MINNESOTA STATE BOARD OF INVESTMENT

MINNESOTA STATE BOARD OF INVESTMENT MEETING
September 19, 1988

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INVESTMENT ADVISORY COUNCIL MEETING
September 16, 1988

MINNESOTA STATE BOARD
OF INVESTMENT
MEETING
SEPTEMBER 19, 1988

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INVESTMENT ADVISORY
COUNCIL MEETING
SEPTEMBER 16, 1988

AGENDA

STATE BOARD OF INVESTMENT
MEETING

Monday, September 19, 1988
8:30 A.M.
Room 120 - State Capitol
Saint Paul

		TAB
1.	Approval of Minutes of June 9, 1988	
2.	Report on Escheated Property (M. McGrath)	
3.	Executive Director's Report (H. Bicker)	A
	A. Quarterly Investment Review (April 1 - June 30, 1988)	
	1. Basic Retirement Funds	
	2. Post Retirement Fund and Other Investment Funds	
	B. Portfolio Statistics (June 30, 1988)	B
	C. Budget and Travel Reports	C
4.	Report from the Board's Consultant (T. Richards)	
5.	Report from the SBI Administrative Committee (M. McGrath)	D
	A. Submission of FY 90-91 Legislative Budget Request	
	B. Summary of other issues discussed at the June 30, 1988 and August 11, 1988 meetings	
6.	Report from the Master Custodian Review Committee	E
7.	Reports from Investment Advisory Council Committees (J. Yeomans)	
	A. Equity Manager Committee	F
	1. Value of Active Management Reports	
	2. Report from the Equity Manager Selection Committee	
	B. Fixed Income Manager Committee	G
	1. Value of Active Management Reports	
	2. Status of Bond Index Fund Implementation	
	3. Schedule for Dedicated Bond Portfolio Software Vendor Review	
	4. BEA Contract Amendment	
	C. Alternative Investment Committee	H
	1. Venture Capital and Resource Fund Manager Annual Reviews	

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
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MINUTES
STATE BOARD OF INVESTMENT
June 9, 1988

The State Board of Investment (SBI) met on Thursday, June 9, 1988 in Room 118 of the State Capitol at 9:00 A.M. Secretary of State Joan Anderson Growe, Acting Chair; State Treasurer Michael A. McGrath and Attorney General Hubert H. Humphrey III were present. Governor Rudy Perpich, Chair, and State Auditor Arne H. Carlson were absent.

The minutes of the March 2, 1988 meeting were unanimously approved.

ESCHEATED PROPERTY

Mr. McGrath reviewed the status of property escheated to the State which has an estimated total value of $77,989.80. The Board had adopted a resolution at its March 2, 1988 meeting instructing the State Treasurer to dispose of a portion of the property escheated to the State. Mr. McGrath then moved approval of a resolution to dispose of the remaining properties (see Exhibit A). The motion was unanimously approved.

APPOINTMENT OF IAC MEMBERS

Ms. Growe stated that there are two vacancies among the Board's appointees to the Investment Advisory Council. Mr. Humphrey moved approval of the appointments of John Bohan and David Jeffery. The motion passed unanimously.

EXECUTIVE DIRECTOR'S REPORT

Howard Bicker, Executive Director, stated that the Basic Retirement Funds increased in value by 7.1% during the first quarter of 1988. He stated that the increase was due to a very strong common stock market during that period and from a positive cash flow into the Basic Retirement Funds. He stated that the asset mix was basically unchanged, although there was a small increase in the common stock segment during the quarter. Mr. Bicker reported that the Basic Retirement Funds returned 5.9 percent during the first quarter and, excluding alternative investments, 7 percent. In comparison, the median balanced fund returned 5 percent for the quarter. He stated that the common stock segment of the Basic Retirement Funds exactly tracked the Wilshire 5000, returning 8.0 percent. He also stated that the bond segment slightly underperformed the Salomon bond index returning 3.7 percent during the quarter compared to the index's 3.8 percent.

Mr. Bicker then summarized the performance of the Post Retirement Fund. He reported that the assets of the Post Retirement Fund increased by 3.6 percent for the quarter, despite a negative cash flow of $32 million during the period. He stated that the Fund's asset mix was essentially unchanged with 85% in bonds, approximately 10% in stocks, and the balance in cash. Mr. Bicker stated that the benefit increase from the Post Retirement Fund to be granted to retirees in January 1989 is estimated at about 6 percent. The final number will not be calculated until certain actuarial data is received in October or November.

Mr. Bicker stated that as of March 31, 1988 all assets under management by the State Board of Investment were $12.1 billion.

EXECUTIVE DIRECTOR'S ADMINISTRATIVE REPORT

Mr. Bicker reported that a surplus of approximately $2,000 is expected in the SBI's administrative budget at the close of FY88.

Mr. Bicker stated that the SBI Board member travel allocation policy allows each Board member and/or designee to use up to $2,000 of the State Board travel budget for matters related to the State Board of Investment. He recommended this policy be renewed for Fiscal Year 1989. Mr. Humphrey moved approval. The motion passed unanimously.

Mr. Bicker stated that Richards & Tierney, Inc. has been the consultant for the SBI for the past two years and that its contract expires on June 30, 1988. He recommended the contract be renewed for one additional year at an unchanged fee of $120,000. Mr. Bicker also stated that it has been the Board's practice to issue a request for proposal (RFP) before renewing a consultant contract for a fourth year. Mr. McGrath moved approval of the contract renewal. The motion passed unanimously.

Mr. Bicker stated that the Board's current fee arrangement for custodial services with State Street Bank and Trust Co. will expire on September 30, 1988. He recommended a Master Custodian Review Committee be formed to review the services of State Street and determine whether the current contract should be renewed or whether an RFP should be issued. Mr. McGrath moved approval. In response to a question from Mr. Humphrey, Mr. Bicker stated that the Committee will review State Street as it currently exists and, if not satisfied with its performance, issue an RFP for the purpose of finding a new Master Custodian. Mr. Bicker said in that case the Board may need to extend its relationship with State Street and renew the current fee for 90 days in order to complete the search process. The McGrath motion passed unanimously.

Mr. Bicker then reported on legislation passed during the 1988 session which effects the SBI. He stated that the SBI's bill passed, giving the Board authority to invest in international securities. Mr. Bicker stated that a second bill related to the SBI was the Northern Ireland bill. He explained that the bill does not restrict the SBI's investment authority, but does require the Board to initiate shareholder resolutions related to companies that have operations in Northern Ireland. The last item of concern was the Environmental Trust Fund bill. Mr. Bicker stated the funding for the Environmental Trust Fund would come from lottery revenue, assuming the lottery is approved. He stated that the SBI will be responsible for investing the Fund, according to the goals and objectives established by the Trust Fund's governing board.

The final item reported by Mr. Bicker was the Board's management goals for fiscal year 1989. Mr. Bicker briefly reviewed a list of new initiatives that will be undertaken during the year and said all items were subject to Board approval.

In response to a question from Mr. McGrath, Mr. Bicker stated that these initiatives will require only small, incremental changes to the budget. He added that international investing may add to travel costs and that the Northern Ireland legislation, if the Board chooses to initiate shareholder resolutions, will require additional travel costs. In response to a question from Ms. Growe, Mr. Bicker stated that groups whose money is invested through the Supplemental Investment Fund need information regarding various alternatives for directing their retirement assets. He said SBI staff attempt to address this by conducting information sessions on the Supplemental Fund.

SBI ADMINISTRATIVE COMMITTEE

Mr. McGrath stated that the SBI Administrative Committee held two scheduled meetings since the last Board meeting. He stated that the Committee has developed a statement of purpose and has begun the process of oversight of the staff and Board management systems. Mr. McGrath said any recommendations from the Committee will be brought to the Board. Mr. McGrath further stated that matters previously handled by the Administrative Committee of the Investment Advisory Council will be handled by the new SBI Administrative Committee and will be reported to the Board by the SBI Administrative Committee Chair.

REPORT FROM THE BOARD'S CONSULTANT

Tom Richards, of Richards & Tierney, the Board's consultant, expressed his thanks to the Board for their vote of confidence in renewing their contract.

Mr. Richards discussed the concept of a Completeness Fund for the Board's domestic equity component. He said a Completeness Fund would assist the Board in reducing return variability, improving the return-risk trade-off, eliminating elements of risk that are undesirable, and making the most productive use of investment managers. He stated that the Completeness Fund is a means to manage the managers and allocate funds among these accounts so as to receive consistent superior performance. He stated that the objective is for each manager to do better than the benchmark so that the funds will achieve the objective of consistent superior performance. In response to a question from Mr. Humphrey concerning the cost of constructing the Completeness Fund, Mr. Richards stated that it will be done in the most efficient, cost effective fashion. Ms. Growe then stated that the consultant and the staff should report to the Board on any item they think is important or significant.

INVESTMENT ADVISORY COUNCIL REPORT

Jan Yeomans, IAC Chair, presented the Investment Advisory Council report.

EQUITY MANAGER COMMITTEE

Ms. Yeomans stated that the Equity Manager Committee reviewed the performance of the external equity managers and has the following recommendations: terminate Beutel Goodman based on poor performance, place Fred Alger on probation for quantitative reasons; and, remove BMI from probation. She said the Committee also recommends that if Beutel Goodman is terminated, the money be placed in the Index Fund. Mr. McGrath moved approval of the recommendations. The motion passed unanimously.

Ms. Yeomans stated the second item considered was extending contracts with the existing equity managers, with the exception of Beutel Goodman. The Equity Committee's recommendation is that the Executive Director be authorized to negotiate and execute contract extensions with the eight remaining active stock managers. The contracts would include the standard thirty day cancellation clause, and the fees would again be based on the same performance fee schedule which is now in effect. Mr. Humphrey moved approval of the Equity Manager Committee recommendation. The motion passed unanimously.

The third item considered by the Committee was a memorandum from the staff discussing the selection of external equity managers. Ms. Yeomans reported that it asked staff to begin, with the Board's approval, to build a recommended list of prospective managers, and that staff initially concentrate on managers with expertise in the value style of management. The resulting list will be used to replace an existing manager or add a new manager as conditions warrant.

The fourth item considered by the Committee was implementation of a Completeness Fund. Ms. Yeomans reported that the Committee recommends that Richards & Tierney assist staff by running a paper completeness fund beginning October 1, 1988. The effort would require all the decisions that would have to be made in running an actual Completeness Fund, except that no trades would actually be settled and no money would change hands. Ms. Yeomans stated that the Committee anticipates coming to the March, 1989 Board meeting with a final recommendation on the Completeness Fund.

FIXED INCOME MANAGER COMMITTEE

Ms. Yeomans stated that the Committee met and reviewed the active bond managers and indicated for the first time the value of active management reports (VAM reports) were available for the bond managers. She stated that the Committee concurs with the staff recommendations to place Morgan Stanley on probation for qualitative reasons, to place Lehman Management on probation because of poor performance, and to terminate Peregrine Capital because of poor performance. Mr. McGrath moved approval of the recommendations. The motion passed unanimously.

Ms. Yeomans reported that all active bond manager contracts expire on June 30, 1988. The Committee recommends the Executive Director be authorized to negotiate and execute contract extensions with all existing bond managers except Peregrine. Ms. Yeomans stated that all contracts will have the same thirty day termination clause and will be compensated under the current fee schedule. Mr. McGrath moved approval. The motion passed unanimously.

Ms. Yeomans then reported that the Bond Index Search Committee recommends the Executive Director be authorized to negotiate and execute contracts with Lincoln Capital Management Company of Chicago, Illinois and Fidelity Management Trust Company of Boston, Massachusetts to provide enhanced bond index fund management. Mr. Humphrey moved approval. The motion passed unanimously.

Ms. Yeomans stated that the final item concerns the implementation of the bond index fund, which requires reallocation of assets among the bond managers. The Committee recommends that the two new bond index managers, Lincoln and Fidelity, each receive approximately $290 million from the Board's active bond managers. After the reallocations, half of the bond segment assets would be under passive management and half under active management. Mr. McGrath moved approval. The motion passed unanimously.

ALTERNATIVE INVESTMENT COMMITTEE

Ms. Yeomans reported that the Alternative Investment Committee met with four of the existing real estate managers. These meetings were satisfactory and the Committee recommends follow-on investments would be appropriate with all but one of these managers, RREEF.

Ms. Yeomans stated that there are three action items which the Committee would like to bring to the Board as recommendations. The first is a new investment in a resource fund with J. P. Morgan Investment Management in Petroleum Fund II. She said the investment would be a commingled petroleum fund and would be a vehicle for direct investments in the resource area, including some developmental drilling. She said total fund is targeted to be $110 million, and the allocation recommended by the Committee is up to $15 million.

Ms. Yeomans stated the second recommendation would be to retain Laventhol & Horwath as a real estate advisory consultant. She said their task would be to conduct an overall review of the Board's real estate strategy and portfolio, and to determine whether adjustments need to be made in the composition of the portfolio to help it achieve its objectives in a more efficient manner. She said the Committee recommends that the Board authorize a contract for these purposes not to exceed $100,000. Mr. Bicker stated that the real estate component has been constructed over several years and totals nearly $500 million. Mr. Bicker suggested it would be prudent to have someone do an in-depth analysis to determine whether there are any problems with the portfolio. In response to a question from Mr. McGrath concerning cost, Mr. Bicker stated the base fee was approximately $85,000 plus some travel expense.

The third recommendation from the Committee is the retention of a consultant, The Sterling Group, to assist with project reviews in the oil and gas area. One of the firm's principals, Gene Graham, has previous experience with J. P. Morgan in the oil and gas area. Ms Yeomans said Ms. Graham would be available as an advisor to look at specific investments under consideration by the Board and would assist in the general due diligence process. Mr. Bicker stated that the contract would be for an amount not to exceed $20,000; payment would be on a project basis with no retainer involved.

In response to a question from Ms. Growe, Ms. Yeomans stated that J. P. Morgan has an excellent reputation, and the people who have invested in Fund I are planning to invest in Fund II. In response to another question from Ms. Growe, Ms. Yeomans further stated that she thought that prudence dictated the Board should review the real estate portfolio to determine whether there are problem areas and whether there is a way to make additional investments which might offset any weaknesses or biases. Mr. Bicker added that staff will also ask Laventhol and Horwath to analyze the Board's investment process in the real estate area.

In response to a question from Mr. McGrath concerning RREEF, Ms. Yeomans stated because it is a closed-end fund the SBI does not have the option to dismiss them as a manager. She stated that it would be possible only to withhold additional investments with them. Mr. McGrath moved approval of all recommendations in the Committee report. The motion passed unanimously.

ENVIRONMENTAL LEARNING CENTER

Mr. Humphrey then stated there was an additional matter to be brought before the Board concerning a resolution regarding the Environmental Learning Center. Mr. Humphrey stated the 1988 Legislature passed various bills relating to the Northeast Minnesota Economic Protection Trust Fund. Ms. Christie Eller of the Attorney General's Office, explained that the item would probably have been included in the State's bonding bill had there been one. Since there was no bonding bill it was decided that Lake County might be able to issue general obligation bonds for the project. She stated that a provision was included in legislation that the Northeast Economic Protection Trust Fund, of which the SBI is prospectively the trustee, would be available to be a guarantor of those bonds. She further stated that in the event the Environmental Learning Center failed to make the debt service payment, Lake County could then call upon the Trust Fund to make those payments. She said the Trust Fund involvement is in the form of a guarantee and not in the form of a specific pledge of assets. She also stated that the legislation obligates the SBI to make the payments and does not give the SBI a choice in the matter.

Ms. Growe stated that the Lake County Auditor, Melroy Peterson, was present. Mr. Peterson stated that Lake County wishes to cooperate with the Environmental Learning Center, but that he is concerned because general obligation bonds would be used. In response to a question from Ms. Growe as to whether Mr. Peterson had any objection to the resolution, he stated that he believes it is a vehicle for further discussion. Mr. Humphrey stated that the action clause in the resolution merely requests that the Executive Director negotiate with Lake County the very questions Mr. Peterson was raising. Mr. Peterson then stated that he hoped everyone could work together to come to a satisfactory agreement which would protect Lake County taxpayers. Mr. Humphrey moved approval of a resolution concerning the Environmental Learning Center (see Exhibit B). The motion passed unanimously.

The meeting adjourned at 10:00 A.M.

Respectfully submitted,

Howard Bicker

Howard Bicker
Executive Director

Attachments
Exhibit A (Escheated Property)

EXHIBIT A

RESOLUTION OF THE
STATE BOARD OF INVESTMENT

WHEREAS, Minnesota Statutes Section 525.161 provides all monies, stocks, bonds, notes, mortgages and other securities, and all other property so escheated is given to the State Treasurer; and

WHEREAS, Minnesota Statutes Section 11A.10, subd. 2 provides the Commissioner of Finance shall report to the State Board of Investment all personal property other than money received by the State as escheated property; and

WHEREAS, attached as Exhibit A is a listing of certain property received by the State as escheated property; and

WHEREAS, Minnesota Statutes Section 11A.10 subd. 2 provides that the SBI may elect to sell such property; and

WHEREAS, investigation by the staff of the SBI and the State Treasurer has determined that it is in the best interest of the State to sell the property listed in Exhibit A.

NOW THEREFORE BE IT RESOLVED that:

The State Treasurer be directed to use his best efforts to sell the property listed on Exhibit A and credit all money received from the sale to the general fund of the State.

Date: June 9, 1988

Joan A. Growe

JOAN A. GROWE
Secretary of State, Member
State Board of Investment

EXHIBIT "A"

Name of Deceased (Date of Death)	Date of P. Decree (County) Crt.File #	No. of Shrs	Description of Asset	Certificate #	Dated or Issued	Face Value	Est.Value by SBI Staff	Basis of Valuation
John Gorman 7/19/54	4/30/56 Hennepin #82149	2/3rd	Consolidated Yukeno Mines Ltd	4490			0.00	Co.Dissolved in 1953
John Henry Jones 2/26/38	9/14/38 Ramsey #59270	0.1	Twin City Rapid Transit Co	2314			Unknown	
		0.1	Twin City Rapid Transit Co	5964			Unknown	
		1	1st Mortgage-4 1/4%-Series B-Due 1/01/90-Missouri Pacific R.R. Co Temporary Bond issued with 2 Coupons attached:	TD 2044		500.00	475.00	
			One due in Jan., 1956			10.63		
			One due in July, 1956			10.62		
		1	1st Mortgage-4 1/4%-Series C-Due 1/01/05-Missouri Pacific R.R. Co Temporary Bond issued with 2 Coupons attached:			500.00	271.25	
			One due in Jan., 1956			10.63		
			One due in July, 1956			10.62		
		1	3% Gold Bond due 1/01/2047 (Northern Pacific Railway)	D11389		500.00	771.25	This valuation includes the coupons and bond & coupons set forth below.
			(Bearer Bond with 85 coupons attached @ $3.75 ea; as of May, 1988, 50 are payable)			187.50		
		1	3% Gold Bond due 1/01/2047 (Northern Pacific Railway)	D8217		500.00		See above
			(Bearer Bond with 85 coupons attached @ $3.75 ea; as of May, 1988, 50 are payable)			187.50		See above
Mina D. Mathey 7/2/55 See Also Alean Mathey 5/1/54	9/24/84 Hennepin P1-84-1609 PX-84-1608	900	Northern States Power Co	S278920	9/25/86		27,225.00	30 1/4 per share
Edward Nielsen 2/14/75	12/17/76 Hennepin #130946	1	Marconi Wireless Telegraph Co (Merged with Globe Investment Trust, Ltd. in Sept., 1977	087609			Unknown	Stock must be re-registered before valuing.
		1	Radio Corp. of America	45182			Unknown	This company merged with General Elect. on June 9, 1986. Stock must be re-registered before valuing.
		2	Radio Corp. of America	FRC75764			Unknown	
		10	Silcorp Limited Class A	AA12168			133.10	$13.31 per share
		10	Silcorp Limited Class B (formerly Silverwood Ind., Inc.)	BA01900			136.20	$13.62 per share

EXHIBIT B

RESOLUTION OF THE STATE BOARD OF INVESTMENT

WHEREAS, the State Board of Investment (SBI) is responsible for investing the Northeast Minnesota Economic Protection Trust Fund ("Trust Fund") established and created pursuant to Minn. Stat. §§ 298.291 to 298.294; and

WHEREAS, Minn. Laws 1988, ch. 718, § 64 authorizes Lake County to issue general obligation bonds to purchase land and construct facilities for an environmental learning center to be secured by payments from the Environmental Learning Center, Inc., a Minnesota non-profit corporation, and further provides that if the Environmental Learning Center, Inc. fails to make the payments required there is an amount appropriated from the Trust Fund in amounts sufficient to repay any remaining interest and principal due on the bonds; and

WHEREAS, Minn. Laws 1988, ch. 718, § 64 further provides that the amount of any payment from the Trust Fund is a lien against the property purchased and improved with the proceeds of the general obligation bonds to be issued by Lake County; and

WHEREAS, in July, 1988, Lake County plans to issue its general obligation bonds in a principal amount up to $1,700,000 and enter into a loan agreement with the Environmental Learning Center, Inc., pursuant to which Environmental Learning Center, Inc. is obligated to make basic payments at the times and in the amounts sufficient to repay the principal of and interest on the Bonds as the bonds become due and payable; and

WHEREAS, in order to effectuate the purpose and intent of Minn. Laws 1988, ch. 718, § 64 to provide additional security for the general obligation bonds to be issued by Lake County, it is necessary for the SBI and Lake County to enter into an agreement providing the SBI will transfer to Lake County the amount of any deficiency between the payments made by the Environmental Learning Center, Inc. and the principal and interest due on the bonds if there are sufficient funds in the Trust Fund (the "Agreement") and an inter-creditor agreement and other legal documents as may be necessary.

NOW, THEREFORE, the SBI authorizes and directs its Executive Director, with assistance from SBI legal counsel, to netogitate and execute the Agreement between the SBI and Lake County, an inter-creditor agreement and such other legal documents as may be necessary in order to effectuate the purpose and intent of Minn. Laws 1988, ch. 718, § 64.

Dated: June 9, 1988.

Joan A. Growe

State Board of Investment

SF 00006 05 (4/86)

DEPARTMENT : ATTORNEY GENERAL

STATE OF MINNESOTA
Office Memorandum

DATE : June 8, 1988

TO : HOWARD BICKER, Executive Director
State Board of Investment

FROM : CHRISTIE B. ELLER
Assistant Attorney General

PHONE : 6-9421

SUBJECT : Minn. Laws 1988, ch. 718, § 64

By statute, the State Board of Investment ("SBI") is responsible for managing and investing the Northeast Minnesota Economic Protection Trust Fund (the "Trust Fund"). During the last session the Minnesota Legislature enacted Minn. Laws 1988, ch. 718, § 64 (the "Act") which provides the Trust Fund will provide a form of guarantee for the Environmental Learning Center, Inc. project in Lake County.

The Act is not effective until July 1, 1988. However, the Environmental Learning Center, Inc. needs the money as soon as possible and Lake County hopes that the bonds will be sold as soon as possible after the effective date of the Act. As the SBI does not meet again until September, Lake County and the Environmental Learning Center, Inc. requested this matter be added as an agenda item to the June 9, 1988 SBI meeting. Unfortunately, the SBI was not informed of this project until after the agenda was prepared.

The Act authorizes the issuance of general obligation bonds by Lake County to purchase land and construct educational facilities for the Environmental Learning Center, Inc., a non-profit corporation. The Act further provides that in the event Environmental Learning Center, Inc. fails to make sufficient payments to repay the bonds, then there is appropriated from the Trust Fund an amount sufficient to repay the remaining interest and principal due on the bonds. The Act also provides that any payment from the Trust Fund is a lien against the Environmental Learning Center, Inc.'s property purchased with the proceeds of the bonds. It should be noted that the legislation does not require a specific pledge of Trust Fund assets; rather it requires an agreement in the form of a guarantee. The legislation does not give the SBI the right to approve or decline use of the Trust Fund for the Environmental Learning Center, Inc. project. The legislation specifically makes no restrictions on future use of the Trust Fund and in no way is there any guarantee that there will be sufficient funds remaining in the Trust Fund to make any payments that may be required.

In order to effectuate the purpose and intent of the legislation to provide additional security for the general obligation bonds of Lake County to be issued for the Environmental Learning Center, Inc. project, it will be necessary for the SBI to enter into an agreement with Lake County and enter into an inter-creditor agreement to specify the rights and obligations of all parties to the transaction.

Available as background are a copy of the relevant portions of Minn. Laws 1988, ch. 718, § 64; a memorandum regarding the Environmental Learning Center, Inc. project; the audited year-end statements for the Environmental Learning Center, Inc.; the 501(c)(3) letter for the Environmental Learning Center, Inc.; the North Central Association of Colleges and Schools membership certificate and commendation; and two brochures regarding the environmental learning center. The enclosed resolution will authorize the Executive Director, with the advice of legal counsel, to negotiate and execute the agreements necessary to effectuate the legislative purpose of providing additional security for the general obligation bonds to be issued by Lake County for the Environmental Learning Center, Inc. project.

CBE:bbl
Enclosures

AGENDA

INVESTMENT ADVISORY COUNCIL MEETING

Friday, September 16, 1988
2:00 P.M.
MEA Building - Conference Room "A"
Saint Paul

		TAB
1.	Approval of Minutes of June 7, 1988	
2.	Executive Director's Report (H. Bicker)	A
	A. Quarterly Investment Review (April 1 - June 30, 1988) 1. Basic Retirement Funds 2. Post Retirement Fund and Other Investment Funds	
	B. Portfolio Statistics (June 30, 1988)	B
	C. Budget and Travel Reports	C
3.	Report from the Board's Consultant (T. Richards)	
4.	Report from the SBI Administrative Committee (T. Triplett)	D
	A. Submission of FY 90-91 Legislative Budget Request	
	B. Summary of other issues discussed at the June 30, 1988 and August 11, 1988 meetings	
5.	Report from the Master Custodian Review Committee	E
6.	Reports from Investment Advisory Council Committees	
	A. Equity Manager Committee (D. Veverka) 1. Value of Active Management Reports 2. Report from the Equity Manager Selection Committee	F
	B. Fixed Income Manager Committee (G. Norstrem) 1. Value of Active Management Reports 2. Status of Bond Index Fund Implementation 3. Schedule for Dedicated Bond Portfolio Software Vendor Review 4. BEA Contract Amendment	G
	C. Alternative Investment Committee (K. Gudorf) 1. Venture Capital and Resource Fund Manager Annual Reviews	H

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

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MINUTES
INVESTMENT ADVISORY COUNCIL
June 7, 1988

The Investment Advisory Council met on Tuesday, June 7, 1988 at 2:00 P.M. in the MEA Building, St. Paul.

MEMBERS PRESENT: Harry Adams, James Eckmann, Elton Erdahl, Paul Groschen, Ken Gudorf, James Hacking, Vern Jackels, Malcolm McDonald, Judy Mares, Gary Norstrem, Joe Rukavina, Tom Triplett, Ray Vecellio, Debbie Veverka, and Jan Yeomans

SBI STAFF: Howard Bicker, Beth Lehman, Jim Heidelberg, John Griebenow, Roger Henry, Harriet Balian, and Charlene Olson

OTHERS ATTENDING: Shane Allers, Gary Austin, Christie Eller, Joan Anderson Growe, Richard Helgeson, Jake Manahan, Mike Ousdigian, Tom Richards, Peter Sausen, Elaine Voss, and Robert Whitaker

The minutes of the March 1, 1988 meeting were approved.

EXECUTIVE DIRECTOR'S REPORT

Howard Bicker, Executive Director, stated that the Basic Retirement Funds increased in value by 7.1 percent during the first quarter of 1988. He stated that the increase was largely due to a very strong common stock market during that period and also from a positive cash flow into the Basic Retirement Funds. He stated that the asset mix was basically unchanged, although there was a small increase in the common stock segment during the quarter. Mr. Bicker reported that the Basic Retirement Funds returned 5.9 percent during the first quarter and, excluding alternative investments, 7 percent. In comparison, the median balanced fund returned 5 percent for the quarter. He stated that the common stock segment of the Basic Retirement Funds exactly tracked the Wilshire 5000, returning 8.0 percent. He also stated that the bond segment slightly underperformed the Salomon bond index returning 3.7 percent during the quarter compared to the index's 3.8 percent.

Mr. Bicker than summarized the performance of the Post Retirement Fund. He reported that the assets of the Post Retirement Fund increased by 3.6 percent for the quarter. He stated that the Fund actually had a negative cash flow of $32 million during the period. He also stated that the Fund asset mix was essentially unchanged with 85% in bonds, approximately 10% in stocks, and the balance in cash. Mr. Bicker stated that the benefit increase from the Post Retirement Fund to be granted to retirees in January 1989 is estimated to be about 6 percent. The final number will be calculated after certain actuarial data is received in October or November.

Mr. Bicker stated that as of March 31, 1988 all assets under management by the State Board of Investment were $12.1 billion.

EXECUTIVE DIRECTOR'S ADMINISTRATIVE REPORT

Mr. Bicker stated that a surplus of approximately $2,000 is expected in the SBI's administrative budget at the close of FY88.

Mr. Bicker stated that the SBI Board Member travel allocation policy allows each Board member and/or designee to use up to $2,000 of the State Board travel budget for matters related to the SBI. In response to a question by Ken Gudorf, Mr. Bicker stated that the State Auditor's office and the Commissioner of Finance have used the allocation in the past, but that the Secretary of State and Attorney General have not.

Mr. Bicker stated that Richards & Tierney has been the consultant for the SBI for the past two years and their contract expires on June 30, 1988. He said he recommended the Board renew the contract for an additional year maintaining the current fee of $120,000. Mr. Bicker also stated that it has been the Board's practice to issue a request for proposal (RFP) before renewing a consultant contract for a fourth year. Ken Gudorf asked Mr. Bicker whether he has been satisfied with Richards and Tierney's services. Mr. Bicker stated that staff believes they have done a fine job. Malcolm McDonald stated that they have provided extra services to the Board. Mr. Bicker stated that the contract is inclusive in that the expenses are included in the fee paid. Tom Triplett stated that the efforts of Richards & Tierney are appreciated and moved approval of the recommendation to renew the contract for one year at the current fee of $120,000. The motion was unanimously approved.

Mr. Bicker stated that the Board's current fee relationship with State Street Bank and Trust of Boston, MA, for Master Custodial services will expire on September 30, 1988. He said State Street has been the SBI's Master Custodian for five years. Mr. Bicker said he was recommending the Board establish a committee, consisting of representatives of the Investment

Advisory Council and representatives of the Board, to review the services of State Street Bank and determine whether the current contract should be renewed or whether an RFP should be issued. He also stated that the Board may need to consider a separate custodial arrangement to handle international investments. In response to a question from Debbie Veverka, Mr. Bicker stated that State Street's services have improved and been expanded as their number of clients has increased. Judy Mares cautioned that a transition to a different Master custodian can be costly. In response to a question from Ms. Mares concerning the review, Mr. Bicker stated staff needs to make sure State Street provides state-of-the-art Master Custodial services.

Mr. Bicker then reported on bills passed by the 1988 Legislature of interest to the SBI. He stated that the SBI's bill passed, giving the Board authority to invest in international securities. Mr. Bicker stated that the second bill related to the SBI was the Northern Ireland bill. He explained that the bill does not restrict the SBI's investment authority, but it does require the Board to initiate shareholder resolutions related to companies that have operations in Northern Ireland. The last legislative item of concern was the Environmental Trust Fund. He stated the funding for the Environmental Trust Fund would come from lottery revenue, assuming the lottery is approved. He stated the SBI has the responsibility to invest the Fund, according to the investment goals and objectives adopted by the board responsible for the Trust Fund. Mr. Triplett added that the Trust Fund is established whether or not the lottery is approved.

Mr. Bicker then reviewed new management goals which the Board staff plan to undertake during fiscal year 1989, subject to Board approval. Ms. Growe stated on-going goals, such as budget and rate of return targets, were not included, but should also be listed. Judy Mares suggested the inclusion of recurring duties or goals of a broad nature, such as "monitoring managers" or "learning about and staying current with the capital markets". Mr. Bicker indicated these would be prepared. Debbie Veverka moved approval of the new initiatives. Ken Gudorf seconded. The motion was unanimously approved.

CONSULTANT'S REPORT

Tom Richards, of Richards & Tierney, the Board's consultant, presented a report to the IAC, with a focus on the Basic Retirement Funds and a possible Completeness Fund in the equity segment of the Basic Funds. He stated the Basic Funds have $2,813,000,000 in equities; with one-third divided among nine active managers and two-thirds in an index fund. He stated that the Completeness Fund investment objectives include an increase in expected return, decrease in return variability, and maximizing superior manager skills. He stated that the Completeness Fund is a means to manage the managers, to determine the allocation of funds to active management and the allocation to individual managers so as to achieve consistent superior performance relative to the market. He stated that the performance objective is for each manager to outperform its benchmark so that the total returns of active management and the Completeness Fund will achieve the objective of consistent superior performance. Mr. Richards explained that proper implementation of a Completeness fund requires an active and knowledgeable sponsor, the cooperation of each investment manager, and state of the art operating systems. In response to a question from Ray Vecellio concerning whether there would be one manager for the Completeness Fund, Mr. Richards stated that there could be one manager to maintain operating systems and determine which securities to include and another to execute trades on an ongoing basis. In response to a question from Ken Gudorf concerning the experience of other funds who have implemented a Completeness fund, Mr. Richards stated that there has not been enough experience to relate specifics.

INVESTMENT ADVISORY COUNCIL COMMITTEE REPORTS

FIXED INCOME MANAGER COMMITTEE

Gary Norstrem presented the report from the Fixed Income Manager Committee. He stated that the Committee reviewed the active managers and makes the following recommendations: 1) to place Lehman Management on probation for quantitative reasons; 2) to place Morgan Stanley on probation for qualitative reasons because they have failed to comply with staff's urging to build an adequate benchmark portfolio and they violated the staff's direction concerning the duration of the bond portfolio; and 3) to terminate Peregrine Capital as of July 1, 1988 because of consistent poor performance. Mr. Norstrem stated that all the bond manager contracts expire on June 30, 1988, and the Committee recommends that all contracts with the exception of Peregrine, be renewed with the thirty day termination clause and the fee schedule currently in place. Mr. Norstrem also reported that the Bond Index Search Committee recommends that the Board execute contracts with Fidelity Management Trust Company of Boston, MA, and Lincoln Capital Management Company of Chicago, IL. In response to a question from Debbie Veverka concerning the choice of two managers rather than one, Mr. Bicker stated that it will give the SBI an opportunity to evaluate two different management styles while using the same fee structure for both. In response to a question from Mr. Gudorf, Mr. Bicker stated that the performance target for each would initially be the Salomon Brothers bond index. In response to questions from Ms. Veverka and Mr. Gudorf, Mr. Bicker explained the fee structure, noting that the cap on the incentive fee is designed to restrain the enhanced index manager from pursuing active management.

Mr. Norstrem stated that the final action item concerns a shift of assets from active managers to the bond index fund managers. He said the Committee made the following recommendations concerning active managers: IAI, $45 million;

Lehman Management $100 million; Western Asset, $185 million; Morgan Stanley $100 million; Miller Anderson $150 million. He said the passive managers would each receive $290 million as a result.

After the members discussed the rationale for the suggested allocation, Mr. Norstrem moved approval of all of the Committee recommendations he presented. Ken Gudorf seconded. The motion was unanimously approved.

EQUITY MANAGER COMMITTEE

Debbie Veverka presented the Equity Manager Committee Report. She stated that the Committee reviewed the performance of the external equity managers and recommends: 1) the termination of Beutel Goodman for quantitative reasons; 2) the placement of Fred Alger on probation for quantitative reasons; and 3) the removal of BMI from probation. She stated the Committee recommends that if Beutel Goodman is terminated, the money be placed in the Index Fund. Ms. Veverka also stated that the contracts with each of the active common stock managers expire on June 30, 1988, and the Committee recommends contract renewals for all but Beutel Goodman. The contracts would include the standard thirty day cancellation clause, and the fees would again be based on the same performance fee schedule in effect.

Ms. Veverka then reported on the manager selection process for external equity managers. She stated that the Committee's position is for staff, with Board approval, to build a recommended list of prospective managers and to concentrate initially on managers with expertise in the value style of management. The list would be used to replace an existing manager or add a new manager. Ms. Veverka moved acceptance of these recommendations. Ken Gudorf seconded. The motion was unanimously approved.

ALTERNATIVE INVESTMENT COMMITTEE

Ken Gudorf presented the report of the Alternative Investment Committee. He stated that the Committee has three recommendations. The first is to invest up to $15 million in a new resource fund, Petroleum Fund II, with J.P. Morgan Investment Management. He said Fund II is patterned after Fund I and would be a commingled petroleum fund involving developmental drilling. The total fund is targeted to be $110 million. Mr. Gudorf stated that the second recommendation is to retain Laventhol & Horwath as a real estate consultant to conduct an overall review of the Board's real estate portfolio. He stated that the Committee recommends a one-time fee not to exceed $100,000. Mr. Gudorf stated the third recommendation is the retention of a consultant, The Sterling Group, to assist with project reviews in the oil and gas area. He said Gene Graham, a principal in the firm, has previous experience with J. P. Morgan in the oil and gas area.

He said Ms. Graham would be available as an advisor to look at specific investments, and the contract would be limited to $20,000 with payments made on an as-needed basis. Mr. Triplett stated he believed that there should be a review of the process by which the SBI identifies real estate investments. Mr. Gudorf stated that the SBI needs to determine whether the real estate portfolio has the proper mix of investment managers and proper geographic mix. Mr. Triplett asked how the funds are to be evaluated. Mr. McDonald stated that the first step in the real estate process is to get all the facts from the managers and that the consultant will assist in that effort. He said the consultant will then help the SBI determine future efforts in the area. Judy Mares moved approval of the three recommendations. Mr. McDonald seconded. The motion passed unanimously.

Mr. Gudorf reported that during April the Alternative Investment Committee and staff met with four of the SBI's real estate managers, Heitman Advisory, Rosenberg Real Estate Equity Funds, Trust Company of the West and Aldrich, Eastman & Waltch, to review their performance. The Committee recommends that the SBI make no new real estate commitments until it retains a consultant. The current allocation to real estate is over $500 million. Mr. Gudorf added that the Committee feels no pressure to invest more money in real estate at this time. Mr. Eckmann moved approval. Joe Rukavina seconded. The motion passed unanimously.

Ms. Growe expressed her appreciation to the Council for the expanded reporting format used during discussions of the Committee reports at the meeting.

The meeting was adjourned at 4:05 P.M.

Respectfully submitted,

Howard Bicker

Howard Bicker
Executive Director

Tab A

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

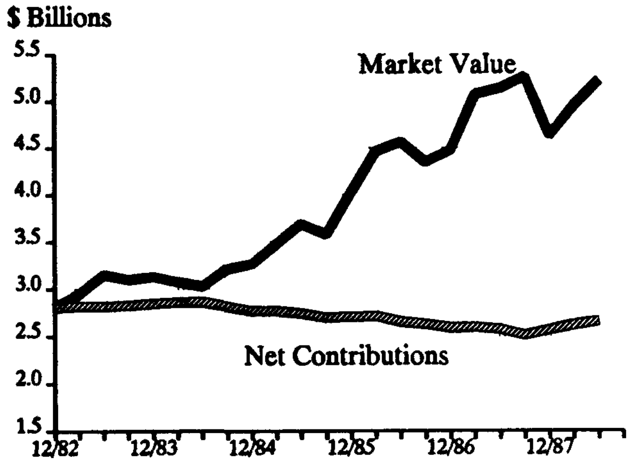
Additional detail on these funds as well as information on other funds managed by the Board can be found in the body of the Quarterly Investment Report.

EXECUTIVE SUMMARY

Basic Retirement Funds

Asset Growth

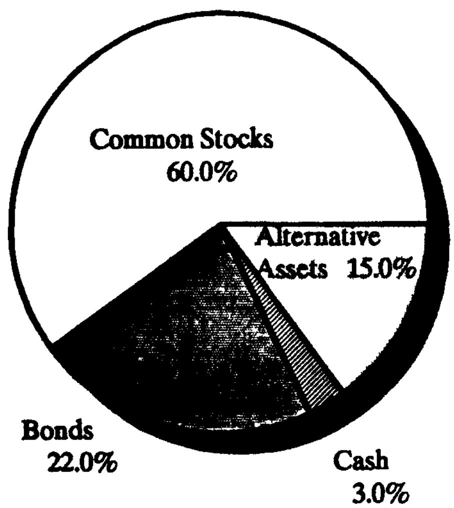
The market value of the Basic Funds increased 5.4% during second quarter 1988. The increase was attributable to rising stock prices based on stronger than expected economic growth and corporate earnings. The bond market experienced slightly higher interest rates due to fears of higher inflation. In addition, the Basic Funds received net contributions of $40 million during the quarter.



Asset Growth During Second Quarter 1988 (Millions)

Beginning Value	$4,958
Net Contributions	40
Investment Return	226
Ending Value	$5,224

Asset Mix



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.

The Basic Funds asset mix changed during the second quarter and continues to correct for the underweighting of the common stock segment that occurred in the fourth quarter of 1987. The change in the stock segment was due to performance and cash contributions. The cash segment is overweighted due to larger than normal cash holdings by outside active equity and bond managers.

	Actual Market Value (Millions)	Actual Mix 6/30/88
Common Stocks	$3,006	57.5%
Bonds	1,018	19.5
Cash*	539	10.3
Alternative Investments	661	12.7
	$5,224	100.0%

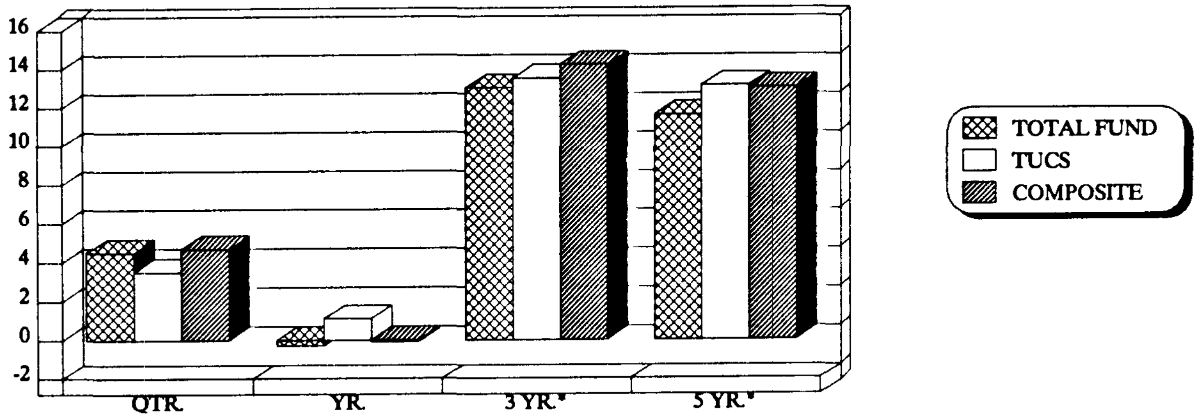
* Includes cash uncommitted to long-term assets plus all cash held by external managers.

Basic Funds (Con't.)

Total Fund Performance

The Basic Funds' total portfolio exceeded its assigned performance standards for the most recent quarter but trailed its performance standards for the last twelve months.

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.



Period Ending 6/30/88

	Qtr.	Yr.	*(Annualized) 3 Yr.	5 Yr.
Total Fund	4.5%	-0.3%	13.0%	11.6%
Total Fund Without Alternative Assets	4.9	-0.8	14.0	12.3
TUCS** Median Balanced Fund	3.5	1.1	13.5	13.1
Stock/Bond/Cash/Composite	4.7	-0.2	14.2	12.9

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

Stock Segment Performance

The Basic Funds' common stock segment exceeded the performance of its target for the latest quarter and year. Details on individual manager stock performance can be found on page 7 of the report.

	Qtr.	Yr.	(Annualized) 3 Yr.	5 Yr.
Stock Segment	6.6%	-5.2%	14.8%	12.0%
Wilshire 5000	6.5	-5.9	15.2	12.9

Bond Segment Performance

The bond segment of the Basic Funds trailed the performance of its target for the last quarter and year. Details on individual bond manager performance can be found on page 8 of the report.

	Qtr.	Yr.	(Annualized) 3 Yr.	5 Yr.
Bond Segment	1.1%	7.9%	11.1%	12.1%
Salomon Broad Index	1.2	8.1	11.0	12.6

EXECUTIVE SUMMARY

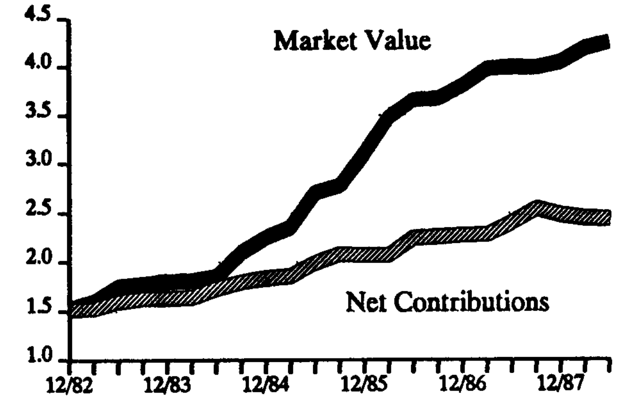
Post Retirement Fund

Asset Growth

The market value of the Post Fund increased by 1.6% during second quarter 1988.

Asset Growth During Second Quarter 1988 (Millions)

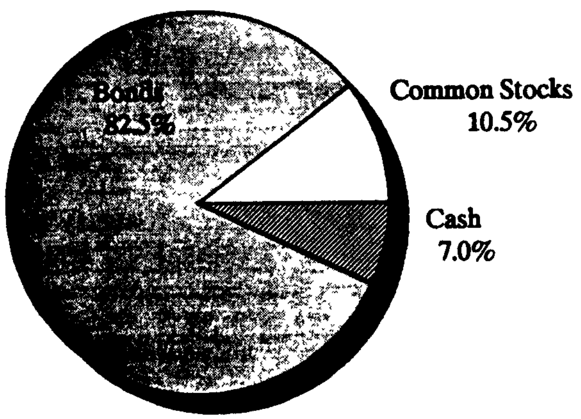
Beginning Value	$4,193
Net Contributions	-8
Investment Return	73
Ending Value	$4,258



Asset Mix

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.

The cash segment of the Post Fund increased during the quarter to fund an interim rebalancing designed to cover recent asset transfers. The rebalancing will occur in the third quarter of 1988.



Actual Asset Mix 6/30/88

	Actual Market Value (Millions)	Asset Mix 6/30/88
Common Stocks	$446	10.5%
Bonds	3,511	82.5
Cash	301	7.0
	$4,258	100.0%

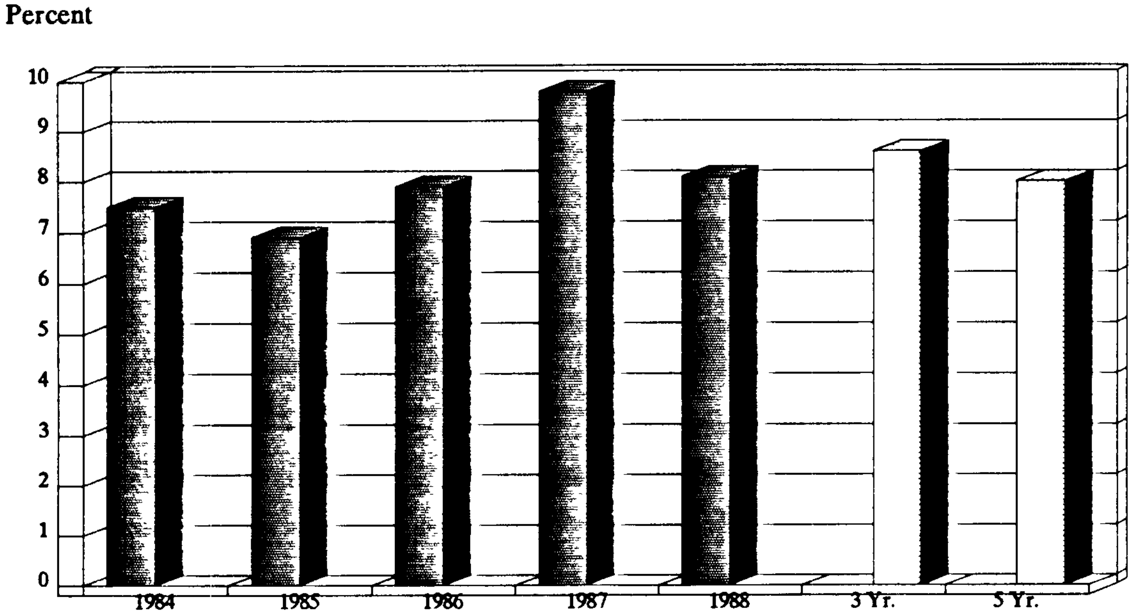
Post Fund (Con't.)

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



Calendar Year

	1984	1985	1986	1987	1988	3 Yrs. (Annualized)	5 Yrs. (Annualized)
Benefit Increases	7.5%	6.9%	7.9%	9.8%	8.1%	8.6%	8.0%

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 3.4% on an annualized basis over the last five years (calendar 1983-1987).

Stock Segment Performance

The stock segment of the Post Fund underperformed its benchmark for the quarter.

Period Ending 6/30/88

	Qtr.	Yr.	3 Yr. (Annualized)	5 Yr. (Annualized)
Stock Segment	8.5%	-4.5%	9.7%	9.9%
Post Fund Benchmark	8.8	-2.3	N.A.	N.A

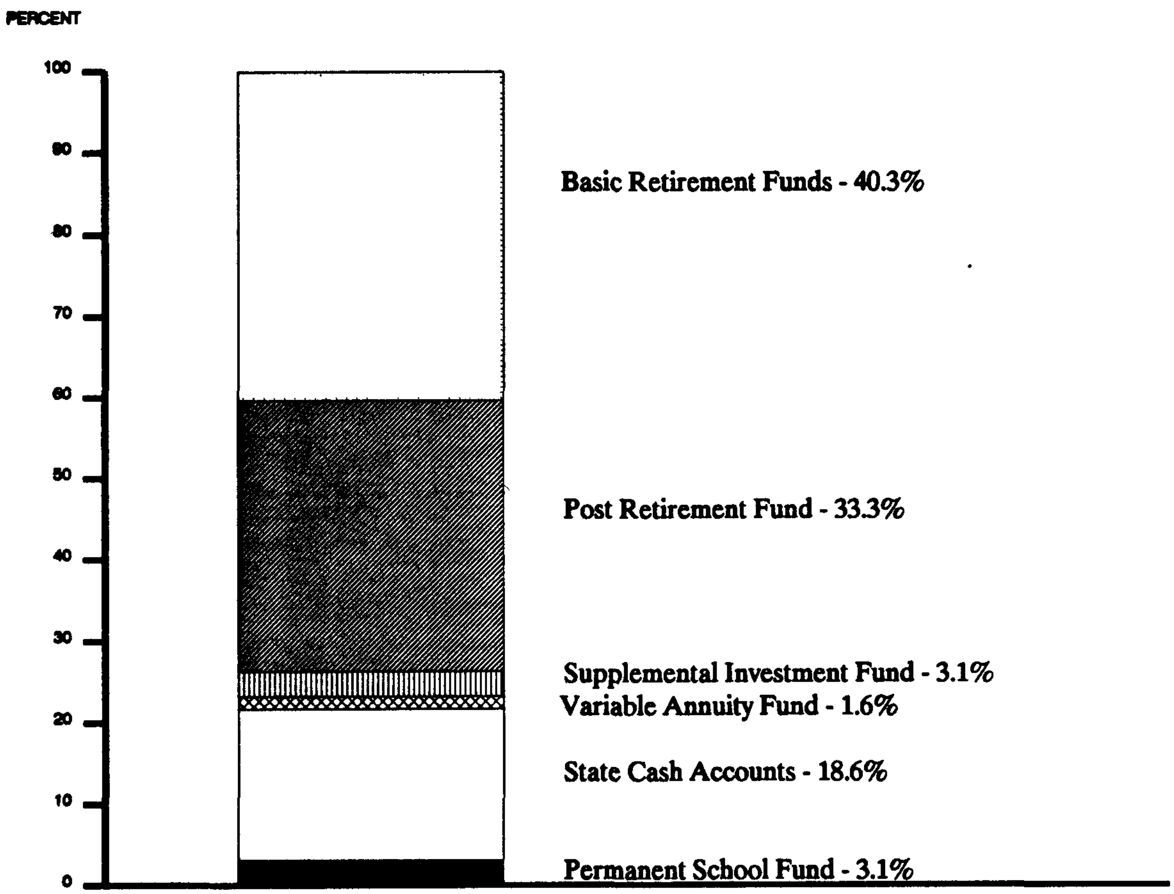
Bond Segment Performance

At the close of the quarter, the dedicated bond portfolio had a current yield of 8.63% and average duration of 7.84 years. The market value of the dedicated bond portfolio was $3.4 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 1.0% return for the quarter and a 6.9% return for the year. This is consistent with the design of the dedicated bond portfolio.

EXECUTIVE SUMMARY

Funds Under Management



	6/30/88 Market Value (Billions)
Basic Retirement Funds	$5.2
Post Retirement Fund	4.3
Supplemental Investment Fund	0.4
Variable Annuity Fund	0.2
State Cash Accounts	2.4
Permanent School Fund	0.4
Total	$12.9

MINNESOTA STATE BOARD

OF INVESTMENT

INVESTMENT REPORT

Second Quarter 1988

(April 1, 1988 - June 30, 1988)

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FINANCIAL MARKETS REVIEW

STOCK MARKET

Stock prices rose during the second quarter supported by reports of stronger economic growth and corporate earnings than expected. Overall, the Wilshire 5000 stock index provided a total return of 6.5% during the quarter. Because of the dramatic market decline on October 19, 1987, the Wilshire index lost 5.9% for the latest year.

There was a wide disparity in the price performance of different sectors during the quarter. Consumer durables was the best performing group with a return of 14.3%. The two worst performing sectors were utilities stocks which rose 2.5% and consumer non-durables which gained 1.6%.

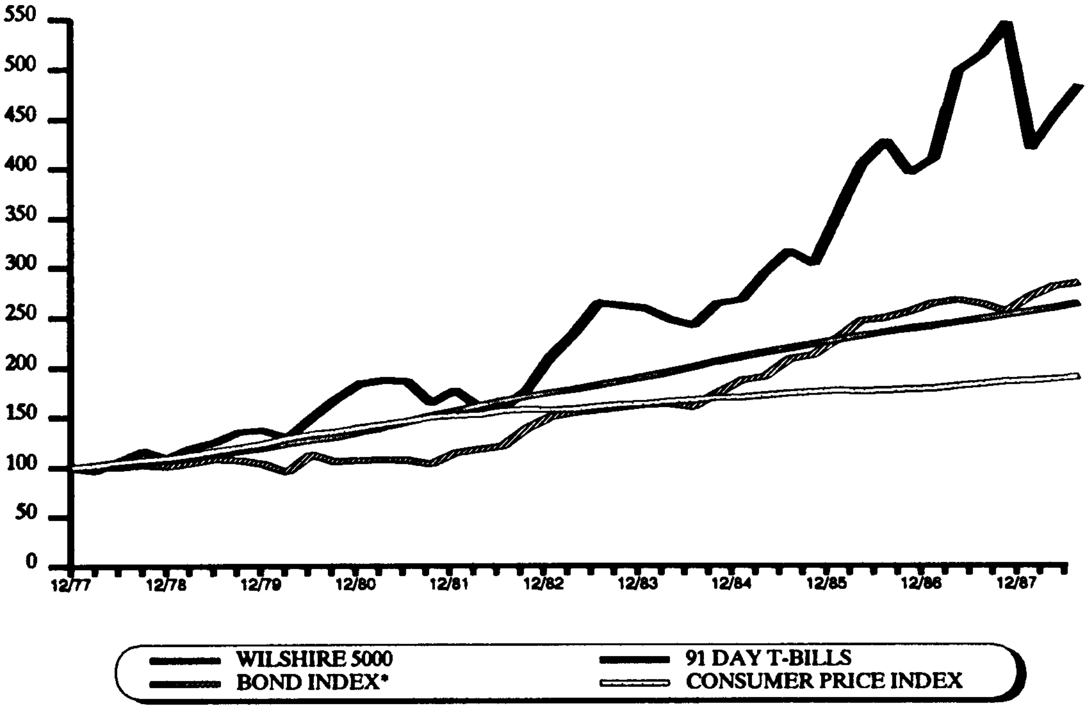
BOND MARKET

Interest rates trended slowly upward during the quarter. The rate increase was due to the severe summer drought in the midwest and economic reports showing low unemployment and high factory capacity utilization rates. Accordingly, the market reacted to concerns that the economy would overheat and that higher food prices would cause an increase in inflation.

Overall, the Salomon Brothers Broad Investment Grade (BIG) Index gained 1.2% for the quarter and had a 8.1% return for the latest year. Mortgages were the best performing sector with a gain of 1.7% and Treasury issues provided the lowest return of 0.9%.

PERFORMANCE OF CAPITAL MARKETS

Cumulative Returns



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

FINANCIAL MARKETS REVIEW

REAL ESTATE

The real estate market currently faces oversupply and slow demand growth. 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 into 1988.

VENTURE CAPITAL

The venture capital industry continues to grow. Analysts reported that $1.4 billion was raised during the first and second quarters of 1988 by more than forty independent venture capital firms. This was approximately the same amount reported for the same period in 1987. In both years, commitments from pension funds dominated capital raised from other sources.

RESOURCE FUNDS

Oil markets showed some strength as Iran and Iraq considered an end to their war. For the intermediate term, however, it appears that oil prices will remain in a range of $16-$18 per barrel trading range as worldwide supplies are more than adequate to meet demand.

BASIC RETIREMENT FUNDS

Investment Objectives

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

The SBI pursues several investment objectives in the management of the Basic Funds' assets. In order of importance, those objectives are:

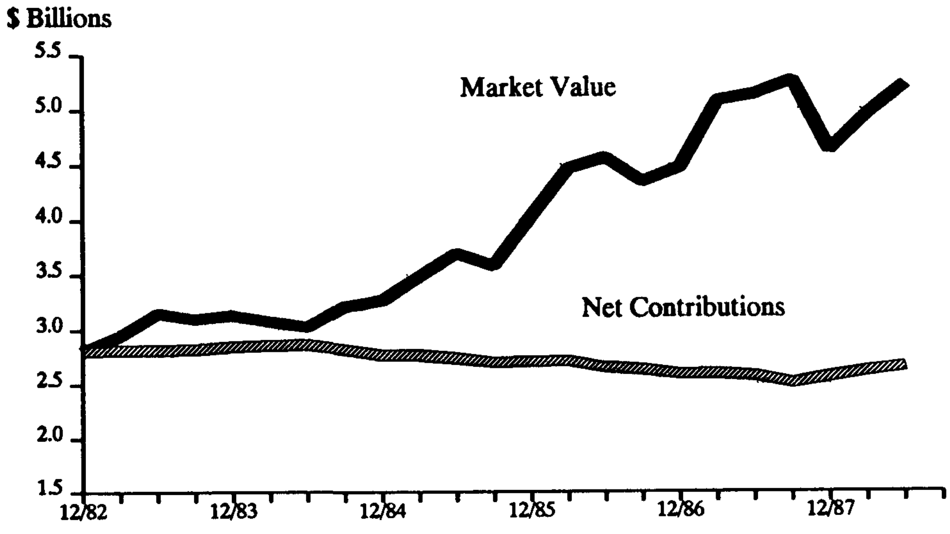
- To secure the benefits promised public employees covered by the statewide retirement plan.
- To reduce employer/employee contributions and/or increase promised benefits.
- To avoid excessive volatility in portfolio returns over the short-run.

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 is cognizant, however, that excessive short-run return volatility is undesirable. As a result, the investment policy of the Basic Funds also is designed to limit extreme portfolio return results through the inclusion of other asset classes that act as hedges against inflationary and deflationary environments.

Asset Growth

The market value of the Basic Retirement Funds' assets increased 5.4% during the second quarter. The increase was attributable to rising stock prices based on economic reports showing stronger economic growth and corporate earnings than expected. The bond market declined because of slightly higher interest rates due to fears of increasing inflation. The Basic Funds received net contributions of $40 million during the quarter.



In Millions

	12/84	12/85	12/86	12/87	3/88	6/88
Beginning Value	$3,129	$3,265	$4,030	$4,474	$4,628	$4,958
Net Contributions	-78	-62	-113	-26	53	40
Investment Return	214	827	557	180	277	226
Ending Value	$3,265	$4,030	$4,474	$4,628	$4,958	$5,224

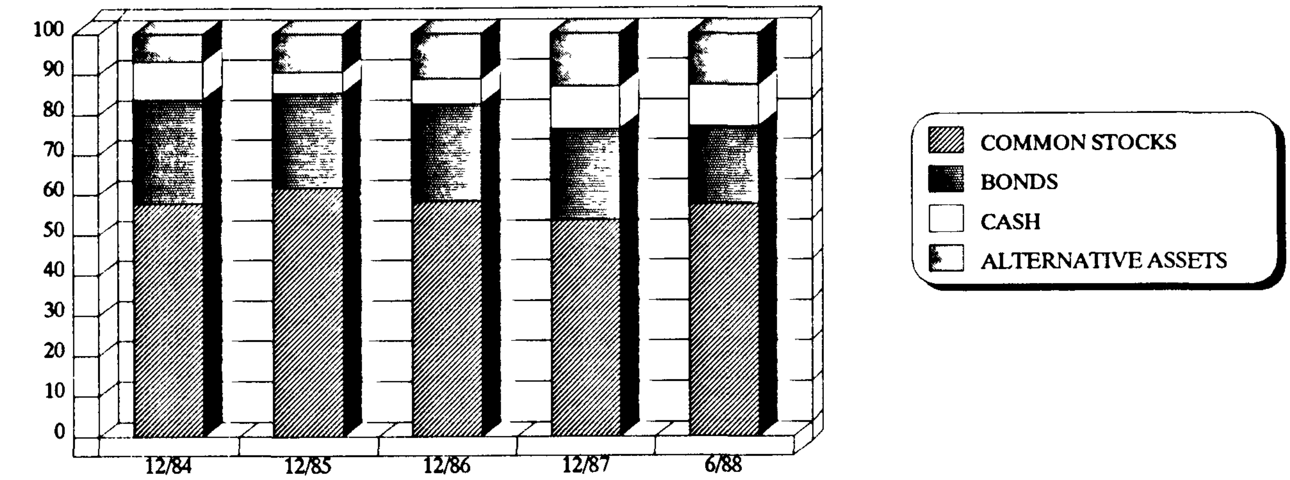
BASIC RETIREMENT FUNDS

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	60.0%
Bonds	22.0
Cash Equivalents	3.0
Real Estate	10.0
Venture Capital	2.5
Resource Funds	2.5

The Basic Funds asset mix changed during the first quarter and partially corrected the underweighting of the common stock segment that occurred in the fourth quarter of 1987. The change in the stock segment was due to performance and cash contributions. The cash segment was overweighted due to larger than normal cash holdings by outside active equity and bond managers.



	Last Five Years				Latest Qtrs.	
	12/84	12/85	12/86	12/87	3/88	6/88
Stocks	57.8%	61.6%	58.3%	53.6%	56.8%	57.5%
Bonds	25.9	23.8	24.3	22.6	21.2	19.5
Cash*	9.4	5.1	6.2	10.6	9.5	10.3
Real Estate	5.5	7.1	8.2	9.3	9.0	8.9
Venture Capital	0.7	1.2	1.6	2.5	2.3	2.6
Resource Funds	0.7	1.2	1.4	1.4	1.2	1.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

BASIC RETIREMENT FUNDS

Total Fund Performance vs. Standards

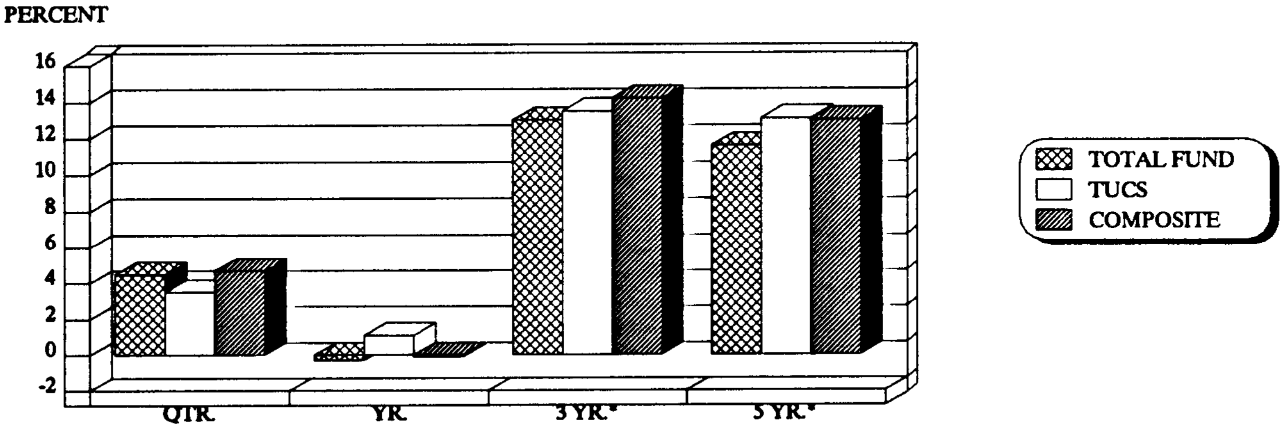
The Basic Funds' long-term rate of return performance is evaluated relative to two specific benchmarks:

- **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 outperformed its assigned performance standards for the most recent quarter but underperformed for the last year. Because of the Basic Funds sizable stock allocation and relatively good performance of the stock market, the Basic Funds' exceeded the median balanced portfolio performance during the first quarter. However, the poor performance of the stock market during fourth quarter 1987 caused the Basic Funds' performance to trail the median balance portfolio for the year.



	Qtr.	Yr.	3 Yr.	5 Yr.
	Period Ending 6/30/88		*(Annualized)	
Total Fund	4.5%	-0.3%	13.0%	11.6%
Total Fund WithoutAlternative Assets	4.9	-0.8	14.0	12.3
TUCS Median Balanced Fund	3.5	1.1	13.5	13.1
Stock/Bond/Cash Composite	4.7	-0.2	14.2	12.9

BASIC RETIREMENT FUNDS

Segment Performance vs. Standards

Stock Segment

The Basic Funds' common stock segment exceeded its performance target for the most recent quarter and year. The outperformance for the latest year was attributable to the active stock managers, who held a portion of their portfolios in cash reserves during the sharp downturn in the stock market.

			Annualized	
	Qtr.	Yr.	3 Yrs.	5 Yrs.
Stock Segment	6.6%	-5.2%	14.8%	12.0%
Wilshire 5000	6.5	-5.9	15.2	12.9

Bond Segment

The bond segment of the Basic Funds trailed the performance of its target for the quarter and latest year. The slight underperformance for the quarter was caused by an underweighting of mortgage bonds compared to their target. For the latest year the bond managers have been maintaining a defensive position by holding portfolios of shorter duration than their target. With interest rates having trended downward for the last year, the shorter durations of the manager's portfolio resulted in minor underperformance.

			Annualized	
	Qtr.	Yr.	3 Yrs.	5 Yrs.
Bond Segment	1.1%	7.9%	11.1%	12.1%
Salomon Bond Index	1.2	8.1	11.0	12.6

Cash Segment

The cash segment of the Basic Funds exceeded its target for the quarter and year.

			Annualized	
	Qtr.	Yr.	3 Yrs.	5 Yrs.
Cash Segment	1.8%	7.2%	7.4%	7.4%
91 Day T-Bills	1.5	6.0	6.3	7.4

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.

			Annualized	
	Qtr.	Yr.	3 Yrs.	5 Yrs.
Alternative Assets	1.9%	8.3%	6.0%	7.6%

BASIC RETIREMENT FUNDS

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 common stock managers exceeded the performance of their aggregate benchmark for the latest quarter but trailed for the lastest year. The performance of the individual managers was extremely varied. Several exceeded the performance of their targets by comfortable margins while others underperformed their benchmarks. A comprehensive analysis of the individual managers' performance is included in this quarter's Equity Manager Committee Report.

Managers	Market Value 6/30/88 (Thousands)	Quarter Ending 6/30//88 Actual	Bmrk	Year Ending 6/30/88 Actual	Bmrk	(Annualized) Since 1/1/84 Actual	Bmrk
Alger	$87,945	9.0%	5.7%	-9.0%	-4.5%	11.4%	14.0%
Alliance	160,771	9.6	6.0	-0.8	-9.7	18.9	12.0
Beutel*	104,666	7.9	6.6	-1.5	0.3	13.5	17.4
BMI	62,236	5.2	6.5	-5.3	-5.7	10.3	11.8
Forstmann	135,998	3.4	5.5	-1.3	-1.5	15.5	12.3
IDS	109,272	7.1	5.3	-9.5	-4.1	15.8	15.0
IAI	77,410	4.6	5.8	-4.9	-4.3	13.6	15.0
Lieber	53,794	4.6	6.9	-3.9	-3.8	13.2	11.8
Waddell	118,939	7.3	5.5	0.9	-1.8	12.9	11.7
Wilshire	2,252,752	6.6	6.5	-5.9	-5.8	14.8	14.8
Stock Segment	$3,163,783	6.6	6.3	-5.2	-5.0	14.5	14.7
Wilshire 5000		6.5%		-5.9%		14.9%	

* This manager was terminated during second quarter 1988.

BASIC RETIREMENT FUNDS

Bond Manager Performance vs. Benchmarks

Staff is in the process of working with the Board's bond managers to develop appropriate benchmark portfolios. Three of the six managers have completed their benchmark portfolios. Returns for these portfolios are reported below. For the remaining three managers, the benchmark portfolio currently in use is the Salomon Broad Investment Grade Bond Index, which represents the performance of essentially the entire investment-grade bond market, plus a small allocation to cash equivalents.

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 bond managers trailed the performance of their aggregate benchmark for the quarter and the latest year. The performance of the individual managers was somewhat varied. Several exceeded the performance of their targets while others underperformed their benchmarks. A comprehensive analysis of the individual managers' performance is included in this quarter's Fixed Income Manager Committee Report.

Managers	Market Value 6/30/88 (Thousands)	Quarter Ending 6/30/88		Year Ending 6/30/88		(Annualized) Since 7/1/84	
		Actual	Bmrk	Actual	Bmrk	Actual	Bmrk
IAI	$45,619	1.1%	1.3%	7.4%	8.1%	15.5%	15.0%
Lehman	251,816	0.7	1.1	7.2	7.7	13.9	14.2
Miller	267,120	1.5	1.3	7.8	8.1	15.6	15.0
Morgan	214,275	0.4	1.3	7.9	8.1	14.5	15.0
Peregrine*	120,616	1.6	1.5	7.6	8.7	12.6	15.1
Western	276,213	1.5	1.4	9.1	8.2	16.5	15.0
Bond Segment	$1,175,659	1.1	1.3	7.9	8.1	14.5	14.9
Salomon Bond Index		1.2%		8.1%		15.5%	

*This manager was terminated during second quarter 1988.

POST RETIREMENT FUND

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.

The SBI pursues two investment goals for the Post Fund:

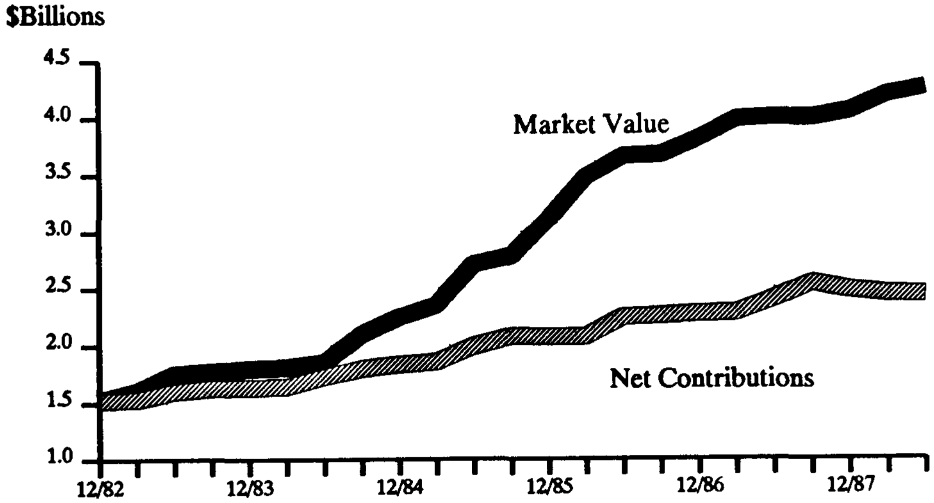
- To produce annual earnings sufficient to maintain promised benefits at current levels
- To generate additional earnings which allow benefits to be increased at a rate which compensates, to some degree, for inflation

To achieve these two objectives, the SBI recognizes that the Post Fund requires a completely different investment approach than that applied to the Basic Retirement Funds.

The Post Fund is not oriented toward long-term total rate of return maximization. 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 1.6% during the second quarter of 1988. Moderate asset growth was achieved through investment returns since net contributions for the quarter were negative $8 million.



In Millions

	12/84	12/85	12/86	12/87	3/88	6/88
Beginning Value	$1,803	$2,246	$3,107	$3,808	$4,047	$4,193
Net Contributions	201	239	199	207	-32	-8
Investment Return	242	622	502	32	178	73
Ending Value	$2,246	$3,107	$3,808	$4,047	$4,193	$4,258

POST RETIREMENT FUND

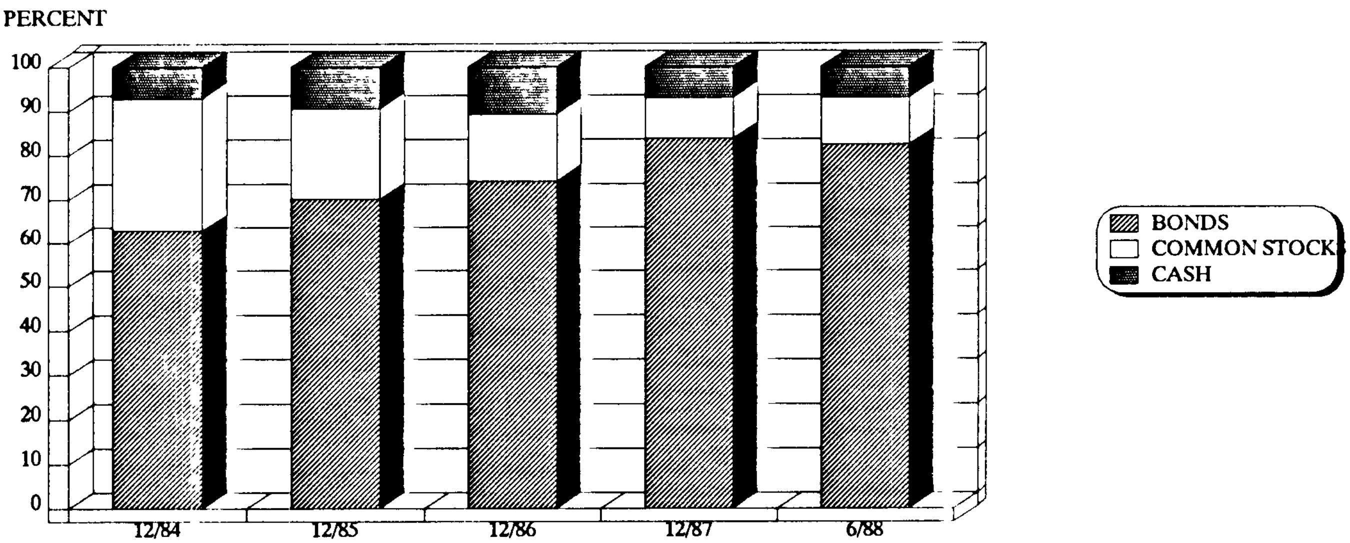
Asset Mix

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.

The cash segment of the Post Fund increased during the quarter to fund an interim rebalancing designed to cover recent asset transfers. The rebalancing will occur in the third quarter of 1988.



	Last Five Years				Latest Qtrs.	
	12/84	12/85	12/86	12/87	3/88	6/88
Bonds	62.9	70.2	74.2	83.7	85.1%	82.5
Stocks	30.0	20.5	15.1	9.3	9.6	10.5
Cash	7.1	9.3	10.7	7.0	5.3	7.0
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

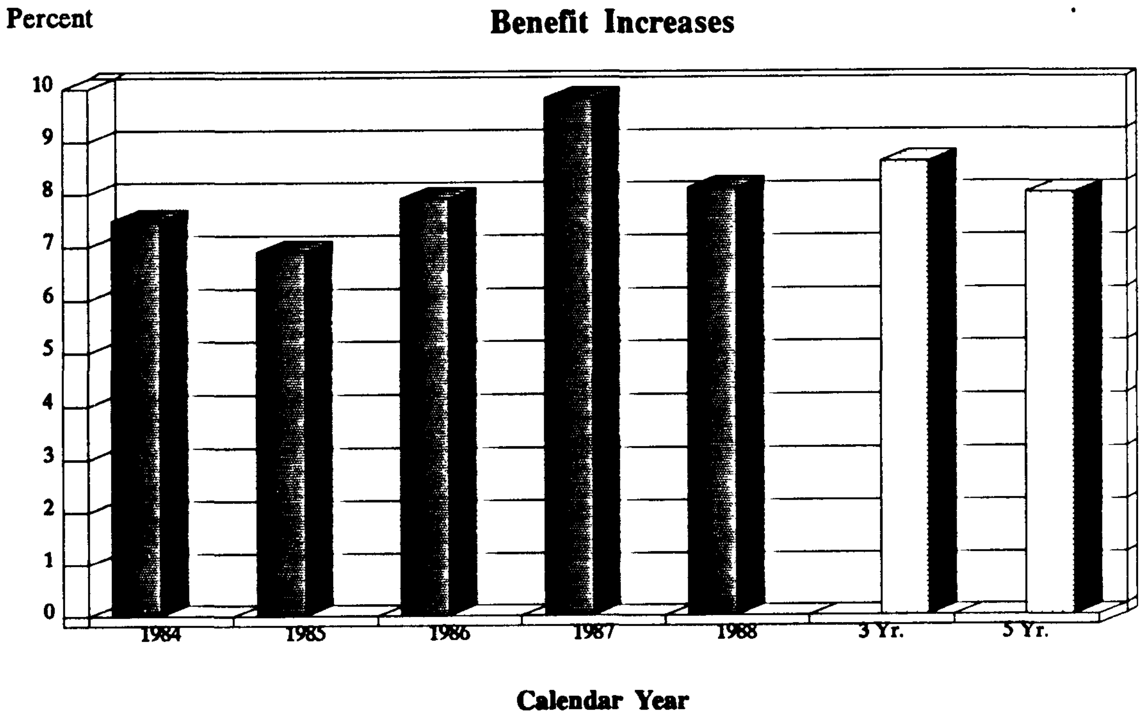
POST RETIREMENT FUND

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.



	1984	1985	1986	1987	1988	3 Yrs. (Annualized)	5 Yrs. (Annualized)
Benefit Increases	7.5%	6.9%	7.9%	9.8%	8.1%	8.6%	8.0%

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 3.4% on an annualized basis over the last five years (calendar 1983-1987).

POST RETIREMENT FUND

Segment Performance

Stock Segment Performance

The stock segment of the Post Fund underperformed its benchmark for the quarter and latest year.

	Period Ending 6/30/88		(Annualized)	
	Qtr.	Yr.	3 Yrs.	5 Yrs.
Stock Segment	8.5%	-4.5%	9.7%	9.9%
Post Fund Benchmark	8.8	-2.3	N.A.	N.A.

Bond Segment Performance

The composition of the Post Retirement Investment Fund's dedicated bond portfolio remained essentially unchanged during the second quarter.

The Post Fund's bond portfolio provided a 1.0% total rate of return for the quarter and a 6.9% 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
6/30/88

Value at Market	$ 3,434,926,115
Value at Cost	3,347,524,472
Average Coupon	6.48%
Current Yield	8.63
Yield to Maturity	9.16
Current Yield at Cost	8.85
Time to Maturity	16.94 Years
Average Duration	7.84 Years
Average Quality Rating	AAA
Number of Issues	404

SUPPLEMENTAL INVESTMENT FUND

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 June 30, 1988 the market value of the entire fund was $401 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.

SUPPLEMENTAL INVESTMENT FUND

Income Share Account

Investment Objectives
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.

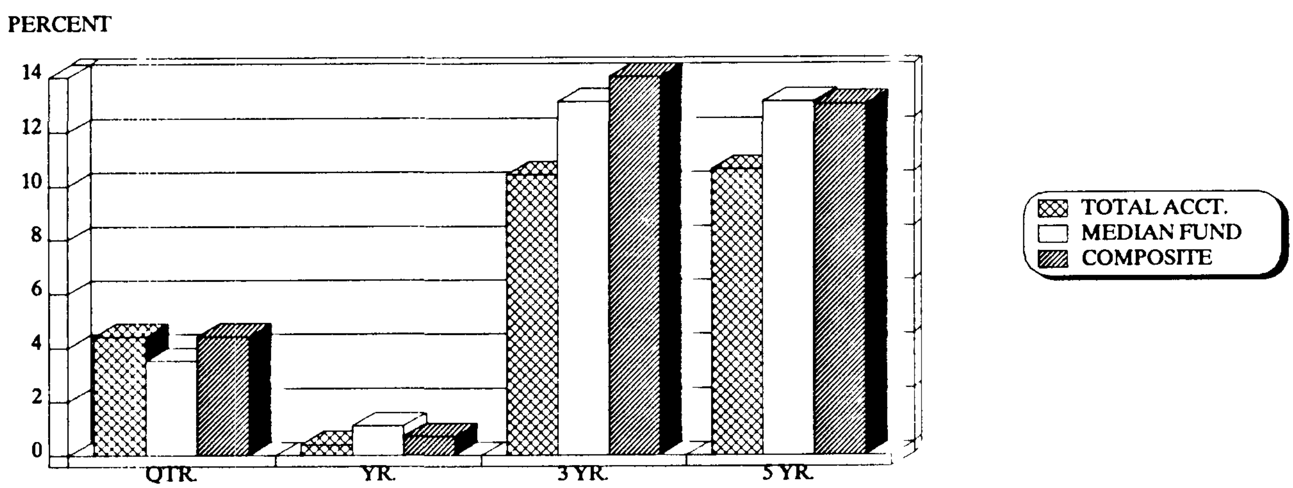
Asset Mix
The Income Share Account is invested in a balanced portfolio of common stocks and fixed income securities. Common stocks provide the potential for significant capital appreciation, while bonds act as a deflation hedge and provide portfolio diversification.

	Target	Actual
Stocks	60.0%	60.1
Bonds	35.0	30.1
Cash*	5.0	9.8
	100.0%	100.0%

* Includes cash held by the external managers

Investment Management
The Account combines internal and external management. Internal investment staff manage the entire fixed income segment. Three quarters of the stock segment is managed by Wilshire Associates as part of a passively managed index fund designed to track the Wilshire 5000. The balance of the stock segment is actively managed by the same group of external managers utilized by the Basic Retirement Funds. (See page 7 for performance results for these managers.)

Market Value
On June 30, 1988 the market value of the Income Share Account was $216 million.



Period Ending 6/30/88

	Qtr.	Yr.	Annualized 3 Yr.	Annualized 5 Yr.
Total Account	4.4%	0.4%	10.4%	10.6%
Median Fund*	3.5	1.1	13.5	13.1
Composite**	4.4	0.6	14.0	13.0
Equity Segment	6.6	-5.8	10.2	9.2
Wilshire 5000	6.5	-5.9	15.2	12.9
Bond Segment	1.1	8.6	10.7	12.9
Salomon Bond Index	1.2	8.1	11.0	12.6

* TUCS Median Balanced Portfolio

** 60/35/5 Wilshire 5000/Salomon Broad Bond Index/T-Bills Composite

SUPPLEMENTAL INVESTMENT FUND

Growth Share Account

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

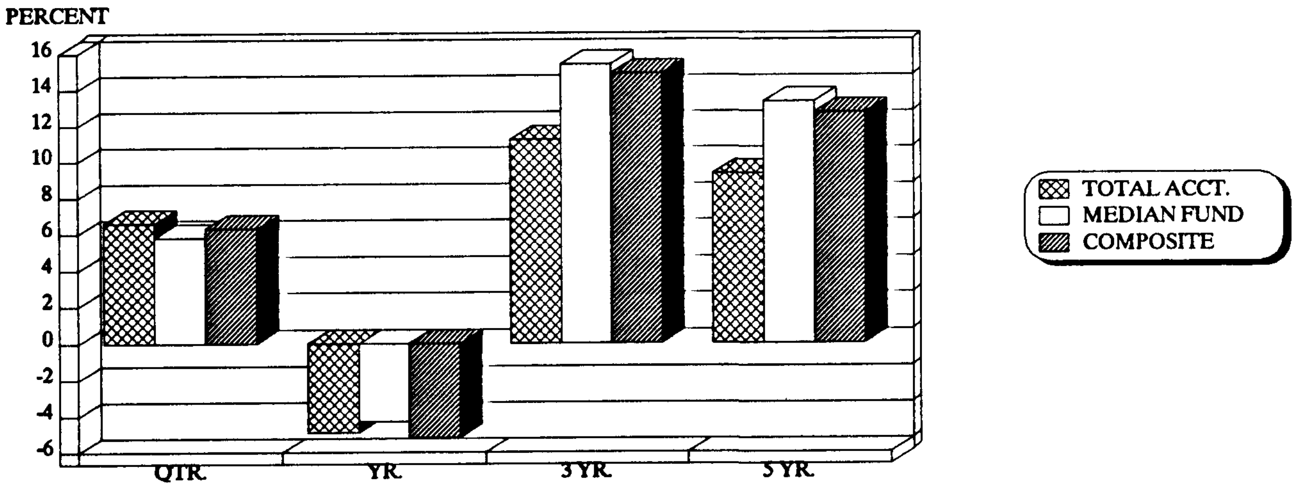
Asset Mix
The Growth Share Account is invested almost entirely in common stocks. Generally, the small cash equivalents component represents the normal cash reserves held by the Account as a result of net contributions not yet allocated to stocks.

	Target	Actual
Stocks	95.0%	80.1
Cash*	5.0	19.9
	100.0%	100.0%

*Includes cash held by the external managers

Investment Management
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.)

Market Value
On June 30, 1988 the market value of the Growth Share Account was $83 million.



Period Ending 6/30/88

	Qtr.	Yr.	Annualized 3 Yr.	Annualized 5 Yr.
Total Account	6.6%	-4.9%	11.2%	9.3%
Median Fund*	5.8	-4.3	15.4	13.3
Composite**	6.3	-5.2	14.9	12.8
Equity Segment	6.8	-4.7	11.5	7.8
Wilshire 5000	6.5	-5.9	15.2	12.9

* TUCS Median Managed Equity Portfolio

** 95/5 Wilshire 5000/T-Bills Composite

SUPPLEMENTAL INVESTMENT FUND

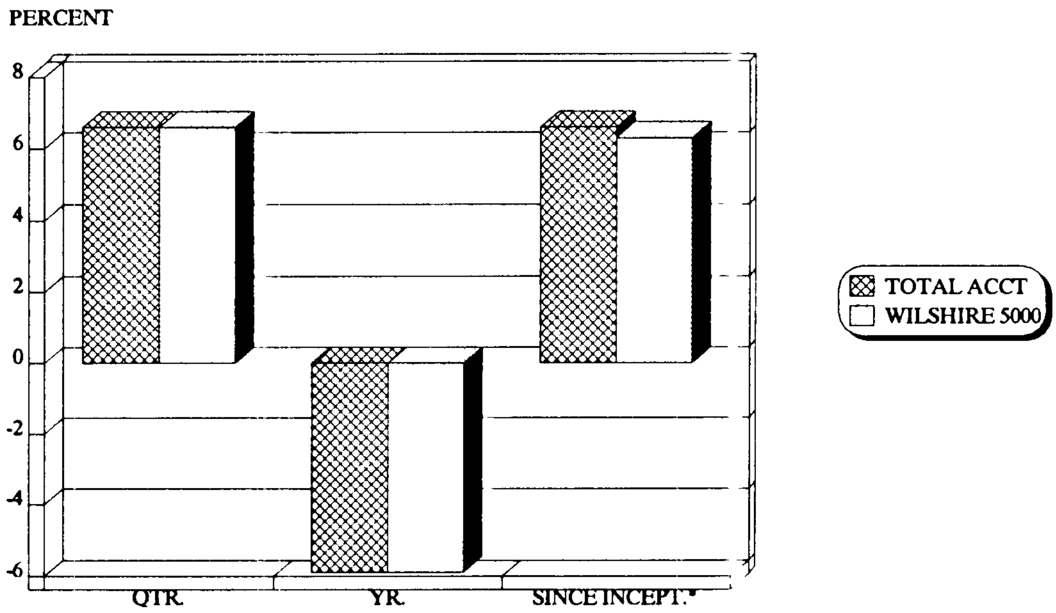
Common Stock Index Account

Investment Objectives 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 June 30, 1988 the market value of the Common Stock Index Account was $3 million.



Period Ending 6/30/88

	Qtr.	Yr.	Annualized Since Inception* 7/1/86
Total Account	6.6%	-5.9%	6.6%
Wilshire 5000	6.5	-5.9	6.3

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

SUPPLEMENTAL INVESTMENT FUND

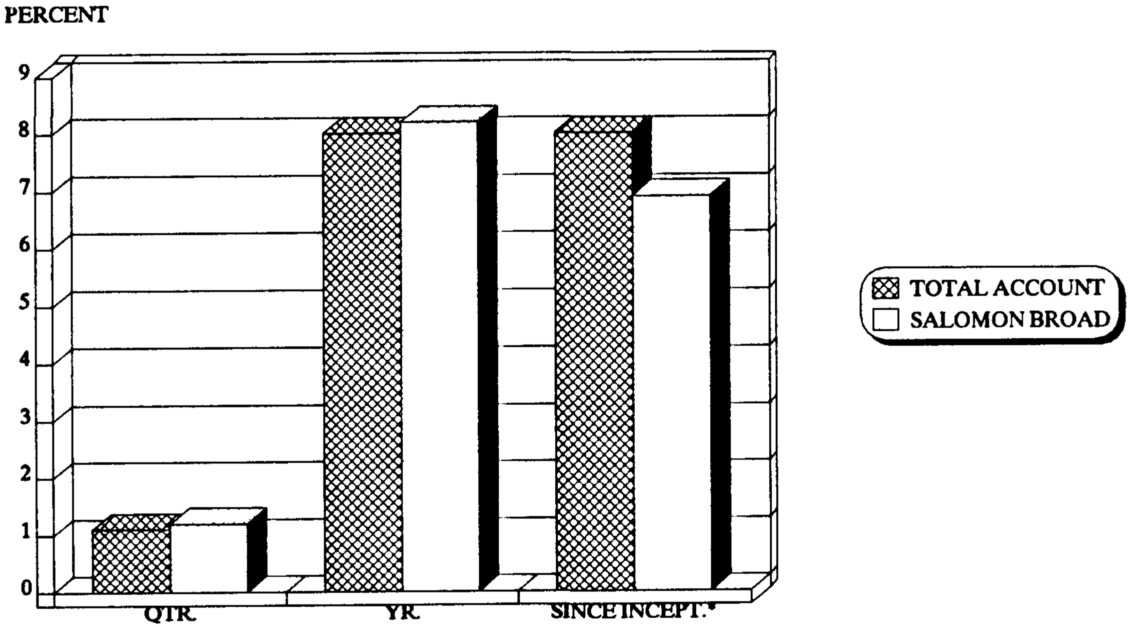
Bond Market Account

Investment Objectives
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 June 30, 1988 the market value of the Bond Market Account was $1 million.



Period Ending 6/30/88

	Qtr.	Yr.	Annualized Since Inception* 7/1/86
Total Account	1.1%	8.0%	8.0%
Salomon Broad Bond Index	1.2	8.1	6.9

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

SUPPLEMENTAL INVESTMENT FUND

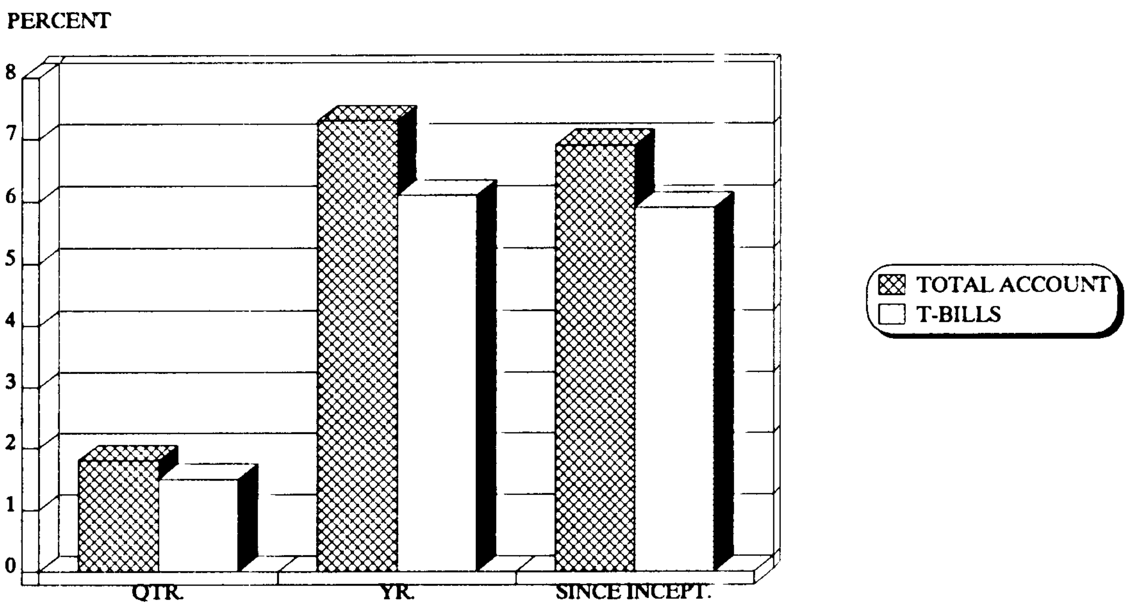
Money Market Account

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 June 30, 1988 the market value of the Money Market Account was $76 million.



Period Ending 6/30/88

	Qtr.	Yr.	Annualized Since Inception* 7/1/86
Total Account	1.8%	7.3%	6.9%
91 Day T-Bills	1.5	6.0	5.9

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

SUPPLEMENTAL INVESTMENT FUND

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 June 30, 1988 the market value of the Guaranteed Return Account was $22 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

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%	80.0
Cash*	5.0	20.0
Total	100.0%	100.0%

*Includes cash held by the external managers

Investment Management
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.)

Asset Growth
The market value of the Variable Annuity Fund increased by 6.4% during the second quarter of 1988. The increase was attributable to rising stock prices during the period.

Asset Growth During Second Quarter 1988 (Millions)

Beginning Value	$151.2
Net Contributions	-0.3
Investment Return	10.0
Ending Value	160.9

Performance
The Variable Annuity Fund outperformed the Median Fund for the quarter but trailed the target for the latest year.

Period Ending 6/30/88

	Qtr.	Yr.	Annualized 3 Yr.	5 Yr.
Total Fund	6.6%	-4.9%	11.6%	9.8%
Median Fund*	5.8	-4.3	15.4	13.3
Composite**	6.3	-5.2	14.9	12.8
Equity Segment	6.8	-4.6	11.8	9.4
Wilshire 5000	6.5	-5.9	15.2	12.9

* 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 second 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%	87.6
Cash	5.0	12.4
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 increased 1.3% during second quarter. Contributions from the fund exceeded withdrawals by 1.2 million.

Asset Growth
During Second Quarter 1988
(Millions)

Beginning Value	$353.2
Net Contributions	1.2
Investment Return	3.4
Ending Value	357.8

Bond Segment Performance
The composition of the Permanent School Fund's bond portfolio remained the same during the second 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 9.3%, an average life of 7.9 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
6/30/88

Value at Market	$307,562,755
Value at Cost	310,163,965
Average Coupon	9.07%
Current Yield	9.33
Yield to Maturity	9.40
Current Yield at Cost	9.35
Time to Maturity	17.13 Years
Average Duration	7.89 Years
Average Quality Rating	AAA
Number of Issues	123

Tab B

PORTFOLIO STATISTICS

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
COMPOSITION OF STATE INVESTMENT PORTFOLIOS BY TYPE OF INVESTMENT
MARKET VALUE JUNE 30, 1988
(in 000's)

	CASH AND SHORT TERM SECURITIES	BONDS		STOCKS		ALTERNATIVE ASSETS	TOTAL
		INTERNAL	EXTERNAL	INTERNAL	EXTERNAL		
BASIC RETIREMENT FUNDS:							
TEACHERS RETIREMENT FUND	$ 102,914 4.58%	$ -0-	$ 501,861 22.34%	$ -0-	$1,351,074 60.14%	$290,795 12.94%	$ 2,246,644 100%
PUBLIC EMPLOYEES RETIRE. FUND	44,762 3.31%	-0-	306,021 22.64%	-0-	823,524 60.93%	177,321 13.12%	1,351,628 100%
STATE EMPLOYEES RETIRE. FUND	34,716 3.31%	-0-	237,159 22.64%	-0-	638,211 60.93%	137,393 13.12%	1,047,479 100%
PUBLIC EMP. POLICE & FIRE FUND	14,598 3.31%	-0-	99,761 22.64%	-0-	268,463 60.93%	57,799 13.12%	440,621 100%
HIGHWAY PATROL RETIRE. FUND	2,587 3.30%	-0-	17,726 22.64%	-0-	47,701 60.93%	10,277 13.13%	78,291 100%
JUDGES RETIREMENT FUND	133 3.94%	-0-	882 26.16%	-0-	1,845 54.72%	512 15.18%	3,372 100%
PUBLIC EMP. P.F. CONSOLIDATED	182 3.29%	-0-	1,251 22.63%	-0-	3,368 60.94%	726 13.14%	5,527 100%
CORRECTIONAL EMPLOYEES RETIREMENT	3,610 7.14%	-0-	10,999 21.74%	-0-	29,598 58.52%	6,373 12.60%	50,580 100%
POST RETIREMENT FUND	301,141 7.07%	3,511,119 82.46%	-0-	445,625 10.47%	-0-	-0-	4,257,885 100%
MINNESOTA SUPPLEMENTAL FUNDS:							
INCOME SHARE ACCOUNT	20,370 9.43%	64,993 30.09%	-0-	-0- -0-	130,652 60.48%	-0-	216,015 100%
GROWTH SHARE ACCOUNT	4,024 4.83%	-0-	-0-	-0-	79,242 95.17%	-0-	83,266 100%
MONEY MARKET ACCOUNT	75,950 100%	-0-	-0-	-0-	-0-	-0-	75,950 100%
COMMON STOCK INDEX ACCOUNT	-0-	-0-	-0-	-0-	3,292 100%	-0-	3,292 100%
BOND MARKET ACCOUNT	-0-	-0-	1,280 100%	-0-	-0-	-0-	1,280 100%
GUARANTEED RETURN ACCOUNT	-0-	-0-	21,652 100%	-0-	-0-	-0-	21,652 100%

	CASH AND SHORT TERM SECURITIES	BONDS INTERNAL	BONDS EXTERNAL	STOCKS INTERNAL	STOCKS EXTERNAL	ALTERNATIVE ASSETS	TOTAL
MINNESOTA VARIABLE ANNUITY	7,881 4.90%	-0-	-0-	-0-	153,018 95.10%	-0-	160,899 100%
TOTAL RETIREMENT FUNDS	$ 612,868 6.10%	$3,576,112 35.60%	$1,198,592 11.93%	$445,625 4.44%	$ 3,529,988 35.15%	$681,196 6.78%	$10,044,381 100%
PERMANENT SCHOOL FUND	44,232 12.36%	313,609 87.64%	-0-	-0-	-0-	-0-	357,841 100%
TREASURERS CASH	2,149,178 100%	-0-	-0-	-0-	-0-	-0-	2,149,178 100%
HOUSING FINANCE AGENCY	79,830 100%	-0-	-0-	-0-	-0-	-0-	79,830 100%
MINNESOTA DEBT SERVICE FUND	18,332 100%	-0-	-0-	-0-	-0-	-0-	18,332 100%
MISCELLANEOUS ACCOUNTS	172,683 100%	-0-	-0-	-0-	-0-	-0-	172,683 100%
MINNESOTA STATE BUILDING FUNDS	53,357 100%	-0-	-0-	-0-	-0-	-0-	53,357 100%
GRAND TOTAL	$3,130,480 24.31%	$3,889,721 30.21%	$1,198,592 9.31%	$445,625 3.46%	$3,529,988 27.42%	$681,196 5.29%	$12,875,602 100%

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

For period of
April 1, 1988 - June 30, 1988

Teachers Retirement Fund	$ 30,000,000.00
Public Employees Retirement Fund	8,000,000.00
State Employees Retirement Fund	-0-
Public Employees Police & Fire	1,500,000.00
Highway Patrol Retirement Fund	-0-
Judges Retirement Fund	(1,008,000.00)
Public Emp. P & F Consolidated	(415,000.00)
Correctional Employees Retirement Fund	2,000,000.00
Post Retirement Fund	(8,242,179.81)
Supplemental Retirement Fund - Income	137,236.38
Supplemental Retirement Fund - Growth	(1,181,205.33)
Supplemental Retirement Fund - Money Market	1,025,268.51
Supplemental Retirement Fund - Index	417,098.28
Supplemental Retirement Fund - Bond Mkt.	115,669.91
Supplemental Retirement Fund - Guaranteed	356,417.18
Minnesota Variable Annuity Fund	$ (297,829.34)
Total Retirement Funds Net Cash Flow	$ 32,407,475.78
Permanent School Fund	1,189,217.49
Total Net Cash Flow	$ 33,596,693.27

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

TRANSACTION AND ASSET SUMMARY
RETIREMENT FUNDS

	Net Transactions				Asset Summary (at market)			
	Bonds (000,000)	Stocks (000,000)	Total	Cash Flow	Short-term % of Fund	Bonds % of Fund	Equity % of Fund	Total (000,000) (at market)
December 1985	(3)	(76)	(79)	16	5.5	43.1	51.4	7583
January 1986	(7)	13	6	13	5.5	42.9	51.6	7618
February	36	(8)	28	34	5.3	42.9	51.8	8049
March	1	(3)	(2)	27	5.4	42.9	51.7	8429
April	(3)	(131)	(134)	20	7.3	42.9	49.8	8384
May	(2)	8	6	44	7.7	40.8	51.5	8450
June	226	326	552	625	8.3	41.4	50.3	8715
July	175	2	177	33	6.8	44.8	48.4	8488
August	147	59	206	39	4.6	45.5	49.9	8884
September	14	(67)	(53)	(48)	4.9	47.0	48.1	8490
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	60	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	8890
December	(3)	34	31	0	6.8	50.1	43.1	9180
January 1988	(5)	118	113	57	5.9	50.0	44.1	9572
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

Tab C

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

September 1, 1988

TO: Members, State Board of Investment

FROM: Howard Bicker

SUBJECT: Quarterly Budget and Travel Report

1) Budget Report

A budget-to-actual report for the SBI's administrative budget is included as Attachment A. This is the final report for Fiscal Year 1988. The SBI ended the year with a small surplus of $1,363.

2) Travel Report

A summary of SBI travel for May 16 through August 15 is included as Attachment B.

ATTACHMENT A

STATE BOARD OF INVESTMENT
FISCAL YEAR 1988 ADMINISTRATIVE BUDGET REPORT
GENERAL FUND APPROPRIATION

ITEM	FISCAL YEAR 1988 BUDGET	FISCAL YEAR 1988 EXPENDITURES
PERSONAL SERVICES		
CLASSIFIED EMPLOYEES	$ 215,700	$ 215,383
UNCLASSIFIED EMPLOYEES	1,012,290	1,011,616
PART-TIME EMPLOYEES	0	1,834
SEVERENCE PAY	23,500	36,627
MISCELLANEOUS PAYROLL	0	7,316
SUBTOTAL	**$ 1,251,490**	**$ 1,272,776**
EXPENSES & CONTRACTUAL SERVICES		
RENTS & LEASES	90,000	79,920
REPAIRS/ALTERATIONS/MAINTENANC	7,000	7,202
PRINTING & BINDING	15,000	7,631
PROFESSIONAL/TECHNICAL SERVICE	5,000	8,834
DATA PROCESSING & SYSTEM SERVI	162,000	162,000
PURCHASED SERVICES	20,000	26,709
SUBTOTAL	**$ 299,000**	**$ 292,296**
MISCELLANEOUS OPERATING EXPENSES		
COMMUNICATIONS	20,000	20,690
TRAVEL, IN-STATE	2,000	395
TRAVEL, OUT-STATE	40,000	26,142
FEES & OTHER FIXED CHARGES	6,000	5,151
SUBTOTAL	**$ 68,000**	**$ 52,378**
SUPPLIES/MATERIALS/PARTS	**13,000**	**15,483**
CAPITAL EQUIPMENT	**13,300**	**10,494**
TOTAL GENERAL FUND	**$ 1,644,790**	**$ 1,643,427**

ATTACHMENT B

STATE BOARD OF INVESTMENT

Travel Summary by Date
May 16, 1988 - August 15, 1988

Purpose	Name(s)	Destination and Date	Total Cost
New Manager Search Bond Index Managers Mellon Bond, Fidelity (finalist interviews)	H. Bicker R. Helgeson R. Henry J. Manahan G. Norstrem E. Voss	Pittsburgh, PA Boston, MA 5/16-17	$4,159.60
Manager Monitoring Venture Capital Manager KKR Annual Investor Mtg.	J. Griebenow	S. Francisco, CA 5/23-24	$ 550.28
New Manager Search Real Estate Manager Zell Lurie Fund (initial interview)	J. Griebenow	Chicago, IL 5/25	$ 338.00
Board Member Travel International Foundation of Employee Benefit Plans (investment conference)	R. Helgeson	Lake Tahoe, NV 6/26-28	$1,178.40
Consultant Meeting Richards & Tierney	H. Bicker	Chicago, IL 7/5-7	$ 572.42
Staff Conference Gov't Finance Off. Assoc. Midwest Region Conference	H. Bicker	Chicago, IL 7/11	$ 421.25
New Manager Search Equity Managers Concord, Franklin, Rosenberg, Sasco (semi-finalist interviews)	D. Gorence M. Menssen	Boston, MA New York, NY San Francisco, CA 7/31-8/3	$2,666.92
Staff Education Financial Analysts Seminar (sponsored by Fin. Anal. Fed. and Univ. of Chicago)	B. Lehman	Rockford, IL 8/7-12	$1,558.00

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

September 2, 1988

TO: Members, State Board of Investment

FROM: Treasurer Michael A. McGrath, Chair
SBI Administrative Committee

SUBJECT: SBI Administrative Committee Report

This report summarizes the items discussed by the SBI Administrative Committee at their June 30 and August 11, 1988 meetings.

1. FY 90-91 Legislative Budget Request.

The Committee recommends the Board approve FY 90-91 budget request documents for submission to the 1989 Legislature (see Attachment A). The budget figures were developed using guidelines issued by the Department of Finance. The $1.7 million annual administrative budget represents a "same level" request. The Committee expects to continue to review the budget request at a greater level of detail in the future.

2. Other Items Discussed by the Committee.

The Committee discussed a number of other issues during the quarter. None requires action by the Board at this time:

- **FY 89-91 Management and Budget Plan.** The Committee reviewed detailed budget documents and workplans for FY 89-91. As noted above, the Committee intends to continue to monitor budget expenditures. Additional information on the capital equipment budget will be considered at the next meeting. The Committee has also requested staff to report on the potential use of cost accounting or functional accounting systems.

- **Return on Management Fees.** At the Committee's request, Tom Richards of Richards & Tierney Inc., the SBI's consultant, analyzed the return the SBI is receiving on fees paid to its investment managers. The study covered the four year period from the end of 1983 to the end of 1987 and included only those managers retained as of December 31, 1987. In aggregate, Mr. Richards reported that the active and passive stock managers returned $2.51 for each $1.00 paid in fees. After discussion, the Committee requested that Richards & Tierney complete additional analysis that compares the performance of each manager and each manager's benchmark to the Wilshire 5000 Index. The results of this study will be reported to the Committee at a future meeting.

- **Northern Ireland Legislation.** The Committee asked the Attorney General to provide advice concerning implementation of the Northern Ireland legislation (MS 11A.241). The new statute requires the Board to vote for certain shareholder resolutions and to sponsor and co-sponsor resolutions that mirror the "MacBride Principles."

- **Social Investing.** The Administrative Committee has requested the Board's Proxy Committee to review the general issue of social investing and report back with their findings and conclusions at a future meeting.

- **Personnel Procedures.** The Committee reviewed salary provisions in the statewide labor agreements that include SBI staff. The Committee also discussed the role of the Executive Director in personnel decisions. Any recommendations on these issues will be reported to the Board in the future.

3. Request from the Chair Concerning Performance Appraisal of the Executive Director.

While the Administrative Committee has not discussed procedures for evaluating the performance of the Executive Director, I believe this issue should be addressed by the Administrative Committee.

I ask that the Board authorize me, as Committee Chair, to appoint a subcommittee of the SBI Administrative Committee to conduct a performance appraisal of the Executive Director prior to the end of the calendar year. The product of the review will be a written evaluation provided to each Board member.

Attachment

ATTACHMENT A

FY 90-91
LEGISLATIVE BUDGET REQUEST

The following pages are facsimiles of the budget document that will be presented to the 1989 Legislature by the Department of Finance.

This material was prepared using the guidelines issued by the Department of Finance. The page layout of the final document will differ from the format shown here due to printing requirements of the Department of Finance.

The SBI's legislative budget request document can be considered a summary of the information contained in the "Management and Budget Plan" discussed by the SBI Administrative Committee. The administrative budget request of $1.7 million/yr. is a "same level" request.

Please note: Pages showing historical expenditures and requested budget were not available from the Biennial Budget System at the time this Board folder was prepared. Those pages will be distributed at the Board meeting on September 19, 1988.

AGENCY: INVESTMENT, STATE BOARD OF
BIENNIAL BUDGET REQUEST FY 90-91

AGENCY PURPOSE: The State Board of Investment (SBI) develops and implements investment policies and strategies for the state's retirement funds, trust funds and cash accounts. The statutory goal of the SBI is "to establish standards which will insure that state and pension assets...will be responsibly invested to maximize the total rate of return without incurring undue risk." (Minnesota Statutes Section 11A.01).

OPERATIONS AND CLIENTELE: The SBI, composed of 5 constitutional officers, provides investment management for the Basic Retirement Fund, the Post Retirement Fund, the Permanent School Fund, the Supplemental Investment Fund, and the Variable Annuity Fund. In addition, the SBI manages Invested Treasurer's Cash and approximately 100 other state cash accounts. On June 30, 1988, assets managed by the board totaled $12.9 billion. All activities of the board are governed by M.S. Chapter 11A.

In order to meet its statutory goal the SBI must:

Establish and periodically update the investment objectives, asset allocation and investment management structure for each of the funds under its control.

Monitor and evaluate investment performance to insure investment objectives are met.

Assess developments in the broad financial markets and evaluate their potential impact on SBI operations and investment policies.

Communicate the investment policies of the SBI to its clients and constituents.

The Board retains an Executive Director, an internal investment management staff, and external investment managers to execute its policies. In performing these duties, the board works in conjunction with the Investment Advisory Council which is composed of 17 persons with investment and retirement fund expertise.

The SBI staff recommends strategic planning alternatives to the board and council and executes the board's policy decisions. The staff also provides internal management for a portion of the board's assets, closely monitors the performance of all external managers retained by the board, and reviews prospective investment vehicles for legislative consideration.

Approximately 55% of the funds invested by the SBI are under internal management. This includes the assets of the Post Retirement Fund, Permanent School Fund, and money in state cash accounts.

Approximately 45% of the funds are managed by external money managers: 8 active common stock managers; 1 passive common stock manager; 5 active fixed income managers; 2 passive fixed income managers; and 7 real estate, 3 resource, and 11 venture capital commingled fund managers. The board also retains a Master Custodian to assist the SBI in a variety of accounting and management functions. Assets of the Basic Retirement Funds, Supplemental Investment Fund and Variable Annuity Fund are under external management.

Since the majority of the board's activity relates to investment of retirement funds, its primary clients are the current and retired members of the three statewide retirement systems (PERA, TRA, MSRS). For activities involving cash accounts, the board's largest clients are the State Treasurer and the Department of Finance.

MAJOR POLICY ISSUES:

Several refinements of the board's investment management program were completed during the 1987-89 biennium, including:

Review and update of the investment policies for the Basic Retirement Funds.

Implementation of performance based fees for all external stock managers.

Creation of a passive fixed income portfolio for the Basic Retirement Funds.

Restructuring the investment options for the participants in the Supplemental Investment Fund.

Creation of pooled funds for state cash accounts.

In addition, several new initiatives are currently underway, including:

Implementation of new statutory authority to invest in international securities.

Use of derivative financial instruments in the investment portfolios.

Comprehensive review of the board's real estate portfolio.

ATTORNEY GENERAL COSTS:

Fees for legal Services Rendered	Actual F.Y. 1988	Act./Est. F.Y. 1989	Agency Request F.Y. 1990	F.Y. 1991
Fees Assessed	$9,351.30	$10,000	$12,600	$12,600
Fee Paid	$4,675.65	$ 5,000	$ 6,300	$ 6,300
Requested Budget	$4,675.65	$ 5,000	$ 6,300	$ 6,300

EXPLANATION OF BUDGET REQUEST:

The SBI is requesting "same level" funding for the upcoming biennium. Although the SBI will be implementing several new management initiatives during this period, they can be completed within the current budget and complement limits.

ACTIVITY STATISTICS:

Basic Retirement Funds

1. Asset Allocation	Actual June 30 1987	Actual June 30 1988	Long-Term Policy Target
Common Stocks	59.8%	57.5%	60%
Bonds	19.8%	19.5%	22%
Alternative Investments	10.6%	12.7%	15%
Cash Equivalents	9.8%	10.3%	3%

2. Performance Comparisons	FY 1987	FY 1988	Five Years Annualized Ending 6/30/88
a) Total Fund			
Basic Funds	14.5%	-0.3%	11.6%
Median balanced fund TUCS Universe	13.1%	1.1%	12.3%
b) Common Stock Segment			
Basic Funds	19.4%	-5.2%	12.0%
Wilshire 5000 Stock Index	20.1%	-5.9%	12.9%
c) Bond Segment			
Basic Funds	7.9%	7.9%	12.1%
Salomon Broad Bond Index	5.6%	8.1%	12.6%

Post Retirement Fund

1. Asset Allocation	Actual June 30 1987	Actual June 30 1988
Common Stocks	16.8%	10.5%
Bonds	74.2%	82.5%
Cash Equivalents	9.0%	7.0%

2. Retiree Benefit Increases Generated	FY 1986	FY 1987	Five Years Annualized Ending 6/30/87
Benefit Increase	9.8%	8.1%	8.0%
One-half Inflation (CPI)	0.9%	1.9%	1.6%

Tab E

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

August 25, 1988

TO: Members, State Board of Investment
Members, Investment Advisory Council

FROM: Master Custodian Review Committee

SUBJECT: Committee Report

At its June 9, 1988 meeting, the State Board of Investment (SBI) established a Master Custodian Review Committee and directed it to determine if the SBI's current custodian is providing adequate services and whether its services are "state of the art".

The Master Custodian Review Committee met several times during the quarter to review the services of the SBI's current custodian (State Street Bank and Trust Company) and to determine if the contract should be renewed. State Street Bank has provided Master Custodial Services for the Board's externally managed portfolios for approximately five years. Its current fee schedule expires on September 30, 1988.

The Committee determined that the best way to insure access to information from top custodial organizations was to issue a Request For Proposal (RFP) to the major participants in the Master Custodian industry. A summary of this process is included in Attachment A.

Recommendation:

Based on the results of the RFP, the Committee recommends that the Board authorize the Executive Director, with the assistance of SBI legal counsel, to execute and negotiate a contract with State Street Bank and Trust Company, Boston MA, for Master Custodial services for a three year period ending September 30, 1991.

The Committee believes State Street's response to the RFP demonstrates client services that equal or exceed all other responders. In addition, State Street's proposed fee schedule is very competitive. Gross fees would be reduced from current levels. Further, State Street will guarantee that the SBI's net fee for each year of the contract will be zero, due to offsets from securities lending income.

ATTACHMENT A

SUMMARY OF REVIEW PROCESS
MASTER CUSTODIAN REVIEW COMMITTEE
July - August 1988

At its meeting on June 9, 1988, the State Board of Investment (SBI) established a Master Custodian Review Committee composed of a designee of each Board member and two representatives of the Investment Advisory Council (IAC). The Committee was asked to evaluate the performance of the SBI's current Master Custodian, State Street Bank and Trust Company, to determine if State Street's services are adequate to meet the SBI's needs and to assess State Street's continuing ability to maintain "state of the art" capabilities in the Master Custodian field.

The members of the Review Committee were:

Peter Sausen	Governor's Designee, Chair
Christie Eller	Attorney General's Designee
Richard Helgeson	Auditor's Designee
John Manahan	Treasurer's Designee
Judy Mares	Secretary of State's Designee
Ray Vecellio	IAC Representative
Jan Yeomans	IAC Representative

The Committee elected to conduct a Request For Proposal (RFP) in order to compare State Street's capabilities to those available from other custodial organizations. The RFP was announced in the State Register on July 18, 1988. In addition, RFP's were solicited from ten organizations; the eight largest firms in the industry and the two Minnesota banks that have custodial operations:

Bank of New York
Bankers Trust Company
Boston Safe Deposit and Trust Company
Chase Manhattan Bank
Citibank
First Trust Company
Mellon Bank
Northern Trust Company
Norwest Bank
State Street Bank & Trust Company

All ten of the above firms responded. Two additional banks indicated an interest in the RFP but did not provide formal responses.

The Committee evaluated the proposals on three broad criteria:

- o ability to provide the services delineated in RFP
- o relative cost of those services
- o completeness of the response

Because it was charged with reviewing the Board's existing master custodian services, the Committee established State Street's current level of services as a minimum requirement. Any responder not able to match current services was dropped from further consideration.

The Committee also compared the estimated fee for each responder by evaluating the two major components of custodial net fees:

o Gross Fees

Each responder based their gross fee on the size of the SBI account, projected number of transactions, projected number of holdings, number of portfolios and cost of other services provided by the bank. Gross fees varied due to the different methods of charging for master custodial services.

o Projected Income Offset

Income from securities lending activity is used to offset the gross fee. Each responder provided a different estimate of its projected income from securities lending. In some cases, the projected income was sufficient to completely offset the stated gross fees. Two responders guaranteed their income projections.

Except where loan income was guaranteed, the Committee placed greater emphasis on the gross fees charged than on estimates of security lending income. Due to the uncertainty of future security lending income, which is dependent on the type of portfolio in place and on general market conditions, this factor was considered to be of secondary importance.

RECOMMENDATION:

Based on its review of the RFP responses, the Master Custodian Review Committee recommends that State Street Bank and Trust Company remain as the SBI's Master Custodian. This recommendation is based on the following conclusions:

- o State Street demonstrated it would continue to provide "state of the art" master custodial services. Its products and services equal or exceed all other responders.

- State Street would provide the lowest gross fee for the services required by the SBI. The proposed gross fee would be lower than the fee schedule in State Street's current contract.

- State Street would guarantee that the SBI will earn securities lending income sufficient to cover all gross fee (i.e. zero net fee) for the three year life of the proposed contract.

- Retention of State Street would avoid any costs associated with moving assets from one custodian to another.

Tab F

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

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

August 29, 1988

TO: Members, State Board of Investment
Members, Investment Advisory Council

FROM: Equity Manager Committee

SUBJECT: Committee Report

The Committee met on Friday, August 19, 1988 to discuss the following agenda items:

- o Review of active equity manager performance
- o Status of equity manager selection process
- o Review of Selection Committee recommendations

A summary of Committee discussion and recommendations for each agenda item are provided below.

INFORMATION ITEMS:

1) Review of Equity Manager Performance

The Committee reviewed the performance evaluation reports for each of the Board's external equity managers and concurred with the following staff recommendations:

a) Maintain the probation status of Fred Alger Management

The firm was placed on probation for quantitative reasons at the June 1988 meeting. Fred Alger's cumulative Value of Active Management VAM chart performance through June 30, 1988 remains below the probation level. On a qualitative level, staff noted concerns regarding the firm's continued account erosion and the recent loss of a key research person. These issues will be reviewed with the firm during the next quarter.

2) <u>Status of Equity Manager Selection Process</u>

The Equity Manager Committee reviewed the "value" manager screening process undertaken by staff during the past quarter. The Committee approves of the screening process conducted by staff for "value" managers and recommends that the same process be applied to other investment styles in the future.

ACTION ITEM:

1) Recommendations from the Equity Manager Selection Committee

The Committee reviewed the results of the Equity Manager Selection Committee and accepts its recommendations concerning the addition of four managers to the SBI's active stock manager group. The Selection Committee's full report is attached. Specifically, the Selection Committee recommends that:

- the SBI authorize the Executive Director, with assistance from SBI's legal counsel, to execute and negotiate contracts with Concord Capital Management, Franklin Portfolio Associates Trust, Rosenberg Institutional Equity Management and Sasco Capital Inc.
- each manager receive an initial portfolio of approximately $100 million
- each manager be compensated through the performance based fee formula used for the SBI's current active stock managers

As noted in the Selection Committee report, $100 million is approximately 3% of the Basic Funds' common stock segment. The Committee believes that a 3% initial allocation represents the minimum level necessary for a manager to have a meaningful impact on total fund performance.

The Committee also discussed the impact that the Selection Committee's recommendation will have on the diversification of the Basic Funds' common stock segment. The Committee reviewed a risk analysis, data indicating that the addition of these four managers will reduce the Basic Funds' misfit exposure.

The Committee recommends that the new managers be funded with assets from the index fund.

Attachments

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

August 25, 1988

TO: Members, State Board of Investment
Members, Investment Advisory Council

FROM: Equity Manager Selection Committee

SUBJECT: Committee Report

At its June 1988 meeting, the Investment Advisory Council (IAC) recommended that the State Board of Investment (SBI) construct and maintain a list of qualified prospective stock managers covering a variety of investment styles. The Council also recommended the manager selection process begin by identifying a number of qualified "value" managers. The "value" style is currently under represented in the aggregate portfolio due to recent terminations of "value" managers.

In order to act on these recommendations, an Equity Manager Selection Committee was formed to:

- review the screening process
- to interview semi-finalist manager candidates
- make final selection recommendations to the Board

Screening Process

Fifty-nine (59) firms were identified as potential candidates. Based on responses to questionnaires and screening interviews, staff referred four firms to the Selection Committee as semi-finalists. During its deliberations, the Selection Committee reviewed the screening process used to identify the semi-finalists.

The Committee reviewed detailed background information, performance data and historical portfolio risk characteristics of each of the four semi-finalists. Each firm made a formal presentation to the Committee on August 8, 1988.

More information on the search process is included in the attachments.

The Committee believes all four firms are well qualified. Based on their review, the Committee recommends the Board hire all four semi-finalist firms and that each be allocated initial portfolio of $100 million.

The Committee based its recommendation on the following factors:

- o An allocation of $100 million represents less than 3.0% of the Basic Funds' common stock program. Managers with allocations less than $100 million would have negligible impact on the performance of the total fund.
- o The total allocation of $400 million to the active equity manager program will move the mix between passive and active management in the Basic Retirement Funds from approximately 72% passive/28% active to 64% passive/36% active. The Board's policy is to allocate up to 50% of the Basic Retirement Funds' stock segment to active management.
- o Each of the prospective manager's benchmarks would provide the Board with diversification not currently offered by the existing manager group. Adding one or more of the recommended managers would not increase the misfit in the total portfolio.

Recommendation:

The Committee recommends the Board authorize the Executive Director, with assistance from SBI legal counsel, to execute and negotiate contracts with the following firms:

o	Concord Capital Mgmt.	San Mateo, CA
o	Franklin Portfolio Associates Trust	Boston, MA
o	Rosenberg Institutional Equity Mgmt.	Orinda, CA
o	Sasco Capital Inc.	Fairfield, CT

Further, the Committee recommends each manager should receive an initial portfolio of approximately $100 million and be compensated through the performance-based fee formula used for the SBI's current active stock managers.

Attachments

ATTACHMENT A

SUMMARY OF SEARCH PROCESS FOR VALUE MANAGERS CANDIDATES
June - August 1988

At its June 1988 meeting, the State Board of Investment (SBI) reviewed recommendations from the Investment Advisory Council (IAC) which outlined a screening and search process for prospective active stock managers. The IAC recommended the SBI construct and maintain a list of qualified manager candidates covering a variety of investment styles. The Council also recommended the manager selection process begin by identifying a number of qualified "value" managers.

The "value" style is currently under represented in the aggregate portfolio due to recent termination of "value" managers. The "value" style encompasses a number of traditional as well as non-traditional, investment approaches. Ideally, a "value" manager's benchmark, when combined with the existing manager group, will not increase the aggregate SBI portfolio misfit.

An Equity Manager Selection Committee was formed to review the initial screening process, to interview semi-finalist candidates and to make final selection recommendations to the Board.

The members of the Committee were:

Peter Sausen	Governor's Designee, Chair
Christie Eller	Attorney General's Designee
Richard Helgeson	Auditor's Designee
John Manahan	Treasurer's Designee
Elaine Voss	Secretary of State's Designee
Debbie Veverka	IAC Representative
Jan Yeomans	IAC Representative

Initial Candidates

A list of prospective "value" managers was built from a number of outside sources. Managers with fewer than $100 million in assets under management were excluded. The initial list included fifty-nine (59) names (see Attachment B).

Staff requested general information from each of the managers on the initial list (see Attachment C). Each respondent was interviewed by staff at the SBI offices. Staff interviewed a total of forty-five (45) managers.

ATTACHMENT A (con't)

Semi-Finalists

The evaluation of the initial candidates was based on the same qualitative criteria used to evaluate the Board's existing managers (see Attachment D). The selection of semi-finalists focused heavily on the following criteria:

- o Innovative and disciplined investment approach
- o Remains full-invested; does not raise cash
- o Consistent application of investment approach
- o Self-sufficiency of ideas; not dependent on "Wall Street"
- o Attention to transaction levels and transaction costs
- o Currently using or developing a benchmark portfolio

This screening process identified four candidate firms for further consideration:

- o Concord Capital Management
- o Franklin Portfolio Associates Trust
- o Rosenberg Institutional Equity Management
- o Sasco Capital, Inc.

Each of the four firms completed a detailed questionnaire relating to the firm's organization and investment approach (see Attachment E.) Also staff requested that each manager provide historical monthly portfolio holdings and performance data for a representative account. From this data, staff produced an analysis of performance and risk to determine the potential impact of each manager on the existing manager program.

Selection Committee Review

The Selection Committee reviewed the screening process used to select semi-finalist candidates. The detailed questionnaire and historical performance data referenced above were evaluated by the Committee for each of the four semi-finalists. In addition, each firm made a formal presentation to the Committee on August 8, 1988.

ATTACHMENT B

VALUE MANAGER CANDIDATE LIST

Barrow, Hanley, Mewhinney & Strauss, Inc.	Dallas, TX
Batterymarch Financial Management	Boston, MA
Birmingham Capital Management Co., Inc.	Birmingham, AL
The Boston Company Insitutional Investors, Inc.	Boston, MA
Brandywine Asset Management	Wilmington DE
Capital Management Association	New York, NY
Cashman, Farrel & Associates, Inc.	Wayne, PA
Centerre Trust	St. Louis, MO
Concord Capital Management	Chicago, IL
Dean Witter Reynolds InterCapital	New York, NY
Delaware Investment Advisers, Inc.	Philadelphia, PA
Dewey Square Investors	Boston, MA
Dillon, Read Capital, Inc.	New York, NY
Disciplined Investment Advisors	Evanston, IL
Dreman Value Management Inc.	New York, NY
Drexel Burnham Lambert, Inc.	Philadelphia, PA
Federated Investment Counseling, Inc.	Pittsburgh, PA
Fiduciary Management Inc. (formerly Resource Capital Advisors)	Milwaukee, WI
First Manhattan Capital Management	New York, NY
First Pacific Advisors, Inc.	Los Angeles, CA
Franklin Portfolio Associates	Boston, MA
Furman Selz Capital Management, Inc.	New York, NY
GAMCO Investors, Inc	New York, NY
Gulf Investment Management	Houston, TX

Hotchkis and Wiley	Los Angeles, CA
Hutton Capital Management	New York, NY
Integrated Resources Asset Management	New York, NY
INVESCO Capital Management, Inc.	Atlanta, GA
Investment Counselors of Maryland	Baltimore, MD
Keystone Investment Management Corp.	Boston, MA
Lazard Freres Asset Management	New York, NY
Lynch & Mayer	New York, NY
Management Asset Corporation	Westport, CT
Marinvest, Inc.	New York, NY
Martingale Asset Management	Boston, MA
Meridian Management Company	Little Rock, AR
Morgan Stanley Asset Management, Inc.	Chicago, Il
Neuberger & Berman Pension Management	New York, NY
Newbold's Asset Management	Philadelphia, PA
NSR Management Corporation	New York, NY
Oppenheimer Capital Corp.	New York, NY
Pinnacle Associates Ltd.	New York, NY
Pioneering Management Corporation	Boston, MA
Provident Capital Management, Inc.	Philadelphia, PA
Qualivest Capital Management	Portland, OR
Quest Advisory Corp.	New York, NY
Rosenberg Institutional Equity Management	Orinda, CA
Sanford C. Bernstein & Co., Inc.	New York, NY
Sasco Capital Inc.	Fairfield, CT
Schaenen Wood & Associates, Inc.	New York, NY
Donald Smith & Co., Inc.	Paramus, NJ
Sound Shore Management, Inc.	Greenwich, CT

State House Capital Management	Hartford, CT
The Travelers Investment Management Company	Hartford, CT
United Capital Management	Denver, CO
Value Line Asset Management	New York, NY
ValueQuest Ltd.	Mablehead, MA
WEDGE Capital Management	Charlotte, NC
Wilmington Capital Management, Inc.	Wilmington, DE

ATTACHMENT C

MINNESOTA STATE BOARD OF INVESTMENT
EXTERNAL COMMON STOCK MANAGER PROGRAM

PROSPECTIVE MANAGER QUESTIONNAIRE

1. Please provide a brief description of your firm's investment approach and categorize your investment approach (i.e. value, growth, sector rotational) if appropriate.

2. For performance evaluation and investment strategy purposes, does your firm utilize any customized common stock performance benchmarks that differ in some way from the broad market indices?

3. How many equity-only accounts does your firm have under management? What is the current market value of these accounts in aggregate?

4. Who are your five largest tax-exempt equity-only clients? What is the current dollar size of each of these accounts?

5. What is the average account load for your equity portfolio managers in terms of total equity accounts managed.

6. Does your firm have a growth plan in place that specifies the maximum number of clients and/or assets under management? If so, what is the firm's current status?

7. If not included in marketing materials, please provide biographies of your firm's key common stock investment personnel.

ATTACHMENT D

MANAGER PERFORMANCE EVALUATION
QUALITATIVE CRITERIA

I. ORGANIZATION/STAFF

A. Experience and Quality

1. Professionals exhibit a high degree of competence and experience.

2. Professionals have managed money successfully under variety of market conditions.

3. Professionals are familiar with needs of large institutional clients.

4. Firm demonstrates its commitment to integrity and fiduciary responsibility.

B. Stability

1. Current group of professionals is responsible for firm's track record.

2. Turnover has not been extraordinary in terms of either numbers of people or reasons for their departures.

3. When turnover has taken place, prompt corrective measures have been taken.

4. Control or business emphasis of firm has not changed, or in those case where it has, the firm's investment process has remained intact.

C. Leadership

1. An individual is clearly accountable for directing and motivating the firm's professionals.

2. No serious dissension among professionals.

D. Growth in Assets/Accounts

1. Firm has growth policy in place, consistent with its investment approach.

2. Account load of portfolio managers is not excessive.

3. No extreme gain or loss of accounts has occurred in recent years.

E. Client Relations

1. Support staff is adequate to provide satisfactory client servicing.

2. Firm demonstrates willingness to cooperate with clients to achieve client goals.

II. INVESTMENT APPROACH

A. Investment Style

1. Investment style is attractive in that it reflects a thoughtful consideration of reasonable risk-return opportunities.

2. Investment style has been consistently applied over a variety of market environments.

3. Investment style is represented by an appropriate benchmark.

B. Decision-Making Process

1. Portfolio construction procedures are specified, efficient, and consistent with the investment style.

2. Investment research coverage is thorough.

3. Decision-making hierarchy among professionals is clearly specified.

4. Firm demonstrates a willingness to make short-term active bets relative to its benchmark.

C. Performance Review Process

1. Comparisons of risk-return performance relative to a pre-determined benchmark are made.

2. Attempts are made to identify and rectify sources of performance problems.

3. Performance results, sources of returns, and investment strategy are clearly presented to clients.

ATTACHMENT E

STATE OF MINNESOTA
EQUITY INVESTMENT MANAGER INFORMATION

I. BACKGROUND DATA

1. Date of Interview with Search Committee: ______________

2. Name of Firm: ______________

3. Address: ______________

____

____

4. Telephone: ______________

5. Contact: ______________

6. Date Business Commenced: ______________

7. Affiliation with other firms (i.e., parent management companies, insurance companies, brokerage firms, investment banking firms, or other entities): ______________

____

____

8. Ownership: ______________

____

9. Is the firm registered as an investment advisor under the Investment Advisors Act of 1940; a bank, as defined in the act; an insurance company qualified to act in such capacity under the laws of Minnesota and one other state?

Personnel

1. Number of Investment Department Personnel: ______________

2. Number of Portfolio Managers: ______________

3. Number of Full-time security analysts: ______________

4. Number of Economists: ______________

5. Does firm have in-house trader(s): ______________

6. Number of portfolio managers and investment analysts added in: ____________

   past three years ____________

   the past year ____________

7. Number of portfolio managers and investment analysts which have left the firm in:

   past three years ____________

   their initiative ____________

   firm's initiative ____________

   the past year ____________

   their initiative ____________

   firm's initiative ____________

8. Elaboration on answers to questions #6 and #7.

9. Experience of investment personnel:

	NUMBER OF YEARS		
	Average	Low	High
Portfolio Managers	______	_____	_____
Investment Analysts	______	_____	_____

10. Average dollars under management, per portfolio manager: ________________

11. Average number of accounts per portfolio manager: ________________

12. Limit on number of accounts per portfolio manager: ________________

13. Approximate allocation of portfolio manager's time (%):

Investment Research	______________
Portfolio Management	______________
Administration/Sales	______________
Other	______________

14. Biographical data on key investment personnel, including education and work experience (attached to this report).

15. Describe the firm's financial incentives for portfolio managers and/or investment analysts.

16. Identify the member(s) of the firm who would most likely be directly responsible for managing the SBI's account.

17. How many accounts and total dollars does the individual(s) listed above currently managed?

18. Describe the firm's experience with managing the money of public funds and other large institutional clients.

Client Base

1. For accounts under management as of June 30, 1988 provide the following information:

Accounts	Number	Assets (market value in millions) Total	Stocks	Bonds	Other	Percent of Total Assets Fully Discretionary
Total						
Tax Exempt						

2. Account breakdown by number of accounts:

Tax-exempt funds

	6/30/88	12/31/87	12/31/86	12/31/85
Under $10 million				
$10-$25 "				
$25-$50 "				
$50-$100 "				
Over $100 "				
Largest Account Size				
Smallest Account Size				

3. Describe any limitations the firm currently imposes or plans to impose regarding:

Number of Client Relationships

Total Assets under Management

Maximum account size

Minimum account size

4. List the names, and the dollar amount of the firm's five largest equity tax-exempt accounts:

5. Provide the names and sizes of all tax-exempt accounts greater than $5 million that the firm lost in 1985, 1986, 1987 and 1988:

6. Describe the firm's management fee schedule:

7. Does the firm utilize performance-based fees for any of its current clients?

8. Relevant background information on past performance data provided.

II. INVESTMENT PHILOSOPHY

1. Describe in broad terms the firm's overall investment management philosophy.

2. What portfolio characteristics does the firm seek with regard to residual and systematic risk and industry diversification?

3. For performance evaluation and investment strategy purposes, does your firm utilize any customized common stock performance benchmarks (normal portfolio) that differ in some way from the broad market indices?

4. If the answer to question #8 above is "yes", please provide a description of the current benchmark construction process.

III. INVESTMENT MANAGEMENT PROCESS

1. Describe the firm's management style with respect to asset allocation.

2. List range of cash position of equity portfolio over last five years.

3. What types of assets and maturities does the firm normally hold as cash equivalents?

4. Describe the firm's process for formulating, implementing, and controlling equity investment strategy. In particular, discuss the subjects of economic analysis, market timing, and stock selection.

5. Assuming the firm's managers have read the SBI's investment guidelines (i.e., restrictions concerning allowable investments and target risk-return parameters), can they work under them?

6. Will the SBI's account be managed on a separate basis? If not, explain.

7. Assuming that the SBI's account is one of the larger that the firm will manage, does the firm anticipate any problems in absorbing the SBI's assets with respect to investment process, philosophy etc.?

IV. ORGANIZATIONAL CAPABILITIES

Equity Research Process

1. What are the firm's principle research and information sources?

2. Does the firm have expertise in any particular group of equities?

3. Describe the size of the firm's research staff and their experience levels.

4. How does the firm focus equity research?

Trading

1. Give a description of the firm's trading operation regarding:

   a) staff size, experience, scope of responsibilities, and allocation of commissions.

   b) trading techniques and venues

2. To what extent is the firm willing to allocate the commission dollars generated in the management of the SBI's assets to the SBI for its research purposes?

Communication

1. How does the firm communicate with clients?

   a) Format and frequency

   b) Who in the organization would handle contact with the SBI?

   c) Will the firm's account manager be available for periodic presentations and joint manager meetings?

   d) Please provide an example of a client/manager presentation (to be attached to this report).

Miscellaneous

1. What does the firm perceive its weaknesses to be, if any?

V. FINANCIAL VIABILITY AND ETHICS

1. Describe the firm's financial position.

2. Provide a copy of the firm's most recent audited financial statement (to be attached to this report).

3. Describe any censure by the SEC or any litigation pending against the firm.

4. Is the firm aware of any potential conflicts of interest in managing the SBI's assets?

5. Provide a copy of the firm's Form ADV (to be attached to this report).

VI. MISCELLANEOUS

1. Does the firm trade with any brokers who are not members of DTC and are not part of DTC's ID system? If yes, explain.

2. Would the firm desire to manage its own cash reserves from the SBI's account? Explain.

3. Does the firm have a preference as to the method of funding its SBI account out of the SBI's current holding?

4. Are there situations in which you recommend using stock index futures? If so, in what manner?

5. Describe the information processing capabilities (databases, software and hardware) supporting the firm's investment operation.

ACTIVE EQUITY MANAGERS

Value of Active Management Reports

Second Quarter 1988

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:

- Maintain probation status for Fred Alger.

Managers	Market Value 6/30/88 (Thousands)	Quarter Ending 6/30/88		Year Ending 6/30/88		(Annualized) Since 1/1/84	
		Actual	Bmrk	Actual	Bmrk	Actual	Bmrk
Alger	$110,365	9.0%	5.7%	-9.0%	-4.5%	11.4%	14.0%
Alliance	201,758	9.6	6.0	-0.8	-9.7	18.9	12.0
BMI	78,102	5.2	6.5	-5.3	-5.7	10.3	11.8
Forstmann	170,669	3.4	5.5	-1.3	-1.5	15.5	12.3
IDS	137,130	7.1	5.3	-9.5	-4.1	15.8	15.0
IAI	97,144	4.6	5.8	-4.9	-4.3	13.6	15.0
Lieber	67,508	4.6	6.9	-3.9	-3.8	13.2	11.8
Waddell	149,261	7.3	5.5	0.9	-1.8	12.9	11.7
Wilshire 5000		6.5%		-5.9%		14.9%	

FRED ALGER MANAGEMENT

PORTFOLIO MANAGER: David Alger

ASSETS UNDER MANAGEMENT: $110,364,959

INVESTMENT PHILOSOPHY

Fred Alger searches for companies expected to experience above-consensus earnings gains. These earnings gains may be either cyclical or secular. The firm focuses on two types of companies: first, companies whose product is expected to achieve high consistent unit volume growth rates; and, second, companies undergoing a positive life cycle change not yet fully recognized by the market. The proportion of the total portfolio invested in these two types of companies varies over time. On average, however, the high unit growth companies tend to dominate the total portfolio. Fred Alger is not an active market timer, usually maintaining a fully invested position.

QUALITATIVE EVALUATION

(Reported By Exception)

The previous evaluation noted several items of concern:

- Growth plan not in place.
- Significant account loss experienced during past year.

The first item remains outstanding. The recent account and personnel losses cause concern and warrant continuous monitoring.

New items of concern are:

- Loss of key research professional

The firm's exceptional strengths continue to be:

- Highly successful and experienced professionals.
- Organizational continuity and strong leadership.
- Extensive securities research process.

QUANTITATIVE EVALUATION

	Performance Relative to Benchmark		
	Latest Quarter	Latest Year	Since 1/1/84 Annualized
Fred Alger Actual	9.0%	-9.0%	11.4%
Fred Alger Benchmark	5.7%	-4.5	14.0

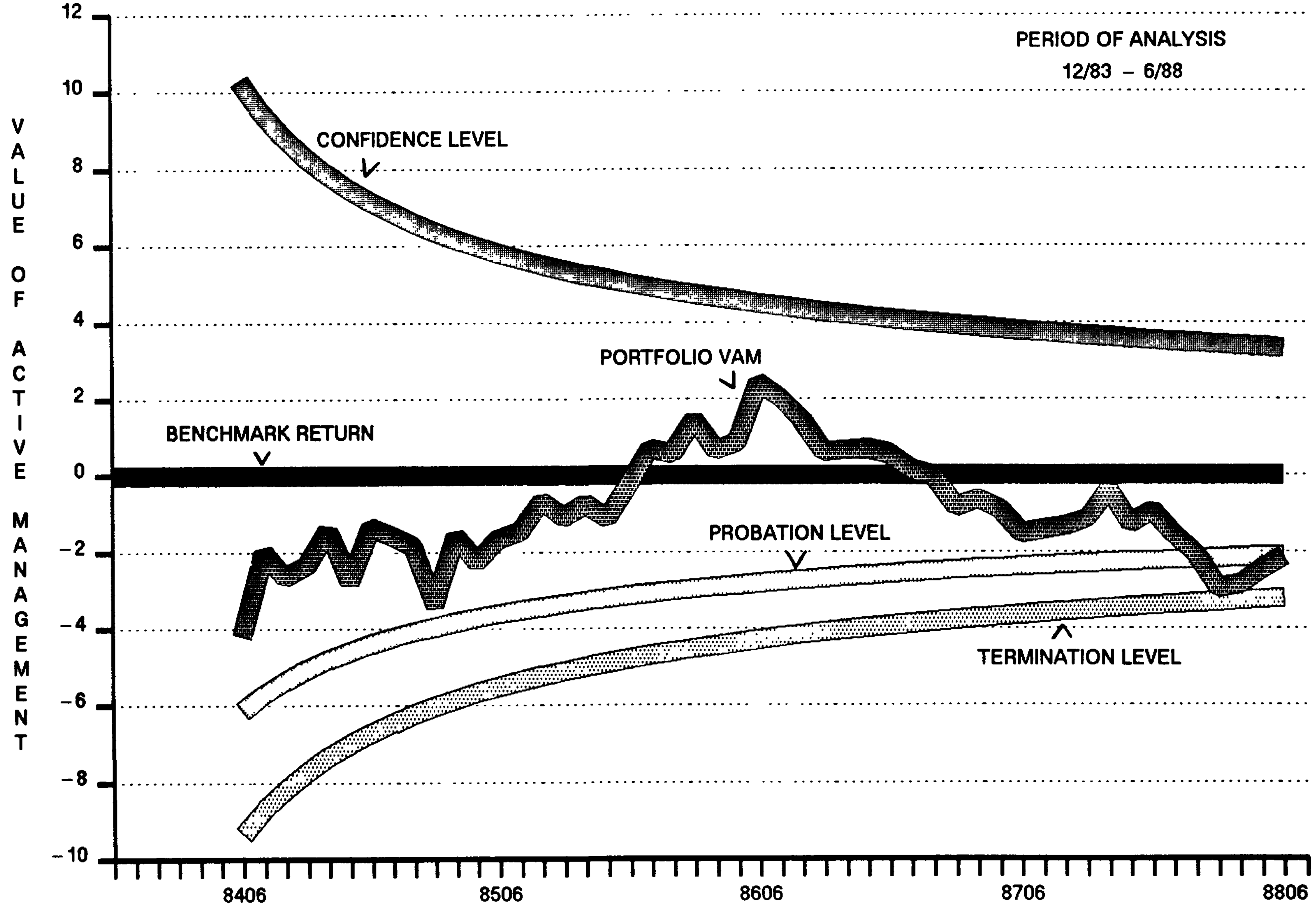
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

Maintain probation status. The manager was placed on probation by the Board at its June 1988 meeting. Fred Alger continues to perform poorly relative to benchmark.

VALUE OF ACTIVE MANAGEMENT

FRED ALGER



ALLIANCE CAPITAL MANAGEMENT

PORTFOLIO MANAGER: Jack Koltes **ASSETS UNDER MANAGEMENT: $201,757,656**

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 previous evaluation noted several items of concern:

- Insufficient effort to understand performance relative to an appropriate benchmark.

This concern has been discussed with the firm. Discussions regarding this issue continue.

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		
	Latest Quarter	Latest Year	Since 1/1/84 Annualized
Alliance Capital Actual	9.6%	-0.8%	18.9%
Alliance Capital Benchmark	6.0	-9.7	12.0

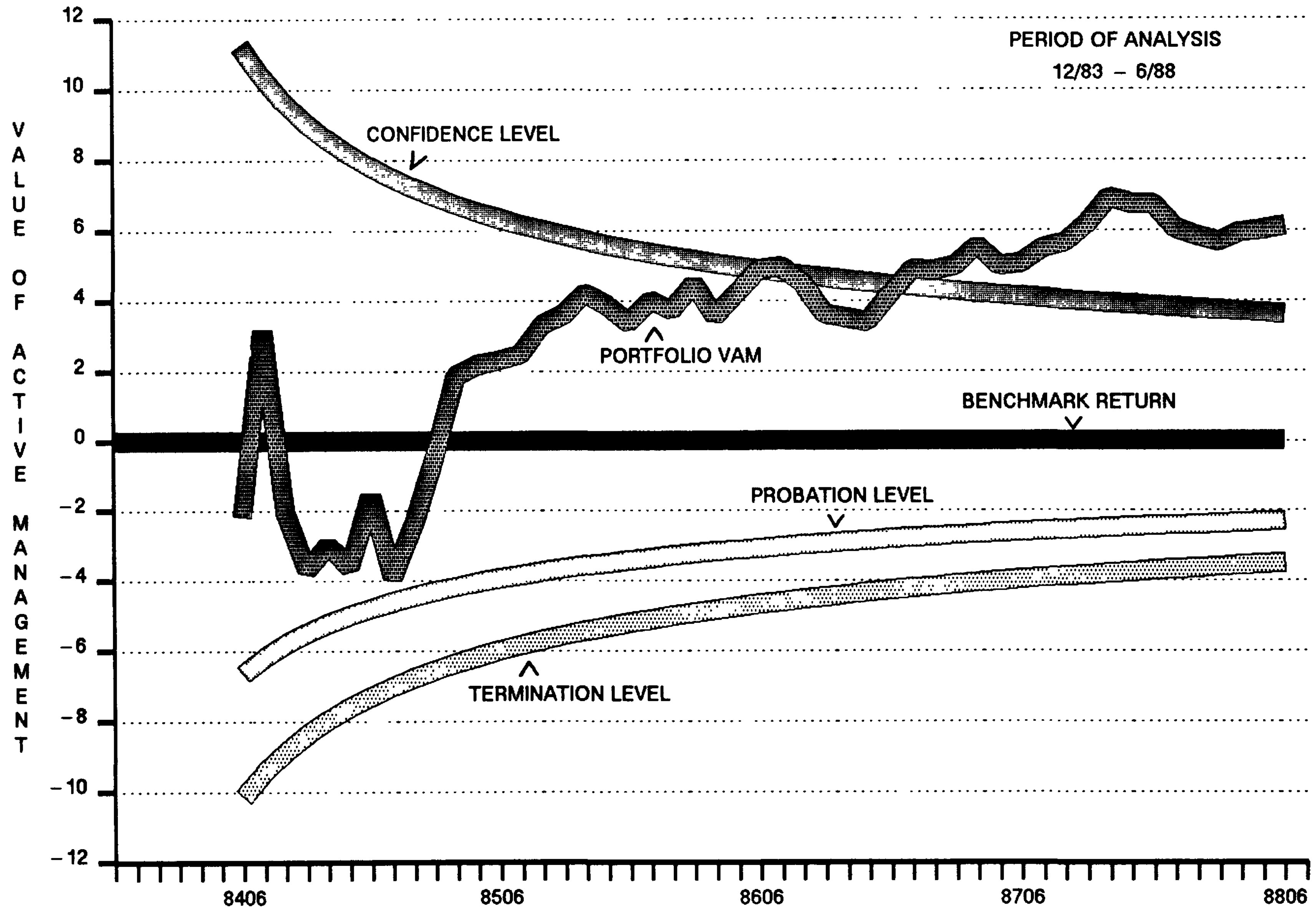
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT

ALLIANCE CAPITAL MANAGEMENT



BMI CAPITAL MANAGEMENT

PORTFOLIO MANAGER: Frank Houghton, James Awad

ASSETS UNDER MANAGEMENT: $78,102,359

INVESTMENT PHILOSOPHY

BMI's investment approach focuses on companies expected to exhibit strong 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

	Performance Relative to Benchmark		
	Latest Quarter	Latest Year	Since 1/1/84 Annualized
BMI Capital Actual	5.2%	-5.3%	10.3%
BMI Capital Benchmark	6.5%	-5.7	11.8

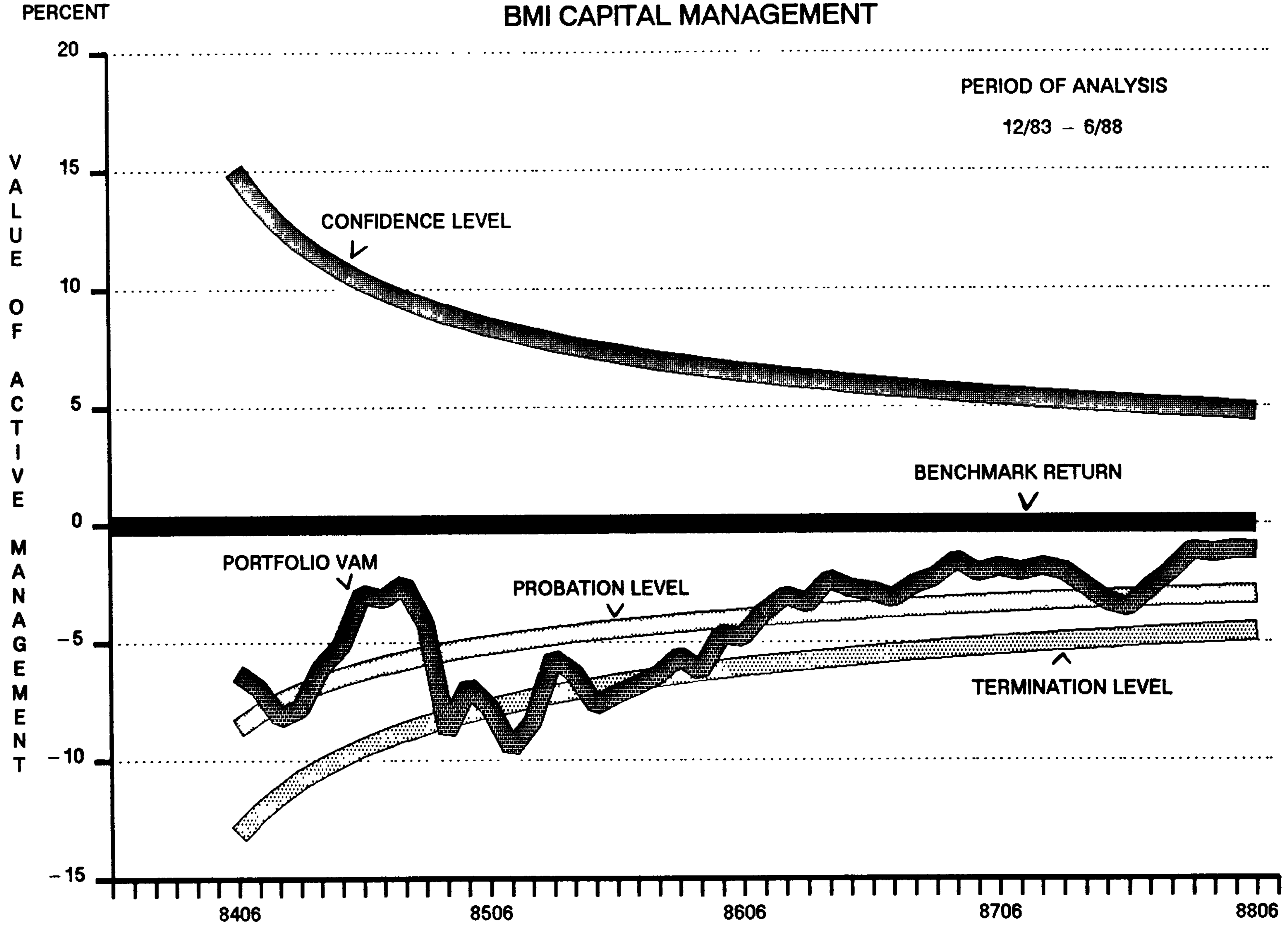
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT

BMI CAPITAL MANAGEMENT



FORSTMANN LEFF ASSOCIATES

PORTFOLIO MANAGER: Joel Leff **ASSETS UNDER MANAGEMENT: $170,669,309**

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.
- Valuation process not clearly defined.

While not serious, these issues remain 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		
	Latest Quarter	**Latest Year**	**Since 1/1/84 Annualized**
Forstmann-Leff Actual	3.4%	-1.3%	15.5%
Forstmann-Leff Benchmark	5.5%	-1.5	12.3

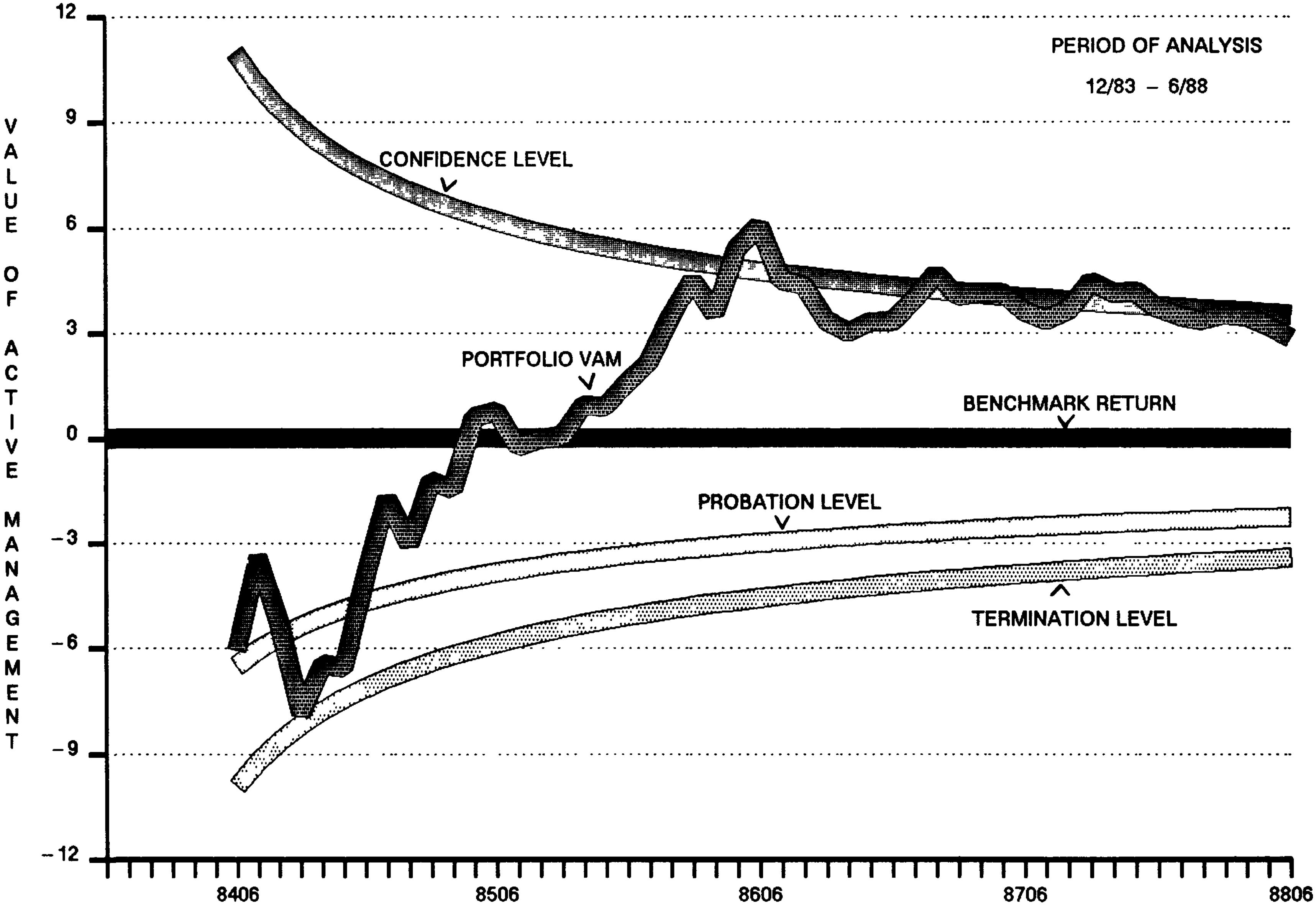
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT

FORSTMANN LEFF



IDS ADVISORY

PORTFOLIO MANAGER: Mitzi Malevich

ASSETS UNDER MANAGEMENT: $137,129,678

INVESTMENT PHILOSOPHY

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

	Latest Quarter	Latest Year	Since 1/1/84 Annualized
IDS Advisory Actual	7.1%	-9.5%	15.8%
IDS Advisory Benchmark	5.3%	-4.1	15.0

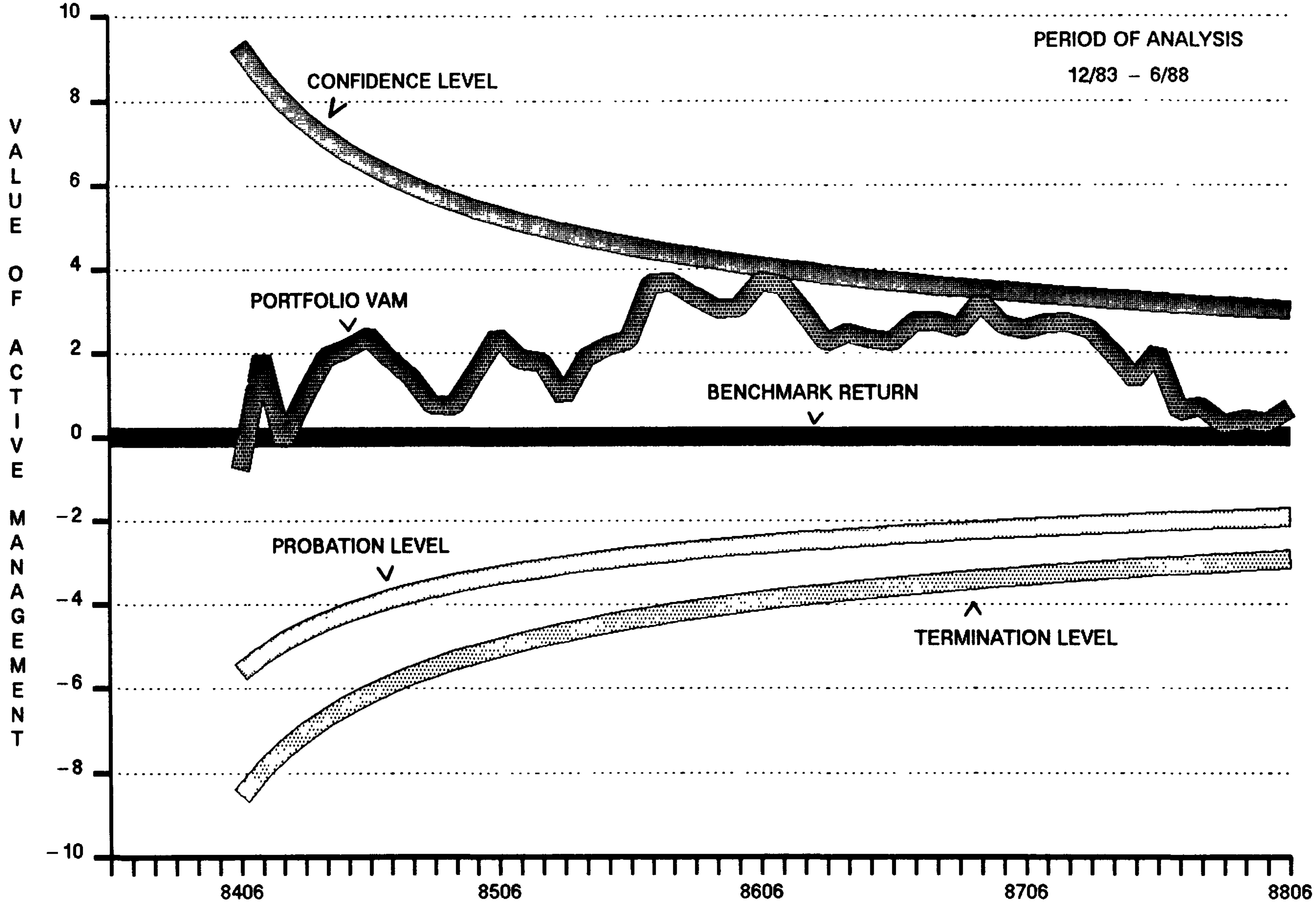
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT

IDS ADVISORY



INVESTMENT ADVISERS

PORTFOLIO MANAGER: Charles Webster **ASSETS UNDER MANAGEMENT: $97,143,848**

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 has made efforts 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		
	Latest Quarter	**Latest Year**	**Since 1/1/84 Annualized**
IAI Actual	4.6%	-4.9%	13.6%
IAI Benchmark	5.8	-4.3	15.0

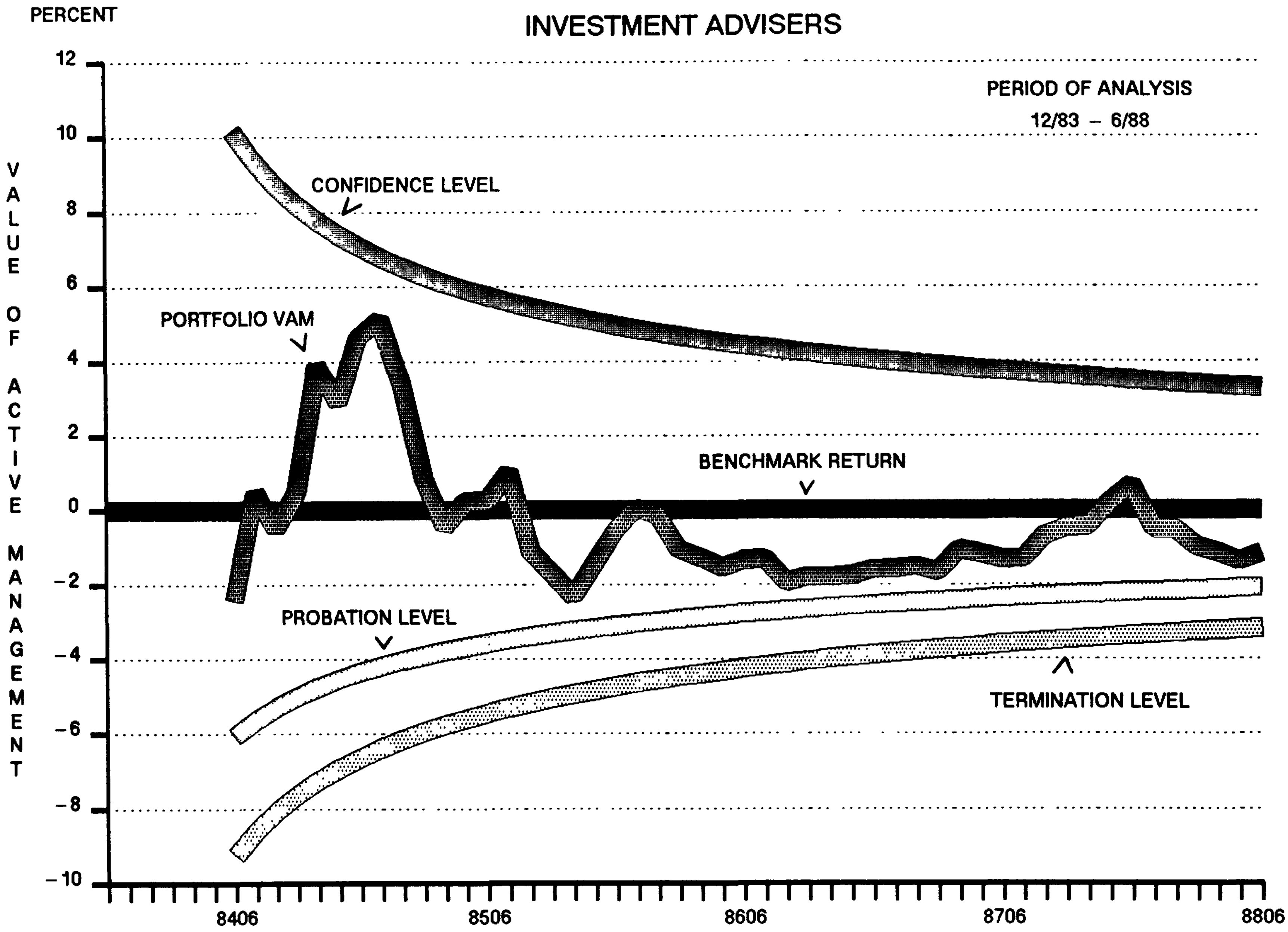
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT

INVESTMENT ADVISERS



LIEBER & COMPANY

PORTFOLIO MANAGER: Stephen Lieber, Nola Falcone

ASSETS UNDER MANAGEMENT: $67,508,400

INVESTMENT PHILOSOPHY

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 concepts. The investment concepts upon which the firm focuses are related to both macroeconomic trends and specific product developments within particular industries or companies. Stocks purchased by Lieber tend to be those of well-managed, high growth and high return on equity, small-to-medium sized companies. The stocks may be undervalued due to the failure of investors to recognize fully either the value of new products or a successful turnaround situation. Particularly attractive to Lieber are small-to-medium size takeover candidates. The firm generally is fully 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.

These issues remain outstanding, despite attempts to resolve them. However, the firm has recently undertaken the task of developing its own customized benchmark portfolio. Staff expects that this will lead to a satisfactory resolution of these issues in the future.

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

	Performance Relative to Benchmark		
	Latest Quarter	Latest Year	Since 1/1/84 Annualized
Lieber & Co. Actual	4.6%	-3.9%	13.2%
Lieber & Co. Benchmark	6.9	-3.8	11.8

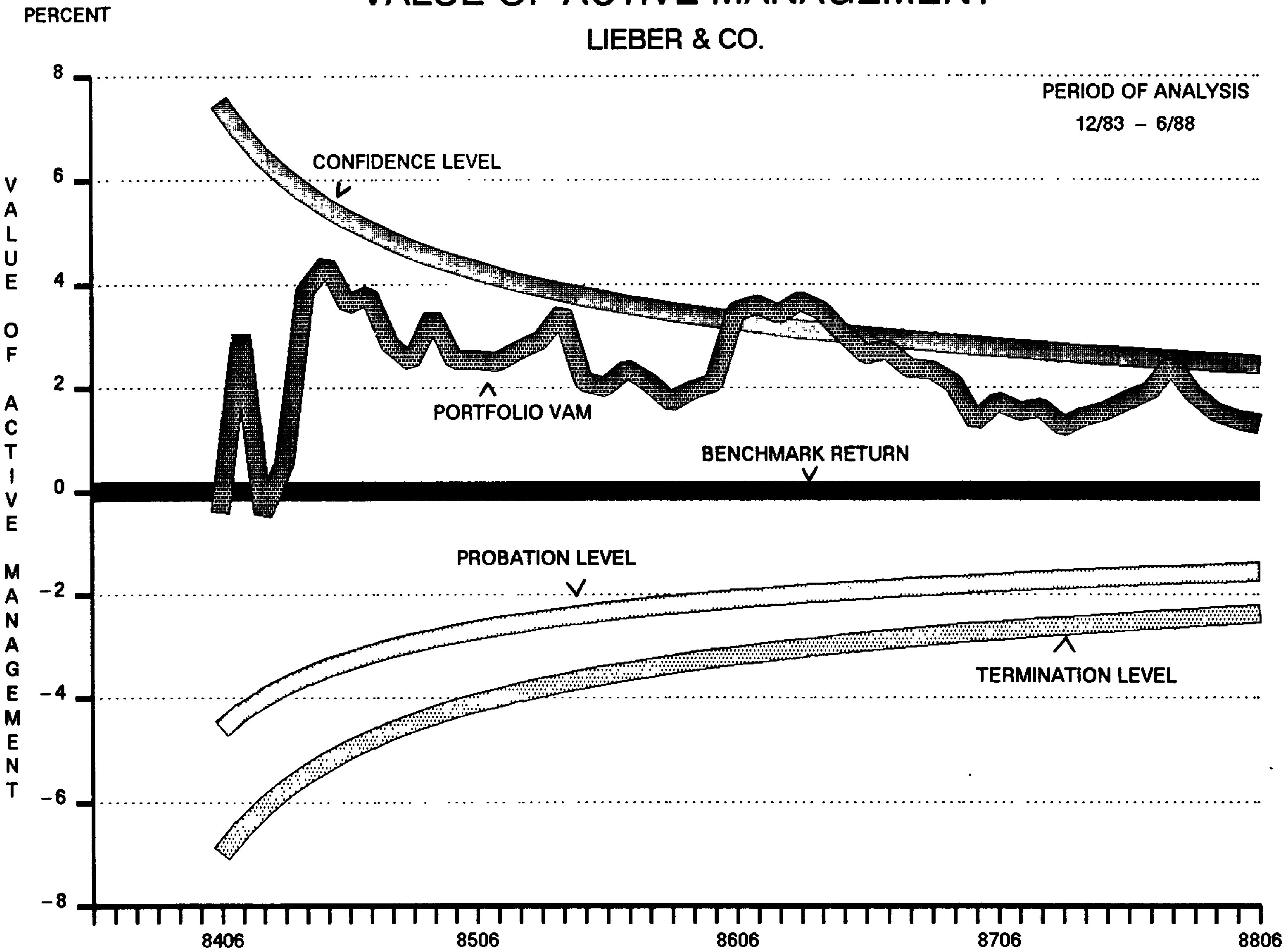
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT

LIEBER & CO.



WADDELL & REED

PORTFOLIO MANAGER: Henry Herrman

ASSETS UNDER MANAGEMENT: $149,261,345

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.
- Valuation process not well-defined.

These two issues warrant further monitoring and discussion with the firm.

The firm's exceptional strengths continue to be:

- Highly successful and experienced professionals.

QUANTITATIVE EVALUATION

	Performance Relative to Benchmark		
	Latest Quarter	Latest Year	Since 1/1/84 Annualized
Waddell & Reed	7.3%	0.9%	12.9%
Waddell & Reed Benchmark	5.5	-1.8	11.7

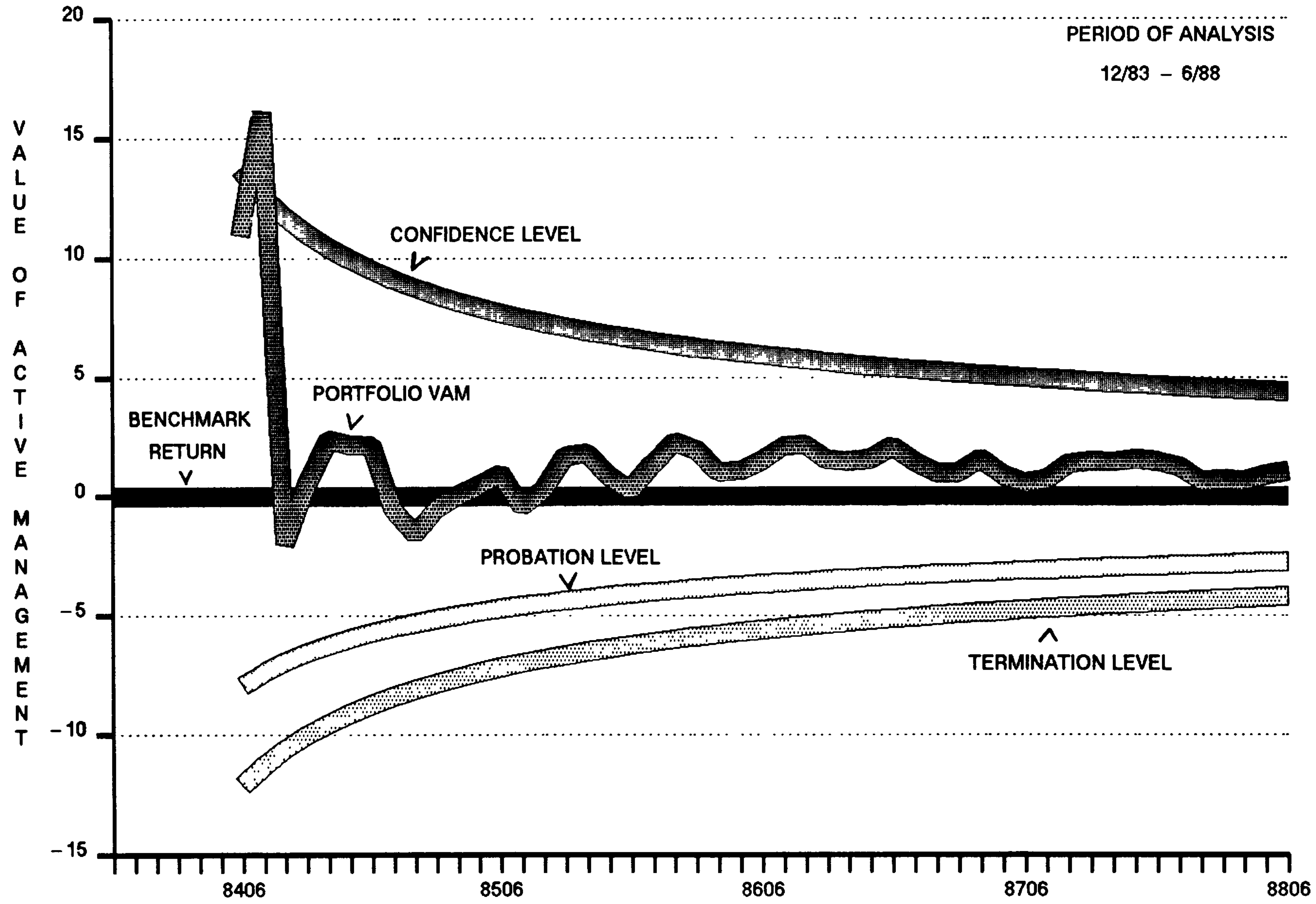
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT

WADDELL & REED



Tab G

EXECUTIVE DIRECTOR
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STATE BOARD OF INVESTMENT

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August 30, 1988

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 August 22, 1988 to review the following agenda items:

- Report on bond index fund implementation
- Review of active manager performance
- Dedicated bond portfolio software vendor review
- BEA contract amendment

INFORMATION ITEMS:

1) Report on Bond Index Fund Implementation

The first discussion item was a review of the implementation of the bond index fund on July 1, 1988. Staff reviewed the steps involved in the transfer of assets to Lincoln Capital and Fidelity Management. The chart below summarizes the asset transfer from each of the SBI's active managers.

FIRM	LINCOLN $000's	FIDELITY $000's	TOTAL $000's
IAI	$ 0	$ 0	$ 0
Lehman	$ 95,702	$ 52,213	$147,915
Miller Anderson	69,507	42,510	112,017
Morgan Stanley	28,172	84,638	112,810
Peregrine	60,217	59,896	120,173
Western Asset	39,155	53,070	92,225
TOTAL	$292,813	$292,327	$585,140

Based on these transfers, the SBI had the following asset allocation among its fixed income managers on July 1, 1988:

MANAGERS	ASSETS UNDER MANAGEMENT 000's	% OF SUB TOTAL	% OF GRAND TOTAL
Investment Advisors	$ 45,669	7.7%	3.9%
Lehman	104,875	17.7	8.9
Miller Anderson	155,394	26.3	13.2
Morgan Stanley	101,698	17.2	8.6
Peregrine	0	0	0
Western Asset	184,289	31.1	15.7
SUB TOTAL	$ 591,925	100.0%	50.3%
Lincoln Capital	$ 292,813	50.0%	24.9%
Fidelity	292,327	50.0	24.8
SUB TOTAL	$ 585,140	100.0%	49.7%
GRAND TOTAL	$1,177,065		100.0%

Additional information will be provided to the Committee at its next meeting relating to the transaction costs that occurred during the transfer.

2) Review of Active Managers

The Committee reviewed the Value of Active Management (VAM) Reports for each manager (attached).

Miller and Western outperformed their benchmarks for the quarter ending June 30, 1988, while IAI, Lehman and Morgan Stanley underperformed.

In addition the staff discussed the status of manager benchmarks. Staff noted that the SBI has agreed on benchmarks for Lehman and Western Asset. Morgan Stanley has submitted a proposed benchmark that staff will evaluate for appropriateness. Staff believes that the benchmark issue can be resolved for the remaining managers by the end of the calendar year.

Based on the preceding discussions, the Committee recommends the following:

o Maintain Lehman Management on probation for quantitative reasons.

  The firm's performance remains at the probation level specified by the VAM analysis. Lehman was placed on probation at the June 1988 Board meeting.

- o Maintain Morgan Stanley on probation for qualitative reasons.

  The firm has taken steps to ensure compliance with SBI duration parameters. In addition, Morgan has also submitted a proposed benchmark. Until the benchmark issue is resolved, however, the Committee believes the firm should remain on probation. Morgan was placed on probation at the June 1988 Board meeting.

3) Dedicated Bond Portfolio Vendor Review

   The SBI purchases software capability to assist in rebalancing the dedicated bond portfolio from an outside vendor. For the past four years, Bankers Trust, NY, has provided this service. During the next quarter, the Fixed Income Committee will survey alternative vendors and review dedicated bond portfolio methodologies. The Committee's recommendation on this issue will be presented to the Board at its December 1988 meeting.

ACTION ITEM:

1) BEA Contract Amendment

   The SBI retained BEA Associates in March 1987 to manage a cash enhancement program for the Post Retirement Fund. Currently, BEA is limited to three investment strategies delineated in the contract. While BEA has successfully added value to its benchmark using the three techniques, other strategies are evolving in the market place that may prove to be more beneficial. The Committee adopted a staff recommendation to grant wider investment authority to BEA so that the firm can take advantage of new or emerging opportunities in the market.

   Specifically, the Committee recommends the SBI authorize the Executive Director, with assistance from SBI's legal counsel, to negotiate and execute contract amendments with BEA Associates to delete references to individual investment strategies and with Bankers Trust for the associated custody arrangements.

Attachment

ACTIVE BOND MANAGERS

Value of Active Management Reports

Second Quarter 1988

Staff is in the process of working with the Board's bond managers to develop appropriate benchmark portfolios. Two of the five current managers have completed their benchmark portfolios. Returns for these portfolios are reported below. For the remaining three managers, the benchmark portfolio currrently in use is the Salomon Broad Investment Grade Bond Index, which represents the performance of essentially the entire investment-grade bond market, plus a small allocation to cash equivalents.

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 regarding manager status:

- Maintain probationary status for Lehman Mgmt. for quantitative reasons.
- Maintain probationary status for Morgan Stanley for qualitative reasons.

Managers	Market Value 6/30/88 (Thousands)	Quarter Ending 6/30/88		Year Ending 6/30/88		(Annualized) Since 6/1/84	
		Actual	Bmrk	Actual	Bmrk	Actual	Bmrk
IAI	$ 45,669	1.1%	1.3%	7.4%	8.1%	15.5%	15.0%
Lehman	252,089	0.7	1.1	7.2	7.7	13.9	14.2
Miller	267,411	1.5	1.3	7.8	8.1	15.6	15.0
Morgan	214,508	0.4	1.3	7.9	8.1	14.5	15.0
Western	276,514	1.5	1.4	9.1	8.2	16.5	15.0
Salomon Broad Investment Grade Index		1.2%		8.1%		15.5%	

INVESTMENT ADVISERS

PORTFOLIO MANAGER: Larry Hill **ASSETS UNDER MANAGEMENT: $45,668,674**

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. Investment Advisers uses the Salomon Broad Investment Grade (BIG) index as their benchmark.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 6/30/84 Annualized
IAI Actual	1.1%	7.4%	15.5%
IAI Benchmark	1.3	8.1	15.0

(See Value of Active Management graph below)

QUALITATIVE EVALUATION

(Reported By Exception)

The previous evaluation noted several items of concern:

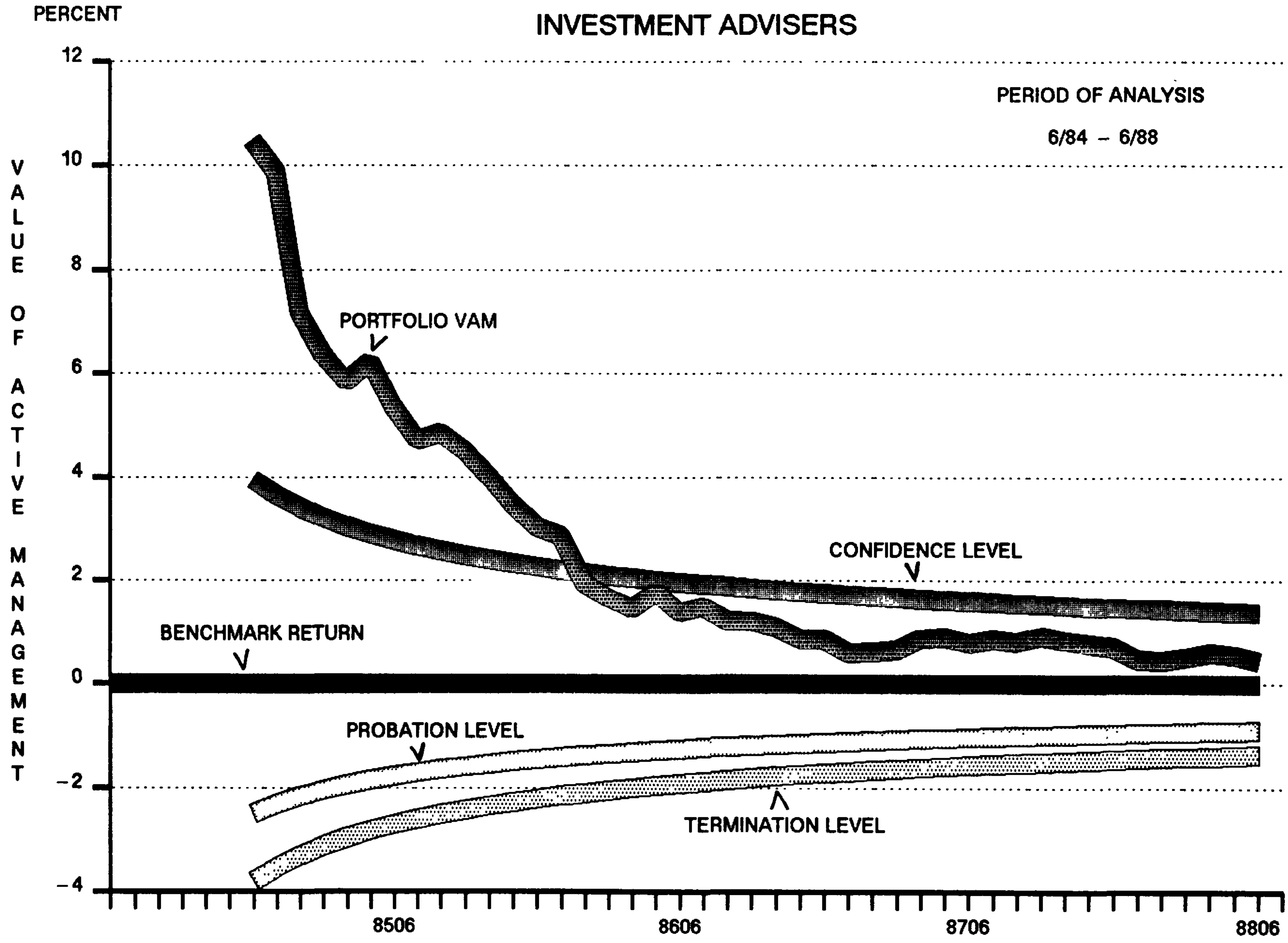
- Insufficient effort to understand performance relative to an appropriate benchmark.

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT REPORT

INVESTMENT ADVISERS



LEHMAN MANAGEMENT

PORTFOLIO MANAGER: Paul Hutter

ASSETS UNDER MANAGEMENT: $252,089,498

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. Lehman has a custom benchmark which has a shorter duration and higher quality orientation than the Salomon Broad Investment Grade (BIG) index.

QUANTITATIVE EVALUATION

	Performance Relative to Benchmark Latest Quarter	Latest Year	Since 6/30/84 Annualized
Lehman Actual	0.7%	7.2%	13.9%
Lehman Benchmark	1.1	7 7	14 2

(See Value of Active Management graph below)

QUALITATIVE EVALUATION

(Reported By Exception)

The previous evaluation noted several items of concern:

- Firm is matched to a new benchmark since inception.
- Firm's returns are near probation level.

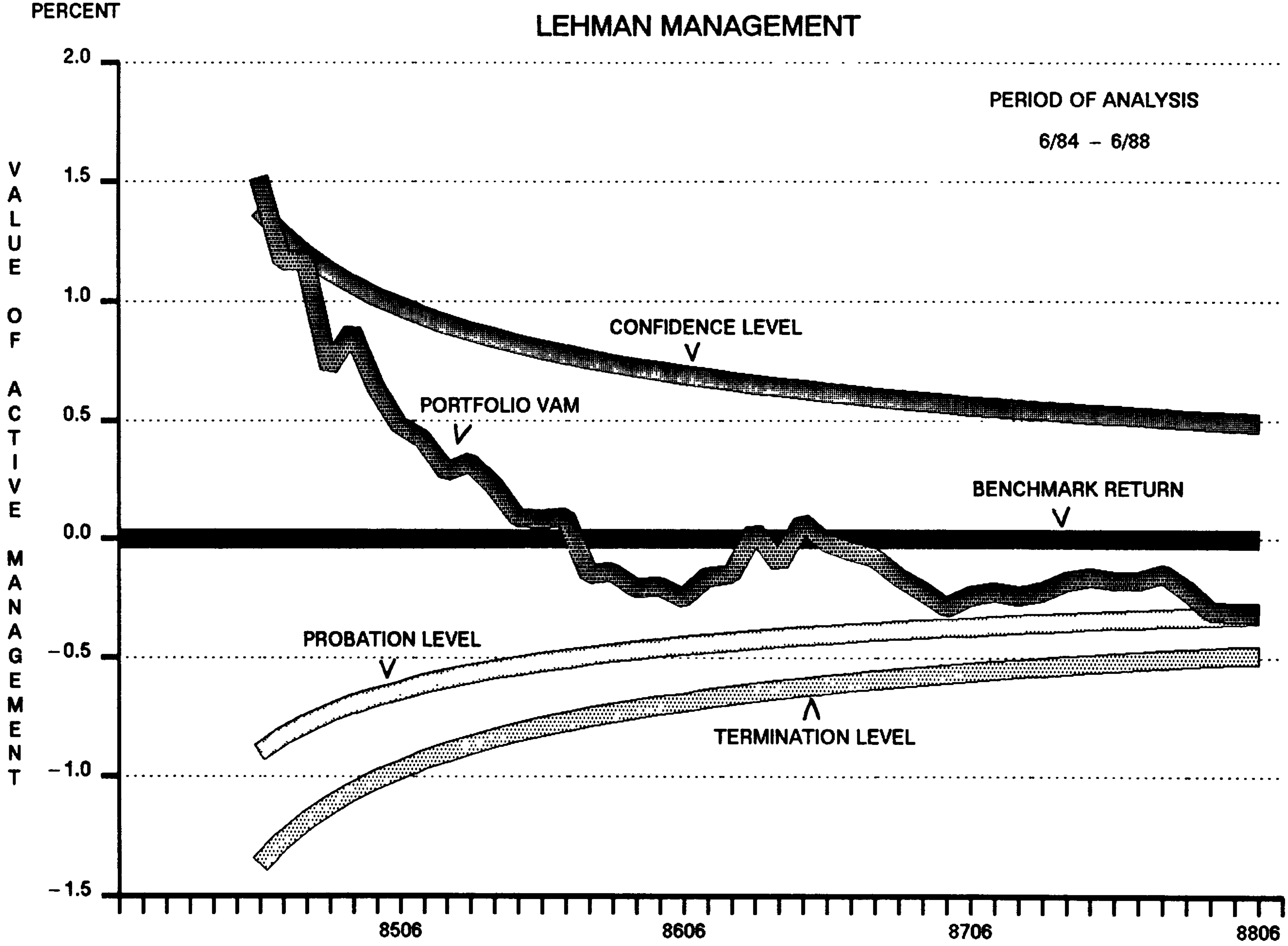
This issue deserves close monitoring over the next three to six months to judge the continuing appropriateness of the new benchmark and Lehman's returns relative to that benchmark.

STAFF RECOMMENDATIONS

Maintain probationary status for quantitative reasons. Lehman was placed on probation by the Board at its June 1988 meeting.

VALUE OF ACTIVE MANAGEMENT REPORT

LEHMAN MANAGEMENT



MILLER ANDERSON

PORTFOLIO MANAGER: Tom Bennet

ASSETS UNDER MANAGEMENT: $267,410,692

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 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 mortgage securities that have prepayment expectations consistent with the portfolio's desired maturity. The firm will also move in and out of cash. 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. Miller Anderson currently uses the Salomon Broad Investment Grade (BIG) index as their benchmark.

QUALITATIVE EVALUATION

(Reported By Exception)

The previous evaluation noted the following concern:

- Insufficient effort to understand performance relative to an appropriate benchmark.

The firm's exceptional strengths continue to be:

- Highly successful and experienced professionals.
- Extensive research and management skills in mortgage and mortgage-backed securities.

QUANTITATIVE EVALUATION

	Performance Relative to Benchmark		
	Latest Quarter	**Latest Year**	**Since 6/30/84 Annualized**
Miller Actual	1.5%	7.8%	15.6%
Miller Benchmark	1.3	8.1	15.0

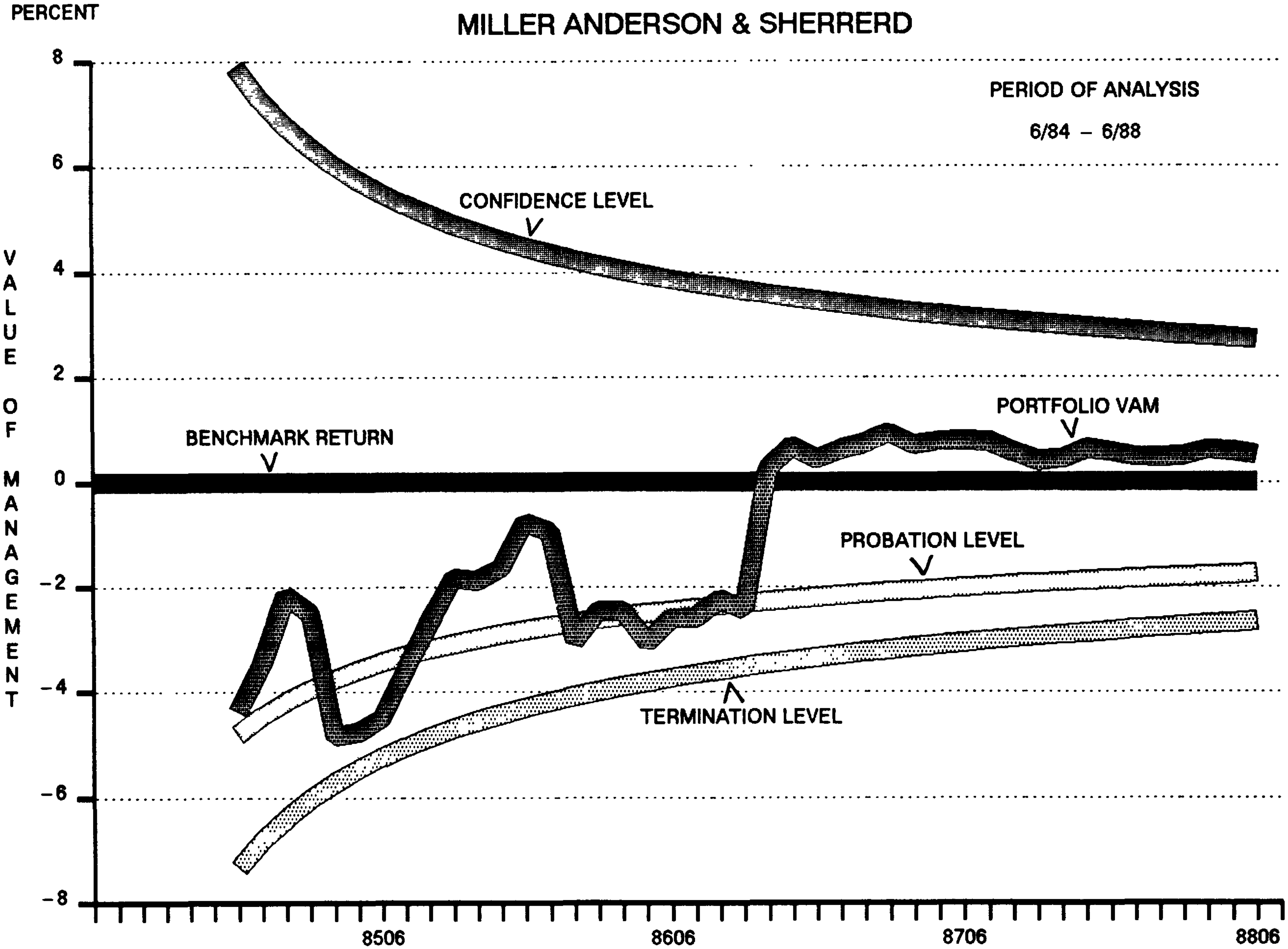
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT REPORT

MILLER ANDERSON & SHERRERD



MORGAN STANLEY

PORTFOLIO MANAGER: Geoffrey Gettman

ASSETS UNDER MANAGEMENT: $214,508,291

INVESTMENT PHILOSOPHY

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

QUALITATIVE EVALUATION

(Reported By Exception)

The previous evaluation noted several items of concern:

- Insufficient effort to understand performance relative to an appropriate benchmark.
- Violation of SBI duration constraints.

QUANTITATIVE EVALUATION

	Performance Relative to Benchmark		
	Latest Quarter	**Latest Year**	**Since 6/30/84 Annualized**
Morgan Actual	0.4%	7.9%	14.5%
Morgan Benchmark	1.3	8.1	15.0

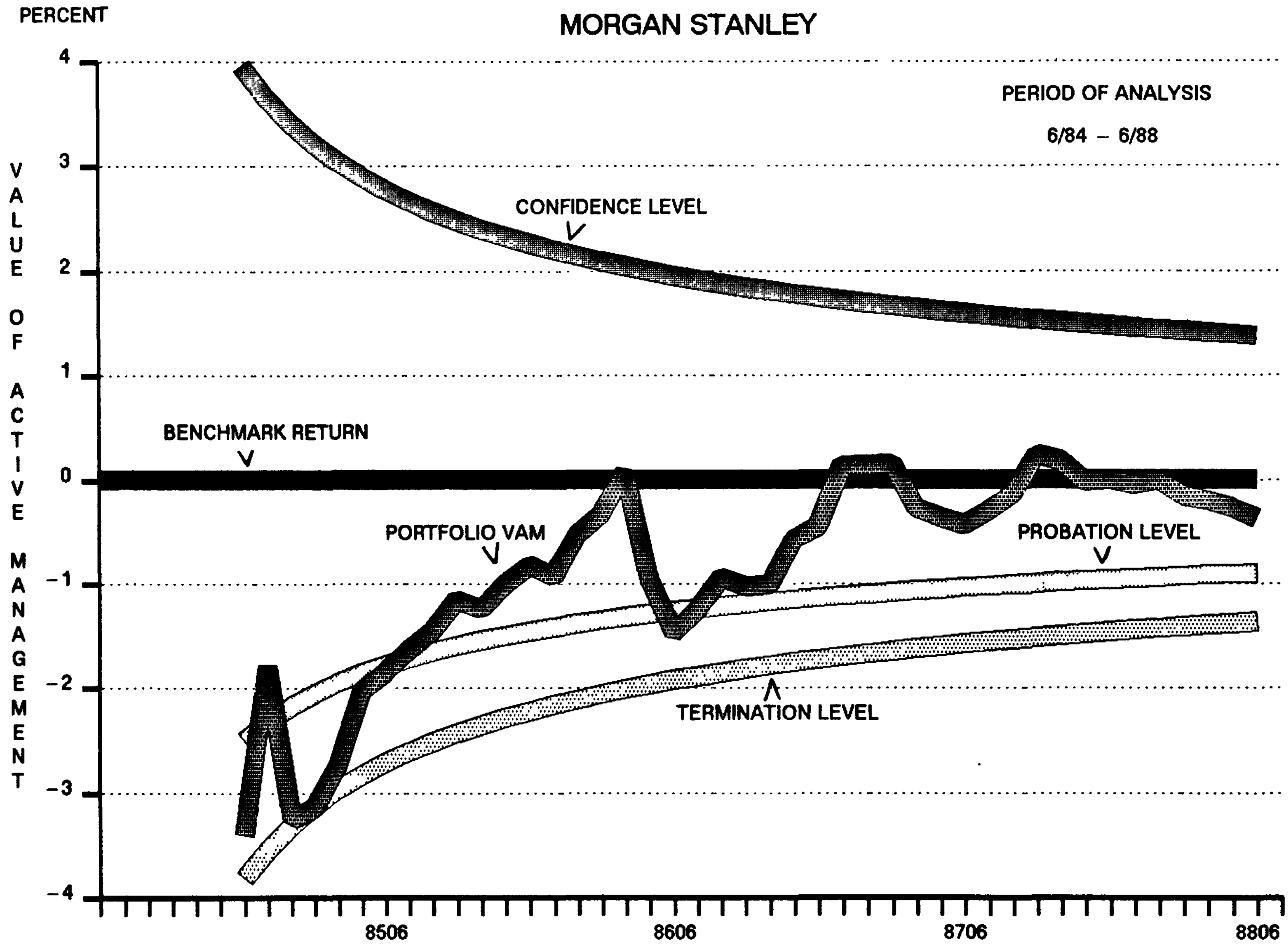
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

Maintain probationary status for qualitative reasons. The inability to develop a benchmark and the violation of the duration bands suggest an unwillingness on the part of Morgan Stanley to adjust its management process to the needs of the SBI. Morgan Stanley was placed on probation by the Board at its June 1988 meeting.

VALUE OF ACTIVE MANAGEMENT REPORT

MORGAN STANLEY



WESTERN ASSET MANAGEMENT

PORTFOLIO MANAGER: Edgar Robie, Jr.

ASSETS UNDER MANAGEMENT: $276,513,937

INVESTMENT PHILOSOPHY

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

QUANTITATIVE EVALUATION

	Performance Relative to Benchmark		
	Latest Quarter	Latest Year	Since 6/30/84 Annualized
Western Actual	1.5%	9.1%	16.5%
Western Benchmark	1.4	8.2	15.0

(See Value of Active Management graph below)

QUALITATIVE EVALUATION

(Reported By Exception)

The previous evaluation noted several items of concern:

- Firm is under new ownership.

This issue, while not serious, should be monitored.

The firm's exceptional strengths continue to be:

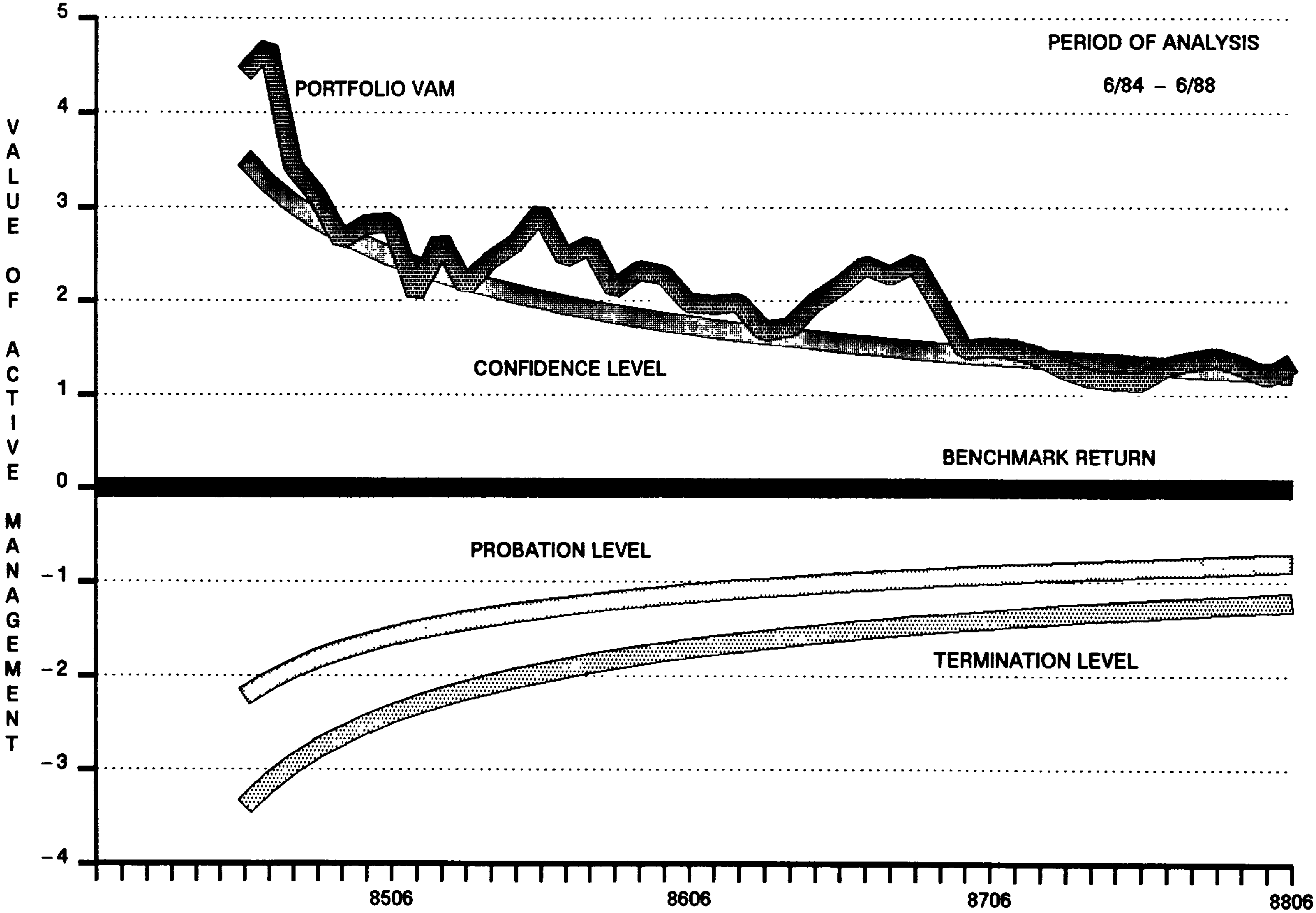
- Highly successful and experienced professionals.
- Extensive research and understanding in the application of normal portfolios to bond management.

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT REPORT

WESTERN ASSET MANAGEMENT



Tab H

EXECUTIVE DIRECTOR
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STATE BOARD OF INVESTMENT

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August 23, 1988

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 items. No action is required by the Board at this time.

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.

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 $308.3 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.

The strategy for resource investment requires that investments be made in resource investment vehicles that are specifically designed for institutional investors to provide an inflation hedge and additional diversification. 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 $120.0 million to seven commingled oil and gas funds.

2) Annual Review Sessions

During July 1988, the Alternative Investment Committee and staff conducted annual review sessions with five of the SBI's alternative investment managers:

VENTURE CAPITAL

- o Kohlberg, Kravis and Roberts (KKR)

REAL ESTATE

- o Aetna
- o Equitable
- o Prudential

OIL AND GAS

- o Apache

Summaries of the review sessions are included as attachments to this Committee report.

The three open-end real estate fund managers reviewed this quarter (Aetna, Equitable and Prudential) represent the SBI's earliest real estate investments. Of the three managers reviewed, Equitable appears to be the strongest in terms of investment strategies, organizational effectiveness and performance to date. Equitable has been generally more successful in targeting the current stronger real estate markets and avoiding the weaker ones. To date, Equitable has also produced the highest rates of return among the three open-end real estate managers.

A further review of the three open-end fund managers, and the SBI's other real estate investment managers, is currently being conducted by the SBI's special project real estate consultant, Laventhol and Horwath.

The annual review session with Apache focused on the performance and expectations for the SBI's three oil and gas investments with Apache.

The SBI's latest and largest investment ($30 million) with Apache, the **1986 Acquisition Net Profits Interest**, was incepted after the severe decline in oil and gas prices in late 1985. Although it is early in the life of this investment, it should perform essentially in line with original expectations.

Only $1 million of the SBI's $15 million commitment to the **1984 Equipment Loan** has been funded. The SBI's remaining unfunded commitment of $14 million will likely be reduced by at least 50% due to Apache's decision to significantly scale-back oil and gas development plans.

The SBI's $23 million investment in the **1985 Acquisition Notes** was made prior to the significant decline in oil and gas prices in late 1985 and returns from this investment should be less than originally expected.

The annual review session with Kohlberg, Kravis and Roberts (KKR) principally reviewed the operations and performance of investments with KKR to date. Six of fifteen investments made so far have been sold or liquidated at prices substantially in excess of cost. The remaining investments, in aggregate, are conservatively valued above original cost.

Going forward, KKR expects an economic slowdown. Therefore, future activities for KKR should include strengthening existing portfolio companies and making new acquisitions that will likely be less financially leveraged.

3) Future Considerations

Going forward, the Alternative Investment Committee agenda will include:

- o Reviewing investment objectives, strategy, asset allocation and performance measurement.
- o Working with the existing real estate and oil and gas special project consultants.
- o Considering potential venture capital consultants.
- o Considering additional investments with new and existing managers.
- o Conducting annual review sessions with existing alternative investment managers.

Attachments

ALTERNATIVE EQUITY INVESTMENTS
SECOND QUARTER 1988

	INCEPT DATE	FUND SIZE (MILLIONS)	SBI COMMITMENT	SBI-FUNDED	SBI-TO BE FUNDED	FUND DESCRIPTION
REAL ESTATE:						
AETNA	Apr-82	$1,791	$40,000,000	$40,000,000	$0	OPEN END - DIVERSIFIED
EQUITABLE	Oct-81	$3,067	$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	$18,119,115	$1,880,885	CLOSED END - DIVERSIFIED
PRUDENTIAL	Sep-81	$3,767	$40,000,000	$40,000,000	$0	OPEN END - DIVERSIFIED
RREEF	Apr-84	$773	$75,000,000	$71,300,000	$3,700,000	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	$10,000,000	$5,000,000	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	$374,419,115	$10,580,885	
VENTURE CAPITAL:						
ALLIED	Jul-85	$40	$5,000,000	$3,333,334	$1,666,666	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	$475,000	$4,525,000	SECONDARY INTERESTS
GOLDER THOMA	Oct-87	$225	$14,000,000	$700,000	$13,300,000	LATER STAGE
INMAN/BOWMAN	Jun-85	$44	$7,500,000	$3,750,000	$3,750,000	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	Oct-87	$4,300	$146,634,660	$12,498,452	$134,136,208	LBO
MATRIX	Jul-85	$70	$10,000,000	$7,500,000	$2,500,000	EARLY STAGE
NORWEST	Jan-84	$60	$10,000,000	$10,000,000	$0	EARLY STAGE
SUMMIT I	Dec-84	$93	$10,000,000	$7,500,000	$2,500,000	LATER STAGE
SUMMIT II	May-88	$230	$30,000,000	$3,000,000	$27,000,000	LATER STAGE
SUPERIOR	Jun-86	$35	$6,645,000	$3,322,500	$3,322,500	EARLY STAGE - MN.
T.ROWE PRICE	Mar-86	-	$125,023	$125,023	$0	IPO MANAGER
TOTAL V.C. PORTFOLIO			$308,269,855	$109,569,481	$198,700,374	
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	$15,000,000	$0	$15,000,000	DEBT WITH EQUITY
APACHE I	May-84	$100	$15,000,000	$993,994	$14,006,006	DEBT WITH EQUITY
APACHE II	Oct-85	$180	$23,000,000	$23,074,449	($74,449)	DEBT WITH EQUITY
APACHE III	Dec-86	$190	$30,000,000	$30,000,000	$0	NET PROFITS INTEREST
MORGAN O&G	Jul-88	$135	$15,000,000	$0	$15,000,000	DEBT WITH EQUITY
TOTAL RES. PORTFOLIO			$120,000,000	$76,068,443	$43,931,557	
TOTAL ALT. INV. PORT			$813,269,855	$560,057,039	$253,212,816	

ANNUAL REVIEW SUMMARY
KKR 1984, 1986 AND 1987 FUNDS
July 21, 1988

MANAGER REPRESENTATIVES: Ted Ammon

SBI ASSETS UNDER MANAGEMENT: $56.0 Million

BACKGROUND AND DESCRIPTION: The KKR 1984, 1986 and 1987 Funds are managed by Kohlberg, Kravis, Roberts and Co. and were incepted in March 1984, December 1986 and September 1987, respectively. The SBI's investment commitment totals $190 million for the three Funds. On 6/30/87, $56.0 million of the SBI's total commitment had been funded. Each fund has a twelve year term. The investment focus of KKR is on large management leveraged buyouts. KKR operates out of offices in San Francisco and New York.

QUALITATIVE EVALUATION:

The evaluation noted several items of interest:

- Since the inception of the SBI's initial investment with KKR in 1984, KKR has made 15 investments. Three of the 15 original investments have been sold and another three have been partially liquidated. In total, the remaining market value of investments and cash distributions to date exceed 1.7 times the SBI's original investment.

- KKR expects an economic slowdown within the next two years. To lessen the impact of a slowdown, KKR is working to deleverage existing portfolio companies, and strengthen their operations. Future acquisitions will likely be less leveraged and may include investments in regulated industries and in the U.K.

AGGREGATED QUANTITATIVE EVALUATION FOR THE THREE KKR FUNDS

COMMITMENT:	$190.0 Million
FUNDED COMMITMENT:	$55.9 Million
MARKET VALUE OF FUNDED COMMITMENT:	$75.7 Million
CASH DISTRIBUTIONS:	$21.8 Million
INCEPTION DATE(S):	1984 Fund March 1984 1986 Fund December 1986 1987 Fund September 1987
WEIGHTED AVERAGE INTERNAL RATE OF RETURN (IRR): (annualized, since inception)	24.5%

DIVERSIFICATION PROFILE (% OF COST)

COMPANIES

MALONE & HYDE	4.72%
COLE NATIONAL	3.72
PACE INDUSTRIES	8.44
MOTEL 6	5.57
M & T	1.19
UNION TEXAS PETROLEUM	11.09
STORER	9.78
BEATRICE	11.62
SAFEWAY	6.20
OWENS-ILLINOIS	8.53
JIM WALTER	6.76
SEAMEN FURNITURE	1.86
STOP AND SHOP	4.54
DURACELL	15.97
	100.00%

STAFF COMMENTS AND RECOMMENDATIONS:

The Alternative Investment Committee and staff have been satisfied with KKR's performance and operation to date.

ANNUAL REVIEW SUMMARY
AETNA REAL ESTATE SEPARATE ACCOUNT (RESA)
July 14, 1988

MANAGER REPRESENTATIVES: Tom Anathan, Maurice Giannotti

SBI ASSETS UNDER MANAGEMENT: $58.2 Million

BACKGROUND AND DESCRIPTION: RESA is an $1.8 billion open- end, commingled, real estate fund managed by Aetna Life and Casualty Company of Hartford Connecticut. The Fund was formed in January 1978 and has no termination date. Investors have the option to withdraw all or a portion of their investment. RESA primarily makes equity investments in existing real estate. Investments are diversified by location and type of property. On-site management of properties is contracted to outside firms or conducted by a joint venture partner.

QUALITATIVE EVALUATION:

The evaluation noted several items of interest:

Aetna has been disappointed by the funds' performance over the last year. This disappointment stems partially from the poor performance of the oil patch properties within the portfolio. To enhance performance going forward, Aetna plans the following:

- Sell approximately $300 million of selected, lower potential properties over the next 18 to 24 months, including office investments in Houston and Denver.

- Rely more heavily on in-depth research to target acquisition activity on those markets where there are barriers to entry;

- Increase the number of large, premier properties;

- Reduce forward commitment activity and shorten the development period to no longer than 18 months;

- Acquire properties for renovation.

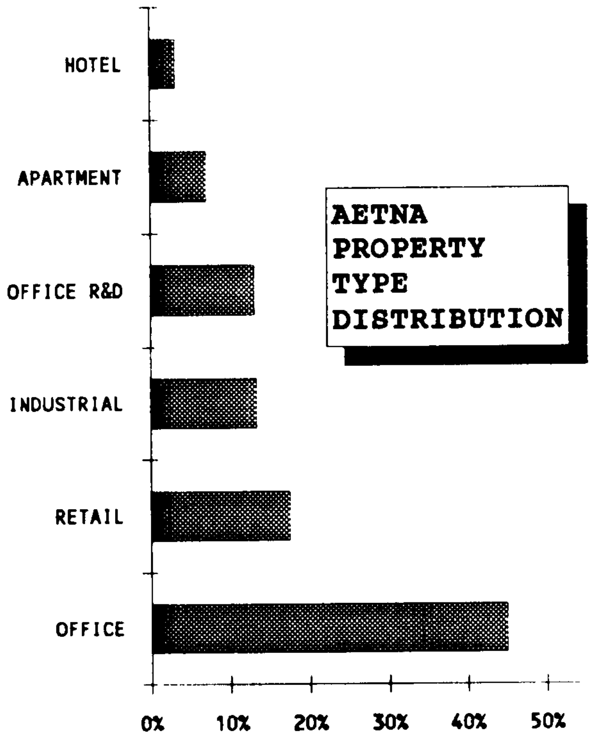
- Reduce holdings in smaller properties and the offices sector.

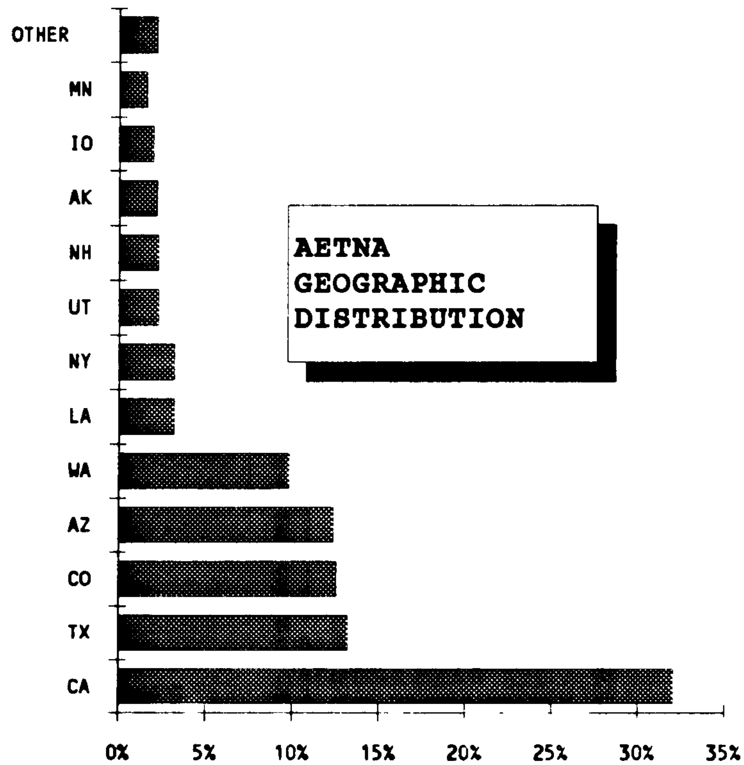
- Increase holdings in retail, multi-family and larger properties.

AGGREGATED QUANTITATIVE EVALUATION FOR RESA

COMMITMENT:	$40.0 Million
FUNDED COMMITMENT:	$40.0 Million
MARKET VALUE OF FUNDED COMMITMENT:	$58.2 Million
CASH DISTRIBUTIONS:	$00.0 Million
INCEPTION DATE(S):	April 1982
WEIGHTED AVERAGE INTERNAL RATE OF RETURN (IRR): (annualized, since inception)	8.1%

AETNAS RESA DIVERSIFICATION





STAFF COMMENTS AND RECOMMENDATIONS:

Of the three open-end real estate funds reviewed this quarter, the Alternative Investment Committee and staff rank RESA second in terms of operations and performance. A further review of RESA and the SBI's other real estate managers is currently being conducted by the SBI's special project real estate consultant, Laventhol and Horwath.

ANNUAL REVIEW SUMMARY
EQUITABLE PRIME PROPERTY FUND
July 20, 1988

MANAGER REPRESENTATIVES: David Bradford, Mike Cassidy

SBI ASSETS UNDER MANAGEMENT: $67.2 Million

BACKGROUND AND DESCRIPTION: The Prime Property Fund is an $3.0 billion open-end, commingled real estate fund managed by Equitable Real Estate Group, Inc. of New York. The Fund was formed in August 1973 and has no termination date. Investors have the option to withdraw all or a portion of their investment. The Equitable primarily makes equity investments in existing real estate. Investments are diversified by location and type of property. On-site management of properties is contracted to outside firms or conducted by joint venture partners.

QUALITATIVE EVALUATION:

The evaluation noted several items of interest:

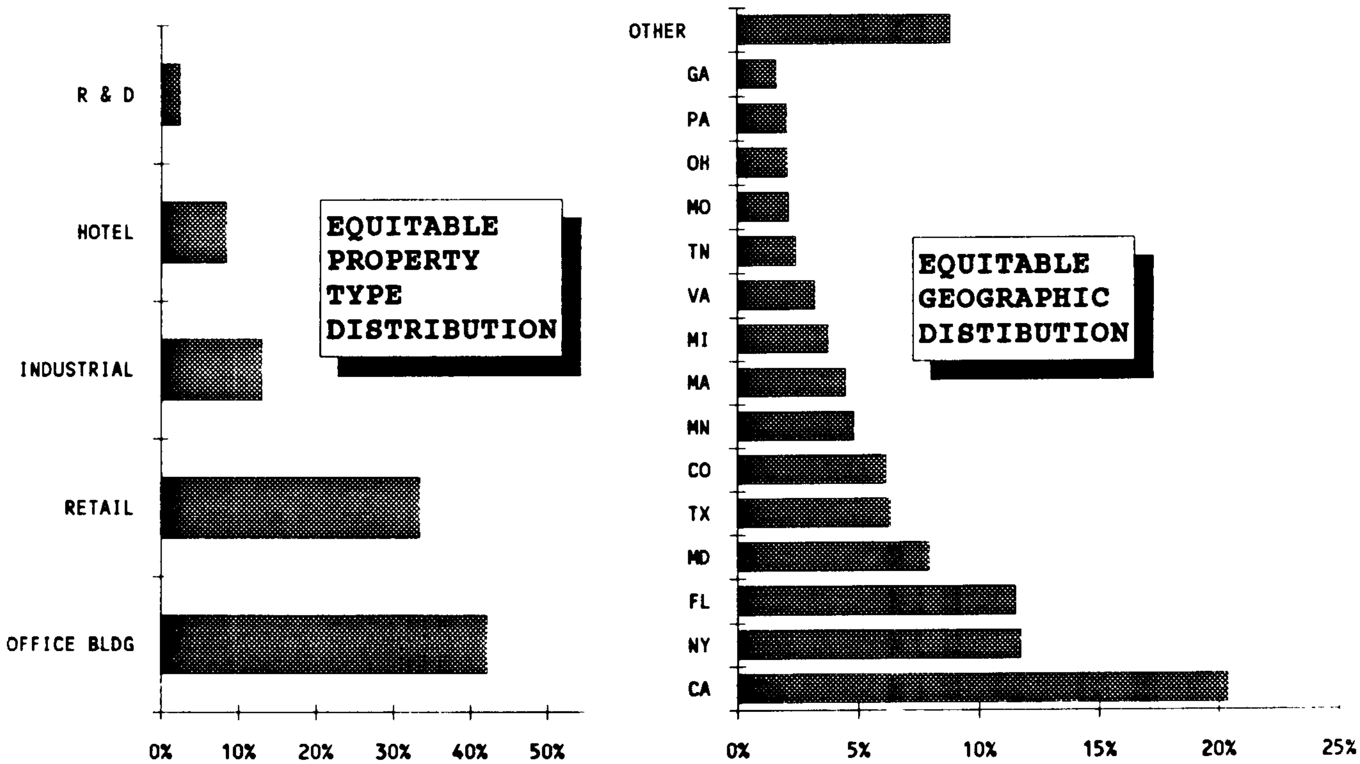
- Equitable has provided the highest returns of the three open-end commingled funds held by the SBI. A strong contributor to performance has been a relative overweighting of retail properties and a limited exposure to oil patch properties.

- Looking forward, the fund plans to maintain its current exposure in the retail market, emphasizing selective upgradings of its strong regional mall portfolio, and to increase its industrial holdings. It will be looking in the frostbelt for new industrial properties. Its strategy in the office sector over the next 2 to 3 years is to deemphasize smaller markets in favor of larger markets that it identifies as strong performers.

AGGREGATED QUANTITATIVE EVALUATION FOR THE PRIME PROPERTY FUND

COMMITMENT:	$40.0 Million
FUNDED COMMITMENT:	$40.0 Million
MARKET VALUE OF FUNDED COMMITMENT:	$67.2 Million
CASH DISTRIBUTIONS:	$00.0 Million
INCEPTION DATE(S):	October 1981
WEIGHTED AVERAGE INTERNAL RATE OF RETURN (IRR): (annualized, since inception)	10.1%

EQUITABLE PRIME PROPERTY FUND DIVERSIFICATION



STAFF COMMENTS AND RECOMMENDATIONS:

Of the three open-end real estate funds reviewed this quarter, the Alternative Investment Committee and staff rank the Prime Property Fund first in terms of operation and performance. A further review of the Prime Property Fund and the SBI's other real estate investments is currently being conducted by the SBI's special project real estate consultant, Laventhol and Horwath.

ANNUAL REVIEW SUMMARY
PRUDENTIAL PROPERTY INVESTMENT SEPARATE ACCOUNT (PRISA)
July 20, 1988

MANAGER REPRESENTATIVES: Robert Dunphy, Donald Davis

SBI ASSETS UNDER MANAGEMENT: $62.0 Million

BACKGROUND AND DESCRIPTION: PRISA is an $3.8 billion open-end commingled, real estate equity fund managed by The Prudential Asset Management Company of Newark, New Jersey. PRISA was formed in July 1970 and has no termination date. Investors have the option quarterly to withdraw all or a portion of their investment. PRISA primarily makes equity investments in existing real estate. Investments are diversified by location and type of property. On-site management of properties is contracted to outside firms or conducted by a joint venture partner.

QUALITATIVE EVALUATION:

The evaluation noted several items of interest:

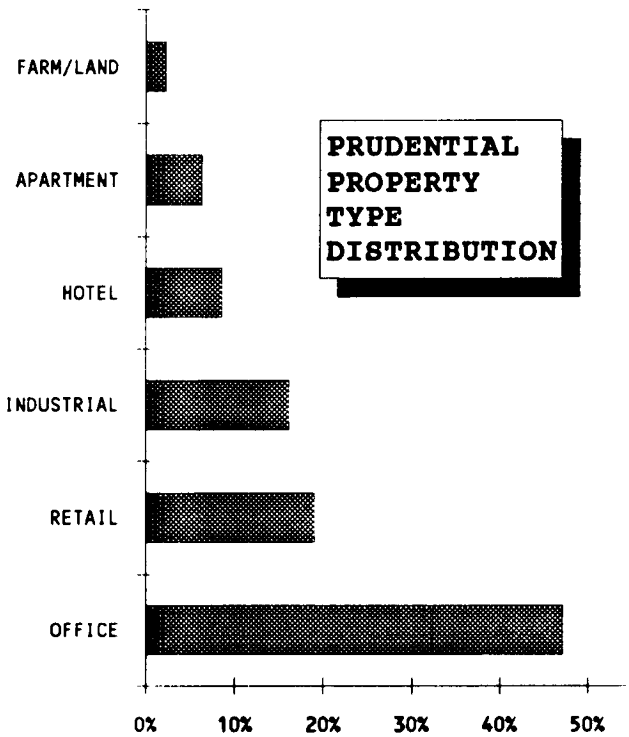
- Prudential is taking steps to improve fund performance which has been hampered in recent years primarily by poor performing oil patch properties located in Texas, Colorado and Oklahoma. Also, investor withdrawals have been above average. In response, the fund is implementing a new research discipline that is guiding acquisitions. The goal is to refine their geographic diversification guidelines to consider economic differences among markets. In addition, over the next three years, the fund expects to 1) reduce exposure in the office sector and in hotels, 2) add apartment properties and 3) add retail properties if affordable opportunities are found.

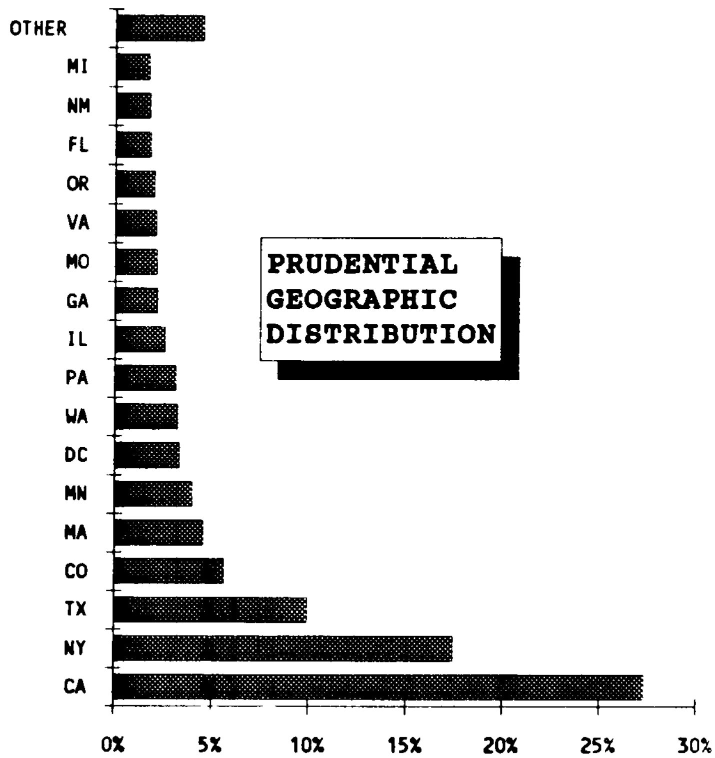
- Over the last two years Prudential has added several senior professionals to assist in implementing the new portfolio strategies.

AGGREGATED QUANTITATIVE EVALUATION FOR PRISA

COMMITMENT:	$40.0 Million
FUNDED COMMITMENT:	$40.0 Million
MARKET VALUE OF FUNDED COMMITMENT:	$62.0 Million
CASH DISTRIBUTIONS:	$00.0 Million
INCEPTION DATE(S):	September 1981
WEIGHTED AVERAGE INTERNAL RATE OF RETURN (IRR): (annualized, since inception)	7.7%

PRISA DIVERSIFICATION





STAFF COMMENTS AND RECOMMENDATIONS:

Of the three open-end real estate funds reviewed this quarter, the Alternative Investment Committee and staff rank PRISA third in terms of operations and performance. A further review of PRISA and the SBI's other real estate managers is currently being conducted by the SBI's special project real estate consultant, Laventhol and Horwath.

ANNUAL REVIEW SUMMARY
APACHE CORPORATION
July 28, 1988

MANAGER REPRESENTATIVES: Charlie Hann, Clyde McKensie, David Higgins, Wade Murdy

SBI ASSETS UNDER MANAGEMENT: $53.95 Million

BACKGROUND AND DESCRIPTION: The SBI is invested in three oil and gas investments managed by Apache. In total, the SBI has committed $68 million to these three investments of which $54.0 million has been funded.

The first investment, **the Apache Equipment Loan**, was incepted in May 1984. The SBI committed $15 million and funded $1.0 million to date to a $100 million private placement. The notes are being used to fund Apache's share of production equipment in a joint venture with Shell Oil Company to develop offshore leases in the Gulf of Mexico. Noteholders receive ten percent per annum fixed interest payments and two percent of Apache's share of gross revenues from the joint venture.

The second investment, **the 1985 Acquisition Notes**, was incepted in October 1985. The SBI committed and funded $23 million of the $118 million private placement to finance acquisition and development costs related to certain acquired oil and gas producing properties. Noteholders receive 10 percent annual interest payments plus 2% of the gross revenues from the project.

The third investment, **the Apache 1986 Acquisition Net Profits Interest**, was incepted in December 1986. The SBI committed and funded $30 million of the $190 million private placement to acquire a non-operating interest in the net profit generated by oil and gas properties acquired from Occidental Petroleum Company. Investors receive up to 90% of the net profits from the properties.

QUALITATIVE EVALUATION:

The evaluation noted several items of concern:

- Apache, like many oil and gas producers, has been hurt by the significant declines in oil and gas prices over the last several years. To cope with the depressed oil and gas business environment, Apache has taken steps to consolidate and streamline the Company.

- Due to the depressed level of oil and gas prices, the Equipment Loan is being funded at a much slower pace than originally expected. The SBI has funded only $1 million of its $15 million commitment. Apache expects to release investors from approximately 50% of their unfunded commitments by year-end.

- The 1985 Acquisition Notes were incepted prior to the significant decline in oil and gas prices in late 1985. Therefore, cash flows and returns from the 1985 Acquisition will likely be less than originally expected.

- The 1986 Acquisition Net Profits Interest was incepted after the significant decline in oil and gas prices in late 1985. Although it is early in the life of this investment, it should perform in line with original expectations.

AGGREGATED QUANTITATIVE EVALUATION FOR THE THREE APACHE FUNDS

COMMITMENT:	$68.0 Million
FUNDED COMMITMENT:	$54.0 Million
MARKET VALUE OF FUNDED COMMITMENT:	$41.8 Million
CASH DISTRIBUTIONS:	$16.5 Million
INCEPTION DATE(S):	Fund I May 1984 Fund I October 1985 Fund III December 1986
WEIGHTED AVERAGE INTERNAL RATE OF RETURN (IRR): (annualized, since inception)	4.2%

GEOGRAPHIC PROPERTY DISTRIBUTION

	APACHE EQUIPMENT LOAN	APACHE 1985 ACQUISITION	APACHE 1986 ACQUISITION
Louisiana	50%	26%	26%
Oklahoma		13	44
Texas	50	18	11
Wyoming		36	5
Other		7	14

STAFF COMMENTS AND RECOMMENDATIONS:

At this time, the Alternative Investment Committee and staff do not recommend additional investments with Apache.