



Every penny counts

Management's Responsibility for Financial Reporting



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.

A handwritten signature in black ink, appearing to read "Gary Findlay".

Gary Findlay
Executive Director

A handwritten signature in black ink, appearing to read "Gary Irwin".

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



KPMG LLP/KPMG LLP, a U.S. limited liability partnership, is a member of KPMG International, a Swiss association.

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 $\text{Assets} - \text{Liabilities} = \text{Net Assets}$ 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 $\text{Additions} - \text{Deductions} = \text{Net Change in Net Assets}$. 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 $\text{Assets} = \text{Liabilities} + \text{Net Assets}$.

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 $\text{Revenues} - \text{Expenses} = \text{Net Revenues over Expenses}$ 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
<u>Receivables</u>				
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
<u>Investments at fair value</u>				
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
<u>Capital assets</u>				
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				
<u>Contributions</u>				
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
<u>Investment income</u>				
<i>From investing activities</i>				
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
<i>From securities lending activities:</i>				
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	<u>\$ 2,781,567</u>
Liabilities and net assets	
<i>Liabilities</i>	
Premiums payable	\$ 2,338,210
Checks outstanding net of deposits	3,020
Other	109,778
Total liabilities	<u>2,451,008</u>
Net assets-unrestricted	<u>330,559</u>
Total liabilities and net assets	<u>\$ 2,781,567</u>

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	<u>25,659,537</u>
Operating expenses	
Premium disbursements	25,169,883
Premium refunds	53,160
Administrative expenses	421,507
Total operating expenses	<u>25,644,550</u>
Operating revenues over operating expenses	<u>14,987</u>
Nonoperating revenues	
Investment income	31,179
Net revenues over expenses	46,166
Net assets June 30, 2002	<u>284,393</u>
Net assets June 30, 2003	<u>\$ 330,559</u>

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	<u>114,783</u>
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	<u>(2,500)</u>
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	<u>(112,283)</u>
Net increase in cash	<u>0</u>
Cash balances June 30, 2002	<u>0</u>
Cash balances June 30, 2003	<u>\$ 0</u>
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	<u>99,796</u>
Net cash provided by operating activities	<u>\$ 114,783</u>

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		<u>93,404</u>

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		<u>109</u>

Financial Section

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		<u>859</u>

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		Internal Service Fund	
	Investments at Cost Value	Investments at Fair Value	Investments at Cost Value	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	<u>2,925,933,907</u>	<u>2,970,943,305</u>		
Category 2 Classification				
Repurchase agreements	415,676	415,676	\$1,749,617	\$1,749,617
Subtotal	<u>415,676</u>	<u>415,676</u>	<u>1,749,617</u>	<u>1,749,617</u>
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	<u>3,444,541,764</u>	<u>3,535,093,910</u>		
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	<u>\$6,370,891,347</u>	<u>\$6,506,452,891</u>	<u>\$1,749,617</u>	<u>\$1,749,617</u>
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 <i>Statement of Plan Net Assets</i>		<u>\$4,995,925,367</u>		

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

<u>Notional Amount</u>	<u>Exposure</u>
\$2,324,473,986	\$2,341,606

Currency Forwards

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

Swaps

<u>Notional Amount</u>	<u>Exposure</u>
\$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	<u>267,286</u>	<u>3,332,605</u>	<u>1,914,604</u>	<u>5,514,495</u>
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	<u>0</u>	<u>401,503</u>	<u>1,501,750</u>	<u>1,903,253</u>
Net Capital Assets June 30, 2003	<u>\$267,286</u>	<u>\$2,931,102</u>	<u>\$ 412,854</u>	<u>\$3,611,242</u>

(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	<u>Annual Required Contribution</u>		Percentage Contributed
	Percent	Dollar Amount	
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	<u>Annual Required Contribution</u>		Percentage Contributed
	Percent	Dollar Amount	
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	<u>Annual Required Contribution</u>		Percentage Contributed
	Percent	Dollar Amount	
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.

	<u>Amount</u>	<u>Percent of Payroll</u>
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.

	<u>Amount</u>	<u>Percent of Payroll</u>
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.

	<u>Amount</u>	<u>Percent of Payroll</u>
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.

	<u>Amount</u>	<u>Percent of Payroll</u>
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.

	<u>Amount</u>	<u>Percent of Payroll</u>
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.

	<u>Amount</u>	<u>Percent of Payroll</u>
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
<u>Investing activity</u>				
<u>Investment management fees</u>				
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
<u>Other investment fees</u>				
<i>Investment consultant fees</i>				
Summit Strategies, Inc.	378,218	980	2,196	381,394
Timberlink Consulting	4,958	13	29	5,000
<i>Investment custodial fees</i>				
Mellon Bank	915,391	2,371	5,315	923,077
<i>Performance measurement fees</i>				
Mellon Bank	247,538	641	1,437	249,616
<i>Portfolio rebalancing costs</i>				
NISA Investment Advisors, LLC	161,013	417	935	162,365
<i>Internal investment activity expenses</i>	1,221,588	3,165	7,093	1,231,846
Total investing activity expenses	18,298,322	47,402	106,241	18,451,965
<u>Securities lending activity</u>				
<i>Securities lending borrower rebates</i>	14,112,689	36,559	81,938	14,231,186
<i>Securities lending management fees</i>				
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	<u>291,563</u>
Professional services	
Attorney services	1,513
Auditing services	2,643
Banking services	550
Total professional services	<u>4,706</u>
Communications	
Postage and mailing	1,627
Telephone	2,640
Video production expense	39
Total communications	<u>4,306</u>
Building and grounds	
Building use charge	8,308
Utilities	3,548
Maintenance	3,821
Total building and grounds	<u>15,677</u>
Equipment	
Equipment use charge	36,503
Maintenance	15,775
Rental	7,355
Total equipment	<u>59,633</u>
Travel and meetings	
Board travel and meetings	1,206
Staff travel and meetings	19,762
Vehicle maintenance and operation	433
Total travel and meetings	<u>21,401</u>
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	<u>24,221</u>
Total administrative expenses	<u>\$ 421,507</u>

See accompanying *Independent Auditors' Report*.

Schedule of Professional/Consultant Fees

Year Ended June 30, 2003

Professional/Consultant	Nature of Service	Pension Trust Funds			Total	Internal Service Fund
		MSEP	ALJLAP	Judicial Plan		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		Purchases and Capital Additions at Cost	Sales and Redemptions at Cost	June 30, 2003		Percent of Total Fair Value
	Cost Value	Fair value			Cost Value	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	1,010,179,519	1,008,874,150	67,575,423,849	(67,328,267,233)	1,257,336,135	1,257,555,834	
lending collateral							
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

Type of Investment	June 30, 2002		Purchases and Capital Additions at Cost	Sales and Redemptions at Cost	June 30, 2003		Percentage of Total Fair Value
	Cost Value	Fair Value			Cost Value	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.