



Commonwealth of Pennsylvania State Employees' Retirement System

Supplement to the 2006 Actuarial Report—
To Reflect Act 2007-8

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2006 Actuarial Report](#)

COMMONWEALTH OF PENNSYLVANIA

STATE EMPLOYEES' RETIREMENT SYSTEM

SUPPLEMENT TO THE 2006 ACTUARIAL REPORT -

TO REFLECT ACT 2007-8

**HAY GROUP
AUGUST 2007**

State Employees' Retirement System Supplement to the 2006 Actuarial Report

Introduction

On June 27, 2007, Governor Rendell signed into law House Bill 876 (Act 2007-8), extending the current 4 percent minimum employer contribution for the Pennsylvania State Employees' Retirement System (SERS) to apply to the fiscal year beginning July 1, 2007 and all future years. This occurred just a few weeks after the issuance of the Commonwealth of Pennsylvania State Employees' Retirement System (SERS) 2006 Actuarial Report, covering the results of Hay Group's December 31, 2006 actuarial valuation. Therefore, both the valuation and the report were based upon the prior law, under which the 4 percent rate floor was scheduled to expire on June 30, 2007.

Under Act 2007-8, the new composite minimum employer contribution rate of 4.00 percent of payroll became effective beginning July 1, 2007, superseding the 1.91 percent of payroll employer contribution rate previously determined in the December 31, 2006 actuarial valuation and communicated in the 2006 Actuarial Report. This change necessitated a redetermination of the employer contribution rates by group for the fiscal year beginning July 1, 2007, which had been previously provided on Page 2 of the 2006 Actuarial Report. Hay Group recalculated these rates and communicated the new rates to SERS in Edwin Husted's June 28, 2007 letter to Leonard Knepp. (A copy of the cover letter to this communication is included on the following page.)

Since the new law also required changes to several other schedules included in the 2006 Actuarial Report and both SERS and Hay Group wanted to communicate all such changes to readers of the report, it was agreed that supplemental information should be published. Thus, we have issued this Supplement to the 2006 Actuarial Report to provide replacement schedules for those included in the original report that were affected by Act 2007-8. Pages 1-6 of this Supplement supersede pages 1, 2, 12, 13, 14 and 26, respectively, of the 2006 Actuarial Report. It should be noted that none of the numbers on Schedule A (page 3 herein and page 12 previously) were affected by the law change; however, the schedule is included in this Supplement since it provides support for the Employer Normal Cost information shown on Schedule B (page 4 herein).

Hay Group, Inc.
Suite 600
4301 North Fairfax Drive
Arlington, VA 22203-1653
USA

tel +1.703.841.3100
fax +1.703.841.3108

www.haygroup.com

June 28, 2007

Mr. Leonard M. Knepp
Acting Executive Director
Pennsylvania State Employees' Retirement System
30 North Third Street, Suite 150
Harrisburg, PA 17101-1716

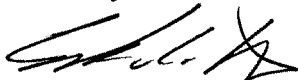
Dear Len:

We understand that yesterday Governor Rendell signed into law House Bill 876 (Act 2007-8), extending the current 4 percent minimum employer contribution for the Pennsylvania State Employees' Retirement System (SERS) to apply to the fiscal year beginning July 1, 2007 and thereafter. As a result, a composite minimum employer contribution rate of 4.00 percent of payroll will be effective beginning July 1, 2007, superseding the 1.91 percent of payroll employer contribution rate previously determined in our December 31, 2006 actuarial valuation.

Based upon the new law, we have now redetermined the employer contribution rates by group for the fiscal year beginning July 1, 2007. These new rates are included in the enclosed table, and they supersede the rates previously provided on Page 2 of our 2006 Actuarial Report.

We certify that the enclosed rates are accurate and appropriate for purposes of determining contributions to be made by the Commonwealth of Pennsylvania and other participating agencies to the Pennsylvania State Employees' Retirement System for the fiscal year beginning July 1, 2007.

Sincerely,



Edwin C. Husted, F.S.A.
Member American Academy of Actuaries
Enrolled Actuary No. 05-1499

**State Employees' Retirement System
Supplement to the 2006 Actuarial Report**

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Valuation Highlights, Reflecting Act 2007-8

	<u>December 31, 2006</u>	<u>December 31, 2005</u>
	<u>Valuation</u>	<u>Valuation</u>
Summary of Contributions as a Percent of Total Compensation		
SERS Plan Contribution		
Normal Cost	8.21%	8.39%
Amortization of Liabilities	-6.30%	-6.32%
Contribution Before Minimum Under Law	1.91%	2.07%
Total SERS Plan Contribution*	4.00%	4.00%
Benefits Completion Plan Contribution	0.04%	0.02%
Total Contribution	4.04%	4.02%

* Reflects the Minimum Under Law (12/31/06 - Act 2007-8; 12/31/05 - Act 2003-40)

Demographic Characteristics of the Population

Active Participants:

Number	110,972		109,981
Average age	46.3		46.0
Average service	12.7		12.6
Average annualized compensation	\$ 46,118	\$	44,815
Total annualized compensation	\$ 5,117,807,000	\$	4,928,799,000
Funding payroll	\$ 5,661,675,000	\$	5,138,377,000

Annuitants and Beneficiaries:

Number	102,060		101,179
Average age	68.4		68.3
Total annual pension	\$ 1,658,130,235	\$	1,603,630,204

Inactive and Vested Participants:

Number	5,843		5,461
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Assets

Market Value Assets	\$ 32,049,112,929	\$	28,749,012,029
Actuarial Value of Assets	\$ 28,148,833,847	\$	26,793,781,828

Funded Status (Market Assets)	105.5%	99.6%
Funded Status (Actuarial Assets)	92.7%	92.9%

**State Employees' Retirement System
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**Employer Contribution Rate by Group
Fiscal Year 2007 - 2008,
Reflecting Act 2007-8**

	<u>SERS Plan</u>	<u>Benefits Completion Plan</u>	<u>Total</u>
Class AA Members:			
Age 60 Retirement	3.24%	0.04%	3.28%
Age 50 Retirement	5.07%	0.04%	5.11%
Park Rangers	4.83%	0.04%	4.87%
Capitol Police	4.83%	0.04%	4.87%
Enforcement Officers	5.07%	0.04%	5.11%
Class A Members:			
Age 60 Retirement	2.59%	0.04%	2.63%
Age 50 Retirement	4.06%	0.04%	4.10%
Park Rangers	4.00%	0.04%	4.04%
Capitol Police	4.00%	0.04%	4.04%
State Police	11.15%	0.04%	11.19%
Enforcement Officers	4.06%	0.04%	4.10%
Class C Members:			
State Police	11.15%	0.04%	11.19%
Enforcement Officers	4.06%	0.04%	4.10%
Class D Members:			
D-3 Legislators	15.21%	0.04%	15.25%
D-4 Legislators	0.00%	0.04%	0.04%
Class E Members	4.11%	0.04%	4.15%

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Unfunded Liability and Normal Cost as of December 31, 2006

I.	Present Value of Benefits:		
	A) Active and Inactive Participants		
	1) Superannuation and Withdrawal	\$	20,849,750,161
	2) Disability		1,271,202,525
	3) Death		884,768,305
	4) Refunds		48,162,832
	5) Special Police and Enforcement Officer Benefits		2,684,335
	6) Subtotal	\$	23,056,568,158
	B) Annuitants and Beneficiaries		14,474,525,244
	C) Total	\$	37,531,093,402
II.	Present Value of Member and Employer Contributions:		
	A) Employer Portion of Normal Cost	\$	4,223,450,068
	B) Member Contributions		2,942,646,773
	C) Total	\$	7,166,096,841
III.	Actuarial Accrued Liability: (I) - (II)	\$	30,364,996,561
IV.	Actuarial Value of Assets	\$	28,148,833,847
V.	Unfunded Liability (III) - (IV)	\$	2,216,162,714
VI.	Employer Normal Cost Rate		
	A) Normal Cost Rate for new active members to fund:		
	1) Superannuation and Withdrawal		12.32%
	2) Disability		1.20%
	3) Death		0.55%
	4) Refunds		<u>0.39%</u>
	5) Total		14.46%
	B) Member Deductions		6.25%
	C) Employer Normal Cost (A) - (B)		8.21%

**State Employees' Retirement System
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Employer Contribution Rate in Fiscal Year 2007-2008

	Funding Period		Outstanding Balance as of 12/31/06	Annual Payment Amount	Payment as a Percent of Payroll *
	Initial Years From July 1	Initial Amount of Liability			
I. Amortization of Liability (Asset) For:					
A) Supplemental Annuities as of 12/31/01	10	\$ 1,143,657,729	\$ 686,855,212	\$ 174,303,527	3.08%
B) Act 2001-9 Benefits	30	2,735,791,064	2,277,342,953	222,524,490	3.93%
C) Other Benefits as of 12/31/01	10	(7,726,186,132)	(4,640,174,341)	(1,177,538,922)	-20.80%
D) Supplemental Annuities (2002 COLA)	10	256,500,000	178,010,153	39,092,863	0.69%
E) Changes in 2002	30	1,119,058,089	1,013,643,397	97,898,155	1.73%
F) Supplemental Annuities (2003 COLA)	10	395,800,000	308,762,493	60,323,412	1.07%
G) Changes in 2003	30	341,601,015	332,629,195	31,786,301	0.56%
H) Changes in 2004	30	1,942,541,016	1,909,933,055	180,755,296	3.19%
I) Changes in 2005	30	494,664,846	490,682,322	46,029,036	0.81%
J) Changes in 2006	30	(341,521,725)	(341,521,725)	(31,778,923)	-0.56%
Total			\$ 2,216,162,714	\$ (356,604,765)	-6.30%
II. Employer Normal Cost					
III. Total Employer Cost before Act 2007-8 minimum = (I) + (II)					
IV. Total Employer Cost (III), but not less than 4.00 percent as required by Act 2007-8					

* The payment is expressed as a percentage of the total projected payroll for active members in fiscal year 2007-2008 of \$5,661,675,000. Percentages may not add due to rounding.

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**Employer Contribution Rate by Group, Showing Development of Rates
(excluding Benefits Completion Plan Rate)**

Employer Group (1)	Basic Contribution Rate (2)	Age 50 Retirement Adjustment (3)	Multiplier Adjustment* (4)	Past Liability Adjustment (5)	Adjusted Contribution Rate** (6)	Projected 2007-2008 Payroll (7)	Employer Contribution Amount (8)
Class AA - Age 60 Retirement	3.24%		1.0000		3.24%	\$ 4,293,981,000	\$ 139,124,984
Class A - Age 60 Retirement	3.24%		0.8000		2.59%	37,954,000	983,009
Class AA - Age 50 Retirement (Including Enforcement Officers)	3.24%	1.83%	1.0000		5.07%	802,954,000	40,709,768
Class A - Age 50 Retirement (Including Class A & Class C Enforcement Officers)	3.24%	1.83%	0.8000		4.06%	14,711,000	597,267
Class AA - Park Rangers & Capitol Police	3.24%	0.92%	1.0000	0.67%	4.83%	13,921,000	672,384
Class A - Park Rangers & Capitol Police	3.24%	0.92%	0.8000	0.67%	4.00%	94,000	3,760
State Police (Class A & Class C)	3.24%	1.83%	1.1395	5.37%	11.15%	354,041,000	39,475,572
Class D3	3.24%	1.83%	3.0000		15.21%	309,000	46,999
Class D4	3.24%	1.83%	1.2000	-6.08%	0.00%	18,962,000	-
Class E	3.24%		1.2677		4.11%	124,748,000	5,127,143

Total*** \$ 5,661,675,000 \$ 226,740,885

* The multiplier adjustment at column 4 is the adjustment for the employer group contribution rate. Because the majority of SERS members are covered under Class AA(60), the 2.5 percent accrual rate for that Class is used to determine the basic contribution rate. Column (4) is the ratio of the class contribution rate to 2.5 percent.

** The adjusted contribution rate is [(2) + (3)] times (4) + (5).

*** The total employer contribution (\$226,740,885) is approximately equal to the average employer contribution rate from Schedule B (4.00 percent) times the total projected payroll of \$5,661,675,000. The Basic Contribution Rate of 3.24 percent was determined as the percentage needed to produce employer contribution amounts by employer group that sum to \$226,740,885.

**State Employees' Retirement System
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**Projection of Expected Contributions and Benefits
Actual Data Through 2006, Reflecting Act 2007-8
(Dollars in Millions)**

Calendar Year	Contributions		Contributions as a Percent of Pay		Benefits and Expenses
	Employee	Employer	Employee	Employer	
1991	\$ 183	\$ 381			\$ 664
1992	187	319			851
1993	190	304			781
1994	193	343			812
1995	202	385			894
1996	210	374			943
1997	213	324			1,037
1998	222	311			1,080
1999	224	270			1,248
2000	232	168			1,198
2001	240	77			1,266
2002	304	51			1,450
2003	308	68			1,656
2004	302	106			1,880
2005	306	147			1,966
2006	317	196			1,943
2007	335	216	6.2%	4.0%	2,198
2008	353	228	6.2%	4.0%	2,439
2009	361	233	6.2%	4.0%	2,639
2010	373	241	6.2%	4.0%	2,848
2011	386	249	6.2%	4.0%	3,145
2012	398	605	6.2%	9.4%	3,468
2013	412	942	6.2%	14.2%	3,712
2014	425	891	6.2%	13.0%	3,964
2015	439	876	6.2%	12.4%	4,341
2016	454	1,029	6.2%	14.1%	4,757
2017	469	1,188	6.2%	15.7%	5,032

The projection is based upon the following assumptions: a projected investment return of 8.5 percent in 2007 and after; general pay increases of 3.3 percent adjusted for negotiated increases; and supplemental annuity increases in 2007, 2011 and 2015. The employer contribution is projected to peak at around 9.1 percent of payroll assuming no future supplemental annuity increases.