

January 22, 1990

MINUTES
REGULAR MEETING OF THE
SACRAMENTO CITY EMPLOYEES' RETIREMENT SYSTEM
ADMINISTRATION, INVESTMENT AND FISCAL MANAGEMENT BOARD
January 22, 1990

CALL TO ORDER AND ROLL CALL

The Administration, Investment and Fiscal Management Board met in regular session in Conference Room 101, 921 - 10th Street, at 1:30 p.m. on January 22, 1990.

PRESENT: Frierson, Masuoka, Wolford, Friery, DeCamilla

ABSENT: None

CONSENT CALENDAR

ELECTION OF CHAIRPERSON FOR CALENDAR YEAR 1990

Chairman David DeCamilla opened the nominations for Chairman of the Board for calendar year 1990. Mr. Friery nominated David DeCamilla. The nomination was seconded by Ms. Masuoka. Mr. DeCamilla was re-elected Chairman by the following vote:

AYES: Frierson, Masuoka, Wolford, Friery, DeCamilla

NOES: None

ELECTION OF VICE-CHAIRPERSON FOR CALENDAR YEAR 1990

Chairman David DeCamilla opened the nominations for Vice Chairman of the Board for calendar year 1990. Mr. DeCamilla nominated Thomas Friery. The nomination was seconded by Mr. Wolford. Mr. Friery was re-elected Vice Chairman by the following vote:

AYES: Frierson, Masuoka, Wolford, Friery, DeCamilla

NOES: None

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MINUTES OF REGULAR MEETING HELD JANUARY 8, 1990

APPROVED

The Board received and reviewed the minutes of the regular meeting held January 8, 1990. Ms. Masuoka moved the minutes be approved. The motion was seconded by Mr. Wolford and was carried by the following vote:

AYES: Frierson, Masuoka, Wolford, Friery, DeCamilla

NOES: None

INVESTMENTS - TREASURER'S ACTIVITY REPORT

ACCEPTED

The Board received the November, 1989 Treasurer's Investment Activity Report. Deborah Carter, Investment Officer, reviewed the investment report with the Board. Ms. Carter informed the Board that attachment A-2 will be replaced. An item was posted in the wrong column. Corrected copies will be distributed.

After discussion, Ms. Frierson moved to accept the investment activity report. The motion was seconded by Mr. Wolford and was carried by the following vote:

AYES: Frierson, Masuoka, Wolford, Friery, DeCamilla

NOES: None

REPORTS OF CONSULTANTS AND ADVISORSREAL ESTATE ADVISOR'S REPORT

ACCEPTED

The Board received the January, 1990 Real Estate Advisor's report, submitted by W. Jim Smith of WJS & Associates. Mr. Smith reviewed the report with the Board.

Mr. Friery moved to accepted the Real Estate Advisor's Report. The motion was seconded by Mr. DeCamilla and was carried by the following vote:

AYES: Frierson, Masuoka, Wolford, Friery, DeCamilla

NOES: None

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POLICY MATTERS TO BE CONSIDERED AND ACTED UPONASSET ALLOCATION AND DIVERSIFICATION
ADOPTED

The Board received a comprehensive report prepared by Thomas P. Friery, City Treasurer and Michelle Stenoski, Investment Officer, on asset diversification of a matured retirement system. The complete report is included with these minutes.

Mr. Friery and Ms. Stenoski reviewed the report with the Board in combination with an overhead visual presentation.

The indepth report presented the findings of research into the implications of developing an asset diversification plan for a maturing pension fund, such as SCERS, in which there are no new entrants and recommended the Board make changes in the portfolio asset diversification and measurement techniques for purposes of structuring the SCERS portfolio to cover required member benefit payments and expenses with existing plan assets including investment income.

It was recommended that: 1) the current asset diversification policy of SCERS which is 53% fixed and 47% equity be changed to 70% fixed and 30% equity. The asset policy change would be accomplished by immediately investing 60% fixed and 40% equity, and that on January 1, 1991, and each year thereafter, continue reducing the equity exposure 2% until the equity portion is 30%, and 2) the Board adopt a cash rate of return review process for fixed income investments as opposed to a total rate of return measurement. The goal of this program will be to use bond maturities, income and contributions to pay for retiree benefits and permit the Treasurer to acquire the longest maturities possible when it can be done at rates in excess of the actuarial earnings assumption.

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Mr. Friery informed the Board that he had discussed these recommendations with all the investment managers. The Board received a letter from Peter Sutro, Vice President of Axe-Houghton, regarding the recommendations.

After a lengthy discussion, Mr. Wolford moved to adopt the recommendations to change the asset diversification policy to 70% fixed and 30% equity, to be accomplished as outlined in the report and to change performance measurement to cash rate of return rather than total rate of return. The motion was seconded by Ms. Masuoka and was carried by the following vote:

AYES: Frierson, Masuoka, Wolford, Friery, DeCamilla

NOES: None

REPORTS OF SECRETARY

AUTOMATIC RENEWAL W.J. SMITH AND ASSOCIATES CONTRACT

The Secretary informed the Board that the real estate advisor's contract with WJS & Associates automatically renewed January, 1990.

TRANSMITTAL LETTER FOR SCERS 1988-89 ANNUAL REPORT

The annual transmittal letter has been completed and forwarded to the auditors. The Board complemented the Treasurer's staff for preparing a thorough and concise report.

AXE-HOUGHTON DISCLOSURE STATEMENT

The Secretary informed the Board that Axe-Houghton had submitted their Disclosure Statement as required by the SEC. The statement will be on file at the retirement office.

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IDEAS QUESTIONS, MEMBERS OF THE BOARD

Ms. Masuoka asked the Board if she should schedule the City's outside audit firm, Deloitte & Touche, to come before the board for an exit interview. It was the consensus of the Board that it would not be necessary since the system received a clear opinion for the auditors.

There being no further business, the meeting was adjourned at 3:30 p.m. to meet again at the call of the chair.



OFFICE OF THE
CITY TREASURER

THOMAS P. FRIERY
TREASURER

MICHAEL L. MEDEMA
ASSISTANT TREASURER

DONALD E. SPERLING
DEPUTY TREASURER/OPERATIONS

DAVID M. AFFLECK
DEPUTY TREASURER/FINANCING

CITY OF SACRAMENTO
CALIFORNIA

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ADMINISTRATION

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January 16, 1990
I00002MS.MSA

TO: Administration, Investment & Fiscal Management Board
(AI & FM)

FROM: Thomas P. Friery, City Treasurer
Michelle Stenoski, Investment Officer II

RE: Asset Diversification of a Matured Retirement System Model.

SUMMARY

This report presents the findings of research into the implications of developing an asset diversification plan for a pension fund such as the Sacramento City Employees Retirement System (SCERS) in which there are no new entrants (diminishing and ultimately eliminated member contributions) and recommends that the Board make certain changes in the portfolio asset diversification and performance measurement techniques. The primary issue facing a "closed" pension system is the ability to cover required member benefit payments and expenses for all remaining retirees with existing plan assets including investment income. Failure to do so increases risk to the plan members and City.

Traditionally investment assets are categorized into two major classifications: equity and fixed. Equity investments (those which connote ownership), such as common stocks, tend to provide a significant portion of their return in the form of increased principal value of the investment. Conversely, fixed income investments (those which connote a liability) tend to provide substantially all of their return in the form of interest payments which are more predictable than dividend income or fluctuations in the value of the investment although do not provide for a participation in future earnings growth.

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Therefore, asset diversification, particularly that portion dedicated to investments which offer a lower current return and higher market exposure, such as equities for example, should be reevaluated when a retirement plan matures and member contributions dissipate. As a result of the maturing nature of the SCERS fund, it is recommended that:

- o the current asset diversification policy be amended to increase the fixed income portion of the portfolio, thereby providing a reliable income stream, and
- o based upon the change in the style of the fixed income management of the fund from one that is actively managed to one that is more passively managed, a cash rate of return method of performance measurement is suggested for fixed income investments and a total rate of return measurement to be maintained for equity investments.

BACKGROUND

A retirement plan is effectively an annuity designed to pay cash benefits to members upon their retirement in conjunction with the retirement plan charter. Very briefly, it is necessary to estimate salary growth, inflation, expenses, withdrawal rate, life expectancy, etc. of plan members, and the total amount of these calculations become the actuarial liability for retirement benefit payments to members. The source of these payments comes from cash assets which are a combination of employee and employer contributions and the investment income earned on these contributions (plan assets). In a defined benefit plan such as SCERS, members are entitled to payment of their defined retirement benefit whether or not there are sufficient plan assets (contribution plus investment income) to meet these payments.

Whenever plan assets are insufficient to meet plan expenses an actuarial unfunded liability occurs. This condition means that if all plan members retire and all actuarial assumptions occur that there would be insufficient plan assets to pay the benefits. In the SCERS defined benefit the City has to increase contributions to the plan to meet the unfunded liability. However, there is a risk to both a plan member as well as the City under this condition. In the event the City is unable to make the payments, a retiree will not receive his/her benefits. Further, should the City have to make substantial unexpected payments, it may interfere or jeopardize the operating budget of the City.

There are many risks in creating a retirement plan. These include

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the risks of incorrect salary projections, unexpected inflation, and other extraordinary expenses. To offset these risks retirement system boards and managers over the years have tended to make equity investments a higher percentage of plan asset investment diversification. Private sector plans have 70% or more of plan assets in equity investments and the balance in fixed income investments. California employee retirement public funds were not permitted to invest in equity investments until 1972. At that time, common stocks were limited to 25% of fund assets. Since then, equity investments of that sector comprised of public employee retirement funds have grown to approximately 40% of assets. The sector that includes all funds in the SEI universe approach 51% of assets according to SEI reporting and management services.

It has been proven that common stocks tend to outperform fixed income investments over time. A combination of dividend income growth and the perception of potentially unlimited growth in the value of equity investments due to inflationary and real earnings growth are the primary causes for this return. However, there is volatility in the predictability of the performance. Similarly, when the average age of plan members is twenty-five or more years younger than retirement age, and cash flow is being augmented by member and plan contributions, it is possible and prudent to increase equity asset investment diversification in an effort to have the greater equity earnings offset the risk of understating plan liabilities. However, as a plan's average age increases, cash flow from contributions decrease and a different phenomena occurs.

The SCERS became closed to new members in 1977 when the average age of members was 36 years and the asset diversification mix was 60% fixed and 40% equity. It was known that contributions from members and the City would steadily decrease and the system would be required to rely upon investment income and plan assets to provide benefits. In the event that plan assets prove insufficient, the City of Sacramento will have to make up this difference from the general fund. The average age of plan members is now 48 years and the asset diversification is 47% Equity and 53% Fixed. It is because of the potential exposure to market volatility that asset diversification is so critical. In other words, it must be determined what asset mix provides the most safety and preservation of principal to cover the expected disbursements and, therefore, act in the best interests of both the participating members and the City.

The actuarial report issued November 3, 1989 by Towers Perrin indicated that, beginning FY 1988/89, disbursements from the system exceeded contributions from members and the City. While investment income was more than sufficient to cover the benefit payments and

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expenses, and is anticipated to continue doing so over the next few years, arrangements should be made now toward dealing with the time when SCERS is in a total payout situation. This is necessitated because of the proven recent historic market actions when long term interest rates fluctuated more than 500 basis points and stock market indices showed swings of 500 points or more. Had it been necessary to liquidate plan assets for member benefits as a result of insufficient income during these time periods, bonds would have lost more than 45% of their value and equities would have lost 33% or more. The negative impact to the plan would have been even greater because these losses would have been magnified further by the loss of potential future income at the actuarial earnings assumption of 7%. Therefore, the ability to lock in investment returns in excess of the actuarial earnings assumption should be taken advantage of by minimizing market value swings in the investment assets. Furthermore, the SCERS unfunded liability, which represents the amount necessary to fully fund the system, was reported to be \$69 million. Also of consideration is the upcoming transfer of Safety Members to PERS which will result in a decrease of member contributions by one-third.

POLICY

Asset Diversification

The pension plan's asset diversification policy is one of the most challenging decisions facing the Board. This requires implementing a plan in which assets and liabilities are coordinated within the dynamic nature of the member's changing demographic characteristics and the investment environment. Retirement system plans, just as individuals and different investors, have different levels of risk tolerance. The members within the SCERS could be considered somewhat risk intolerant. That is because the system is closed to new members and has been for more than twelve years. Since the average age of the plan participants is now 48 years and more than one-third of the members are retired, it would be advisable to lean toward a dependable stream of income with which to pay benefits. Therefore, the asset diversification policy should be adapted to reflect the profile of its participants.

A brief review of other pension plans throughout the state provided a means of comparison. It should be noted that none were found that faced exactly the same situation as the SCERS. Of those contacted, all agreed to the basic philosophy that the asset diversification policy should reflect the unique profile of the system participants.

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Performance Measurement

Along with any significant change in asset diversification comes the necessity to ascertain the impact on the methodology of measuring performance. Performance measurement techniques vary, as does the asset diversification policy, with the goals and profile of the system members.

Currently, the SCERS measures performance based upon the total rate of investment return achieved on a quarterly, fiscal year, and varying annual time periods up to ten years time horizons. The theory behind total rate of investment return performance measurement is to view the cash income plus or minus any changes in the market value of the investments and compare the results to similar plans and/or indices and make judgements as to the success of the manager(s) over the time period of review. Price appreciation therefore is a key element. However, price appreciation is not used to pay benefits in young and growing plans. Rather, in young and growing plans current income can be overlooked and emphasis placed on acquiring investments that will grow in principal with income being postponed until needed.

A viable alternative for SCERS performance measurement that considers the maturing of the plan is a cash rate of return. The emphasis can be placed on achieving cash rates of return in excess of the actuarial earnings assumption (7%) and the ability to have investment maturities and income sufficient to meet projected actuarial benefits. In this manner, focus can be addressed to the cash income ability to pay and not face market considerations of having to liquidate fixed income or equity investments at a loss. Further, the SCERS will not be performance measured against plans with vastly dissimilar interests and plan demographics. That portion of assets left in equity can then be measured on a total rate of return basis because fixed income will have been used to eliminate market volatility from the ability to pay.

FINANCIAL

The modification of any asset diversification policy has a financial impact primarily to the extent 1) of the change in the proportion dedicated to fixed income, equity, and cash markets and 2) the risk/return profile of the securities affected. Each security type has an expected rate of return associated with its ownership based upon the uncertainty of the receipt of income or actual loss of principal. Therefore, a portfolio comprised mostly of equities would typically tend to provide over time a higher yield based on the

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uncertainty (risk) of payment of dividends and potential principal loss.

Although earning power is the fundamental basis of valuation for the selection of any security type, the analytical thrust of fixed income selection differs widely from that of equities. Specifically, fixed income securities offer continuity of income and protection against loss of principal, whereas equity selection emphasizes earnings and dividend growth and capital appreciation potential. This basic difference has some obvious implications in terms of expected returns.

As a historical point of view, a study of rates of return on common stocks and bonds was conducted by the University of Chicago and the American National Bank and Trust Company of Chicago in 1977 in which it was concluded that the annual compounded rate of return and the risk of variation (standard deviation of returns) for selected investments over the period 1926-1976 was as follows:

| Investment | Return (Compounded, Annually) | Risk (Standard Deviation) |
|-----------------|----------------------------------|------------------------------|
| Common Stocks | 9.2% | 22.4% |
| Corporate Bonds | 4.1 | 5.6 |

In other words, an owner of common stocks over the period under study earned, on average 9.2%. However, some stockholders earned as much as 31.6%, while others lost up to (13.2%). Likewise, the bondholder earned considerably less with a range of 9.7% to (1.5%). These findings underscore the link between return and risk. While common stocks more than doubled the return of bonds, the potential risk of doing so was four times as high. Other studies of returns of bonds over a number of years support the findings that, while long-term bonds have provided a lower than average return than a portfolio of common stocks, bonds have also exhibited a more than proportionately lower level of risk. Another test of annual rates of return on stocks and bonds during market swings from mid-1965 to early 1973 indicated that bonds increased at an annual rate of return about equal to that of stocks in bull markets, yet declined at an annual rate substantially less than stocks in bear markets.

Another consideration is the fact that common stock dividends on average range from 2.5% to 3% whereas high grade long term bonds produce interest income of 8.5% to 9% in today's market. Therefore, long term bonds tend to pay a higher portion of their return in a predictable income stream. The lower return of bonds long term may be more a function of expected inflation in the current market which retards purchasing power of the dollar. Naturally, since bonds

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mature at par, the par value of a bond at maturity in twenty years or more will not reflect inflation. Conversely, equity investments will generally reflect this value.

The point of these studies is not simply that one investment type is riskier, and therefore higher yielding than another, but that these characteristics must be considered when analyzing the asset diversification policy. Although a portfolio comprised of a smaller equity percentage and a greater fixed income percentage may not perform as well in terms of rate of return over the long term when compared to other plans who are not as mature as the SCERS, it may be more prudent for SCERS to provide the safety of principal and income stream at the actuarial earnings rate (currently 7%) at a much lower level of risk. As a fund matures and the uncertainty of inflation and actuarial payout diminishes, it is more prudent to remove or reduce substantially the equity risk undertaken when a plan was in its initiating and growing stage.

RECOMMENDATION

It is recommended that:

- o the current asset diversification policy of SCERS which is 53% fixed and 47% equity be changed to 70% fixed and 30% equity and,
 - the asset policy change shall be accomplished by immediately investing the SCERS safekeeping assets along with the other plan assets to increase the rate to 60% fixed and 40% equity, and that on January 1, 1991, and each year thereafter, continue reducing the equity exposure 2% until the equity portion is 30%. This action will immediately increase the return on book to 7.34% and by 1995 will result in a minimum return on book of 7.72%, and,
 - the Board adopt the following asset allocation model:
- | | Current Policy | Recommended Policy |
|-----------------|----------------|--------------------|
| Fixed: | | |
| Bonds, Mtg | 50.5% | 51% |
| Real Estate Mtg | 2.5 | 4 |
| Utility Stocks | 5.0 | 5 |
| Total Fixed | 58.0% | 60% |
| Equity: | | |
| Axe Houghton | 4.0% | 4.0% |
| Batterymarch | 9.0 | 4.0 |
| Delaware | 9.0 | 11.0 |

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| | | |
|--------------------|--------------|--------------|
| Lexington | 4.0 | 5.0 |
| Newbolds | 9.0 | 9.0 |
| Gold & Silver | 1.0 | 0.0 |
| Real Estate Equity | <u>6.0</u> | <u>7.0</u> |
| Total Equity | <u>42.0%</u> | <u>40.0%</u> |
| Total | 100.0% | 100.0% |

- o the Board adopt a cash rate of return review process for fixed income investments as opposed to a total rate of return measurement. The goal of this program will be to use bond maturities, income, and contributions to pay for retiree benefits and permit the Treasurer to acquire the longest maturities possible when it can be done at rates in excess of the actuarial earnings assumption.

I am prepared to discuss this recommendation at length.

Respectfully,

Thomas P. Friery
 Thomas P. Friery,
 City Treasurer

Michelle Stenoski

Michelle Stenoski
 Investment Officer II

cc: Honorable Mayor and Members of Council
 John McLaughlin, SEI
 Patricia Small, UC Berkeley
 Jim Smith
 Axe Houghton
 Batterymarch
 Delaware
 Newbolds
 Lexington

ATTACHMENT A-1

SCERS - STATEMENT OF ASSETS AVAILABLE FOR INVESTMENT
AS OF NOVEMBER 30, 1989

| | CASH | | INVESTMENTS @ COST | AMOUNT 1/ AVAILABLE FOR INVESTMENT |
|------------------------------------|-------------|------------|-----------------------|--|
| | FOOL A | PAC HOR | | |
| EXTERNAL CONTRIBUTIONS | (3,177,616) | | | (3,177,616) |
| FIXED: | | | | |
| BONDS, 2ND TD'S, & MTG. BK. CERTS. | 1,688,357 | 798,940 | 119,475,055 | 121,962,352 |
| REAL ESTATE MORTGAGE | 544,255 | | 5,494,335 | 6,038,590 |
| UTILITY STOCKS | 821,671 | 1,610,994 | 9,647,119 | 12,079,784 |
| TOTAL FIXED | 3,054,283 | 2,409,934 | 134,616,509 | 140,080,726 |
| EQUITY: | | | | |
| AXE-HOUGHTON | (17,288) | 1,534,204 | 9,657,995 | 11,174,911 |
| BATTERYMARCH | | 608,479 | 19,188,677 | 19,797,156 |
| DELAWARE | | 3,634,937 | 18,311,812 | 21,946,748 |
| LEXINGTON | (18,449) | 2,992,938 | 7,312,277 | 10,286,766 |
| NEWBOLDS | (19,353) | 3,280,141 | 19,454,751 | 22,715,539 |
| GOLD & SILVER | 308,155 | | 2,049,044 | 2,357,199 |
| REAL ESTATE EQUITY | 2,185,535 | | 22,925,347 | 25,110,882 |
| LESS: LOAN PAYABLE | | | (6,000,000) | (6,000,000) |
| TOTAL EQUITY | 2,438,600 | 12,050,698 | 92,899,903 | 107,389,201 |
| SUB-TOTAL | 2,315,267 | 14,460,633 | 227,516,412 | 244,292,311 |
| SCERS SAFEKEEPING II 2/ | (435,083) | 759,956 | 116,652,494 | 116,977,366 |
| GRAND TOTAL | 1,880,183 | 15,220,588 | 344,168,906 | 361,269,678 |

1/ This column represents the amount available for investment for each category derived by adding to or subtracting from the previous period's balance all invested income (interest, dividend, gains, losses, etc.) and all contribution transfers.

2/ In compliance with action taken by the AIFM Board approving the plan to transfer the Safety Members assets, all the investments have been liquidated as of June 30, 1989. During the month of July 1989, \$116,217,073 was transferred to a separate account at Security Pacific National Bank and have been invested in various short term securities until January 12, 1990, when the transfer to PERS will take place.

SCERS - STATEMENT OF ASSETS @ MARKET VALUE
AS OF NOVEMBER 30, 1989

| | CASH | | INVESTMENTS @MARKET | TOTAL ASSETS @ MARKET |
|------------------------------------|------------------|-------------------|------------------------|--------------------------|
| | POOL A | PAC HOR | | |
| EXTERNAL CONTRIBUTIONS | (3,177,616) | | | (3,177,616) |
| FIXED: | | | | |
| BONDS, 2ND TD'S, & MTG. BK. CERTS. | 1,688,357 | 798,940 | 120,511,282 | 122,998,579 |
| REAL ESTATE MORTGAGE | 544,255 | | 5,909,450 | 6,453,705 |
| UTILITY STOCKS | 821,671 | 1,610,994 | 10,388,538 | 12,821,203 |
| TOTAL FIXED | 3,054,283 | 2,409,934 | 136,809,270 | 142,273,487 |
| EQUITY: | | | | |
| AXE-HOUGHTON | (17,288) | 1,534,204 | 10,479,523 | 11,996,439 |
| BATTERYMARCH | | 608,479 | 21,233,386 | 21,841,865 |
| DELAWARE | | 3,634,937 | 21,128,219 | 24,763,156 |
| LEXINGTON | (18,449) | 2,992,938 | 9,041,263 | 12,015,752 |
| NEWBOLDS | (19,353) | 3,280,141 | 21,434,482 | 24,695,270 |
| GOLD & SILVER | 308,155 | | 1,468,280 | 1,776,435 |
| REAL ESTATE EQUITY | 2,185,535 | | 22,580,000 | 24,765,535 |
| LESS: LOAN PAYABLE | | | (6,000,000) | (6,000,000) |
| TOTAL EQUITY | 2,438,600 | 12,050,698 | 101,365,153 | 115,854,451 |
| SUB-TOTAL | 2,315,267 | 14,460,633 | 238,174,423 | 254,950,322 |
| SCERS SAFEKEEPING II | (435,083) | 759,956 | 116,652,494 | 116,977,366 |
| GRAND TOTAL | 1,880,183 | 15,220,588 | 354,826,917 | 371,927,688 |

ATTACHMENT A-2

SCERS - STATEMENT OF CHANGES IN ASSETS AVAILABLE FOR INVESTMENT
FOR THE PERIOD 10/31/89 - 11/30/89
(AMENDED)

| | BALANCE 10/31/89 | INTEREST INCOME | | | | GAIN (LOSS) ON SALES | NET RENTAL INCOME | INTEREST EXPENSE | NET EXTERNAL CONTRIB. | CONTRIB. TRANSFER | BALANCE 11/30/89 |
|--------------------------------------|---------------------------|-----------------|---------|------------|-----------|-------------------------|-------------------------|---------------------|-----------------------------|---------------------------|---------------------|
| | | POOL A | PAC HDR | INVESTMENT | DIV | | | | | | |
| EXTERNAL CONTRIBUTION | (3,070,347) | | | | | | | | (107,269) | (3,177,616) | |
| FIXED: | | | | | | | | | | | |
| BONDS, 2ND TO'S, & MTG. BK. CERTS | 121,304,510 | 0 | 6,122 | 650,571 | | 1,150 | | | | 121,962,353 | |
| REAL ESTATE MORTGAGES | 5,984,979 | 0 | | 53,612 | | | | | | 6,038,591 | |
| UTILITY STOCKS | 12,021,988 | 0 | 6,144 | | 49,652 | 0 | | | | 12,079,784 | |
| EQUITY: | | | | | | | | | | | |
| AXE-HOUGHTON | 10,678,669 | 0 | 9,956 | | 960 | 485,324 | | | | 11,174,912 | |
| BATTERYMARCH | 19,712,933 | | 3,139 | | 49,713 | 31,310 | | | | 19,797,156 | |
| DELAWARE | 21,843,341 | | 22,439 | | 60,967 | 3 | | | | 21,945,745 | |
| LEXINGTON | 10,273,690 | 0 | 16,565 | | 14,223 | (17,713) | | | | 10,286,764 | |
| MEMPHIS | 22,246,149 | 0 | 13,409 | | 50,972 | 405,009 | | | | 22,715,538 | |
| GOLD & SILVER | 2,354,999 | | | 2,200 | | 0 | | | | 2,357,199 | |
| REAL ESTATE EQUITY LOAN PAYABLE | 25,040,662 (6,000,000) | 0 | | | | | 119,375 | (49,375) | | 25,110,662 (6,000,000) | |
| SUB-TOTAL | 242,391,853 | 0 | 79,776 | 705,383 | 246,487 | 905,083 | 119,375 | (49,375) | (107,269) | 0 | 244,292,312 |
| SCERS SAFKEEPING II | 116,407,039 | | 4,806 | 565,521 | | | | | | | 116,977,366 |
| GRAND TOTAL | 358,798,892 | 0 | 84,582 | 1,271,904 | 246,487 | 905,083 | 119,375 | (49,375) | (107,269) | 0 | 361,269,678 |
| YEAR TO DATE: | | | | | | | | | | | |
| PERMANENT ASSETS | 349,384,263 | 592,853 | 605,684 | 4,727,068 | 1,406,748 | 6,519,938 | 748,625 | (246,875) | (3,229,117) | (116,217,074) | 244,292,313 |
| SCERS SAFKEEPING II | | | 132,071 | 626,221 | | | | | | 116,217,074 | 116,977,366 |
| TOTAL YEAR TO DATE | 349,384,263 | 592,853 | 737,955 | 5,353,289 | 1,406,748 | 6,519,938 | 748,625 | (246,875) | (3,229,117) | 0 | 361,269,678 |

SCERS - STATEMENT OF ESTIMATED INCOME & RATES OF RETURN
AS OF NOVEMBER 30, 1989

| | COST | MARKET | ESTIMATED ANNUAL INCOME | EST. RATE AT COST | EST. RATE AT MARKET |
|------------------------------------|--------------------|--------------------|-------------------------------|----------------------|------------------------|
| CASH | | | | | |
| CITY POOL A | 2,315,267 | 2,315,267 | 206,058 | 8.90% | 8.90% |
| PAC HORIZONS MONEY MARKET FUND | 14,460,633 | 14,460,633 | 1,166,973 | 8.07% | 8.07% |
| SCERS INVESTMENT POOLS | | | | | |
| FIXED: | | | | | |
| BONDS, 2ND TD'S & MIG. BK CERTS | 119,475,055 | 120,511,292 | 10,889,165 | 9.11% | 9.04% |
| REAL ESTATE MORTGAGE | 5,494,335 | 5,909,450 | 646,543 | 11.77% | 10.94% |
| UTILITY STOCKS | 9,647,119 | 10,388,538 | 618,053 | 6.41% | 5.95% |
| EQUITY: | | | | | |
| AXE-HOUGHTON | 9,657,995 | 10,479,523 | 60,133 | 0.62% | 0.57% |
| BATTERYMARCH | 19,188,677 | 21,233,386 | 383,897 | 2.00% | 1.81% |
| DELAWARE | 18,311,812 | 21,128,219 | 876,496 | 4.79% | 4.15% |
| LEXINGTON | 7,312,277 | 9,041,263 | 213,258 | 2.92% | 2.36% |
| NEWBOLDS | 19,454,751 | 21,434,482 | 804,148 | 4.13% | 3.75% |
| GOLD & SILVER | 2,049,044 | 1,468,280 | | | |
| REAL ESTATE EQUITY | 22,925,347 | 22,580,000 | 1,797,500 1/ | 7.84% | 7.96% |
| LOAN PAYABLE | (6,000,000) | (6,000,000) | | | |
| SUB-TOTAL | 244,292,311 | 254,950,322 | 17,662,224 2/ | 7.23% | 6.93% |
| SCERS SAFEKEEPING - II | 116,977,366 | 116,977,366 | 10,235,519 | 8.75% | 8.75% |
| GRAND TOTAL | 361,269,678 | 371,927,688 | 27,897,743 | 7.72% | 7.50% |

1/ Per Board Resolution # 86-007, dated 6/23/86, Real Estate Equity can be leveraged up to 50% of the System's Portfolio and up to 75% of the purchase price of a particular property. The Discovery Plaza Property purchased for \$10 million was leveraged with a \$6 million 9.875% note dated 2/24/87 payable to the Travelers Insurance Company. Annual interest expense on this loan is \$592,500.

2/ The estimated annual income represents only interest and dividends, and does not include Capital Gains, Administrative Expenses and Debt Service. Capital Gains for the prior fiscal year 1987/8 was \$9 million. Administrative Expenses for this same period were \$90,000 for Banking and Trustee Fees, \$766,000 for Investment Manager Fees, \$444,000 for Interest Expense on Note Payable (Discovery Plaza), and \$793,000 for Real Estate Maintenance and Repair Expenses. Although we are unable to estimate Capital Gains for Fiscal Year 1988, we anticipate that the other expenses should remain fairly constant. These additional income and expense items should be considered in determining the funds total performance.

ATTACHMENT A-4

SCERS - STATEMENT OF OVER (UNDER) INVESTMENT BASED UPON
COST/MARKET AS OF NOVEMBER 30, 1989

| | 1/ COST | 1/ MARKET | % AUTHORIZED | DOLLARS AUTHORIZED | 2/ OVER (UNDER) INVESTED, BASED UPON COST/MARKET |
|-----------------------------------|-------------|-------------|--------------|--------------------|--|
| EXTERNAL CONTRIBUTIONS | (3,177,616) | (3,177,616) | | | (3,177,616) |
| FIXED: | | | | | |
| BONDS, 2ND TD'S, & MIG BK. CERTS. | 121,962,352 | 122,998,579 | 50.50% | 123,367,617 | (369,038) |
| REAL ESTATE MORTGAGE | 6,038,590 | 6,453,705 | 2.50% | 6,107,308 | 346,397 |
| UTILITY STOCKS | 12,079,784 | 12,821,203 | 5.00% | 12,214,616 | 606,587 |
| TOTAL FIXED | 140,080,726 | 142,273,487 | 58.00% | 141,689,541 | 583,947 |
| EQUITY: | | | | | |
| AXE-HOUGHTON | 11,174,911 | 11,996,439 | 4.00% | 9,771,692 | 2,224,746 |
| BATTERYMARCH | 19,797,156 | 21,841,865 | 9.00% | 21,986,308 | (144,443) |
| DELAWARE | 21,946,748 | 24,763,156 | 9.00% | 21,986,308 | 2,776,848 |
| LEXINGTON | 10,286,766 | 12,015,752 | 4.00% | 9,771,692 | 2,244,060 |
| NEWBOLDS | 22,715,539 | 24,695,270 | 9.00% | 21,986,308 | 2,708,962 |
| GOLD & SILVER | 2,357,199 | 1,776,435 | 1.00% | 2,442,923 | (85,724) |
| REAL ESTATE EQUITY | 25,110,882 | 24,765,535 | 6.00% | 14,657,539 | 4,453,343 |
| LESS: LOAN PAYABLE | (6,000,000) | (6,000,000) | | | |
| TOTAL EQUITY | 107,389,201 | 115,854,451 | 42.00% | 102,602,771 | 14,177,792 |
| SUB-TOTAL | 244,292,311 | 254,950,322 | 100.00% | 244,292,311 | 11,584,122 |
| SCERS SAFEKEEPING II | 116,977,366 | 116,977,366 | 100.00% | 116,977,366 | 0 |
| GRAND TOTAL | 361,269,678 | 371,927,688 | 100.00% | 361,269,678 | 11,584,122 |

1/ Includes cash for each investment category. See Attachment A-1 and Attachment A-1A for the breakdown of cash and investments at cost and market respectively.

2/ This column represents the amount over (under) invested for each category (Cost/Market) based upon the Board's asset allocation policy. These are the amounts to be considered should the Board decide to reallocate assets of this date. The last reallocation was as of 12/31/88 and became effective 2/29/89.

Should the Board reallocate as of November 30, 1989, \$11,584,122 would be allocated to the managers according to the percentages authorized.

Effective April 1, 1988, the Board appointed Axe-Houghton Management, Inc. and Lexington Capital Management, Inc.

ATTACHMENT A-5

1]

SCERS - STATEMENT OF PURCHASES AND SALES ACTIVITY
FOR NOVEMBER 1989
(AMENDED)

| PORTFOLIO MANAGER | PURCHASES (COST) | (PROCEEDS) | SALES (COST) | GAIN/(LOSS) |
|-----------------------------|---------------------|--------------------|----------------------|------------------|
| FIXED: | | | | |
| BONDS | | \$50,000 | (\$48,750) | \$1,250 |
| MTG BACKED | | \$95,999 | (\$96,099) | (\$100) |
| 2ND TD'S | | | | \$0 |
| REAL ESTATE MORTGAGES | | | | \$0 |
| UTILITY STOCKS | \$0 | \$0 | \$0 | \$0 |
| TOTAL FIXED | \$0 | \$145,999 | (\$144,849) | \$1,150 |
| EQUITY: | | | | |
| AXE-HUGHTON | \$2,075,572 | \$2,690,895 | (\$2,205,570) | \$485,324 |
| BATTERYMARCH | \$27,101 | | | \$31,311 |
| DELAWARE | \$0 | \$28 | (\$25) | \$3 |
| LEXINGTON | \$1,167,421 | \$408,379 | (\$426,093) | (\$17,713) |
| NEWBOLDS | \$869,097 | \$1,677,171 | (\$1,272,163) | \$405,009 |
| GOLD & SILVER | | | | \$0 |
| TOTAL EQUITY | \$4,139,190 | \$4,776,473 | (\$3,903,850) | \$903,933 |
| SUB -TOTAL | \$4,139,190 | \$4,922,472 | (\$4,048,699) | \$905,083 |
| SCERS SAFEKEEPING II | | | | |
| GRAND TOTAL | \$4,139,190 | \$4,922,472 | (\$4,048,699) | \$905,083 |

1] For detailed listings of activity, see Attachments "B" through "I".