



  
MOSERS

Missouri State Employees' Retirement System

*A Component Unit of the State of Missouri*

Summary Annual Financial Report

*Fiscal Year Ended June 30, 1999*

## Letter from MOSERS' Board of Trustees



*Seated left to right:* Senator John Scott, Richard Hanson,  
Thomas Hodges - Chairman, Jacquelyn White - Vice Chairman  
*Standing left to right:* Ben Russell, Representative Bill Skaggs, Senator John Russell,  
Steve Price, Joseph Bednar  
*Not pictured:* Bob Holden, Representative Richard Franklin

September 22, 1999

Dear Members:

On behalf of the board of trustees, I am pleased to present the MOSERS' Summary Annual Financial Report for the fiscal year ended June 30, 1999. This report provides information on the financial status of your retirement system while also highlighting significant changes that occurred during the year.

The investment return on plan assets during the fiscal year again exceeded our assumed actuarial rate of return. This strong investment performance served to further reinforce an already sound funding ratio. These favorable results are directly attributable to the dedication of the investments staff who diligently execute the asset allocation decisions and strategic policies adopted by the board through cost effective external manager selection initiatives and internal management of index funds.

Expansion of member services was also a hallmark of this fiscal year. The board authorized new Mid-Career Seminars to assist members in their retirement planning efforts earlier in their careers. Member publications continue to improve and evolve, and a new accounting software system was installed to address Y2K issues, as well as anticipated future growth. In addition, benefit and member services handled a significant increase in call volume due to the enactment of the MSEP 2000 legislation. The professional work of our employees in accounting, benefit services, member services, communications, member training, information technology, investments, staff services, and executive services, and the value they add to the system and its members is greatly appreciated by the board of trustees.

During the past year, the board's membership changed with the departure of Don Martin and Bryan Ornburn, and the addition of Steve Price and Ben Russell. Don, having served four years, and Bryan, having served six years, exemplified what fiduciary responsibility means in their every action. Their concern for the membership served as a model for other board members, and we recognize them for the valuable contributions they made while serving as trustees. Although we will miss working with Don and Bryan, we look forward to working with Steve and Ben.

In closing, I wish to thank MOSERS' Executive Director, Gary Findlay, for his work this year on the MSEP 2000 legislation that will be implemented during the upcoming fiscal year. The board recognizes and appreciates his many talents and the contributions he has made to the system.

Sincerely,

  
Thomas F. Hodges, Chairman  
Board of Trustees

# 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.

## Administrative Organization

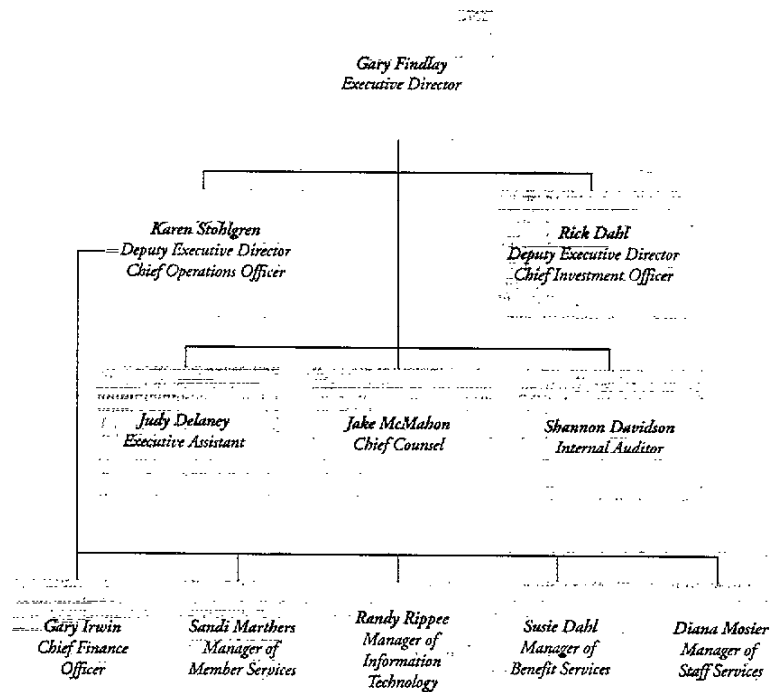


### Management and Senior Support Staff

*Front row:* Randy Rippee, Karen Stohlgren, Judy Delaney, Gary Findlay

*Back row:* Susie Dahl, Jake McMahon, Sandi Marthers,  
Shannon Davidson, Diana Mosier, Gary Irwin

*Not pictured:* Rick Dahl



## 1999 Legislative Review

On July 10, 1999, Governor Mel Carnahan signed into law Senate Bills 308 & 314 (SB308) - legislation that creates a new retirement plan for eligible state employees. The new retirement plan is commonly referred to as the Missouri State Employees' Plan 2000 (MSEP 2000) for general employees, legislators, and elected state officials. All future employees will become participants in the new plan, and present active, terminated-vested, and retired members covered by the existing plan (MSEP) will be given the option of electing coverage under the MSEP 2000, which will become effective on July 1, 2000.

The key differences between the MSEP and the MSEP 2000 are illustrated in the table below:

**Comparison of the MSEP and the MSEP 2000 for General Employees**

Benefit	MSEP	MSEP 2000
Normal Retirement Eligibility	Age 60 with 15 years service. Age 65 with five years service. "Rule of 80"/ minimum age 50.	Age 62 with five years service. "Rule of 80"/ minimum age 50.
Early Retirement Eligibility	Age 55 with 10 years service.	Age 57 with 5 years service.
Benefit Formula		
Life	.016 x FAP* x service.	.017 x FAP* x service.
Temporary	Not available.	.008 x FAP* x service (until age 62- only if retiring under "Rule of 80").
Death In Service	Survivor benefit calculated using the Joint & 100% Survivor Option for spouse; or 50 percent of the member's life income annuity for eligible children (50 percent of FAP* if death is duty related).	Survivor benefit calculated using the Joint & 100% Survivor Option for spouse; or 80 percent of the member's life income annuity for eligible children (50 percent of FAP* if death is duty related).
Death After Retirement	Survivor benefit based on option elected at retirement. Options include: " Life Income Annuity " Unreduced Joint & 50% Survivor " Joint & 100% Survivor " 60 or 120 Guaranteed Payments	Survivor benefit based on option elected at retirement. Options include: " Life Income Annuity " Joint & 50% Survivor " Joint & 100% Survivor " 120 or 180 Guaranteed Payments
Retirement Calculation on Disability	Salary indexed each year while on disability.	Salary indexed each year while on disability.
COLA	If hired before August 28, 1997, COLA is equal to 80 percent of increase in CPI with minimum of 4 percent and maximum of 5 percent until reaching 65 percent cap. Thereafter, the COLA rate is based on 80 percent of increase in CPI with a maximum of 5 percent.	80 percent of increase in CPI with maximum of 5 percent.
In-Service COLA	4 percent per year for service beyond age 65 (if eligible).	Not available.
Optional Life Insurance at Retirement	Maximum \$60,000 (cannot exceed coverage while actively employed).	Members retiring under "Rule of 80" may retain the same amount of coverage as was in effect during the month prior to termination of employment until age 62. Maximum of \$60,000 from age 62 forward.

\* Final Average Pay - highest 36 consecutive months of pay

For more information regarding other plan changes contained in SB308, contact a MOSERS' benefit specialist at (573) 632-6100 or (800) 827-1063.

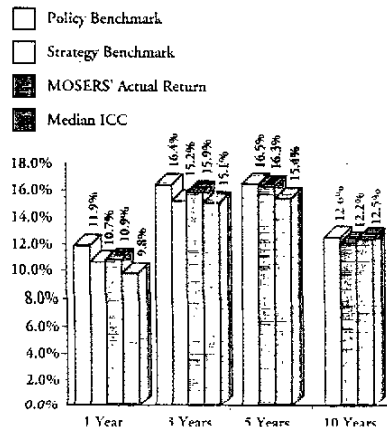
MOSERS is one of the 200 largest employee benefit funds in the United States with total assets in excess of \$5.1 billion. During the year, the asset base grew by approximately \$509 million with the total fund generating returns of 10.9 percent. For the year, the fund spent approximately \$7 million for management of the assets, which was approximately \$6.6 million less than the median fund in our peer group.

### Total Fund Returns and Benchmark Comparisons

In monitoring performance, the board compares the actual returns generated by the fund to the following three benchmarks: the MOSERS' Policy Benchmark, the MOSERS' Strategy Benchmark, and the median return generated by a peer group of public pension funds.

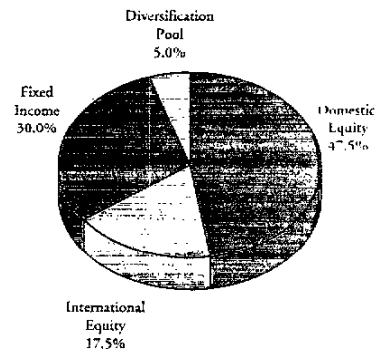
- ◆ The policy benchmark provides an indication of the returns that could be achieved by a portfolio invested passively in the broad market with percentage weights allocated to each asset class in MOSERS' policy asset allocation.
- ◆ The strategy benchmark reflects decisions made by the board to strategically deviate from the broad asset classes. The strategy benchmark focuses on any specific "bets" made relative to the policy benchmark. Examples of strategic decisions in the MOSERS' portfolio would be the overweight to small capitalization and value stocks in the domestic equity portfolio.
- ◆ The Independent Consultants Cooperative (ICC) median public fund return reflects a universe of public pension plans with assets in excess of \$1 billion.

The graph below shows total fund return comparisons for 1-, 3-, 5-, and 10-year periods. Strategy benchmarks were not clearly defined prior to 1995, which was when MOSERS formally adopted strategic biases.



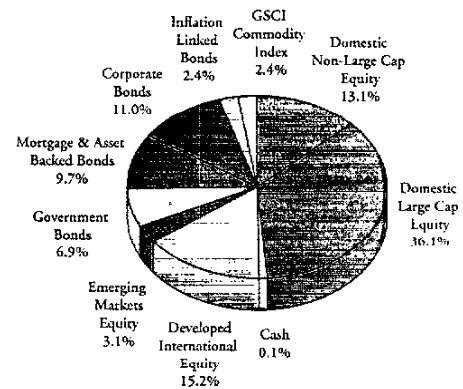
### Policy Asset Allocation

MOSERS' assets are divided into the following asset classes: domestic and international equities, domestic fixed income, and a diversification pool. The resulting portfolio is intended to produce the required real rate of return necessary to fund the pension liabilities within prudent levels of risk. (Real return is the amount by which actual return exceeds the rate of inflation.) The chart below depicts the MOSERS' current policy asset allocation, adopted by the board in August 1998.



### Strategy Asset Allocation

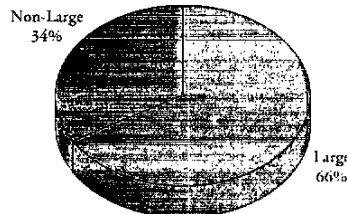
Strategic biases within asset classes are employed to enhance long-term returns within each asset class. A strategic decision should be thought of as any decision that might cause MOSERS' actual return to differ from the return of the policy mix. These strategic allocations may subject the fund to higher return volatility over shorter time frames; however, if successful in their purpose, returns will be enhanced. The chart below depicts MOSERS' actual strategy mix as of June 30, 1999.



### Summary of Domestic Equity

MOSERS maintains a significant allocation to publicly held shares of corporations domiciled in the United States. Domestic equities are held in broadly diversified portfolios, and they represent 47.5 percent of the MOSERS' policy asset allocation.

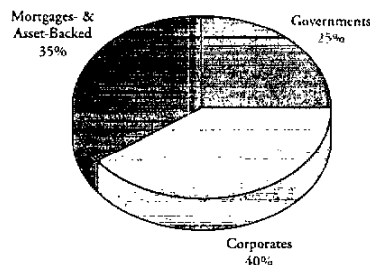
As of June 30, 1999, the MOSERS' U.S. Stock Portfolio had a market value of \$3.52 billion representing 49.2 percent of the total fund. Large cap stocks represented 66 percent of the total domestic equity assets while medium/small cap stocks represented 34 percent as depicted in the graph below.



### Summary of Fixed Income

Domestic fixed income, with a target allocation of 32.5 percent, serves to diversify the equity risk component within the fund. Bonds have traditionally been regarded as a hedge in a disinflationary or deflationary environment. In most periods, fixed income has provided returns substantially in excess of the inflation rate, although not of the magnitude of equity returns. The cash flow predictability of bonds, however, makes the asset class less volatile than equities.

As of June 30, 1999, the MOSERS' Domestic Fixed Income Portfolio had a market value of \$1.41 billion representing 27.6 percent of the total fund. Government bonds represented 25 percent of the total fixed income assets, corporate bonds represented 40 percent, while mortgages and asset backed bonds represented 35 percent as depicted in the graph below.

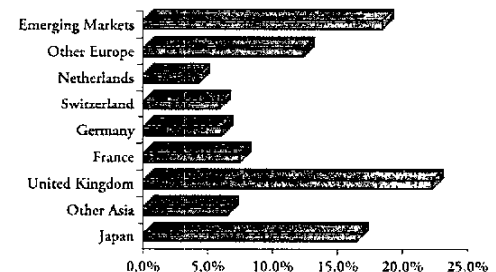


### Summary of International Equity

International stocks represent 17.5 percent of the MOSERS' policy asset allocation. By incorporating international stocks into the asset

mix, MOSERS expects to achieve overall equity returns which are comparable to that of a U.S. stock portfolio while reducing overall portfolio risk, through diversification.

As of June 30, 1998, the MOSERS' International Stock Portfolio had a market value of \$937 million representing 18.3 percent of the total fund. The country weights of the international portfolio are shown in the graph below.



### Summary of Diversification Pool

The decision to fund a 5 percent allocation to diversifying assets was made with the intent of cushioning the fund when downturns in financial assets (i.e., stocks and bonds) are experienced due to strong inflationary forces. While MOSERS has made great efforts to diversify the stock and bond portfolios across countries, sectors, and companies, the board realizes that during periods of extreme market stress due to increasing inflation, these attempts at diversification will not be of much benefit. The pool includes exposure to an unleveraged commodities index and Inflation Linked Bonds (ILBs). Both ILBs and commodities have historically contributed significantly to improving the risk/return profile of a portfolio during severe economic events caused by rapid and/or unexpected inflation.

As of June 30, 1999, the MOSERS' Diversification Pool Portfolio had a market value of \$247.3 million, representing 4.8 percent of the total fund.

### Summary of Cash Investments

Cash investments are employed by the fund to meet liquidity needs and to allow the MOSERS' managers a vehicle for investment of funds during brief periods between the sale of an existing security and purchase of a replacement. This portfolio generally represents less than 1 percent of the total fund.

As of June 30, 1999, the MOSERS' Cash Portfolio had a market value of \$5.7 million, representing 0.1 percent of the total fund.

# Actuarial

## Fund Determined Sound

Gabriel, Roeder, Smith & Company, MOSERS' actuarial consultant, performed the annual actuarial valuation and determined that MOSERS' assets cover approximately 89.2 percent of the actuarial accrued liabilities - a strong reserve position.

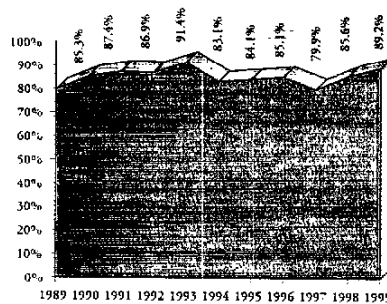
On June 30, 1999, the total accrued liability for the Missouri State Employees' Plan was \$5.51 billion, an increase of approximately 12 percent over 1998. A pension plan's accrued liability is the current value of future promised

benefit payments based on service rendered to date. On June 30, 1999, this liability was \$.60 billion over the actuarial value of assets of \$4.91 billion. The funding level increased from 85.6 percent to 89.2 percent during the year.

What do these figures mean? Comparing assets to accrued liabilities is a good way to measure the strength of a retirement plan. This comparison shows a plan's ability to pay projected benefits with today's dollars. According to MOSERS' actuarial consultant, the plan is strong and sound.

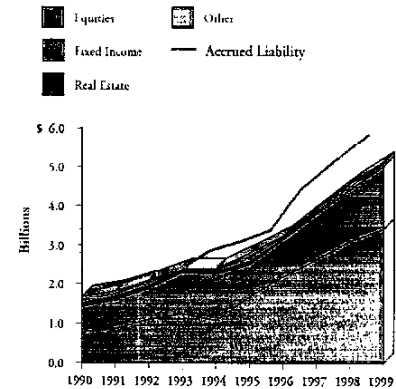
## Valuation Assets as Percents of Pension Liabilities

Ten Years Ended June 30, 1999



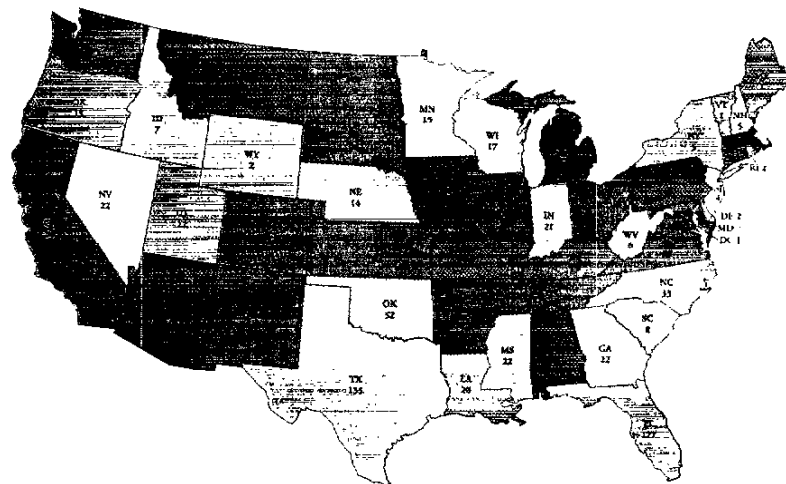
## Pension Trust Funds Net Assets vs. Pension Liabilities

Ten Years Ended June 30, 1999



# Statistical

## Benefit Recipients by Location



Recipients outside the continental U.S. include:

- |                           |                  |
|---------------------------|------------------|
| Alaska-3                  | Mexico-1         |
| Argentina-1               | New Zealand 2    |
| Canada-1                  | Puerto Rico 1    |
| Columbia, South America-1 | South Korea-1    |
| Germany-2                 | Sweden-1         |
| Hawaii-1                  | United Kingdom-2 |
| Ireland-1                 | West Indies 1    |
| Israel-1                  | Military-1       |

# Financial Statements

Missouri State Employees' Retirement System  
**Statements of Plan Net Assets**  
**Pension Trust Funds**  
As of June 30, 1999

	Missouri State Employees' Plan	Administrative Law Judges' and Legal Advisors' Plan	Judicial Plan	Total (Memorandum Only)
<b>Assets</b>				
Cash and short-term investments	\$ 96,216,865	\$ 230,185	\$ 86,380	\$ 96,533,430
<b>Receivables</b>				
State contributions	16,648,357	54,850	1,495,367	18,198,574
Investment income	34,062,940	81,491	30,581	34,175,012
Investment sales	92,588,850	221,505	83,123	92,893,478
Other	317,994	761	285	319,040
Total receivables	143,618,141	358,607	1,609,356	145,586,104
<b>Investments at fair value</b>				
U.S. Treasury securities	380,343,729	909,916	341,460	381,595,105
Corporate bonds	583,229,093	1,395,290	523,603	585,147,986
Government bonds and govt. mortgage-backed securities	573,166,211	1,371,216	514,569	575,051,996
Real estate equity	6,787,668	16,239	6,094	6,810,001
Common stock	2,422,664,620	5,795,868	2,174,986	2,430,635,474
International EAFE index fund	376,941,288	901,776	338,405	378,181,469
Preferred stock	79,328	190	71	79,589
Venture capital	322,078	771	289	323,138
Closed-end real estate fund	89,711	215	81	90,007
Collateralized mortgage obligations	32,122,257	76,848	28,838	32,227,943
Foreign currency	4,779,050	11,433	4,290	4,794,773
International equities	617,907,997	1,478,254	554,737	619,940,988
U.S. dollar denominated international corporate bonds	25,629,882	61,316	23,010	25,714,208
Total investments	5,024,062,912	12,019,332	4,510,433	5,040,592,677
Securities lending collateral	88,689,834	212,177	79,623	88,981,634
<b>Fixed assets</b>				
Land	337,177	807	303	338,287
Building and building improvements	4,354,196	10,417	3,909	4,368,522
Furniture, fixtures, and equipment	1,880,088	4,498	1,688	1,886,274
Accumulated depreciation	(6,571,461)	(15,722)	(5,900)	(6,593,083)
Total fixed assets	(1,461,708)	(3,497)	(1,312)	(1,466,517)
Prepaid expenses and other	5,109,753	12,225	4,588	5,126,566
Total assets	5,357,745,568	12,832,641	6,290,423	5,376,868,632
<b>Liabilities</b>				
Administrative expense payables	1,951,935	4,670	1,752	1,958,357
Investment purchases	142,456,721	340,807	127,893	142,925,421
Securities lending collateral	88,689,834	212,177	79,623	88,981,634
Real estate security deposits	54,115	129	49	54,293
Employee vacation and overtime liability	179,453	429	161	180,043
Total liabilities	233,332,058	558,212	209,478	234,099,748
Net assets held in trust for pension benefits	\$ 5,124,413,510	\$ 12,274,429	\$ 6,080,945	\$ 5,142,768,884

Note: Financial statements for the Internal Service Fund are not included in this summary annual report.

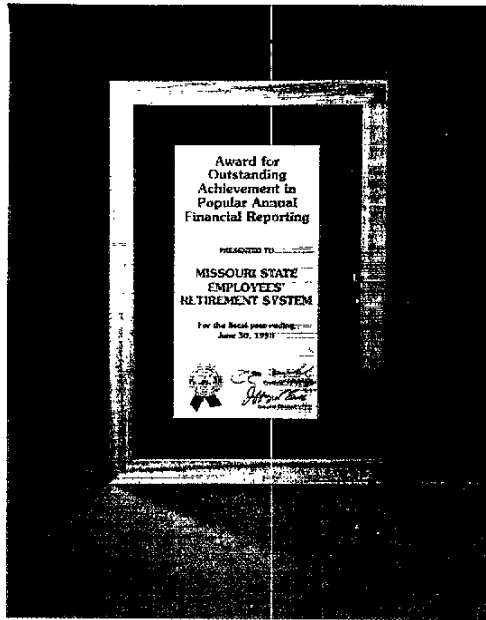


# Financial Statements

Missouri State Employees' Retirement System  
**Statements of Changes in Plan Net Assets**  
**Pension Trust Funds**  
Year Ended June 30, 1999

	Missouri State Employees' Plan	Administrative Law Judges' and Legal Advisors' Plan	Judicial Plan	Total (Memorandum Only)
<b>Additions</b>				
<b>Contributions</b>				
State contributions	\$ 197,909,834	\$ 639,285	\$ 17,862,353	\$ 216,411,472
Member purchases of service credit	1,151,328	0	0	1,151,328
Service transfer contributions	147,315	0	0	147,315
<b>Total contributions</b>	<b>199,208,477</b>	<b>639,285</b>	<b>17,862,353</b>	<b>217,710,115</b>
<b>Investment income</b>				
<i>From investing activities</i>				
Net appreciation in fair value of investments	364,054,803	870,952	326,839	365,252,594
Interest	96,078,786	229,854	86,256	96,394,896
Dividends	43,934,382	105,107	39,443	44,078,932
Other	4,296,074	10,278	3,857	4,310,209
<b>Total investing activity income</b>	<b>508,364,045</b>	<b>1,216,191</b>	<b>456,395</b>	<b>510,036,631</b>
Investing activity expenses:				
Management fees	(5,068,775)	(12,126)	(4,551)	(5,085,452)
Custody fees	(582,133)	(1,393)	(523)	(584,049)
Consultant fees	(201,545)	(482)	(181)	(202,208)
Performance measurement fees	(48,453)	(116)	(44)	(48,613)
Portfolio transition costs	(77,168)	(185)	(69)	(77,422)
<b>Total investing activity expenses</b>	<b>(5,978,074)</b>	<b>(14,302)</b>	<b>(5,368)</b>	<b>(5,997,744)</b>
<b>Net income from investing activities</b>	<b>502,385,971</b>	<b>1,201,889</b>	<b>451,027</b>	<b>504,038,887</b>
<i>From securities lending activities</i>				
Securities lending income	12,670,452	30,312	11,375	12,712,139
Securities lending expenses:				
Borrower rebates	(10,757,291)	(25,735)	(9,658)	(10,792,684)
Management fees	(272,842)	(653)	(245)	(273,740)
<b>Total securities lending activities expenses</b>	<b>(11,030,133)</b>	<b>(26,388)</b>	<b>(9,903)</b>	<b>(11,066,424)</b>
<b>Net income from securities lending activities</b>	<b>1,640,319</b>	<b>3,924</b>	<b>1,472</b>	<b>1,645,715</b>
<b>Total net investment income</b>	<b>504,026,290</b>	<b>1,205,813</b>	<b>452,499</b>	<b>505,684,602</b>
Miscellaneous income	659,215	1,577	592	661,384
<b>Total additions</b>	<b>703,893,982</b>	<b>1,846,675</b>	<b>18,315,444</b>	<b>724,056,101</b>
<b>Deductions</b>				
Benefits	155,260,156	747,663	12,229,325	168,237,144
Benefit adjustments	39,768	0	0	39,768
Administrative expenses	5,763,229	13,788	5,174	5,782,191
<b>Total deductions</b>	<b>161,063,153</b>	<b>761,451</b>	<b>12,234,499</b>	<b>174,059,103</b>
<b>Net increase</b>	<b>542,830,829</b>	<b>1,085,224</b>	<b>6,080,945</b>	<b>549,996,998</b>
Net assets held in trust for pension benefits:				
Beginning of year	4,581,582,681	11,189,205	0	4,592,771,886
End of year	<b>\$ 5,124,413,510</b>	<b>\$ 12,274,429</b>	<b>\$ 6,080,945</b>	<b>\$ 5,142,768,884</b>

Note: Financial statements for the Internal Service Fund are not included in this summary annual report.



## *Outstanding Achievement in Popular Annual Financial Reporting*

The Government Finance Officers Association of the United States and Canada (GFOA) presented an Award for Outstanding Achievement in Popular Annual Financial Reporting to MOSERS for its summary annual report for the fiscal year ended June 30, 1998. This prestigious national award recognizes popular reports for creativity, presentation, understandability and reader appeal, and is valid for a period of one year. We believe the current summary annual report continues to meet these program standards and we are submitting it to GFOA for evaluation.

Alternative format available upon request.  
To request an alternative format, please call the personnel officer  
of MOSERS at 573-632-6100 or 800-827-1063.  
Missouri relay numbers are: 800-735-2466 (Voice) or 800-735-2966 (TT).

MOSERS is an equal opportunity employer.

Missouri State Employees'  
Retirement System  
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