MINNESOTA STATE BOARD OF INVESTMENT



Governor Rudy Perpich

State Auditor Arne H. Carlson

State Treasurer Michael A. McGrath

Secretary of State Joan Anderson Growe

Attorney General Hubert H. Humphrey III

MINNESOTA STATE BOARD OF INVESTMENT MEETING June 7, 1989

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INVESTMENT ADVISORY COUNCIL MEETING June 6, 1989

AGENDA STATE BOARD OF INVESTMENT MEETING

Wednesday, June 7, 1989 8:30 A.M. Room 118 - State Capitol Saint Paul

		TAB
1.	Approval of Minutes: Special Meeting-February 8, 1989 Regular Meeting-March 1, 1989	
2.	Executive Director's Report (H. Bicker)	
	A. Quarterly Investment Review (January 1 - March 31, 1989)	A
	B. Portfolio Statistics (March 31, 1989)	В
	 C. Administrative Report 1. Budget and Travel Reports 2. Update on Legislation 3. Update on Post Retirement Fund Discussion 	С
3.	Report from the SBI Administrative Committee (M. McGrath)	D
	A. Proposed Board/IAC Seminar to Review Fund Policies B. Approval of Consultant Contract C. Approval of FY 1990 Management and Budget Plan D. Approval of FY 1990 Board Member Travel Policy E. Approval of Position Description for the Executive Direct F. Consideration of Commitment to U.S. Government Guarant Agricultural Export Loan Program	
4.	Reports from Investment Advisory Council Committees (J. Yeomans)	
	 A. Equity Manager Committee 1. Review of Active Manager Performance 2. Review of New Manager Funding 3. Approval of Active Manager Contract Renewals 	E
	B. Fixed Income Manager Committee 1. Review of Active Manager Performance 2. Review of Semi-Passive Manager Performance 3. Update on Dedicated Bond Portfolio Rebalancing 4. Review of Updated Active Manager Investment Guideline 5. Approval of Active Manager Contract Renewals 6. Approval of Semi-Passive Manager Contract Renewals	F es
	 C. Alternative Investment Committee 1. Report on Fund Manager Annual Reviews 2. Status Report on Real Estate Study 3. Status Report on Alternative Asset Indices 4. Approval of Resource Consultant Contract Renewal 	G

MEMBERS OF THE BOARD:
GOVERNOR RUDY PERPICH
STATE AUDITOR ARNE H CARLSON
STATE TREASURER MICHAEL A McGRATH
SECRETARY OF STATE JOAN ANDERSON GROWE
ATTORNEY GENERAL HUBERT H HUMPHREY III



EXECUTIVE DIRECTOR HOWARD J. BICKER

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

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REVISED

MINUTES

SPECIAL MEETING

STATE BOARD OF INVESTMENT

February 8, 1989

The State Board of Investment (SBI) met on Wednesday, February 8, 1989 in Room 118, State Capitol, at 8:45 A.M. This was a special State Board of Investment meeting to review the results of the Investment Advisory Council Task Force on Fund Objectives. Governor Rudy Perpich, Chair; Secretary of State Joan Anderson Growe, State Auditor Arne H. Carlson; State Treasurer Michael A. McGrath, and Attorney General Hubert H. Humphrey III were present.

Governor Perpich introduced Mr. John Bohan. He stated that Mr. Bohan would share with the Board the report from the Task Force on Fund Objectives. (See attached)

Mr. Bohan stated that a written report was sent to each Board member, and his presentation would summarize the report. He stated the mission of the Task Force was to review fund objectives of the Basic Funds and Post Retirement Fund and to suggest necessary changes, and stated that the recommendations were in two parts: 1) changes that could be implemented within current statutory language, and 2) changes that would require statutory change.

Mr. Bohan stated that the Task Force developed for the Basic Retirement Funds a mission statement; total return objectives, including a real return measure (return compared to inflation) and two relative return measures (return compared to the market and compared to a peer group); a liquidity objective; and an appropriate asset allocation to achieve the objectives.

In response to a question from Mr. Carlson concerning whether the Wilshire 5000 or the S&P 500 is the appropriate index by which to measure the SBI's relative performance, Mr. Bohan stated that the Task Force would suggest using the index that is appropriate given the portfolio of equities in which the SBI invests. He stated that the Wilshire 5000 is a much broader

index than the S&P 500, and that to the extent the SBI is participating in a broader capital market than the S&P 500, the Wilshire 5000 is a more appropriate index. Mr. Carlson stated that the Task Force report contained no language that would indicate flexibility in choosing market targets. Mr. Bohan stated he thought that the Board should have an investment policy and statement of objectives that do not change with the vacillations of the market. He stated that one should not confuse the actual asset allocation decision with the choice of the performance measure of the market in which the fund participates.

Mr. Bohan then stated that the Task Force developed for the Post Retirement Fund a mission statement, return objectives, and asset allocation.

After Mr. Bohan finished his presentation, Mr. Humphrey asked why the proposal for international investments was included in the report. He asked whether there was sufficient diversity In response, Mr. Bohan in domestic investment opportunities. stated that capital markets outside the U.S. are smaller, except Japan, and have the opportunity to grow at higher rates. He also stated that other capital markets do not move in the same direction as the U.S. market, so that by adding assets from non-U.S. markets the Board could lower variability of returns. Mr. Humphrey then expressed concern over the emphasis on long term goals. He asked how the Board could balance long term goals with short term economic and political realities. In response, Mr. Bohan stated that the suggested five year return measures respond to more immediate needs of the funds than what may be captured in the very long-term horizons of the capital markets.

Mr. Carlson moved 1) approval of the first part of the Task Force Report with the understanding that the Board is not committed solely to the Wilshire 5000 and the Salomon Bond Index as performance measures and that it would discuss the question of a flexible asset allocation, and 2) further discussion of the proposal to change the Post Fund by the pension funds, who would report back to the Board at the next Board meeting. In response to a question from Mr. Carlson, Mr. Bicker stated that, in his opinion, if the Post Retirement benefit increase formula were changed the questions of combining the investments of the Post Fund with those of the Basic Funds would be moot. Mr. Bicker also stated that he would be willing to speak with the retirement systems and retiree groups, the IAC, the Finance Department and others about trying to reach a consensus on the issue of needing to change the Post Fund formula. Ms. Growe stated that the first part of the report dealt with fund objectives given present statutory language. She asked Mr. Carlson whether the motion was to accept the first part of the report with the understanding that the question of the Wilshire 5000 or the S&P 500 would be decided later, and to accept the suggested reporting format. Mr. Carlson concurred. Mr. Humphrey stated that he was concerned that the Board was making decisions about the two funds (Basic Funds and Post Retirement Fund) based on the premise that the

suggested statutory changes to combine the funds would happen. He expressed concern over the recommendation to change the asset allocation in the Basic Funds to 85 percent equities. Mr. Bicker then stated that the recommendations for change concerning the Basic Funds' asset allocation primarily involve international investments and that the Board would have to develop an implementation plan. Mr. Bicker stated that this plan would take at least six months to develop. Ms. Growe stated that the recommendations will provide a structure from which the Board can operate and upon which the Board may make more rational decisions. The Carlson motion was approved. ('Aye'-Carlson, Growe, McGrath, Perpich; 'nay'-Humphrey).

- 3 -

The meeting adjourned at 10:00 A.M.

Respectfully submitted,

Howard Bicker

Executive Director

Attachment

Report of the Task Force on Fund Objectives

Basic Retirement Funds
Post Retirement Investment Fund

January, 1989

Members of the Task Force:

John Bohan, Pillsbury Company, Chair Harry Adams, Mpls. Teachers Retirement Fund Jim Eckmann, Dayton-Hudson Malcolm McDonald, Space Center Corporation Joe Rukavina, Public Representative Jan Yeomans, 3M Company

REPORT ON THE TASK FORCE ON FUND OBJECTIVES

BASIC RETIREMENT FUNDS POST RETIREMENT INVESTMENT FUND

Table of Contents

	Pages
Executive Summary	1- 2
Recommendations Within Current Statutory Requirements	
o Basic Retirement Funds	3- 6
o Post Retirement Investment Fund	7- 8
o Funding Status	9
o Score Card Report Format	10
Recommendations For Statutory Changes	11-13

Report of the Task Force on Fund Objectives

EXECUTIVE SUMMARY

MISSION:

At its first meeting on December 15, 1988, the Task Force agreed that its mission was to:

- o Review objectives of the Basic and Post Retirement Funds as to relevancy, clarity, measurability of results, and recognition of the Board's responsibilities to the Fund beneficiaries and contributors.
- o Identify barriers to the development and execution of strategies to accomplish stated objectives.
- o After review with the Investment Advisory Council, report findings to the Board, including where appropriate, recommendations for change.

PROCESS:

Participants included six members of the Investment Advisory Council (IAC). Extensive meetings were held on consecutive Wednesdays: December 15, December 28 and January 4. Members of the professional staff and representatives of members of the State Board of Investment were present at each meeting and contributed to the discussions.

A report draft of the Task Force report was forwarded to the Investment Advisory Council on January 23, 1989. Following discussion with the IAC on January 30, in which the Board's consultant participated, the draft was modified to incorporate certain clarifications.

CONCLUSIONS AND RECOMMENDATIONS:

Early on in its deliberations, the Task Force concluded that it would separate its recommendations into two parts:

- o Recommendations that can be implemented within current statutory requirements (pages 3 to 10).
- o Recommendations that require statutory changes to eliminate what the Task Force perceives as unreasonable and costly investment policy restrictions (pages 11 to 13).

Recommendations within current statutory requirements:

o The Task Force developed, separately for the Basic and Post Retirement Funds, a mission statement, a statement of

Executive Summary (con't)

objectives and an asset allocation strategy designed to achieve the respective mission and objectives.

Further, the Task Force recommends that the combined funding status of the Basic and Post Retirement Funds, currently 72% of the present value of the future benefit obligations for actives and retirees, be included in the periodic reporting to the State Board of Investment. The current statute provides for the obligation to be fully funded by 2009. Adoption of the Task Force recommendations for a more aggressive investment policy in the Basic Funds may permit the acceleration of this schedule without affecting the current mechanism used to finance retirement benefit increases.

o The Task Force also recommends that a "score card" (page 10) be used in quarterly reporting of performance to the Board.

Recommendations that require statutory changes:

- o The Task Force recommends substituting an inflation-based benefit increase formula for the current formula that is keyed to excess "realized income" from the Post Retirement Investment Fund.
- o The Task Force recommends that the separation of the pension assets of retirees and active employees be discontinued. This structure is believed to be unique among U.S. pension plans, with the known exception of one other public plan in Minnesota. This structure, along with the investment-driven benefit increase formula, leads to an asset allocation for the Post Retirement Investment Fund that generates current "realized income" from fixed income securities. Greater return could be secured from a portfolio more heavily weighted to equities, albeit with potentially more volatility in any given year.

The Task Force recommends that the Board, at its February 8, 1989 meeting, approve those recommendations that can be implemented within current statutory requirements.

With respect to statutory changes, the Task Force recommends that the Board, after consulting with the retirement systems and other state agencies, develop enabling legislation for consideration by the Legislature. The Investment Advisory Council stands ready to assist the Board in furthering these changes.

Report of the Task Force on Fund Objectives

BASIC RETIREMENT FUNDS

Mission, Objectives, Asset Allocation Strategy

MISSION:

To invest the pension contributions of employees/employers so that sufficient funds are available to finance promised benefits to over 200,000 public employees at retirement. All investments shall be governed by standards codified in Minnesota Statutes Chapter 11A, including the prudent person rule.

OBJECTIVES:

The Task Force recommends the following objectives:

- o Total Return
- o Liquidity

1) Total Return (net of fees)

a) Real Return over 10 years

The Basic Funds should generate total annualized returns that are 3-5 percentage points greater than the rate of inflation over moving 10 year periods.

Rationale: Historically, the capital markets have, over time, provided total returns exceeding inflation.

Since inflation and stock and bond returns will vary widely on a year to year basis, comparisons over short time periods are not meaningful. Given current trends in inflation, the Task Force believes an objective of 3-5% real return over a 10 year period is an appropriate and achievable objective for the Basic Funds. If inflationary trends change significantly, this objective should be reevaluated.

b) Relative Return over 5 years

Relative return measures should be compared to the Basic Funds' performance over moving <u>5 year</u> periods. Return comparisons for shorter time periods (1 and 3 years) provide insights to relative performance but should not be used in judging the Funds' performance.

o Exceed a composite of market indices ("Custom Index")

The Basic Funds' total return should exceed a composite of market indices that is weighted in a manner that reflects the target asset allocation of the Funds.

Asset Class	Recommended Index/Target	Current Index/Target .
Equities:	711 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	W11-1-1 5000
Domestic Common Stock	Wilshire 5000	Wilshire 5000
Int'l Common Stock	EAFE *	None
Real Estate	**	None
Venture Capital	**	None
Resource Funds	**	None
Fixed Income:		
Domestic Bonds Cash Equivalents	Salomon BIG None	Salomon BIG 91 Day T-Bills

- * Morgan Stanley Capital International Index of Europe, Asia and the Far East.
- ** To be recommended by the Alternative Investment Committee of the IAC.

Rationale: The Task Force recommends that the indices in the custom index correspond to the Board's asset class targets. If the Board changes these asset class targets, corresponding changes in the indices used in the composite should be made.

Implicit in the objective to "exceed" the Custom Index is the use of active management. Over time, active management is expected to add value, net of fees, to the return available from passively managed index funds.

Basic Funds (con't)

o Exceed the median fund in TUCS Universe ("Peer Index")

The Basic Funds' total return should be above the median return from a representative cross section of other public and private pension funds.

The current peer index used is the Trust Universe Comparison Service (TUCS). Since many funds report only their stock, bond and cash returns to TUCS, the Task Force recommends that this measure be compared to the Basic Funds' return without alternative assets.

Rationale: TUCS is the largest and most comprehensive universe available to the SBI. It includes the returns of more than 800 public and private pension funds across the U.S.

The recommended asset allocation for the Basic Funds contains a larger percentage of stock than most funds reported to TUCS. As a result, the Basic Funds' return may be above the TUCS median return in years that the stock market performs well relative to the bond market, and below the TUCS median in years when the stock market performs poorly. The Task Force believes the Basic Funds' can be expected to exceed the TUCS median return over a moving 5 year period.

It should be noted that many funds report their returns before management fees are deducted. As a result, the Basic Funds are at a disadvantage when compared to other funds in the sample.

2) Liquidity

The Basic Funds should provide enough cash to meet the monthly transfer needs to the Post Retirement Fund.

Rationale: Historically, cash equivalents have provided lower rates of return than investments in stocks, bonds or alternative assets.

Accordingly, the Task Force recommends that the Basic Funds minimize the amount of cash it holds at any point.

ASSET ALLOCATION STRATEGY

The Task Force recommends the Basic Funds allocate 85% of its assets to equities (common stock and alternative assets). This is the maximum equity allocation allowed under current statute. The specific long term asset allocation recommended by the Task Force is:

	Recommended	Current
Equities:		
Domestic Common Stock	60.0%	60.0%
International Common Stock	10.0	
Real Estate	10.0	10.0
Venture Capital	2.5	2.5
Resource Funds	2.5	2.5
Sub-Total Equities	85.0%	75.0%
Fixed Income:		
Domestic Bonds	15.0	22.0%
Cash Equivalents	0.0	3.0
Sub-Total Fixed Income	15.0%	25.0%

Rationale: Historically, equities have provided higher returns than fixed income assets. Over the long term, the Basic Funds will achieve substantially higher total return than is possible from a lower equity position, although returns may fluctuate widely on a year to year basis. Given their long time horizon and low liquidity needs, the Basic Funds are ideally suited to take advantage of this return relationship.

The Task Force believes that the Basic Funds should increase its equity exposure by adding a 10% allocation to international common stocks and reducing allocations to bonds and cash equivalents. The Task Force recommends that staff develop an implementation plan for the international equity component for the Basic Funds. The plan should be reviewed by the IAC and approved by the Board prior to execution.

Report of the Task Force on Fund Objectives

POST RETIREMENT INVESTMENT FUND

Mission, Objectives, Asset Allocation Strategy

MISSION:

To insure that assets transferred to the Post Retirement Fund generate sufficient realized earnings to maintain promised benefits, and to generate additional realized earnings that will provide increases to more than 55,000 retired public employees. All investments shall be governed by standards codified in Minnesota Statutes Chapter 11A, including the prudent person rule.

OBJECTIVES:

The Task Force recommended the following objectives:

- o Realized Earnings
- o Liquidity

1) Annual Realized Earnings

a) Generate 5% Realized Earnings to Maintain Current Benefits

The Post Fund must generate realized earnings of 5% each year to maintain current benefits.

b) Generate at least 3% Additional Realized Earnings to Provide Benefit Increases

After the 5% earnings goal is assured, the Post Fund should maximize additional realized earnings in a way that provides a relatively consistent level of benefit increases over time.

Rationale: The Post Fund's return objectives focus on realized earnings (interest, dividends plus net realized capital gains) because of its statutory provisions. By statute, the Post Fund must realize 5% earnings on the entire fund each year in order to provide current benefits.

If the Fund generates more than 5% realized earnings in any year, statutes require that the additional earnings be distributed to retirees in the form of lifetime benefit increases. In order to provide benefit increases over time,

Post Fund (con't)

the Fund should be invested to generate a relatively stable stream of additional earnings each year.

2) Liquidity

The Post Fund must generate sufficient cash each month to pay benefits to retirees.

ASSET ALLOCATION STRATEGY:

As cited previously, the Post Fund requires a large, stable stream of current income to pay monthly benefits to retirees. The Task Force believes the asset mix strategy currently in place fulfills this need. The current strategy is:

- o Commit sufficient assets to a dedicated bond portfolio to meet the annual realized earnings objective of 5%.
- o Commit additional assets to a dedicated bond portfolio to provide a floor benefit increase of 3% each year.
- o Invest any remaining assets in common stock to provide realized gains that will contribute to benefit increases.
 - Rationale: A dedicated bond portfolio is a collection of various maturity, high quality bonds that generate cash flows from income and principal payments matching a specific stream of liabilities. The dedicated bond portfolio ensures that funds are available at the required times to meet promised benefit payments.

While the dedicated bond portfolio satisfies the Post Fund's statutory constraints, the Task Force believes there are other investment strategies that can generate a high level of current income and low volatility. The Task Force recommends that staff explore alternatives (e.g. dividend models used by endowment funds) and report on their potential applicability to the Post Fund.

Report of the Task Force on Fund Objectives

BASIC AND POST RETIREMENT FUNDS Funding Status

During its deliberations, the Task Force spent considerable time discussing the funding status of the statewide retirement systems. At the present time, the three largest statewide retirement plans have assets equal to approximately 72% of their combined actuarial liability. In dollar terms, this equals a shortfall of \$3.2 billion. Current law provides that this shortfall will be eliminated by 2009.

Two sources of financing could reduce the shortfall at a faster pace than anticipated by current State law:

- o increased contributions by employees/employers
- o increased investment returns

While the State Board of Investment has no control over the level of contributions coming into the retirement plans, it can assist in reducing the shortfall through superior investment performance.

Actuarial funding status is calculated on the assumption that the Basic Retirement Funds will provide an annual return of 8% over time and the Post Retirement Fund will provide 5% annual return.

The Task Force believes it is appropriate for the Basic Retirement Funds to employ an aggressive investment program that will, over time, have a high likelihood of exceeding the 8% assumed rate of return. This will assist the State in achieving full funding on or before the statutory target date of 2009. In addition, it could reduce the long term cost of public pension financing to the general taxpayer or allow benefit formulas to be enhanced.

MINNESOTA STATE BOARD OF INVESTMENT QUARTERLY REPORT ON OBJECTIVES

	Status Month/Day/Year
BASIC RETIREMENT FUNDS	\$xx.x billion
o Total Return (Annualized)	
- Real (10 years)	xx.x%
3 to 5 percentage points over inflation	x.x percentage points over/under
· Relative (5 years)	xx.x%
Above median return Above composite index return	x.x percentage points above/below x.x percentage points above/below
o Liquidity	
- Minimal cash	<pre>\$xx million in cash,% of total fund</pre>
POST RETIREMENT INVESTMENT FUND	\$xx.x billion
o Realized earnings	\$xx.x million in FY 19
- Above 8% per year	x.x percentage points above/below
o Liquidity	
- Cash equivalent to one month's benefits	\$xx.x million,% of previous month's
FUNDING (BASIC + POST RETIREMENT FUNDS)*	Status June 30, 19
o Achieve full funding by 2009	
- Projected benefit obligations (PBO)	\$xx.x billion
- Fair market value of assets (FMV)	\$xx.x billion
- Percent funded (PBO/FMV)	xx %

* TRA, MSRS, PERA General Plans Only

Report of the Task Force on Fund Objectives

BASIC AND POST RETIREMENT FUNDS Recommendations for Statutory Changes

The Task Force has reviewed the structure of the Basic and Post Retirement Funds within their current statutory requirements. The Task Force has identified three structural issues that unduly constrain the SBI's investment policies and asset management strategies. Addressing any of these issues would require changes the SBI's statutory authority.

o Equity Exposure Limit

By law, no more than 85% of any fund may be invested in equities or equity equivalents (common stock, real estate, venture capital, resource funds, high yield debt, international securities).

Since equities have provided the highest historical rates of return, limits on equity exposure may limit the SBI's ability to maximize returns over time.

o Benefit Increase Formula

By law, benefit increases in the Post Retirement Fund are granted whenever realized earnings exceed 5% in a year. This formula presents two problems:

- The formula requires the Post Fund to focus on generating current income (interest, dividends and net realized capital gains and losses) rather than total return (interest, dividends and realized and unrealized capital gains and losses). This limits the Post Fund's exposure to equities and therefore limits its potential for long term growth.
- The formula generates increases that may bear little relationship to inflation. Over time, it is likely that the formula will produce high increases during periods of low inflation and low (or no) increases during periods of high inflation. This is contrary to the implicit objective of providing benefit increases that parallel inflation and maintain the buying power of retirees.

o Separation of the Basic and Post Funds

By law, pension assets of currently working employees accumulate in the Basic Funds and pension assets attributable to retirees are transferred to the Post Fund for payout during retirement. This structure is very rare among other public and private pension plans in Minnesota and across the U.S.

Statutory Changes (con't)

The Task Force believes that separate fund management, combined with the current benefit increase formula, increases the long term costs of pension financing in Minnesota. Therefore, the Task Force believes this structure should be modified.

Over the long term, there is a potential increase in annual total return of 1.12% if the current statutory constraints were modified to permit a more aggressive investment policy. This translates to increases in value of more than \$100 million each year.(1)

RECOMMENDATION:

The Task Force recommends that legislation be developed and implemented that:

- o Replaces the present benefit increase formula that is totally dependent on "realized earnings" with one that relates in some manner to inflation.
- o Eliminates the requirement for separate investment of the pension assets of active and retired employees.

Rationale: The Task Force believes that the pension income of public employees should be targeted at a proportion of their preretirement after-tax income that is competitive with the private sector for similar jobs.

Generally, public and private sector pensions are fixed as of the date of retirement. Some employers have subsequently elected, at their sole discretion, to provide ad hoc increases to mitigate the impact of inflation on retirees' after-tax income.

If it is the policy of the State of Minnesota to provide formula-driven benefit increases after retirement, the formula should relate to inflation rather than to excess "realized earnings" on a portion of retirement assets. Further, in establishing a new policy, due consideration should be given to competitive practices by other public and private employers.

The Task Force believes that continuation of the present benefit increase formula and the accompanying statutory limitations on investment policy are not in the best interest

Statutory Changes (con't)

of Minnesota taxpayers and do not effectively achieve the implicit objective of protecting retirees' income from the ravages of inflation. While any modifications should recognize the benefits promised to current retirees, such considerations should not preclude future action.

(1) Assumes asset mix changes from 40% stock/60% bonds to 60% stock/40% bonds on a fund of \$10 billion.

Calculated using 9.9% annual total return for stocks and 4.3% annual total return for bonds. These total return values are taken from research by Ibbotson Associates and cover the period from 1926-1987.

If the Basic and Post Retirement Funds are considered together, their combined asset mix on 9/30/88 was 35% stocks/7% alternative assets/49% bonds/9% cash and their combined value was \$9.65 billion.

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STATE OF MINNESOTA STATE BOARD OF INVESTMENT

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MINUTES STATE BOARD OF INVESTMENT MARCH 1, 1989

The State Board of Investment (SBI) met on Wednesday, March 1, 1989 in Room 118 of the State Capitol at 9:25 A.M. Secretary of State Joan Anderson Growe, Acting Chair; State Treasurer Michael A. McGrath; Attorney General Hubert H. Humphrey III, and State Auditor Arne H. Carlson were present. Governor Rudy Perpich was absent.

The minutes of the December 7, 1988 were unanimously approved.

EXECUTIVE DIRECTOR'S REPORT

Howard Bicker, Executive Director, stated that the market value of the Basic Retirement Funds increased by 1.7 percent during the quarter ending December 31, 1988. He stated that the increase was due to investment returns. He also stated that the Funds experienced a negative cash flow of \$22 million during the period. Mr. Bicker stated that there were no significant changes in the asset mix during the fourth quarter. He stated that the Basic Funds outperformed the median balanced fund during the He stated stocks latest year. quarter and during the underperformed the Wilshire 5000 by 0.4 percentage points and bonds slightly outperformed the Salomon Bond Index by 0.2 percentage points for the quarter.

Mr. Bicker stated that the Post Retirement Fund increased in value by 2.5 percent during the fourth quarter due to investment returns and a positive cash flow of \$37 million. He stated that there were no significant changes in the asset mix. He then stated that a benefit increase of 6.9 percent was provided to retirees as of January 1, 1989. He stated that the stock segment of the Post Retirement Fund outperformed the target by 6.0 percentage points for the year.

Mr. Bicker also reported that as a result of the discussions on the Post Retirement Fund at the special Board meeting on February 8, 1989, he has addressed the boards of the Public Employees Retirement Association and Minnesota State Retirement

System and has talked with other interested parties, including some of the retiree representatives, concerning a change in the Post Fund benefit formula. He said he would keep the IAC informed on the results of these discussions.

Mr. Bicker reported that as of December 31, 1988 all assets under management by the State Board of Investment totalled \$13.2 billion.

EXECUTIVE DIRECTOR'S ADMINISTRATIVE REPORT

Mr. Bicker referred the Board to his Administrative Report in the meeting materials. After reviewing the budget and travel reports, he said that he wished to speak in some detail about the implementation of the Task Force recommendations.

First, he stated that staff wanted the Board to reaffirm the Wilshire 5000, the Salomon Broad Investment Grade (BIG) bond index, and 91-day Treasury bills as the SBI's asset class targets. He stated that staff will be bringing proposed asset class targets for alternative investments to the Board in accordance with the recommendation of the Task Force Report on Fund Objectives.

With respect to stock indices, Mr. Bicker stated that the returns of the Wilshire 5000 and the S&P 500 over the ten years ended December 31, 1988 were essentially the same. He stated that over various periods of time the two measures would deviate because the Wilshire 5000 contains more small capitalization stocks. He stated that in 1983 the Board adopted the Wilshire 5000 as its equity class target because the Wilshire 5000 includes all the stocks traded on U.S. exchanges and SBI managers participate in the entire stock market. With respect to bond indices, he stated that the returns of the Salomon BIG Index and the Shearson Lehman Index over the past nine years were very similar. (He stated nine years was used because the Salomon Index was only nine years old.) He stated that the Salomon Index was preferrable because it was the first to incorporate mortgage backed securities, and several of the SBI's fixed income managers purchase these securities. He stated that the Salomon Index is representative of the entire market of investment grade securities.

Second, Mr. Bicker said he recommended that the Task Force recommendation for "minimal cash" be quantified as one percent. He stated that the one percent cash target should be sufficient to cover most monthly transfers from the Basic Funds to the Post Fund and should accommodate monthly payments out of the Post Fund to retirees.

Ms. Growe then asked for questions or comments concerning the Wilshire 5000 issue. In response to a question from Mr. Carlson, Mr. Bicker stated that the Wilshire 5000 more accurately reflects the current Basic Funds portfolio than the S&P 500. In response to another question from Mr. Carlson, Mr. Bicker stated

that a plan sponsor should choose an asset class target for the long term. He stated that staff estimates that to change the Basic Funds' index fund to reflect the S&P 500 rather than the current Wilshire 5000 would cost about \$3 million. Mr. Carlson stated that the Basic Funds' index fund had outperformed the active managers since January 1984. In response to another question from Mr. Carlson, Mr. Bicker stated that the issue of whether to continue with active managers is a separate issue that the Board should discuss. In response, Mr. Carlson stated that he believed the two issues were not separate and that he believes the SBI ought to expect its external managers to outperform the market index that is expected to perform better over the next market cycle. Mr. Carlson then asked what the forecast of the IAC and staff was to support the recommendation of the Wilshire 5000 as the asset class target rather than the S&P 500.

Ms. Growe asked Ms. Yeomans to relate the discussion the IAC had concerning the Wilshire 5000. Ms. Yeomans stated that the IAC drew a distinction between the asset class target and particular equity investments. She stated that it is a policy decision to choose the asset class target that best reflects the equity investment opportunities available to the fund. She stated that the particular securities selected by managers reflect active investment decisions designed to add value to the asset class target. She stated that the IAC would agree that a plan sponsor should choose one target and consistently use it.

In response to a question from Mr. Carlson, Ms. Yeomans stated that in the recommendation to retain the Wilshire 5000 as an equity target there is no implicit forecast that the Wilshire 5000 will outperform the S&P 500 or some other index. In response to another question from Mr. Carlson, Ms. Yeomans stated that asset allocation is the primary determinant of the outcome of an investment, but the sponsor still needs to have a benchmark in place against which to measure performance, and the benchmark should not change depending on the economic forecast. After further discussion, Ms. Yeomans stated that she believed that an economic forecast is relevant to a market timing decision but not to the asset class target decision.

In response to a question from Mr. Carlson about market timing and flexibility, Ms. Yeomans stated that it would be a major policy decision of the Board to have asset allocation handled on an active basis rather than by rebalancing to fixed targets. She stated that if it were to decide to market time by actively changing the asset allocation, the Board would need to incorporate market expectations and forecasts, set a time frame for reviewing allocation decisions, and provide a great deal of flexibility to make allocation decisions to the staff or to the party who has the responsibility for making the decisions. She then stated that she thought the market timing issue is separate from the asset class target. In response to another question from Mr. Carlson, Ms. Yeomans stated that there are plan sponsors on the IAC who use market timing in their funds. She said that in a previous position paper staff had provided the Board and IAC

with several reasons why market timing is not appropriate for a large fund like the Basic Funds.

In response to another question from Mr. Carlson, Ms. Yeomans stated that there is reasonably strong statistical evidence that there are active managers who consistently add value. She stated that there is some evidence that some value added can be obtained by actively managing the asset allocation. She then stated that the Board's active stock managers have a growth style bias. As a result, she said, the Board has not had a significant presence in market areas that have performed well in recent years.

Mr. Humphrey moved that the Board retain the Wilshire 5000, the Salomon BIG, and 91-day Treasury Bills as asset class targets, and to amend the Task Force Report asset allocation to include one percent cash in both the Basic Funds and the Post Fund. Mr. McGrath seconded. The motion was adopted (Ayes: Mr. Humphrey, Ms. Growe, Mr. McGrath; Nay: Mr. Carlson).

Mr. Bicker returned to the action plan in his administrative report and stated that the Board's current rebalancing policy is to sell high and buy low when the allocation in an asset class moves away from the target allocation by a certain amount. He stated that when the allocation changes ten percent either plus or minus from the target allocation, rebalancing must take place. He stated that when an asset class allocation moves up or down by at least five percent, then staff has discretion to rebalance back to the target allocation. He stated that rebalancing has not been an issue because the Basic Retirement Funds have had a negative cash flow due to the Rule of 85. He concluded by stating that staff wanted the Board to be aware of its current rebalancing policy.

Mr. Bicker stated that the last issue related to the Task Force report is the development of an implementation plan for international securities. He reported that it is staff's suggestion that the implementation timetable laid out in the meeting materials can be accomplished by December 1989. He stated that staff will bring various topics to the Board as it proceeds. He also stated that staff plans to hold informal miniseminars on various international investing topics for Board members and deputies. He then stated that staff would like to bring to the Board at its June 1989 meeting a recommendation for using international securities in the short-term portfolios that the SBI manages.

ADMINISTRATIVE COMMITTEE REPORT

Mr. McGrath stated that several information items were contained in the meeting materials. He said that Richards & Tierney has been the Board's consultant for three years and that it has been the Board's policy to review such contracts every three years. He stated that the Administrative Committee recommends that a Consultant Review Committee be formed to draft

an RFP, review responses, and interview finalists. He stated that the IAC would review and recommend a choice for Board approval at the June 1989 meeting. He stated the Committee would include a designee of each Board member. Mr. McGrath moved the recommendation concerning the Consultant Review Committee; Mr. Humphrey seconded. The motion passed unanimously.

CONSULTANT'S REPORT

Mr. Tom Richards, of Richards & Tierney, the Board's consultant, reported on the investment performance of the Basic Retirement Funds for calendar year 1988 and for the five year period ending December 31, 1988. He stated that the total rate of return for 1988 was 13.74 percent and for the five year period through 1988, 12.51 percent. He stated that the Basic Funds achieved a real rate of return of over five percent annually over the past five years. He reported that active management had returned a negative 27 basis points (0.27 per cent) over the five years, but that the shortfall is modest.

INVESTMENT ADVISORY COUNCIL COMMITTEE REPORTS

EQUITY AND FIXED INCOME MANAGER COMMITTEES

Ms. Yeomans introduced Mr. Eckmann and then stated that she She stated that the Equity and had two items of information. Fixed Income Manager Committees met jointly February 15, 1989. She stated that the Joint Committee reviewed each active manager and that no Board action was required. She then stated that the dedicated bond portfolio within the Post Fund was rebalanced in January. She stated that funds necessary to match the entire projected liability stream were not available without liquidating Instead of stocks being liquidated, the some common stocks. portfolio was rebalanced so that 100 percent of the liabilities for the next ten years were covered and about 80 percent of the liabilities for the remaining years were covered. She stated that the remaining portions of liabilities would be filled in as cash flow becomes available. She stated that the chosen method does not jeopardize the ability of the Post Fund to pay promised the five percent realized earnings benefits or to meet requirement.

Ms. Yeomans then stated that the first action item is a proposal to renew the BEA contract. She stated that BEA was hired on April 1, 1987 as a manager to enhance cash returns on the cash portion of the Post Fund. She stated that the Joint Committee recommends that BEA be retained for an additional year, but that the size of their portfolio be reduced from \$115 million to \$20 million. Mr. Carlson moved approval of a motion to authorize Howard Bicker, with the assistance of legal counsel, to negotiate and execute a new contract with BEA and make necessary custody arrangements given the reduction in the size of the portfolio. Mr. McGrath seconded. The motion passed unanimously.

Ms. Yeomans then stated that the second item on which action is required is a commitment to a U.S. government guaranteed agricultural export loan program. After an explanation of the proposal by Ms. Yeomans, Mr. Humphrey stated that he was unsure of the value being returned to the farmers and that he would like the Board to delay the matter for further discussion. Ms. Growe stated that the matter would be placed on the June agenda.

Ms. Yeomans then stated that the next item was a review of manager probation status. She stated that at the last meeting the Board asked the IAC to consider whether a limit should be placed on the length of time a manager is allowed to remain on probation. She stated that the joint committee recommends that: (1) a significant gain or loss in the number of accounts or clients under management over the previous year should be added as a qualitative factor requiring probation, and (2) when a manager is on probation for two successive quarters the manager will be interviewed at SBI offices and the IAC would recommend whether the manager would be continued or terminated. Mr. Carlson moved approval of the recommendation. Mr. Humphrey seconded. The motion passed unanimously.

Ms. Yeomans stated that the final item of discussion for the Joint Committee was whether the additional active equity managers should be retained. She stated that the Joint Committee and the full IAC reaffirmed the belief that active management can add value and continues to recommend that four managers considered earlier be retained and funded with \$100 million each. She stated the four are: Rosenberg Institutional Equity Management, Franklin Portfolio Associates Trust, Sasco Capital, Inc., and Concord Capital Management. She stated that the reasons for the recommendation are: 1) the belief that active management can add value over time, 2) the Basic Funds' current actively managed portfolio has a growth stock bias that can be partially offset by adding the four value-type managers, and 3) the IAC believes that each of the four managers are capable of adding value.

In response to a question from Mr. McGrath, Ms. Yeomans stated that the assets to fund the four managers would come from the index fund, which would change the portion of the stock segment that is actively managed from the current 25 percent to about 37 percent. She stated that current policy allows up to 50 percent of the stock segment to be actively managed.

Mr. Carlson then asked Mr. Bicker to review the equity manager selection process. Mr. Bicker stated that the process began with the identification that the stock portfolio had a growth bias, and staff recommended to the IAC and the Board that the SBI review value oriented managers to offset the growth bias. He stated that staff received names of potential managers from money market directories, from members of the IAC, from Board members and deputies, and from the Board's consultant. He stated that staff focused on value oriented managers that had at least \$100 million under management so that they would be large enough to handle the size portfolio the SBI would provide them. He

stated that staff sent questionnaires which were reviewed by the IAC, Equity Committee, and Board deputies, to 59 managers and 45 that each of the responders were He stated He stated that staff interviewed by staff in the SBI offices. narrowed the list to four who were formally interviewed by the Selection Committee, which included Board deputies. He stated that the Committee declined the suggestion to interview the finalists at their places of business, and that the Committee chose to recommend that all four be retained. In response to a question from Mr. Carlson, Mr. Bicker stated that the Review Committee was provided with a list of the firms that were interviewed, a copy of the questionnaire, detailed qualitative and quantitative information about the four finalists, and staff made available any information collected on each of the firms interviewed. Mr. Carlson stated that he believed the review process was subjective and not based on a consistent set of criteria. After some discussion concerning active management and benchmark portfolios, Mr. Humphrey stated that he felt the Board had a constructive discussion, but that it was time to vote on a Mr. McGrath moved that the motion to hire the four managers. Board retain the four managers and provide them with a portfolio \$100 million as recommended by the IAC. Mr. Humphrey seconded. Mr. Carlson requested a roll call vote. The motion was adopted (Aye: Mr. Humphrey, Ms. Growe, Mr. McGrath; Nay: Mr. Carlson).

ALTERNATIVE INVESTMENT COMMITTEE

Ms. Yeomans stated that the Alternative Investment Committee had only information items that did not need to be discussed by the Board.

TASK FORCE ON SOUTH AFRICA REPORT

Ms. Christie Eller stated that the Task Force on South Africa met February 17, 1989 to review implementation of the Board's resolution on South Africa given financial and legal advice recently received. She stated that the Task Force recommends that the Board continue to implement the resolution through its policy of divestment through attrition, and that the Board amend confirm that policy (see and restate the resolution to She stated that the revised resolution draft Exhibit A). reflects decisions that the Board has made in its implementation and it sets a revised target of March 1, 1991 for divestment. Mr. Humphrey stated that it was his understanding that the draft updates the resolution to reflect where the Board is in its implementation and removes extraneous language. He stated that the revision retains the fiduciary requirements. He stated that the Board's divestment by attrition policy has been highly successful. In response to a question from Mr. Carlson, Mr. Bicker stated that three Minnesota based companies would be 3M, and Donaldson affected by the resolution: Control Data, Company. Ms. Growe stated that the Board is using the same criteria, based on information from the Investor Responsibility Research Center, used previously concerning the definition of doing business in South Africa. She stated that she believes the revised resolution just lengthens the process of divestment by attrition, and that the Board is accomplishing with the resolution what it set out to do. Mr. Humphrey moved adoption of the Task Force recommendation. Mr. McGrath seconded. The motion was adopted (Aye: Mr. McGrath, Ms. Growe, Mr. Humphrey; Nay: Mr. Carlson).

The meeting adjourned at 11:15 A.M.

Respectfully submitted,

Howard Bicker

Executive Director

Housed Briker.

Attachment

AMENDED AND RESTATED RESOLUTION OF THE MINNESOTA STATE BOARD OF INVESTMENT

WHEREAS, the policy of Apartheid as maintained by the present government of the Republic of South Africa is not only morally repugnant to all who believe in the inherent rights of individual freedom and equal treatment under the law and has resulted in the systematic enslavement and subjugation of the non-white majority of South Africa and Namibia but casts doubt on the safety and stability of investment in companies doing business with, operating in, or making loans to the Republic of South Africa or Namibia:

NOW, THEREFORE, BE IT RESOLVED THAT:

- 1. No monies held and invested by the Minnesota State Board of Investment (SBI) in its actively managed stock portfolios shall remain invested in or hereinafter be invested in the stocks of:
 - (a) any foreign or United States company or any subsidiary or affiliate thereof doing business or operating in the Republic of South Africa or Namibia, or
 - (b) any bank or financial institution which makes loans to the Republic of South Africa or Namibia or a governmental enterprise thereof, or other loans deemed by the SBI to directly support Apartheid, subject to and in accordance with the provisions hereninafter set forth.
- 2. Foreign and United States companies, and subsidiaries and affiliates therof covered by section 1 shall be identified:
 - (a) by reference to the most recent annual report of the American Consulate General of Johannesburg, entitled "American Firms, Subdivisions and Affiliates - South Africa," or
 - (b) through correspondence with the United Nation's Office of the Commissioner for Namibia and the United Nation's Center on Transnational Corporations, or
 - (c) by other procedures satisfactory to the SBI.
- 3. Banks or financial institutions covered by Section 1 shall be identified:
 - (a) from the records of the Interfaith Center on Corporate Responsibility, or

- (b) from affidavits of such institutions, or
- (c) by other procedures satisfactory to the SBI.
- The divestiture required by section 1 shall be completed not later than March 1, 1991. In the event a manager holds stock now covered by section 1, or which was not covered by section 1 of this resolution at the time of its initial purchase but subsequently is covered by section 1, the managers shall be so notified and shall proceed in accordance with section 6 (c) and (d) in an effort to meet the SBI's goal of divestment of such stock by March 1, 1991, or, if the stock is aquired after March 1, 1989, 2 years after the date the stock became subject to section 1 of this resolution. Notwithstanding anything contained herein to the contrary, if during the process of divestiture, the SBI determines that completion of divestiture not later than March 1, 1991, would be inconsistent with the SBI's fiduciary obligations, then the SBI shall authorize an extension of time within which to complete divestiture. The SBI shall periodically evaluate the situation in the Republic of South Africa and Namibia and determine whether the divestiture program shall be accelerated, decelerated or otherwise modified, including whether, as a result of lack of improvement in conditions in those countries, or for other reasons, it is necessary to seek complete divestiture of the securities covered by this resolution.
- 5. During implementation of this resolution, the SBI shall hereafter direct its active stock managers to neither invest funds in the stocks of i) foreign and United States companies and subsidiaries and affiliates thereof or ii) banks or financial institutions both of which are described in sections one, two and three of this resolution nor reinvest funds in the stocks of such entities following the divestment or sale thereof unless:
 - (a) SPI staff or other persons and entities charged with the day-to-day investment of funds entrusted to the SBI conclude that other available investment alternatives are not as sound from a fiduciary point of view, or
 - (b) the SBI concludes that the failure to invest or reinvest in such entities would be inconsistent with the SBI's fiduciary obligations.
 - (c) the entities meet the standards set forth in section 7 of the resolution.
- 6. The process of divestiture of and limiting new investments in stocks held in the SBI's actively managed stock protfolios will be conducted consistent with fiscal prudence and

so as to minimize financial market disturbance. On March 1, 1989 and monthly thereafter, the SBI shall notify its active stock managers of the final phase of implementation of this resolution. The active stock managers shall be directed as follows:

- (a) To discontinue purchases of stock covered by section 1 of this resolution unless failure to so invest would be a breach of the active stock manager's fiduciary duty to the SBI.
- (b) In the event such manager finds it is necessary to purchase any of the stocks covered by section 1 of this resolution in fulfillment of the fiduciary obligations, the active stock manager must send a letter certifying the reasons for the purchase to the SBI.
- (c) Active managers are not automatically required to sell any stock held which is covered by section 1 of the resolution solely to achieve divestiture.
- (d) All decisions to sell stock should be made by the SBI's active stock managers only for economic or financial reasons in the normal course of business.
- 7. Notwithstanding the foregoing, the SBI may authorize the holding by the SBI's active stock managers of investments covered by this resolution in companies engaging in corporate political, social, and economic activities, in addition to compliance with the Sullivan Principles, as amended from time to time, or a similar corporate policy, that are deemed by the SBI to be of substantial assitance to efforts to eliminate Apartheid.

Evidence to the SBI of such corporate political, social and economic activities, which must go beyond workplace reform and include steps taken in substantial opposition to Apartheid, shall include the following:

- (a) actions to persuade the government of the Republic of South Africa to eliminate Apartheid and to comply with the United Nations Security Council Resolution 435 on Namibia, including tangible opposition to the system of pass laws, influx controls and other fundamental building blocks of Apartheid;
- (b) absence of participation and investment in the bantustan/homelands;
- (c) formal recognition of and collective bargaining with black trade unions that are independent of government control;

- (d) providing specific training and upgrading programs at the work-place and increasing the number of non-whites in technical, skilled, professional and management positions, including positions in which non-whites supervise whites;
- (e) payment of a reasonable, livable wage to all employees;
- (f) substantial expenditures to raise the level of education and skills of the non-white majority population, including the provision of schooling for workers and children in the community;
- (g) substantial expenditures to provide decent, affordable, permanent housing units to workers and their families on a non-discriminatory basis; and
- (h) substantial expenditures to provide health and medical servicies to workers and their families on a non-discriminatory basis.

To be substantial, a company's expenditures should represent a proportion of profit after taxes or of revenue that is among the highest proportions spent by all United States companies in South Africa and Namibia and that is significantly more than the proportion spent by the company in other countries.

- 8. In furtherance of the principles set forth in the resolution, the SBI shall, pursuant to procedure set forth in this resolution, seek out and persuade other shareholders to act in a concerted manner to change corporate political, social and economic activities in the Republic of South Africa and Namibia. The SBI, in conjunction with its staff, shall during all phases of the divestiture, the SBI shall act in these and other ways to persuade corporations to continually improve their corporate political, social and econimic activities in the Republic of South Africa and/or Namibia consistent with the resolution; and from the date of this resolution, vote the shares held "For" all management or stockholder proposals consistent with this section.
- 9. The SBI directs its staff, upon adoption of this amended resolution, to write to the companies and instituions identified in sections 2 and 3 of this resolution to inform them of the adoption of this resolution and its provisions, to give them notice of the actions they should take in order to avoid divestiture, and to provide them an opportunity to describe any actions they may be taking to work for peaceful fundamental change in the Republic of South Africa and Namibia; and further directs that prior to implementing the final Phase of the divesiture program, the SBI staff again communicate with such

companies and institutions to provide them an opportunity to describe any changes that have been made in their operations and policies with respect to the Republic of South Africa and Namibia.

- 10. The SBI shall seek financial and legal advice concerning the divestiture program set forth for consideration in this resolution. Before each stage of the divestiture program, the SBI shall seek advice from financial experts concerning the effect of the proposed divestiture program shall be implemented so as to be consistent with the advice received from the SBI's financial and legal advisors.
- 11. To advise and assist it in implementation of this resolution, the SBI hereby authorizes the formation of an Advisory Taskforce on Divestment composed of a representative selected by each member of the SBI and at least one representative from the Minnesota corporate community, one representative from a Minnesota public employee labor group and one representative from a public employee retirement group.
- 12. To assist in implementation of this resolution, the SBI directs its Executive Director to obtain the consulting services of a representative from the Interfaith Center on Corporate Responsibility.
 - 13. This resolution shall take effect immediately.

Amended and Restated this 1st day of March, 1989.

Secretary of State

Minnesota State Board of

Investment

AGENDA INVESTMENT ADVISORY COUNCIL MEETING

Tuesday, June 6, 1989 2:00 P.M. MEA Building - Conference Room "A" Saint Paul

	Daine Laar	TAB
1.	Approval of Minutes: Special Meeting - January 30, 1989 Regular Meeting - February 28, 1989	
2.	Executive Director's Report (H. Bicker)	
	A. Quarterly Investment Review (January 1-March 31, 1989)	A
	B. Portfolio Statistics (March 31, 1989)	В
	 C. Administrative Report 1. Budget and Travel Reports 2. Update on Legislation 3. Update on Post Retirement Fund Discussions 	С
3.	Report from the SBI Administrative Committee (T. Triplett)	D
	A. Proposed Board/IAC Seminar to Review Fund Policies B. Approval of Consultant Contract C. Approval of FY 1990 Management and Budget Plan D. Approval of FY 1990 Board Member Travel Policy E. Approval of Position Description for the Executive Direct F. Consideration of Commitment to U.S. Government Guarant Agricultural Export Loan Program	tor eed
4.	Reports from Investment Advisory Council Committees	
	 A. Equity Manager Committee (D. Veverka) 1. Review of Active Manager Performance 2. Review of New Manager Funding 3. Approval of Active Manager Contract Renewals 	E
	B. Fixed Income Manager Committee (J. Rukavina) 1. Review of Active Manager Performance 2. Review of Semi-Passive Manager Performance 3. Update on Dedicated Bond Portfolio Rebalancing 4. Review of Updated Active Manager Investment Guideline 5. Approval of Active Manager Contract Renewals 6. Approval of Semi-Passive Manager Contract Renewals	F s
	 C. Alternative Investment Committee (K. Gudorf) 1. Report on Fund Manager Annual Reviews 2. Status Report on Real Estate Study 3. Status Report on Alternative Asset Indices 4. Approval of Resource Consultant Contract Renewal 	G

MEMBERS OF THE BOARD.

GOVERNOR RUDY PERPICH

STATE AUDITOR ARNE H CARLSON

STATE TREASURER MICHAEL A McGRATH

SECRETARY OF STATE JOAN ANDERSON GROWE

ATTORNEY GENERAL HUBERT H HUMPHREY III



EXECUTIVE DIRECTOR HOWARD J. BICKER

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Room 105, MEA Building 55 Sherburne Avenue St Paul, MN 55155 Tel (612) 296-3328 FAX. (612) 296-9572

REVISED

MINUTES

SPECIAL MEETING INVESTMENT ADVISORY COUNCIL

January 30, 1989

A special meeting of the Investment Advisory Council was held on Monday, January 30, 1989 at 2:00 P.M. in the MEA Building, Saint Paul, MN.

MEMBERS PRESENT:

Harry Adams, John Bohan, James Eckmann, Elton Erdahl, Paul Groschen, Ken Gudorf, Jim Hacking, Malcolm McDonald, Joe Rukavina, Tom Triplett, and Jan Yeomans.

MEMBERS ABSENT:

Vern Jackels, David Jeffery, Judy Mares, Gary Norstrem, Ray Vecellio, and Debbie Veverka.

SBI STAFF:

Howard Bicker, Beth Lehman, Jim Heidelberg,

and Charlene Olson.

OTHERS ATTENDING:

Gary Austin, Christie Eller, John Gardner, Jake Manahan, Tom Richards, Richards & Tierney, Peter Sausen, and Elaine Voss.

Ms. Yeomans introduced Mr. Bohan as Chair of the IAC Task Force on Objectives. She stated that the purpose of the meeting was to discuss the draft report of the Task Force and solicit reactions and comments from the IAC before presenting the report to the Board at the February 8 Board meeting.

Mr. Bohan presented the report using a series of visuals. He stated that he would attempt to highlight the end results of the report and their rationale. He discussed the purpose of the Task Force, he stated the mission statements and objectives of the Basic Funds and Post Fund as suggested by the Task Force, and presented the need as perceived by the Task Force to include a funding objective.

In response to a question from Mr. Triplett concerning the language of the suggested mission statement, Christie Eller stated that the common law prudent person standard is embodied in the Chapter 11A standards. She agreed that specific reference to the common law standard is redundant and could be eliminated from the mission statement.

With reference to the suggested real return target of three percent to five percent over a rolling 10 year period, Mr. Richards stated that there have been periods in the past that provided negative real returns. He stated he believed that there is an element of uncertainty in achieving the objective that needs to be recognized initially. He stated that if the objective is not met, the shortfall implies that one ought to reassess what is being done, and this reassessment can lead to changes in policies when none may be in order. Mr. Bohan stated that the Task Force has the same concern. He stated he thought the caution expressed by Mr. Richards suggests that fund performance must be effectively communicated and it points to a need to emphasize relative rates of return. He stated that the Task Force wants to have a custom index made up of a composite of the markets in which the SBI participates in proportion to the asset allocation.

In response to a question from Mr. Groschen, Mr. Bohan stated that the Task Force suggests that the objective should be to exceed the indices. He stated that implicit in that is the use of active managers, because without active managers a plan sponsor would have a hard time exceeding the indices. In response to a question from Mr. Richards, Ms. Yeomans stated that the one page summary report would have the objective of exceeding the median return of the Trust Universe Comparison Service (TUCS) universe over a period of five years. Mr. Bicker then stated that a new composite index would need to be constructed to include alternative investments because the current composite index reported to the Board does not include alternative investments.

Mr. Bohan stated that the Task Force suggests the Board change its allocation for equities and alternative investments in the Basic Funds to the 85 percent maximum allowed by statute. He explained that if the Board were to follow the recommendation, the Basic Funds and Post Fund together would have approximately 51 percent in equities and alternative investments and 49 percent in bonds, which, he stated, is not an aggressive asset mix.

Mr. Erdahl stated that the retirement systems had some misgivings about setting the asset allocation for a combined fund given the different objectives of the Basic Funds and the Post Fund. In response to an observation and question from Mr. Groschen, Mr. Richards stated that the returns of the Basic Funds with an 85 percent equity exposure will be more volatile compared to the TUCS universe which has an average equity exposure of only 50 percent. He stated that the anticipated differences in performance must be recognized by the Board before it adopts the Task Force suggestions.

Mr. Manahan asked whether the adoption of the proposed asset allocation would fundamentally shift the emphasis from quarterly reports to the rolling ten year real rate of return and the five Mr. Bohan answered affirmatively. Mr. year relative measures. Manahan then asked what a Board member should do if the results on the longer term measures were off by a percentage point. He commented that such a shortfall could convey a need for the Board to do something and the solution could be exactly the wrong thing In response, Ms. Yeomans stated that if the performance measures on the one page summary looked good, then the Board would not need to look at anything more. She stated that if performance lagged in one of the measures, the Board could look at the more detailed information to determine the reason for the shortfall. Mr. Bohan stated that staff and the consultant would be studying the quarter to quarter numbers as indicators of progress.

After discussion of the Post Fund and the present benefit increase formula, Mr. Bohan presented the second part of the Task Force report which dealt with future considerations. Mr. Bohan stated that the Task Force raises several questions about the existing statutes, and these concerns would require statutory changes. He stated that the present Post Fund benefit formula, which is tied to investment earnings, the current statutory equity exposure limits, and the separation of the Basic Funds and Post Fund should be changed because these items are constraints on investment performance and increase the cost of the system to the taxpayers. Mr. Triplett stated he thought it important that the Task Force members who are from outside the state system offer this type of independent policy recommendation. After some discussion, Ms. Yeomans asked the Task Force members if they wished to amend the present report to make a stronger statement concerning statutory changes. She then stated that with a show of hands five of the seven Task Force members voted in the affirmative. After further discussion, Mr. Bohan stated that pages 8 and 9 of the Task Force report would be modified to He stated that the emphasize the recommended changes. 1) that the benefit recommendation would be in two parts: increase formula be decoupled from investment returns, and an appropriate alternative be used that would compensate to an appropriate degree for inflation, and 2) that the Basic Funds and Post Fund be invested as one fund.

The meeting adjourned at 4:00 P.M.

Respectfully submitted,

Howard J. Bicker Executive Director

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MEMBERS OF THE BOARD.
GOVERNOR RUDY PERPICH
STATE AUDITOR ARNE H CARLSON
STATE TREASURER MICHAEL A McGRATH
SECRETARY OF STATE JOAN ANDERSON GROWE
ATTORNEY GENERAL HUBERT H HUMPHREY III



EXECUTIVE DIRECTOR HOWARD J. BICKER

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

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MINUTES

INVESTMENT ADVISORY COUNCIL

February 28, 1989

The Investment Advisory Council met on Tuesday, February 28, 1989 at 2:00 P.M. in the MEA Building, Saint Paul, MN.

MEMBERS PRESENT: Harry Adams, John Bohan, Jim Eckmann, Elton

Erdahl, Paul Groschen, Ken Gudorf, Jim Hacking, Vern Jackels, David Jeffery, Malcolm McDonald, Judy Mares, Joe Rukavina, Ray

Vecellio, and Jan Yeomans.

MEMBERS ABSENT: Gary Norstrem, Tom Triplett, and Debbie

Veverka.

SBI STAFF: Howard Bicker, Beth Lehman, Jim Heidelberg,

Roger Henry, Harriet Balian and Charlene

Olson.

OTHERS ATTENDING: Shane Allers, Gary Austin, Ed Burek, John

Gardner, Jake Manahan, Mike Ousdigian, Tom Richards, Richards & Tierney, Peter Sausen,

and Robert Whitaker.

The minutes of the December 6, 1988 meeting were approved. Moved by Malcolm McDonald, seconded by Ken Gudorf.

EXECUTIVE DIRECTOR'S REPORT

Howard Bicker, Executive Director, stated that the market value of the Basic Retirement Funds increased by 1.7 percent during the fourth quarter of 1988. He stated that the increase was due to investment returns. He also stated that the Funds experienced a negative cash flow of \$22 million over that period of time. Mr. Bicker stated that there were no significant changes in the asset mix during the fourth quarter. He stated that the Basic Funds outperformed the median balanced fund during the quarter and during the latest year. He stated stocks underperformed the Wilshire 5000 by 0.4 percentage points and

bonds slightly outperformed the Salomon Bond Index 0.2 percentage points.

Mr. Bicker stated that the Post Retirement Fund increased in value by 2.5 percent during the fourth quarter due to investment returns and a positive cash flow of \$37 million. He stated that there were no significant changes in the asset mix. He then stated that a benefit increase of 6.9 percent was provided to retirees as of January 1, 1989. He also stated that the stock segment of the Post Retirement Fund outperformed the target by 6.0 percentage points for the year.

Mr. Bicker reported that as of December 31, 1988 all assets under management by the State Board of Investment totalled \$13.2 billion.

EXECUTIVE DIRECTOR'S ADMINISTRATIVE REPORT

Mr. Bicker then gave his Administrative Report. He referred Committee members to the meeting materials. After reviewing the budget and travel reports, Mr. Bicker stated that staff had developed an implementation plan to fulfill the Task Force Report on Fund Objectives.

First, Mr. Bicker stated the composite index used to measure the Basic Fund's performance relative to the market needs to be reconfigured. He said the Board will need to identify acceptable indices for real estate, oil and gas, and venture capital and incorporate those returns in the new composite.

Second, Mr. Bicker stated that he wanted the IAC and the Board to affirm the use of its current asset class targets for domestic stocks (Wilshire 5000) and bond (Salomon Broad). He referenced figures that show minimal performance differences between these targets and available alternative indices over 9 and 10 year periods. In addition, he said the current asset class targets were preferred because they better represent the range of investment opportunities available to the SBI.

Third, Mr. Bicker stated that he agreed that the Basic Funds should minimize their unallocated cash as recommended in the report. He stated, however, that a minimum 1% allocation to cash (approximately \$55 million in the Basic Funds and \$40 million in the Post) is necessary to meet current liquidity needs. He stated that it was staff's recommendation the Board modify the asset allocation recommended by the Task Force to include a one percent allocation to cash in both the Basic Funds and the Post Retirement Fund.

Fourth, he stated that the Board should review its rebalancing policy. Mr. Bicker stated that current guidelines require rebalancing when any asset class moves more than ten percent away from its long term target, and that staff has discretion to rebalance if the asset class is between five and

ten percent above or below its target. Mr. Bicker said that rebalancing the Basic Funds' portfolio has not been a major issue in recent years because negative cash flow to the Basic Funds due to the Rule of 85 has kept the stock segment within a relatively narrow band around the target.

Fifth, Mr. Bicker stated that an implementation plan for international equities must be developed and listed several issues that must be addressed before any international securities are added to the portfolio. He said he felt the program would not be ready before the end of calendar 1989. He stated that staff is also planning to use international securities in the short term portfolio and hopes to bring a recommendation on international short term securities to the Board at its June meeting. He added that staff plans to hold "mini-seminars" for Board members and deputies for all of the implementation issues concerning international investing.

Sixth, Mr. Bicker stated that the recommendations in the Task Force report require a revised reporting format. He said staff has prepared a new summary report for the March 1, 1989 meeting using data currently available.

The Council then discussed Mr. Bicker's proposed plan.

In response to a question from Ms. Yeomans, Mr. Bohan recommended the Council adopt the one percent cash allocation recommendation. Mr. McDonald seconded the motion. The motion was approved.

In response to a question from Mr. Manahan concerning asset class targets, Mr. Bohan stated that he believed that it was not appropriate to change to an asset class target only because the performance of another target may be higher. He stated that it is more appropriate to set a target that describes the market in which the Basic Funds are invested. He stated that he would, therefore, favor the Wilshire 5000. He stated that he saw no reason to switch between the Wilshire 5000 and the S&P 500. Mr. Adams and Ms. Mares stated that they agreed with Mr. Bohan. Ms. Mares stated that if the Board were to change targets, it would be mixing the issue of the appropriate target allocation and index with the issue of how best to hire managers to beat the market. Ms. Yeomans stated that switching asset class targets is a losing strategy unless the plan sponsor can accurately forecast when each target will be the better performer. Ms. Mares then stated the Board previously decided against having a style bias in its equity portfolio, and that to adopt changing targets implies the Board wants to have a style bias. Ms. Yeomans stated that the consensus appeared to be to affirm the Wilshire 5000 as the equity asset class target. Mr. McDonald moved for approval; Ms. Mares seconded. The motion passed unanimously.

In response to a question from Mr. Rukavina, Mr. Bicker stated that the Salomon BIG index is preferred to the Shearson Lehman index because the Salomon BIG was the first to incorporate mortgage pass-through securities and the SBI bond managers buy mortgage securities. Mr. Rukavina moved approval of the Salomon BIG, as the bond asset class target, seconded by Mr. Bohan. The motion passed unanimously. Mr. McDonald moved approval of the 91-day T-bill as the target for cash. Mr. Bohan seconded. The motion passed unanimously.

Mr. Bohan moved to affirm the rebalancing strategy reviewed by Mr. Bicker. Mr. McDonald seconded. The motion was unanimously approved.

Mr. Adams asked whether indexing will be used for international equities. Mr. Bicker stated that the active/passive mix would be determined as the Board works through each of the steps in the implementation plan. Ms. Mares moved approval of the implementation plan for international assets; Mr. Eckmann seconded. The motion passed unanimously.

SBI ADMINISTRATIVE COMMITTEE REPORT

Malcolm McDonald stated that the Administrative Committee met February 15, 1989. Mr. McDonald stated that the 1988 audit report from the Legislative Auditor contained no findings or recommendations. He stated that an unqualified report is seldom received and congratulated staff for an outstanding job. He also stated that the Committee reviewed the status of the FY 1989 staff work plan, as described in meeting materials.

Mr. McDonald reported that the Committee discussed the Deferred Compensation Plan, and agreed to have a task force of SBI and MSRS staff review plan vendors and the SBI's role in vendor contracts and to have the task force report back to the Committee.

Mr. McDonald then stated that the Committee considered and recommended that the Board establish a Consultant Review Committee to draft an RFP, review responses, interview candidates, and make a recommendation to the Administrative Committee. He stated that the Administrative Committee would make a recommendation to the Board at its June 1989 meeting, concerning consutants.

INVESTMENT ADVISORY COUNCIL REPORTS

EQUITY MANAGER AND FIXED INCOME MANAGER COMMITTEES

Mr. Eckmann gave the Joint Committee Report of the Equity Manager Committee and the Fixed Income Manager Committee. He stated that the two Committees met jointly on February 15, 1989. He stated that the Joint Committee reviewed the performance reports for the active equity and fixed income managers and determined no action was required concerning the current group of

managers. Mr. Eckmann then reported that the dedicated bond portfolio rebalancing occurred in January, 1989. He stated that in order to completely match the projected liability stream, \$200 million from the common stock segment would have had to be liquidated. He stated that instead, the portfolio was rebalanced by minimizing turnover and covering 100 percent of the liabilities for the first ten years and about 80 percent of the liabilities for the remainder of the time period.

Mr. Eckmann stated that the first action item is a proposal to renew the BEA contract. He stated that BEA was hired on April 1, 1987 to enhance returns on the cash portfolio in the Post Retirement Fund. He stated that BEA has added value equal to 82 basis points on an annualized basis. He stated that the recommendation from the Joint Committee would be that the State Board of Investment authorize Mr. Bicker, with assistance from the legal counsel, to negotiate and execute a new contract with BEA for another year, but that the size of the BEA portfolio be reduced from \$115 million to \$20 million. He stated that the \$95 million difference would become available for the dedicated bond portfolio rebalancing. In response to a question from Mr. Eckmann, Mr. Bicker stated that the reduction in the size of the BEA portfolio would require the SBI to renegotiate a custodial relationship at Bankers Trust in New York.

Mr. Eckmann stated that the second item on which action was requested was a commitment to a U.S. government guaranteed export loan program. He stated that the First National Bank of Chicago presented the proposal to staff under which assets in the Treasurer's Cash Pool would be used to finance agricultural export shipments. He stated that under the proposal the SBI would purchase up to \$30 million of floating rate notes which would have an interest rate pegged to exceed the six month Treasury bill rate and which would carry a significant federal government guarantee. He stated that the proceeds from the purchase would be used to support a loan only if Minnesota holds a significant market share of the export commodity.

Mr. Eckmann stated that the third action item was a review of manager probation status. Mr. Eckmann stated that at its last meeting the Board asked the IAC to consider whether a limit should be placed on the length of time that a manager could remain on probation. He stated that the Joint Committee agreed that probation was a useful tool and referred Committee members He stated that two changes to the to the meeting materials. current policy were recommended: 1) a significant gain or loss in the number of clients or accounts under management in a given year should be added as a qualitative factor requiring probation, and 2) a manager who continues on probation for two successive quarters would be formally reviewed in the SBI offices, and the IAC would recommend continuation or termination based on the He added that Board members and deputies formal evaluation. would be notified of the review sessions.

- 5 -

Mr. Eckmann stated the last action item was the hiring of the four value oriented equity managers that had been postponed by the Board since September 1988. He stated the Joint Committee wants the Board to be aware that no decision on the matter is a bet on the current growth orientation of the equity portfolio. He stated that the hiring of the value oriented managers would alleviate the growth bias. He stated that the Joint Committee agreed that managers are expected to add value to a benchmark that represents their investment style. He stated the Joint Committee recommends that Concord Capital Management, Franklin Portfolio Associates Trust, Rosenberg Institutional Equity Management, and Sasco Capital, Inc., be hired and that each be provided a \$100 million portfolio.

Mr. McDonald moved adoption of the Joint Committee report. Mr. Gudorf seconded. The motion passed unanimously.

ALTERNATIVE INVESTMENT COMMITTEE

Mr. Gudorf stated that there were no action items to come before the IAC. He stated that during January 1989, the Alternative Investment Committee and staff conducted annual review sessions with three of the SBI's venture capital managers and one of the SBI's resource managers. He stated that the Committee met with the SBI's special project real estate consultant, Laventhol & Horwath, and received a draft report of the real estate study. He stated there will be a full recommendation on the report at the June Board meeting. He added that Apache will be discussing a possible buyout of its second fund in which the SBI is a participant. Mr. McDonald moved to accept the report; Ms. Mares seconded. The motion was approved unanimously.

CONSULTANT REPORT

Mr. Richards from Richards & Tierney, the Board consultant, presented a summary of his quarterly report concerning the investment performance of the Basic Retirement Funds. Mr. Bohan commented that the effects of asset allocation and portfolio rebalancing were imbedded in the active manager returns shown by Mr. Richards. Mr. Richards added that manager style bias also was a factor in the figures shown as the return from active management.

The meeting adjourned at 3:30 P.M.

Respectfully submitted,

Howard Bicker

Executive Director

Tab A

QUARTERLY REPORT ON OBJECTIVES

BASIC RETIREMENT FUNDS	Status March 31, 1989
Market Value	\$5.7 billion
Total Return (Annualized)	
■ Real (10 years) 3 to 5 percentage points over inflation	12.3% (nominal) 6.5 percentage points over
■ Relative (5 years) with Alternative Assets Above composite index return	14.2% (nominal)1.1 percentage points below
■ Relative (5 years) without Alternative Assets Above median fund return	14.9% (nominal) 0.1 percentage points over
Liquidity	
■ Minimal cash	4.3% of total fund
POST RETIREMENT FUND	Status March 31, 1989
Market Value	\$4.5 billion
Realized Earnings	\$446 million in FY 1988
■ Above 8% per year	3.9 percentage points above in FY 1988
Liquidity	
■ Minimal cash	1.8% of total fund
FUNDING (Basic + Post Funds)*	Status June 30, 1988
Achieve full funding by 2009	
■ Actuarial accrued liability	\$11.6 billion
■ Actuarial value of assets	\$8.3 billion
■ Percent funded	72%

[•] TRA, MSRS, PERA General Plans only. Based on FY88 valuation by State's actuary.

The executive summary highlights the asset mix, performance standards and investment results for the Basic Retirement Funds and the Post Retirement Fund.

Additional detail on these funds as well as information on other funds managed by the Board can be found in the body of the Quarterly Investment Report.

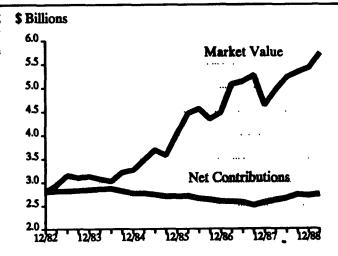
EXECUTIVE SUMMARY

Basic Retirement Funds

Asset Growth

The market value of the Basic Funds increased 5.7% during first quarter of 1989. The increase was due to investment return. All four asset classes had positive returns with stocks providing the majority of the increase.

Asset Growth
During First Quarter 1989
(Millions)
\$5,420
32
275
\$5,727



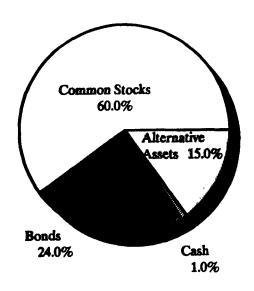
Asset Mix

Beginning Value

Net Contributions

Investment Return

Ending Value



Policy Asset Mix

The asset mix of the Basic Funds is chosen to maximize long term rate of return. This requires a large commitment to common stocks. Other asset classes are used to limit short-run return volatility and to diversify portfolio holdings.

During the quarter, the only significant change in the asset mix was an increase in common stocks due to appreciation. The cash component was held higher than normal due to the transactions necessary to fund new managers effective April 3, 1989.

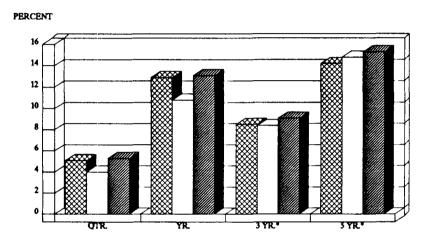
	Policy Asset Mix	Actual Mix 3/31/89	Actual Market Value (Millions)
Stocks	60.0%	61.0%	\$3,491
Bonds	24.0	21.4	1,229
Unallocated Cash	1.0	4.3	247
Alternative Assets	15.0	13.3	760
	100.0%	100.0%	\$5.727

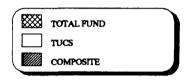
Basic Funds (Con't.)

Total Fund Performance

The Basic Funds' total portfolio substantially exceeded the return on the median fund for the quarter and the latest year.

Given its large commitment to common stocks, the Basic Funds can be expected to outperform other balanced pension portfolios during periods of positive stock performance and underperform during periods of negative stock performance.





	Pe	riod Ending 3/31/	89	•
		_	*(Annı	ıalized)
	Qtr.	Yr.	3 Yr.	5 Yr.
Total Fund	5.1%	12.9%	8.5%	14.2%
Total Fund Without Alternative Assets	5.4	12.7	8.6	14.9
TUCS** Median Balanced Fund	4.0	10.8	8.4	14.8
Stock/Bond/Cash/Composite	5.3	13.1	9.1	15.3

^{**} Trust Universe Comparison Service (TUCS) includes returns of over 800 public and private tax-exempt investors

Stock Segment Performance

200011208-10110111111100					
The Basic Funds' common stock segment exceeded the			<u>-</u>	(Annu	alized)
performance of its target for the latest quarter but trailed		Qtr.	Yr.	3 Yr.	5 Yr.
its target for the year. Details on individual manager stock	Stock Segment	7.6%	16.2%	9.1%	16.1%
performance can be found on page 7 of the report.	Wilshire 5000	7.4	17.3	9.6	16.5

Bond Segment Performance

The bond segment of the Basic Funds exceeded the				(Annu	alized)
performance of its target for the latest quarter and year.		Qtr.	Yr.	3 Yr.	5 Yr.
Details on individual bond manager performance can be	Bond Segment	1.3%	5.7%	6.9%	12.1%
found on page 8 of the report.	Salomon Broad Index	1.2	5.2	6.3	12.6

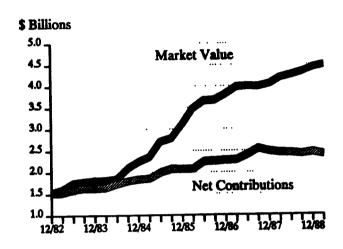
EXECUTIVE SUMMARY

Post Retirement Fund

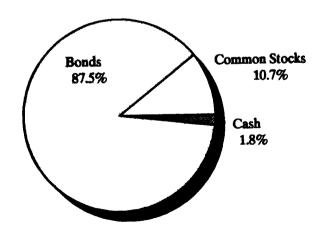
et Grewth

The market value of the Post Fund increased by 1.1% during first quarter 1989.

	Asset Growth During First Quarter 1989
	(Millions)
Beginning Value	\$4,434
Net Contributions	-50
Investment Return	100
Ending Value	\$4,484



Asset Mix



Actual Asset Mix 3/31/89

The asset mix of the Post Retirement fund is chosen to create a sizable, steady stream of income sufficient to pay currently promised benefits. This income stream is created by a large commitment to bonds, primarily through a dedicated bond portfolio. Assets not committed to bonds are invested in cash equivalents or common stocks.

During the quarter, cash holdings decreased and bond holdings increased due to further rebalancing in the dedicated bond portfolio.

	Actual Market Value	Asset Mix
Common Stocks	(Millions) \$479	3/31/89 10.7%
Bonds Unallocated Cash	3,922 83	87.5 1.8
	\$4,484	100.0%

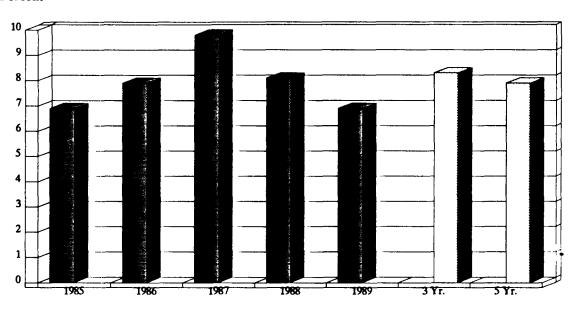
Post Fund (Con't.)

Total Fund Performance

Assets committed to the dedicated bond portfolio ensure that all existing promised benefits will be paid to current retirees. Excess investment earnings on Post Fund assets are used to finance permanent lifetime benefit increases for retirees. Benefit increases are based upon earnings during a fiscal year and are effective at the start of the following calendar year. Benefit increases generated for the last five years are shown below.

Benefit Increases

Percent



Calendar Year

						(Alindanzeu)		
	1985	1986	1987	1988	1989	3 Yrs.	5 Yrs.	
Benefit Increases	6.9%	7.9%	9.8%	8.1%	6.9%	8.3%	7.9%	

Benefit increases are intended to compensate, to some degree, for the effect of inflation.

As measured by the Consumer Price Index (CPI), inflation increased by 3.5% on an annualized basis over the last five years (calendar 1984-1988).

(Annualizad)

Stock Segment Performance

The stock segment of the Post Fund exceeded its benchmark for the latest quarter and year by a substantial margin.

	Period Ending 3/31/89					
	(Annuali:					
	Qtr.	Yr.	3 Yr.	5 Yr.		
Stock Segment	11.3%	22.7%	7.3%	14.1%		
Post Fund Benchmark	7.2	18.0	N.A.	N.A.		

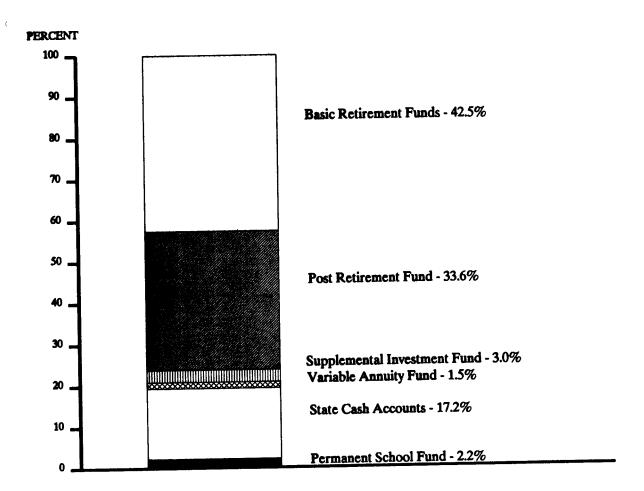
Bond Segment Performance

At the close of the quarter, the dedicated bond portfolio had a current yield of 8.38% and average duration of 7.62 years. The market value of the dedicated bond portfolio was \$3.8 billion at the end of the quarter.

The dedicated bond portfolio is designed such that cash inflows from portfolio income and principal payments match required cash outflows to retirees. Thus, total return is not a relevant performance measure for the portfolio. Nevertheless, the bond segment provided a 1.3% return for the quarter and a 6.5% return for the year. This is consistent with the design of the dedicated bond portfolio.

EXECUTIVE SUMMARY

Funds Under Management



	3/31/89 Market Value (Billions)
Basic Retirement Funds	\$ 5.7
Post Retirement Fund	4.5
Supplemental Investment Fund	0.4
Variable Annuity Fund	0.2
State Cash Accounts	2.3
Permanent School Fund	0.3
Total	\$13.4

MINNESOTA STATE BOARD

OF INVESTMENT

QUARTERLY INVESTMENT REPORT

First Quarter 1989

(January 1, 1989 - March 31, 1989)

Table of Contents

	Page
Financial Markets Review	1
Basic Retirement Funds	3
Fund Objectives	
Asset Growth	
Total Fund Performance vs. Standards	
Segment Performance vs. Standards	
Manager Performance vs. Benchmarks	
Post Retirement Fund	9
Fund Objectives	
Asset Growth	
Asset Mix	
Total Fund Performance	
Supplemental Investment Fund	13
Fund Description	
Income Share Account	
Growth Share Account	
Common Stock Index Account	
Bond Market Account	
Money Market Account	
Guaranteed Return Account	
Variable Annuity Fund	20
Permanent School Fund	21
State Cash Accounts	22

FINANCIAL MARKETS REVIEW

STOCK MARKET

Stock prices advanced during the first quarter primarily due to indications that the economy is gradually slowing down. This gradual slowdown was perceived by the market as an indication that the economy might be going into a soft landing rather than a recession. Overall, the Wilshire 5000 stock index provided a total return of 7.4% during the quarter and had a 17.3% return for the latest year.

There was a wide disparity in the price performance of different sectors during the quarter. Finance was the best performing sector with a return of 11.3%. The worst performing sector was the technology sector with a return of 0.3%.

BOND MARKET

Concern about higher inflation due to larger than expected increases in some price indexes caused bond prices to be somewhat lower for the quarter. Overall, the market gained slightly due to interest payments.

Overall, the Salomon Brothers Broad Investment Grade (BIG) Index gained 1.2% for the quarter and had a 5.2% return for the latest year. Corporate securities were the best performing sector with a gain of 1.4% and Agency issues provided the lowest return of 1.1%.

PERFORMANCE OF CAPITAL MARKETS

Cumulative Returns 550 500 450 400 350 300 250 200 150 100 50 0 12/86 12/82 91 DAY T-BILLS CONSUMER PRICE INDEX WILSHIRE 5000

* Merrill Lynch Master Index through 12/79; Salomon Broad Investment Grade Bond Index thereafter

BOND INDEX*

FINANCIAL MARKETS REVIEW

REAL ESTATE

Currently, the real estate market faces oversupply and slow demand. These factors are most apparent in second tier office properties, small shopping centers and properties located in the Southwest. The stronger sectors of the real estate market include warehouse and distribution facilities and larger retail centers. Current supply/demand forecasts extrapolate these trends through 1989.

VENTURE CAPITAL

The venture capital industry's total capital under management increased by only 7% in 1988 to end the year at \$31.1 billion, compared to \$29 billion at the end of 1987. This net increase of \$2.1 billion comes on the heels of a record \$4.9 billion jump in venture capital resources in 1987.

Independent private funds accounted for all of the \$2.1 billion increase in the pool, as this group continues to grow and dominate the venture capital industry. Since 1977, the independent private funds have gradually become the most significant portion of the industry. At the end of 1988 they managed over 80% of the total industry resources.

RESOURCE FUNDS

Over the last few months, domestic crude oil prices have increased several dollars a barrel to the current \$20 per barrel level. Oil industry mishaps, including the much publicized Alaskan oil spill, have contributed to the strength in domestic crude oil prices. For the remainder of 1989, many analysts feel that domestic crude oil prices will remain in a \$17-\$20 per barrel trading range.

Investment Objectives

The Basic Retirement Funds are composed of the retirement assets for currently working participants in the statewide retirement funds.

Based upon the Basic Funds' adequate funding levels and participant demographics, its investment time horizon is quite long. This extended time horizon permits the Board to take an aggressive, high expected return investment policy which incorporates a sizable equity component.

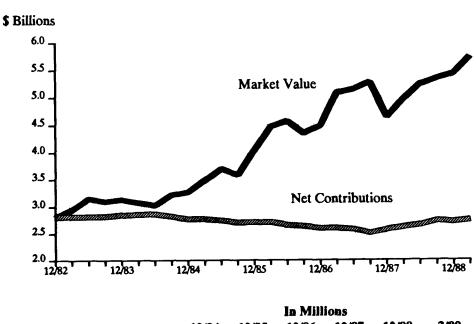
The Board has established three return objectives for the Basic Funds:

- provide real rates of return that are 3-5 percentage points greater than the rate of inflation over moving 10 year periods.
- outperform the median fund from a universe of public and private funds with a balanced asset mix over moving 5 year periods.
- outperform a composite index weighted in a manner that reflects the long term asset allocation of the Basic Funds over moving 5 year periods.

Asset Growth

The market value of the Basic Retirement Funds' assets increased 5.7% during the first quarter of 1989. The increase was due to investment return. All four asset

classes had positive returns with stocks providing the majority of the increase.



	12/84	12/85	12/86	12/87	12/88	3/89	
Beginning Value	\$3,129	\$3,2 65	\$4,030	\$4,474	\$4,628	\$5,420	
Net Contributions	-78	-62	-113	-26	146	32	
Investment Return	214	827	557	180	646	275	
Ending Value	\$3,265	\$4,030	\$4,474	\$4,628	\$5,420	\$5,727	

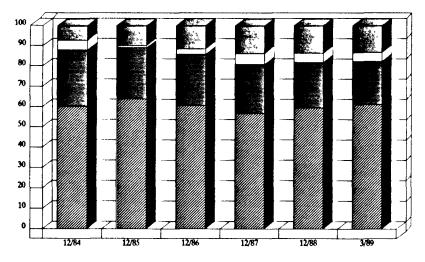
Asset Mix

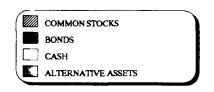
Based on the Basic Funds' investment objectives and the expected long-run performance of the capital markets, the Board has adopted the following long term policy asset allocation for the Basic Funds:

Common Stocks
Bonds
Cash Equivalents
Real Estate
Venture Capital
Resource Funds
60.0%
1.0
1.0
2.5
2.5

The only significant change during the quarter was the increase in common stocks due to appreciation. The cash component was held higher than normal due to several manager transitions that were anticipated in April 1989.

PERCENT





						Latest
	Last Five Years					Qtr.
	12/84	12/85	12/86	12/87	12/88	3/89
Stocks	60.1%	63.8%	60.6%	56.7%	59.5%	61.0%
Bonds	27.9	25.3	25.3	24.2	22.4	21.4
Unallocated Cash	4.8	1.1	2.6	5.4	4.5	4.3
Real Estate	5.4	7.2	8.3	9.5	9.0	8.7
Venture Capital	0.9	1.3	1.8	2.8	3.1	3.0
Resource Funds	0.9	1.3	1.4	1.4	1.5	1.6

Total 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%

Total Fund Performance vs. Standards

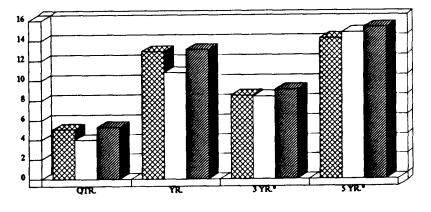
The Basic Funds' long-term rate of return performance is evaluated relative to two specific benchmarks:

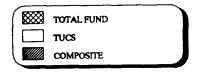
- Composite Index. The returns provided by the total portfolio are expected to exceed those derived from a composite of market indices, weighted in the same proportion as the Basic Funds' policy asset allocation. Because comprehensive data is available for only the stock, bond and cash equivalents markets, the composite index is weighted 65% stocks, 30% bonds, 5% cash equivalents.
- Median Tax-Exempt Fund. The Basic Funds' portfolio is expected to outperform the median return produced by a representative sample of other public and private tax-exempt balanced funds. The sample universe used by the Board is the Wilshire Associates Trust Universe Comparison Service (TUCS). TUCS data reflects the investment returns of over 800 public and private pension investors.

The policy asset mix of the Basic Funds is based on the superior performance of common stocks over the history of the capital markets. The asset mix is designed to add value to the Basic Funds' over their long-term investment time horizon. In the short-run, the Basic Funds can be expected to outperform the median balanced portfolio during periods of positive relative stock performance and underperform during periods of negative stock performance.

The Basic Funds total portfolio exceeded most of its assigned performance standards for the latest quarter and year. Because of the Basic Funds sizable stock allocation and relatively good performance of the stock market, the Basic Funds' exceeded the median balanced fund by a substantial margin during the first quarter and year.







Period Ending 3/31/89

			*(Annualized)	
	Qtr.	Yr.	3 Yr.	5 Yr.
Total Fund	5.1%	12.9%	8.5%	14.2%
Total Fund WithoutAlternative Assets	5.4	12.7	8.6	14.9
TUCS Median Balanced Fund	4.0	10.8	8.4	14.8
Stock/Bond/Cash Composite	5.3	13.1	9.1	15.3

Segment Performance vs. Standards

Stock Segment					
The Basic Funds' common stock segment exceeded its performance target for the latest quarter but trailed its target for the latest year.	Stock Segment Wilshire 5000	Qtr. 7.6% 7.4	Yr. 16.2% 17.3	Annu 3 Yrs. 9.1% 9.6	5 Yrs. 16.1% 16.5
Bond Segment				·	
The bond segment of the Basic Funds exceeded the performance of its target for the latest quarter and year.	Bond Segment Salomon Bond Index	Qtr. 1.3% 1.2	Yr. 5.7% 5.2		salized 5 Yrs. 12.1% 12.6
Cash Segment The cash segment of the Basic Funds exceeded its target for the latest quarter and year.	Cash Segment 91 Day T-Bills	Qtr. 2.3% 2.1	Yr. 8.4% 7.3	Annu 3 Yrs. 7.4% 6.7	alized 5 Yrs. 8.2% 7.2
Alternative Assets Segment					-
Comprehensive data on returns provided by the real estate, resource and venture capital markets are not available at this time. Therefore, performance standards for the alternative investment segment have not been established. Returns from the alternative asset segment are shown in the table.	Alternative Assets	Qtr. 1.6%	Yr. 11.6%	3 Yrs.	alized 5 Yrs. 7.6%

Stock Manager Performance vs. Benchmarks

Common stock manager returns are evaluated against the performance of customized indices constructed to represent the managers' specific investment approaches. These custom indices are commonly referred to as "benchmark portfolios." The benchmark portfolios take into account the equity market forces that at times favorably or unfavorably impact certain investment styles. Thus, benchmark portfolios are the appropriate bogeys against which to judge the managers' performances.

Manager performance relative to benchmarks is evaluated on a quarterly basis by the Equity Manager Committee of the Investment Advisory Council. As a group, the active and passive common stock managers exceeded the performance of their aggregate benchmark for the latest quarter but trailed their aggregate benchmark for the latest year.

The performance of the individual active managers for the quarter was very good. Six out of the seven managers either equaled or exceeded their benchmark. A comprehensive analysis of the individual managers' performance is included in this quarter's Equity Manager Committee Report.

	Percent of Segment 3/31/89	Market Value 3/31/89 (Thousands)	Quarter Ending 3/31/89 Actual Bmrk	Year Ending 3/31/89 Actual Bmrk	(Annualized) Since 1/1/84 Actual Bmrk
Active Managers	3,0 2,05	(11111111111111111111111111111111111111			
Alliance	7.3%	\$256,679	10.0% 6.7%	17.0% 13.6%	17.4% 11.7%
BMI	1.8	64,71 6	8.2 8.2	10.5 15.6	9.8 11.8
Forstmann	4.2	145,918	8.3 6.3	11.9 14.2	14.9 12.1
IDS	3.3	114,710	8.2 6.6	13.3 15.2	14.6 14.7
IAI	2.4	83,105	7.4 6.4	13.3 16.8	13.3 14.9
Lieber & Co.	2.4	83,068	7.2 7.1	13.2 13.7	12.9 11.3
Waddell & Reed	3.4	117,928	5.2 6.5	7.4 11.6	11.0 11.2
Aggregate Active	24.8%	\$866,124	8.1%	12.7%	12.8%
Passive Manager Wilshire Associates	75.2%	\$2,624,801	7.4% 7.4%	17.4% 17.3%	14.7% 14.7%
Aggregate Passive	75.2%	\$2,624,801	7.4%	17.4%	14.7%
Total Stock Segment	100.0%	\$3,490,925	7.6% 7.2%	16.2% 16.4%	14.1% 14.4%
Wilshire 5000 Index			7.4%	17.3%	14.7%

Note: Total segment and aggregate active performance numbers include returns of any managers retained during the time periods shown but subsequently terminated by the Board.

Bond Manager Performance vs. Benchmarks

Bond manager returns are evaluated against the performance of customized indices constructed to represent the managers' specific investment approaches. These custom indices are commonly referred to as "benchmark portfolios." The benchmark portfolios take into account the bond market forces that at times favorably or unfavorably impact certain investment styles. Thus, benchmark portfolios are the appropriate bogeys against which to judge the managers' performances.

Manager performance relative to benchmarks is evaluated on a quarterly basis by the Fixed Income Manager Committee of the Investment Advisory Council. As a group, the active and passive bond managers exceeded the performance of their aggregate benchmark for the quarter and the latest year.

The performance of the individual managers for the quarter was very good. All exceeded or equaled the performance of their individual benchmark. A comprehensive analysis of the individual managers' performance is included in this quarter's Fixed Income Manager Committee Report.

	Percent of Segment	Market Value 3/31/89	Quarter Ending 3/31/89	Year Ending 3/31/89	(Annualized) Since 7/1/84
	3/31/89	(Thousands)	Actual Bmrk	Actual Bmrk	Actual Bmrk
Active Managers					
IAI	3.9%	\$48,343	1.3% 1.1%	5.0% 5.1%	13.8% 13.4%
Lehman	8.9	109,185	1.3 1.2	6.1 5.1	12.8 12.8
Miller Anderson	13.2	162,547	1.4 1.2	6.6 5.2	14.1 13.8
Morgan Stanley	8.5	104,501	1.1 1.1	3.5 4.5	12.8 13.4
Western Asset	15.8	194,148	1.5 1.2	7.4 5.8	15.1 13.5
Aggregate Active	50.3%	\$618,724	1.4%	6.1%	13.7%
Semi-Passive Manage	rs				
Fidelity Management	24.8%	\$304,878	1.3% 1.2%		
Lincoln Capital	24.9	305,497	1.2 1.2		
Aggregate Passive	49.7%	\$610,375	1.3%		
Total Bond Segment	100.0%	\$1,229,099	13% 12%	5.7% 5.3%	11.8% 12.0%
Salomon Broad Index			1.2%	5.2%	13.8 %

Notes: Total segment and aggregate active performance numbers include returns of any managers retained during the time periods shown but subsequently terminated by the Board

The semi-passive managers were retained effective July 1, 1988.

Investment Objectives

The Post Retirement Investment Fund contains the pension assets of retired public employees covered by statewide retirement plans.

Upon the employees' retirement, sums of money sufficient to finance fixed monthly annuities are transferred from accumulation pools in the Basic Funds to the Post Fund. In order to support promised benefits, the Post Fund must "earn" at least 5% on its invested assets each year. If the Post Fund exceeds this earnings rate, excess earnings are used to finance permanent benefit increases for eligible retirees.

Unrealized capital gains (or losses) are excluded from the statutory definition of earnings. For this reason the Post Fund is not designed to maximize long-term total rates of return.

The Board has established two earnings objectives for the Post Fund:

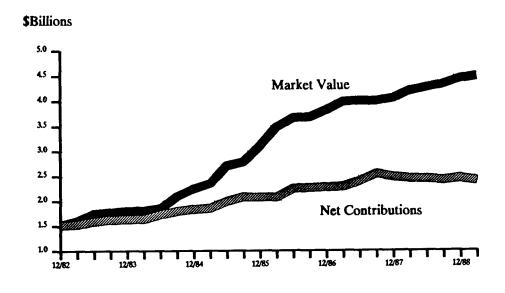
- generate 5% realized earnings to maintain current benefits.
- generate at least 3% additional realized earnings to provide benefit increases.

The Post Fund is not oriented toward maximizing long-term total rate of return. Rather, the SBI attempts to generate a high, consistent stream of earnings for the Post Fund that will maintain current benefits, as well as produce benefit increases over time.

Asset Growth

The market value of the Post Fund increased by 1.1% during the first quarter of 1989. Moderate asset growth was

achieved through investment returns since net contributions were a negative \$50 million for the quarter.



	In Millions					
	12/84	12/85	12/86	12/87	12/88	3/89
Beginning Value	\$1,803	\$2,246	\$3,107	\$3,808	\$4,047	\$ 4,434
Net Contributions	201	239	199	207	-27	-50
Investment Return	242	622	502	32	414	100
Ending Value	\$2,246	\$ 3,107	\$3,808	\$4,047	\$ 4,434	\$ 4,484

Asset Mix

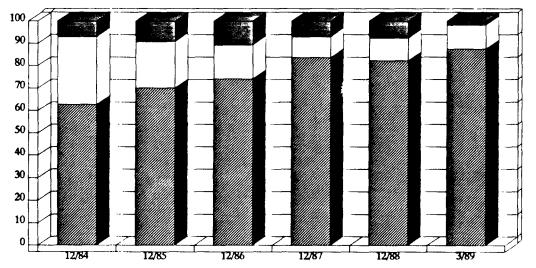
The Board has designed the asset mix of the Post Fund to generate the sizable stable earnings stream necessary to finance monthly payments to retirees.

The SBI invests the majority of the Post Fund's assets in a dedicated bond portfolio. A dedicated bond portfolio is a collection of various maturity, high-quality bonds which generate cash flows from income and principal payments that match a specific stream of liabilities.

Assets not committed to the dedicated bond portfolio generally are invested in common stocks and cash equivalents.

During the quarter, cash holdings decreased and bond holdings increased due to further rebalancing in the dedicated bond portfolio.

PERCENT





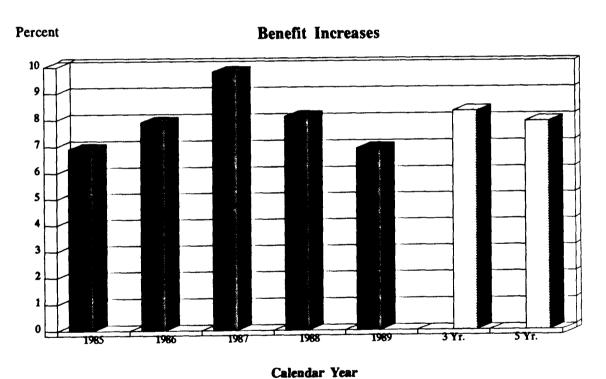
		Las	t Five Ye	ars		Latest Qtr.
	12/84	12/85	12/86	12/87	12/88	3/89
Bonds	62.9%	70.2%	74.2%	83.7%	82.3%	87.5%
Stocks	30.0	20.5	15.1	9.3	10.1	10.7
Unallocated Cash	7.1	9.3	10.7	7.0	7.6	1.8
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100 0%

Total Fund Performance

The ability of the Post Fund to maintain current benefit levels and provide future benefit increases depends upon its earnings. State statutes define earnings for the Post Fund as interest and dividend income as well as realized equity and fixed income capital gains (or losses). Unrealized capital gains (or losses) have no direct impact on the benefits paid out to retirees. Unrealized 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.

Assets committed to the dedicated bond portfolio ensure that all existing promised benefits will be paid to current retirees. Excess investment earnings on the Post Fund assets are used to finance permanent lifetime benefit increases for retirees.

Benefit increases are based upon earnings during a fiscal year and are effective at the start of the following calendar year. Benefit increases generated over the last five years are shown below.



(Annualized) 1988 1989 3 Yrs. 5 Yrs. 1987 1986 1985 8.3% 7.9% 6.9% 8.1% 7.9% 9.8% Benefit Increases 6.9%

Benefit increases are intended to compensate, to some degree, for the effect of inflation.

As measured by the Consumer Price Index (CPI), inflation increased by 3.5% on an annualized basis over the last five years (calendar 1984-1988).

Segment Performance

Stock Segment Performance

The stock segment of the Post Fund exceeded its benchmark for the latest quarter and year by substantial margins.

	Period Ending 3/31/89				
		_	(Annualized)		
	Qtr.	Yr.	3 Yrs.	5 Yrs.	
Stock Segment	11.3%	22.7%	7.3%	14.1%	
Post Fund Benchmark	7.2	18.0	N.A.	N.A.	

Bond Segment Performance

The composition of the Post Retirement Investment Fund's dedicated bond portfolio remained essentially unchanged during the first quarter, despite further rebalancing purchases.

The Post Fund's bond portfolio provided a 1.3% total rate of return for the quarter and a 6.5% return for the year. This performance is consistent with the bond portfolio's design. The Post Fund's dedicated bond portfolio is structured so that portfolio income and maturities match the Fund's liability stream. As a result, the duration of the dedicated bond portfolio exceeds that of the bond market. Consequently, on a total return basis, the portfolio can be expected to underperform the bond market in down periods and outperform the market in up periods.

Dedicated Bond Portfolio Statistics 3/31/89

Value at Market	\$ 3,836,351,067
Value at Cost	3,776,265,747
Average Coupon	5.70%
Current Yield	8.38
Yield to Maturity	9.64
Current Yield at Cost	8.52
Time to Maturity	15.93 Years
Average Duration	7.62 Years
Average Quality Rating	AAA
Number of Issues	405

The Minnesota Supplemental Investment Fund is a multi-purpose investment program that offers a range of investment options to state and local public employees. The different participating groups use the Fund for a variety of purposes:

- It functions as the investment manager for all assets of the Unclassified Employees Retirement Plan.
- It acts as the investment manager for all assets of the supplemental retirement programs for state university and community college teachers and for Hennepin County Employees.
- It is one investment vehicle offered to public employees as part of the state's Deferred Compensation Plan.
- It serves as an external money manager for a portion of some local police and firefighter retirement plans.

A wide diversity of investment goals exists among the Fund's participants. In order to meet those needs, the Fund has been structured much like a "family of mutual funds." Participants may allocate their investments among one or more accounts that are appropriate for their needs, within the statutory requirements and rules established by the participating organizations. Participation in the Fund is accomplished through the purchase or sale of shares in each account.

The investment returns shown in this report are calculated using a time-weighted rate of return formula. These returns may differ slightly from calculations based on share values, due to the movement of cash flows in and out of the accounts.

On March 31, 1989 the market value of the entire fund was \$400 million.

Investment Options

Income Share Account - an actively managed, balanced portfolio utilizing both common stocks and bonds.

Growth Share Account - an actively managed, all common stock portfolio.

Common Stock Index Account - a passively managed, all common stock portfolio designed to track the performance of the entire stock market.

Bond Market Account - an actively managed, all bond portfolio.

Money Market Account - a portfolio utilizing short term, liquid debt securities.

Guaranteed Return Account - an option utilizing guaranteed investment contracts (GIC's), which offer a fixed rate of return for a specified period of time.

Income Share Account

Investment Objective

The primary investment objective of the Income Share Account is similar to that of the Basic Retirement Funds. The Account seeks to maximize long-term real rates of return, while limiting short-run portfolio return volatility.

Asset Mix

The Income Share Account is invested in a balanced portfolio of common stocks and fixed income securities. Common stocks provide the potential for significant capital appreciation, while bonds act as a deflation hedge and provide portfolio diversification.

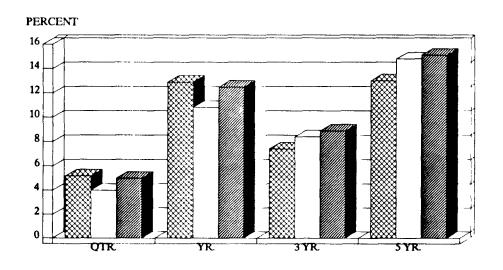
	Target	Actual
Stocks	60.0%	63.6
Bonds	35.0	31.3
Unallocated Cash	5.0	5.1
	100.0%	100.0%

Investment Management

The Account combines internal and external management. Internal investment staff manage the entire fixed income segment. Currently, the entire stock segment is managed by Wilshire Associates as part of a passively managed index fund designed to track the Wilshire 5000. Prior to April, 1988, a significant portion of the stock segment was actively managed.

Market Value

On March 31, 1989 the market value of the Income Share Account was \$206 million





Period Ending 3/31/89

			Annualized		
	Qtr.	Yr.	3 Yr.	5 Yr.	
Total Account	5.2%	12.9%	7.4%	13.0%	
Median Fund*	4.0	10.8	8.4	14.8	
Composite**	5.0	12.5	8.9	15.1	
Equity Segment	7.3	17.3	6.9	13.5	
Wilshire 5000	7.4	17.3	9.6	16.5	
Bond Segment	1.5	5.8	7.4	12.8	
Salomon Bond Index	1.2	5.2	6.3	12.6	

- TUCS Median Balanced Portfolio
- ** 60/35/5 Wilshire 5000/Salomon Broad Bond Index/T-Bills Composite

Growth Share Account

Investment Objective

The Growth Share Account's investment objective is to generate above-average returns from capital appreciation on common stocks.

Asset Mix

The Growth Share Account is invested almost entirely in common stocks. Generally, the small cash equivalents component represents the normal cash reserves held by the Account as a result of net contributions not yet allocated to stocks.

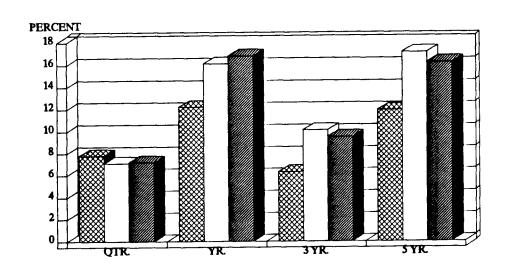
	Target	Actual	
Stocks	95.0%	99.4%	
Unallocated Cash	5.0	0.6	
	100.0%	100.0%	

Investment Management

Currently, the entire Account is managed by the same group of active external stock managers utilized by the Basic Retirement Funds. (See page 7 for performance results for these managers.) Prior to April, 1988, other active managers controlled a substantial portion of the account.

Market Value

On March 31, 1989 the market value of the Growth Share Account was \$70 million.





Period Ending 3/31/89

			Annualized	
	Qtr.	Yr.	3 Yr.	5 Yr.
Total Account	7.8%	12.2%	6.3%	11.9%
Median Fund*	7.1	16.1	10.1	17.1
Composite**	7.2	16.8	9.5	16.2
Equity Segment	8.1	12.6	6.2	12.3
Wilshire 5000	7.4	17.3	9.6	16.5

- * TUCS Median Managed Equity Portfolio
- ** 95/5 Wilshire 5000/T-Bills Composite

Common Stock Index Account

Investment Objective and Asset Mix

The investment objective of the Common Stock Index Account is to generate returns that match those of the common stock market. The Account is designed to track the performance of the Wilshire 5000, a broad-based equity market indicator.

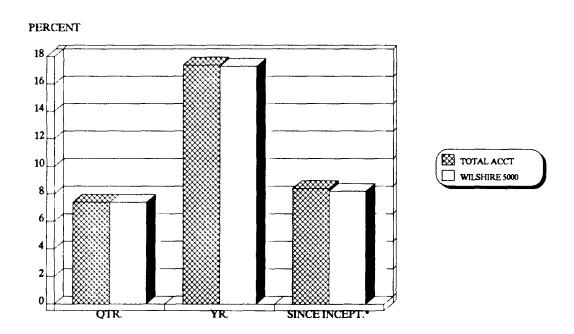
The Account is invested 100% in common stocks.

Investment Management

The entire Account is managed by Wilshire Associates as part of a passively managed index fund.

Market Value

On March 31, 1989 the market value of the Common Stock Index Account was \$4 million.



Period Ending 3/31/89

Since Inception*
7/1/86
8.4%

Annualized

Qtr.
 Yr.
 7/1/86

 Total Account
 7.4%
 17.4%
 8.4%

 Wilshire 5000
 7.4
 17.3
 8.2

^{*} The Common Stock Index Account was added to the Supplemental Fund in July 1986.

Bond Market Account

Investment Objective

The investment objective of the Bond Market Account is to earn a high rate of return by investing in fixed income securities.

Asset Mix

The Bond Market Account invests primarily in high-quality, government and corporate bonds that have intermediate to long-term maturities, usually 3 to 20 years.

Investment Management

The entire Account is managed by the same group of active external bond managers utilized by the Basic Retirement Funds. (See page 8 for performance results for these managers.)

Market Value

On March 31, 1989 the market value of the Bond Market Account was \$2 million.

PERCENT 8 7 6 5 4 3 2 1 0 QTR. YR. SINCE INCEPT.

Period Ending 3/31/89

	1 321 10 40 41 11 40
	Since Inception*
Yr.	7/1/86
6.0%	7.6%
5.2	6.4

Annualized

Qtr.
Total Account 1.3%
Salomon Broad 1.2

* The Bond Market Account was added to the Supplemental Fund in July 1986.

Money Market Account

Investment Objectives

The investment objective of the Money Market Account is to purchase short-term, liquid fixed income investments that pay interest at rates competitive with those available in the money markets.

Assset Mix

The Money Market Account is invested entirely in high quality short-term investments such as U.S. Treasury Bills, bank certificates of deposit, repurchase agreements, and high grade commercial paper. The average maturity of these investments is 30 to 60 days.

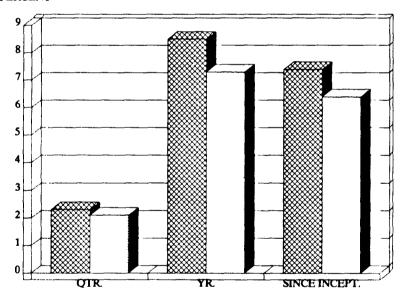
Investment Management

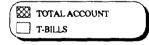
The Money Market Account is managed solely by State Street Bank and Trust Company. State Street manages a major portion of the Board's cash reserves.

Market Value

On March 31, 1989 the market value of the Money Market Account was \$70 million.

PERCENT





Period Ending 3/31/89

Annualized
Since Inception*

	Qtr.	Yr.	7/1/86	
Total Account	2.3%	8.5%	7.4%	
91 Day T-Bills	2.1	7.3	6.4	

^{*} The Money Market Account was added to the Supplemental Fund in July 1986.

Guaranteed Return Account

Investment Objectives

The investment objectives of the Guaranteed Return Account are to protect investors from any loss of their original investment and to provide a fixed rate of return over a three year period.

Asset Mix

The Guaranteed Return Account is invested in guaranteed investment contracts (GIC's) offered by major U.S. insurance companies.

Investment Management

Annually, the Board accepts bids from insurance companies that meet the financial quality criteria defined by State statute. Generally, the insurance company offering the highest three year GIC interest rate is awarded the contract. That interest rate is then offered to participants who make contributions to the Guaranteed Return Account over the following twelve months.

Market Value

On March 31, 1989 the market value of the Guaranteed Return Account was \$47 million.

Contract Period	Annual Effective Interest Rate	Manager	
Nov. 1, 1986 - Oct. 31, 1989	7.72%	Principal Mutual Life	
Nov. 1, 1987 - Oct. 31, 1990	8.45%	Principal Mutual Life	
Nov. 1, 1988 - Oct. 31, 1991	9.01%	Mutual of America	

VARIABLE ANNUITY FUND

Investment Objective

The 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 Variable Annuity Fund is comparable to that of the Supplemental Investment Fund's Growth Share Account. The goal of the Variable Annuity fund is to generate above-average capital appreciation.

Asset Mix

The Variable Annuity Fund is invested almost entirely in common stocks.

	Target	Actual
Stocks	95.0%	95.9%
Unallocated Cash	5.0	4.1
Total	100.0%	100.0%

Investment Management

Currently, the entire Fund is managed by the same group of active external stock managers utilized by the Basic Retirement Funds. (See page 7 for performance results for these managers.) Prior to April, 1988, other active managers controlled the account.

Asset Growth

The market value of the Variable Annuity Fund increased by 7.6% during the first quarter of 1989. The increase was attributable to increasing stock prices during the period.

	Asset Growth During First Quarter 1989 (Millions)
Beginning Value	\$ 156.5
Net Contributions	-0.4
Investment Return	12.3
Ending Value	\$168.4

Performance

The Variable Annuity Fund exceeded the median fund for the quarter but underperformed for the latest year.

Period Ending 3/31/89

			Annuanzeu	
	Qtr.	Yr.	3 Yr.	5 Yr.
Total Fund	7.8%	12.6%	6.3%	12.9%
Median Fund*	7.1	16.1	10.1	17.1
Composite**	7.2	16.8	9.5	16.2
Equity Segment	8.1	12.8	6.4	13.3
Wilshire 5000	7.4	17.3	9.6	16.5

^{*} TUCS Median Managed Equity Portfolio

^{** 95/5} Wilshire 5000/T-Bills Composite

PERMANENT SCHOOL FUND

Investment Objectives

The SBI invests the Permanent School Fund to produce a high, consistent level of income that will assist in offsetting state expenditures on school aids.

The Permanent School fund's investment objectives are influenced by the restrictive legal provisions under which its investments must be managed. These provisions require that the Permanent School Fund's principal remain inviolate. Further, any net realized equity and fixed income capital gains must be added to principal. Moreover, if the Permanent School Fund realizes net capital losses, these losses must be offset against interest and dividend income before such income can be distributed. Finally, all interest and dividend income must be distributed in the year in which it is earned.

These legal provisions limit the investment time horizon over which the Permanent School Fund is managed. Long-run growth in its assets is difficult to achieve without seriously reducing current spendable income and exposing the spendable income stream to unacceptable volatility. The SBI, therefore, invests the Permanent School Fund's assets to produce the maximum amount of current income, within the constraint of maintaining adequate portfolio quality.

Asset Mix

The asset mix of the Permanent School Fund was essentially unchanged during the fourth quarter. The Permanent School fund continues to hold only fixed income securities. Under current legal limitations, common stocks are not appropriate vehicles for the Fund.

	Target	Actual
Bonds	95.0%	99.2%
Unallocated Cash	5.0	0.8
Total	100.0%	100.0%

Investment Management

The entire fund is managed by an internal investment staff.

Asset Growth

The market value of the Permanent School Fund's assets decreased 2.2% during the first quarter. Withdrawals from the fund exceeded contributions by 13.4 million.

	Asset Growth During First Quarter 1989 (Millions)
Beginning Value	\$ 355.5
Net Contributions	-13.4
Investment Return	5.5
Ending Value	\$347.6

Bond Segment Performance

The composition of the Permanent School Fund's bond portfolio was essentially unchanged during the quarter. The bond portfolio is structured with a laddered distribution of maturities to minimize the Fund's exposure to re-investment rate risk. At the quarter's-end, the portfolio had a current yield of 9.54%, an average life of 7.0 years, and a AAA quality rating. The portfolio remains concentrated in Treasury and Agency issues and has a significant mortgage component as well.

Bond Portfolio Statistics 3/31/89

Value at Market	\$336,879,561
Value at Cost	345,015,610
Average Coupon	9.08%
Current Yield	9.54
Yield to Maturity	9.77
Current Yield at Cost	9.32
Time to Maturity	15.32 Years
Average Duration	7.00 Years
Average Quality Rating	AAA
Number of Issues	132

STATE CASH ACCOUNTS

Description

State Cash Accounts represent the cash balances in more than 200 separate counts that flow through the Minnesota State Treasury. These accounts range in size from \$5,000 to over \$400 million.

Most accounts are invested by SBI staff through two short-term pooled funds:

- Trust Fund Pool contains the cash balances of retirement-related accounts managed internally and cash balances in the Permanent School Fund.
- Treasurer's Cash Pool contains the cash balances of special or dedicated accounts necessary for the operation of certain State agencies and the balance of the Invested Treasurer's Cash.

In addition, each State of Minnesota bond sale requires two additional pools; one for bond proceeds and one for the debt reserve transfer.

Because of special legal restrictions, a small number of cash accounts cannot be commingled. These accounts are invested separately.

Investment Objectives

- Safety of Principal. To preserve capital.
- Competitive Rate of Return. To provide a high level of current income.
- Liquidity. To meet cash needs without the forced sale of securities at a loss.

Asset Mix

The SBI maximizes current income while preserving capital by investing all cash accounts in high quality, liquid short term investments. These include U.S. Treasury and Agency issues, repurchase agreements, bankers acceptances, commercial paper, and certificates of deposit.

Investment Management

All state cash accounts are managed by the SBI investment staff. As noted above, most of the assets of the cash accounts are invested through two large commingled investment pools.

Performance

Both the Trust Fund Pool and the Treasurer's Cash Pool outperformed their target for the quarter and the latest year.

Period Ending 3/31/89 **Market Value** (Millions) Otr. Yr. Treasurer's Cash Pool \$2,078 2.2% 8.4% Trust Fund Cash Pool 162 2.2 8.3 91-Day T-Bills 2.1 7.3

Tab B

PORTFOLIO STATISTICS

		PAGE
ı.	Composition of State Investment Portfolios 3/31/89	ı
II.	Cash Flow Available for Investment 1/1/89-3/31/89	3
ıı.	Monthly Transactions and Asset Summary - Retirement Funds	4

STATE OF MINNESOTA STATE BOARD OF INVESTMENT COMPOSITION OF STATE INVESTMENT PORTFOLIOS BY TYPE OF INVESTMENT MARKET VALUE MARCH 31, 1989 (in 000's)

	CASH AND						
	SHORT TERM	BON	DS	STO	CKS	ALTERNATIV	E
	SECURITIES	INTERNAL	EXTERNAL	INTERNAL	EXTERNAL	ASSETS	TOTAL
BASIC RETIREMENT FUNDS:							
TEACHERS RETIREMENT FUND	\$ 103,732	\$ -0-	\$ 543,400	\$ -0-	\$1,543,380	\$337,456	\$ 2,527,968
	4.10%		21.50%		61.05%	13.35%	100%
PUBLIC EMPLOYEES RETIRE. FUND	64,795	-0-	298,419	-0-	847,579	185,321	1,396,114
POBLIC CHIEOTECS RETIRET TONS	4.64%	•	21.38%	_	60.71%	13,27%	100%
STATE EMPLOYEES RETIRE. FUND	48,186	-0-	248,886	-0-	706,892	154,560	1,158,524
	4.16%		21.48%		61.02%	13.34%	100%
		_	405 5/0	•	200 004	45 756	/00 974
PUBLIC EMP. POLICE & FIRE FUND	21,375	-0-	105,240	-0-	298,906	65,355	490,876 100%
	4.36%		21.44%		60.89%	13.31%	100%
HIGHWAY PATROL RETIRE. FUND	4,597	-0-	18,535	-0-	52,644	11,511	87,287
	5.27%		21.23%		60.31%	13.19%	100%
JUDGES RETIREMENT FUND	152	-0-	785	-0-	2,228	487	3,652
	4.16%		21.50%		61.01%	13.33%	100%
DUNI 10 TUD D 5 000001 IDATED	4 477	-0-	1,879	-0-	5,320	1,163	9,999
PUBLIC EMP. P.F. CONSOLIDATED	1,637	-0-	18.79%	-0-	53.21%	11.63%	100%
	16.37%		10.774		JJ.21%	11.03%	100%
CORRECTIONAL EMPLOYEES RETIREMEN	T 2,316	-0-	11,963	-0-	33,976	7,429	55,684
	4.16%		21.48%		61.02%	13.34%	100%
	A7 4F7	7 000 //7	0	/ 79 EOE	-0-	-0-	4,484,195
POST RETIREMENT FUND	83,153	3,922,447	-0-	478,595 10.67%	-0-	-0	100%
	1.86%	87.47%		10.07%			.00%
MINNESOTA SUPPLEMENTAL FUNDS:							
INCOME SHARE ACCOUNT	10,549	64,429	-0-	-0-	130,970	-0-	205,948
	5.12%	31.29%			63.59%		100%
						_	(0.017
GROWTH SHARE ACCOUNT	418	-0-	-0-	-0-	69,495	-0-	69,913
	0.60%				99.40%		100%
MONEY MARKET ACCOUNT	69,905	-0-	-0-	-0-	-0-	-0-	69,905
HONET MARKET ACCOUNT	100%	•					100%
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
COMMON STOCK INDEX ACCOUNT	-0-	-0-	-0-	-0-	4,041	-0-	4,041
					100%		100%
	•	-0-	2,458	-0-	٠٥٠	•0-	2,458
BOND MARKET ACCOUNT	-0-	-0-	100%			•	100%
			100%				
GUARANTEED RETURN ACCOUNT	-0-	-0-	47,368	-0-	-0-	-0-	47,368
ARMUNITER UFFAUT LIANGES	-		100%				100%

	CASH AND						
	SHORT TERM	BON	DS	STO	OCKS	ALTERNATIV	Έ
	SECURITIES	INTERNAL	EXTERNAL	INTERNAL	EXTERNAL	ASSETS	TOTAL
MINNESOTA VARIABLE ANNUITY	6,855 4.07%	-0-	-0-	-0-	161,546 95.93%	-0-	168,401 100%
TOTAL RETIREMENT FUNDS	\$ 417,670 3.87%	\$3,986,876 36.98%	\$1,278,933 11.86%	\$478,595 4.44%	\$ 3,856,977 35.77%	\$763,282 7.08%	\$10,782,333 100%
PERMANENT SCHOOL FUND	2,705 0.78%	344,909 99.22%	-0-	-0-	-0-	-0-	347,614 100%
TREASURERS CASH	2,077,989 100%	-0-	-0-	-0-	-0-	-0-	2,077,989 100%
HOUSING FINANCE AGENCY	173,444 100%	-0-	-0-	-0-	.0-	-0-	173,444 100%
MINNESOTA DEBT SERVICE FUND	29,486 100%	-0-	-0-	-0-	-0-	-0-	29,486 100%
MISCELLANEOUS ACCOUNTS	165,436 100%	-0-	-0-	-0-	.0.	-0-	165,436 100%
MINNESOTA STATE BUILDING FUNDS	20,584 100%	-0-	-0-	-0-	-0-	-0-	20,584 100%
GRAND TOTAL	\$2,887,314 21.23%	\$4,331,785 31.86%	\$1,278,933 9.41%	\$478,595 3.52%	\$3,856,977 28.37%	\$763,282 5.61%	\$13,596,886 100%

STATE OF MINNESOTA STATE BOARD OF INVESTMENT NET CASH FLOW AVAILABLE FOR INVESTMENT

For period of January 1, 1989 - March 31, 1989

Teachers Retirement Fund Public Employees Retirement Fund State Employees Retirement Fund Public Employees Police & Fire Highway Patrol Retirement Fund Judges Retirement Fund Public Emp. P & F Consolidated Correctional Employees Retirement Fund Post Retirement Fund Supplemental Retirement Fund - Income Supplemental Retirement Fund - Growth Supplemental Retirement Fund - Money Market Supplemental Retirement Fund - Index Supplemental Retirement Fund - Bond Mkt. Supplemental Retirement Fund - Guaranteed Minnesota Variable Annuity Fund	\$ 52,936.00 10,029,336.00 8,024,096.00 11,009,960.00 1,751,770.00 76.00 138,847.00 1,001,145.00 (33,432,657.00) (16,481,878.00) (7,265,592.00) 670,726.00 95,869.00 258,888.00) 104,363.00 (372,600.00)
Total Retirement Funds Net Cash Flow	\$ (24,414,715.00)
Permanent School Fund	 (13,427,762.00)
Total Net Cash Flow	\$ (37,842,477.00)

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

TRANSACTION AND ASSET SUMMARY RETIREMENT FUNDS

Net Transactions

Asset Summary (at market)

	Bonds	Stocks		Cash	Short-term	Bonds	Equity	Total
	(000,000)	(000,000)	Total	Flow	% of Fund	% of Fund	% of Fund	(000,000)
								(at market)
September 1986	14	(67)	(53)	(48)	4.9	47.0	48.1	8 490
October	4	(117)	(113)	10	6.2	46.5	47.3	8724
November	(17)	(3)	(20)	40	6.8	46.0	47.2	8864
December	(51)	44	(7)	12	7.0	46.0	47.0	8772
January 1987	34	21	42	15	6.2	44.4	49.4	9283
February	120	(9)	111	50	5.4	44.4	50.2	9576
March	76	(15)	61	18	4.9	44.5	50.6	9614
April	100	(7)	93	4	4.1	45.0	50.9	9383
May	3	(136)	(133)	33	5.9	44.6	49.5	9403
June	(42)	(22)	(64)	141	7.8	42.6	49.6	9706
July	283	(119)	164	52	6.4	44.9	48.7	10028
August	181	(14)	167	40	5.2	44.7	50.1	10020
September	50	10	6 0	59	5.3	44.5	50.2	9850
October	(12)	(37)	(49)	20	6.5	50.1	43.4	9077
November	9	(10)	(1)	69	7.4	51.1	41.5	889 0
December	(3)	34	31	0	6.8	50.1	43.1	9180
January 1988	(5)	118	113	57	5.9	50. 0	44.1	9 572
February	102	1	103	47	5.2	49.8	45.0	9841
March	25	(10)	15	6	5.2	49.8	45.0	9686
April	(9)	16	7	11	5.2	49.1	45.7	9667
May	(2)	(2)	(4)	41	5.7	48.3	46.0	9633
June	(3)	18	15	75	6.1	47.5	46.4	10045
July	91	(5)	8 6	56	5.8	48.1	46.1	10003
August	(3)	14	11	55	6.3	48.2	45.5	99 20
September	(7)	(3)	(10)	19	6.4	48.0	45.6	10208
October	(7)	0	(7)	(27)	6.2	48.2	45.6	10329
November	129	1	130	88	5.8	48.6	45.6	10217
December	(1)	2	1	83	6.5	47.8	45.7	10414
January 1989	88	(10)	78	3	5.6	47.7	46.7	10760
February	60	18	78	38	5.3	47.9	46.8	10633
March	150	5	155	12	3.9	48.8	47.3	10783

Tab C



EXECUTIVE DIRECTOR HOWARD J. BICKER

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Room 105, MEA Building 55 Sherburne Avenue Saint Paul 55155 (612) 296-3328

May 26, 1989

TO:

Members, State Board of Investment

Members, Investment Advisory Council

FROM:

Howard Bicker

SUBJECT: Executive Director's Administrative Report

1) Budget Report

A budget-to-actual report for the SBI's FY 1989 administrative budget is included on Attachment A. It includes expenditures through April 30, 1989.

2) Travel Report

A summary of SBI travel expenditures for February 16 - May 15, 1989 is included as Attachment B.

3) 1989 Legislative Update

The 1989 legislature enacted several measures of interest to the SBI.

o SBI Administrative Budget FY 90-91 (H.F. 372/S.F. 1631)

The SBI requested a "same level" budget for FY 90-91.

A summary of action on the request is shown below:

	<u>FY 90</u>	<u>FY 91</u>	Complement
Governor's Recommendation	1,727,000	1,727,000	25
House-Gov's. Recommendation Senate - 2% Reduction	1,727,000 1,692,000	1,727,000 1,692,000	25 25
Conference Committee	\$1,692,000	\$1,692,000	25

I believe the reduction can be accommodated through reallocation of certain spending items in the proposed budget. I have reviewed a reallocation proposal with the SBI Administrative Committee. The Board will be informed of actual expenditures through regular quarterly budget-to-actual reports.

o Pension Legislation (S.F. 783)

Significant changes in pension policy were enacted late in the session. The major provisions are:

o "Rule of 90" for TRA and MSRS.

This provision allows retirement with unreduced pension benefit if age and years of service add to 90. The current formula will be used to compute the initially promised benefit if the employee elects to retire under the Rule of 90. PERA has had the Rule of 90 since 1982.

o Level Benefit Formula for PERA, MSRS, TRA.

If an employee does not elect to use the Rule of 90, the initially promised benefit will be calculated with a new formula using 1.5 percent of the "high-five" average salary calculation for each year of service. (Current formula is 1.0 percent per year for the first 10 years, 1.5 percent per year thereafter.) The initial benefit will be reduced by 3% per year if an employee retires early.

This change is estimated to cost approximately \$90 million per year. Most of this cost is financed by extending the amortization from 2010 to 2020 and by increasing the actuarial interest assumption in the Basic Retirement Funds from 8.0% to 8.5%. Small increases in employer/employee contributions will finance the remainder.

o Elimination of the Variable Annuity Fund.

The Variable Annuity Fund is an investment option available to certain members of TRA. It is not available to new TRA members. The legislation eliminates this Fund

and transfers its assets to the Basic and Post Retirement Funds.

o Fiduciary Responsibility

The bill incorporates the version of Fiduciary Responsibility Bill that was sponsored by Representative Simoneau (H.F. 1168). The new law will not change the prudent person fiduciary standard for the SBI. The law contains new requirements for on-going education of pension fund fiduciaries. I have asked Ms. Christie Eller, Assistant Attorney General, to provide more specific advice regarding the SBI's responsibilities under the new law.

A description of other legislation of interest to the SBI is provided in Attachment C.

4) Update on Post Retirement Fund Discussions

At its special meeting on February 8, 1989, the Board reviewed the January 1989 Report from the Task Force on Fund Objectives. The report contained several recommendations that would require statutory changes regarding the structure and operation of the Post Retirement Fund.

The Board did not adopt those recommendations. Rather, it directed me to discuss the report with the retirement systems and other affected parties and report back to the Board. Board members clearly stated they would not endorse legislative action without support from those groups.

Since the last Board meeting, I have met with the following groups to explain the recommendations of the Task Force:

Public Employees Retirement System (PERA) Board
Teachers Retirement Association (TRA) Board
Minnesota State Retirement Retirement System (MSRS) Board
PERA Pre 1973 Retirees
PERA Post 1973 Retirees
Retired Educators Association of Minnesota (REAM)
Minnesota State Employee Retiree Association

Also, I have met with the retirement system directors and leaders from the above retiree groups to discuss how the current benefit increase formula could be modified to better reflect the impact of inflation.

Generally, I feel these presentations and discussions have been productive. While I cannot report that there is concensus on any specific changes, I believe discussions will continue in the coming months.

STATE BOARD OF INVESTMENT FISCAL YEAR 1989 ADMINISTRATIVE BUDGET REPORT GENERAL FUND APPROPRIATION FISCAL YEAR TO-DATE THROUGH APRIL 30,1989

	FIS	CAL YEAR 1989	FISCAL YEAR		
ITEM	,	BUDGET	EYDE	1989 Expenditures	
PERSONAL SERVICES		DODGEL	BAFE	EAPERDITURES	
CLASSIFIED EMPLOYEES	\$	222,572	\$	178,135	
UNCLASSIFIED EMPLOYEES	, ,	1,050,000		806,436	
PART-TIME EMPLOYEES		0	ŀ	0	
SEVERENCE PAY		10,600	ł	0	
MISCELLANEOUS PAYROLL		6,000		-524	
			755778		
SUBTOTAL	\$	1,289,172	\$	984,047	
EXPENSES & CONTRACTUAL SERVICES			ĺ		
RENTS & LEASES		97,000		75,870	
REPAIRS/ALTERATIONS/MAINTENANC		9,000	<u> </u>	6,418	
PRINTING & BINDING		18,000		14,244	
PROFESSIONAL/TECHNICAL SERVICE		5,000		8,298	
DATA PROCESSING & SYSTEM SERVI		162,000		121,800	
PURCHASED SERVICES		20,000		23,091	
SUBTOTAL	\$	311,000	\$	249,721	
MISCELLANEOUS OPERATING EXPENSES	ı				
COMMUNICATIONS	i	20,000		18,944	
TRAVEL, IN-STATE		3,000		317	
TRAVEL, OUT-STATE	i	40,000		27,033	
FEES & OTHER FIXED CHARGES		7,000		3,501	
			\$ XX. XX	A Control of the second	
SUBTOTAL	\$	70,000	\$	49,795	
SUPPLIES/MATERIALS/PARTS		15,000		20,709	
CAPITAL EQUIPMENT	. 8158 2.0 0 80	22,000		22,899	
TOTAL GENERAL FUND	\$	1,707,172	\$	1,327,171	

ATTACHMENT B

STATE BOARD OF INVESTMENT

Travel Summary by Date February 16, 1989 - May 15, 1989

Purpose	Name(s)	Destination and Date	Total Cost
Manager Monitoring Active Bond Managers Morgan Stanley, Lehman, Bankers Trust	R. Henry J. Lukens	New York 2/28-3/1	\$1,696.35
Staff Education State Street Master Custodian Conference	M. Schmitt	Miami 3/4-3/8	\$ 362.05
Board Member Travel National Association of State Treasurers	M. McGrath J. Manahan	Washington D.C. 3/4-3/10	\$1,975.66
Staff Education Institute for Int'l Research Global Stock Conference	B. Lehman	New York 3/27-3/29	\$ 741.50
Manager Monitoring and Investment Conference	H. Bicker	San Francisco 3/28-3/31	\$ 144.76
Manager Monitoring Passive Equity Manager Wilshire Associates	M. Edwards	Los Angeles 4/12-4/13	\$ 849.00
Miscellaneous Institute for Fiduciary Ecucation & the Ford Foundation	H. Bicker	Chicago 4/20	\$ 377.00
Miscellaneous Appearance at St. Cloud State University Investment Club	H. Bicker	St. Cloud 4/26	\$ 22.40
Staff Education IDS Client Conference	M. Menssen	Washington D.C. 5/10-12	\$ 697.39

ATTACHMENT C

1989 Legislative Summary

The 1989 Legislature enacted the following measures of interest to the SBI:

1) Donations to the Permanent School Fund (S.F. 478)

S.F. 478 allows the acceptance of gifts on behalf of the Permanent School Fund.

The Commissioner of Natural Resources may accept gifts of land on behalf of the Fund and manage those lands in a manner consistent with other DNR holdings.

The Commissioner of Education may accept donations of cash, marketable securities or other personal property on behalf of the Fund. The SBI has discretion to dispose of the marketable securities consistent with its investment authority in Minnesota Statutes, sections 11A.16 and 11A.24.

2) SBI Administrative Budget

H.F. 372, the Omnibus State Departments Appropriations Bill, provides that the SBI's general fund administrative budget will be:

\$1,692,000 in FY 1990 \$1,692,000 in FY 1991

The totals represent a 2 percent reduction from the Governor's recommendation of \$1,727,000 each year.

Authorized complement remains 25 positions. After labor contracts are negotiated, the SBI will receive a portion of the salary supplement appropriation contained in the bill. This will increase the SBI's total budget.

Approximately 75% of the SBI's administrative budget is billed back to the retirement systems. The receipts from the billings are deposited in the general fund.

3) Pension Legislation (S.F. 783)

The Legislature passed the largest pension improvement package since 1973. The legislation provides significant pension increases for the statewide plans and contains numerous other measures. Major provisions of interest to the SBI are:

o "Rule of 90" for TRA and MSRS.

This provision allows retirement with unreduced pension benefit if age and years of service add to 90. The current formula will be used to compute the initially promised benefit if the employee elects to retire under the Rule of 90. PERA has had the Rule of 90 since 1982.

o Level Benefit Formula for PERA, MSRS, TRA.

If an employee does not elect to use the Rule of 90, the initially promised benefit will be calculated with a new formula using 1.5 percent of the "high-five" average salary calculation for each year of service. (Current formula is 1.0 percent per year for the first 10 years, 1.5 percent per year thereafter.) The initial benefit will be reduced by 3% per year if an employee retires early.

This change is estimated to cost approximately \$90 million per year. Most of this cost is financed by extending the amortization from 2010 to 2020 and by increasing the actuarial interest assumption in the Basic Retirement Funds from 8.0% to 8.5%. Small increases in employer/employee contributions will finance the remainder.

o Partial Post Retirement Adjustments.

Retirees receive a benefit increase from the Post Retirement Fund on January 1 of each year based on the earnings of the Fund during the previous fiscal year (July 1-June 30). Currently, beneficiaries must be retired for the entire fiscal year in order to be eligible for the benefit increase. As a result, new retirees are ineligible for a benefit increase for 18-30 months, depending on the time of year they retired.

The legislation reduces this waiting period by providing partial benefit increases to individuals who have been retired for less than the full fiscal year. The minimum waiting period for a partial benefit increase will be 7 months. The partial benefit increase will be based on the number of months the individual was retired during the previous fiscal year.

All benefit increases, whether full or partial, will still be effective January 1 of each year. This change will reduce the benefit increases provided under the current formula by a slight amount because a larger number of individuals will receive an increase.

o Elimination of the Variable Annuity Fund.

The Variable Annuity Fund is an investment option available to certain members of TRA. It is not available to new TRA members. The legislation eliminates this Fund and transfers its assets to the Basic and Post Retirement Funds.

o Fiduciary Responsibility.

The bill incorporates the version of Fiduciary Responsibility Bill that was sponsored by Representative Simoneau (H.F. 1168). The new law will not change the prudent person fiduciary standard for the SBI. The law contains new requirements for on-going education of pension fund fiduciaries.

4) Department of Finance Housekeeping Bill (S.F. 481)

Section 2 of S.F. 481 allows the Commissioner of Finance to purchase noninterest bearing certificates of deposit (CD's) from the State's clearing agent bank. These CD's can be used in lieu of some compensating balances with the State's clearing agent, currently First Trust of St. Paul. This change may allow the State to lower reserves held at First Trust and may increase the amount of short term cash available for investment by the SBI.

Tab D



STATE OF MINNESOTA OFFICE OF THE STATE TREASURER ST. PAUL 55155

MICHAEL A. McGRATH Treasurer

303 State Administration Building 50 Sherburne Avenue St. Paul, Minnesota 55155 (612) 296-7091

May 30, 1989

TO:

Members, State Board of Investment

FROM:

Michael A. McGrath, Chair SBI Administrative Committee

SUBJECT: Committee Report

The SBI Administrative Committee met on May 26, 1989 and discussed the following items.

INFORMATION ITEM:

1) Proposed Board/IAC Seminar to Review Fund Policies

In October 1987, the Board and IAC met jointly at the Spring Hill Center to review the structure and performance of the Basic and Post Retirement Funds. The meeting was informational in nature since no formal action was taken to affirm or modify existing policies.

In the past year, the SBI has identified a need to establish a regular schedule to formally review investment objectives for the funds under its control. Mr. Bicker has proposed that the seminar become an annual event geared to this purpose. He suggested that the meeting be scheduled sometime during September or October 1989 at a location outside the capitol complex. The meeting would replace the SBI's next regular quarterly meeting (currently scheduled for September 6, 1989) and would require 4 to 6 hours.

The Committee directed Mr. Bicker to contact each Board member individually to discuss the proposal and determine what type of seminar would be most beneficial. If Board members are willing to proceed, Mr. Bicker will plan the seminar with a task force of Board member designees and IAC representatives.

ACTION ITEMS:

1) Approval of Consultant Contract

At its meeting on March 1, 1989, the Board requested that a Consultant Review Committee be formed to review available investment consulting services through a request for proposal (RFP) process. A report from the Review Committee is attached (see Attachment A).

The SBI received nine responses to the RFP. From these responses, the Review Committee selected four firms for interviews. Based on its evaluation of the RFP responses and face-to-face interviews, the Consultant Review Committee has recommended that the current consultant, Richards & Tierney, Inc., continue as the SBI's consultant. The SBI Administrative Committee concurs.

RECOMMENDATION:

The SBI Administrative Committee recommends that the SBI authorize the Executive Director, with assistance from SBI's legal counsel, to negotiate and execute a contract for investment consulting services with Richards & Tierney, Inc., Chicago, IL for a period of three years, subject to the standard 30-day cancellation provision, at an amount not to exceed \$175,000 per year.

2) Approval of the Proposed FY 1990 Management and Budget Plan

The Committee reviewed Mr. Bicker's Management and Budget Plan for FY 1990 along with the results of the FY 1989 plan:

- o a summary report of management initiatives undertaken in FY 89 is contained in Attachment B.
- o a summary of the management initiatives proposed for FY 90 is contained in Attachment C.
- o a summary of the proposed administrative budget for FY 90 is contained in Attachment D.

RECOMMENDATION:

The SBI Administrative Committee concurs with the plan outlined by Mr. Bicker and recommends that he proceed with its implementation. The Committee will receive progress reports at its quarterly meetings.

3) Approval of Board Member Travel Policy

Under current policy, each Board member is allocated up to \$2,000 annually from the SBI's administrative budget for travel by him or herself and their staff for purposes related to Board matters. The Board should take action to renew or modify this policy for FY 90.

RECOMMENDATION:

The Committee recommends that the Board renew its current policy to allocate up to \$2,000 of the SBI's administrative budget for Board member/designee travel for FY 1990.

4) Approval of Position Description for the Executive Director

The current position description for the SBI Executive Director was prepared in 1979 and is in need of revision. The Committee has drafted an updated description for review and approval by the Board (see Attachment E).

RECOMMENDATION:

The SBI Administrative Committee recommends that the Board approve the revised position description for the Executive Director.

5) Consideration of Item Laid Over at the Previous Board meeting

At its meeting on March 1, 1989, the Board laid-over a recommendation from the Investment Advisory Council concerning a proposal to purchase U.S. government guaranteed agriculture export loan participations. The item was laid-over to allow Board members to consider the potential policy implications of the proposal. Information on the terms of the proposal is contained in Attachment F.

The IAC recommendation to the Board at the March meeting follows:

"The IAC recommends that the SBI authorize the Executive Director, with assistance from legal counsel, to negotiate and execute a commitment of up to \$30 million to the First National Bank of Chicago Agricultural Export Loan Program sponsored by the U.S. Commodity Credit Corporation."

ATTACHMENT A

DEPARTMENT: of Finance

STATE OF MINNESOTA

OFFICE MENORANDUM

DATE: May 18, 1989

TO: Michael A. McGrath, Chair SBI Administrative Committee

Chair, Consultant Review Committee FROM:

PHONE: 296-8372

SUBJECT: Consultant Review Committee

The Consultant Review Committee has completed its work. The Committee recommends that the State Board of Investment retain Richards & Tierney for a three year period at a cost not to exceed \$175,000 per year.

The Committee met three times. At the first meeting, the committee reviewed the draft Request for Proposal and reviewed the list of firms that were to be sent the RFP. The Committee reviewed the responses to the RFP at the second meeting and selected the firms that would be asked to make presentations to the Committee. At the third meeting, the Committee interviewed the firms, and at the completion of the interviews, made its recommendation.

During the selection process, the Committee agreed that the services that the consultant provided could be divided into two major parts. They are (1) the quantitative reporting including the quarterly performance reviews of the funds and the active managers and (2) the general consulting services including advising the Board and the IAC on investment policy.

The Committee agreed that in quantitative reporting, Richards & Tierney was best qualified. This is based upon the computer systems and the data base that they have developed.

The Committee was not in agreement that Richards & Tierney was the best qualified to provide the general consulting services. Considerable discussion was held

Michael A. McGrath, page 2

by the Committee on the ability of Richards & Tierney to communicate with the SBI and the IAC. However, a majority of the Committee did recommend Richards & Tierney for the general consulting services.

The committee recognized that the Administrative Committee could recommend or the full Board could chose to retain two consultants. Considering this possibility, the committee made a second recommendation.

Should the Administrative Committee recommend or the Board wish a second consultant for general consulting services, the committee recommends that Rogers, Casey & Associates be retained.

- 6.

ATTACHMENT B

STATE BOARD OF INVESTMENT Management Plan Summary Report on FY 89 Initiatives

	FY 89 Plan	
	Projected	Current
I. <u>Implement Investment Strategies</u>	Time Frame	Status
A. Asset Allocation		
1. Review goals and objectives of	•••••	1. New project undertaken during
Basic and Post Funds.		FY 89. Task Force Report adopted Feb. 1989.
2. Develop and implement		2. Postponed due to above.
international investment		Target allocation of 10%
program.		international equities adopted
 Establish target allocation 	Jul. 1988 - Dec. 1988	Feb. 1989 for the Basic Funds.
o Develop program structure	Jul. 1988 - Mar. 1989	Development of program structure
o Conduct manager search	Jan. 1989 - Jun. 1989	included in FY 90 plan.
3. Review asset allocation in	Jul. 1988 - Dec. 1988	3. Postponed. Needs
alternative investment area.		re-evaluation due to above.
B. Equities		
 Recommend completeness fund alternatives. 	Jul. 1988 - Jun. 1989	1. Study will continue in FY 90.
Review equity asset class target.	Oct. 1988 - Mar. 1989	2. Completed.
3. Review index fund manager.	Jan. 1989 - Jun. 1989	3. Postponed.
4. Implement new/replacement	On-going	4. On-going. Four managers
manager search process.		retained effective 4/1/89.
C. Fixed Income		
1. Implement customized bond	Jul. 1988 - Mar. 1989	1. Enhanced Bond Index Fund in place.
index fund.		Decision to further customize postponed.
Review software vendors for dedicated bond portfolio rebalancing.	Oct. 1988 - Dec. 1988	Completed. Bankers Trust Company retained.
3. Complete development of bond	Oct. 1988 - Mar. 1989	3. Completed.
manager benchmark portfolios. 4. Review short-term portfolio	Oct. 1988 - Mar. 1989	4. Postponed. Included in FY 90 plan.
liquidity needs.		
5. Implement arbitrage earnings		5. New project assigned to Short-Term
<pre>program for state's general obligation bond proceeds.</pre>		<pre>portfolio staff. Program nearly complete.</pre>
D. Alternative Investments		
1. Conduct real estate portfolio	Jul. 1988 - Dec. 1988	1. Consultant report being evaluated by
review with special project		Alternative Investment Committee.
consultant.		Recommendations will be brought to the Board in June and Sep.
2. Investigate new investment	Jan. 1989 - Jun. 1989	2. Postponed.

vehicles for inclusion in

portfolios.

STATE BOARD OF INVESTMENT Management Plan Summary Report on FY 89 Initiatives

Implement Administrative Initiatives	FY 89 Plan Projected <u>Time Frame</u>	CurrentStatus
A. FY 90-91 Budget		
1. Develop budget proposal.	Jul. 1988 - Dec. 1988	1. Completed.
2. Seek approval.	Jan. 1989 - May 1989	2. In-progress.
B. Master Custodian		
1. Review services and	Jul. 1988 - Sept. 1988	1. Completed. State Street
associated costs.		Bank retained.
C. Northern Ireland Legislation		
1. Develop implementation plan.	Jul. 1988 - Dec. 1988	 Completed. Implementation will continue in FY 90.
D. South Africa Resolution		
1. Implement Phase IV.	Jan. 1989 - Jun. 1989	 Board revised resolution in March, 1989. Implementation will continue in FY 90.
E. SBI Investment Conference		
1. Plan conference agenda and	Jul. 1988 - Sept. 1988	1. Conference held Jan. 24, 1989.
make all necessary arrangements.2. Conduct conference.	Sept. 1988	
F. Deferred Compensation Plan	·	
T. Pererred dalperisación reali		
 Review SBI involvement in administration of plan. 	Oct. 1988 - Mar. 1989	 Issue brought to Administrativ Committee Feb., 1989. Review will take place in FY 90.
G. Consultant RFP		
1. Develop RFP.	Jan. 1989 - Mar. 1989	1. Completed.
2. Conduct search.	Apr. 1989 - Jun. 1989	2. On schedule.
H. Information Sessions for		
Supplemental Fund Participants		
 Plan and conduct information sessions around the state. 	On-going	1. On schedule.

Committee. Additional activity will take place in FY 90.

1. New project delegated to Proxy

1. Review by Proxy Committee.

.....

ATTACHMENT C

STATE BOARD OF INVESTMENT

FY 90 Management Plan Summary Proposed Initiatives

ı.	Imp	olei	ment Investment Strategies	Projected Time Frame
	A.	Ass	set Allocation	
		1.	Review structure of the Post Retirement Fund	Jul Dec.
		2.	Review feasibility of market timing strategies in the Basic Retirement Funds	Oct Jun.
		3.	Develop international equity program for the Basic Retirement Funds	
			o review rationale for international investing	Jul Dec.
			o develop program structure options	Jan Jun.
	в.	Eq	uities	
		1.	Implement new/replacement manager search process	On-going
		2.	Continue study of completeness fund alternatives	Jul Mar.
		3.	Review manager guidelines on an annual basis	Apr Jun.

STATE BOARD OF INVESTMENT

FY 90 Management Plan Summary Proposed Initiatives

ı.	Im	plement Investment Strategies (con't)	Projected Time Frame
	c.	Fixed Income	
		 Implement new/replacement manager search process 	On-going
		 Review feasibility of performance based fees for active bond managers 	Jan Jun.
		 Review and develop guidelines for use of private placement debt 	Oct Mar.
		4. Review manager guidelines on an annual basis	Apr Jun.
	D.	Alternative Investments	
		 Consider additional investments with new/existing managers 	On-going
		 Develop plans to address real estate study recommendations 	Jul Dec.
		 Review continued use of specialized consultants for alternative investment area 	Jul Sep.
	E.	Short Term Accounts	
		 Review liquidity needs of the short term cash accounts 	Jul Dec.
		 Develop guidelines for use of dollar- denominated international securities in the short term portfolios 	Sep Mar.

STATE BOARD OF INVESTMENT

FY 90 Management Plan Summary Proposed Initiatives

II.	<u>Im</u>	oleme	nt Administrative Initiatives	Projected Time Frame
	A.	Info	rmation and Education	
		1. C	onduct joint seminar for Board/IAC o review SBI investment policies	
			plan seminar hold seminar	Jul Sep. Sep.
			coordinate potential round table iscussions with SBI's external managers	On-going
			onduct investment conference for BI clientele	
			plan conference hold conference	Oct Dec. Jan Mar.
		S	conduct information sessions for supplemental Investment Fund user roups	On-going
	в.	Repo	orting	
		1. R	eview quarterly report format	Dec Jun.
		2. P	Prepare FY 1989 Annual Report	Sep Feb.

STATE BOARD OF INVESTMENT

FY 90 Management Plan Summary Proposed Initiatives

II.	Imp	olement Administrative Initiatives (con't)	Projected Time Frame
	c.	Proxy Committee	
		 Implement proxy voting procedures and guidelines 	On-going
		2. Implement Northern Ireland mandate	On-going
		3. Review opportunities for in-state investing	On-going
	D.	South Africa Task Force	
		1. Implement revised resolution on South Africa	On-going
	E.	Deferred Compensation Plan	
		1. Conduct review of current plan vendors	Jul Dec.
	F.	Legislation	
		1. Review need for SBI housekeeping bill for 1990 legislative session	Sep Dec.
	G.	Management and Budget Plan	
		1. Execute FY 1990 plan	Jul Jun.
		2. Prepare FY 1991 plan	Mar Jun.

ATTACHMENT D

STATE BOARD OF INVESTMENT

Administrative Budget Fiscal Year 1990-91 Appropriation Overview

The SBI's FY 90-91 budget request reflected a "same level" budget. Action on the request is shown below:

	FY 90	<u>FY 91</u>
SBI Request Addition for health insurance	\$1,707,000 20,000	\$1,707,000 20,000
Governor's Recommendation	\$1,727,000	\$1,727,000
Appropriation	\$1,692,000	\$1,692,000

The Governor's recommendation increased the SBI's request by the increased cost of employee health insurance. The 1989 Legislature appropriated the Governor's recommendation less a 2% (\$35,000) decrease. Proposed allocation of the reduction is outlined below:

Personnel Costs (reduce by \$16,000/yr.)

The original budget request included an amount to fund anticipated severance costs. Any severence costs occurring during the biennium will be absorbed by leaving the position vacant long enough to pay the severence benefit.

Expense and Contractual Services (reduce by \$2,500/yr.)

The cost of repairs will be reduced by removing some equipment from maintenance contracts. Printing costs will be reduced by cutting the number of Supplemental Fund Prospectus that are printed and by reducing the cost of printing the annual report.

These decreases will be offset by an expected increase in Attorney General services that will be billed to the SBI during the biennium.

Miscellaneous Operating Expenses (reduce by \$10,000/yr.)

The allocations for communication, in-state travel and out-state travel will be reduced in each year.

Equipment (reduce by \$5,000/yr.)

The equipment budget will be reduced by the amount that was unallocated in the proposed equipment budget.

Unallocated Reduction (\$1,500/yr.)

The above reductions total \$33,500. The remaining \$1,500 will be allocated during the coming months. Some salary savings may be realized by leaving a position vacant during some portion of a maternity leave.

Salary Supplement

The SBI's appropriation amount will be increased when the Department of Finance allocates the salary supplement appropriation provided by the Legislature. This will occur after contract negotiations are completed by the Department of Employee Relations.

FISCAL YEARS 1990 - 1991 BIENNIAL BUDGET GENERAL FUND SUMMARY ADJUSTED FOR ACTUAL APPROPRIATION

DESCRIPTION

TOTAL PERBONAL BERVICES	EXPENSES & CONTRACTUAL SERVICES	RENTS & LEASES	REPAIRS/ALTERATIONS/MAINTENANCE	PRINTING & BINDING	PROFESSIONAL/TECHNICAL SERVICES	DATA PROCESSING & SYSTEM SERVICES	PURCHASED SERVICES
ģ	E			*	£	¥	2

TOTAL MISCELLANEOUS OPERATING EXPENSES

SUPPLIES/NATERIALS/PARTS

CAPITAL EQUIPMENT UNALLOCATED REDUCTION

TOTAL

226,000 0 226,000 0 1,067,000 0 0 0 1,067,000 0 0 16,000 0 0 16,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000 000 0 0 0 0 0 0 0 0 0
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-1,500	-1,500
1,727,000 -35,000 1,727,000	,000 -35,000

ATTACHMENT E

DATE: May 1989

POSITION DESCRIPTION: Executive Director

Minnesota State Board of Investment

POSITION PURPOSE:

The position is The Executive Di the Minnesota St

The individual Mester Copy To Mester

goals for return risk, the purpos

ites Section 11A.07. reports directly to

16 implementation, policies determined activities of an and communicating lature, pension fund 3) and others.

meet or exceed the itisfy, with prudent SBI is responsible.

DUTIES AND RESPO

- Development of Investment Policies A.
 - Develop and recommend investment policies that meet the controlled by the need of each fund The policies shall address:
 - Risk tolerance. a.
 - Long term investment objectives. b.
 - Long term asset allocation strategy. c.
 - d. Asset class targets.
 - Performance standards for the total fund, asset e. class segments, and individual managers.
 - Re-balancing strategy. f.
 - Develop and recommend an appropriate investment management structure for each fund that meets the This shall investment policies outlined above. consider:
 - Mix of active and passive management. a.
 - Use of internal or external managers b.

- c. Types of investment vehicles (e.g., publicly traded securities, private placements, commingled funds, limited partnerships).
- d. Custody relationships.
- e. Brokerage relationships.
- 3. Assess developments within the financial markets that may positively or negatively affect the ability of the funds to meet their long term goals/liabilities. Where appropriate, recommend modifications to the SBI's statutory authority or investment policies that take these developments into account and seek approval for those changes.
- B. Implementation of Investment Policies Approved by the SBI.
 - 1. Develop appropriate procedures for selecting investment managers, custodians and consultants necessary to implement the SBI's investment plan for each fund.
 - 2. Ensure that applicable policies are communicated to each internal and external investment manager retained by the SBI.
 - 3. Allocate and re-balance assets and contributions among the investment managers for each fund on an on-going basis.
- C. Review and Control of Investment Policies
 - 1. Assure that investment policies are regularly reviewed by the SBI.
 - 2. Evaluate the performance of each fund relative to the policies established by the SBI and recommend corrective action, where appropriate.
 - Monitor the activities of internal and external investment managers to ensure they adhere to established policies.
 - 4. Develop and administer systems to evaluate the performance of individual investment managers retained by the SBI.
- D. Administration and Management of Staff Operations
 - 1. Prepare the SBI's biennial budget within guidelines established by the Department of Finance, present the budget to the SBI for review, seek legislative approval of the SBI's budget request and manage its execution.

- 2. Prepare an annual management and budget plan for the SBI's review and approval and manage its execution.
- 3. Retain, supervise, and evaluate all SBI staff and, when necessary, discipline and terminate employees. Staff compensation is governed by applicable contracts and plans established by the Department of Employee Relations.
- 4. Negotiate favorable terms with contractors and vendors for goods and services. Contractual relationships are governed by the applicable law and the rules of the Department of Administration.
- 5. Maintain accurate and complete records of all financial transactions and official activities of the SBI.
- 6. Apportion actual expenses among the funds managed by the SBI according to statutory requirements.

E. Communication and Reporting

- 1. Prepare quarterly reports on investment results and the status of the management and budget plan for review by the SBI, the IAC and the SBI's consultant.
- 2. Meet with the SBI and the IAC on a quarterly basis and at other times as required.
- 3. Prepare the SBI's annual report. Financial statements shall be prepared according to generally accepted accounting principles.
- 4. Meet with pension fund trustees and other clientele whose assets are managed by the SBI on a regular basis, or as requested, concerning the SBI's activities and investment performance.
- 5. Meet with representatives of the local and national financial community.
- 6. Testify before legislative committees as required. Meet with legislators as needed to discuss issues of importance to the SBI.
- 7. Respond promptly to special requests for information from the SBI, Legislature, pension funds, IAC and other interested parties, including the press.
- 8. Provide educational forums for the SBI and others, in conjunction with the IAC and the SBI's consultant, concerning investment issues and policy alternatives.
- 9. Plan and conduct conferences or seminars for the SBI or its clientele annually or as requested by the SBI.

ATTACHMENT E (con't)

10. Prepare other reports as requested by the SBI or required by the Legislature or by law.

Approximate Allocation of Time

ı.	Development of Investment Policies	15%
2.	Implementation of Investment Policies	15%
3.	Review and Control of Investment Policies	20%
4.	Administration and Management of Staff Operations	208
5.	Communication and Reporting	30 % 100%

ATTACHMENT F

ITEM LAID OVER AT THE BOARD MEETING ON MARCH 1, 1989

(Excerpt from Joint Fixed Income and Equity Manager Committee Report dated February 16, 1989)

Commitment to U.S. Government Guaranteed Agricultural Export Loan Program

First National Bank of Chicago has presented a proposal for the State Board of Investment (SBI) to purchase agricultural export loan participations. The proceeds would be used to finance commodity shipments that qualify under the guaranty program of the U.S. Commodity Credit Corporation. The program is designed to reduce export costs and thereby make U.S. export products more competitive on the world markets.

SBI funds would be used to purchase floating rate notes. Proceeds from the purchase would be used to support a loan only if Minnesota holds a significant market share of the export commodity.

The states of Wisconsin and North Dakota have committed to the program under similar terms. A number of other states are reviewing participation as well.

Proposed Commitment: \$30 Million

Proposed Terms:

- o up to 3-year floating rate notes
- o interest rate will be 50 basis points over 6 month U.S. Treasury Bills
- o interest will be paid semi-annually
- o principal will be paid annually

Guaranty:

- o principal is 100% guaranteed by the U.S. government
- o the first four and one-half percentage points of interest is quaranteed by the U.S. government

The Joint Committee concurs with a staff recommendation that the SBI commit \$30 million to the program from assets in the Treasurer's Cash Pool. The terms of the notes are compatible with the structure of the short-term state cash accounts and the proposed interest rate is competitive with other short-term investments. If fully utilized, the commitment would comprise approximately 2% of the average daily balance in the Treasurer's Cash Pool.

Recommendation:

The Joint Committee recommends that the SBI authorize the Executive Director, with assistance from legal counsel, to negotiate and execute a commitment of up to \$30 million to the First National Bank of Chicago Agricultural Export Loan Program sponsored by the U.S. Commodity Credit Corporation.

Tab E

MEMBERS OF THE BOARD:
GOVERNOR RUDY PERPICH
STATE AUDITOR ARNE H. CARLSON
STATE TREASURER MICHAEL A. McGRATH
SECRETARY OF STATE JOAN ANDERSON GROWE
ATTORNEY GENERAL HUBERT H. HUMPHREY III



STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Room 105, MEA Building 55 Sherburne Avenue Saint Paul 55155 (612) 296-3328

May 26, 1989

TO:

Members, State Board of Investment Members, Investment Advisory Council

FROM:

Equity Manager Committee

SUBJECT: Committee Report

The Committee met on May 8, 1989. The agenda items included:

- o Review of Active Manager Performance
- o Review of New Manager Funding
- o Renewal of Active Equity Manager Contracts

A summary of Committee discussion and recommendations for these agenda items follows.

INFORMATION ITEMS:

1) Review of Active Manager Performance

The Committee reviewed the performance reports for the active equity managers. No action is required by the Board since all current managers currently meet the established qualitative and quantitative guidelines. The value of active management (VAM) reports for each manager are attached.

The Committee noted that the current group of active managers has outperformed its aggregate benchmark by 1.7 percentage points on an annualized basis since January 1984. The current manager group has outperformed the Wilshire 5000 by 0.2 percentage points on an annualized basis during the same time period.

2) Review of New Manager Funding

At its March 1, 1989 meeting the Board approved a recommendation to retain Concord Capital, Franklin Portfolio, Rosenberg Institutional Equity Management, and Sasco Capital. The recommendation called for each manager to be funded with an initial portfolio of \$100 million from the index fund.

The four new equity managers were funded on April 3, 1989. The Committee reviewed the funding program undertaken by staff. A summary of the process is contained in Attachment A.

ACTION ITEM:

1) Renewal of Active Manager Contracts

Contracts with seven of the Board's active common stock managers expire on June 30, 1989. Consistent with the results of the manager reviews cited above, the Committee recommends the contracts be renewed.

RECOMMENDATION:

The Committee recommends that the Board authorize the Executive Director, with assistance from the Board's legal counsel, to negotiate and execute contract extensions with:

- o Alliance Capital Management
- o BMI Capital Management
- o Forstmann Leff Associates
- o IDS Advisory
- o Investment Advisers, Inc.
- o Lieber & Co.
- o Waddell & Reed

Further, the Committee recommends that all contracts be subject to the standard 30 day cancellation clause and that all firms continue to be compensated using the current performance-based fee formula.

MEMBERS OF THE BOARD:
GOVERNOR RUDY PERPICH
STATE AUDITOR ARNE H. CARLSON
STATE TREASURER MICHAEL A. McGRATH
SECRETARY OF STATE JOAN ANDERSON GROWE
ATTORNEY GENERAL HUBERT H. HUMPHREY III



EXECUTIVE DIRECTOR HOWARD J. BICKER

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Room 105, MEA Building 55 Sherburne Avenue Saint Paul 55155 (612) 296-3328

May 5, 1989

TO:

Members, IAC Equity Manager Committee

FROM:

Doug Gorence

SUBJECT: Summary of New Manager Funding

At its March 1, 1989 meeting the Board approved a recommendation by the Joint Equity/Fixed Income Manager Committee to retain Concord Capital, Franklin Portfolio, Rosenberg Institutional Equity Management, and Sasco Capital. The recommendation called for each manager to be funded with an initial portfolio of \$100 million from the index fund.

During March, staff, with assistance from the SBI's legal counsel, negotiated contracts and performance-based fees with each of the four managers. In addition, mutually agreed upon benchmark portfolios were established for each manager and delivered to Richards & Tierney.

On April 3, 1989, each of the four new domestic equity managers was funded with \$100 million from the index fund. The initial \$100 million portfolio consisted of a combination of inkind stock transfers and cash from the index fund. Because of the index fund's large market value and large number of holdings, the majority of each manager's initial portfolio was provided in the form of stock. The market value of the in-kind stock transfers for each manager is provided below. The securities transferred were priced as of 3/31/89.

Manager	Value of Stock	# of Stocks	Cash
Concord Capital	\$95,836,196	91 74	\$ 4,163,804 7,801,617
Franklin Portfolio Rosenberg Institutional	92,198,383 87,144,175	309	12,855,825
Sasco Capital	80,457,312	25	19,542,688

ATTACHMENT A (con't)

Also, on April 3, 1989, \$180 million in cash was transferred from the Basic Funds' cash to the index fund as a result of the revised policy asset allocation targets adopted by the Board. This contribution reduced the net withdrawal from the index fund to \$220 million.

Using the index fund as a transitional manager can greatly reduce the transaction costs associated with active manager terminations and funding. Through in-kind transfers of stock, the initial cash position held by the active managers is kept closer to their desired level and the fund does not incur high transactions costs in order to build the initial portfolio. In addition, the impact of cash on manager performance is reduced.

Using the index fund as a transitional manager raises the possibility of increased tracking error in the index fund. On an on-going basis, staff will review with the Committee any tracking error that exceeds normal expectations.

ACTIVE EQUITY MANAGERS

Value of Active Management Reports

First Quarter 1989

Common stock manager returns are evaluated against the performance of customized indices constructed to represent the managers' specific investment approaches. These custom indices are commonly referred to as "benchmark portfolios." The benchmark portfolios take into account the equity market forces that at times favorably or unfavorably impact certain investment styles. Thus, benchmark portfolios are the appropriate bogeys against which to judge the managers' performance.

Manager performance relative to benchmarks is evaluated on a quarterly basis by the Equity Manager Committee of the Investment Advisory Council.

Staff Recommendations

Staff recommends the following actions concerning manager status:

• No action required.

Managers	Market Value 3/31/89 (Thousands)	Qua End 3/31 Actual	ling 1/89	Caler Yes To D Actual	ar Pate	Yea Endi 3/31/ Actual	ng 89	(Annua Sin 1/1/ Actual	ce 84
Alliance	\$ 325,149	10.0%	6.7%	10.0%	6.7%	17.0%	13.6%	17.4%	11.7%
BMI	81,979	8.2	8.2	8.2	8.2	10.5	15.6	9.8	11.8
Forstmann	184,842	8.3	6.3	8.3	6.3	11.9	14.2	14.9	12.1
IDS	145,309	8.2	6.6	8.2	6.6	13.3	15.2	14.6	14.7
IAI	105,274	7.4	6.4	7.4	6.4	13.3	16.8	13.3	14.9
Lieber & Co.	105,227	7.2	7.1	7.2	7.1	13.2	13.7	12.9	11.3
Waddell & Reed	149,386	5.2	6.5	5.2	6.5	7.4	11.6	11.0	11.2
Aggregate Active*		8.2	6.8	8.2	6.8	13.0	14.2	14.9	13.2
Wilshire 5000			7.4%		7.4%		17.3%		14.7%

^{*} Historical performance reflects composite of current managers only.

ALLIANCE CAPITAL MANAGEMENT

PORTFOLIO MANAGER: Jack Koltes

ASSETS UNDER MANAGEMENT: \$325,149,005

INVESTMENT PHILOSOPHY

Alliance searches for companies likely to experience high rates of earnings growth, on either a cyclical or secular basis. Alliance has invested in a wide range of growth opportunities from small, emerging growth to large, cyclically sensitive companies. There is no clear distinction on the part of the firm as to an emphasis on one particular type of growth company over another. However, the firm's decision-making process appears to be much more oriented toward macroeconomic considerations than is the case with most other growth managers. Accordingly, cyclical earnings prospects, rather than secular, appear to play a larger role in terms of stock selection. Alliance is not an active market timer, rarely raising cash above minimal levels.

QUALITATIVE EVALUATION (Reported By Exception)

The firm's exceptional strengths continue to be:

- Highly successful and experienced professionals.
- Organizational continuity and strong leadership.
- Well-acquainted with needs of large clients.
- Investment style consistently and successfully applied over a variety of market environments.

QUANTITATIVE EVALUATION

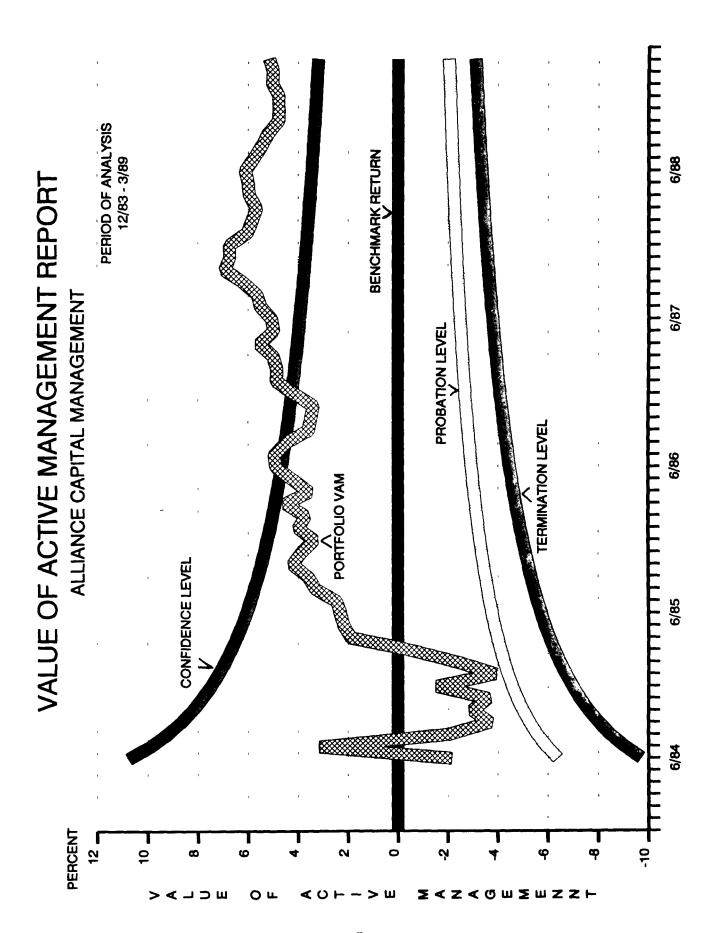
Performance Relative to Benchmark Calendar

		;		:
	Latest	Year	Latest	Since 1/1/84
		To Date		Annualized
Alliance Capital Actual	10.0%	10.0%	17.0%	17 4%
Alliance Capital Benchmark		6.7	13.6	11.7

STAFF RECOMMENDATIONS

No action required.

(See Value of Active Management graph below)



BMI CAPITAL MANAGEMENT

ASSETS UNDER MANAGEMENT: \$81,978,814

PORTFOLIO MANAGER: Frank Houghton, James Awad

INVESTMENT PHILOSOPHY

BMI's investment approach focuses on companies expected to exhibit "ong sustained earnings gains. BMI attempts to identify two types of "growth" companies: first, misperceived companies that are in the process of undergoing dynamic changes that will cause them to produce materially higher earnings over the near-term; and, second, small-to-medium sized companies that exhibit the potential for rapid future earnings growth. The weighting of the two types of growth companies within the firm's portfolio will vary over time depending upon economic and financial conditions. Generally, however, the misperceived companies will make up the majority of the portfolio. On the other hand, the smaller high growth companies tend to dominate the portfolio's risk characteristics. The firm concentrates almost exclusively on stock selection, only rarely raising cash to significant levels.

QUALITATIVE EVALUATION (Reported By Exception)

The previous evaluation noted several items of concern:

Lack of clearly identifiable leadership.

This issue, while not serious, warrants continued monitoring.

The firm's exceptional strengths continue to be:

Extensive securities research process.

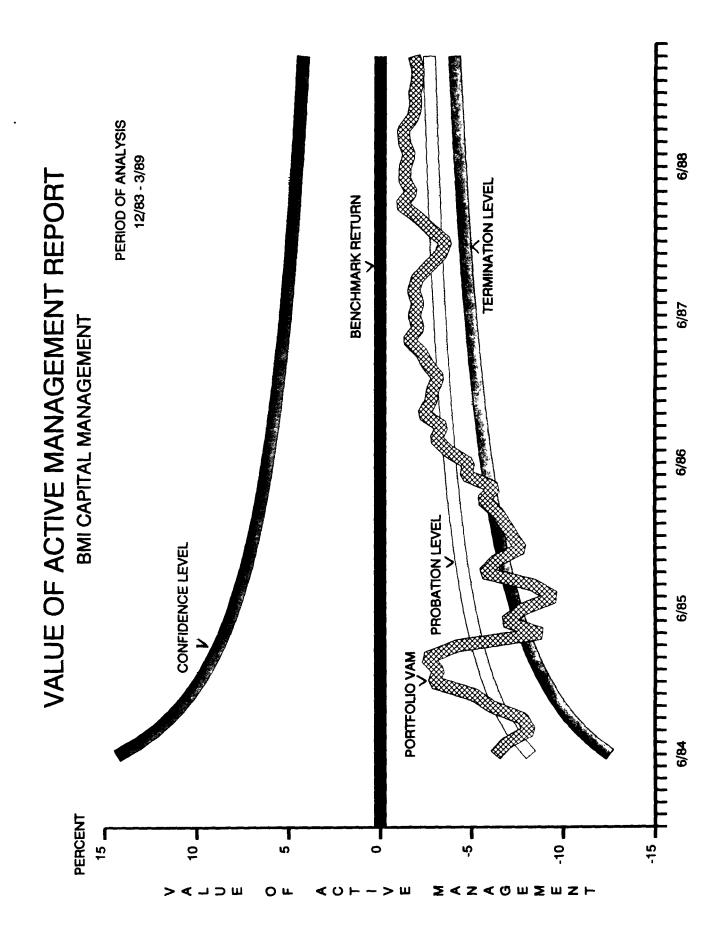
QUANTITATIVE EVALUATION

	Tenor	renormance Relative to Benchmark	tive to Be	nchmark
		Calendar		
	Latest	Year	Latest	Since 1/1/84
	Quarter	To Date	Year	Annualized
BMI Capital Actual	8.2%	8.2%	10.5%	10.5% 9.8%
BMI Capital Benchmark	8.2	8.2	15.6	11.8

(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.



PORTFOLIO MANAGER: Joei Left

FORSTMANN LEFF ASSOCIATES

ASSETS UNDER MANAGEMENT: \$184,841,873

INVESTMENT PHILOSOPHY

Forstmann Leff is a classic example of a "rotational" manager. The firm focuses almost exclusively on asset mix and sector weighting decisions. Based upon its macroeconomic outlook, the firm will move aggressively into and out of asset classes and equity sectors over the course of a market cycle. The firm tends to purchase liquid, large capitalization stocks. Forstmann Leff will make sizable market timing moves at any point during a market cycle.

QUALITATIVE EVALUATION (Reported By Exception)

The previous evaluation noted several items of concern:

Relatively high turnover among firm's professionals.

This issue, while not serious, remains outstanding.

The firm's exceptional strengths continue to be:

- Highly successful and experienced professionals.
- Investment style consistently and successfully applied over a variety of market environments.
- Well-acquainted with needs of large clients.

QUANTITATIVE EVALUATION

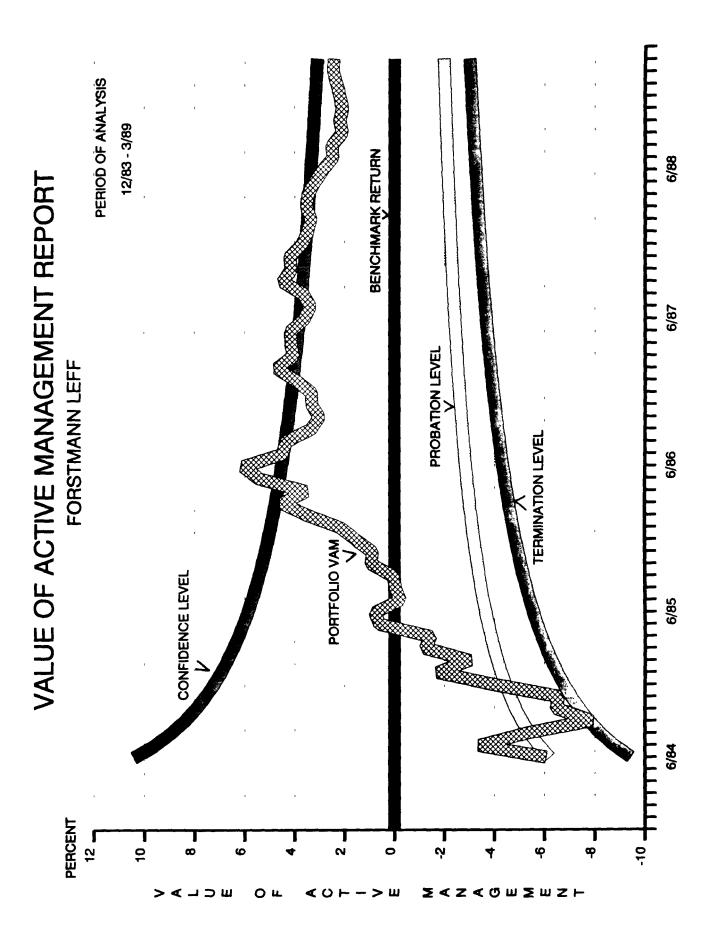
Performance Relative to Benchmark Calendar

	Latest	Year	Latest	Since 1/1/84
	Quarter	To Date	Year	Annualized
Forstmann-Leff Actual	8.3%	8.3%	11.9%	14.9%
Forstmann-Leff Benchmark	6.3%	6.3	14.2	12.1

(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.



PORTFOLIO MANAGER: Mitzi Malevich

IDS ADVISORY

ASSETS UNDER MANAGEMENT: \$145,309,021

INVESTMENT PHILOSOPHY

timing is also used. Over a market cycle IDS will invest in a wide range of The firm emphasizes primarily sector weighting decisions. Moderate market make occasional significant asset mix shifts over a market cycle, the firm is a IDS employs a "rotational" style of management, shifting among industry sectors based upon its outlook for the economy and the financial markets. industries. It tends to buy liquid, large capitalization stocks. While IDS will less aggressive market timer than most rotational managers.

QUALITATIVE EVALUATION (Reported By Exception)

The previous evaluation noted several items of concern:

- Growth plan not in place.
- Account load for portfolio managers is large.

These items remain outstanding and, while not serious, should continue to be monitored.

The firm's exceptional strengths continue to be:

 Investment style consistently and successfully applied over a variety of market environments.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

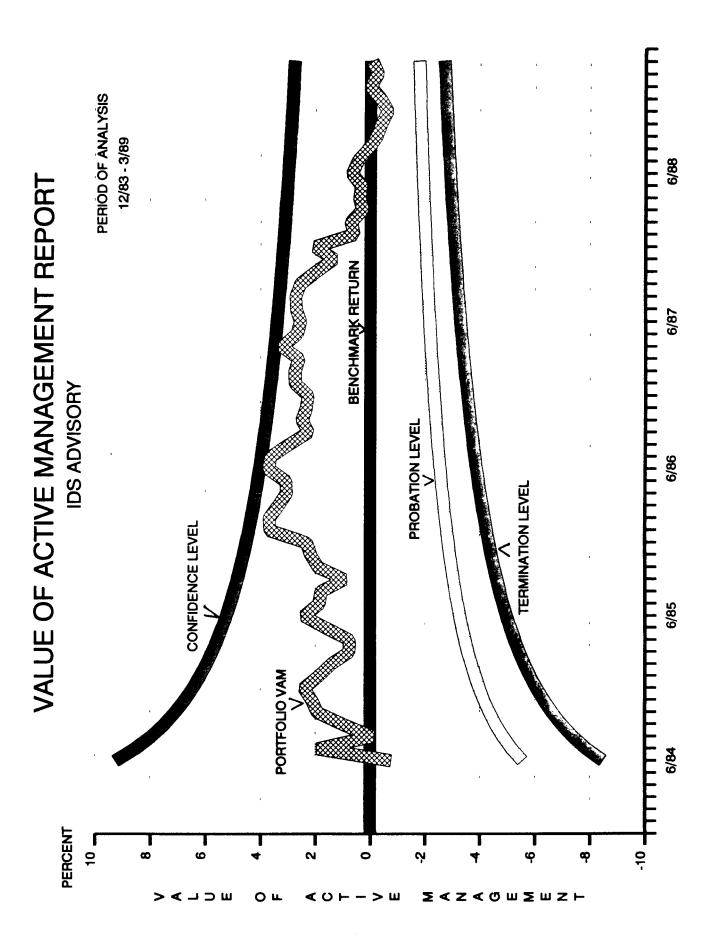
Since 1/1/84 Annualized 14.6% Latest 13.3% Year Calendar To Date Year 8.2% Quarter Latest 8.2% 6.6% IDS Advisory Benchmark

IDS Advisory Actual

STAFF RECOMMENDATIONS

No action required.

(See Value of Active Management graph below)



PORTFOLIO MANAGER: Charles Webster

INVESTMENT ADVISERS

ASSETS UNDER MANAGEMENT: \$105,274,127

INVESTMENT PHILOSOPHY

Investment Advisers is a "rotational" manager. Its macroeconomic forecasts drive its investment decision-making. The firm emphasizes market timing and sector weighting decisions. Investment Advisers will invest in a wide range of industries over a market cycle. It tends to hold liquid, medium to large capitalization stocks. The firm is an active market timer, willing to make gradual but significant asset mix shifts over a market cycle.

QUALITATIVE EVALUATION (Reported By Exception)

The previous evaluation noted several items of concern:

- Growth plan not in place.
- Lack of familiarity with needs of large institutional clients.

The first item, while not serious, warrants additional monitoring. While the firm continues to address the second issue, staff believes additional monitoring is warranted.

The firm's exceptional strengths continue to be:

 Investment style consistently applied over a variety of market environments.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark Calendar

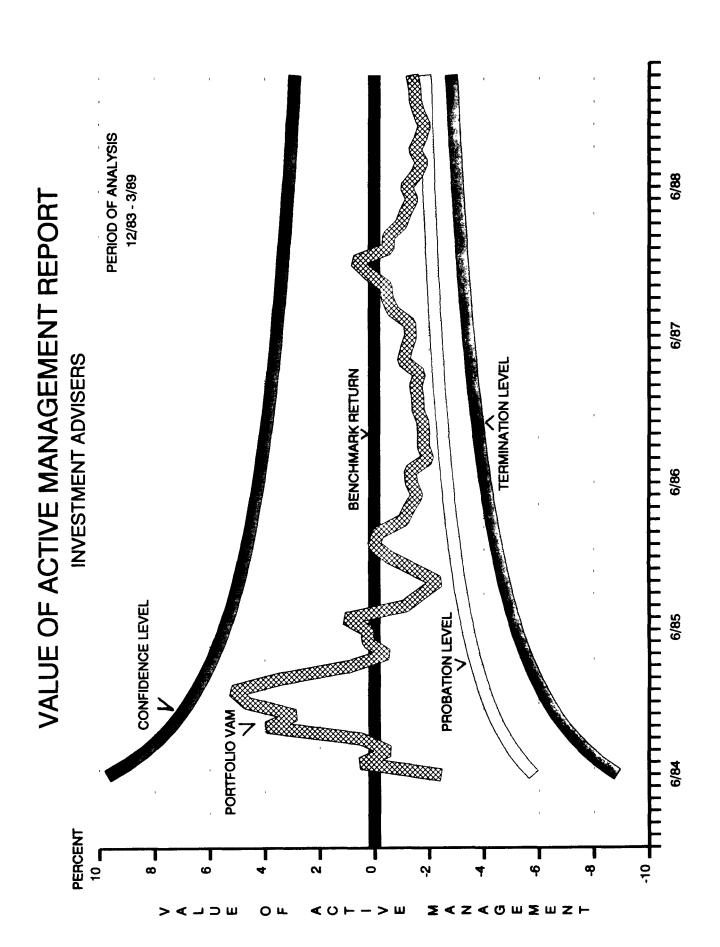
	Latest	Year	Latest	Since 1/1/84
	Quarter	To Date	Year	Annualized
IAI Actual	7.4%	7.4%	13.3%	13.3%
IAI Benchmark	6.4	6.4	16.8	14.9

(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

- 14 -



LIEBER & COMPANY

ASSETS UNDER MANAGEMENT: \$105,227,003

PORTFOLIO MANAGER: Stephen Lieber, Nola Falcone

INVESTMENT PHILOSOPHY

small-to-medium size takeover candidates. The firm generally is fully concepts. The investment concepts upon which the firm focuses are related to both macroeconomic trends and specific product developments within 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 Lieber and 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 particular industries or companies. Stocks purchased by Lieber tend to be those of well-managed, high growth and high return on equity, invested, with any cash positions the result of a lack of attractive investment concepts

QUALITATIVE EVALUATION

The previous evaluation noted several items of concern:

- Firm is unfamiliar with needs of large clients.
- No analysis of performance relative to benchmark.

The first item, while not serious, warrants additional monitoring. The second issue has been satisfactorily resolved.

The firm's exceptional strengths continue to be:

- Organizational continuity and strong leadership.
- Attractive, unique investment approach.
- Investment style consistently and successfully applied over a variety of market environments.
- Extensive securities research process.

QUANTITATIVE EVALUATION

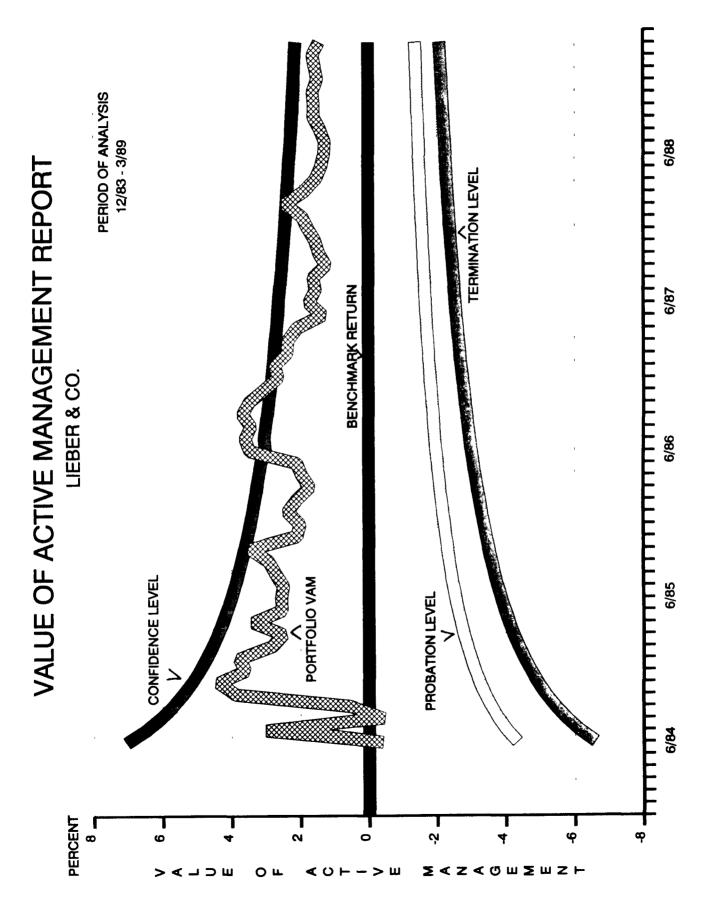
1/84 Performance Relative to Benchmark Calendar

	Latest	Year	Latest	Since 1/1/84
	Quarter	To Date	Year	Annualized
Lieber & Co. Actual	7.2%	7.2%	13.2%	12.9%
Lieber & Co. Benchmark	7.1	7.1	13.7	11.3

(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.



WADDELL & REED

PORTFOLIO MANAGER: Henry Herrman

ASSETS UNDER MANAGEMENT: \$149,385,962

INVESTMENT PHILOSOPHY

Waddell & Reed focuses its attention primarily on smaller capitalization growth stocks, although the firm has been very eclectic in its choice of stocks in recent years. However, the firm has demonstrated a willingness to make significant bets against this investment approach for extended periods of time. The firm is an active market timer and will raise cash to extreme levels at various points in the market cycle.

QUALITATIVE EVALUATION (Reported By Exception)

The previous evaluation noted several items of concern:

 Insufficient effort to understand performance relative to an appropriate benchmark. While the firm has made significant progress in its effort to resolve this issue, staff believe additional monitoring is warranted.

The firm's exceptional strengths continue to be:

Highly successful and experienced professionals.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark Calendar

 Latest
 Year
 Latest
 Since 1/1/84

 Quarter
 To Date
 Year
 Annualized

 Waddell & Reed
 5.2%
 5.2%
 7.4%
 11.0%

 Waddell & Reed Benchmark
 6.5
 6.5
 11.6
 11.2

(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

10

PERIOD OF ANALYSIS 12/83 - 3/89 VALUE OF ACTIVE MANAGEMENT REPORT **TERMINATION LEVEL** 28/9 WADDELL & REED PROBATION LEVEL CONFIDENCE LEVEL 6/85 PORTFOLIO VAM BENCHMARK RETURN PERCENT 0 -1 0-ا 8 5 우 15 1 ιŲ

Tab F

MEMBERS OF THE BOARD:
GOVERNOR RUDY PERPICH
STATE AUDITOR ARNE H. CARLSON
STATE TREASURER MICHAEL A. McGRATH
SECRETARY OF STATE JOAN ANDERSON GROWE
ATTORNEY GENERAL HUBERT H. HUMPHREY III



EXECUTIVE DIRECTOR HOWARD J. BICKER

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Room 105, MEA Building 55 Sherburne Avenue Saint Paul 55155 (612) 296-3328

May 26, 1989

TO:

Members, State Board of Investment Members, Investment Advisory Council

FROM:

Fixed Income Manager Committee

SUBJECT: Committee Report

The IAC Fixed Income Manager Committee met on May 16, 1989 to review the following agenda:

- o Review of Active Manager Performance
- o Review of Semi-Passive Manager Performance
- o Update on Dedicated Bond Portfolio Rebalancing
- o Review of Updated Active Manager Investment Guidelines
- o Renewal of Active Manager Contracts
- o Renewal of Semi-Passive Manager Contracts

INFORMATION ITEMS:

1) Review of Active Manager Performance

The Committee reviewed the performance reports for the active bond managers. No action is required by the Board since all managers meet the established qualitative and quantitative guidelines. The value of active management (VAM) reports for each manager are attached.

All five active managers met or exceeded their benchmarks in the recent quarter. For the past year, the active manager aggregate performance was 6.1%, 0.9 percentage points above the Salomon BIG Index during the period. Western Asset continues to be the top performing manager.

This reporting period represents the first time the new benchmarks for Investment Advisors, Morgan Stanley and Miller Anderson have been incorporated in the VAM analysis.

2) Review of Semi-Passive Manager Performance

Both Fidelity and Lincoln have generated returns above the Salomon Broad Investment Grade (BIG) Index for the nine month period since they were retained. The cumulative return for Fidelity is 4.07% and for Lincoln is 4.3%. The index return over this time was 3.96%. This performance level is consistent with expectations of an annual return enhancement of 10 to 25 basis points over the index.

3) Update on Dedicated Bond Portfolio Rebalancing

As previously reported, the Post Fund did not have sufficient cash reserves in December 1988 to cover the entire newly projected liability stream for the dedicated bond portfolio. At that time, staff opted to fund 100% of all liabilities for the first 10 years and 70% of the remaining liabilities.

During March 1989, staff undertook a \$135,000,000 purchase program to complete funding of all projected liabilities. Reduction of the BEA Associates portfolio and excess interest income provided the source of funding. The purchase program was concentrated in zero coupon or strip securities achieving an average yield of 9.4%. With the addition of these securities, 100% of all projected liabilities have been funded.

4) Review of Updated Investment Management Guidelines

The Committee reviewed the active bond manager investment guidelines recently updated by staff. The guidelines are used to govern and evaluate the investment actions of the Board's active domestic bond managers and are part of the investment management agreement between the Board and manager.

The original guidelines were established in 1984 when the external active manager program was initiated. The updated guidelines incorporate the role of benchmark portfolios and the evaluation of managers as provided in the Board's manager continuation policy. A copy of the updated investment guidelines is attached to this report (see Attachment A). The Committee concurs with the revisions.

ACTION ITEMS:

1) Renewal of Active Manager Contracts

All active bond manager contracts expire on June 30, 1989. Based on the qualitative and quantitative evaluations of the managers cited above, the Committee recommends the contracts be renewed.

RECOMMENDATION:

The Committee recommends the Board authorize the Executive Director, with assistance from the Board's legal counsel, to negotiate and execute contract extensions with the following five managers:

- o Investment Advisers
- o Lehman Management
- o Miller Anderson
- o Morgan Stanley
- o Western Asset Management

Further, the Committee recommends that all contracts be subject to the standard 30 day cancellation clause and that all managers continue to be compensated under the fee schedule currently in place.

2) Renewal of Semi-Passive Manager Contracts

Contracts with the SBI's two semi-passive/enhanced-index bond managers will expire on June 30, 1989. Consistent with the results of the manager reviews cited above, the Committee recommends the contracts be renewed.

Under the current contract, the semi-passive managers are compensated on a performance-based fee formula. The actual fee paid can range from a minimum of 3.5 basis points to a maximum of 11.5 basis points. Managers gain one basis point in fee for every ten points of excess return over the Salomon BIG Index.

During the past year, staff has reviewed the potential impact of this fee schedule and determined that it should be revised. Staff recommends that the new fee range from a minimum of 5.0 basis points to a maximum of 10.0 basis points. In addition, staff recommends that the manager's share of excess return be lowered to one basis point in fee for every fifteen basis points of excess return.

The impact of these changes will be to lower the expected fee payments under most probable outcomes and to limit the role of the performance component of the fee structure. Staff believes that these changes are consistent with the goal of a semi-passive investment approach.

RECOMMENDATION:

The Committee recommends that the SBI authorize the Executive Director, with assistance from SBI's legal counsel, to negotiate and execute contract extensions with:

- o Fidelity Management Trust
- o Lincoln Capital

Further, the Committee recommends that the contracts be subject to the standard 30 day cancellation clause and that the two managers be compensated using the revised performance-based fee formula outlined above.

MINNESOTA STATE BOARD OF INVESTMENT

INVESTMENT GUIDELINES EXTERNAL ACTIVE FIXED INCOME MANAGERS

The investment actions of State Board of Investment (SBI) external active fixed income managers will be governed and evaluated by the following guidelines:

1. RISK/RETURN OBJECTIVES

Each fixed income manager will be expected to produce portfolios which differ from the manager's benchmark portfolio in a manner consistent with their investment philosophy. These differences will be monitored on the key areas of duration, sector weighting, industry weighting, and coupon and company selection.

Over time, each fixed income manager will be expected to deliver cumulative annualized returns after fees 25 to 50 basis points above a predetermined benchmark portfolio return. Excess returns should be commensurate with portfolio risk as measured by annualized standard deviation.

2. ELIGIBLE INVESTMENTS

Each manager must provide and maintain a customized benchmark (normal) portfolio, agreed upon by both manager and SBI, for the purpose of performance evaluation and risk measurement. The benchmark portfolio provided by the manager must satisfy the following characteristics:

- (a) Unambiguous. The sectors and weights of sectors comprising the benchmark are clearly delineated.
- (b) Investable. The option is available to forego active management and simply hold the benchmark portfolio.
- (c) Measurable. It is possible to calculate the benchmark's return on a monthly basis.
- (d) Appropriate. The benchmark is consistent with the manager's investment style or biases.
- (e) Reflective of current investment opinions. The manager has current investment opinions (be they positive, negative, or neutral) on the securities which make up the benchmark.
- (f) Specified in advance. The benchmark must be available prior to the start of an evaluation period.

3. INVESTMENT PARAMETERS

The investment managers may hold fixed income instruments, fixed income index options and futures, and cash equivalents. The investments of each manager must satisfy the following criteria and constraints:

- (a) Government obligations of the U.S., its agencies, Canada, its provinces, or U.S. sponsored organizations must be payable in U.S. dollars and comply with the provisions of SBI investment guidelines 11A.24 subdivision 2.
- (b) U.S. and Canadian corporate obligations must be payable in U.S. dollars, be rated among the top four quality categories by a nationally recognized rating agency, and comply with all provisions of 11A.24 subdivision 3.
- (c) Other obligations not specified in (a) or (b) must meet the provisions of 11A.24 subdivision 4.
- (d) The use of fixed income index futures and options requires a separate commodities trading agreement between the SBI, manager, and CFTC clearing broker prior to commencement of trading.
- (e) Total portfolio duration must stay within a 3 to 7 year band.
- (f) Cash equivalent reserves shall be invested in the SBI's STIF fund, managed by its custodian bank.

Investment managers are not constrained regarding:

- (1) transaction turnover
- (2) use of covered call options as hedging devices
- (3) liquidity requirements
- (4) number of fixed income issues which must be held at any given point in time
- (5) the percentage of assets held in cash reserves (subject to constraint(e))
- (6) the use of fixed income index futures or options to adjust the effective total portfolio duration from 3 to 7 years.

4. PERFORMANCE EVALUATION

Manager performance will be evaluated according to the guidelines established in the SBI's Manager Continuation Policy. These guidelines assist the SBI in its decisions concerning retention and termination of investment managers.

5. COMMUNICATION

The SBI requires its investment managers to communicate with SBI staff on a regular basis.

- (a) On a semi-annual basis, managers will meet with staff to review the results of the manager's investment decision-making process. In reviewing past and current investment strategies and performance, the manager is expected to present the analysis relative to the benchmark portfolio.
- (b) On quarters between meetings, managers will call the SBI staff to review the results of the manager's investment decision-making process.
- (c) On a monthly basis, managers will provide SBI staff with a status report pertaining to the status of accounts, assets under management, and relevant personnel and ownership changes.

6. FUTURE MODIFICATIONS

The SBI reserves the right to modify these investment guidelines at any time to insure that the managers, both individually and collectively, are in compliance with Minnesota statutes and SBI policy. Managers will be notified in advance of changes to the investment guidelines.

Revised: May 1989

ACTIVE BOND MANAGERS

Value of Active Management Reports

First Quarter 1989

Fixed income manager returns are evaluated against the performance of customized indices constructed to represent the managers' specific investment approaches. These custom indices are commonly referred to as "benchmark portfolios." The benchmark portfolios factor in bond market influences that at times favorably or unfavorably impact certain investment styles. Thus, benchmark portfolios are the appropriate standards against which to judge the managers' performance.

Manager performance relative to benchmarks is evaluated on a quarterly basis by the Fixed Income Manager Committee of the Investment Advisory Council.

Staff Recommendations

Staff recommends the following actions concerning manager status:

• No action required.

Managers	Market Value 3/31/89 (Thousands)	Qua End 3/31 Actual	ling 1/89	Calei Ye To I Actual	ar Date	Yea Endi 3/31/ Actual	ng 89	(Annus Sir 7/1, Actua	ice
IAI	\$ 48,536	1.3%	1.1%	1.3%	1.1%	5.0%	5.1%	13.8%	13.4%
Lehman	109,619	1.3	1.2	1.3	1.2	6.1	5.1	12.8	12.8
Miller Anderson	163,193	1.4	1.2	1.4	1.2	6.6	5.2	14.1	13.8
Morgan Stanley	104,916	1.1	1.1	1.1	1.1	3.5	4.5	12.8	13.4
Western Asset	194,920	1.5	1.2	1.5	1.2	7.4	5.8	15.1	13.5
Aggregate Active		1.3	1.2	1.3	1.2	6.0	5.2	13.8	13.4
Salomon Broad Investment Grade	Index	1.2%		1.2%		5.2%		13.8%	,

PORTFOLIO MANAGER: Larry Hill

INVESTMENT ADVISERS

INVESTIMENT AL

ASSETS UNDER MANAGEMENT: \$48,535,586

INVESTMENT PHILOSOPHY

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 selection are secondary decisions. Quality and sector choices are made through yield spread analyses consistent with the interest rate forecasts. Individual security selection receives very limited emphasis, focusing largely on specific bond characteristics such as call provisions.

QUALITATIVE EVALUATION (Reported By Exception)

The current evaluation notes the following concern:

New benchmark adopted.

The SBI approved a customized benchmark for IAI at its December 1988 meeting. This issue deserves close monitoring over the next several quarters to judge the continuing appropriateness of the new benchmark and Investment Adviser's return relative to that benchmark.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

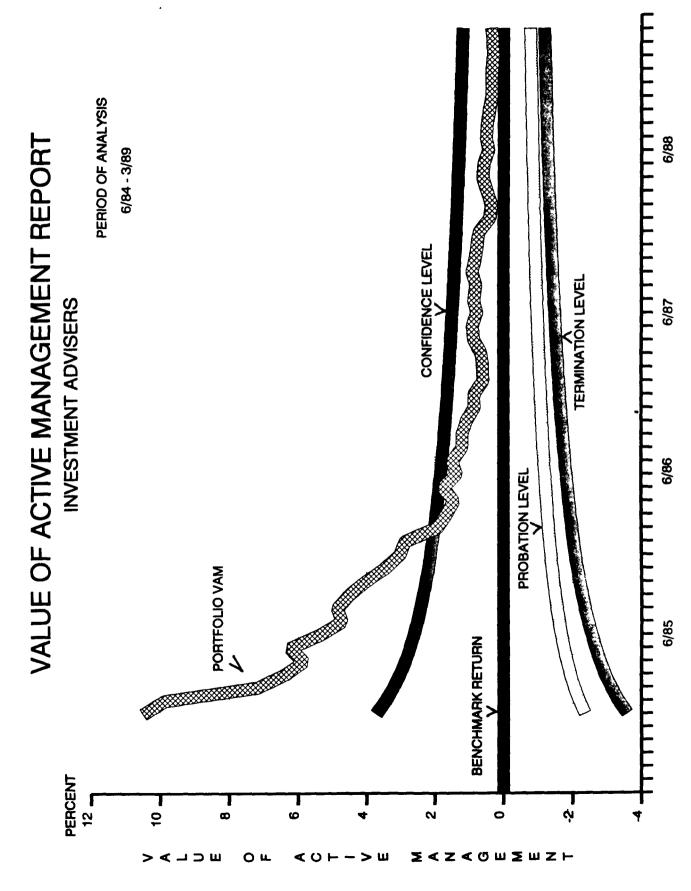
tage	Calendar Van	_	Ciamo Contra
Quarter	To Date	Year	Annualized
1.3%	1.3%		13.8%
1.1	1.1		13.4

(See Value of Active Management graph below)

IAI Actual IAI Benchmark

STAFF RECOMMENDATIONS

No action required.



LEHMAN MANAGEMENT

PORTFOLIO MANAGER: Paul Hutter

ASSETS UNDER MANAGEMENT: \$109,618,987

INVESTMENT PHILOSOPHY

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.

QUALITATIVE EVALUATION (Reported By Exception)

QUANTITATIVE EVALUATION

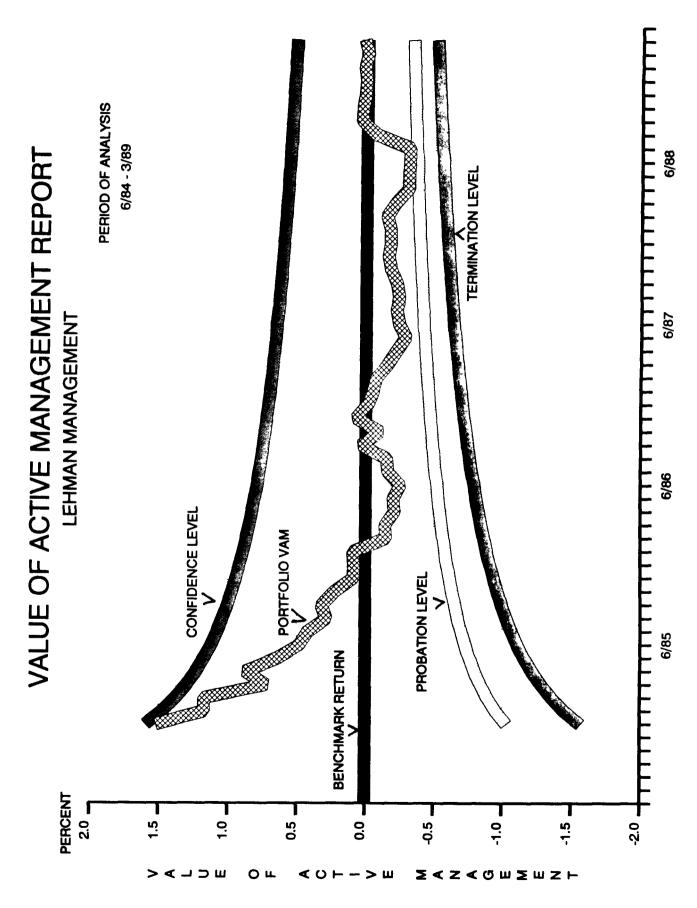
Performance Relative to Benchmark

STAFF RECOMMENDATIONS

No action required.

		Calendar		
	Latest	Year	Latest	Since 6/30/84
	Quarter	To Date	Year	Annualized
Lehman Actual	13%	1.3%	6.1%	12.8%
Lehman Benchmark	1.2	1.2	5.1	12.8

(See Value of Active Management graph below)



MILLER ANDERSON

ASSETS UNDER MANAGEMENT: \$163,193,134

PORTFOLIO MANAGER: Tom Bennet

INVESTMENT PHILOSOPHY

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 and specialized corporate securities in its portfolios. 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 securities and cash levels that are consistent with the portfolio's desired maturity. However, such moves are made gradually over an interest rate cycle and extremely high cash positions are never taken. Total portfolio maturity is always kept within an intermediate three-to-seven year duration band. Unlike 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.

QUALITATIVE EVALUATION (Reported By Exception)

The firm's exceptional strengths continue to be:

- Highly successful and experienced professionals.
- Extensive securities research process.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark Calendar Latest Year Latest Since 6/30/84 Quarter To Date Year Annualized 1.4% 1.4% 6.6% 14.1% 1.2 1.2 5.2 13.8

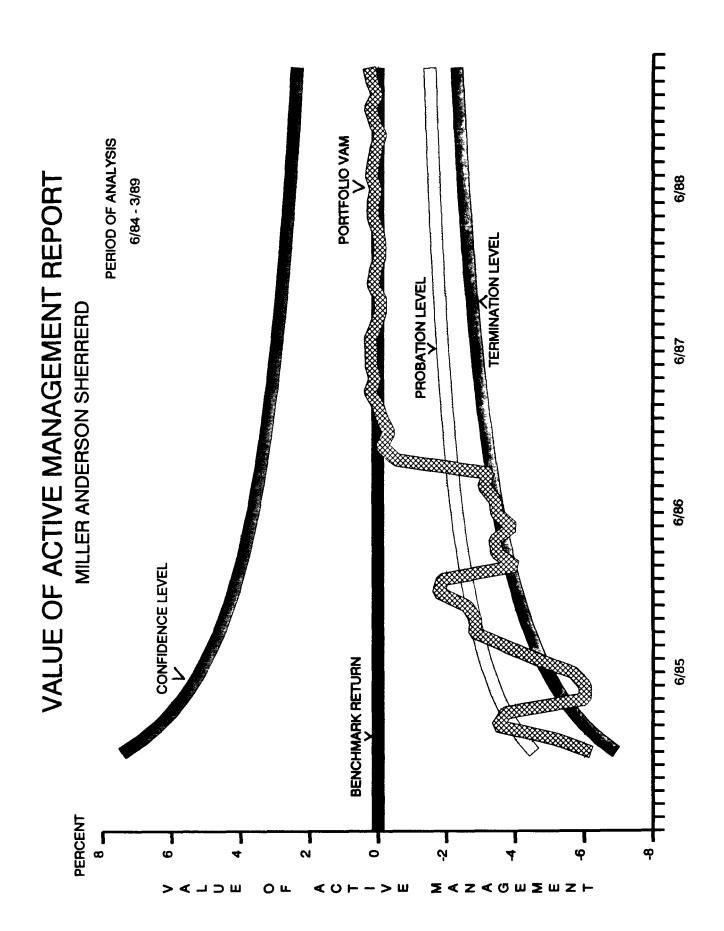
(See Value of Active Management graph below)

Miller Benchmark

Miller Actual

STAFF RECOMMENDATIONS

No action required.



MORGAN STANLEY

PORTFOLIO MANAGER: Geoffrey Gettman

ASSETS UNDER MANAGEMENT: \$104,916,323

INVESTMENT PHILOSOPHY

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

QUALITATIVE EVALUATION (Reported By Exception)

The current evaluation notes the following concern:

New benchmark adopted.

quarters to judge the continuing appropriateness of the new benchmark and Morgan Stanley's returns relative to that benchmark. 1988 meeting. This issue deserves close monitoring over the next several The SBI approved a customized benchmark for Morgan at its December

QUANTITATIVE EVALUATION

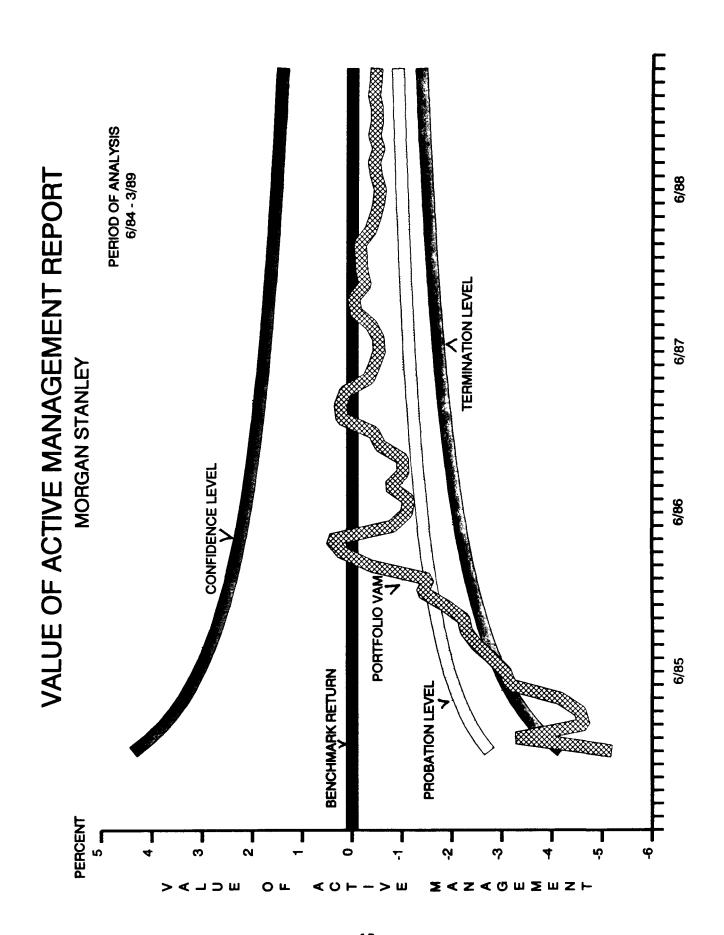
Performance Relative to Benchmark Calendar

	Latest	Year		Since 6/30/84
	Quarter	To Date		Annualized
Morgan Actual	1.1%	1.1%	3.5%	12.8%
Morgan Benchmark	1.1	1.1		13.4

(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.



WESTERN ASSET MANAGEMENT

ASSETS UNDER MANAGEMENT: \$194,919,706

PORTFOLIO MANAGER: Edgar Robie, Jr.

INVESTMENT PHILOSOPHY

forecasting, particularly short-run forecasting, is extremely difficult to Western recognizes the importance of interest rates changes on fixed income portfolio returns. However, the firm believes that successful interest rate accomplish consistently. Thus, the firm attempts to keep portfolio maturity 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 particular sectors, shifting these weights as economic expectations warrant. Issue selection, like maturity in a narrow band near that of the market, making only relatively small, decisions, are of secondary importance to the firm.

QUALITATIVE EVALUATION (Reported By Exception)

The firm's exceptional strengths continue to be:

- Highly successful and experienced professionals.
- Extensive research and understanding in the application of normal portfolios to bond management.

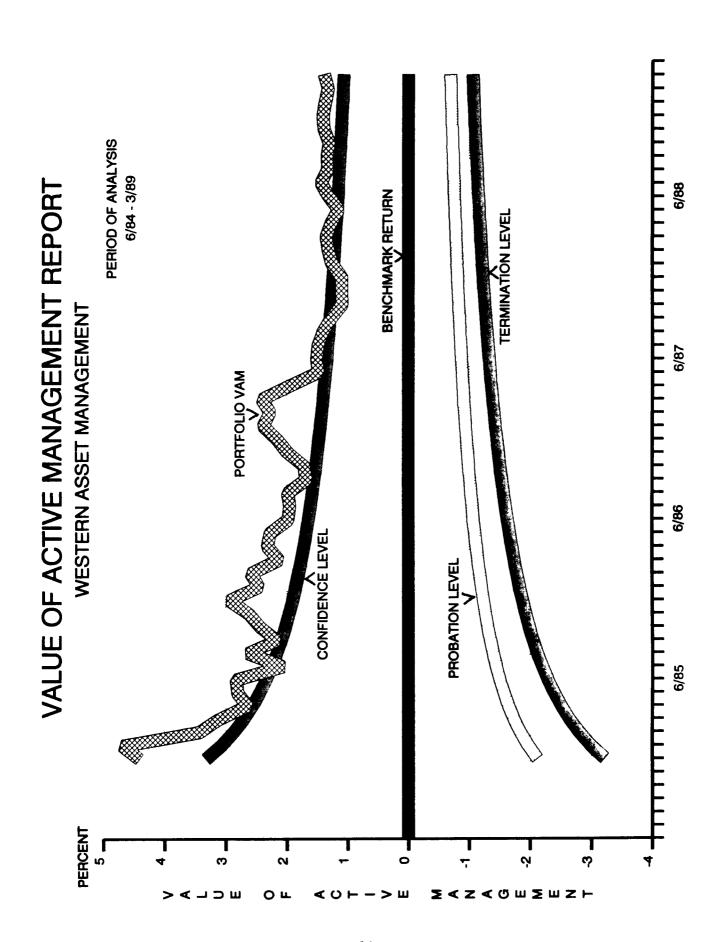
QUANTITATIVE EVALUATION

No action required.

STAFF RECOMMENDATIONS

	Perform	Performance Relative to Benchmark	ive to Ber	nchmark
		Calendar		
	Latest		Latest	Since 6/30/84
	Quarter	To Date	Year	Year Annualized
Western Actual	1.5%		7.4%	15.1%
Western Benchmark	1.2	1.2	2.8	13.5

(See Value of Active Management graph below)



Tab G

MEMBERS OF THE BOARD:
GOVERNOR RUDY PERPICH
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STATE TREASURER MICHAEL A. McGRATH
SECRETARY OF STATE JOAN ANDERSON GROWE
ATTORNEY GENERAL HUBERT H. HUMPHREY III



EXECUTIVE DIRECTOR HOWARD J. BICKER

STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Room 105, MEA Building 55 Sherburne Avenue Saint Paul 55155 (612) 296-3328

May 26, 1989

TO:

Members, State Board of Investment Members, Investment Advisory Council

FROM:

Alternative Investment Committee

SUBJECT: Committee Report

The Alternative Investment Committee met during the quarter to review the following information and action items:

- o Review of Current Strategy
- o Results of Annual Review Sessions with Real Estate
- o Status Report on Real Estate Study
- o Status Report on Indices for Alternative Assets
- o Renewal of Resource Consultant Contract

INFORMATION ITEMS:

1) Strategy Review

To increase overall portfolio diversification, 15% of the Basic Retirement Funds is allocated to alternative investments. Alternative investments include real estate, venture capital and resource investments where Minnesota State Board of Investment (SBI) participation is limited to commingled funds or other pooled vehicles. A chart summarizing the Board's current commitments is attached (see Attachment A).

The venture capital investment strategy is to establish and maintain a broadly diversified venture capital portfolio comprised of investments that provide diversification by industry type, stage of corporate development and location. To date, the SBI has committed to fourteen commingled venture capital funds for a total commitment of \$308 million.

The real estate investment strategy involves three steps. The first step calls for investment of 30-40% of the real estate portfolio in diversified open-end commingled funds. The second step calls for investment of 30-40% of the real estate portfolio in diversified closed-end commingled funds. The third step calls for investment of 20-30% of the real estate portfolio in less diversified, more focused (specialty) commingled funds. Currently, the SBI has committed \$385 million to twelve commingled real estate funds.

requires that investment resource strategy for The investments be made in resource investment vehicles that are specifically designed for institutional investors to provide diversification. additional hedge and inflation Individual resource investments will include proved producing oil and gas properties, royalties and other investments that are diversified geographically and by type. Currently, the SBI has committed \$130 million to eight commingled oil and gas funds.

2) Results of Annual Review Sessions

During April, the Alternative Investment Committee and staff conducted annual review sessions with four of the SBI's real estate managers:

- o Heitman Advisory Corporation (Heitman)
- o Rosenberg Real Estate Equity Funds (RREEF)
- o Trust Company of the West (TCW)
- o Aldrich, Eastman, Waltch (AEW/State Street)

Summaries of the review sessions are included as attachments B,C,D, and E to this committee report.

In aggregate, these managers represent approximately 59% of the SBI's total real estate holdings and approximately 5.3% of the Basic Retirement Funds as of 12/31/88. The SBI's total real estate portfolio was 9.0% of the Basic Funds on 12/31/88.

Generally, the meetings went well and produced no major surprises. The managers by and large are conforming to their originally stated investment strategies.

In comparing investment strategies, organizational effectiveness and performance to date, staff and the Alternative Investment Committee have been satisfied with the performance of Heitman, TCW, and AEW/State Street and would recommend additional investments with these managers, when appropriate.

The Committee and staff have been less satisfied with the investment performance of RREEF. Several investments in weak real estate markets have negatively impacted RREEF's investment performance since fund inception. At this time, the Alternative Investment Committee and staff do not recommend additional investments with RREEF.

3) Status Report on Real Estate Study

In June 1988, the SBI retained Laventhol & Horwath to conduct a special review of the SBI's real estate program. The final project report was received in May 1989. Major conclusions contained in the report are:

- o Real estate has provided the necessary return and diversification benefits to the SBI since the inception of the SBI's real estate investment program. More specifically, the SBI's real estate portfolio has provided an inflation hedge and contributed to reduced portfolio volatility.
- o The SBI should request withdrawal of its investment in PRISA in the most timely and efficient manner possible. The historic performance and risk profile of the PRISA investment does not provide sufficient added economic and diversification benefits to the SBI to warrant its continued presence in the portfolio.
- o Invest one-fourth of the remaining uncommitted real estate allocation in, at most, two specialized real estate commingled funds which can include specified property commingled funds or single property investments. The remaining three-fourths should be allocated to, at most, two investment managers that can implement specialized co-investment opportunities. Specialized co-investment opportunities can include partnerships of tax exempt investors who purchase either an individual or small number of properties on a deal-by-deal basis rather than on a blind pool basis.

The uncommitted real estate allocation referenced above includes approximately \$57 million from the uncommitted allocation to real estate and approximately \$66 million from the proposed withdrawal from PRISA.

o Change investment statutes to increase the SBI's allowable percentage participation in any one deal/fund to 25-35% from the current 20%. Also, decrease the required number of additional investor participants from four to two.

The full report was transmitted to all Board members and their designees on May 15, 1989.

In response to the report, the Alternative Investment Committee and staff plan to:

o Establish appropriate timing and method for withdrawal from the Prudential PRISA account.

Jul. - Aug. 1989

o Develop an action plan based on conclusions and recommendations in the real estate report concerning future real estate commitments.

Jul. - Aug. 1989

o Determine the continuing role, if any, for a real estate consultant.

Jul. - Aug. 1989

o Review proposed action plan with IAC and obtain Board approval.

Sept. 1989

o Implement priority directives.

Sept. 1989-Forward

4) Status Report on Selection of Indices for Alternative Assets

The Report of the Task Force on Fund Objectives was presented to the Board in February 1989. One of its recommendations called for the construction of a new composite index for the Basic Retirement Funds that includes appropriate indices for real estate, venture capital and resource funds.

The Committee reviewed several potential indices based on research presented by staff:

Real Estate

- Wilshire Associate Real Estate Index

- Frank Russell Real Estate Index

Venture Capital

- An index derived from returns reported by Venture Economics

Resource Funds

- An index reflecting changes in West Texas Intermediate Oil Prices

No conclusions have been reached at this time regarding the suitability of the above indices to serve as a component of the composite index. Discussions regarding these and other alternatives will continue into the next quarter. The Committee expects to finalize its recommendation on this issue prior to the Board's meeting in September 1989.

ACTION ITEM:

1) Renewal of Resource Consulting Contract

In June 1988, the SBI retained Gene Graham of the Sterling Group to provide consulting services regarding oil and gas investments at a cost not to exceed \$20,000 for the period of July 1, 1988 - June 30, 1989.

To date, billings under the contract total \$3,200. Ms. Graham has provided the SBI with valuable assistance on the following projects:

- o analysis of proposed commitment to J.P. Morgan Petroleum Fund
- o analysis of proposed commitment to Standard Alaska/British Petroleum Royalty Trust
- o review of reports concerning the SBI's investments with Apache Corporation

The Committee and staff have been very satisfied with Ms. Graham's performance. She has provided expertise regarding both new and existing investments that otherwise would have been unavailable to the SBI. The Committee believes the SBI should continue the consulting relationship.

More information on Ms. Graham and the current contract is included as Attachment F.

RECOMMENDATION:

The Committee recommends the Board authorize the Executive Director, with assistance from the Board's legal counsel, to negotiate and execute a one year contract renewal with Gene Graham of the Sterling Group for selected oil and gas project reviews at a cost not to exceed \$20,000. The Committee also recommends that the terms and conditions of the original contract remain essentially the same.

ATTACHMENT A

ALTERNATIVE EQUITY INVESTMENTS FIRST QUARTER 1989

	INCEPT	FUND SIZE	SBI		SBI-TO BE	
	DATE	(MILLIONS)	COMMITMENT	SBI-FUNDED	FUNDED	FUND DESCRIPTION
REAL ESTATE:						
Name and the second	•					
AETNA	Apr-82	\$1,573	\$40,000,000	\$40,000,000	\$0	OPEN END - DIVERSIFIED
EQUITABLE	Oct-81	\$3,613	\$40,000,000	\$40,000,000	\$0	OPEN END - DIVERSIFIED
HEITMAN I	Jun-84	\$113	\$20,000,000	\$20,000,000	\$0	CLOSED END - DIVERSIFIED
HEITMAN II	Oct-85	\$238	\$30,000,000	\$30,000,000	\$0	CLOSED END - DIVERSIFIED
HEITMAN III	Nov-86	\$200	\$20,000,000	\$20,000,000	\$0	CLOSED END - DIVERSIFIED
PRUDENTIAL	Sep-81	\$3,560	\$40,000,000	\$40,000,000	\$0	OPEN END - DIVERSIFIED
RREEF	Apr-84	\$773	\$75,000,000	\$75,000,000	\$0	CLOSED END - DIVERSIFIED
STATE STREET III	Jul -85	\$103	\$20,000,000	\$20,000,000	\$0	CLOSED END - SPECIALIZED
STATE STREET IV	Jul -86	\$86	\$15,000,000	\$15,000,000	\$0	CLOSED END - SPECIALIZED
STATE STREET V	Nov-87	\$82	\$15,000,000	\$15,000,000	\$0	CLOSED END - SPECIALIZED
TCW III	Jul -85	\$216	\$40,000,000	\$40,000,000	\$0	CLOSED END - SPECIALIZED
TCW IV	Sep-86	\$250	\$30,000,000	\$30,000,000	\$0	CLOSED END - SPECIALIZED
TOTAL R.E. PORTFOLIO			\$385,000,000	\$385,000,000	\$0	
VENTURE CAPITAL:	<u>-</u>					
					••	
ALLIED	Jul -85	\$40	\$5,000,000	\$5,000,000	\$0	LATER STAGE
DSV	Apr-85	\$60	\$10,000,000	\$10,000,000	\$0	EARLY STAGE
FIRST CENTURY	Dec-84	\$100	\$10,000,000	\$4,000,000	\$6,000,000	EARLY STAGE
FIRST CHICAGO	Mar-88	\$50	\$5,000,000	\$708,915	\$4,291,085	SECONDARY INTERESTS
GOLDER THOMA	Oct-87	\$225	\$14,000,000	\$4,900,000	\$9,100,000	LATER STAGE
Inman/Bolman	Jun-85	\$44	\$7,500,000	\$4,500,000	\$3,000,000	EARLY STAGE
KKR I	Mar-84	\$1,000	\$25,000,000	\$25,000,000	\$0	LBO
KKR II	Dec-85	\$2,000	\$18,365,172	\$18,365,172	\$0	LBO
KKR III	0ct-87	\$5,600	\$146,634,660	\$87,455,076	\$59,179,584	LBO
MATRIX	Jul -85	\$70	\$10,000,000	\$10,000,000	\$0	EARLY STAGE
NORWEST	Jan-84	\$60	\$10,000,000	\$10,000,000	\$0	EARLY STAGE
SUMMIT I	Dec-84	\$ 93	\$10,000,000	\$10,000,000	\$0	LATER STAGE
SUMMIT II	May-88	\$230	\$30,000,000	\$7,500,000	\$22,500,000	LATER STAGE
SUPERIOR	Jun-86	\$35	\$6,645,000	\$3,322,500	\$3,322,500	EARLY STAGE - MN.
T.ROWE PRICE	Nar-86	-	\$413,411	8413,411	\$0	IPO MANAGER
TOTAL V.C. PORTFOLIO			\$308,558,243	\$201,165,074	\$107,393,169	
RESOURCES:	-					
AMGO I	Jul-81	\$144	\$15,000,000	\$15,000,000	\$0	DEBT WITH EQUITY
AMGO II	Feb-83	\$36	\$7,000,000	\$7,000,000	\$0	DEBT WITH EQUITY
AMGO IV	May-88	\$75	\$12,300,000	\$4,285,700	\$8,014,300	DEBT WITH EQUITY
APACHE I	Nay-84	\$100	\$3,000,000	\$1,564,025	\$1,435,975	DEBT WITH EQUITY
APACHE II	Oct-85	\$180	\$23,000,000	\$23,000,000	\$0	DEBT WITH EQUITY
APACHE III	Dec-86	\$190	\$30,000,000	\$30,000,000	\$0	NET PROFITS INTEREST
MORGAN OLG	Jul -88	\$135	\$15,000,000	\$6,840,000	\$8,160,000	DEBT WITH EQUITY
B.P. ROYALTY	Feb-89	\$500	\$25,000,000	\$25,000,000	\$0	ROYALTY
TOTAL RES. PORTFOLIO			\$130,300,000	\$112,689,725	\$17,610,275	
TOTAL ALT. INV. PORT			\$823,858,243	\$698,854,799	\$125,003,444	

ATTACHMENT B

ANNUAL REVIEW SUMMARY HEITMAN FUNDS I, II AND III May 1, 1989

MANAGER REPRESENTATIVES: David Glickman, Teresa Myers,

Herb Kuehnle

ASSETS UNDER MANAGEMENT: \$76,578,927

BACKGROUND AND DESCRIPTION: The Heitman Funds I, II and III are managed by Heitman Advisory Corporation, whose primary office is in Chicago. Funds I, II, III, were begun in August 1984, November 1985, and January 1987, respectively. The SBI investment commitment totals \$70 million for the three Funds. As of December 31, 1988, the entire \$70 million had been funded. Each fund has a twelve year term. The majority of the fund's investments are equity real estate diversified by property type and location. Heitman Properties Ltd., an affiliate of Heitman, manages the funds' wholly owned properties.

QUALITATIVE EVALUATION

- o Going forward, Heitman sees no change in its basic strategy for the funds. In July 1989, Funds I, II, and III will be fully invested.
- o Heitman will consider additional leverage where there is positive leverage, long term leases are in place, and downside risk is minimal. Currently, the Funds are, in aggregate, one-third leveraged.
- o Heitman is currently structuring a defensive posture by lengthening lease terms to insulate the properties in the event of a recession.
- o Fund I, at five years into its expected life of 12 years, is at a maturity level where selective property sales are being considered. One portfolio property has already been sold and another is currently up for sale.

ATTACHMENT B (con't)

QUANTITATIVE EVALUATION FOR HEITMAN FUNDS I, II, AND III AGGREGATE AS OF 12/31/88

COMMITMENT: \$70,000,000

FUNDED COMMITMENT: \$70,000,000

MARKET VALUE OF

FUNDED COMMITMENT: \$76,578,927

CASH DISTRIBUTIONS: \$16,848,212

INCEPTION DATE(S): Fund I - August 1984

Fund II - November 1985

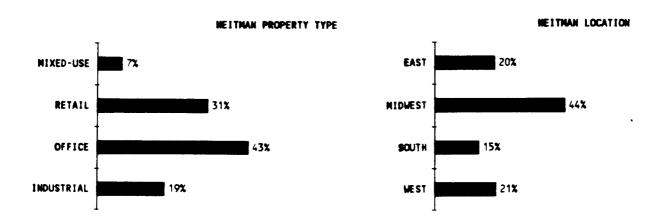
Fund III - January 1987

WEIGHTED AVERAGE INTERNAL

RATE OF RETURN (IRR):

(annualized, since inception) 10.2%

DIVERSIFICATION PROFILE (AS OF 12/31/88)



STAFF COMMENTS AND RECOMMENDATIONS:

The Alternative Investment Committee and staff have been satisfied with Heitmans' operations and performance to date. Additional investments with Heitman will be considered, when appropriate.

ANNUAL REVIEW SUMMARY TCW FUNDS III AND IV APRIL 18, 1989

MANAGER REPRESENTATIVES: Jake McCandless, Vince Martin

ASSETS UNDER MANAGEMENT: \$76,451,715

BACKGOUND AND DESCRIPTION: Management of TCW Funds is a joint venture between Trust Company of the West (TCW) and Westmark Real Estate Investment Services of Los Angeles. Funds III and IV were begun in August 1985 and November 1986, respectively. The SBI's investment commitment totals \$70 million for the two funds. As of December 31, 1988, the entire \$70 million had been funded. Both funds have ten year terms. The fund managers utilize specialty investment vehicles such as convertible and participating mortgages to enhance real estate returns. In addition, they specialize in real estate research to identify attractive property markets. Generally, investments are diversified by location and property type with some concentration in particular property types and locations identified by internal research. Management of portfolio properties is typically handled by local property management firms.

QUALITATIVE EVALUATION

- TCW completed an organizational change in 1988 that will decentralize decision-making and allow the fund to more effectively manage its properties. Four regional investment managers now coordinate acquisition, property management, and property selling disciplines and are responsible for the on-going performance of the properties they acquire.
- o TCW is research oriented with an intensive, supply-demand based research program. Based on current research findings, the firm has targeted office acquisitions in very specific locations in the Los Angeles area, in Washington D.C., and in Boston; and industrial property opportunities in Los Angeles and Washington, D.C.
- o In 1988, Fund III completed its first property sale. The rate of return on this asset approximated 15% per year from original purchase date. Other property sales are actively being considered for 1989.
- o Going forward, TCW anticipates adding additional leverage to properties if financing opportunities are favorable.

ATTACHMENT C (con't)

QUANTITATIVE EVALUATION FOR TCW FUNDS III AND IV AGGREGATE AS OF 12/31/88

COMMITMENT: \$70,000,000

FUNDED COMMITMENT: \$70,000,000

MARKET VALUE OF

FUNDED COMMITMENT: \$76,451,715

CASH DISTRIBUTIONS: \$ 9,877,508

INCEPTION DATE(S): Fund III August 1985

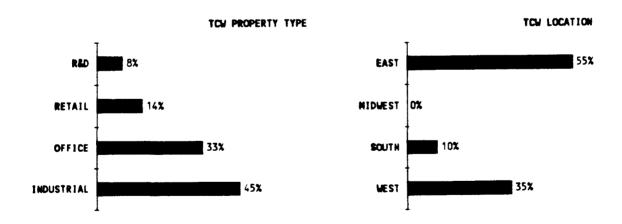
Fund IV November 1986

WEIGHTED AVERAGE INTERNAL

RATE OF RETURN (IRR): 8.88%

(annualized, since inception)

DIVERSIFICATION PROFILE (AS OF 12/31/88)



STAFF COMMENTS AND RECOMMENDATIONS:

The Alternative Investment Committee and staff have been satisfied with TCW's operations and performance to date. Additional investments with TCW will be considered, when appropriate.

ATTACHMENT D

ANNUAL REVIEW SUMMARY AEW/STATE STREET FUNDS III, IV, V April 25, 1989

MANAGER REPRESENTATIVES: John Pattillo, Robert Hannon

Robert Kilroy

ASSETS UNDER MANAGEMENT: \$57,883,738

BACKGOUND AND DESCRIPTION: The AEW/State Street Funds III, IV and V are managed by Aldrich, Eastman and Waltch under the Trusteeship of State Street Bank and Trust of Boston. Funds III, IV and V were begun in September 1985, September 1986 and December 1987, respectively. The SBI's investment commitment totals \$50 million for the three funds. As of December 31, 1988, all \$50 million of the SBI's investment commitment had been funded. Each fund has a 15 year term. The funds' special orientation is the use of creative investment vehicles such as convertible and participating mortgages to maximize real estate returns. The real estate portfolios are diversified by location and property type. On-site property management is typically contracted to outside firms or conducted by joint venture partners. The firm's primary office is in Boston.

QUALITATIVE EVALUATION

- o The AEW organization underwent a major organizational change in 1988. The firm was recapitalized and a significantly greater number of employees now have equity ownership in the firm, and therefore, a direct financial stake in the success of the organization.
- o As portfolio investments mature, underperforming properties and properties that have reached maximum potential in Fund III and Fund IV are being considered for sale.
- o AEW continues its investment philosophy of actively managing both the investment asset and its capital structure. In addition, AEW has implemented, in some cases, creative acquisition financing which serves to lower acquisition cost and/or reduce purchaser risk.

ATTACHMENT D (con't)

QUANTITATIVE EVALUATION FOR AEW/STATE STREET FUNDS III, IV, V AGGREGATE AS OF 12/31/88

COMMITMENT: \$50,000,000

FUNDED COMMITMENT: \$50,000,000

MARKET VALUE OF

FUNDED COMMITMENT: \$57,883,738

CASH DISTRIBUTIONS: \$0

INCEPTION DATE(S):
Fund III - September 1985

Fund IV - September 1986

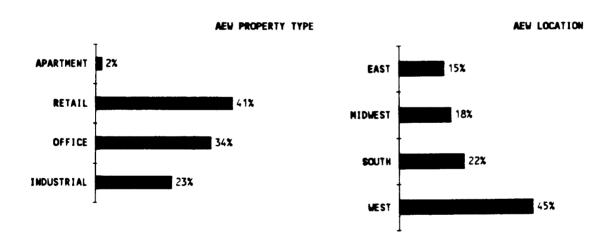
Fund V - December 1987

WEIGHTED AVERAGE INTERNAL RATE OF RETURN (IRR):

(annualized, since inception)

7.02%

DIVERSIFICATION PROFILE (AS OF 12/31/88)



STAFF COMMENTS AND RECOMMENDATIONS:

The Alternative Investment Committee and staff have been satisfied with AEW/State Street's operation and performance to date. Additional investments with AEW/State Street will be considered, when appropriate.

ATTACHMENT E

ANNUAL REVIEW SUMMARY RREEF USA FUND III APRIL 24, 1989

MANAGER REPRESENTATIVES: Don King, Stas Maliszewski

ASSETS UNDER MANAGEMENT: \$77,521,228

BACKGROUND AND DESCRIPTION: RREEF USA Fund III is managed by the Rosenberg Real Estate Equity Funds. The SBI's \$75 million commitment was made to the Fund in May 1984. As of December 31, 1988 the entire commitment had been funded. The Fund has a twelve year term. Typically, the Fund purchases 100 percent of the equity of its properties with cash and does not utilize leverage or mortgages. Properties are diversified by location and type. RREEF's inhouse staff manages the real estate properties. The firm's primary offices are located in San Francisco and Chicago.

QUALITATIVE EVALUATION:

- o RREEF USA Fund III is now fully invested and will make no new acquisitions. Cash available in the fund will be used for improvements on existing properties.
- o The Fund's first property sale is being considered. RREEF is actively engaged in selling a poorly performing Atlanta office building.
- o A San Francisco office building continues to be a slow starter although a building moratorium in the city is starting to cause rents to firm and the long term prospects for this property to improve.
- o As noted in last year's evaluation, about one-third of the fund is invested in the oil patch areas of Texas, Oklahoma, and Colorado. These properties are major retail malls which have been less vulnerable to the oil patch economic downturn than office buildings in the same markets. The performance of each improved in 1988.

ATTACHMENT E (con't)

QUANTITATIVE EVALUATION FOR RREEF USA FUND III AGGREGATE AS OF 12/31/88

COMMITMENT \$75,000,000

FUNDED COMMITMENT: \$75,000,000

MARKET VALUE OF

FUNDED COMMITMENT: \$77,521,228

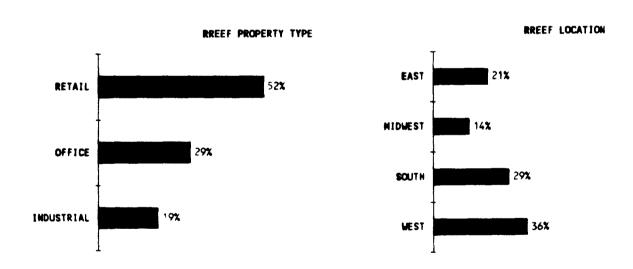
CASH DISTRIBUTIONS: \$ 9,881,368

INCEPTION DATE: May 1984

INTERNAL RATE OF RETURN (IRR): 5.43%

(annualized, since inception)

DIVERSIFICATION PROFILE (AS OF 12/31/88)



STAFF COMMENTS AND RECOMMENDATIONS:

At this time, the Alternative investment Committee and staff do not recommend additional investments with RREEF. In comparison to the SBI's other closed-end real estate managers, RREEF appears to have been less successful in targeting current, strong real estate markets. In addition, RREEF's performance since inception has lagged that of other managers.

ATTACHMENT F

OIL AND GAS CONSULTANT PROFILE

I. BACKGROUND DATA

FIRM NAME: The Sterling Group

FIRM CONTACT: Gene Graham

ADDRESS: Eight Greenway Plaza

Houston, Texas 77046

TELEPHONE: (713) 877-8257

II. ORGANIZATION AND STAFF

Gene Graham is one of seven principals of the Sterling Group, a private financial company in Houston acting as both principal and investment banker in leveraged buyout transactions. Sterling also provides financial advisory services to a limited number of corporate clients, primarily firms in the energy industry.

Prior to joining The Sterling Group in May 1987, Ms. Graham was the general manager of J.P. Morgan Investment's Petroleum Fund, a commingled pension trust fund for direct investments in oil and gas. For four years, she was responsible for generating, analyzing and negotiating the Fund's investments. During her tenure with the Petroleum Fund, Ms. Graham was involved with over \$100 million in producing property acquisitions, as well as development and exploratory drilling programs. From 1979 to 1982, prior to managing the Fund, she was in Morgan Guaranty's petroleum department where she had extensive production related lending experience.

III. SERVICES

The Sterling Group provides the SBI with economic and technical analysis necessary to effectively screen prospective oil and gas investments. In addition, the firm assists in analyzing components of existing investments. Specific services include:

- Reference checks on the investment manager and/or operating company;
- 2. An analysis of the manager's or company's track record (performance to date, as well as assumptions used for estimating long-term returns);

ATTACHMENT F (con't)

- 3. An engineering and/or geologic consulting report, as required, to assess relevant technical aspects of the offering. For project specific offerings, a consultants report would include an assessment of the overall quality of the reservoirs, ultimate expected recoveries, production decline curves, development potential and costs, operating concerns and costs, and the overall economics of the project's area of interest;
- 4. An assessment of the offering to test the potential impact on the State's expected rate of return given various assumptions related to economic scenarios and reservoir performance variables; and
- 5. Participation, as required, in closing procedures related to transactions approved for investment by the State.

IV. FEE AND TERM

For each advisory project undertaken, the SBI pays Sterling a consulting fee estimated to be between \$4,000-\$5,000 per individual project review. The total cost of the proposed consulting arrangement with Sterling will be a maximum of \$20,000 per year.

The SBI may, at any time, terminate Sterling's work on a project; however, the Board is obligated to pay Sterling for all advisory services rendered up to such time of termination.