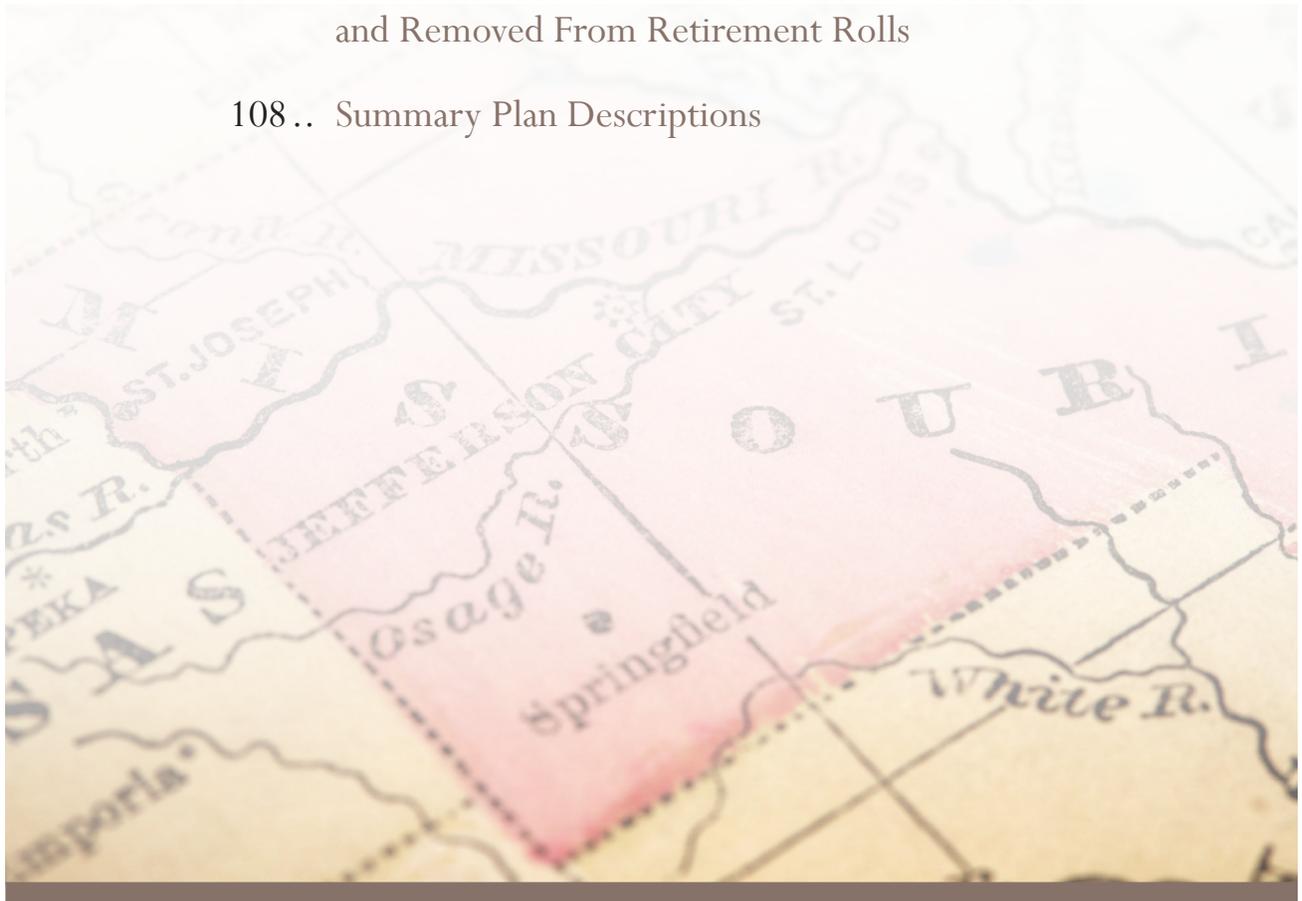


# ACTUARIAL SECTION

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## CERTIFICATION OF ACTUARIAL RESULTS



November 15, 2010

Board of Trustees  
Public School Retirement System of Missouri  
Public Education Employee Retirement System of Missouri  
3210 West Truman Boulevard  
Jefferson City, MO 65109

**Re: Certification of Actuarial Results**

Dear Members of the Board:

At your request, we have performed actuarial valuations of the Public School Retirement System and the Public Education Employee Retirement System of Missouri as of June 30, 2010. An actuarial valuation of each System is performed annually.

The actuarial valuation is based upon:

- a. *Data Relative to the Members of the Systems* - Data for all members of each System was provided by the staff. Such data is tested for reasonableness by the actuary but is used unaudited.
- b. *Assets of the Fund* - The values of the trust fund assets for each System are provided by the staff. An actuarial value of assets, with gains and losses recognized over five years, is used to develop actuarial results.
- c. *Actuarial Method* - The actuarial method utilized by each System is the Entry Age Normal Cost Method. The objective of this method is to finance the benefits of the Systems as a level percentage of pay over the entire career of each member. Any Unfunded Actuarial Accrued Liability ("UAAL") under this method is separately financed as a level percentage of payroll over 30 years where the amortization period is reset to 30 years at each valuation date.
- d. *Actuarial Assumptions* - The actuarial assumptions used in the valuation of each System are summarized in the following pages. The Board adopted this set of assumptions effective for the actuarial valuations as of June 30, 2006 and later.

The actuarial assumption and methods used are in accordance with paragraph 36 of GASB Statement Number 25.

The trend data in the Financial Section and the schedules and other data in this Section are prepared by the staff with our guidance.

The Board's statement of funding policy provides that:

1. The Board of Trustees shall adopt actuarial assumptions, each of which individually represents a reasonable long-term estimate of anticipated experience under the System, derived from experience studies conducted every fifth year.

.....  
PricewaterhouseCoopers LLP, One North Wacker Drive Chicago, IL, 60606  
T: (312)298 2000, F: (312) 298 2001, [www.pwc.com/us](http://www.pwc.com/us)

## CERTIFICATION OF ACTUARIAL RESULTS



2. The actuarial funding method used shall be the Entry Age Normal Method with normal costs allocated as a percentage of payroll.
3. It shall be the general objective to maintain an amortization period of 30 years or less in the funding of the UAAL. Whenever a change is made in a System's benefit structure, the amortization period for the System after this change should not exceed 30 years initially. Effective with the 2007 Legislative session, any changes in the UAAL due to such changes in benefit structure shall be amortized over a 20-year period.
4. If an escalation in future payroll is assumed in determining the amortization payments toward the Unfunded Actuarial Accrued Liability, then the annual rate of such escalation shall not exceed the expected rate of expansion in total System payroll based upon the actuarial assumptions.
5. Assets used in the actuarial valuation shall be valued using adjusted market values averaged over a period of 5 years.
6. Annual actuarial valuations shall be made of the System's assets and liabilities. The contribution rate shall be established based on the results of these valuations.

The results of the valuation are based on the data and actuarial techniques described above and on the provision of each System at the valuation date. Based on these items, we certify these results to be true and correct.

Sincerely,

A handwritten signature in black ink that reads "Sheldon A. Gamzon".

Sheldon Gamzon, FSA, MAAA  
Principal

A handwritten signature in black ink that reads "Brandon A. Robertson".

Brandon Robertson, ASA, MAAA  
Manager

## CALCULATIONS OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

### PSRS

As of June 30, 2010

	<u>Amount</u>
(1) Present value of future benefits for:	
Active members	\$ 25,968,878,140
State members	17,069,956
Service retirees	19,573,885,849
Disability retirees	158,665,497
Tax-sheltered annuitants	745,173
Survivors	736,720,720
Death benefits	61,993,959
Inactive members	476,722,017
Total	<u>46,994,681,311</u>
(2) Present value of future normal costs	<u>9,761,078,949</u>
(3) Actuarial accrued liability ((1)-(2))	37,233,602,362
(4) Actuarial value of assets	<u>28,931,330,978</u>
(5) Unfunded actuarial accrued liability ((3)-(4))	<u><u>\$ 8,302,271,384</u></u>

### PEERS

As of June 30, 2010

	<u>Amount</u>
(1) Present Value of future benefits for:	
Active members	\$ 3,424,002,990
Service retirees	1,315,521,886
Disability retirees	24,687,490
Survivors	52,543,995
Inactive members	97,733,696
Total	<u>4,914,490,057</u>
(2) Present value of future normal costs	<u>1,255,777,512</u>
(3) Actuarial accrued liability ((1)-(2))	3,658,712,545
(4) Actuarial value of assets	<u>2,892,410,849</u>
(5) Unfunded actuarial accrued liability ((3)-(4))	<u><u>\$ 766,301,696</u></u>

## REQUIRED CONTRIBUTION RATES AND AMORTIZATIONS OF UNFUNDED LIABILITY

### PSRS

For the fiscal year ending June 30, 2012

	<u>Percentage of Payroll</u>
(1) Total contribution rate, member and employer*	28.00%
(2) Normal cost rate	21.97%
(3) Approximate rate available for unfunded actuarial accrued liability ((1) - (2))	6.03%
(4) Rate needed to fund UAAL	9.37%
(5) Benchmark contribution rate - normal cost plus a rate to fund the UAAL over 30 years	31.34%
(6) Recommended rate for FY 2012	29.00%

\* While the current contribution rate will not fund the UAAL in 30 years, the funding process is designed to fund that item over time.

### PEERS

For the fiscal year ending June 30, 2012

	<u>Percentage of Payroll</u>
(1) Total contribution rate, member and employer	13.26%
(2) Normal cost rate	11.01%
(3) Approximate rate available for unfunded actuarial accrued liability ((1) - (2))	2.25%
(4) Rate needed to fund UAAL	2.71%
(5) Benchmark contribution rate - normal cost plus a rate to fund the UAAL over 30 years	13.72%
(6) Recommended rate for FY 2012	13.72%

## ANALYSIS OF ACTUARIAL GAINS AND LOSSES

### PSRS

As of June 30, 2010

*(Dollar amounts in thousands)*

(1) Unfunded actuarial liability as of July 1, 2009	\$ 7,234,046
(2) Normal cost for 2010 plan year	969,541
(3) Contribution received during year	(1,336,698)
(4) Interest to year end at 8.00% on (1), (2) and (3)	<u>564,037</u>
(5) Expected unfunded actuarial liability as of June 30, 2010	7,430,926
(6) Contribution shortfall	105,739
(7) Actuarial (gain)/loss during the year	
a. From investment	\$ 1,621,201
b. From actuarial liabilities	<u>(855,595)</u>
c. Total	<u>765,606</u>
(8) Actual unfunded actuarial liability as of June 30, 2010	<u><u>\$ 8,302,271</u></u>

### PEERS

As of June 30, 2010

(1) Unfunded actuarial liability as of July 1, 2009	\$ 665,861,634
(2) Normal cost for 2010 plan year	154,284,267
(3) Contribution received during year	(187,958,455)
(4) Interest to year end at 8.00% on (1), (2), and (3).	<u>51,921,963</u>
(5) Expected unfunded actuarial liability as of June 30, 2010	684,109,409
(6) Contribution shortfall	555,479
(7) Actuarial (gain)/loss during the year	
a. From investment	\$ 153,945,972
b. From actuarial liabilities	<u>(72,309,164)</u>
c. Total	<u>81,636,808</u>
(8) Actual unfunded actuarial liability as of June 30, 2010	<u><u>\$ 766,301,696</u></u>

## PSRS SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

**Mortality** - Sample rates per 1,000 members by age: (effective 6/30/06)

Active and service retired members, beneficiaries and survivors

	<u>Age</u>	<u>Male</u>	<u>Female</u>
	20	0.430	0.262
	40	0.891	0.551
	60	5.581	2.919
	80	45.171	28.366
	100	268.815	219.655
<b>Active % of Retired -</b>		70%	65%

**Investment Return** - 8% per annum compound, net of expenses (1980)

**Termination** - Illustrate per 1,000 members (male and female): (2006)

<u>Service</u>	<u>Rate</u>
0	190
2	85
4	62
10	23
20	5

**Salary Increases** - Sample annual rates varying by years of service: (effective 6/30/06)

<u>Service</u>	<u>Increase</u>	<u>Service</u>	<u>Increase</u>
0	10.25%	9	6.5%
3	7.75	10	6.25
6	7.25	15 and over	5.0

**Retirement Rates** - Sample rates per 1,000 members: (effective 6/30/06)

<u>Age</u>	<u>Years of Service</u>			
	<u>&lt;25</u>	<u>25</u>	<u>30</u>	<u>31+</u>
<55	N/A	40	350	300
55	25	450	350	300
60	200	200	350	300
65	300	300	350	300
70+	1,000	1,000	1,000	1,000

## PSRS SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

<b>Asset Valuation -</b>	Based on five-year average of adjusted market value returns (1994).
<b>Payroll Increase -</b>	Total covered payroll of the entire membership is assumed to increase 5.0% per year (effective 6/30/06).
<b>Inflation -</b>	3.25% per annum compound (effective 6/30/06).
<b>Actuarial Method -</b>	Entry Age Normal Funding Method is used. Gains and losses are reflected immediately in the unfunded actuarial accrued liability of the System, and amortized in the future as a level percentage of payroll (1947).
<b>Other -</b>	In addition to the above, other assumptions are made with respect to the incidence of disability, the rates of retirement under a special temporary program, mortality of disabled lives, the probability that a member has a spouse, minor children and the ages of the children (effective 6/30/06).
<b>COLA -</b>	3.25% per year (effective 6/30/06).

*Note: Dates reflect the effective date as adopted by the Board of Trustees. The most recent assumption analysis was performed as of June 30, 2006. The revised assumptions were used for the June 30, 2007 valuation going forward.*

## PEERS SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

**Mortality** - Sample rates per 1,000 members by age: (effective 6/30/06)

Active and service retired members, beneficiaries and survivors

	Age	Male	Female
	20	0.530	0.273
	40	1.156	0.598
	60	8.986	3.359
	80	68.615	31.727
	100	333.461	237.713
<b>Active % of Retired -</b>		70%	60%

**Investment Return** - 8% per annum compound, net of expenses (1980)

**Termination** - Illustrate per 1,000 members (male and female): (2006)

Service	Rate
0	300
2	150
4	100
10	48
20	18
25	0

**Salary Increases** - Sample annual rates varying by years of service: (effective 6/30/06)

Service	Increase	Service	Increase
0	10.00%	9	5.15%
3	6.05	10 and over	5.0
6	5.60		

**Retirement Rates** - Sample rates per 1,000 members: (effective 6/30/06)

Age	Years of Service		
	<25	25	30+
<50	N/A	50	150
55	30	270	170
60	160	160	160
65	260	260	260
70	200	200	200
70+	1,000	1,000	1,000

## PEERS SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

<b>Asset Valuation -</b>	Based on five-year average of adjusted market values (1994).
<b>Payroll Increase -</b>	Total covered payroll of the entire membership is assumed to increase 5.0% per year (effective 6/30/06).
<b>Inflation -</b>	3.25% per annum compound (effective 6/30/06).
<b>Actuarial Method -</b>	Entry Age Normal Funding Method is used. Gains and losses are reflected immediately in the unfunded actuarial accrued liability of the System, and amortized in the future as a level percentage of payroll (1966).
<b>Other -</b>	The above, other assumptions are made with respect to the incidence of disability, the rates of retirement under a special temporary program, mortality of disabled lives, the probability that a member has a spouse and average work year (effective 6/30/06).
<b>COLA -</b>	3.25% per year. (effective 6/30/06).

*Note: Dates reflect the effective date as adopted by the Board of Trustees.  
The most recent assumption analysis was performed as of June 30, 2006. The revised assumptions were used for the June 30, 2007 valuation going forward.*

## SCHEDULES OF ACTIVE MEMBER VALUATION DATA

### PSRS

Actuarial Valuation Date	Number of Members	Covered Annual Payroll (000's)	Average Annual Salary	% Increase in Average Salary	Average Attained Age	Average Years of Service
6/30/2001	72,688	\$ 2,982,051	\$ 41,025	3.7%	42.4	11.3
6/30/2002	73,673	3,213,461	43,618	6.3	42.3	11.2
6/30/2003	74,347	3,373,058	45,369	4.0	42.4	11.3
6/30/2004	73,797	3,408,230	46,184	1.8	42.5	11.4
6/30/2005	73,850	3,540,649	47,944	3.8	42.5	11.4
6/30/2006	75,540	3,775,752	49,983	4.3	42.4	11.2
6/30/2007	77,121	3,980,698	51,616	3.3	42.3	11.1
6/30/2008	78,436	4,209,417	53,667	4.0	42.2	11.1
6/30/2009	79,335	4,439,381	55,957	4.3	42.2	11.1
6/30/2010	79,256	4,493,865	56,701	1.3	42.3	11.3

### PEERS

Actuarial Valuation Date	Number of Members	Covered Annual Payroll (000's)	Average Annual Salary	% Increase in Average Salary	Average Attained Age	Average Years of Service
6/30/2001	45,517	\$ 814,158	\$ 17,887	5.9%	44.6	6.3
6/30/2002	46,728	895,420	19,162	7.1	44.8	6.4
6/30/2003	46,863	971,177	20,724	8.2	45.3	6.6
6/30/2004	45,880	984,866	21,466	3.6	46.2	7.0
6/30/2005	46,598	1,055,204	22,645	5.5	46.6	7.1
6/30/2006	48,188	1,190,994	24,716	9.1	46.4	7.1
6/30/2007	49,281	1,275,199	25,876	4.7	46.6	7.2
6/30/2008	50,865	1,377,506	27,082	4.7	46.8	7.3
6/30/2009	51,234	1,417,485	27,667	2.2	47.1	7.7
6/30/2010	50,363	1,433,691	28,467	2.9	47.5	8.0

## SOLVENCY TESTS

### PSRS

(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Accrued Liability for:			Net Assets Available for Benefits	Percentage of Actuarial Liabilities Covered by Net Assets for:		
	Member Contributions	Current Retirees & Beneficiaries	Active & Inactive Members Employer Financed Portion		(1)	(2)	(3)
6/30/2001	\$ 4,129,191	\$ 9,504,921	\$ 7,648,091	\$ 21,146,294	100.00%	100.00%	98.2%
6/30/2002	4,354,507	10,589,546	8,389,885	22,236,105	100.00	100.00	86.9
6/30/2003	4,687,227	11,387,543	8,644,680	20,047,982	100.00	100.00	46.0
6/30/2004	4,954,080	12,625,925	8,645,254	21,501,572	100.00	100.00	45.4
6/30/2005	5,119,055	13,976,901	8,785,557	23,049,441	100.00	100.00	45.0
6/30/2006	5,453,906	15,371,279	9,211,945	24,801,644	100.00	100.00	43.2
6/30/2007	5,787,667	17,059,613	9,549,443	27,049,004	100.00	100.00	44.0
6/30/2008	6,174,718	18,548,552	9,767,182	28,751,241	100.00	100.00	41.2
6/30/2009	6,299,067	19,745,129	10,015,925	28,826,075	100.00	100.00	27.8
6/30/2010	6,506,803	20,532,011	10,194,788	28,931,331	100.00	100.00	18.6

### PEERS

(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Accrued Liability for:			Net Assets Available for Benefits	Percentage of Actuarial Liabilities Covered by Net Assets for:		
	Member Contributions	Current Retirees & Beneficiaries	Active & Inactive Members Employer Financed Portion		(1)	(2)	(3)
6/30/2001	\$ 301,936	\$ 565,126	\$ 769,014	\$ 1,686,242	100.00%	100.00%	106.5%
6/30/2002	354,296	651,295	850,391	1,810,619	100.00	100.00	94.7
6/30/2003	394,925	731,059	923,732	1,677,770	100.00	100.00	59.7
6/30/2004	444,318	804,864	972,028	1,837,308	100.00	100.00	60.5
6/30/2005	466,259	904,292	1,043,943	2,011,566	100.00	100.00	61.4
6/30/2006	524,014	1,020,486	1,212,333	2,218,638	100.00	100.00	55.6
6/30/2007	580,853	1,093,650	1,308,310	2,481,562	100.00	100.00	61.7
6/30/2008	650,970	1,215,036	1,412,596	2,703,762	100.00	100.00	59.3
6/30/2009	693,962	1,305,025	1,459,057	2,792,182	100.00	100.00	54.4
6/30/2010	743,146	1,392,753	1,522,813	2,892,411	100.00	100.00	49.7

## PSRS SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM RETIREMENT ROLLS

	Added to Rolls		Removed from Rolls		Rolls End of Year			% Increase	
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowances	in Annual Allowance	in Average Annual Allowance
<b>2009-2010</b>									
Service retirees	2,392	\$ 84,290,821	825	\$ 23,896,894	41,464	\$ 1,576,834,116	\$ 38,029	4.02%	0.09%
Disability retirees	54	1,337,647	29	646,445	721	17,328,504	24,034	4.18	0.57
Beneficiaries	290	7,127,771	161	2,596,246	3,282	78,045,764	23,780	6.18	2.00
<b>2008-2009</b>									
Service retirees	2,629	\$ 98,725,164	777	\$ 21,507,072	39,897	\$ 1,515,913,812	\$ 37,996	10.30%	5.18%
Disability retirees	37	924,132	32	621,480	696	16,632,852	23,898	5.89	5.13
Beneficiaries	287	7,160,304	136	2,206,056	3,153	73,504,884	23,313	10.68	5.38
<b>2007-2008</b>									
Service retirees	2,596	\$ 91,611,816	808	\$ 21,214,344	38,045	\$ 1,374,367,260	\$ 36,125	8.08%	3.01%
Disability retirees	45	1,122,528	37	855,696	691	15,707,856	22,732	3.95	2.74
Beneficiaries	289	6,258,996	175	2,635,176	3,002	66,412,560	22,123	8.06	3.96
<b>2006-2007</b>									
Service retirees	2,396	\$ 85,977,276	770	\$ 20,772,324	36,257	\$ 1,271,565,084	\$ 35,071	9.66%	4.75%
Disability retirees	41	886,872	29	646,560	683	15,111,252	22,125	5.17	3.32
Beneficiaries	241	5,318,208	161	1,972,128	2,888	61,457,496	21,280	8.95	5.93
<b>2005-2006</b>									
Service retirees	2,441	\$ 85,952,556	811	\$ 19,138,824	34,631	\$ 1,159,504,692	\$ 33,482	8.59%	3.48%
Disability retirees	41	855,684	34	594,708	671	14,368,776	21,414	3.95	2.86
Beneficiaries	279	6,109,776	127	1,679,784	2,808	56,410,080	20,089	10.61	4.62
<b>2004-2005</b>									
Service retirees	2,630	\$ 91,773,708	681	\$ 16,100,976	33,001	\$ 1,067,742,636	\$ 32,355	10.86%	4.31%
Disability retirees	58	1,151,928	24	402,816	664	13,823,160	20,818	7.94	2.42
Beneficiaries	226	4,153,424	118	1,426,464	2,656	51,000,276	19,202	9.47	5.02

## PEERS SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM RETIREMENT ROLLS

	Added to Rolls		Removed from Rolls		Rolls End of Year		% Increase		
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowances	in Annual Allowance	in Average Annual Allowance
<b>2009-2010</b>									
Service retirees	1,426	\$ 12,130,367	613	\$ 3,074,132	18,274	\$ 125,327,880	\$ 6,858	6.14%	1.42%
Disability retirees	51	250,591	16	62,887	575	2,592,012	4,508	7.81	1.26
Beneficiaries	139	832,603	67	315,936	1,222	5,585,100	4,570	9.82	3.32
<b>2008-2009</b>									
Service retirees	1,325	\$ 12,276,828	560	\$ 2,464,452	17,461	\$ 118,079,604	\$ 6,762	11.55%	6.66%
Disability retirees	44	233,556	18	92,412	540	2,404,284	4,452	10.46	5.12
Beneficiaries	112	556,872	40	176,184	1,150	5,085,876	4,423	10.89	3.95
<b>2007-2008</b>									
Service retirees	1,256	\$ 11,273,184	569	\$ 2,322,624	16,696	\$ 105,856,860	\$ 6,340	10.49%	5.93%
Disability retirees	46	214,596	21	91,332	514	2,176,536	4,235	8.26	3.02
Beneficiaries	99	423,360	62	211,236	1,078	4,586,436	4,255	6.91	3.25
<b>2006-2007</b>									
Service retirees	1,250	\$ 10,608,864	563	\$ 2,140,032	16,009	\$ 95,809,332	\$ 5,985	11.70%	6.91%
Disability retirees	29	134,592	18	56,736	489	2,010,516	4,111	7.35	4.93
Beneficiaries	120	537,792	39	108,804	1,041	4,290,168	4,121	14.55	5.64
<b>2005-2006</b>									
Service retirees	1,080	\$ 8,500,248	528	\$ 1,834,320	15,322	\$ 85,772,400	\$ 5,598	9.22%	5.28%
Disability retirees	53	217,428	23	96,480	478	1,872,912	3,918	9.62	2.73
Beneficiaries	86	291,804	50	175,392	960	3,745,200	3,901	4.79	0.85
<b>2004-2005</b>									
Service retirees	1,092	\$ 7,628,508	481	\$ 1,697,460	14,770	\$ 78,531,972	\$ 5,317	10.76%	6.17%
Disability retirees	43	203,208	26	101,004	448	1,708,548	3,814	9.49	5.36
Beneficiaries	98	443,100	29	77,064	924	3,573,960	3,868	16.21	7.53

## PSRS SUMMARY PLAN DESCRIPTION

The Public School Retirement System of Missouri (PSRS) became operative July 1, 1946. It was established by an Act of the Missouri Legislature and is governed by Chapter 169 of the *Revised Statutes of Missouri*. Its purpose is to provide benefits to members and their dependents at retirement or in the event of death or disability prior to retirement.

PSRS is a defined benefit plan funded on an actuarial reserve basis, which guarantees availability of funds to pay benefits as prescribed by law. The System is established as an independent trust fund and is not subject to direction by any state agency. Administrative expenses are paid entirely out of investment earnings.

**Administration** – The administration of PSRS is vested in a seven-member Board of Trustees, composed of three elected PSRS members, one elected Public Education Employee Retirement System (PEERS) member, and three appointed trustees. The four elected trustees are selected by vote of the members and retirees of both Systems. Two are elected each even-numbered calendar year to serve four-year terms. The three appointed trustees, one of whom must be a PSRS or a PEERS retiree, are named by the Governor to serve four-year terms. The appointed trustees must be residents of school districts included in the Retirement System but not employees of such districts nor state employees nor a state elected official. The Board appoints an executive director who is responsible for employment of the retirement office staff, routine operation of the System, and advisement of the Board on all matters pertaining to the System.

**Member Participation** – PSRS membership is automatic, regardless of position, for certificated, full-time employees of public school districts in Missouri (except the St. Louis city and the Kansas City school districts), public two-year colleges in Missouri, PSRS, and certain statewide non-profit educational associations that have elected to join. Certificated, part-time employees whose services would qualify them for membership in the Public Education Employee Retirement System are contributing members of PSRS unless PEERS membership is elected.

Members working in covered employment are considered *active* members. Such members contribute 13.5% (14.0% effective July 1, 2010) of total compensation to PSRS. The contributions are deducted and remitted by the employer and are credited by PSRS to individual member accounts. Since July 1, 1989, member contributions have been tax-deferred for federal and state income tax purposes under IRS 414(h)(2). Contributions are not considered income for such purposes until they are paid as a lump-sum refund or monthly benefits.

Interest at a rate set each year by the Board of Trustees is credited to individual member accounts each June 30 on the previous June 30 balance. The rate credited on June 30, 2010 was 1%. Since PSRS is a defined benefit plan, benefits are based upon the member's final average salary and years of creditable service. The amount of interest credited to a member's account has no bearing on the monthly benefit amount payable at retirement.

In addition to credit earned for covered service, members may purchase credit in various categories including several types of leave, out-of-state school service, other public and private employment, active U.S. military duty, and service under the federal Uniformed Services Employment and Re-employment Rights Act of 1994 (USERRA).

Members who have contributions on deposit with PSRS but are not working in covered employment are considered *inactive* members.

**Employer Participation** – The employers served by PSRS withhold members' contributions from salary payments and match those contributions at a rate of 13.5% (14.0% effective July 1, 2010) of payroll. Employer contributions and investment earnings on those funds are placed by PSRS in a general reserve account to pay monthly benefits to retirees and to beneficiaries of deceased members. Employers are responsible for remitting contributions promptly and for furnishing contribution information and new membership records to PSRS. Employers also provide record data when members apply for benefits or for refunds upon termination of employment.

**Survivor Benefits** – The designated beneficiary of a member who dies before retirement is eligible for a lump-sum refund of the member's contributions and interest. If the beneficiary is an eligible dependent and the member dies while in covered employment with at least two years of credit for such service, or while eligible for disability retirement benefits, monthly survivor benefits based on a percentage of the member's salary for the last full year of covered service can be elected instead of the contribution refund. Monthly survivor benefits may also be payable to qualified dependents of an inactive member who has at least five years of credit.

In lieu of a lump-sum refund or monthly survivor benefits, survivors with an insurable interest and beneficiaries of disability retirees may elect to receive monthly benefits under the Option 2 retirement plan. Such benefits are payable when the member would have been eligible for early or normal service retirement.

## PSRS SUMMARY PLAN DESCRIPTION

**Refund of Contributions** – Member contributions and interest are fully refundable upon termination of service or death. All credit and benefit rights are forfeited upon voluntary withdrawal or automatic termination of membership.

A member may, upon returning to covered employment, reinstate the credit forfeited through termination of a previous membership by repaying the money refunded plus interest.

**Membership Termination** – Membership is terminated by death, retirement, refund of contributions, or absence from covered employment by a non-vested member for five consecutive school years.

**Disability Retirement Benefits** – Disability retirement benefits are payable to eligible members who, because of permanent disability, are unable to earn a livelihood in any occupation. In most instances, the disability retirement benefit is calculated at 50% of the member's salary for the last full year of creditable service.

**Service Retirement Benefits** – Service retirement benefits are payable to members who have terminated covered employment and have met certain eligibility requirements.

**Benefit Formula** – All service retirement benefits are based on a formula which multiplies final average salary by the applicable formula factor, by the years of credit and, in the case of early retirement, by an age-reduction factor. Final average salary is obtained by dividing the total salaries for the three highest consecutive years of service by 36; the applicable factor is determined by the type of retirement eligibility; total credit is the amount accumulated at retirement for covered service and purchased credit; and the age-reduction factor, where applicable, is determined by the age at retirement.

**Normal Retirement** – A member may retire with benefits calculated under the standard (2.5%) formula factor at age 60 with five years of credit, at any age with 30 years of credit, or when a combination of age and service credit equals 80 or more. Between 7/1/2001 and 7/1/2013, a member may retire with a 2.55% formula factor with 31 or more years of service.

**Early Retirement** – A member may retire with benefits calculated under the standard (2.5%) formula with an age-reduction factor applied, at age 55 with five years of credit or at any age with 25 years of credit, as long as they do not qualify for Rule of 80.

A special provision in effect until July 1, 2013 allows members under age 55 with 25.0 to 29.9 years of credit to retire with benefits calculated under a modified formula factor ranging from 2.2% to 2.4% but with no age-reduction factor applied.

**Payment Options** – A retiring member may elect to receive the maximum benefits payable under the Single Life option, or may elect to receive a reduced benefit under one of three Joint-and-Survivor options or under one of two Term-Certain options, to provide survivor benefit coverage in varying degrees after the retiree's death.

Certain benefit minimums apply to normal or early retirement with 15 or more years of credit. The minimums for 15 but fewer than 25 years of credit are reduced if a Joint-and-Survivor or a Term-Certain option is elected and/or if an age factor is applicable because of early retirement. The minimums for 25 or more years of credit are reduced only if a Joint-and-Survivor or a Term-Certain option is elected.

The Partial Lump Sum Option (PLSO) is available to qualified members. This option allows qualified members to elect to have their lifetime monthly benefits actuarially reduced in exchange for the right to also receive a one-time, lump-sum payment at retirement.

**Cost-of-Living Adjustments** – Cost-of-living adjustments (COLAs) are provided beginning the second January after retirement to service and disability retirees, and to Joint-and-Survivor and Term-Certain beneficiaries of deceased retirees. The annual COLA, not to exceed 5%, is based on the increase in the cost of living as measured by the Department of Labor Consumer Price Index for Urban Consumers for the previous fiscal year and is applied to the current benefit of each eligible recipient. Lifetime COLAs are limited to 80% of the original retirement benefit.

**Member Handbook** – A Member Handbook containing detailed information concerning the retirement program can be obtained from the retirement office upon request.

## PEERS SUMMARY PLAN DESCRIPTION

The Public Education Employee Retirement System of Missouri (PEERS) was established by an Act of the Missouri Legislature effective November 1, 1965, and is governed by Chapter 169 of the Revised Statutes of Missouri. Its purpose is to provide benefits to members and their dependents at retirement or in the event of death or disability prior to retirement.

PEERS is a defined benefit plan funded on an actuarial reserve basis, which guarantees availability of funds to pay benefits as prescribed by law. The System is established as an independent trust fund and is not subject to direction by any state agency. Administrative expenses are paid entirely out of investment earnings.

**Administration** – The statutes provide that the responsibility for the operation and administration of the retirement system is vested in the Public School Retirement System (PSRS) Board of Trustees sitting as the Board of Trustees for PEERS. The Board is comprised of three elected PSRS members, one elected Public Education Employee Retirement System (PEERS) member and three appointed trustees. The four elected trustees are selected by vote of the members and retirees of both Systems. Two are elected each even-numbered calendar year to serve four-year terms. The three appointed trustees, one of whom must be a PSRS or a PEERS retiree, are named by the Governor to serve four-year terms. The appointed trustees must be residents of school districts included in the Retirement System but not employees of such districts nor state employees nor a state elected official.

The Board appoints an executive director who is responsible for employment of the retirement office staff and routine operation of the system, and who acts as advisor to the Board on all matters pertaining to the System.

**Member Participation** – PEERS membership is automatic, regardless of position, for all persons not covered by the Public School Retirement System who are employed for 20 or more hours a week on a regular basis in a position that normally requires at least 600 hours during the school term by the public school districts in Missouri (except the St. Louis city and the Kansas City school districts), public two-year colleges in Missouri, and by the Retirement System.

Members working in covered employment are considered *active* members. Such members contribute 6.5% (6.63% effective July 1, 2010) of their total compensation to PEERS. These amounts are deducted by the employing district and then forwarded to PEERS by the payroll officer and applied to the member's account in PEERS.

PEERS membership can be elected by employees with Missouri teaching certificates who work in any position for 17 or more hours weekly but less than full time; however, PSRS membership is automatic if a PEERS election is not made. The election to join PEERS must be filed with the Board of Trustees within 90 days after entering first time, part-time employment.

Since July 1, 1989, member contributions have been tax-deferred for federal and state income tax purposes under IRC 414(h)(2). Contributions are not considered as income for federal or state income tax purposes until they are paid in a lump-sum refund or in monthly benefits.

Individual accounts are maintained for all PEERS members. Interest is credited each June 30 on the previous June 30 balance. The interest rate, set annually by the Board of Trustees, was 1% on June 30, 2010. Since PEERS is a defined benefit plan, benefits are based upon the member's final average salary and years of creditable service. The amount of interest credited to a member's account has no bearing on the monthly benefit amount payable at retirement.

In addition to credit earned for covered service, members may purchase credit in various categories including several types of leave, out-of-state school service, other public and private employment, active U.S. military duty, and service under the federal Uniformed Services Employment and Re-employment Rights Act of 1994 (USERRA).

Members who have contributions on deposit with PEERS but are not currently working in covered employment are considered *inactive* members.

**Employer Participation** – The employers served by PEERS withhold members' contributions from salary payments and match employee contributions at a current rate of 6.5% (6.63% effective July 1, 2010) of payroll. Employer contributions and investment earnings on those funds are placed in a general reserve account to pay monthly benefits to retirees and to beneficiaries of deceased members. It is the responsibility of the employers to remit contributions to the Retirement System promptly and to supply PEERS with new membership records and members' contribution information. Employers also provide needed data when members apply for benefits or refund of contributions upon termination of employment.

**Survivor Benefits** – When a member dies before retirement, the designated beneficiary becomes eligible for a lump-sum refund of the employee's contributions and interest. In lieu of the lump-sum refund, beneficiaries with an insurable interest and beneficiaries of disability retirees may elect to receive monthly benefits under the Option 2 retirement plan. Benefits are payable to the beneficiary under the Option 2 plan when the member would have been eligible for early or normal retirement.

## PEERS SUMMARY PLAN DESCRIPTION

**Refund of Contributions** – Member contributions plus interest are fully refundable upon termination of service or death. All credit and benefit rights are forfeited upon voluntary withdrawal or automatic membership termination. Voluntary withdrawal is available to members who cease covered employment. Automatic termination occurs when a non-vested member is absent from covered employment for five consecutive years. Only the money the member has contributed and accrued interest are refundable.

A member may, upon returning to covered employment, reinstate the credit forfeited through termination of a previous membership by repaying the money withdrawn plus interest.

**Membership Termination** – Membership in the System is terminated by death, retirement, refund of contributions, or absence from covered employment by a non-vested member for five consecutive school years.

**Disability Retirement Benefits** – Disability retirement benefits are payable to members who have met service and eligibility requirements and who, because of permanent disability, are unable to earn a livelihood in any occupation. The disability retirement benefit is calculated at 90% of the normal service retirement benefit.

**Service Retirement Benefits** – Service retirement benefits are payable to members who have terminated employment and who have met age and service requirements.

**Benefit Formula** – All service retirement benefits are based on a formula which multiplies final average salary by the applicable formula factor, by the years of credit and, in the case of early retirement, by an age-reduction factor. Final average salary is obtained by dividing the total salaries for the three highest consecutive years of service by 36; the applicable factor is determined by the type of retirement eligibility; total credit is the amount accumulated at retirement for covered service and purchased credit; and the age-reduction factor, where applicable, is determined by the age at retirement.

Because of the conversion of the System from a formula integrated with Social Security to the present basis, a special “frozen benefit” is in effect for certain members for service prior to July 1, 1973.

**Normal Retirement** – A member may retire with benefits calculated under the standard (1.61%) formula at age 60 with five years of credit, at any age with at least 30 years of credit, and at the point where the member’s age plus creditable service equals or exceeds 80 (Rule of 80). A member may retire under the standard (1.61%) formula when the member qualifies for Rule of 80 or 30-and-Out and will receive an additional .8% multiplier until he/she reaches minimum eligibility age for Social Security benefits (currently age 62).

**Early Retirement** – A member may retire with benefits calculated under the standard (1.61%) formula with an age-reduction factor applied at age 55 with five but fewer than 25 years of credit, or at any age with 25 years of credit, as long as they do not qualify for Rule of 80.

A special provision in effect until July 1, 2013 allows members under age 55 with 25.0 to 29.9 years of credit to retire with benefits calculated under a modified formula factor ranging from 1.51% to 1.59% but with no age-reduction factor applied.

**Payment Options** – A retiring member may elect to receive the maximum benefits payable under the Single Life option, or may elect to receive a reduced benefit under one of three Joint-and-Survivor options or under one of two Term-Certain options, to provide survivor benefit coverage in varying degrees after the retiree’s death.

Another option, the Accelerated Payment Plan (APP), allows members to receive a higher PEERS benefit prior to minimum Social Security eligibility age (currently age 62). When the minimum Social Security eligibility age is attained, the member’s PEERS benefit is reduced and remains at a reduced level for the remainder of their retirement.

The Partial Lump Sum Option (PLSO) is available to qualified members. This option allows qualified members to elect to have their lifetime monthly benefits actuarially reduced in exchange for the right to also receive a one-time, lump-sum payment at retirement.

**Cost-of-Living Adjustments** – Cost-of-living adjustments (COLAs) are provided starting the fourth January after retirement to service and disability retirees, and to Joint-and-Survivor and Term-Certain beneficiaries of deceased retirees. The annual COLA, not to exceed 5%, is based on the increase in the cost of living as measured by the Department of Labor Consumer Price Index for Urban Consumers for the previous fiscal year and is applied to the current benefit of each eligible recipient. Lifetime COLAs are limited to 80% of the original retirement benefit.

**Member Handbook** – A Member Handbook containing detailed information concerning the retirement program can be obtained from the retirement office upon request.