Missouri State Employees' Retirement System

A Component Unit of the State of Missouri

MOSERS®

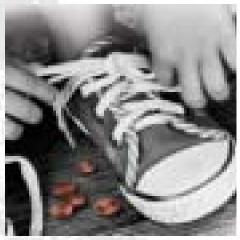
Comprehensive Annual Financial Report

Fiscal Year Ended June 30, 2003

Missouri State Employees' Retirement System

A Component Unit of the State of Missouri






Comprehensive Annual Financial Report

Fiscal Year Ended June 30, 2003

Gary Findlay
Executive Director

Gary Irwin
Chief Finance Officer

MOSERS

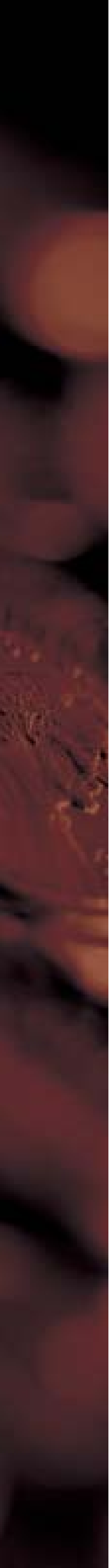


TABLE OF CONTENTS

Introductory Section

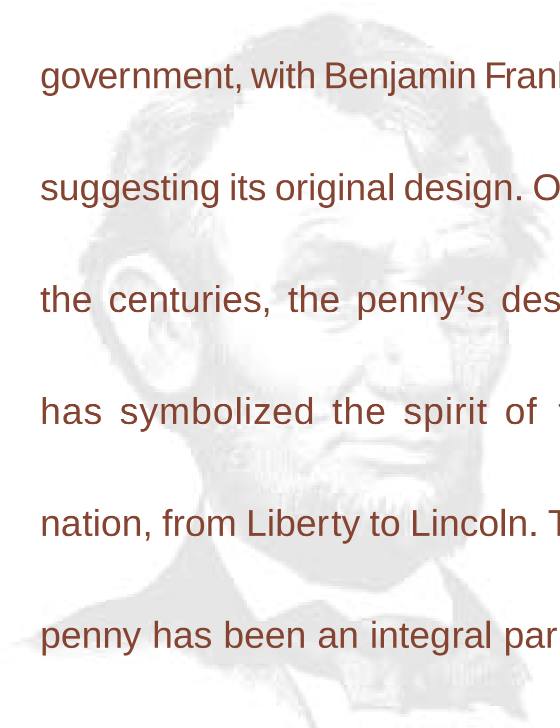
Financial Section

Investment Section

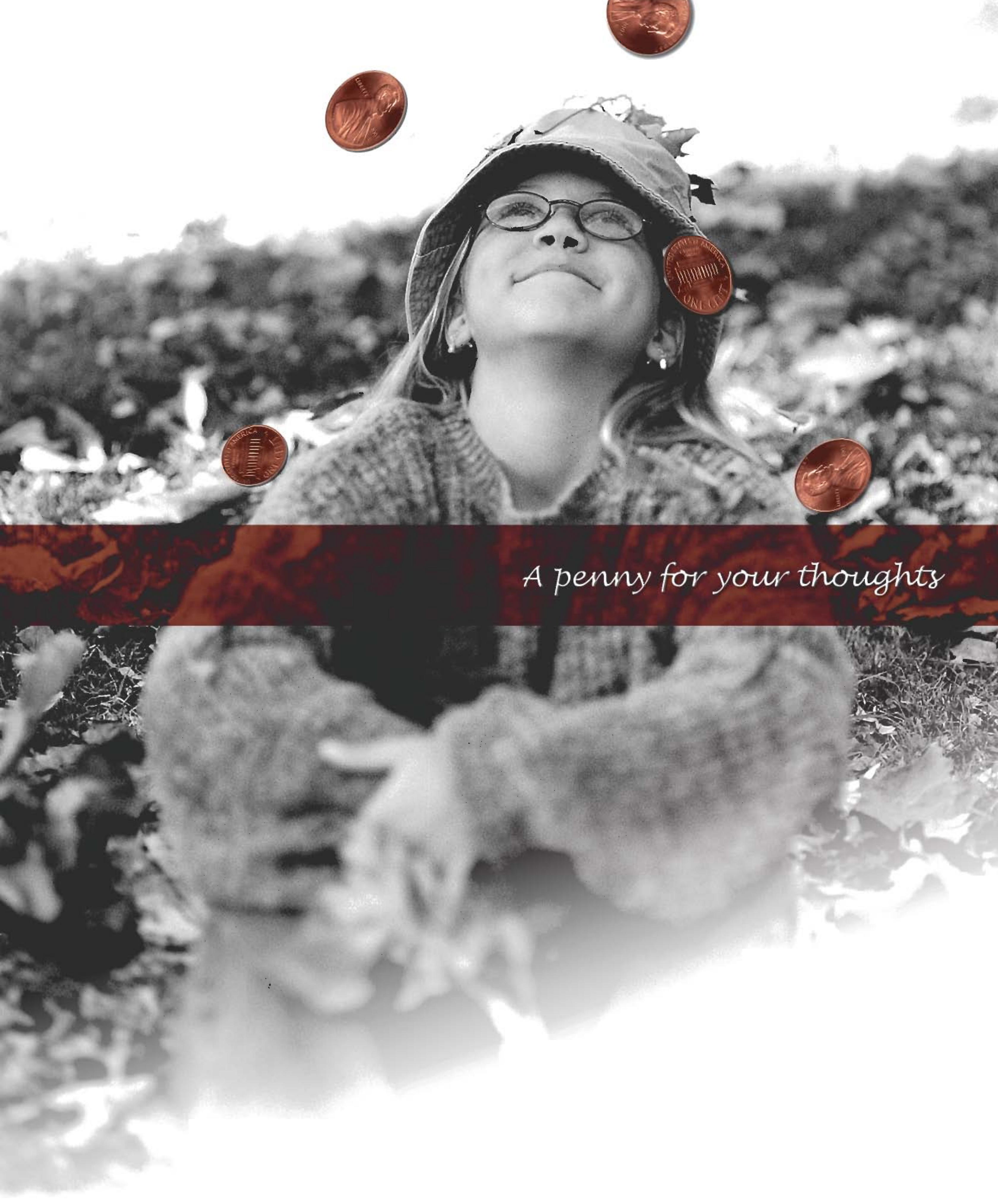
Actuarial Section

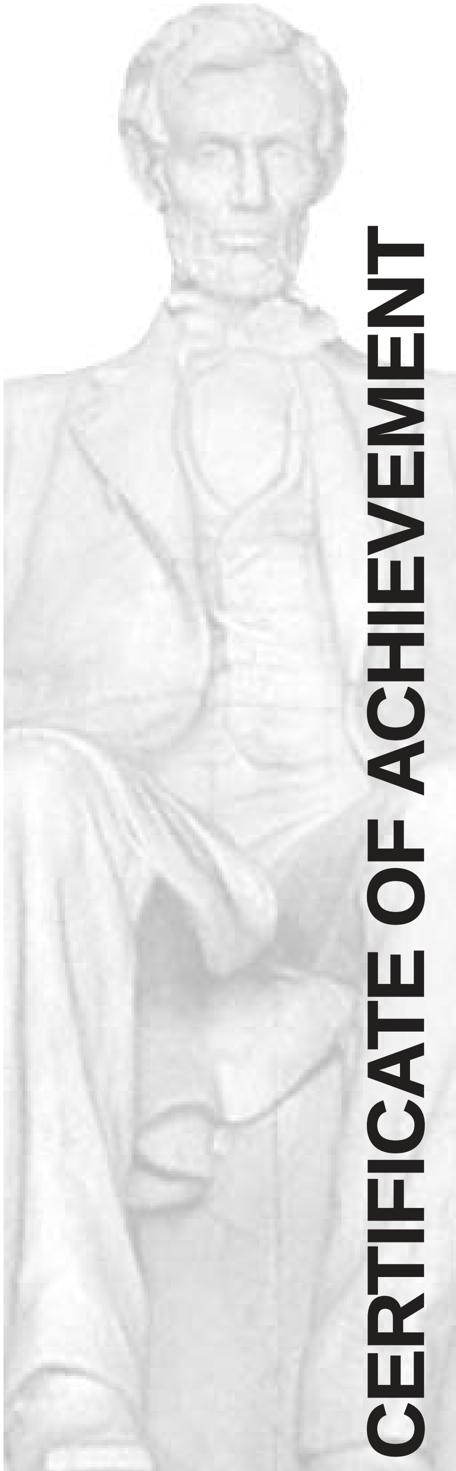
Statistical Section

* Missouri State Employees' Plan
**Administrative Law Judges and Legal Advisors' Plan

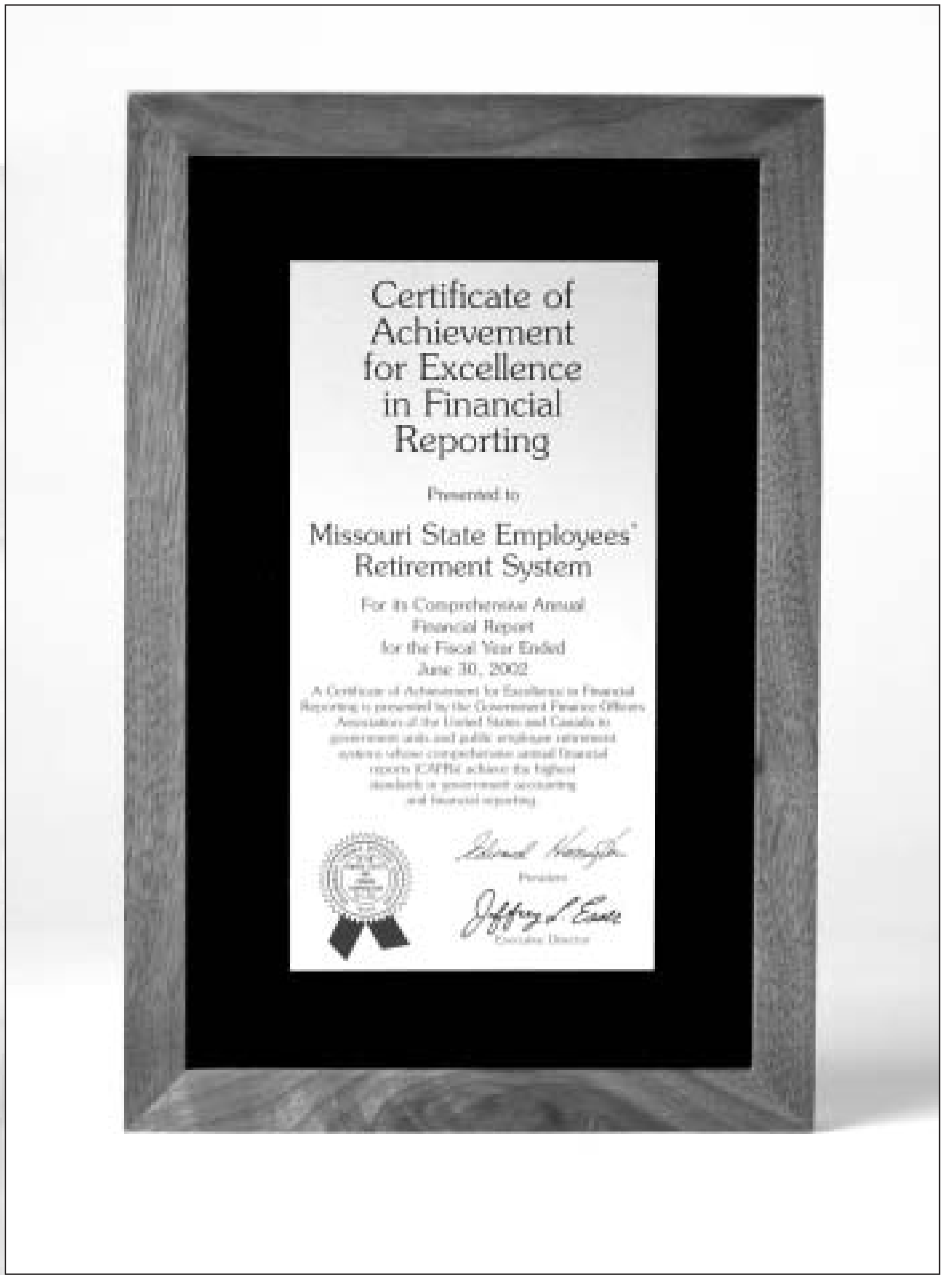


The penny is part of our nation's history and culture. It was the first coin authorized to be minted by the government, with Benjamin Franklin suggesting its original design. Over the centuries, the penny's design has symbolized the spirit of the nation, from Liberty to Lincoln. The penny has been an integral part of the American experience. Whose childhood would be complete without penny candy and other small purchases?


A penny for your thoughts



CERTIFICATE OF ACHIEVEMENT



Letter of Transmittal

October 1, 2003

The Board of Trustees
Missouri State Employees' Retirement System
907 Wildwood Drive
Jefferson City, MO 65109

Dear Board Members:

It is with great pleasure that I submit the annual report of the Missouri State Employees' Retirement System (MOSERS).

Report Contents and Structure

MOSERS is considered a component unit of the state of Missouri for financial reporting purposes and, as such, the financial statements contained in this report are also included in the *State of Missouri's Comprehensive Annual Financial Report*. The financial information presented in this report is the responsibility of the management of MOSERS, and sufficient internal accounting controls exist to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements, supporting schedules, and statistical tables. The report is also designed to comply with the reporting requirements of Sections 104.480, 104.1006, and 105.661 of the Revised Statutes of Missouri (RSMo) as amended. The report is divided into the following five sections:

- The Introductory Section, which contains general information regarding the operations of MOSERS;
- The Financial Section, which contains a management discussion and analysis report, the independent auditors' opinion, the financial statements and notes thereto, and required supplementary information regarding the funds administered by MOSERS;
- The Investment Section, which contains information pertaining to the management of the investments of the pension trust funds, including reports from the system's chief investment officer and investment consultant;
- The Actuarial Section, which contains information regarding the financial condition and financial position of the retirement plans administered by the system, including the retained actuary's opinion and the opinion of an independent reviewing actuary; and,
- The Statistical Section, which contains general statistical information regarding system participants and finances.

Fiscal Year 2003 Highlights

Deferred Retirement Option Provision

This was the first full year following implementation of the Deferred Retirement Option Provision (BackDROP), which became available to general state employees on January 1, 2002. For the year ended June 30, 2003, 610 retiring members elected the BackDROP option and received $40.5 million in BackDROP payments. This may be compared to the six-month period ending June 30, 2002 during which 308 members elected the BackDROP option and received $19.2 million in BackDROP payments.

Legislation Enacted During the 2003 Legislative Session

Senate Bill 248, enacted this year, created a health care retirement incentive plan for general state employees eligible to retire on or after February 1, 2003 through January 1, 2004 and who actually retired no later than September 1, 2003. Under this legislation, an eligible member who retired during the window period could elect to continue their state-sponsored health care coverage for him/herself and any eligible dependents at the same cost as if such retiree were an active employee. The retiree is eligible for the active employee rate for a maximum period of five years or until becoming eligible for Medicare, whichever occurs first, at which time the rate reverts to the applicable rate for retiree coverage. The legislation also limits the number of employees departments may hire to replace those employees who retired under the incentive to no more than 25% of the positions vacated. Exceptions to the 25% restriction may be made for critical, seasonal and positions that are 100% federally funded. In addition, the colleges and universities have been excluded from the 25% restriction. The legislation further requires MOSERS, the Missouri Consolidated Health Care Plan, and the State's Office of Administration to provide written reports by April 1, 2004 to the Governor and General Assembly regarding the various financial impacts of this retirement incentive.

The prompt delivery of accurate information to eligible members was particularly critical at this time in order to allow members sufficient time to make decisions about participating in the incentive program. That is because participation required members to submit retirement applications by July 31, 2003 in order to be eligible to retire by the September 1, 2003 deadline.

Update on Service Purchases Rollover Activity

The volume of service purchases remained at somewhat elevated levels during the fiscal year primarily due to the federal legislation that went into effect January 1, 2002 which allowed members to rollover their 457 deferred compensation funds to purchase service, combined with the retirement incentive legislation enacted during the year. During the fiscal year ended June 30, 2003, approximately $3.7 million was received for the purchase of service credit whereas $3.9 million was received during the fiscal year ended June 30, 2002. During both years, rollovers represented approximately 63% of the service purchase funds received.

Technology Improvements

We have continued to capitalize on technology to keep pace with and improve on our delivery of quality customer service. While we continue to use our newsletters, brochures, phone counseling, and group meetings to ensure that all prospective retirees have sufficient information to make informed decisions, a primary focus this year was improving member access to information via the system's web site. Upon request, members are issued a personal identification number (PIN) that can be used to gain access to the data we maintain. Members are now able to view their personal information in our database and produce their own benefit estimates without the intervention of a benefits specialist. The volume of estimates being produced in this manner suggests that this is very popular. We anticipate that this will become an increasingly attractive customer service feature.

In addition to our web site improvements, this year we equipped each benefits specialist with two flat screen monitors, thus providing them with the ability to view database information and imaged records at the same time they are counseling a member in person or over the phone, which speeds up the process considerably. The benefit specialists can also use the second screen to show detailed information to members during one-on-one counseling sessions.

The speed with which new information is added to the files and the accuracy of that information is vital to our success. By adding faster scanners, we have now reached the point where all information received is scanned and routed within 24 hours of receipt. In addition, we have improved the accuracy of the keying and document routing process through an audit function established within the records management section.

Focus Groups and Surveys

To assure that we are on target with our newsletters, brochures, and seminars, we have continued the use of focus groups in developing and delivering our final products. During the fiscal year, we conducted focus group meetings on our BackDROP benefit estimates and our *Summary Annual Report*. We believe the focus group process has given us a much better understanding of how to effectively serve our members, and we will continue to use them in the future.

Using telephone log information, we randomly select about 60 members each month who called with an inquiry. Those individuals are sent a customer service survey covering a range of subjects. Survey forms that are returned are reviewed by the manager of benefits and the benefits supervisor and are assessed to determine whether or not there are any adjustments that need to be made in our service delivery activity. We have also begun using targeted surveys to assess the quality of our customer service and determine how we can make improvements. This year, surveys were conducted on general customer service, the retirement process, the LTD process, and the board election process. In addition, we have added a question of the month to our web site and provided a suggestion box on the site to facilitate member input regarding any aspect of our services. Managers analyze the survey data, discuss member concerns and suggestions with their staff, and implement changes as warranted.

MOSERS has participated in the Benefits Administration Benchmarking survey administered by Cost Effectiveness Measurement, Inc. (CEM) over the last several years. Through our participation, we obtain peer group comparisons on our benefits administration operation, which is used to help identify those areas where we have excelled and those areas where we could improve. According to the most recent survey, because of the accuracy and speed of our systems, MOSERS is able to provide a formal written pension estimate to members in less than one day, while the average for our peer group is nine days. In fact, we received the highest ranking for customer service among our peers.

Member Information Security

One area of concern expressed by our members in the past was the use of social security numbers on benefit statements and other documents. System generated member numbers are now used in place of social security numbers on all outgoing correspondence where the social security number is not essential. Also, since many of our discarded documents contain personally identifiable information, we entered into a contract with a new on-site paper shredding service, which allows us to physically monitor the destruction of those documents.

Staff Team Building

This year we did two things that I believe helped staff have a better understanding of how personalities and preferences will impact employees differently and how an appreciation for those differences can make for a more collegial work environment. Last Columbus Day the staff participated in Myers-Briggs Personality Inventory training for half a day and then spent the balance of the day engaged in team building exercises. Later in the year, we followed up with "True Colors" training targeted at helping employees understand how they can more effectively relate to their co-workers.

Investment Activity

The MOSERS' investment program has undergone major restructuring over the past year. As a result of an asset/liability study conducted in the spring of 2002, the Board approved a new asset allocation model that added several new asset classes including marketable alternatives, distressed debt, timber, and private equity. In addition, authority was granted to staff to make strategic sub-asset class allocation decisions at the margins within predetermined ranges. These changes contributed significantly to the fund's performance over the past year. MOSERS' investment portfolio produced a total return, net of expenses, of 7.0% for the year ended June 30, 2003. Relative to the policy benchmark return of 5.9%, this indicates MOSERS' practices resulted in 1.1% of value added versus the market for the year. In addition, when compared to other public funds, our returns for fiscal year 2003 rank in the top 9% of statewide funds with over $1 billion in assets. The fund has achieved its goal of adding value over its policy benchmark and over the longer term has continued to exceed the actuarial real rate of return target of 5%. Additional information regarding the investment results for the year is included in the Investment Section of this report.

Summary of Financial Information

The following schedule is a summary of the pension trust funds' additions and deductions for the years ended June 30, 2003, and June 30, 2002.

	Pension Trust Funds	
	Year Ended June 30, 2003	Year Ended June 30, 2002
Additions	$518,210,724	$(113,571,787)
Deductions	(345,647,243)	(291,085,249)
Net Change	$172,563,481	$(404,657,036)

The following schedule is a summary of the revenues and expenses of the Internal Service Fund (insurance activity) for the years ended June 30, 2003, and June 30, 2002.

	Internal Service Fund	
	Year Ended June 30, 2003	Year Ended June 30, 2002
Operating revenues	$ 25,659,537	$ 25,190,197
Operating expenses	(25,644,550)	(25,192,940)
Nonoperating revenues	31,179	47,767
Net Change	$ 46,166	$ 45,024

Additional financial information can be found in the management discussion and analysis report, financial statements, and schedules included in the financial section of this report.

Plan Financial Condition

The funding objective of MOSERS' pension trust funds is to meet long-term benefit promises through contributions which remain approximately level as a percent of member payroll over decades of time. Historical information relating to progress in meeting this objective is presented on pages 37-40. During the year ended June 30, 2003, the funded ratio of the Missouri State Employees' Plan, which covers 93,404 participants, decreased from 95.9% to 90.9%, primarily as the result of plan investment experience in previous years. The funded ratio of the Administrative Law Judges' and Legal Advisors' Plan, which covers 109 participants, decreased from 83.5% to 78.3%, primarily as the result of plan investment experience in previous years. Funding of the Judicial Plan, which covers 859 participants, began on July 1, 1998. During the year ended June 30, 2003, the funded ratio of the Judicial Plan increased from 11.6% to 12.9%, primarily as the result of favorable plan experience during the year. Additional information regarding the financial condition of the pension trust funds can be found in the actuarial section of this report.

Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to MOSERS for its comprehensive annual financial report (CAFR) for the fiscal year ended June 30, 2002. The Certificate of Achievement is a prestigious national award, recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized CAFR conforming to program standards. The CAFR must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. MOSERS has received a Certificate of Achievement for the last fourteen consecutive years (fiscal years ended 1989-2002). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA for evaluation.

Conclusion

This report is a product of the combined efforts of the MOSERS' staff and advisors functioning under your leadership. It is intended to provide complete and reliable information that will facilitate the management decision making process; serve as a means for determining compliance with legal requirements; and allow for the evaluation of responsible stewardship of the funds of the system. As in the past, MOSERS received an unqualified opinion from our independent auditors on the financial statements included in this report. The opinion of the independent auditor can be found on page 18.

Copies of this report are provided to the Governor, State Auditor, Joint Committee on Public Employee Retirement of the general assembly, and all state agencies. These agencies form the link between MOSERS and its members, and their cooperation contributes significantly to the success of MOSERS. We hope all recipients of this report find it informative and useful.

I would like to take this opportunity to express my gratitude to you, the staff, the advisors, and other people who have worked so diligently to assure the continued successful operation of the system.

Respectfully submitted,

Gary Findlay

Gary Findlay
Executive Director

Letter from the Board Chair

October 1, 2003

Dear Members:

On behalf of the board of trustees, I am pleased to present the *MOSERS' Comprehensive Annual Financial Report* for the fiscal year ended June 30, 2003. In keeping with this year's annual report theme, fiscal year 2003 will certainly be remembered as a year filled with "change" for the system. This report highlights these changes and provides information on the financial status of your retirement system.

Fiscal year 2003 began with the board's approval of a new asset allocation based upon an asset/liability study which was conducted in the spring of 2002. The majority of the past year has been spent implementing this new asset allocation mix. As a result of many of the changes that were implemented, I am pleased to report that the system generated a return of 7% net of expenses for the fiscal year. This return compares quite favorably to the public pension fund universe of funds greater than $1 billion, placing MOSERS' investment returns in the top 9% of funds within this category. On an even brighter note, despite a difficult investment market over the past few years, the system has been able to ensure that your retirement system remains well funded and your promised benefits are secure.

On the legislative front, Senate Bill 248 was passed and took effect July 1, 2003. This bill established a health care retirement incentive for eligible active or retired members who were eligible on or after February 1, 2003 through January 1, 2004, and actually retired no later than September 1, 2003. Those eligible members who retired during this period may continue medical coverage for themselves and any eligible dependents at the active employee rate for five years or until becoming eligible for Medicare. The legislation was designed to reduce state payroll as a means of helping balance the state budget. While the financial impact to the retirement system has not yet been determined, the system has witnessed a significant increase in the number of members applying for retirement. Despite record numbers of retirements during this period, MOSERS' staff mobilized to meet the counseling needs of the members and processed all paperwork in a timely manner.

The board experienced significant turnover throughout the fiscal year. We bid farewell to several long time members who have contributed a great deal to the system. I would like to express the board's collective thanks to elected trustees Tom Hodges and Bryan Ornburn and appointed trustees Representative Richard Franklin and Representative Bill Skaggs for their dedication and service to the system and our members. Several new additions were made to the board throughout the year. On behalf of the board, I am pleased to welcome Wayne Bill, Marsha Buckner, and Don Martin who were all elected by the membership. In addition, we welcome two newly appointed trustees, Representative Bill Deeken and Representative Todd Smith. We look forward to working with them.

In closing, if you have any questions regarding this report, please contact us at MOSERS, PO Box 209, Jefferson City, MO 65102, or by calling 1-800-827-1063. We look forward to our continued service to you, as we strive to make "little changes today for a big difference tomorrow."

Sincerely,

Carol Gilstrap

Carol Gilstrap, Board Chair
Board of Trustees

Board of Trustees

left to right

Lori Strong-Goeke
Governor Appointed Member

Wayne Bill
Elected Active Member

State Treasurer Nancy Farmer
Ex-Officio Member

Carol Gilstrap
Board Chair
Governor Appointed Member

Senator John Russell
Member of the Senate

Representative Bill Deeken
Member of the House
of Representatives

Representative Todd Smith
Member of the House
of Representatives

Commissioner Jacquelyn White
Ex-Officio Member

Senator Ed Quick
Member of the Senate

Marsha Buckner
Active Elected Member

Don Martin
Elected Retired Member

Administrative Organization

Gary Findlay
Executive Director

Jake McMahon
Chief Counsel

Greg Beck
Internal Auditor

Judy Delaney
Executive Assistant

Karen Stohlgren
Deputy Executive Director
Chief Operations Officer

Gary Irwin
Chief Finance Officer

Scott Simon
Manager of Benefit Services

Sandra Lynn
Manager of Communications

Randy Rippee
Manager of Information Technology

JoAnn Looten
Manager of Records

Diana Mosier
Manager of Staff Services

Rick Dahl
Deputy Executive Director
Chief Investments Officer

Pat Neylon
Manager of Public Equities

Jim Mullen
Manager of Public Debt

Tricia Scrivner
Manager of Alternatives

Shannon Davidson
Manager of Invest. Operations

Meg Cline
Manager of Invest. Policy & Communications

About MOSERS

MOSERS was established September 1, 1957, and is governed by laws of the state of Missouri.

Purpose

MOSERS provides retirement, survivor, and disability benefits, and life insurance to its members.

MOSERS administers retirement benefits for most state employees, including members of the Missouri General Assembly, elected state officials, administrative law judges and legal advisors, and judges. MOSERS is responsible for administering the law in accordance with the expressed intent of the Missouri General Assembly and bears a fiduciary obligation to the state employees who are its members and beneficiaries.

MOSERS Mission

To play an integral role in the future financial security of plan participants by promptly and courteously delivering quality benefits and information which members value and trust through professional plan administration and prudent management of system assets.

Administration

State law provides that responsibility for the administration of MOSERS is vested in an eleven member board of trustees. The board is comprised of:

- Two members of the Senate appointed by the President Pro Tem of the Senate.
- Two members of the House of Representatives appointed by the Speaker of the House.
- Two members appointed by the Governor.
- The State Treasurer.
- The Commissioner of Administration.
- Three other members of the system: two active members elected by the active and terminated-vested members, and one retiree elected by the retired members.

The day-to-day management of MOSERS is delegated to the executive director who is appointed by the board and serves at its pleasure. The executive director acts as advisor to the board on all matters pertaining to the system, contracts for professional services, and employs the remaining staff needed to operate the system.

Organization

The executive director, deputy executive director - chief operations officer, and the deputy executive director - chief investment officer are responsible for planning, organizing, and administering the operations of the system under the broad policy guidance and direction of the board.

MOSERS' office is divided into eight administrative sections that perform specific functions for the system.

Executive Services

The executive services team provides administrative support by assisting the executive director and chief operations officer in the major legal, operational, and oversight functions of the retirement, benefit, and communication programs.

Accounting

This section is responsible for all financial records of the programs administered by MOSERS, including the preparation of financial and statistical reports. Accounting performs the purchasing functions for MOSERS and interfaces with the investment custodian, Office of Administration accounting, various payroll/personnel departments, life insurance companies, actuaries, banks, and the IRS.

Benefit Services

Benefit services is responsible for all contact with the membership regarding the benefit programs administered by MOSERS, which include retirement, life insurance, and long-term disability.

Communications

Communications is responsible for providing clearly written and attractively designed publications and educational seminars needed to inform all members about benefit programs administered by MOSERS. Communications and the information technology section are jointly responsible for MOSERS' web site.

Information Technology

Utilizing an IBM AS400 minicomputer and high-end work stations, information technology provides all computer and technical design support for MOSERS' data processing activities. This group is responsible for establishing and updating computer programs to implement plan changes and also maintains members' folder information on FileNet - an optical disk image system that allows information to be stored and processed using computer displayed images of original documents. Information technology is also responsible for administration of the personal computer network and the telephone system. Information technology and the communications section are jointly responsible for MOSERS' web site.

Investments

The primary functions of the investment staff are to provide internal investment management and consulting services to the board and the executive director. Other functions include a key role in hiring and terminating external investment managers, analyzing and rebalancing the overall asset allocation and portfolio, serving as a liaison to the investment community, and informing and advising the board and executive director on financial, economic, political and other developments which may affect the system. The investment staff also works with the asset consultant and the executive director in selecting and monitoring external money managers. Information regarding the investment professionals who provide services to MOSERS can be found in the investment section of this report.

Records Management

Records Management is responsible for establishing and maintaining all membership records - including maintenance of the data on the electronic imaging system, balancing payroll deductions for insurance, and entering the payroll, service, and leave data into the system's computerized database.

Staff Services

Staff services provides clerical support, mail services, and general building maintenance for MOSERS' personnel. Human resources is also represented in this section.

Outside Professional Services

Actuary
Gabriel, Roeder, Smith & Co.
Actuaries and Consultants
Norman L. Jones, Brad Armstrong
Southfield, Michigan

Auditors
KPMG LLP
Certified Public Accountants
Andrew J. Blossom, Melissa Benton
Kansas City, Missouri

Legal Counsel
Thompson Coburn
Attorneys at Law
General Counsel
Allen Allred, Tom Litz
St. Louis, Missouri

Perkins Coie
Attorneys at Law
Timberland Counsel
Jim Johnston
Seattle, Washington

Master Custodian
Mellon Financial Corp.
Primary Custodian
Irene Speridakos, Judy Hanlon
Boston, Massachusetts

Investment Management Consultants
Summit Strategies, Inc.
General Asset Consultant
Steve Holmes, Tom Pollihan
St. Louis, Missouri

TimberLink LLC
Timber Consultant
Kate Robie
Atlanta, Georgia

Risk Management Consultants
Charlesworth & Associates, LLC
Art Charlesworth, Bob Charlesworth
Overland Park, Kansas

Third-Party Administrators
The Standard Insurance Company
Tom Trussell
Overland Park, Kansas

TIAA-CREF
Robert Kissel, Lisa Dunkel
Chicago, Illinois

Securities Lending Advisors
Credit Suisse First Boston Corporation
Dwight Skerritt
New York, New York

Lehman Brothers
Johnine Kilgallon
New York, New York

Investment Advisors
AmeriCap Advisers, LLC
Michael Gayed, Nadia Albert,
Steve Shobin
New York, New York

BlackRock Financial Management
Rob Capaldi, Andy Phillips,
Dennis Schaney
New York, New York

The Blackstone Group
Blackstone Alternative Asset
Management, LP
Hal Lindquist, Tom Hill,
Rupal Doshi
New York, New York

Blackstone Real Estate Advisors, LP
Gary Sumers, Maryfrances Metrick
New York, New York

Blackstone Bridge Advisors, LP
Steve Saslow, Stephen Morton
New York, New York

Capital Guardian Trust Company
Andy Barth, Mike Nyeholt
Los Angeles, California

CFSC Wayland Advisers, Inc.
Steve Adams, Patrick Halloran
Minnetonka, Minnesota

DDJ Capital Management, LLC
Mike Forrester, David Breazzano,
Judy Mencher
Wellesley, Massachusetts

Dimensional Fund Advisors, Inc.
Rex Sinquefield, Carol Wardlaw
Santa Monica, California

Hoisington Investment Management Co.
Van Hoisington, Lacy Hunt
Austin, Texas

Legg Mason Capital Management, Inc.
Chuck Knudsen, Kyle Prechtl Legg
Baltimore, Maryland

Mastholm Asset Management, LLC
Thomas Garr, Theodore Tyson
Bellevue, Washington

Merrill Lynch Asset Management Group
Rick Vella, Lisa Torrington
New York, New York

MHR Fund Management, LLC
Hal Goldstein, Mark Rachesky
New York, New York

NISA Investment Advisors, LLC
Robert Krebs, Bill Marshall
St. Louis, Missouri

Oak Associates, Ltd.
Sandra Noll, Jim Oelschlager
Akron, Ohio

OakBrook Investments
Michael Lorenzen
Janna Sampson
Lisle, Illinois

Oaktree Capital Management, LLC
Howard Marks, Russell Bernard,
John Moon, Tim Jensen,
Greg Brandner
Los Angeles, California
New York, New York

Silchester International Investors
Christopher Cowie, Stephen Butt
London, England

The Lincoln Penny was the first U.S. coin to feature a historic figure. The original Lincoln Head Penny was designed in 1909 to celebrate the 100th anniversary of his birth. The Lincoln Memorial was added to the back of the one-cent coin by Mint engraver Frank Gasparro in 1959 to mark Lincoln's 150th birthday, making it the first and only coin to have the same person engraved on both sides.


Every penny counts

Management's Responsibility for Financial Reporting

MOSERS

October 1, 2003

Management has prepared the basic financial statements of the Missouri State Employees' Retirement System (MOSERS), and is responsible for the integrity and fairness of the information presented. Some amounts included in the financial statements may be based on estimates and judgments. These estimates and judgments were made utilizing the best business practices available. The accounting policies followed in the preparation of these basic financial statements conform with generally accepted accounting principles. Financial information presented throughout the annual report is consistent with the basic financial statements.

Ultimate responsibility for the basic financial statements and annual report rests with the board of trustees. The executive director and the rest of MOSERS staff assist the board in its responsibilities. Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets are safeguarded, and proper records are maintained. These controls include standards in hiring and training of employees, the establishment of an organizational structure, and the communication of policies and guidelines throughout the organization. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the board of trustees.

The system's external auditors, KPMG LLP, have conducted an independent audit of the basic financial statements in accordance with generally accepted auditing standards. This audit is described in their Independent Audit Report on page 18. Management has provided the external auditors with full and unrestricted access to MOSERS' staff to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal controls for the preparation of financial statements.

Gary Findlay
Executive Director

Gary Irwin
Chief Finance Officer

Independent Auditors' Report

1000 Walnut, Suite 1600
PO Box 13127
Kansas City, MO 64199

August 22, 2003

The Board of Trustees
Missouri State Employees' Retirement System

We have audited the accompanying basic financial statements of the Missouri State Employees' Retirement System, a component unit of the state of Missouri, as of and for the year ended June 30, 2003, as listed in the accompanying table of contents. These financial statements are the responsibility of the retirement system's management. Our responsibility is to express opinions on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe our audit provides a reasonable basis for our opinions.

In our opinion, the financial statements of the Missouri State Employees' Retirement System present fairly, in all material respects, the plan net assets as of June 30, 2003, and the related changes in plan net assets for the year then ended in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the financial statements of the Missouri State Employees' Retirement System's Internal Service Fund present fairly, in all material respects, its financial position as of June 30, 2003, and the changes in its financial position and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary management discussion and analysis on pages 19-23 and the supplementary schedules of funding progress and employer contributions on pages 37-40 are not a required part of the basic financial statements of the Missouri State Employees' Retirement System, but are supplementary information required by accounting principles generally accepted in the United States of America. The supplementary information included on pages 41-47 is presented for purposes of additional analysis and is not a required part of the basic financial statements of the Missouri State Employees' Retirement System. Such information, included on pages 19-23 and 37-47, has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

KPMG LLP

Required Supplementary Information

Management Discussion and Analysis

The basic financial statements contained in this section of the Comprehensive Annual Financial Report consist of:

The ***Statements of Plan Net Assets***, which reports the pension trust funds assets, liabilities, and resultant net assets where Assets – Liabilities = Net Assets available at the end of the fiscal year. It can be thought of as a snapshot of the financial position of the pension trust funds of MOSERS at that specific point in time.

The ***Statements of Changes in Plan Net Assets***, which reports the pension fund transactions that occurred during the fiscal year where Additions – Deductions = Net Change in Net Assets. It can be thought of as a movie that has recorded the action that occurred over the specified time period of a fiscal year, and supports the change that has occurred to the prior year's net asset value on the *Statements of Plan Net Assets*.

The ***Balance Sheet*** of the Internal Service Fund is similar to the *Statement of Net Assets* in that it also is a snapshot of the financial position of the Internal Service Fund where Assets = Liabilities + Net Assets.

The ***Statement of Revenues, Expenses, and Changes in Net Assets*** of the Internal Service Fund is similar to the *Statements of Changes in Plan Net Assets* in that it also reports the activity that occurred over the period of the fiscal year where Revenues – Expenses = Net Revenues over Expenses and supports the change to the prior year's net assets.

The ***Statement of Cash Flows*** of the Internal Service Fund reports the transactions for the fiscal year of the Internal Service Fund on a cash basis. It is similar to the *Statement of Revenues, Expenses, and Changes in Net Assets*; however, the focus of this statement is on the change to cash balances with noncash items such as depreciation, accrued income and accrued expense items eliminated.

The ***Notes to the Financial Statements*** are an integral part of the above financial statements and include additional information not readily evident in the statements themselves.

This *Required Supplementary Information and the required Supplementary Information and Schedules* following the *Notes to the Financial Statements*, provide added historical and detailed information considered useful in evaluating the condition of the plans administered by MOSERS.

Pages 20-23 contain summary comparative statements of MOSERS' pension trust funds and Internal Service Fund and provide additional analysis of the changes noted on those schedules.

Pension Trust Funds

Summary Comparative Statements of Plan Net Assets

	As of June 30, 2003	As of June 30, 2002	Amount of Change	Percentage Change
Cash and short-term investments	$ 305,694,180	$ 378,842,984	$ (73,148,804)	(19.31)%
Receivables	180,555,167	103,682,194	76,872,973	74.14
Investments	4,995,925,367	4,881,498,067	114,427,300	2.34
Invested securities lending collateral	1,257,555,834	1,008,874,150	248,681,684	24.65
Capital assets	3,611,242	3,901,893	(290,651)	(7.45)
Other assets	47,143	58,594	(11,451)	(19.54)
Total assets	6,743,388,933	6,376,857,882	366,531,051	5.75
Administrative expense payables	2,128,236	3,065,142	(936,906)	(30.57)
Investment purchase payables	248,794,828	301,053,151	(52,258,323)	(17.36)
Securities lending collateral	1,257,336,137	1,010,179,520	247,156,617	24.47
Other liabilities	283,605	277,423	6,182	2.23
Total liabilities	1,508,542,806	1,314,575,236	193,967,570	14.76
Net assets	$ 5,234,846,127	$ 5,062,282,646	$ 172,563,481	3.41

Summary Comparative Statements of Plan Net Assets Analysis

- The decrease in cash balances is primarily attributable to the build up of cash in fiscal year 2002 to fund the new allocation model, which MOSERS began implementing at the end of fiscal year 2002. As the implementation of the new allocation model continued into fiscal year 2003, the cash and short-term investments month-end balances ranged from a low of $165 million in July to a high of $400 million in October with an average month-end balance of $287 million.

- The increase in receivable balances is primarily attributable to the receivables from investment sales at the end of each fiscal year. At June 30, 2003 the receivable from investment sales was $140 million whereas at June 30, 2002 it was $65 million. During the fiscal year ended June 30, 2003, the month-end receivable balances from investment sales ranged from a low of $36 million in November to a high of $181 million in May with an average month-end balance of $98 million.

- The increase in the invested securities lending collateral reflects the general increase in lending activity that occurred during the second half of the fiscal year. The month-end balance of the invested collateral ranged from a low of $892 million in September to a high of $1.3 billion in May with an average month-end balance of $1 billion. The liability for the securities lending collateral likewise increased over the prior year; however, the liability is less than the invested collateral due to a portion of the invested collateral in corporate bonds which fair value fluctuates with market conditions.

- The decrease in administrative expense payables is primarily due to a reduction in the investment manager fees remaining unpaid at the end of fiscal year 2003 over those that remained unpaid at the end of fiscal year 2002.

- Although the amount payable for investment purchases at the end of June 2003 was lower than the amount at the end of June 2002, investment activity picked up during the second half of the fiscal year as the economy showed signs of improvement. Month-end payables for security purchases ranged from a low of $57 million in January to a high of $248 million in June with an average month-end balance of $111 million during the year.

Summary Comparative Statements of Changes in Plan Net Assets

	Year Ended June 30, 2003	Year Ended June 30, 2002	Amount of Change	Percentage Change
Contributions	$ 182,073,252	$ 236,638,339	$ (54,565,087)	(23.06)%
Investment income (loss) - investing activities	331,739,686	(351,502,117)	683,241,803	194.38
Investment income - securities lending activities	3,956,537	841,245	3,115,292	370.32
Miscellaneous income	441,249	450,746	(9,497)	(2.11)
Total additions	518,210,724	(113,571,787)	631,782,511	556.28
Benefits	337,451,395	285,261,239	52,190,156	18.30
Service transfers and refunds	2,191,487	27,970	2,163,517	7735.13
Administrative expenses	6,004,361	5,796,040	208,321	3.59
Total deductions	345,647,243	291,085,249	54,561,994	18.74
Net increase (decrease)	172,563,481	(404,657,036)	577,220,517	142.64
Net assets beginning of year	5,062,282,646	5,466,939,682	(404,657,036)	(7.40)
Net assets end of year	$ 5,234,846,127	$ 5,062,282,646	$ 172,563,481	3.41

Summary Comparative Statements of Changes in Plan Net Assets Analysis

- The decrease in contributions in fiscal year 2003 as compared to those of fiscal year 2002 is primarily attributed to a 27% reduction in the actuarially required retirement contribution rate of the MSEP plan from 11.59% to 8.51% of covered payroll.

- The increase in the investment income over the amount reported last year is primarily attributed to the favorable market conditions experienced during the second half of the fiscal year as the economy began showing signs of improvement.

- As noted in last year's report, an error was discovered in the amount recorded as securities lending rebates for the fiscal year ended June 30, 2001, which caused the amount recorded as rebates to be understated in fiscal year 2001 and overstated in fiscal year 2002 by $4,068,350. Although this error was not deemed to be material to the financial statements as a whole, when comparing the total net income from securities lending activities for fiscal years 2002 and 2003, the amounts would have been $4,909,595 and $3,956,537, respectively, resulting in a 19% decrease.

- The increase in benefit payments over last fiscal year is primarily attributable to the Deferred Retirement Option Provision (BackDROP) and changes in the monthly benefit rolls for the year. The BackDROP became available to general state employees on January 1, 2002 and payments under this benefit provision increased by $21 million in fiscal year 2003 primarily as a result of this being the first full year of availability to the members. The remainder of the increase, $31 million, can be attributed to the change in the monthly benefit rolls for the year. Detailed schedules of the changes in the monthly benefit rolls can be found on pages 110-117 of the Actuarial section of this report.

- The increase in service transfer payments is primarily attributable to a $2,050,813 transfer in pension liabilities from MOSERS to the Highway Transportation Employees' and Highway Patrol Retirement System in December 2002 for 40 employees electing to transfer to the Missouri Department of Transportation under the provisions of Senate Bill 1202 enacted in fiscal year 2002.

Internal Service Fund

Summary Comparative Balance Sheets

	As of June 30, 2003	As of June 30, 2002	Amount of Change	Percentage Change
Premiums receivable	$ 1,031,950	$ 1,187,571	$ (155,621)	(13.10)%
Investments	1,749,617	1,606,156	143,461	8.93
Total assets	2,781,567	2,793,727	(12,160)	(0.44)
Premiums payable	2,338,210	2,343,733	(5,523)	(0.24)
Other liabilities	112,798	165,601	(52,803)	(1.89)
Total liabilities	2,451,008	2,509,334	(58,326)	(2.32)
Net assets	330,559	284,393	46,166	16.23
Total liabilities and net assets	$ 2,781,567	$ 2,793,727	$ (12,160)	(0.44)

Summary Comparative Balance Sheets Analysis

- The decrease in receivable balances at the end of fiscal year 2003 over those at the end of fiscal year 2002 was primarily attributable to normal fluctuations in the receipt of premiums. Likewise, the amount of funds invested was higher at the end of fiscal year 2003 than was the amount invested at the end of fiscal year 2002.

- The decrease in other payables was primarily attributable to the timing of the reimbursement to the pension plans for those administration expenses charged to the operation of the internal service fund.

Summary Comparative Statements of Revenues, Expenses, and Changes in Net Assets

	Year Ended June 30, 2003	Year Ended June 30, 2002	Amount of Change	Percentage Change
Premium receipts	$ 25,223,043	$ 24,753,708	$ 469,335	1.90%
Miscellaneous income	436,494	436,489	5	0.00
Total operating revenue	25,659,537	25,190,197	469,340	1.86
Premium disbursements	25,169,883	24,675,520	494,363	2.00
Premium refunds	53,160	78,188	(25,028)	(32.01)
Administrative expenses	421,507	439,232	(17,725)	(4.04)
Total operating expenses	25,644,550	25,192,940	451,610	1.79
Net operating income (loss)	14,987	(2,743)	17,730	(646.37)
Investment income	31,179	47,767	(16,588)	(34.73)
Net revenues over expenses	46,166	45,024	1,142	2.54
Net assets beginning of year	284,393	239,369	45,024	18.81
Net assets end of year	$ 330,559	$ 284,393	$ 46,166	16.23

Summary Comparative Statements of Revenues, Expenses and Changes in Net Assets Analysis

- The increase in premium receipts and disbursements reflected a general change in the amount of premiums collected and remitted to the insurance company retained to provide the life and long-term disability coverage to eligible employees of the state. There were no changes in the premium rates during the fiscal year.

- The decrease in premium refunds is primarily attributable to the continued improvement in the processing of employee deductions by the various payroll clerks throughout the state of Missouri following the implementation of the state's new payroll/accounting system in fiscal year 2001.

- The decrease in administrative expenses is attributable to normal fluctuations in the amounts charged to the internal service fund to cover costs associated with the collection and remittance of the life and long-term disability premiums.

- The decrease in the investment income is primarily attributed to the general decline in the 90-day T-Bill rates during the period.

Summary Comparative Statements of Cash Flows

	Year Ended June 30, 2003	Year Ended June 30, 2002	Amount of Change	Percentage Change
Cash flows from operating activities	$ 114,783	$ 840,291	$ (725,508)	(86.34)%
Cash flows from noncapital financing activities	(2,500)	(4,602)	2,102	(45.68)
Cash flows from investing activities	(112,283)	(835,689)	723,406	(86.56)
Net change in cash	0	0	0	0.0
Cash balances beginning of year	0	0	0	0.0
Cash balances end of year	$ 0	$ 0	$ 0	0.0

Summary Comparative Statements of Cash Flows Analysis

- The decrease in cash flows from operating activities and increase in cash flows from investing activities is primarily attributable to the net change in cash flows from premium receipts versus premium disbursements during the period.

Statements of Plan Net Assets

Pension Trust Funds - As of June 30, 2003

	MSEP	ALJLAP	Judicial Plan	Total
Assets				
Cash and short-term investments	$ 303,148,797	$ 785,308	$ 1,760,075	$ 305,694,180
Receivables				
State contributions	7,594,853	39,215	870,828	8,504,896
Investment income	31,140,713	80,670	180,802	31,402,185
Investment sales	139,368,062	361,033	809,168	140,538,263
Other	108,909	282	632	109,823
Total receivables	178,212,537	481,200	1,861,430	180,555,167
Investments at fair value				
U.S. Treasury securities	1,023,746,156	2,652,018	5,943,848	1,032,342,022
Corporate bonds	293,075,743	759,214	1,701,591	295,536,548
Convertible bonds	1,363,601	3,532	7,917	1,375,050
Government bonds & gov't mortgage-backed securities	139,917,189	362,456	812,356	141,092,001
Real estate equity	6,339,550	16,423	36,807	6,392,780
Common stock	1,255,179,671	3,251,547	7,287,546	1,265,718,764
International EAFE index fund	196,473,382	508,965	1,140,720	198,123,067
Preferred stock	15,767,270	40,845	91,544	15,899,659
Limited partnerships	983,747,166	2,548,401	5,711,615	992,007,182
Real estate investment trust	155,318,528	402,353	901,776	156,622,657
Collateralized mortgage obligation	47,377,244	122,731	275,071	47,775,046
Foreign currency	30,685,797	79,492	178,161	30,943,450
International equities	780,973,713	2,023,115	4,534,317	787,531,145
U.S. dollar-denominated international corporate bonds	24,361,446	63,108	141,442	24,565,996
Total investments	4,954,326,456	12,834,200	28,764,711	4,995,925,367
Securities lending collateral	1,247,084,710	3,230,577	7,240,547	1,257,555,834
Capital assets				
Land	265,060	687	1,539	267,286
Building and building improvements	3,304,855	8,561	19,188	3,332,604
Furniture, fixtures, and equipment	1,898,662	4,918	11,024	1,914,604
	5,468,577	14,166	31,751	5,514,494
Accumulated depreciation	(1,887,405)	(4,889)	(10,958)	(1,903,252)
Total capital assets	3,581,172	9,277	20,793	3,611,242
Prepaid expenses and other	46,751	121	271	47,143
Total assets	6,686,400,423	17,340,683	39,647,827	6,743,388,933
Liabilities				
Administrative expense payables	2,110,515	5,467	12,254	2,128,236
Investment purchases	246,723,221	639,137	1,432,470	248,794,828
Securities lending collateral	1,246,866,842	3,230,013	7,239,282	1,257,336,137
Real estate security deposits	30,988	80	180	31,248
Employee vacation and overtime liability	250,256	648	1,453	252,357
Total liabilities	1,495,981,822	3,875,345	8,685,639	1,508,542,806
Net assets held in trust for pension benefits	$ 5,190,418,601	$ 13,465,338	$ 30,962,188	$ 5,234,846,127

(A schedule of funding progress for each plan is presented on page 37.)
See accompanying *Notes to the Financial Statements.*

Statements of Changes in Plan Net Assets
Pension Trust Funds - Year Ended June 30, 2003

	MSEP	ALJLAP	Judicial Plan	Total
Additions				
Contributions				
State contributions	$ 156,576,150	$ 951,023	$ 20,802,140	$ 178,329,313
Member purchases of service credit	3,690,820	0	0	3,690,820
Service transfer contributions	53,119	0	0	53,119
Total contributions	160,320,089	951,023	20,802,140	182,073,252
Investment income				
From investing activities				
Net appreciation in fair value of investments	193,731,688	501,863	1,124,802	195,358,353
Interest	109,235,454	282,975	634,218	110,152,647
Dividends	35,940,974	93,105	208,673	36,242,752
Other	8,367,641	21,676	48,582	8,437,899
Total investing activity income	347,275,757	899,619	2,016,275	350,191,651
Investing activity expenses:				
Management fees	(15,369,616)	(39,815)	(89,236)	(15,498,667)
Custody fees	(915,391)	(2,371)	(5,315)	(923,077)
Consultant fees	(383,176)	(993)	(2,225)	(386,394)
Performance measurement fees	(247,538)	(641)	(1,437)	(249,616)
Portfolio transition/rebalancing cost	(161,013)	(417)	(935)	(162,365)
Internal investment activity expenses	(1,221,588)	(3,165)	(7,093)	(1,231,846)
Total investing activity expenses	(18,298,322)	(47,402)	(106,241)	(18,451,965)
Net income from investing activities	328,977,435	852,217	1,910,034	331,739,686
From securities lending activities:				
Securities lending income	18,884,058	48,919	109,641	19,042,618
Securities lending expenses:				
Borrower rebates	(14,112,689)	(36,559)	(81,938)	(14,231,186)
Management fees	(847,777)	(2,196)	(4,922)	(854,895)
Total securities lending activities expenses	(14,960,466)	(38,755)	(86,860)	(15,086,081)
Net income from securities lending activities	3,923,592	10,164	22,781	3,956,537
Total net investment income	332,901,027	862,381	1,932,815	335,696,223
Miscellaneous income	437,574	1,134	2,541	441,249
Total additions	493,658,690	1,814,538	22,737,496	518,210,724
Deductions				
Benefits	279,075,848	969,918	16,870,011	296,915,777
Benefit adjustments	40,535,618	0	0	40,535,618
Service transfer payments	2,191,487	0	0	2,191,487
Administrative expenses	5,954,365	15,425	34,571	6,004,361
Total deductions	327,757,318	985,343	16,904,582	345,647,243
Net increase	165,901,372	829,195	5,832,914	172,563,481
Net assets held in trust for pension benefits:				
Beginning of year	5,024,517,229	12,636,143	25,129,274	5,062,282,646
End of year	$ 5,190,418,601	$ 13,465,338	$ 30,962,188	$ 5,234,846,127

See accompanying *Notes to the Financial Statements*.

Balance Sheet
Internal Service Fund - As of June 30, 2003

Assets	
Premiums receivable	$ 1,031,950
Investments at fair value	1,749,617
Total assets	$ 2,781,567
Liabilities and net assets	
Liabilities	
Premiums payable	$ 2,338,210
Checks outstanding net of deposits	3,020
Other	109,778
Total liabilities	2,451,008
Net assets-unrestricted	330,559
Total liabilities and net assets	$ 2,781,567

See accompanying *Notes to the Financial Statements*.

Statement of Revenues, Expenses, and Changes in Net Assets
Internal Service Fund - Year Ended June 30, 2003

Operating revenues	
Premium receipts	$ 25,223,043
Miscellaneous income	436,494
Total operating revenues	25,659,537
Operating expenses	
Premium disbursements	25,169,883
Premium refunds	53,160
Administrative expenses	421,507
Total operating expenses	25,644,550
Operating revenues over operating expenses	14,987
Nonoperating revenues	
Investment income	31,179
Net revenues over expenses	46,166
Net assets June 30, 2002	284,393
Net assets June 30, 2003	$ 330,559

See accompanying *Notes to the Financial Statements*.

Statement of Cash Flows

Internal Service Fund - Year Ended June 30, 2003

Cash flows from operating activities	
Cash received from employer and members	$ 25,815,891
Premium payments to outside carriers	(25,175,131)
Refunds of premiums to members	(53,160)
Cash payments to employees for services	(264,578)
Cash payments to other suppliers of goods and services	(208,233)
Miscellaneous income	(6)
Net cash provided by operating activities	114,783
Cash flows from noncapital financing activities	
Implicit funding of checks outstanding net of deposits	3,020
Implicit repayment of prior years checks outstanding net of deposits	(5,520)
Net cash used in noncapital financing activities	(2,500)
Cash flows from investing activities	
Purchase of investment securities	(494,936,907)
Proceeds from sale and maturities of investment securities	494,793,445
Cash received from investment income	31,179
Net cash used by investing activities	(112,283)
Net increase in cash	0
Cash balances June 30, 2002	0
Cash balances June 30, 2003	$ 0
Reconciliation of operating revenues over operating expenses to net cash provided by operating activities	
Operating revenues over operating expenses	$ 14,987
Adjustments to reconcile operating revenues over operating expenses to net cash provided by operating activities	
Change in assets and liabilities:	
Decrease in operational accounts receivable	155,622
Decrease in operational accounts payable	(55,826)
Total adjustments	99,796
Net cash provided by operating activities	$ 114,783

See accompanying *Notes to the Financial Statements*.

Notes to the Financial Statements

June 30, 2003

(1) Plan Descriptions

Missouri State Employees' Plan (MSEP)

The MSEP is a single-employer, public employee retirement plan with two benefit structures known as the MSEP (closed plan) and MSEP 2000 (new plan) which are administered by the Missouri State Employees' Retirement System (MOSERS) in accordance with Sections 104.010 and 104.312 to 104.1215 of the Revised Statutes of Missouri (RSMo). As established under Section 104.320, RSMo, MOSERS is a body corporate and an instrumentality of the state. In the system are vested the powers and duties specified in sections 104.010 and 104.312 to 104.1215, RSMo, and such other powers as may be necessary or proper to enable it, its officers, employees, and agents to carry out fully and effectively all the purposes of sections 104.010 and 104.312 to 104.1215, RSMo.

Responsibility for the operation and administration of the system is vested in the MOSERS Board of Trustees. Due to the nature of MOSERS' reliance on funding from the state of Missouri and the overall control of the plan document by the legislative and executive branches of state government, the MSEP is considered a component unit of the state of Missouri financial reporting entity and is included in the state's financial reports as a pension trust fund.

Generally, all full-time state employees hired before July 1, 2000 who were not covered under another state-sponsored retirement plan are eligible for membership in the MSEP (closed plan). All full-time state employees hired on or after July 1, 2000 are eligible for membership in the MSEP 2000 (new plan).

As of June 30, 2003, membership in the MSEP consisted of the following:

Retirees and beneficiaries currently receiving benefits		22,872
Terminated employees entitled to, but not yet receiving benefits		12,974
Active:		
Vested	35,588	
Nonvested	21,970	57,558
Total membership		93,404

The MSEP provides retirement, survivor, and disability benefits.

MSEP (closed plan)

General state employees are fully vested for benefits upon receiving five years of credited service. Under the MSEP (closed plan), general employees may retire with full benefits upon the earliest of attaining:

- Age 65 and active with 4 years of service;
- Age 65 with 5 years of service;
- Age 60 with 15 years of service; or
- Age 50 with age and service equaling 80 or more (Rule of 80).

General employees may retire early at age 55 with at least 10 years of service with reduced benefits.

The base benefit in the general employee plan is equal to 1.6% multiplied by the final average pay multiplied by years of credited service.

For members hired prior to August 28, 1997, cost-of-living adjustments (COLAs) are provided annually based on 80% of the change in the consumer price index (CPI) with a minimum rate of 4%, and maximum rate of 5%, until the cumulative amount of COLAs equals 65% of the original benefit. Thereafter, the 4% minimum rate is eliminated. For members hired on or after August 28, 1997, COLAs are provided annually based on 80% of the change in the CPI up to a maximum rate of 5%.

Qualified, terminated-vested members may make a one-time election to receive the present value of their benefit in a lump sum payment. To qualify, a member must have terminated with at least 5, but less than 10 years of service, be less than age 60, and have a benefit present value of less than $10,000.

MSEP 2000 (new plan)

General state employees are fully vested for benefits upon receiving five years of credited service. Under the MSEP 2000 (new plan), general employees may retire with full benefits upon the earliest of attaining:

- Age 62 with 5 years of service; or
- Age 50 with age and service equaling 80 or more (Rule of 80).

General employees may retire early at age 57 with at least 5 years of service with reduced benefits.

The base benefit in the general employee plan is equal to 1.7% multiplied by final average pay multiplied by years of credited service. For those retiring under Rule of 80, an additional temporary benefit equivalent to 0.8% multiplied by final average pay multiplied by years of credited service is payable until age 62.

COLAs are provided annually based on 80% of the change in the CPI up to a maximum rate of 5%.

For a more detailed summary of benefits for general employees and a description of benefits available to legislators and elected officials under the MSEP (closed plan) and the MSEP 2000 (new plan), refer to the Summary of Plan Provisions contained in the Actuarial Section of this report.

The state of Missouri is required to make all contributions to the MSEP. Prior to September 1, 1972, contributions by members were required. Accumulated employee contributions made prior to that time, plus interest through August 28, 1997 (for refunds pending), are refundable to the member or designated beneficiaries.

Administrative Law Judges and Legal Advisors' Plan (ALJLAP)

The ALJLAP is a single-employer, public employee retirement plan administered in accordance with Sections 287.812 to 287.856, RSMo. Responsibility for the operation and administration of the system is vested in the MOSERS Board of Trustees. Due to the nature of MOSERS' reliance on funding from the state of Missouri and the overall control of the plan document by the legislative and executive branches of state government, the ALJLAP is considered a component unit of the state of Missouri financial reporting entity and is included in the state's financial reports as a pension trust fund.

Individuals appointed or employed as administrative law judges or legal advisors in the Division of Workers' Compensation, members of the Labor and Industrial Relations Commission and their attorneys, the chairperson of the State Board of Mediation, and administrative hearing commissioners are eligible for membership in the ALJLAP.

On June 30, 2003, membership in the ALJLAP consisted of the following:

Retirees and beneficiaries currently receiving benefits		27
Terminated employees entitled to, but not yet receiving benefits		25
Active:		
Vested	57	
Nonvested	0	57
Total membership		109

The ALJLAP provides retirement, death, and disability benefits. Members are immediately vested.

Under the ALJLAP, members may retire with full benefits upon the earliest of attaining:

- Age 62 with 12 years of service;
- Age 60 with 15 years of service; or
- Age 55 with 20 years of service.

Employees may retire early at age 65 with less than 12 years of service with a reduced benefit that is based upon years of service relative to 12 years.

In the ALJLAP, the base benefit for members with 12 or more years of service is equivalent to 50% of the average highest 12 consecutive months of salary.

For members hired prior to August 28, 1997, COLAs are provided annually based on 80% of the change in the CPI with a minimum rate of 4%, and maximum rate of 5%, until the cumulative amount of COLAs equals 65% of the original benefit. Thereafter, the 4% minimum rate is eliminated. For members hired on or after August 28, 1997, COLAs are provided annually based on 80% of the change in the CPI up to a maximum rate of 5%.

Qualified, terminated-vested members may make a one-time election to receive the present value of their benefit in a lump sum payment. To qualify, a member must have terminated with at least 5, but less than 10 years of service, be less than age 60, and have a benefit present value of less than $10,000.

For a more detailed summary of benefits for members of the ALJLAP, refer to the Summary of Plan Provisions contained in the Actuarial Section of this report.

The state of Missouri is required to make all contributions to the ALJLAP.

Judicial Plan

The Judicial Plan is a single-employer, public employee retirement plan administered in accordance with Sections 476.445 to 476.690, RSMo. Responsibility for the operation and administration of the Judicial Plan is vested in the MOSERS Board of Trustees. Due to the nature of MOSERS' reliance on funding from the state of Missouri and the overall control of the plan document by the legislative and executive branches of state government, the Judicial Plan is considered a component unit of the state of Missouri financial reporting entity and is included in the state's financial reports as a pension trust fund.

Judges and commissioners of the supreme court or the court of appeals, judges of the circuit court, probate court, magistrate court, court of common pleas, court of criminal corrections, or a justice of the peace, or a commissioner or deputy commissioner of the circuit court appointed after February 29, 1972 are eligible for membership in the Judicial Plan.

On June 30, 2003, membership in the Judicial Plan consisted of the following:

Retirees and beneficiaries currently receiving benefits		393
Terminated employees entitled to, but not yet receiving benefits		74
Active:		
Vested	392	
Nonvested	0	392
Total membership		859

The Judicial Plan provides retirement, death, and disability benefits. Members are immediately eligible for benefits.

Under the Judicial Plan, members may retire with full benefits upon the earliest of attaining:

- Age 62 with 12 years of service;
- Age 60 with 15 years of service; or
- Age 55 with 20 years of service.

Employees may retire early at age 62 with less than 12 years of service or age 60 with less than 15 years of service with a reduced benefit that is based upon years of service relative to 12 or 15 years.

In the Judicial Plan, the base benefit for members with 12 or more years of service is equivalent to 50% of the highest annual salary earned while active.

For members hired prior to August 28, 1997, COLAs are provided annually based on 80% of the change in the CPI with a minimum rate of 4%, and maximum rate of 5%, until the cumulative amount of COLAs equals 65% of the original benefit. Thereafter, the 4% minimum rate is eliminated. For members hired on or after August 28, 1997, COLAs are provided annually based on 80% of the change in the CPI up to a maximum rate of 5%.

Qualified, terminated-vested members may make a one-time election to receive the present value of their benefit in a lump sum payment. To qualify, a member must have terminated with at least 5, but less than 10 years of service, be less than age 60, and have a benefit present value of less than $10,000.

For a more detailed summary of benefits for members of the Judicial Plan, refer to the Summary of Plan Provisions contained in the Actuarial Section of this report.

Funding of the Judicial Plan on an actuarial basis began on July 1, 1998. The state of Missouri is required to make all contributions to the Judicial Plan.

Missouri State Insurance Plan

The Missouri State Insurance Plan is accounted for as an internal service fund of the state of Missouri and is administered by MOSERS. It provides basic life insurance in an amount equal to one-times annual salary while actively employed (with a $15,000 minimum) to:

- Eligible active members of the MSEP and MSEP 2000 (except employees of the Missouri Department of Conservation, and the state colleges and universities);
- Active members of the ALJLAP;
- Active members of the Judicial Plan; and
- Certain active members of the Public School Retirement System

The plan also provides duty-related death benefits, optional life insurance for active employees and retirees who are eligible for basic coverage, and a long-term disability plan for certain eligible members. For a more detailed description of insurance benefits, refer to Life Insurance Plans contained in the Summary Plan Provisions on page 128 of this report.

Due to the nature of MOSERS' reliance on funding from the state of Missouri and the overall control of the plan document by the legislative and executive branches of state government, the Missouri State Insurance Plan is included in the state's financial reports as an internal service fund.

(2) Summary of Significant Accounting Policies and Plan Asset Matters

Basis of Accounting

The financial statements of the MSEP, the ALJLAP, the Judicial Plan, and the Missouri State Insurance Plan were prepared using the accrual basis of accounting. Contributions are recognized as revenues in the period in which employee services are performed, and expenses are recorded when the corresponding liabilities are incurred, regardless of when contributions are received or payment is made. The direct method of reporting cash flows is used.

Cash

Cash balances represent both operating cash accounts held by the banks and investment cash on deposit with the investment custodian. To maximize investment income, the float caused by outstanding checks is invested, thus causing a possible negative book balance. Negative book balances are reflected in the liabilities section of the balance sheet of the internal service fund and included in the cash and short-term investments on the statements of plan net assets of the pension trust funds. The following is a schedule of the aggregate book and bank balances of all cash accounts. All deposits are fully insured by the Federal Deposit Insurance Corporation (FDIC). In addition to the FDIC insurance coverage on the accounts of MOSERS, the Central Trust Bank pledged the following securities to MOSERS on June 30, 2003, as collateral for overnight repurchase agreements:

- $719,207 Small Business Association Pool # 504555 *Maturity Date 11/25/2011*
- $1,112,490 Small Business Association Pool # 506161 *Maturity Date 12/25/2014*
- $912,553 Small Business Association Pool # 504234 *Maturity Date 04/25/2012*
- $535,500 Small Business Association Pool # 505227 *Maturity Date 06/25/2012*
- $687,643 Small Business Association Pool # 505430 *Maturity Date 08/25/2019*

	Cash Balances	
	Book	Banks and Investment Custodian
Pension Trust Funds	$52,722,490	$61,023,788
Internal Service Fund	(3,020)	298

Method Used to Value Investments

Investments of the pension trust funds and the internal service fund are reported at fair value.

The schedule on page 33 provides a summary of the fair values of the investments as reported on the statements of plan net assets of the pension trust funds and balance sheet of the internal service fund. Fair values for the equity real estate investments are based on appraisals. Fair values of the limited partnership investments are based on valuations of the underlying companies of the limited partnerships as reported by the general partner. Fair value of the EAFE index fund is determined based on the underlying assets in the fund. The remaining assets are primarily valued by the investment custodian using the last trade price information supplied by various pricing data vendors. On June 30, 2003, the system did not have investments in any one organization, other than those issued by the U.S. government, which represented greater than 5% of plan net assets.

Categories of Asset Risks

All investments are governed primarily by an investment doctrine known as the prudent person rule. The prudent person rule, as set forth by state statute, establishes a standard for all fiduciaries, which includes anyone who has authority with respect to the funds. The Governmental Accounting Standards Board Statement Number 3 requires disclosure of investment securities within the following three categories of custodial credit risk. Category 1 includes investments that are insured or registered or which are held by the system or its agent in the system's name. Category 2 includes uninsured and unregistered investments, which are held by the counterparty's trust departments or agent in the system's name. Category 3 includes uninsured and unregistered investments, which are held by the counterparty, its trust department, or agent but not in the system's name.

A security, for purposes of classification in the above categories, is a transferable financial instrument that evidences ownership or creditorship. Securities do not include investments made with another party, real estate, or direct investments in mortgages and other loans. Investments in open-end mutual funds, annuity contracts, and guaranteed investment contracts are also not considered securities for purposes of custodial credit risk classification. Such investments are shown as not subject to classification.

Investments - As of June 30, 2003

Type of Investment	Pension Trust Funds Investments at Cost Value	Pension Trust Funds Investments at Fair Value	Internal Service Fund Investments at Cost Value	Internal Service Fund Investments at Fair Value
Category 1 Classification				
Common stocks not on securities loan	$1,137,879,138	$1,079,229,990		
International equities not on securities loan	675,714,166	757,242,860		
International corporate bonds	23,483,396	24,565,996		
Preferred stocks not on securities loan	12,287,978	14,597,381		
Treasury bonds, notes and bills not on securities loan	53,354,536	54,960,913		
Government bonds and government mortgage backed securities	135,794,273	141,092,001		
Corporate bonds not on securities loan	886,131,022	897,879,114		
Convertible bonds	1,289,398	1,375,050		
Subtotal	2,925,933,907	2,970,943,305		
Category 2 Classification				
Repurchase agreements	415,676	415,676	$1,749,617	$1,749,617
Subtotal	415,676	415,676	1,749,617	1,749,617
Not Subject to Classification				
Investments held by broker-dealers under securities loans for cash collateral				
Common stocks	221,358,210	186,488,775		
International equities	24,783,569	30,288,285		
Preferred stocks	1,541,199	1,302,278		
Treasury bonds, notes and bills	876,510,103	977,381,109		
Corporate bonds	24,353,780	24,529,110		
Short-term investment funds	883,240,171	883,240,171		
Collateralized mortgage obligations	46,415,807	47,775,046		
Real estate equity holdings	6,392,780	6,392,780		
Real estate investment trust	153,508,871	156,622,657		
EAFE index fund	288,791,742	198,123,067		
Foreign currencies	30,699,813	30,943,450		
Limited partnerships	886,945,719	992,007,182		
Subtotal	3,444,541,764	3,535,093,910		
Total Investments				
Out on loan	1,148,546,861	1,219,989,557		
Not on securities loan	5,222,344,486	5,286,463,334	1,749,617	1,749,617
Total	$6,370,891,347	$6,506,452,891	$1,749,617	$1,749,617
Reconciliation to investments on Statements of Net Assets				
Total from above		$6,506,452,891		
Less short-term investments				
Repurchase agreements		(415,676)		
Short-term investment funds		(252,556,014)		
Less invested securities lending collateral				
Short-term investment funds		(630,684,156)		
Corporate bonds		(626,871,678)		
Investments on *Statement of Plan Net Assets*		$4,995,925,367		

Derivatives

In accordance with its investment policy, MOSERS through its external investment managers, holds investments in futures contracts, swap contracts, and forward foreign currency exchange contracts. The tables below summarize the various contracts in the portfolio as of June 30, 2003, which are included in the fair value of investments reported in the Statements of Plan Net Assets of the Pension Trust Funds.

Futures Contracts

Notional Amount	Exposure
$2,324,473,986	$2,341,606

Currency Forwards

Book Value	Fair Value	Gain/(Loss)
$4,048,061	$4,072,583	$24,522

Swaps

Notional Amount	Exposure
$98,215,715	$9,147,720

MOSERS does not anticipate additional significant market risk from the swap arrangements. Forward foreign currency exchange contracts are used primarily to hedge against changes in exchange rates related to foreign equities, primarily denominated in European and Asian currencies.

MOSERS could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. MOSERS' investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, and exposure monitoring procedures. MOSERS anticipates that the counterparties will be able to satisfy their obligations under the contracts. Investments in limited partnerships and index funds may include derivatives which are not shown in the underlying derivative totals.

MOSERS invests in mortgage-backed securities, which are reported at fair value in the Statements of Plan Net Assets of Pension Trust Funds and are based on the cash flows from interest and principal payments by the underlying mortgages. As a result, they are sensitive to prepayments by mortgagees, which may result from a decline in interest rates, thereby reducing the value of these securities. MOSERS invests in mortgage-backed securities to diversify the portfolio and increase the return while minimizing the extent of risk.

Securities Lending Program

The board of trustees' investment policy permits the pension trust funds to participate in a securities lending program. Fixed income, international equity and domestic equity securities of the pension trust funds are loaned to participating brokers who provide collateral in the form of cash, U.S. Treasury or government agency securities, or letters of credit issued by approved banks. Collateral must be provided in the amount of 102% of market value for domestic loans and 105% of market value for international loans. MOSERS does not have the authority to pledge or sell collateral securities, without borrower default. Securities on loan at fiscal year end for cash collateral are presented as not subject to classification in the schedule on page 33; securities on loan for noncash collateral are classified according to the category pertaining to the collateral. On June 30, 2003, MOSERS had no credit risk exposure to borrowers because the collateral amounts received exceeded amounts out on loan.

As of June 30, 2003, Credit Suisse/First Boston, New York Branch (CSFBNY), served as the agent for the fixed income and international equity securities lending programs. In this capacity, MOSERS reduces credit risk by allowing CSFBNY to lend these securities to a diverse group of dealers on behalf of MOSERS. Indemnification against dealer default is provided by CSFBNY, an "AA-rated" bank. With each of MOSERS' securities lending programs, the majority of loans are open loans and can be terminated on demand by either MOSERS or the borrower. Net income from the fixed income and international equity securities lending programs is split on an 85/15 basis between MOSERS and CSFBNY respectively.

As of June 30, 2003, Lehman Brothers, a broker-dealer, was the exclusive borrower of the MOSERS' domestic equity securities. In order to reduce credit risk in this exclusive agreement, MOSERS has placed a cap of $250 million on the amount of securities that can be on loan at any given time. In this program, MOSERS receives a monthly borrowing fee of 5 basis points on the market value of the lendable domestic equities multiplied by the following fraction: number of days in the given month divided by 360. The guaranteed fee is renegotiated on a periodic basis to adjust for changes in the securities lending business climate.

Daily monitoring of securities that are on loan ensure proper collateralization levels and mitigate counterparty risk. Cash collateral from all three programs is commingled and invested in a separately managed short-term investment fund for MOSERS. This cash collateral fund is managed by CSFBNY. On June 30, 2003, the cash collateral fund had a market value of $1,257,336,137 and a weighted average maturity of 30 days. For all of the securities lending operational services, the custodian is paid an annual fee, which is netted out against MOSERS' earnings in the securities lending programs managed by Lehman Brothers and CSFBNY.

Capital Assets

Office building, furniture, fixtures and equipment costing $250 or more when acquired are capitalized at cost. Improvements, which increase the useful life of the property, are capitalized. Maintenance and repairs are charged to expense as incurred. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets according to the following schedule:

5 years for furniture, fixtures, and equipment
40 years for building

The table below is a schedule of the capital asset account balances as of June 30, 2002 and June 30, 2003 and changes to those account balances during the year ended June 30, 2003:

Capital Assets	Land	Building and Building Improvements	Furniture, Fixtures and Equipment	Total Capital Assets
Balances June 30, 2002	$267,286	$3,309,192	$2,067,178	$5,643,656
Additions	0	23,413	155,802	179,215
Deletions	0	0	(308,376)	(308,376)
Balances June 30, 2003	267,286	3,332,605	1,914,604	5,514,495
Accumulated Depreciation				
Balances June 30, 2002	0	318,426	1,423,336	1,741,762
Depreciation expense	0	83,077	357,276	440,353
Deletions	0	0	(278,862)	(278,862)
Balances June 30, 2003	0	401,503	1,501,750	1,903,253
Net Capital Assets June 30, 2003	$267,286	$2,931,102	$ 412,854	$3,611,242

(3) Contributions and Reserves

The MSEP, the ALJLAP, and the Judicial Plan are pension plans covering substantially all state of Missouri employees, administrative law judges and legal advisors in the Division of Workers' Compensation, and judges. The state of Missouri is obligated by state law to make all required contributions to the plans. The required contributions are expressed as a level percentage of covered payroll and are actuarially determined using an individual entry-age actuarial cost method. The unfunded accrued liabilities are amortized over a closed 32-year period. Costs of administering the plans are financed from the assets of the pension trust funds.

(4) Other Post-employment Benefits (OPEB)

In addition to the retirement benefits provided through MOSERS, the state of Missouri also funds, either partially or in its entirety, OPEB for eligible retirees as follow:

Retiree Life Insurance

Members, who retire on or after October 1, 1985, are eligible for $5,000 of state-sponsored, basic life insurance coverage if they retire directly from active employment. As of June 30, 2003, a total of 11,680 retirees were eligible and participating in the program. The coverage is financed on a pay-as-you-go basis and is purchased as a group policy through competitive bids at a current cost of $10.35 per month per eligible participant ($1,405,323 for the year ended June 30, 2003). Premiums are paid entirely by the state as provided for by Section 104.515, RSMo.

Retirees of the Department of Labor and Industrial Relations (DOLIR), who retired prior to January 1, 1996, are eligible for state-sponsored life insurance coverage in the same amount of coverage they were receiving through the DOLIR. As of June 30, 2003, a total of 574 retirees were eligible and participating in the program. The coverage is financed on a pay-as-you-go basis and is purchased as a group policy through competitive bids at a current cost of $2.07 per thousand dollars of coverage, per month, per eligible participant ($65,793 for the year ended June 30, 2003). Premiums are paid entirely by the DOLIR as provided for by Section 228.225, RSMo. Retirees of the DOLIR who retired on or after January 1, 1996, are eligible for $5,000 of state-sponsored life insurance coverage if they retire directly from active employment. They are included in the group described in the preceding paragraph.

(5) Plan Termination

MOSERS and its related plans are administered in accordance with Missouri statutes. The statutes do not provide for termination of the plans under any circumstances.

(6) Contingencies

Included in MOSERS' real estate investments is a property located in Kansas City, Missouri, which has been found to have hazardous substance contamination. MOSERS is currently participating in the Petroleum Storage Tank Insurance Fund administered by the Missouri Department of Natural Resources in order to delineate the scope and magnitude of the contamination and determine what appropriate remedial action is needed. Based on the available information, the system's management believes it is not reasonably possible to predict the amount of additional expense MOSERS may incur. Accordingly, no provision has been made in the accompanying financial statements for this matter.

MOSERS is a defendant in two lawsuits that, in management's opinion, will not have a material effect on the financial statements.

Required Supplementary Information
Schedules of Funding Progress
Pension Trust Funds

MSEP

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b-a)/c]
6/30/98	$ 4,210,635,094	$ 4,918,887,183	$ 708,252,089	85.6%	$ 1,459,712,203	48.5%
6/30/99	4,908,820,033	5,505,968,629	597,148,596	89.2	1,564,552,532	38.2
6/30/00	5,511,714,616	5,920,684,192	408,969,576	93.1	1,683,697,080	24.3
6/30/01	5,881,232,850	6,065,166,716	183,933,866	97.0	1,758,190,268	10.5
6/30/02	6,033,133,598	6,294,272,275	261,138,677	95.9	1,773,283,484	14.7
6/30/03	6,057,329,072	6,662,291,406	604,962,334	90.9	1,739,895,364	34.8

ALJLAP

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b-a)/c]
6/30/98	$ 10,285,233	$ 12,886,908	$ 2,601,675	79.8%	$ 2,806,436	92.7%
6/30/99	11,763,737	14,774,525	3,010,788	79.6	3,488,698	86.3
6/30/00	13,191,825	16,521,743	3,329,918	79.8	4,072,888	81.8
6/30/01	14,410,199	16,809,962	2,399,763	85.7	4,661,020	51.5
6/30/02	15,172,619	18,175,342	3,002,723	83.5	4,779,504	62.8
6/30/03	15,626,461	19,946,487	4,320,026	78.3	4,657,896	92.7

Judicial Plan

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b-a)/c]
6/30/98	$ 0	$ 207,579,797	$ 207,579,797	0.0%	$ 32,446,141	639.8%
6/30/99	6,067,305	227,802,341	221,735,036	2.7	34,162,013	649.1
6/30/00	13,861,769	241,797,341	227,935,572	5.7	37,107,487	614.3
6/30/01	22,613,050	247,978,904	225,365,854	9.1	38,687,793	582.5
6/30/02	29,651,113	256,115,452	226,464,339	11.6	40,068,744	565.2
6/30/03	34,556,516	267,049,857	232,483,341	12.9	40,052,952	580.4

See *Notes to the Schedules of Required Supplementary Information*.
See accompanying *Independent Auditors' Report*.

Required Supplementary Information
Schedules of Employer Contributions
Pension Trust Funds

MSEP

Year Ended June 30	Annual Required Contribution Percent	Annual Required Contribution Dollar Amount	Percentage Contributed
1998	10.40%	$ 152,090,687	100%
1999	12.58	197,909,834	100
2000	11.91	202,330,547	100
2001	11.59	215,750,128	100
2002	11.59	209,515,026	100
2003	8.81	156,576,150	100

ALJLAP

Year Ended June 30	Annual Required Contribution Percent	Annual Required Contribution Dollar Amount	Percentage Contributed
1998	19.66%	$ 564,295	100%
1999	18.70	639,285	100
2000	20.10	807,022	100
2001	22.32	1,074,946	100
2002	22.32	1,072,562	100
2003	20.02	951,023	100

Judicial Plan

Year Ended June 30	Annual Required Contribution Percent	Annual Required Contribution Dollar Amount	Percentage Contributed
1998	45.91%	$ 14,896,023	77%
1999	51.81	17,862,353	100
2000	53.92	19,988,676	100
2001	55.30	22,473,913	100
2002	55.30	22,088,485	100
2003	52.12	20,802,140	100

See *Notes to the Schedules of Required Supplementary Information*.
See accompanying *Independent Auditors' Report*.

Notes to the Schedules of Required Supplementary Information

June 30, 2003

Actuarial Methods and Assumptions for Valuations Performed June 30, 2003

The entry-age actuarial cost method of valuation is used in determining liabilities and normal cost. Differences in the past between assumed experience and actual experience (actuarial gains and losses) become part of actuarial accrued liabilities. Unfunded, actuarial accrued liabilities are amortized to produce payments (principal and interest), which are expressed as a percent of payroll. A closed 32-year amortization period was used for the June 30, 2003, valuations. The actuarial value of assets is based on a method that fully recognizes expected investment return and averages unanticipated market return over a 5-year period. The investment return rate assumption used is 8.5% per year, compounded annually (net after investment expenses). The price inflation assumption used is 3.5% per year. Projected salary increase assumptions are based on 4% per year for wage inflation plus an additional 0% to 2.7% per year for the MSEP and 0% to 1.6% per year for the ALJLAP and the Judicial Plan (depending on age, attributable to seniority, and/or merit increases). In order to reflect the current general wage freeze in the state, the pay increase assumptions for fiscal year ending June 30, 2004 were adjusted accordingly (see page 40). The assumption used for annual post-retirement benefit increases is 4% (on a compound basis), when a minimum COLA of 4% is in effect, and 2.8% (on a compound basis), when no minimum COLA is in effect.

Factors That Have Significantly Affected Trends

1998 - The actuarial valuations as of June 30, 1998, reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2000.

	Amount	Percent of Payroll
MSEP		
Experience and nonrecurring items	$(9,780,072)	(0.67)%
ALJLAP		
Experience and nonrecurring items	39,290	1.40
Judicial Plan		
Experience and nonrecurring items	684,614	2.11

1999 - The actuarial valuations as of June 30, 1999, reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2001.

	Amount	Percent of Payroll
MSEP		
Change in benefits	$6,258,206	0.40%
Experience and nonrecurring items	(11,264,771)	(0.72)
ALJLAP		
Change in benefits	72,914	2.09
Experience and nonrecurring items	4,535	.13
Judicial Plan		
Change in benefits	321,123	.94
Experience and nonrecurring items	150,313	.44

2000 - The actuarial valuations as of June 30, 2000, reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2002.

	Amount	Percent of Payroll
MSEP		
Change in assumptions	$(5,051,091)	(.30)%
Experience and nonrecurring items	(10,438,922)	(.62)
ALJLAP		
Change in assumptions	36,656	.90
Experience and nonrecurring items	(51,726)	(1.27)
Judicial Plan		
Change in assumptions	(315,414)	(.85)
Experience and nonrecurring items	(352,521)	(.95)

2001 - The actuarial valuations as of June 30, 2001, reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2003.

	Amount	Percent of Payroll
MSEP		
Change in assumptions	$(41,844,928)	(2.38)%
Release of asset funding margin	(15,647,893)	(.89)
Change in asset valuation method	(3,868,019)	(.22)
Plan experience	12,483,151	.71
ALJLAP		
Change in assumptions	(105,339)	(2.26)
Change in amortization of UAAL	(88,559)	(1.90)
Change in asset valuation method	(4,195)	(.09)
Plan experience	49,873	1.07
Judicial Plan		
Change in assumptions	(1,133,552)	(2.93)
Change in asset valuation method	(197,308)	(.51)
Plan experience	441,041	1.14

2002 - The actuarial valuations as of June 30, 2002, reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2004.

	Amount	Percent of Payroll
MSEP		
Recognizing state pay freeze FY03	$(6,206,492)	(.35)%
Plan experience	15,782,223	.89
ALJLAP		
Recognizing state pay freeze FY03	(20,074)	(.42)
Plan experience	23,420	.49
Judicial Plan		
Recognizing state pay freeze FY03	(208,357)	(.52)
Plan experience	32,055	.08

2003 - The actuarial valuations as of June 30, 2003, reflected the following changes to the computed contribution rates for fiscal year ending June 30, 2005.

	Amount	Percent of Payroll
MSEP		
Reduction in projected across-the-board pay increases to 1.67% for the fiscal year ending June 30, 2005	$(6,089,634)	(.35)%
Plan experience	28,543,284	1.64
ALJLAP		
Recognizing state pay freeze for annual salaries above $40,000	(18,632)	(.40)
Plan experience	112,255	2.41
Judicial Plan		
Recognizing state pay freeze for annual salaries above $40,000	(224,297)	(.56)
Plan experience	1,357,795	3.39

Schedule of Investment Expenses

Pension Trust Funds - Year Ended June 20, 2003

	MSEP	ALJLAP	Judicial Plan	Total
Investing activity				
Investment management fees				
Americap Advisors	$ 230,121	$ 596	$ 1,336	$ 232,053
BlackRock Financial Management L.P.	1,299,274	3,366	7,544	1,310,184
Blackstone Hedged Equity	1,264,428	3,276	7,341	1,275,045
Blackstone Madison	1,869,932	4,844	10,857	1,885,633
Brinson Partners, Inc.	1,022	3	6	1,031
Capital Guardian Trust	364,816	945	2,118	367,879
DDJ Capital Management	805,735	2,087	4,678	812,500
Dimensional Fund Advisors Inc.	399,787	1,036	2,321	403,144
Hoisington Investment Management Company	198,334	514	1,152	200,000
Legg Mason	826,261	2,140	4,798	833,199
Mastholm Investment Managers	1,402,538	3,633	8,143	1,414,314
Merrill Lynch EAFE	536,710	1,390	3,116	541,216
Merrill Lynch Emerging Markets	192,876	500	1,119	194,495
MHR Institutional Partners II	759,250	1,967	4,408	765,625
NISA Corporate Bonds	495,837	1,284	2,879	500,000
NISA Investment Advisors, LLC	428,199	1,109	2,486	431,794
Oak Associates, Ltd.	853,833	2,212	4,957	861,002
Oakbrook Investments	250,565	649	1,455	252,669
Oaktree Capital Management	500,216	1,296	2,904	504,416
OCM Emerging Markets	41,320	107	240	41,667
OCM Opportunity Fund IV-B	1,078,852	2,795	6,264	1,087,911
CFSC Wayland Advisors, Inc.	142,637	370	828	143,835
Silchester International Investors	1,427,073	3,696	8,286	1,439,055
Total investment management fees	15,369,616	39,815	89,236	15,498,667
Other investment fees				
Investment consultant fees				
Summit Strategies, Inc.	378,218	980	2,196	381,394
Timberlink Consulting	4,958	13	29	5,000
Investment custodial fees				
Mellon Bank	915,391	2,371	5,315	923,077
Performance measurement fees				
Mellon Bank	247,538	641	1,437	249,616
Portfolio rebalancing costs				
NISA Investment Advisors, LLC	161,013	417	935	162,365
Internal investment activity expenses	1,221,588	3,165	7,093	1,231,846
Total investing activity expenses	18,298,322	47,402	106,241	18,451,965
Securities lending activity				
Securities lending borrower rebates	14,112,689	36,559	81,938	14,231,186
Securities lending management fees				
Mellon Bank	247,919	642	1,439	250,000
Credit Suisse First Boston	599,858	1,554	3,483	604,895
Total securities lending activity expenses	14,960,466	38,755	86,860	15,086,081
Total investment expenses	$ 33,258,788	$ 86,157	$ 193,101	$ 33,538,046

See accompanying *Independent Auditors' Report*.

Schedule of Internal Investment Activity Expenses

Pension Trust Funds - Year Ended June 30, 2003

	MSEP	ALJLAP	Judicial Plan	Total
Personnel services				
Salaries	$ 710,741	$ 1,841	$ 4,127	$ 716,709
Employee fringe benefits	152,250	394	884	153,528
Total personnel services	862,991	2,235	5,011	870,237
Professional services				
Attorney services	73,348	190	426	73,964
Consulting services	3,811	10	22	3,843
Total professional services	77,159	200	448	77,807
Communications				
Telephone	1,307	3	8	1,318
Total communications	1,307	3	8	1,318
Equipment				
Maintenance	37,809	98	220	38,127
Total equipment	37,809	98	220	38,127
Travel and meetings				
Staff travel and meetings	56,949	148	331	57,428
Total travel and meetings	56,949	148	331	57,428
General				
Educational materials	892	2	5	899
Office supplies	588	2	3	593
Subscriptions and dues	183,169	475	1,063	184,707
Miscellaneous	724	2	4	730
Total general	185,373	481	1,075	186,929
Total administrative expenses	$ 1,221,588	$ 3,165	$ 7,093	$ 1,231,846

See accompanying *Independent Auditors' Report*.

Schedule of Administrative Expenses

Pension Trust Funds - Year Ended June 30, 2003

	MSEP	ALJLAP	Judicial Plan	Total
Personnel services				
Salaries	$ 2,598,195	$ 6,731	$ 15,085	$ 2,620,011
Employee fringe benefits	734,896	1,904	4,267	741,067
Total personnel services	3,333,091	8,635	19,352	3,361,078
Professional services				
Actuarial services	214,247	555	1,244	216,046
Attorney services	24,927	65	145	25,137
Auditing services	38,040	99	221	38,360
Banking services	17,445	45	101	17,591
Consulting services	161,206	418	936	162,560
Total professional services	455,865	1,182	2,647	459,694
Communications				
Postage and mailing	350,376	908	2,034	353,318
Telephone	36,687	95	213	36,995
Printing	208,485	540	1,211	210,236
Video production	557	1	3	561
Total communications	596,105	1,544	3,461	601,110
Building and grounds				
Depreciation	82,385	213	479	83,077
Utilities	51,063	133	296	51,492
Maintenance	54,996	142	319	55,457
Total building and grounds	188,444	488	1,094	190,026
Equipment				
Depreciation	354,301	918	2,057	357,276
Maintenance	200,397	519	1,164	202,080
Rental	105,862	274	615	106,751
Loss on sale of equipment	20,366	53	118	20,537
Total equipment	680,926	1,764	3,954	686,644
Travel and meetings				
Board travel and meetings	27,398	71	159	27,628
Staff travel and meetings	217,447	563	1,263	219,273
Vehicle maintenance and operation	6,229	16	36	6,281
Total travel and meetings	251,074	650	1,458	253,182
General				
Educational materials	24,480	63	142	24,685
Office supplies	173,440	449	1,007	174,896
Subscriptions and dues	145,278	376	843	146,497
Insurance	96,496	250	560	97,306
Advertising	3,138	8	18	3,164
Temporary help	3,014	8	17	3,039
Miscellaneous	3,014	8	18	3,040
Total general	448,860	1,162	2,605	452,627
Total administrative expenses	$ 5,954,365	$ 15,425	$ 34,571	$ 6,004,361

See accompanying *Independent Auditors' Report*.

Schedule of Administrative Expenses

Internal Service Fund - Year Ended June 30, 2003

Personnel services	
Salaries	$ 229,900
Employee fringe benefits	61,663
Total personnel services	291,563
Professional services	
Attorney services	1,513
Auditing services	2,643
Banking services	550
Total professional services	4,706
Communications	
Postage and mailing	1,627
Telephone	2,640
Video production expense	39
Total communications	4,306
Building and grounds	
Building use charge	8,308
Utilities	3,548
Maintenance	3,821
Total building and grounds	15,677
Equipment	
Equipment use charge	36,503
Maintenance	15,775
Rental	7,355
Total equipment	59,633
Travel and meetings	
Board travel and meetings	1,206
Staff travel and meetings	19,762
Vehicle maintenance and operation	433
Total travel and meetings	21,401
General	
Educational materials	1,763
Office supplies	12,091
Subscriptions and dues	2,976
Insurance	6,704
Advertising	218
Temporary help	209
Miscellaneous	260
Total general	24,221
Total administrative expenses	$ 421,507

See accompanying *Independent Auditors' Report*.

Schedule of Professional/Consultant Fees

Year Ended June 30, 2003

		Pension Trust Funds				Internal Service Fund
Professional/Consultant	Nature of Service	MSEP	ALJLAP	Judicial Plan	Total	Missouri State Insurance Plan
Gabriel, Roeder, Smith & Co.	Actuarial	$ 214,246	$ 556	$ 1,244	$216,046	$ 0
Thompson Coburn	Legal counsel	24,928	64	145	25,137	1,513
KPMG LLP	Financial audit	38,040	99	221	38,360	2,643
Jack Pierce	Governmental pension consulting	29,750	77	173	30,000	0
Central Bank	Banking	17,445	45	101	17,591	550
Buck Consultants	Actuarial audit	47,104	122	274	47,500	0
Qflow Systems, LLC	Image system consulting	595	2	3	600	0
Charlesworth & Associates	Risk management consulting	5,966	15	35	6,016	0
Cortex Applied Research, Inc.	Governance consulting	25,625	66	149	25,840	0
Huber & Associates	AS400 hardware installation consulting	14,875	39	86	15,000	0
Malicoat-Winslow Engineers, PC	Building's air conditioner study	198	1	1	200	0
PeopleSoft	Accounting software consultant	2,287	6	13	2,306	0
Voice Retrieval & Information Services	Board election voting	34,806	90	202	35,098	0
Total professional/consultant fees		$ 455,865	$ 1,182	$ 2,647	$ 459,694	$ 4,706

See accompanying *Independent Auditors' Report*.

Information on investment management and consulting fees can be found in the *Schedule of Investment Expenses* on page 41.

Investment Summary

Pension Trust Funds - Year Ended June 30, 2003

Type of Investment	June 30, 2002 Cost Value	June 30, 2002 Fair value	Purchases and Capital Additions at Cost	Sales and Redemptions at Cost	June 30, 2003 Cost Value	June 30, 2003 Fair Value	Percent of Total Fair Value
Fixed Income							
Treasury bonds, notes, and bills	$ 668,345,531	$ 741,830,188	$ 1,339,281,748	$ (1,077,762,640)	$ 929,864,639	$ 1,032,342,022	21%
Govt. Bonds and govt. mortgage-backed securities	338,270,568	349,522,964	1,239,487,651	(1,441,963,946)	135,794,273	141,092,001	3
Corporate bonds	572,603,067	570,744,962	767,664,704	(1,056,434,948)	283,832,823	295,536,548	6
Convertible bonds	150,000	204,750	2,672,991	(1,533,593)	1,289,398	1,375,050	0
Collateralized mortgage obligations	105,924,517	107,670,076	20,674,006	(80,182,716)	46,415,807	47,775,046	1
International corporate bonds	38,369,264	38,323,464	70,831,802	(85,717,670)	23,483,396	24,565,996	0
Total fixed income	1,723,662,947	1,808,296,404	3,440,612,902	(3,743,595,513)	1,420,680,336	1,542,686,663	31
Common stock	1,764,941,441	1,585,534,914	720,370,080	(1,126,074,174)	1,359,237,347	1,265,718,764	25
Preferred stock	6,423,300	4,709,567	10,454,772	(3,048,894)	13,829,178	15,899,659	0
International investments							
International equities	881,761,307	909,173,125	1,106,475,224	(1,287,738,798)	700,497,733	787,531,145	16
Foreign currency	14,698,099	19,428,087	30,699,813	(14,698,099)	30,699,813	30,943,450	1
EAFE index fund	386,341,377	294,028,371	0	(97,549,634)	288,791,743	198,123,067	4
Total international investments	1,282,800,783	1,222,629,583	1,137,175,037	(1,399,986,531)	1,019,989,289	1,016,597,662	20
Real estate							
Equity holdings	5,658,746	5,658,746	51,034,182	(50,300,148)	6,392,780	6,392,780	0
REITs	246,502,582	254,553,971	15,462,740	(108,456,451)	153,508,871	156,622,657	3
Total real estate	252,161,328	260,212,717	66,496,922	(158,756,599)	159,901,651	163,015,437	3
Limited partnerships	0	114,882	1,007,849,117	(120,903,396)	886,945,721	992,007,182	20
Investments (per Statement of Plan Net Assets page 24)	5,029,989,799	4,881,498,067	6,382,958,830	(6,552,365,107)	4,860,583,522	4,995,925,367	100%
Short-term investments							
Short-term investment funds	383,864,683	383,864,684	3,282,169,186	(3,413,477,855)	252,556,014	252,556,014	
Repurchase agreements	2,284,402	2,284,401	153,171,537	(155,040,263)	415,676	415,676	
Total short-term investments	386,149,085	386,149,085	3,435,340,723	(3,568,518,118)	252,971,690	252,971,690	
Invested securities lending collateral							
Corporate bonds	435,655,120	434,349,750	457,121,749	(266,124,890)	626,651,979	626,871,678	
Short-term investment funds	574,524,399	574,524,400	67,118,302,100	(67,062,142,343)	630,684,156	630,684,156	
Total invested securities lending collateral	1,010,179,519	1,008,874,150	67,575,423,849	(67,328,267,233)	1,257,336,135	1,257,555,834	
Total investments	$ 6,426,318,403	$ 6,276,521,302	$ 77,393,723,402	$ (77,449,150,458)	$ 6,370,891,347	$ 6,506,452,891	

See accompanying *Independent Auditors' Report*.
Note: Due to space limitations and printing costs, a detailed listing of the investment holdings and transactions could not be provided in this annual report; however, the detailed reports are available for review as an appendix to this report at the MOSERS' office.

Investment Summary

Internal Service Fund - Year Ended June 30, 2003

	June 30, 2002				June 30, 2003		
Type of Investment	Cost Value	Fair Value	Purchases and Capital Additions at Cost	Sales and Redemptions at Cost	Cost Value	Fair Value	Percentage of Total Fair Value
Repurchase agreements	$1,606,156	$1,606,156	$494,936,907	$(494,793,446)	$1,749,617	$1,749,617	100%

See accompanying *Independent Auditors' Report*.
Note: Due to space limitations and printing costs, a detailed listing of the investment holdings and transactions could not be provided in this annual report; however, the detailed reports are available for review as an appendix to this report at the MOSERS' office.

The word “penny” is derived from the British coin pence. Over 300 billion one-cent coins, with 11 different designs, have been minted since 1787. Today, the United States has four mints which produce coins. They are located in Philadelphia, PA; San Francisco, CA; Denver, CO; and West Point, NY. However; only Philadelphia and Denver produce coins for general circulation. The others make proof sets and perform specialty minting.


A penny saved is a penny earned

Chief Investment Officer's Report

MOSERS

FY03 Highlights

- As of June 30, 2003, MOSERS was one of the 200 largest defined benefit plans in the United States with total assets of just over $5 billion.
- The fund generated a return of 7.0% net of expenses for the year, placing MOSERS' investment return in the top 9% among public pension funds with assets in excess of $1 billion according to the Independent Consultants Cooperative (ICC). This return also compares favorably to the return of the policy benchmark, which it out performed by 1.1%.
- Over the 3 years ended June 30, 2003, the MOSERS' investment portfolio returned -.6%. While slightly negative on an absolute basis, when compared to the returns experienced by the broad equity markets (defined by the Russell 3000) over the last 3 years of -10.5%, this is remarkable capital preservation during a very difficult time.
- Over the bear market of the last three years, MOSERS has been able to generate a return of 4.11% per annum in excess of the return of our policy benchmark. In real dollars, these results have produced well over $600 million for the fund that would not have been earned had the assets been invested passively in index funds.
- MOSERS' internal investment department manages approximately $956.6 million in assets, or about 18.3% of the fund. All of these internally managed portfolios have met or exceeded expectations, with very low management costs.

October 1, 2003

Dear Members:

It is a privilege to present this year's Investment Section of the *MOSERS Comprehensive Annual Financial Report*. In keeping with the theme of this year's report, if a "little change today makes a big difference for tomorrow", I can attest to the fact that FY03 will be a year remembered for changes made that will make a big difference in MOSERS' financial future.

As you will see from the box on the left, FY03 was filled with many highlights, and I am excited about sharing them with you. FY03 was the first year in the last three in which well diversified portfolios generated positive returns. However, the magnitude of the positive results for MOSERS' total fund for the fiscal year were directly attributable to policy decisions made by the board based on an asset/ liability study conducted by staff and Summit Strategies, our external asset consultant, in the spring of 2002.

Let's talk a little about why the board concluded that a study made sense. Late last fiscal year, about 73.0% of the portfolio was in a variety of publicly traded stocks across the globe, 14.0% in publicly traded fixed income securities, 10.0% in inflation indexed bonds and 3% in commodities. While the allocation to inflation indexed bonds and commodities would not have been considered mainstream, the fact that in total these two investment strategies only represented 13.0% of our investments would not have been enough to define the MOSERS' portfolio as anything other than a fairly traditional stock/bond mix. While that structure served us well through the decade of the 1990s, it failed to provide desired results in the bear market that began in early 2000, even though it held up relatively well given the high equity exposure. Our relative success was, in large part, due to our overweight to value stocks coupled with a high quality, long maturity bias in the fixed income portfolio. The point of this somewhat lengthy explanation is to make it clear that we were not being reactive to the events that had unfolded in the previous few years. In actuality, the call for and subsequent changes that were made in the portfolio that I earlier described as "historical" were based on a belief that we could build a better mix of assets for the future, given our expectations that traditional stocks and bonds would not be able to deliver returns in line with their long-term average returns over the next several years. In other words, our expectations suggested that a typical stock/bond mix (one that has between 60.0% and 70.0% stocks and the remainder in bonds) would probably not produce the 8.5% return the fund needs in order to keep contribution rates from increasing in the future. A quick review of some of the numbers for both stocks and bonds should illustrate why.

Let's start with bonds. In developing our return expectations for bonds, a reasonable approach is to look at the yields available to investors today. In the early days of summer last year, yields on ten-year treasury securities were about 5.0%. We also know mathematically that if interest rates go up during the next ten years, prices on our bonds will fall and eat into that 5.0% yield. On the flipside, if interest rates go down, our returns will be somewhat higher than 5.0%. However, it is important to understand that higher returns due to decreasing interest rates are limited because interest rates cannot go below zero. We know that the average yield on ten-year treasuries over the last 50 years has been about 6.5%. Given our belief that at some point in the future yields will return to their long-term average, it's reasonable to conclude that we could earn less than 5.0% from bond investments. The bottom line on our bond portfolio – 4.5% to 5.5% is about all we could expect given the level of interest rates a little over a year ago.

On the stock front, things were not much better. A portion of the expected return from stocks comes from dividend yields. Dividend yields on stocks can be thought of in the same way as yields on bonds. However, stock investors should receive an additional return from earnings growth. Dividend yields on stocks early last summer were somewhere between 1.5% and 2.0%. Expectations for earnings growth are very subjective; however, we know that earnings will grow no faster than the economy as a whole for any extended period of time and will likely trail it by some amount. While earnings have grown at around 6.0% historically, about 4.0% of that has come from inflation. In other words, real earnings growth has been about 2.0%. With a low inflationary environment like the one we are currently experiencing (let's say inflation is running about 2.0%) it would be a stretch to expect earnings growth to be above 6.0%. It would also not be a surprise if earnings growth were as low as 4.0%. The other component of the return from stocks is the change in the price earnings (P/E) ratio, or the amount investors are willing to pay for $1 worth of earnings. Once again, a recap of history would suggest that the long-term average P/E is about 16, while normalized P/Es a little over a year ago were in the low to mid 20's. We know that if P/Es fall, returns will be impacted negatively and if they rise the opposite will occur. Given P/E levels at the time and their relationship to historical P/Es, we felt that the most aggressive case would be to assume that P/Es would remain unchanged and thus have no impact on future returns. A more conservative case would have been to assume that P/Es would return to average over some period of time, thus detracting somewhat from future returns. The bottom line on stocks – 1.5% to 2.0% from dividends, coupled with 4.0% to 6.0% from earnings growth and -2.0% to 0% from changes in P/E's suggesting a realistic range of returns between 3.5% and 8.0%.

So now we can do the math on the traditional stock/bond mix. A portfolio that's 60.0% stocks and 40.0% bonds should be expected to generate a return of 3.9% to 7.0% while a portfolio of 70.0% stocks and 30.0% bonds should be expected to generate 3.8% to 7.3%. As it should now be clear, none of these choices get us to the 8.5% we need to fund the liabilities with no change in contribution rates.

Given this information, the MOSERS' Board had three choices to consider based on this expected outcome: (1) hold out hope that the glory days of the 1990s would return and investors would bid up P/E ratios, thus propelling stock returns back into double digits; (2) acknowledge the fact that it would be difficult to earn 8.5% in the near future and lower the assumption regarding future return. (This action would have increased the required contributions from the state of Missouri at a time when budget problems where already an issue.); or (3) evaluate a more non-traditional approach to portfolio management to determine if higher returns and/or lower volatility could be expected which, in turn, would increase the likelihood of achieving the established return objective. Based on a lot of thought provoking debate and discussion, Option (3) was chosen and a new course for the MOSERS portfolio was charted. At the foundation of any investment program are the philosophies that will guide it. I briefly touched on these beliefs in last year's letter. Since that time they have been refined somewhat and will probably be refined further as we move forward. Because they are so important to our future direction, I would like to share them with you again.

Tenet #1

Diversification is critical because the future is unknown.

Diversification in the 1990s was about holding some amount of bonds (generally somewhere between 30.0% and 40.0% of the portfolio) and a variety of stocks; large-cap, small-cap, domestic and international. We believe that true diversification goes well beyond the 1990s mantra. In our opinion, for a portfolio to be truly diversified, it should encompass a much broader array of investments, each with unique characteristics that will likely cause them to perform differently in a variety of economic scenarios. One way we provide ourselves with comfort that our portfolio is well diversified is by asking the following simple question, "Do we have holdings in the portfolio that make us uncomfortable given our views of the markets?" If the answer is yes, we are well on our way to having a diversified portfolio. A portfolio composed of only comfortable holdings will be built around a specific view of market direction. The stronger your view of a specific market outcome the more you will tend to tilt the portfolio to perform well if that outcome unfolds. *The problem is we do not have a crystal ball.* There are plenty of opinions in our business and many intelligent, articulate folks who are very willing to share their views. In many cases, these folks get paid huge amounts of money for their opinions. The problem is they don't have crystal balls either. The first step in generating successful long-term investment results is a realization that the future is unknowable. Accordingly, a portfolio must be built upon the premise that we have very little knowledge about what the future holds and therefore economic diversification is critical. The "Total Fund Review" section of this report includes a pie chart on page 65 that lays out various economic environments and the types of investments that should be expected to perform well in those environments. While we will have views on the direction of the markets and will adjust the amount of money we have invested in the various economic slices of the pie to match those views, it is important to understand that these shifts will take place "at the margin." These strategic shifts are discussed further in Tenet #3.

Tenet #2

Every investment should be examined in the context of its two distinct return components – beta and alpha.

Beta is the return we expect from simply having exposure to the asset class. It includes a risk-free component and a risk premium. As an example, if we have an allocation to U.S. equities, we can get our beta exposure by investing the money in a broad market index like the Russell 3000. This exposure can be purchased very cheaply and, over long periods of time, the beta return should not only be positive, but should be related to the expected risk premium of the asset class. Thus, beta returns from stocks should be higher than beta returns from bonds, which should be higher than beta returns from cash.

In contrast, alpha is the skill-based component of the return equation, or the return generated through a manager's ability to select particular investments that perform better than the asset class as a whole. An index portfolio does not seek alpha, because the expectation of the index portfolio is to achieve the market's return – no better, no worse. If we are seeking to generate alpha in our U.S. equity portfolio, we must start to distinguish the portfolio from the market. This is what active management is all about; alpha generation.

As discussed at the beginning of my letter, in today's environment of extremely low interest rates, one should not expect the beta portfolio to generate more than about 7.0%. Therefore, if we are to achieve our return objectives, alpha must become more of a focus than it has been in the past. As returns from beta are harder to come by, finding managers who possess the skills to produce returns above and beyond the asset class returns will be crucial to long-term success. Truly skillful managers should be coveted because alpha is a "zero-sum" game. Simply put, for every winner there is a loser. Thus, just as alpha can provide positive value added to total return, it can also detract from performance. The only way to capture positive alpha is to select managers who focus on inefficient markets and possess the skill set needed to achieve success through application of their unique skills. Alpha seeking is not for everyone, and the costs of failure are high. We believe MOSERS' governance policies, fund size, and the stability of the investment team position us well to capture positive alpha in the future. In addition, it certainly helps to know that we have been able to generate significant positive alpha for the fund in the past.

Tenet #3

Asset classes will be in and out of favor at different times and they all tend to be cyclical, thus flexibility is key.
Economies are cyclical and it logically follows that all asset classes/investments should be as well. Let's look back at the spring of 2000 when money was flooding into technology stocks just before the market took its tumble. Expectations for higher growth rates in "new economy" industries like technology, media, and telecom pushed prices of those companies' stocks higher and higher. As prices rose and the market values of those companies increased, those companies found themselves flush with newly acquired cash. Management of those companies utilized the cash to build plants, purchase equipment and hire additional employees with the expectation that it would lead to higher growth and more profits. Because of the seemingly endless opportunities for outsized profits, new players (competition) entered this marketplace with hopes of dipping their hands into the pot of gold. Ultimately, the system was sowing the seeds of its own demise. The lessons of Economics 101 were alive and well– "High returns attract capital investments, which generate competition, which leads to lower future returns, while low returns dissuade capital investments which lead to divestiture, bankruptcies, and less competition, which inevitably will lead to better future returns." It is this cyclical nature of investments that creates opportunities to buy cheap and sell dear. As Peter Bernstein, a well-known economist, recently stated in his Economics and Portfolio Strategy newsletter, "In a volatile world, opportunities and risks will appear and disappear in short order. Flexibility is the watchword." It is important to note that we are prepared to make shifts in the portfolio; however, we would expect to utilize this flexibility "at the margin" and only in those instances where valuations are extremely compelling.

Tenet #4
This isn't about risk or return.
It's about risk-adjusted returns.
Throughout the 1990s, a great deal of focus was placed on return with little attention paid to the risk. Over the last year, we have spent a great deal of time looking at expected return and risk, in tandem, in order to maximize the expected return for a given level of risk being assumed. Part of this change in thinking stems from the fact that we now recognize that, despite our infinite time horizon, there are still benefits to pay. In fiscal year 2003, we paid out some $150 million more in benefits than we received in contributions from the state. This is a natural evolution in the aging of our pension fund; however, it does demand an increased focus on shorter-term risks. Volatility results in huge "costs" to the system. Think of the example where you have $100 invested in the stock market. If you lose 50% in one year, you now have $50. The next year, you earn 50% on your investment. At the end of year two, you only have $75, not the $100 you started with. What happened to the other $25? The answer is volatility ate it up. While this is an extreme example, it makes the point that by improving the risk/return trade-off in the portfolio, we are increasing our chances of reaching our objectives.

Finally, it is important to remember that there is no "Holy Grail" or "Silver Bullet" in investing. Investing is a game of survival and is not as simple as following the crowd. In fact, following the crowd will often lead to trouble down the road. (Lemmings can attest to that adage.) As Warren Buffett has stated, "what the wise person does in the beginning for all the right reasons, the fool does in the end for all the wrong ones." Today's investment environment requires independent thinking and independent action. We believe that just as much time should be spent thinking about what can go wrong (the risk side of the equation) as is spent thinking about what can go right (the return side of the equation).

The pages in the remainder of this section of the report illustrate how we have implemented these tenets within the context of the MOSERS' portfolio over the past year. While the ultimate success or failure of our new direction will only be determined well into the future, it is certainly nice to get off on the right foot. Since we began the implementation of the new allocation, the investment allocation has generated an extra $190 million, over and above what would have been generated had we continued with the allocation in place prior to July 1, 2002.
We look forward to continuing with implementation of the new program in FY 2004 and are confident that the changes being made today will make a big difference tomorrow for MOSERS' stakeholders.

Until next year,

Rick Dahl

Rick Dahl
Chief Investment Officer

Investment Consultant's Report

Summit Strategies Group

October 1, 2003

Dear Members:

The fiscal year ending June 30, 2003 was a very important one for MOSERS' investment portfolio. This was true both in dollars and cents as well as the evolution of the investment philosophy of the fund. First, let's quickly review the dollars and cents. For the first time in three years, the fund is able to report a positive result for the year at 7.0%. This equates to over $345 million of investment earnings and a market value of $5.23 billion. An attribution of returns reveals that the 7.0% return was generated in the fixed income and alternatives segments of the fund as equities continued to have a slightly negative impact on absolute results. It's also worth noting, for reasons to be explained shortly, that the big contributors to the fund's growth were areas like treasury inflation protected securities (TIPS), high yield bonds, a commodities index fund, and private placement distressed debt funds.

The 7.0% annual return placed MOSERS in the top 9% of public funds in the Independent Consultants Cooperative sample – the largest sample of its kind in the industry. For the most recent three-, five- and ten-year periods, MOSERS performed in the top one-third of this universe and outperformed the fund's policy benchmark. It's worth noting that, in spite of the dramatic bear market of the past three years, the long-term results of the fund (10 years) were 8.4%, which is near the long-term assumption used by the actuaries in computing contribution rates and funding status. The rates of return quoted here and throughout this annual report have been calculated using a time-weighted rate of return methodology based upon market values.

As you read in the preceding letter from Rick Dahl, the system's chief investment officer, a significant step in the evolution of the way in which the board structured the investment program took full effect in the fiscal year just completed. Rick's letter spells out the details of the program, but I would like to take a minute to impress upon you the significance of this program and its status at the forefront of public fund management. I have worked with a couple dozen public funds in my career and am familiar with many more. I can say that the activity at MOSERS is unique in the industry and, in my view, very positive.

To begin to appreciate the significance of what the board has done in developing its philosophy, it's helpful to get a brief lay of the land of the current public fund environment. As pension fund investing grew from a relatively small industry to the multi-trillion dollar business it is today, an 18-year bull market in both stocks and bonds during most of the 1980s and 1990s created the backdrop for the "standards and practices" of the pension industry. During this period, anything done at a pension plan or the process by which decisions were made really didn't seem to matter. With stocks up over 17% and bonds up over 10% on an annualized basis, the markets carried all funds along to great success and many pension plans became overfunded. Benefit increases became almost annual expectations. Whether or not your equity portfolio did well versus the market (up 19% versus the market of 17%), or poorly (up 15% versus the market of 17%), the truth was that no one paid any real penalty because these returns were so far in excess of the actuary's assumptions.

In this environment, a culture materialized regarding pension plan management. Typically a group of trustees, consisting primarily of potential beneficiaries, sets about developing policies, establishing asset allocation targets, and choosing money managers. Because these groups of trustees are not investment experts and meet no more than once a month or quarter, they choose to keep the investment program simple. 60% equities, 40% fixed income has become the standard. Equity diversification focused on large and small U.S. stocks with some international stock exposure, while fixed income allocations were focused on high grade U.S. bonds. A fund might add a few things like real estate and/or alternatives around the edges, but the public stock/bond structure as described is still generally 90%+ of the equation. It was this structure that dominated results and the bull market assured that the results were indeed very good. In order to keep busy during this period, most public fund trustees, staffs, and their consultants "fiddled" with the money manager line-up.

Every study of this subject says that the manager selection aspect of investing produces, at best, 10% of the results, yet here is where the bulk of the time was being spent. Manager searches, followed by manager replacement searches, with semi-annual manager presentations, as well as conferences funded by managers at which managers told trustees what the managers wanted the trustees to hear, are the norm. It is great for the consultant and money management communities. Beyond that, staffs and the trustees feel that they are being "active" and" "prudent" and showing great "oversight."

In the spring of 2002, the board at MOSERS was challenged with a very frightening proposition, "What if the equity markets don't return enough to assure all of us success? What if simply investing inefficiently (as described above) in broad public markets does not get us what we need?" "What if there's more to pension fund management than three searches per year?" And, the answer the board arrived at (in an industry where nobody wants to look too differently from everybody else) was, "Maybe there's a better way." In my opinion, this is what makes this past fiscal year such a milestone for MOSERS.

The policy the board enacted has precedence in the foundation and endowment world, and some precedence in the corporate world, but is very unique among public funds. The board has redefined its oversight role to be just that. As the "captains" of this ship, they have set the course, the final destination, and the schedule for the journey. But they wisely put the trust for running the ship in the hands of investment professionals, both internally and externally. Controls are in place and regular monitoring is structurally assured, but both the accountability and the responsibility for achieving these goals has been given to investment professionals. Manager selection, the main investment-related activity of most public boards, has been delegated to staff and Summit. Variations in asset allocations within a very well-defined structure are allowed to take advantage of valuation opportunities in the markets. Strategies that are routinely rejected at most public funds because they are too complex for a lay board to get comfortable with in the 20 minutes of typically allotted board time, are being used to MOSERS' advantage. Total fund results and risk controls are the focus as opposed to viewing each piece of the puzzle in isolation.

As I described in the first paragraph of this letter, the first year results relative to the policy benchmark were very good. We fully expect that this evolution of philosophy embraced by the board will add significant value for a very long time to come. Frankly, the first year's relative results were almost too good, because our long-term expected value added target is lower than what was achieved. I view this like I do a good batter who's hitting .480 at the end of April. He's off to a great start and we think he's a quality player, but we all know that we'd be thrilled if he were hitting .350 at the end of the year. Putting the baseball analogy aside, we all believe that the confidence, latitude, and trust the board has placed in us is the major story of the past decade at MOSERS.

We have confidence that this responsibility will result in a long-term advantage for MOSERS that gives the fund a far better chance of meeting its goals in what we believe will, in the future, continue to be difficult markets. While we wish we could have the 1980s and 1990s back with their "easy" bull market returns, the reality suggests that we will all have to work harder to "find pennies for our pocket" along the way and, we believe the board has given us the ideal platform from which to operate.

Sincerely,

Stephen P. Holmes, CFA
President

Investment Consultant Evaluation Report

Cooper Consultants

2236 Sixth Street, Suite B
Berkeley, California 94710
510.549.3334
Fax: 510.549.3338
www.institutional-research.com

June 20, 2003

Members, Board of Trustees
Missouri State Employees' Retirement System
Jefferson City, MO 65109

Cooper Consultants recently conducted a site visit and review of operations of your general investment consultant, Summit Strategies Group ("Summit"). During the site visit we met with Steve Holmes, lead consultant for MOSERS and president of Summit, and several other senior professionals at the firm. The primary objective of the visit was to assess the state of the firm since our last visit and due diligence effort, and to identify any material issues that need to be addressed. Specifically, we reviewed the sophistication of Summit's capabilities and the reasonableness of the firm's processes in the following functional areas:

- Asset Allocation and Asset/Liability Modeling
- Manager Research and Monitoring
- Performance Measurement
- Derivation of Capital Markets Expectations and Investment Research

We also reviewed the stability of the firm in the following areas:

- Professional Experience and Turnover
- Client Growth and Client Turnover
- Financial Health

In addition, we reviewed Summit with respect to independence. This included a request for conflict-of-interest statements signed by professionals of the firm, review of completed employee conflict-of-interest statements, and a brief review of the firm's financial statements. Lastly, we reviewed MOSERS' contracted fees with Summit and compared them to averages within our consultant fee database to assess whether or not their fees appear reasonable.

To our knowledge, there are no material issues or concerns relating to Summit and the services being provided to MOSERS at this time. Specifically, we have formed the following opinions with respect to Summit:

- It is our opinion that Summit's capabilities are average or above average in all core functional areas. It is also our opinion that the processes utilized by Summit are prudent and reasonable and the professionals performing the work are experienced.

- Professional turnover at Summit is not a material issue. The firm's policies, including ownership distribution and the firm culture, suggest to us that turnover at the senior level should be relatively low in the future.

- Client turnover remains very low at the firm. Recent client growth has been significant but the firm has provided assurances that the number of client retainer relationships will be capped at a level appropriate to the resources of the firm.

- We have identified no material issues with MOSERS' lead consultant, Steve Holmes. Mr. Holmes, as founder and president of the firm and a major shareholder, represents an extremely low risk of departure. In our opinion Mr. Holmes' workload, which includes retainer consulting, firm management, and business development, is significant but not cause for great concern. Mr. Holmes has stated that he may add one or two more clients to his current roster of retainer relationships, but that would most likely be accompanied by a transfer of some current smaller relationships (not MOSERS) to another consultant within the firm.

- The firm appears to be in reasonably good financial health. A growing roster of retainer clients and escalating fees in the industry should result in increased profitability. Unlike many businesses in the financial industry, consulting firms tend to generate additional business during market downturns. Revenues and expenses were stable between 2001 and 2002. Profitability can be difficult to determine from financial statements since all profits (after planned capital expenditures) are paid out as bonuses at the end of the year.

- Summit retains our highest independence rating of "1A."

- Summit's current fee equates to approximately .6 basis points of the plan's asset value (before incentives). Our industry mean fee is .6 basis points and our industry median fee is .5 basis points for plans of asset size between $1 billion and $10 billion. Therefore, we conclude that the fee is reasonable and well within established ranges for the investment consulting industry. Perhaps more importantly, MOSERS' consultant incentive compensation structure further aligns the interests of the investment consultant with the interests of MOSERS' plan participants.

- The United States Securities and Exchange Commission (SEC) Form ADV indicates that Summit is properly registered as an investment advisor and has no incidence of regulatory violations or disciplinary violations.

- We find that Summit is providing all the consulting services to the Missouri State Employees' Retirement System required by the existing contract.

Overall, we find and certify that the investment advice your plan receives from Summit is derived from a process that is prudent and reasonable and that is supported by quality resources. We appreciate having had the opportunity to conduct this review on your behalf. Also, we wish to fully acknowledge the cooperation of your staff and the staff at Summit, which greatly facilitated our work on this project.

Sincerely,

Jennifer A. Cooper, CFA
Principal

Investment Policy Summary

The investment policy is specifically designed to serve as a reference point for the management of system assets and outlines MOSERS' investment philosophy and practices. This document assists the board of trustees in carrying out their fiduciary responsibilities for the investment of system assets.

Investment Objective

The board's guiding principles with respect to the investment of MOSERS' assets are to preserve the long-term corpus of the fund, maximize total return within prudent risk parameters, and act in the exclusive interest of the members of the system. In keeping with these three primary guiding principles, the board has established the following investment objectives:

- Develop a real return objective (RRO)[1] that will:
  - Keep contribution rates reasonably level over long periods of time absent changes in actuarial assumptions.
  - Maintain contribution rates consistent with historical levels ranging from 8% to 12% of covered payroll.
- Establish an asset allocation policy that is expected to meet the RRO over a long periods of time, while minimizing volatility.
- Minimize the costs associated with implementation of the asset allocation through the efficient use of internal and external resources.

Investment Beliefs

In carrying out the board's broad investment objectives, MOSERS' internal investment staff and external asset consultant have established investment beliefs which have shaped the portfolio to achieve the board's stated objectives. From time to time, these beliefs may need to be modified to keep pace with the changing investment landscape, however, it is expected that some version of these beliefs will be in place for many years to come. The primary tenets underlying MOSERS' investment beliefs are as follows:

- Diversification is critical because the future is unknown.
- Every investment should be examined in the context of the two distinct return components - beta and alpha.
- Asset classes will be in and out of favor at different times and they all tend to be cyclical, thus flexibility is key.
- This isn't about risk or return. It's about risk-adjusted returns.

For further explanation of these tenets, see the CIO's report in this section.

Roles and Responsibilities

Board of Trustees

The board of trustees bears the ultimate fiduciary responsibility for the investment of system assets. Members of the board must adhere to state law and prudent standards of diligence with respect to their duties as investment fiduciaries. Accordingly, they are required to discharge their duties in the interest of plan participants. They must also act with the same care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a similar capacity and familiar with those matters would use in the conduct of a similar enterprise with similar aims.[2] Specifically related to investments, the board is charged with the duties of establishing and maintaining broad policies and objectives for the investment program along with the recommendations of staff and the external asset consultant.

1 The real return objective is the rate by which the total return exceeds the inflation rate as measured by the CPI, US City Average for all Urban Consumers (CPI-U). As of June 30, 2003, the real return objective was 5% after inflation.

2 Section 105.688, RSMo – Investment Fiduciaries, Duties

Executive Director

The executive director is appointed by, and serves at the pleasure of the board. The board has given the executive director broad authority for planning, organizing, and administering the operations and investments of the system under broad policy guidance from the board. Specifically with regard to investments, the executive director is broadly responsible for the oversight of the investment program. He or she must ensure that system assets are invested in accordance with the board's policies and that internal controls are in place to safeguard system assets. The executive director must also approve all manager hiring and firing decisions and may approve strategic allocation decisions made by the CIO.

Chief Investment Officer (CIO) and Internal Staff

The CIO serves at the pleasure of the executive director, yet has a direct line of communication with the board on investment-related issues. The CIO has primary responsibility for the overall direction of the investment program. The CIO works with the external asset consultant and executive director in advising the board on policies related to the investment program. The CIO has primary responsibility to make hiring and firing decisions related to money managers, but must have the approval of the executive director and external asset consultant in so doing. The CIO is also charged with the responsibility of making strategic allocation decisions with the approval of either the executive director or the external asset consultant. Other responsibilities of the CIO include monitoring the investment of system assets, oversight of external money managers and the internally managed portfolios, and keeping the board apprised of situations which merit their attention. The internal investment staff is accountable to the CIO.

External Asset Consultant

Summit Strategies Group of St. Louis, Missouri serves as the system's external asset consultant. The external asset consultant works at the pleasure of the board. The primary duties of the external asset consultant are to advise the board on policies related to the investment program and to provide a third party perspective and level of oversight to the system's investment program. The external asset consultant must also approve all manager hiring and firing decisions and may approve strategic allocation decisions made by the CIO. The external asset consultant also provides advice and input to the CIO and internal investment staff on investment-related issues and money manager searches.

Internal Auditor

The internal auditor reports directly to the executive director and, if in the opinion of the internal auditor circumstances warrant, may report directly to the board. The internal auditor is independent of the system's investment operations and, among other things, is responsible for providing objective audit and review services for the investment operations. It is the internal auditor's objective to promote adequate and effective internal controls at a reasonable cost which result in suggested improvements that will lead to economies and efficiencies in the system's investment operations.

Master Custodian

Mellon Financial Corp. of Boston, Massachusetts serves as the master custodian of the system's assets, except in cases where investments are held in partnerships, commingled accounts or unique asset classes where it is impossible for them to do so. The master custodian is responsible for maintaining the official book of records, providing performance reports, and serving as an additional layer of risk control in the safekeeping of system assets.

Asset Allocation

The system's asset allocation is regarded as one of the most important decisions in the investment management process. The current asset allocation is designed to achieve the long-term required return objectives of the system, given certain risk constraints. The current asset allocation reflects the need for a diversified portfolio which will perform well in a variety of economic conditions and will help reduce the portfolio's overall volatility. In determining the optimum mix of assets, the board considers five factors:

- The expected rate of return for each asset class.
- The expected risk of each asset class.
- The correlation between the rates of return of the asset classes.
- The investment objectives and risk constraints to the fund.
- The impact of the portfolio's volatility on the contribution rate.

The policy allocation as of June 30, 2003 is illustrated in the table in the following column.

In September of 2002, the board took additional steps to provide for flexibility at the sub-asset class level by granting authority to the chief investment officer, with the approval of the executive director or the external asset consultant, to make sub-asset class allocation decisions based upon expectations for each sub-asset class. This flexibility has allowed the system to take advantage of changing market conditions. The board has placed ranges on the sub-asset class allocations in order to maintain appropriate risk controls. These ranges are included in the table at the top of the following column.

Asset Class	Target Allocation[3]	Strategic Allocation Ranges
Public equity	52.0%	
Domestic equity	27.5	15.0 to 40.0%
Hedged equity	5.0	0.0 to 10.0
Int'l. developed equity	17.0	5.0 to 25.0
Emerging market equity	2.5	0.0 to 5.0
Public debt	30.0	
Core fixed income	10.0	5.0 to 15.0
TIPS	10.0	5.0 to 15.0
High yield bonds	5.0	0.0 to 10.0
Market neutral	5.0	0.0 to 10.0
Alternatives	18.0	
Distressed debt	2.5	0.0 to 5.0
Commodities	2.5	0.0 to 5.0
Timber	5.0	2.5 to 7.5
Private equity	3.0	2.5 to 7.5
REITs/Real estate	5.0	2.5 to 7.5

Rebalancing

It is the responsibility of staff to ensure that the asset allocation is adhered to by following the policy the board has established on rebalancing. Staff has engaged NISA Investment Advisors of St. Louis, Missouri, to assist in the oversight and implementation of the rebalancing policy. MOSERS utilizes a combination of cash market and exchange traded futures transactions to maintain the total fund's allocation at the broad policy level. Month-end reviews are conducted to bring the portfolio back within allowable ranges of the broad policy targets.

Risk Controls

MOSERS' investment program faces numerous risks; however, the primary risk to MOSERS is that the assets will not support the liabilities over long periods of time. In order to control for this risk and numerous other risks that face the system, the board has taken the following steps to help protect the system on an ongoing basis:

3 As of June 30, 2003, the board's long-term policy allocation of 50% public equity, 30% public debt, and 20% alternatives had not been achieved. In fiscal year 2004, we anticipate completing the implementation of this new policy. The shift in asset allocation will come from a reduction in international developed equity to 15% and an increase in private equity to 5%.

- Actuarial valuations are performed each year to ensure the system is on track to meet the funding objectives of the plan. In addition, every five years an external audit of the actuary is conducted to ensure that the assumptions being made and calculation methods being utilized are resulting in properly computed liabilities.
- Asset/Liability studies are conducted at least once every five years. The purpose of this study is to ensure that the current portfolio design is structured to meet the system's liabilities. This is also a time when investment expectations are reexamined in a more detailed way.
- A governance policy and investment policy statement are in place to ensure that board policies are clearly identified. Within these documents, the desired outcomes are outlined, individuals are identified as to their responsibility for particular areas of the portfolio's management, and details are lined out as to how the outcomes will be measured by the board. In addition, reporting requirements are clearly identified to ensure appropriate checks and balances are in place.

Performance Objectives and Monitoring Process

Total Fund

Generating returns net of expenses in excess of the RRO of 5% after inflation remains the primary performance objective for the total fund over the long-term. The reason for the long-term focus on this objective is to preclude the temptation to overreact to events in the marketplace that have no relevance in long-term asset/liability management. The resulting dilemma is the conflicting need to evaluate investment policy implementation decisions over shorter time frames while maintaining the longer-term focus necessary to manage and measure the fund's performance relative to the RRO. To address this problem, the Board evaluates performance relative to policy and strategy benchmarks which help to evaluate the board's broad policy decisions and the staff and external consultant's implementation decisions. Policy benchmarks measure broad investment opportunities of each asset class in which MOSERS has chosen to invest. The strategy benchmarks represent decisions made by the CIO to strategically deviate from the midpoint of the policy asset allocation within each sub-asset class. The return of the strategy benchmarks are determined based upon the actual weight of the asset class multiplied by the appropriate benchmark.

The policy and strategy benchmarks are used in the following manner to evaluate decisions made by the board and staff:

- Board Decisions - The value added through board policy decisions is measured by the difference between the total fund policy benchmark return and the RRO. This difference captures the value added by the board through their broad policy asset allocation decisions relative to the required rate of return objective necessary to meet the actuarial assumptions. A policy benchmark return greater than the RRO reflects value added through board decisions. A policy benchmark return less than the RRO reflects losses or shortfalls in performance in funding the liabilities of the system. These policy decisions are measured over long periods of time.

- Staff and External Asset Consultant Decisions - There are two components to decisions made by the staff and external asset consultant which are monitored by the board on an ongoing basis. These include 1) strategic sub-asset class allocation decisions made by the CIO with the approval of the executive director or external asset consultant and, 2) implementation decisions which include manager hiring and termination decisions made by the CIO with the approval of the executive director and external asset consultant.

  Strategy Decisions are sub-asset class allocation choices made by the CIO with the approval of the executive director or external asset consultant to deviate from the policy benchmark weight. The value added through these decisions to overweight or underweight these sub-asset classes is measured by the difference between the strategy benchmark return and the policy benchmark return. This difference captures the value added by the CIO through sub-asset class strategic decisions relative to the board's broad policy allocation decisions. A strategy benchmark return greater than the policy benchmark return reflects value added through the sub-asset class allocation decisions. A strategy benchmark return less than the policy benchmark return reflects losses to the fund's performance based upon strategy decisions. Strategy decisions should be measured over all periods of time, with majority weight placed on outcomes that have occurred over a market cycle.

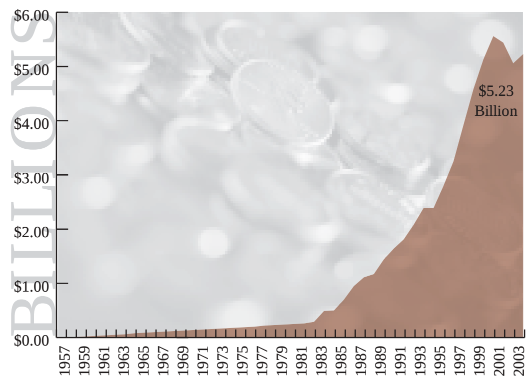
Implementation Decisions are money manager selection choices made by the CIO with the approval of the executive director and the external asset consultant. The value added through these manager selection decisions is measured by the difference between the actual portfolio return and the strategy benchmark return. This difference captures the value added through these manager hiring decisions. An actual portfolio return greater than the strategy benchmark return reflects value added through these manager selection decisions. An actual portfolio return less than the strategy benchmark return reflects losses to the fund's performance based upon implementation decisions. Implementation decisions should be measured over all periods of time, with a majority weight placed on outcomes that have occurred over a market cycle.

The board receives performance information on a quarterly basis to help ensure adequate monitoring of the fund's overall performance objectives.

Asset Classes

At the broad asset class level, policy and strategy benchmarks have been established to measure board, strategic, and implementation decisions. At the manager level, performance is measured against appropriate benchmarks for each particular investment mandate. Investment guidelines have been established for each manager outlining specific expectations for each portfolio. In addition, many managers are employed with performance-based fee structures which help to align the manager's interests with the total fund's objectives.

Total Fund Review



Total Fund Market Value

As of June 30, 2003, the MOSERS investment portfolio had a market value of $5.23 billion. The chart to the left illustrates the growth of the MOSERS' portfolio since the system's inception.

Total Fund Investment Performance

The MOSERS' investment portfolio returned 7.0% in fiscal year 2003. Performance for the fiscal year may be attributed to the various sub-asset classes. The table below illustrates each sub-asset class' contribution to the total return.

Sub-Asset Class Returns for Fiscal Year Ended June 2003

Sub-Asset Class	Fiscal Year Return	Contribution to Total Return
Domestic equity	2.4%	0.4%
Developed international equity	(6.7)	(1.2)
Emerging markets equity	9.1	0.5
Hedged equity * (1/03)	5.1	0.2
Total public equity	(1.3%)	(0.1%)
Core fixed income	11.0	1.9
High yield	21.4	0.9
TIPS	20.0	1.8
Market neutral * (12/02)	6.0	0.3
Total public debt	16.3%	4.9%
REITs/Real estate	3.3	0.2
Commodities	25.0	0.5
Distressed debt * (9/02)	68.5	1.5
Timber * (6/03)	(2.6)	(0.1)
Private equity * (6/03)	0.5	0.0
Total alternative investments	21.6%	2.1%
Cash[4]	32.5%	0.1%
Total fund	7.0%	7.0%

* Returns since inception as the accounts were funded after July 2002

Investment Performance vs. the RRO[5]

The first measure of comparison for the portfolio's investment performance is to determine how well the fund performed relative to the RRO. The RRO is the rate established by the board that MOSERS' investment portfolio must earn in order to meet future plan obligations after accounting for inflation. The actuarial funding objective is to produce a return that exceeds the rate of inflation by 5% per year. The best known measure of inflation is the Consumer Price Index (CPI).[6] For purposes of examining fund performance relative to the RRO, we are interested in long periods of time. Given the volatile nature of the investment markets, we should not expect the portfolio to always meet the RRO in the short-term. From the graph on the following page, one can see that MOSERS' investment returns have exceeded the RRO over long time periods since the mid 1980s.[7]

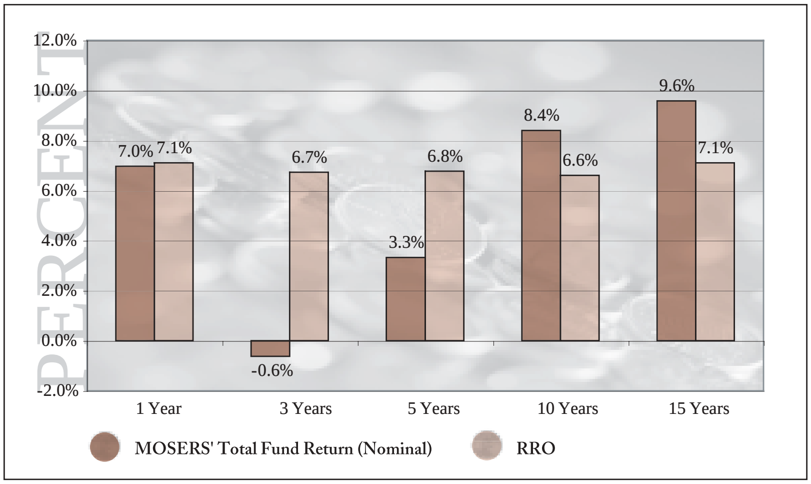
4 The return for cash includes income from securities lending, securities litigation, and other miscellaneous sources.

5 The real return objective is the rate by which the total return exceeds the inflation rate as measured by the CPI, U.S. City Average for all Urban Consumers (CPI-U).

6 CPI Source: United States Department of Labor, Bureau of Labor Statistics (not seasonally adjusted). MOSERS' real return is the excess return over the CPI utilizing the formula: Real = (1+Nominal)/(1+CPI)-1.

7 Performance returns were calculated using a time-weighted rate of return based on market values.

Total Fund Actual Return vs. Real Return Objective



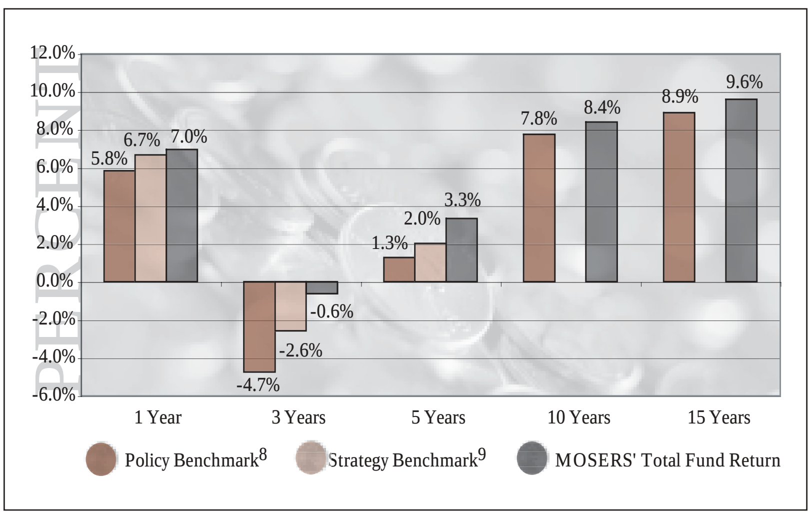
Investment Performance vs. Benchmark Comparisons

In addition to measuring the portfolio's performance relative to the RRO, the board also compares fund returns to the following two benchmarks: the policy benchmark and the strategy benchmark. Descriptions of the policy and strategy benchmarks follow.

<u>Policy Benchmark</u> - The policy benchmark provides an indication of the returns that could be achieved (excluding transaction costs) by a portfolio invested passively in the broad market with percentage weights allocated to each asset class in the MOSERS' policy asset allocation.

<u>Strategy Benchmark</u> - The strategy benchmark is more narrowly defined and focuses on the sub-asset class allocation decisions made by the CIO with the approval of the executive director or external asset consultant. Prior to 1995, strategy benchmarks were not clearly defined.

Total Fund Returns vs. Benchmarks



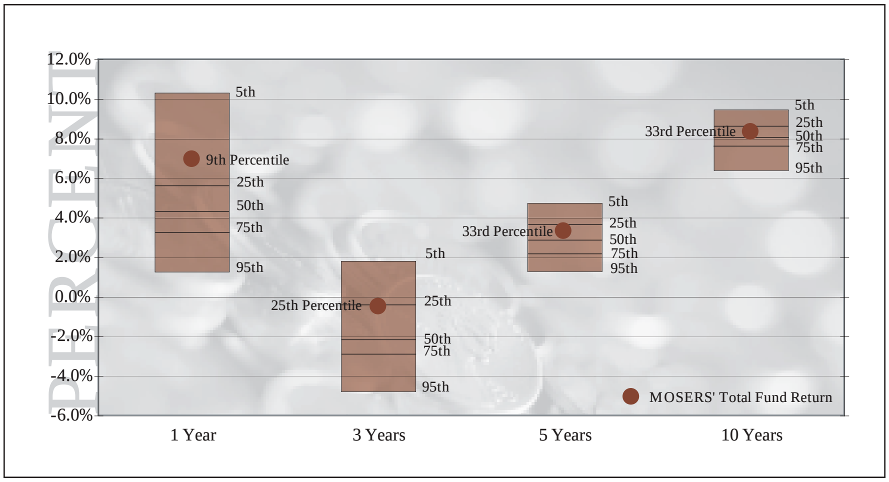
The historical returns for the total fund versus these benchmarks are displayed in the chart to the left. By comparing the policy benchmark to the strategy benchmark, the board is able to determine what value is being added through strategic decisions made by the CIO to position the fund away from the policy allocation. Value is being created if the strategy benchmark returns exceed the policy benchmark returns.

Similarly, by comparing the actual return to the strategy benchmark, the board will, over time be able to judge the success or failure of the staff and consultant in implementing the CIO's strategic decisions. The primary implementation decision is in determining which managers the fund should employ. Value is being added from manager selection if the total fund return exceeds the strategy benchmark return.

8 As of 6/30/03, the policy benchmark was comprised of the following components: 52% total equity policy benchmark, 30% total fixed income policy benchmark, 18% total alternatives policy benchmark.

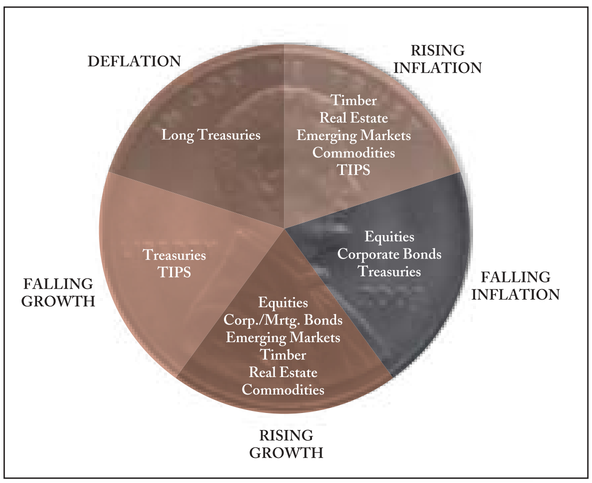
9 As of 6/30/03, the strategy benchmark was comprised of the following components: 52.1% total equity strategy benchmark, 29.4% total fixed income strategy benchmark, 18.5% total alternatives strategy benchmark. The weights of each component change each month according to the actual allocation of the fund at month end.

Total Fund Return vs. ICC Universe



Investment Performance vs. Peer Universe
Finally, but to a lesser extent, the board compares total fund performance to the returns generated by a peer group of public pension funds generated by the Independent Consultants Cooperative (ICC)[10] universe. For the past fiscal year, MOSERS' total fund return of 7.0% ranked in the ninth percentile of the ICC universe of public pension plans with assets in excess of $1 billion. Historical data about MOSERS' total fund performance within the ICC universe is provided in the chart to the left.

Economic Diversification



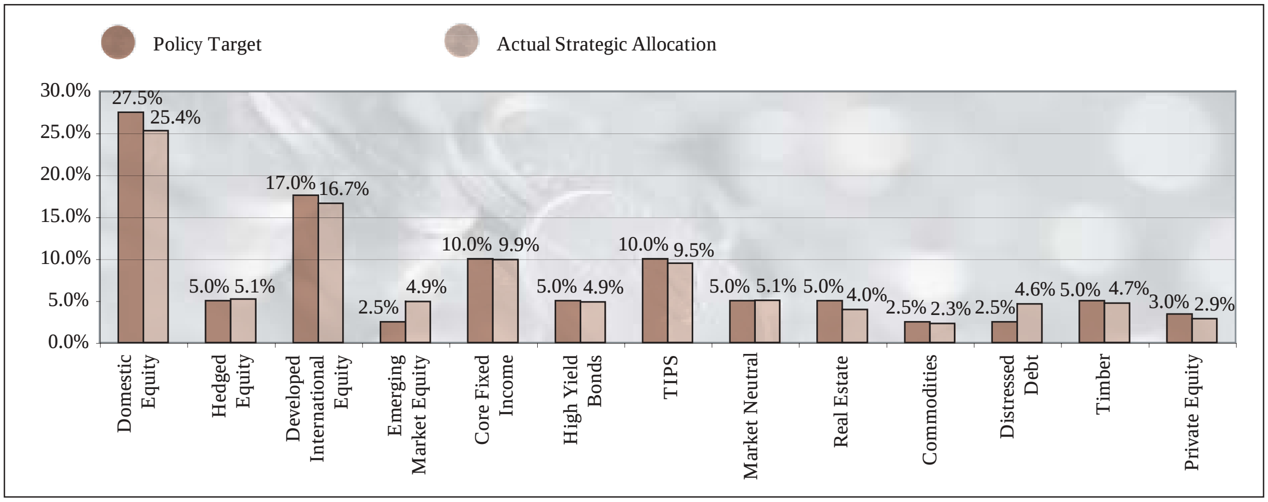
Total Fund Asset Allocation Overview
In the spring of 2002, staff, in conjunction with Summit Strategies, the system's external asset consultant, conducted an asset/liability study to reexamine the policy asset allocation of the fund. The objective of the study was not only to assess the portfolio's ability to generate the RRO given expectations about returns from the various types of investments, but to also lower the total portfolio volatility. The formal study revealed that the MOSERS' portfolio could be further diversified in order to protect it from a variety of economic scenarios that might play out over time, thus reducing the volatility of the portfolio and ultimately contribution rates. The pie chart to the left summarizes the economic diversification of the portfolio as of June 30, 2003.

Historically, once the policy asset allocation was established, the portfolio was allowed to stray very little from static policy targets. Little thought was given to the valuations of various strategies and no attempt was made to position the portfolio "strategically" to take advantage of opportunities in this regard. A strategic decision should be thought of as any decision that might cause MOSERS' actual portfolio to differ from the policy asset allocation. In September of 2002, the board granted the CIO the authority to make strategic allocation decisions subject to predefined ranges. This authority has allowed the fund to capitalize on investment opportunities that have looked attractive or avoid full weightings to asset classes that have not appeared to present attractive opportunities. In its first year of implementation, the authority to make these decisions along with manager hiring and termination decisions generated an additional 1.1% of return, or approximately $56.7 million of additional assets to the total portfolio.

10 The ICC is a cooperative of 13 independent investment consultants from across the United States and one major custodial bank that collectively provide performance data in order to create a universe for peer returns.

The chart below illustrates the policy target as of June 30, 2003, along with the actual strategic allocation to each type of investment. While it may take several years to fully implement the board's policy mix, the majority of the changes occurred within the first six months of FY03.

Total Fund Policy vs. Actual Allocation (as a percentage of the total fund)



Total Fund Beta and Alpha Continuum

One of the outgrowths of the new asset allocation is an increased focus on alpha. Alpha is the return generated by an investment manager's ability to select investments within their investment universe that outperform their broad asset class. In contrast, beta is the return achieved simply by being invested in the broad asset class. It is MOSERS' belief that alpha will be a much more important component to the return equation in the future than it has been over the last 20 years. That being said, MOSERS has taken action in the past year to seek out managers who we believe have particular talent for finding value above and beyond the broad asset classes, particularly in inefficient markets where we believe the opportunities for generating alpha are more abundant. The chart below shows the continuum of beta and alpha strategies for various asset classes within the portfolio as of June 30, 2002 compared to June 30, 2003.

Continuum of Beta and Alpha Strategies

Schedule of Investment Portfolios

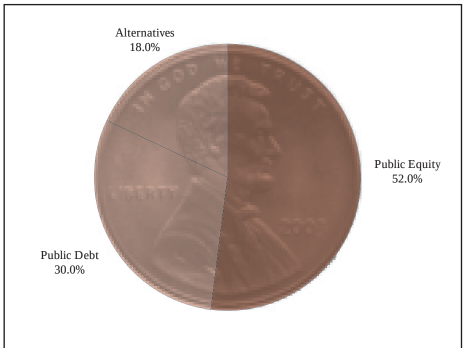
(by Asset Class)

As of June 30, 2003

	Fair Value
Public equity	
Domestic equity	$ 1,325,510,679
International developed equity	870,325,635
Emerging market equity	255,233,340
Hedged equity	263,115,290
Total equity	2,714,184,944
Public debt	
Core fixed income	518,224,347
High yield bonds	255,368,271
TIPS	496,215,126
Market neutral	264,231,137
Total fixed income	1,534,038,881
Alternative investments	
Real estate	207,206,061
Commodities	119,787,496
Distressed debt	241,256,002
Private equity - temporary	150,547,332
Timber - temporary	246,238,030
Total alternative investments	965,034,921
Other	
Other investments	8,217,981
Cash reserve	10,590,480
Total other	18,808,461
Grand total	$ 5,232,067,207

Reconciliation to *Statement of Plan Net Assets*	
Total portfolio value	$ 5,232,067,207
STIF	(252,556,014)
Uninvested cash	(60,004,550)
Cash held at Lehman Brothers	(825,034)
Accrued income	(31,012,807)
Accounts receivable securities sold	(140,538,263)
Accounts payable securities purchased	248,794,828
Investments per *Statement of Plan Assets*	$ 4,995,925,367

Public Equity Asset Class Summary



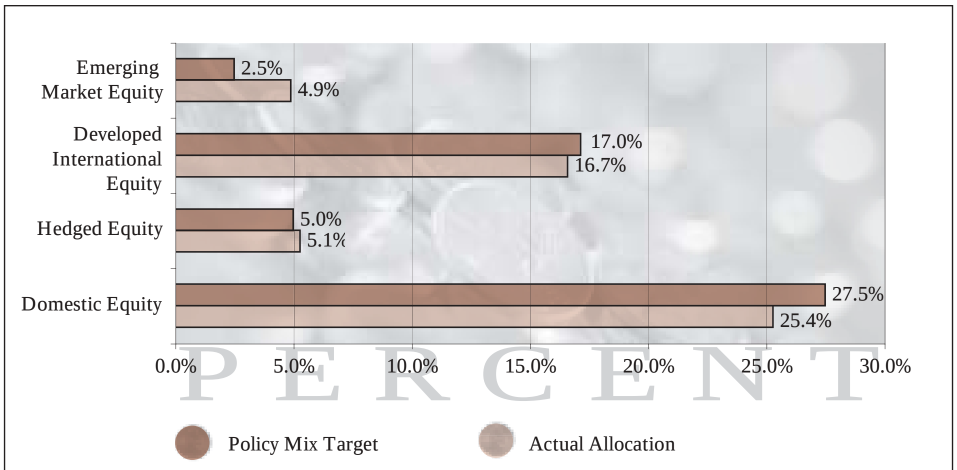
Public Equity Market Value

As of June 30, 2003, the MOSERS public equity portfolio had a market value of $2.7 billion, representing 52.1% of the total fund.

Public Equity Portfolio Structure

The public equity portfolio has a target allocation of 52% of the total fund as illustrated in the pie chart to the left. This portfolio is comprised of four sub-asset classes which include domestic equity, hedged equity, international developed equity, and emerging market equity. In June 2002, the board established the sub-asset class target policy allocation mix illustrated in the bar chart below. This chart compares the target policy mix to the actual sub-asset class mix as of June 30, 2003. In September 2002, the board granted the CIO authority to make strategic allocation decisions within established ranges. This flexibility allows for strategic allocation decisions at the margins, while imposing risk controls. Decisions to overweight or underweight sub-asset classes as of June 30, 2003 are reflected in the allocation bar chart. The table below the bar chart to the left summarizes the sub-asset class allocation ranges established by the board.

Public Equity Policy vs. Actual Allocation (as a percentage of the total fund)



Public Equity Strategic Sub-Asset Allocation Ranges (as a percentage of the total fund)

Sub-Asset Class	Minimum	Maximum	Policy Target
Domestic equity	15.0%	40.0%	27.5%
Hedged equity	0.0	10.0	5.0
Developed international equity[11]	5.0	25.0	17.0
Emerging market equity	0.0	5.0	2.5
Total public equity allocation			52.0%

Public Equity Market Overview

It was a bumpy ride for the domestic equity markets during FY03, but a ride that ended at a better place than the previous two years. The Russell 3000 index ended the year in positive territory for the first time in three years. It's return of 0.8% was not much, but it was a big improvement over the 14.0% and 17.0% losses for the two previous fiscal years. The less than 1% gain might give the impression of an uneventful year for the domestic market; this could not be further from the truth.

The ride started with a big dip at the beginning of the fiscal year. By July 23rd the market was already down over 19.0%. In the next month the market was up 20.0%, leaving it down about 3.0% for the FY. This roller coaster ride continued with another dip and climb before Thanksgiving. Heading into December the market was down about 5.0% for the fiscal year.

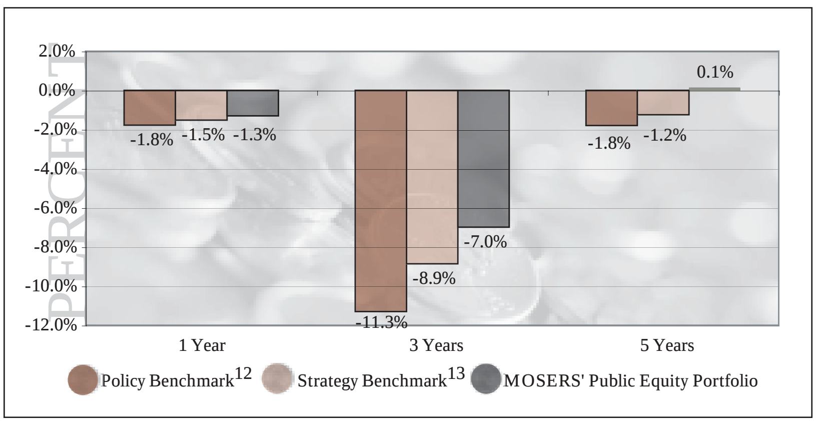
11 When the board's policy mix is fully implemented, the developed international equity target will be reduced to 15%, bringing the total public equity allocation down to 50%.

Concerns over the war caused the market to fall 14.0% by March 11th, leaving it down 18.0% for the year. From the low on March 11th, the market climbed steadily. The end of major fighting in Iraq combined with Federal Reserve easing, tax cuts, and positive earnings announcements from corporate America helped to produce a 21.0% return over the last three and one half months. The roller coaster ride ended just about where it started; after all of the dips and climbs, the market was up less than 1.0% for the fiscal year.

The international markets produced similar, but not as good results. For the year, the portfolio was down about 4.0%; however, the final quarter of the year saw the portfolio rise 19.0%. The fact that the dollar began to weaken after years of strengthening added to the portfolio return. The weakening U.S. dollar caused the dollar based return to beat the local currency return by about 6.0%. This means that the foreign stocks were down over 10.0% in local currencies but only 4.0% in U.S. dollars. Most of the same factors that drove the domestic markets were also the drivers in the international markets. It is looking as if the Japanese market is starting to turn after over a decade of poor performance.

We continue to be cautious on the equity markets both in the U.S. and Europe, as valuations remain above long-term averages. Valuations are certainly more reasonable in Japan and in many of the emerging markets. The portfolio is currently significantly overweight in the emerging markets and slightly overweight in Japan. These overweights are offset by underweights in the US and Western Europe.

Public Equity Returns vs. Benchmarks



Public Equity Performance

The public equity portfolio returned -1.3% for the fiscal year, exceeding the policy benchmark return of -1.8% and the strategy benchmark return of -1.5% as illustrated in the graph to the left. Despite the negative absolute performance, MOSERS' public equity portfolio added value relative to the broad equity market as measured by the policy benchmark. The positive performance of the actual portfolio relative to the policy benchmark shows value added by staff and the external asset consultant through strategic decisions and manager hiring decisions. The strategy benchmark is compared to the policy benchmark to capture the value added by the staff's decision to overweight or underweight given sub-asset classes within this category. The actual portfolio return is compared to the strategy benchmark to reflect value added through manager selection decisions. A majority of the outperformance in the public equity portfolio over the past year may be attributed to the managers in the concentrated domestic equity portfolio. The four managers combined to outperform the Russell 3000 by nearly 9% (9.62% vs. 0.77%) on 11.6% of the total fund. A developed international manager continued to outperform the index. During FY03 the manager beat the index by over 8.0%. For three years, the manager has provided an 8.9% return per year while the index returned -13.5% per year over this same time period. Historical performance information is also included in the chart above.

12 As of 6/30/03, the policy benchmark for public equity was 62.5% Russell 3000, 32.7% MSCI EAFE Net, 4.8% MSCI EMF.

13 As of 6/30/03, the strategy benchmark for public equity was 48.8% Domestic Equity Strategy Benchmark (comprised of the S&P 500, Russell 2500 Value, Russell 3000), 9.7% Russell 3000, 32.1% MSCI EAFE Net Index, and 9.4% MSCI Emerging Markets Free Index. The weights of each component change each month according to the actual allocation of the fund at month end.

Public Equity Allocation - Top 10 Holdings

The top 10 holdings within the public equity portfolio as of June 30, 2003 are illustrated below. A complete listing of holdings is available upon request.

Ten Largest Holdings as of June 30, 2003	Market Value	% of Total MOSERS' Public Equity Portfolio
Pfizer	33,824,551	1.2
Microsoft	31,082,654	1.1
General Electric	25,932,169	1.0
Cisco Systems	24,141,199	0.9
AOL Time Warner, Inc.	18,508,681	0.7
American International Group, Inc.	18,149,199	0.7
JP Morgan Chase & Co	15,765,217	0.6
Citigroup, Inc.	15,216,770	0.6
Wal-Mart Stores, Inc.	14,458,698	0.5
Boots Group, PLC	14,287,945	0.4

Public Equity FY03 Highlights

The public equity portfolio underwent some restructuring throughout FY03, as changes were made to implement the board's broad policy decisions established as a result of the 2002 asset/liability study. Throughout the year, staff made progress in implementing the board's asset allocation policy decisions. Below are just a few of the highlights:

- Blackstone Alternative Asset Management was hired to manage the hedged equity allocation.
- Oaktree Capital Management was hired to manage an emerging markets allocation.
- The allocation to a number of managers was adjusted to bring the portfolio in-line with the new asset allocation.

Domestic Equity

Domestic Equity Market Value

The domestic equity allocation was $1.3 billion or 25.4% of the total fund as of June 30, 2003.

Summary of the Domestic Equity Portfolio

MOSERS maintains a significant allocation to publicly traded shares of corporations domiciled in the United States. Domestic equities are held in broadly diversified portfolios representing a variety of styles, sectors, and market capitalizations. The domestic equity component is expected to contribute significantly to the fund's achievement of a long-term real return in excess of the 5% objective set by the board due to equities' historic return premium over inflation. In addition, we would expect this component to perform well in periods of falling inflation and rising growth and offer income potential through dividend payments. As of June 30, 2003, MOSERS was slightly underweight in this sub-asset class relative to the policy mix.

Characteristics	Domestic Equity Portfolio	Russell 3000
Number of securities	1,150	3,000
Average market capitalization	$56.3 B	$70.8 B
Portfolio yield	1.3%	1.7%
Portfoio P/E	18.7	18.4
Portfolio beta vs. S&P 500	1.2	1.0
Price/Book ratio	2.3	2.8

Domestic Equity Statistics

The corresponding table displays the statistical characteristics of the domestic equity portfolio as of June 30, 2003, with comparisons shown to the Russell 3000 Index.

Domestic Equity Investment Advisors

As of June 30, 2003, MOSERS had contracts with six external investment advisors who managed 79.0% of the domestic equity portfolio. The remaining 21.0% of the portfolio is managed internally by staff in a passive S&P 500 Index fund.

In FY03 there were no new managers hired or terminated within the domestic equity portfolio. Two high yield bond managers were reassigned from the public equity portfolio to the public debt portfolio. The internally-managed REIT portfolio was reassigned from public equity to alternative investments.

Investment Advisor	Investment Style	Market Value as of June 30, 2003[14]	FY03 Management Fee
Internal Staff[15]	Passive S&P 500 Index	$ 281,932,577	$ 0
OakBrook Investments	Enhanced S&P 500 Index	166,361,279	252,669
Dimensional Fund Advisors	Enhanced Non-Large Value	255,117,242	403,144
Legg Mason Capital Management[16]	Active All-Cap	152,966,893	833,199
Capital Guardian Trust Company	Active All-Cap	149,749,920	367,879
Oak Associates[16]	Active All-Cap	148,453,131	861,002
AmeriCap Advisers	Active All-Cap	158,494,467	232,053
Total		$ 1,313,075,509	$ 2,949,946

Domestic Equity Brokerage Activity

The following brokerage activity occurred within the domestic equity portfolio throughout the fiscal year:

Brokerage Firm	Shares Traded	Dollar Volume of Trades	Commissions	
			Dollar Amount	Value Per Share
U.S. Clearing Instinet	49,373,650	$720,024,689	$651,907	$0.013
Guzman & Co.	5,546,023	150,206,666	72,478	0.013
Investment Technology Group	7,933,446	123,240,370	150,903	0.019
Bear Stearns	6,648,281	73,666,920	124,447	0.019
Salomon Smith Barney	3,114,391	58,654,986	99,147	0.032
Bank of America	3,540,927	51,143,541	114,081	0.032
Citigroup Global Market	2,808,900	49,535,010	79,678	0.028
Cantor Fitzgerald	2,845,754	47,253,284	96,546	0.034
Jefferies and Co.	2,097,499	46,167,133	68,379	0.033
Instinet	3,275,480	38,278,713	51,613	0.016
Lehman Brothers	3,491,700	34,037,302	75,841	0.022
Merrill Lynch	2,154,118	31,863,499	98,466	0.046
Brooks Securities	1,026,164	28,104,706	30,785	0.030
Montgomery Securities	1,123,715	28,067,225	34,294	0.031
Lynch Jones & Ryan	1,081,706	23,483,587	28,036	0.026
B Trade Services, LLC	1,534,499	16,014,758	39,570	0.026
Morgan Stanley	699,911	14,430,438	32,084	0.046
Rochdale Securities	606,700	12,895,650	12,839	0.021
Warburg Dillion Read	497,100	12,884,852	24,855	0.050
SC Bernstein	520,000	11,187,920	15,767	0.030
Others (Including 60 brokerage firms)	8,361,959	127,341,362	380,558	0.046
Totals	108,281,923	$1,698,482,611	$2,282,274	$0.021
Zero Commission trades excluded from above	17,802,484	$147,694,740		

14 The total market value of domestic equity displayed in this table does not include funds held in the domestic equity rebalancing account managed by NISA Investment Advisors, LLC.

15 Fees for the management of internal assets are captured in the general operating expenses of the system.

16 Total FY03 management fee does not reflect incentive fees which may be payable in the future, or fees which may be returned due to performance.

Domestic Equity Soft Dollar Expenditures

In the fiscal year ended June 30, 2003, MOSERS' domestic equity managers declared $288,832 of the commissions generated were utilized to acquire a variety of services and research information. These expenditures, referred to as soft dollars (expendable excess commissions), are permitted under current SEC investment advisor guidelines, and represent 12% of MOSERS' agency commissions.

Types of Services Acquired	Commissions Used	Percentage of Total
Trading/Analytic Systems	$181,626	62.9%
Research Services	73,779	25.5
Portfolio Mgmt. Systems	12,394	4.3
Pricing Services	7,407	2.6
Exchange Fees	6,538	2.3
Transaction Cost Analysis	4,384	1.5
Consulting, Benchmarks	2,025	0.7
Proxy Services	679	0.2
Total	$288,832	100.0%

Hedged Equity

Hedged Equity Market Value

The hedged equity allocation was $263.1 million or 5.1% of the total fund as of June 30, 2003.

Summary of the Hedged Equity Portfolio

The hedged equity portfolio was a new sub-asset class added to the total fund in fiscal year 2003. Hedged equity managers utilize skill-based investment strategies, which allow them to take advantage of periodic inefficiencies that may exist within the market. Hedged equity managers seek to produce consistent returns in various economic environments. The ultimate goal within the public equity portfolio is to provide downside protection in slumping equity markets. MOSERS utilizes a fund-of-funds approach to gain exposure to this asset class. This allows MOSERS to invest in a pool of hedged equity strategies which provides additional risk protection. As of June 30, 2003, MOSERS' weight to this sub-asset class was at the policy weight of 5% of the total fund.

Characteristics	For Life of the Fund
Average number of managers	19
Cumulative geometric return	4.8%
Annualized standard deviation	2.4%
Sharpe ratio	3.6
Beta	0.2
Alpha (annualized)	4.6%
Index correlation[17]	0.9%

Hedged Equity Statistics

The table to the left displays the statistical characteristics of the hedged equity portfolio as of June 30, 2003.

17 S&P 500 Index

Hedged Equity Investment Advisors

In FY03, MOSERS hired Blackstone Alternative Asset Management as a strategic partner to make investments within the hedged equity sub-asset class and provide ongoing consulting and education to staff. Below is a table summarizing our investment with them as of June 30, 2003.

Investment Advisor	Investment Style	Market Value as of June 30, 2003	FY03 Management Fee
Blackstone Alternative Asset Management[18]	Long/Short Equity	$263,115,290	$1,202,227

International Developed Equity

International Developed Equity Market Value

As of June 30, 2003, the international developed equity portfolio was $870.3 million, or 16.7% of the total fund.

Summary of the International Developed Equity Portfolio

MOSERS' international developed equity allocation allows for the participation in the growth of non-U.S. companies. Historically, this asset class has had returns at a premium relative to inflation, thus enhancing the total fund's ability to achieve the long-term real rate of return objectives of 5.0%. It is anticipated that this sub-asset class will perform well in periods of falling inflation and periods of rising growth. In addition, this asset class provides diversification to the total equity portfolio. As of June 30, 2003, MOSERS' allocation was at 16.7% of the total fund, slightly lower than the policy allocation target of 17.0%.

Characteristics	International Developed Equity Portfolio	MSCI EAFE Index
Number of securities	915	1013
Average market capitalization	$23.2 B	$39.0 B
Portfolio yield	2.5%	2.7%
Portfoio P/E	16.7	16.8
Portfolio beta vs. S&P 500	0.9	1.0
Price/Book ratio	1.8	2.3

International Developed Equity Statistics

The table to the left displays the statistical characteristics of the international developed equity portfolio as of June 30, 2003, with comparisons shown to the Morgan Stanley Capital International Europe Australia Far East Index (MSCI EAFE).

International Developed Equity Investment Advisors

As of June 30, 2003, MOSERS had contracts with three external investment advisors for the management of three separate international developed equity portfolios. Two of these advisors are managing active portfolios and are expected to add incremental returns over the MSCI EAFE index through stock selection, country selection, and small amounts of currency hedging. The third manager runs an enhanced index portfolio that is expected to add small amounts of return over the MSCI EAFE Index while matching country weights within the index.

The table at the top of the following page displays the external firms that were under contract with MOSERS during FY03 for management of international developed equity portfolios, as well as portfolio market values and management fees.

18 Portfolio market value does not include amounts held in the alternatives asset class within the private equity allocation.

Investment Advisor	Investment Style	Market Value as of June 30, 2003[19]	FY03 Management Fee
Merrill Lynch Quantitative Advisors	Enhanced EAFE	$198,123,067	$ 541,216
Silchester International Investors	Active Value	345,920,758	1,439,055
Mastholm Asset Management	Active Growth	326,281,807	1,414,314
Total		$870,325,632	$3,394,585

International Developed Equity Brokerage Activity

The following brokerage activity occurred within the international developed equity portfolio throughout the fiscal year:

			Commissions	
Brokerage Firm	Shares Traded	Dollar Volume of Trades	Dollar Amount	Basis Points
Merrill Lynch	25,377,355	$171,756,722	$353,642	20.6
Credit Suisse First Boston	14,457,005	133,408,640	306,027	22.9
UBS Warburg	15,622,798	112,655,276	242,879	21.6
Morgan Stanley	7,682,542	105,177,697	236,292	22.5
Deutsche Bank	7,191,400	94,444,451	224,705	23.8
Goldman Sachs	6,879,000	91,288,438	189,604	20.8
BNP Paribas	7,324,701	83,240,885	203,614	24.5
Credit Lyonnais	11,237,700	82,889,457	203,900	24.6
Societe Generale	4,756,249	80,730,311	192,899	23.9
Nomura	4,040,190	64,929,860	121,224	18.7
Dresdner Kleinwort	7,287,486	49,462,964	65,217	13.2
Cheuvreux De Virieu	3,209,900	48,823,203	121,361	24.9
Mainfirst Bank	951,000	34,604,318	83,864	24.2
Lehman Brothers	1,752,050	34,419,332	65,652	19.1
JP Morgan	2,713,900	31,573,089	68,475	21.7
Enskilda Securities	5,421,281	31,352,426	77,543	24.7
ABN AMRO	3,277,282	31,019,887	70,317	22.7
Nesbitt Burns	1,019,200	27,853,594	34,160	12.3
TD Waterhouse Securities	1,020,900	22,832,066	29,884	13.1
Oppenheim	666,300	19,376,244	47,298	24.4
Other (Including 22 brokerage firms)	18,705,059	100,781,667	263,131	26.1
Total	150,593,298	$1,452,620,527	$3,201,688	22.0
Zero Commission trades excluded from above	59,858,169	$305,003,377		

19 The total market value of international developed equity displayed in this table does not include funds held in the international equity rebalancing account managed by NISA Investment Advisors, LLC.

International Developed Equity Soft Dollar Expenditures

In the fiscal year ended June 30, 2003, MOSERS' international developed equity managers declared $225,423 of the commissions generated were utilized to acquire a variety of services and research information. These expenditures, referred to as soft dollars (expendable excess commissions), are permitted under current SEC investment advisor guidelines, and represent 7.0% of MOSERS' agency commissions.

Types of Services Acquired	Commissions Used	Percentage of Total
Consulting, Benchmarks	$ 0	0.0%
Exchange Fees	0	0.0
Market Research	0	0.0
Portfolio Mgmt. Systems	0	0.0
Pricing Services	43,822	19.4
Proxy Services	0	0.0
Research Services	181,601	80.6
Trading/Analytic Systems	0	0.0
Transaction Cost Analysis	0	0.0
Total	$ 225,423	100.0%

Emerging Market Equity

Emerging Market Equity Market Value

As of June 30, 2003, the emerging markets equity portfolio was $255.2 million, or 4.9% of the total fund.

Summary of the Emerging Market Equity Portfolio

The emerging market equity allocation allows for the participation in the growth of companies in emerging economies outside of the U.S. It is anticipated that this sub-asset class will perform well in periods of rising inflation, as these economies tend to be driven by commodity businesses. In addition, this asset class provides diversification to the total equity portfolio. As of June 30, 2003, MOSERS' allocation was 4.9% of the total fund, almost double the policy allocation target of 2.5%.

Characteristics	Emerging Market Equity Portfolio	MSCI EMF Index
Number of securities	320	657
Average market capitalization	$8.5 B	$10.4 B
Portfolio yield	2.5%	2.9%
Portfoio P/E	10.3	10.5
Portfolio beta vs. S&P 500	1.2	1.0
Price/Book ratio	1.5	2.3

Emerging Market Equity Statistics

The table to the left displays the statistical characteristics of the emerging market equity portfolio as of June 30, 2003, with comparisons shown to the Morgan Stanley Capital International Emerging Markets Free Index (MSCI EMF).

Emerging Market Equity Investment Advisors

As of June 30, 2003, MOSERS had two emerging market equity managers. Throughout the fiscal year one manager, Oaktree Capital Management, LLC, was hired in this sub-asset class for an active mandate.

The following table displays the firms that were under contract with MOSERS during FY03 for management of emerging market equity portfolios, as well as portfolio market values and management fees.

Investment Advisor	Investment Style	Market Value as of June 30, 2003	FY03 Management Fee
Merrill Lynch Quantitative Advisors	Enhanced Emerging Markets Free Index	$230,041,562	$194,495
Oaktree Capital Management, LLC[20]	Active Emerging Markets Fund	25,191,778	41,667
Total		$225,233,340	$236,162

Emerging Market Equity Brokerage Activity

The table below summarizes brokerage activity which occurred within the emerging market equity portfolio throughout the fiscal year. Information in the table is strictly for the Merrill Lynch Emerging Markets Free portfolio.

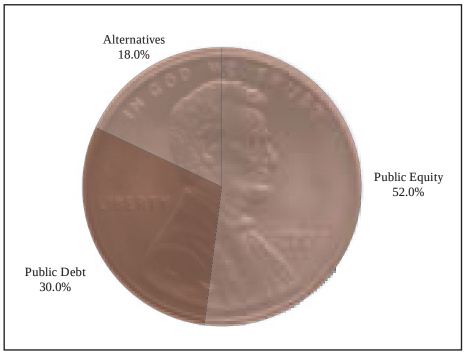
			Commissions	
Brokerage Firm	Shares Traded	Dollar Volume of Trades	Dollar Amount	Basis Points
B Trade Services, LLC	7,000	$520,475	$123	2.4
Citibank	328,484	330,610	1,032	31.2
HSBC Securities	97,562	1,888,006	7,810	41.4
Instinet	5,000	381,502	100	2.6
James Capel	2,723	145,275	872	60.0
JP Apex Securities	2,020,257	2,242,631	7,849	35.0
JP Morgan	25,638,713	27,550,160	61,455	22.3
Morgan Stanley	24,126,163	10,699,760	27,019	25.3
Salomon Smith Barney	24,750,325	21,152,294	52,172	24.7
UBS Warburg	68,978,645	13,990,936	17,772	12.7
Total	145,954,872	$78,901,649	$176,204	22.3
Zero commission trades excluded from above totals included	837,400,099	$7,800,924		

Emerging Market Soft Dollar Expenditures

There was no soft dollar activity within this sub-asset class within FY03 for the Merrill Lynch Emerging Markets Free portfolio.

20 Management fees paid do not reflect performance-based fees which may have accrued but have not yet been paid.

Public Debt Asset Class Summary



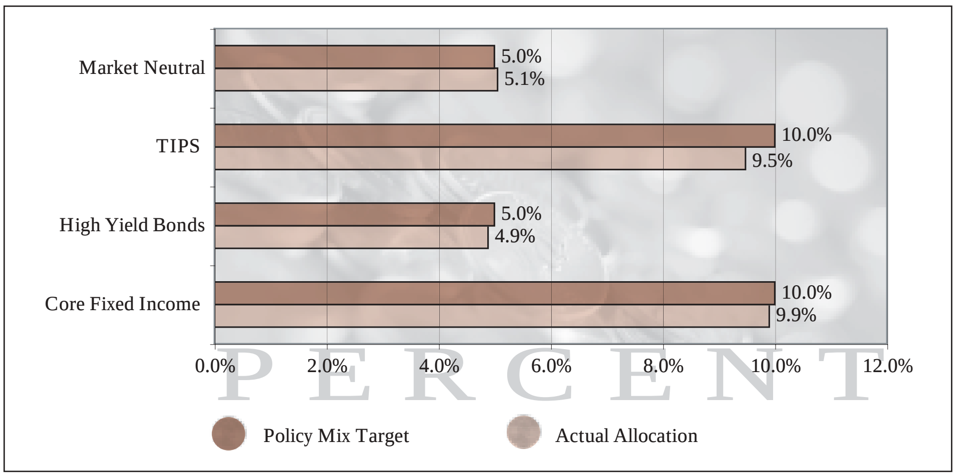
Public Debt Market Value

As of June 30, 2003, the public debt allocation had a market value of $1.5 billion, representing 29.4% of the total fund.

Public Debt Portfolio Structure

The public debt portfolio has a target allocation of 30% of the total fund as illustrated in the pie chart to the left. This portfolio is comprised of four sub-asset classes which includes core fixed income, high yield bonds, Treasury Inflation Protected Securities (TIPS), and market neutral. In June 2002, the board established a sub-asset class target policy allocation mix illustrated in the bar chart below. This chart compares the policy target mix to the actual sub-asset class mix as of June 30, 2003. In September 2002, the board granted the CIO authority to make allocation decisions within established ranges. This flexibility allows for strategic allocation decisions at the margins, while imposing risk controls. The table below summarizes the allocation ranges established by the board.

Public Debt Policy vs. Actual Allocation (as a percentage of the total fund)



Public Debt Strategic Sub-Asset Allocation Ranges
(as a percentage of the total fund)

Sub-Asset Class	Minimum	Maximum	Policy Target
Core fixed income	5.0%	15.0%	10.0%
High yield bonds	0.0	10.0	5.0
TIPS	5.0	15.0	10.0
Market neutral	0.0	10.0	5.0
Total public debt allocation			30.0%

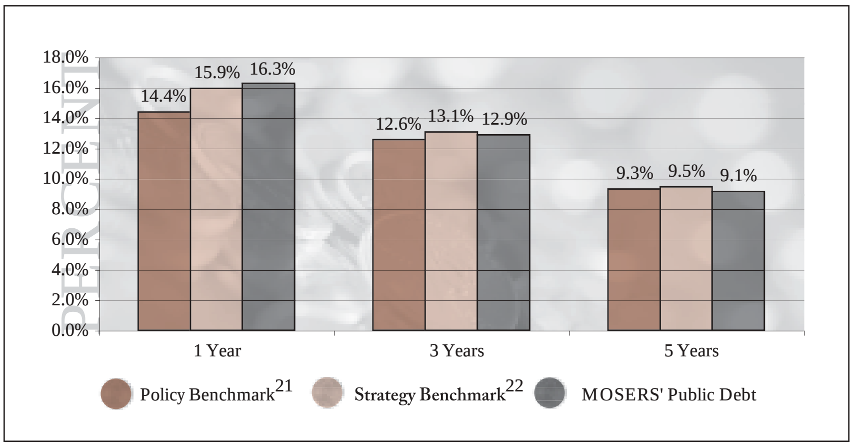
Public Debt Market Overview

The bond market over the course of the fiscal year was characterized by interest rates declining substantially in reaction to the Federal Reserve's very aggressive easing posture put in place to fight deflationary forces. The target for fed funds was lowered twice during the fiscal year with the cumulative easing move being 75 basis points. Intermediate and long interest rates declined anywhere from 95 to 145 basis points depending upon maturity. Long rates dipped below 4.3% in mid-June 2003 to levels not seen since the decade of the 50s. Additionally, investors continued to perceive inflation as very benign in the 1.5% to 2.0% range with little evidence of accelerating.

Coupled with the declining interest rate trend was an emerging investor perception that corporate credit quality in the U.S. was showing signs of stabilizing after having hit "rock-bottom" following the WorldCom bankruptcy in July 2002. Since market action tends to lead confirmations of a trend, the investment grade corporate market and particularly the high yield market experienced sharp rallies during the fiscal year, beginning from the latter part of 2002. The substantial lift in investor confidence in corporates, reflected in the price rally, resulted from the notion that fiscal and monetary policy were geared in the direction of revitalizing the economy, and the strengthening stock market was signaling success of these policies. Additionally, there was a developing notion that good corporate governance, conspicuously absent for the several years of accounting scandals, was becoming a ruling factor in the markets.

In summary, bond investors were best rewarded during the fiscal year with a long maturity profile and with lower credit quality portfolios.

Public Debt Returns vs. Benchmarks



Public Debt Performance

The public debt portfolio returned 16.3% for the fiscal year, exceeding the policy benchmark return of 14.4% and the strategy benchmark return of 15.9%. As mentioned in the market overview above, long maturity and lower credit quality were the areas of choice for fixed income during the course of the fiscal year. Long maturities in the core segment of public debt and a significant overweight to high yield were the major factors contributing to the superior performance of the portfolio relative to the policy benchmark.

Public Debt Allocation - Top 10 Holdings

The top 10 holdings within the public debt portfolio as of June 30, 2003 are illustrated in the table below. A complete list of holdings within the public debt portfolio is available upon request.

Ten Largest Holdings as of June 30, 2003	Market Value	% of Total MOSERS' Public Debt Portfolio
U.S. Treasury Inflation Index Bond, 3.875% '29	$ 257,705,178	16.8%
U.S. Treasury Inflation Index Bond, 3.625% '28	180,381,229	11.8
U.S. Treasury Inflation Index Bond, 3.375% '32	54,826,441	3.6
U.S. Treasury Notes, 2.625% '08	46,267,690	3.0
U.S. Treasury Notes, 1.625%, '05	44,261,958	2.9
U.S. Treasury Notes, 3.875% '13	41,251,537	2.7
U.S. Treasury Notes, 5.375% '31	30,152,378	2.0
U.S. Treasury Notes, 6% '04	23,614,575	1.5
Commit. to purchase FNMA Single Family Mortgages, 6% '33	17,040,625	1.1
U.S. Treasury Notes, 3.625% '03	16,572,765	1.0

21 The policy benchmark is comprised of 33.3% Lehman Aggregate, 16.7% Lehman High Yield, 33.3% Lehman 10+ Year TIPS Index, 16.7% T-bills + 4%.
22 The strategy benchmark is comprised of the Core Bond Strategy Benchmark (includes Lehman MBS/ABS 67%/33% Hybrid , Lehman US Government Credit), Lehman High Yield Index, Lehman 10+ Year TIPS Index, and T-Bills +4% Benchmark. The weights of each component change each month according to the actual allocation of the funds at month end.

Public Debt FY03 Highlights

FY03 has been an extremely busy year within the public debt category. Over the course of the year, staff implemented the board's asset allocation policy decisions while making several tactical shifts along the way. Below are just a few of the highlights:

- A market neutral portfolio was funded in December 2002 representing MOSERS' first exposure to this strategy. The strategy is expected to generate returns in excess of core fixed income securities with bond-like volatility. In addition, the strategy is expected to add an additional layer of diversification to the overall fund.
- High yield exposure was taken from 5.0% of the total fund to 10.0% at the beginning of the fiscal year in response to a belief that this security class was substantially undervalued and represented a return expectation from coupon cash flow alone that exceeded 10.0%.
- Following a successful call on high yield return expectations alluded to above, exposure in high yield was reduced back down to the level of 5.0% of total fund in May 2003, following the realization of a 17.0% holding period return for the added exposure.
- A core fixed income portfolio was established with the proceeds from the high yield liquidation, using an all-treasury implementation.
- The maturity profile of the public debt portfolio was significantly shortened so as to afford better protection in the event of rising interest rates.

Core Fixed Income

Core Fixed Income Market Value

The core fixed income allocation was $518.2 million as of June 30, 2003, or 9.9% of the total fund, just slightly below its policy target of 10.0%.

Summary of the Core Fixed Income Portfolio

The core fixed income sub-asset class gives the total fund exposure to high quality fixed income instruments which, in turn, provides stable cash flows and excellent liquidity to the portfolio. Types of fixed income securities held within this portfolio may include mortgage-backed securities, asset-backed securities, U.S. treasuries, agency securities and high quality corporate bonds. While historically fixed income has not outperformed equities, the asset class does provide diversification to the portfolio in a variety of different economic scenarios. Core fixed income performs well particularly in periods of good economic growth and falling or stable, relatively low inflation. Because of the generally high quality nature of the core segment, one can also expect adequate performance from the core portfolio in periods of modestly falling growth.

Characteristics	Core Fixed Income Portfolio	Lehman Aggregate Bond Index
Total number of securities	465	7,454
Current yield	4.3%	5.3%
Yield to maturity	2.6%	3.6%
Average life/maturity	10.7 years	6.7 years
Adjusted duration	4.1	4.0
Quality	Government	AAA-

Core Fixed Income Statistics

The table to the left displays the statistical characteristics of the core fixed income portfolio as of June 30, 2003, with comparisons shown to the Lehman Aggregate Bond Index.

Core Fixed Income Investment Advisors

As of June 30, 2003, MOSERS had contracts with two external investment advisors for the management of two separate fixed income portfolios, one for mortgage-backed/asset-backed securities and the other for government/corporate securities. The two portfolios when aggregated together, produce the desired exposure to core fixed income. The government/corporate portfolio is currently being replicated only by treasuries with the intent to scale into the appropriate weightings of agencies and corporates when the outlook for credit risk is clearer, or when the investor is more properly compensated for this risk. Earlier in the fiscal year, the internally-managed corporate bond portfolio was terminated due to the desire to maintain corporate exposure in the form of high yield at a time when this class of securities was extremely attractive and offered significantly greater opportunity for superior returns.

The table below displays the investment advisors that were under contract with MOSERS during FY03 for management of core fixed income portfolios as well as their particular investment mandates, portfolio market values and management fees.

Investment Advisor	Investment Style	Market Value as of June 30, 2003[23]	FY03 Management Fee
BlackRock Financial Management, Inc.	Enhanced Index - MBS/ABS	$ 171,519,412	$294,407
NISA Investment Advisors[24]	Enhanced Index - Gov't./Corp.	273,811,004	50,000
Internal Staff[25]	Corporate Bond Portfolio	0	N/A
Internal Staff[26]	Cash Portfolio	10,590,480	N/A
Hoisington Investment Management[27]	Active Duration Treasury Securities	0	183,333
Total		$ 455,920,896	$527,740

23 The total market value of core fixed income displayed in this table does not include funds held in the fixed income rebalancing account managed by NISA Investment Advisors, LLC.

24 Prior to April 30, 2003, the NISA Fixed Income portfolio was managed within the high yield sub-asset class under a high yield bond mandate.

25 As of January 31, 2003, the internally-managed corporate bond portfolio was liquidated. In addition, fees for internally-managed accounts are not separately listed here, but are accounted for under general operating expenses of the investment program in the financial section of this report.

26 The cash portfolio which is managed by internal staff is not included in the core fixed income portfolio for purposes of performance calculations. Fees for the management of the cash portfolio are not listed separately here, but are accounted for under general operations of the investment department. These expenses may be found in the financial section of this report.

27 Prior to June 1, 2003, Hoisington Investment Management Company was a manager within this asset class. As of June 1, 2003, it was moved to the alternatives asset class as a deflationary hedge.

Core Fixed Income Brokerage Activity

In FY03, MOSERS generated the following core fixed income brokerage activity ranked by percentage of total, through the purchase and sale of core fixed income assets.

Broker/Dealer Firms	Par Amount Traded	Market Value Traded	Percent of Total Trading Volume by Market Value
Goldman Sachs	$ 925,598,701	$ 960,834,866	26.7%
Morgan Stanley	755,324,200	776,465,508	21.6
Citigroup Global Markets	228,937,526	241,607,425	6.7
UBS Securities	212,235,000	223,089,619	6.2
Lehman Brothers	209,812,082	217,848,765	6.1
Credit Suisse First Boston	202,754,365	210,993,956	5.9
Deutsche Morgan Grenfell	152,215,000	155,076,974	4.3
Merrill Lynch	127,354,000	120,584,150	3.4
Barclays Capital	116,005,000	118,720,669	3.3
J. P. Morgan	103,404,000	113,961,033	3.2
Banc of America Securities	61,335,000	62,976,048	1.8
Southwest Securities	152,000,000	58,927,360	1.6
Greenwich Capital Markets	48,065,000	52,706,905	1.5
BNP Paribas	37,080,000	38,840,310	1.1
Bear Stearns	32,865,000	34,818,241	1.0
Others (includes 17, each contributing less than 1%)	252,071,504	202,736,097	5.6
Totals	$3,617,056,378	$3,590,187,926	100.0%

High Yield Bonds

High Yield Bond Market Value

The high yield bond allocation was $255.4 million as of June 30, 2003, or 4.9% of the total fund with a policy target of 5.0%.

Summary of the High Yield Bond Portfolio

The high yield bond portfolio invests in debt securities whose credit ratings have fallen below investment grade quality. Relative to the core fixed income portfolio, this sub-asset class provides superior coupon cash flow, as well as some diversification benefit due to a reduced sensitivity to changes in interest rates. MOSERS views this allocation as one that is likely to be changeable and very much dependent upon the particular stage of the economic cycle being experienced at the time of the allocation decision. As mentioned in the highlights section, MOSERS had a significant overweighting to high yield for most of the fiscal year relative to its policy benchmark, based upon a judgment that the security class had reached compellingly cheap valuation levels. In May of 2003, staff brought high yield back to a neutral allocation following very substantial price appreciation and a move by this sub-asset class to levels approaching fair value.

Characteristics	High Yield Bond Portfolio	Lehman High Yield Bond Index
Total number of securities	173	1,502
Current yield	9.0%	8.7%
Yield to maturity	8.3%	9.1%
Average life/maturity	5.7 years	8.2 years
Adjusted duration	4.9	4.8
Quality	B1	B1/B2

High Yield Bond Statistics

The table to the left displays the statistical characteristics of the high yield bond portfolio as of June 30, 2003, with comparisons shown to the Lehman High Yield Bond Index.

High Yield Bond Investment Advisors

As of June 30, 2003, MOSERS had a contract with one external investment advisor for the management of a high yield bond portfolio. Throughout most of the year, a second manager was in place to manage an additional high yield portfolio. When staff brought the strategic allocation back to 5.0% from 10.0%, alluded to in the highlights section, the second manager's portfolio mandate was changed to a government/corporate mandate within core fixed income in May, 2003.

The corresponding table displays the external firms that were under contract with MOSERS during FY03 for management of high yield bond portfolios, as well as portfolio market values and management fees.

Investment Advisor	Investment Style	Market Value as of June 30, 2003	FY03 Management Fee
BlackRock Financial Management, Inc.	Active - High Yield Bond	$ 255,368,271	$ 1,015,777
NISA Investment Advisors[28]	Active - High Yield Bond	0	450,000
Total		$ 255,368,271	$ 1,465,777

High Yield Bond Brokerage Activity

In FY03, MOSERS generated the following high yield bond brokerage activity ranked by percentage of total, through the purchase and sale of high yield assets.

Broker/Dealer Firms	Par Amount Traded	Market Value Traded	Percent of Total Trading Volume by Market Value
Morgan Stanley	$ 316,715,003	$ 324,909,890	13.6%
Credit Suisse First Boston	293,098,928	287,312,058	12.1
Goldman Sachs	275,518,750	277,055,013	11.7
UBS Securities	187,525,000	190,860,485	8.0
Merrill Lynch	167,147,000	170,215,921	7.2
J. P. Morgan	164,655,000	166,632,928	7.0
Lehman Brothers	158,586,605	164,687,334	6.9
Citigroup Global Markets	165,163,884	163,570,243	6.9
Banc of America Securities	134,995,000	133,769,773	5.6
Deutsche Morgan Grenfell	90,625,000	91,532,361	3.9
Bear Stearns	89,115,000	89,696,413	3.8
Greenwich Capital Markets	58,955,000	60,368,267	2.5
BNP Paribas	36,228,000	38,102,819	1.6
Barclays Capital	30,610,000	32,598,503	1.4
Others (includes 40, each contributing less than 1%)	185,389,612	185,179,851	7.8
Totals	$2,354,327,782	$2,376,491,859	100.0%

28 In May 2003, the NISA High Yield Bond portfolio mandate was changed to a government/corporate mandate under the core fixed income sub-asset class.

Treasury Inflation Protected Securities (TIPS)

TIPS Market Value

The TIPS allocation was $496.2 million as of June 30, 2003, or 9.5% of the total fund with a policy target of 10.0%.

Summary of the TIPS Portfolio

TIPS are fixed income securities issued and guaranteed by the U.S. government. The yield on these securities is specifically tied to inflation, as measured by the U.S. consumer price index, plus a set yield above and beyond inflation. The TIPS allocation provides an excellent match relative to the system's liabilities both in terms of maturity profile and its ability to track inflation.

Characteristic	TIPS Portfolio	Lehman 10+ Year TIPS Index
Total number of securities	3	3
Current yield	3.0%	3.0%
Yield to maturity	4.5%	4.5%
Average life/maturity	25.7 years	25.7 years
Adjusted duration	11.9	11.9
Quality	Treasury	Treasury

TIPS Statistics

The table to the left displays the statistical characteristics of the TIPS portfolio as of June 30, 2003, with comparisons shown to the Lehman 10+ Year TIPS Index.

TIPS Investment Advisors

As of June 30, 2003, the TIPS portfolio was 100% internally managed. The following table summarizes the details.

Investment Advisor	Investment Style	Market Value as of June 30, 2003	FY03 Management Fee
Internal Staff[29]	Passive Index-Government TIPS	$496,215,126	N/A

TIPS Brokerage Activity

In FY03, MOSERS generated the following TIPS brokerage activity ranked by percentage of total, through the purchase and sale of TIPS.

Broker/Dealer Firms	Par Amount Traded	Market Value Traded	Percent of Total Trading Volume by Market Value
Barclays Capital	$354,550,000	$467,848,513	85.7%
Goldman Sachs	49,900,000	64,270,895	11.8
Lehman Brothers	10,370,000	13,573,034	2.5
Totals	$414,820,000	$545,692,442	100.0%

29 Fees for the management of the TIPS portfolio are not listed separately here, but are accounted for under general operations of the investment department. These expenses may be found in the financial section of this report.

Market Neutral

Market Neutral Market Value

The market neutral allocation was $264.2 million as of June 30, 2003, or 5.1% of the total fund with a policy target of 5.0%.

Summary of the Market Neutral Portfolio

The market neutral portfolio is a new strategy (herein referred to as a "sub-asset class") added to the total fund in fiscal year 2003. Market neutral managers utilize skill-based investment strategies, which allow them to take advantage of periodic inefficiencies that may exist within the market. Market neutral managers seek to produce consistent absolute returns in various economic environments. The ultimate goal of the market neutral investments within the public debt portfolio is to provide returns that are slightly higher than traditional fixed income products with volatility similar to those products. Market neutral investments also provide diversification and downside protection to the portfolio. MOSERS utilizes a fund-of-funds approach to gain exposure to this sub-asset class. This allows MOSERS to invest in a pool comprised of a variety of different types of strategies which provides additional risk protection. Strategies utilized within this pool may include event driven, relative value, global fixed income/currencies, managed futures, hedged equity, convertible arbitrage, and commodities trading strategies.

Characteristics	For Life of the Fund
Average number of managers within the fund	32
Cumulative geometric return	6.2%
Annualized standard deviation	2.1%
Sharpe ratio	4.7
Beta	(0.01)
Alpha (annualized)	9.6%
Index correlation[30]	(0.07)

Market Neutral Statistics

The table to the left displays the statistical characteristics of the market neutral portfolio as of June 30, 2003.

Market Neutral Investment Advisors

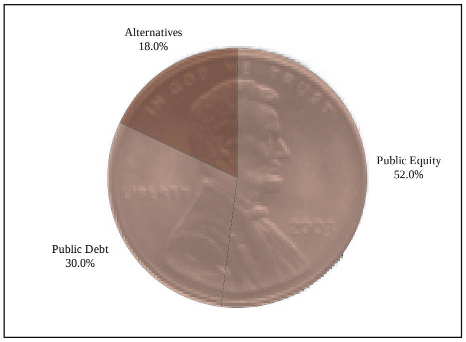
Early in FY03, MOSERS hired Blackstone Alternative Asset Management as a strategic partner to make investments within the market neutral sub-asset class and provide ongoing consulting and education to staff. Below is a table summarizing our investment within the market neutral category as of June 30, 2003.

Investment Advisor	Investment Style	Market Value as of June 30, 2003	FY03 Management Fees
Blackstone Alternative Asset Management, LP[31]	Market Neutral	$264,231,137	$1,839,687

30 S&P 500 Index.

31 Portfolio market value does not include amounts held in the alternatives asset class within the private equity allocation. The FY03 fees are reflective of management fees and performance fees paid from December 1, 2002 through June 30, 2003.

Alternative Investments Asset Class Summary



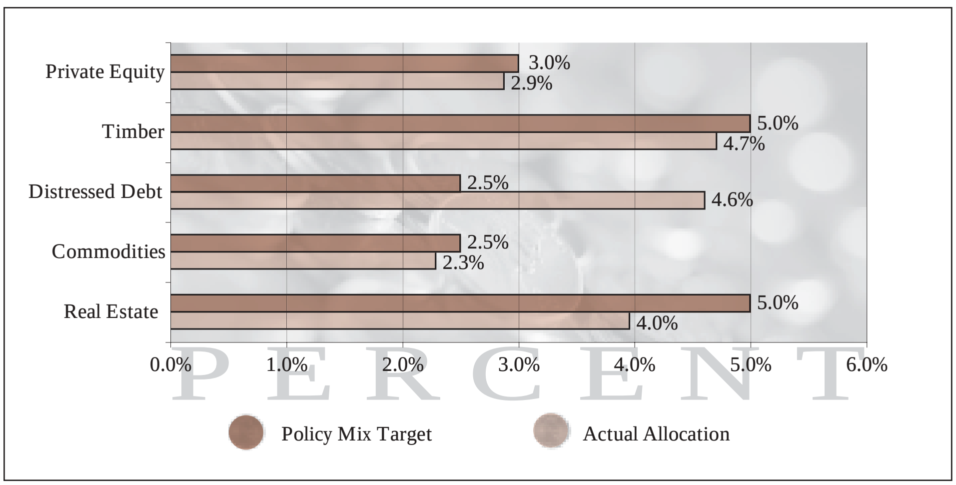
Alternative Investments Market Value

As of June 30, 2003, the alternative investments portfolio had a market value of $965 million, representing 18.5% of the total fund.

Alternative Investments Portfolio Structure

The alternative investments portfolio has a current target allocation of 18.0% of the total fund as illustrated in the pie chart to the left. The board established this broad asset class in June 2002. This portfolio is comprised of 5 strategies (herein also referred to as "sub-asset classes") which include real estate, commodities, distressed debt, timber, and private equity. Over the past year, investments have been made in distressed debt, real estate, and commodities. Although allocations have been approved for timber and private equity, the funds to be invested in these sub-asset classes are currently being invested in liquid alternatives as they await deployment. It is expected that achieving full deployment of this capital into timber and private equity will take several years due to the nature of these strategies where capital is called for investment only as opportunities are identified.

Alternative Investments Policy vs. Actual Allocation
(as a percentage of the total fund)



Alternative Investment Sub-Asset Allocation Ranges
(as a percentage of the total fund)

Sub-Asset Class	Minimum	Maximum	Policy Target
REITs/Real estate	2.5%	7.5%	5.0%
Commodities	0.0	5.0	2.5
Distressed debt	0.0	5.0	2.5
Timber	2.5	7.5	5.0
Private equity	2.5	7.5	3.0
Total alternative allocation			18.0%

In June 2002, the board established the sub-asset class target policy allocation mix illustrated in the bar chart to the left. This chart compares the policy target mix to the actual sub-asset class mix as of June 30, 2003. In September 2002, the board granted the CIO the authority to make strategic allocation decisions within established ranges. This flexibility allows for strategic allocation decisions at the margins, while imposing risk controls. Decisions to overweight or underweight sub-asset classes as of June 30, 2003 are reflected in the bar chart to the left. The table accompanying the bar chart summarizes the sub-asset class allocation ranges established by the board.

Alternatives Investments Market Overview

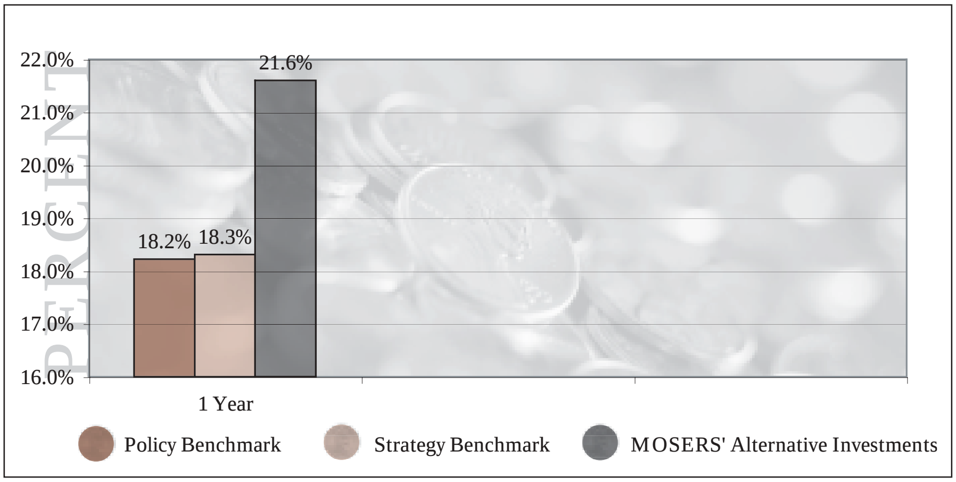
As a new allocation in the overall fund, the alternative investments portfolio was created to provide several advantages. These advantages include high returns, diversification against specific economic environments and volatility reduction. While not every one of the alternative strategies will provide for all advantages, they are expected to achieve at least one.

Over the past year, several alternatives have proved to be beneficial to the fund's performance. The commodities allocation has provided outstanding returns in a period of weak stock market performance. The negative correlation of this strategy to public equities held true once again. Meanwhile, the year produced record defaults for bonds, and therefore a plethora of opportunities for distressed debt investors existed. As banks closed their doors to companies that they considered unworthy borrowers, confidence in these companies plunged, and distressed debt investors were able to scoop up the values and buy securities at uncommonly deep discounts. MOSERS' investment in this strategy proved valuable to the entire fund as returns blossomed in 2003.

Although real estate fundamentals continued to deteriorate over much of the last year, MOSERS' internally-managed REIT portfolio performed nicely. As of June 30, 2003, the S&P 500 Index produced dividends of 1.7% (annual dividend yield), compared to the internally-managed REIT portfolio's dividend yield of 6.3%. These high-dividend securities continued to provide stable cash flow to shareholders while outperforming the S&P 500 Index over the fiscal year. A portion of the profits generated in the REIT portfolio over the past three years was realized and subsequently pegged for investment in opportunistic real estate funds. These assets will be invested slowly over the next several years as managers seek appropriate investments during this difficult time in the market. A common theme that is present in many of the alternative strategies is that the investments are made in inefficient, sometimes illiquid, markets which should lead to enhanced returns. In addition to distressed debt and private equity, the equity real estate market fits this description.

Finally, certain alternative investment strategies are expected to lower the volatility, and therefore dampen the risk, of the overall portfolio. Timber investments satisfy this role, as they steadily maintain their biological growth in all financial environments. Although the price of lumber has been suppressed over recent years, one benefit of long-term timber investing is the ability to delay harvesting the trees until more desirable conditions emerge. Staff continues their efforts to seek out the most advantageous implementation strategy for the timber allocation. Initial investments in timber and

Alternative Investments Returns vs. Benchmarks



private equity are planned for fiscal year 2004.

Alternative Investments Performance

MOSERS' alternative investments portfolio returned 21.6% for the fiscal year, exceeding the policy benchmark return of 18.2% and the strategy benchmark return of 18.3% as illustrated in the graph to the left. The positive performance of the actual portfolio relative to the policy benchmark reflects the value added by staff and the external asset consultant through strategic sub-asset class decisions and manager hiring decisions. Specifically, the strategy benchmark is compared to the policy benchmark to capture the value added by the staff's decision to overweight or underweight sub-asset classes within the alternative investments portfolio. The actual portfolio return is compared to the strategy benchmark to reflect value added through manager selection decisions. For the past year, a majority of the outperformance in the alternative investments portfolio may be attributed to manager selection decisions.

Given the introduction of this asset class on July 1, 2002, there are no historical performance returns for this asset class.

Alternative Investments FY03 Highlights

FY03 has been an extremely busy year with the introduction of alternative investments as a new broad asset class. Throughout the year, staff made significant progress in implementing the board's asset allocation policy decisions. Below are just a few of the highlights:

- MOSERS entered into partnerships with four distressed debt managers at an opportune time in the market cycle.
- A portion of the internally-managed REIT portfolio was liquidated, and funds were committed to two opportunistic real estate partnerships. As a result, some of the profits were realized in the REIT portfolio.
- Temporary placeholders were established for the timber and private equity allocations which brought the alternative investments portfolio close to the target asset allocation of 18.0%.

Real Estate

Real Estate Market Value

The real estate allocation was $207.2 million, or 4% of the total fund, as of June 30, 2003.

Summary of the Real Estate Portfolio

Investments in the real estate allocation may take the form of publicly-traded Real Estate Investment Trusts (REITs) or equity real estate through closed-end funds. Investments in real estate provide a hedge against inflation. Opportunistic real estate funds should provide returns in excess of those expected from the public equity market due to the illiquidity of their investments, and the inefficiencies in this market. Manager skill is expected to add value to the performance of these private partnerships. As of fiscal year-end, MOSERS had investments in a varied portfolio of real estate, including REITs for core exposure and closed-end opportunistic real estate funds for enhanced returns and diversification. A temporary holding account has also been established in order to temporarily invest the assets to be used for funding the opportunistic real estate portfolios as capital is called for investment. This account is expected to produce absolute enhanced cash returns from specialized relative value strategies employed by the manager.

Characteristics	REIT Portfolio	Wilshire REIT Index
Number of securities	50	89
Average market capitalization	$2.5 B	$1.6 B
Portfolio yield	6.3%	6.4%
Portfoio P/E	17.5	17.7
Portfolio beta vs. Wilshire REIT Index	1.0	1.0
Price/Book ratio	2.1	1.9

Real Estate Statistics

The corresponding table displays the statistical characteristics of the REIT portfolio as of June 30, 2003, with comparisons shown to the Wilshire REIT Index.

Real Estate Investment Advisors

During FY03, MOSERS committed assets to two external investment advisors who managed 23% of the total real estate portfolio as of June 30, 2003. MOSERS invests as a limited partner in each of the externally-managed funds. One of the investment advisors manages a closed-end opportunistic real estate fund. As capital is called for this fund, portions of the REIT portfolio will be liquidated to fulfill the requests. Additionally, the second investment advisor manages an absolute return fund which serves as a surrogate to fund a future opportunistic real estate manager (commitment to be made in July 2003). This absolute return fund has been established as a holding account for the assets to be called by the real estate fund manager as investment opportunities arise. The remainder of the real estate portfolio is managed by internal staff in a passively-managed REIT portfolio. This internally-managed REIT portfolio exposes the fund to the public real estate market by replicating the 50 largest names in the Wilshire REIT Index. Internal staff also manages the liquidation effort of a small portfolio of direct real estate holdings from a mandate no longer pursued by MOSERS. The table at the top of the following page lists MOSERS' real estate investment advisors.

Investment Advisor	Investment Style	Market Value as of June 30, 2003	FY03 Management Fees
Internal Staff[32]	Passive REIT Index	$159,646,488	N/A
Internal Staff[33]	Direct Real Estate	8,217,981	N/A
Oaktree Capital Management, LLC[34]	Opportunistic Real Estate	12,559,573	1,087,911
Blackstone Bridge Advisors, LP[35]	Opportunistic Real Estate	35,000,000	0
Total		$215,424,042	$1,087,911

Real Estate Brokerage Activity

The following brokerage activity occurred within the internally-managed REIT portfolio throughout the fiscal year:

			Commissions	
Brokerage Firm	Shares Traded	Dollar Volume of Trades	Dollar Amount	Value Per Share
Instinet Corp.	4,867,479	$126,588,730	$144,567	$0.03

Real Estate Soft Dollar Expenditures

There were no soft dollars utilized within the REIT portfolio in the fiscal year ended June 30, 2003.

32 Fees for the management of the REIT portfolio are not listed separately here, but are accounted for under general operations of the investment department. These expenses may be found in the financial section of this report.

33 The direct real estate allocation is not included in the performance figures or market value for the real estate sub-asset class. Fees for the management of the direct real estate portfolio are not listed separately here, but are accounted for under general operations of the investment department. These expenses may be found in the financial section of this report.

34 OCM Real Estate Opportunities Fund III, LP does not include performance based fees that may have accrued but have not yet been paid.

35 Blackstone Relative Value Fund, LP is a temporary holding account for funds waiting to be deployed into an opportunistic real estate manager to be hired in July 2003. Initial funding into the Relative Value Fund was on June 30, 2003, thus no manager fees were paid in FY03.

Commodities

Commodities Market Value

The commodities allocation was $119.8 million, or 2.3% of the total fund as of June 30, 2003.

Summary of the Commodities Portfolio

MOSERS gains exposure to commodities with a focus on the Goldman Sachs Commodities Index (GSCI). The MOSERS commodities strategy has been in place since 1998. The commodities portfolio has provided exceptional diversification benefits to MOSERS, and continues to provide a hedge against unexpected inflation. Although volatile at times, the low/negative correlation of commodities to traditional asset classes provides protection to the total fund.

Sector	Weighting	Largest Component
Energy	68.0%	Crude oil (26.0%)
Agricultural	16.2	Corn (4.0)
Industrial metals	6.1	Aluminum (3.0)
Precious metals	2.3	Gold (2.1)
Livestock	7.4	Live cattle (3.9)

Commodities Statistics

The table to the left displays the sector weightings of the commodities portfolio as of June 30, 2003.

Commodities Investment Advisors

MOSERS has had one manager of the commodities portfolio since its inception in 1998.

Investment Advisor	Investment Style	Market Value as of June 30, 2003	FY03 Management Fee
NISA Investment Advisors, LLC	Enhanced Index	$119,787,496	$431,794

Distressed Debt

Distressed Debt Market Value

The distressed debt allocation was $241.3 million, or 4.6% of the total fund as of June 30, 2003.

Summary of the Distressed Debt Portfolio

Distressed debt investments are expected to provide capital appreciation as funds are used to purchase securities at a significant discount to fair value. The inefficiency of the distressed debt market, lack of participation in this market segment, and the premium we expect to earn from the illiquid nature of this asset class are all factors that should add enhanced returns to the total fund. Participation as limited partners in closed-end funds has been the method of implementation for this strategy. Managers purchase a variety of securities in the capital structure, and may hold controlling debt positions in various companies. The objective is to invest with managers who invest in companies that are undervalued. The managers typically pursue active strategies to change the credit profile of the company in an attempt to realize a gain on the investment through appreciation of the securities. Over a full market cycle, returns in excess of public debt, and in particular, high yield debt, are expected from distressed debt investments.

As of June 30, 2003, the portfolio was overweight relative to the distressed debt policy allocation due to the economic scenario that evolved in the fall of 2002. Default rates were at record levels, and the capital markets had overreacted by beating down the prices on certain securities that distressed debt investors deemed to be of greater value. When securities are purchased for pennies on the dollar, less funding is required and large positions can be built, allowing the manager to pursue control over the situation. Control is an important factor in the manager's ability to effect change in the distressed company, therefore leading to the possibility of high returns. The authority granted by the board to make strategic allocations has allowed MOSERS to benefit from a tactical overweight to this sub-asset category.

Sector	Weighting
Manufacturing	15.0%
Telecom	13.9
Energy	10.4
Media	9.4
Transportation	7.9

Distressed Debt Statistics

The table to the left displays the industry weights of the distressed debt portfolio as of June 30, 2003.

Distressed Debt Investment Advisors

During fiscal year 2003, MOSERS has committed assets that total $250 million to four external distressed debt managers, all of which MOSERS invests with as a limited partner in a closed-end fund. As of June 30, 2003, $182.5 million of the committed assets have been called and invested, additionally MOSERS has received $20 million in distributions. Capital to fund these managers was taken from the public equity markets as part of the total fund restructuring.

Investment Advisor	Investment Style	Market Value as of June 30, 2003	FY03 Management Fees[36]
Oaktree Capital Management, LLC	Distressed Debt	$135,750,882	$1,087,911
DDJ Capital Management, LLC	Distressed Debt	16,503,487	209,085
MHR Fund Management, LLC	Distressed Debt	27,512,000	72,917
CFSC Wayland Advisers, LLC	Distressed Debt	63,395,996	143,835
Total		$243,162,365	$1,513,748

36 Management fees do not include performance-based fees which have not been paid; managers were hired throughout FY03.

Timber

Timber Market Value

The market value of assets currently being held in the timber allocation is $246.2 million, or 4.7% of the total fund. It should be noted that none of these funds have been invested with timber managers as of June 30, 2003. Instead, these are funds which are being invested in a temporary holding account until capital is deployed into timber investments, likely beginning in fiscal year 2004.

Summary of the Timber Portfolio

Although there are currently no properties held in the timber portfolio, the dollars committed to timber investments are being held in a U.S. Treasury portfolio. The choice to hold these assets in treasuries is a conscious decision to provide the fund some protection against the risk of deflation. It is anticipated that the timber allocation will be implemented through the purchases of properties over a period of two to three years. Investing in timber consists of purchasing properties in a diversified manner. Regional diversification, age and species diversification, and investments in a variety of timber markets are all means of mitigating risk in a timber portfolio. Timber returns over a full market cycle are expected to be similar to those generated by the public equity markets, but should exhibit volatility similar to public debt securities. An allocation to timber also provides a hedge against inflation, cash flows, and diversification to the fund when financial assets are experiencing poor performance.

Timber Investment Advisors

While capital has not yet been invested in timber assets, funds have been earmarked for deployment into the strategy upon selection of timber investment management organizations. As of June 30, 2003, cash was invested in U.S. Treasury securities. Details regarding this portfolio are summarized in the table below.

Investment Advisor	Investment Style	Market Value as of June 30, 2003	FY03 Management Fee
Hoisington Investment Management Co.[37]	Active Duration Treasury Securities	$246,238,030	$16,667

37 Effective June 1, 2003, Hoisington Investment Management Company was moved from the public debt allocation to the timber allocation. It is a temporary holding account for funds to be deployed into timber investments. All activity and performance for Hoisington prior to June 1, 2003 is captured in the public debt section of this report. Fees have been pro-rated between public debt and timber.

Private Equity

Private Equity Market Value

The market value of assets currently being held in the private equity allocation is $150.5 million, or 2.9% of the total fund. It should be noted that none of these funds have been invested in private equity portfolio companies as of June 30, 2003. Instead, these funds have been invested in temporary holding accounts until capital is ready to be deployed to this strategy in fiscal year 2004.

Summary of the Private Equity Portfolio

As of June 30, 2003, temporary investments in this allocation reside in absolute return strategies. Once the funds have been committed to private equity investment advisors, the assets will flow into private equity investments as the capital is called. The private equity portfolio is expected to be invested primarily over the next three years, with ongoing investments to be made as capital distributions occur.

Private equity investments may be allocated to three primary strategies: leveraged buyouts (LBOs), venture capital, and special situations (activist strategies). Each of these strategies has a different level of risk and expected return, so diversification is a key benefit of the private equity portfolio. We anticipate that less capital will be committed to venture capital, as it is seen to have a less attractive risk/return profile than LBOs and special situation strategies. The private equity portfolio is expected to produce returns of 3.0-5.0% in excess of the public equity markets over a full market cycle.

Private Equity Investment Advisors

While capital has not yet been committed to private equity advisors, funds have been earmarked for investment in private equity strategies upon selection of external managers. As of June 30, 2003, cash was invested in temporary absolute return strategies. Details regarding the manager of these accounts are summarized in the table below.

Investment Advisor[38]	Investment Style	Market Value as of June 30, 2003	FY03 Management Fees
Blackstone Alternative Asset Management, LP	Long/Short Equity	$100,407,086	$ 72,818
Blackstone Alternative Asset Management, LP	Market Neutral	50,140,246	45,946
Total		$150,547,332	$118,764

38 Effective June 1, 2003, additional commitments were made to the Blackstone Hedged Equity Fund, LP and the Blackstone Madison Avenue Fund, LP. This additional commitment was placed within the private equity allocation as a temporary holding account for funds to be deployed into private equity investments. It should be noted that these allocations, in combination with the allocations in the public equity and public debt asset classes, do not exceed the board's 20% limitation to marketable alternative strategies.

Securities Lending Summary

Summary of Program

In FY03, MOSERS earned net income of $3,956,537 through its securities lending programs. This was approximately $1 million less than revenue earned in FY02 due to allocation changes in total portfolio assets which affect the amount available for securities lending. This incremental income contributed 7.6 basis points to MOSERS' total fund return resulting in 2.1 basis points less than fiscal year 2002. MOSERS lends its domestic equities, international equities, and domestic fixed income to borrowers that manage either an agent lending program or a principal lending program. MOSERS fixed income and international equities are lent through an agent program while the domestic equities are lent through a principal program. Definitions of these two programs follow.

Agent Lending Program

In this type of program, a large custodial bank or investment banking institution acts on behalf of the beneficial owner to lend its securities. This type of lending program is essentially a "one-stop" shopping process in which all operational aspects of the program are centered exclusively with one entity. The agent lender is responsible for making the loans to various broker-dealers, investing the cash collateral associated with the loaned securities, marking the loans and collateral to market on a daily basis, and in most cases, indemnifying the lender against the default of a broker-dealer to whom they have loaned securities on behalf of the beneficial owner.

Principal Lending Program

This type of program differs from an agent lending program in that loans are being made directly to the end user of the securities on an exclusive basis. The elimination of the agent (middle man), carries with it the opportunity for increased revenue; however, this does not come risk free. The primary risk in a principal lending program that an agent program generally avoids is the risk of concentrating a large block of loans with one counterparty and that entity being unable to return the loaned securities due to a coincidental financial hardship or bankruptcy. We will discuss the implications of counterparty risk and how MOSERS manages it later in this report.

Domestic Equity

MOSERS generated total income from the domestic equity principal lending program of $1.5 million in FY03. Revenue from this program was $523,751 less than FY02 stemming from asset allocation changes driving down the lendable base. Lehman Brothers is the exclusive borrower of MOSERS securities for this program.

The table on the following page highlights statistics for the last two fiscal years relating to the domestic equity securities lending program.

International Equity

MOSERS generated total income from the international equity securities lending program of $744,985 in FY03. This $385,943 revenue decrease from FY02 was accredited to the movement of a piece of the international equity lendable base into a commingled fund. Credit Suisse First Boston (CSFB) managed this program in a principal capacity up until March 1, 2003, and subsequently as an agent program.

The table on the following page contains the international equity securities lending program statistics from FY02 and FY03.

Domestic Fixed Income

MOSERS generated total income from the domestic fixed income securities lending program of $1.7 million in FY03. Income was slightly less than FY02 mainly due to changes in the market for certain securities. CSFB manages this program in an agent capacity.

The table on the following page presents the statistics for the domestic fixed income securities lending program for FY02 and FY03.

Domestic Equity

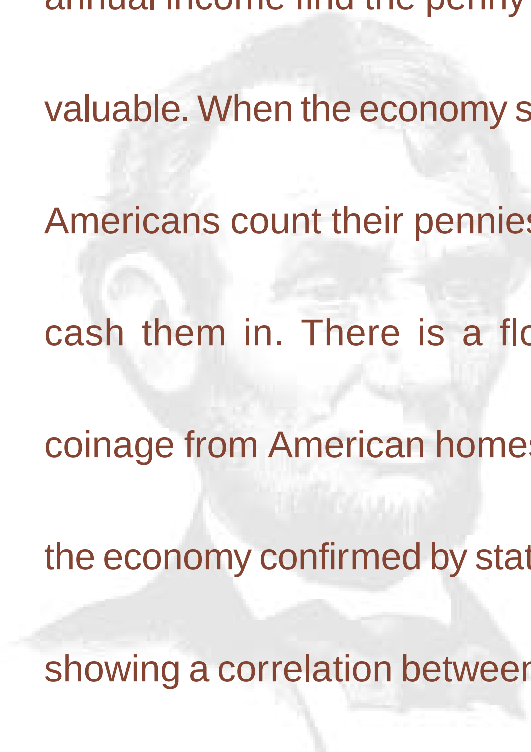
	Average Lendable	Average on Loan	Average Utilization	Return Added to Lendable Domestic Equities (basis points)	Net Income
FY03	$1,4209,413,446	$234,776,497	16.7%	10.2	$1,504,152
FY02	2,347,223,937	254,035,429	10.8	10.7	2,027,903

International Equity

	Average Lendable	Average on Loan	Average Utilization	Return Added to Lendable International Equities (basis points)	Net Income
FY03	$544,976,709	$36,820,686	9.3%	13.4	$744,985
FY02	728,081,371	70,020,289	9.6	11.9	1,130,928

Domestic Fixed Income

	Average Lendable	Average on Loan	Average Utilization	Return Added to Lendable Domestic Fixed Income (basis points)	Net Income
FY03	$969,156,825	$757,537,477	79.4%	13.4	$1,707,400
FY02	899,565,271	720,912,307	80.3	18.4	1,750,764



Most Americans still "count their pennies." Those with the least annual income find the penny most valuable. When the economy slows, Americans count their pennies and cash them in. There is a flow of coinage from American homes into the economy confirmed by statistics showing a correlation between U.S. Mint demand for new pennies and the Gross Domestic Product (GDP) rate.

Pinching Pennies

Actuaries Certification Letter

GRS

GABRIEL, ROEDER, SMITH & COMPANY

Consultants & Actuaries

One Towne Square • Suite 800 • Southfield, Michigan 48076 • 248-799-9000 • 800-521-0498 • fax 248-799-9020

October 1, 2003

The Board of Trustees
Missouri State Employees' Retirement System
907 Wildwood Drive
Jefferson City, Missouri 65109

Dear Board Members:

The basic financial objective of the Missouri State Employees' Retirement System (MOSERS) is to establish and receive contributions, which:

(1) when expressed in terms of percents of active member payroll will remain approximately level from generation to generation of Missouri citizens, and which
(2) when combined with present assets and future investment return will be sufficient to meet the present and future financial obligations of MOSERS.

In order to measure progress toward this fundamental objective, MOSERS has annual actuarial valuations performed. The valuations (i) measure present financial position, and (ii) establish contribution rates that provide for the current cost and level percent of payroll amortization of unfunded actuarial accrued liabilities over a reasonable period. The latest completed actuarial valuations were based upon data and assumptions as of June 30, 2003. These valuations indicate that the contribution rates for the fiscal year ending June 30, 2005, adopted by the board of trustees for the benefits scheduled to be in effect on July 1, 2003, meet the basic financial objective. These contribution rates are 10.64% of payroll for 57,558 general state employees, 22.13% of payroll for 57 administrative law judges, and 54.51% of payroll for 392 judges other than administrative law judges.

The actuarial valuations are based upon financial and participant data, which is prepared by retirement system staff, assumptions regarding future rates of investment return and inflation, and assumptions regarding rates of retirement, turnover, death, and disability among MOSERS' members and their beneficiaries. The data is reviewed by us for internal and year-to-year consistency as well as general reasonableness prior to its use in the actuarial valuations. It is also summarized and tabulated for the purpose of analyzing trends. The demographic assumptions were adopted by the board of trustees and were based upon actual experience of MOSERS during the years 1995 to 1999. The economic assumptions were adopted by the board of trustees in September 2001. Assets are valued according to a method that fully recognizes expected investment return and averages unanticipated market return over a five-year period. The assumptions and methods utilized in this valuation, in our opinion, meet the parameters established by Governmental Accounting Standards Board Statement No. 25.

The current benefit structure is outlined in the Actuarial Section. The changes made since the previous valuation are highlighted on page 129. We provided the information used in the supporting schedules in the Actuarial Section and the Schedules of Funding Progress in the Financial Section, as well as the employer contribution rates shown in the Schedule of Employer Contributions in the Financial Section.

Based upon the valuation results, it is our opinion that the Missouri State Employees' Retirement System continues in sound condition in accordance with actuarial principles of level percent of payroll financing.

Respectfully submitted,

Norman L. Jones

Norman L. Jones, F.S.A.
Senior Consultant & Actuary

Brad L Armstrong

Brad L. Armstrong, A.S.A.
Senior Consultant & Actuary

Actuary Peer Review

BUCK CONSULTANTS
A Mellon Financial Company
200 Galleria Parkway, N.W., Suite 1900
Atlanta, Georgia 30339-5945

April 18, 2003

Buck Consultants, Inc.
200 Galleria Parkway, NW
Suite 1900
Atlanta, GA 30339-5945

To the MOSERS' Board of Trustees:

I, Edward A. Macdonald, certify that the following is a true, correct, and complete copy of the executive summary section outlining all substantive findings of a comprehensive actuarial review of the Missouri State Employees' Retirement System completed April 1, 2003 under my direct supervision:

The main purpose of an actuarial review is to provide assurance to the Board that the actuarial valuations are being completed properly in accordance with all applicable statutes and actuarial standards of practice.

Our conclusions with regard to the primary issues of this review are as follows:

- The results of the June 30, 2002 actuarial valuation prepared by Gabriel, Roeder, Smith & Company (GRS)
  - Have been prepared using reasonable and appropriate actuarial assumptions.
  - Have been prepared using a reasonable and appropriate actuarial funding method, properly applied.
  - Have been prepared by fully qualified actuaries and in accordance with all applicable Actuarial Standards of Practice.
  - Present a fair and reasonable representation of the actuarial accrued liabilities of the Missouri State Employees' Retirement System.
  - Develop contribution rates, which are appropriate to satisfy the funding obligations of the System.

Other highlights of our review process and minor corrections and recommendations are summarized below:

- The demographic information provided to GRS appears to be clean and complete, with a few exceptions. GRS did make assumptions regarding missing information, which we believe were appropriate. The data procedures used by GRS were reasonable overall; however, there are a few areas that we feel should be addressed. We recommend some minor adjustments in the data procedures in order to more accurately account for every member, to check for invalid data and to use all provided data accurately

- Our review considered the actuarial assumptions used in the most recent actuarial valuation as of June 30, 2002. We have also reviewed the results of the experience analysis covering the period July 1, 1995 through June 30, 1999. Our comments reflect our review of the current assumptions with recommended changes for the next experience study where appropriate. The actuarial assumptions have been set using an explicit approach considering separate rates of mortality, separation, disability, and retirement. Salaries are assumed to increase based on promotional and productivity sources and an underlying inflation rate, which is consistent with the investment return assumption. In our opinion, the approach used in setting the assumptions is consistent with generally accepted actuarial standards and practices. Particularly in light of assumption changes made due to the implementation of a BackDROP program and other findings from the last experience study, we recommend that the demographic assumptions, particularly retirement rates, be reviewed carefully in connection with the next experience study.

- We understand MOSERS' basic funding objective is to avoid the transfer of benefit cost between generations of taxpayers. To accomplish this, the benefit obligations are pre-funded to systematically pay the cost of the benefit over a member's career. In our opinion, the actuarial cost methods used by GRS accomplish this objective. The method used to determine the assets available for funding is the five-year smoothed market value method. We agree that this method smooths market volatility. Overall, the valuation procedures used by GRS are reasonable and we were able to replicate the valuation liabilities within an acceptable range. However, there were several errors discovered with the terminated vested liability. We recommend that in future valuations, the methods used to determine the liability for terminated vested members be reviewed carefully.

Thank you for the opportunity to participate in this actuarial review. Overall, we have been favorably impressed with the performance of the actuarial functions. Messrs. Jones and Armstrong, their staff, as well as MOSERS' staff, should be commended for their assistance with this review.

Respectfully submitted,

Edward A. Macdonald
Principal, Consulting Actuary

Summary of Actuarial Assumptions
June 30, 2003

Economic Assumptions
The investment return rate used in the valuations was 8.5% per year, compounded annually (net after investment expenses). This assumption is used to account for the fact that equal amounts of money payable at different points in time in the future do not have the same value presently.

Pay increase assumptions for individual active members are shown for sample ages on page 101. Part of the assumption for each age is for merit and/or seniority increase, and the other 4% recognizes wage inflation. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

The active member payroll is assumed to increase 4% annually, which is the portion of the individual pay increase assumptions attributable to inflation.

The annual COLA is assumed to be 4% per year on a compounded basis when a minimum COLA of 4% is in effect and 2.8% per year on a compounded basis when no minimum COLA is in effect.

The number of active members in the MSEP is assumed to remain constant although certain new hires on or after July 1, 2002, will participate in the College and University Retirement Plan (CURP). The number of active members in the ALJLAP and Judicial Plan is assumed to continue at the present number. Active and retired member data is reported as of May 31. It is assumed for valuation purposes that there is no turnover among members and no new entrants during the month of June.

Noneconomic Assumptions
The mortality table, for post-retirement mortality, used in evaluating allowances to be paid was the 1971 Group Annuity Mortality Table, projected to the year 2000 with a 1-year age setback for men and a 7-year age setback for women. Related values are shown on page 102. This assumption is used to measure the probabilities of each benefit payment being made after retirement.

The probabilities of age and service retirement are shown on page 103. The first two years of eligibility if prior to age 70, were halved due to the expected emerging effect of the BackDROP. It was assumed that each member will be granted one half year of service credit for unused leave upon retirement and military service purchases.

The probabilities of withdrawal from service, death-in-service, and disability are shown for sample ages on page 101. For disability retirement, impaired longevity was recognized by use of special mortality tables.

The entry age normal actuarial cost method of valuation was used in determining liabilities and normal cost. The normal cost was based on the benefit provisions affecting new employees (MSEP 2000). Differences in the past between assumed experience and actual experience (actuarial gains and losses) become part of actuarial accrued liabilities. Unfunded actuarial accrued liabilities are amortized to produce payments (principal and interest), which are a level percent of payroll.

Employer contribution dollars were assumed to be paid in equal installments throughout the employer fiscal year.

The asset valuation method fully recognizes expected investment return and averages unanticipated market return over a five-year period.

The data about persons now covered and about present assets was furnished by the system's administrative staff. Although examined for general reasonableness, the data was not audited by the actuary.

It is assumed that, among active members, 80% are married at retirement, 70% of those dying in active service are married, and men are three years older than their spouses.

The liabilities for active members hired on or after July 1, 2000, were based on MSEP 2000 benefits. The liabilities for active members hired before July 1, 2000, were based on MSEP 2000 benefits for male general employees with an age at hire of 35 years or less, for female general employees, for contract employees, for elected officials, and for general assembly members. All others were based on MSEP benefits. The BackDROP was only explicitly valued for those assumed to receive MSEP 2000 benefits.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries.

Summary of Actuarial Assumptions

Separations From Active Employment Before Service Retirement and Individual Pay Increase Assumptions

June 30, 2003

MSEP

Sample Ages	Years of Service	Percent of Active Members Separating Within the Next Year: Withdrawal Men	Withdrawal Women	Death* Men	Death* Women	Disability Men	Disability Women	Pay Increase Assumptions for an Individual Employee: Merit and Seniority**	Base (Economy)	Increase Next Year
	0	25.2%	24.7%							
	1	17.1	17.7							
	2	14.4	14.4							
	3	12.8	12.8							
	4	12.0	12.0							
20	+5	12.0	11.0	.04%	.03%	.00%	.00%	2.7%	4.0%	6.7%
25		12.0	11.0	.05	.04	.05	.03	2.6	4.0	6.6
30		8.8	8.9	.06	.04	.12	.04	2.2	4.0	6.2
35		6.2	6.0	.08	.06	.16	.13	1.9	4.0	5.9
40		4.6	4.9	.12	.08	.21	.21	1.4	4.0	5.4
45		3.5	4.3	.19	.11	.29	.25	1.2	4.0	5.2
50		2.8	3.6	.35	.17	.41	.41	0.7	4.0	4.7
55		2.4	2.9	.59	.31	.77	.85	0.7	4.0	4.7
60		2.4	2.9	.90	.54	1.40	1.50	0.0	4.0	4.0
65		2.4	2.9	1.44	.83	0.00	0.00	0.0	4.0	4.0

* 2% of the deaths in active service are assumed to be duty-related.
** Does not apply to members of the general assembly.

ALJLAP

Sample Ages	Percent of Active Members Separating Within the Next Year: Withdrawal Men	Withdrawal Women	Death Men	Death Women	Disability Men	Disability Women	Pay Increase Assumptions for an Individual Employee: Merit and Seniority	Base (Economy)	Increase Next Year
25	7.5%	6.0%	.05%	.04%	.02%	.02%	1.6%	4.0%	5.6%
30	6.6	4.9	.06	.05	.03	.03	1.2	4.0	5.2
35	4.7	3.5	.08	.06	.04	.07	0.9	4.0	4.9
40	3.3	2.8	.11	.08	.05	.11	0.4	4.0	4.4
45	2.6	2.5	.19	.10	.09	.17	0.3	4.0	4.3
50	2.6	2.2	.35	.17	.12	.35	0.2	4.0	4.2
55	2.6	1.6	.59	.31	.23	.49	0.2	4.0	4.2
60	2.0	0.8	.90	.54	.33	.53	0.0	4.0	4.0
65	1.5	0.6	1.44	.83	0.00	0.00	0.0	4.0	4.0

Summary of Actuarial Assumptions
Single Life Retirement Values
June 30, 2003

Sample Attained Ages	Present Value of $1/Month the First Year Increasing 4%/2.8% Yearly				Future Life Expectancy (Years)			
	Service		Disability		Service		Disability	
	Men	Women	Men	Women	Men	Women	Men	Women
40	$ 202.23	$ 212.07	$ 135.46	$ 156.68	38.46	44.22	19.70	26.02
45	191.81	204.06	126.32	150.16	33.73	39.41	17.50	23.70
50	179.47	194.06	116.10	142.75	29.17	34.67	15.35	21.39
55	165.25	182.08	106.06	135.11	24.82	30.06	13.43	19.18
60	148.90	168.25	97.62	126.74	20.70	25.67	11.87	17.01
65	130.43	152.36	90.66	117.09	16.82	21.50	10.56	14.82
70	110.79	134.27	82.12	105.05	13.32	17.57	9.13	12.50
75	91.75	114.73	70.79	89.33	10.36	13.99	7.49	10.00
80	73.37	95.50	56.17	71.93	7.83	10.91	5.66	7.62
85	57.86	76.89	42.26	56.17	5.89	8.29	4.08	5.66

Summary of Actuarial Assumptions
Percent of Eligible Active Members Retiring Next Year
June 30, 2003

MSEP

Retirement Ages	Percent Men	Percent Women	Percent of "Rule of 80" at 48 Men	Percent of "Rule of 80" at 48 Women	Retirement Ages	Percent Men	Percent Women	Percent of "Rule of 80" at 48 Men	Percent of "Rule of 80" at 48 Women
48			25%	20%	62	29.0%	28.0%	29.0	28.0
49			25.0	20.0	63	24.0	18.0	24.0	18.0
50	25.0%	20.0%	20.0	18.0	64	30.0	33.0	30.0	33.0
51	25.0	19.5	20.0	18.0	65	40.0	50.0	40.0	50.0
52	21.0	18.5	20.0	18.0	66	32.0	27.0	32.0	28.0
53	17.0	16.0	17.0	16.0	67	26.0	27.0	26.0	27.0
54	12.5	12.5	12.5	12.5	68	23.0	27.0	23.0	27.0
55	6.5	6.7	6.5	6.7	69	23.0	27.0	23.0	27.0
56	6.5	6.7	6.5	6.7	70	23.0	27.0	23.0	27.0
57	6.5	6.7	6.5	6.7	71	23.0	27.0	23.0	27.0
58	6.5	6.7	6.5	6.7	72	23.0	27.0	23.0	27.0
59	6.5	8.3	6.5	8.3	73	23.0	27.0	23.0	27.0
60	9.5	12.0	9.5	12.0	74	23.0	27.0	23.0	27.0
61	13.0	16.5	13.0	16.5	75 & over	100.0	100.0	100.00	100.00

ALJLAP

Retirement Ages	Percent Men	Percent Women	Retirement Ages	Percent Men	Percent Women
55	5.0%	8.0%	65	25.0%	55.0%
56	5.0	8.0	66	20.0	35.0
57	5.0	8.0	67	20.0	25.0
58	5.0	8.0	68	20.0	25.0
59	5.0	8.0	69	30.0	60.0
60	15.0	25.0	70	30.0	60.0
61	10.0	15.0	71	30.0	60.0
62	15.0	25.0	72	30.0	60.0
63	10.0	15.0	73	30.0	60.0
64	10.0	25.0	74	30.0	60.0
			75 & over	100.0	100.0

Judicial Plan

Retirement Ages	Percent Men	Percent Women	Retirement Ages	Percent Men	Percent Women
55	5.0%	8.0%	65	25.0%	40.0%
56	5.0	8.0	66	20.0	25.0
57	5.0	8.0	67	20.0	25.0
58	5.0	8.0	68	20.0	25.0
59	5.0	8.0	69	30.0	50.0
60	15.0	15.0	70	100.0	100.0
61	10.0	10.0			
62	15.0	15.0			
63	10.0	10.0			
64	10.0	10.0			

Summary of Actuarial Assumptions

Miscellaneous and Technical Assumptions

June 30, 2003

Pay Increase Timing
Middle of fiscal year.

Decrement Timing
Decrements of all types are assumed to occur mid-year.

Eligibility Testing
Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

Benefit Service
Exact fractional service is used to determine the amount of benefit payable.

Decrement Relativity
Decrement rates are used directly from the experience study without adjustments for multiple decrement table effects.

Decrement Operation
Disability and turnover decrements do not operate during the first five years of service. Disability and withdrawal do not operate during normal retirement eligibility.

Normal Form of Benefit
The assumed normal form of benefit is the straight life form for the MSEP 2000 with 50% continuing to an eligible surviving spouse for the MSEP. No adjustment has been made for post-retirement option election changes.

Loads
No loads were used.

Incidence of Contributions
Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in the report, and the actual payroll payable at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits.

Summary of Member Data Included in Valuations

Pension Trust Funds

June 30, 2003

Active Members

Valuation Group	Number	Payroll	Group Averages Salary	Age (Yrs.)	Service (Yrs.)
Missouri State Employees' Plan					
Regular state employees	52,893	$1,539,362,020	$ 29,103	43.5	9.6
Elected officials	6	590,976	98,496	46.1	6.1
Legislative clerks	86	2,329,824	27,091	53.8	14.3
Legislators	196	6,177,456	31,518	48.8	3.9
Uniformed water patrol	77	3,015,264	39,159	39.5	13.8
Conservation Department	1,475	53,925,085	36,559	42.2	12.6
School-term salaried employees	2,825	134,494,739	47,609	49.9	14.8
Total MSEP group	57,558	1,739,895,364	30,229	43.8	9.9
Administrative Law Judges' and Legal Advisors' Plan	57	4,657,896	81,717	48.0	9.9
Judicial Plan	392	40,052,952	102,176	53.0	10.7

Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages Benefit	Age (Yrs.)
Missouri State Employees' Plan				
Retirement	20,084	$266,415,860	$ 13,265	69.9
Disability	29	113,843	3,926	57.5
Survivor of active member	1,151	8,133,737	7,067	59.0
Survivor of retired member	1,608	12,420,698	7,724	72.9
Total MSEP group	22,872	287,084,138	12,552	69.5
Administrative Law Judges and Legal Advisors' Plan	27	993,990	36,814	73.8
Judicial Plan	393	17,342,866	44,129	75.3

Others

Group	Terminated Vested	Leave of Absence	Long-Term Disability
Missouri State Employees' Plan	12,974	512	1,117
Administrative Law Judges and Legal Advisors' Plan	25	0	0
Judicial Plan	74	0	0

Active Members by Attained Age and Years of Service

June 30, 2003

MSEP

	Years of Service to Valuation Date							Totals	
Attained Age	0-3	4	5-9	10-11	12-14	15-29	30 Plus	Number	Valuation Payroll
Under 20	53							53	$ 929,444
20-24	1,978	52	21					2,051	42,030,339
25-29	3,668	565	808	7				5,048	125,060,169
30-34	2,846	639	2,575	299	144	19		6,522	179,358,823
35-39	2,190	496	2,077	644	809	610		6,826	198,314,570
40-44	2,221	500	1,953	513	958	2,179		8,324	252,774,287
45-49	1,918	499	1,842	520	917	3,376	59	9,131	290,249,990
50	353	88	379	106	183	713	83	1,905	63,214,225
51	361	78	365	103	178	826	64	1,975	66,161,801
52	352	91	314	98	170	771	94	1,890	63,143,006
53	338	57	309	114	188	675	72	1,753	57,478,798
54	305	69	324	120	191	608	95	1,712	56,449,423
55	318	75	265	87	164	561	82	1,552	50,587,537
56	280	63	292	102	155	540	108	1,540	51,046,402
57	233	59	254	84	159	468	90	1,347	44,324,393
58	175	45	192	67	85	365	55	984	32,930,838
59	161	40	144	62	99	324	65	895	29,227,771
60	144	48	185	61	99	334	57	928	31,030,194
61	138	41	157	56	86	246	53	777	26,102,720
62	83	23	149	36	84	202	55	632	20,676,179
63	67	20	85	24	59	129	25	409	13,365,059
64	48	13	67	18	42	76	44	308	10,818,981
65	40	12	55	24	38	81	37	287	10,271,161
66	16	9	42	8	23	47	24	169	5,956,674
67	14	5	26	10	14	43	13	125	4,484,103
68	13	4	17	9	14	36	15	108	3,914,305
69	14	2	11	3	8	23	8	69	2,346,898
70 & Over	38	12	42	18	23	85	20	238	7,647,274
Totals	18,365	3,605	12,950	3,193	4,890	13,337	1,218	57,558	$1,739,895,364

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Group Averages:

Age	43.8 years
Service	9.9 years
Annual Pay	$30,229

Active Members by Attained Age and Years of Service

June 30, 2003

ALJLAP

	Years of Service to Valuation Date							Totals	
Attained Age	0-3	4	5-9	10-11	12-14	15-29	30 Plus	Number	Valuation Payroll
30-34	2							2	$ 136,392
35-39	7	1	2	1	1			12	932,184
40-44	1		2	4	2	1		10	832,584
45-49	3	2	3	1	1			10	835,824
50				1		1		2	163,200
51					1	2		3	274,176
52						1		1	86,400
54					1			1	91,392
55			2		1	1		4	326,400
57	2					1		3	255,672
58				1				1	86,400
59	1					1		2	153,600
60			1			1		2	157,272
61				1				1	86,400
66						1		1	76,800
68	1							1	86,400
70 & Over							1	1	76,800
Totals	17	3	10	9	7	10	1	57	$4,657,896

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Group Averages:

Age	48.0 years
Service	9.9 years
Annual Pay	$81,717

Active Members by Attained Age and Years of Service

June 30, 2003

Judicial Plan

	Years of Service to Valuation Date							Totals	
Attained Age	0-3	4	5-9	10-11	12-14	15-29	30 Plus	Number	Valuation Payroll
30-34	1							1	$ 96,000
35-39	15	5	1					21	2,028,000
40-44	17	2	11	2	1	1		34	3,362,016
45-49	14	7	20	4	5	6		56	5,671,008
50	4	1	7	1	4	4		21	2,206,032
51	4	1	6	2	3	6		22	2,266,512
52	10	1	6	2	2	5		26	2,692,032
53	6		1	1	1	4		13	1,335,000
54	4	2	5	3	1	8		23	2,342,016
55	4	3	3	4	3	10		27	2,708,208
56	5	1	7	1	1	8		23	2,343,000
57	4	3	5		3	5		20	2,054,016
58	1	1	1	3	4	9		19	2,004,024
59	1	1	2	4	4	4		16	1,620,000
60	1		3			2		6	612,000
61	1	2	2	1	1	6		13	1,334,016
62	1	1	2	1	5	5		15	1,567,008
63			3	1		5		9	943,008
64	1				1	2	2	6	626,016
65			1		3	1		5	535,008
66	1					2	1	4	427,008
67					1	3	1	5	530,016
68					1	1		2	216,000
69			1			1	1	3	312,000
70 & Over						2		2	223,008
Totals	95	31	87	30	44	100	5	392	$40,052,952

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Group Averages:

Age	53.0 years
Service	10.7 years
Annual Pay	$102,176

Schedules of Active Member Valuation Data

Six Years Ended June 30, 2003

MSEP

Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	Percentage of Increase in Average Pay
June 30, 1998	54,544	$1,459,712,203	$26,762	3.80%
June 30, 1999	56,158	1,564,551,532	27,860	4.10
June 30, 2000	57,774	1,683,697,080	29,143	4.61
June 30, 2001	58,431	1,758,190,268	30,090	3.25
June 30, 2002	58,616	1,773,283,484	30,253	0.54
June 30, 2003	57,558	1,739,895,364	30,229	(0.08)

ALJLAP

Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	Percentage of Increase in Average Pay
June 30, 1998	42	$2,806,436	$ 66,820	4.93%
June 30, 1999	47	3,488,698	74,228	11.09
June 30, 2000	52	4,072,888	78,325	5.52
June 30, 2001	57	4,661,020	81,772	4.40
June 30, 2002	58	4,779,504	82,405	0.77
June 30, 2003	57	4,657,896	81,717	(0.83)

Judicial Plan

Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	Percentage of Increase in Average Pay
June 30, 1998	365	$32,446,141	$ 88,894	2.47%
June 30, 1999	366	34,162,013	93,339	5.00
June 30, 2000	375	37,107,487	98,953	6.01
June 30, 2001	381	38,687,793	101,543	2.62
June 30, 2002	392	40,068,744	102,216	0.66
June 30, 2003	392	40,052,952	102,176	(0.04)

Retirees and Beneficiaries Added and Removed

Six Years Ended June 30, 2003

MSEP

Fiscal Year Ended	Classification	Benefit Type	Added to Rolls: Number	Added to Rolls: Annual Allowances
June 30, 1998	General Employee	Retirement	1,270	$ 19,629,029
		Survivor of active	81	665,237
		Survivor of retired	122	951,214
		Disability	0	7,932
		Occupational disability	0	0
	Lincoln University - Vested	Retirement	1	994
		Survivor of active	0	0
	Legislators	Retirement	13	244,763
		Survivor of active	1	10,818
		Survivor of retired	3	34,201
	Elected Officials	Retirement	0	2,551
		Survivor of active	0	0
		Survivor of retired	1	21,512
June 30, 1999	General Employee	Retirement	1,282	18,566,542
		Survivor of active	95	773,822
		Survivor of retired	152	1,081,059
		Disability	0	4,558
		Occupational disability	0	0
	Lincoln University - Vested	Retirement	1	1,051
		Survivor of active	0	(262)
	Legislators	Retirement	10	257,072
		Survivor of active	2	26,662
		Survivor of retired	5	39,656
	Elected Officials	Retirement	1	49,578
		Survivor of active	0	0
		Survivor of retired	0	861
June 30, 2000	General Employee	Retirement	1,337	20,272,214
		Survivor of active	86	1,020,432
		Survivor of retired	416	2,481,786
		Disability	1	8,081
		Occupational disability	0	0
	Lincoln University - Vested	Retirement	1	5,860
		Survivor of active	0	0
	Legislators	Retirement	8	204,076
		Survivor of active	0	2,157
		Survivor of retired	3	36,026
	Elected Officials	Retirement	0	6,821
		Survivor of active	0	0
		Survivor of retired	0	895

MSEP continued on pages 112 -113.

Removed From Rolls		Rolls at End of Year				
Number	Annual Allowances	Number	Annual Allowances	Percentage Increase in Annual Allowances	Average Annual Allowance	Percentage Increase in Average Annual Allowance
650	$ 4,947,946	14,532	$ 131,956,416	12.52%	$ 9,080	7.71%
27	81,763	860	4,279,631	15.79	4,976	8.50
42	187,731	700	4,540,140	20.22	6,486	6.48
13	49,220	63	241,899	(14.58)	3,840	3.06
0	0	1	17,448	0.00	17,448	0.00
0	0	6	34,419	2.97	5,737	(14.18)
0	0	1	2,886	0.00	2,886	0.00
8	129,692	158	2,686,976	4.47	17,006	1.17
0	0	6	41,217	35.59	6,870	12.99
3	11,086	28	218,653	11.82	7,809	11.83
1	41,811	2	86,868	(31.13)	43,434	3.31
0	0	0	0	0.00	0	0.00
0	0	1	21,512	0.00	21,512	0.00
637	4,686,352	15,177	145,836,606	10.52	9,609	5.83
21	47,199	934	5,006,254	16.98	5,360	7.72
37	193,063	815	5,428,136	19.56	6,660	2.68
4	21,045	59	225,412	(6.82)	3,821	(0.49)
0	0	1	17,448	0.00	17,448	0.00
1	4,327	6	31,143	(9.52)	5,191	(9.52)
0	0	1	2,624	(9.08)	2,624	(9.08)
7	105,277	161	2,838,771	5.65	17,632	3.68
0	0	8	67,879	64.69	8,485	23.51
6	60,921	27	197,388	(9.73)	7,311	(6.38)
0	0	3	136,446	57.07	45,482	4.72
0	0	0	0	0.00	0	0.00
0	0	1	22,373	4.00	22,373	4.00
649	5,324,814	15,865	160,784,006	10.25	10,135	5.47
37	110,049	983	5,916,637	18.18	6,019	12.29
47	294,927	1,184	7,614,995	40.29	6,432	(3.42)
8	43,141	52	190,352	(15.55)	3,661	(4.19)
0	0	1	17,448	0.00	17,448	0.00
0	0	7	37,003	18.82	5,286	1.83
0	0	1	2,624	0.00	2,624	0.00
3	95,126	166	2,947,721	3.84	17,757	0.71
0	0	8	70,036	3.18	8,755	3.18
0	0	30	233,414	18.25	7,780	6.41
0	0	3	143,267	5.00	47,756	5.00
0	0	0	0	0.00	0	0.00
0	0	1	23,268	4.00	23,268	4.00

Retirees and Beneficiaries Added and Removed

Six Years Ended June 30, 2003

MSEP (continued from previous page)

Fiscal Year Ended	Classification	Benefit Type	Added to Rolls Number	Added to Rolls Annual Allowances
June 30, 2001	General Employee	Retirement	2,580	$ 55,234,780
		Survivor of active	84	814,517
		Survivor of retired	197	1,832,029
		Disability	0	3,518
		Occupational disability	0	0
	Lincoln University - Vested	Retirement	1	1,841
		Survivor of active	0	0
	Legislators	Retirement	14	436,356
		Survivor of active	0	2,468
		Survivor of retired	7	89,399
	Elected Officials	Retirement	6	230,136
		Survivor of active	1	56,938
		Survivor of retired	0	931
June 30, 2002	General Employee	Retirement	1,840	32,360,047
		Survivor of active	84	842,611
		Survivor of retired	209	1,805,486
		Disability	0	3,474
		Occupational disability	0	0
	Lincoln University - Vested	Retirement	2	6,061
		Survivor of active	0	0
	Legislators	Retirement	8	238,058
		Survivor of active	1	6,950
		Survivor of retired	4	59,947
	Elected Officials	Retirement	0	304
		Survivor of active	0	2,277
		Survivor of retired	0	968
June 30, 2003	General Employee	Retirement	1,819	33,654,082
		Survivor of active	76	808,507
		Survivor of retired	206	1,944,744
		Disability	0	2,109
		Occupational disability	0	0
	Lincoln University - Vested	Retirement	0	0
		Survivor of active	0	0
	Legislators	Retirement	45	880,632
		Survivor of active	1	27,031
		Survivor of retired	4	65,987
	Elected Officials	Retirement	0	(13,546)
		Survivor of active	0	2,369
		Survivor of retired	0	1,007

Removed From Rolls		Rolls at End of Year				
Number	Annual Allowances	Number	Annual Allowances	Percentage Increase in Annual Allowances	Average Annual Allowance	Percentage Increase in Average Annual Allowance
670	$ 5,935,443	17,775	$ 210,083,343	30.66%	$ 11,819	16.62%
27	173,754	1,040	6,557,400	10.83	6,305	4.75
67	328,785	1,314	9,118,239	19.74	6,939	7.88
14	55,684	38	138,186	(27.41)	3,636	(0.68)
0	0	1	17,448	0.00	17,448	0.00
0	0	8	38,844	4.98	4,856	(8.13)
0	0	1	2,624	0.00	2,624	0.00
9	156,423	171	3,227,654	9.50	18,875	6.30
0	0	8	72,504	3.52	9,063	3.52
1	11,056	36	311,757	33.56	8,660	11.31
0	0	9	373,403	160.63	41,489	(13.12)
0	0	1	56,938	0.00	56,938	0.00
0	0	1	24,199	4.00	24,199	4.00
685	6,249,943	18,930	236,193,447	12.43	12,477	5.57
30	137,619	1,094	7,262,392	10.75	6,638	5.28
67	378,545	1,456	10,545,180	15.65	7,243	4.38
7	32,754	31	108,906	(21.19)	3,513	(3.38)
0	0	1	17,448	0.00	17,448	0.00
0	0	10	44,905	15.60	4,491	(7.52)
0	0	1	2,624	0.00	2,624	0.00
4	80,340	175	3,385,372	4.89	19,345	2.49
0	0	9	79,454	9.59	8,828	(2.59)
1	4,195	39	367,509	17.88	9,423	8.81
0	0	9	373,707	0.08	41,523	0.08
0	0	1	59,215	4.00	59,215	4.00
0	0	1	25,167	4.00	25,167	4.00
734	6,798,563	20,015	263,048,966	11.37	13,143	5.34
28	97,740	1,142	7,973,159	9.79	6,982	5.18
71	368,959	1,591	12,120,965	14.94	7,618	5.18
3	15,849	28	95,166	(12.62)	3,399	(3.25)
0	0	1	17,448	0.00	17,448	0.00
1	1,051	9	43,854	(2.34)	4,873	8.51
0	0	1	2,624	0.00	2,624	0.00
4	71,803	216	4,194,201	23.89	19,418	0.38
0	0	10	106,485	34.02	10,649	20.63
3	20,943	40	412,553	12.26	10,314	9.46
0	0	9	360,161	(3.62)	40,018	(3.62)
0	0	1	61,584	4.00	61,584	4.00
0	0	1	26,174	4.00	26,174	4.00

Retirees and Beneficiaries Added and Removed

Six Years Ended June 30, 2003

ALJLAP

		Added to Rolls		Removed From Rolls	
Fiscal Year Ended	Benefit Type	Number	Annual Allowances	Number	Annual Allowances
June 30, 1998	Retirement	3	$ 123,798	0	$ 0
	Survivor of active	0	645	0	0
	Survivor of retired	0	3,734	0	0
June 30, 1999	Retirement	0	24,637	0	0
	Survivor of active	0	671	0	0
	Survivor of retired	0	3,883	0	0
June 30, 2000	Retirement	0	23,908	1	42,874
	Survivor of active	0	698	1	18,148
	Survivor of retired	1	25,475	0	0
June 30, 2001	Retirement	1	57,621	1	39,647
	Survivor of active	0	0	0	0
	Survivor of retired	1	25,674	0	0
June 30, 2002	Retirement	1	67,877	1	46,580
	Survivor of active	0	0	0	0
	Survivor of retired	0	5,582	0	0
June 30, 2003	Retirement	3	166,161	0	0
	Survivor of active	0	0	0	0
	Survivor of retired	0	5,601	0	0

Rolls at End of Year				
Number	Annual Allowances	Percentage Increase in Annual Allowances	Average Annual Allowance	Percentage Increase in Average Annual Allowance
17	$ 615,932	25.16%	$ 36,231	3.07%
1	16,779	4.00	16,779	4.00
6	97,077	4.00	16,180	4.00
17	640,569	4.00	37,681	4.00
1	17,450	4.00	17,450	4.00
6	100,960	4.00	16,827	4.00
16	621,603	(2.96)	38,850	3.10
0	0	(100.00)	0	(100.00)
7	126,435	25.23	18,062	7.34
16	639,577	2.89	39,974	2.89
0	0	0.00	0	0.00
8	152,109	20.31	19,014	5.27
16	660,874	3.33	41,305	3.33
0	0	0.00	0	0.00
8	157,691	3.67	19,711	3.67
19	827,035	25.14	43,528	5.38
0	0	0.00	0	0.00
8	163,292	3.55	20,412	3.56

Retirees and Beneficiaries Added and Removed

Six Years Ended June 30, 2003

Judicial Plan

		Added to Rolls		Removed From Rolls	
Fiscal Year Ended	Benefit Type	Number	Annual Allowances	Number	Annual Allowances
June 30, 1998	Retirement	22	$ 1,427,677	8	$ 341,058
	Survivor of active	27	362,157	0	0
	Survivor of retired	6	185,841	34	424,102
	Disability	0	2,458	0	0
June 30, 1999	Retirement	22	1,293,321	11	514,874
	Survivor of active	1	53,269	3	31,176
	Survivor of retired	6	185,690	6	142,056
	Disability	1	47,771	3	130,852
June 30, 2000	Retirement	18	1,343,591	11	535,292
	Survivor of active	2	76,496	1	6,813
	Survivor of retired	10	295,547	7	93,502
	Disability	1	46,500	0	0
June 30, 2001	Retirement	25	2,241,337	8	354,861
	Survivor of active	2	83,627	2	34,642
	Survivor of retired	1	76,395	4	42,983
	Disability	0	1,500	0	0
June 30, 2002	Retirement	11	984,612	9	455,021
	Survivor of active	1	57,051	1	28,541
	Survivor of retired	5	195,971	5	84,932
	Disability	0	0	1	48,000
June 30, 2003	Retirement	23	1,445,716	10	560,588
	Survivor of active	0	34,820	0	0
	Survivor of retired	6	214,029	7	101,944
	Disability	0	0	0	0

Rolls at End of Year Number	Annual Allowances	Percentage Increase in Annual Allowances	Average Annual Allowance	Percentage Increase in Average Annual Allowance
220	$ 9,779,907	12.50%	$ 44,454	5.34%
45	734,635	97.23	16,325	(21.11)
80	1,182,634	(16.77)	14,783	12.37
2	83,081	3.05	41,541	3.05
231	10,558,354	7.96	45,707	2.82
43	756,728	3.01	17,598	7.80
80	1,226,268	3.69	15,328	3.69
0	0	(100.00)	0	(100.00)
238	11,366,653	7.66	47,759	4.49
44	826,411	9.21	18,782	6.73
83	1,428,313	16.48	17,209	12.27
1	46,500	100.00	46,500	100.00
255	13,253,129	16.60	51,973	8.82
44	875,396	5.93	19,895	5.93
80	1,461,725	2.34	18,272	6.18
1	48,000	3.23	48,000	3.23
257	13,782,720	4.00	53,629	3.19
44	903,906	3.26	20,543	3.26
80	1,572,764	7.60	19,660	7.60
0	0	(100.00)	0	(100.00)
270	14,667,848	6.42	54,325	1.30
44	938,726	3.85	21,335	3.86
79	1,684,849	7.13	21,327	8.48
0	0	0.00	0	0.00

Short-Term Solvency Test

Pension Trust Funds

Ten Years Ended June 30, 2003

MSEP

	Actuarial Accrued Liabilities for						
Fiscal Year	Member Contributions (1)	Current Retirees and Beneficiaries (2)	Active and Inactive Members, Employer Financed Portion (3)	Actuarial Value of Assets	Percentage of Actuarial Liabilities Covered by Assets Available for (1)	(2)	(3)
1994	$ 448,559	$ 909,819,763	$ 2,009,188,103	$ 2,425,134,504	100.0%	100.0%	75.4%
1995	448,559	1,010,431,608	2,139,916,413	2,649,077,134	100.0	100.0	76.6
1996	448,559	1,156,347,608	2,283,330,316	2,927,896,643	100.0	100.0	77.6
1997	448,501	1,552,966,747	2,930,632,553	3,580,974,502	100.0	100.0	69.2
1998	447,716	1,688,502,950	3,229,936,517	4,210,635,094	100.0	100.0	78.1
1999	0	1,970,504,367	3,535,464,262	4,908,820,033	100.0	100.0	83.1
2000	0	2,142,487,495	3,778,196,697	5,511,714,616	100.0	100.0	89.2
2001	0	2,496,277,500	3,568,889,216	5,881,232,850	100.0	100.0	94.8
2002	0	2,716,457,033	3,577,815,242	6,033,133,598	100.0	100.0	92.7
2003	0	3,016,029,050	3,646,262,356	6,057,329,072	100.0	100.0	83.4

ALJLAP

	Actuarial Accrued Liabilities for						
Fiscal Year	Member Contributions (1)	Current Retirees and Beneficiaries (2)	Active and Inactive Members, Employer Financed Portion (3)	Actuarial Value of Assets	Percentage of Actuarial Liabilities Covered by Assets Available for (1)	(2)	(3)
1994	$ 0	$ 5,973,718	$ 2,793,014	$ 6,229,224	100.0%	100.0%	9.1%
1995	0	6,088,732	3,641,223	6,655,207	100.0	100.0	15.6
1996	0	6,196,526	4,079,837	7,258,814	100.0	100.0	26.0
1997	0	6,569,957	4,857,224	8,864,395	100.0	100.0	47.2
1998	0	7,415,852	5,471,056	10,285,233	100.0	100.0	52.4
1999	0	7,883,988	6,890,537	11,763,737	100.0	100.0	56.3
2000	0	7,526,118	8,995,625	13,191,825	100.0	100.0	63.0
2001	0	7,534,368	9,275,594	14,410,199	100.0	100.0	74.1
2002	0	8,268,650	9,906,692	15,172,619	100.0	100.0	69.7
2003	0	9,709,096	10,237,391	15,626,461	100.0	100.0	57.8

Judicial Plan

	Actuarial Accrued Liabilities for						
Fiscal Year	Member Contributions (1)	Current Retirees and Beneficiaries (2)	Active and Inactive Members, Employer Financed Portion (3)	Actuarial Value of Assets	Percentage of Actuarial Liabilities Covered by Assets Available for (1)	(2)	(3)
1994	$ 0	$ 70,477,754	$ 71,117,871	$ 0	100.0%	0.0%	0.0%
1995	0	81,586,593	72,060,389	0	100.0	0.0	0.0
1996	0	86,145,180	75,588,930	0	100.0	0.0	0.0
1997	0	99,662,179	97,810,394	0	100.0	0.0	0.0
1998	0	108,392,273	99,187,524	0	100.0	0.0	0.0
1999	0	120,543,611	107,258,730	6,067,305	100.0	5.0	0.0
2000	0	131,199,867	110,597,474	13,861,769	100.0	10.6	0.0
2001	0	143,163,718	104,815,186	22,613,050	100.0	15.8	0.0
2002	0	149,135,989	106,979,463	29,651,113	100.0	19.9	0.0
2003	0	157,923,805	109,126,052	34,566,516	100.0	21.9	0.0

Derivation of Experience Gain (Loss)

MSEP

Actual experience will never coincide exactly with assumed experience (except by coincidence). Gains and losses may offset each other over a period of years, but sizeable year-to-year variations from assumed experience are common. Detail on the derivation of the experience gain (loss) is shown below, along with a year-by-year comparative schedule.

		$ Millions
(1)	UAAL* at beginning of year	$261.1
(2)	Normal cost from last valuation	150.2
(3)	Actual employer contributions	156.6
(4)	Interest accrual: (1)x.085+[(2)-(3)]x(.085/2)	21.9
(5)	Expected UAAL before changes: (1)+(2)-(3)+(4)	276.6
(6)	Change from any changes in benefits, assumptions, or methods	(76.5)
(7)	Expected UAAL after changes: (5)+(6)	200.1
(8)	Actual UAAL at end of year	605.0
(9)	Gain (loss) (7)-(8)	(404.9)
(10)	Gain (loss) as a percent of actuarial accrued liabilities at start of year	(6.4)%

* Unfunded actuarial accrued liability.

Valuation Date June 30	Actuarial Gain (Loss) as a Percentage of Beginning Accrued Liabilities
1994	2.9%
1995	0.6
1996	0.4
1997	5.5
1998	5.5
1999	4.7
2000	2.7
2001	(4.4)
2002	(3.8)
2003	(6.4)

Derivation of Experience Gain (Loss)

ALJLAP

The actuarial gains or losses realized in the operation of the Retirement System provide an experience test. Gains and losses are expected to cancel each other over a period of years but sizable year to year fluctuations are common. Detail on the derivation of the actuarial gain (loss) is shown below, along with a year-by-year comparative schedule.

		$ Millions
(1)	Unfunded actuarial accrued liability (UAAL) at beginning of year	$3.00
(2)	Normal cost	0.79
(3)	Employer contributions	0.95
(4)	Interest	
	a. on (1)	0.26
	b. on (2)	0.03
	c. on (3)	0.04
	d. total [a+b-c]	0.25
(5)	Expected UAAL end of year before changes	3.09
(6)	Change in UAAL end of year	
	a. amendments	0
	b. assumptions	0
	c. methods	(0.31)
	d. total	(0.31)
(7)	Expected UAAL after changes: (5)+(6d.)	2.78
(8)	Actual UAAL at end of year	4.32
(9)	Gain (loss) (7)-(8)	(1.54)
(10)	Gain (loss) as a percent of actuarial accrued liabilities at start of year	(8.5)%

Valuation Date June 30	Actuarial Gain (Loss) as a Percentage of Beginning Accrued Liabilities
2000	0.3%
2001	(1.3)
2002	(5.9)
2003	(8.5)

Derivation of Experience Gain (Loss)

Judicial Plan

The actuarial gains or losses realized in the operation of the Retirement System provide an experience test. Gains and losses are expected to cancel each other over a period of years but sizable year to year fluctuations are common. Detail on the derivation of the actuarial gain (loss) is shown below, along with a year-by-year comparative schedule.

		$ Millions
(1)	Unfunded actuarial accrued liability (UAAL) at beginning of year	$226.46
(2)	Employer normal cost middle of year	7.72
(3)	Employer contributions	20.80
(4)	Interest	
	a. on (1)	19.25
	b. on (2)	0.33
	c. on (3)	0.88
	d. total [a+b-c]	18.70
(5)	Expected UAAL end of year before changes	232.08
(6)	Change in UAAL end of year	
	a. amendments	0
	b. assumptions	0
	c. methods	(3.71)
	d. total	(3.71)
(7)	Expected UAAL after changes: (5)+(6d.)	228.37
(8)	Actual UAAL at end of year	232.48
(9)	Gain (loss) (7)-(8)	(4.11)
(10)	Gain (loss) as a percent of actuarial accrued liabilities at start of year	(1.6)%

Valuation Date June 30	Actuarial Gain (Loss) as a Percentage of Beginning Accrued Liabilities
2000	(1.7)%
2001	(3.2)
2002	(0.2)
2003	(1.6)

Summary Plan Provisions*

June 30, 2003

MSEP and MSEP 2000
(Comparison of Plans for General State Employees)

Plan Provision	MSEP	MSEP 2000
Membership eligibility	Members who work in a position normally requiring at least 1,000 hours of work a year.	Members hired for the first time on or after July 1, 2000, in a position normally requiring at least 1,000 hours of work a year. Members who left state employment prior to becoming vested and return to work on or after July 1, 2000, in a position normally requiring at least 1,000 hours of work a year.
Normal retirement eligibility	Age 65 and active with 4 years of service, Age 65 with 5 years of service, Age 60 with 15 years of service, or "Rule of 80" - minimum age 50.	Age 62 with 5 years of service or "Rule of 80" - minimum age 50.
Early retirement eligibility	Age 55 with 10 years of service.	Age 57 with 5 years of service.
Benefit		
Life benefit	1.6% x final average pay (FAP) x service.	1.7% x FAP x service.
Temporary benefit	Not available.	0.8% x FAP x service (until age 62 - only if retiring under "Rule of 80").
Vesting	5 years of service.	5 years of service.
In-service cost-of-living adjustment (COLA)	COLA given for service beyond age 65. COLA provisions are determined by employment date.	Not available.
COLA	If hired before August 28, 1997, annual COLA is equal to 80% of the change in the consumer price index (CPI) with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with maximum rate of 5%. If hired on or after August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a maximum rate of 5%.	Annual COLA is equal to 80% of the change in the CPI with a maximum rate of 5%.
Survivor benefit (Death before retirement)		
Non duty-related death	Survivor benefit to eligible spouse calculated using the Joint & 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.	Survivor benefit to eligible spouse calculated using the Joint & 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.
Duty-related death	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).
Optional forms of payment (Death after retirement)	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: - Life Income Annuity - Unreduced Joint & 50% Survivor - Joint & 100% Survivor - 60 or 120 Guaranteed Payments - BackDROP	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: - Life Income Annuity - Joint & 50% Survivor - Joint & 100% Survivor - 120 or 180 Guaranteed Payments - BackDROP

* This summary describes the plan provisions of the Revised Statutes of Missouri (RSMo), as amended, that governed the programs, which MOSERS administered during the period covered by this report. It does not overrule any applicable statute or administrative rule and, in the event of a conflict, the applicable statute or rule would apply. The MSEP 2000 became effective July 1, 2000.

Summary Plan Provisions

June 30, 2003

MSEP and MSEP 2000

(Comparison of Plans for Uniformed Members of the Water Patrol)

Plan Provision	MSEP	MSEP 2000
Membership eligibility	Members who work in a position normally requiring at least 1,000 hours of work a year.	Members hired for the first time on or after July 1, 2000, in a position normally requiring at least 1,000 hours of work a year. Members who left state employment prior to becoming vested and return to work on or after July 1, 2000, in a position normally requiring at least 1,000 hours of work a year.
Normal retirement eligibility	Age 55 and active with 4 years of service, Age 55 with 5 years of service, or "Rule of 80" - minimum age 50.	Age 62 with 5 years of service or "Rule of 80" - minimum age 50.
Early retirement eligibility	Not available.	Age 57 with 5 years of service.
Benefit		
Life benefit	1.6% x FAP x service increased by 33.3%.	1.7% x FAP x service.
Temporary benefit	Not available.	0.8% x FAP x service (until age 62 - only if retiring under "Rule of 80").
Vesting	5 years of service.	5 years of service.
In-service COLA	COLA given for service beyond age 65. COLA provisions are determined by employment date.	Not available.
COLA	If hired before August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with maximum rate of 5%. If hired on or after August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a maximum rate of 5%.	Annual COLA is equal to 80% of the change in the CPI with a maximum rate of 5%.
Survivor benefit (Death before retirement)		
Non duty-related death	Survivor benefit to eligible spouse calculated using the Joint & 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.	Survivor benefit to eligible spouse calculated using the Joint & 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.
Duty-related death	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).
Optional forms of payment (Death after retirement)	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: - Life Income Annuity - Unreduced Joint & 50% Survivor - Joint & 100% Survivor - 60 or 120 Guaranteed Payments - BackDROP	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: - Life Income Annuity - Joint & 50% Survivor - Joint & 100% Survivor - 120 or 180 Guaranteed Payments - BackDROP

Summary Plan Provisions
June 30, 2003

MSEP and MSEP 2000
(Comparison of Plans for Legislators)

Plan Provision	MSEP	MSEP 2000
Membership eligibility	Elected to the general assembly.	Elected to the general assembly on or after July 1, 2000.
Normal retirement eligibility	Age 55 with 3 full-biennial assemblies.	Age 55 with 2 full-biennial assemblies or "Rule of 80" - minimum age 50.
Early retirement eligibility	Not available.	Not available.
Benefit Life benefit	$150 per month per biennial assembly.	(Monthly base pay ÷ 24) x service capped at 100% of pay.
Temporary benefit	Not available.	Not available.
Vesting	3 full-biennial assemblies.	3 full-biennial assemblies.
In-service COLA	COLA given for service beyond age 65. COLA provisions are determined by employment date.	Not available.
COLA	If hired before August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with maximum rate of 5%. If hired on or after August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a maximum rate of 5%.	Benefit adjusted each year based on the percentage increase in the current pay for an active member of the general assembly.
Survivor benefit (Death before retirement) Non duty-related death	Survivor benefit to eligible spouse calculated using the Joint & 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.	Survivor benefit to eligible spouse calculated using the Joint & 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.
Duty-related death	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).
Optional forms of payment (Death after retirement)	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: - Life Income Annuity - Unreduced Joint & 50% Survivor - Joint & 100% Survivor - 60 or 120 Guaranteed Payments	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: - Life Income Annuity - Joint & 50% Survivor - Joint & 100% Survivor - 120 or 180 Guaranteed Payments

Summary Plan Provisions

June 30, 2003

MSEP and MSEP 2000
(Comparison of Plans for Elected State Officials)

Plan Provision	MSEP	MSEP 2000
Membership eligibility	Elected to state office.	Elected to state office on or after July 1, 2000.
Normal retirement eligibility	Age 65 with 4 years of service, Age 60 with 15 years of service, or "Rule of 80" - minimum age 50.	Age 55 with 4 years of service or "Rule of 80" - minimum age 50.
Early retirement eligibility	Age 55 with 10 years of service.	Not available.
Benefit		
Life benefit	<u>12 or more years of service</u> 50% of current pay for highest position held. <u>Less than 12 years of service</u> 1.6% x FAP x service.	(Monthly base pay ÷ 24) x service capped at 12 years or 50% of pay.
Temporary benefit	Not available.	Not available.
Vesting	4 years of service.	4 years of service.
In-service COLA	COLA provisions determined by amount of service relative to 12 years and date of employment.	Not available.
COLA	<u>12 or more years of service</u> COLA is equal to the percentage increase in the current pay of an active elected state official in the highest position held. <u>Less than 12 years of service</u> If hired before August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with maximum rate of 5%. If hired on or after August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a maximum rate of 5%.	Benefit adjusted each year based on the percentage increase in the current pay for an active elected state official in the highest position held.
Survivor benefit (Death before retirement)		
Non duty-related death	Survivor benefit to eligible spouse calculated using the Joint & 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.	Survivor benefit to eligible spouse calculated using the Joint & 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.
Duty-related death	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).
Optional forms of payment (Death after retirement)	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: - Life Income Annuity - Unreduced Joint & 50% Survivor - Joint & 100% Survivor - 60 or 120 Guaranteed Payments	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: - Life Income Annuity - Unreduced Joint & 50% Survivor - Joint & 100% Survivor - 120 or 180 Guaranteed Payments

Summary Plan Provisions
June 30, 2003

ALJLAP

Plan Provision	Requirement
Membership eligibility	Administrative law judge or legal advisor in the Division of Workers' Compensation, a member or legal counsel of the Labor and Industrial Relations Commission, chairperson of the State Board of Mediation, or an administrative hearing commissioner.
Normal retirement eligibility	Age 62 with 12 years of service, Age 60 with 15 years of service, or Age 55 with 20 years of service.
Reduced retirement eligibility	Age 65 with less than 12 years of service with reduced benefit, based upon years of service relative to 12 years.
Benefit formula	<u>12 or more years of service</u> 50% of the average highest 12 consecutive months of salary.
Vesting	Immediate.
In-service COLA	Not available.
COLA	If hired before August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with a maximum rate of 5%. If hired on or after August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a maximum rate of 5%.
Survivor benefit (Death before retirement)	Survivor benefit to eligible spouse equal to 50% of the benefit the member would have received based on service to age 70.
Survivor benefit (Death after retirement)	Survivor benefit to eligible spouse equal to 50% of the member's annuity at the time of death.

Summary Plan Provisions
June 30, 2003

Judicial Plan

Plan Provision	Requirement
Membership eligibility	Must be a judge or commissioner of the supreme court or of the court of appeals, or a judge of any circuit court, probate court, magistrate court, court of common pleas, or court of criminal corrections, or a justice of the peace, or a commissioner or deputy commissioner of the circuit court appointed after February 29, 1972.
Normal retirement eligibility	Age 62 with 12 years of service, Age 60 with 15 years of service, or Age 55 with 20 years of service.
Early retirement eligibility	Age 62 with less than 12 years of service or age 60 with less than 15 years of service with a reduced benefit based on years of service relative to 12 or 15 years.
Benefit formula	<u>12 or more years of service</u> 50% of the FAP. <u>Less than 12 or 15 years of service</u> If between age 60 and 62 (years of service ÷ 15) x 50% of compensation on the highest court served. If age 62 (years of service ÷ 12) x 50% of compensation on the highest court served.
Vesting	Immediate.
In-service COLA	Judges who are at least age 60 and work beyond the date first eligible for unreduced benefits will receive COLAs for each year worked beyond normal retirement eligibility. COLA provisions are determined by date of employment.
COLA	If hired before August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with maximum rate of 5%. If hired on or after August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a maximum rate of 5%.
Survivor benefit (Death before retirement)	Survivor benefit to eligible spouse equal to 50% of the benefit the member would have received based on service to age 70.
Survivor benefit (Death after retirement)	Survivor benefit to eligible spouse equal to 50% of the member's annuity at the time of death.

Contributions

The plans previously described are noncontributory with the entire cost paid by the state of Missouri. The contribution rate paid by the state for the general state employees, uniformed members of the water patrol, legislators, and elected state officials retirement plan for FY03 was 8.81% of the membership payroll. The contribution rate paid by the state for the ALJLAP for FY03 was 20.02% of the membership payroll. The contribution rate paid by the state for the Judicial Plan for FY03 was 52.12% of the membership payroll.

Summary Plan Provisions

June 30, 2003

Life Insurance Plans

(MOSERS administers basic and optional term life insurance plans for eligible state employees and retirees.)

Active Members*	Requirement	Retired Members	Requirement
Basic Life Insurance An amount equal to one-times annual salary (with a minimum of $15,000) while actively employed.	Actively employed in an eligible state position resulting in membership in MOSERS.	Basic Life Insurance at Retirement $5,000 basic life insurance during retirement.	Must retire directly from active employment.
Duty-Related Death Benefit Duty-related death benefit equivalent to two-times the annual salary the member was earning at the time of death in addition to the basic life insurance amount of one-times annual salary.	Actively employed in an eligible state position resulting in membership in MOSERS.	Optional Life Insurance at Retirement (MSEP) An employee may retain up to the lesser of $60,000 or the amount of optional life insurance coverage held at time of retirement at the group rate and may convert any remaining basic and optional life insurance at individual rates.	Must retire directly from active employment.
Optional Life Insurance Additional life insurance may be purchased in multiples of annual salary up to six-times annual salary (maximum of $800,000) or in a flat amount in multiples of $1,000 not to exceed the maximum. Spouse coverage may be purchased in multiples of $1,000 up to a maximum of $100,000; however, the amount of spouse coverage cannot exceed the amount of optional coverage the member has purchased. Coverage for children is available in a flat amount of $10,000 per child.	Actively employed in an eligible state position resulting in membership in MOSERS.	Optional Life Insurance at Retirement (MSEP 2000) Under "Rule of 80" an employee may retain the current amount of coverage prior to retirement until age 62 at which time coverage is reduced to $60,000, and may convert any remaining basic and optional life insurance at individual rates. Coverage for spouse and/or children ends at member's retirement and may be converted at individual rates.	Must retire directly from active employment.

*Terminating employees may convert coverage up to the amount they had as an active employee at individual rates.

Long-Term Disability (LTD) Plan

(MOSERS administers the LTD Plan for eligible state employees who become disabled during active employment.)

Plan	Provision
General State Employees, Legislators, and Elected State Officials Members of MOSERS in a position normally requiring 1,000 hours of work a year are covered under the LTD plan, unless they work for a state agency which has its own LTD plan.	Long-Term Disability - Eligible participants receive 60% of their compensation minus primary social security, workers' compensation, and employer provided income. Benefits commence after 90 days of disability or after sick leave expires, whichever occurs last. LTD benefits cease upon the earliest of (i) when disability ends, (ii) when the member is first eligible for normal retirement benefits or is receiving early retirement benefits, (iii) when the member returns to work, or (iv) upon the member's death. Partial Disability - A member may be considered partially disabled during the benefit waiting period and the 24 months following that period if the member is working in an occupation, but as a result of physical disease, injury, pregnancy, or mental disorder, is unable to earn more than 80% of pre-disability earnings. After the first 24 months, a member may be considered partially disabled if working in an occupation but unable to earn more than 60% of the member's pre-disability earnings. In both instances, work earnings are used to reduce the LTD benefit.
Water Patrol	Uniformed members who are eligible for statutory occupational disability receive benefits equal to 50% of compensation with no offset for social security at the time of disability. For nonoccupational disabilities, eligible participants receive the same benefit as general employees.
Judges	In addition to the disability benefits provided to general employees, judges also receive benefits under the state constitution. Participants receive 50% of salary until the current term expires.

Changes in Plan Provisions

Health Care Retirement Incentive

On June 19, 2003, Governor Holden signed into law Senate Bill 248 – legislation that created a health care retirement incentive plan for general state employees who are eligible to retire on or after February 1, 2003 through January 1, 2004, and actually retire no later than September 1, 2003. Under this legislation, an eligible retiree who retires during the window may elect to continue health care coverage for him/herself and any eligible dependents at the same cost as if such retiree were an active employee for a maximum period of five years or until becoming eligible for Medicare, whichever occurs first, at which time the rate reverts to the applicable rate for retiree coverage.

The health care retirement incentive is only available to eligible general employees covered under Chapter 103, RSMo; however, the legislation also contains a provision that will allow the governing boards of Truman State University, Lincoln University, and the colleges and universities, and the commission that governs the Department of Conservation to elect to offer the same health care retirement incentive to their eligible employees.

Senate Bill 248 also contains provisions that will require MOSERS to make a report in writing to the Governor, Commissioner of Administration and the General Assembly by April 1, 2004, and also provide monthly tracking, as to the effect of state employee retirements. The written report covers the period February 1, 2003 through January 31, 2004, and includes the number of retirements, the amount of the affected payroll, and the financial effect as expressed by the system's actuary. There are additional provisions that require the Office of Administration and the Missouri Consolidated Health Care Plan to make a similar report on the budgetary effect of state retirements, including the reduction in payroll, the number of positions core cut, the number of employees replaced and the financial effect on the budget including any costs associated with payment of medical premiums.

The legislation further limits the number of employees departments may hire to replace those employees who retired under the incentive to no more than 25% of the positions vacated. Exceptions to the 25% restriction may be made for critical or seasonal positions or any positions which are entirely federally funded. Lastly, the Truman University, Lincoln University and the educational institutions described in section 174.020 have been excluded from the 25% restriction.

Age 48 for Rule of 80

Senate Bill 248 also contains provisions that lower the minimum age for Rule of 80 from age 50 to age 48.

Administrative Changes

The legislation also contained provisions that involve minor modifications to and clarifications of the Missouri State Employees' Plan (MSEP) and the Missouri State Employees' Plan 2000 (MSEP 2000) that will enable MOSERS to more effectively administer these plans.

Other Provisions

Another provision contained in Senate Bill 248 will allow employees of the Division of Public Safety, who are transferred to the Missouri Department of Transportation (MoDOT) by virtue of executive order 03-05, the option of electing to remain in MOSERS or transferring their service to the Highway and Transportation Employees' and Highway Patrol Retirement System (HTEHPRS) that covers MoDOT employees. For any employee who elects to transfer their service to HTEHPRS, MOSERS will be required to pay to HTEHPRS an amount actuarially determined to equal the liability at the time of transfer to the extent that liability is funded as of the most recent actuarial valuation not to exceed 100%.

Actuarial Present Values
As of June 30, 2003

MSEP

Actuarial Present Value June 30, 2003 for:	Actuarial Present Value	Portion Covered by Future Normal Cost Contributions	Actuarial Accrued Liabilities
Active members			
Service retirement benefits based on services rendered before and likely to be rendered after valuation date	$ 3,669,046,665	$ 777,586,082	$ 2,891,460,583
Disability benefits likely to be paid to present active members who become totally and permanently disabled	100,052,794	41,718,942	58,333,852
Survivor benefits likely to be paid to widows and children of present active members who die before retiring	142,902,496	43,615,804	99,286,692
Separation benefits likely to be paid to present active members	401,142,235	200,759,383	200,382,852
Active member totals	$ 4,313,144,190	$ 1,063,680,211	3,249,463,979
Members on leave of absence & LTD			
Service retirement benefits based on service rendered before the valuation date			104,500,225
Terminated-vested members			
Service retirement benefits based on service rendered before the valuation date			292,298,152
Retired lives			3,015,205,273
BackDROP installment payments incurred, but not yet paid			823,777
Total actuarial accrued liability			6,662,291,406
Assets used in valuation			6,057,329,072
Unfunded actuarial accrued liability			$ 604,962,334

Actuarial Present Values
As of June 30, 2003

ALJLAP

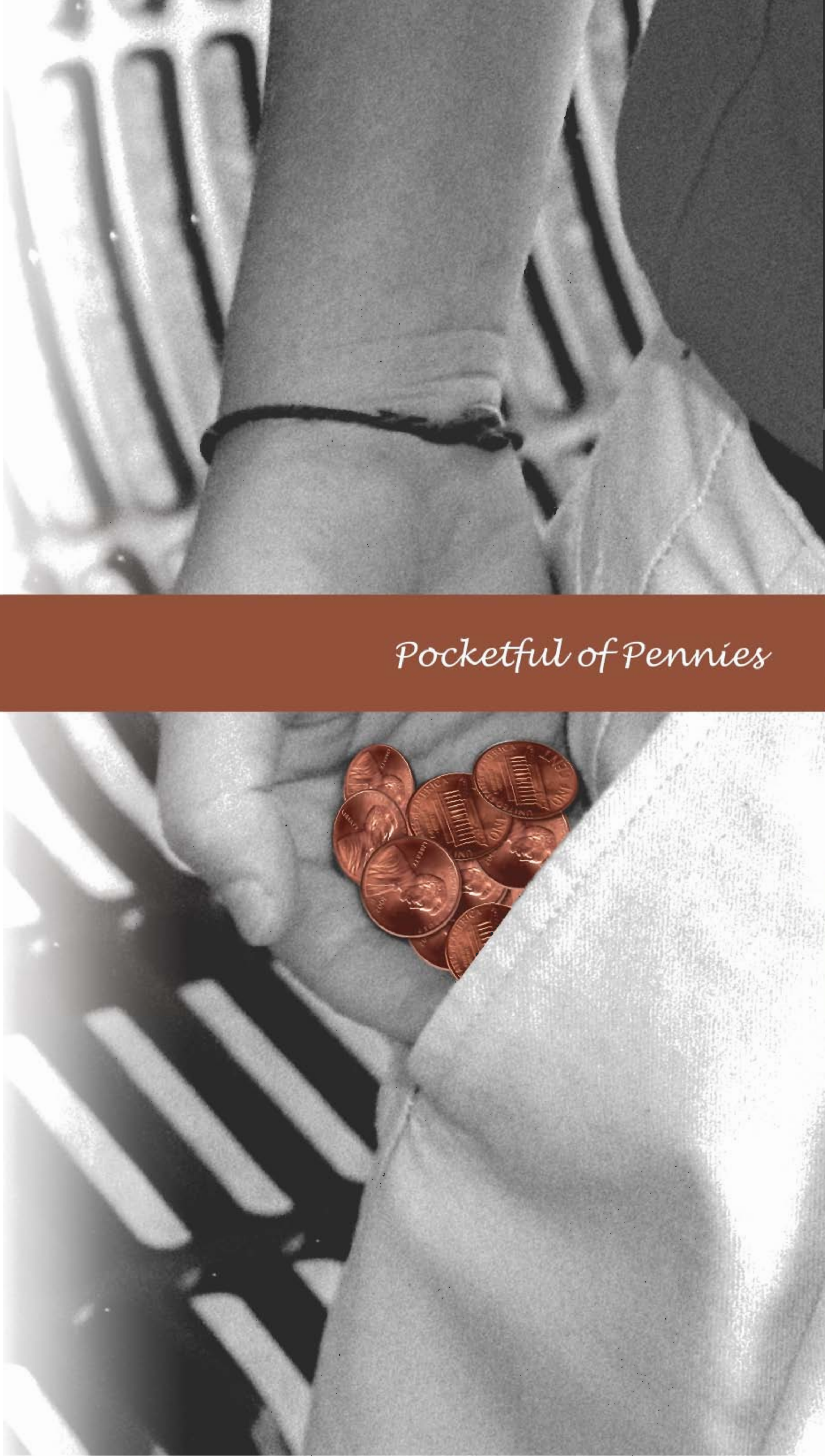
Actuarial Present Value June 30, 2003 for:	Actuarial Present Value	Portion Covered by Future Normal Cost Contributions	Actuarial Accrued Liabilities
Active members			
Service retirement benefits based on services rendered before and likely to be rendered after valuation date	$ 11,921,744	$ 4,549,138	$ 7,372,606
Disability benefits likely to be paid to present active members who become totally and permanently disabled	227,241	144,784	82,457
Survivor benefits likely to be paid to widows and children of present active members who die before retiring	485,135	296,001	189,134
Separation benefits likely to be paid to present active members	1,607,317	1,066,688	540,629
Active member totals	$ 14,241,437	$ 6,056,611	8,184,826
Terminated-vested members			
Service retirement benefits based on service rendered before the valuation date			2,052,565
Retired lives			9,709,096
Total actuarial accrued liability			19,946,487
Assets used in valuation			15,626,461
Unfunded actuarial accrued liability			$ 4,320,026

Judicial Plan

Actuarial Present Value June 30, 2003 for:	Actuarial Present Value	Portion Covered by Future Normal Cost Contributions	Actuarial Accrued Liabilities
Active members			
Service retirement benefits based on services rendered before and likely to be rendered after valuation date	$ 142,747,590	$ 51,057,805	$ 91,689,785
Disability benefits likely to be paid to present active members who become totally and permanently disabled	1,805,609	1,405,129	400,480
Survivor benefits likely to be paid to widows and children of present active members who die before retiring	5,894,849	3,403,098	2,491,751
Active Member Totals	$ 150,448,048	$ 55,866,032	94,582,016
Terminated-vested members			
Service retirement benefits based on service rendered before the valuation date			14,544,036
Retired lives			157,923,805
Total actuarial accrued liability			267,049,857
Assets used in valuation			34,566,516
Unfunded actuarial accrued liability			$ 232,483,341

The penny greatly facilitates commerce. The U.S. Mint produces between 10 billion to 13 billion pennies annually to meet broad public demand. The U.S. Mint produces 1,040 pennies per second, which adds up to 30 million pennies per day. This represents over two-thirds of all the coins produced by the U.S. Mint. It is estimated there may be as many as 150 billion pennies in circulation.

Pocketful of Pennies



Summary

Plan Membership

Membership in the pension trusts administered by MOSERS increased 1,057. Active members decreased by 1,059, retired members and their beneficiaries increased 1,382, and terminated-vested members increased by 734. Membership data for the last ten years ended June 30, 2003, can be found on page 134. Page 135 depicts the location of benefit recipients, showing that the majority remain in the state of Missouri after retirement.

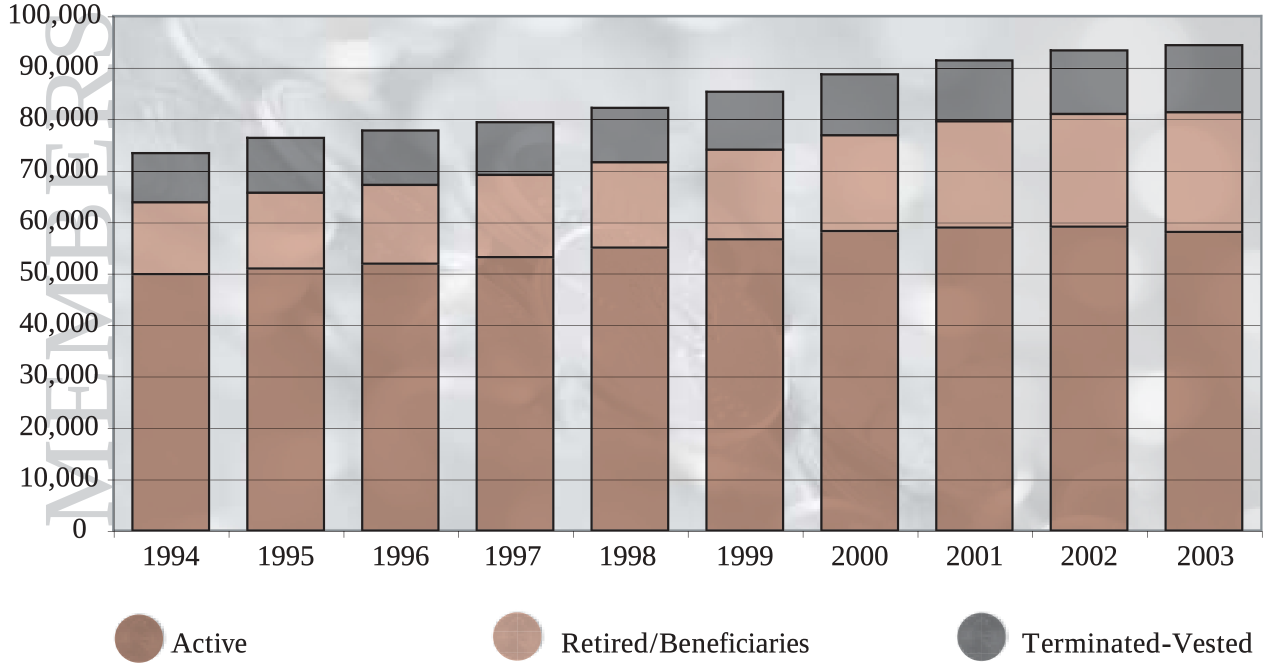
Net Assets vs. Liabilities

The charts on page 136 graphically represent the funding progress of the pension plans for the ten years ended June 30, 2003. The area chart on the top of the page shows the portion of the pension liabilities that are unfunded compared to the portion covered by assets in the trust funds. The chart on the bottom of the page illustrates the funded ratio of the plans for the ten years ended June 30, 2003.

The existence of the unfunded actuarial accrued liabilities is not necessarily an indication of financial problems, but the fluctuations are important and must be monitored and controlled.

The remainder of this section contains various statistical and historical data considered useful in evaluating the condition of the plans.

Membership in Retirement Plans
Last Ten Fiscal Years

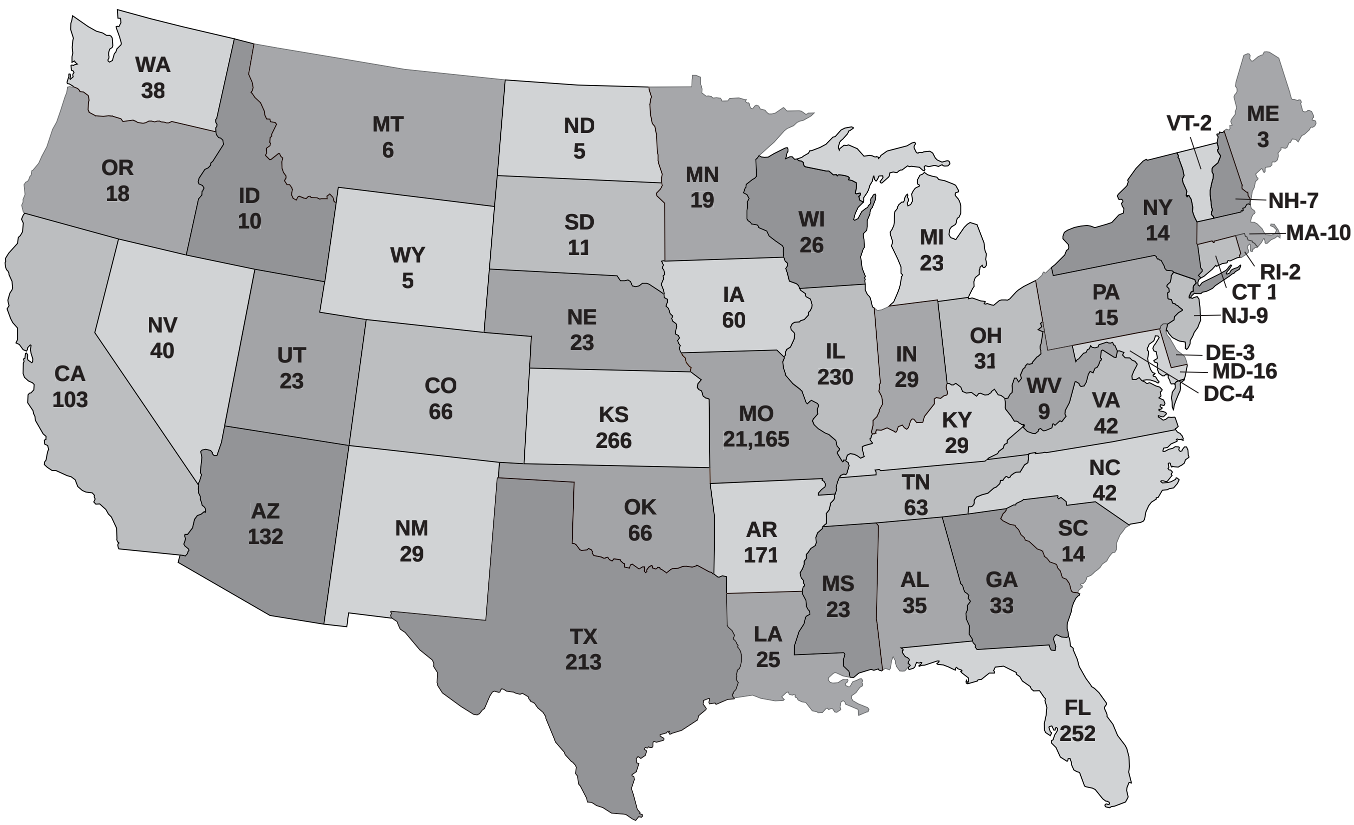


Fiscal Year	Active	Retired/ Beneficiaries	Terminated- Vested	Totals
1994	49,826	13,988	9,499	73,313
1995	50,918	14,747	10,673	76,338
1996	51,837	15,362	10,548	77,747
1997	53,147	15,963	10,273	79,383
1998	54,951	16,616	10,561	82,128
1999	56,571	17,495	11,181	85,247
2000	58,201	18,582	11,858	88,641
2001	58,869	20,642	11,837	91,348
2002	59,066	21,910	12,339	93,315
2003	58,007	23,292	13,073	94,372

Data from actuarial valuations using May 30, 2003 information.

Distribution of Benefit Recipients by Location

June 30, 2003



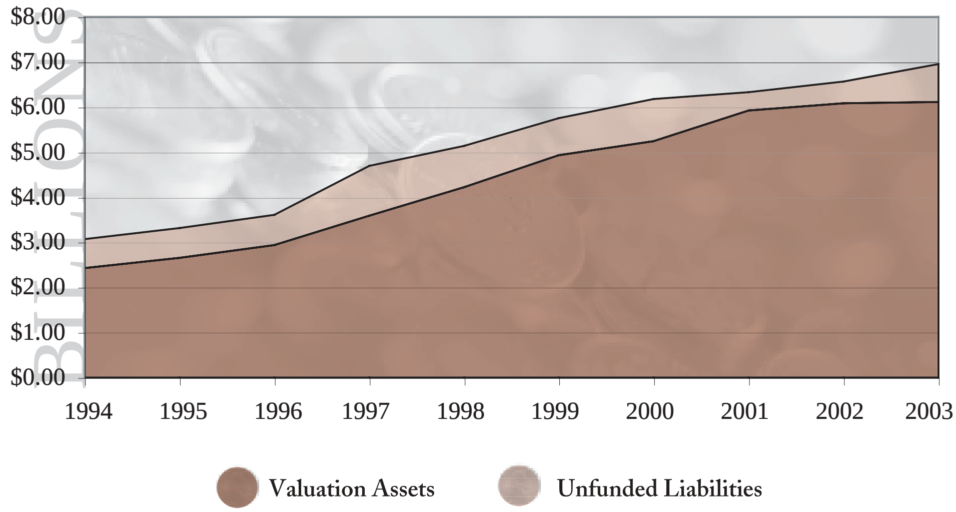
Recipients Outside the Continental United States

Alaska-8, Argentina-1, Australia-1, Canada-1, Columbia, South America-1, Germany-1, Hawaii-3, Ireland-1, Mexico-1, Puerto Rico-1, South Korea-1, Sweden-1, The Netherlands-1, United Kingdom-1

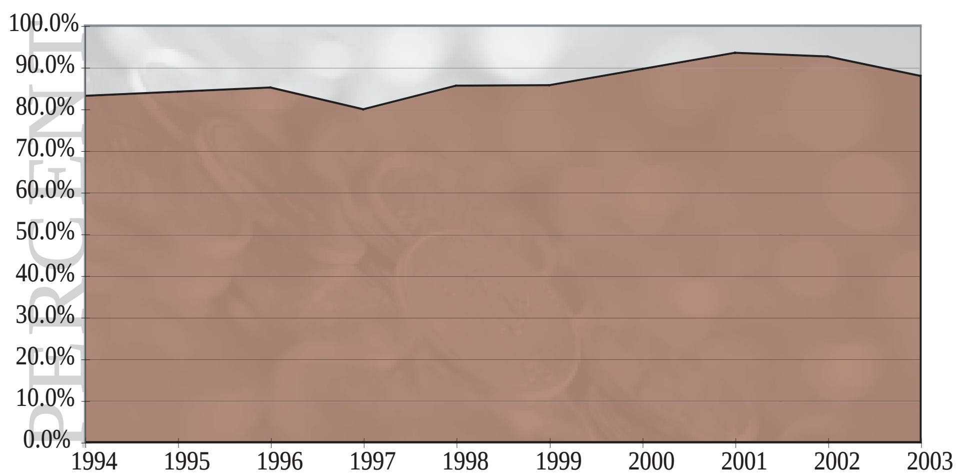
Net Assets vs. Pension Liabilities

Pension Trust Funds
Ten Years Ended June 30, 2003

Actuarial Accrued Liabilities



Valuation Assets as Percents of Pension Liabilities



Ten-Year Historical Data

Pension Trust Funds

MSEP
(Additions by Source)

Fiscal Year	Employer Contribution Rate	Employer Contributions as a Percent of Covered Payroll	Employer Contribution Amount	Employer Contributions Service Transfers	Member Payments for Purchasing Service Credit	Net Investment Income	Other	Total
1994	9.49%	9.48%	$ 106,681,308	$ 78,554	$ 765,977	$ (15,865,184)	$ 411,469	$ 92,072,124
1995	9.04	9.08	108,902,372	170,081	753,984	393,915,517	0	503,741,954
1996	10.69	10.81	137,007,112	135,598	726,527	453,955,454	9,129	591,833,820
1997	10.66	10.77	146,383,371	2,238,691	640,590	653,958,265	235,279	803,456,196
1998	10.40	10.42	152,090,687	36,908	1,035,738	661,480,958	14,925	814,659,216
1999	12.58	12.65	197,909,834	147,315	1,151,328	504,026,290	659,215	703,893,982
2000	11.91	12.02	202,330,547	3,468,697	1,991,206	402,878,683	629,924	611,299,057
2001	11.59	12.27	215,750,128	167,640	1,918,572	(112,164,123)	418,663	106,090,880
2002	11.59	11.82	209,515,026	48,840	3,913,426	(348,106,057)	447,462	(134,181,303)
2003	8.81	9.00	156,576,150	53,119	3,690,820	332,901,027	437,574	493,658,690

MSEP
(Deductions by Type)

Fiscal Year	Benefits	Contribution Refunds	Service Transfers	Administrative	Legal Settlements	Total
1994	$ 84,482,785	$ 1,598	$ 16,252	$ 3,336,941	$ 0	$ 87,837,576
1995	96,198,413	0	0	3,060,262	0	99,258,675
1996	115,627,764	0	30,327	3,221,578	23,148,000	142,027,669
1997	126,941,341	102	2,091,233	3,563,018	0	132,595,694
1998	149,261,681	1,514	0	4,500,944	18,998	153,783,137
1999	155,299,924	0	0	5,763,229	0	161,063,153
2000	179,690,822	889	18,609	5,487,531	0	185,197,851
2001	217,862,853	0	31,482	5,749,965	0	223,644,300
2002	268,480,982	0	27,970	5,753,812	0	274,262,764
2003	319,607,447	4,019	2,191,487	5,954,365	0	327,757,318

Ten-Year Historical Data
Pension Trust Funds

ALJLAP
(Additions by Source)

Fiscal Year	Employer Contribution Rate	Employer Contributions as a Percent of Covered Payroll	Employer Contribution Amount	Net Investment Income (Loss)	Other	Total
1994	24.18%	23.97%	$502,019	$ (45,152)	$ 1,056	$ 457,923
1995	22.50	23.00	498,233	986,426	0	1,484,659
1996	21.16	20.26	548,276	1,122,107	23	1,670,406
1997	22.60	22.78	652,709	1,614,183	34	2,266,926
1998	19.66	20.11	564,295	1,613,972	36	2,178,303
1999	18.70	18.32	639,285	1,205,813	1,577	1,846,675
2000	20.10	19.81	807,022	961,336	1,503	1,769,861
2001	22.32	14.03	1,074,946	(273,380)	1,020	802,586
2002	22.32	22.44	1,072,562	(874,249)	1,124	199,437
2003	20.02	20.42	951,023	862,381	1,134	1,814,538

ALJLAP
(Deductions by Type)

Fiscal Year	Benefits	Administrative	Legal Settlements	Total
1994	$ 565,082	$ 8,566	$ 0	$ 573,648
1995	600,650	7,663	0	608,313
1996	633,527	7,963	0	641,490
1997	616,859	8,795	0	625,654
1998	677,213	10,981	46	688,240
1999	747,663	13,788	0	761,451
2000	755,574	13,094	0	768,668
2001	776,422	14,015	0	790,437
2002	836,615	14,450	0	851,065
2003	969,918	15,425	0	985,343

Ten-Year Historical Data

Pension Trust Funds

Judicial Plan
(Additions by Source)

Fiscal Year	Employer Contribution Rate	Employer Contributions as a Percent of Covered Payroll	Employer Contribution Amount	Net Investment Income (Loss)	Other	Total
1994	Non-funded	30.38%	$ 8,205,509	$ 0	$ 0	$ 8,205,509
1995	Non-funded	32.84	9,188,599	0	0	9,188,599
1996	Non-funded	33.13	9,907,505	0	0	9,907,505
1997	Non-funded	33.00	10,450,270	0	0	10,450,270
1998	Non-funded	35.24	11,433,457	0	0	11,433,457
1999	51.81%	52.29	17,862,353	452,499	592	18,315,444
2000	53.92	53.87	19,988,676	869,566	1,360	20,859,602
2001	55.30	58.09	22,473,913	(391,124)	1,460	22,084,249
2002	55.30	55.13	22,088,485	(1,680,566)	2,160	20,410,079
2003	52.12	51.94	20,802,140	1,932,815	2,541	22,737,496

Judicial Plan
(Deductions by Type)

Fiscal Year	Benefits	Administrative	Total
1994	$ 8,205,509	$ 0	$ 8,205,509
1995	9,188,599	0	9,188,599
1996	9,907,505	0	9,907,505
1997	10,450,270	0	10,450,270
1998	11,433,457	0	11,433,457
1999	12,229,325	5,174	12,234,499
2000	13,292,188	11,844	13,304,032
2001	15,010,098	20,051	15,030,149
2002	15,943,642	27,778	15,971,420
2003	16,870,011	34,571	16,904,582

Benefit Expenses by Type

Last Ten Fiscal Years

	FY94	FY95	FY96	FY97	FY98
Retirement	$78,018,158	$88,532,996	$102,257,950	$112,523,766	$126,121,327
Survivor	4,202,875	5,146,981	6,001,028	7,036,816	8,233,831
Disability	436,022	379,382	347,589	310,693	279,208
Lump sum payment	0	0	4,494,184	4,258,380	3,130,459
Benefit adjustments	0	0	0	0	8,453,580
Judges	8,205,509	9,188,599	9,907,505	10,450,270	11,433,457
Legislators	1,825,730	2,139,053	2,527,014	2,811,686	3,043,276
Administrative law judges	565,082	600,650	633,527	616,859	677,213
Totals	$93,253,376	$105,987,661	$126,168,797	$138,008,470	$161,372,351

	FY99	FY00	FY01	FY02	FY03
Retirement	$140,138,342	$153,916,226	$196,343,161	$225,997,699	$254,120,264
Survivor	9,812,877	12,551,644	14,845,353	17,070,281	19,204,495
Disability	245,284	219,550	178,336	145,856	118,278
Lump sum payment	1,871,798	1,522,313	1,886,958	1,893,194	1,384,599
Benefit adjustments	39,768	8,162,749	1,134,262	19,626,450	40,535,618
Judges	12,229,325	13,292,188	15,010,098	15,943,642	16,870,011
Legislators	3,191,855	3,318,342	3,474,782	3,747,502	4,248,212
Administrative law judges	747,663	755,574	776,422	836,615	969,918
Totals	$168,276,912	$193,738,586	$233,649,372	$285,261,239	$337,451,395

Benefits Payable June 30, 2003

Tabulated by Option and Type of Benefit

MSEP (Closed Plan)

Type of Benefit	Number	Annual Funded Benefits	Average Annual Benefits
Service retirement			
Life annuity	4,568	$ 41,384,127	$ 9,060
50% joint and survivor	4,915	62,764,730	12,770
75% joint and survivor	8	79,050	9,881
100% joint and survivor	2,155	33,200,577	15,406
5 year certain and life	126	1,044,187	8,287
10 year certain and life	97	758,227	7,817
Survivor beneficiary	1,527	11,558,060	7,569
Total	13,396	150,788,958	11,256
Disability retirement	29	113,843	3,926
Death-in-service	1,150	8,132,614	7,072
Grand totals	14,575	$159,035,415	10,912

MSEP 2000 (New Plan)

Type of Benefit	Number	Annual Funded Benefits	Average Annual Benefits
Service retirement			
Life annuity	5,878	$ 82,077,352	$ 13,963
50% joint and survivor	1,060	23,853,129	22,503
100% joint and survivor	883	16,955,124	19,202
5 year certain and life	57	726,077	12,738
10 year certain and life	232	2,657,600	11,455
15 Year certain and life	105	915,680	8,721
Survivor beneficiary	81	862,638	10,650
Total	8,296	128,047,600	15,435
Disability retirement	0	0	0
Death-in-service	1	1,123	1,123
Grand totals	8,297	$128,048,723	15,433

ALJLAP

Type of Benefit	Number	Annual Funded Benefits	Average Annual Benefits
Service retirement			
Life annuity	1	$48,456	$ 48,456
50% joint and survivor	18	782,250	43,458
Survivor beneficiary	8	163,284	20,411
Total	27	$993,990	36,814

Judicial Plan

Type of Benefit	Number	Annual Funded Benefits	Average Annual Benefits
Service retirement			
Life annuity	6	$ 321,780	$ 53,630
50% joint and survivor	263	14,371,424	54,644
Survivor beneficiary	80	1,706,924	21,337
Total	349	16,400,128	46,992
Death-in-service	44	942,738	21,426
Grand totals	393	$ 17,342,866	44,129

Schedules from the June 30, 2003 actuarial valuations using May 30, 2003 data.

Average Monthly Benefit Amounts

Six Years Ended June 30, 2003

MSEP

Members Retiring During Fiscal Year		<5	5-10	10-15	15-20	20-25	25-30	30+	All Members
		Years Credited Service by Category							
1998	Average monthly benefit	$ 137	$ 241	$ 363	$ 561	$ 831	$1,275	$1,678	$ 906
	Average final average salary	$1,919	$1,900	$1,987	$2,002	$2,263	$2,652	$2,924	$2,349
	Number of retirees	9	129	185	173	173	195	251	1,115
1999	Average monthly benefit	$ 113	$ 239	$ 373	$ 616	$ 855	$1,242	$1,877	$ 984
	Average final average salary	$1,599	$2,033	$2,058	$2,281	$2,343	$2,623	$3,278	$2,520
	Number of retirees	5	117	188	188	186	238	267	1,189
2000	Average monthly benefit	$ 175	$ 242	$ 363	$ 645	$ 825	$1,355	$1,891	$1,025
	Average final average salary	$2,700	$1,995	$2,007	$2,320	$2,272	$2,889	$3,278	$2,575
	Number of retirees	7	123	196	179	200	255	296	1,256
2001	Average monthly benefit	$ 222	$ 251	$ 431	$ 671	$ 958	$1,380	$1,744	$1,068
	Average final average salary	$2,258	$2,055	$2,113	$2,410	$2,498	$2,898	$3,057	$2,615
	Number of retirees	13	384	352	224	274	491	761	2,499
2002	Average monthly benefit	$ 94	$ 254	$ 428	$ 652	$ 977	$1,440	$1,854	$ 957
	Average final average salary	$1,339	$2,203	$2,192	$2,415	$2,567	$3,032	$3,269	$2,627
	Number of retirees	8	254	311	261	279	385	265	1,763
2003	Average monthly benefit	$ 107	$ 288	$ 492	$ 720	$1,060	$1,453	$1,820	$1,036
	Average final average salary	$1,499	$2,211	$2,364	$2,708	$2,734	$3,056	$3,279	$2,766
	Number of retirees	7	223	279	261	315	466	263	1,814
Six years ended June 30, 2003									
	Average monthly benefit	$ 151	$ 256	$ 418	$ 651	$ 936	$1,379	$1,797	$1,007
	Average final average salary	$1,933	$2,089	$2,140	$2,385	$2,483	$2,902	$3,154	$2,598
	Number of retirees	49	1,230	1,511	1,286	1,427	2,030	2,103	9,636

Note: COLA increases and temporary benefits payable under the MSEP 2000 until age 62 are excluded from the above for comparison purposes.

Average Monthly Benefit Amounts
Six Years Ended June 30, 2003

General Employees in the MSEP

Members Retiring During Fiscal Year		Years Credited Service by Category <5	5-10	10-15	15-20	20-25	25-30	30+	All Members
1998	Average monthly benefit	$ 137	$ 210	$ 352	$ 545	$ 831	$1,272	$1,674	$ 901
	Average final average salary	$1,919	$1,865	$1,991	$1,995	$2,263	$2,650	$2,927	$2,348
	Number of retirees	9	123	182	171	173	194	250	1,102
1999	Average monthly benefit	$ 113	$ 227	$ 345	$ 604	$ 855	$1,229	$1,870	$975
	Average final average salary	$1,599	$2,019	$2,021	$2,277	$2,343	$2,623	$3,279	$2,514
	Number of retirees	5	114	185	186	186	236	265	1,177
2000	Average monthly benefit	$ 175	$ 225	$ 357	$ 633	$ 825	$1,355	$1,884	$1,022
	Average final average salary	$2,700	$1,974	$2,004	$2,306	$2,272	$2,889	$3,278	$2,572
	Number of retirees	7	119	195	177	200	255	294	1,247
2001	Average monthly benefit	$ 101	$ 236	$ 394	$ 632	$ 958	$1,374	$1,742	$1,058
	Average final average salary	$1,612	$2,033	$2,052	$2,372	$2,498	$2,899	$3,055	$2,599
	Number of retirees	12	379	346	219	274	488	760	2,478
2002	Average monthly benefit	$ 94	$ 252	$ 418	$ 641	$ 977	$1,436	$1,848	$ 952
	Average final average salary	$1,339	$2,201	$2,189	$2,413	$2,567	$3,033	$3,271	$2,627
	Number of retirees	8	253	308	259	279	384	263	1,754
2003	Average monthly benefit	$ 107	$ 247	$ 459	$ 667	$1,037	$1,446	$1,813	$1,021
	Average final average salary	$1,499	$2,188	$2,355	$2,713	$2,736	$3,058	$3,284	$2,770
	Number of retirees	7	211	269	249	310	464	261	1,771
Six years ended June 30, 2003									
	Average monthly benefit	$ 119	$ 237	$ 395	$ 625	$ 931	$1,373	$1,792	$ 998
	Average final average salary	$1,765	$2,071	$2,118	$2,373	$2,483	$2,903	$3,155	$2,593
	Number of retirees	48	1,199	1,485	1,261	1,422	2,021	2,093	9,529

Note: COLA increases and temporary benefits payable under the MSEP 2000 until age 62 are excluded from the above for comparison purposes.

Average Monthly Benefit Amounts
Six Years Ended June 30, 2003

Uniformed Members of the Water Patrol in the MSEP

Members Retiring During Fiscal Year		Years Credited Service by Category: <5	5-10	10-15	15-20	20-25	25-30	30+	All Members
1998	Average monthly benefit	$ 0	$ 0	$ 0	$ 0	$ 0	$1,782	$ 0	$1,782
	Average final average salary	$ 0	$ 0	$ 0	$ 0	$ 0	$3,001	$ 0	$3,001
	Number of retirees	0	0	0	0	0	1	0	1
1999	Average monthly benefit	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$2,567	$2,567
	Average final average salary	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$3,767	$3,767
	Number of retirees	0	0	0	0	0	0	1	1
2000	Average monthly benefit	$ 0	$ 0	$ 0	$1,749	$ 0	$ 0	$3,297	$2,523
	Average final average salary	$ 0	$ 0	$ 0	$4,432	$ 0	$ 0	$4,014	$4,223
	Number of retirees	0	0	0	1	0	0	1	2
2001	Average monthly benefit	$ 0	$ 0	$1,664	$ 0	$ 0	$1,923	$3,236	$2,274
	Average final average salary	$ 0	$ 0	$5,833	$ 0	$ 0	$3,172	$4,274	$4,426
	Number of retirees	0	0	1	0	0	1	1	3
2002	Average monthly benefit	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$1,843	$1,843
	Average final average salary	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$3,432	$3,432
	Number of retirees	0	0	0	0	0	0	1	1
2003	Average monthly benefit	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Average final average salary	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Number of retirees	0	0	0	0	0	0	0	0
Six years ended June 30, 2003									
	Average monthly benefit	$ 0	$ 0	$1,664	$1,749	$ 0	$1,853	$2,736	$2,258
	Average final average salary	$ 0	$ 0	$5,833	$4,432	$ 0	$3,087	$3,872	$3,991
	Number of retirees	0	0	1	1	0	2	4	8

Note: COLA increases and temporary benefits payable under the MSEP 2000 until age 62 are excluded from the above for comparison purposes.

Average Monthly Benefit Amounts
Six Years Ended June 30, 2003

Legislators in the MSEP

		Years Credited Service by Category							
Members Retiring During Fiscal Year		<5	5-10	10-15	15-20	20-25	25-30	30+	All Members
1998	Average monthly benefit	$ 0	$ 868	$1,054	$1,953	$ 0	$ 0	$2,700	$1,248
	Average final average salary	$ 0	$2,613	$1,739	$2,613	$ 0	$ 0	$2,298	$2,368
	Number of retirees	0	6	3	2	0	0	1	12
1999	Average monthly benefit	$ 0	$ 684	$1,139	$1,736	$ 0	$2,821	$3,150	$1,659
	Average final average salary	$ 0	$2,549	$2,518	$2,613	$ 0	$2,613	$2,423	$2,556
	Number of retirees	0	3	2	2	0	2	1	10
2000	Average monthly benefit	$ 0	$ 759	$1,519	$1,736	$ 0	$ 0	$2,400	$1,242
	Average final average salary	$ 0	$2,613	$2,613	$2,613	$ 0	$ 0	$2,423	$2,586
	Number of retirees	0	4	1	1	0	0	1	7
2001	Average monthly benefit	$ 0	$ 925	$1,376	$1,750	$ 0	$2,649	$ 0	$1,548
	Average final average salary	$ 0	$2,613	$2,613	$2,608	$ 0	$2,604	$ 0	$2,610
	Number of retirees	0	4	3	4	0	2	0	13
2002	Average monthly benefit	$ 0	$ 871	$1,451	$2,068	$ 0	$2,830	$3,365	$1,944
	Average final average salary	$ 0	$2,613	$2,550	$2,613	$ 0	$2,613	$2,613	$2,589
	Number of retirees	0	1	3	2	0	1	1	8
2003	Average monthly benefit	$ 0	$1,016	$1,393	$1,816	$2,482	$3,157	$2,700	$1,675
	Average final average salary	$ 0	$2,613	$2,613	$2,613	$2,613	$2,613	$2,613	$2,613
	Number of retirees	0	12	10	12	5	2	2	43
Six years ended June 30, 2003									
	Average monthly benefit	$ 0	$ 902	$1,335	$1,828	$2,482	$2,869	$2,836	$1,591
	Average final average salary	$ 0	$2,606	$2,476	$2,612	$2,613	$2,610	$2,497	$2,570
	Number of retirees	0	30	22	23	5	7	6	93

Note: COLA increases are excluded from the above for comparison purposes.

Average Monthly Benefit Amounts
Six Years Ended June 30, 2003

Elected Officials in the MSEP

Members Retiring During Fiscal Year		<5	5-10	10-15	15-20	20-25	25-30	30+	All Members
		Years Credited Service by Category							
1998	Average monthly benefit	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Average final average salary	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Number of retirees	0	0	0	0	0	0	0	0
1999	Average monthly benefit	$ 0	$ 0	$ 4,019	$ 0	$ 0	$ 0	$ 0	$4,019
	Average final average salary	$ 0	$ 0	$ 8,038	$ 0	$ 0	$ 0	$ 0	$8,038
	Number of retirees	0	0	1	0	0	0	0	1
2000	Average monthly benefit	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Average final average salary	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2001	Average monthly benefit	$ 1,668	$3,154	$ 4,882	$ 5,004	$ 0	$ 0	$ 0	$3,918
	Average final average salary	$10,007	$8,038	$10,007	$10,007	$ 0	$ 0	$ 0	$9,613
	Number of retirees	1	1	2	1	0	0	0	5
2002	Average monthly benefit	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Average final average salary	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2003	Average monthly benefit	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Average final average salary	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Number of retirees	0	0	0	0	0	0	0	0
Six years ended June 30, 2003									
	Average monthly benefit	$ 1,668	$3,154	$ 4,594	$ 5,004	$ 0	$ 0	$ 0	$3,935
	Average final average salary	$10,007	$8,038	$ 9,351	$10,007	$ 0	$ 0	$ 0	$9,351
	Number of retirees	1	1	3	1	0	0	0	6

Note: COLA increases are excluded from the above for comparison purposes.

Average Monthly Benefit Amounts
Six Years Ended June 30, 2003

ALJLAP

Members Retiring During Fiscal Year		Years Credited Service by Category <5	5-10	10-15	15-20	20-25	25-30	30+	All Members
1998	Average monthly benefit	$ 0	$ 0	$2,927	$ 0	$2,875	$ 0	$ 0	$2,892
	Average final average salary	$ 0	$ 0	$5,854	$ 0	$5,749	$ 0	$ 0	$5,784
	Number of retirees	0	0	1	0	2	0	0	3
1999	Average monthly benefit	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$0
	Average final average salary	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$0
	Number of retirees	0	0	0	0	0	0	0	0
2000	Average monthly benefit	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Average final average salary	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Number of retirees	0	0	0	0	0	0	0	0
2001	Average monthly benefit	$ 0	$ 0	$ 0	$ 0	$2,982	$ 0	$ 0	$2,982
	Average final average salary	$ 0	$ 0	$ 0	$ 0	$5,965	$ 0	$ 0	$5,965
	Number of retirees	0	0	0	0	1	0	0	1
2002	Average monthly benefit	$ 0	$ 0	$ 0	$ 0	$3,739	$ 0	$ 0	$3,739
	Average final average salary	$ 0	$ 0	$ 0	$ 0	$7,478	$ 0	$ 0	$7,478
	Number of retirees	0	0	0	0	1	0	0	1
2003	Average monthly benefit	$ 0	$ 0	$ 0	$3,730	$ 0	$ 0	$ 0	$3,730
	Average final average salary	$ 0	$ 0	$ 0	$7,460	$ 0	$ 0	$ 0	$7,460
	Number of retirees	0	0	0	4	0	0	0	4
Six years ended June 30, 2003									
	Average monthly benefit	$ 0	$ 0	$2,927	$3,730	$3,118	$ 0	$ 0	$3,369
	Average final average salary	$ 0	$ 0	$5,854	$7,460	$6,235	$ 0	$ 0	$6,737
	Number of retirees	0	0	1	4	4	0	0	9

Note: COLA increases are excluded from the above for comparison purposes.

Average Monthly Benefit Amounts

Six Years Ended June 30, 2003

Judicial Plan

Members Retiring During Fiscal Year		<5	5-10	10-15	15-20	20-25	25-30	30+	All Members
		Years Credited Service by Category							
1998	Average monthly benefit	$ 243	$1,567	$3,689	$3,484	$3,624	$3,999	$3,921	$3,420
	Average final average salary	$5,824	$5,129	$7,378	$6,969	$7,247	$7,999	$7,843	$7,208
	Number of retirees	1	1	2	4	7	4	1	20
1999	Average monthly benefit	$ 289	$2,099	$3,647	$3,759	$3,635	$4,450	$4,123	$3,247
	Average final average salary	$6,598	$7,108	$7,409	$7,517	$7,270	$8,900	$8,246	$7,432
	Number of retirees	2	3	7	8	1	1	1	23
2000	Average monthly benefit	$ 0	$1,282	$3,368	$4,116	$3,991	$4,139	$4,375	$3,763
	Average final average salary	$ 0	$5,129	$6,735	$8,232	$7,982	$8,278	$8,750	$7,677
	Number of retirees	0	1	4	4	4	3	1	17
2001	Average monthly benefit	$ 0	$1,711	$4,216	$3,849	$4,500	$4,573	$4,250	$4,197
	Average final average salary	$ 0	$8,000	$8,519	$7,698	$9,000	$9,146	$8,500	$8,632
	Number of retirees	0	1	5	3	6	4	2	21
2002	Average monthly benefit	$ 0	$1,337	$3,606	$4,093	$3,905	$4,576	$ 0	$3,872
	Average final average salary	$ 0	$6,095	$7,405	$8,186	$7,811	$9,153	$ 0	$8,061
	Number of retirees	0	1	2	4	2	3	0	12
2003	Average monthly benefit	$ 756	$1,946	$4,042	$3,849	$4,000	$4,250	$4,167	$3,435
	Average final average salary	$8,000	$6,317	$8,333	$7,697	$8,000	$8,500	$8,333	$7,824
	Number of retirees	2	3	3	6	3	2	3	22
Six years ended June 30, 2003									
	Average monthly benefit	$ 521	$1,872	$3,774	$3,844	$3,990	$4,317	$4,177	$3,636
	Average final average salary	$7,004	$6,463	$7,651	$7,688	$7,980	$8,633	$8,355	$7,789
	Number of retirees	5	10	23	29	23	17	8	115

Note: COLA increases are excluded from the above for comparison purposes.

Retirees and Beneficiaries

Tabulated by Fiscal Year of Retirement
As of June 30, 2003

MSEP

Fiscal Year of Retirement	Number	Total Annual Benefits	Average Monthly Benefit
1965 & prior	4	$ 28,328	$ 590
1966	2	13,852	577
1967	5	40,669	678
1968	6	25,840	359
1969	7	36,425	434
1970	12	95,848	666
1971	13	82,766	531
1972	21	138,736	551
1973	62	379,347	510
1974	68	409,825	502
1975	90	566,442	524
1976	114	724,899	530
1977	163	1,116,081	571
1978	129	789,359	510
1979	140	997,212	594
1980	162	1,145,951	589
1981	208	1,665,264	667
1982	311	2,412,203	646
1983	325	2,699,266	692
1984	340	2,470,384	605
1985	359	3,122,584	725
1986	435	3,208,296	615
1987	499	4,446,509	743
1988	558	5,850,405	874
1989	610	7,007,190	957
1990	620	7,071,312	950
1991	703	9,092,202	1,078
1992	795	9,601,758	1,006
1993	898	10,593,284	983
1994	897	10,232,946	951
1995	1,142	13,961,314	1,019
1996	1,114	13,732,957	1,027
1997	1,135	14,705,192	1,080
1998	1,302	16,690,574	1,068
1999	1,415	18,821,947	1,108
2000	1,484	21,178,260	1,189
2001	2,774	44,229,285	1,329
2002	2,056	28,089,812	1,139
2003	2,086	30,988,808	1,238
	23,064	$288,463,332	1,042

Retirees and Beneficiaries

Tabulated by Fiscal Year of Retirement
As of June 30, 2003

ALJLAP

Fiscal Year of Retirement	Number	Total Annual Benefits	Average Monthly Benefit
1989 & prior	4	$167,007	$ 3,479
1991	2	60,244	2,510
1992	3	117,651	3,268
1993	1	42,882	3,574
1994	1	21,928	1,827
1995	2	67,185	2,799
1997	4	110,736	2,307
1998	3	126,669	3,519
2000	1	24,114	2,010
2001	2	61,009	2,542
2002	1	46,664	3,889
2003	3	144,237	4,007
	27	$990,326	3,057

Judicial Plan

Fiscal Year of Retirement	Number	Total Annual Benefits	Average Monthly Benefit
1976 & prior	6	$100,420	$1,395
1977	4	78,933	1,644
1978	1	11,742	979
1979	3	100,733	2,798
1980	4	42,984	896
1981	6	201,732	2,802
1982	3	133,432	3,706
1983	9	254,707	2,358
1984	3	66,523	1,848
1985	5	218,549	3,642
1986	8	209,608	2,183
1987	27	1,049,390	3,239
1988	12	502,131	3,487
1989	18	791,427	3,664
1990	10	402,815	3,357
1991	28	1,365,251	4,063
1992	15	721,210	4,007
1993	16	662,768	3,452
1994	13	564,821	3,621
1995	29	1,601,707	4,603
1996	13	585,670	3,754
1997	8	309,512	3,224
1998	27	1,386,246	4,279
1999	30	1,345,066	3,736
2000	29	1,344,431	3,863
2001	22	1,314,024	4,977
2002	17	771,302	3,781
2003	27	1,154,762	3,564
	393	$17,291,896	3,667

Total Benefits Payable

Tabulated by Attained Ages of Benefit Recipients
As of June 30, 2003

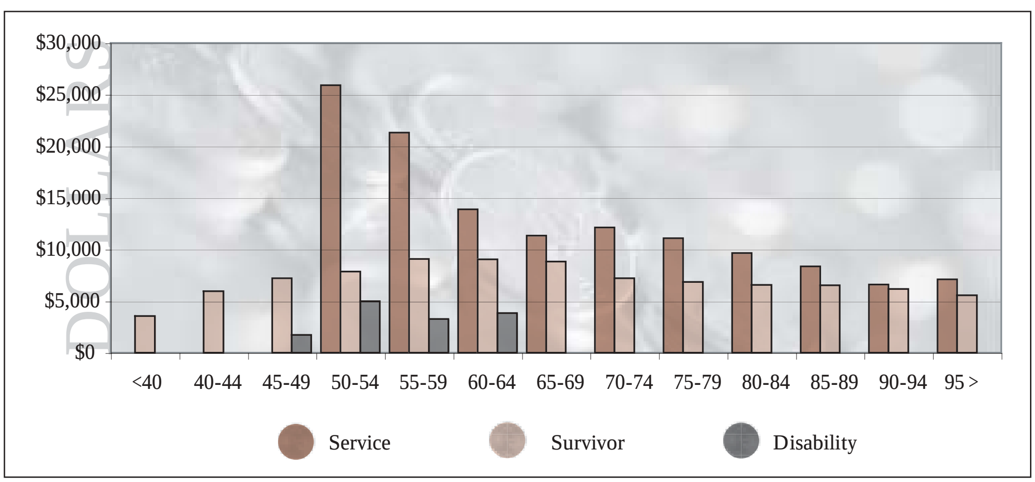
MSEP

Attained Age	Service Retirement No.	Service Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Totals No.	Totals Annual Benefits
Under 20					81	$ 216,659	81	$ 216,659
20-24					16	55,323	16	55,323
25-29					7	54,847	7	54,847
30-34					17	77,292	17	77,292
35-39					23	107,364	23	107,364
40-44					52	310,121	52	310,121
45-49			1	$ 1,740	99	715,220	100	716,960
50-54	767	$ 19,869,762	8	39,950	183	1,435,553	958	21,345,265
55-59	2,425	51,655,595	8	26,022	234	2,126,538	2,667	53,808,155
60-64	3,544	49,275,990	12	46,131	280	2,536,790	3,836	51,858,911
65-69	4,070	46,096,228			426	3,759,725	4,496	49,855,953
70-74	3,453	41,842,885			410	2,956,974	3,863	44,799,859
75-79	2,741	30,385,807			438	2,998,176	3,179	33,383,983
80-84	1,724	16,638,344			291	1,912,877	2,015	18,551,221
85-89	918	7,681,163			144	940,174	1,062	8,621,337
90-94	350	2,315,561			46	284,216	396	2,599,777
95	34	241,348			5	25,596	39	266,944
96	19	131,652			5	36,301	24	167,953
97	9	66,471					9	66,471
98	14	85,886			1	3,981	15	89,867
99	7	55,764			1	708	8	56,472
100	3	29,508					3	29,508
101	5	41,052					5	41,052
102	1	2,844					1	2,844
Totals	20,084	$266,415,860	29	$113,843	2,759	$20,554,435	22,872	$287,084,138

Schedule from the June 30, 2003 actuarial valuation using May 30, 2003 data.

Average Age At Retirement 61.1 years
Average Age Now 69.5 years

Average Annual Benefits



Total Benefits Payable

Tabulated by Attained Ages of Benefit Recipients
As of June 30, 2003

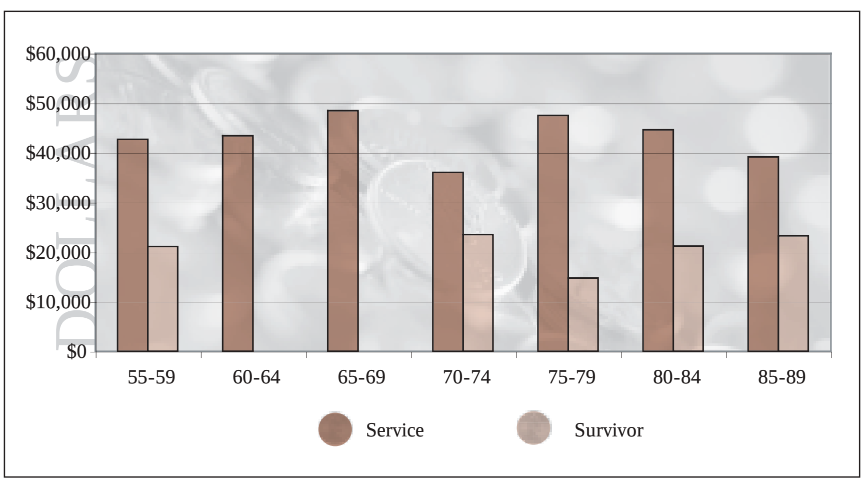
ALJLAP

	Service Retirement		Disability Retirement		Survivors and Beneficiaries		Totals	
Attained Age	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
56	1	$46,668					1	$46,668
57	1	38,712					1	38,712
58					1	21,072		
61	2	86,820					2	86,820
65	2	97,776					2	97,776
68	1	47,677					1	47,677
71	2	86,220					2	86,220
73					2	46,968		
74	1	21,924					1	21,924
75	1	42,888			1	24,108	2	66,996
76	1	54,768					1	54,768
77	1	47,364			1	5,484	2	52,848
78	1	44,441					1	44,441
79	1	48,000					1	48,000
80	1	44,400					1	44,400
81	1	44,760					1	44,760
83					2	42,420		
86	1	29,832			1	23,232	2	53,064
89	1	48,456					1	48,456
Totals	19	$830,706	0	$0	8	$163,284	27	$993,990

Schedule from the June 30, 2003 actuarial valuation using May 30, 2003 data.

Average Age At Retirement 65.8 years
Average Age Now 73.8 years

Average Annual Benefits



Total Benefits Payable

Tabulated by Attained Ages of Benefit Recipients
As of June 30, 2003

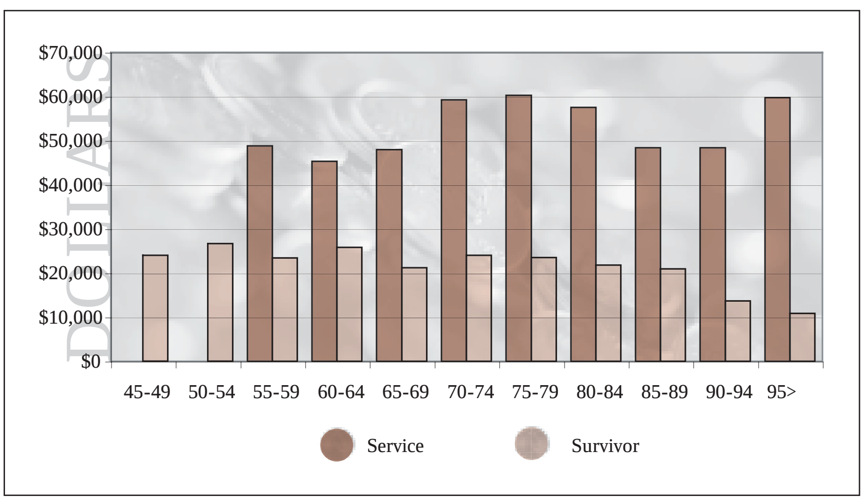
Judicial Plan

Attained Age	Service Retirement No.	Service Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Totals No.	Totals Annual Benefits
45-49					1	$24,024	1	$24,024
50-54					5	133,121	5	133,121
55-59	7	$341,904			11	257,869	18	599,773
60-64	35	1,585,567			5	129,012	40	1,714,579
65-69	37	1,775,000			5	105,912	42	1,880,912
70-74	69	4,085,954			11	263,916	80	4,349,870
75-79	56	3,375,367			26	610,863	82	3,986,230
80-84	41	2,356,728			22	480,132	63	2,836,860
85-89	16	774,249			20	418,789	36	1,193,038
90-94	7	338,724			11	150,339	18	489,063
95 and over	1	59,712			7	75,684	8	135,396
Totals	269	$14,693,205	0	$0	124	$2,649,661	393	$17,342,866

Schedule from the June 30, 2003 actuarial valuation using May 30, 2003 data.

Average Age At Retirement 65.5 years
Average Age Now 75.3 years

Average Annual Benefits



Ten Year Historical Data

Internal Service Fund

Revenues by Source

Fiscal Year	Employer Contributions*	Member Contributions*	Investment Income*	Optional Life Premium Receipts	Basic Life Premium Receipts	LTD Premium Receipts	HMO Premium Receipts*	Premium Retention for Operating Expenses*	Miscellaneous Income	Settlements Net of Legal Expense	Total
1994	$37,918,127	$11,513,810	$384,795	$4,862,255	$2,520,938	$5,265,812	$8,308,277	$355,642	$3,534	$0	$71,133,190
1995	0	0	79,215	5,535,334	2,801,939	5,650,682	0	275,646	0	205,411	14,548,227
1996	0	0	81,687	5,924,096	2,037,618	6,148,535	0	396,889	0	0	14,588,825
1997	0	0	50,608	6,319,662	3,224,533	6,711,653	0	379,683	1	0	16,686,140
1998	0	0	58,889	7,116,370	3,656,443	5,947,386	0	423,378	41	0	17,202,507
1999	0	0	55,323	8,216,777	3,556,088	7,169,727	0	413,519	31,098	0	19,442,532
2000	0	0	68,349	8,688,948	3,712,349	7,718,487	0	436,488	0	0	20,624,621
2001	0	0	81,717	9,277,192	5,357,260	8,551,077	0	464,351	0	0	23,731,597
2002	0	0	47,767	9,908,883	6,638,030	8,206,795	0	436,489		0	25,237,964
2003	0	0	31,179	10,425,056	6,685,321	8,112,666	0	436,494	0	0	25,690,716

* The Missouri State Employees' Medical Care Plan operations were transferred to the Missouri Consolidated Health Care Plan January 1, 1994.

Ten Year Historical Data
Internal Service Fund

Expenses by Type

Fiscal Year	Medical Claims*	Administrative*	Optional Life Premium Disbursements	Basic Life Premium Disbursements	LTD Premium Disbursements	HMO Premium Disbursements	Premium Refunds*	Basic Life Death Benefits	Total
1994	$23,005,156	$3,336,388	$4,825,723	$2,519,343	$5,264,677	$8,284,843	$152,961	$0	$47,389,091
1995	0	349,835	5,482,421	2,799,469	5,648,930	0	57,161	5,000	14,342,816
1996	0	330,702	5,874,317	3,023,323	6,146,610	0	53,652	0	15,428,604
1997	0	363,276	6,269,758	3,222,327	6,708,212	0	55,550	0	16,619,123
1998	0	470,791	7,053,924	3,654,416	5,945,374	0	66,485	0	17,190,990
1999	0	622,545	8,154,983	3,555,101	7,167,330	0	65,177	5,000	19,570,136
2000	0	519,271	8,622,170	3,711,311	7,716,026	0	70,277	0	20,639,055
2001	0	410,906	8,577,987	5,355,775	8,546,942	0	704,825	0	23,596,435
2002	0	439,232	9,836,571	6,635,835	8,203,114	0	78,188	0	25,192,940
2003	0	421,507	10,379,510	6,681,142	8,109,231	0	53,160	0	25,644,550

* The Missouri State Employees' Medical Care Plan operations were transferred to the Missouri Consolidated Health Care Plan January 1, 1994.

Don't be a penny loafer!

Penny facts reprinted with permission of
Americans For Common Cents (www.pennies.org)

This publication may be provided in alternative formats.
To obtain accessible formats, please contact MOSERS at
(573) 632-6100 or (800) 827-1063.
Missouri relay numbers are (800) 735-2466 (Voice)
or (800) 735-2966 (TDD).

MOSERS is an equal opportunity employer.