



Controlling
System Risk

Actuarial Section

103	Actuary's Certification Letter
104	Summary of Actuarial Assumptions
110	Summary of Member Data Included in Valuations
111	MSEP Active Members by Attained Age and Years of Service
112	Judicial Plan Active Members by Attained Age and Years of Service
113	Schedules of Active Member Valuation Data Last Six Years
114	MSEP Retirees and Beneficiaries Added and Removed
118	Judicial Plan Retirees and Beneficiaries Added and Removed
120	Short-Term Solvency Test
121	MSEP Derivation of Experience Gain (Loss)
121	Judicial Plan Derivation of Experience Gain (Loss)
122	Summary Plan Provisions
130	Changes in Plan Provisions
131	MSEP Actuarial Present Values
132	Judicial Plan Actuarial Present Values

Actuary's Certification Letter



GABRIEL, ROEDER, SMITH & COMPANY
Consultants & Actuaries

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

October 17, 2005

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

Dear Board Members:

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

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

In order to measure progress toward this fundamental objective, MOSERS has annual actuarial valuations performed. The valuations (i) measure present financial position, and (ii) establish contribution rates that provide for the current cost and level percent of payroll amortization of unfunded actuarial accrued liabilities over a reasonable period. The latest completed actuarial valuations were based upon data and assumptions as of June 30, 2005. These valuations indicate that the contribution rates for the fiscal year ending June 30, 2007, adopted by the board of trustees for the benefits scheduled to be in effect on July 1, 2005, meet the basic financial objective. These contribution rates are 12.78% of payroll for 55,944 general state employees, including 59 administrative law judges, and 58.48% of payroll for 392 judges other than administrative law judges.

The actuarial valuations are based upon financial and participant data, which is prepared by retirement system staff, assumptions regarding future rates of investment return and inflation, and assumptions regarding rates of retirement, turnover, death, and disability among MOSERS' members and their beneficiaries. The data is reviewed by us for internal and year-to-year consistency as well as general reasonableness prior to its use in the actuarial valuations. It is also summarized and tabulated for the purpose of analyzing trends. The demographic assumptions were adopted by the board of trustees in January 2004 based upon recommendations made in an experience study covering the period from 1999-2003. The economic assumptions were adopted by the board of trustees in September 2001 and reaffirmed in January 2004. Assets were adjusted in the June 30, 2005 valuation to equal market value. The assumptions and methods utilized in this valuation, in our opinion, meet the parameters established by Governmental Accounting Standards Board Statement No. 25.

The current benefit structure is outlined in the Actuarial Section. The changes made since the previous valuation are highlighted on page 130. We provided the information used in the supporting schedules in the Actuarial Section and the *Schedules of Funding Progress* in the Financial Section, as well as the employer contribution rates shown in the *Schedule of Employer Contributions* in the Financial Section.

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

Respectfully submitted,

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

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

Summary of Actuarial Assumptions

June 30, 2005

Economic Assumptions

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

Pay increase assumptions for individual active members are shown for sample ages on page 106. Part of the assumption for each age is for merit and/or seniority increase, and the other 4% recognizes wage inflation. This assumption is used to project a member's current salary to the salary upon which benefits will be based.

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

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

The number of active members in the MSEP is assumed to remain constant although certain new hires on or after July 1, 2002, will participate in the College and University Retirement Plan (CURP). The number of active members in the Judicial Plan is assumed to continue at the present number. Active and retired member data is reported as of May 31, 2005. It is assumed for valuation purposes that there is no turnover among members and no new entrants during the month of June.

Noneconomic Assumptions

The mortality table for post-retirement mortality used in evaluating allowances to be paid, was the 1971 Group Annuity Mortality Table projected to the year 2000 with a 1-year age setback for men and a 7-year age setback for women. Related values are shown on page 107. This assumption is used to measure the probabilities of each benefit payment being made after retirement.

The probabilities of age and service retirement are shown on page 108. It was assumed that each member will be granted one-half year of service credit for unused leave upon retirement and military service purchases.

The probabilities of withdrawal from service, death-in-service, and disability are shown for sample ages on page 106. For disability retirement, impaired longevity was recognized by use of special mortality tables.

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

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

Valuation assets recognize assumed investment return fully each year. Differences between actual and assumed investment return are phased in over a closed 5-year period. Valuation assets are not permitted to deviate from the market value by more than 20%.

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

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

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

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

Summary of Actuarial Assumptions
 Separations From Active Employment Before Service
 Retirement and Individual Pay Increase Assumptions
 June 30, 2005

MSEP

Sample Ages	Years of Service	Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions for an Individual Employee		
		Withdrawal		Death*		Disability		Merit and Seniority**	Base (Economy)	Increase Next Year
		Men	Women	Men	Women	Men	Women			
	0	23.8%	24.7%							
	1	16.5	17.2							
	2	13.4	13.5							
	3	11.9	10.7							
	4	12.0	10.7							
	+5									
	20	12.0	11.0	.04%	.03%	.16%	.18%	2.7%	4.0%	6.7%
	25	12.0	11.0	.05	.04	.16	.18	2.6	4.0	6.6
	30	8.8	9.9	.06	.04	.16	.18	2.2	4.0	6.2
	35	6.2	6.8	.08	.06	.21	.19	1.9	4.0	5.9
	40	4.6	4.9	.12	.08	.26	.32	1.4	4.0	5.4
	45	3.5	4.3	.19	.11	.34	.37	1.2	4.0	5.2
	50	2.8	3.6	.35	.17	.49	.57	0.7	4.0	4.7
	55	2.4	2.9	.59	.31	1.07	.89	0.7	4.0	4.7
	60	2.4	2.9	.90	.54	1.50	1.50	0.0	4.0	4.0
	65	2.4	2.9	1.44	.83	1.60	1.70	0.0	4.0	4.0

* 2% of the deaths in active service are assumed to be duty-related.

** Does not apply to members of the general assembly.

Judicial Plan

Sample Ages	Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions for an Individual Employee		
	Withdrawal		Death		Disability		Merit and Seniority	Base (Economy)	Increase Next Year
	Men	Women	Men	Women	Men	Women			
25	6.2%	4.5%	.05%	.04%	.02%	.02%	1.6%	4.0%	5.6%
30	5.5	3.7	.06	.04	.03	.03	1.2	4.0	5.2
35	3.8	2.6	.08	.06	.03	.07	0.9	4.0	4.9
40	2.7	2.1	.12	.08	.04	.11	0.4	4.0	4.4
45	2.1	1.9	.19	.11	.09	.17	0.3	4.0	4.3
50	2.1	1.7	.35	.17	.12	.35	0.2	4.0	4.2
55	2.1	1.2	.59	.31	.23	.49	0.2	4.0	4.2
60	1.7	0.6	.90	.54	.33	.53	0.0	4.0	4.0
65	1.2	0.4	1.44	.83	.00	.00	0.0	4.0	4.0

Summary of Actuarial Assumptions

Single Life Retirement Values

June 30, 2005

All Plans

Sample Attained Ages	Present Value of \$1/Month the First Year Increasing 4%/2.8% Yearly				Future Life Expectancy (Years)			
	Service		Disability		Service		Disability	
	Men	Women	Men	Women	Men	Women	Men	Women
40	\$ 203.29	\$ 213.24	\$ 135.93	\$ 157.34	38.46	44.22	19.70	26.02
45	192.77	205.14	126.72	150.77	33.73	39.41	17.50	23.70
50	180.29	195.04	116.43	143.29	29.17	34.67	15.35	21.39
55	165.93	182.93	106.32	135.58	24.82	30.06	13.43	19.18
60	149.43	168.96	97.83	127.14	20.70	25.67	11.87	17.01
65	130.80	152.92	90.83	117.40	16.82	21.50	10.56	14.82
70	111.02	134.67	82.22	105.26	13.32	17.57	9.13	12.50
75	91.88	114.99	70.84	89.45	10.36	13.99	7.49	10.00
80	73.43	95.64	56.19	71.98	7.83	10.91	5.66	7.62
85	57.86	76.96	42.26	56.19	5.89	8.29	4.08	5.66

Summary of Actuarial Assumptions
 Percent of Eligible Active Members Retiring Next Year
 June 30, 2005

MSEP

Retirement Ages	Year of Eligibility		
	1st Year	2nd Year	3rd Year
48	20.0%	10.0%	8.0%
49	20.0	10.0	8.0
50	20.0	10.0	8.0
51	20.0	10.0	8.0
52	20.0	10.0	8.0
53	20.0	10.0	8.0
54	20.0	10.0	8.0
55	25.0	10.0	12.0
56	20.0	10.0	12.0
57	20.0	10.0	12.0
58	20.0	10.0	12.0
59	20.0	10.0	12.0
60	25.0	10.0	12.0
61	20.0	10.0	12.0
62	30.0	15.0	30.0
63	20.0	12.0	20.0
64	20.0	12.0	20.0
65	30.0	15.0	30.0
66	20.0	12.0	20.0
67	20.0	12.0	20.0
68	20.0	12.0	20.0
69	20.0	12.0	20.0
70	20.0	12.0	20.0
71	20.0	12.0	20.0
72	20.0	12.0	20.0
73	20.0	12.0	20.0
74	20.0	12.0	20.0
75 & over	20.0	12.0	100.0

Early retirement rates were assumed to be 5.0% from age 57-61.

Judicial Plan

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

Summary of Actuarial Assumptions

Miscellaneous and Technical Assumptions - June 30, 2005

Pay Increase Timing
Beginning of fiscal year.

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

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

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

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

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

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

Loads
No loads were used.

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

Active and retired member data was reported as of May 31, 2005. It was brought forward to June 30, 2005 by adding one month of service for all active members and the June COLA for certain retired members. It is expected that this procedure resulted in a slight overstatement of total liabilities as of June 30, 2005. Financial information continues to be reported as of June 30. This procedure was instituted to provide sufficient time for the board of trustees to certify the appropriate contribution rate prior to the October 1 statutory deadline.

Summary of Member Data Included in Valuations

Pension Trust Funds - June 30, 2005

Active Members

Valuation Group	Number	Payroll	Group Averages		
			Salary	Age (Yrs)	Service (Yrs)
Missouri State Employees' Plan					
Regular state employees	51,615	\$ 1,597,600,643	\$ 30,952	43.9	9.9
Elected officials	6	576,564	96,094	46.4	5.8
Legislative clerks	67	1,898,036	28,329	55.3	15.7
Legislators	194	6,055,458	31,214	48.7	2.2
Uniformed water patrol	93	3,663,384	39,391	38.2	12.7
Conservation Department	1,532	58,866,972	38,425	42.7	12.7
School-term salaried employees	2,378	133,081,935	55,964	52.2	16.2
Administrative Law Judges	59	4,857,568	82,332	48.8	10.2
Total MSEP group	55,944	\$ 1,806,600,560	32,293	44.2	10.2
Judicial Plan	392	\$ 40,016,098	\$102,082	54.1	11.8

110

Retired Members

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age (Yrs)
Missouri State Employees' Plan				
Retirement	22,695	\$322,844,040	\$ 14,225	69.2
Disability	21	69,943	3,331	58.1
Survivor of active member	1,239	9,604,686	7,752	59.2
Survivor of retired member	1,825	15,572,681	8,533	73.7
Total MSEP group	25,780	\$348,091,350	13,502	69.0
Judicial Plan	397	\$ 18,832,103	\$ 47,436	75.9

Others

Group	Terminated Vested	Leave of Absence	Long-Term Disability
Missouri State Employees' Plan	14,718	534	1,082
Judicial Plan	71	0	0

Active Member by Attained Age and Years in Service
June 30, 2005

MSEP

Attained Age	Years of Service to Valuation Date								Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll	
15-19	40							40	\$ 758,052	
20-24	1,793	24						1,817	40,315,636	
25-29	3,970	815	8					4,793	127,197,977	
30-34	2,926	2,429	482	10				5,847	170,117,942	
35-39	2,302	2,204	1,573	514	28			6,621	205,307,672	
40-44	2,264	1,992	1,392	1,405	626	58		7,737	250,092,918	
45-49	2,106	1,987	1,283	1,478	1,091	880	72	8,897	296,745,395	
50-54	1,758	1,801	1,297	1,507	982	1,183	464	8,992	316,833,448	
55-59	1,471	1,368	1,197	1,219	828	589	379	7,051	246,414,972	
60	173	170	143	147	89	54	46	822	29,816,002	
61	147	145	126	153	62	42	43	718	25,530,687	
62	121	160	123	131	60	48	44	687	25,221,803	
63	102	118	98	89	43	20	43	513	19,330,107	
64	49	109	57	71	29	16	43	374	13,682,895	
65	45	64	45	55	24	13	21	267	9,922,951	
66	34	41	23	27	7	12	32	176	7,124,550	
67	27	26	33	26	16	5	23	156	6,313,914	
68	10	20	21	19	4	11	20	105	3,971,161	
69	13	13	14	19	7	2	10	78	2,960,452	
70 & Over	46	46	47	50	19	16	29	253	8,942,026	
Totals	19,397	13,532	7,962	6,920	3,915	2,949	1,269	55,944	\$ 1,806,600,560	

Includes 59 administrative law judges and legal advisors.

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

Group Averages:

Age	44.2 years
Service	10.2 years
Annual Pay	\$32,293

Active Member by Attained Age and Years in Service
June 30, 2005

Judicial Plan

Attained Age	Years of Service to Valuation Date							No.	Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus		Valuation Payroll
35-39	13	2						15	\$ 1,440,000
40-44	14	5	4					23	2,237,000
45-49	14	29	10	3				56	5,711,943
50-54	20	25	34	10	7	6		102	10,460,095
55-59	18	23	24	16	9	11	4	105	10,705,263
60	2	1	7	2	5	3		20	2,109,799
61	1	1	7	5				14	1,404,000
62	1	1	2		1	1		6	612,000
63	1	3	3	4	2			13	1,334,000
64		3	4	2	4	1		14	1,458,999
65		2	2		1	2	2	9	943,000
66	1		1		1		1	4	414,999
67			2	3				5	535,000
68	1			1	1		1	4	427,000
69						1		1	115,000
70 & Over			1					1	108,000
Totals	86	95	101	46	31	25	8	392	\$40,016,098

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

Group Averages:

Age	54.1 years
Service	11.8 years
Annual Pay	\$102,082

Schedules of Active Member Valuation Data
Six Years Ended June 30, 2005

MSEP

Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
June 30, 2000	57,774	\$ 1,683,697,080	\$ 29,143	4.61%
June 30, 2001	58,431	1,758,190,268	30,090	3.25
June 30, 2002	58,616	1,773,283,484	30,253	0.54
June 30, 2003	57,558	1,739,895,364	30,229	(0.08)
June 30, 2004	55,914	1,737,454,454	31,074	2.80
June 30, 2005	55,944	1,806,600,560	32,293	3.92

ALJLAP*

Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
June 30, 2000	52	\$4,072,888	\$78,325	5.52%
June 30, 2001	57	4,661,020	81,772	4.40
June 30, 2002	58	4,779,504	82,405	0.77
June 30, 2003	57	4,657,896	81,717	(0.83)
June 30, 2004	57	4,655,340	81,673	(0.05)

* Transferred to the MSEP during the year ended 6/30/2005

Judicial Plan

Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
June 30, 2000	375	\$37,107,487	\$98,953	6.01%
June 30, 2001	381	38,687,793	101,543	2.62
June 30, 2002	392	40,068,744	102,216	0.66
June 30, 2003	392	40,052,952	102,176	(0.04)
June 30, 2004	391	39,878,499	101,991	(0.18)
June 30, 2005	392	40,016,098	102,082	0.09

Retirees and Beneficiaries Added and Removed

Six Years Ended June 30, 2005

MSEP

Added to Rolls

Fiscal Year Ended	Classification	Benefit Type	Number	Annual Allowances
June 30, 2000	General Employee	Retirement	1,337	\$ 20,272,214
		Survivor of active	86	1,020,432
		Survivor of retired	416	2,481,786
		Disability	1	8,081
		Occupational disability	0	0
	Lincoln University - Vested	Retirement	1	5,860
		Survivor of active	0	0
	Legislators	Retirement	8	204,076
		Survivor of active	0	2,157
		Survivor of retired	3	36,026
	Elected Officials	Retirement	0	6,821
		Survivor of active	0	0
		Survivor of retired	0	895
Administrative Law Judges and Legal Advisors	Retirement	0	23,908	
	Survivor of active	0	698	
	Survivor of retired	1	25,475	
June 30, 2001	General Employee	Retirement	2,580	55,234,780
		Survivor of active	84	814,517
		Survivor of retired	197	1,832,029
		Disability	0	3,518
		Occupational disability	0	0
	Lincoln University - Vested	Retirement	1	1,841
		Survivor of active	0	0
	Legislators	Retirement	14	436,356
		Survivor of active	0	2,468
		Survivor of retired	7	89,399
	Elected Officials	Retirement	6	230,136
		Survivor of active	1	56,938
		Survivor of retired	0	931
Administrative Law Judges and Legal Advisors	Retirement	1	57,621	
	Survivor of active	0	0	
	Survivor of retired	1	25,674	
June 30, 2002	General Employee	Retirement	1,840	32,360,047
		Survivor of active	84	842,611
		Survivor of retired	209	1,805,486
		Disability	0	3,474
		Occupational disability	0	0
	Lincoln University - Vested	Retirement	2	6,061
		Survivor of active	0	0
	Legislators	Retirement	8	238,058
		Survivor of active	1	6,950
		Survivor of retired	4	59,947
	Elected Officials	Retirement	0	304
		Survivor of active	0	2,277
		Survivor of retired	0	968
Administrative Law Judges and Legal Advisors	Retirement	1	67,877	
	Survivor of active	0	0	
	Survivor of retired	0	5,582	

<u>Removed From Rolls</u>		<u>Rolls at End of Year</u>				
Number	Annual Allowances	Number	Annual Allowances	Percentage Increase in Annual Allowances	Average Annual Allowance	Percentage Increase in Average Annual Allowance
649	\$ 5,324,814	15,865	\$ 160,784,006	10.25%	\$ 10,135	5.47%
37	110,049	983	5,916,637	18.18	6,019	12.29
47	294,927	1,184	7,614,995	40.29	6,432	(3.42)
8	43,141	52	190,352	(15.55)	3,661	(4.19)
0	0	1	17,448	0.00	17,448	0.00
0	0	7	37,003	18.82	5,286	1.83
0	0	1	2,624	0.00	2,624	0.00
3	95,126	166	2,947,721	3.84	17,757	0.71
0	0	8	70,036	3.18	8,755	3.18
0	0	30	233,414	18.25	7,780	6.41
0	0	3	143,267	5.00	47,756	5.00
0	0	0	0	0.00	0	0.00
0	0	1	23,268	4.00	23,268	4.00
1	42,874	16	621,603	(2.96)	38,850	3.10
1	18,148	0	0	(100.00)	0	(100.00)
0	0	7	126,435	25.23	18,062	7.34
670	5,935,443	17,775	210,083,343	30.66	11,819	16.62
27	173,754	1,040	6,557,400	10.83	6,305	4.75
67	328,785	1,314	9,118,239	19.74	6,939	7.88
14	55,684	38	138,186	(27.41)	3,636	(0.68)
0	0	1	17,448	0.00	17,448	0.00
0	0	8	38,844	4.98	4,856	(8.13)
0	0	1	2,624	0.00	2,624	0.00
9	156,423	171	3,227,654	9.50	18,875	6.30
0	0	8	72,504	3.52	9,063	3.52
1	11,056	36	311,757	33.56	8,660	11.31
0	0	9	373,403	160.63	41,489	(13.12)
0	0	1	56,938	0.00	56,938	0.00
0	0	1	24,199	4.00	24,199	4.00
1	39,647	16	639,577	2.89	39,974	2.89
0	0	0	0	0.00	0	0.00
0	0	8	152,109	20.31	19,014	5.27
685	6,249,943	18,930	236,193,447	12.43	12,477	5.57
30	137,619	1,094	7,262,392	10.75	6,638	5.28
67	378,545	1,456	10,545,180	15.65	7,243	4.38
7	32,754	31	108,906	(21.19)	3,513	(3.38)
0	0	1	17,448	0.00	17,448	0.00
0	0	10	44,905	15.60	4,491	(7.52)
0	0	1	2,624	0.00	2,624	0.00
4	80,340	175	3,385,372	4.89	19,345	2.49
0	0	9	79,454	9.59	8,828	(2.59)
1	4,195	39	367,509	17.88	9,423	8.81
0	0	9	373,707	0.08	41,523	0.08
0	0	1	59,215	4.00	59,215	4.00
0	0	1	25,167	4.00	25,167	4.00
1	46,580	16	660,874	3.33	41,305	3.33
0	0	0	0	0.00	0	0.00
0	0	8	157,691	3.67	19,711	3.67

Retirees and Beneficiaries Added and Removed Six Years Ended June 30, 2005

MSEP continued from pages 114-115

MSEP

Added to Rolls

Fiscal Year Ended	Classification	Benefit Type	Number	Annual Allowances
June 30, 2003	General Employee	Retirement	1,819	\$ 33,654,082
		Survivor of active	76	808,507
		Survivor of retired	206	1,944,744
		Disability	0	2,109
		Occupational disability	0	0
	Lincoln University - Vested	Retirement	0	0
		Survivor of active	0	0
	Legislators	Retirement	45	880,632
		Survivor of active	1	27,031
		Survivor of retired	4	65,987
	Elected Officials	Retirement	0	(13,546)
		Survivor of active	0	2,369
		Survivor of retired	0	1,007
	Administrative Law Judges and Legal Advisors	Retirement	3	166,161
		Survivor of active	0	0
Survivor of retired		0	5,601	
June 30, 2004	General Employee	Retirement	2,454	42,366,392
		Survivor of active	91	926,617
		Survivor of retired	171	1,965,930
		Disability	1	6,657
		Occupational disability	0	0
	Lincoln University - Vested	Retirement	0	0
		Survivor of active	0	0
	Legislators	Retirement	10	182,124
		Survivor of active	1	16,311
		Survivor of retired	3	73,196
	Elected Officials	Retirement	0	0
		Survivor of active	0	2,464
		Survivor of retired	0	1,045
	Administrative Law Judges and Legal Advisors	Retirement	1	62,331
		Survivor of active	0	0
Survivor of retired		2	58,362	
June 30, 2005	General Employee	Retirement	1,719	27,796,807
		Survivor of active	78	891,051
		Survivor of retired	206	2,036,085
		Disability	0	1,409
		Occupational disability	0	0
	Lincoln University - Vested	Retirement	1	3,086
		Survivor of active	0	0
	Legislators	Retirement	31	606,743
		Survivor of active	2	15,361
		Survivor of retired	3	47,695
	Elected Officials	Retirement	2	92,916
		Survivor of active	0	2,562
		Survivor of retired	0	1,089
	Administrative Law Judges and Legal Advisors	Retirement	4	203,829
		Survivor of active	0	0
Survivor of retired		0	4,987	

Removed From Rolls		Rolls at End of Year			Percentage Increase in Average Annual Allowance	
Number	Annual Allowances	Number	Annual Allowances	Percentage Increase in Annual Allowances	Average Annual Allowance	Percentage Increase in Average Annual Allowance
734	\$ 6,798,563	20,015	\$ 263,048,966	11.37%	\$ 13,143	5.34%
28	97,740	1,142	7,973,159	9.79	6,982	5.18
71	368,959	1,591	12,120,965	14.94	7,618	5.18
3	15,849	28	95,166	(12.62)	3,399	(3.25)
0	0	1	17,448	0.00	17,448	0.00
1	1,051	9	43,854	(2.34)	4,873	8.51
0	0	1	2,624	0.00	2,624	0.00
4	71,803	216	4,194,201	23.89	19,418	0.38
0	0	10	106,485	34.02	10,649	20.63
3	20,943	40	412,553	12.26	10,314	9.46
0	0	9	360,161	(3.62)	40,018	(3.62)
0	0	1	61,584	4.00	61,584	4.00
0	0	1	26,174	4.00	26,174	4.00
0	0	19	827,035	25.14	43,528	5.38
0	0	0	0	0.00	0	0.00
0	0	8	163,292	3.55	20,412	3.56
<hr/>						
733	7,302,918	21,736	298,112,440	13.33	13,715	4.35
38	197,250	1,195	8,702,526	9.15	7,282	4.30
96	623,128	1,666	13,463,767	11.08	8,081	6.08
5	21,761	24	80,062	(15.87)	3,336	(1.85)
0	0	1	17,448	0.00	17,448	0.00
0	0	9	43,854	0.00	4,873	0.00
0	0	1	2,624	0.00	2,624	0.00
5	116,367	221	4,259,958	1.57	19,276	(0.73)
0	0	11	122,796	15.32	11,163	4.83
1	20,633	42	465,116	12.74	11,074	7.37
0	0	9	360,161	0.00	40,018	0.00
0	0	1	64,048	4.00	64,048	4.00
0	0	1	27,219	3.99	27,219	3.99
3	152,311	17	737,055	(10.88)	43,356	(0.40)
0	0	0	0	0.00	0	0.00
2	48,306	8	173,348	6.16	21,669	6.16
<hr/>						
737	6,879,542	22,718	319,029,705	7.02	14,043	2.39
47	227,380	1,226	9,366,198	7.63	7,640	4.91
92	632,735	1,780	14,867,117	10.42	8,352	3.36
3	12,123	21	69,348	(13.38)	3,302	(1.01)
1	17,448	0	0	(100.00)	0	(100.00)
0	0	10	46,940	7.04	4,694	(3.67)
0	0	1	2,624	0.00	2,624	0.00
14	274,590	238	4,592,111	7.80	19,295	0.10
0	0	13	138,157	12.51	10,627	(4.80)
1	4,156	44	508,655	9.36	11,560	4.39
0	0	11	453,077	25.80	41,189	2.93
0	0	1	66,610	4.00	66,610	4.00
0	0	1	28,308	4.00	28,308	4.00
0	0	21	940,884	27.65	44,804	3.34
0	0	0	0	0.00	0	0.00
0	0	8	178,335	2.88	22,292	2.87

Retirees and Beneficiaries Added and Removed

Six Years Ended June 30, 2005

Judicial Plan

Fiscal Year Ended	Benefit Type	Added to Rolls		Removed From Rolls	
		Number	Annual Allowances	Number	Annual Allowances
June 30, 2000	Retirement	18	\$ 1,343,591	11	\$ 535,292
	Survivor of active	2	76,496	1	6,813
	Survivor of retired	10	295,547	7	93,502
	Disability	1	46,500	0	0
June 30, 2001	Retirement	25	2,241,337	8	354,861
	Survivor of active	2	83,627	2	34,642
	Survivor of retired	1	76,395	4	42,983
	Disability	0	1,500	0	0
June 30, 2002	Retirement	11	984,612	9	455,021
	Survivor of active	1	57,051	1	28,541
	Survivor of retired	5	195,971	5	84,932
	Disability	0	0	1	48,000
June 30, 2003	Retirement	23	1,445,716	10	560,588
	Survivor of active	0	34,820	0	0
	Survivor of retired	6	214,029	7	101,944
	Disability	0	0	0	0
June 30, 2004	Retirement	12	1,076,421	11	652,803
	Survivor of active	0	36,471	2	56,802
	Survivor of retired	7	269,344	4	86,633
	Disability	0	0	0	0
June 30, 2005	Retirement	12	1,159,324	8	402,329
	Survivor of active	0	35,224	1	14,247
	Survivor of retired	6	211,269	6	75,799
	Disability	0	0	0	0

<u>Rolls at End of Year</u>				
Number	Annual Allowances	Percentage Increase in Annual Allowances	Average Annual Allowance	Percentage Increase in Average Annual Allowance
238	\$ 11,366,653	7.66%	\$ 47,759	4.49%
44	826,411	9.21	18,782	6.73
83	1,428,313	16.48	17,209	12.27
1	46,500	100.00	46,500	100.00
255	13,253,129	16.60	51,973	8.82
44	875,396	5.93	19,895	5.93
80	1,461,725	2.34	18,272	6.18
1	48,000	3.23	48,000	3.23
257	13,782,720	4.00	53,629	3.19
44	903,906	3.26	20,543	3.26
80	1,572,764	7.60	19,660	7.60
0	0	(100.00)	0	(100.00)
270	14,667,848	6.42	54,325	1.30
44	938,726	3.85	21,335	3.86
79	1,684,849	7.13	21,327	8.48
0	0	0.00	0	0.00
271	15,091,466	2.89	55,688	2.51
42	918,395	(2.17)	21,867	2.49
82	1,867,560	10.84	22,775	6.79
0	0	0.00	0	0.00
275	15,848,461	5.02	57,631	3.49
41	939,372	2.28	22,912	4.78
82	2,003,031	7.25	24,427	7.25
0	0	0.00	0	0.00

Short-Term Solvency Test

Pension Trust Funds - Ten Years Ended June 30, 2005

MSEP

Actuarial Accrued Liabilities for							
Fiscal Year	Member Contributions (1)	Retirees and Beneficiaries (2)	Members, Employer Financed Portion (3)	Actuarial Value of Assets Available for Benefits	Percentage of Actuarial Liabilities Coverage by Assets Available for		
					(1)	(2)	(3)
1996	\$ 448,559	\$ 1,156,347,608	\$ 2,283,330,316	\$ 2,927,896,643	100.0%	100.0%	77.6%
1997	448,501	1,552,966,747	2,930,632,553	3,580,974,502	100.0	100.0	69.2
1998	447,716	1,688,502,950	3,229,936,517	4,210,635,094	100.0	100.0	78.1
1999	0	1,970,504,367	3,535,464,262	4,908,820,033	100.0	100.0	83.1
2000	0	2,142,487,495	3,778,196,697	5,511,714,616	100.0	100.0	89.2
2001	0	2,496,277,500	3,568,889,216	5,881,232,850	100.0	100.0	94.8
2002	0	2,716,457,033	3,577,815,242	6,033,133,598	100.0	100.0	92.7
2003	0	3,016,029,050	3,646,262,356	6,057,329,072	100.0	100.0	83.4
2004	0	3,405,053,804	3,824,957,124	6,118,214,495	100.0	100.0	70.9
2005	0	3,629,506,014	3,948,522,003	6,435,344,102	100.0	100.0	71.1

ALJLAP*

Actuarial Accrued Liabilities for							
Fiscal Year	Member Contributions (1)	Retirees and Beneficiaries (2)	Members, Employer Financed Portion (3)	Actuarial Value of Assets Available for Benefits	Percentage of Actuarial Liabilities Coverage by Assets Available for		
					(1)	(2)	(3)
1996	\$ 0	\$ 6,196,526	\$ 4,079,837	\$ 7,258,814	100.0%	100.0%	26.0%
1997	0	6,569,957	4,857,224	8,864,395	100.0	100.0	47.2
1998	0	7,415,852	5,471,056	10,285,233	100.0	100.0	52.4
1999	0	7,883,988	6,890,537	11,763,737	100.0	100.0	56.3
2000	0	7,526,118	8,995,625	13,191,825	100.0	100.0	63.0
2001	0	7,534,368	9,275,594	14,410,199	100.0	100.0	74.1
2002	0	8,268,650	9,906,692	15,172,619	100.0	100.0	69.7
2003	0	9,709,096	10,237,391	15,626,461	100.0	100.0	57.8
2004	0	9,188,086	11,196,127	16,238,804	100.0	100.0	63.0

*Assets and liabilities transferred to the MSEP during fiscal year 2005.

Judicial Plan

Actuarial Accrued Liabilities for							
Fiscal Year	Member Contributions (1)	Retirees and Beneficiaries (2)	Members, Employer Financed Portion (3)	Actuarial Value of Assets Available for Benefits	Percentage of Actuarial Liabilities Coverage by Assets Available for		
					(1)	(2)	(3)
1996	\$ 0	\$ 86,145,180	\$ 75,588,930	\$ 0	100.0%	0.0%	0.0%
1997	0	99,662,179	97,810,394	0	100.0	0.0	0.0
1998	0	108,392,273	99,187,524	0	100.0	0.0	0.0
1999	0	120,543,611	107,258,730	6,067,305	100.0	5.0	0.0
2000	0	131,199,867	110,597,474	13,861,769	100.0	10.6	0.0
2001	0	143,163,718	104,815,186	22,613,050	100.0	15.8	0.0
2002	0	149,135,989	106,979,463	29,651,113	100.0	19.9	0.0
2003	0	157,923,805	109,126,052	34,566,516	100.0	21.9	0.0
2004	0	162,539,486	117,857,978	39,120,142	100.0	24.1	0.0
2005	0	168,703,822	123,600,064	44,223,509	100.0	26.2	0.0

Derivation of Experience Gain (Loss)

MSEP

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

	<u>\$ Millions</u>
(1) Unfunded actuarial accrued liability (UAAL) at beginning of year	\$1,111.8
(2) Normal cost from last valuation	153.1
(3) Actual employer contributions	195.6
(4) Interest accrual: $(1) \times .085 + [(2) - (3)] \times (.085/2)$	92.7
(5) Expected UAAL before changes: $(1) + (2) - (3) + (4)$	1,162.0
(6) Change from any changes in benefits, assumptions, or methods	(268.0)
(7) Expected UAAL after changes: $(5) + (6)$	894.0
(8) Actual UAAL at end of year	1,142.7
(9) Gain (loss) $(7) - (8)$	\$ (248.7)
(10) Gain (loss) as a percent of actuarial accrued liabilities at start of year (\$7,230)	(3.4)%

Actuarial Gain (Loss) as a % of Beginning Accrued Liabilities (Valuation Date as of June 30)

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
0.4	5.5	5.5	4.7	2.7	(4.4)	(3.8)	(6.4)	(6.0)	(3.4)

Judicial Plan

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

	<u>\$ Millions</u>
(1) Unfunded actuarial accrued liability (UAAL) at beginning of year	\$ 241.3
(2) Employer normal cost middle of year	8.0
(3) Employer contributions	21.9
(4) Interest	
a. on (1)	20.5
b. on (2)	0.3
c. on (3)	0.9
d. total [a+b+c]	19.9
(5) Expected UAAL end of year before changes	247.3
(6) Change in UAAL end of year	
a. amendments	0.0
b. assumptions	0.0
c. methods	0.4
d. total	0.4
(7) Expected UAAL after changes: $(5) + (6d.)$	247.7
(8) Actual UAAL at end of year	248.1
(9) Gain (loss) $(7) - (8)$	\$ (0.4)
(10) Gain (loss) as a percent of actuarial accrued liabilities at start of year	(0.1)%

Actuarial Gain (Loss) as a % of Beginning Accrued Liabilities (Valuation Date as of June 30)

2000	2001	2002	2003	2004	2005
(1.7)	(3.2)	(0.2)	(1.6)	(1.0)	(0.1)

Summary of Plan Provisions*

June 30, 2005

MSEP and MSEP 2000 - Comparison of Plans for General State Employees

Plan Provision	MSEP	MSEP 2000
Membership eligibility	Members who work in a position normally requiring at least 1,000 hours of work a year.	Members hired for the first time on or after July 1, 2000, in a position normally requiring at least 1,000 hours of work a year. Members who left state employment prior to becoming vested and return to work on or after July 1, 2000, in a position normally requiring at least 1,000 hours of work a year.
Normal retirement eligibility	Age 65 and active with 4 years of service, Age 65 with 5 years of service, Age 60 with 15 years of service, or "Rule of 80" - minimum age 48.	Age 62 with 5 years of service or "Rule of 80" - minimum age 48.
Early retirement eligibility	Age 55 with 10 years of service.	Age 57 with 5 years of service.
Benefit		
Life Benefit	1.6% x final average pay (FAP) x service	1.7% x FAP x service
Temporary Benefit	Not available.	0.8% x FAP x service (until age 62 - only if retiring under "Rule of 80").
Vesting	5 years of service.	5 years of service.
In-service cost-of-living adjustment (COLA)	COLA given for service beyond age 65. COLA provisions are determined by employment date.	Not available.
COLA	If hired before August 28, 1997, annual COLA is equal to 80% of the change in the consumer price index (CPI) with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with maximum rate of 5%. If hired on or after August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a maximum rate of 5%.	Annual COLA is equal to 80% of the change in the CPI with a minimum rate of 5%.
Survivor benefit (Death before retirement)		
Non duty-related death	Survivor benefit to eligible spouse calculated using the Joint & 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.	Survivor benefit to eligible spouse calculated using Joint & 100% Survivor Option or 80% of the members Life Income Annuity paid to eligible children.
Duty-related death	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).
Optional forms of payment (Death after retirement)	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> • Life Income Annuity • Unreduced Joint & 50% Survivor • Joint & 100% Survivor • 60 or 120 Guaranteed Payments • BackDROP 	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> • Life Income Annuity • Joint & 50% Survivor • Joint & 100% Survivor • 120 or 180 Guaranteed Payments • BackDROP

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

Summary of Plan Provisions

June 30, 2005

MSEP and MSEP 2000 - Comparison of Plans for Uniformed Members of the Water Patrol

Plan Provision	MSEP	MSEP 2000
Membership eligibility	Members who work in a position normally requiring at least 1,000 hours of work a year.	Members hired for the first time on or after July 1, 2000, in a position normally requiring at least 1,000 hours of work a year. Members who left state employment prior to becoming vested and return to work on or after July 1, 2000, in a position normally requiring at least 1,000 hours of work a year.
Normal retirement eligibility	Age 55 and active with 4 years of service, Age 55 with 5 years of service, or "Rule of 80" - minimum age 48.	Age 62 with 5 years of service or "Rule of 80" - minimum age 48.
Early retirement eligibility	Not available.	Age 57 with 5 years of service.
Benefit Life Benefit Temporary Benefit	1.6% x FAP x service increased by 33.3% Not available.	1.7% x FAP x service 0.8% x FAP x service (until age 62 - only if retiring under "Rule of 80").
Vesting	5 years of service.	5 years of service.
In-service COLA	COLA given for service beyond age 65. COLA provisions are determined by employment date.	Not available.
COLA	If hired before August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with maximum rate of 5% If hired on or after August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a maximum rate of 5%.	Annual COLA is equal to 80% of the change in the CPI with a minimum rate of 5%.
Survivor benefit (Death before retirement) Non duty-related death Duty-related death	Survivor benefit to eligible spouse calculated using the Joint & 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children. Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).	Survivor benefit to eligible spouse calculated using Joint & 100% Survivor Option or 80% of the members Life Income Annuity paid to eligible children. Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).
Optional forms of payment (Death after retirement)	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> Life Income Annuity Unreduced Joint & 50% Survivor Joint & 100% Survivor 60 or 120 Guaranteed Payments BackDROP 	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> Life Income Annuity Joint & 50% Survivor Joint & 100% Survivor 120 or 180 Guaranteed Payments BackDROP

Summary of Plan Provisions

June 30, 2005

MSEP and MSEP 2000 - Comparison of Plans for Legislators

Plan Provision	MSEP	MSEP 2000
Membership eligibility	Elected to the general assembly.	Elected to the general assembly on or after July 1, 2000.
Normal retirement eligibility	Age 55 with 3 full-biennial assemblies.	Age 55 with 3 full-biennial assemblies or "Rule of 80" - minimum age 50.
Early retirement eligibility	Not available.	Not available.
Benefit		
Life Benefit	\$150 per month per biennial assembly.	(Monthly base pay ÷ 24) x service capped at 100% of pay.
Temporary Benefit	Not available.	Not available.
Vesting	3 full-biennial assemblies.	3 full-biennial assemblies.
In-service COLA	COLA given for service beyond age 65. COLA provisions are determined by employment date.	Not available.
COLA	<p>If hired before August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with maximum rate of 5%</p> <p>If hired on or after August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a maximum rate of 5%.</p>	Benefit adjusted each year based on the percentage increase in the current pay for an active member of the general assembly.
Survivor benefit (Death before retirement)		
Non duty-related death	Survivor benefit to eligible spouse calculated using the Joint & 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.	Survivor benefit to eligible spouse calculated using Joint & 100% Survivor Option or 80% of the members Life Income Annuity paid to eligible children.
Duty-related death	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).
Optional forms of payment (Death after retirement)	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> • Life Income Annuity • Unreduced Joint & 50% Survivor • Joint & 100% Survivor • 60 or 120 Guaranteed Payments 	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <ul style="list-style-type: none"> • Life Income Annuity • Joint & 50% Survivor • Joint & 100% Survivor • 120 or 180 Guaranteed Payments

Summary of Plan Provisions
June 30, 2005

MSEP and MSEP 2000 - Comparison of Plans for Elected Officials

Plan Provision	MSEP	MSEP 2000
Membership eligibility	Elected to state office.	Elected to state office on or after July 1, 2000.
Normal retirement eligibility	Age 65 with 4 years of service, Age 60 with 15 years of service, or "Rule of 80" - minimum age 48.	Age 55 with 4 years of service or "Rule of 80" - minimum age 50.
Early retirement eligibility	Age 55 with 10 years of service.	Not available.
Benefit Life Benefit	<u>12 or more years of service</u> 50% or current pay for highest position held. <u>Less than 12 years of service.</u> 1.6% x FAP x service.	(Monthly base pay ÷ 24) x service capped at 12 years or 50% of pay.
Temporary Benefit	Not available.	Not available.
Vesting	4 years of service	4 years of service.
In-service COLA	COLA provisions determined by amount of service relative to 12 years and date of employment.	Not available.
COLA	<u>12 or more years of service</u> COLA is equal to the percentage increase in the current pay of an active elected state official in the highest position held. <u>Less than 12 years of service</u> If hired before August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with maximum rate of 5%. If hired on or after August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a maximum rate of 5%.	Benefit adjusted each year based on the percentage increase in the current pay for an active elected state official in the highest position held.
Survivor benefit (Death before retirement) Non duty-related death	Survivor benefit to eligible spouse calculated using the Joint & 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.	Survivor benefit to eligible spouse calculated using Joint & 100% Survivor Option or 80% of the members Life Income Annuity paid to eligible children.
Duty-related death	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).
Optional forms of payment (Death after retirement)	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: • Life Income Annuity • Unreduced Joint & 50% Survivor • Joint & 100% Survivor • 60 or 120 Guaranteed Payments	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: • Life Income Annuity • Joint & 50% Survivor • Joint & 100% Survivor • 120 or 180 Guaranteed Payments

Summary of Plan Provisions

June 30, 2005

MSEP and MSEP 2000 - Administrative Law Judges and Legal Advisors*

Plan Provision	Requirement
Membership eligibility	Administrative law judge or legal advisor in the Division of Workers' Compensation, a member or legal counsel of the Labor and Industrial Relations Commission, chairperson of the State Board of Mediation, or an administrative hearing commissioner hired prior to April 26, 2005.
Normal retirement eligibility	Age 62 with 12 years of service, Age 60 with 15 year of service, or Age 55 with 20 years of service.
Reduced retirement eligibility	Age 65 with less than 12 years of service with reduced benefit, based upon years of service relative to 12 years.
Benefit formula	<u>12 or more years of service</u> 50% of the average highest 12 consecutive months of salary.
Vesting	Immediate.
In-service COLA	Not available.
COLA	If hired before August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a minimum of 4% and a maximum of 5% until reaching 65% cap. Thereafter, the rate is based on 80% of the change in the CPI with maximum rate of 5%. If hired on or after August 28, 1997, annual COLA is equal to 80% of the change in the CPI with a maximum rate of 5%.
Survivor benefit (Death before retirement)	Survivor benefit to eligible spouse equal to 50% of the benefit the member would have received based on service at age 70.
Survivor benefit (Death after retirement)	Survivor benefit to eligible spouse equal to 50% of the member's annuity at the time of death.

* All new administrative law judges and legal advisors hired on or after April 26, 2005, who had not been previously covered by a retirement system under Chapter 287, RSMo, participate in the MSEP which is covered under Chapter 104, RSMo.

Summary of Plan Provisions
June 30, 2005

Judicial Plan

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

Summary of Plan Provisions

June 30, 2005

Life Insurance Plans

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

Active Members*	Requirement
Basic Life Insurance An amount equal to one-times annual salary (with a minimum of \$15,000) while actively employed.	Actively employed in an eligible state position resulting in membership in MOSERS.
Duty-Related Death Benefit Duty-related death benefit equivalent to two-times the annual salary the member was earning at the time of death in addition to the basic life insurance amount of one-times annual salary.	Actively employed in an eligible state position resulting in membership in MOSERS.
Optional Life Insurance Additional life insurance may be purchased in a flat amount in multiples of \$10,000 not to exceed the maximum (lesser of six-times annual salary or \$800,000). Spouse coverage may be purchased in multiples of \$10,000 up to a maximum of \$100,000; however, the amount of spouse coverage cannot exceed the amount of optional life insurance coverage the member has purchased. Coverage for children is available in a flat amount of \$10,000 per child.	Actively employed in an eligible state position resulting in membership in MOSERS.
* Terminating employees may convert coverage up to the amount they had as an active employee at individual rates.	

Retired Members	Requirement
Basic Life Insurance at Retirement \$5,000 basic life insurance during retirement.	Must retire directly from active employment.
Optional Life Insurance at Retirement (MSEP) An employee may retain up to the lesser of \$60,000 or the amount of optional life insurance coverage held at the time of retirement at the group rate and may convert any remaining basic and optional life insurance at individual rates.	Must retire directly from active employment.
Optional Life Insurance at Retirement (MSEP 2000) Under "Rule of 80" an employee may retain the current amount of coverage prior to retirement until age 62 at which time coverage is reduced to \$60,000, and may convert any remaining basic and optional life insurance at individual rates. Coverage for spouse and/or children ends at member's retirement and may be converted at individual rates.	Must retire directly from active employment.

Summary of Plan Provisions

June 30, 2005

Long-Term Disability (LTD) Plans

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

Active Members	Requirement
<p>General State Employees, Legislators, and Elected State Officials Members of MOSERS in a position normally requiring 1,000 hours of work a year are covered under the LTD plan, unless they work for a state agency which has its own LTD plan.</p>	<p>Long-Term Disability - Eligible participants receive 60% of their compensation minus primary social security, workers' compensation, and employer provided income. Benefits commence after 90 days of disability or after sick leave expires, whichever occurs last. LTD benefits cease upon the earliest of (i) when disability ends, (ii) when the member is first eligible for normal retirement benefits or is receiving early retirement benefits, (iii) when the member returns to work, or (iv) upon a member's death.</p>
<p>Water Patrol</p>	<p>Uniformed members who are eligible for statutory occupational disability receive benefits equal to 50% of compensation with no offset for social security at the time of disability. For nonoccupational disabilities, eligible participants receive the same benefit as general employees.</p>
<p>Judges</p>	<p>In addition to the disability benefits provided to general employees, judges also receive benefits under the state constitution. Participants receive 50% of salary until the current term expires.</p>

Changes in Plan Provisions

Administrative Law Judges and Legal Advisors' Plan

Senate Bill No. 202 et al requires any administrative law judge or legal advisor (which by statutory definition includes the Chairman of the Board of Mediation, a Labor and Industrial Relations Commissioner, an attorney employed by the Division of Labor Standards, an administrative hearing commissioner and the Division Director of Workers' Compensation) who is employed on or after April 26, 2005 (who has not been previously covered by a retirement system under Chapter 287, RSMo), to participate in the Missouri State Employees' Plan (MSEP) which is covered under Chapter 104, RSMo. This legislation does not impact anyone serving in (or who had served in) a position covered by the ALJLAP prior to the effective date of the legislation, and requires all liabilities and assets of the ALJLAP to be transferred and combined with the MSEP.

Life Insurance for State Employees Called to Active Military Duty

HB No. 119 allows all public employees who are entitled to life insurance benefits as a state employee or member of a state retirement system, who are or become members of the United States Armed Forces or the national guard and who are called to such military service in time of active armed warfare, to receive life insurance benefits for the entire duration of such military deployment, including time periods in excess of twelve months.

MOSERS facilitates both the basic and optional life insurance programs through a third party administrator. Under the prior insurance contract, all employees who were eligible for any type of leave have the option of continuing both basic and optional life insurance at their own expense for a period not to exceed twelve months. Under this legislation, employees who are called to active military duty are able to continue such insurance coverage for the length of their deployment which may well extend beyond twelve months.

Actuarial Present Values

As of June 30, 2005

MSEP

Actuarial Present Value As of June 30, 2005 for	Actuarial Present Value	Portion Covered by Future Normal Cost Contributions	Actuarial Accrued liabilities
Active members			
Service retirement benefits based on services rendered before and likely to be rendered after valuation date	\$ 3,893,586,337	\$ 793,617,282	\$ 3,099,969,055
Disability benefits likely to be paid to present active members who become totally and permanently disabled	124,887,418	53,064,218	71,823,200
Survivor benefits likely to be paid to widows and children of present active members who die before retiring	152,662,846	41,847,796	110,815,050
Separation benefits likely to be paid to present active members			
Refunds of member contributions	0	0	0
Deferred benefits	408,944,698	200,051,699	208,892,999
Active Member Totals	<u>\$ 4,580,081,299</u>	<u>\$ 1,088,580,995</u>	3,491,500,304
Members on leave of absence & LTD			
Service retirement benefits based on service rendered before the valuation date			99,571,087
Terminated-vested members			
Service retirement benefits based on service rendered before the valuation date			357,450,612
Retired lives			
BackDROP installment payments incurred, but not yet paid			3,628,798,766
Total actuarial accrued liability			<u>707,248</u>
Actuarial value of assets			7,578,028,017
Unfunded actuarial accrued liability			<u>6,435,344,102</u>
			<u>\$ 1,142,683,915</u>

Actuarial Present Values

As of June 30, 2005

Judicial Plan

Actuarial Present Value As of June 30, 2005 For	Actuarial Present Value	Portion Covered by Future Normal Cost Contributions	Actuarial Accrued liabilities
Active members			
Service retirement benefits based on services rendered before and likely to be rendered after valuation date	\$ 154,034,725	\$ 48,602,824	\$ 105,431,901
Disability benefits likely to be paid to present active members who become totally and permanently disabled	1,737,937	1,363,700	374,237
Survivor benefits likely to be paid to widows and children of present active members who die before retiring	<u>5,532,149</u>	<u>3,047,229</u>	<u>2,484,920</u>
Active member totals	<u>\$ 161,304,811</u>	<u>\$ 53,013,753</u>	108,291,058
Terminated-vested members			
Service retirement benefits based on service rendered before the valuation date			15,309,006
Retired lives			
Total actuarial accrued liability			<u>168,703,822</u>
Actuarial value of assets			<u>292,303,886</u>
Unfunded actuarial accrued liability			<u>44,223,509</u>
			<u>\$ 248,080,377</u>