



The quality or state of being strong

STRENGTH

Actuary's Certification Letter



September 26, 2002

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, 2002. These valuations indicate that the contribution rates for the fiscal year ending June 30, 2004, established by the board of trustees for the benefits scheduled to be in effect on July 1, 2002, meet the basic financial objective. These contribution rates are 9.35% of payroll for 58,616 general state employees, 20.12% of payroll for 58 administrative law judges, and 51.68% 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 rates of retirement, turnover, death, and disability among MOSERS' members and their beneficiaries. The data is reviewed by us for internal and year-to-year consistency as well as general reasonableness prior to its use in the actuarial valuations. It is also summarized

and tabulated for the purpose of analyzing trends. The demographic assumptions were adopted by the board of trustees and were based upon actual experience of MOSERS during the years 1995-1999. The economic assumptions were adopted by the board of trustees in September 2001. Assets are valued according to a method that fully recognizes expected investment return and averages unanticipated market return over a five-year period. The assumptions and methods utilized in this valuation, in our opinion, meet the parameters established by Governmental Accounting Standards Board Statement No. 25.

The current benefit structure is outlined in the Actuarial Section. The changes made since the previous valuation are highlighted on page 104. We provided the information used in the supporting schedules in the Actuarial Section and the *Schedules of Funding Progress* in the Financial Section, as well as the employer contribution rates shown in the *Schedule of Employer Contributions* in the Financial Section.

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

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Norman L. Jones".

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

A handwritten signature in black ink, appearing to read "Brad L. Armstrong".

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



Summary of Actuarial Assumptions

June 30, 2002

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 76. Part of the assumption for each age is for merit and/or seniority increase, and the other 4% recognizes wage inflation. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

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

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

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

Noneconomic Assumptions

The mortality table, for post-retirement mortality, used in evaluating allowances to be paid was the 1971 Group Annuity Mortality Table, projected to the year 2000 with a 1-year age setback for men and a 7-year age setback for women. Related values are shown on page 77. 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 78. The first two years of eligibility if prior to age 70, were halved due to the expected emerging effect of the BackDROP. It was assumed that each member will be granted one half year of service credit for unused leave upon retirement and military service purchases.

The probabilities of withdrawal from service, death-in-service, and disability are shown for sample ages on page 76. 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 fiscal year.

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

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

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

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

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



Summary of Actuarial Assumptions

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

Year Ended June 30, 2002

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	25.2%	24.7%							
	1	17.1	17.7							
	2	14.4	14.4							
	3	12.8	12.8							
	4	12.0	12.0							
20	+5	12.0	11.0	.04%	.03%	.00%	.00%	2.7%	4.0%	6.7%
25		12.0	11.0	.05	.04	.05	.03	2.6	4.0	6.6
30		8.8	8.9	.06	.04	.12	.04	2.2	4.0	6.2
35		6.2	6.0	.08	.06	.16	.13	1.9	4.0	5.9
40		4.6	4.9	.12	.08	.21	.21	1.4	4.0	5.4
45		3.5	4.3	.19	.11	.29	.25	1.2	4.0	5.2
50		2.8	3.6	.35	.17	.41	.41	0.7	4.0	4.7
55		2.4	2.9	.59	.31	.77	.85	0.7	4.0	4.7
60		2.4	2.9	.90	.54	1.40	1.50	0.0	4.0	4.0
65		2.4	2.9	1.44	.83	0.00	0.00	0.0	4.0	4.0

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

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

ALJLAP

Sample Ages	Percent of Active Members Separating Within the Next Year						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	7.5%	6.0%	.05%	.04%	.02%	.02%	1.6%	4.0%	5.6%
30	6.6	4.9	.06	.05	.03	.03	1.2	4.0	5.2
35	4.7	3.5	.08	.06	.04	.07	0.9	4.0	4.9
40	3.3	2.8	.11	.08	.05	.11	0.4	4.0	4.4
45	2.6	2.5	.19	.10	.09	.17	0.3	4.0	4.3
50	2.6	2.2	.35	.17	.12	.35	0.2	4.0	4.2
55	2.6	1.6	.59	.31	.23	.49	0.2	4.0	4.2
60	2.0	0.8	.90	.54	.33	.53	0.0	4.0	4.0
65	1.5	0.6	1.44	.83			0.0	4.0	4.0



Summary of Actuarial Assumptions Single Life Retirement Values June 30, 2002

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



Summary of Actuarial Assumptions Percent of Eligible Active Members Retiring Next Year June 30, 2002

MSEP

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

ALJLAP

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

Judicial Plan

Retirement Ages	Percent		Retirement Ages	Percent	
	Men	Women		Men	Women
55	5.0%	8.0%	65	25.0%	40.0%
56	5.0	8.0	66	20.0	25.0
57	5.0	8.0	67	20.0	25.0
58	5.0	8.0	68	20.0	25.0
59	5.0	8.0	69	30.0	50.0
60	10.0	15.0	70	100.0	100.0
61	5.0	10.5			
62	10.0	15.0			
63	5.0	10.0			
64	5.0	10.0			



Summary of Actuarial Assumptions

Miscellaneous and Technical Assumptions

June 30, 2002

Pay Increase Timing

Middle of fiscal year.

Decrement Timing

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

Eligibility Testing

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

Benefit Service

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

Decrement Relativity

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

Decrement Operation

Disability and turnover decrements do not operate during the first five years of service. They also do not operate during retirement eligibility.

Normal Form of Benefit

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

Loads

No loads were used.

Incidence of Contributions

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



Summary of Member Data Included in Valuations

Pension Trust Funds

June 30, 2002

Active Members

Valuation Group	Number	Payroll	Group Averages		
			Salary	Age (Yrs.)	Service (Yrs.)
Missouri State Employees' Plan					
Regular state employees	53,601	\$1,558,658,691	\$ 29,079	43.0	9.4
Elected state officials	6	590,976	98,496	45.1	5.1
Legislative clerks	100	2,689,932	26,899	52.6	13.3
Legislators	195	6,122,532	31,398	51.1	8.6
Uniformed members of the water patrol	79	3,084,612	39,046	38.5	12.9
Conservation department	1,534	57,189,062	37,281	42.6	13.1
School-term salaried employees	3,101	144,947,679	46,742	50.2	14.1
Total MSEP group	58,616	\$1,773,283,484	30,253	43.4	9.8
Administrative Law Judges and Legal Advisors' Plan					
Judicial Plan	58	\$ 4,779,504	82,405	48.8	9.9
Judicial Plan	392	\$ 40,068,744	102,216	52.6	11.0

Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age (Yrs.)
Missouri State Employees' Plan				
Retirement	18,876	\$238,156,189	\$12,617	70.2
Disability	33	129,062	3,911	57.3
Survivor of active member	1,104	7,397,969	6,701	58.5
Survivor of retired member	1,489	10,910,168	7,327	72.6
Total MSEP group	21,502	\$256,593,388	11,933	69.7
Administrative Law Judges' and Legal Advisors' Plan				
Judicial Plan	25	\$ 868,652	34,746	74.3
Judicial Plan	383	\$ 16,446,999	42,943	75.3

Others

Group	Terminated Vested	Leave of Absence	Long-Term Disability
Missouri State Employees' Plan	12,257	317	1,052
Administrative Law Judges and Legal Advisors' Plan	19	0	0
Judicial Plan	63	0	0



Active Members by Attained Age and Years of Service June 30, 2002

MSEP

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Number	Valuation Payroll
Under 20	68							68	\$ 1,173,215
20-24	2,076	19						2,095	42,749,180
25-29	4,528	784	7					5,319	132,458,951
30-34	3,855	2,607	459					6,950	191,670,911
35-39	2,937	2,034	1,482	29				7,148	208,888,579
40-44	2,973	1,856	1,484	1,394	775			8,565	259,412,036
45-49	2,617	1,770	1,489	1,318	1,225	848		9,325	298,271,440
50-54	2,213	1,559	1,463	1,241	1,134	1,211		9,188	303,790,949
55-59	1,352	1,119	1,020	942	748	492		6,103	203,773,736
60	197	154	167	134	64	76		862	29,094,917
61	134	156	144	110	75	60		77	25,017,583
62	123	91	117	84	53	28		42	17,620,289
63	85	76	67	48	36	27		56	13,655,639
64	62	64	66	51	33	28		47	12,628,721
65	45	54	47	40	17	23		34	9,271,539
66	27	30	29	29	14	9		19	5,642,850
67	25	20	31	26	13	8		16	4,940,074
68	27	10	17	19	9	5		15	3,399,514
69	13	8	15	7	9	2		4	2,239,130
70 & Over	42	46	38	37	31	15		28	7,584,231
Totals	23,399	12,457	8,142	6,172	4,268	2,915	1,263	58,616	\$1,773,283,484

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

Group Averages:

Age 43.4 years
 Service 9.8 years
 Annual Pay \$30,253



Active Members by Attained Age and Years of Service June 30, 2002

ALJLAP

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Number	Valuation Payroll
30-34	2							2	\$ 163,200
35-39	5	2	2					9	676,800
40-44	2	5	4					11	909,384
45-49	4	3	4	1				12	997,728
50-54		3	3	4				10	872,400
55-59	2	1		1	1	1		6	462,264
60		1		1				2	178,032
61	1							1	94,032
65	1					1		2	170,832
67	1			1				2	178,032
79 & Over							1	1	76,800
Totals	18	15	13	8	1	2	1	58	\$ 4,779,504

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

Group Averages:

Age 48.8 years
 Service 9.9 years
 Annual Pay \$82,405

Judicial Plan

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Number	Valuation Payroll
30-34	2							2	\$ 192,000
35-39	13	1	1					15	1,464,000
40-44	26	13	3	1				43	4,298,016
45-49	18	25	10	7	4			64	6,514,032
50-54	34	24	17	18	13	3		109	11,225,568
55-59	17	17	19	14	10	7		84	8,570,040
60	3	2	2	6	1			14	1,442,016
61	1	2	6	4	1		1	15	1,567,008
62		2	1	2	2	3		10	1,027,008
63			3	1	1		2	7	734,016
64	2	1	4		1			8	835,008
65			1	1			1	3	319,008
66			3	1	1		1	6	626,016
67			1			1		2	216,000
68		1				1	2	4	408,000
69					2	1		3	331,008
70		1			1		1	3	300,000
Totals	116	89	71	55	37	16	8	392	\$40,068,744

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

Group Averages:

Age 52.9 years
 Service 11 years
 Annual Pay \$102,216



Schedule of Active Member Valuation Data Six Years Ended June 30, 2002

MSEP

Schedule of Active Member Valuation Data				
Valuation Date	Number	Annual Payroll	Annual Average Pay	Percentage of Increase in Average Pay
June 30, 1997	52,737	\$ 1,359,656,666	\$ 25,782	4.59%
June 30, 1998	54,544	1,459,712,203	26,762	3.80
June 30, 1999	56,158	1,564,551,532	27,860	4.10
June 30, 2000	57,774	1,683,697,080	29,143	4.61
June 30, 2001	58,431	1,758,190,268	30,090	3.25
June 30, 2002	58,616	1,773,283,484	30,253	.54

ALJLAP

Schedule of Active Member Valuation Data				
Valuation Date	Number	Annual Payroll	Annual Average Pay	Percentage of Increase in Average Pay
June 30, 1997	45	\$ 2,865,733	\$ 63,683	8.24%
June 30, 1998	42	2,806,436	66,820	4.93
June 30, 1999	47	3,488,698	74,228	11.09
June 30, 2000	52	4,072,888	78,325	5.52
June 30, 2001	57	4,661,020	81,772	4.40
June 30, 2002	58	4,779,504	82,405	.77

Judicial Plan

Schedule of Active Member Valuation Data				
Valuation Date	Number	Annual Payroll	Annual Average Pay	Percentage of Increase in Average Pay
June 30, 1997	365	\$ 31,663,101	\$ 86,748	6.16%
June 30, 1998	365	32,446,141	88,894	2.47
June 30, 1999	366	34,162,013	93,339	5.00
June 30, 2000	375	37,107,487	98,953	6.01
June 30, 2001	381	38,687,793	101,543	2.62
June 30, 2002	392	40,068,744	102,216	.66



Retirees and Beneficiaries Added and Removed

Six Years Ended June 30, 2002

MSEP

Fiscal Year Ended	Classification	Benefit Type	Number	Added to Rolls
				Annual Allowances
June 30, 1997	General employee	Retirement	1,083	\$ 14,896,637
		Survivor of active	82	582,915
		Survivor of retired	70	693,859
		Disability	1	13,242
		Occupational disability	0	0
	Lincoln University-vested	Retirement	1	7,710
		Survivor of active	0	0
	Legislators	Retirement	20	374,048
		Survivor of active	0	1,888
	Elected state officials	Survivor of retired	1	13,414
		Retirement	2	86,684
		Survivor of active	0	0
June 30, 1998	General employee	Retirement	1,270	19,629,029
		Survivor of active	81	665,237
		Survivor of retired	122	951,214
		Disability	0	7,932
		Occupational disability	0	0
	Lincoln University-vested	Retirement	1	994
		Survivor of active	0	0
	Legislators	Retirement	13	244,763
		Survivor of active	1	10,818
	Elected state officials	Survivor of retired	3	34,201
		Retirement	0	2,551
		Survivor of active	0	0
June 30, 1999	General employee	Retirement	1,282	18,566,542
		Survivor of active	95	773,822
		Survivor of retired	152	1,081,059
		Disability	0	4,558
		Occupational disability	0	0
	Lincoln University-vested	Retirement	1	1,051
		Survivor of active	0	(262)
	Legislators	Retirement	10	257,072
		Survivor of active	2	26,662
	Elected state officials	Survivor of retired	5	39,656
		Retirement	1	49,578
		Survivor of active	0	0
		Survivor of retired	0	861

MSEP continued on pages 86-87.



Removed From Rolls		Rolls at End of Year				
Number	Annual Allowances	Number	Annual Allowances	Percentage Increase in Annual Allowances	Average Annual Allowance	Percentage Increase in Average Annual Allowance
595	\$ 4,153,718	13,912	\$ 117,275,333	10.08%	\$ 8,430	6.22%
23	74,143	806	3,696,157	15.96	4,586	7.47
19	103,644	620	3,776,657	18.52	6,091	8.77
11	47,701	76	283,187	(10.85)	3,726	0.88
0	0	1	17,448	0.00	17,448	0.00
0	0	5	33,425	29.98	6,685	3.99
0	0	1	2,886	0.00	2,886	0.00
6	104,376	153	2,571,905	11.71	16,810	1.49
1	18,693	5	30,399	(35.60)	6,080	(22.72)
0	0	28	195,538	7.37	6,983	3.53
0	0	3	126,128	219.76	42,043	6.59
0	0	0	0	0.00	0	0.00
0	0	0	0	0.00	0	0.00
650	4,947,946	14,532	131,956,416	12.52	9,080	7.72
27	81,763	860	4,279,631	15.79	4,976	8.52
42	187,731	700	4,540,141	20.22	6,486	6.48
13	49,220	63	241,899	(14.58)	3,840	3.05
0	0	1	17,448	0.00	17,448	0.00
0	0	6	34,419	2.97	5,736	(14.19)
0	0	1	2,886	0.00	2,886	0.00
8	129,692	158	2,686,977	4.47	17,006	1.17
0	0	6	41,217	35.59	6,870	12.99
3	11,086	28	218,653	11.82	7,809	11.82
1	41,811	2	86,868	(31.13)	43,434	3.31
0	0	0	0	0.00	0	0.00
0	0	1	21,512	0.00	21,512	0.00
637	4,686,352	15,177	145,836,607	10.52%	9,609	5.82
21	47,199	934	5,006,254	16.98	5,360	7.71
37	193,063	815	5,428,137	19.56	6,660	2.69
4	21,045	59	225,412	(6.82)	3,821	(0.50)
0	0	1	17,448	0.00	17,448	0.00
1	4,327	6	31,143	(9.52)	5,190	(9.52)
0	0	1	2,623	(9.09)	2,623	(9.09)
7	105,277	161	2,838,771	5.65	17,632	3.68
0	0	8	67,879	64.69	8,485	23.51
6	60,921	27	197,388	(9.73)	7,311	(6.38)
0	0	3	136,446	57.07	45,482	4.71
0	0	0	0	0.00	0	0.00
0	0	1	22,372	4.00	22,372	4.00



Retirees and Beneficiaries Added and Removed Six Years Ended June 30, 2002

MSEP (continued from previous page)

Fiscal Year Ended	Classification	Benefit Type	Added to Rolls	
			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
	Elected state officials	Survivor of retired	3	36,026
		Retirement	0	6,821
		Survivor of active	0	0
		Survivor of retired	0	895
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
	Elected state officials	Survivor of retired	7	89,399
		Retirement	6	230,136
		Survivor of active	1	56,938
		Survivor of retired	0	931
June 30, 2002	General employee	Retirement	1,840	32,360,047
		Survivor of active	84	842,610
		Survivor of retired	209	1,805,487
		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
	Elected state officials	Survivor of retired	4	59,947
		Retirement	0	304
		Survivor of active	0	2,277
		Survivor of retired	0	968



Removed from Rolls		Rolls at End of Year		Percentage Increase in Annual Allowances	Average Annual Allowance	Percentage Increase in Average Annual Allowance
Number	Annual Allowances	Number	Annual Allowances			
649	\$ 5,324,814	15,865	\$ 160,784,007	10.25%	\$ 10,135	5.47%
37	110,049	983	5,916,636	18.18	6,019	12.29
47	294,927	1,184	7,614,996	40.29	6,432	(3.43)
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	1.84
0	0	1	2,623	0.00	2,623	0.00
3	95,126	166	2,947,722	3.84	17,757	0.71
0	0	8	70,036	3.18	8,754	3.18
0	0	30	233,414	18.25	7,780	6.43
0	0	3	143,267	5.00	47,756	5.00
0	0	0	0	0.00	0	0.00
0	0	1	23,267	4.00	23,267	4.00
670	5,935,443	17,775	210,083,344	30.66	11,819	16.62
27	173,754	1,040	6,557,400	10.83	6,305	4.76
67	328,785	1,314	9,118,239	19.74	6,939	7.89
14	55,684	38	138,186	(27.41)	3,636	(0.66)
0	0	1	17,448	0.00	17,448	0.00
0	0	8	38,844	4.97	4,855	(8.15)
0	0	1	2,623	0.00	2,623	0.00
9	156,423	171	3,227,654	9.50	18,875	6.29
0	0	8	72,503	3.52	9,063	3.52
1	11,056	36	311,756	33.56	8,660	11.30
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	24,198	4.00	24,198	4.00
685	6,249,943	18,930	236,193,448	12.43	12,477	5.57
30	137,619	1,094	7,262,391	10.75	6,638	5.29
67	378,545	1,456	10,545,180	15.65	7,243	4.37
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	4,490	(7.51)
0	0	1	2,623	0.00	2,623	0.00
4	80,340	175	3,385,372	4.89	19,345	2.49
0	0	9	79,453	9.59	8,828	(2.59)
1	4,195	39	367,508	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	25,166	4.00	25,166	4.00



Retirees and Beneficiaries Added and Removed
Six Years Ended June 30, 2002

ALJLAP

Fiscal Year Ended	Benefit Type	Added to Rolls		Removed From Rolls	
		Number	Annual Allowances	Number	Annual Allowances
June 30, 1997	Retirement	1	\$ 51,588	4	\$ 152,520
	Survivor of active	0	621	0	0
	Survivor of retired	3	58,510	0	0
June 30, 1998	Retirement	3	123,798	0	0
	Survivor of active	0	645	0	0
	Survivor of retired	0	3,734	0	0
June 30, 1999	Retirement	0	24,637	0	0
	Survivor of active	0	671	0	0
	Survivor of retired	0	3,883	0	0
June 30, 2000	Retirement	0	23,908	1	42,874
	Survivor of active	0	698	1	18,148
	Survivor of retired	1	25,475	0	0
June 30, 2001	Retirement	1	57,621	1	39,647
	Survivor of active	0	0	0	0
	Survivor of retired	1	25,674	0	0
June 30, 2002	Retirement	1	67,877	1	46,580
	Survivor of active	0	0	0	0
	Survivor of retired	0	5,582	0	0



Rolls at End of Year		Percentage Increase in Annual Allowances	Average Annual Allowance	Percentage Increase in Average Annual Allowance
Number	Annual Allowances			
14	\$ 492,134	(17.02)%	\$ 35,152	0.76%
1	16,134	4.00	16,134	4.00
6	93,343	167.98	15,557	33.99
17	615,933	25.16	36,231	3.07
1	16,779	4.00	16,779	4.00
6	97,077	4.00	16,179	4.00
17	640,570	4.00	37,681	4.00
1	17,450	4.00	17,450	4.00
6	100,960	4.00	16,827	4.01
16	621,604	(2.96)	38,850	3.10
0	0	0.00	0	0.00
7	126,435	25.23	18,062	7.34
16	639,577	2.89	39,974	2.89
0	0	0.00	0	0.00
8	152,109	20.31	19,014	5.27
16	660,873	3.33	41,305	3.33
0	0	0.00	0	0.00
8	157,691	3.67	19,711	3.67



**Retirees and Beneficiaries Added and Removed
Six Years Ended June 30, 2002**

Judicial Plan

Fiscal Year Ended	Benefit Type	Added to Rolls		Removed From Rolls	
		Number	Annual Allowances	Number	Annual Allowances
June 30, 1997	Retirement	5	\$ 581,733	6	\$ 237,358
	Survivor of active	1	34,290	1	15,186
	Survivor of retired	4	136,079	8	70,013
	Disability	1	42,593	0	0
June 30, 1998	Retirement	22	1,427,677	8	341,058
	Survivor of active	27	362,157	0	0
	Survivor of retired	6	185,841	34	424,102
	Disability	0	2,458	0	0
June 30, 1999	Retirement	22	1,293,321	11	514,874
	Survivor of active	1	53,269	3	31,176
	Survivor of retired	6	185,690	6	142,056
	Disability	1	47,771	3	130,852
June 30, 2000	Retirement	18	1,343,591	11	535,292
	Survivor of active	2	76,496	1	6,813
	Survivor of retired	10	295,547	7	93,502
	Disability	1	46,500	0	0
June 30, 2001	Retirement	25	2,241,337	8	354,861
	Survivor of active	2	83,627	2	34,642
	Survivor of retired	1	76,395	4	42,983
	Disability	0	1,500	0	0
June 30, 2002	Retirement	11	984,612	9	455,021
	Survivor of active	1	57,051	1	28,541
	Survivor of retired	5	195,971	5	84,932
	Disability	0	0	1	48,000



Rolls at End of Year		Percentage Increase in Annual Allowances	Average Annual Allowance	Percentage Increase in Average Annual Allowance
Number	Annual Allowances			
206	\$ 8,693,288	4.12%	\$ 42,200	4.63%
18	372,478	5.41	20,693	5.40
108	1,420,895	4.88	13,156	8.75
2	80,623	112.00	40,311	6.00
220	9,779,907	12.50	44,454	5.34
45	734,634	97.23	16,325	(21.11)
80	1,182,635	(16.77)	14,783	12.37
2	83,081	3.05	41,541	3.05
231	10,558,354	7.96	45,707	2.82
43	756,728	3.01	17,598	7.80
80	1,226,269	3.69	15,328	3.69
0	0	0.00	0	0.00
238	11,366,653	7.66	47,759	4.49
44	826,410	9.21	18,782	6.73
83	1,428,314	16.48	17,209	12.27
1	46,500	100.00	46,500	100.00
255	13,253,130	16.60	51,973	8.82
44	875,395	5.93	19,895	5.93
80	1,461,726	2.34	18,272	6.18
1	48,000	3.23	48,000	3.23
257	13,782,721	4.00	53,629	3.19
44	903,905	3.26	20,543	3.26
80	1,572,765	7.60	19,660	7.59
0	0	(100.00)	0	0.00



**Short-Term Solvency Test
Pension Trust Funds
Ten Years Ended June 30, 2002**

MSEP

Actuarial Accrued Liabilities for							
Fiscal Year	Member Contributions (1)	Current Retirees and Beneficiaries (2)	Active and Inactive Members, Employer Financed Portion (3)	Actuarial Value of Assets	Percentage of Actuarial Liabilities Covered by Assets Available for		
					(1)	(2)	(3)
1993	\$ 448,909	\$ 743,697,883	\$ 1,703,075,268	\$ 2,236,558,739	100.0%	100.0%	87.6%
1994	448,559	909,819,763	2,009,188,103	2,425,134,504	100.0	100.0	75.4
1995	448,559	1,010,431,608	2,139,916,413	2,649,077,134	100.0	100.0	76.6
1996	448,559	1,156,347,608	2,283,330,316	2,927,896,643	100.0	100.0	77.6
1997	448,501	1,552,966,747	2,930,632,553	3,580,974,502	100.0	100.0	69.2
1998	447,716	1,688,502,950	3,229,936,517	4,210,635,094	100.0	100.0	78.1
1999	0	1,970,504,367	3,535,464,262	4,908,820,033	100.0	100.0	83.1
2000	0	2,142,487,495	3,778,196,697	5,511,714,616	100.0	100.0	89.2
2001	0	2,496,277,500	3,568,889,216	5,881,232,850	100.0	100.0	94.8
2002	0	2,716,457,033	3,577,815,242	6,033,133,598	100.0	100.0	92.7

ALJLAP

Actuarial Accrued Liabilities for							
Fiscal Year	Member Contributions (1)	Current Retirees and Beneficiaries (2)	Active and Inactive Members, Employer Financed Portion (3)	Actuarial Value of Assets	Percentage of Actuarial Liabilities Covered by Assets Available for		
					(1)	(2)	(3)
1993	\$ 0	\$ 5,615,161	\$ 2,549,307	\$ 5,864,317	100.0%	100.0%	9.8%
1994	0	5,973,718	2,793,014	6,229,224	100.0	100.0	9.1
1995	0	6,088,732	3,641,223	6,655,207	100.0	100.0	15.6
1996	0	6,196,526	4,079,837	7,258,814	100.0	100.0	26.0
1997	0	6,569,957	4,857,224	8,864,395	100.0	100.0	47.2
1998	0	7,415,852	5,471,056	10,285,233	100.0	100.0	52.4
1999	0	7,883,988	6,890,537	11,763,737	100.0	100.0	56.3
2000	0	7,526,118	8,995,625	13,191,825	100.0	100.0	63.0
2001	0	7,534,368	9,275,594	14,410,199	100.0	100.0	74.1
2002	0	8,268,650	9,906,692	15,172,619	100.0	100.0	69.7

Judicial Plan

Actuarial Accrued Liabilities for							
Fiscal Year	Member Contributions (1)	Current Retirees and Beneficiaries (2)	Active and Inactive Members, Employer Financed Portion (3)	Actuarial Value of Assets	Percentage of Actuarial Liabilities Covered by Assets Available for		
					(1)	(2)	(3)
1993	\$ 0	\$ 65,843,955	\$ 66,598,009	\$ 0	100.0%	0.0%	0.0%
1994	0	70,477,754	71,117,871	0	100.0	0.0	0.0
1995	0	81,586,593	72,060,389	0	100.0	0.0	0.0
1996	0	86,145,180	75,588,930	0	100.0	0.0	0.0
1997	0	99,662,179	97,810,394	0	100.0	0.0	0.0
1998	0	108,392,273	99,187,524	0	100.0	0.0	0.0
1999	0	120,543,611	107,258,730	6,067,305	100.0	5.0	0.0
2000	0	131,199,867	110,597,474	13,861,769	100.0	10.6	0.0
2001	0	143,163,718	104,815,186	22,613,050	100.0	15.8	0.0
2002	0	149,135,989	106,979,463	29,651,113	100.0	19.9	0.0



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.

		\$ Millions
(1)	UAAL* at beginning of year	\$183.9
(2)	Normal cost	144.5
(3)	Actual employer contributions	209.5
(4)	Interest accrual: $(1) \times .085 + [(2) - (3)] \times (.085/2)$	12.9
(5)	Expected UAAL before changes: $(1) + (2) - (3) + (4)$	131.8
(6)	Change from any changes in benefits, assumptions, or methods	(103.5)
(7)	Expected UAAL after changes: $(5) + (6)$	28.3
(8)	Actual UAAL at end of year	261.1
(9)	Gain (loss) $(7) - (8)$	(232.8)
(10)	Gain (loss) as a percent of actuarial accrued liabilities at start of year (\$6,065)	(3.8)%

* Unfunded actuarial accrued liability.

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



Derivation of Experience Gain (Loss)

ALJLAP

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

	\$ Millions
(1) UAAL* at beginning of year	\$ 2.40
(2) Normal cost	.82
(3) Employer contributions	1.07
(4) Interest	
a. on (1)	.20
b. on (2)	.03
c. on (3)	.05
d. total [a+b+c]	.18
(5) Expected UAAL end of year before changes	2.33
(6) Change in UAAL end of year	
a. amendments	0
b. assumptions	0
c. methods	(.32)
d. total	(.32)
(7) Expected UAAL after changes: (5)+(6d.)	2.01
(8) Actual UAAL at end of year	3.00
(9) Gain (loss) (7)-(8)	(.99)
(10) Gain (loss) as a percent of actuarial accrued liabilities at start of year (\$16,809,962)	(5.9)%

* Unfunded actuarial accrued liability.

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



Derivation of Experience Gain (Loss)

Judicial Plan

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

		\$ Millions
(1)	UAAL* at beginning of year	\$ 225.37
(2)	Normal cost	7.67
(3)	Employer contributions	22.09
(4)	Interest	
	a. on (1)	19.16
	b. on (2)	.33
	c. on (3)	.94
	d. total [a+b+c]	18.55
(5)	Expected UAAL end of year before changes	229.50
(6)	Change in UAAL end of year	
	a. amendments	0
	b. assumptions	(3.63)
	c. methods	0
	d. total	(3.63)
(7)	Expected UAAL after changes: (5)+(6d.)	225.87
(8)	Actual UAAL at end of year	226.46
(9)	Gain (loss) (7)-(8)	(.59)
(10)	Gain (loss) as a percent of actuarial accrued liabilities at start of year (\$247,978,904)	(0.2)%

* Unfunded actuarial accrued liability.

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



Summary Plan Provisions*

As of June 30, 2002

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

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

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



Summary Plan Provisions

As of June 30, 2002

MSEP and MSEP 2000

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

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



Summary Plan Provisions As of June 30, 2002

MSEP and MSEP 2000 (Comparison of Plans for Legislators)

Plan Provision	MSEP	MSEP 2000
Membership eligibility	Elected to the general assembly.	Elected to the general assembly on or after July 1, 2000.
Normal retirement eligibility	Age 55 with 3 full-biennial assemblies.	Age 55 with 2 full-biennial assemblies or "Rule of 80" - minimum age 50.
Early retirement eligibility	Not available.	Not available.
Benefit Life benefit	\$150 per month per biennial assembly.	(Monthly base pay ÷ 24) x service capped at 100% of pay.
Temporary benefit	Not available.	Not available.
Vesting	3 full-biennial assemblies.	2 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 the Joint & 100% Survivor Option or 80% of the member's Life Income Annuity paid to eligible children.
Duty-related death	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).	Survivor benefit to eligible spouse or children no less than 50% of current pay (no service requirement).
Optional forms of payment (Death after retirement)	Survivor benefit to eligible spouse based on payment option elected at retirement. Payment options include: <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 Plan Provisions As of June 30, 2002

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

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



Summary Plan Provisions As of June 30, 2002

ALJLAP

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



Summary Plan Provisions

As of June 30, 2002

Judicial Plan

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

Contributions

The plans previously described are noncontributory with the entire cost paid by the state of Missouri. The contribution rate paid by the state for the general state employees, uniformed members of the water patrol, legislators, and elected state officials retirement plan for FY02 was 11.59% of the membership payroll. The contribution rate paid by the state for the ALJLAP for FY02 was 22.32% of the membership payroll. The contribution rate paid by the state for the Judicial Plan for FY02 was 55.30% of the membership payroll.



Summary Plan Provisions

As of June 30, 2002

Life Insurance Plans

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

Active Members*	Requirement	Retired Members	Requirement
<p><u>Basic Life Insurance</u> An amount equal to one-times annual salary (with a minimum of \$15,000) while actively employed.</p>	Actively employed in an eligible state position resulting in membership in MOSERS.	<p><u>Basic Life Insurance at Retirement</u> \$5,000 basic life insurance during retirement.</p>	Must retire directly from active employment.
<p><u>Duty-Related Death Benefit</u> 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.</p>	Actively employed in an eligible state position resulting in membership in MOSERS.	<p><u>Optional Life Insurance at Retirement (MSEP)</u> An employee may retain up to the lesser of \$60,000 or the amount of optional life insurance coverage held at time of retirement at the group rate and may convert any remaining basic and optional life insurance at individual rates.</p>	Must retire directly from active employment.
<p><u>Optional Life Insurance</u> Additional life insurance may be purchased in multiples of annual salary up to six-times annual salary (maximum of \$800,000) or in a flat amount in multiples of \$1,000 not to exceed the maximum. Spouse coverage may be purchased in multiples of \$1,000 up to a maximum of \$100,000; however, the amount of spouse coverage cannot exceed the amount of optional coverage the member has purchased. Coverage for children is available in a flat amount of \$10,000 per child.</p>	Actively employed in an eligible state position resulting in membership in MOSERS.	<p><u>Optional Life Insurance at Retirement (MSEP 2000)</u> 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.</p>	Must retire directly from active employment.

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



Summary Plan Provisions

As of June 30, 2002

Long-Term Disability (LTD) Plan

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

Plan	Provision
<p><u>General State Employees, Legislators, and Elected State Officials</u> 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 the member's death.</p> <p>Partial Disability - A member may be considered partially disabled during the benefit waiting period and the 24 months following that period if the member is working in an occupation, but as a result of physical disease, injury, pregnancy, or mental disorder, is unable to earn more than 80% of pre-disability earnings. After the first 24 months, a member may be considered partially disabled if working in an occupation but unable to earn more than 60% of the member's pre-disability earnings. In both instances, work earnings are used to reduce the LTD benefit.</p>
<u>Water Patrol</u>	<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>
<u>Judges</u>	<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

On July 11, 2002, Governor Bob Holden signed into law HB 1455 – legislation that involved minor modifications to and clarifications of the Missouri State Employees’ Plan, the Missouri State Employees’ Plan 2000, the Administrative Law Judges and Legal Advisors’ Plan, and the Judicial Plan. These changes were designed to enable MOSERS to more effectively administer these plans as well as ease some of the administrative burden associated with members and their beneficiaries applying for and receiving benefits. There were no benefit increases enacted in FY02.



Actuarial Present Values

As of June 30, 2002

MSEP

Actuarial Present Value June 30, 2002	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	\$ 3,589,762,636	\$ 775,172,992	\$ 2,814,589,644
Disability benefits likely to be paid to present active members who become totally and permanently disabled	91,394,069	42,041,347	49,352,722
Survivor benefits likely to be paid to widows and children of present active members who die before retiring	141,937,176	43,981,233	97,955,943
Separation benefits likely to be paid to present active members	405,027,885	202,134,549	202,893,336
Active member totals	<u>\$ 4,228,121,766</u>	<u>\$ 1,063,330,121</u>	3,164,791,645
Members on leave of absence & LTD			
Service retirement benefits based on service rendered before the valuation date			85,778,750
Terminated-vested members			
Service retirement benefits based on service rendered before the valuation date			327,244,847
Retired lives			
<i>BackDROP installment payments incurred, but not yet paid</i>			2,715,873,070
Total actuarial accrued liability			<u>583,963</u>
Assets used in valuation			6,294,272,275
Unfunded actuarial accrued liability			<u>6,033,133,598</u>
			<u>\$ 261,138,677</u>



Actuarial Present Values
As of June 30, 2002

ALJLAP

Actuarial Present Value June 30, 2002	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	\$ 12,183,178	\$ 4,494,935	\$ 7,688,243
Disability benefits likely to be paid to present active members who become totally and permanently disabled	238,674	152,016	86,658
Survivor benefits likely to be paid to widows and children of present active members who die before retiring	509,336	306,750	202,586
Separation benefits likely to be paid to present active members	1,822,161	1,169,534	652,627
Active member totals	<u>\$ 14,753,349</u>	<u>\$ 6,123,235</u>	<u>8,630,114</u>
Terminated-vested members			
Service retirement benefits based on service rendered before the valuation date			1,276,578
Retired lives			
Total actuarial accrued liability			<u>8,268,650</u>
Assets used in valuation			18,175,342
Unfunded actuarial accrued liability			<u>15,172,619</u>
			<u>\$ 3,002,723</u>

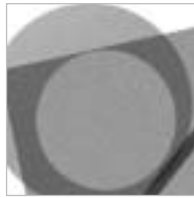


Actuarial Present Values

As of June 30, 2002

Judicial Plan

Actuarial Present Value June 30, 2002	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	\$ 143,572,889	\$ 50,807,491	\$ 92,765,398
Disability benefits likely to be paid to present active members who become totally and permanently disabled	1,814,417	1,389,701	424,716
Survivor benefits likely to be paid to widows and children of present active members who die before retiring	5,932,833	3,388,314	2,544,519
Active Member Totals	<u>\$ 151,320,139</u>	<u>\$ 55,585,506</u>	<u>95,734,633</u>
Terminated-vested members			
Service retirement benefits based on service rendered before the valuation date			11,244,830
Retired lives			
Total actuarial accrued liability			<u>149,135,989</u>
Assets used in valuation			256,115,452
Unfunded actuarial accrued liability			<u>29,651,113</u>
			<u>\$ 226,464,339</u>



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