000 30,000	0	Bell & Howell Co.	225,650	197,3
nerican Nati. Ins. Co.	19,100	- 0	Bell Atlantic Corp.	38,800	43,4
nerican Natural Resources Co.	12,000	~ U 0	Bell Canada Enterprises Inc.	177,000	
nerican Petrofina Inc.	667,250	1,166,000	Bell Industries	3,500	3,
nerican Standard Inc.	47,000	1,100,000	Bell South Corporation	21,500	22,
nerican Sterilizer Co.	48,800	ŏ	Belo A. H. Corp.	18,000	•
nerican Stores Co. New nerican Tel. & Tel. New	58,050	35,100	Beneficial Corporation	11,000	
nerican tel. & tel. New nerican Tel. & Tel.	1,228,857	2,226,697	Berg Enterprises	0	14,
nerican lei, & lei, nerican Water Works	6,000	2,220,037	Bergen Brunswig Corp.	50,500	5,
merifin Corp	15,000	ŏ	Best Products	26,000	77,
neritech Corp.	17,300	19,981	Bethlehem Steel	66,200	31,
neritrust Corp.	17,000	0	Betz Labs Inc.	13,000	
nes Department Stores	14,000	3,200	Beverly Enterprises	56,000	
netek Inc.	62,400	0	Big Three Industries	35,000	
MF Inc.	44,500	0	Bank of New Hampshire Corp.	5,100	
nfac Inc.	30,200	0	Black & Decker Mfg. Co.	43,500	-
nfesco Ind. Inc.	2,100	0	Bláir John & Ćo.	. 0	8,
MP inc.	66,900	10,200	Block H & R Inc.	41,900	14,
VIR Corp.	276,200	219,900	Blount Inc.	13,400	
nstar Corp.	12,000	12,000	Blue Bell Inc.	11,000	
msted Inds. Inc.	29,000	16,700	Bob Evans Farms Inc.	37,000	
nacomp	0	68,200	Boeing Company	956,650	1,760,
nalog Devices Inc.	27,000	0	Boise Cascade Corp.	35,500	
nalogic Corp.	49,000	0	Borden Inc.	25,800	7,
nchor Hocking Corp.	69,700	46,700	Borg-Warner	634,928	1,361,
	26,000	0	Borg-Warner ARCN 11-15-02	0	5,
nderson Clayton & Co.	20,000	•	Boston Édison Co.	24,000	

Security Description	Units Bought	Unit's Sold	Security Description	Units Bought	Units Sold
Bowater Inc.	18,600	18,600	Citizens & Southern GA Corp.	49.600	0
Brascan Ltd.	21,300	0	Citizens Fid. Corp.	21,000	ő
Briggs & Stratton Corp.	17,000	, O	Citizens Utils. Co. Del.	22,000	ő
Bristol-Myers Company	1,409,550	1,829,150	City Fed. Savings & Loan Assn., Eliz, NJ	55,000	•0
British Petroleum Broaklup Up, Gao Co	15,900	7,750	City Investing	262,350	194,650
Brooklyn Un. Gas Co. Brooks Fashion Stores Inc.	21,000 35,000	0	Clark Investing Pfd. 2.875 Clark Equipment Co.	35,000 24,400	35,000 0
Brown Group	234,550	20,750	Cleveland Cliffs & Iron	27,000	0
Browning Ferris Inds. Inc.	30,600	0	Cleveland Elec. Illum.	103,200	51,200
Brunswick Corp.	310,400	38,300	Clorox Co.	38,600	57,100
Brush Wellman Inc.	11,000	0	Cluett Peabody	90,000	60,000
Bucyrus Erie Co. Builders Transport Inc.	28,000	4,500	CNA Finl Corp. Coachmen Inds. Inc.	50,000	. 0
Burlington Industries	124,600	212,100	Coastal Corp.	25,000 20,000	· 0
Burlington Northern Inc.	213,300	9,000	Coca Cola Bottling Co. Cons,	20,000	· ŏ
Burndy Corp.	33,000	0	Coca Cola Company	160,000	159,600
Burroughs Corporation	62,500	0	Cole National Corp.	5,600	0
Cabot Corp.	18,000	0	Coleco Ind.	10,000	13,000
Caesar's World Calfed Inc.	53,000 30,000	53,000 0	Coleman Co. Inc.	11,000	. 0
California Federal S & L	17,000	17,000	Colgate Palmolive Collins & Aikman Corp.	224,400 17,600	0
Callahan Mining Corp.	30,000	. 0	Collins Foods Intl.	34,500	ŏ
Cameron Iron Works Inc.	39,000	· · · 0	Colonial Penn Group	16,000	30,700
Campbell Red Lakes Mines Ltd.	50,000	0	Colt Inds. Inc. Del.	21,800	0
Campbell Soup Co.	33,000	0	Columbia Gas System Inc.	193,700	2,700
Canadian Marconi Co.	30,000	0	Combined Intl. Corp.	17,000	. 0
Canadian Pacific Enterprises Canadian Pacific Ltd.	15,000 227,300	0 2,300	Combustion Engineering Comdata Network Inc.	399,350	722,350
Canal-Randolph Corp.	- 1,000	2,300	Comdata Network Inc. Comdisco Inc.	68,200 62,500	32,200 37,500
Capital Cities Communications	12,700	ŏ	Comerica Inc.	23,000	37,500
Capital Holding Corp.	65,200	37,300	Cominco Ltd.	16,000	0
Carl Karcher Enterprises Inc.	36,800	3,800	Commerce Clearing House Inc.	6,000	0
Carlisle Corp.	247,150	26,250	Commercial Alliance	2,000	0
Carnation Carolina Freight Corp.	51,500 24,000	5,000 0	Commercial Metals Co. Commodore Intl. Ltd.	26,000	· 0
Carolina Power & Light Co.	48,400	ő	Commonwealth Edison Co.	22,800 2,163,916	0 3,993,606
Carpenter Technology Corp.	13,800	ŏ	Communications Inds. Inc.	25,000	0
Carson Pirie & Co.	45,100	· 0	Communications Satellite Corp.	27,000	õ
Carter Hawley Hale Stores Inc.	37,800	0	Comprehensive Care Corp.	28,000	× 0
Castle & Cooke Inc.	49,700	0	Compression Labs Inc.	11,800	11,800
Castle Ind. Inc. Caterpillar Tractor Co.	0 84,300	15,000	Compugraphic Corp.	27,000	0
CBI Inds. Inc.	12,000	, 0	Computer Assoc. Intl. Inc. Computer Consoles	25,000 4,800	· 0
CBS Incorporated	. 125,800	95,900	Computer Memories	6,000	6,000
CBT Corp.	22,000	0	Computer Sciences Corp.	85,500	0
Celanese Corporation	148,300	56,400	Computer Vision Corp.	51,100	0
Cen. Jersey B & Tr.	. 0	7,000	Conagra Inc.	108,500	18,500
Centel Corp. Centex Corp.	21,000 27,700	0	Conair Corp. Del.	11,000 10,000	10,000
Central & So. West Corp.	113,200	ŏ	Cone MLS Corp. Conifer/Essex Group	2,000	10,000
Central III. Light Co.	32,000	ō	Conroy Inc.	2,000	18,000
Central III. Pub. Service Co.	41,000	0	Consol. Edison of NY	358,600	260,800
Central LA Electric Co.	34,000	0	Consol. Foods Corp.	52,000	0
Central Soya Inc. Cenvill Invs. Inc.	46,000 26,000	0	Consol, Freightways Inc. Consol, Natural Gas	11,800 66,700	0 9,700
Certain Teed Products Corp.	31,400	0	Consolidated Papers Inc.	13,000	9,700
Cessna Aircraft Co.	42,000	ō	Consumers Power Co.	45,000	ŏ
Cetus Corp.	59,000	0	Continental Bancorp Inc. PA	26,000	Õ
CFS Contl. Inc.	18,000	0	Continental Corp.	28,000	· 0
Champion International	103,300	62,500	Continental Group Inc.	139,800	177,250
Champion Spark Plug Co. Charming Shoppes Inc.	64,000 28,000	· 0 0	Continental III. Corp. Continental Telecom. Inc.	38,000 401,200	0 420,300
Chart House Inc.	19,000	79,000	Contl. Air	2,500	420,300 ∾ 15,900
Charter Co.	67,000	67,000	Contl. Air 9% CV Pfd.	2,500	6;500
Charter Med. Corp.	32,000	· 0	Control Data Corp.	221,400	164,200
Chase Manhattan Corp.	203,700	^O	Convergent Tech.	129,100	37,400
Chem-Lawn Corp. Chemed Corporation	21,000	6,000	Conwood Corp.	25,900 69,600	25,900
Chemical New York Corp.	12,000 354,600	0 3,700	Cooper Inds. Inc. * Cooper Labs Inc.	57,000	37,000
Chesapeake Corp. VA	16,000	0,700	Cooper Tire & Rubber	403,850	9,100
Chesebrough-Ponds Inc.	25,500	• 0	Coopervision Inc.	44,000	44,000
Chi-Chis Inc.	29,000	0	Condura Corp.	31,800	0
Chicago & NW Trans.	16,000	16,000	Corestates Finl. Corp.	21,000	· · 0
Chieftáin Dev. Ltd. Chromalloy American Corp. Del.	21,000 57,000	0	Corning Glass Works Corroon & Black Corp.	35,100 11,000	0
Chrysler Corp.	180,800	104,500	Countrywide Cr. Ind.	17,000	, o
Chubb Corporation	22,500	14,400	Cox Communications Inc.	48,800	ŏ
Churchs Fried Chicken	212,900	164,700	CPC International Inc.	223,900	156,000
Cigna Corporation	71,600	0	CPT Corp.	18,000	21,100
Cincinnati Bell Inc.	3,000	0	Crane Co.	106,000	84,660 0
Cincinnatti Finł Corp. Cincinnati Gas & Electric Co.	10,000 48,100	48,100	Cray Resh Inc. Crocker National Corp.	12,100 31,700	14,700
Cincinnati Milacron Inc.	18,000	48,100	Cross & Trecker	24,000	10,000
Cintas Corp.	7,000	7,000	Cross A. T. Co.	22,500	. 0
Cipher Data Products Inc.	28,000	0	Crown Cork &Seal	236,550	72,500
Circle K Corp.	21,000	0	Crown Zellerbach Corp.	27,400	0
Circus Circus Enter. Citicorp	4,000 1,093,100	4,000 1,699,700	CSX Corporation Cullen Frost Bankers Inc.	310,700 23,000	262,000
Citizens & Southern Corp.	20,000	1,699,700	Guilen must bankers inc.	23,000	v
	20,000	v			

Security Description	Units Bought	Units Sold	Security Description	Units Bought	Units Sold
Cullinet Software Inc.	43,300	18,300	Faberge Inc.	27,000	0
Cummins Engine Co.	116,100	77,500	Fairchild Inds. Inc.	37,000	0
Dale Electronics	5,000	0	Fairfield Commun. Inc.	10,000	0
Dana Corporation	38,000	67,500	Falconbridge Ltd.	10,000	0
Dart & Kraft Inc. Dart Drug Corp.	150,300	90,700 5,000	Family DIr. Stores Inc. Farm Fresh Inc.	34,000 35,000	· 0
Data General Corp.	101,500	45,000	Farmers Group Inc.	61,000	9,000
Data Switch Corp.	20,000	0	Federal Co.	21,000	0
Datapoint Corp.	41,600	17,000	Federal Express Corp.	128,300	15,300
Dataproducts Corp.	23,000	20,000	Federal Natl. Mtg.	2,505,900	2,292,300
Datum Inc.	16,300	42,200	Federal Paper Brd Inc.	16,000	0
Dauphin Deposit Corp.	5,000	0	Federal-Mogul Corp.	21,000	15,000 139,350
Dayton Power & Light Co.	57,700 343,000	0 500,700	Federated Dept. Stores Felmont Oil Corp.	154,650 30,000	30,000
Dayton-Hudson Corp. DeLuxe Check Printers Inc.	21,400	. 0	Ferro Corp.	10,000	30,000
Dean Foods Co.	22,000	. 0	Fidelcor	18,000	ő
Deere & Company	51,300	Ō	Figgie Intl. Inc.	17,700	14,800
DeKalb Agresearch Inc.	26,000	0	Filtertek Cos.	10,000	0
Delmarva Power & Light Co.	40,500	0 ·	Fin. Corp. of America	72,904	100,599
Delmed Inc.	69,000	0	Financial Cp. of Amer. Fpfd.	11,760	11,760
Delta Air Lines Inc.	136,800	100,000	Firestone Tire & Rubber Co.	26,000	. 0
Dennison Mines Ltd. A	19,000 40,600	66,300	First ALA Bancshares Inc First Atlanta Corp.	18,000 38,500	0
Dennys Inc. Detroit Edison Co.	153,000	· 0	First Bank System	12,800	0
Detroit Edison Co.	79,000	66,000	First Boston Inc.	14,700	ő
Dexter Corp.	29,000	0	First Charter Financial	65,000	84,000
Diagnostic Products Corp.	7,000	.0	First Chicago Corp.	35,300	0
Diamond Shamrock	161,200	58,800	First City Bankcorp Texas	375,800	8,400
Diasonics Inc.	96,000	0	First Data Resources	5,000	5,000
Diebold Inc.	10,000	25,000	First Executive Corp. Del.	47,600	0
Digital Equipment Corp.	119,700	48,000	First Interstate Bancorp.	302,250	96,850
Digital Switch	66,000 61,700	32,900 75,800	First Jersey Natl. Co.	8,000 17,900	0
Disney Walt Productions Diversifoods Inc.	133,230	78,230	First KY Nátl. Corp. First Natl BNCP-ALNTWN	6,000	ő
Docutel Olivetti Corp.	1,000	50,000	First Natl. St. Bancorporation	15,700	ŏ
Dome Mines Ltd.	42,000	0	First Sec. Corp. Del.	29,000	ō
Dominion Resources	339,050	3,850	First Savings Bank Florida	10,000	0
Donaldson Lufkin & Jen.	61,200	. 0	First Tenn. Natl. Corp.	5,000	0
Donnelley RR & Sons	36,600 .	10,000	First UN Corp.	18,000	0
Dorchester Gas Corp.	31,400	31,400	Fleet Financial Group Inc.	• 8,000	0
Dover Corp.	37,000	0	Fleetwood Enter. Inc.	341,200	120,000
Dow Chemical Company	1,304,500	2,030,900	Fleming Cos.	228,600 23,000	199,400
Dow Jones & Co. Dr. Pepper Co.	90,000 39,200	0 39,200	Flightsafety Intl. Inc. Floating Point Systems Inc.	54,000	. 0
Dresser Industries	61,600	33,200	Florida Federal S & L	20,000	· 0
Drevers Grand Ice Cream Inc.	31,000	ŏ	Florida National Banks Fla. Inc.	19,000	õ
Dreyfus Corp.	40,500	51,000	Florida Power & Light Co.	41,800	.0
DuPont E.I. DeNemours	829,080	1,223,280	Florida Progress Corp.	35,000	`o
Duke Power Co. NC	610,400	78,000	Florida Rock Industries	3,000	0
Dun & Bradstreet Cos. Inc.	207,000	1,100	Flowers Industries	52,000	17,000
Duquesne Lt. Co.	55,900	0	Fluke John Mfg.	0	5,000
Durr Fillauer Méd. Inc.	500 58,500	0	Fluor Corp. FMC Corp.	73,000 25,000	0
Dysan Corp. E-Systems	138,900	. 0	Find Motor Co.	458,150	100,100
E.F. Hutton Group Inc.	67,100	45,000	Foremost Corp. of America	40,000	10,000
Eagle Picher Inds. Inc.	27,000	0	Forest Labs	13,000	0
Eastern Gas & Fuel Assoc.	27,000	0	Forest Oil Corp.	27,000	0
Eastman Kodak Company	259,800	523,380	Fort Howard Paper Co.	23,000	0
Eaton Corp.	83,900	20,000	Foster Med. Corp.	60,000	60,000
Echlin Inc.	29,000	47,000	Foster Wheeler Corp.	47,000	0
Eckerd Jack Corp.	29,100	0	Foxboro Co.	19,000	, O
Economics Lab Inc.	26,800	0	Foxmeyer Corp.	22,600 69,000	8,300 0
Edison Bros Stores Inc.	15,000 15,000	- : O O	Freeport-McMoran Inc.	42,000	0
Educational Comp. Corp. Edwards A.G. & Sons	10,000	19,700	Fruehauf Corp.	35,000	ő
EG & G Inc.	28,900	0	Fugua Inds. Inc.	24,000	0
El Chico Corp.	0	12,000	G & K Services Inc.	10,500	0
El Paso Electric Co.	57,000	0	G.D. Ritzys Inc.	8,500	8,500
Electronic Data Systems Corp.	56,700	700	GAF Corp.	40,000	0
Electrospace Systems	9,000	0	Gallagher Arthur J. & Co.	9,500	0
Emerson Electric	68,100	36,500	Gannett Inc.	41,400	0
Emerson Radio Corp.	174,993	262,390	Garan Inc.	3,500 30,000	4,200
Emery Air Freight Corp.	33,900 18,000	61,900 0	GATX GCA Corp.	⊂ 33,800	0
Émhart Corp VA Emulex Corp.	15,100	· 0	Gearhart Inds. Inc.	40,000	0
Englehard Corp.	27,400	Ő	Geico Corp.	15,000	40,000
Englenard Corp.	284,450	2,950	Gelco Corporation	322,450	21,650
Entex	111,000	75,000	Genentech Inc.	17,000	. 0
Entre Computer Centers	5,300	5,300	General Cinema Corp.	11,000	0
Enzo Biochem Inc.	29,000	0	General Datacomm Inds. Inc.	22,000	0
Equatorial	28,900	15,900	General Dynamics	164,900	238,500
Equitable Gas Co.	14,000	0	General Electric Co.	1,528,800	2,200,800
Esmark Inc.	39,500	65,000	General Foods Corp.	165,200	. 115,900
Esquire Inc.	36,300	36,300 0	General Homes General Host Corp.	.0 37,000	4,000
Esterline Corp.	23,000 125,900	211,800	General Host Corp. General Instrument Corp.	23,800	40,000
Ethyl Corp. Evans & Sutherland Computer C	45,000	211,800	General Mills Inc.	77,000	25,000
Excello Corp.	19,000	ŏ	General Motors Corp.	471,500	737,600
				57,000	

Security Description	Units Bought	Units Sold	Security Description	Units Bought	Units Sold
General Public Utilities Corp.	153,600	0	Honeywell Inc.	66,700	107,700
General Re Corp.	160,650	950	Hoover Co.	24,400	0
General Signal Corp.	48,000	0	Hoover Universal Hospital Corp. of America	47,400 115,900	5,200 84,000
General Tire & Rubber Co. Genetic Sys. Corp.	20,000 77,000	0	Houghton Mifflin Co.	20,900	04,000
Genrad Inc.	17,800	30,000	House of Fabrics Inc.	0	41,000
Genstar Ltd.	16,000	0	Household Intl.	37,000	0
Genuine Parts Company	275,900	636,500	Houston Industries Inc.	1,110,800	1,966,300 30,700
George A. Hormel & Co.	14,200 78,800	0	Houston Natl. Gas Corp. Hubbard Real Estate Investments	284,050 28,000	30,700
Georgia Pacific Corp. Gerber Products Co.	14,700	0	Hubbell Harvey B.	21,000	õ
Gerber Scientific	8,000	8,000	Hughes Tool	42,900	0
Getty Oil Company	60,000	60,000	Humana Inc.	119,400	63,500
Gibraltar Savings Assn. Houston T	24,000	24,000	Hunt J.B.	10,100 77,300	10,100 2,000
Gibson Greetings	10,000 23,700	0 212,000	Hybritech Inc. Hyster Co.	8,000	8,000
Gillette Company Global Marine	44,100	44,100	I. C. Industries	19,000	10,000
Golden West Financial	24,800	3,800	I.M.S. Intl. Inc.	23,000	0
Goodrich (B.F.)	25,100	132,700	Idaho Power Co.	21,000	0
Goodyear Tire & Rubber	949,500	2,269,000	Ideal Basic Industries Inc. Illinois Power Co.	30,000 56,400	0 47,200
Gould Inc. Goulds Pumps Inc.	34,400 35,000	0	Illinois Power Corp.	86,000	47,200
Gr. Amer. Fed. Savings Bank	50,000	17,500	Illinois Tool Works Inc.	12,000	Ō
Great Lakes Federal S&L	14,000	1,300	Imperial Oil Co. Ltd.	42,400	0
Great Western Financial	49,800	184,500	Inco Inc.	72,700	230,000
Grace W. R. & Co.	36,700	0	Inexco Oil Co.	69,000 4,000	4,000
Grainger W.W. Inc. Granger Assoc.	12,600 36,000	2,600	Infotron Systems Ingersoll Rand	20,200	4,000
Great Atlantic & Pacific Tea Inc.	40,000	0	Inland Steel Corp.	30,500	35,000
Great Lakes Chemical Corp.	26,400	Ō	Insilco Corp.	43,000	0
Great Northern Nekoosa Corp.	61,000	0	Instacom Inc.	0	46,000
Greentree Accept. Inc.	14,000	0	Intl. Kings Table	15,000 0	10,000
Greyhound Corp. Grow Chem. Corp.	675,100 35,000	1,238,200	Integr. Res. 4.25 Pfd. Cv. Integrated Device Tech.	6,800	,0,000
Grow Chem. Corp. Grumman Corp.	67,600	85,000	Integrated Genetics Inc.	4,000	4,000
GTE Corp.	625,600	1,249,700	Integrated Resources Inc.	68,000	23,750
Guardian Inds. Corp.	32,000	0	Intel Corp.	161,100	65,000
Guilford Mills	29,000	0	Intelligent Sys. Corp.	35,000 3,000	0
Gulf & Western Indus.	668,200 132,800	1,223,200 0	Inter Lease Financial Interco	6,600	0
Gulf Broadcasting Gulf CDA Ltd.	78,000	0	Interfirst Corp.	52,500	75,000
Gulf Corp.	167,700	549,700	Intergraph Corp.	151,200	51,900
Gulf Stream Aerospace	54,900	8,500	Intermedics Inc.	42,000	0
Gulf Sts. Utils. Co.	47,000	0	International Multifoods Corp.	26,000	0 2,000
Gulf Utd. Corp. Hall Frank B. & Co. Inc.	21,400 29,500	21,400	Internorth Inc. Interpublic Group	188,700 14,000	5,000
Halliburton Inc.	1,101,650	2,382,900	Intl. Business Machines	856,642	1,288,949
Hamilton Bros. Pete. Corp.	44,000	0	Inti. Flavors & Frag.	37,200	7,500
Hammermill Paper Co.	14,000	0	Intl. Minerals & Chem.	56,700	30,000
Handleman Co.	0	3,500	Inti. Paper Co.	305,200 24,500	489,100
Handy & Harman Hanover Ins. Co.	38,000 19,000	0	Invacare Corp. Iowa III. Gas & Elec. Co.	26,000	0
Harcourt Brace Jovan.	30,000	ŏ	Iowa Resources Inc.	24,000	ŏ
Harland John H. Co.	17,000	ō	Ipalco Enterprises	15,000	. 0
Harris Bankcorp. Inc.	10,000	0	Irving Bk. Corp.	14,000	0
Harris Corp.	70,900	40,000	ISC Sys. Corp.	44,000	0 292,995
Harsco Corp. Harte Hanks Communications In.	28,000 27,000	0	ITT Corp. IU Intl. Corp.	163,850 26,000	292,995
Hartford Nati. Corp.	12,500	ŏ	James Riv, Corp. VA	28,700	ŏ
Hartmarx Corp.	35,000	ō	Jamesway Corp.	0	6,800
Hasbro Inds. Inc.	3,000	- 0	Jefferson Bankshares VA	6,500	0
Hawkeye Bancorp.	4,000	0	Jefferson Pilot Corp.	26,000	0
HBO & Co. HCC Industries	· 20,000	- 0 20,200	Jeffries Group Jerrico Inc.	7,500 40,000	7,500
Healthamerica Corp.	0 2,500	2,500	Jewel Companies	280,650	269,650
Healthdyne	98,000	7,000	Johnson & Johnson	303,500	979,000
Hecla Inc.	36,000	36,000	Johnson Controls	14,000	15,000
Heinz H.J. & Co.	295,050	226,350	Jonathan Logan	21,000	0
Heizer Corp.	40,000 15,000	0 15,000	Josephson Intl. Inc. Jostens Inc.	0 24,000	8,000 0
Heller Walter E. Intl. Corp. Helmerich & Pavne Inc.	30,000	15,000	Joy Mfg. Co.	17,000	ŏ
Hercules Incorporated	77,400	51,000	Juno Lighting Inc.	5,000	ō
Heritage Federal S&L	20,000	0	JWT Group Inc.	21,900	0
Hershey Foods Corp.	34,400	0	K Mart Corporation	222,300	75,500
Hewlett Packard Co.	264,900	32,000 0	K N Energy Inc.	22,000 32,800	0
Higbee Company Hillenbrand Inds. Inc.	5,000 16,000	0	Kaiser Alum. & Chem. Corp. Kaneb Services	54,000	0
Hilton Hotels Corp.	16,000	ŏ	Kansas City Power & Light Co.	35,000	ŏ
Home Fed. Svg. & Loan Assn. S.D. Calif.	41,800	0	Kansas City So. Ind.	, 20,100	24,000
Hogan Systems	67,300	0	Kansas Gas & Elec. Co.	38,000	0
Holiday Inns	, 56,500	11,000	Kansas Power & Light Co.	23,000	0
Holly Corp. Home Centers of America	50,000 13,400	0 13,400	Katy Inds. Inc. Kaufman & Broad Inc.	21,000 42,000	. 0
Home Centers Amer. WTS 86	33,800	33,800	Kaydon Corp.	20,500	ŏ
Home Depot Inc.	56,000	20,000	Kearney Natl. Inc.	6,000	0
Home Health Care America	7,000	5,000	Kellogg Co.	73,000	0
Homecrafters Whse. Inc.	3,700	3,700 `	Kemper Corp.	16,035	35
Homestake Mining Co. Hon Industries	85,950 6,000	13,700 6,000	Kennametal Inc. Kentron Intl. Inc.	19,000 19,400	0
	0,000	0,000		10,400	l ů

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ecurity Description	Units Bought	Units Sold	Security Description	Units Bought	Units Sold
entucky Utils. Co.	29,000	0	McKesson Corp.	9,000	•
err McGee Corp.	58,500	9,900	Mead Corp.	51,000	28,70
ey Pharmaceutical	55,600	55,500	Media Gen. Inc.	11,000	•
sytronic Inc.	0	6,000	Medtronic Inc.	30,900	
dde Inc.	244,400	114,400	MEI Corp.	19,000 162,750	. 3,85
mberly Clark Corp.	30,500	26,000 86,000	Mellon National Corp. Melridge Inc.	3,000	3,00
nder Care Learning Center	44,200	0	Melville Corporation	263,700	43,25
.A Instrs. Corp. .M Royal Dutch Air	10,600	30,000	Mentor Graphics Corp.	9,275	9,27
hight Ridder Inc.	- 64,000	00,000	Mercantile Bancorporation Inc.	10,000	
oppers inc.	33,000	õ	Mercantile Stores Inc.	11,000	
oger Company	206,300	3,000	Mercantile Texas Corp.	120,600	31,00
oy Inc.	24,000	0	Merchants Savings Bank	11,000	
licke & Soffa Ind.	17,300	9,000	Merck & Company Inc.	, 69,200	· 8,90
Quinta Mtr. Inns Inc.	25,000	Ó	Meredith Corp.	28,000 `	
dd Furniture	8,000	0	Meridian Bancorp Inc. 4	22,000	
farge Corp.	285,000	0	Merrill Lynch & Co. Inc.	142,900	252,80
nce Inc.	25,000	0	Metromedia Inc.	31,300	31,30
ndmark Banking Corp. Fla.	12,500	. 0	MGM/UA Enterprises	47,400	9,80
wter Intl. Inc.	32,000	•0	Mgmt. Science Amer.	48,700	
ar Siegler Inc.	164,900	40,200	Micom Sys. Inc.	23,000	19.00
e Data Corp.	50,000	0	Micro Mask	6,000	18,00 15,90
nnar Corp.	15,000	80,000	Micron Technology	-15,900 7,000	7,00
vi Strauss & Co.	287,100	75,000	Micropolis Corp. Midcon Corporation	24,000	7,00
vitz Furniture	17,000	0	Middon Corporation Middle South Utils, Inc.	120,900	
obey Owens Ford Co.	16,000	0	Midale South Utils, Inc. Midland Energy Co.	10,000	
berty Homes	18,000	0	Midland Energy Co. Midland Ross Corp.	35,000	
erty National Corp.	3,000	0	Midland Ross Corp. Midlantic Banks Inc.	8,000	
ebert Corp.	30,000 5,100	5,100	Miller Herman Inc.	66,700	10,0
eline Systems Inc. emark Corp	18,900	18,900	Miller Wohl	34,000	82,0
emark Corp. Iy Eli & Co.	68,300	13,400	Millipore Corp.	22,000	15,0
v Tulip Inc.	31,000	13,400	Miniscribe	15,000	15,0
nited Inc.	112,700	130,000	Minnesota Mining & Mfg. Co.	96,900	16,5
Broadcast. Corp.	118.000	0	Minnesota Power & Light Co.	25,000	
coln Natl. Corp. Ind.	18,200	õ	Mission Ins. Group Inc.	45,100	
ton Inds. Inc.	113,200	65,000	Mitchell Energy	247,850	13,7
Claiborne Inc.	36,000	5,000	Mitel Corp.	47,000	
ckheed Aircraft Corp.	511,870	863,170	Mn. Venture Capital Pool	29,587	
ctite Corp.	20,000	0	Mn. Ext. Active Man. Pool	0	3,2
ews Corp.	38,000	0	Mn. Indexed Fund Pool	1,407,040	1,9
gicon Inc.	16,000	0	Mn. Real Estate Fund Pool	157,899	
mas & Nettleton Finl Corp.	26,000	0	Mn. Resources Fund Pool	24,203	
ne Star Industries	25,000	3,100	 Mobil Corporation 	1,052,550	1,663,2
ng Drug Stores Inc.	13,000	15,000	Molex Inc.	9,400	
ing Island Ltg. Co.	73,800	73,800	Monarch Capital Corp.	56,000	59,0
ral Corp.	20,000	0	Monolithic Memories Inc.	52,900	
tus	4,500	4,500	Monsanto Co.	112,700	102,5
uisiana Ld. & Expl. Co.	34,600	0	Montana Power Co.	25,000 29,100	
uisiana Pac. Corp.	20,000	50,000	Moore Corp. Ltd. Moore McCormack Bos, Inc.	29,100	
uisville Gas & Elec. Co.	28,000	0	Moore McCormack Res. Inc.	614,900	798,4
wenstein M Corp.	5,000	0 72 000	Morgan J.P. & Company Inc. Morris Co. Savings Bank	15,000	/ 30,4
wes Company	107,200	72,000	Morris Co. Savings Bank Morrison Knudsen Inc.	23,000	. -
I Logic Corp.	34,200	0		5,000	· ·
V Corp.	110,900	0	Morse Shoe Morton Thiokol	25,000	15,0
brizol Corp.	63,200		Morton Thickol Motorola Incorporated	25,000	388,1
cky Stores	391,200 79,700	1,000 16,000	Motorola Incorporated Mountain Fuel Supply Co.	241,900	300,1
A Com	43,700	16,000	Multimedia Inc.	18,000	1,5
achine Technology ack Trucks Inc.	43,700 99,400	0	Munford Inc.	5,000	
ick Trucks Inc.	55,100	68,000	Murphy Oil	25,000	
icy R.H. & Co. Igic Chef Inc.	16,000	08,000	Mylan Labs Inc.	35,000	11,0
lone & Hyde Inc.	21,000	0 0	N.W. Natl. Life	4,000	4,0
inufacturers Han. Corp.	45,500	ŏ	Nabisco Brands	84,100	20,9
pco Inc.	27,000	· Õ	Nalco Chemical Co.	70,000	40,0
rine Midland Banks Inc.	33,000	0	National Bankshares Corp.	5,000	
rion Labs Inc.	27,900	ō	National City Corp.	14,000	
rriott Corp.	20,800	0	National Convenience Stores	35,000	
irsh & McClennan	179,350	132,350	National Data Corp.	33,000	
rshall Industries	37,500	15,500	National Distillers & Chem.	28,000 .	
irtin Marietta	39,700	36,850	National Gypsum Co.	19,500	
ry Kay Cosmetics	254,000	35,000	National Intergroup Inc.	20,300	
sco Corp.	42,500	0	National Med. Care Inc.	72,600	•
sonite Corp. New	13,000	29,400	National Service Inds. Inc.	18,600	
terials Research	4,000	4,000	Natl. Patent Devel. Corp.	38,800	
trix Corp NJ	25,000	0	Natl. Computer Systems	5,000	
trix Science Corp.	0	23,000	Natl. Med. Enter. Inc.	952,250	1,815,4
y Dept. Stores Co. 🦛	246,800	386,900	Natl. Semiconductor	235,800	175,2
ytag Co.	8,000	3,100	NBD Bancorp Inc.	16,000	
A Inc.	171,000	60,700	NBI Inc.	18,000	40.0
Cormick & Co. Inc.	22,000	0	NCNB Corp.	36,000	40,0
Dermott Intl. Inc.	20,000	0	NCR Corp.	240,100 114,200	605,6 73,2
Donalds Corp.	586,350	1,352,050	Network Systems Corp.		13,2
Donnell Douglas Corp.	140,400	31,050	Nevada Power Co.	26,000	
Farland Energy Inc.	1,500	120.050	New England Business Svc. Inc.	20,500 16,069	
Craw Edison Co.	138,950	120,950	New England Elec. Sys. New York St. Electric & Gas Corp.	37,000	
cGraw Hill Inc.	61,800 2,196,900	- 0 3,395,300	New York St. Electric & Gas Corp. New York Times Co.	34,800	
CI Communication					

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Security Description	Units Bought	Units Sold	•	Security Description	Units Bought	Units Sold
Newhall Ld. & Farming Co.	21,000	0		PHH Group Inc.	21,000	0
Newmont Mining	47,700	22,000		Phibro-Salomon	267,300	84,600
Niagara Mohawk Power Corp.	76,400	· 0		Philadelphia Elec. Co.	505,700	1,800
Nico Corp. Nicor Inc.	10,000 23,100	0		Philip Morris Philips Petroleum Co.	17,000 260,500	17,000 143,550
Nielsen A.C. Co.	20,000	. 0		Pic N Save Corp.	39,000	4,000
Nike Inc.	46,000	· Õ		Piedmont Aviation	36,000	24,000
NL Industries	29,300	. · O		Pier 1 Imports .	40,200	40,200
No. American Philips Corp.	11,700	6,000		Pier 1 Imports Wts. 7/15/88	15,540	0
No. States Power Co. Minn. Noble Affiliates Inc.	386,144 51,000	939,351 0		Pillsbury Company Pioneer Corp.	32,100 20,000	0 51,200
Nordstrom Inc.	18,000	· · · ·		Pioneer Hi-Bred Intl.	35,000	. 0
Norfolk Southern Corp.	47,600	, O		Pitney Bowes Inc.	215,850	378,450
Norstar Bancorp	18,000	0		Pittston Co.	47,000	0
North American Coal Corp.	13,000	. 0		Planning Research Corp.	7,500	0
Northeast Utilities Northern Ind. Pub. Service Co.	635,050 50,200	27,150 0		PNC Financial Pneumo Corp	30,600 29,000	. 0
Northern Telecom Ltd.	86,700	69,700		Pogo Producing Co.	30,000	ŏ
Northrop Corp.	16,100	20,500		Polaroid Corp.	13,900	, O
Northwest Airlines	20,700	20,400		Policy Mgmt. Sys. Corp.	26,000	6,000
Northwest Inds. Inc.	55,700	35,400		Ponderosa System Inc.	27,000	. 75,000
Norton Co. Norwest Corp.	11,000 50,700	0		Pope & Talbot Portland Gen. Elec. Co.	24,300 46,000	. 0
Novar Electronics	29,400	. õ		Post Corp.	3,900	ŏ
Noxell Corp.	18,000	· 0	•	Potlatch Corp.	20,000	0
Nucor Corp.	37,800	• 0		Potomac Electric & Power	71,000	38,000
Numerax Inc.	15,000	.0		PPG Industries Inc.	53,500	25,000
Nutri Sys. Inc.	70,000 49,100	0 44,781		Premier Indl. Corp. Prentice Hall Inc.	20,000	0 5,000
Occidental Pete Corp.	72,800	. 44,781		Priam Corp.	22,700	15,500
Ocean Drilling & Expl. Co.	39,000	ŏ		Price Co.	6,000	0
Ogden Corp.	24,000	20,000		Prime Computer Inc.	37,400	· O
Ohio Cas Corp.	14,000	0		Prime Motor Inns Inc.	30,000	. 0
Ohio Edison Co. Ohio Mattress Co.	106,200 19,000	· · · 0 0		Proctor & Gamble Progressive Corp. Ohio	419,600 30,000	655,600
Oklahoma Gas & Electric Co.	33,000	0		Provident Life & Acc. Ins. Co.	11,000	0
Old Rep. Intl. Corp.	20,000	ő		PSA Inc.	28,000	õ
Olin Corp.	27,400	0		Public Service Co. Colo.	35,000	0
OMI Corp.	20,000	20,000		Public Service Co. Ind. Inc.	70,000	70,000
Omnicare Inc.	25,000	0	•	Public Service Co. NH	66,600	66,600 0
Oneok Inc. Optical Coating Lab	24,000 7,000	· 0		Public Service Co. N. Mex. Public Service Electric & Gas Co.	35,000 75,300	- 0
Optical Radiation Corp.	24,900	. Ö		Puget Sound Power & Light Co.	59,000	ŏ
Outboard Marine Corp.	13,300	. 0		Pulte Home Corp.	33,700	0
Overnite Transport	39,300	0		Purolator	13,500	0
Overseas Shipholding Group In.	34,000	0		Quaker Oats Co.	15,500	0
Owens Corning Fiber. Corp. Owens Illinois Inc.	383,000 217,600	1,700 29,850		Quaker State Oil Refining Corp. Quantum Corp.	47,400 6,800	0
Oxford Inds. Inc.	32,500	0		Quotron Systems Inc.	114,200	55,000
Paccar Inc.	7,000	, 0		R.P.M. Inc. Ohio	20,000	■ 0
Pacific Gas & Electric Co.	222,600	0		Rio Grande Inds. Inc.	20,000	15,000
Pacific Lumber Co.	26,000	0		Rainier Bancorporation	20,000 135,900	0 11,800
Pacific Ltg. Corp. Pacific Telesis Group	24,800 11,500	0 25,181		Ralston Purina Co. Ranger Oil Ltd.	77,000	0
Pacificorp	72,000	28,900		Ransburg Corp.	34,000	ŏ
Paine Webber	18,100	53,000		Raychem Corp.	6,000	0
Pall Corp.	24,300	• 0		Raytheon Company	125,700	0
Pandick Inc.	19,000	0		RB Industries Inc.	800 250,300	50,800 77,000
Pandick Press Inc.	19,000	28,500		RCA Corp. Reading & Bates Corp.	65,000	. 0
Panhandle Eastern Corp. Pantry Pride	31,900 44,700	44,700		Reading & Bates Corp. Recoton Corp.	25,000	ŏ
Par Pharmaceutical	1,1,000	11,000		Redman Inds. Inc.	40,000	0
Paradyne Corp.	92,500	0		Reeves Communications Corp.	58,000	0
Parisian Inc.	8,000	- 8,000		Regency Electronics	9,500	. 0
Parker Drilling Co. Parker Hannifin Corp.	90,000 21,000	. 0		Republic Airlines Republic Bank Corp.	41,000	28,000 3,300
Parker Pen Co.	36,000	. 0		Republic N.Y. Corp.	23,300	.0
Parsons Corporation	269,800	18,800		Republic Steel	129,000	0
Pay N Pak Stores	0	5,000		Resort Intl.	11,000	11,000
Pay N Save Corp.	25,000	0		Restaurant Systems	2,500	2,500
Payless Cashways	62,500 53,900	20,000 0		Reuters Holdings Plc. Revco D.S.	20,000 317,100	20,000 724,600
Penn Central Corp. Penn Central Pfd. 5.27	53,900	. 53,500		Revion incorporated	65,700	38,000
Penney J.C. Inc.	217,000	399,800		Rexnord Inc.	45,000	0
Pennsylvania Power & Light Co.	87,600	0		Reynolds & Reynolds Co.	20,000	0
Pennwalt Corp.	16,000	0		Reynolds Metals Co.	21,000	. 0
Pennzoil Co.	219,500	2,850 0		Richardson Vicks Rite Aid Corp.	24,000 52,500	20,000
Pentair Inc. Peoples Energy Corp.	26,000 44,000	0		RIC Corp.	62,500	20,000
Peoples Express Airlines Inc.	30,000	0		Roadway Services Inc.	19,900	. Ö
Pep Boys Manny Moe & Jack	25,000	. 0		Robertson H.H. Co.	18,500	. 0
Pepsico Incorporated	109,800	22,200		Robins A.H. Inc.	45,300	1,200
Perkin Elmer	40,500	56,500		Rochester Gas & Elec. Corp.	39,000	0
Petrie Stores Corp.	74,800	84,800 7,500		Rochester Tel. Corp. Rockwell Intl. Corp.	22,000 159,900	0
					100,000	
Petrolane Inc. Petrolite Corp	65,500 24,000					0
Petrolane Inc. Petrolite Corp. Pfizer Incorporated	24,000 1,127,800	0 1, 241 ,700		Rohm & Haas Co. Rohr Inds. Inc.	19,800 19,800	. 0
Petrolite Corp.	24,000	0		Rohm & Haas Co.	19,800	

Security Description	Units Bought	Units Sold	Security Description	Units Bought	Units Sold
Rollins Inc.	35,000	0	Sparkman Energy Corp. Units	0	310
Rolm Corp.	19,600	0	Sperry Corp.	183,200	74,700
Rorer Group Inc.	37,000	33,900	Springs Inds. Inc.	21,000	0.
Roses Stores Inc.	8,000 22,000	0	Square D Co. Squibb Corp.	22,100 287,000	0 624,900
Rouse Co. Rouse Companies Inc.	115,500	50,700	Squibb Corp.	38,000	024,900
Rowań Companies Inc. Royal Crown Cos. Inc.	25,800	25,800	St. Regis Corp.	26,900	ŏ
Royal Dutch Pet. Gldrs.	964,500	2,079,400	St. Paul Cos. Inc.	135,750	1,050
RPC Energy Services Inc.	21,000	0	Staley A.E. Mfg. Co.	41,000	0
Rubbermaid Inc.	19,000	0	Stanadyne Inc.	2,000	2,000
Ryan Homes Inc.	29,000	0	Standard Mtr. Prods: Inc.	34,000	0
Ryder Systems Inc.	39,000	22,750	Standard Oil Co. Ohio	318,450	102,700
Rykoff S.E. & Co.	37,000	0	Standard Oil of Calif.	756,100	1,874,600
Sabine Corp.	33,000	0	Standard Oil of Indiana	377,450	136,250
Safeco Corporation	19,200	0	Standard Products Co.	6,000 10,000	0 12,500
Safety Kleen Corp.	19,000 57,400	0	Standun Corp. Stanley Works	30,700	12,500
Safeway Stores Inc.	70,000	0	State Street Boston Corp.	20,000	ő
Saga Corp. San Diago Con & Electric Co.	37,000	0	Stauffer Chemical Co.	59,000	23,000
San Diego Gas & Electric Co. Sanders Associates	86,700	0	Sterling Drug Inc.	605,500	17,200
Santa Fe Industries	15,000	25,000	Stevens, J.P.	52,600	70,100
Santa Fe So. Pacific Corp.	146,245	20,000	Stone Container Corp.	18,000	0
Sargent Welch Scien.	800	õ	Stop & Shop Inc.	46,300	1,300
Savannah Foods & Inds. Inc.	10,900	0	Storage Technology	52,000	60,300
SCA Services Inc.	46,000	Ō	Storer Communications	54,000	· 0
Scherer R.P. Corp.	8,000	37,000	Stratus Computer Inc.	4,000	4,000
Schering Plough Corp.	38,500	0	Stryker Corp.	25,000	0
Schlumberger Ltd.	545,300	167,100	Subaru of America Inc.	86,500	7,600
SCI Sys. Inc.	48,900	0	Sun Bks. Inc.	17,000	0
Scientific Atlanta Inc.	33,000	0	Sun Chemical	80,000	0
Scitex Ltd.	27,000	0	Sun Inc.	88,400	0
SCM Corp.	19,000	0	Sunair Electric Inc.	11,600 14,800	0
SCOA Inds. Inc.	27,000	. 0	Sundstrand Corp.	54,000	0
Scott & Fetzer Company	152,500	142,200 50.000	Sunshine Mining Co. Super Valu Stores Inc.	78,600	76,700
Scott Paper Co.	62,700	50,000	Superior Oil Company	113,500	59,517
Scovill	16,000 153,600	3,600	Supermarkets Gen. Corp.	19,000	00,017
Sea Containers Ltd. Seaco Inc.	157,200	210,200	Surgical Care Affil.	4,700	ŏ
Seaco Inc.	150,000	0	Susquehanna Bankshares Inc.	8,000	. 0
Seagate Technology	96,300	34,800	Savings Bank Puget Sound	0	20,000
Sealed Power Corp.	24,000	20,000	Swift Indpt. Corp.	22,000	. 0
Searle Gd. & Co.	135,800	56,500	Sybron Corp. 🚿	31,000	0
Sears Roebuck & Company	285,900	69,500	Syms Corp.	29,000	0
Security Pacific Corp.	304,285	526,503	Syntex Corporation	744,750	1,596,350
Sedco Inc.	27,400	8,000	Sysco Corp.	26,000	0
See Q Tech. Inc.	2,900	2,900	Systems & Computer Technology	24,000	0
SEI Corp.	14,000	0	Systems Associates	13,000	0
Sensormatic Electrs. Corp.	29,400	0	Taft Broadcasting	12,000 17,200	4,000
Service Corp. Intl.	24,500	15,000	Tambrands Inc.	149,000	137,000
Service Merchandise	44,000	0	Tampax Inc. Tandem Computers Inc.	49,100	16,500
Servicemaster Inds. Inc.	21,000	0	Tandon Corp.	130,700	35,200
SFN Cos. Inc.	29,000	ŏ	Tandy Corp.	476,200	154,000
Shaklee Corp. Shared Med. Systems Corp.	80,500	25,000	Teco Energy Inc.	24,000	0
Shawmut Corp.	10,000	. 0	Tecumseh Products Co.	7,000	0
Shell Oil	150,900	150,900	Tejon Ranch Co.	7,000	0
Sheller Globe Corp.	30,000	0	Tektronix Inc.	14,800	0
Sherwin Williams Co.	35,000	114,800	Tele Communications Inc.	32,600	0
Shoneys Inc.	28,000	0	Telecom Plus Intl. Corp.	87,000	0
Signal Cos. Inc.	84,500	0	Teledyne Inc.	28,000	20,400
Silicone Systems Inc.	16,400	7,400	Telesphere Intl. Inc.	0	18,000
Silvercrest Ind.	1,700	0	Telex Corp.	74,000	55,300
Singer Co.	158,000	133,000	Tellabs Inc.	32,000 34,844	15,408
Skyline Corp.	36,000	0	Temple Inland	482,000	681,150
Smith Intl. Inc.	43,000	0	Tenneco Inc. Teradyne Inc. 😙	482,000	30,000
Smithkline-Beckman Corp.	535,400	470,800 0	Tesoro Pete Corp.	44,000	00,000
Smucker J.M. Co.	11,000 21,200	0	Texaco Inc.	256,400	39,800
Snap On Tools Corp.	386,600	14,500	Texas Amern, Bancshares Inc.	17,000	0
Sonat Inc.	1,000	0	Texas Commerce Bankshares	318,200	0
Sonoco Products Co. Sony Corp.	34,000	34,000	Texas Eastern Corp.	118,850	0
South Carolina Electric & Gas Co.	36,000	0	Texas Industries	25,500	13,800
Southdown Inc.	20,600	0	Texas Instruments	87,900	112,400
Southeast Bkg. Corp.	28,000	0	Texas Oil & Gas Corp.	568,700	1,461,120
Southern Calif. Edison	118,600	0	Texas Utilities Co.	343,600	4,050
Southern Co.	170,900	0	Textron Inc.	29,700	0
Southern New England Tel. Co.	21,000	0	Thermo Electron Corp.	15,000	0
Southern Pacific Co.	42,000	62,000	Thomas & Betts Corp.	9,900	0
Southern Union Co.	31,000	0	Thompson Med. Co. Inc.	8,000	9,000
Southland Corp.	342,574	388,259	Thousand Trails	12,700 10,400	9,000
Southland Rty. Co.	39,000	. 0	Three Com. Corp.	40,000	
Southmark Corp.	31,300	. 0	Thrifty Corp. Thunsander Corp.	10,000	
Southwest Airlines	44,000	10,000	Thunander Corp.	36,000	
Southwest Bancshares Inc.	25,000	26.001	Tidewater Inc. TIE Communications	119,100	108,800
Southwestern Bell Corp.	36,000	36,681 0	Time Inc.	68,400	48,300
	32,000	-		15,800	40,000
Southwestern Energy Co.	20.000	∩	Limenley Inc.	10.000	L L L L L L L L L L L L L L L L L L L
Southwestern Pub. Service Co. Sovran Financial Corp.	39,000 21,050	0	Timeplex Inc. Times Mirror Co.	26,700	0

Security Description	Units Bought	- Units Sold	Security Description	Units Bought	Units Sold
Todd Shipyards Corp.	10,000	0	Wavetek Corp.	5,400	15,400
Toledo Edison Co. Topps Chewing Gum Inc.	44,000 25,000	0 25,000	WD 40 Co. Weis Markets Inc.	32,000 6,500	0
Torchmark Corp.	17,000	23,000	Weldotron Corp.	5,000	0
Toys R Us	148,300	61,000	Wells Fargo & Co.	14,000	5,000
Tracor Inc. Trane Co.	78,000	0 11,000	Wells Fargo Mtg. & Equity Tr. Wendys Intl. Inc.	24,000	0
Trans World Airl. Pfd05	0	6,938	West Inc.	25,000	ŏ
Trans World Airlines Trans World Corp.	69,859 83,900	1 32,700	West Point Pepperell Inc.	15,000	5,000
Transamerica Corp.	207,450	158,950	Western Cas. & Surety Co. Western Pac. Inds. Inc.	7,000 7,500	0 1,000
Transco Energy Co.	171,350	40,800	Western Tel. Comm.	1,630	0
Transco Expl. Part. Ltd. Travelers Corp.	96,900 818,300	0 64,100	Western Union Corp. Westinghouse Elec. Co.	247,350 1,079,300	23,250 1,399,000
Tribune Company	16,150	16,150	Westmoreland Coal Co.	27,000	1,333,000
Trinity Inds. Inc.	20,000	0	Westvaco Corp.	14,700	0
Trust Co. GA Atlanta TRW Inc.	14,000 27,300	0 29,600	Wetterau Inc. Weyerheuser Co.	33,000 99,700	0
Tyco Labs	127,800	0	Whirlpool Corp.	1,065,300	1,779,300
Tyler Corp.	22,000	0	White Cons. Inds. Inc.	15,000	0
Tymshare Inc. Tyson Foods Inc.	33,000 44,000	33,000 0	Whitehall Corp. Whittaker Corp.	13,600 36,600	. O O
U.S. Bancorp.	31,000	ŏ	Willamette Inds. Inc.	21,000	ŏ
U.S. Inds. Inc.	40,000	40,000	Williams Cos.	16,000	0
U.S. Gypsum Co. U.S. Home Corp.	17,700 0	, 0 143,000	Williams Sonoma Inc. ' Winn Dixie Stores Inc.	3,000 32,200	3,000 0
U.S. Steel Pfd. 12.75	15,500	5,500	Winnebago Ind. Inc.	85,000	ŏ
U.S. West Corp. UAL Inc.	29,300	19,981	Wisconsin Electric Power	256,200	229,800
UAL Inc. UAL Inc. CV Pfd. 2.40	58,100 0	59,500 29,300	Wisconsin Pub. Service Corp. Wisconsin Power & Light Co.	24,000 26,000	0
Ultimate Corp.	70,700	24,200	Wiser Oil Co. Del.	28,000	ŏ
Ultrasystems Inc.	500	0	Witco Chemical Corp.	40,600	3,500
Union Camp Corp. Union Carbide Corp.	60,200 147,518	8,000 427,899	Wolverine World Wide Wometco Enterprises Inc.	14,000	25,000 14,000
Union Elec. Co.	195,500	427,000	Woods Pete Corp.	27,000	14,000
Union Pacific Corp.	108,000	28,000	Woolworth F.W. Co.	23,800	0
Uniroyal Inc. United Artists Theatre Circuit	20,000 37,000	0	Worthington Inds. Inc. Wrigley Wm, Jr. Co.	33,000 12,000	0
United Brands Co.	45,500	· 0	Wyman-Gordon Co.	21,200	15,000
United Cable TV Corp.	42,100	0	Xerox Corp.	403,300	185,750
United Energy Res. Inc. United Illum. Co.	28,000 28,000	0	Xicor Inc. Xidex Corp.	32,200	7,000 0
United States Leasing Intl. In.	17,000	Ō	Xtra Corp.	24,000	8,800
United States Shoe Corp. United States Steel Corp.	21,700	· 0	Yellow Freight System	25,600	40,700
United States Surgical Corp.	80,700 45,000	0	Zapata Corp. Zayre Corp.	6,100 61,000	6,100 68,000
United Stationers Inc.	500	Ō	Zenith Radio Corp.	18,900	0
United Stockyerds Corp. United Technologies Corp.	3,000 76,000	0 10,000	Zero Corp. Zurn Inds, Inc.	23,000	4,000 0
United Telecom. Inc.	65,200	0,000	Zycad Corp.	23,400	0
United VA Bankshares Inc.	22,000	0	Equit. Life Assur. Society	0	11,373
Unitog Co. Unitrode Corp.	3,000 23,000	3,000 0	Amgo I Aetna Real Estate Fund	0- 0	21,996
Universal Foods Corp.	19,300	~ õ	Prudential Real Estate Fund	ŏ	11,414 10,480
Universal Health Services	50,000	· 0	TOTAL	121,819,617	102,094,331
Unocal Corp. Upjohn Co.	1,177,000 26,800	2,297,500			
US Air Group	236,050	41,450	· · ·		
US Fidelity & Guar. Co.	280,900	35,550			
USLIFE Corp. Utah Power & Light Co. In.	23,000 31,000	0			
UTL Corp.	2,000	53,900			
V. F. Corp. Valero Energy Corp.	32,400 484,050	0 2,550			
Valid Logic Systems Inc.	18,000	2,000		İ	
Valley National Corp.	110,000	83,000		İ	
Value Line Inc. Varian Assoc. Inc.	20,000 34,900	0 30,000			
Veeco Instra. Inc.	30,000	00,000	-		
Verbatim Corp. Viacom Intl.	28,000	Ó			
Vicorp Restaurants Inc.	22,000 30,000	9,000 40,000			
Virginia Natl. Bankshares Inc.	7,000	7,000		i	
Vulcan Matis. Co. Wachovia Corp.	10,000	0			
Wackenhut Corp.	33,200 12,000	0			
Wal-Mart Stores Inc.	358,650	261,850			
Walgreen Co. Wallace Computer Ser. Inc.	25,000	0			
Walter Jim Corp.	22,000 10,000	· 0			
Wang Labs Cl. B	1,077,400	1,089,300			
Warnaco Inc. Warner Communications	267,100 70,400	19,500			
Warner Lambert	62,100	17,800 53,000			
Washington Natl. Corp.	26,000	• 0			
Washington Post B Washington Water Power Co.	10,000 34,000	0			`
Waste Management	752,900	1,254,000			
Watkins Johnson Co.	8,000	0			

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	EQUITY		BOND		SHORT TERM
BROKER	DOLLAR VOLUME	EQUITY COMM	DOLLAR VOLUME	BOND COMM	DOLLAR VOLUME
A.G. BECKER & CO.	\$ 31,083,549.03	\$ 72,189.00	\$ 0.00	\$ 0.00	\$ 1,858,052,222.22
ABEL/NOSER CORP.	2,195,250.00	4,860.00	0.00	0.00	.0.00
ADAMS HARKNESS & HILL	2,359,519.67	5,025.00	0.00	0.00	0.00
ALLISON-WILLIAMS	0.00	0.00	2,573,222.09	19,810.31	0.00
AMERICAN EXPRESS CREDIT	0.00	0.00	0.00	0.00	3,354,000.00
AMERICAN NATIONAL BANK	0.00	0.00	0.00	0.00	88,353,200.00
AMERICAN SECURITIES	3,335,602.25	8,300.99	0.00	0.00	0.00
ASSOC CORP OF N AMER	0.00	0.00	0.00	0.00	140,059,155.56
AUTRANET	22,338,149.93	48,747.00	0.00	0.00	0.00
BAIRD PATRICK AND CO	556,037.82	1,404.00	0.00	0.00	0.00
BANK OF AMERICA	0.00	0.00	5,000,000.00	13,500.00	66,000,000.00
BANKERS TRUST	0.00	0.00	0.00	0.00	134,505,000.00
BATEMAN EICHLER	1,875,000.00	6,000.00	0.00	0.00	0.00
BEAR STEARNS & CO	59,401,772.32	147,456.55	0.00	. 0.00	5,716,398,000.00
BECKER-WARBURG-PARIBUS	63,984,112.50	142,358.00	0.00	0.00	0.00
BLYTH PAINE WEBBER	0.00	0.00	2,000,000.00	6,000.00	0.00
BMI CAPITAL MANAGEMENT	11,078,853.89	38,797.09	0.00	0.00	0.00
BOSTON INST. SERVICES	32,313,049.21	88,653.00	0.00	0.00	0.00
BRANDT (ROBERT) & CO	27,173,512.50	61,941.00	0.00	0.00	0.00
BRIGGS & SCHAEDLE	0.00	0.00	0.00	0.00	84,700,000.00
BROWN ALEX & SONS	1,685,618.46	3,860.00	188,560.00	500.00	0.00
BROWN BROS. HARRIMAN	1,232,300.00	3,395.00	0.00	0.00	0.00
BURGESS & LEITH	1,109,453.02	3,538.00	0.00	0.00	0.00
BURNS FRY & TIMMINS	949,590.00	2,340.00	0.00	0.00	- 0.00
BUTCHER & SINGER	723,170.87	560.00	0.00	0.00	0.00
CABLE/HOWSE & RAGEN	1,149,894.35	2,714.00	0.00	0.00	0.00
CANTOR FITZGERALD	25,568,892.78	62,264.50	0.00	0.00	0.00
	25,508,892.78	0.00	0.00	0.00	16,000,000.00
CARROLL MCENTEE & MCGIN.	0.00	0.00	0.00	0.00	12,800,000.00
CHASE MANHATTAN BANK	0.00	0.00	0.00	0.00	9,800,000.00
CHEMICAL BANK N.Y.	117,096.08	400.00	0.00	0.00	0.00
CHICAGO CORP		500.00	0.00	0.00	0.00
CHRISTOPHER (B.C.) & CO.	302,812.50	0.00	0.00	0.00	90,703,111.11
CIT FINANCIAL CORP	0.00		0.00	0.00	244,803,028.86
CITIBANK	0.00	0.00	0.00	0.00	244,803,020.80
CONNING & COMPANY	5,974,794.42	15,428.00			0.00
COWEN & CO	17,682,263.17	38,709.90	0.00	0.00	0.00
CYRUS J. LAWRENCE	25,547,450.73	57,994.50	0.00	0.00	0.00
DAIN KALMAN & QUAIL	3,453,072.50	9,597.50	0.00	0.00	
DEAN WITTER REYNOLDS	123,723,354.59	287,303.70	3,920,260.00	11,000.00	303,705,000.00
DELAFIELD HARVEY TABELL	9,758,487.50	21,745.00	0.00	0.00	0.00 0.00
DILLON READ	45,346,808.88	113,283.57	0.00	0.00	
DISCOUNT CORP (N.Y.)	0.00	- 0.00	0.00,	0.00	99,765,000.00
DONALDSON LUFKIN	46,297,114.46	100,407.00	0.00	0.00	• 0.00
DREXEL BURNHAM LAMBERT	79,443,591.93	182,309.00	0.00	0.00	0.00.

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		EQUITY		BOND		SHORT TERM
	BROKER	DOLLAR VOLUME	EQUITY COMM	DOLLAR VOLUME	BOND COMM	DOLLAR VOLUME
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	EF HUTTON AND CO \$	40,991,078.54	\$ 98,150.00	\$ 0.00	\$ 0.00	\$ 0.00
	EBERSTADT (F) & CO	23,836,886.98	50,815.00	0.00	0.00	0.00
	EDWARDS A.G. & SONS	0.00	0.00	0.00	4,000.00	0.00
	ERNST & CO.	20,346,160.69	39,891.62	0.00	0.00	0.00
	FHLB DES MOINES	0.00	0.00	0.00	0.00	12,000,000.00
	FIRST BOSTON CORPORATION	96,937,021.58	209,214.55	7,000,000.00	16,100.00	4,496,192,100.00
	FIRST INTERSTATE BANK CAL	0.00	0.00	0.00	0.00	22,576,867.56
	FIRST INTERSTATE DALLAS	0.00/	0.00	0.00	0.00	5,000,000.00
	FIRST MANHATTAN COMPANY	47,987,506.21	106,942.50	0.00	0.00	0.00
	FIRST NATIONAL BANK BOSTON	0.00	0.00	0.00	0.00	1,000,000.00
	FIRST NATIONAL BANK CHICAGO	0.00	0.00	0.00	0.00	53,000,000.00
	FIRST NATIONAL BANK MPLS	0.00	0.00	0.00	0.00	193,356,000.00
	FIRST NATIONAL BANK ST. PAUL		0.00	0.00	0.00	185,829,000.00
	FRED ALGER & COMPANY	86,942,238.40	309,706.84	0.00	0.00	0.00
	GENERAL ELECTRIC CREDIT	1,543,975.51	3,346.00	0.00	0.00	84,639,000.00
	GENERAL MOTORS ACCEPTANCE	0.00	0.00	0.00	0.00	286,746,100.00
	GEORGE K. BAUM & CO.	29,336.64	144.00	0.00	0.00	288,748,100.00
	GOLDMAN SACHS & COMPANY	150,998,388.03	328,705.50	2,000,000.00	6,000.00	6,420,457,100.00
D S	HALSEY STUART & COMPANY	6,370,530.91	15,603.00	2,000,000.00	0.00	0.00
Л	HAMBRECHT & QUIST	914,850.00	. 2,052.00	0.00	0.00	0.00
	HARRIS TRUST & SAVINGS	0.00	0.00	0.00	0.00	
	HAYDEN STONE INC	605,129.78	1,225.00	0.00	0.00	13,000,000.00
	HOENIG & CO.	372,500.00	1,600.00	0.00	0.00	0.00
	HOUSEHOLD FINANCE	0.00	0.00	0.00	0.00	9,900,000.00
	INDEPENDENT STATE BANK	0.00	0.00	0.00	0.00	24,500,000.00
•	INSTANET	240,107,524.26	97,768.34	0.00	0.00	0.00
	INTERFIRST DALLAS	0.00	0.00	0.00	0.00	1,500,000.00
	INTERSTATE SECURITIES	4,678,072.50	5,651.00	0.00	0.00	0.0,0
	IRVING TRUST CO N.Y.	0.00	0.00	0.00	0.00	12,000,000.00
	JANNEY MONTGOMERY SCOTT	0.00	0.00	470,000.00	1,250.00	0.00
	JEFFERIES & CO	84,527,614.71	186,490.61	0.00	0.00	0.00
	JOHNSON LANE SPACE & SMITH	44,139,841.83	87,488.00	0.00	0.00	0.00
	JONES & ASSOCIATES	51,260,014.25	93,438.00	0.00	0.00	0.00
	JOSEPHTHAL & CO.	3,021,573.60	7,783.00	0.00	0.00	0.00
	KEEFE BRUYETTE & WOOD	14,165,431.25	32,546.00	0.00	0.00	0.00
	KIDDER PEABODY	93,365,622.33	217,263.45	29,638,968.30	85,175.00	15,219,479,000.00
	KIRKPATRICK & CO.	284,058.20	579.00	0.00	0.00	0.00
	KLEINWORT BENSON GOVT SEC	0.00	0.00	0.00	0.00	1,014,200,000.00
	KLEINWORTH BENSON INC	0.00	0.00	0.00	0.00	20,000,000.00
	L F ROTHSCHILD	7,651,225.12	18,700.00	0.00	0.00	-0.00
	LANSTON CO	0.00	0.00	0.00	0.00	4,120,000.00
	LAZARD FRERES & CO	702,470.63	2,280.00	497,800.00	1,250.00	0.00
	LEGG-MASON	38,795.00	170.00	0.00	0.00	0.00
	LEHMAN GOVT SECURITIES	0.00	0.00	191,400.00	500.00	10,586,887,844.44
	LEIBER & COMPANY	33,756,260.02	121,483.50	0.00	0.00	0.00

	EQUITY OLLAR VOLUME 2,848,961.23 1,012,371.50	EQUITY COMM \$ 58,225.52	BOND DOLLAR VOLUME	BOND COMM	SHORT TERM DOLLAR VOLUME
·		\$ 58 225 52			
LEWCO SECURITIES INC. \$ 2		Y JU/24JAJA	\$ 0.00	\$ 0.00	\$ 0.00
	T'OTT'3/T'3O	2,759.00	0.00	0.00	0.00
LYNCH JONES & RYAN	6,469,959.19	14,018.00	0.00	0.00	0.00
	1,693,956.00	5,340.00	0.00	0.00	0.00
MARQUETTE NATIONAL BANK	0.00	0.00	0.00	0.00	129,927,000.00
MCDONALD & COMPANY	629,639.48	2,338.00	0.00	0.00	0.00
MERRIL-PERFORMANCE MEASURE	2,331,793.13	5,811.58	0.00	0.00	0.00
MERRILL LYNCH - IDC 20	7,975,928.41	423,117.63	0.00	0.00	0.00
MERRILL LYNCH EVALUATION	2,257,325.00	4,560.00	0.00	0.00	0.00
MERRILL LYNCH P F & S 5	4,392,388.67	128,338.50	0.00	0.00	9,967,147.22
MERRILL LYNCH P F & S (R) 9	5,178,530.73	246,355.50	6,298,180.00	16,875.00	287,404,000.00
MESIROW AND COMPANY 2	4,604,930.00	46,413.50	0.00	0.00	0.00
MIDLAND NATIONAL BANK MPLS	0.00	0.00	0.00	0.00	6,800,000.00
MIDWAY NATIONAL BANK ST PAUL	0.00	0.00	0.00	0.00	1,500,000.00
	4,668,572.10	37,338.50	0.00	0.00	0.00 0.00
MOORE SCHLEY & CAMERON	2,022,106.34	2,247.00	0.00	0.00	
MORGAN GUARANTY	0.00	0.00	0.00	0.00	18,100,000.00 0.00
MORGAN STANLEY & CO 11	2,618,521.27	253,320.50	14,834,896.00	33,750.00	0.00
MOSELY (F.S.) & CO	81,685.00	310.00	0.00	0.00	0.00
MURPHY, BARRY W.	328,720.00	560.00	0.00	0.00	7,500,000.00
NATIONAL CITY BANK MPLS	0.00	0.00	0.00	0.00	0.00
	1,889,896.25	27,521.00	0.00	0.00	0.00
	3,529,660.00	8,360.00	0.00	0.00	243,547,000.00
NORWEST BANK MPLS	0.00	0.00	0.00	0.00	0.00
	5,649,459.26	129,214.17	0.00	0.00	0.00
	5,660,188.03	425,691.00	0.00	0.00	1,434,344,000.00
	8,642,669.18	225,055.50	, 0.00	0.00	15,456,000.00
PENNEY (J.C.) FINANCE	0.00	0.00	0.00	0.00	0.00
PFORZHEIMER CARL H.	347,613.39	450.00	0.00	0.00	0.00
PIPER JAFFRAY & HOPWOOD	1,675,382.50	5,377.00	0.00	0.00	0.00
	2,602,575.00	8,457.50	0.00	0.00	0.00
PRESCOTT BALL & TURBAN	3,618,083.30	7,909.00	1,243,282.50	3,667.50	0.00
PRINTON & KANE	0.00	25,681.00	0.00	0.00	0.00
	1,844,527.37	225,881.00	16,571,949.00	47,500.00	1,391,816,000.00
• • • • • • • • • • • • • • • • • • • •	9,436,524.55	4,450.00	0.00	0.00	0.00
QUANTITATIVE ANALYSIS	2,127,873.74	2,700.00	0.00	0.00	0.00
QUEST SECURITIES INC	1,052,700.00	6,000.00	0.00	0.00	0.00
R.C. STAMM	2,696,575.00	0.00	0.00	0.00	5,292,000.00
REPUBLIC BANK DALLAS	0.00	0.00	0.00	0.00	7,284,705.66
REPUBLIC NATL. BANK N.Y.	0.00	0.00	0.00	0.00	13,864,973.62
RESEARCH MANAGEMENT ASSOC	0.00	940.00	0.00	0.00	0.00
ROBERTSON COLMAN & STEPH	206,439.22	5,200.00	0.00	0.00	0.00
ROBINSON-HUMPHREY CO RODMAN & RENSHAW	2,275,000.00 0.00	0.00	3,405,130.00	8,875.00	0.00

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		EQUITY		BOND	•	
	BROKER	DOLLAR VOLUME	EQUITY COMM	DOLLAR VOLUME	BOND COMM	SHORT TERM
			Agoiii comm	DOBIAR VOLOME	BOND COMM	DOLLAR VOLUME
	ROONEY PACE INC.	123,662.50	\$ 700.00	\$ 0.00	\$ 0.00	\$ 0.00
	ROTAN MOSLE	1,622,294.24	4,763.00	0.00	0.00	¢ 0.00
	SALOMON BROTHERS	177,135,354.76	336,252.65	20,753,841.50	82,478.75	15,151,906,200.00
	SANFORD C. BERNSTEIN	52,063,762.51	129,806.50	0.00	0.00	0.00
	SEARS ROEBUCK ACCEPTANCE	0.00	0.00	0.00	0.00	65,681,000.00
	SECURITIES SETTLEMENT COF	RP 1,853,164.47	3,594.00	0.00	0.00	0.00
	SECURITY PACIFIC BANK	0.00	0.00	0.00	0.00	5,000,000.00
	SHEARSON ARGUS RESEARCH	869,970.83	5,000.00	0.00	0.00	0.00
	SHEARSON COMPUTER	0.00	0.00	3,000,000.00	8,500.00	0.00
	SHEARSON LEHMAN (BONDSTAT		0.00	5,000,000.00	14,500.00	0.00
	SHEARSON LEHMAN AMER EXP.		172,996.80	5,110,625.00	13,812.00	33,744,000.00
	SHEARSON/AMERICAN EXPRESS	85,228,997.87	188,768.50	0.00	0.00	0.00
	SMITH BARNEY & COMPANY	171,337,944.17	380,928.25	963,760.00	2,500.00	0.00
	SOWARBY (JOHN) ASSOCIATES		0.00	0.00	0.00	10,593,000.00
СÖ	SUTRO & COMPANY INC	274,915.12	922.00	0.00	0.00	0.00
7	SYNDICATION	0.00	0.00	14,922,190.00	0.00	0.00
	THOMSON & MCKINNON	2,732,347.08	3,980.00	4,000,000.00	8,600.00	0.00
	TRANSAM FINANCIAL	0.00	0.00	0.00	0.00	21,015,000.00
	TUCKER ANTHONY & R.L. DAY		17,820.00	0.00	0.00	0.00
	TUCKER ANTHONY (L. BAILEY		5,574.00	0.00	0.00	0.00
	UNION BANK OF L.A.	0.00	0.00	0.00	0.00	63,590,000.00
	W.E. POLLOCK & COMPANY	0.00	0.00	0.00	0.00	1,119,834,000.00
	WAGNER STOTT & CO.	663,340.91	2,234.00	0.00	0.00	0.00
	WALL STREET CLEARING	112,050.00	300.00	0.00	0.00	0.00
	WALTER HELLER & CO	0.00	0.00	0.00	0.00	123,668,844.44
	WEEDEN & COMPANY	43,506,625.00	86,566.00	0.00	0.00	0.00
	WEISS	1,580,668.28	3,580.00	0.00	0.00	0.00
	WELLS FARGO BANK	0.00	0.00	0.00	0.00	517,531,000.00
	WERTHEIM & COMPANY	32,835,437.51	72,613.25	11,786,600.00	31,000.00	0.00
	WERTHEIM MEASUREMENT	229,592.33	400.00	0.00	0.00	0.00
	WESTINGHOUSE CREDIT	0.00	0.00	0.00	0.00	49,126,000.00
	WILLIAM BLAIR & CO.	3,580,985.37	11,042.00	0.00	0.00	0.00
	WILLIAM O NEIL & CO	47,955.00	80.00	0.00	0.00	0.00
	WILSHIRE ASSOCIATES	18,550,713.36	35,986.50	0.00	· 0.00	0.00
	WILSHIRE_EQUITY_MGRSERV		15,000.00	0.00	0.00	0.00
	WOOD GUNDY & COMPANY	11,409,338.64	25,037.00	0.00		0.00
	ALL BROKERS COMBINED	\$3,606,264,379.86	\$7,416,760.96	\$161,370,664.39	\$437,143.56	\$68,269,872,600.69

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TIME-WEIGHTED RATE OF RETURN

In measuring the performance of a manager or fund whose investment objective is to maximize the total value of an investment portfolio, the proper measuring tool is the time-weighted total rate of return. This performance measure includes the effect of income earned as well as realized and unrealized portfolio market value changes. In addition, the time-weighted total rate of return nets out the influence of contributions made to and distributions taken from the manager or fund. These are variables over which the manager or fund generally has no control.

The calculation of a portfolio's true time-weighted return requires that the portfolio be valued every time that there is a capital flow in or out. Because most portfolios are not valued that frequently, it is usually necessary to estimate the time-weighted total rates of return by approximating the required valuations.

In 1968, the Bank Administration Institute (BAI) commissioned a study, conducted by the University of Chicago, which considered desirable methods of estimating time-weighted returns. The BAI report is considered to be the definitive work in the field of performance measurement because of the academic reputations and thorough scientific efforts of its authors.

When monthly data are available, the BAI study recommends employing a technique called the linked internal rate of return (LIRR). Merrill Lynch, the SBI's performance measurement consultant, calculates the LIRR by solving the following equation for R:

VB*(1+R) + C*(1+R)**1/2 = VE

Where:

VB = Value of the fund at the beginning of the month

VE = Value of the fund at the end of the month

C = Assumed single mid-month net cash flow

R = Internal rate of return

The internal rate of return, R, is a proxy for the true time-weighted return over the month. It approximates the interim valuations by assuming a 'uniform growth of the invested assets throughout the period.

The IRR's calculated for each month can be linked together to estimate the time-weighted return for a longer period. For example, given three consecutive monthly IRR's - R1, R2, and R3, the quarterly time-weighted return (TWRQ) is:

$$TWRQ = (1+R1)*(1+R2)*(1+R3) - 1$$



OFFICE OF THE LEGISLATIVE AUDITOR

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JAMES R. NOBLES, LEGISLATIVE AUDITOR

STATE OF MINNESOTA

The State Board of Investment and

Howard J. Bicker, Executive Director

We have examined the combining and individual fund financial statements, including the portfolio of investments, and the supplementary schedule of participation of the Investment Trust Funds of the Minnesota State Board of Investment as of and for the year ended June 30, 1984 as shown on pages 91 to 183. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. Securities owned at June 30, 1984 were counted by us when held by the State Treasurer or were confirmed to us when held by other custodians.

Required reserves, which determine participation in the Post Retirement Investment Fund, are presented in accordance with reports certified by the consulting actuaries for the various pension funds participating in the fund.

In our opinion, the aforementioned combining financial statements PRESENT FAIRLY the net assets and participation of the INVESTMENT TRUST FUNDS of the State of Minnesota at June 30, 1984, and the results of their operations and changes in their net assets for the year then ended, in conformity with generally accepted accounting principles which, except for the change in reporting entity as discussed in the Summary of Significant Accounting Policies, have been applied on a basis consistent with that of the preceding fiscal year.

In our opinion, relying on the certifications from the consulting actuaries as to reserves required for the Post Retirement Investment Fund, as discussed previously, the aforementioned financial statements PRESENT FAIRLY the net assets and participation of the SUPPLEMENTAL RETIREMENT FUND and its components, the INCOME SHARE, GROWTH SHARE, FIXED RETURN, and BOND accounts, the POST RETIREMENT INVESTMENT FUND, the VARIABLE ANNUITY FUND and the ACTIVE EQUITY FUND at June 30, 1984 and the results of their operations and changes in their net assets for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding fiscal year. The State Board of Investment and Howard J. Bicker, Executive Director

In our opinion, the aforementioned financial statements PRESENT FAIRLY the net assets and participation of the BASIC RETIREMENT POOLED FUNDS and the PASSIVE EQUITY FUND, REAL ESTATE FUND, RE-SOURCE FUND, VENTURE CAPITAL FUND, BOND FUND, and MONEY MARKET FUND at June 30, 1984 and the results of their operations and changes in their net assets for the year then ended, in conformity with generally accepted accounting principles.

Sincerely,

Janes R. Nobles Legislative Auditor

November 19, 1984

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John Asmussen, CPA Deputy Legislative Auditor

STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS COMBINING STATEMENT OF ASSETS AND LIABILITIES JUNE 30, 1984

	SUPPLEMENTAL RETIREMENT FUND TOTAL	POST RETIREMENT INVESTMENT FUND	VARIABLE (4) ANNUITY FUND	BASIC RETIREMENT POOLED_FUNDS	TOTAL
ASSETS:					
INVESIMENTS (at market value)(1)					
Common Stock	\$ 87,503,669	\$ 650,034,806	\$ 82,036,515	\$ 1,686,649,400	\$ 2,506,224,390
Alternative Equities	-0-	-0-	-0-	167,919,43 2	167,919,43 2
Fixed Income Securities Short Term Securities	85,021,765	924,432,719	4,901,550	826,747,938	1,841,103,972
TOTAL INVESTMENTS(2)	<u>46,627,795</u> \$ 219,153,229	252,034,000	8,972,877	292,716,548	600,351,220
IOTAL INVESTMENTS(2)	\$ 219,153,229	\$ 1,826,501,525	\$ 9 5,910 ,94 2	\$ 2,974,033,318	\$ 5,115, 59 9,014
Cash With State Treasurer	551	612	217	14	1,394
Security Sales Receivable	1,191,319	9,588,843	847,506	19,846,440	31,474,108
Accounts Receivable Mortality	-0	9,223,205	-0-'	-0-	9,223,205
Accounts Receivable-Participants	-0-	6,533,620	-0-	-0	6,533,620
Accrued Interest	2,550,981	29,902,893	78,736	22,526,040	55,058,650
Accrued Dividends	400,444	3,580,377	286,728	7,530,953	11,798,502
Accrued Short Term Gain	128,098	686,944	2,878	2,555,107	3,373,027
TOTAL ASSETS	\$ 223,424,622	\$ 1,886,018,019	\$ 97,127,007	\$ 3,026,491,872	\$ 5,233,061,520
LIABILITIES:					*
Management Fees Payable	114,037	331,321	115,008	85 0,625	1,410,991
Security Purchases Payable	3,365,784	19,686,152	1,937,435	14,475,113	39,464,484
Accounts Payable to Teachers	-0-	-0-	267,724	-0-	267,724
Options Premiums Received	0	<u>121,550</u> (3)	-0-	<u>-0-</u>	121,550
TOTAL LIABILITIES	\$ 3,479,821	\$ 20,139,02 3	\$ 2,320,167	\$ 15,325,738	\$ 41,264,749
NET ASSETS AT JUNE 30, 1984	<u>\$ 219,944,801</u>	<u>\$ 1,865,878,996</u>	<u>\$ 94,806,840</u>	\$ 3,011,166,134	<u>\$ 5,191,796,771</u>
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				•	
(1) The cost of investments at June 30, was:			•	- v,	
Common Stock	\$ 94,224,99 1	\$ 675,298,750	\$ 88,839,877	\$ 1,855,597,064	\$ 2,713,960,682
Alternative Equities	-0-	-0	-0	157,126,365	157,126,365
Fixed Income Securities	99,173,739	1,041,511,250	5,000,764	828,740,387	1,974,426,140
Short Term Securities	46.627.795	252,034,000	8.972.877	292,716,548	600,351,220
Total Investments at Cost	\$ 240.026.525	\$ 1,968,844,000	\$ 102,813,518	\$ 3,134,180,364	\$ 5,445,864,407
		· · · · · · · · · · · · · · · · · · ·			
(2) The cost of loaned securities		·		•	-
outstanding at June 30, was:	\$ 1,639,141	\$ 71,105,102	\$ -0	\$ ⁺ -0-	\$ 72,744,243

STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS COMBINING STATEMENT OF CHANGES IN NET ASSETS YEAR ENDED JUNE 30, 1984

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	5	SUPPLEMENTAL RETIREMENT FUND TOTAL		ST RETIREMENT INVESTMENT FUND		VARIABLE (4) ANNUITY FUND		BASIC RETIREMENT POOLED FUNDS		TOTAL
FROM INVESTMENT ACTIVITY:										
Net Investment Income	\$	17,202,163	\$	162,467,706	\$	4,339,777	\$	90,943,084	\$	274,952,730
Realized Gains (Losses)	· ·	6,950,051		42,263,254		3,902,257		(38,713,705)		14,401,857
Unrealized Gains (Losses)	<u> </u>	(33,845,695)	<u> </u>	(264,396,146)		(19,423,648)		(214,657,961)	<u> </u>	(532,323,450)
TOTAL INCOME	\$	(9,693,481)	\$	(59,665,186)	\$	(11,181,614)	\$	(162,428,582)	\$	(242,968,863)
		• •				· 1.	•			,
Less Distribution to		F 177 450		(02 101 257)		(10 505 516)		(40.015.013)		(1) 21 245 020)
Participant Accounts		5,177,450		(83,181,357)		(10,525,516)		(42,815,613)		(131,345,036)
Undistributed Dedicated Income		-0-		(111,514,807)		-0-	-	1,090,356		(110,424,451)
NET CHANGE IN UNDISTRIBUTED INCOME	\$	(4,516,031)	\$	(254,361,350)	\$	(21,707,130)	\$	(204,153,839)	\$	(48 4,738,350)
FROM PARTICIPANT TRANSACTION: Additions to Participant Accounts						'				6 6 10 × 10 mm
Participant Contributions		11,931,161		277,990,549		9,190		2,558,268,776		2,848,199,676
Income Distribution		(5 ,177,4 50)		83,181,357		10,525,516		42,815,613		131,345,036
Income to be Distributed		<u>-0-</u>	<u> </u>	111,514,807		<u> </u>		(1,090,356)	<u> </u>	110,424,451
TOTAL ADDITIONS	Ş	6,753,711	Ş	472,686,713	Ş	10,534,7 0 6	Ş	2 ,599,994,03 3	Ş	3,0 89,969,16 3
Deductions from										•
Participant Accounts				· · · · · · · · · · · · · · · · · · ·		,	•			
Withdrawals	<u> </u>	4,207,566	<u> </u>	136.867.738	<u></u>	803,259		-0-		141,878,563
TOTAL DEDUCTIONS	<u>\$</u>	4,207,566	<u>\$</u>	136,867,738	<u>\$</u>	803,259	<u> </u>	-0-	<u>\$</u>	141,878,563
NET CHANGE IN PARTICIPATION	\$	2,546,145	Ş	335,818,975	Ş	9,731,447	Ş	2,599,994,033	\$	2,948,090,600
TOTAL CHANGE IN ASSETS		(1,969,886)		81,457,625		(11,975,683)		2,395,840,194		2 ,46 3,352 ,25 0
NET ASSETS:								,		-
Beginning of Period		221,914,687		1,784,421,371		106.782.523		615,325,940		2,728,444,521
End of Period	Ś	219,944,801	Ś	1,865,878,996	s	94.806.840	\$	3,011,166,134	\$	5.191.796.771

STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS COMBINING STATEMENT OF OPERATIONS YEAR ENDED JUNE 30, 1984

	SUPPLEMENTAL RETIREMENT FUND TOTAL	POST RETIREMENT INVESTMENT FUND	VARIABLE (4) ANNUITY FUND	BASIC RETIREMENT POCLED FUNDS	TOTAL
INVESTMENT INCOME:	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
Interest	\$ 9,945,521	\$ 120,932,350	\$ 473,981	\$ 21,924,315	\$ 153,276,167
Dividends	3,772,682	31,662,679	2,827,665	53,103,510	91,3 6 6,536
Short Term Gains	3.771.445	10,203,998	1,341,264	19,368,771	34,685,478
INCOME BEFORE EXPENSES	\$ 17,489,648	\$ 162,799,027	\$ 4,642,910	\$ 94,396,596	\$ 279,328,181
Management Fee-Outside Managers	(287,485)	(331,321)	(303,133)	(3,453,512)	(4.375.451)
NET INCOME	\$17,202,163	\$ 162.467.706	\$ 4.339.777	\$ 90,943,084	\$ 274.952.730
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS			ار داری این این این این این این این این این ای		
Realized:	•				-
Proceeds from Sales	\$ 151,165,440	\$ 641,246,98 5	\$ 130,854,491	\$ 2,409,794,847	\$ 3,333,061,763
Cost of Securities Sold	144,215,389	<u> </u>	126,952,234	<u>2,448,508,553</u>	3,318,659,907
NET REALIZED GAIN (LOSS) Unrealized	\$ 6 ,9 50 ,0 51	\$ 42,263,254	\$ 3 ,90 2 ,2 57	\$ (38,713,706)	\$ 14,401,8 56
Beginning of Period	12,972,399	122,368,389	12,521,072	5 4, 51 0,9 14	202,372,774
End of Period	(20,873,296)	(142,027,757)	<u>(6,902,576</u>)	(160,147,027)	(329,950,656)
INCREASE (DECREASE) IN		• .			
UNREALIZED APPRECIATION	<u>\$ (33,845,695</u>)	<u>\$ (264,396,146)</u>	<u>\$ (19,423,648</u>)	<u>\$ (214,657,941</u>)	<u>\$ (532,323,430</u>)
NET REALIZED AND UNREALIZED					
GAIN (LOSS) ON INVESTMENT	<u>\$ (26,895,644</u>)	<u>\$ (222,132,892</u>)	<u>\$ (15,521,391</u>)	<u>\$ (253,371,647</u>)	<u>\$ (517,921,574</u>)
		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	

STATE BOARD OF INVESTMENT MINNESOTA SUPPLEMENTAL RETIREMENT FUND COMBINING STATEMENT OF ASSETS AND LIABILITIES JUNE 30, 1984

	INCOME SHARE ACCOUNT	GROWIH SHARE ACCOUNT	FIXED RETURN ACCOUNT	BOND -	SUPPLEMENTAL RETIREMENT FUND TOTAL
ASSETS:					• •
INVESIMENTS (at market value)(1)					
Common Stock	\$ 60,426,777	\$	\$ -0-	\$ -0-	\$ 87,503,669
Fixed Income Securities	38,715,034	-0-	43,466,393	2,840,338	85,021,765
Short Term Securities	10,934,330	27.063.465	8,533,000	97,000	46,627,795
TOTAL INVESTMENTS(2)	\$ 110,076,141	\$ 54,140,357	\$ 51,999, 393	\$ 2,937,338	\$ 219,153,229
Cash With State Treasurer	162	(1,018)	890	517	551
Security Sales Receivable	666,997	524,322	-0-	-0	1,191,319
Accounts Receivable-Mortality	-0-	-0-	-0-	-0-	-0-
Accounts Receivable-Participants	-0-	·0	-0	-0	· -0-
Accrued Interest	1,099,719	-0-	1,358,268	92 , 9 94	2,550,981
Accrued Dividends	273,269	127,175	-0-	-0-	400,444
Accrued Short Term Gain	6,938	113,647	7.513	<u> </u>	128,098
TOTAL ASSETS	\$ 112,123,226	\$ 54,904,483	\$ 53,366,064	\$ 3,030,849	\$ 223,424,622
• • • •		· · ·			
LIABILITIES:			0.050	177	114,037
Management Fees Payable	42,029	62,479	9,052	477 -0	3,365,784
Security Purchases Payable	1,751, 1 65	690,189	924,430	-0- -0-	-0-
Accounts Payable to Teachers	-0-	-0-	-0-	-0 -0	-0-
Options Premiums Received	-0-	-0-	<u>-0-</u> \$ 933,482	\$ 47 7	\$ - 3,479,821
TOTAL LIABILITIES	\$ 1,793,194	\$ 752,668	\$ 933,482		
NET ASSETS AT JUNE 30, 1984	<u>\$ 110,330,032</u>	<u>\$ 54,151,815</u>	<u>\$ 52,432,582</u>	<u>\$ 3,030,372</u>	<u>\$ 219,944,801</u>
•.		فيالي المشعلية بالرجي في المنابعة إلى والمشعلية في			المالي ال والي العالم الي العالم بين المالي على الع الم العالم العالم الم
				•	
(1) The cost of investments at June 30, was:			s -0-	s -0-	\$ 94,224,991
Common Stock	\$ 64,721,701	\$ 29,503,290	\$	2,990,747	99,173,739
Fixed Income Securities	45,894,921	-0-		97,0 00	46,627,795
Short Term Securities	10,934,330	27.063.465	8,533,000	\$ 3.087.747	\$ 240,026,525
Total Investments at Cost	\$ 121,550,952	<u>\$ 56,566,755</u>	\$ 58.821.071	<u>ş </u>	A1V19AV194
(2)The cost of loaned securities	and a second second second second second second second second second second second second second second second			•	
(2) The cost of loaned securities outstanding at June 30, was:	\$ 460,000	\$ -0-	\$ 85 0,000	\$ 329,141	\$ 1,639,141

STATE BOARD OF INVESTMENT MINNESOTA SUPPLEMENTAL RETIREMENT FUND COMBINING STATEMENT OF CHANGES IN NET ASSETS YEAR ENDED JUNE 30, 1984

		INCOME SHARE ACCOUNT		GROWTH SHARE ACCOUNT		FIXED RETURN ACCOUNT	- <u></u>	BOND (6)	SUPPLEMENTAL RETIREMENT FUND TOTAL
FROM INVESIMENT ACTIVITY: Net Investment Income Realized Gains (Losses) Unrealized Gains (Losses)	\$	8,179,927 4,503,771 (19,120,623)	\$	3,029,728 2,445,151 (10,213,500)	\$	5,675,231 1,129 (4,231,917)	\$	317,277 -0- (279,655)	\$ 17,202,163 6,950,051 (33,845,695)
TOTAL INCOME Less Distribution to Participant Accounts Undistributed Dedicated Income NET CHANGE IN UNDISTRIBUTED INCOME	\$ 	(6,436,925) 6,436,925 <u>-0-</u> -0-	\$	(4,738,621) 4,738,621 -0-	\$ 	1,444,443 (5,687,558) (4,243,115)	\$ \$	37,622 (310,538) -0- (272,916)	\$ (9,693,481) 5,177,450 <u>-0-</u> (4,516,031)
FROM PARTICIPANT TRANSACTION: Additions to Participant Accounts Participant Contributions Income Distribution Income to be Distributed TOTAL ADDITIONS Deductions from	Ş	4,293,085 (6,436,925) -0- (2,143,840)	\$	344,192 (4,738,621) -0- (4,394,429)	ş	6,457,914 5,687,558 <u>-0-</u> 12,145,472	\$	835,970 310,538 <u>-0-</u> 1,146,508	\$ 11,931,161 (5,177,450) 6,753,711
Participant Accounts Withdrawals TOTAL DEDUCTIONS NET CHANGE IN PARTICIPATION TOTAL CHANGE IN ASSETS	\$ \$	2.270.436 2.270.436 (4,414,276) (4,414,276)	\$\$	<u>-0-</u> (4,394,429) (4,394,429)	\$\$	<u>1,937,130</u> (5) <u>1,937,130</u> 10,208,342 5,965,227	<u>\$</u> \$ *	<u>-0-</u> <u>-0-</u> 1,146,508 873,592	\$ <u>4.207.566</u> <u>4.207.566</u> 2,546,145 (1,969,886)
NET ASSETS: Beginning of Period End of Period	\$	114.744.308 110.330.032	\$	58,546,244 54,151,815	\$	<u>46,467,355</u> 52,432,582	<u>\$</u>	2,156,780	\$ 221,914,687 219,944,801

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STATE BOARD OF INVESTMENT MINNESOTA SUPPLEMENTAL RETIREMENT FUND COMBINING STATEMENT OF OPERATIONS YEAR ENDED JUNE 30, 1984

•		INCOME SHARE ACCOUNT		GROWITH SHARE ACCOUNT		FIXED RETURN ACCOUNT		BOND ACCOUNT		SUPPLEMENTAL RETIREMENT FUND TOTAL
INVESTMENT INCOME:										
Interest	\$	4,673,464	\$	13,096	\$	4,956,712	\$	3 02,249	\$	9,945,521
Dividends		2,558,831		1 ,21 3,851		-0		-0		3,772,682
Option Income		-0-		-0-		-0-		-0-	• •	-0-
Short Term Gains		1.060.564		1,967,805		727.571		15,505		3,771,445
INCOME BEFORE EXPENSES	\$	8,292,859	\$	3 ,194,75 2	\$	5 ,684, 283	\$	317,754	\$	17 ,489,64 8
Management Fee-Outside Managers		(112,932)		(165.024)		(9,052)		(477)		(287,485)
NET INCOME	\$	8,179,927	\$	3.029.728	\$	5,675,231	\$	317.277	\$	17,202,163
				· ····································						
REALIZED AND UNREALIZED GAIN		`						·		
(LOSS) ON INVESTMENTS										
Realized:						· .				
Proceeds from Sales	\$	82,371,797	\$	68,407,539	\$	386,104	\$	-0-	\$	151,1 6 5,4 40
Cost of Securities Sold		77.868.026		65,962,388		384.975		-0-	<u></u>	<u>144,215,389</u>
NET REALIZED GAIN (LOSS)	\$	4,503,771	\$	2,445,151	\$	1,129	\$	↓ −0−	\$	6 ,95 0,051
Unrealized										*
Beginning of Period		7,645,812		7,787,102		(2,58 9,761)		129,246		12,972,39 9
End of Period		(11,474,811)	_	(2,426,398)		<u>(6,821,678</u>)		(150,409)		<u>(20,873,296</u>)
INCREASE (DECREASE) IN			·							
UNREALIZED APPRECIATION	\$	(19,120,623)	\$	(10,213,500)	\$	(4,231,917)	\$	(279,655)	\$	(33,845,695)
NET REALIZED AND UNREALIZED		• •								
GAIN (LOSS) ON INVESTMENT	<u>\$</u>	(14,616,852)	\$	(7,768,349)	<u>\$</u>	(4,230,788)	<u>\$</u>	(279,655)	\$	(26,895,644)
				 						

STATE BOARD OF INVESTMENT MINNESOTA FOOLED FUNDS COMBINING STATEMENT OF ASSETS AND LIABILITIES JUNE 30, 1984

*

						•		
	ACTIVE EQUITY FUND	PASSIVE EQUITY FUND	REAL ESTATE FUND	RESOURCE	VENIURE CAPITAL FUND	BOND FUND	MONEY MARRET FUND	BASIC RETIREMENT POOLED FUNDS TOTAL
ASSETS:								
INVESTMENTS (at market value)(1)								
Common Stock	\$ 441,679,745	\$1,244,969,655	\$ -0-	\$ <u>-0-</u>	\$ -0 4,375,000	\$ -0 -0	\$ -0- -0-	\$ 1,686,649,400 167,919,432
Alternative Equities	-0-	-0-	140,493,313	23,051,119 -0-	4,3/3,000	807,677,389	-0-	826,747,938
Fixed Income Securities	18,113,497	957,052	25.613.143	1,111,066	25,054,234	24,958,876	140,436,906	292.716.548
Short Term Securities	<u>66,942,566</u> \$ 526,735,808	<u>8,599,757</u> \$1,254,526,464	\$ 166,106,456	\$ 24,162,185	\$ 29,429,234	\$ 832,636,265	\$ 140,436,906	\$ 2,974,033,318
TOTAL INVESTMENTS(2)	≥ 520,/35,608	\$1 ,234,320,40 4	\$ 100,100,430	* X411071101	V 2314231434	\$ 832,630,20J	4 140,450,500	* 2151410551510
Cash With State Treasurer	8	1	1	· -0-	1	3	-0-	· 14
Security Sales Receivable	16,242,051	3,604,389	- o -	-0-	_0 _	0_	-0	19,846,440
Accounts Receivable-Mortality	-0-	-0	-0	-0-	-0-	-0- ·	-0-	-0-
Accounts Receivable-Participants	-0-	-0-	-0-	-0-	-0-	-0-	-0-	- - -
Accrued Interest	822,346	4,742	-0-	-0-	-0-	21,698,952	-0-	22,526,040
Accrued Dividends	1,635,530	5,895,423	-0-	-0-	-0	-0	-0-	7,530,953
Accrued Short Term Gain	614.687	<u>75,091</u>	222.378	9,646	218.702	195,303	1,219,300	2,555,107
TOTAL ASSETS	\$ 546,050,430	\$1,264,106,110	\$ 166,328,835	\$ 24,171,831	\$ 29,647,937	\$ 854,530,523	\$ 141,656,206	\$ 3,026,491,872
LIABILITIES:			•	•		· · · ·		**
Management Fees Payable	807,647	42.978		-0-	-0-	-0-	-0-	- 850,625
Security Purchases Payable	11,814,227	2,660,886		- Č -	-0-	-0-	- 0	14,475,113
Accounts Payable to Teachers	-0-	-0-	- o -	-0-	-0-	- 0 -	-0-	-0-
Options Premiums Received	-0-	-0-	-0-	-0-	-0-	-0-	-0-	_0_
TOTAL LIABILITIES	\$ 12,621,874	\$ 2,703,864	\$ -0-	\$ -0-	\$ -0-	₽ -0-	\$ -0-	\$ 15,325,738
NET ASSETS AT JUNE 30, 1984	\$533,428,556	\$1.261.402.246	<u>\$ 166,328,835</u>	<u>\$24,171,831</u>	<u>\$ 29.647.937</u>	<u>\$ 854.530.523</u>	<u>\$ 141.656.206</u>	\$ 3.011.166.134
								<u> </u>
			÷ ' ·				· · · ·	
(1) The cost of investments			• •					-
at June 30, was:	\$ 472.190.773	\$1,383,406,291	s0	s -0-	s _0_	s -0-	\$0	\$ 1,855,597,064
Ommon Stock Alternative Equities	-0-	-0-	129,700,246	23,051,119	4,375,000	-0	_0_	157,126,365
Fixed Income Securities	19,053,856	965,697	-0-	-0-	-0-	808,720,834	-0-	828,740,387
Short Term Securities	66.942.566	8,599,757	25,613,143	1,111,066	25,054,234	24.958.876	140,436,906	292.716.548
Total Investments at Oost	\$ 558,187,195	\$1.392.971.745	\$ 155,313,389	\$ 24.162.185	\$ 29.429.234	\$ 833.679.710	\$ 140,436,906	<u>\$ 3,134,180,364</u>
							 	
(2) The cost of loaned securities	-						• •	0 165 200 244
outstanding at June 30, was:	\$ 35,227,313	\$ 113,287,485	\$-0-	·\$ -0	ş -0	\$ 16,865,546	ş -0-	\$ 165,380,344
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STATE BOARD OF INVESTMENT MINNESOTA FOOLED FUNDS COMBINING STATEMENT OF CHANGES IN NET ASSETS YEAR ENDED JUNE 30, 1984

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	ACT EQU	ITY EQUITY	: REAL ESTATE FUND	RESOURCE	VENIURE CAPITAL FUND	BOND	MONEY Market Fund	BASIC RETIREMENT POOLED FUNDS TOTAL
FROM INVESTMENT ACTIVITY: Net Investment Income Realized Gains (Losses) Unrealized Gains (Losses)	(15,) (85,)	837,263 \$ 39,453 825,345) 13,74 962,302) (138,44 950,384) \$ (85,24	,314 - ,281)10,793.0	-00- 0670	\$ 647,937 -0- <u>-0-</u> \$ 647,937	\$ 18,979,078 (36,633,674) (1,043,445) \$ (18,698,041)	\$ 10,504,122 -0- -0- \$ 10,504,122	\$ 90,943,084 (38,713,705) (214,657,961) \$ (162,428,582)
TOTAL INCOME Less Distribution to Participant Accounts Undistributed Dedicated Incon NET CHANGE IN UNDISTRIBUTED	(4,	819,565) (52,50	(1,135,5 (1,304)	522) (383,590 -00	-		-0- -0- \$ 10,504,122	(42,815,613) <u>1,090,356</u> \$ (204,153,839)
FROM PARTICIPANT TRANSACTION: Additions to Participant Acco Participant Contribution Income Distribution Income to be Distributed TOTAL ADDITIONS	ounts B 4,	53,000 1,346,64 819,565 52,50	5,641 154,400,2 5,582 1,135,5 7,304	522 383,590 -0	29,000,000 647,937 -0- \$ 29,647,937	873,228,564 (16,674,583) (980.013) \$ 855,573,968	131,152,084 -0- <u>-0-</u> \$ 131,152,084	2,558,268,776 42,815,613 (1,090,356) \$ 2,599,994,033
Deductions from Participant Accounts O Withdrawals O TOTAL DEDUCTIONS NET CHANGE IN PARTICIPAT TOTAL CHANCE IN ASS		<u>-0-</u> <u>5</u> 064,918 \$ 1,399,84 897,384) 1,261,40			-0- \$ -0- \$ 29,647,937 29,647,937	<u>-0-</u> \$ 855,573,968 854,530,523	<u>-0-</u> <u>\$ -0-</u> \$ 131,152,084 141,656,206	<u>-0-</u> <u>\$</u> 2,599,994,033 2,395,840,194
NET ASSETS: Beginning of Period End of Period		325.940 428.556 \$_1.261.40	<u>-0-</u> 2,246 \$ <u>166,328,8</u>	<u>-0-</u> <u>-0-</u> 835 <u>\$</u> 24.171.831	<u>-0-</u> \$29.647.937	-0- \$ 854.530.523	<u>-0-</u> <u>\$ 141,656,206</u>	<u>615.325.940</u> <u>\$_3.011.166.134</u>

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STATE BOARD OF INVESTMENT MINNESOTA POOLED FUNDS COMBINING STATEMENT OF OPERATIONS YEAR ENDED JUNE 30, 1984

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INVESTMENT INCOME:	ACTIVE EQUITY FUND	PASSIVE EQUITY FUND	REAL ESTATE FUND	RESOURCE	VENTURB CAPITAL FUND	BOIND FUND	MOREY MARKET FUND	BASIC RETIREMENT POOLED FUNDS TOTAL
Interest Dividends Short Term Gains INCOME BEFORE EXPENSES Management Fee-Outside Managers NET INCOME	\$ 2,032,049 14,431,891 <u>6,730,790</u> \$ 23,194,730 <u>3,357,467</u> \$ 19,837,263	\$ 1,202,856 38,344,019 <u>4,742</u> \$ 39,551,617 <u>96,045</u> \$ 39,455,572	\$ -0- -0- 1,135,522 \$ 1,135,522 -0- \$ 1,135,522	\$ -0- 327,600 <u>55,990</u> \$ 383,590 <u>-0-</u> \$ 383,590	\$ -0- -0- <u>647,937</u> \$ 647,937 <u>-0-</u> \$ 647,937	\$ 18,689,410 -0- 289,668 \$ 18,979,078 -0- \$ 18,979,078	\$ -0- -0- <u>10,504,122</u> \$ 10,504,122 -0- \$ 10,504,122	\$ 21,924,315 53,103,510 <u>19,368,771</u> \$ 94,396,596 <u>3,453,512</u> \$ 90,943,084
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS Realized: Proceeds from Sales Cost of Securities Sold	\$ 572,541,966 588,367,312	\$ 1,109,510,453 1.095,765,139	\$ -0-	\$ -0- 	\$ -0-	* 727,742,428 764,376,102	\$ -0- 	\$ 2,409,794,847 2,448,508,553
NET REALIZED GAIN (LOSS) Unrealized Beginning of Period End of Period INCREASE (DECCASE) IN UNREALIZED APPRECIATION	\$ (15,825,346) 54,510,914 (31,451,388) \$ (85,962,302)	\$ 13,745,314 -0- (138,445,261) \$ (138,445,261)	\$ -0- -0- <u>10,793,067</u> \$ 10,793,067	\$ -0- -0- \$ -0-	\$ -0- -0- -0- \$ -0-	<pre>\$ (36,633,674)</pre>	\$ -0- -0- - <u></u> \$ -0-	<pre>\$ (38,713,706) 54,510,914 (160,147,027) \$ (214,657,941)</pre>
NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT	<u>\$ (101.787.648)</u> 	<u>\$ (124.699.947)</u>	<u>8 10,793,067</u>	<u>\$</u>	<u>\$</u>	<u>\$(37.677.119</u>)	<u>\$</u>	<u>\$(253,371,647</u>)

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SIGNIFICANT ACCOUNTING POLICIES

The following general notes apply to all financial statements presented herein for the twelve funds under management of the State Board. Specific notes can be found immediately after the financial statements.

The Minnesota Post Retirement Fund, Minnesota Variable Annuity Fund, Minnesota Supplemental Retirement Fund, Minnesota Active Equity Pooled Fund, Minnesota Passive Equity Pooled Fund, Minnesota Real Estate Pooled Fund, Minnesota Resource Pooled Fund, Minnesota Venture Capital Pooled Fund and the Minnesota Bond Pooled Fund are managed by the State Board of Investment under authority of Minnesota Statutes 11A. The Supplemental Fund prepares separate financial statements for four investment accounts which it is comprised oft Income Share, Growth Share, Fixed Return and Bond Accounts.

The assets of the six pooled funds are held by our new master custodian State Street Bank of Boston. The six Basic Retirement Funds are the sole participants of these pooled funds. State Street Bank also invests cash equivalents for the six basic retirement funds and the value of these cash equivalents are included in the combining statement. The master custodial relationship with State Street Bank started on November 1, 1983. The Minnesota Active Equity Pooled Fund was created on March 1, 1983 and the remaining five pooled funds on November 1, 1984.

The financial statements presented for these funds are based on the preferred accounting practices described in the American Institute of Certified Public Accountants audit guide, "Audits of Investment Companies".These practices and the significant accounting policies which follow are in conformity with generally accepted accounting principles.

The format of the financial statements presented herein is unchanged from that used in the prior years report, but the number of funds included has increased from seven to twelve. In the prior years annual report only one of the six pooled funds existed. For this reason comparative statements were not presented. The four investment accounts that make up the Supplemental Fund are combined to show the total for that fund. The six pooled funds are combined to show the total investments for the six basic retirement funds that are held at State Street Bank. The totals for the Supplemental Fund and the Pooled Funds are then combined with the Post Retirement and Variable Annuity Funds to present the entire group of funds administered by the State Board on a combined basis.

SECURITY VALUATION: All securities are valued at market except for U.S. Government short-term securities and commercial paper, which are valued at market less accrued interest. Accrued short-term interest is recognized as income as part of "Short-Term Gain". For long-term fixed income securities the State Board uses the Merrill Lynch valuation system. This pricing service is capable of providing prices for both actively traded and privately placed bonds. For equity securities the State Board uses a valuation service provided by Compensation & Capital.

RECOGNITION OF SECURITY TRANSACTIONS: Security transactions are accounted for on the date the securities are purchased or sold.

INCOME RECOGNITION: Dividend income is recorded on the ex-dividend date. Interest and dividend income are accrued monthly. Short term interest is accrued monthly and is presented as "Accrued Short-Term Gain".

LOANING SECURITIES: Certain U.S. Government and Government Agency securities are loaned out by the State Board to banks and brokers for additional income. Collateral in the amount of 105% of the market value of the security loaned is required. The Pooled Funds under the custody of State Street Bank participate in a loan program in which equity and corporate bonds are loaned out to banks and brokers for additional income. This program is run entirely by the Bank with the income generated being split evenly by the State Board and the Bank.

PORTFOLIO LISTING: A listing of all securities held by these funds can be found starting on page 104 of this report. Bonds are shown at face value and stocks at market value. Securities held as cash equivalents are not listed.

GENERAL FOOTNOTES:

3)Options premiums received are shown as a liability until such time as the option contract is terminated. Upon termination any gain or loss applicable to the option transaction is recognized. For reporting purposes the market value of the option is shown on the Statement of Assets and Liabilities, while the difference between the premium received and the market value of the option is reported on the Statement of Operations as part of the "Increase [Decrease] in Unrealized Appreciation". At June 30, 1984 the option account in the Post Retirement Fund was: 68.47 50.00 18.47

	Premium Received	\$436,2
Market	Value of Options	121,5
Unreali	ized Appreciation	\$314,7

4)STATUTORY VALUATIONS REQUIRED IN MINNESOTA VARIABLE ANNUITY FUND: The Admitted Value Increment at June 30, 1983 and 1984 was \$2,015,181 and \$4,298,664 respectively. This valuation is required by Minnesota Statutes 11A.19 Subdivision 5 and is the amount by which the recognized value of investments is above of below the book value of investments. The admitted value is based on an average ratio of book value to market value of the securities calculated over a two year period. This calculation is used to determine the rate of return and the increase or decrease which shall be credited to the individual member's account balances at the end of the fiscal year.

Laws of Minnesota 1978, Chapter 781, stated in part "Effective July 1, 1978 no Laws of Minnesota 1978, Chapter 781, stated in part "Effective July 1, 1978 no future employee and employer contribution shall be credited to any account in the variable annuity division unless the member elects continued participation...". Very few members of the Teachers' Retirement Fund elected to continue in the variable annuity division. There have been no contributions in the last five years. Previous contributions for all former and current participants in the variable annuity fund will remain in that fund until the participant retires or withdraws in accordance with the Teachers' Retirement Act [M.S.354]

VARIABLE ANNUITY FUND PARTICIPATION AT JUNE 30,1984

Net Assets	\$ 94,806,106
Admitted Value Increment	4,298,664
	\$ 99,104,770
Less:Unrealized Market	
Appreciation (Depreciation)	[6,902,576]
Total Participation	\$ 106,002,346

5)Withdrawels from the fixed return account are paid out pursuant to Minnesota Statutes 11A.17 Subdivision 9, which states in part that: "The value of investment shares in the fixed-return account shall be \$5 per share; provided, howerver, if the fixed-return investment account shares are redeemed by a public retirement fund where the shares are not attributable to the individual account of any person prior to the expiration of the multi-year period set by the board for the payment of the applicable assumed rate, the value of the investment shares shall be at market value. Terms as to withdrawal schedules will be agreed upon by the public retirement fund and the state board."

6)The Minnesota Supplemental Investment Fund Bond Account was created pursuant b) ne minnesote Supplemental investment Fund Bond Account was created pursuant to Laws of Minnesota 1981, Chapter 208 with activity commencing on July 1, 1981. It is designed for public retirement funds who wish to lock in a guaranteed rate over a multi-year period. These retirement funds have been participating in a similar multi-year guaranteed rate plan in the Fixed Account. The guaranteed rate plan is being phased out of the Fixed Return Account. Income earned from prior year pools in the Fixed Return Account is being transferred to the Bond Account on a monthly basis. This income, new contributions and principal from the guaranteed rate pools as it matures will all be invested in the Bond Account. The first investment pool which commenced July 1, 1981 will pay 14.4% over a seven year period.

7]Total participation for the Post Retirement Fund is equal to the actuarially determined required reserves at June 30, 1984. It includes the 5% actuarially assumed income distribution made pursuant to Minnesota Statutes 11A.18 and the mortality gains and losses as determined by the actuaries for the applicable retirement funds.

8) The annuity stabilization reserve is the difference between the actuarially determined reserves required to support benefits in force and the book value of the essets of the fund. Pursuant to Minnesota Statutes 11A.18 Subdivision 9 Claus 2C, " The book value of assets on any given date shall be the net assets at cost less the excess investment income determined pursuant to Clause (1) [C]." "If the state board determines that the book value of the assets of the fund is less than an amount equal to 100 percent of the current June 30 required reserves, with the book value and required reserves to be determined after the adjustments provided for in Subdivision 11, then the board shall allocate five percent of the excess investment income as an asset of the fund. The remaining 95 percent will be termed available for distribution."

The Deferrred Yield Adjustment account at June 30, 1984 was \$21,895,896.15. This account is required by Minnesota Statutes 11A.18 Subdivision 5 and is the unamortized loss on the sale or disposition of debt securities. The account is increased by the loss on the sale of debt securities and decreased by the gain on the sale of such securities. At the end of each year a portion of the balance is offset against investment income for the year.

FISCAL YEAR	1984
Deferred Yield Adjustment	
Beginning Balance	\$23,580,322.81
Net Realized (Gain) Loss	560,585.49
Amortization	[2,245,012,15]
Balance at June 30	\$21,895,896,15

9)The unrealized market appreciation or (depreciation) is the difference between the cost and market value of investments.

10)Pursuant to Minnesota Statutes 11A.18 Subdivision 9 this is the portion of fiscal year 1984 income which is available for distribution as a benefit increase in January of 1985. This amount shall be increased by 2.5% from fiscal year 1985 income and shall be stated as a percentage of total required reserves. The amount available shall be certified to each participating pension fund for distribution to eligible individuals. Individuals receiving benefits at June 30, 1983 are eligible to receive the January 1, 1985 increase. Past increases paid to retirees on January 1st have been:

1981	3.209%	
1982	7,436%	
1983	6 853%	
1984	7.449%	
 Innungy	4. 4985 will be	

The benefit increase for January 1, 1985 will be 6.905%.

STATE BOARD OF INVESTMENT Minnesota investment trust funds Schedule of participation June 3D, 1884

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	1	UPPLEMENTAL Retirement Fund total	F	POST Retirement Fund		AN	IABLE NUITY UND	POOL	RETIREMENT ED FUND Total		TOTAL	
Albert Lea Firemen's Releif		1,985,322	ŧ	-0-			-0- 1	b	-0-		1,985,32	22
Apple Valley Firemen's-Special		138,392		-0-			-0-		-0-		138,39	
Apple Valley Firemen's-General		8,670		-0-			-0-		-0-		8,67	
Bloomington Fire Dept, Relief		4,828,218		-0-			-0-		-0-		4,828,21	
Bloomington Police Relief		598,617	•	-0-			-0-		-0-		598,61	
Chanhassen Fire Dept.		17,483		-0-			-0-		-0-		17,46	
Hennepin County Supplemental Ret.		13,687,308		-0- -8-			-0- -0-	•	· -0-		13,687,30	
Inver Grove Heights Fire-Special St. Louis Park Police Relief		114,636		-0-			-0-		-0-		114,63	
ST. Paul Fire -General		283,656		-0-			-0- 1		-0-		283.65	
St. Paul Fire-Special		29,201,139		· - 0-			-0-		-0-		29,201,1	
St. Paul Police Relief		29,448,877		~ - 0 -			-0-	• •	-0-	•	29,448,87	
MSRS Deferred Compensation		71,221,353		' -0			-0-		-0-		71,221,3	53
MSRS Unclassified Empl. Escrow		21,584,539		-0-		*	-0-		-0-		21,584,5	
South St. Paul Policemen's Relief		159,074		-0-			-0-		-0-		159,07	
Teacher's Supplemental Retirement		53,390,279		-0-			-0- -0-		-0-		53,390,27 199,31	
Winona Fire Dept. Relief		199,301		-0-			-0-		- u -	•	188,00	
Teacher's Retirement Fund		-0-		819,209,787		108.	008,080	1.21	13,765,945	2.	138,983,79	92
Public Employees Retirement Fund		-0-		834,793,435	•	•	-0-		10,394,885		575,188,10	
State Employees Retirement Fund		-0-		356,378,679			-0-	60	3,952,486		960,331,14	45
Public Employees Police & Fire		· ~0-		59,663,039		•	-0-		37,809,909		267,272,94	
Highway Patrolmen's Retirement		-0		40,454,943			-0-	4	12,488,780		82,921,70	
Legislators & Survivors Retire.		-0-		5,501,428	·	•	-0-		-0-		5,501,42	
Judges Ratirement Fund Total Participation		228,914,225		<u>6,838,301</u> ,922,839,590	(7)	108-	008,080	1 3.01	1,166,134	8 5.	266,928,0	
Lessi	•	EEUJATAJEEU	. .	, , , , , , , , , , , , , , , , , , , ,		,		• • • • •	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	200,020,0	
Annuity Stabilization[8]		-0-		[28,447,844]		-0-		-0-		[28,447,84	44) "
Admitted Value Increment		-0-	· .	-0-		[4,	298,664)		-0-		(4,298,6)	64)
Unrealized Appreciation(8)		· · · · · · · · · · · · ·							-			
[Depreciation] of Investments	•	[6,972,087].		{142,027,757		[6,	902,576)		· -0- -0-	. I	155,902,4	20]
Undistributed Earnings NET ASSETS		2,663	·	<u>111,514,807</u> ,865,878,996		94	<u>-0-</u> 806,840	1 3.04	11,166,134	8 5	111,517,47	<u>70</u> 71
NET ROBELS	•	c:0,044,0UI	€ * * •	1100010/01000	4 •	341	000,040	• 0,0		• •,	101110011	
			SUPI	PLEMENTAL RET	IREMENT	FUND			-	2		• •
		INCOME	•	GROWTH			FIXED				SUPPLEMEN	
		SHARE		SHARE			RETURN		BOND		RETIRENE	
Albert Las Firemen's Ralief		ACCOUNT	•	ACCOUNT			ACCOUNT 88,729	· · · · · · · · · · · · · · · · · · ·	<u>ACCOUNT</u> 22,187		FUND TOT	AL
Apple Valley Firemen's Special	•	32,130	. •	13,08			21,135		71,242	•		,392
Apple Valley Firemen's-General		3,893		-0			-0-		4,777			,670
Bloomington Fire Dept. Relief		4,445,881		382,33	Ż		-0-		-0-		4,828	
Bloomington Police Relief		598,617		-0			-0-		-0-	. •		,817
Chanhassen Fire Dept.		-0-		-0			13,077		4,386			,463
Hennepin County Supplemental Ret.		6,100,081		5,892,61			1,694,631		-0-		13,687	,308
Inver Grove Heights Fire-Special		114,636		-0			-0-	,	-0-			,636
St. Louis Park Police Relief		47,381		-0			-0-		-0 89,620			,381 ,856
St. Paul Fire -General St. Paul Fire-Special		163,491 15,113,241		30,54 3,706,13			7,423,669		2,958,090		28,201	
St. Paul Fire-Special St. Paul Police Relief		24,326,528	'	5,122,34			/,420,000	· · · ·	-0-		29,448	
MSRS Deferred Compensation		13,554,218		11,872,73			45,794,404		-0-		71,221	,353
MSRS Unclassified Empt. Escrow		12,463,850		4,935,57	7.		4,185,112		-0-		21,584	,539
South St. Paul Policeman's Relief		75,755		-0			61,773	•••	21,548			,074
Teacher's Supplemental Retirement		31,194,643		22,195,83			-0-		-0-		53,390	
Winona Fire Dept. Relief	-	199,301	<u> </u>	-0			-0-		- <u>0-</u> 3,171,848		226,914	<u>,301</u>
TOTAL PARTICIPATION	•	110,330,032	-, ₹ ,	_54,151,01	• •		0 915001090	•	31111040	•	2201014	1.2.0
Unrealized Appreciation		•			1						a	۰.
(Depreciation) of Investments(9)		-0-		; -0		3	[6,821,678		[150,409]		(8,972	
Undistributed Earnings		-0-		-0			[8,270		8,933			1663
NET ASSETS	\$	110,330,032		54,151,81	5		52,432,582	8	3,030,372	\$ °	219,944	,801
	#****	MINNES	OTA	BASIC RETIREM	ENT PO	DLED F		·				-
ACTIV		PASSIVE :		REAL			VENTURE					ASIC RI
EQUIT		EQUITY	I	ESTATE	RESOUL		CAPITAL Fund		BOND Fund		ASH VALENTS	POOLEC TO
FUND		FUND.		EUND	FUN		<u> </u>			-ERAY	COPECIA -	

	ACTIVE Equity	PASSIVE Equity	REAL ESTATE	RESOURCE	VENTURE Capital	Bond	CASH	BASIC RETIREMENT POOLED FUND	
1	FUND	FUND.	FUND	FUND	FUND	FUND -	EQUIVALENTS	TOTAL	
Teachers Retirement Fund	\$ 214,705,987	\$ 510.732.838	\$ 67.096.868	9,356,497	11,960,374	\$ 344,496,975	\$ 55,416,431	\$ 1,213,765,945	
Public Employees Retirement Fund	172.197.531	404.082.209	52.329.735	7.984.025	9,316,008	268,022,542	26,482,615	940,394,685	
State Employees Retirement Fund	103.235.912	245,166,300	38.053.771	4.826.384	5.897.649	4171, 171, 442	40,601,008	603,952,466	
Public Employees Police & Fire	34.886.228	82.683.573	11.832.554	1.630.983	2.023.399	58,628,880	18,474,292	207,609,909	
Highway Patrolman's Retirement	7,869,490	17.582.423	2.351.495	336.862	420.859	11,475,258	2,450,373	42,466,760	
Judges Retirement Fund	533,428	1.244.908	184,412	37,080	29.648	735,428	231,487	2,978,389	
TOTAL PARTICIPATION	\$ 533.428.556	1.261.402.246		\$ 24.171.891	\$ 29,847,937	854,530,523	\$141,856,206	\$ 3,011,166,134	

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MINNESOTA STATE BOARD OF INVESTMENT POST RETIREMENT FUND ALPHABETICAL EQUITY HOLDINGS JUNE 30, 1984

220,700 AMER. GENERAL CORP 4,579,525 72,500 AMER. INT'L. GROUP 4,241,250 314,150 AMERICAN EXPRESS CO 9,031,813 3172,257 AMERICAN TEL & TEL NEW 2,971,433 408,100 ARCHER DANIELS MIDLAND 7,192,763 148,200 ATLANTIC RICHFIELD 6,707,800 0304,900 AVON PRODS INC 6,707,800 223,050 BANKERS TRUST NY CORP 8,587,425 245,800 BAXTER TRAVENOL LABS 3,779,175 271,500 BOEING CO 11,878,125 241,728 BORG-WARNER 4,532,400 157,400 BROWN GROUP 4,117,100 170,700 BRUNSWICK CORP 4,992,975 109,050 BURLINGTON NORTHERN 4,389,263 154,300 CANADIAN PACIFIC LTD 4,112,938 154,300 CAPITAL HOLDING CORP 5,091,900 157,200 CARLISLE CORP 4,480,200 69,100 CHANESE CORP 4,447,4225 1331,300 CHEMICAL NEW YORK CO 7,951,200 87,950 CITY INVESTING 13,812,539 134,300	NO. OF SHARES	SECURITY	MARKET VALUE
157,400 BROWN GROUP 4,171,100 170,700 BRUNSWICK CORP 4,992,975 109,050 BURLINGTON NORTHERN 4,389,263 134,300 CANADIAN PACIFIC LTD 4,112,938 154,300 CAPITAL HOLDING CORP 5,091,900 157,200 CARLISLE CORP 4,480,200 69,100 CELANESE CORP 4,474,225 119,100 CHASE MANHATTAN CORP 4,689,563 331,300 CHEMICAL NEW YORK CO 7,951,200 87,950 CITY INVESTING 3,748,869 130,550 COLUMBIA GAS SYSTEM 4,340,788 142,900 COMBUSTION ENGINEERING 4,447,763 607,145 COMMONWEALTH EDISON 13,812,539 223,800 CONTROL DATA CORP 4,46513 316,450 COOPER TIRE & RUBBER 4,430,300 125,050 CROWN CORK & SEAL 4,955,106 218,600 DU PONT EI DENEMOURS 4,553,375 366,400 DUKE POWER CO. NC 8,976,800 85,100 DU PONT EI DENEMOURS 4,368,750 247,400 EXXON CORP 10,081,550 974,650	146,775	ALLIED CORP	4,641,759
	220,700	AMER. GENERAL CORP	4,579,525
	72,500	AMER. INT'L. GROUP	4,241,250
	314,150	AMERICAN EXPRESS CO	9,031,813
	172,257	AMERICAN TEL & TEL NEW	2,971,433
	408,100	ARCHER DANIELS MIDLAND	7,192,763
	148,200	ATLANTIC RICHFIELD	6,743,100
	304,900	AVON PRODS INC	6,707,800
	223,050	BANKERS TRUST NY CORP	8,587,425
	245,800	BAXTER TRAVENOL LABS	3,779,175
	271,500	BOEING CO	11,878,125
154,300 CAPITAL HOLDING CORP 5,091,900 157,200 CARLISLE CORP 4,480,200 69,100 CELANESE CORP 4,474,225 119,100 CHASE MANHATTAN CORP 4,689,563 331,300 CHEMICAL NEW YORK CO 7,951,200 87,950 CITY INVESTING 3,748,869 130,550 COLUMBIA GAS SYSTEM 4,340,788 142,900 COMBUSTION ENGINEERING 4,447,763 607,145 COMMONWEALTH EDISON 13,812,539 223,800 CONTROL DATA CORP 4,146,513 316,450 COOPER TIRE & RUBBER 4,430,300 125,050 CROWN CORK & SEAL 4,955,106 218,600 DOMINION RESOURCES 5,082,450 99,800 DU PONT EI DENEMOURS 4,553,375 366,400 DUKE POWER CO. NC 8,976,800 85,100 DUN & BRADSTREET CO 5,042,175 88,600 E-SYSTEMS 2,458,650 175,000 ENSERCH CORP 10,081,550 274,850 FIRST CITY BANCORP 4,397,600 274,850 FIRST INTERSTATE BANK 3,950,113 234,200 <td>157,400 170,700 109,050</td> <td>BROWN GROUP BRUNSWICK CORP BURLINGTON NORTHERN</td> <td>4,532,400 4,171,100 4,992,975 4,389,263 4,112,938</td>	157,400 170,700 109,050	BROWN GROUP BRUNSWICK CORP BURLINGTON NORTHERN	4,532,400 4,171,100 4,992,975 4,389,263 4,112,938
87,950 CITY INVESTING 3,748,869 130,550 COLUMBIA GAS SYSTEM 4,340,788 142,900 COMBUSTION ENGINEERING 4,447,763 607,145 COMMONWEALTH EDISON 13,812,539 223,800 CONTINENTAL TELECOM 4,280,175 134,300 CONTROL DATA CORP 4,146,513 316,450 COOPER TIRE & RUBBER 4,430,300 125,050 CROWN CORK & SEAL 4,955,106 218,600 DOMINION RESOURCES 5,082,450 99,800 DU PONT EI DENEMOURS 4,553,375 366,400 DUKE POWER CO. NC 8,976,800 85,100 DUN & BRADSTREET CO 5,042,175 88,600 E-SYSTEMS 2,458,650 175,000 ENSERCH CORP 3,368,750 247,400 EXXON CORP 10,081,550 274,850 FIRST CITY BANCORP 4,397,600 125,900 FIRST INTERSTATE BANK 3,950,113 234,200 FLEETWOOD ENTER. INC 4,010,675 120,300 FORD MOTOR CO 4,345,838 271,800 GELCO CORP 4,110,975	154,300 157,200 69,100 119,100	CAPITAL HOLDING CORP CARLISLE CORP CELANESE CORP CHASE MANHATTAN CORP	5,091,900 4,480,200 4,474,225 4,689,563 7,951,200
134,300 CONTROL DATA CORP 4,146,513 316,450 COOPER TIRE & RUBBER 4,430,300 125,050 CROWN CORK & SEAL 4,955,106 218,600 DOMINION RESOURCES 5,082,450 99,800 DU PONT EI DENEMOURS 4,553,375 366,400 DUKE POWER CO. NC 8,976,800 85,100 DUN & BRADSTREET CO 5,042,175 88,600 E-SYSTEMS 2,458,650 175,000 ENSERCH CORP 3,368,750 247,400 EXXON CORP 10,081,550 974,650 FEDERAL NATL. MTG 12,304,956 274,850 FIRST CITY BANCORP 4,397,600 125,900 FIRST INTERSTATE BANK 3,950,113 234,200 FLEETWOOD ENTER. INC 4,010,675 120,300 FORD MOTOR CO 4,345,838 271,800 GELCO CORP 4,110,975	87,950	CITY INVESTING	3,748,869
	130,550	COLUMBIA GAS SYSTEM	4,340,788
	142,900	COMBUSTION ENGINEERING	4,447,763
	607,145	COMMONWEALTH EDISON	13,812,539
366,400 DUKE POWER CO. NC 8,976,800 85,100 DUN & BRADSTREET CO 5,042,175 88,600 E-SYSTEMS 2,458,650 175,000 ENSERCH CORP 3,368,750 247,400 EXXON CORP 10,081,550 974,650 FEDERAL NATL. MTG 12,304,956 274,850 FIRST CITY BANCORP 4,397,600 125,900 FIRST INTERSTATE BANK 3,950,113 234,200 FLEETWOOD ENTER. INC 4,010,675 120,300 FORD MOTOR CO 4,345,838 271,800 GELCO CORP 4,110,975	134,300	CONTROL DATA CORP	4,146,513
	316,450	COOPER TIRE & RUBBER	4,430,300
	125,050	CROWN CORK & SEAL	4,955,106
	218,600	DOMINION RESOURCES	5,082,450
974,650FEDERAL NATL. MTG12,304,956274,850FIRST CITY BANCORP4,397,600125,900FIRST INTERSTATE BANK3,950,113234,200FLEETWOOD ENTER. INC4,010,675120,300FORD MOTOR CO4,345,838271,800GELCO CORP4,110,975	366,400	DUKE POWER CO. NC	8,976,800
	85,100	DUN & BRADSTREET CO	5,042,175
	88,600	E-SYSTEMS	2,458,650
	175,000	ENSERCH CORP	3,368,750
	974,650 274,850 125,900 234,200 120,300 271,800 290,800	FEDERAL NATL. MTG FIRST CITY BANCORP FIRST INTERSTATE BANK FLEETWOOD ENTER. INC FORD MOTOR CO GELCO CORP GENERAL ELECTRIC CO	10,081,330 12,304,956 4,397,600 3,950,113 4,010,675 4,345,838 4,110,975 15,267,000 11,460,238

MINNESOTA STATE BOARD OF INVESTMENT POST RETIREMENT FUND ALPHABETICAL EQUITY HOLDINGS JUNE 30, 1984

NO. OF	,	MARKET
SHARES	SECURITY	VALUE
74,250	GENERAL RE CORP	\$ 4,260,094
133,900	GOODYEAR TIRE & RUBBER	3,447,925
336,300	GREYHOUND CORP	7,524,713
122,200	GTE CORP	4,567,225
91,950	HALLIBURTON INC	3,091,819
261,100	HOUSTON INDUSTRIES INC	4,830,350
178,100	HOUSTON NAT. GAS CORP	8,571,063
123,700	INTERNORTH INC	4,499,588
261,684	INTL. BUSINESS MACHINES	27,673,083
194,655	ITT CORP	6,107,301
79,800	KIDDE INC	2,284,275
141,900	KROGER CO	4,700,438
75,500	LEAR SIEGLER INC	3,265,375
178,650	LEVI STRAUSS & CO	5,113,856
750	LITTON INDS INC	55,125
196,030	LOCKHEED AIRCRAFT CO	7,694,178
284,850	LUCKY STORES	4,593,206
180,775	MARY KAY COSMETICS	1,852,944
81,700	MCA INC	3,553,950
88,450	MCDONNELL DOUGLAS CO	4,953,200
385 , 200	MCI COMMUNICATION	2,889,000
113,500	MELLON NATIONAL CORP	4,256,250
119,700	MELVILLE CORP	4,294,238
157,050	MITCHELL ENERGY	3,023,213
280,650	MOBIL CORP	7,437,225
58,000	NATL. MED. ENTER. INC	1,210,750
408,700	NORTHEAST UTILITIES	4,648,963
326,500	OWENS CORNING FIBERGLASS	8,570,625
123,900	OWENS ILLINOIS INC	4,584,300
189,600	PARSONS CORP	4,597,800 4,213,606
130,150	PENNZOIL CO	5,240,000
160,000	PFIZER INC	4,051,250
324,100	PHILADELPHIA ELEC. CO PHILLIPS PETROLEUM CO	2,172,600
61,200 8,300	RAYTHEON CO	315,400
314,900	REPUBLIC BANK CORP	8,344,850
372,000	ROYAL DUTCH PET. GLD	17,809,500
178,450	SCHLUMBERGER LTD	8,074,863
79,550	SECURITY PACIFIC CORP	3,360,988
227,750	SMITHKLINE-BECKMAN CORP	12,896,344
268,000	SONAT INC	8,676,500
149,900	SOUTHLAND CORP	4,047,300
85,800	ST. PAUL COS. INC	4,483,050
100,850	STANDARD OIL CO. OHIO	4,399,581
301,000	STERLING DRUG INC	8,051,750

MINNESOTA STATE BOARD OF INVESTMENT POST RETIREMENT FUND ALPHABETICAL EQUITY HOLDINGS JUNE 30, 1984

NO. OF SHARES	SECURITY	MARKET VALUE
57,900 116,600 320,000 116,950 221,000 149,200 600,800 194,250	SUBARU OF AMERICA INC SYNTEX CORP TANDY CORP TENNECO INC TEXAS COMMERCE BANKS TEXAS EASTERN CORP TEXAS OIL & GAS CORP TEXAS UTILITIES CO	<pre>\$ 5,326,800 5,013,800 8,320,000 4,371,006 9,033,375 4,196,250 13,367,800 4,152,094 4,446,100</pre>
102,800 515,600 164,200 356,800 361,600 194,200 194,400 184,300 938,100 114,950	TRANSCO ENERGY CO TRAVELERS CORP US AIR GROUP US FIDELITY & GUARANTY VALERO ENERGY CORP WARNACO INC WASTE MANAGEMENT WESTERN UNION CORP WESTINGHOUSE ELEC. CO XEROX CORP	4,448,100 14,694,600 4,474,450 7,091,400 3,480,400 4,709,350 6,342,300 4,238,900 20,638,200 4,411,206

TOTAL EQUITY PORTFOLIO

\$ 650,034,806
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PAR				MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
	· · ·			
100,000	ALBERTA GOVT TEL COMM	06/15/1994	8.000%	\$ 70,560
100,000	AMERICAN BRANDS INC	03/01/1985	8.125%	97,260
745,000	AMERICAN PRES LINES	11/01/1991	4.800%	450,688
22,000,000	AMERICAN TELEPHONE & TEL	03/15/1991	13.250%	21,168,840
1,105,000	ARISTAR INC	05/15/1990		951,681
• •			8.500%	
5,000,000	ASSOCIATES CORP NO. AMER	11/15/1992	11.450%	4,306,000
4,427,142	ATLANTIC RICHFIELD CO	07/15/1996	9.250%	3,169,745
2,842,393	ATLANTIC RICHFIELD CO	12/01/2001	8.750%	1,864,320
2,250,000	BEATRICE FOODS CO	08/15/2008	8.500%	1,414,170
5,000,000	BELL TEL CO OF PENN	01/15/2019	9.250%	3,237,800
1,175,000	BROOKLYN UNION GAS	04/01/1990	4.625%	772,069
4,200,000	BURLINGTON INDUSTRIES	08/01/1990	11.250%	3,690,540
2,143,907	BURLINGTON NORTHERN	09/01/1993	8.750%	1,559,199
179,931	BURLINGTON NORTHERN	07/03/1993	8.500%	129,045
4,000,000	CANADIAN PACIFIC LTD	01/15/1992	8.625%	3,336,600
5,000,000	CENTRAL POWER & LIGHT	06/01/2004	9.375%	3,307,350
15,000,000	CHESAPEAKE & POTOMAC TEL	04/15/2019	9.500%	9,936,300
1,000,000	CITIZENS UTILITIES	12/31/1991	4.800%	628,370
3,000,000	CONSOLIATED NATURAL GAS	10/01/2000	12.875%	2,706,870
1,650,000	DEERE (JOHN) CREDIT		5.000%	1,075,536
6,000,000	DOW CHEMICAL CO	07/15/2007	7.875%	3,465,720
150,000	DRESSER INDUSTRIES	05/15/1985	8.650%	145,218
50,000		05/01/1986	3.625%	43,218
	DUKE POWER CO			
250,000	FARRELL LINES INC	06/29/1997	8.350%	165,935
3,000,000	FEDERAL FARM CREDIT BANK	10/20/1997	11.900%	2,634,360
6,000,000	FEDERAL FARM CREDIT BANK	10/22/1990	10.600%	5,156,220
10,000,000	FEDERAL FARM CREDIT BANK	10/21/1991	10.600%	8,453,100
20,000,000	FEDERAL FARM CREDIT BANK	10/20/1993	11.800%	17,625,000
5,000,000	FEDERAL FARM CREDIT BANK	03/01/1994	12.350%	4,540,600
5,000,000	FEDERAL FARM CREDIT BANK	10/20/1986	10.750%	4,745,300
6,500,000	FEDERAL FARM CREDIT BANK	04/22/1985	13.250%	6,550,765
1,300,000	FEDERAL FARM CREDIT BANK	12/01/1986	10.000%	1,211,847
28,000,000	FEDERAL FARM CREDIT BANK	07/22/1991	14.700%	28,805,000
10,000,000	FEDERAL HOME LOAN BANK	09/25/1990	12.500%	9,400,000
10,000,000	FEDERAL HOME LOAN BANK	09/25/1991	11.750%	8,968,700
5,000,000	FEDERAL HOME LOAN BANK	04/27/1992	11.700%	4,446,850
7,000,000	FEDERAL HOME LOAN BANK	07/26/1993	11.700%	6,138,090
5,000,000	FEDERAL HOME LOAN BANK	11/25/1992	11.100%	4,271,850
10,000,000	FEDERAL HOME LOAN BANK	12/27/1993	12.150%	9,000,000
1,698,397	FEDERAL HOME LOAN MTG	01/01/2010	12.500%	1,515,820
8,579,558	FEDERAL HOME LOAN MTG	03/01/2010	14.750%	8,569,348
2,555,904	FEDERAL HOME LOAN MTG	07/01/2010	10.750%	2,054,308
20,000,000	FEDERAL HOME LOAN MIG	08/30/1991	11.850%	17,987,400
3,000,000	FEDERAL NATIONAL MTG	11/12/1990	10.900%	2,610,000
14,000,000				
14,000,000	FEDERAL NATIONAL MTG	05/10/1990	10.300%	11,943,680

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PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
	· · · ·			
250,000	FEDERAL NATIONAL MTG	03/10/1987	7.750%	\$ 218,828
4,000,000	FEDERAL NATIONAL MTG	06/10/1988	10.500%	3,597,480
5,000,000	FIRESTONE TIRE & RUBBER	12/01/2004	9.250%	3,194,000
5,000,000	FIRST INTERSTATE BANCORP	04/15/1988	10.500%	4,498,050
2,000,000	FLORIDA POWER & LIGHT	05/01/2010	11.300% 12.125%	1,544,040 2,472,330
3,000,000 4,850,000	FLORIDA POWER & LIGHT	11/01/2009 01/15/2000	9.500%	3,414,497
1,850,000	FMC CORP FORD MOTOR CO	07/15/1994	9.250%	1,379,564
5,000,000	FORD MOTOR CREDIT CO	04/01/1999	8.700%	3,221,400
14,000,000	GENERAL ELECTRIC CR. CO	09/15/1991	13.625%	13,766,340
5,500,000	GENERAL FOODS INC	03/01/1989	14.375%	5,554,230
13,000,000	GENERAL MOTORS ACCEPT CORP	04/01/2011	6.000%	5,850,000
8,800,000	GENERAL MOTORS ACCEPT CORP		11.750%	8,061,416
1,000,000	GENERAL TEL CO (FLA)	05/01/1993	4.500%	559,150
946,271	GNMA POOL # 03818	04/15/2004	8.000%	631,636
70,742	GNMA POOL # 04054	10/15/2004	8.500%	44,339
636,099	GNMA POOL # 04086	05/15/2004	8.000%	424,596
1,609,081	GNMA POOL # 04137	10/15/2004	9.000%	1,138,425
690,943	GNMA POOL # 04149	09/15/2004	8.500%	433,063
504,244	GNMA POOL # 04168	09/15/2004	9.000%	356,753
36,452	GNMA POOL # 04225	09/15/2004	8.500%	22,847
516,614	GNMA POOL # 04471	11/15/2004	9.000%	365,505
477,542	GNMA POOL # 04507	10/15/2004	9.000%	337,861
427,393	GNMA POOL # 04714	10/15/2004	8.250%	262,103
235,676	GNMA POOL # 08073	01/15/2006	8.500%	147,715
468,703	•••••••	02/15/2006	8.500%	293,769
229,872	GNMA POOL # 08437	02/15/2006	8.500%	144,077
1,305,390	GNMA POOL # 08803 GNMA POOL # 08961	04/15/2006 05/15/2006	8.250% 8.250%	800,543 394,600
643,446	GNMA POOL # 08961 GNMA POOL # 09105	03/15/2006	8.250%	681,388
1,111,092 1,132,874	GNMA POOL # 09105 GNMA POOL # 09204	02/15/2006	8.500%	710,052
731,127	GNMA POOL # 09204	08/15/2006	8.000%	488,027
1,149,017	GNMA POOL # 09760	05/15/2006	8.250%	704,646
699,597	GNMA POOL # 10182	05/15/2006	8.000%	466,981
498,082	GNMA POOL # 10278	06/15/2006	8.000%	332,470
55,503	GNMA POOL # 10697	07/15/2006	8.000%	37,048
272,323	GNMA POOL # 10805	10/15/2006	8.000%	181,776
688,071	GNMA POOL # 10810	07/15/2006	8.000%	459,288
1,186,360	GNMA POOL # 10904	08/15/2006	8.000%	791 , 895
596,766	GNMA POOL # 10910	09/15/2006	8.000%	398,341
559,547	GNMA POOL # 10960	07/15/2006	8.000%	
655,896	GNMA POOL # 10961	08/15/2006	·8.000%	437,811
724,458	GNMA POOL # 10975	08/15/2006	8.000%	483,575
1,195,561	GNMA POOL # 11057	09/15/2006	8.000%	798,037
°568,695	GNMA POOL # 11304	07/15/2006	8.000%	379,604

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PAR VALUE	SECURII	YY.	MATURITY	COUPON	MARKET VALUE
427,858	GNMA POOL #	11312	09/15/2006	8.000% \$	285,595
716,062		11639	10/15/2006	8.000%	477,972
548,806		11780	02/15/2007	8.000%	366,328
1,160,179	GNMA POOL #	12312	10/15/2006	8.000%	774,419
335,550		12527	10/15/2006	8.000%	223,980
305,809		13003	10/15/2006	8.000%	204,128
621,846	GNMA POOL #	13338	11/15/2006	8.000%	415,082
595,264	GNMA POOL #	13439	10/15/2006	8.000%	397,339
718,511	GNMA POOL #	13548	01/15/2007	8.000%	479,606
800,189		13653	10/15/2006	8.000%	534,126
505,794		13844	01/15/2007	8.000%	337,617
744,692	GNMA POOL #	14575	07/15/2007	8.000%	497,082
753,535	GNMA POOL #	16214	07/15/2007	8.000%	502,984
693,960	GNMA POOL #	16805	08/15/2007	8.000%	463,218
761,690		17398	08/15/2007	8.000%	508,428
836,075		17424	07/15/2007	8.000%	558,080
733,223		17467	07/15/2007	8.000%	489,427
633,230		17784	07/15/2007	8.000%	422,681
632,188		17891	07/15/2007	8.000%	421,985
663,696		18077	07/15/2007	8.000%	443,017
215,441	GNMA POOL #	18516	09/15/2007	8.000%	143,807
1,684,825	GNMA POOL #	19672	02/15/2008	8.000%	1,124,621
793,646	GNMA POOL #	20041	03/15/2008	8.000%	529,759
787,773	GNMA POOL #	20413	01/15/2008	8.000%	525,839
805,440	GNMA POOL #	20746	12/15/2007	8.000%	537,631
764,868	GNMA POOL #	20952	10/15/2007	8.000%	510,549
772,288 746,663	GNMA POOL # GNMA POOL #	21467 21480 21652	12/15/2007 01/15/2008 02/15/2008	8.000% 8.000% 8.000%	515,502 498,398 545,592
817,366 1,800,767 821,673	GNMA POOL # GNMA POOL #	21878 21982	04/15/2008 01/15/2008	8.000% 8.000%	1,202,012 548,466
803,244	GNMA POOL #	22676	02/15/2008	8.000%	536,165
871,087	GNMA POOL #	23016	01/15/2008	8.000%	581,450
701,608	GNMA POOL #	23098	01/15/2008	8.000%	468,323
4,342,053 820,276 819,310	GNMA POOL #	24978	05/15/2008 04/15/2008 04/15/2008	8.000% 8.000%	2,898,320 547,534 546,890
4,448,479 4,696,093 3,808,113	GNMA POOL # GNMA POOL # GNMA POOL #	26980 33172 34007	10/15/2008 07/15/2009 09/15/2009	9.500% 9.500%	3,147,299 3,445,758 2,794,203
2,865,725 2,879,100 709,315	GNMA POOL # GNMA POOL # GNMA POOL #	34126 36068 38180	08/15/2009 10/15/2009 07/15/2010	9.500% 13.500%	2,102,726 2,112,540 673,849
4,574,567 6,231,110	GNMA POOL #	42691 43600	08/15/2010 11/15/2010		3,716,836 5,584,633

PAR				MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
3,665,163	GNMA POOL # 44539	10/15/2010	11.500%	\$3,087,900
799 , 125	GNMA POOL # 45933	04/15/2011	13.500%	759 , 169
845,790	GNMA POOL # 46868	05/15/2011	13.500%	803,500
790, 574	GNMA POOL # 47924	05/15/2011	13.500%	751,045
443,295	GNMA POOL # 49656	10/15/2011	16.000%	471,001
433,394	GNMA POOL # 49993	10/15/2011	16.000%	460,481
963,235	GNMA POOL # 50250	10/15/2011	13.500%	915,073
260,511	GNMA POOL # 50733	10/15/2011	16.000%	276,793
178,278	GNMA POOL # 51252	11/15/2011	16.000%	189,420
169,003	GNMA POOL # 51524	10/15/2011	16.000%	179,566
77,961	GNMA POOL # 51624	10/15/2011	16.000%	82,833
380,955	GNMA POOL # 52431	10/15/2011	16.000%	404,765
258,629	GNMA POOL # 52437	10/15/2011	16.000%	274,793
200,000	HARBOR TUG & BARGE	03/15/2001	8.150%	124,436
3,000,000	HERTZ CORP	02/15/1999	9.500%	2,099,010
5,000,000	HONEYWELL INC	11/01/1992	11.125%	4,316,350
5,000,000	HOUSTON NATURAL GAS CO	11/15/1992	11.000%	4,230,250
150,000	INGERSOLL RAND CO	05/01/1985	8.750%	145,535
4,950,000	JEWEL COS INC	12/01/1992	11.500%	4,294,373
10,000,000	KIMBERLY CLARK	10/15/1990	11.125%	8,841,500
1,895,000	LACHMAR HULL 54 US	09/25/1988	14.000%	1,917,020
6,124,613	LNM ACCEPTANCE CORP	12/01/1986	9.100%	5,594,773
1,000,000	LONG ISLAND LIGHTING	04/01/1993	4.400%	530,590
3,518,861	LOUISVILLE & NASHVILLE	10/20/1991	9.000%	2,663,954
122,042	LOUISVILLE & NASHVILLE	04/20/1988	8.125%	100,796
50,000	MACMILLAN BLOEDEL LTD	07/15/1992	6.500%	29,865
4,940,000	MANITOBA HYDRO ELECTRIC	10/15/1997	7.650%	3,008,954
1,020,000	MANITOBA, PROVINCE OF	04/01/1994	7.875%	680,830
9,000,000	MARTIN-MARIETTA CORP	03/15/2011	7.000%	4,373,730
5,000,000	MINNESOTA POWER & LIGHT	08/01/2005	10.500%	3,643,150
5,000,000	MINNESOTA POWER & LIGHT	09/01/2006	8.700%	3,068,300
3,000,000	MISSISSIPPI POWER & LIGHT	06/01/1988	11.250%	2,675,280
1,463,662	MISSOURI PACIFIC RR	06/01/1995	12.750%	1,343,847
2,313,654	MISSOURI PACIFIC RR	06/01/1994	9.750%	1,774,480
250,000	MONTGOMERY WARD CREDIT	09/15/1986	8.625%	224,375
1,228,000	MOUNTAIN FUEL SUPPLY	09/01/1986	4.875%	1,055,589
7,000,000	MOUNTAIN STATES TEL & TEL	06/01/2013	7.750%	3,784,830
8,825,000	MOUNTAIN STATES TEL & TEL	04/01/2018	8.625%	5,299,589
150,000	NATIONAL RURAL UTILITIES	02/01/1985	8.950%	147,267
4,000,000	NATL MED ENTERPRISE CV.	05/15/2008	8.000%	3,320,000
2,000,000	NEW YORK STATE ELEC & GAS	04/01/1993	11.750%	1,667,740
6,500,000	NEW YORK STATE ELEC & GAS	01/01/1994	12.375%	5,592,080
2,500,000	NORTHERN STATES POWER CO	01/01/2004	8.375%	1,539,625
8,500,000	NORTHWESTERN BELL TEL	08/15/2016	9.500%	5,660,660
4,000,000	NORWEST CORP	03/15/2003	, 7.750 %	2,276,800

PAR				MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
2,000,000	NORWEST FINANCIAL	07/01/1990	12.750%	\$1,885,380
2,570,000	NORWEST FINANCIAL	07/01/1993	11.250%	2,191,311
7,000,000	NORWEST FINANCIAL	01/01/1994	12.125%	6,221,740
3,500,000	NOVA SCOTIA POWER COMM	03/15/1997	7.750%	2,111,095
6,400,000	NOVA SCOTIA POWER CORP	06/01/2008	9.625%	4,279,360
4,680,000	ONTARIO HYDRO	03/15/1996	9.500%	3,492,450
7,000,000	ONTARIO, PROVINCE OF	06/01/2008	9.375%	4,661,300
6,920,000	ONTARIO, PROVINCE OF	11/30/2008	9.375%	4,602,215
5,300,000	OWENS ILLINOIS INC	06/01/1990	10.375%	4,515,229
3,000,000	PACIFIC TEL & TEL CO	11/01/2020	15.000%	2,990,070
30,000	PACIFIC TELE & TELE	11/01/1990	4.625%	19,566
12,660,000	PENNEY (J.C.) CO	06/15/1990	10.750%	11,010,022
100,000	PENNWALT CORP	04/15/1985	9.000%	97,285
15,000,000	PHILLIPS PETROLEUM	09/01/1992	12.875%	14,193,600
2,415,000	PUBLIC SERV ELEC & GAS	09/01/1994	4.625%	1,300,188
3,000,000	PUBLIC SERVICE CO OF IND	09/01/1990	12.125%	2,538,990
7,000,000	PUBLIC SERVICE ELEC & GAS	06/01/2007	8.250%	4,090,240
1,110,000	ROCHESTER TELEPHONE	09/01/1993	4.750%	631,523
7,000,000	SASKATCH., PROVINCE OF	04/15/2008	9.250%	4,588,080
4,826,091	SEABOARD COAST LINE RR	10/01/1992	8.250%	3,590,419
4,701,139	SEABOARD COAST LINE RR	09/01/1993	9.625%	3,558,292
4,000,000	SEAFIRST CORP	06/01/1990	10.500%	3,460,000
3,200,000	SOUTHERN BELL TEL & TEL	10/05/2020	12.875%	2,782,368
6,000,000	SOUTHERN BELL TEL & TEL	12/01/2019	10.900%	4,499,040
8,000,000	SOUTHERN BELL TEL & TEL	03/15/2013	7.625%	4,320,960
3,150,000	SOUTHERN NATURAL GAS	11/15/1994	11.375%	2,681,753
200,000	SOUTHWEST INVESTMENT	10/15/1986	8.500%	177,440
5,000,000	SOUTHWESTERN BELL TEL CO	03/15/2019	9.625%	3,309,050
450,000	SPRAGUE ELECTRIC CO	09/01/1988	4.375%	313,200 703,383
1,123,687	STANDARD OIL OF CALIF	03/30/1997 03/02/1997	7.700% 7.700%	647,601
1,043,424	STANDARD OIL OF CALIF	02/10/1997	7.700%	654,738
1,043,424 4,308,801	STANDARD OIL OF CALIF STANDARD OIL OF CALIF	07/02/1999	8.500%	2,818,947
15,000,000	STANDARD OIL OF CALIF STANDARD OIL OF INDIANA	06/01/1991	14.000%	15,065,400
550,000	STATES STEAMSHIP CO	03/31/1993	5.100%	314,298
5,000,000	STUDEBAKER-WORTHINGTON	11/15/2003	9.350%	3,400,100
4,000,000	TEKTRONIX INC	07/15/1990	11.000%	3,499,240
3,275,000	TEXACO INC	12/01/2001	7.750%	1,940,241
150,000	TEXAS EASTERN TRANS	07/01/1985	10.000%	146,016
3,000,000	TEXAS POWER & LIGHT	01/01/2006		1,852,410
2,500,000	TEXAS POWER & LIGHT	02/01/2009	9.375%	1,638,950
12,000,000	U.S.A. TREASURY BOND	02/15/2001	11.750%	10,372,440
9,000,000	U.S.A. TREASURY BOND	05/15/2009	9.125%	6,069,330
10,000,000	U.S.A. TREASURY NOTE	05/15/1992	13.750%	9,950,000
20,000,000	U.S.A. TREASURY NOTE	07/15/1989	14.500%	20,537,400

PAR				MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
26,000,000	U.S.A. TREASURY NOTE	10/15/1989	11.875%	\$24,212,500
23,000,000	U.S.A. TREASURY NOTE	11/15/1992	10.500%	19,248,010
20,000,000	U.S.A. TREASURY NOTE	04/30/1985	9.500%	19,606,200
13,000,000	U.S.A. TREASURY NOTE	05/15/1993	10.125%	10,570,560
15,000,000	U.S.A. TREASURY NOTE	05/31/1985	9.875%	14,700,000
5,000,000	U.S.A. TREASURY NOTE	.05/15/1991	14.500%	5,146,850
20,000,000	U.S.A. TREASURY NOTE	08/15/1991	14.875%,	20,937,400
25,000,000	U.S.A. TREASURY NOTE	11/15/1991	14.250%	25,484,250
10,500,000	U.S.A. TREASURY NOTE	04/15/1988	13.250%	10,421,250
15,000,000	U.S.A. TREASURY NOTE	10/15/1988	15.375%	15,853,050
46,000,000	U.S.A. TREASURY NOTE	01/15/1989	14.625%	47,437,500
2,000,000	U.S.A. TREASURY NOTE	11/15/1989	10.750%	1,780,000
36,000,000	U.S.A. TREASURY NOTE	02/15/1992	14.625%	37,305,000
5,000,000	UNION CAMP	10/01/2012	12.750%	4,435,300
4,000,000	UNION TANK CAR	12/15/1995	9.500%	3,005,200
20,000,000	UPJOHN CO	06/01/1991	14.000%	19,948,000
4,000,000	USLIFE CORP	10/15/1989	12.000%	3,680,040
60,000	VIRGINIA ELEC. & POWER	12/01/1987	4.500%	46,332
4,000,000	WESTINGHOUSE CREDIT CORP	01/15/1989	10.750%	3,561,280
10,450,000	WILLAMETTE INDUSTRIES INC	04/15/1993	11.375%	8,832,758

TOTAL BOND PORTFOLIO

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\$924,432,719

NO. OF		•	MARKET
SHARES		SECURITY	VALUE
10 010			401 207
16,812		ALLIED BANCSHARES INC \$	
12,075		ALLIED CORP	381,872
18,900		AMER. GENERAL CORP	392,175
6,400		AMER. INT'L. GROUP INC	374,400
31,000 7,900		AMERICAN EXPRESS CO	891,250
49,200		AMERICAN TEL & TEL NEW	136,275 867,150
25,000	*	ARCHER DANIELS MIDLAND ASK COMPUTER	412,500
16,600	•••	ATLANTIC RICHFIELD	755,300
32,300		AVON PRODS INC	710,600
19,600		BANKERS TRUST NY CORP	754,600
28,600		BOEING CO	1,251,250
18,200		BORG-WARNER	341,250
15,300		BROWN GROUP	405,450
13,300		BRUNSWICK CORP	4037430
15,000		BMI CAPITAL MGMT	438,750
19,500		INTERNAL MGMT	570,375
197500		SUB-TOTAL 34,500 SHARES	-
16,500	*	BURLINGTON INDUSTRIES	435,188
8,150		BURLINGTON NORTHERN INC	328,038
11,150		CANADIAN PACIFIC LTD	341,469
12,500		CANADIAN PACIFIC LTD CAPITAL HOLDING CORP CARLISLE CORP	412,500
13,900		CARLISLE CORP	396,150
5,750		CELANESE CORP	372,313
10,500		CHASE MANHATTAN CORP	413,438
28,150		CHEMICAL NEW YORK CORP	675,600
10,700		CITY INVESTING	456,088
11,000		COLUMBIA GAS SYSTEM INC	365,750
13,000		COMBUSTION ENGINEERING	404,625
72,700		COMMONWEALTH EDISON CO	1,653,925
20,300		CONTINENTAL TELECOM. INC	388,238
12,300		CONTROL DATA CORP	379,763
27,400		COOPER TIRE & RUBBER	383,600
10,500		CROWN CORK & SEAL	416,063
7,000	*	CULLINET SOFTWARE INC	270,375
17,500		DOMINION RESOURCES	406,875
8,400		DU PONT EI DENEMOURS	383,250
32,500		DUKE POWER CO	796 , 250
		DUN & BRADSTREET COS INC	
8,000		BMI CAPITAL MGMT	474,000
6,900		INTERNAL MGMT	408,825
		SUB-TOTAL 14,900 SHARES	882,825
7,800		E-SYSTEMS	216,450
44,450		EMERSON RADIO CORP	377,825

NO. OF		MARKET
SHARES	SECURITY	VALUE
20,900	ENSERCH CORP	\$ 402,325
21,750	EXXON CORP	886,313
102,100	FEDERAL NATL. MTG	1,289,013
18,400	FIRST CITY BANCORP TEXAS	294,400
9,800	FIRST INTERSTATE BANCORP	307,475
20,700	FLEETWOOD ENTER. INC	354,488
	FORD MOTOR CO	55.7.00
10,000	BMI CAPITAL MGMT	361,250
10,600	INTERNAL MGMT	382,925
•	SUB-TOTAL 20,600 SHARES	
13,000	* FOREST LABS	204,750
6,200	GENERAL MOTORS CORP	405,325
5,350	GENERAL RE CORP	306,956
19,500	* GENUINE PARTS CO	536,250
	GOODYEAR TIRE & RUBBER	
19,000	BMI CAPITAL MGMT	489,250
16,000	INTERNAL MGMT	412,000
	SUB-TOTAL 35,000	901,250
39,800	GREYHOUND CORP	890,525
10,500	GTE CORP	392,438
6,600	HALLIBURTON INC	221,925
20,150	HOUSTON INDUSTRIES INC	372 , 775
11,700	HOUSTON NAT. GAS CORP	563,063
26,250	* INSILCO CORP	416,719
10,000	* INTERGRAPH CORP	435,000
10,300	INTERNORTH INC	374,663
6,700	INTL. BUSINESS MACHINES	708,525
10,500	* INTL. FLAVORS & FRAGRANCES	271,688
16,000	* KELLWOOD CO	424,000
6,500	KIDDE INC	186,063
12,000	KROGER CO	397,500
7,000	LEAR SIEGLER INC	302,750
13,700 250	LEVI STRAUSS & CO	392,163
250	LITTON INDS INC	18,375
11,000	LOCKHEED AIRCRAFT CORP BMI CAPITAL MGMT	431,750
23,800	INTERNAL MGMI	934,150
23,000	SUB-TOTAL 34,800	1,365,900
22,650	LUCKY STORES	365,231
13,450	MARY KAY COSMETICS	137,863
9,950	MARI RAI COSMETTOS MCA INC	432,825
7,200	MCDONNELL DOUGLAS CORP	403,200
46,000	MCI COMMUNICATION	345,000
8,050	MELLON NATIONAL CORP	301,875

NO. OF		MARKET
SHARES	SECURITY	VALUE
٠		
11,100	MELVILLE CORP	\$ 398,213
15,000	* MGMT. SCIENCE AMER	296,250
10,000	* MILLIPORE CORP	270,000
4,500	* MINNESOTA MNG & MFG CO	347,063
16,300	MITCHELL ENERGY	313,775
21,400	MOBIL CORP	567,100
20,000	* MORSE SHOE	460,000
35,700	NORTHEAST UTILITIES	406,088
6,900	NUCOR CORP	205,275
15,000	* NUMERAX INC	105,000
13,500	OWENS CORNING FIBERGLASS	354,375
11,600	OWENS ILLINOIS INC	429,200
16,300	PARSONS CORP	395,275
11,000	PENNZOIL CO	356,125
26,400	PHILADELPHIA ELEC. CO	330,000
25,000	* QUOTRON SYSTEMS INC	268,750
24,800	REPUBLIC BANK CORP	657,200
7,800	ROYAL DUTCH PET. GLDRS	373,425
12,550	SCHLUMBERGER LTD	567,888
	SEA CONTAINERS LTD	704,213
31,650		114,731
31,650	SEACO INC	264,063
6,250	SECURITY PACIFIC CORP	288,750
10,000	* SHARED MED. SYSTEMS CORP	282,500
10,000	* SHERWIN WILLIAMS CO	1,319,363
23,300	SMITHKLINE-BECKMAN CORP	
22,400	SONAT INC	725,200
13,300	SOUTHLAND CORP	359,100
7,600	ST. PAUL COS. INC	397,100
9,000	STANDARD OIL CO. OHIO	392,625
34,300	STERLING DRUG INC	917,525
4,500	SUBARU OF AMERICA INC	414,000
.8,800	SYNTEX CORP	378,400
28,200	TANDY CORP	733,200
9,900	TENNECO INC	370,013
19,500	TEXAS COMMERCE BANKSHARES	797,063
11,300	TEXAS EASTERN CORP	317,813
10,100	TEXAS UTILITIES CO	215,888
22,500	* THERMO ELECTRON CORP	360,000
19,000	TIE COMMUNICATIONS	285,000
9,100	TRANSCO ENERGY CO	393,575
39,400	TRAVELERS CORP	1,122,900
2,500	* UPJOHN CO	165,625
14,100	US AIR GROUP	384,225

NO. OF Shares	SECURITY	MARKET VALUE
36,700	US FIDELITY & GUAR. CO	-\$ 729,413 258,913
26,900 16,300	VALERO ENERGY CORP WARNACO INC	395,275
21,100	WASTE MANAGEMENT	688,388
15,250 99,800	WESTERN UNION CORP WESTINGHOUSE ELEC. CO	350,750 2,195,600
10,700	XEROX CORP	410,613

TOTAL EQUITY PORTFOLIO

\$60,426,777

* THESE SECURITIES ARE HELD IN THE PORTFOLIO MANAGED BY BMI CAPITAL MANAGEMENT INC.

MINNESOTA STATE BOARD OF INVESTMENT SUPPLEMENTAL RETIREMENT INCOME SHARE ACCOUNT ALPHABETICAL BOND HOLDINGS JUNE 30, 1984

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PAR VALUE	SECURITY	MATURITY	COUPON	MARKET Value
1,000,000	AMERICAN TELEPHONE & TEL	08/01/2000	6.000%	\$ 491,520
1,250,000	ASSOCIATES CORP NO AMER	11/15/1992	11.450%	1,076,500
668,000	BRITISH COLUMBIA HYDRO	07/15/1996	9.625%	519,991
535 ,97 7	BURLINGTON NORTHERN	09/01/1993	8.750%	389,800
400,000	CANADIAN PACIFIC LTD	01/15/1992	8.625%	333,660
259,137	CHESAPEAKE & OHIO RY	03/15/1989	8.750%	221,165
400,000	CITIES SERVICE GAS CO	06/01/1991	8.250%	286,136
500,000	CONSOLIATED NATURAL GAS	10/01/2000	12.875%	451,145
1,000,000	DOW CHEMICAL CO	07/15/2007	7.875%	577,620
1,500,000	FEDERAL FARM CREDIT BANK	03/01/1994	12.350%	1,362,180
1,000,000	FEDERAL FARM CREDIT BANK	04/22/1985	13.250%	1,007,810
2,000,000	FEDERAL HOME LOAN MTG	08/30/1991	11.850%	1,798,740
1,000,000	FEDERAL NATIONAL MTG	08/10/1984	11.100%	1,000,000
500,000	FEDERAL NATIONAL MTG	06/10/1988	10.500%	449,685
1,000,000	FIRST INTERSTATE BANCORP	04/15/1988	10.500%	899,610
800,000	FMC CORP	01/15/2000	9.500%	563,216
800,000	FORD MOTOR CREDIT CO	04/01/1999	8.700%	515,424
1,000,000	GENERAL MOTORS ACCEPT CO	10/15/1989	11.750%	916,070
1,500,000	GERBER PRODUCTS CO	11/01/1994	11.750%	1,296,660
580,136	GNMA POOL # 11828	09/15/2006	8.000%	387,241
695,602	GNMA POOL # 12712	10/15/2006	8.000%	464,314
655,202	GNMA POOL # 14185	12/15/2006	8.000%	437,347
755,377	GNMA POOL # 17945	12/15/2007 11/15/2007	8.000% 8.000%	504,214 544,828
816,221	GNMA POOL # 19774	10/01/2010	13.375%	902,980
1,000,000 1,000,000	HAWAIIAN TELEPHONE	10/01/2010	11.000%	846,050
1,000,000	HOUSTON NATURAL GAS CO KIMBERLY CLARK	10/15/1990	11.125%	884,150
800,000	LINCOLN NATIONAL CORP	09/15/1992	13.875%	778,288
351,886	LOUISVILLE & NASHVILLE	10/20/1991	9.000%	266,395
500,000	MANITOBA HYDRO ELEC	10/15/1997	7.650%	304,550
800,000	MARATHON OIL CO	02/01/2000	8.500%	480,152
2,000,000	MISSISSIPPI POWER & LIGHT	06/01/1988	11.250%	1,783,520
731,831	MISSOURI PACIFIC RR	06/01/1995	12.750%	671,923
407,000	NATL MED ENTERPRISE CV.	11/15/2001	12.625%	421,245
700,000	NEW YORK STATE ELEC & GAS	04/01/1993	11.750%	583,709
625,000	NORTHERN STATES POWER CO	01/01/2004	8.375%	384,906
1,000,000	NORTHWESTERN BELL TEL	08/15/2016	9.500%	665,960
800,000	NORWEST CORP	09/15/1986	7.875%	710,864
624,000	ONTARIO HYDRO	03/15/1996	9.500%	465,660
1,000,000	ONTARIO, PROVINCE OF	06/15/2005	9.125%	658,120
500,000	ONTARIO, PROVINCE OF	06/01/2008	9.375%	332,950
500,000	PACIFIC TEL & TEL CO	11/01/2020	15.000%	498,345
500,000	ROHM & HAAS CO	04/15/1985	9.000%	486,785
700,000	SASKATCH., PROVINCE OF	04/15/2008	9.250%	458,808
500,000	SEAFIRST CORP	06/01/1990	10.500%	432,500

MINNESOTA STATE BOARD OF INVESTMENT SUPPLEMENTAL RETIREMENT INCOME SHARE ACCOUNT ALPHABETICAL BOND HOLDINGS JUNE 30, 1984

PAR				MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
500,000	SOUTHERN BELL TEL & TEL	10/05/2020	12.875%	\$ 434,745
120,395	STANDARD OIL OF CALIF	03/30/1997	7.700%	75,363
120,395	STANDARD OIL OF CALIF	03/02/1997	7.700%	74,723
160,527	STANDARD OIL OF CALIF	02/10/1997	7.700%	100,729
82,045	STANDARD OIL OF CALIF	09/07/1997	7.700%	50,978
82,045	STANDARD OIL OF CALIF	09/08/1997	7.700%	50,976
82,045	STANDARD OIL OF CALIF	11/06/1997	7.700%	50,842
1,400,000	U.S.A. TREASURY BOND	11/15/1995	11.500%	1,216,250
3,000,000	U.S.A. TREASURY NOTE	10/15/1989	11.875%	2,793,750
3,000,000	U.S.A. TREASURY NOTE	11/15/1992	10.500%	2,510,610
1,000,000	U.S.A. TREASURY NOTE	02/15/1987	9.000%	907,810
500,000	USLIFE CORP	10/15/1990	12.500%	466,355
766,000	WELLS FARGO & CO	11/01/1998	8.625%	469,167

TOTAL BOND PORTFOLIO

\$38,715,034

NO. OF		MARKET
SHARES	SECURITY	VALUE
		i – – – – – – – – i
6,787	ALLIED BANCSHARES INC	\$ 162,040
4,725	ALLIED CORP	149,428
7,600	AMER. GENERAL CORP	157,700
2,600	AMER. INT'L. GROUP	152,100
12,350	AMERICAN EXPRESS CO	355,063
1,200	AMERICAN TEL & TEL NEW	20,700
20,600	* AMR CORP	628,300
19,800	ARCHER DANIELS MIDLAND	348,975
6,600	ATLANTIC RICHFIELD	300,300
8,000	BANKERS TRUST NY CORP	308,000
,11,350	BOEING CO	496,563
3,000	BRITISH PETROLEUM	74,625
3,850	BROWN GROUP	102,025
6,800	BRUNSWICK CORP	198,900
3,200	BURLINGTON NORTHERN INC	128,800
	CALFED INC	
17,000	WADDELL & REED	218,875
10,700	INTERNAL MGMT	137,763
-	SUB-TOTAL 27,700 SHAR	ES 356,638
3,900	CANADIAN PACIFIC LTD	119,438
5,000	CAPITAL HOLDING CORP	165,000
5,600	CARLISLE CORP	159,600
2,300	CELANESE CORP	148,925
4,200	CHASE MANHATTAN CORP	165,375
10,750	CHEMICAL NEW YORK CORP	258,000
42,200	* CHRYSLER CORP	1,055,000
20,000	* CHURCHS FRIED CHICKEN	550,000
4,300	CITY INVESTING	183,288
10,000	CLEVELAND ELEC. ILLUM	157,500
3,800	COLUMBIA GAS SYSTEM INC	126,350
5,200	COMBUSTION ENGINEERING	161,850
23,770	COMMONWEALTH EDISON CO	540,768
4,700	CONTINENTAL TELECOM. INC	89,888
4,950	CONTROL DATA CORP	152,831
11,000	COOPER TIRE & RUBBER	154,000
4,200	CROWN CORK & SEAL	166,425
5,600	* DATAPOINT CORP	106,400
13,000	DETROIT EDISON CO	164,125
7,100	DOMINION RESOURCES	165,075
3,400	DU PONT EI DENEMOURS	155,125
13,000	DUKE POWER CO NC	318,500
2,800	DUN & BRADSTREET COS INC	165,900
3,100	E-SYSTEMS	86,025

NO. OF SHARES	SECURITY	MARKET VALUE
39,520	EMERSON RADIO CORP	\$ 335,920
8,500	ENSERCH CORP	163,625
7,850	EXXON CORP	319,888
	FEDERAL NATL. MTG	
35,000	WADDELL & REED	441,875
31,850	INTERNAL MGMT	402,106
	SUB-TOTAL 66,850 SHARES	843,981
2,900	FIGGIE INTL. INC	73 , 950
6,900	FIRST CITY BANCORP TEXAS	110,400
3,800	FIRST INTERSTATE BANCORP	119,225
8,300	FLEETWOOD ENTER. INC	142,138
	FORD MOTOR CO	
13,700	WADDELL & REED	494,912
4;300	INTERNAL MGMT	155,338
	SUB-TOTAL 18,000 SHARES	650 , 250
1,600	GENERAL ELECTRIC CO	84,000
2,500	GENERAL MOTORS CORP	163,438
1,600	GENERAL RE CORP	91,800
6,400	GOODYEAR TIRE & RUBBER	164,800
10,000	* GR. WESTERN FINANCIAL	177,500
	GREYHOUND CORP	
4,700	WADDELL & REED	105,163
16,000	INTERNAL MGMT	358,000
	SUB-TOTAL 20,700	463,163
4,200	GTE CORP	156,975
8,000	HALLIBURTON INC	269,000
6,000	HOOVER UNIVERSAL	136,500
8,100	HOUSTON INDUSTRIES INC	149,850
1,300	HOUSTON NAT. GAS CORP	62,563
9,200	ILLINOIS POWER CO	170,200
4,100	INTERNORTH INC	149,138
3,000	INTL. BUSINESS MACHINES	317,250
2,800	KIDDE INC	80,150
4,800	KROGER CO	159,000
2,800	LEAR SIEGLER INC	121,100
5,500	LEVI STRAUSS & CO	157,438
50	LITTON INDS INC	3,675
9,600		376,800
34,200	* LSI LOGIC CORP	478,800
8,250	LUCKY STORES	133,031
5,275	MARY KAY COSMETICS	54,069
4,000	MCA INC	174,000

NO. OF		MARKET
SHARES	SECURITY	VALUE
	SECURITY MCDONNELL DOUGLAS CORP \$ MCI COMMUNICATION MELLON NATIONAL CORP	
2,900	MCDONNELL DOUGLAS CORP \$	162,400
18,900	MCI COMMUNICATION	141,750
2,150	MELLON NATIONAL CORP	80,625
4,500	MELVILLE CORP MITCHELL ENERGY MOBIL CORP MOTOBOLA INC	161,438
6,750	MITCHELL ENERGY	129,938
8,800	MOBIL CORP	233,200
7,500		250,313
8,500	NATL. MED. ENTER. INC	177,438
3,950	NO. STS. POWER CO	146,644
25,550	NORTHEAST UTILITIES	290,631
3,000	NUCOR CORP	89,250
5,000	OWENS CORNING FIBERGLASS	131,250
4,700	OWENS ILLINOIS INC	173,900
6,500	PARSONS CORP	157,625
4,400	PENNZOIL CO	142,450
13,500	* PFIZER INC	442,125
8,600	PHILADELPHIA ELEC. CO	107,500
9,400	REPUBLIC BANK CORP	249,100
2,550	ROYAL DUTCH PET. GLDRS	122,081
3,900	SCHLUMBERGER LTD	176,475
12,550	NUCOR CORP OWENS CORNING FIBERGLASS OWENS ILLINOIS INC PARSONS CORP PENNZOIL CO * PFIZER INC PHILADELPHIA ELEC. CO REPUBLIC BANK CORP ROYAL DUTCH PET. GLDRS SCHLUMBERGER LTD SEA CONTAINERS LTD SEACO INC SECURITY PACIFIC CORP	279,238
12,550	SEACO INC	45,494
2,500	SECURITY PACIFIC CORP	105,625
9,400	SMITHKLINE-BECKMAN CORP SONAT INC	532,275
9,000	SONAT INC	291,375
5,300	SOUTHLAND CORP	143,100
3,000		156,750
3,600		157,050
14,050	STERLING DRUG INC	375,838
1,800	SUBARU OF AMERICA INC	165,600
4,100	SYNTEX CORP	176,300
51,000	* TANDON CORP	363,375
11,400	TANDY CORP	296,400
4,000	TENNECO INC	149,500
7,900	TEXAS COMMERCE BANKSHARES	322,913
4,400	TEXAS EASTERN CORP	123,750
7,200	TEXAS UTILITIES CO	153,900
12,900	TIE COMMUNICATIONS	193,500
6,200	* TOYS R US	274,350
3,600	TRANSCO ENERGY CO	155,700
16,400	TRANSCO MALAGI CO	467,400
5,700	US AIR GROUP	155,325
5,100	OD VIK GVOOL	1001000

NO. OF Shares	SECURITY	MARKET VALUE
14,800	US FIDELITY & GUAR. CO	\$ 294,150
11,050	VALERO ENERGY CORP	106,356
6,500	WARNACO INC	157,625
9,450	WASTE MANAGEMENT	308,306
5,400	WESTERN UNION CORP	124,200
34,600	WESTINGHOUSE ELEC. CO	761,200
4,300	XEROX CORP	165,013

TOTAL EQUITY PORTFOLIO

\$27,076,893

* THESE SECURITIES ARE HELD IN THE PORTFOLIO MANAGED BY WADDELL & REED.

MINNESOTA STATE BOARD OF INVESTMENT SUPPLEMENTAL RETIREMENT FIXED RETURN ACCOUNT ALPHABETICAL BOND HOLDINGS JUNE 30, 1984

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PAR VALUE	SECURITY	MATURITY	COUPON	MARKET Value
VADOL	SECORITI	MAIONIII	COUPON	AVTOR
105,000	ACF INDUSTRIES INC	03/01/1991	9.000%	\$ 81,195
51,000	ACF INDUSTRIES INC	02/01/1992	8.000%	39,250
150,000	AMAX	03/01/2001	8.625%	93,394
1,000,000	ASSOCIATES CORP NO AMER	02/01/1989	11.850%	924,250
1,000,000	ASSOCIATES CORP NO AMER	11/15/1992	11.450%	861,200
132,814	ATLANTIC RICHFIELD CO	07/15/1996	9.250%	95,092
501,000	BRITISH COLUMBIA HYDRO	07/15/1996	9.625%	389,993
401,983	BURLINGTON NORTHERN	09/01/1993	8.750%	292,350
280,000	BURLINGTON NORTHERN	06/15/1998	9.250%	209 , 776
200,000	CANADIAN PACIFIC LTD	01/15/1992	8.625%	166,830
500,000	COMMONWEALTH EDISON	04/01/1999	10.000%	385,735
500,000	CREDITHRIFT FINANCIAL	01/01/1994	12.375%	451,990
500,000	FEDERAL FARM CREDIT BANK	01/22/1990	10.950%	443,750
500,000	FEDERAL HOME LOAN BANK	03/25/1987	11.100%	495,780
750 , 000	FEDERAL HOME LOAN BANK	06/25/1987 [°]	10.300%	691,403
5,000,000	FEDERAL HOME LOAN BANK	12/26/1990	10.900%	4,356,250
500,000	FEDERAL HOME LOAN BANK	11/25/1986	11.300%	479,375
77 , 600	FEDERAL HOME LOAN MTG	03/15/2007	8.050%	61,546
1,600,000	FEDERAL HOME LOAN MTG	08/30/1991	11.850%	1,438,992
500,000	FLORIDA POWER & LIGHT	11/01/1990	13.300%	483,590
500,000	FLORIDA POWER CORP	04/01/1987	13.625%	496,940
150,000	FMC CORP	01/15/2000	9.500%	105,603
500,000	FORD LEASING DEV	03/15/2004	9.500%	328,355
150,000	FORD MOTOR CO	07/15/1994	9.250%	111,856
11,795	GNMA POOL # 09797	05/15/2006	8.000%	7,873
351,896	GNMA POOL # 10375	05/15/2006	8.250%	215,804
174,462	GNMA POOL # 15955	08/15/2007	8.000%	116,453
373,414	GNMA POOL # 17086	11/15/2007	8.000%	249,254
364,052	GNMA POOL # 17606	07/15/2007	8.000%	243,005
500,000	HAWAIIAN TELEPHONE	10/01/2010	13.375%	451,490
600,000	HOUSTON LIGHTING & POWER	02/01/1991	13.875%	590,586
250,000	HOUSTON LIGHTING & POWER	10/01/2006	8.375%	145,490
250,000	IOWA-ILL GAS & ELEC	01/15/2007	8.250%	148,400
500,000	KIMBERLY CLARK	10/15/1990	11.125%	442,075
471,124	LNM ACCEPTANCE CORP	12/01/1986	9.100%	430,367
105,566	LOUISVILLE & NASHVILLE	10/20/1991	9.000%	79,919
83,576	LOUISVILLE & NASHVILLE	04/20/1992	8.375%	66,210
150,000	MINNESOTA POWER & LIGHT	08/01/2005	10.500%	109,295
330,522	MISSOURI PACIFIC RR	06/01/1994	9.750%	253,497
400,000	MONTGOMERY WARD CREDIT	06/30/2002	8.250%	233,316
400,000	MONTGOMERY WARD CREDIT	10/01/2002	8.375%	235,936
500,000	NEW YORK STATE ELEC & GAS	01/01/1994	12.375%	430,160
400,000	NORTHERN STATES POWER	01/01/2004	8.375%	246,340
1,000,000	NORTHERN TELECOM	10/01/1990	12.250%	909,470
500 ₀ 000	NORWEST FINANCIAL	07/01/1990	12.750%	471,345

MINNESOTA STATE BOARD OF INVESTMENT SUPPLEMENTAL RETIREMENT FIXED RETURN ACCOUNT ALPHABETICAL BOND HOLDINGS JUNE 30, 1984

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
1,000,000 500,000 233,652 468,000 700,000 500,000 250,000 700,000	NORWEST FINANCIAL NOVA SCOTIA POWER CORP OHIO EDISON CO OLYMPIC PIPELINE CO ONTARIO HYDRO ONTARIO, PROVINCE OF ONTARIO, PROVINCE OF PACIFIC GAS & ELECTRIC PENNEY J.C.	07/01/1991 06/01/2008 04/15/2010 09/01/2001 03/15/1996 06/15/2005 11/30/2008 12/01/2005 02/01/1993	12.750% 9.625% 15.500% 8.850% 9.500% 9.125% 9.375% 7.750% 12.125%	<pre>\$ 928,670 334,325 457,870 144,119 349,245 460,684 332,530 137,465 632,373</pre>
219,000	PLANTATION PIPE LINE	10/01/2001	7.875%	168,253
1,000,000	PUBLIC SERVICE CO OF IND	09/01/1990	12.125%	846,330
250,000	PUBLIC SERVICE CO OF IND	01/01/2007	7.625%	120,088
500,000	PUBLIC SERVICE ELEC & GAS	06/01/2007	8.250%	292,160
600,000	SASKATCH., PROVINCE OF	04/15/2008	9.250%	393,264
196,833	SEABOARD COAST LINE RR	04/01/1992	9.000%	147,382
386,087	SEABOARD COAST LINE RR	10/01/1992	8.250%	287,234
250,000	SOUTHERN BELL TEL & TEL	03/15/2013	7.625%	135,030
125,499	STANDARD OIL OF CALIF	07/02/1999	8.500%	82,105
150,000	STANDARD OIL OF INDIANA	07/15/2004	9.200%	104,565
250,000	TEXAS POWER & LIGHT CO	02/01/2007	8.250%	147,845
500,000	U.S.A. TREASURY BOND	11/15/1993	8.625%	365,935
2,000,000	U.S.A. TREASURY NOTE	09/30/1986	12.250%	1,965,620
5,000,000	U.S.A. TREASURY NOTE	04/15/1990	10.500%	4,362,500
3,000,000	U.S.A. TREASURY NOTE	04/30/1985	9.500%	2,940,930
1,000,000	U.S.A. TREASURY NOTE	05/31/1985	9.875%	980,000
500,000	U.S.A. TREASURY NOTE	02/15/1987	9.000%	453,905
500,000	U.S.A. TREASURY NOTE	11/15/1984	14.375%	505,470
3,000,000	U.S.A. TREASURY NOTE	02/15/1985	14.625%	3,047,820
250,000	UNION OIL OF CALIF	03/01/2006	8.625%	160,283
2,000,000	UPJOHN CO	07/15/1990	10.650%	1,732,640
500,000	USLIFE CORP	10/15/1990	12.500%	466,355
500,000	WILLAMETTE INDUSTRIES	04/15/1993	11.375%	400,333

TOTAL BOND PORTFOLIO

\$43,466,393

MINNESOTA STATE BOARD OF INVESTMENT SUPPLEMENTAL RETIREMENT BOND ACCOUNT ALPHABETICAL BOND HOLDINGS JUNE 30, 1984

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
350,000	ASSOCIATES CORP NO AMER	11/15/1992	11.450%	\$ 301,420
200,000	FEDERAL NATIONAL MTG	10/13/1987	12.125%	192,000
400,000	FIRST INTERSTATE BANCORP	04/15/1988	10.500%	359,844
200,000	GENERAL MOTORS ACCEPT	10/15/1989	11.750%	183,214
300,000	NEW YORK STATE ELEC & GAS	04/01/1993	11.750%	250,161
300,000	PENNEY J.C.	02/01/1993	12.125%	271,017
480,000	U.S.A. TREASURY NOTE	04/15/1989	14.375%	491,098
250,000	U.S.A. TREASURY NOTE	11/15/1991	14.250%	254,842
250,000	U.S.A. TREASURY NOTE	01/15/1989	14.625%	257,813
330,000	WILLAMETTE INDUSTRIES	04/15/1993	11.375%	278,929

TOTAL BOND PORTFOLIO

\$2,840,338

\$4,901,550

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MINNESOTA STATE BOARD OF INVESTMENT MINNESOTA VARIABLE ANNUITY FUND ALPHABETICAL BOND HOLDINGS JUNE 30, 1984

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PAR				MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
5,000,000	U.S.A. TREASURY NOTE	04/30/1985	9.500%	\$4,901,550

TOTAL BOND PORTFOLIO

NO. OF			MARKET
SHARES		SECURITY	VALUE
10,000	**	A G EDWARDS INC \$	225,000
10,000		ADAGE INC	92,500
15,605	*	AGENCY RENT A CAR	280,890
10,000	**	ALBA WALDENSIAN INC	95,000
17,900	. *	ALCO STANDARD CORP	548,188
10,900		ALLIED BANCSHARES INC	260,238
7,625		ALLIED CORP	241,141
13,000	* *	AMER. DISTRICT TELEGRAPH	352,625
12,300		AMER. GENERAL CORP	255,225
4,100		AMER. INT'L GROUP INC	239,850
15,800	**	AMER. MEDICAL INT'L	363,400
5,000	* *	AMERADA HESS CORP	140,625
26,000	*	AMERICAN CARRIERS	234,000
20,100		AMERICAN EXPRESS CO	577,875
6,800	* *	AMERICAN GREETINGS	194,650
8,000	* *	AMERICAN STANDARD INC	199,000
6,000	* *	AMERICAN WATER WORKS	184,500
5,620	* *	AMFESCO IND. INC	76 , 573
9,900	**	AMP INC	316,800
20,000	**	ANALOGIC CORP -	255,000
9,000	* *	ANDREW CORP	299,250
9,300	* *	APOGEE ENTERPRISES	76,725
13,000	*	APPLIED CIRCUIT TECH	27,625
19,005	*	APPLIED DATA RESEARCH	372,973
10,500	* *	APPLIED MAGNETICS	124,688
31,900		ARCHER DANIELS MIDLAND CO	562,238
7,000	**	ARMSTRONG IND. INC	179,375
7,800	*	ASSOC. DRY GOODS	419,250
10,800		ATLANTIC RICHFIELD	491,400
7,500		AYDIN CORP_	201,563
16,000	* *	BANK OF NY CO INC	432,000
12,800		BANKERS TRUST NY CORP	492,800
10,000		BANTA.GEORGE & CO	181,250
6,000	* *	BASSET WALKER INC	117,000
5,100	- **	BK. OF NEW HAMP. CORP	132,600
18,100		BOEING CO	791 ; 875
5,150		BRITISH PETROLEUM	128,106
7,150		BROWN GROUP	189,475
-		BRUNSWICK CORP	
15,000 🗋		NORWEST BANK MPLS	438,750
11,200		INTERNAL MGMT	327,600
•	~	SUB-TOTAL 26,200 SHARES	766,350
2,500	* * *.	BUILDERS TRANSPORT INC	38,125
5,450		BURLINGTON NORTHERN INC	219,363

NO.OF Shares,		SECURITY	MARKET VALUE
51,600		CALFED INC	\$ 664,350
6,750		CANADIAN PACIFIC LTD	206,719
8,100		CAPITAL HOLDING CORP	267,300
9,000		CARLISLE CORP	256,500
8,000	**	CARTER HAWLEY HALE STORES	158,000
		CBS INC	539,925
6,900	~		
3,700	**	CELANESE CORP	239,575
7,500	* *	CEN. BANKSHRS SO	151,875
6,800		CHASE MANHATTAN CORP	267,750
17,900		CHEMICAL NEW YORK CORP	429,600
29,100	*	CHRYSLER CORP	727.,500
6,950		CITY INVESTING	296,244
8,000		CLUETT PEABODY	208,000
5,000		COLE NATIONAL CORP	186,250
11,000		COLEMAN CO INC	310 , 750
10,000	**	COLLINS FOODS INTL	186,250
6,500		COLUMBIA GAS SYSTEM INC	216,125
8,400		COMBUSTION ENGINEERING	261,450
14,600	**	COMMERCIAL ALLIANCE	251,850
32,300		COMMONWEALTH EDISON CO	734,825
4,800	**	COMPUTER CONSOLES	88,800
11,000		CONAIR CORP DEL	203,500
7,800		CONIFER/ESSEX GROUP	269,100
9,000		CONROY INC	31,500
10,100		CONTINENTAL TELECOM. INC	193,163
8,000		CONTROL DATA CORP	247,000
22,300	*	CONVERGENT TECH	301,050
17,800		COOPER TIRE & RUBBER	249,200
31,800	.	CORDURA CORP	651,900
17,340	~ ~ ~	COUNTRYWIDE CR. IND	114,878
6,800	* *	CROWN CORK & SEAL	269,450
5,000		DALE ELECTRONICS	96,250
5,000	**	DAUPHIN DEPOSIT CORP	126,250
13,800	*	DENNYS INC	545,100
7,000	**	DIAGNOSTIC PRODUCTS CORP	57,750
5,500	**	DILLARD DEPT. STORES	283,938
10,500	*	DISNEY WALT PRODUCTIONS	497,438
11,400		DOMINION RESOURCES	265,050
7,000	**		276,500
5,400		DU PONT EI DENEMOURS	246,375
21,000		DUKE POWER CO NC	514,500
4,500		DUN & BRADSTREET COS INC	266,625
5,100		e-systems	141,525
11,000	**	E.F. HUTTON GROUP INC	328,625

NO. OF SHARES	SECURITY	MARKET VALUE ,
15,000 *	* EDUCATIONAL COMP. CORP	\$ 105,000
	* ELECTROSPACE SYSTEMS	121,250
63,703	EMERSON RADIO CORP	541,476
13,600	ENSERCH CORP	261,800
	* EQUATORIAL	287,625
12,600		513,450
	* FAIRFIELD COMMUN. INC	211,500
28,200	FEDERAL NATL. MTG	356,025
	* FILTERTEK COS	135,000
11,750	FIRST CITY BANKCORP TEXAS	188,000
• .	FIRST INTERSTATE BANCORP	310,613
9,900	* FIRST JERSEY NAT'L. CO	184,000
		163,500
	* FIRST NATL BNCP-ALLENTOWN	•
10,000 *	* FIRST NATL. SUPERMARKET	145,000
10,000 *	* FIRST SVGS. BANK FLORIDA FLEETWOOD ENTER. INC	250,000
		229,475
	* FLEMING COS	212,000
	* FLORIDA FED. S & L	295,000
	* FLORIDA ROCK INDUSTRIES	148,500
•	FORD MOTOR CO	249,263
•	* FORT HOWARD PAPER CO	273,125
•	* FOXMEYER CORP	314,600
•	* G & K SERVICES INC	175,875
•	* GALLAGHER ARTHUR J. & CO	137,750
4,000	GENERAL MOTORS CORP	261,500
3,750	GENERAL RE CORP	215,156
10,000 *	* GIBSON GREETINGS	245,000
# ?	GOODYEAR TIRE & RUBBER	
17,300	NORWEST BANK MPLS	445,475
10,400	INTERNAL MGMT	267,800
· ·	SUB-TOTAL 27,700 SHARES	
	* GR. LAKES FEDERAL S&L	74,613
14,000 *	* GREENTREE ACCEPT. INC	199,500
25,800	GREYHOUND CORP	577,275
6,800	GTE CORP	254,150
15,000 *	* GULF CDA LTD	191,250
	* GULF STREAM AEROSPACE	575,250
26,950-	HALLIBURTON INC	906,194
4,000 *		128,500
10,000 *	-	295,000
-	* HARPER GROUP	120,000
• •	* HARTMARX CORP	392,000
4,500 *		201,375
4,000 *		60,000
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NO. OF			MARKET
SHARES		SECURITY	VALUE
20,000	**	HERITAGE FEDERAL S&L	\$ 265,000
5,000	**	HIGBEE CO	195,000
37,300	*	HOGAN SYSTEMS	568,825
8,400	**	HOLMES D.H. & CO	151,200
10,200		HOOVER UNIVERSAL	232,050
28,900	*	HOUGHTON MIFFLIN CO	722,500
13,100		HOUSTON INDUSTRIES INC	242,350
6,800		HUBBELL HARVEY B.	204,850
44,800		HYBRITECH INC	627,200
23,400	, . *	IMPERIAL OIL CO LTD	611,325
15,000		INT'L KINGS TABLE	232,500
6,800	*	INTEGRATED DEVICE TECH	61,200
3,000	**	INTER LEASE FINANCIAL	39,375
6,700		INTERNORTH INC	243,713
10,000	**	INTL. ALUMINUM CORP	156,250
		INTL. ALUMINUM CORP INTL. BUSINESS MACHINES NORWEST BANK MPLS LIEBER & CO INTERNAL MGMT SUB-TOTAL 22,302 SHARES INVACARE CORP JAMES RIVER CORP VA JEFFERSON BANKSHARES VA JUNO LIGHTING INC KEARNEY NATL. INC KERR MCGEE CORP	
7,000		NORWEST BANK MPLS	740,250
10,300	`	LIEBER & CO	1,089,225
5,002		INTERNAL MGMT	528,962
•		SUB-TOTAL 22,302 SHARES	2,358,437
24,500	*	INVACARE CORP	232,750
7,700	*	JAMES RIVER CORP VA	209,825
6,500	**	JEFFERSON BANKSHARES VA	159,250
5,000	**	JUNO LIGHTING INC	91,250
6,000	**	KEARNEY NATL. INC	97,500
15,600	*	KERR MCGEE CORP	487,500
4,400		KIDDE INC	125,950
7,800	•	KROGER CO	258,375
12,300	*	KULICKE & SOFFA IND	250,613
8,000	**	LADD FURNITURE	112,000
10,000		LANCE INC	267,500
10,000		LEAR SIEGLER INC	207,500
13,300		NORWEST BANK MPLS	575,225
5,500	-	INTERNAL MGMT	237,875
57500.			
6,000.	**	SUB-TOTAL 18,800 SHARES LEE DATA CORP	813,100 62,250
-	**		
15,000 8,900	4.6	LENNAR CORP	157,500
-	**	LEVI STRAUSS & CO	254,763
18,000		LIBERTY HOMES	175,500
14,700		LIBERTY NATIONAL CORP	169,050
31,000		LILY TULIP INC	259,625
10,000	4 x	LIMITED INC	195,000
250	ـهـه	LITTON INDS INC	18,375
10,000	· **	LIZ CLAIBORNE INC	400,000

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NO. OF			MARKET
SHARES		SECURITY	VALUE
		LOCTURED STRONGER CODD	
17-000		LOCKHEED AIRCRAFT CORP	
17,000		NORWEST BANK MPLS	\$ 667,250
15,500		INTERNAL MGMT	608,375
•		SUB-TOTAL 32,500 SHARES	1,275,625
10,300	**	LOUISIANA PAC. CORP	187 , 975
5,000	**	LOWENSTEIN M CORP	273,750
14,200		LUCKY STORES	228,975
9,050		MARY KAY COSMETICS	92,763
10,000	**	MAYFLOWER CORP	220,000
6,450		MCA INC	280,575
4,600		MCDONNELL DOUGLAS CORP	257,600
95,100	*	MCI COMMUNICATION	713,250
5,500		MELLON NATIONAL CORP	-
			206,250
7,250	**	MELVILLE CORP	260,094
11,000		MERCHANTS SVGS. BANK	184,250
8,000		MERRILL LYNCH & CO INC	215,000
37,600		MGM/UA ENTERPRISES	521,700
8,000		MICOM SYS INC	310,000
10,000		MIDLAND ENERGY CO	233,750
16,000	**	MILLER HERMAN INC	396,000
11,750		MITCHELL ENERGY	226,188
15,550		MOBIL CORP	412,075
15,000	**	MORRIS CO SVGS. BANK	202,500
13,500		MOTOROLA INC	450,563
5,625	**	MUNFORD INC	109,688
12,500		NATL. COMPUTER SYSTEMS	200,000
14,000		NATL. MED. ENTER. INC	292,250
39,000	*	NATL. SEMICONDUCTOR	477,750
19,000		NETWORK SYSTEMS CORP	441,750
			85,000
10,000	~~	NICO CORP	-
55,700		NORTHEAST UTILITIES	633,588
4,900		NUCOR CORP	145,775
7,000	**	OPTICAL COATING LAB	152,250
8,300		OWENS CORNING FIBERGLASS	217,875
7,500		OWENS ILLINOIS INC	277,500
21,000	**		288,750
24,100	*	PARADYNE CORP	310,288
10,500		PARSONS CORP	254,625
32,500	*	PAYLESS CASHWAYS	532,188
7,100	2	PENNZOIL CO	229,863
7,000	**	PERKIN ELMER	145,250
14,500		PHILADELPHIA ELEC. CO	181,250
7,500	**	PLANNING RESEARCH CORP	112,500
9,000	**		144,000
27000		TATH & TUMPAT	

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NO. OF			MARKET
SHARES	SECURITY		VALUE
3,900 **	POST CORP	\$	249,113
8,700 **	PRENTICE HALL INC		376,275
2,500 **	PUROLATOR		80,625
10,800 *			202,500
	RAYTHEON CO		748,600
15,500 *			490,188
	RECOTON CORP		265,625
9,500 **			65,313
	REPUBLIC AIRLINES		48,750
16,100	REPUBLIC BANK CORP		426,650
	ROSES STORES INC		144,000
	ROWAN COMPANIES INC		150,075
10,550	ROYAL DUTCH PET. GLDRS.		505,081
	SARGENT WELCH SCIENTIFIC		62,388
9,800	SCHLUMBERGER LTD		443,450
21,150	SEA CONTAINERS LTD		470,588
21,150	SEACO INC		76,669
	SEAGATE TECHNOLOGY		206,025
5,450	SECURITY PACIFIC CORP		230,263
	SELONITI PACIFIC CONF		210,000
	SILICONE SYSTEMS INC		182,250
	SMITHKLINE-BECKMAN CORP		849,375
15,000	SO. CAROLINA NATL. CORP		126,400
	SONAT INC		472,675
14,600			232,200
8,600	SOUTHLAND CORP		632,188
-	SOUTHWEST AIRLINES		
4,900	ST. PAUL COS. INC		256,025
5,800	STANDARD OIL CO OHIO		253,025
21,950	STERLING DRUG INC		587,163
3,000	SUBARU OF AMERICA INC		276,000
•	SUNAIR ELEC. INC		94,250
4,700 *			48,175
	SUSQUEHANNA, BNKSHRS. INC		248,000
29,000 *	Danie Gona	-	362,500
28,100	SYNTEX CORP	Ч,	,208,300
	SYSTEMS ASSOCIATES		237,250
13,500 *			96,188
18,300	TANDY CORP		475,800
6,400	TENNECO INC		239,200
12,700	TEXAS COMMERCE BANKSHARES		519,113
7,500	TEXAS EASTERN CORP		210,938
230	TEXAS INDUSTRIES	_	6,699
52,100	TEXAS OIL & GAS CORP	1	,159,225

NO. OF				MARKET	
SHARES		SECURITY		VALUE	
26,050		TEXAS UTILITIES CO	\$	556,819	
10,400	*	THREE COM CORP		81,900	
10,000		THUNANDER CORP		56,250	
3,500		TIE COMMUNICATIONS		52,500	
23,425	*	TIMEPLEX INC		333,806	
5,900		TRANSCO ENERGY CO		255,175	;
26,700		TRAVELERS CORP		760,950	
17,000	**	U.S. HOME CORP		97,750	
5,000		UNITED STATES SHOE CORP		135,625	
10,100		UNIVERSAL-RUNDLE		188,113	
7,000	**	UNOCAL CORP		234,500	
9,200		US AIR GROUP		250,700	
23,800		US FIDELITY & GUAR. CO		473,025	
5,000	**	V F CORP	-	121,250	
18,050		VALERO ENERGY CORP		173,731	
18,000	*	VALID LOGIC SYSTEMS INC		213,750	
12,000	**	WACKENHUT CORP		265,500	
10,500		WARNACO INC		254,625	
18,200	*	WARNER COMMUNICATIONS		425,425	
		WASTE MANAGEMENT			
17,300		NORWEST BANK MPLS	,	564,412	
15,550		INTERNAL MGMT		507,319	
		SUB-TOTAL 32,850 SHARES	1,	,071,731	
6,500		WEIS MARKETS INC		201,500	
5,000	**	WELDOTRON CORP		35,000	
9,200		WESTERN UNION CORP		211,600	
57 , 800		WESTINGHOUSE ELEC. CO	1,	271,600	
6,900		XEROX CORP		264,788	
23,400	*	ZYCAD CORP		310,050	
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TOTAL EQUITY PORTFOLIO

\$ 82,036,515

- * THESE SECURITIES ARE HELD IN THE PORTFOLIO MANAGED BY NORWEST BANK.
- ** THESE SECURITIES ARE HELD IN THE PORTFOLIO MANAGED BY LIEBER & CO.

NO. OF SHARES	SECURITY		MARKET VALUE
13,488	ALLIED BANCSHARES INC	\$	322,026
10,675	ALLIED CORP		337,597
15,300	AMER. GENERAL CORP		317,475
5,200	AMER. INT'L. GROUP		304,200
27,400	AMERICAN EXPRESS CO		787,750
8,400	AMERICAN TEL & TEL NEW		144,900
43,500	ARCHER DANIELS MIDLAND		766,688
13,400	ATLANTIC RICHFIELD		609,700
23,300	AVON PRODS INC	• .	512,600
16,000	BANKERS TRUST NY CORP		616,000
23,100	BAXTER TRAVENOL LABS		355,163
27,650	BOEING CO		1,209,688
16,800 13,100 20,800 8,150	BORG-WARNER BROWN GROUP BRUNSWICK CORP BURLINGTON NORTHERN		315,000 347,150 608,400 328,038
10,200	CANADIAN PACIFIC LTD	•	312,375
10,100	CAPITAL HOLDING CORP		333,300
11,200	CARLISLE CORP		319,200
4,650	CELANESE CORP		301,088
8,500	CHASE MANHATTAN CORP		334,688
24,600	CHEMICAL NEW YORK CO		590,400
9,500	CITY INVESTING		404,938
9,750	COLUMBIA GAS SYSTEM		324,188
10,500	COMBUSTION ENGINEERING		326,813
64,350	COMMONWEALTH EDISON		1,463,963
16,400	CONTINENTAL TELECOM		313,650
14,350	CONTROL DATA CORP		443,060
22,100	COOPER TIRE & RUBBER		309,400
14,300	DOMINION RESOURCES		332,475
6,800	DU PONT EI DENEMOURS		310,250
26,100	DUKE POWER CO. NC		639,450
5,600 6,300 18,500 16,700	DUN & BRADSTREET CO E-SYSTEMS ENSERCH CORP EXXON CORP EEDEBAL NAME		680,525
88,100	FEDERAL NATL. MTG		1,112,273
20,500	FIRST CITY BANKCORP		328,000
9,500	FIRST INTERSTATE BANK		298,063
16,700	FLEETWOOD ENTER. INC		285,988
8,600	FORD MOTOR CO		310,675
5,000	GENERAL MOTORS CORP		326,875
5,650	GENERAL RE CORP		324,169
12,900	GOODYEAR TIRE & RUBBER		332,175
34,000	GREYHOUND CORP		760,750

NO. OF		MARKET
SHARES	SECURITY	VALUE
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8,500	GTE CORP	\$ 317,688
6,950	HALLIBURTON INC	233,694
18,750	HOUSTON INDUSTRIES INC	346,875
7,350	HOUSTON NAT. GAS CORP	353,719
8,300	INTERNORTH INC	301,913
6,700	INTL. BUSINESS MACHINES	708,525
6,500	KIDDE INC	186,063
9,800	KROGER CO	324,625
5,600	LEAR SIEGLER INC	242,200
14,350	LEVI STRAUSS & CO	410,769
4,400	LITTON INDS INC	323,400
22,650	LUCKY STORES	365,231
13,450	MARY KAY COSMETICS	137,863
8,800	MCA INC	382,800
5,800	MCDONNELL DOUGLAS CO	324,800
7,700	MELLON NATIONAL CORP	288,750
17,800	MELVILLE CORP	638,575
16,300	MITCHELL ENERGY	313,775
22,850	MOBIL CORP	605,525
29,250	NORTHEAST UTILITIES	332,719
11,700	OWENS CORNING FIBERGLASS	307,125
18,550	OWENS ILLINOIS INC	686,350
13,100	PARSONS CORP	317,675
	PENNZOIL CO	288,138
8,900	PHILADELPHIA 'ELECTRIC CO	313,750
25,100		-
22,700	REPUBLIC BANK CORP	601,550
6,900	ROYAL DUTCH PET. GLD	330,338
15,300	SCHLUMBERGER LTD	692,325
31,650	SEA CONTAINERS LTD	704,213
31,650	SEACO INC	114,731
6,250	SECURITY PACIFIC CORP	264,063
19,950	SMITHKLINE-BECKMAN CORP	1,129,669
18,200	SONAT INC	589,225
10,700	SOUTHLAND CORP	288,900
6,100	ST. PAUL COS. INC	318,725
7,300	STANDARD OIL CO. OHIO	318,463
29,700	STERLING DRUG INC	794,475
3,700	SUBARU OF AMERICA INC	340,400
8,900	SYNTEX CORP	382,700
8,000	TENNECO INC	299,000
15,800	TEXAS COMMERCE BANKS	645,825
12,300	TEXAS EASTERN CORP	345,938
13,750	TEXAS UTILITIES CO	293,906
7,350	TRANSCO ENERGY CO	317,888

	MARKET
SECURITY	VALUE
TRAVELERS CORP	\$ 1,122,900
US AIR GROUP	310,650
US FIDELITY & GUARANTY	618,113
VALERO ENERGY CORP	258,913
WARNACO INC	317,675
WASTE MANAGEMENT	688,388
WESTERN UNION CORP	323,150
WESTINGHOUSE ELEC. CO	1,828,200
XEROX CORP	330,025
	TRAVELERS CORP US AIR GROUP US FIDELITY & GUARANTY VALERO ENERGY CORP WARNACO INC WASTE MANAGEMENT WESTERN UNION CORP WESTINGHOUSE ELEC. CO

TOTAL EQUITY PORTFOLIO

\$ 44,186,723

PAR				MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
1,000,000	ALUMINUM CO OF CANADA	03/01/1995	9.500%	\$ 745,570
787,000	AMERICAN PRES LINES	11/01/1991	4.800%	476,096
2,656,285	ATLANTIC RICHFIELD CO	07/15/1996	9.250%	1,901,847
1,894,929	ATLANTIC RICHFIELD CO	12/01/2001	8.750%	1,242,884
2,500,000	BELL TELE. CO CANADA	09/01/1995	4.850%	1,321,175
1,200,000	CANADIAN PACIFIC, LTD	01/15/1992	8.625%	1,000,980
4,000,000	CONSOLIDATED NATURAL GAS	06/01/1997	8.125%	2,657,120
875,000	CONSTRUCTION AGGREGATE	06/01/1991	7.500%	637,254
1,644,000	EAGLE TERMINAL TANKERS	06/01/1989	6.000%	1,191,867
2,867,000	EL PASO COLUMBIA TANKER	03/31/2003	9.250%	1,953,316
150,000	FARRELL LINES, INC	09/20/1998	9.000%	103,692
140,000	FARRELL LINES, INC	06/29/1997	9.000%	98,102
144,000	FARRELL LINES, INC	11/27/1997	9.000%	100,423
146,000	FARRELL LINES, INC	02/28/1998	9.000%	101,531
591,000	FARRELL LINES, INC	04/01/1988	8.050%	509,158
5,000,000	FEDERAL FARM CREDIT BANK	10/21/1991	10.600%	4,226,550
7,000,000	FEDERAL HOME LOAN BANK	03/25/1988	10.200%	6,289,080
3,000,000	FEDERAL HOME LOAN BANK	04/27/1992	11.700%	2,668,110
3,000,000	FEDERAL HOME LOAN BANK	07/26/1993	11.700%	2,630,610
3,000,000	FEDERAL HOME LOAN MTG	08/30/1991	11.850%	2,698,110
2,500,000	FEDERAL NATIONAL MTG	08/10/1984	11.100%	2,500,000
4,000,000	FEDERAL NATIONAL MTG	05/10/1990	10.300%	3,412,480
3,000,000	FMC CORP	01/15/2000		2,112,060
3,609,183	GNMA POOL #	07/30/2001	8.750%	2,277,755
1,064,594	GNMA POOL # 00001	02/15/2000	7.000%	674,686
671 , 376	GNMA POOL # 00010	06/15/2000	8.000%	448,144
739,441	GNMA POOL # 00019	07/15/2000	8.000%	493,577
669,753	GNMA POOL # 00020	10/15/2000	8.000%	447,060
722,460	GNMA POOL # 00021	11/15/2000	8.000%	482,242
716,993	GNMA POOL # 00022	01/15/2001	8.000%	478,593
313,944	GNMA POOL # 00023	02/15/2001	8.000%	209,557
761,812	GNMA POOL # 00027	05/15/2000	7.000%	482,798
752 , 918	GNMA POOL # 00030	07/15/2000	8.000%	502,573
819,469	GNMA POOL # 00058	08/01/2000	8.000%	546,996
602,410	GNMA POOL # 00061	12/15/2000	8.000%	402,109
784 , 953	GNMA POOL # 00071	09/15/2000	8.000%	523,956
530,695	GNMA POOL # 00075	12/15/2000	8.000%	354,239
759,049	GNMA POOL # 00107	12/15/2000	8.000%	506,665
489,363	GNMA POOL # 00116	02/15/2001	8.000%	326,650
669,659	GNMA POOL # 00252	02/15/2001	8.000%	446,997
377,103	GNMA POOL # 00484	03/15/2001	7.500%	244,645
2,352,410	GNMA POOL # 00505	11/15/2001	6.500%	1,482,018
2,303,606	GNMA POOL # 00506	12/15/2001	6.500%	1,451,272
619,740	GNMA POOL # 02180	02/15/2004	8.000%	413,677
2,479,651	GNMA POOL # 02290	03/15/2003	6.500%	1,562,180

PAR VALUE		SECURI	ГУ	MATURITY	COUPON	MARKET Value
2,732,627 1,259,325	GNMA	POOL # POOL #	02291 02292	04/15/2003 06/15/2003	6.500% 6.500%	\$1,721,555 793,375
2,703,587		POOL #	02424	04/15/2003	6.500%	1,703,260
2,691,562 955,095		POOL # POOL #	02548 02678	07/15/2003	6.500% 8.000%	1,695,684
1,496,668		POOL #	02682	11/15/2003	8.000%	637,526 999,026
937,902		POOL #	03015	04/15/2004	8.000%	626,050
1,473,030		POOL #	03291	04/15/2004	8.000%	983,248
828,634	GNMA	POOL #	03487	02/15/2004	8.000%	553,113
390,644		POOL #	03627	07/15/2004	8.250%	239,566
25,993		POOL #	03738	06/15/2004	8.000%	17,350
1,098,639		POOL #	03972	07/15/2004	8.250%	673,752
779,061		POOL #	03974	11/15/2004	9.000%	551,185
1,204,341 434,393		POOL #	03975 03979	07/15/2004 08/15/2004	8.000%	803,898
442,795		POOL # POOL #	04004	08/15/2004	8.250% 8.250%	266,396 271,549
1,176,728		POOL #	04092	07/15/2004	8.250%	721,640
369,670		POOL #	04145	08/15/2004	8.250%	226,704
507,801		POOL #	04472	09/15/2004	9.000%	359,269
35,754		POOL #	06039	07/15/2005	8.000%	23,866
24,632	GNMA	POOL #	06560	10/15/2005	8.000%	16,442
502,643	GNMA	POOL #	09113	12/15/2005	8.000%	335,514
463,169		POOL #	09680	06/15/2006	8.250%	284,043
690,045		POOL #	10351	08/15/2006	8.000%	460,605
674,693		POOL #	10887	07/15/2006	8.250%	413,762
758,575		POOL #	11127	09/15/2006	8.000%	506,349
555,826		POOL #	11299	08/15/2006	8.000%	371,014
3,786,540		POOL #	12383	02/15/2005 12/15/2006	8.750% 8.000%	2,389,686
744,597 451,049		POOL # POOL #	12766 13705	10/15/2006	8.000%	497,019 301,07 5
1,524,331		POOL #	15976	08/15/2007	8.000%	1,017,491
690,486		POOL #	16875	08/15/2007	8.000%	460,899
833,035		POOL #	16965	11/15/2007	8.000%	556,051
810,011			17189	07/15/2007	8.000%	540,683
885,242		POOL #	17769	08/15/2007	8.000%	590,899
396,243	GNMA	POOL #	17803	11/15/2007	8.000%	264,492
733,826		POOL #	17904	08/15/2007	8.000%	489,829
755,377		POOL #	17945	12/15/2007	8.000%	504,214
684,465		POOL #	18017	07/15/2007	8.000%	456,880
883,534		POOL #	18058	07/15/2007	8.000%	589,759
362,359		POOL #	18592	11/15/2007	8.000%	241,875 501,682
751,584 699,340		POOL #	18768 18782	08/15/2007 10/15/2007	8.000% 8.000%	466,809
798,501		POOL # POOL #	19105	07/15/2007	8.000%	532,999
737,268		POOL #	19667	01/15/2008	8.000%	492,127
1311200	GUUN	100D #	1000		0.0000	

PAR				MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
746,183	GNMA POOL # 19740	10/15/2007	8.000%	\$ 498,077
4,232,147	GNMA POOL # 19784	09/15/2007	8.000%	2,824,958
681,769	GNMA POOL # 19997	10/15/2007	8.000%	455,081
53,554	GNMA POOL # 20074	03/15/2007	8.000%	35,747
787,476	GNMA POOL # 20263	11/15/2007	8.000%	525,640
811,724	GNMA POOL # 20393	11/15/2007	8.000%	541,826
829,543	GNMA POOL # 20495	11/15/2007	8.000%	553 , 720
896,484	GNMA POOL # 21037	11/15/2007	8.000%	598,403
746,663	GNMA POOL # 21480	01/15/2008	8.000%	498,398
823,832	GNMA POOL # 21615	01/15/2008	8.000%	549,908
768,937	GNMA POOL # 21930	03/15/2008	8.000%	513,266
891,477	GNMA POOL # 22012	04/15/2008	8.000%	595,061
799,753	GNMA POOL # 22820	12/15/2007	8.000%	533,835
847,427	GNMA POOL # 24078-	02/15/2008	8.000%	565,658
892,384	GNMA POOL # 24417	03/15/2008	8.000%	595,667
4,206,204	GNMA POOL # 27638	10/15/2008	9.000%	2,975,889
4,496,877	GNMA POOL # 35014	02/15/2010	11.000%	3,653,713
1,975,796	GNMA POOL # 40589	03/15/2010	11.000%	1,605,334
1,827,219	GNMA POOL # 42691	08/15/2010	11.000%	1,484,616
2,665,721	GNMA POOL # 43596	10/15/2010	11.500%	2,245,870
4,000,000	KANSAS POWER & LIGHT	06/01/2007	8.125%	2,337,200
3,140,827	LNM ACCEPTANCE CORP	12/01/1986	9.100%	2,869,114 1,85,874
1,977,473	MARLIN DRILLING CO	01/01/1991	8.900% 7.500%	644,264
984,000	MATSON NAVIGATION CO	11/10/1994 03/15/2003	7.750%	723,000
1,205,000	MCI COMMUNICATIONS CV. MICHIGAN BELL TELEPHONE	06/01/2015	8.125%	1,415,350
2,500,000 2,607,000	MOORE-MCCORMACK LEASING	07/15/2001	8.875%	1,738,061
648,000	MOORE-MCCORMACK LEASING	04/01/1987	5.750%	560,209
3,000,000	MOUNTAIN STATES TEL & TEL	06/01/2013	7.750%	1,622,070
30,000	MOWER/FREEBORN SD 90	07/01/1986	3.000%	26,276
355,000	NATL MED ENTERPRISE CV.	11/15/2001	12.625%	•
2,500,000	NORTHERN STATES POWER	01/01/2004	8.375%	1,539,625
1,904,800	NORTON SIMON, INC	06/01/2004	9.875%	1,334,598
1,500,000	NORWEST CORP	03/15/2003	7.750%	853,800
3,000,000	NORWEST CORP	09/15/1986	7.875%	2,665,740
1,500,000	NORWEST CORP	10/15/1990	5.125%	990,375
1,000,000	OWENS ILLINOIS INC	06/01/1990	10.375%	851,930
1,543,000	PACIFIC FAR EAST LINE	02/01/1997	8.750%	1,066,290
914,500	PENN TANKER CO	11/10/1989	6.000%	664,073
1,632,000	PRUDENTIAL LINES INC	11/01/1995	6.000%	902,904
1,855,000	PUGET SOUND TUG & BARGE	02/15/2001	9.125%	1,265,815
148,500	SBA POOL # 3004	05/15/2004	11.700%	148,500
268,216	SBA POOL # 3009	12/19/2003	11.700%	268,216
66,780	SBA POOL # 3005A	04/13/1999	11.700%	66,780
100,470	SBA POOL # 3005B	03/25/1999	11.700%	100,470
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PAR				MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
109,296	SBA POOL - SULLIVAN	05/10/1991	11.700%	\$ 109,296
37,800	SBA POOL - WAGNER	04/02/1999	11.700%	37,800
4,000,000	SOUTHERN BELL TEL & TEL	03/15/2013	7.625%	2,160,480
1,000,000	SPRAGUE ELECTRIC CO	09/01/1988	4.375%	696,000
820,448	STANDARD OIL OF CALIF	09/07/1997	7.700%	509,785
820,448	STANDARD OIL OF CALIF	09/08/1997	7.700%	509,761
820,448	STANDARD OIL OF CALIF	11/06/1997	7.700%	508,423
878,000	STATES STEAMSHIP CO	03/31/1993	5.100%	501,733
3,000,000	TEXAS POWER & LIGHT	02/01/2009	9.375%	1,966,740
1,000,000	U.S.A. TREASURY BOND	02/15/2007	7.625%	582,500
2,000,000	U.S.A. TREASURY BOND	11/15/2010	12.750%	1,857,500
2,000,000	U.S.A. TREASURY BOND	11/15/1995	11.500%	1,737,500
50,000	U.S.A. TREASURY BOND	11/15/1998	3.500%	44,938
3,000,000	U.S.A. TREASURY BOND	02/15/2001	11.750%	2,593,110
69,000	U.S.A. TREASURY BOND	08/15/1984	6.375%	68,676
2,000,000	U.S.A. TREASURY BOND	11/15/1993	8.625%	1,463,740
15,000,000	U.S.A. TREASURY NOTE	10/15/1989	11.875%	13 ,9 68,750
5,000,000	U.S.A. TREASURY NOTE	04/30/1985	9.500%	4,901,550
40,000	U.S.A. TREASURY NOTE	11/15/1987	7.625%	34,300
11,000	U.S.A. TREASURY NOTE	02/15/1985	8.000%	10,780
50,000	U.S.A. TREASURY NOTE	05/15/1986	7.875%	45,860
2,000,000	U.S.A. TREASURY NOTE	02/15/1987	9.000%	1,815,620
40,000	U.S.A. TREASURY NOTE	05/15/198	12.000%	38,825
90,000	U.S.A. TREASURY NOTE	08/15/1986	8.000%	81,815
2,000,000	U.S.A. TREASURY NOTE	11/15/1989	10.750%	1,780,000
2,985,261	US DEPT OF AGRICULTURE	07/31/1985	8.625%	2,847,193
20,000	WAD/OTTERTL JICSD 291	07/01/1986	3.000%	17,518
2,176,246	WESTERN CO OF NORTH AMER	06/11/1990	9.250%	1,775,490
3,000,000	ZAPATA OFF-SHORE CO	06/15/1996	8.625%	2,072,550
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TOTAL BOND PORTFOLIO

\$175,683,473

MINNESOTA STATE BOARD OF INVESTMENT BASIC RETIREMENT FUNDS ALPHABETICAL ACTIVE EQUITY MANAGER HOLDINGS JUNE 30, 1984

NO. OF			MARKET
SHARES	SECURITY	ADVISOR	VALUE
41,800	A & M FOOD SERVICES	HERBERT R. SMITH	\$ 240,350
50,000	ABBOTT LABS	LOOMIS SAYLES	2,181,250
20,000	ADVANCED MICRO DEV	HELLMÀN JORDAN	615,000
60,000	AHMANSON H.F. CO	INVESTMENT ADVISORS	1,117,500
39,900	AIR MIDWEST INC	HERBERT R. SMITH	458,850
16,500	AIRCAL INC	HERBERT R. SMITH	148,500
7,000	ALCAN ALUMINUM LTD	HELLMAN JORDAN	190,750
30,000	ALEXANDER & ALEXANDER	HELLMAN JORDAN	570,000
140,000	ALLEGHENY INTERNATIONAL	BEUTEL GOODMAN	2,905,000
55,866		ALLIANCE CAPITAL	901,620
35,000		HELLMAN JORDAN	1,190,000
75,000	AMER. GEN. CORP PFD 2.64	BEUTEL GOODMAN	3,140,625
31,000		HELLMAN JORDAN	1,298,125
17,900	е	SIEBEL CAPITAL	749,563
	SUB-TOTAL	123,900 SHARES	
63,100	AMER. MEDICAL INT'L	FRED ALGER	1,451,300
47,000		SIEBEL CAPITAL	1,081,000
	SUB-TOTAL	110,100 SHARES	2,532,300
14,400	AMERADA HESS CORP	HERBERT R. SMITH	405,000
9,000		FORSTMANN LEFF	564,750
40,000	AMERICAN EXPRESS CO	FORSTMANN LEFF	1,150,000
40,000		INVESTMENT ADVISORS	1,150,000
11,000		SIEBEL CAPITAL	316,250
,	SUB-TOTAL	91,000 SHARES	2,616,250
54,000	AMERICAN GREETINGS	FRED ALGER	1,545,750
25,000	AMERICAN HOSPITAL SUPPLY	INVESTMENT ADVISORS	778,125
40,000	AMERICAN STANDARD INC	INVESTMENT ADVISORS	995,000
25,000	AMERICAN STORES CO NEW	IDS ADVISORY	809,375
18,000	AMERITECH CORP	IDS ADVISORY	1,170,000
44,400	AMETEK INC	IDS ADVISORY	1,176,600
45,000	AMP INC	FRED ALGER	1,440,000
30,000	•	ALLIANCE CAPITAL	960,000
90,000	· · · · · · · · · · · · · · · · · · ·	LOOMIS SAYLES	2,880,000
	SUB-TOTAL	165,000 SHARES	5,280,000
43,000	AMR CORP	ALLIANCE CAPITAL	1,311,500
19,000		FORSTMANN LEFF	579,500
31,000		INVESTMENT ADVISORS	945,500
70,000		LOOMIS SAYLES	2,135,000
-	SUB-TOTAL	163,000 SHARES	4,971,500
60,000	ARCHER DANIELS MIDLAND	HELLMAN JORDAN	1,057,500
20,000	ARKLA INCORPORATED	INVESTMENT ADVISORS	395,000
70,000		TRUSTEE & INVESTORS	1,382,500
*	SUB-TOTAL	90,000 SHARES	1,777,500

MINNESOTA STATE BOARD OF INVESTMENT BASIC RETIREMENT FUNDS ALPHABETICAL ACTIVE EQUITY MANAGER HOLDINGS JUNE 30, 1984

NO. OF	,
SHARES	SECURITY
15 000	
15,000	ATLANTIC RICHFIELD
15,000	·
26 500	SUB-TOTAL
26,500 110,000	AUXTON COMP. ENTERPRISES AVCO CORP
54,500	AVCO CORP
0.7000	SUB-TOTAL
12,600	BANK OF VIRGINIA
70,000	BAXTER TRAVENOL LABS
34,700	BAYLY CORP
16,000	BELL ATLANTIC CORP
20,000	BERGEN BRUNSWIG CORP
35,000	BEVERLY ENTERPRISES
25,000	
26 000	SUB-TOTAL BLOCK H & R INC
26,000 41,500	BOEING CO
29,000	BOLING CO
17,000	
30,000	4
	SUB-TOTAL
30,000	BOISE CASCADE CORP
15,000	BRUNSWICK CORP
30,000	BURLINGTON INDUSTRIES
16,000	· · · · · · · · · · · · · · · · · · ·
	SUB-TOTAL
29,500	BURLINGTON NORTHERN INC
12,000	
21,000	SUB-TOTAL BURROUGHS CORP
7,700	BURROUGHS CORP
///00	SUB-TOTAL
16,100	CARNATION
70,100	CARSON PIRIE & CO
70,000	CATERPILLAR TRACTOR CO
25,000	CELANESE CORP
7,500	а 1
	SUB-TOTAL
15,700	CENTEX CORP
57,200	CENTRAL & SO WEST CORP
54,000	
65,000 29,000	CHASE MANHATTAN CORP
29,000	SUB-TOTAL
37.500	CHEMICAL NEW YORK CORP
57,500	

INVESTMENT ADVISORS \$ 682,500 TRUSTEE & INVESTORS 682,500 30,000 SHARES 1,365,000	J		MARKET
TRUSTEE & INVESTORS 30,000 SHARES 682,500 30,000 SHARES 1,365,000 HERBERT R. SMITH 324,625 BEUTEL GOODMAN 3,272,500 SIEBEL CAPITAL 1,621,375 164,500 SHARES 4,893,875 HERBERT R. SMITH 456,750 INVESTMENT ADVISORS 1,076,250 HERBERT R. SMITH 303,625 IDS ADVISORY 1,086,000 SIEBEL CAPITAL 684,375 GOOD SHARES 1,642,500 SIEBEL CAPITAL 1,622,500 SIEBEL CAPITAL 1,020,500 SIEBEL CAPITAL 1,020,500 SIEBEL CAPITAL 1,020,500 SIEBEL CAPITAL 1,020,500 SIEBEL CAPITAL 1,268,750 IDS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 1,40,625 INVESTMENT ADVISORS 1,023,750 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,87,375 IDS ADVISORY 1,18,250 HERBERT R. SMITH 410,025 28,700	ADVISOR		VALUE
30,000 SHARES 1,365,000 HERBERT R. SMITH 324,625 BEUTEL GOODMAN 3,272,500 SIEBEL CAPITAL 1,621,375 164,500 SHARES 4,893,875 HERBERT R. SMITH 456,750 INVESTMENT ADVISORS 1,076,250 HERBERT R. SMITH 303,625 IDS ADVISORY 1,086,000 SIEBEL CAPITAL 445,000 INVESTMENT ADVISORS 958,125 SIEBEL CAPITAL 60,000 SHARES 60,000 SHARES 1,642,500 SIEBEL CAPITAL 1,020,500 FRED ALGER 1,815,625 ALLIANCE CAPITAL 1,020,500 FRED ALGER 1,815,625 ALLIANCE CAPITAL 1,023,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 1,40,625 INVESTMENT ADVISORS 1,023,750 FRED ALGER 1,87,375 IDS ADVISORY 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,528,275 HERBERT R. SMITH 410,025 SIEBEL CAPITAL <td>INVESTMENT ADVISORS</td> <td>\$</td> <td>682,500</td>	INVESTMENT ADVISORS	\$	682,500
HERBERT R. SMITH 324,625 BEUTEL GOODMAN 3,272,500 SIEBEL CAPITAL 1,621,375 164,500 SHARES 4,893,875 HERBERT R. SMITH 456,750 INVESTMENT ADVISORS 1,076,250 HERBERT R. SMITH 303,625 IDS ADVISORY 1,086,000 SIEBEL CAPITAL 445,000 INVESTMENT ADVISORS 958,125 SIEBEL CAPITAL 684,375 60,000 SHARES 1,642,500 SIEBEL CAPITAL 1,020,500 FRED ALGER 1,642,500 SIEBEL CAPITAL 1,020,500 FRED ALGER 1,815,625 ALLIANCE CAPITAL 1,020,500 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 1,40,625 INVESTMENT ADVISORS 1,023,750 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,187,375 IDS ADVISORY 1,187,375 IDS ADVISORY 1,182,50 HERBERT R. SMITH 422,000 41,500 SHARES 1,528,275 HERBERT R. SMITH		٦	
SIEBEL CAPITAL 1,621,375 164,500 SHARES 4,893,875 HERBERT R. SMITH 456,750 INVESTMENT ADVISORS 1,076,250 HERBERT R. SMITH 303,625 IDS ADVISORY 1,086,000 SIEBEL CAPITAL 445,000 INVESTMENT ADVISORS 958,125 SIEBEL CAPITAL 684,375 60,000 SHARES ,642,500 SIEBEL CAPITAL 1,020,500 FRED ALGER 1,815,625 ALLIANCE CAPITAL 1,268,750 IDS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 1,40,625 INVESTMENT ADVISORS 1,023,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,87,375 IDS ADVISORY 1,187,375 IDS ADVISORY 1,187,375 IDS ADVISORY 1,182,50 HERBERT R. SMITH 410,025 28,700 SHARES 1,670,375 IDS ADVISORY 1,118,250 HERBERT R. SMITH 525,000 FRED ALGER 1,	HERBERT R. SMITH		324,625
164,500 SHARES 4,893,875 HERBERT R. SMITH 456,750 INVESTMENT ADVISORS 1,076,250 HERBERT R. SMITH 303,625 IDS ADVISORY 1,086,000 SIEBEL CAPITAL 445,000 INVESTMENT ADVISORS 958,125 SIEBEL CAPITAL 642,500 SIEBEL CAPITAL 1,020,500 FRED ALGER 1,815,625 ALLIANCE CAPITAL 1,268,750 IDS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,87,375 IDS ADVISORY 483,000 41,500 SHARES 1,528,275 IDS ADVISORY 1,18,250 HERBERT R. SMITH 410,025 IDS ADVISORY 1,18,250 HERBERT R. SMITH 525,000 FRED ALGER 1,618,750 SIEBEL CAPITAL 2,646,		3	,272,500
HERBERT R. SMITH 456,750 INVESTMENT ADVISORS 1,076,250 HERBERT R. SMITH 303,625 IDS ADVISORY 1,086,000 SIEBEL CAPITAL 445,000 INVESTMENT ADVISORS 958,125 SIEBEL CAPITAL 642,500 SIEBEL CAPITAL 1,020,500 FRED ALGER 1,815,625 ALLIANCE CAPITAL 1,268,750 IDS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,187,375 IDS ADVISORY 1,18,250 HERBERT R. SMITH 410,025 28,700 SHARES 1,528,275 SIEBEL CAPITAL 2,646,275 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 HERBERT R. SMITH 485,625 32,500 SHARES 1,618,750 FORSTMANN LEFF		1	,621,375
INVESTMENT ADVISORS 1,076,250 HERBERT R. SMITH 303,625 IDS ADVISORY 1,086,000 SIEBEL CAPITAL 445,000 INVESTMENT ADVISORS 958,125 SIEBEL CAPITAL 684,375 60,000 SHARES 1,642,500 SIEBEL CAPITAL 1,020,500 FRED ALGER 1,815,625 ALLIANCE CAPITAL 1,268,750 IDS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,670,375 IDS ADVISORY 1,187,375 IDS ADVISORY 1,182,500 HERBERT R. SMITH 400,025 28,700 SHARES 1,528,275 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 HERBERT R. SMITH 380,725 FORSTMANN LEFF		4	,893,8/5
HERBERT R. SMITH 303,625 IDS ADVISORY 1,086,000 SIEBEL CAPITAL 445,000 INVESTMENT ADVISORS 958,125 SIEBEL CAPITAL 684,375 60,000 SHARES 1,642,500 SIEBEL CAPITAL 1,020,500 SIEBEL CAPITAL 1,020,500 SIEBEL CAPITAL 1,268,750 DIS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,187,375 IDS ADVISORY 483,000 41,500 SHARES 1,528,275 HERBERT R. SMITH 410,025 28,700 SHARES 1,528,275 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 HELLMAN JORDAN 525,000 FRED ALGER 1,618,750 FORSTMANN LEFF 485,625 32,500 SHARES 1,044,375		r	436,750
IDS ADVISORY 1,086,000 SIEBEL CAPITAL 445,000 INVESTMENT ADVISORS 958,125 SIEBEL CAPITAL 684,375 60,000 SHARES 1,642,500 SIEBEL CAPITAL 1,020,500 FRED ALGER 1,815,625 ALLIANCE CAPITAL 1,268,750 IDS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,187,375 IDS ADVISORY 483,000 41,500 SHARES 1,670,375 IDS ADVISORY 1,118,250 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 HERBERT R. SMITH 380,725 HERBERT R. SMITH 380,725 FORSTMANN LEFF 1,015,300 INVESTMENT ADVISORS 1,046,250 BEUTEL GOODMAN 2,559,375 IRUSTEE & INVESTORS			303.625
SIEBEL CAPITAL 445,000 INVESTMENT ADVISORS 958,125 SIEBEL CAPITAL 684,375 60,000 SHARES 1,642,500 SIEBEL CAPITAL 1,020,500 FRED ALGER 1,815,625 ALLIANCE CAPITAL 1,268,750 IDS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,187,375 IDS ADVISORY 483,000 41,500 SHARES 1,670,375 IDS ADVISORY 1,118,250 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 HERBERT R. SMITH 380,725 FORSTMANN LEFF 1,015,300 INVESTMENT ADVISORS 1,046,250 BEUTEL GOODMAN 2,559,375 TRUSTEE & INVESTORS		1	.086.000
INVESTMENT ADVISORS 958,125 SIEBEL CAPITAL 684,375 60,000 SHARES 1,642,500 SIEBEL CAPITAL 1,020,500 FRED ALGER 1,815,625 ALLIANCE CAPITAL 1,268,750 IDS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,187,375 IDS ADVISORY 483,000 41,500 SHARES 1,670,375 IDS ADVISORY 1,118,250 HERBERT R. SMITH 410,025 28,700 SHARES 1,528,275 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 HELLMAN JORDAN 525,000 FRED ALGER 1,618,750 FORSTMANN LEFF 380,725 HERBERT R. SMITH 380,725 FORSTMANN LEFF 1,015,300 INVESTMENT ADVISORS 1,0			445,000
SIEBEL CAPITAL 684,375 60,000 SHARES 1,642,500 SIEBEL CAPITAL 1,020,500 FRED ALGER 1,815,625 ALLIANCE CAPITAL 1,268,750 IDS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,187,375 IDS ADVISORY 483,000 41,500 SHARES 1,670,375 IDS ADVISORY 1,118,250 HERBERT R. SMITH 410,025 28,700 SHARES 1,528,275 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 HERBERT R. SMITH 380,725 FORSTMANN LEFF 485,625 32,500 SHARES 1,015,300 INVESTMENT ADVISORS 1,046,250 BEUTEL GOODMAN 2,559,375 TRUSTEE & INVESTORS 1,141,875 94,000 SHARES <	INVESTMENT ADVISORS		958,125
SIEBEL CAPITAL 1,020,500 FRED ALGER 1,815,625 ALLIANCE CAPITAL 1,268,750 IDS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,187,375 IDS ADVISORY 483,000 41,500 SHARES 1,670,375 IDS ADVISORY 1,118,250 HERBERT R. SMITH 410,025 28,700 SHARES 1,528,275 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 HELLMAN JORDAN 525,000 FRED ALGER 1,618,750 FORSTMANN LEFF 485,625 32,500 SHARES 1,015,300 INVESTMENT ADVISORS 1,046,250 BEUTEL GOODMAN 2,559,375 TRUSTEE & INVESTORS 1,141,875 94,000 SHARES 3,701,250			684,375
FRED ALGER 1,815,625 ALLIANCE CAPITAL 1,268,750 IDS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,187,375 IDS ADVISORY 483,000 41,500 SHARES 1,670,375 IDS ADVISORY 118,250 HERBERT R. SMITH 410,025 28,700 SHARES 1,528,275 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 HERBERT R. SMITH 380,725 FORSTMANN LEFF 1,015,300 INVESTMENT ADVISORS 1,046,250 BEUTEL GOODMAN 2,559,375 TRUSTEE & INVESTORS 1,141,875 94,000 SHARES 3,701,250		1	,642,500
ALLIANCE CAPITAL 1,268,750 IDS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,187,375 IDS ADVISORY 483,000 41,500 SHARES 1,670,375 IDS ADVISORY 1,118,250 HERBERT R. SMITH 410,025 28,700 SHARES 1,528,275 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 SIEBEL CAPITAL 2,55,000 FRED ALGER 1,618,750 FORSTMANN LEFF 380,725 FORSTMANN LEFF 1,015,300 INVESTMENT ADVISORS <t< td=""><td></td><td>1</td><td>,020,500</td></t<>		1	,020,500
IDS ADVISORY 743,750 TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,187,375 IDS ADVISORY 483,000 41,500 SHARES 1,670,375 IDS ADVISORY 483,000 41,500 SHARES 1,670,375 IDS ADVISORY 118,250 HERBERT R. SMITH 410,025 28,700 SHARES 1,528,275 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 HELLMAN JORDAN 525,000 FRED ALGER 1,618,750 FORSTMANN LEFF 485,625 32,500 SHARES 2,104,375 HERBERT R. SMITH 380,725 FORSTMANN LEFF 1,015,300 INVESTMENT ADVISORS 1,046,250 BEUTEL GOODMAN 2,559,375 TRUSTEE & INVESTORS 1,141,875 94,000 SHARES 3,701		1	,815,625
TRUSTEE & INVESTORS 1,312,500 117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,187,375 IDS ADVISORY 483,000 41,500 SHARES 1,670,375 IDS ADVISORY 483,000 41,500 SHARES 1,528,275 IDS ADVISORY 118,250 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 SIEBERT R. SMITH 380,725 FORSTMANN LEFF 1,015,300 INVESTMENT ADVISORS 1,046,250 BEUTEL GOODMAN 2,559,375 TRUSTEE & INVESTORS 1,141,875 94,000 SHARES 3,701,250		1	,268,750
117,500 SHARES 5,140,625 INVESTMENT ADVISORS 1,023,750 HELLMAN JORDAN 438,750 FORSTMANN LEFF 791,250 HERBERT R. SMITH 422,000 46,000 SHARES 1,213,250 FRED ALGER 1,187,375 IDS ADVISORY 483,000 41,500 SHARES 1,670,375 IDS ADVISORY 410,025 28,700 SHARES 1,528,275 HERBERT R. SMITH 961,975 SIEBEL CAPITAL 2,646,275 FORSTMANN LEFF 525,000 FRED ALGER 1,618,750 FORSTMANN LEFF 485,625 32,500 SHARES 2,104,375 HERBERT R. SMITH 380,725 FORSTMANN LEFF 1,015,300 INVESTMENT ADVISORS 1,046,250 BEUTEL GOODMAN 2,559,375 TRUSTEE & INVESTORS 1,141,875 94,000 SHARES 3,701,250		•	/43,/50
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INVESTMENT ADVISORS 900,000		~	
	INVESTMENT ADVISORS		900,000

MINNESOTA STATE BOARD OF INVESTMENT BASIC RETIREMENT FUNDS ALPHABETICAL ACTIVE EQUITY MANAGER HOLDINGS JUNE 30, 1984

NO. OF			MARKET	
SHARES	SECURITY	ADVISOR	VALUE	
55,000	CHRYSLER CORP	ALLIANCE CAPITAL \$	1,375,000	
100,000		LOOMIS SAYLES	2,500,000	
·	SUB-TOTAL	155,000 SHARES	3,875,000	
20,300	CHUBB CORP	HERBERT R. SMITH	933,800	
17,000	CIGNA CORP	FRED ALGER	533,375	
40,000	CITICORP	INVESTMENT ADVISORS	1,225,000	
40,000		TRUSTEE & INVESTORS	1,225,000	
	SUB-TOTAL	80,000 SHARES	2,450,000	
21,600	CITIZENS & SOUTHN GA CORP	HERBERT R. SMITH	294,300	
24,600	CLOROX CO	HERBERT R. SMITH	658,050	
17,200	COCA COLA CO	HERBERT R. SMITH	991,150	
145,000	COLGATE PALMOLIVE	BEUTEL GOODMAN	3,335,000	
17,400		HERBERT R. SMITH	400,200	
. • .	SUB-TOTAL	162,400 SHARES	3,735,200	
19,300	COLONIAL PENN GROUP	HERBERT R. SMITH	547,638	
46,600	COMMONWEALTH EDISON CO	IDS ADVISORY	1,060,150	
51,000	COMPUTER SCIENCES CORP	SIEBEL CAPITAL	663,000	
30,000	COMPUTER VISION CORP	TRUSTEE & INVESTORS	1,162,500	
60,000	CONAGRA INC	IDS ADVISORY	2,280,000	
25,000	CONSOL. NAT. GAS	IDS ADVISORY	868,750	
74,900	CONTINENTAL TELECOM. INC	TRUSTEE & INVESTORS	1,432,463	
56,600	CONTL. AIR	HERBERT R. SMITH	360,825	
63,500	CONTL. AIR 9% CV PFD	HERBERT R. SMITH	492,125	
45,000	CONTROL DATA CORP	INVESTMENT ADVISORS	1,389,375	
48,400	CONVERGENT TECH.	FORSTMANN LEFF	653,400	
19,100	CORNING GLASS WORKS	FRED ALGER	1,217,625	
25,000	COX COMMUNICATIONS INC	ALLIANCE CAPITAL	1,321,875	
20,900	CPC INTERNATIONAL INC	FORSTMANN LEFF	770,688	
7,000	CROWN ZELLERBACH CORP	HELLMAN JORDAN	215,250	
45,000	CSX CORP	FORSTMANN LEFF	933,750	
35,000		IDS ADVISORY	726,250	
•	SUB-TOTAL	80,000 SHARES	1,660,000	
31,200	CUMMINS ENGINE CO	FRED ALGER	2,242,500	
66,000	· · ·	BEUTEL GOODMAN	4,743,750	
20,000		LOOMIS SAYLES	1,437,500	
5,100		HERBERT R. SMITH	366,563	
- (SUB-TOTAL	122,300 SHARES	8,790,313	
60,000	DAMON CORP	FRED ALGER	855,000	
9,000	DART & KRAFT INC	IDS ADVISORY	709,875	
45,000	DATA GENERAL CORP	LOOMIS SAYLES	2,115,000	
58,500	DAYTON HUDSON CORP	ALLIANCE CAPITAL	1,835,438	
40,000		INVESTMENT ADVISORS	1,255,000	
	SUB-TOTAL	98,500 SHARES	3,090,438	
35,000	DELTA AIR LINES INC	HELLMAN JORDAN	1,076,250	
62,000	DETROIT EDISON CO	IDS ADVISORY	782,750	
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NO. OF		A DUIT COD		MARKET
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SHARES	SECURITY	ADVISOR		VALUE
46,000	DIAMOND SHAMROCK	HELLMAN JORDAN	\$	851,000
11,500	DIGITAL EQUIPMENT CORP	FORSTMANN LEFF		966,000
25,000		LOOMIS SAYLES	2,	100,000
15,300	· · · · · · · · · · · · · · · · · · ·	TRUSTEE & INVESTORS	1,	285,200
-	SUB-TOTAL	51,800 SHARES	4,	351,200
17,800	DIGITAL SWITCH	HELLMAN JORDAN	ļ	407,175
16,800		TRUSTEE & INVESTORS		384,300
•	SUB-TOTAL	34,600 SHARES		791,475
55,000	DIVERSIFOODS INC	SIEBEL CAPITAL		763,125
22,200	DONALDSON LUFKIN & JEN	HERBERT R. SMITH		432,900
51,000	DONNELLEY RR & SONS	ALLIANCE CAPITAL		014,500
50,000	DOW CHEMICAL CO	INVESTMENT ADVISORS		400,000
45,000	DOW JONES & CO	ALLIANCE CAPITAL		985,625
26,200	DUN & BRADSTREET COS INC	FRED ALGER,		552,350
23,000		IDS ADVISORY		362,750
	SUB-TOTAL	49,200 SHARES		915,100
23,000	EASTMAN KODAK CO	FRED ALGER		592,750
15,000		INVESTMENT ADVISORS		038,750
21,000		TRUSTEE & INVESTORS		454,250
	SUB-TOTAL	59,000 SHARES		085,750
40,000	EATON CORP	LOOMIS SAYLES		640,000
12,200	ELECTRONIC DATA SYS CORP	HERBERT R. SMITH	_	510,875
25,000	EXXON CORP	IDS ADVISORY	1.	018,750
21,700		HERBERT R. SMITH		884,275
	SUB-TOTAL	46,700 SHARES		903,025
23,000	FARMERS GROUP INC	IDS ADVISORY		885,500
40,000	FEDERAL EXPRESS CORP	ALLIANCE CAPITAL		395,000
60,000		LOOMIS SAYLES		092,500
•	SUB-TOTAL	100,000 SHARES		487,500
45,000	FEDERAL NATL. MTG.	ALLIANCE CAPITAL		568,125
45,000		SIEBEL CAPITAL		568,125
·	SUB-TOTAL	90,000 SHARES		136,250
70,000	FIN. CORP OF AMERICA	HELLMAN JORDAN		735,000
83,000	FIRST INTERSTATE BANCORP	BEUTEL GOODMAN		604,125
18,000	FLUOR CORP	HELLMAN JORDAN		308,250
41,900	FORD MOTOR CO	HELLMAN JORDAN		513,638
35,000		IDS ADVISORY		264,375
34,000		INVESTMENT ADVISORS		228,250
75,000		LOOMIS SAYLES	1.	709,375
• • • •	SUB-TOTAL	185,900 SHARES		715,638
30,000	FOREMOST CORP. OF AMERICA	SIEBEL CAPITAL		742,500
39,700	FRUEHAUF CORP	FRED ALGER		210,850
45,000	GANNETT INC	ALLIANCE CAPITAL	-	878,750
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NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
31,400 33,000 25,000	GENERAL ELECTRIC CO	FRED ALGER INVESTMENT ADVISORS SIEBEL CAPITAL	<pre>\$ 1,648,500 1,732,500 1,312,500</pre>
23,000	SUB-TOTAL	89,400 SHARES	
14,000	GENERAL MOTORS CORP	FRED ALGER	915,250
34,000		ALLIANCE CAPITAL	2,222,750
31,700	_	HELLMAN JORDAN	2,072,388
26,000		INVESTMENT ADVISORS	1,699,750
•	SUB-TOTAL	105,700 SHARES	
108,600	GENERAL PUBLIC UTIL. CORP	TRUSTEE & INVESTORS	977,400
35,000	GENERAL RE CORP	LOOMIS SAYLES	2,008,125
22,000	GENERAL SIGNAL CORP	INVESTMENT ADVISORS	962,500
62,100	GENSTAR LTD.	TRUSTEE & INVESTORS	1,040,175
5,000	GENUINE PARTS CO	FORSTMANN LEFF	137,500
43,300	GEORGIA PACIFIC CORP	FORSTMANN LEFF	822,700 870,350
33,800 40,000	GOODYEAR TIRE & RUBBER GOULD INC	FORSTMANN LEFF TRUSTEE & INVESTORS	1,050,000
32,500	GOULD INC GR. AMER. FED. SVGS. BANK	INVESTMENT ADVISORS	292,500
45,000		LOOMIS SAYLES	1,530,000
34,000	GRUMMAN CORP	TRUSTEE & INVESTORS	884,000
29,000	GUILFORD MILLS	HERBERT R. SMITH	616,250
85,000	GULF & WESTERN IND	FRED ALGER	2,486,250
28,900		HERBERT R. SMITH	845,325
40,600	•	TRUSTEE & INVESTORS	1,187,550
. •	SUB-TOTAL	154,500 SHARES	4,519,125
10,000	HALLIBURTON INC	HELLMAN JORDAN	336,250
25,000		TRUSTEE & INVESTORS	840,625
	SUB-TOTAL	35,000 SHARES	
71 , 700	HECLA INC	TRUSTEE & INVESTORS	1,209,938
35,000	HERCULES INC	IDS ADVISORY	1,045,625
8,000	HEWLETT PACKARD CO	HELLMAN JORDAN	292,000
35,000		TRUSTEE & INVESTORS	1,277,500
	SUB-TOTAL	43,000 SHARES	1,569,500
	HOLIDAY INNS	FORSTMANN LEFF	709,500
	HOME DEPOT INC	IDS ADVISORY	452,500
	HONEYWELL INC	FORSTMANN LEFF	962,325
	HOUSTON NAT. GAS CORP	HELLMAN JORDAN HERBERT R. SMITH	385,000
8,000 8,000-		TRUSTEE & INVESTORS	385,000 385,000
07000,	SUB-TOTAL	24,000 SHARES	1,155,000
52,100	HUGHES TOOL	TRUSTEE & INVESTORS	827,088
28,500	HUMANA INC	FORSTMANN LEFF	758,813
16,600		HERBERT R. SMITH	441,975
_ , , , , , , , , , , , , , , , , , , ,	SUB-TOTAL	45,100 SHARES	1,200,788
48,600	ILLINOIS POWER CORP	HELLMAN JORDAN	899,100

NO. OF				MARKET
SHARES	SECURITY _	ADVISOR		VALUE
33,000	INTEGRATED RESOURCES INC	SIEBEL CAPITAL	\$	701,250
41,500	INTEL CORP	ALLIANCE CAPITAL		255,375
39,000	INIEL CORF	TRUSTEE & INVESTORS		,179,750
55,000	SUB-TOTAL	80,500		,435,125
20,000	INTERGRAPH CORP	IDS ADVISORY	2	870,000
50,000		LOOMIS SAYLES	2	,175,000
30,000	SUB-TOTAL	70,000 SHARES		,045,000
20,000	INTL. BUSINESS MACHINES	FRED ALGER		,115,000
22,000	INID. DODINIDD MICHINDD	ALLIANCE CAPITAL		,326,500
15,000		HELLMAN JORDAN		,586,250
18,000		IDS ADVISORY		,903,500
20,000		INVESTMENT ADVISORS		,115,000
26,291		SIEBEL CAPITAL		,780,273
,	SUB-TOTAL	121,291 SHARES		826,523
19,000	INTL. PAPER CO	HELLMAN JORDAN		923,875
12,000	JEFFERSON PILOT CORP	SIEBEL CAPITAL	-	363,000
31,000	JOHNSON & JOHNSON	FORSTMANN LEFF		930,000
21,900	JWT GROUP INC	SIEBEL CAPITAL		810,300
49,300	K MART CORP	FRED ALGER	1	,528,300
70,000		FORSTMANN LEFF		,170,000
·	SUB-TOTAL	119,300		,698,300
41,800	KASLER CORP	HERBERT R. SMITH	,	627,000
36,400	KENTRON INTL. INC	HERBERT R. SMITH		154,700
38,000	KNIGHT RIDDER INC	IDS ADVISORY	1	,030,750
285,000	LAFARGE CORP	BEUTEL GOODMAN	2	,956,875
	LEVI STRAUSS & CO	IDS ADVISORY		578,225
	LEVITZ FURNITURE	FRED ALGER	1.	,200,000
•	LIMITED INC	ALLIANCE CAPITAL		780,000
	LIN BROADCAST. CORP	ALLIANCE CAPITAL	· 1,	,513,750
	LITTON INDS INC	HERBERT R. SMITH		867,300
35,000	LOCKHEED AIRCRAFT CORP	IDS ADVISORY		,373,750
60,000		LOOMIS SAYLES	2,	,355,000
25,000		SIEBEL CAPITAL		981,250
13,200		HERBERT R. SMITH		518,100
- 14 ,800		TRUSTEE & INVESTORS		580,900
	SUB-TOTAL	148,000 SHARES		,809,000
19,800	LOEWS CORP	FRED ALGER	1	,593,900
9,900		SIEBEL CAPITAL		796,950
•	SUB-TOTAL	29,700 SHARES	2	,390,850
16,000	LOGICON INC	SIEBEL CAPITAL		364,000
24,800	LONE STAR INDUSTRIES	TRUSTEE & INVESTORS		489,800
	LOUISIANA LD & EXPL CO	HERBERT R. SMITH	~	546,375
180,400	LTV CORP	BEUTEL GOODMAN	2	,142,250
30,000		HELLMAN JORDAN	^	356,250
	SUB-TOTAL	210,400 SHARES	2	,498,500

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NO. OF				MARKET
SHARES	SECURITY	ADVISOR		VALUE
0111120				
28,080	LTV CORP CV PFD 1.25 SER.D	BEUTEL GOODMAN	\$	449,280
26,200	LUBRIZOL CORP	IDS ADVISORY	. •	569,850
21,700	M/A COM	TRUSTEE & INVESTORS		396,025
43,700	MACHINE TECHNOLOGY	HERBERT R. SMITH		284,050
67,000	MACHINE TECHNOLOGI MACK TRUCKS INC	IDS ADVISORY		1,030,125
30,000	MACY R.H. & CO			1,462,500
16,100		ALLIANCE CAPITAL SIEBEL CAPITAL		784,875
10,100	SUB-TOTAL	46,100 SHARES		2,247,375
10,000	MANUFACTURERS HANOVER CORP			247,500
10,000	MARRIOTT CORP	INVESTMENT ADVISORS		681,250
20,000	MARKIOII CORF MARSH & MCCLENNAN	IDS ADVISORY		
5,000	MARSH & MCCLENNAN MATH. APPLICATION GROUP			870,000
7,300		HERBERT R. SMITH		30,000
	MAY DEPT. STORES CO	HERBERT R. SMITH		413,363
40,000	MCA INC	· ALLIANCE CAPITAL		1,740,000
28,900	MCDONALDS CORP	FRED ALGER		1,983,263
17,400		FORSTMANN LEFF		1,194,075
22,000		INVESTMENT ADVISORS		1,509,750
	SUB-TOTAL	68,300 SHARES		4,687,088
26,800	MCGRAW HILL INC	FRED ALGER		1,139,000
34,000		TRUSTEE & INVESTORS		1,445,000
	SUB-TOTAL	60,800 SHARES		2,584,000
95,000	MCI COMMUNICATION	ALLIANCE CAPITAL		712,500
3,000	MELRIDGE INC	HERBERT R. SMITH		23,625
11,400	MELVILLE CORP	HERBERT R. SMITH		408,975
30,000	MERCANTILE TEXAS CORP	IDS ADVISORY		607,500
30,000		SIEBEL CAPITAL		607,500
	SUB-TOTAL	60,000 SHARES		1,215,000
13,000	MEREDITH CORP	SIEBEL CAPITAL		562,250
25,000	MERRILL LYNCH & CO INC	HELLMAN JORDAN		671,875
51,000		TRUSTEE & INVESTORS		1,370,625
•	SUB-TOTAL	76,000 SHARES		2,042,500
50,000	MILLER HERMAN INC	IDS ADVISORY		1,237,500
102,100	MIN. & RES. LTD. ADR	TRUSTEE & INVESTORS		791,275
50,000	MOBIL CORP	TRUSTEE & INVESTORS		1,325,000
54,000	MONSANTO CO	BEUTEL GOODMAN		2,335,500
10,000		HELLMAN JORDAN		432,500
207000	SUB-TOTAL	64,000 SHARES		2,768,000
20,000	MORGAN J P & CO INC	INVESTMENT ADVISORS		1,242,500
45,600	MOTOROLA INC	FRED ALGER		1,521,900
45,000		ALLIANCE CAPITAL	•	1,501,875
36,000		IDS ADVISORY		
6,000				1,201,500
42,000	· · · · · · · · · · · · · · · · · · ·	SIEBEL CAPITAL		200,250
44,000		TRUSTEE & INVESTORS		1,401,750
	SUB-TOTAL	174,600 SHARES		5,827,275
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NO. OF		ADVISOR	M	NARKET VALUE
SHARES	SECURITY	ADVIBOR		VIILOL
45,000 5,000 25,600 63,300	MULTIMEDIA INC NATIONAL BANKSHARES CORP NATIONAL MED CARE INC NATL. SEMICONDUCTOR	ALLIANCE CAPITAL HERBERT R. SMITH HERBERT R. SMITH FORSTMANN LEFF]	743,750 106,250 348,800 775,425
60,000 56,000	NCR CORP	FRED ALGER FORSTMANN LEFF	1,3	470,000 872,000
20,000	SUB-TOTAL NORTHERN TELECOM LTD	116,000 SHARES ALLIANCE CAPITAL HERBERT R. SMITH	Í e	342,000 572,500 427,800
4,600 45,000 13,000	NORTHROP CORP NORTHWEST AIRLINES	ALLIANCE CAPITAL FORSTMANN LEFF	1,6	559,375 479,375
•	SUB-TOTAL NORWEST CORP	58,000 SHARES INVESTMENT ADVISORS		L38,750 005,000
40,000 50,800	NOVAR ELECTRONICS	HERBERT R. SMITH	4	482,600
25,000 23,300	NYNEX OVERNITE TRANSPORT	INVESTMENT ADVISORS HERBERT R. SMITH	4	460,175
7,000 13,000	PACIFIC TELESIS GROUP PAINE WEBBER	HELLMAN JORDAN FRED ALGER		380,625 396,500
20,000	PENN CENTRAL CORP	SIEBEL CAPITAL HERBERT R. SMITH		925,000
	SUB-TOTAL	30,300 SHARES IDS ADVISORY	1,4	401,375769,500
36,000 18,100	PENNSYLVANIA PWR & LT CO PENNZOIL CO	TRUSTEE & INVESTORS	1	585,988
31,800 53,000	PFIZER INC	HELLMAN JORDAN INVESTMENT ADVISORS	1,	735,750
30,000	SUB-TOTAL	SIEBEL CAPITAL 114,800 SHARES	3,	982,500 759,700
24,000	PHELPS DODGE CORP PFD \$5 PHIBRO-SALOMON	HELLMAN JORDAN ALLIANCE CAPITAL		435,000 642,000 802,500
30,000 20,000		FORSTMANN LEFF HELLMAN JORDAN	1	535,000
40,000 50,000		INVESTMENT ADVISORS TRUSTEE & INVESTORS	1):	070,000
11,300	SUB-TOTAL PHILLIPS PETROLEUM CO	164,000 SHARES HERBERT R. SMITH		387,000 401,150
38,000	PIER 1 IMPORTS PIER I IMPORTS WTS 7/15/88	HERBERT R. SMITH HERBERT R. SMITH		650,750 69,930
40,000	PIONEER HI-BRED INT'L	INVESTMENT ADVISORS INVESTMENT ADVISORS		040,000 200,600
34,800 30,000	PITNEY BOWES INC PROGRESSIVE CORP OHIO	ALLIANCE CAPITAL		937,500

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NO. OF			MARKET
SHARES	SECURITY	ADVISOR	VALUE
5,100	RALSTON PURINA CO	IDS ADVISORY	\$ 154,913
27,800		HERBERT R. SMITH	844,425
	SUB-TOTAL	32,900 SHARES	999,338
40,000	RAYTHEON CO	INVESTMENT ADVISORS	1,520,000
39,000		TRUSTEE & INVESTORS	1,482,000
	SUB-TOTAL	79,000 SHARES	3,002,000
47,000	RCA CORP	FRED ALGER	1,486,375
36,900		FORSTMANN LEFF	1,166,963
15,000	· · · ·	SIEBEL CAPITAL	474,375
-	SUB-TOTAL	98,900 SHARES	3,127,713
93 , 750	RLC CORP	HERBERT R. SMITH	773,438
43,000	ROCKWELL INTL CORP	TRUSTEE & INVESTORS	1,166,375
17,100	ROLLINS ENVIR. SVS	HERBERT R. SMITH	241,538
26,100	RORER GROUP INC	SIEBEL CAPITAL	822,150
20,000	ROYAL DUTCH PET. GLDRS	IDS ADVISORY	957,500
20,600	RYDER SYSTEMS INC	IDS ADVISORY	901,250
52,000	SAGA CORP	IDS ADVISORY	1,534,000
30,000		SIEBEL CAPITAL	885,000
	SUB-TOTAL	82,000 SHARES	2,419,000
50,000	SANDERS ASSOCIATES	LOOMIS SAYLES	2,137,500
35,000	· · · · · · · · · · · · · · · · · · ·	TRUSTEE & INVESTORS	1,496,250
•	SUB-TOTAL	85,000 SHARES	3,633,750
15,000	SCHLUMBERGER LTD	IDS ADVISORY	678,750
10,000	÷.	INVESTMENT ADVISORS	452,500
	SUB-TOTAL	25,000 SHARES	1,131,250
17,800	SCOTT PAPER CO	FORSTMANN LEFF	489,500
150,000	SEA CONTAINERS LTD	BEUTEL GOODMAN	3,337,500
150,000	SEACO INC	BEUTEL GOODMAN	543,750
30,000	SEARLE GD & CO	FRED ALGER	1,372,500
16,500		IDS ADVISORY	754 , 875
30,000		LOOMIS SAYLES	1,372,500
	SUB-TOTAL	76,500 SHARES	3,499,875
35,000	SEARS ROEBUCK & CO	FORSTMANN LEFF	1,102,500
46,000		HELLMAN JORDAN	1,449,000
38,700		TRUSTEE & INVESTORS	1,219,050
	SUB-TOTAL	119,700 SHARES	3,770,550
30,000	SECURITY PACIFIC CORP	INVESTMENT ADVISORS	1,267,500
33,000	SHARED MED. SYSTEMS CORP	IDS ADVISORY	952,875
18,700	SILVERCREST IND	HERBERT R. SMITH	100,513
82,400	SOUTHDOWN INC	BEUTEL GOODMAN	3,656,500
30,000	SOUTHERN CALIF. EDISON	IDS ADVISORY	1,106,250
99,000	SOUTHMARK CORP	SIEBEL CAPITAL	742,500
20,000	SOUTHWESTERN BELL CORP	HELLMAN JORDAN	1,117,500
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NO. OF	SECURITY
SHARES	SECORITI
49,350	SPARKMAN ENERGY CORP
22,900	SPERRY CORP
40,000	SUB-TOTAL
32,000	SQUIBB CORP -
11,700	ST. PAUL COS. INC
13,700	STANDARD OIL OF CALIF
15,000	STANDARD OIL OF INDIANA
26,400	SUB-TOTAL
140,000	STERLING DRUG INC
30,000	STOP & SHOP INC
35,000	STORER COMMUNICATIONS
80,000	SUN CHEMICAL
50,000	SUPER VALU STORES INC
18,200	SYNTEX CORP
70,000	TAMBRANDS INC
17,200	SUB-TOTAL
44,700	TELEX CORP
19,200	
21,400	TEXACO INC
9,800	TEXAS COMMERCE BANKSHARES
15,000	TEXAS INSTRUMENTS
7,000	
6,900 5,500	
5,000	SUB-TOTAL
16,100	TEXAS OIL & GAS CORP
29,550	THOUSAND TRAILS
38,500	TIE COMMUNICATIONS
45,000	TOYS R US
45,000 10,600	
10,000	SUB-TOTAL
62,000	TRACOR INC
87.999	TRANS WORLD AIRLINES
30,000	TRANS WORLD CORP
16,200	TRANSCO ENERGY CO TRANSCO EXPL. PART. LTD TRAVELERS CORP
96,900	TRANSCO EXPL. PART. LTD
33,000	TRAVELERS CORP
43,000	SUB-TOTAL
104.300	TYCO LABS
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ADVISOR

HERBERT R. SMITH FORSTMANN LEFF INVESTMENT ADVISORS 62,900 SHARES INVESTMENT ADVISORS IDS ADVISORY HERBERT R. SMITH INVESTMENT ADVISORS HERBERT R. SMITH 41,400 SHARES BEUTEL GOODMAN ALLIANCE CAPITAL FORSTMANN LEFF BEUTEL GOODMAN INVESTMENT ADVISORS FORSTMANN LEFF BEUTEL GOODMAN SIEBEL CAPITAL 87,200 SHARES HERBERT R. SMITH TRUSTEE & INVESTORS HERBERT R. SMITH HERBERT R. SMITH FRED ALGER SIEBEL CAPITAL HERBERT R. SMITH TRUSTEE & INVESTORS 34,400 SHARES HERBERT R. SMITH HERBERT R. SMITH ALLIANCE CAPITAL ALLIANCE CAPITAL LOOMIS SAYLES HERBERT R. SMITH 100,600 SHARES INVESTMENT ADVISORS HELLMAN JORDAN HELLMAN JORDAN HERBERT R. SMITH HERBERT R. SMITH HELLMAN JORDAN TRUSTEE & INVESTORS. 76,000 SHARES BEUTEL GOODMAN

MARKET VALUE 690,900 850,163 1,485,000 2,335,163 1,476,000 611,325 479,500 856,875 1,508,100 2,364,975 3,745,000 1,323,750 1,404,375 2,030,000 1,425,000 782,600 3,622,500 890,100 4,512,600 1,195,725 717,600 722,250 400,575 1,931,250 901,250 888,375 708,125 4,429,000 358,225 624,244 577,500 1,991,250 1,991,250 469,050 4,451,550 1,472,500 780,991 813,750 700,650 1,986,450 940,500 1,225,500 2,166,000 3,415,825

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NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
10,000	U.S. STEEL PFD. 12.75	HELLMAN JORDAN	\$ 1,233,750
	U.S. WEST CORP	IDS ADVISORY	1,732,500
25,000	UAL INC	INVESTMENT ADVISORS	881,250
65,000		LOOMIS SAYLES	2,291,250
	SUB-TOTAL	90,000 SHARES	3,172,500
44,350	ULTIMATE CORP	HERBERT R. SMITH	870 , 369
60,000	UNION CAMP CORP	LOOMIS SAYLES	2,062,500
100,000	UNION ELEC CO	IDS ADVISORY	1,275,000
14,000	UNION PACIFIC CORP	HELLMAN JORDAN	542,500
12,000		SIEBEL CAPITAL	465,000
	SUB-TOTAL	26,000 SHARES	1,007,500
42,100	UNITED CABLE TV CORP	ALLIANCE CAPITAL	1,015,663
30,000	UNITED TECHNOLOGIES CORP	INVESTMENT ADVISORS	975,000
46,000		TRUSTEE & INVESTORS	1,495,000
	SUB-TOTAL	76,000 SHARES	2,470,000
32,000	UNOCAL CORP	INVESTMENT ADVISORS	1,072,000
37,700	UTL CORP	HERBERT R. SMITH	669,175
15,200	WACHOVIA CORP	HERBERT R. SMITH	697,300
55,000	WAL-MART STORES INC	ALLIANCE CAPITAL	2,268,750
46,000		IDS ADVISORY	1,897,500
25,000		LOOMIS SAYLES	1,031,250
	SUB-TOTAL	126,000 SHARES	5,197,500
40,000	WANG LABS CL B	ALLIANCE CAPITAL	1,130,000
26,000		HELLMAN JORDAN	734,500
	SUB-TOTAL	66,000 SHARES	1,864,500
15,900	WASHINGTON POST B	FRED ALGER	1,236,225
78,300	WATKINS JOHNSON CO	FRED ALGER	1,937,925
25,000	WEST POINT PEPPERELL INC	SIEBEL CAPITAL	993,750
63,600	WESTINGHOUSE ELEC. CO	FRED ALGER	1,399,200
46,800	· · · · · · · · · · · · · · · · · · ·	FORSTMANN LEFF	1,029,600
	SUB-TOTAL	110,400 SHARES	2,428,800
39,700	WEYERHEUSER CO	FORSTMANN LEFF	1,061,975
19,600	WHITEHALL CORP	HERBERT R. SMITH	445,900
50,000	WILMINGTON TRUST CO	SIEBEL CAPITAL	1,675,000
20,100	WITCO CHEMICAL CORP	HERBERT R. SMITH	635,663
23,000	WOLVERINE WORLD WIDE	HERBERT R. SMITH	313,375
36,900	XTRA CORP	FRED ALGER	844,088

TOTAL EQUITY PORTFOLIO

\$441,679,745

NO. OF		MARKET
SHARES	SECURITY	VALUE
26,000	A G EDWARDS INC	\$ 585,000
95,500	ABBOTT LABS	4,166,140
2,800	ACCO WORLD CORP	78,750
9,600	ACF INDUSTRIES INC	517,200
35,000	ADOBE OIL & GAS	665,000
41,700	ADVANCED MICRO DEV	1,282,275
18,000	ADVANCED SEMI CONDUCTOR	391,500
75,400	AETNA LIFE AND CASUALTY	2,214,875
31,000	AFG INDS INC	488,250
21,000	AHMANSON H.F. CO	391,125
24,500	AIR PRODUCTS & CHEM	1,010,625
24,000	AIRBORNE FGHT CORP	432,000
45,000	ALASKA AIRLS INC	511,875
26,000	ALBERTSONS INC	656,500
70 , 900	ALCAN ALUMINUM LTD	1,932,025
20,000	ALCO STANDARD CORP	612,500
33,000	ALEXANDER & ALEXANDER	627,000
24,000	ALEXANDER & BALDWIN	603,000
11,000	ALLEGHANY CORP	807,125
500	- ALLEGHENY & WESTERN ENERGY	6,875
41,000	ALLEGHENY BEVERAGE	594,500
17,000	ALLEGHENY INTERNATIONAL	352,750
35,600	ALLEGHENY PWR SYS INC	881,100
8,000	ALLEN GROUP INC	156,000
30,000	ALLIED BANCSHARES INC	716,250
60,750	ALLIED CORPORATION	1,921,219
15,800	ALLIED STORES CORP	663,600
40,000	ALLIS CHALMERS CORP	430,000
26,000	ALLTEL CORP	555,750
65,000	ALUMINUM CO OF AMERICA	2,210,000
51,000	AMAX INC	1,026,375
36,600	AMDAHL CORP	411,750
16,000	AMER. DISTRICT TEL	434,000
50,200	AMER. GENERAL CORP	1,041,650
54,200	AMER. INT'L. GROUP	3,170,700
67 , 900	AMER. MEDICAL INT'L	1,561,700
64,000	AMERADA HESS CORP	1,800,000
49,500	AMERICAN BRANDS INC	2,741,063
22,800	AMERICAN BROADCASTING	1,430,700
21,800	AMERICAN CAN CORP	1,016,425
37,000	AMERICAN CYANAMID	1,780,625
137,400	AMERICAN ELEC PWR INC	2,335,800
171,419	AMERICAN EXPRESS	4,928,296
35,000	AMERICAN FAMILY CORP	612,500
24,900	AMERICAN GREETINGS	712,763

53,700 AMERICAN HOSPITAL SUPPLY \$ 1,671,4 38,000 AMERICAN MTR INNS INC 560,5 30,000 AMERICAN NATL INS CO 742,5 28,650 AMERICAN NATURAL RES 816,5 12,000 AMERICAN PETROFINA 723,0 37,950 AMERICAN STANDARD INC 944,0 47,000 AMERICAN STANDARD INC 944,0 47,000 AMERICAN STORES CO 770,5 783,607 AMERICAN TEL & TEL 13,517,2 15,000 AMERITECH CORP 4,833,4 17,000 AMERITRUST CORP 709,7 14,000 AMES DEPARTMENT STORES 710,5 18,000 AMETEK INC 477,0 44,500 AMF INC 728,6 30,200 AMERCORP 1,055,3 12,300 AMSTED INDS INC 356,7 31,000 ANALOG DEVICES INC 759,5 29,000 ANALOGIC CORP 675,6 26,000 ANCHOR HOCKING CORP 675,6 26,000 ANDERSON CLAYTON & CO 721,5	00 00 25 00
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26,000 ANDERSON CLAYTON & CO 721,5	
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12,000 ANDREW CORP 399,0	
21,000 ANIXTER BROS 349,1	
58,000 APACHE CORP 638,0	
44,000 APPLE COMPUTER 1,166,0	
30,000APPLIED MATLS INC930,019,200ADD CEDUICES934,0	
18,200ARA SERVICES834,990,800ARCHER DANIELS MIDLAND1,600,3	
90,800ARCHER DANIELS MIDLAND1,600,350,100ARIZONA PUB SVC CO864,2	
39,000 ARKLA INC 770,2	
39,000 ARMCO INC 599,6	
24,800 ARMSTRONG IND. INC 635,5	
27,000 ARVIN INDS INC 600,7	
15,000 ASA LTD 862,5	
71,000 ASAMERA INC 754,3	
28,700 ASARCO INC 685,2	
34,000 ASHLAND OIL INC 786,2	
15,700 ASSOC. DRY GOODS 843,8	
36,000 ATLANTIC BANCORP. 949,5	00
28,000 ATLANTIC CITY ELEC CO 581,0	
201,200 ATLANTIC RICHFIELD 9,154,6	
1,000 ATWOOD OCEANICS INC 16,5	
12,000 AUGAT INC 360,0	00

	NO. OF SHARES	SECURITY	MARKET VALUE
	27,300	AUTOMATIC DATA PROCESSING	\$ 969,150
	27,000 21,000	AVANTEK INC AVCO CORP	604,125
	22,000	AVERY INTL. CORP	624,750 561,000
	27,000	AVNET INC	891,000
	101,200	AVON PRODS INC	2,226,400
	24,000	AVX CORP	486,000
	23,600	AXIA INC	575,250
	16,000	AYDIN CORP	430,000
	20,500	BAIRNCO CORP	684,188
	52,200	BAKER INTL. CORP	939,600
	32,800	BALLY MFG CO	709,300
	28,500	BALTIMORE GAS & ELECTRIC	908,438
	31,900	BANC ONE CORP	697,813
	30,000	BANCOHIO CORP	956,250
	11,000	BANDAG INC	500,500
	11,000	BANK BOSTON CORP	338,250
	20,000	BANK OF NY CO INC	540,000
	111,600	BANKAMERICA CORP	1,771,650
	28,200	BANKERS TRUST NY CORP	1,085,700
	17,000	BARD C.R. INC	425,000
	20,000	BARNETT BKS FLORIDA	697,500
	26,000	BARRY WRIGHT CORP	702,000
	14,000	BASSETT FURNITURE INC	448,000
	24,800	BAUSCH & LOMB INC	499,100
	105,100	BAXTER TRAVENOL LABS	1,615,913
	18,000	BAYBANKS INC	630,000
	92,100	BEATRICE FOODS CO	2,440,650
	12,000	BECTON DICKINSON & CO	399,000 738,400
	28,400 74,360	BELL & HOWELL CO BELL ATLANTIC CORP	5,047,185
	177,000	BELL CANADA ENTERPRISE	4,115,250
	243,080	BELL SOUTH CORP	6,745,470
	18,000	BELO A H CORP	846,000
	11,000	BENEFICIAL CORP	277,750
	25,000	BERGEN BRUNSWIG CORP	556,250
•	26,000	BEST PRODUCTS	383,500
	35,100	BETHLEHEM STEEL	671,288
	13,000	BETZ LABS INC	383,500
	19,000	BEVERLY ENTERPRISES	520,125
	35,000	BIG THREE INDUSTRIES	813,750
	43,500	BLACK & DECKER MFG CO	984,188
	14,000	BLOCK H & R INC	549,500
	13,400	BLOUNT INC	189,275
	11,000	BLUE BELL INC	481,250
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NO. OF SHARES	SECURITY		MARKET VALUE
•		\$	
37,000	BOB EVANS FARMS INC	· 7	601,250 3,209,063
73,350 21,000	BOEING CO BOISE CASCADE CORP		716,625
25,800	BORDEN INC		1,489,950
64,100	BORG-WARNER		1,201,875
24,000	BOSTON EDISON CO		639,000
21,300	BRASCAN LTD		487,238
17,000	BRIGGS & STRATTON CO		459,000
103,000	BRISTOL-MYERS CO		4,841,000
21,000	BROOKLYN UN GAS CO		624,750
35,000	BROOKS FASHION STORE		888,125
17,000	BROWN GROUP		450,500
30,600	BROWNING FERRIS INDS		898,875
23,100	BRUNSWICK CORP		675,675
22,000			737,000
28,000	BUCYRUS ERIE CO		353,500
21,200	BURLINGTON INDUSTRIES		559,150
57,600	BURLINGTON NORTHERN		2,318,400
33,000	BURNDY CORP		523,875
33,800	BURROUGHS CORP		1,799,850
18,000	CABOT CORP		441,000
30,000	CALFED INC		386,250
30,900	CÁLL CORP		571,650
39,000×			638,625
50,000	CAMPBELL RED LAKES		1,243,750
33,000	CAMPBELL SOUP CO		2,062,500
30,000	CANADIAN MARCONI CO		536,250
15,000	CANADIAN PACIFIC ENTER		240,000
58,700	CANADIAN PACIFIC LTD		1,797,688
1,000	CANAL-RANDOLPH CORP		58,125
12,700	CAPITAL CITIES COMM		2,047,875
27,900	CAPITAL HOLDING CORP		920,700
33,000	CARL KARCHER ENTERPRISES		808,500 684,000
24,000	CARLISLE CORP		2,115,150
35,400	CARNATION CAROLINA FREIGHT CORP		414,000
24,000 48,400	CAROLINA PWR & LT CO		968,000
13,800	CARPENTER TECHNOLOGY		584,775
29,800	CARTER HAWLEY HALE STORES		588,550
49,700	CASTLE & COOKE INC		621,250
70,300	CATERPILLAR TRACTOR		2,636,250
12,000	CBI INDS INC		373,500
23,000	CBS INC		1,799,750
22,000	CBT CORP		594,000
12,100	CELANESE CORP		783,475
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NO. OF		MARKET
SHARES	SECURITY	VALUE
21,000	CENTEL CORP	\$ 732 , 375
12,000	CENTEX CORP	291,000
56,000	CENTRAL & SO WEST CO	994,000
32,000	CENTRAL ILL LIGHT CO	672,000
41,000	CENTRAL ILL PUB SVC	630,375
34,000	CENTRAL LA ELEC CO	624,750
46,000	CENTRAL SOYA INC	730,250
26,000	CENVILL INVS INC	507,000
31,400	CERTAIN TEED PRODS CO	553,425
42,000 ť	CESSNA AIRCRAFT CO	819,000
59,000°	CETUS CORP	671 , 125
27,000	CFS CONTL INC	718,875
40,800	CHAMPION INTERNATIONAL	790,500
64,000	CHAMPION SPARK PLUG	560,000
28,000	CHARMING SHOPPES INC	563,500
32,000	CHARTER MED CORP	804,000
25,600	CHASE MANHATTAN CORP	1,008,000
25,500	CHEM-LAWN CORP	694,875
12,000	CHEMED CORP	352,500
55,500	CHEMICAL NEW YORK CO	1,332,000
16,000	CHESAPEAKE CORP VA	516,000
25,500-	CHESEBROUGH-PONDS INC	943,500
29,000		522,000
21,000	CHIEFTAIN DEV LTD	262,500
57,000	CHROMALLOY AMERN CORP	655,500
14,550	CHUBB CORP	669,300
28,200	CHURCHS FRIED CHICKEN -	775,500
54,600	CIGNA CORP	1,713,075
3,000	CINCINNATI BELL INC	108,750
10,500	CINCINNATI FINL CORP	643,125
18,000	CINCINNATI MILACRON	465,750
28,000	CIPHER DATA PRODS INC	609,000
21,000	CIRCLE K CORP	525,000
94,000	CITICORP	2,878,750
20,000	CITIZENS & SOUTHN CO	485,000
28,000	CITIZENS & SOUTHN GA	381,500
31,500	CITIZENS FID CORP	685,125
22,792	CITIZENS UTILS CO DEL	632,478
55,000	CITY FED SVGS&LN ASSOC	467,500
27,600	CITY INVESTING	1,176,450
24,400	CLARK EQUIP CO	686,250
27,000	CLEVELAND CLIFFS	526,500
42,000	CLEVELAND ELEC. ILLUM	661,500
14,000	CLOROX CO	374,500
22,000	CLUETT PEABODY	572,000

NO. OF			MARKET
SHARES	SECURITY		VALUE
		•	
50,000	CNA FINL CORP	Ş	1,162,500
25,000	COACHMEN INDS INC		346,875
20,000	COASTAL CORP		582,500
35,000	COCA COLA BOTTLING CO		682,500
116,600 🕤	COCA COLA CO		6,719,075
. 600	COLE NATIONAL CORP		22,350
62,000	COLGATE PALMOLIVE		1,426,000
17,600	COLLINS & AIKMAN CORP		616,000
32,000	COLLINS FOODS INTL.		596,000
16,000	COLONIAL PENN GROUP		454,000
21,800	COLT INDS INC DEL		994,625
29,400	COLUMBIA GAS SYSTEM		977,550
17,000	COMBINED INTL CORP		512,125
25,100	COMBUSTION ENGINEERING		781,238
36,000	COMDATA NETWORK INC		544,500
25,000	COMDISCO INC		318,750
23,000	COMERICA INC		612,375
48,000	COMINCO LTD		552,000
6,000	COMMERCE CLEARING HOUSE		330,000
26,000	COMMERCIAL METALS CO		455,000
22,800	COMMODORE INTL LTD		618,450
126,936	COMMONWEALTH EDISON		2,887,794
25,000	COMMUNICATIONS INDS		512,500
27,000	COMMUNICATIONS SATELLITE		631,125
28,000	COMPREHENSIVE CARE CO		570,500
27,000	COMPUGRAPHIC CORP		850,500
25,000	COMPUTER ASSOC INTL		462,500
34,500	COMPUTER SCIENCES CO		448,500
21,100	COMPUTER VISION CORP		817,625
30,000	CONAGRA INC		1,140,000
97,800	CONSOL. EDISON OF N.Y.		2,469,450
52,000	CONSOL. FOODS CORP		1,495,000
11,800	CONSOL. FREIGHTWAYS		544,275
32,000	CONSOL. NAT. GAS		1,112,000
13,000	CONSOLIDATED PAPERS		754,000
45,000	CONSUMERS PWR CO		270,000
26,000	CONTINENTAL BANCORP		702,000
28,000	CONTINENTAL CORP		766,500
-	CONTINENTAL COMP		1,637,888
31,650	CONTINENTAL GROUP INC		209,000
38,000			1,009,800
52,800	CONTINENTAL TELECOM		913,900
29,600	CONTROL DATA CORP		
29,000	CONVERGENT TECHNOLOGY		391,500
32,600	COOPER INDS. INC		916,875
37,000	COOPER LABS INC		888,000

NO. OF SHARES	SECURITY	MARKET VALUE
21,000 16,000	CORESTATES FINL CORP CORNING GLASS WORKS	\$ 708,750 1,020,000
11,000 23,800	CORROON & BLACK CORP COX COMMUNICATIONS INC	283,250 1,258,425
47,000	CPC INTERNATIONAL INC	1,733,125
18,000 23,164	CPT CORP CRANE CO	198,000 816,531
12,100	CRAY RESEARCH INC	544,500
17,000	CROCKER NATIONAL CORP	278,375
24,000 22,500	CROSS & TRECKER CROSS A T CO	468,000 556,875
17,500	CROWN CORK & SEAL	693,438
20,400	CROWN ZELLERBACH CORP	627,300
108,100 23,000	CSX CORP	2,243,075
18,000	CULLEN FROST BANKERS CULLINET SOFTWARE INC	713,000 695,250
13,500	CUMMINS ENGINE CO	970,313
33,000	DANA CORP	763,125
50,600 31,500	DART & KRAFT INC DATA GENERAL CORP	3,991,075 1,480,500
20,000	DATA SWITCH CORP	300,000
19,000	DATAPOINT CORP	361,000
23,000 57,700	DATAPRODUCTS CORP DAYTON PWR & LT CO	388,125
72,300	DATION PWR & LT CO DAYTON-HUDSON CORP	685,188 2,268,413
21,400	DE LUXE CHECK PRINTERS	888,100
33,000	DEAN FOODS CO	849,750
51,300	DEERE & CO	1,404,338
26,000 40,500	DEKALB AGRESEARCH INC DELMARVA PWR & LT CO	591,500 749,250
69,000	DELMED INC	483,000
29,800	DELTA AIR LINES INC	916,350
19,000 19,000	DENISON MINES LTD A	242,250
13,000	DENISON MINES LTD B DENNYS INC	213,750 513,500
91,000	DETROIT EDISON CO	1,148,875
29,000	DEXTER CORP	576,375
98,400 96,000	DIAMOND SHAMROCK	1,820,400
41,900	DIASONICS INC DIGITAL EQUIPMENT CO	252,000 3,519,600
47,380	DIGITAL SWITCH	1,083,818
29,700	DISNEY WALT PRODUCTIONS	1,407,038
42,000 66,300	DOME MINES LTD	483,000
39,000	DOMINION RESOURCES DONALDSON LUFKIN & JEN	1,541,475 760,500

NO. OF		MARKET
SHARES	SECURITY	VALUE
29,600	DONNELLEY RR & SONS	\$ 1,169,200
37,000	DOVER CORP	1,267,250
147,700	DOW CHEMICAL CO	4,135,600
45,000	DOW JONES & CO	1,985,625
61,600	DRESSER INDUSTRIES	1,232,000
31,000	DREYERS GRAND ICE CREAM	457,250
15,000	DREYFUS CORP	403,125
197,780	DU PONT EI DENEMOURS	9,023,713
73,400 43,800	DUKE POWER CO NC DUN & BRADSTREET COS	1,798,300 2,595,150
55,900	DUQUESNE LIGHT CO	670,800
500	DUQUESNE HIGHT CO DURR FILLAUER MED INC	5,688
58,500	DYSAN CORP	511,875
28,000	E-SYSTEMS	777,000
36,100	E.F. HUTTON GROUP INC	1,078,488
27,000	EAGLE PICHER INDS INC	621,000
27,000	EASTERN GAS & FUEL	594,000
135,200	EASTMAN KODAK CO	9,362,600
23,900	EATON CORP	979,900
29,000	ECHLIN INC	641,625
29,100	ECKERD JACK CORP	676,575
26,800	ECONOMICS LAB INC	606,350
15,000	EDISON BROS STORES INC	510,000
28,900	EG & G INC	801,975
57,000	EL PASO ELEC CO	591,375
43,800	ELECTRONIC DATA SYSTEMS	1,834,125
4,000	ELECTROSPACE SYSTEMS	97,000
52,100	EMERSON ELECTRIC	3,314,863
22,000	EMERY AIR FREIGHT CO	310,750 669,875
23,000	EMHART CORP VA EMULEX CORP	551,150
27,400	ENGLEHARD CORP	691,850
45,000	ENSERCH CORP	866,250
36,000		715,500
29,000	ENZO BIOCHEM INC	435,000
21,000	EQUITABLE GAS CO	698,250
23,000	ESTERLINE CORP	644,000
20,000	ETHYL CORP	437,500
45,000	EVANS & SUTHERLAND CO	787,500
19,000	EX CELL O CORP	581,875
690,400	EXXON CORP	28,133,800
27,000	FABERGE INC	806,625
37,000	FAIRCHILD INDS INC	633,625
10,000	FALCONBRIDGE LTD	440,000

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NO. OF Shares	SECURITY	MARKET VALUE
34,000 35,700	FAMILY DOLLAR STORES INC FARM FRESH INC	\$ 731,000 566,738
29,000	FARMERS GROUP INC	1,116,500
21,000	FEDERAL CO	685,125
33,000	FEDERAL EXPRESS CORP	1,150,875
49,500	FEDERAL NATL. MTG	624,938
16,000	FEDERAL PAPER BRD INC	604,000
21,000		714,000
36,400	FEDERATED DEPT. STORES	1,747,200
10,000	FERRO CORP	252,500
18,000 26,000	FIDELCOR	690,750
36,000	FIRESTONE TIRE & RUBBER FIRST ALA BANCSHARES	445,250
38,500	FIRST ATLANTA CORP	648,000 750,750
25,600	FIRST BANK SYSTEM	592,000
14,700	FIRST BOSTON INC	595,350
35,300	FIRST CHICAGO CORP	732,475
35,000	FIRST CITY BANKCORP	560,000
47,600	FIRST EXECUTIVE CORP	511,700
38,500	FIRST INTERSTATE BANCORP	1,207,938
17,900	FIRST KY NATL CORP	501,200
15,700	FIRST NATL ST BANCORP	561,275
·29 , 000	FIRST SEC CORP DEL	540,125
5,000	FIRST TENN NATL CORP	120,625
27,000	FIRST UNION CORP	702,000
8,000	FLEET FINANCIAL GROUP	326,000
27,900	FLEETWOOD ENTER. INC	477,788
26,200	FLEMING COS	694,300
23,000	FLIGHTSAFETY INTL INC	557,750
54,000 19,000	FLOATING POINT SYS INC	891,000
41,800	FLORIDA NATL BKS FLA	793,250
35,000	FLORIDA POWER & LIGHT FLORIDA PROGRESS CORP	1,515,250 673,750
35,000	FLOWERS INDUSTRIES	682,500
55,000	FLUOR CORP	941,875
25,000	FMC CORP	1,215,625
152,150	FORD MOTOR CO	5,496,419
27,000	FOREST OIL CORP	681,750
23,000	FORT HOWARD PAPER CO	1,256,375
47,000	FOSTER WHEELER CORP	540,500
19,000	FOXBORO CO	572,375
69,000	FREEPORT-MCMORAN INC	1,173,000
42,000	FREMONT GEN CORP	656,250
15,000	FRUEHAUF CORP	457,500
24,000	FUQUA INDS INC	609,000

NO. OF		MARKET
SHARES	SECURITY	VALUE
40,000	GAF CORP	\$ 710,000
62,100	GANNETT INC	2,592,675
30,000	GATX	855,000
		895,700
33,800	GCA CORP	
40,000	GEARHART INDS INC	805,000
15,000	GEICO CORP	840,000
29,000	GELCO CORP	438,625
20,400	GENCORP	762,450
17,000	GENENTECH INC	586,500
11,000	GENERAL CINEMA CORP	528,000
44,000	GENERAL DATACOMM IND	687,500
42,100	GENERAL DYNAMICS	2,210,250
356,300	GENERAL ELECTRIC CO	18,705,750
49,300	GENERAL FOODS CORP	2,693,013
45,750	GENERAL HOST CORP	686,250
23,800	GENERAL INSTRUMENT	505,750
52,000	GENERAL MILLS INC	2,743,000
257,400	GENERAL MOTORS CORP	16,827,525
57,000	GENERAL NUTRITION INC	349,125
45,000	GENERAL PUBLIC UTILITIES	405,000
34,100	GENERAL RE CORP	1,956,488
26,000	GENERAL SIGNAL CORP	1,137,500
77,000	GENETIC SYS CORP	442,750
17,800	GENRAD INC	409,400
16,000	GENSTAR LTD	268,000
41,100	GENUINE PARTS CO	1,130,250
14,200	GEORGE A HORMEL & CO	379,850
78,800	GEORGIA PACIFIC CORP	1,497,200
14,700	GERBER PRODUCTS CO	580,650
23,700	GILLETTE CO	1,107,975
21,000	GOLDEN WEST FINANCIAL	244,125
25,100	GOODRICH (B.F.)	677,700
		2,049,700
79,600	GOODYEAR TIRE & RUBBER	
34,400	GOULD INC	903,000
35,000	GOULDS PUMPS INC	621,250
39,800	GR. WESTERN FINANCIAL	706,450
36,700	GRACE W R & CO	1,587,275
10,000	GRAINGER W W INC	516,250
40,000	GREAT ATLANTIC & PACIFIC	640,000
26,400	GREAT LAKES CHEMICAL	864,600
19,000	GREAT NORTHN NEKOOSA	646,000
36,200	GREYHOUND CORP	809,975
35,335	GROW CHEMICAL CORP	525,608
33,600	GRUMMAN CORP	873,600
144,100	GTE CORP	5,385,738

	RKET ALUE
63,000 GULF CDA LTD 803, 20,000 GULF STREAM AEROSPACE 325, 47,000 GULF STS UTILS CO 511, 29,500 HALL FRANK B & CO INC 656, 89,600 HALLIBURTON INC 3,012, 44,000 HAMILTON OIL CORP 715, 14,000 HAMMERMILL PAPER CO 616,	,675 ,200 ,250 ,000 ,125 ,375 ,800 ,000
19,000HANOVER INS. CO45130,000HARCOURT BRACE JOVAN885	,000 ,250 ,000
10,000HARRIS BANCORP INC77830,900HARRIS CORP776	,000 ,750 ,363 ,000
27,000 HARTE HANKS COMM 810 12,500 HARTFORD NATL CORP 275 21,000 HARTMARX CORP 588	,000 ,000 ,000
91,000HEALTHDYNE58068,700HEINZ H.J. & CO2,576	
206,900HEWLETT PACKARD CO7,55132,000HILLENBRAND INDS INC62416,000HILTON HOTELS CORP800	,850 ,000 ,000
30,000 HOGAN SYSTEMS 457 29,000 HOLIDAY INNS 1,247	,050 ,500 ,000 ,000
16,000HOME DEPOT INC3627,000HOME HEALTH CARE AMER4972,250HOMESTAKE MNG CO1,896	,000 ,875
36,400HONEYWELL INC1,92424,400HOOVER CO597,26,000HOOVER UNIVERSAL591	,650 800 ,500
70,400HOUSTON INDUSTRIES INC1,30230,900HOUSTON NAT. GAS CORP1,487	,625 ,400

NO. OF		MARKET
SHARES	SECURITY	VALUE
21,000	HUBBELL HARVEY B.	\$ 632,625
42,900	HUGHES TOOL	681,038
98,340	HUMANA INC	2,618,303
38,500	HYBRITECH INC	539 , 000
9,000	I C INDUSTRIES	410,625
23,000	I M S INTL INC	707,250
21,000	IDAHO PWR CO	690,375
30,000	IDEAL BASIC INDS INC	562,500
37,400	ILLINOIS POWER CORP	691,900
24,000	ILLINOIS TOOL WORKS	576,000
19,000	IMPERIAL OIL CO LTD	496,375
72,700	INCO INC	708,825
69,000	INEXCO OIL CO	707,250 808,000
20,200	INGERSOLL RAND	667,188
30,500 40,000	INLAND STEEL CORP	635,000
	INSILCO CORP INTEGRATED RESOURCES	637,500
30,000 85,600	INTEGRATED RESOURCES	2,589,400
35,000	INTELLIGENT SYS CORP	481,250
6,600	INTERCO	399,300
52,500	INTERFIRST CORP	518,438
19,300	INTERGRAPH CORP	839,550
42,000	INTERMEDICS INC	556,500
26,000	INTERNATIONAL MULTIFOODS	611,000
33,600	INTERNORTH INC	1,222,200
28,000	INTERPUBLIC GROUP	917,000
485,772	INTL. BUSINESS MACHINES	51,370,389
37,200	INTL. FLAVORS & FRAG	962,550
26,700	INTL. MINERALS & CHEM	961,200
37,100	INTL. PAPER CO	1,803,988
26,000	IOWA ILL GAS & ELEC	591,500
24,000	IOWA RESOURSES INC.	618,000
15,000	IPALCO ENTERPRISES	408,750
14,000	IRVING BK CORP	700,000
44,000	ISC SYS CORP	671,000
107,800	ITT CORP	3,382,225
26,000	IU INTL CORP	461,500
21,000	JAMES RIVER CORP VA	572,250
27,000	JEFFERSON PILOT CORP	816,750
40,000	JERRICO INC	570,000
11,000	JEWEL COMPANIES	792,000
163,500	JOHNSON & JOHNSON	4,905,000 614,250
14,000	JOHNSON CONTROLS	
21,000	JONATHAN LOGAN	538,125 603,000
24,000	JOSTENS INC	000,000

NO. OF		MARKET
SHARES	SECURITY	VALUE
17 000		¢ 200 075
17,000 92,500	JOY MFG CO	\$ 388,875 2,867,500
	K MART CORP	662,750
22,000 32,800	K N ENERGY INC	475,600
54,000	KAISER ALUM & CHEM CO KANEB SERVICES	756,000
35,000	- KANSAS CITY PWR & LT	520,625
6,100	KANSAS CITY SO. IND	280,600
38,000	KANSAS GAS & ELEC CO	489,250
23,000	KANSAS PWR & LT CO	695,750
21,000	KATY INDS INC	446,250
42,000	KAUFMAN & BROAD INC	456,750
20,500	KAYDON CORP	133,250
73,000	KELLOGG CO	2,290,375
16,022	KEMPER CORP	556,765
19,000	KENNAMETAL INC	451,250
29,000	KENTUCKY UTILS CO	609,000
39,000	KERR MCGEE CORP	1,218,750
31,000	KEY PHARMACEUTICAL	383,625
30,000	KIDDE INC	858,750
35,000	KIMBERLY CLARK CORP	1,408,750
44,200	KLA INSTRS CORP	994,500
10,600	KLM ROYAL DUTCH AIR	532,650
45,000	KNIGHT RIDDER INC	1,220,625
33,000	KOPPERS INC	618,750
27,000	KROGER CO	894,375
24,000		246,000
25 , 000 -	LA QUINTA MTR INNS INC	375,000
25,000	LANCE INC	668,750
12,500	LANDMARK BKG CORP	184,375
48,000	LAWTER INTL INC	624,000
15,000		648,750
44,000	LEE DATA CORP	456,500
30,300	LEVI STRAUSS & CO	867,338
17,000.	LEVITZ [°] FURNITURE	510,000
16,000	LIBBEY OWENS FORD CO	720,000
30,000	LIEBERT CORP	592,500
54,900	LILLY ELI & CO	3,328,313
52,700 48,000	LIMITED INC	1,027,650 1,038,000
32,000	LIN BROADCASTING CORP LINCOLN NATL CORP INC	976,000
30,700	LITTON INDS INC	2,256,450
21,000	LIZ CLAIBORNE INC	840,000
47,670	LOCKHEED AIRCRAFT CO	1,871,048
20,000	LOCTITE CORP	710,000
20,750	LOEWS CORP	1,670,375
		£70/070/0

NO. OF		MARKET
SHARES	SECURITY	VALUE
26,000	LOMAS & NETTLETON FINL.	\$ 611,000
25,000	LONE STAR INDUSTRIES	493,750
13,000	LONG DRUG STORES INC	485,875
20,000	LORAL CORP	492,500
16,000	LOUISIANA LD & EXPL	470,000
20,600	LOUISIANA PAC. CORP	375,950
28,000	LOUISVILLE GAS & ELEC	640,500
35,200	LOWES CO	748,000
94,000	LTV CORP	1,116,250
10,620	LTV CORP CV PFD	169,920
37,000	LUBRIZOL CORP	804,750
37,600	LUCKY STORES	606,300
42,000	M/A COM	766,500
32,400	MACK TRUCKS INC	498,150
39,000	MACY R.H. & CO	1,901,250
16,000	MAGIC CHEF INC	402,000
21,000	MALONE & HYDE INC	729,750
35,500	MANUFACTURERS HANOVER	878,625
27,000	MAPCO INC	712,125
33,000	MARINE MIDLAND BKS INC	651,750
27,900	MARION LABS INC	1,074,150
20,800	MARRIOTT CORP	1,417,000
27,000	MARSH & MCCLENNAN	1,174,500
22,000	MARSHALL INDUSTRIES	508,750
27,400	MARTIN MARIETTA	893,925
32,000	MARY KAY COSMETICS	328,000
42,500	MASCO CORP	1,110,313
25,000	MATRIX CORP N J	600,000
21,900	MAY DEPT. STORES CO	1,240,088
8,000	MAYTAG CO	305,000
36,400	MCA INC	1,583,400
22,000	MCCORMICK & CO INC	723,250
20,000	MCDERMOTT INTL INC	512,500
44,950	MCDONALDS CORP	3,084,694
30,400	MCDONNELL DOUGLAS CO	1,702,400
1,500	MCFARLAND ENERGY INC	23,438
18,000	MCGRAW EDISON CO	607,500
33,000	MCGRAW HILL INC	1,402,500
173,300	` MCI COMMUNICATION	1,299,750
8,000	MCINTYRE MINES LTD	181,000
9,000	MCKESSON CORP	313,875
22,300	MEAD CORP	713,600
11,000	MEDIA GENERAL INC	594,000
30,900	MEDTRONIC INC	784,088
19,000	MEI CORP	719,625

NO. OF		MARKET
SHARES	SECURITY	VALUE
22,000	MELLON NATIONAL CORP	\$ 825,000
48,700	MELVILLE CORP	1,747,113
15,000	MERCANTILE BANCORP	354,375
11,000	MERCANTILE STORES INC	567,875
29,600	MERCANTILE TEXAS CORP	599,400
60,300	MERCK & CO INC	5,577,750
15,000	MEREDITH CORP	648,750
22,000	MERIDIAN BANCORP INC	665,500
62,900	MERRILL LYNCH & CO	1,690,438
33,700	MGMT. SCIENCE AMER	665,575
15,000	MICOM SYS INC	581,250
24,000	MIDCON CORP	828,000
120,900	MIDDLE SOUTH UTILS	1,284,563
35,000	MIDLAND ROSS CORP	695,625
16,000	MIDLANTIC BKS INC	356,000
25,400	MILLER HERMAN INC	628,650
22,000	MILLIPORE CORP	594,000
91,400	MINNESOTA MNG & MFG	7,049,225
25,000	MINNESOTA PWR & LT CO	640,625
45,100	MISSION INS GROUP INC	648,313
26,000	MITCHELL ENERGY	500,500
47,000	MITEL CORP	317 , 250
334,300	MOBIL CORP	8,858,950
18,800	MOLEX INC	737 , 900
17,000	MONARCH CAPITAL CORP	575 , 875
52,900	MONOLITHIC MEMORIES	972 <u>,</u> 038
60,400	MONSANTO CO	2,612,300
25,000	MONTANA PWR CO	634,375
29,100	MOORE CORP LTD	1,109,438
10,000	MOORE MCCORMACK RES	207,500
30,700	MORGAN J P & CO	1,907,238
23,000	MORRISON KNUDSEN INC	646,875
10,000	MORTON THIOKOL	760,000
90,700	MOTOROLA INC	3,027,113
26,000	MOUNTAIN FUEL SUPPLY	715,000
18,000	MULTIMEDIA INC	697,500
25,000	MURPHY OIL	818,750
41,500	MYLAN LABS INC	1,120,500
63,200	NABISCO BRANDS	2,907,200
30,000	NALCO CHEMICAL CO	712,500
21,000	NATIONAL CITY CORP	598,500
35,000	NATIONAL CONVENIENCE	555,625
33,000	NATIONAL DATA CORP	474,375
28,000 19,500	NATIONAL DISTILLERS	773,500 582,563
	NATIONAL GYPSUM CO	202,203

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NO. OF		MARKET
SHARES	SECURITY	VALUE
20,300	NATIONAL INTERGROUP	\$ 530,338
47,000	NATIONAL MED CARE INC	640,375
27,900	NATIONAL SVC INDS INC	662,625
38,800	NATL PATENT DEVEL CO	620,800
49,375	NATL. MED. ENTER. INC	1,030,703
64,300	NATL. SEMICONDUCTOR	787 , 675
16,000	NBD BANCORP INC	648,000
18,000	NBI INC	382,500
26,000	NCNB CORP	624,000
82,400	NCR CORP	2,018,800
22,000	NETWORK SYSTEMS CORP	511,500
26,000	NEVADA PWR CO	643,500
20,500	NEW ENGLAND BUSINESS	563,750
16,069	NEW ENGLAND ELEC SYS	520,234
37,000	NEW YORK ST ELEC & GAS	656,750
40,800	NEW YORK TIMES CO	1,280,100
21,000	NEWHALL LD & FARMING	708,750
25,700	NEWMONT MINING	950,900
76,400	NIAGARA MOHAWK PWR CO	1,069,600
23,100	NICOR INC	603,488
20,000	NIELSEN A C CO	1,002,500
46,000	NIKE INC	460,000
29,300	NL INDUSTRIES	391,888
23,400	NO. AMERICAN PHILIPS	751,725
23,294	NO. STS. POWER CO MINN	864,790
51,000	NOBLE AFFILIATES INC	803,250
18,000	NORDSTROM INC	589,500
47,600	NORFOLK SOUTHERN CORP	2,427,600
18,900	NORSTAR BANCORP NORTH AMERN COAL CORP	576,450
13,000	NORTHEAST UTILITIES	620,750 602,875
53,000 50,200	NORTHERN IND PUB SVC	690,250
39,000	NORTHERN TELECOM LTD	1,311,375
11,500	NORTHERN TELECOM LID NORTHROP CORP	1,069,500
16,400	NORTHWEST AIRLINES	604,750
20,300	NORTHWEST INDS INC	984,550
11,000	NORTON CO	357,500
30,700	NORWEST CORP	771,338
18,000	NOXELL CORP	630,000
23,000	NUCOR CORP	684,250
70,000	NUTRI SYSTEMS INC	420,000
74,360	NYNEX	4,498,780
72,800	OCCIDENTAL PET CORP	2,083,900
39,000	OCEAN DRILLING & EXPL	1,043,250
24,000	OGDEN CORP	672,000

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NO. OF		MARKET
SHARES	SECURITY	VALUE
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14,000	OHIO CAS CORP	\$ 558,250
106,200	OHIO EDISON CO	1,062,000
19,000	OHIO MATTRESS CO	287,375
33,000	OKLAHOMA GAS & ELEC	664,125
21,000	OLD REP INTL CORP	685,125
27,400	OLIN CORP	746,650
25,000	OMNICARE INC	393,750
24,000	ONEOK INC	681,000
24,900	OPTICAL RADIATION CO	958,650
26,600	OUTBOARD MARINE CORP	548,625
16,000	OVERNITE TRANSPORTATION	316,000
34,000	OVERSEAS SHIPHOLDING	522,750
16,300	OWENS CORNING FIBER	427,875
21,500	OWENS ILLINOIS INC	795,500
34,000	OXFORD INDS INC	467,500
14,000	PACCAR INC	570,500
222,600	PACIFIC GAS & ELEC	3,060,750
26,000	PACIFIC LUMBER CO	565,500
24,800	PACIFIC LTG CORP	824,600
74,360	PACIFIC TELESIS GROUP	4,043,325
43,100	PACIFICORP	958,975
18,100	PAINE WEBBER	552,050
24,300	PALL CORP	817,088
28,500	PANDICK INC	463,125
31,900	PANDICK INC PANHANDLE EASTERN CORP	1,100,550
68,400	PARADYNE CORP	880,650
90,000	PARKER DRILLING CO	821,250
21,000	PARKER HANNIFIN CORP	632,625
36,000	PARKER PEN CO	526,500
15,000	PARSONS CORP	363,750
25,000	PARSONS CORP PAY N SAVE CORP	431,250
30,000	PAIN SAVE CORF PAYLESS CASHWAYS	491,250
23,600	PAILESS CASHWAIS PENN CENT CORP	1,091,500
56,200	PENNEY J.C. INC	2,852,150
51,600	PENNEI J.C. INC PENNSYLVANIA PWR & LIGHT	1,102,950
16,000		546,000
37,000	PENNWALT CORP	1,197,875
	PENNZOIL CO	
26,000	PENTAIR INC	650,000
44,000	PEOPLES ENERGY CORP	423,500
30,000	PEOPLES EXPRESS AIRLINES	333,750
25,000	PEP BOYS MANNY MOE	675,000
87,600	PEPSICO INC	3,657,300
33,500	PERKIN ELMER	695,125
25,000	PETRIE STORES CORP	806,250
58,000	PETROLANE INC	1,123,750

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24,000PETROLITE CORP\$ 642,0119,800PFIZER INC3,923,427,700PHELPS DODGE477,8	50 25 00 25 00 50 50
27,700 PHELPS DODGE 477,8	25 00 25 00 50 50
	00 25 00 50 50
21,000 PHH GROUP INC 409,5	25 00 50 50
108,700 PHIBRO-SALOMON 2,907,7	00 50 50
105,200 PHILADELPHIA ELEC. CO 1,315,0	50 50
116,100 PHILLIPS PETROLEUM CO 4,121,5	50
35,000 PIC N SAVE CORP 691,2	00
12,000 PIEDMONT AVIATION 351,0	
32,100 PILLSBURY CO 1,195,7	25
20,000 PIONEER CORP 542,5	
30,000 PIONEER HI-BRED INTL 780,0	
27,600 PITNEY BOWES INC 952,2	
47,000 PITTSTON CO • 552,2	
30,600 PNC FINANCIAL 1,147,5	
² 29,000 PNEUMO CORP 797,5	
30,000POGO PRODUCING CO592,513,900POLAROID CORP378,7	
13,900 POLAROID CORP 378,7 23,000 POLICY MGMT. SYS. CO 678,5	
27,000 PONDEROSA SYSTEM INC 526,5	
24,300 POPE & TALBOT 388,8	
46,000 PORTLAND GEN ELEC CO 655,5	
20,000 POTLATCH CORP 555,0	
33,000 POTOMAC ELEC. & POWER 676,5	
53,500 PPG INDUSTRIES INC 1,491,3	
20,000 PREMIER INDL CORP 617,5	
14,000 PRENTICE HALL INC 605,5	00
12,000 PRICE CO 468,0)0
37,400 PRIME COMPUTER INC 500,2	
30,000 PRIME MTR INNS INC 615,00	
126,200 PROCTOR & GAMBLE 6,609,72	
11,000 PROVIDENT LIFE & ACC 753,50	
28,000 PSA INC 546,01 35,000 PUBLIC SVC CO COLORADO 612,50	
35,000PUBLIC SVC CO N MEXICO765,6275,300PUBLIC SVC ELEC & GEORGIA1,618,99	
59,000 PUGET SOUND PWR & LIGHT 612,12	
33,700 PULTE HOME CORP 417,03	
11,000 PUROLATOR 354,7	
15,500 QUAKER OATS CO 988,1	
47,400 QUAKER ST OIL REFINING 770,2	
34,200 QUOTRON SYSTEMS INC 367,69	
20,000 R.P.M. INC OHIO 270,00	
5,000 R10 GRANDE INDS INC 209,3	75
20,000 RAINIER BANCORP 732,50)0

NO. OF SHARES	SECURITY	MARKET VALUE
91,200	RALSTON PURINA CO	\$ 2,770,200
77,000	RANGER OIL LTD	519,750
34,000	RANSBURG CORP	518,500
6,000	RAYCHEM CORP	324,000
65,700	RAYTHEON CO	2,496,600
58,900	RCA CORP	1,862,713
65,000	READING & BATES CORP	723,125
40,000	REDMAN INDS INC	375,000
58,000	REEVES COMMUNICATION	406,000
25,000	REPUBLIC BANK CORP	662,500
23,300	REPUBLIC N Y CORP	751,425
11,000	RESORTS INTL	389,125
24,350	. REVCO D.S.	681,800
27,700	REVLON INC	1,076,838
45,000	REXNORD INC	686,250
20,000	REYNOLDS & REYNOLDS	575,000
21,000	REYNOLDS METALS CO	590,625
24,000	RICHARDSON VICKS	639,000
51,000	RITE AID CORP	1,051,875
39,800	ROADWAY SVCS INC	1,024,850
18,500	ROBERTSON H H CO	783,938 628,425
44,100	ROBINS A.H. INC	541,125
39,000	ROCHESTER GAS & ELECTRIC	624,250
22,000	ROCHESTER TEL CORP	3,170,913
116,900	ROCKWELL INTL CORP ROHM & HAAS CO	1,059,300
19,800	ROHR INDS INC	678,150
19,800 21,000	ROLLINS COMMUNICATION	317,625
35,000	ROLLINS INC	669,375
19,600	ROLM CORP	779,100
27,000	RORER GROUP INC	850,500
22,000	ROUSE CO	715,000
76,000	ROWAN COMPANIES INC	826,500
21,000	RPC ENERGY SVCS INC	81,375
19,000	RUBBERMAID INC	717,250
29,000	RYAN HOMES INC	551,000
19,570	RYDER SYSTEMS INC	856,188
37,000	RYKOFF S E & CO	518,000
33,000	SABINE CORP	647,625
38,400	SAFECO CORP	1,200,000
19,000	SAFETY KLEEN CORP	641,250
57,400	SAFEWAY STORES INC	1,320,200
18,000	SAGA CORP	531,000
37,000	SAN DIEGO GAS & ELECTRIC	666,000
21,700	SANDERS ASSOCIATES	927,675

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NO. OF		MARKET
SHARES	SECURITY	VALUE
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146,245	SANTA FE SO. PACIFIC	\$ 3,308,793
10,900	SAVANNAH FOODS & IND	487,775
46,000	SCA SVCS INC	954,500
38,500	SCHERING PLOUGH CORP.	1,491,875
224,400	SCHLUMBERGER LTD	10,154,100
48,900	SCI SYS INC	678 , 488
33,000	SCIENTIFIC ATLANTA INC	288,750
27,000	SCITEX LTD	519,750
19,000	SCM CORP	752,875
27,000	SCOA INDS INC	705,375
15,300	SCOTT & FETZER CO	799,425
44,900	SCOTT PAPER CO	1,234,750
16,000	SCOVILL	384,000
41,400	SEAGATE TECHNOLOGY	424,350
24,000	SEALED POWER CORP	585,000
37,300	SEARLE GD & CO	1,706,475
283,100	SEARS ROEBUCK & CO	8,917,650
28,635	SECURITY PACIFIC CORP	1,209,829
19,400	SEDCO INC	657 , 175 [,]
29,400	SENSORMATIC ELECTRS	224,175
24,500	SERVICE CORP INTL	967,750
44,000	SERVICE MERCHANDISE.	610,500
21,000	SERVICEMASTER INDS INC	588,000
17,000	SFN COS INC	433,500
29,000	SHAKLEE CORP	456,750
20,700	SHARED MED. SYSTEMS	597,713
10,000	SHAWMUT CORP	425,000
30,000	SHELLER GLOBE CORP	536,250
25,000	SHERWIN WILLIAMS CO	706,250
28,000	SHONEYS INC	731,500
84,500	SIGNAL COS INC	2,228,688
25,000	SINGER CO	725,000
36,000	SKYLINE CORP	445,500
43,000	SMITH INTL INC	688,000
61,800	SMITHKLINE-BECKMAN CORP	3,499,425
11,000	SMUCKER J M CO	423,500
21,200	SNAP ON TOOLS CORP	654,550
39,900	SONAT INC	1,291,763
1,000	SONOCO PRODS CO	42,000
36,000	SOUTH CAROLINA ELECTRIC	648,000
10,600	SOUTHDOWN INC	470,375
28,000	SOUTHEAST BKG CORP	619,500
88,600	SOUTHERN CALIF. EDISON	3,267,125
170,900	SOUTHERN CO	2,542,138
21,000	SOUTHERN NEW ENGLAND	637,875

NO. OF SHARES	SECURITY	MARKET Value
31,000	SOUTHERN UN CO	\$ 782,750
27,874	SOUTHLAND CORP	752,598
39,000	SOUTHLAND RTY CO	536,250
21,250	SOUTHWEST AIRLINES	451,563
25,000	SOUTHWEST BANCSHARES	484,375
74,360	SOUTHWESTERN BELL CO	4,154,865
32,000	SOUTHWESTERN ENERGY .	664,000
39,000	SOUTHWESTERN PUB SERVICE	726,375
21,050	SOVRAN FINANCIAL CORP	626,238
45,600	SPERRY CORP	1,692,900
21,000	SPRINGS INDS INC	753,375
22,100	SQUARE D CO	734,825
40,100	SQUIBB CORP	1,849,613
38,000	SRI CORP	532,000
26,900	ST. REGIS CORP	1,018,838
15,600	ST. PAUL COS. INC	815,100
41,000	STALEY A E MFG CO	855,875
34,000	STANDARD MTR PRODS INC	595,000
89,200	STANDARD OIL CO OHIO	3,891,350
279,900	STANDARD OIL OF CALIF	9,796,500
240,800	STANDARD OIL OF IND	13,755,700
6,000	STANDARD PRODS CO	99,000
30,700	STANLEY WKS	663,888
20,000	STATE STREET BOSTON	680,000
36,000	STAUFFER CHEMICAL CO	634,500
47,300	STERLING DRUG INC	1,265,275
27,000	STEVENS J.P.	556,875
18,000	STONE CONTAINER CORP	567,000
15,000	STOP & SHOP INC	661,875
52,000	STORAGE TECHNOLOGY	507,000
19,000	STORER COMMUNICATION	762,375
25,000	STRYKER CORP	531,250
8,000	SUBARU OF AMERICA INC	736,000
17,000	SUN BKS INC	408,000
88,400	SUN INC	4,442,100
14,800	SUNDSTRAND CORP	599,400
54,000	SUNSHINE MNG CO	607,500
28,600	SUPER VALU STORES INC	815,100
59,483	SUPERIOR OIL CO	2,520,592
19,000	SUPERMARKETS GEN CORP	460,750
22,000	SWIFT INDPT CORP	574,750
31,000	SYBRON CORP	558,000
25,600	SYNTEX CORP	1,100,800
26,000	SYSCO CORP	789,750
24,000	SYSTEMS & COMPUTER TECH	600,000

NO. OF		MARKET
SHARES	SECURITY	VALUE
10 000		A 700 000
12,000	TAFT BROADCASTING	\$ 780,000 621,000
12,000	TAMBRANDS INC	
32,600	TANDEM COMPUTERS INC	766,100 270,750
38,000	TANDON CORP	2,113,800
81,300	TANDY CORP.	600,000
24,000	TECO ENERGY INC TECUMSEH PRODS CO	556,500
7,000 7,000	TEJON RANCH CO	609,000
14,800	TEKTRONIX INC	839,900
32,600	TELE COMMUNICATIONS	627,550
87,000	TELECOM PLUS INTL CO	870,000
15,100	TELEDYNE INC	3,633,438
19,000	TELEX CORP	508,250
32,000	TELLABS INC	760,000
19,436	TEMPLE INLAND	512,625
115,300	TENNECO INC	4,309,338
18,000	TERADYNE INC	492,750
44,000	TESORO PETE CORP	731 , 500
195,200	TEXACO INC	6,588,000
17,000	TEXAS AMERN BANCSHARES	614,125
31,500	TEXAS COMMERCE BANKS	1,287,563
53,000	TEXAS EASTERN CORP	1,490,625
12,060	TEXAS INDUSTRIES	351,248
18,200	TEXAS INSTRUMENTS	2,343,250
158,800	TEXAS OIL & GAS CORP	3,533,300
88,200	TEXAS UTILITIES CO	1,885,275
29,700	TEXTRON INC	846,450
9,900	THOMAS & BETTS CORP	670,725
8,000	THOMPSON MED CO INC	202,000
40,000	THRIFTY CORP	620,000
36,000	TIDEWATER INC	832,500
36,400	TIE COMMUNICATIONS	546,000
40,100	TIME INC	1,604,000
53,400	TIMES MIRROR CO	1,989,150
10,200	TIMKEN CO	540,600
10,000	TODD SHIPYARDS CORP	318,750 665,500
44,000	TOLEDO EDISON CO	760,750
34,000	TORCHMARK CORP	2,256,750
51,000	TOYS R US	380,000
16,000 7,541	TRACOR INC TRANS WORLD AIRL PFD	754
19,722	TRANS WORLD AIRL FFD TRANS WORLD AIRLINES	175,033
21,200	TRANS WORLD AIRLINES TRANS WORLD CORP	575,050
48,500	TRANS WORLD CORP TRANSAMERICA CORP	1,091,250
18,100	TRANSCO ENERGY CO	782,825
TOTIO		1021023

NO. OF		MARKET
SHARES	SECURITY	VALUE
58,700	TRAVELERS CORP	\$ 1,672,950
20,000	TRINITY INDS INC	360,000
21,000	TRUST CO GA ATLANTA	582,750
27,300	TRW INC	1,754,025
23,500	TYCO LABS	769,625
22,000	TYLER CORP -	533,500
44,000	TYSON FOODS INC	803,000
31,000	U S BANCORP	561,875
17,700	U.S. GYPSUM CO	858,450
74,360	U.S. WEST CORP	4,294,290
26,600	UAL INC	937,650
25,000	ULTIMATE CORP	490,625
500	ULTRASYSTEMS INC	9,875
44,400	UNION CAMP CORP	1,526,250
53,318	UNION CARBIDE CORP	2,719,218
95,500	UNION ELEC CO	1,217,625
89,000	UNION PACIFIC CORP	3,448,750
20,000	UNIROYAL INC	242,500
37,000	UNITED ARTISTS THEATRE	823,250
45,500	UNITED BRANDS CO	705,250
28,000	UNITED ENERGY RES INC	665,000
28,000	UNITED ILLUM CO	353,500
17,000	UNITED STATES LEASING	527,000
16,700	UNITED STATES SHOE CO	452,988
80,700	UNITED STATES STEEL CO	1,967,063
45,000	UNITED STATES SURGICAL	540,000
500	UNITED STATIONERS INC	10,500
3,000	UNITED STOCKYARDS CO	25,500
86,000	UNITED TECHNOLOGIES	2,795,000
65,200	UNITED TELECOM. INC	1,198,050
22,000	UNITED VA BANKSHARES	572,000
23,000	UNITRODE CORP	612,375
19,300	UNIVERSAL FOODS CORP	424,600
50,000	UNIVERSAL HEALTH SERVICE	587,500
131,700	UNOCAL CORP	4,411,950 1,609,875
24,300 20,000	UPJOHN CO	545,000
	US AIR GROUP	715,500
36,000 23,000	US FIDELITY & GUARANTY USLIFE CORP`	580,750
	UTAH POWER & LIGHT CO	639,375
31,000 32,400	V F CORP	785,700
37,000	V F CORP VALERO ENERGY CORP	356,125
27,000	VALLEY NATIONAL CORP	634,500
20,000	VALUE LINE INC	665,000
19,900	VALUE DINE INC VARIAN ASSOC. INC	776,100

NO. OF		MARKET
SHARES	SECURITY	VALUE
30,000	VEECO INSTRS INC	\$ 630,000
28,000	VERBATIM CORP	283,500
22,000		640,750
30,000	VICORP RESTAURANTS INC	525,000
10,000	VULCAN MATLS CO	615,000
18,000	WACHOVIA CORP	825,750
105,400	WAL-MART STORES INC	4,347,750
25,000	WALGREEN CO	865,625
22,000	WALLACE COMPUTER SERVICE	569,250
12,500	WALTER JIM CORP	307,813
104,100	WANG LABS CL B	2,940,825
22,000	WARNACO INC	533,500
52,200	WARNER COMMUNICATION	1,220,175 1,948,388
62,100 26,000	WASHINGTON NATL CORP	464,750
10,000	WASHINGTON POST B	777,500
34,000	WASHINGTON WTR PWR CO	561,000
36,100	WASTE MANAGEMENT	1,177,763
24,000	WATKINS JOHNSON CO	594,000
32,000	WD 40 CO	736,000
14,000	WELLS FARGO & CO	449,750
24,000	WELLS FARGO MTG & EQTY	576,000
64,800	WENDYS INTL INC	1,109,700
25,000	WEST INC	581 , 250
15,000	WEST POINT PEPPERELL	596,250
7,000	WESTERN CAS. & SURTY	313,250
6,500	WESTERN PAC INDS INC	633,750
1,630	WESTERN TEL COM	22,005
17,900		411,700
132,600	WESTINGHOUSE ELEC. CO	2,917,200
27,000	WESTMORELAND COAL CO	648,000
14,700	WESTVACO CORP	499,800 651,750
33,000	WETTERAU INC	2,666,975
99,700	WEYERHEUSER CO	1,079,850
27,600 15,000	WHIRLPOOL CORP WHITE CONS INDS INC	414,375
36,600	WHITTAKER CORP	677,100
21,000	WILLAMETTE INDS INC	498,750
16,000	WILLIAMS COS	420,000
32,200	WINN DIXIE STORES INC	921,725
85,000	WINNEBAGO IND INC	871,250
26,400	WISCONSIN ELEC. POWER	735,900
24,000	WISCONSIN PUB SVC CO	666,000
26,000	WISCONSIN PWR & LT CO	711,750
28,000	WISER OIL CO DEL	595 , 000

NO. OF SHARES	SECURITY	MARKET VALUE
17,000 27,000 23,800 33,000 12,000 21,200 72,100 32,200 24,000 14,900 18,700	WITCO CHEMICAL CORP WOODS PETE CORP WOOLWORTH F W CO WORTHINGTON INDS INC WRIGLEY WM JR CO WYMAN-GORDON CO XEROX CORP XIDEX CORP XIDEX CORP YELLOW FREIGHT SYSTEM ZAYRE CORP	\$ 537,625 621,000 835,975 680,625 645,000 556,500 2,766,838 499,100 549,000 352,013 701,250 448,875
18,900 23,000	ZENITH ELECTRONICS CO ZURN INDS INC	- 517,500

TOTAL PORTFOLIO

\$ 1,243,869,655

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE	
HELLMAN JOH	RDAN MANAGEMENT		-		
7,870,000 9,175,000 610,000 525,000	U.S.A. TREASURY NOTE U.S.A. TREASURY BOND AMERICAN GENERAL CV. CROWN ZELLERBACH SER B	08/15/1993 08/15/2013 11/04/2008 05/01/2009	11.875% 12.000% 11.000% 9.250%	\$ 7,058,367 8,022,345 756,400 498,750	
TOTAL BOND	PORTFOLIO			\$16,335,862	
HERBERT R.	SMITH INC.				
500,000 1,000,000 310,000	FEDERAL NATIONAL MTG FEDERAL NATIONAL MTG SPARKMAN ENERGY CORP CV.	05/10/1985 04/10/1987 04/01/2003	11.300% 12.250% 10.750%	\$ 496,095 968,440 313,100	
TOTAL BOND	PORTFOLIO	• ·		\$ 1,777,635	
MINNESOTA I	MINNESOTA INDEX FUND - WILSHIRE ASSOCIATES				

987,925 MOBIL CORP		06/15/2004	14.400% \$	957,052
TOTAL BOND PORTFOLIO	•		\$	957,052

PAR				MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
VIIDOL	DECONTEL	MALONT 1	COOPON	VADOB
250,000	ALLSTATE FINANCIAL CORP	04/15/1987	8.125%	\$ 216,968
7,000,000	AMERICAN EXPRESS	07/01/1990	10.100%	5,853,260
450,000	AMERICAN INVESTMENT	11/01/1986	6.750%	378,576
668,000	AMERICAN INVESTMENT	01/01/1991	5.250%	387,814
3,500,000	AMERICAN TELEPHONE & TEL	12/01/2003	7.125%	1,912,400
17,241,000	AMERICAN TELEPHONE & TEL	08/01/2000	6.000%	8,474,296
8,000	ANOKA CTY SD 48	02/01/1985	3.200%	8,785
66,000	ANOKA/CIRCLE PINES	01/01/1987	4.500%	58,267
40,000	APPALACHIAN ELEC POWER	03/01/1987	4.625%	32,520
7,500,000	ATLANTIC RICHFIELD	09/15/2012	12.500%	6,530,025
10,093,883	ATLANTIC RICHFIELD	07/15/1996	9.250%	7,227,018
6,000,000	BEATRICE FOODS CO	08/15/2008	8.500%	3,771,120
14,000,000	BELL TEL CO OF PENN	05/01/2008	6.750%	
3,000,000	BELL TEL CO OF PENN			6,908,440
		05/01/2001	4.750%	1,225,770
8,809,250	BRITISH COLUMBIA HYDRO	07/15/1996	9.625%	6,857,384
6,134,925	BURLINGTON NORTHERN	09/01/1993	8.750%	4,461,747
1,900,000	C.I.T. FINANCIAL CORP	10/01/1986	6.375%	1,673,881
90,000	CANADIAN PACIFIC LTD	01/15/1992	8.625%	75,074
105,000	CASS CITY/PINE RIVER	09/01/1989	4.700%	81,356
250,000	CASTLE & COOKE INC	05/15/1985	8.125%	235,863
150,000	CHASE MANHATTAN CORP	05/15/1986	8.750%	136,700
259,137	CHESAPEAKE & OHIO RY	03/15/1989	8.750%	221,163
48,000	CHISAGO 140 TAYLOR FLS	02/01/1988	3.700%	38,760
9,750,000	CITIES SERVICE GAS	09/15/2005	13.000%	8,243,723
4,750,000	CITIES SERVICE GAS	06/01/1991	8.250%	3,397,865
5,500,000	CONSOLIATED NATURAL GAS	10/01/2000	12.875%	4,962,595
3,052,264	CONSOLIDATED EDISON	01/01/1996	9.250%	2,290,847
10,000	DAKOTA CTY SD 2	02/01/1985	3.900%	9,712
16,000,000	DAYTON HUDSON CO	10/15/2012	11.875%	13,322,710
12,213	DETROIT EDISON CO	06/30/1985	12.875%	12,092
12,542	DETROIT EDISON CO	12/30/1985	12.875%	12,363
20,000	DOUGLAS ISD 213 OSASIS	03/01/1989	3.900%	15,495
5,000	DOUGLAS ISD 214 CARLOS	02/01/1986	3.900%	4,571
8,000,000	DOW CHEMICAL CO	07/15/2007	7.875%	4,620,960
2,114,000	DRESSER INDUSTRIES	05/15/1985	8.650%	2,046,606
7,000,000	DUKE POWER CO	05/01/2009	10.125%	4,936,120
15,000	FARIBAULT/FREEBORN	02/01/1985	2.750%	14,380
13,000,000	FEDERAL FARM CREDIT BANK 🥢	10/20/1997	11.900%	11,415,560
19,000,000	FEDERAL FARM CREDIT BANK	10/22/1990	10.600%	16,328,030
10,000,000	FEDERAL FARM CREDIT BANK	10/21/1991	10.600%	8,453,100
5,000,000	FEDERAL FARM CREDIT BANK	10/20/1986	10.750%	4,745,300
12,500,000	FEDERAL FARM CREDIT BANK	04/22/1985	13.250%	12,597,625
3,290,000	FEDERAL HOME LOAN BANK	08/27/1984	7.850%	3,275,590
22,000,000	FEDERAL HOME LOAN BANK	07/26/1993	11.700%	19,291,140
6,707,831	FEDERAL HOME LOAN MTG	10/01/2009	12.500%	5,986,739

PAR				MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
6,793,590	FEDERAL HOME LOAN MTG	01/01/2010	12.500%	\$ 6,063,279
3,407,872	FEDERAL HOME LOAN MTG	07/01/2010	10.750%	2,739,077
12,000,000	FEDERAL NATIONAL MTG	08/10/1984	11.100%	12,000,000
17,000,000	FEDERAL NATIONAL MTG	11/12/1990	10.900%	14,790,000
15,000,000	FEDERAL NATIONAL MTG	05/10/1990	10.300%	12,796,800
5,500,000	FEDERAL NATIONAL MTG	06/10/1988	10.500%	4,946,535
11,400,000	FIRESTONE TIRE & RUBBER	12/01/2004	9.250%	7,282,320
3,600,000	FIRST INTERSTATE BANCORP	04/15/1988	10.500%	3,238,596
3,000,000	FLORIDA POWER & LIGHT	05/01/2010	11.300%	2,316,060
7,000,000	FLORIDA POWER & LIGHT	11/01/2009	12.125%	5,768,770
11,200,000	FMC CORP	01/15/2000	9.500%	7,885,024
250,000	FORD MOTOR CREDIT CORP	11/01/1984	8.100%	246,655
565,985	GNMA POOL # 02731	02/15/2004	8.000%	377,795
1,103,067	GNMA POOL # 03518	01/15/2004	8.000%	736,297
1,100,264	GNMA POOL # 03802	07/15/2004	8.250%	742,678
684,143	GNMA POOL # 04039	07/15/2004	8,250%	461,797
454,393	GNMA POOL # 04064	08/15/2004	8.250%	306,715
136,985	GNMA POOL # 04218	05/15/2004	8.000%	91,438
40,409	GNMA POOL # 04236	06/15/2004	8.000%	26,973
823,503	GNMA POOL # 04281	09/15/2004	8.250%	555,864
65,953	GNMA POOL # 05767	07/15/2005	8.000%	44,024
480,358	GNMA POOL # 06336	06/15/2005	8.000%	320,639
444,777	GNMA POOL # 07214	09/15/2005	8.000%	296,889
22,561	GNMA POOL # 08550	03/15/2006	8.250%	15,229
217,243	GNMA POOL # 09125	06/15/2006	8.250%	146,639
512,713	GNMA POOL # 09162	04/15/2006	8.250%	346,081
76,099	GNMA POOL # 09350	03/15/2006	8.250%	51,367
506,585	GNMA POOL # 09790	04/15/2006	8.250%	341,945
461,294	GNMA POOL # 10249	11/15/2006	8.000%	307,914
547,578	GNMA POOL # 10411	06/15/2006	8.000%	365,508
583,419	GNMA POOL # 10706	06/15/2006	8.000%	389,432
153,679	GNMA POOL # 10743	05/15/2006	8.250%	103,733
727,595	GNMA POOL # 10943	07/15/2006	8.000%	485,670
630,849 482,103	GNMA POOL # 11281 GNMA POOL # 11364	08/15/2006 08/15/2006	8.000%	421,092
239,742	GNMA POOL # 11384 GNMA POOL # 11486	09/15/2006	8.000% 8.250%	321,804
757,352	GNMA POOL # 11480 GNMA POOL # 11810	10/15/2006	8.000%	161,826
1,077,396	GNMA POOL # 11810	09/15/2006	8.000%	505,532 719,162
788,532	GNMA POOL # 12025	10/15/2006	8.000%	526,345
763,217	GNMA POOL # 12025	11/15/2006	8.000%	509,448
495,322	GNMA POOL # 12243	10/15/2006	8.000%	330,627
586,160	GNMA POOL # 12283	10/15/2006	8.000%	-391,262
2,412,961	GNMA POOL # 12289	10/15/2006	8.000%	1,610,652
481,083	GNMA POOL # 12548	11/15/2006	8.000%	321,123
610,177	GNMA POOL # 12599	09/15/2006	8.000%	407,293

PAR VALUE		SECURI	TY	MATURITY	COUPON	MARKET VALUE	
647,113 788,962		POOL # POOL #	12757 12777	09/15/2006 11/15/2006	8.000% 8.000%	\$ 431,94 526,63	
1,227,843	-	POOL #	13099	10/15/2006	8.000%	819,58	
633,947		POOL #	13255	11/15/2006	8.000%	423,16	
536,033		POOL #	13262	11/15/2006	8.000%	357,80	
644,801		POOL #	13297	11/15/2006	8.000%	430,40	
816,900		POOL #	13327	11/15/2006	8.000%	545,28	
624,818		POOL #	13334	10/15/2006	8.000%	417,06	6
1,333,387		POOL #	13380	12/15/2006	8.000%	890,03	
804,276	GNMA	POOL #	13935	01/15/2007	8.000%	536,85	4
1,201,114	GNMA	POOL #	14053	12/15/2006	8.000%	801,74	
815,674	GNMA	POOL #	14174	12/15/2006	8.000%	544,46	
775 , 513	GNMA	POOL #	14188	10/15/2006	8.000%	517,65	
684,132	GNMA	POOL #	14919	02/15/2007	8.000%	456,65	
1,543,288		POOL #	15012	12/15/2006	8.000%	1,030,14	
717,613		POOL #	15616	01/15/2007	8.000%	479,00	
1,199,573		POOL #	15783	01/15/2007	8.000%	800,71	
879,843		POOL #	16051	01/15/2008	8.000%	587,29	
373,414		POOL #	17086	11/15/2007	8.000%	249,25	
958,374		POOL #	17566	03/15/2008	8.000%	639,71 1,071,63	
1,605,443		POOL #	17619	08/15/2007	8.000% 8.000%	488,90	
732,443		POOL #	18099 18224	08/15/2007 09/15/2007	8.000%	540,92	
810,374		POOL # POOL #	18279	01/15/2008	8.000%	581,66	
871,406 81,950		POOL # POOL #	18542	09/15/2007	8.000%	54,70	
1,736,399		POOL #	18553	09/15/2007	8.000%	1,159,04	
1,734,204		POOL #	19083	12/15/2007	8.000%	1,157,58	
719,514		POOL #	19157	10/15/2007	8.000%	480,27	
758,905		POOL #	19311	10/15/2007	8.000%	506,56	
717,022		POOL #	19458	08/15/2007	8.000%	478,61	
858,922		POOL #	19574	12/15/2007	8.000%	573,33	
1,730,935		POOL #	20008	11/15/2007	8.000%	1,155,39	
781,388		POOL #	20109	12/15/2007	8.000%	521,57	
1,602,223	GNMA	POOL #	20197	09/15/2007	8.000%	1,069,48	
1,718,789		POOL #	20289	11/15/2007	8.000%	1,147,29	2
847,317	GNMA	POOL #	20290	12/15/2007	8.000%	565,58	
813,600	GNMA	POOL #	20305	11/15/2007	8.000%	543,07	
853,544	GNMA	POOL #	20455	12/15/2007	8.000%	569,74	
817 , 487		POOL #	20489	10/15/2007	8.000%	545,67	
1,583,727		POOL #	20691	12/15/2007	8.000%	1,057,13	
853,426		POOL #	20761	10/15/2007	8.000%	569,66	
690,004		POOL #	20819	10/15/2007	8.000%	460,57	
840,456		POOL #	20916	11/15/2007	8.000%	561,00	
817,870		POOL #	20963	11/15/2007	8.000%	545,92	
1,681,060	GNMA	POOL #	21013	11/15/2007	8.000%	1,122,10	1

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
856,555	GNMA POOL # 21113	10/15/2007	8.000%	
835,056		12/15/2007	8.000%	\$ 571,751 557,400
822,356	GNMA POOL # 21131 GNMA POOL # 21329	12/15/2007	8.000%	548,923
828,401	GNMA POOL # 21325 GNMA POOL # 21487	11/15/2007	8.000%	552,958
1,567,703	GNMA POOL # 21407 GNMA POOL # 21694	02/15/2008	8.000%	1,046,442
1,667,720	GNMA POOL # 21772	12/15/2007	8.000%	1,113,203
1,646,393	GNMA POOL # 21790	12/15/2007	8.000%	1,098,967
816,221	GNMA POOL # 22022	01/15/2008	8.000%	544,827
1,611,594	GNMA POOL # 22832	09/15/2007	8.000%	1,075,739
20,148	GNMA POOL # 23012	03/15/2008	8.000%	13,449
4,216,260	GNMA POOL # 26157	10/15/2008	9.000%	2,983,004
4,404,806	GNMA POOL # 27963	11/15/2008	9.000%	3,116,400
967,678	GNMA POOL # 31488	07/15/2009	9.000%	684,632
2,918,526	GNMA POOL # 34131	08/15/2009	9.500%	2,141,469
4,571,421	GNMA POOL # 35013	01/15/2010	11.000%	3,714,280
3,781,556	GNMA POOL # 35047		· - 9.500%	2,774,717
2,861,312	GNMA POOL # 35549	08/15/2009	9.500%	2,099,487
2,866,766	GNMA POOL # 36021	09/15/2009	9.500%	2,103,490
2,840,000	GULF OIL CORP	06/15/1993	6.625%	1,903,482
7,000,000	HALLIBURTON CO	06/01/2005	10.200%	5,241,320
9,000,000	HAWAIIAN TELEPHONE	10/01/2010	13.375%	8,126,820
10,000	HENN CTY ISD 17 EDINA	02/01/1987	4.000%	8,829
7,000,000 1,800,000	HERTZ CORP	02/15/1999	9.500%	4,897,690
4,000,000	HOUSEHOLD FINANCE HOUSTON LIGHTING & POWER	01/01/1990 06/01/2010	7.250% 12.000%	1,387,116
10,000,000	HOUSTON NATURAL GAS CO	11/15/1992	11.000%	3,166,440 8,460,500
4,000,000	ILLINOIS BELL TEL & TEL	07/01/2003	4.375%	1,490,560
50,000	INDIANA & MICH ELEC	02/01/1988	3.875%	36,146
5,000,000	INT'L BUS. MACHINES	10/01/1986	9.500%	4,608,450
5,000	ISANTI/PINE/KANABEC	02/01/1986	4.000%	4,578
3,160,000	LACHMAR HULL 54 US	09/25/1988	14.000%	3,196,719
25,000	LAKE CTY/BEAVER BAY	01/01/1987	5.000%	22,406
1,200,000	LINCOLN NATIONAL CORP	09/15/1992	13.875%	1,167,432
8,000	LINCOLN/LYON 409 TYLER	02/01/1986	4.300%	7,392
5,966,628	LNM ACCEPTANCE CORP	12/01/1986	9.100%	5,450,455
1,313,709	LOUISVILLE & NASHVILLE	10/20/1991	9.000%	994,543
5,161,666	LOUISVILLE & NASHVILLE	04/20/1992	8.375%	4,089,123
1,500,000	LOUISVILLE & NASHVILLE	12/01/1987	4.875%	1,207,500
9,375,000	MANITOBA HYDRO ELEC	10/15/1997	7.650%	5,710,313
2,000,000	MANITOBA, PROVINCE OF	11/01/1993	6.875%	1,243,760
6,200,000	MARATHON OIL CO	02/01/2000	8.500%	3,721,178
6,000,000	MARTIN-MARIETTA CORP	03/15/2011	7.000%	2,915,820
30,000 30,000	MCLEOD CTY SD 38	02/01/1987	3.900%	26,109
150,000	METRO WTR DIST SO CAL METRO WTR DIST SO CAL	08/01/1985 04/01/1986	4.000%	28,591
120,000	MEINO WIK DISI BU CAL	04/01/1300	4.000%	142,953

PAR			•	MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
11102	D DOOR111		000101	111202
25,000	MILLE LACS SD 4/1 BOCK	03/01/1989	3.900%	\$ 19,039
800,000	MINNESOTA POWER & LIGHT	09/01/2006	8.700%	490,928
5,122,817	MISSOURI PACIFIC RR	06/01/1995	12.750%	4,703,464
5,586,070	MISSOURI PACIFIC RR	06/01/1994	9.750%	4,284,292
628,000	MOORE-MCCORMACK LINES	04/01/1987	5.750%	542,919
30,000	MORRISON/TODD ISD 486	02/01/1988	3.800%	24,316
7,000	MOWER/FREEMAN JISD 27	01/01/1986	3.000%	6,400
5,000	NOBLES CTY ICSD 119	09/01/1984	3.300%	4,937
•	NOBLES CIT ICSD IIJ NORTHERN STATES POWER	01/01/2004	8.375%	739,020
1,200,000	NORTHERN STATES POWER NORTHWESTERN BELL TEL	06/01/1998	4.875%	2,480,463
5,420,000		08/15/2016	9.500%	6,992,580
10,500,000	NORTHWESTERN BELL TEL	09/15/1986	7.875%	10,129,812
11,400,000	NORWEST CORP			
12,785,000	NORWEST FINANCIAL	07/01/1990	12.750%	12,052,292
4,650,000	NOVA SCOTIA POWER	07/15/1998	8.125%	2,920,898
3,000,000	NOVA SCOTIA POWER	03/15/1997	7.750%	1,809,510
3,000,000	NOVA SCOTIA POWER	06/01/2008	9.625%	2,005,950
2,900,000	NOVA SCOTIA, PROVINCE OF	08/01/1993	7.250%	1,875,546
10,218,000	ONTARIO HYDRO	03/15/1996	9.500%	7,625,183
1,000,000	ONTARIO, PROVINCE OF	06/15/2005	9.125%	658,120
1,350,000	ONTARIO, PROVINCE OF	12/01/1997	6.875%	766,692
3,800,000	ONTARIO, PROVINCE OF	05/15/2001	7.850%	2,252,602
7,500,000	ONTARIO, PROVINCE OF	12/15/2002	7.300%	4,115,400
3,500,000	ONTARIO, PROVINCE OF	06/01/2008	9.375%	2,330,650
13,100,000	ONTARIO, PROVINCE OF	11/30/2008	9.375%	8,712,286
1,100,000	ONTARIO, PROVINCE OF	04/15/1997	5.625%	560,472
9,000,000	OWENS ILLINOIS INC	06/01/1990	10.375%	7,667,370
100,000	PACIFIC GAS & ELECTRIC	-06/01/1985	9.500%	97,254
6,000,000	PACIFIC NORTHWEST BELL	10/01/2010	8.625%	3,643,380
8,500,000	PACIFIC TEL & TEL	11/01/2020	15.000%	8,471,865
2,000,000	PFIZER INC	08/15/2000	9.250%	1,411,400
12,000,000	PUBLIC SERVICE CO OF IND	09/01/1990	12.125%	10,155,960
25,000	RICE ISD 656 FARIBAULT	01/01/1987	3.400%	21,570
14,700,000	SASKATCH., PROVINCE OF	04/15/2008	9.250%	9,634,968
944,797	SEABOARD COAST LINE RR	04/01/1992	9.000%	707,436
386,087	SEABOARD COAST LINE RR	10/01/1992	8.250%	287,234
5,500,000	SEAFIRST CORP	06/01/1990	10.500%	4,757,500
26,000	SHERBURNE/VIL BIG LAKE	07/01/1986	4.500%	23,759
5,000,000	SOUTH CENTRAL BELL TEL	10/01/2020	12.875%	4,347,450
6,300,000	SOUTHERN BELL TEL & TEL	10/05/2020	12.875%	5,477,787
6,000,000	SOUTHERN PACIFIC TRANS	10/01/1992	8.250%	5,988,720
4,750,000	SOUTHWESTERN BELL TEL	08/01/1995	4.625%	2,327,453
250,000	SPERRY RAND FINANCIAL	02/01/1985	7.875%	243,558
550,000	SPRAGUE ELECTRIC CO	09/01/1988	4.375%	382,800
3,931,573	STANDARD OIL (INDIANA)	10/01/2000	9.000%	2,683,062
1,163,819	STANDARD OIL OF CALIF	03/30/1997	7.700%	728,504

PAR			t.	MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
1,244,082	STANDARD OIL OF CALIF	03/02/1997	7.700%	\$ 772,140
1,203,951	STANDARD OIL OF CALIF	02/10/1997	7.700%	755,467
2,215,209	STANDARD OIL OF CALIF	09/07/1997	7.700%	1,376,420
1,435,783	STANDARD OIL OF CALIF	09/08/1997	7.700%	892,081
1,435,783	STANDARD OIL OF CALIF	11/06/1997	7.700%	889,741
5,019,962	STANDARD OIL OF CALIF	07/02/1999	8.500%	3,284,210
35,000	STEARNS CTY ISD 93	07/01/1987	4.750%	30,713
20,000	STEELE/FREEBORN 30	01/01/1985	2.700%	19,266
3,000	STEELE/RICE JICSD 5	01/01/1985	3.000%	2,825
14,500,000	STUDEBAKER-WORTHINGTON	11/15/2003	9.350%	9,860,290
6,000,000	TEXAS POWER & LIGHT	01/01/2006	8.600%	3,704,820
6,500,000	TEXAS POWER & LIGHT	02/01/2009	9.375%	4,261,270
200,000	TRAILMOBILE FINANCE	11/15/1987	8.200%	169,602
13,000,000	U.S.A. TREASURY BOND	11/15/2002	11.625%	· 11,074,310
20,000,000	U.S.A. TREASURY BOND	11/15/2012	10.375%	15,162,400
15,000,000	U.S.A. TREASURY BOND	11/15/2010	12.750%	13,931,250
26,600,000	U.S.A. TREASURY BOND	11/15/1995	11.500%	23,108,750
10,000,000	U.S.A. TREASURY BOND	02/15/2001	11.750%	8,643,700
32,000,000	U.S.A. TREASURY NOTE	11/15/1992	10.500%	26,779,840
47,000,000	U.S.A. TREASURY NOTE	04/30/1985	9.500%	46,074,570
17,000,000	U.S.A. TREASURY NOTE	05/15/1993	10.125%	13,823,040
8,500,000	U.S.A. TREASURY NOTE	05/31/1985	9.875%	8,330,000
7,500,000	U.S.A. TREASURY NOTE	02/15/1987	9.000%	6,808,575
20,000,000	U.S.A. TREASURY NOTE	11/15/1984	14.375%	20,218,800
6,000,000	U.S.A. TREASURY NOTE	11/15/1989	10.750%	5,340,000
10,000,000	UNION CAMP	10/01/2012	12.750%	8,870,600
6,000,000	UNION TANK CAR	12/15/1995	9.500%	4,507,800
7,000,000	USLIFE CORP	10/15/1989	12.000%	6,440,070
11,000,000	USLIFE CORP	10/15/1990	12.500%	10,259,810
250,000	UT CREDIT CORP WAB/GOOD/OLMSTD 50 141	06/01/1986	8.625%	228,210
15,000	WABASHA CTY CSD 2374	02/01/1986	3.800%	13,737
2,000	WABASHA CTI CSD 2374 WABASHA/OLMSTEAD 806	02/01/1985	3.750%	1,926
15,000	WELLS FARGO & CO	06/01/1987	4.100%	12,940
6,989,750 10,000	WILLS FARGO & CO WINONA CTY/GOODVIEW	11/01/1998 01/01/1985	8.625% 4.500%	4,281,152
10,000	WINOWA CITY GOODVIEW	01/01/1903	4.0008	9,7 78

TOTAL BOND PORTFOLIO

\$807,677,389

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MINNESOTA STATE BOARD OF INVESTMENT BASIC RETIREMENT FUNDS ALTERNATIVE EQUITY INVESTMENT FUNDS JUNE 30, 1984

NO. OF		MARKET	
SHARES	SECURITY	VALUE	<i>.</i>
REAL ESTATE	POOLED FUND	1	
300.000	ROSENBURG REAL ESTATE EQUITY FUND	300,000	
	EQUITABLE LIFE ASSURANCE FUND	48,468,702	
	AETNA REAL ESTATE FUND	44,172,705	
10,478	PRUDENTIAL REAL ESTATE FUND	47,551,906	
10/1/0		•	
TOTAL REAL	ESTATE POOLED FUND	\$140,493,313	
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RESOURCE PO	OLED FUND		
		17 520 241	
	AMERICAN GAS & OIL I	17,538,241	
	AMERICAN GAS & OIL II	5,250,000	
262,878	APACHE CORP	262,878	
		\$ 23,051,119	1
TOTAL RESOU	RCE POOLED FUND	<i>4</i> 23,031,113	
* '			
VENTIDE CAD	ITAL POOLED FUND		
VENIORE CAP			
375.000	KOHLBERG KRAVIS, ROBERTS & CO.	375,000	
4,000	NORTHWEST VENTURE PARTNERS	4,000,000	
	•		
TOTAL VENTU	RE CAPITAL POOLED FUND	4,375,000	
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