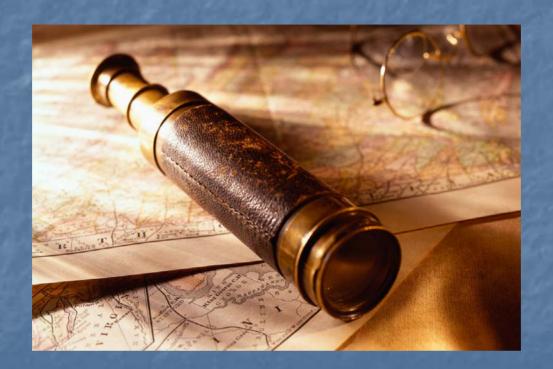
An Update on PSERS

Rate Spike/Plateau Presentation



PSERS' Overview



PSERS' Overview

- The Public School Employees' Retirement System (PSERS) is a governmental, (non ERISA), mandatory, multi-employer, defined benefit pension plan for Pennsylvania school employees
- PSERS was established on July 18, 1917 and thus is one of the oldest public pension plans in the United States
 - PSERS principal plan document"is the Public School Employes' Retirement Code, 24 Pa.C.S. §8101 et. seq.
- PSERS is governed by a 15 person Board of Trustees, and has a complement of 310 employees
- PSERS serves over 547,000 members

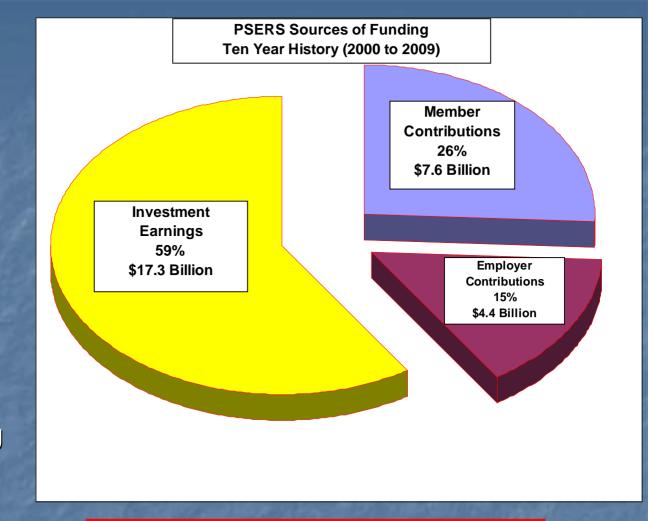
PSERS manages assets of approximately \$46.7 billion as of December 31, 2009

PSERS is the 16th largest statesponsored defined benefit pension fund in the nation according to Pensions and Investments Magazine



PSERS' Overview

- PSERS is funded by three sources:
 - Employee Contributions,
 - Employer Contributions, and
 - Investment Earnings
- Investment
 earnings have
 been the primary
 source of funding
 for PSERS
 benefits,
 dwarfing the
 contributions
 from both school
 employers and
 PSERS active
 members



Over the last 25 years, 20% of PSERS' funding has come from school employers. Another 15% has come from PSERS' active members. All the rest – 65% – has come from investment earnings

PSERS Overview

- PSERS is a large economic engine in the Commonwealth
- PSERS paid out approximately \$4.9 billion in benefits in FY 2009
 - Since nearly 90% of PSERS' retirees reside in the Commonwealth, a substantial portion of PSERS' estimated \$4.9 billion annual payroll remains in Pennsylvania, thus benefiting the economy of the Commonwealth
- In addition PSERS has a continuing commitment to Pennsylvania companies by contracting with Pennsylvania-based investment advisor companies and by investing in Pennsylvaniabased companies

PSERS Overview

The following is a table of Pennsylvania-based investments and other statistics at December 31, 2009 (\$'s in millions):

Asset Class	Marka (PS	al PA et Value SERS' rtion)	Mau	Total PA rket Value (Total rvested)	# of People Employed	Payroll		
U.S. Equities	\$	113.1	\$	113.1	*		*	
Fixed Income		47.3		47.3	*		*	
Private Real Estate		218.4		2,578.6	1,357	\$	32.2	
Private Markets:								
Venture Capital		145.3		1,380.5	5,556	\$	285.6	
Private Equity		1,898.2		12,813.5	28,579	\$	1,110.9	
Private Debt		265.3		3,646.1	14,295	\$	705.7	
Total	\$	2,687.6	\$	20,579.1	49,787	\$	2,134.4	

^{*} Statistics for publicly traded companies not included due to the difficulty in obtaining the information.

PSERS' Net Plan Assets as of:

June 30, 2002 \$43.6 Billion (audited)

March 31, 2003 \$38.3 Billion (unaudited)

June 30, 2003 \$42.5 Billion (audited)

June 30, 2004 \$48.5 Billion (audited)

June 30, 2005 \$52.1 Billion (audited)

June 30, 2006 \$57.0 Billion (audited)

June 30, 2007 \$67.5 Billion (audited)

June 30, 2008 \$62.7 Billion (audited)

September 30, 2008 \$54.7 Billion (unaudited)

December 31, 2008 \$45.4 billion (unaudited)

June 30, 2009 \$43.2 billion (audited)

December 31, 2009 \$46.7 billion (unaudited)

S & P 500 Bear Markets/Bull Markets This Decade

BEAR MARKET	<u>PEAK</u>	<u>TROUGH</u>	% CHANGE
03/24/2000> 10/09/2002	1,527.50	776.76	- 49.15%
BULL MARKET	TROUGH	<u>PEAK</u>	% CHANGE
10/09/2002 10/09/2007	776.76	1,565.15	+ 101.49%
BEAR MARKET	<u>PEAK</u>	TROUGH	% CHANGE
10/09/2007 3/09/2009	1,565.15	676.53	- 56.78%
BULL MARKET	<u>TROUGH</u>	<u>PEAK</u>	% CHANGE
3/09/2009 12/28/2009	676.53	1,127.78	+ 66.70%
TOTAL PERIOD	<u>BEGINNING</u>	<u>ENDING</u>	% CHANGE
12/31/1999> 12/31/2009	1,469.25	1,115.10	- 24.10%

PSERS' Investment Rates of Return as of:

- FY 1999/2000 11.9%
- FY 2000/2001 (7.4)%
- FY 2001/2002 (5.3)%
- FY 2002/2003 2.7%
- FY 2003/2004 19.67%
- FY 2004/2005 12.87%
- FY 2005/2006 15.26%
- FY2006/2007 22.93%
- FY 2007/2008 (2.82)%
- FY 2008/2009 (26.54)%

Below PSERS' annual actuarial earnings assumption therefore resulting in an actuarial loss

Over the past 25
years the Fund
earned an
annualized rate of
return of 9.23%
which is above the
Fund's actuarial
rate of return for
the same period

Current Employer Contribution Rate



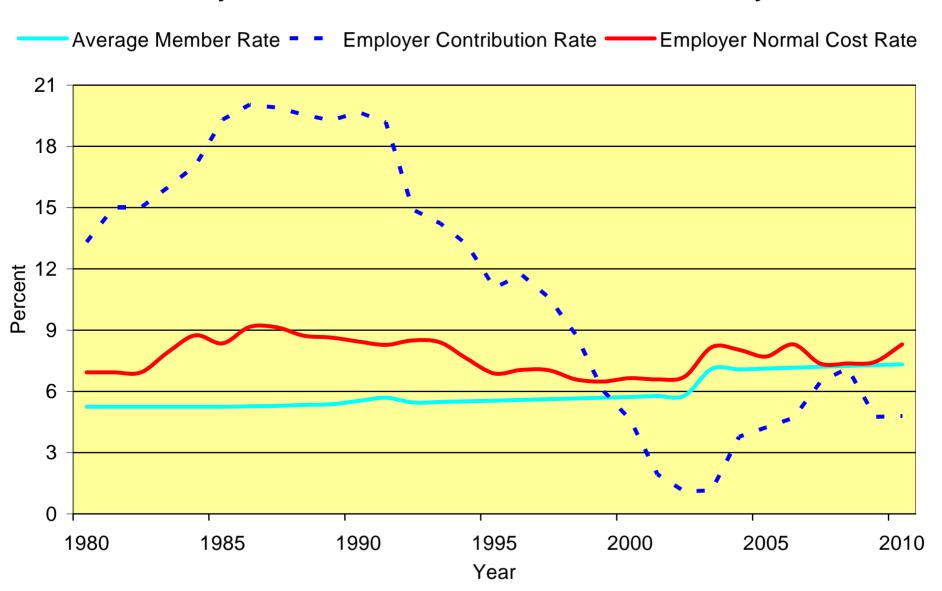
Employer Contribution Rate

- Employer contribution rate for the current fiscal year 2009/2010 - ends June 30, 2010
 - The FY 2009/2010 rate is 4.78%
 - The 4.78% rate is composed of a 0.78% rate for health insurance premium assistance and a pension rate of 4.00%
 - School payroll for FY 2009-2010 is estimated to be \$12.9 billion
- Employer contribution rate for the next fiscal year 2010/2011 - begins on July 1, 2010
 - On December 11, 2009, PSERS Board certified the employer contribution rate for FY 2010-2011
 - The rate for FY 2010-2011 is 8.22% (0.64% for health insurance premium assistance and 7.58% for the pension rate)
 - School payroll for FY 2010-2011 is estimated to be \$13.5 billion
- The Commonwealth reimburses school employers for not less than 50% of the employer contribution rate
 - Statewide average is 55/45% split with the Commonwealth paying 55%

Employer Contribution Rate

- The pension component of the employer contribution rate has been below the employer normal cost for 13 years
 - The "employer normal cost" is the amount needed from the school employers to fund the benefits earned by the active members for that year
 - It can be thought of as the minimum payment that would be made by school employers if the System's actual experience perfectly matched its economic and demographic operating assumptions
- PSERS' funded status is 79.2% as of June 30, 2009, down from 86.0% as of June 30, 2008

History of PSERS' Contribution Rates as a Percent of Payroll



History of the Employer Contribution Rate from the Peak
Rate in 1986

SCHOOL	TOTAL EMPLOYER	AVG. EMPLOYEE					
YEAR	CONTRIBUTION	CONTRIBUTION					
ENDED	RATE	RATE					
1986	20.040%	5.27%					
1987	19.900%	5.29%					
1988	19.540%	5.34%					
1989	19.270%	5.37%					
1990	19.680%	5.53%					
1991	19.180%	5.69%					
1992	14.900%	5.46%					
1993	14.240%	5.48%					
1994	13.170%	5.51%					
1995	11.060%	5.55%					
1996	11.720%	5.59%					
1997	10.600%	5.62%					
1998	8.760%	5.65%					
1999	6.040%	5.69%					
2000	4.610%	5.72%					
2001	1.940%	5.77%					
2002	1.090%	6.43%					
2003	1.150%	7.10%					
2004	3.770%	7.08%					
2005	4.230%	7.12%					
2006	4.690%	7.16%					
2007	6.460%	7.21%					
2008	7.130%	7.25%					
2009	4.760%	7.29%					
2010	4.780%	7.32%					
2011	8.22%	7.34%					

Projected Employer Contribution Rate Spike

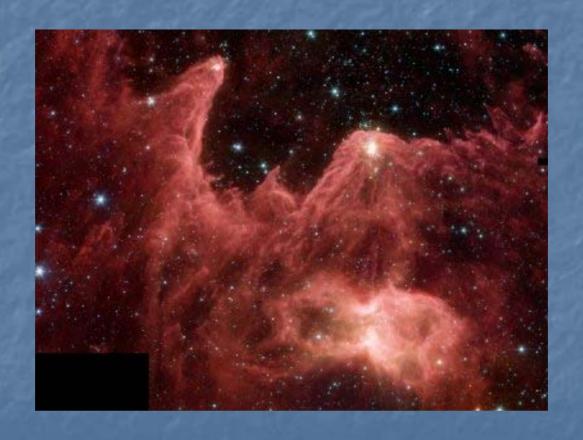


Public School Employees' Retirement System of Pennsylvania Projection of Contribution Rates and Funded Ratios As of June 30, 2009

(The Board at its January 2009 meeting adopted to reduce the interest rate from 8.50% to 8.25% for the June 30, 2008 valuation and to 8.00% thereafter.)

Fiscal Year Ending June	Appropriation Payroll (thousands)	Fiscal Year Market Rate of Return	Pension Rate Floor	Employee Contribution Rate	Employer Normal Cost	Unfunded Liability Rate	Preliminary Employer Pension Rate	Health Care Contribution	Total Employer Contribution Rate	Projected Total Employer Contribution (thousands)	Funded Ratio	Unfunded Accrued Liability (\$ Millions)
2008	\$ 12,881,244	(2.82) %	4,00 %	7.25 %	6,68 %	(0.24) %	6.44 %	0.69 %	7.13 %		86,0 %	
2009	12,500,000	(26,54)	4,00	7.29	6,68	(3,37)	3,31	0.76	4.76		79.2	15,739,2
2010	12,899,000	8.00	4,00	7.32	7,35	(3,72)	3,63	0.78	4,78	\$ 616,572	73.4	20,898,6
2011	13,510,000	8.00	4,00	7.34	8.08	(0,50)	7.58	0.64	8,22	1,110,522	66.8	27,049.9
2012	13,920,859	8.00	4,00	7.37	8.02	1.85	9.87	0.72	10.59	1,474,219	58.3	35,213.4
2013	14,345,321	8,00	4.00	7.38	8.00	20,50	28,50	0.72	29.22	4,191,703	54,2	40,138.3
2014	14,797,664	8,00	4,00	7.40	7.96	23,42	31,38	0.71	32,09	4,748,570	55,1	40,732,8
2015	15,280,148	8.00	4,00	7.42	7.93	24.97	32,90	0.70	33,60	5,134,130	56,7	40,743.0
2016	15,794,512	8.00	4.00	7.43	7.91	24,68	32.59	0.68	33.27	5,254,834	58.5	40,443.9
2017	16,341,270	8.00	4.00	7.44	7.89	24,18	32,07	0.67	32,74	5,350,132	60.5	39,884.5
2018	16,926,735	8,00	4.00	7.45	7.87	23,54	31,41	0.65	32,06	5,426,711	62,6	39,149.0
2019	17,557,664	8.00	4.00	7.46	7.85	22,78	30,63	0.64	31,27	5,490,282	64.7	38,312,8
2020	18,232,076	8.00	4.00	7.46	7.84	21.97	29.81	0.61	30,42	5,546,198	66.8	37,388,2
2021	18,948,040	8.00	4.00	7.47	7.82	21,15	28.97	0.59	29.56	5,601,041	68.9	36,378.2
2022	19,703,172	8.00	4.00	7.47	7.81	20,35	28,16	0.59	28,75	5,664,662	71.0	35,282,2
2023	20,493,701	8,00	4.00	7.48	7.79	19.57	27,36	0.59	27.95	5,727,989	73.0	34,096.3
2024	21,321,539	8.00	4,00	7.48	7.78	18,81	26,59	0.59	27.18	5,795,194	75.0	32,814,5
2025	22,185,011	8,00	4,00	7.48	7.77	18,08	25,85	0.59	26.44	5,865,717	77.0	31,429.6
2026	23,081,835	8.00	4.00	7.48	7.77	17.38	25.15	0.59	25.74	5,941,264	79.0	29,933.6
2027	24,006,797	8.00	4.00	7.49	7.75	16,71	24,46	0.59	25,05	6,013,703	80.9	28,317.8
2028	24,958,599	8.00	4.00	7.49	7.74	16,07	23,81	0.59	24,40	6,089,898	82.8	26,572.8
2029	25,937,456	8.00	4.00	7.49	7.73	15.46	23.19	0.59	23.78	6,167,927	84.6	24,688.1
2030	26,943,962	8,00	4,00	7.49	7.72	14,88	22,60	0.59	23.19	6,248,305	86.5	22,652,6
2031	27,978,093	8.00	4.00	7.49	7.71	14,33	22.04	0.59	22.63	6,331,442	88.2	20,454.2
2032	29,041,527	8.00	4.00	7.49	7.70	13.81	21,51	0.59	22,10	6,418,177	90.0	18,080.0
2033	30,136,493	8,00	4.00	7.49	7.69	11,18	18,87	0.59	19.46	5,864,562	91.4	16,158,1
2034	31,268,441	8.00	4.00	7.49	7.68	9.89	17.57	0.59	18.16	5,678,349	92.7	14,357.1
2035	32,446,271	8,00	4.00	7.50	7.66	8,57	16,23	0.59	16,82	5,457,463	93.8	12,724.7
2036	33,675,824	8.00	4.00	7.50	7.64	7.42	15.06	0.59	15.65	5,270,266	94.7	11,242,6
2037	34,956,565	8.00	4.00	7.50	7.63	6,11	13.74	0.59	14,33	5,009,276	95.5	10,006,0
2038	36,292,078	8,00	4.00	7.50	7.62	5,67	13,29	0.59	13,88	5,037,340	96,2	8,748.9
2039	37,690,635	8,00	4.00	7.50	7.60	6,45	14,05	0.59	14,64	5,517,909	97.1	7,017.7

Genesis of Rate Spike



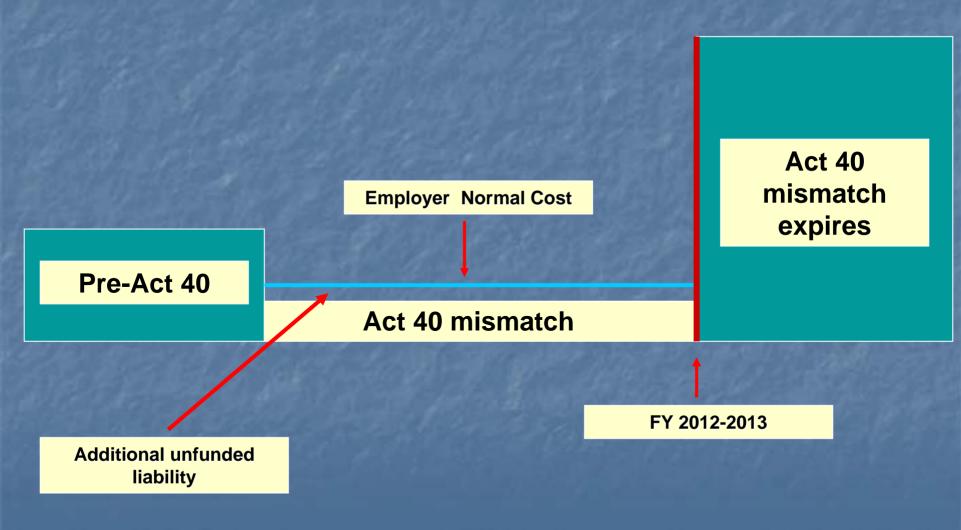
Employer Contribution Rate Spike

- The projected sharp rise in PSERS' employer contribution rate from 10.59% in FY 2011-2012 to an estimated 29.22% in FY 2012/2013 is primarily the result of:
 - The unfunded liabilities primarily created by
 - The FYs' 2001-2003, 2008-2009 down investment markets
 - Earnings assumption change
 - Cost of deferring contributions
 - Act 2001-9 multiplier increase
 - The Act 2002-38 phased COLA
 - The actuarial funding changes made by Acts 2002-38 and 2003-40

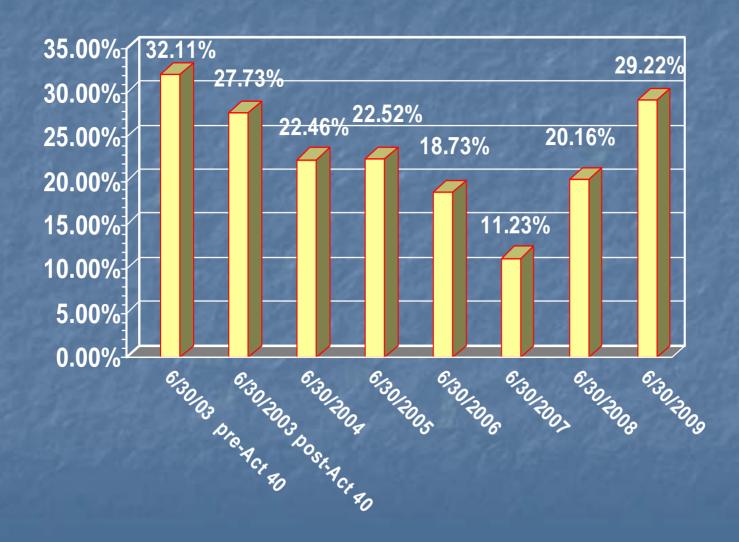
Employer Contribution Rate Spike

- Without going into details about the funding changes of Act 38 and Act 40, each had the effect of pushing off liability to the future to provide fiscal relief to both the Commonwealth and School Employers during recessionary times
 - Of the two, Act 40 had the greatest impact as it created a mismatch of the amortization of PSERS' actuarial gains and losses for 10 years ending with the start of FY 2012-2013
 - This technique lowered the employer contribution rate below the employer normal cost notwithstanding the existence of unfunded liability
 - This artificial suppression has also resulted in additional unfunded liability for PSERS

Employer Contribution Rate Spike



History of PSERS' Employer Contribution Rate Spike in FY 2012-2013



Options to resolve the rate spike



- Fundamentally, there are only three ways to address the funding issues at the Pension Fund
 - Increase the funding of the System
 - Decrease/cut the costs/liabilities of the System
 - Defer the liabilities of the System

Increase Funding to the System:

- Increased employer contributions
 - Employer rate are already projected to increase significantly in FY 2012-2013 and are expected to continue well into the future beyond FY 2012-2013
 - Unlikely the Commonwealth and School Employers can afford these increased costs without significant and perhaps prohibitive tax increases at the State and/or Local levels
- Increased employee contributions
 - Can only occur prospectively for new employees due to constitutional impairment of contract issues, therefore not a significant impact on current unfunded liabilities
- Significant increased investment returns
 - Unlikely, under current market conditions

- Seek another source of funding:
 - Use of Federal stimulus funds
 - Unclear if these funds can legally be directly used to fund pension contributions
 - Obtain a formal Federal bailout of public pension funds
 - Little or no discussion of this option is occurring
 - Use the proceeds of a pension obligation bond (POB)
 - POB's are debt instruments issued by a governmental entity to fund all or a portion of the Unfunded Actuarially Accrued Liabilities for pension and/or Other Post Employment Benefits
 - Significant risk involved to the Plan Sponsor/Bond issuer if the pension plan's investment returns are less than the debt costs
 - Potential legal issue whether the Commonwealth can issue a POB
 - May require the approval of the voters via a referendum

- Decrease/cut the costs or liabilities of the System to potentially solve funding issues
 - Convert PSERS to a Defined Contribution or Hybrid plan
 - A Hybrid plan typically is a combination of both DC and DB components
 - Proposed by PSBA
 - Maintain the existing Defined Benefit plan with benefit modifications/cuts, e.g.:
 - Reduce multiplier/repeal Act 2001-9
 - Change terms of retirement
 - Return to a 10-year vesting period
 - Prohibit the withdrawal of a member's contribution

- Each of these would have limited impact on current funding issues because it could only be done prospectively for new employees
 - Any such changes would have to be prospective only, (meaning impacting new hires after the effective date of the change), to avoid the PA Constitution's prohibition against the impairment of a contract (Article I, Section 17)
 - The courts have ruled that PSERS' pension benefits are contracts with the existing members of the System, regardless of vesting, and thus subject to the constitutional impairment of contract prohibition
 - See e.g. Pennsylvania Federation of Teachers v. School District of Philadelphia, 484 A.2d 751 (Pa. 1984) and American Federation of State, County and Municipal Employees, AFL-CIO, v. Commonwealth, 479 A.2d 962 (Pa. 1984)
 - Each, however, would reduce the long term liability of the System and thus reduce the rate plateau

- Defer liabilities at the System into the future to marginally postpone the impact of funding issues at the System
 - Further adjust the actuarial funding methods at the System
 - No single or combination of changes resolves the rate spike
 - The Governor's original funding proposal
 - Uses legislatively prescribed employer contribution rate collars and floors that are tied to the funding status of the System
 - A copy of the proposal is available at the following link:
 - http://www.budget.state.pa.us/portal/server.pt/co mmunity/financial_reports/4574

- Governor's latest funding proposal
 - Fresh start accrued liability over thirty years
 - 1% rate cap for FY 2010-2011
 - Will require the PSERB to re-certify the employer contribution rate established in December 2009
 - 3% rate cap for FY 2011-2012 and thereafter
 - For more information on the Governor's proposal see pages 20-21 in the Governor's 2010-2011 Budget in brief available at the following link:
 - http://www.governor.state.pa.us/portal/server.pt/g ateway/PTARGS_0_2_24980_2985_368304_43/http %3B/pubcontent.state.pa.us/publishedcontent/publi sh/cop_general_government_operations/pagov/med ia/latest_news/budget_in_brief_2010_11_final.pdf

PSERS														
Employer	Contribution	projection	ns using salar	y projectio	ns from Jun	ie 30, 2009 actu	ıarial valı	uation						
Governor	's Proposal vs	Current L	_aw Actuarial	Projection	ns									
2/12/2010	•			•										
Α	В	С	D=B*C	E	F=B*E	G=D-F	Н	I=H*F	J	K=J*I	L=I*.2875	M=K+L	N	O=N-M

		****	****		Governor's	Total Employer							Current Law	Commonwealth
		Current	Current	Governor's	Proposal	Contributions		Governor's				Governor's	June 30, 2009	Share
		Law	Law	Proposal	Projected	Difference		Proposal				Proposal	Actuarial	Difference
		Projected	Total	Projected		between Current	Est.	State		Governor's	Governor's	Projected	Projections	between Current
		Employer	Employer	Employer	Employer	Law and	State	Share before		Proposal	Proposal	Commonwealth	Commonwealth	_
Fiscal	Approp Payroll	Contribution	Contributions	Contribution	Contributions	Governor's	Share	Quarter Lag	**	3 qtrs of current			Share	Governor's
Year	Projected (\$)	Rate	\$	Rate	\$	Proposal (\$)		\$		fiscal year (\$)	Fiscal year (\$)	\$	\$	Proposal (\$)
		. ==												
2008-2009	12,500,000,000	4.76%	595,000,000	4.76%	595,000,000		54.00%	321,300,000	0.7125	228,926,250	142,586,676	371,512,926	371,512,926	1
2009-2010	12,899,000,000	4.78%	616,572,200	4.78%	616,572,200		54.88%	338,374,823	0.7125	241,092,062	92,373,750	333,465,812		-
2010-2011	13,510,000,000	8.22%	1,110,522,000	5.64%	761,964,000	348,558,000	55.21%	420,680,324	0.7125	299,734,731	97,282,762	397,017,493	534,130,189	
2011-2012	13,921,000,000	10.59%	1,474,233,900	8.72%	1,213,911,200	260,322,700	55.54%	674,206,280	0.7125	480,371,975	120,945,593	601,317,568	759,659,293	
2012-2013	14,345,000,000	29.22%	4,191,609,000	11.72%	1,681,234,000	2,510,375,000	55.87%	939,305,436	0.7125	669,255,123	193,834,306	863,089,429	1,903,971,497	1,040,882,068
2013-2014	14,798,000,000	32.09%	4,748,678,200		2,176,785,800	2,571,892,400	56.20%	1,223,353,620	0.7125	871,639,454	270,050,313	1,141,689,767	2,574,771,903	
2014-2015	15,280,000,000	33.60%	5,134,080,000		2,704,560,000	2,429,520,000	56.53%	1,528,887,768	0.7125	1,089,332,535	351,714,166	1,441,046,700	2,835,153,170	1,394,106,469
2015-2016	15,795,000,000	33.27%	5,254,996,500		3,266,406,000	1,988,590,500	56.86%	1,857,278,452	0.7125	1,323,310,897	439,555,233	1,762,866,130	2,963,353,529	1,200,487,399
2016-2017	16,341,000,000	32.74%	5,350,043,400		3,867,914,700	1,482,128,700	57.19%	2,212,060,417	0.7125	1,576,093,047	533,967,555	2,110,060,602	3,039,076,412	1
2017-2018	16,927,000,000	32.06%	5,426,796,200		4,511,045,500	915,750,700	57.52%	2,594,753,372	0.7125	1,848,761,777	635,967,370	2,484,729,147	3,103,724,710	618,995,563
2018-2019	17,558,000,000	31.27%	5,490,386,600		5,204,191,200	286,195,400	57.85%	3,010,624,609	0.7125	2,145,070,034	745,991,594	2,891,061,628	3,160,463,699	
2019-2020	18,232,000,000	30.42%	5,546,174,400	32.61%	5,945,455,200	(399,280,800)	58.18%	3,459,065,835	0.7125	2,464,584,408	865,554,575	3,330,138,983	3,212,223,776	(117,915,207)
				_										
		l	Cummulative Diffe	rence Gov. vs	s. Current	12,394,052,600					Cummulative D	ifference Gov. vs. I	Current	7,063,510,732
* - For Comr	nonwealth budgeta	iry pyrposes	there is a one qua	ı arter lag in the	e collection of en	nployer contribution	is							
						h qtr of the fiscal ye								
	r's 2009-2010 Bud						valanov							
	es annual investm													
7 100011	AA MINIMAN IIITAANIII	2.16 TWIC OF TO	VI W/V											

Market Returns and Pension Rate Floors Set by User and are the same for both Current and Alternative Funding

Market Returns Scenario 1

- *Alternative Funding assumptions:
 - Fresh-start accrued liability payments over 30 years.
 - If applicable, the FYE 2011 rate is limited to the FYE 2010 pension rate + 1% and all succeeding years are limited to the prior FYE's pension rate + 3%.

				Сште	nt Law	Alternative	Funding*			Total Emp	loyer Rate	Funded Ratio	
Fiscal Year Ending June	Appropriation Payroll (thousands)	Fiscal Year Market Rate of Return	Employee Contribution Rate	Employer Normal Cost	Unfunded Liability Rate	Employer Normal Cost	Unfunded Liability Rate	Pension Rate Floor	Health Care Contribution	Current Law	Alternative Funding*	Current Law	Alternative Funding*
2008 2009 2010	\$ 12,881,244 12,500,000 12,899,000	(2.82) % (26.54) 8.00	7.25 % 7.29 7.32	6.68 % 6.68 7.35	(0.24) % (3.37) (3.72)	6.68 % 6.68 7.35	(0.24) % (3.37) (3.72)	4.00 % 4.00 4.00	0.69 % 0.76 0.78	7.13 % 4.76 4.78	7.13 % 4.76 4.78	86.0 % 79.2 73.4	86.0 % 79.2 73.4
2011	13,510,000	8.00	7.34	8.08	(0.50)	8.08	11.51	4.00	0.64	8.22	5.64	66.8	66.3
					` '								
2012	13,920,859	8.00	7.37	8.02	1.85	8.02	13.51	4.00	0.72	10.59	8.72	58.3	57.4
2013	14,345,321	8.00	7.38	8.00	20.50	8.00	17.43	4.00	0.72	29.22	11.72	54.2	50.3
2014 2015	14,797,664 15,280,148	8.00 8.00	7.40 7.42	7.96 7.93	23.42 24.97	7.96 7.93	22.22 26.04	4.00 4.00	0.71 0.70	32.09 33.60	14.71 17.70	55.1 56.7	48.1 46.7
2015	15,794,512	8.00	7.42	7.93	24.97	7.93 7.91	27.22	4.00	0.70	33.00	20.68	58.5	46.7
2010	15,754,512	8.00	7.43	7.51	24.00	7.51	27.22	4.00	0.08	33.27	20.08	56.5	40.0
2017	16,341,270	8.00	7.44	7.89	24.18	7.89	28.23	4.00	0.67	32.74	23.67	60.5	45.9
2018	16,926,735	8.00	7.45	7.87	23.54	7.87	28.85	4.00	0.65	32.06	26.65	62.6	46.5
2019	17,557,664	8.00	7.46	7.85	22.78	7.85	29.12	4.00	0.64	31.27	29.64	64.7	47.6
2020	18,232,076	8.00	7.46	7.84	21.97	7.84	29.07	4.00	0.61	30.42	32.61	66.8	49.4
2021	18,948,040	8.00	7.47	7.82	21.15	7.82	28.72	4.00	0.59	29.56	35.59	68.9	51.7
2022	19,703,172	8.00	7.47	7.81	20.35	7.81	28.08	4.00	0.59	28.75	36.48	71.0	54.4
2023	20,493,701	8.00	7.48	7.79	19.57	7.79	27.14	4.00	0.59	27.95	35.52	73.0	57.0
2024	21,321,539	8.00	7.48	7.78	18.81	7.78	26.09	4.00	0.59	27.18	34.46	75.0	59.6
2025	22,185,011	8.00	7.48	7.77	18.08	7.77	25.08	4.00	0.59	26.44	33.44	77.0	62.2
2026	23,081,835	8.00	7.48	7.77	17.38	7.77	24.10	4.00	0.59	25.74	32.46	79.0	64.6
2027	24,006,797	8.00	7.49	7.75	16.71	7.75	23.17	4.00	0.59	25.05	31.51	80.9	67.1
2028	24,958,599	8.00	7.49	7.74	16.07	7.74	22.29	4.00	0.59	24.40	30.62	82.8	69.4
2029	25,937,456	8.00	7.49	7.73	15.46	7.73	21.45	4.00	0.59	23.78	29.77	84.6	71.8
2030	26,943,962	8.00	7.49	7.72	14.88	7.72	20.65	4.00	0.59	23.19	28.96	86.5	74.0
2031	27,978,093	8.00	7.49	7.71	14.33	7.71	19.88	4.00	0.59	22.63	28.18	88.2	76.2
0020	00.041.507		7.40	220	12.01	7.70	10.16	4.00	0.50	00.10	07.45	20.0	70.4
2032	29,041,527	8.00	7.49	7.70	13.81	7.70	19.16	4.00	0.59	22.10	27.45	90.0	78.4
2033 2034	30,136,493	8.00	7.49 7.49	7.69 7.68	11.18	7.69 7.68	18.46	4.00	0.59 0.59	19.46	26.74	91.4	80.5 82.6
2034	31,268,441 32,446,271	8.00 8.00	7.49 7.50	7.68	9.89 8.57	7.68 7.66	17.79 17.15	4.00 4.00	0.59 0.59	18.16 16.82	26.06 25.40	92.7 93.8	82.6 84.6
2035	32,446,271	8.00	7.50 7.50	7.64	8.57 7.42	7.64	16.52	4.00	0.59	15.65	25.40 24.75	93.8 94.7	84.6 86.6
2030	33,013,624	0.00	7.50	7.04	1.44	7.04	10.52	4.00	0.59	L CO.CI	24.73	34.7	80.0
2037	34,956,565	8.00	7.50	7.63	6.11	7.63	15.91	4.00	0.59	14.33	24.13	95.5	88.6
2038	36,292,078	8.00	7.50	7.62	5.67	7.62	15.33	4.00	0.59	13.88	23.54	96.2	90.6
2039	37,690,635	8.00	7.50	7.60	6.45	7.60	14.76	4.00	0.59	14.64	22.95	97.1	92.5

Public School Employees' Retirement System of Pennsylvania

Projection of Contribution Rates and Funded Ratios As of June 30, 2009

Market Returns and Pension Rate Floors Set by User Contributions Determined under Current Law

Market Returns Scenario 1

Fiscal Year Ending June	Appropriation Payroll (thousands)	Fiscal Year Market Rate of Return	Pension Rate Floor	Employee Contribution Rate	Employer Normal Cost	Unfunded Liability Rate	Preliminary Employer Pension Rate	Health Care Contribution	Total Employer Contribution Rate	Projected Total Employer Contribution (thousands)	Funded Ratio	Unfunded Accrued Liability (\$ Millions)	GASB Compliant?
2008	\$ 12,881,244	(2.82) %	4.00 %	7.25 %	6.68 %	(0.24) %	6.44 %	0.69 %	7.13 %		86.0 %	\$ 9,923.0	
2009	12,500,000	(26.54)	4.00	7.29	6.68	(3.37)	3.31	0.76	4.76		79.2	15,739.2	
2010	12,899,000	8.00	4.00	7.32	7.35	(3.72)	3.63	0.78	4.78	\$ 616,572	73.4	20,898.6	
2011	13,510,000	8.00	4.00	7.34	8.08	(0.50)	7.58	0.64	8.22	1,110,522	66.8	27,049.9	
2012	13,920,859	8.00	4.00	7.37	8.02	1.85	9.87	0.72	10.59	1,474,219	58.3	35,213.4	
2013	14,345,321	8.00	4.00	7.38	8.00	20.50	28.50	0.72	29.22	4,191,703	54.2	40,138.3	yes
2013	14,797,664	8.00	4.00	7.40	7.96	23.42	31.38	0.72	32.09	4,748,570	55.1	40,732.8	yes
2015	15,280,148	8.00	4.00	7.42	7.93	24.97	32.90	0.70	33.60	5,134,130	56.7	40,743.0	yes
													,
2016	15,794,512	8.00	4.00	7.43	7.91	24.68	32.59	0.68	33.27	5,254,834	58.5	40,443.9	yes
2017	16,341,270	8.00	4.00	7.44	7.89	24.18	32.07	0.67	32.74	5,350,132	60.5	39,884.5	yes
2018	16,926,735	8.00	4.00	7.45	7.87	23.54	31.41	0.65	32.06	5,426,711	62.6	39,149.0	yes
2019	17,557,664	8.00	4.00	7.46	7.85	22.78	30.63	0.64	31.27	5,490,282	64.7	38,312.8	yes
2020	18,232,076	8.00	4.00	7.46	7.84	21.97	29.81	0.61	30.42	5,546,198	66.8	37,388.2	yes
2021	18,948,040	8.00	4.00	7.47	7.82	21.15	28.97	0.59	29.56	5,601,041	68.9	36,378.2	yes
2022	19,703,172	8.00	4.00	7.47	7.81	20.35	28.16	0.59	28.75	5,664,662	71.0	35,282.2	yes
2023	20,493,701	8.00	4.00	7.48	7.79	19.57	27.36	0.59	27.95	5,727,989	73.0	34,096.3	yes
2024	21,321,539	8.00	4.00	7.48	7.78	18.81	26.59	0.59	27.18	5,795,194	75.0	32,814.5	yes
2025	22,185,011	8.00	4.00	7.48	7.77	18.08	25.85	0.59	26.44	5,865,717	77.0	31,429.6	yes
2026	23,081,835	8.00	4.00	7.48	7.77	17.38	25.15	0.59	25.74	5,941,264	79.0	29,933.6	yes
2027	24,006,797	8.00	4.00	7.49	7.75	16.71	24.46	0.59	25.05	6,013,703	80.9	28,317.8	yes
2028	24,958,599	8.00	4.00	7.49	7.74	16.07	23.81	0.59	24.40	6,089,898	82.8	26,572.8	yes
2029	25,937,456	8.00	4.00	7.49	7.73	15.46	23.19	0.59	23.78	6,167,927	84.6	24,688.1	yes
2030	26,943,962	8.00	4.00	7.49	7.72	14.88	22.60	0.59	23.19	6,248,305	86.5	22,652.6	yes
2031	27,978,093	8.00	4.00	7.49	7.71	14.33	22.04	0.59	22.63	6,331,442	88.2	20,454.2	yes
2032	29,041,527	8.00	4.00	7.49	7.70	13.81	21.51	0.59	22.10	6,418,177	90.0	18,080.0	yes
2032	30,136,493	8.00	4.00	7.49	7.69	11.18	18.87	0.59	19.46	5,864,562	91.4	16,158.1	yes
2033	31,268,441	8.00	4.00	7.49	7.68	9.89	17.57	0.59	18.16	5,678,349	92.7	14,357.1	yes
2035	32,446,271	8.00	4.00	7.50	7.66	8.57	16.23	0.59	16.82	5,457,463	93.8	12,724.7	yes
												,	,
2036	33,675,824	8.00	4.00	7.50	7.64	7.42	15.06	0.59	15.65	5,270,266	94.7	11,242.6	yes
2037	34,956,565	8.00	4.00	7.50	7.63	6.11	13.74	0.59	14.33	5,009,276	95.5	10,006.0	yes
2038	36,292,078	8.00	4.00	7.50	7.62	5.67	13.29	0.59	13.88	5,037,340	96.2	8,748.9	yes
2039	37,690,635	8.00	4.00	7.50	7.60	6.45	14.05	0.59	14.64	5,517,909	97.1	7,017.7	yes

Public School Employees' Retirement System of Pennsylvania

Projection of Contribution Rates and Funded Ratios As of June 30, 2009

Market Returns and Pension Rate Floors Set by User

Market Returns Scenario 1

Alternative Funding assumptions:

37,690,635

8.00

4.00

7.50

2039

- Fresh-start accrued liability payments over 30 years.
- If applicable, the FVE 2011 rate is limited to the FVE 2010 pension rate + 1% and all succeeding years are limited to the prior FVE's pension rate + 3%.

0.59

22.95

8,650,001

92.5

22.36

18,279.4

yes

		- If :	applicable, th	ie FYE 2011 ra	ite is limited	to the FYE 20	IIO pension rate	+ 1% and all	succeeding year	rs are limited to	the prior FYE	s pension rate	e + 3%.
Fiscal Year Ending June	Appropriation Payroll (thousands)	Fiscal Year Market Rate of Return	Pension Rate Floor	Employee Contribution Rate	Employer Normal Cost	Unfunded Liability Rate	Preliminary Employer Pension Rate	Health Care Contribution	Total Employer Contribution Rate	Projected Total Employer Contribution (thous ands)	Funded Ratio	Unfunded Accrued Liability (\$ Millions)	GASB Compliant?
2008 2009	\$ 12,881,244 12,500,000	(2.82) % (26.54)	4.00 % 4.00	7.25 % 7.29	6.68 % 6.68	(0.24) % (3.37)	6.44 % 3.31	0.69 % 0.76	7.13 % 4.76		86.0 % 79.2	\$ 9,923.0 15,739.2	
2010	12,899,000	8.00	4.00	7.32	7.35	(3.72)	3.63	0.78	4.78	\$ 616,572	73.4	20,898.6	
2011	13,510,000	8.00	4.00	7 .34	8.08	11.51	19.59	0.64	5.64	761,964	66.3	27,477.1	
2012	13,920,859	8.00	4.00	7.37	8.02	13.51	21.53	0.72	8.72	1,213,899	57.4	36,010.9	
2013	14,345,321	8.00	4.00	7.38	8.00	17.43	25.43	0.72	11.72	1,681,272	50.3	43,592.9	
2014	14,797,664	8.00	4.00	7.40	7.96	22.22	30.18	0.71	14.71	2,176,736	48.1	47,130.6	
2015	15,280,148	8.00	4.00	7.42	7.93	26.04	33.97	0.70	17.70	2,704,586	46.7	50,185.9	
2016	15,794,512	8.00	4.00	7.43	7.91	27.22	35.13	0.68	20.68	3,266,305	46.0	52,725.0	
2017	16,341,270	8.00	4.00	7.44	7.89	28.23	36.12	0.67	23.67	3,867,979	45.9	54,716.7	
2018	16,926,735	8.00	4.00	7.45	7.87	28.85	36.72	0.65	26.65	4,510,975	46.5	56,155.4	
2019	17,557,664	8.00	4.00	7.46	7.85	29.12	36.97	0.64	29.64	5,204,092	47.6	57,021.6	yes
2020	18,232,076	8.00	4.00	7.46	7.84	29.07	36.91	0.61	32.61	5,945,480	49.4	57,230.2	yes
2021 2022 2023	18,948,040 19,703,172 20,493,701	8.00 8.00 8.00	4.00 4.00 4.00	7.47 7.47 7.48 7.48	7.82 7.81 7.79	28.72 28.08 27.14	36.54 35.89 34.93	0.59 0.59 0.59	35.59 36.48 35.52	6,743,607 7,187,717 7,279,363	51.7 54.4 57.0	56,676.9 55,681.4 54,574.9	yes yes
2024	21,321,539	8.00	4.00	7.48	7.78	26.09	33.87	0.59	34.46	7,347,402	59.6	53,378.8	yes
2025	22,185,011	8.00	4.00	7.48	7.77	25.08	32.85	0.59	33.44	7,418,668	62.2	52,086.5	yes
2026	23,081,835	8.00	4.00	7.48	7.77	24.10	31.87	0.59	32.46	7,492,364	64.6	50,690.5	yes
2027	24,006,797	8.00	4.00	7.49	7.75	23.17	30.92	0.59	31.51	7,564,542	67.1	49,182.8	yes
2028	24,958,599	8.00	4.00	7.49	7.74	22.29	30.03	0.59	30.62	7,642,323	69.4	47,554.4	yes
2029	25,937,456	8.00	4.00	7.49	7.73	21.45	29.18	0.59	29.77	7,721,581	71.8	45,795.6	yes
2030	26,943,962	8.00	4.00	7.49	7.72	20.65	28.37	0.59	28.96	7,802,971	74.0	43,896.2	yes
2031	27,978,093	8.00	4.00	7.49	7.71	19.88	27.59	0.59	28.18	7,884,227	76.2	41,844.8	yes
2032	29,041,527	8.00	4.00	7.49	7.70	19.16	26.86	0.59	27.45	7,971,899	78.4	39,629.3	yes
2033	30,136,493	8.00	4.00	7.49	7.69	18.46	26.15	0.59	26.74	8,058,498	80.5	37,236.6	yes
2034	31,268,441	8.00	4.00	7.49	7.68	17.79	25.47	0.59	26.06	8,148,556	82.6	34,652.5	yes
2035	32,446,271	8.00	4.00	7.50	7.66	17.15	24.81	0.59	25.40	8,241,353	84.6	31,861.6	yes
2036	33,675,824	8.00	4.00	7.50	7.64	16.52	24.16	0.59	24.75	8,334,766	86.6	28,847.4	yes
2037	34,956,565	8.00	4.00	7.50	7.63	15.91	23.54	0.59	24.13	8,435,019	88.6	25,592.1	yes
2038	36,292,078	8.00	4.00	7.50	7.62	15.33	22.95	0.59	23.54	8,543,155	90.6	22,076.4	yes

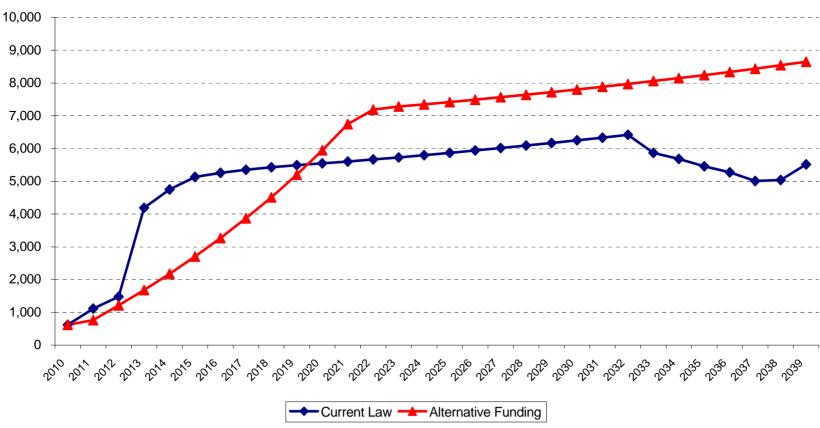
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Public School Employees' Retirement System of Pennsylvania Market Returns and Pension Rate Floors Set by User and are the same for both Current and Alternative Funding Market Returns Scenario 1

Alternative Funding Assumptions:

- Fresh-start accrued liability payments over 30 years.
- If applicable, the FYE 2011 rate is limited to the FYE 2010 pension rate + 1% and all succeeding years are limited to the prior FYE's pension rate + 3%.



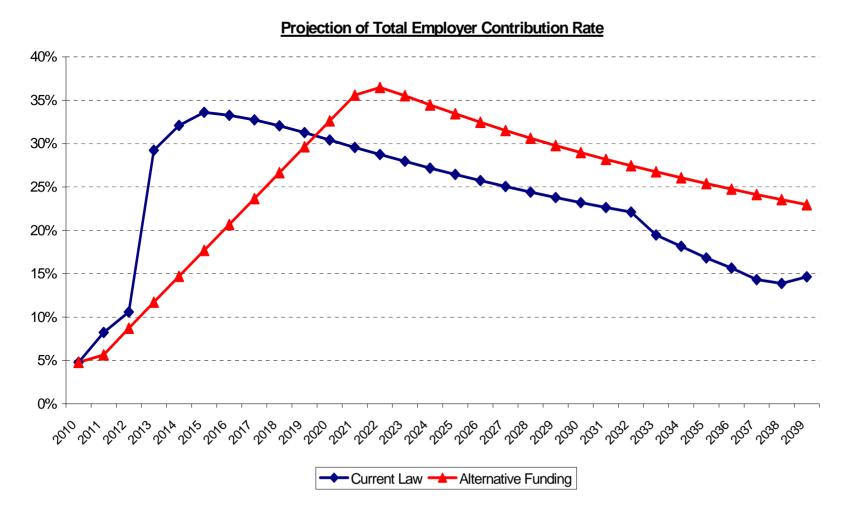


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Public School Employees' Retirement System of Pennsylvania Market Returns and Pension Rate Floors Set by User and are the same for both Current and Alternative Funding Market Returns Scenario 1

Alternative Funding Assumptions:

- Fresh-start accrued liability payments over 30 years.
- If applicable, the FYE 2011 rate is limited to the FYE 2010 pension rate + 1% and all succeeding years are limited to the prior FYE's pension rate + 3%.

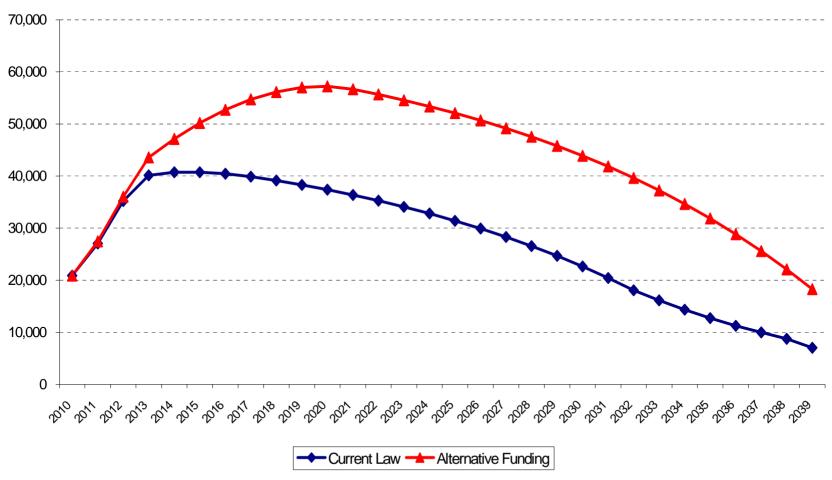


Public School Employees' Retirement System of Pennsylvania Market Returns and Pension Rate Floors Set by User and are the same for both Current and Alternative Funding Market Returns Scenario 1

Alternative Funding Assumptions:

- Fresh-start accrued liability payments over 30 years.
- If applicable, the FYE 2011 rate is limited to the FYE 2010 pension rate + 1% and all succeeding years are limited to the prior FYE's pension rate + 3%



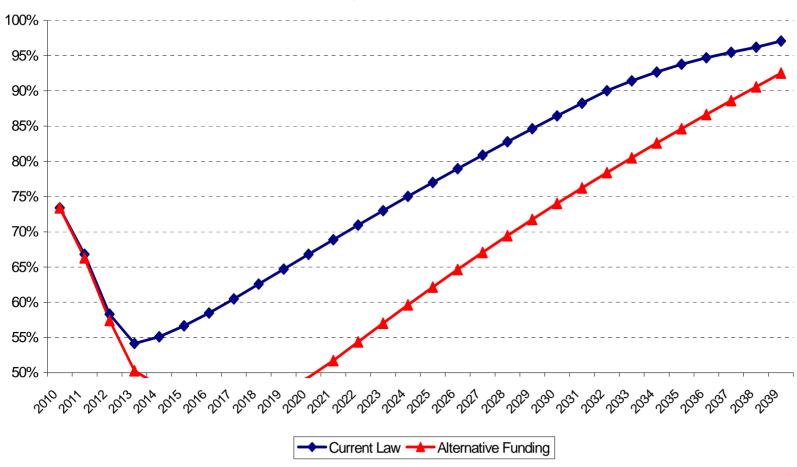


Public School Employees' Retirement System of Pennsylvania Market Returns and Pension Rate Floors Set by User and are the same for both Current and Alternative Funding Market Returns Scenario 1

Alternative Funding Assumptions:

- Fresh-start accrued liability payments over 30 years.
- If applicable, the FYE 2011 rate is limited to the FYE 2010 pension rate + 1% and all succeeding years are limited to the prior FYE's pension rate + 3%.

Projection of Funded Ratio



- Observations concerning the Governor's latest proposal:
 - Next year's rate of 8.22% would be reduced to 5.64%
 - The rate spike in FY 2012-2013 would be reduced from 29.22% to 11.72%
 - The proposal provides short term cash flow relief by significant additional deferral of liability and thus significant additional cost
 - The new and higher rate peak is projected to be 36.48% in FY 2021-2022 as opposed to 33.60% in FY 2014-2015
 - PSERS' funding level will be driven below 50% for seven years, presuming PSERS meets its 8% investment return assumption
 - The proposal will aggravate PSERS' current liquidity concerns
 - The proposal makes PSERS more vulnerable to a future downturn in the investment markets

Public School Employees' Retirement System of Pennsylvania

Projection of Contribution Rates and Funded Ratios As of June 30, 2009

Market Returns and Pension Rate Floors Set by User and are the same for both Current and Alternative Funding

Market Returns Scenario 1

- *Alternative Funding assumptions:
 - Fresh-start accrued liability payments over 30 years.
 - If applicable, the FYE 2011 rate is limited to the FYE 2010 pension rate + 1.00% and all succeeding years are limited to the prior FYE's pension rate + 3%.

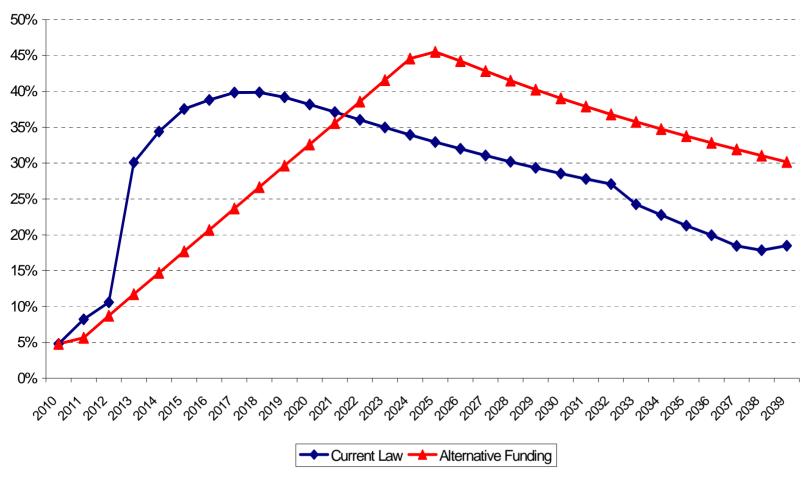
				Current Law		Alternative Funding*				Total Employer Rate		Funded Ratio	
Fiscal Year Ending June	Appropriation Payroll (thousands)	Fiscal Year Market Rate of Return	Employee Contribution Rate	Employer Normal Cost	Unfunded Liability Rate	Employer Normal Cost	Unfunded Liability Rate	Pension Rate Floor	Health Care Contribution	Current Law	Alternative Funding*	Current Law	Alternative Funding*
2008 2009 2010	\$ 12,881,244 12,500,000 12,899,000	(2.82) % (26.54) 8.00	7.25 % 7.29 7.32	6.68 % 6.68 7.35	(0.24) % (3.37) (3.72)	6.68 % 6.68 7.35	(0.24) % (3.37) (3.72)	4.00 % 4.00 4.00	0.69 % 0.76 0.78	7.13 % 4.76 4.78	7.13 % 4.76 4.78	86.0 % 79.2 73.4	86.0 % 79.2 73.4
2011	13,510,000	(7.40)	7.34	8.08	(0.50)	8.08	11.51	4.00	0.64	8.22	5.64	65.2	64.9
2012 2013	13,920,819 14,345,321	(5.30) 2.70	7.37 7.38	8.02 8.00	1.85 21.35	8.02 8.00	13.51 18.17	4.00 4.00	0.72 0.72	10.59 30.07	8.72 11.72	54.0 46.7	53.3 42.9
2014	14,797,664	8.00	7.40	7.96	25.72	7.96	24.33	4.00	0.71	34.39	14.71	44.5	37.3
2015 2016	15,280,148 15,794,512	8.00	7.42 7.43	7.93 7.91	28.92 30.22	7.93 7.91	29.81 32.77	4.00 4.00	0.70 0.68	37.55 38.81	17.70 20.68	43.2 43.6	32.3 29.3
2017	16,341,270	8.00	7.44	7.89	31.27	7.89	35.64	4.00	0.67	39.83	23.67	45.4	27.8
2018	16,926,735	8.00	7.45	7.87	31.34	7.87	37.47	4.00	0.65	39.86	26.65	47.9	27.4
2019	17,557,664	8.00	7.46	7.85	30.70	7.85	38.49	4.00	0.64	39.19	29.64	50.6	27.6
2020	18,232,076	8.00	7.46	7.84	29.73	7.84	39.03	4.00	0.61	38.18	32.61 35.59	53.3	28.4
2021	18,948,040	8.00	7.47	7.82	28.70	7.82	39.25	4.00	0.59	37.11	35.50	56.1	29.9
2022	19,703,172	8.00	7.47	7.81	27.64	7.81	39.16	4.00	0.59	36.04	38.59	58.8	32.1
2023	20,493,701	8.00	7.48	7.79	26.60	7.79	38.78	4.00	0.59	34.98	41.59	61.6	34.8
2024	21,321,539	8.00	7.48	7.78	25.57	7.78	38.11	4.00	0.59	33.94	44.59	64.2	38.3
2025	22,185,011	8.00	7.48	7.77	24.58	7.77	37.14	4.00	0.59	32.94	45.50	66.9	42.0
2026	23,081,835	8.00	7.48	7.77	23.63	7.77	35.87	4.00	0.59	31.99	44.23	69.5	45.7
2027 2028	24,006,797 24,958,599	8.00 8.00	7.49 7.49	7.75 7.74	22.72 21.85	7.75 7.74	34.49 33.18	4.00 4.00	0.59 0.59	31.06 30.18	42.83 41.51	72.0 74.5	49.3 52.8
2029	25,937,456	8.00	7.49	7.73	21.03	7.73	31.92	4.00	0.59	29.35	40.24	76.9	56.2
2030	26,943,962	8.00	7.49	7.72	20.24	7.72	30.73	4.00	0.59	28.55	39.04	79.3	59.5
2031	27,978,093	8.00	7.49	7.71	19.49	7.71	29.60	4.00	0.59	27.79	27.90	81.6	62.7
2032	29,041,527	8.00	7.49	7.70	18.78	7.70	28.51	4.00	0.59	27.07	36.80	83.9	65.8
2033	30,136,493	8.00	7.49	7.69	15.97	7.69	27.48	4.00	0.59	24.25	35.76	85.9	68.9
2034	31,268,441	8.00	7.49	7.68	14.51	7.68	26.48	4.00	0.59	22.78	34.75	87.6	71.9
2035 2036	32,446,271 33,675,824	8.00 8.00	7.50 7.50	7.66 7.64	13.02 11.71	7.66 7.64	25.52 24.59	4.00 4.00	0.59 0.59	21.27 19.94	33.77 32.82	89.2 90.6	74.9 77.8
2030	33,013,624	8.00	7.50	7.04	11.71	7.04	24.33	4.00	0.39	19.94	34.04	90.0	11.0
2037	34,956,565	8.00	7.50	7.63	10.24	7.63	23.69	4.00	0.59	18.46	31.91	91.9	80.6
2038	36,292,078	8.00	7.50	7.62	9.65	7.62	22.82	4.00	0.59	17.86	31.03	93.1	83.4
2039	37,690,635	8.00	7.50	7.60	10.28	7.60	21.97	4.00	0.59	18.47	30.16	94.4	86.2

Public School Employees' Retirement System of Pennsylvania Market Returns and Pension Rate Floors Set by User and are the same for both Current and Alternative Funding Market Returns Scenario 1

Alternative Funding Assumptions:

- Fresh-start accrued liability payments over 30 years.
- If applicable, the FYE 2011 rate is limited to the FYE 2010 pension rate + 1.00% and all succeeding years are limited to the prior FYE's pension rate + 3%.



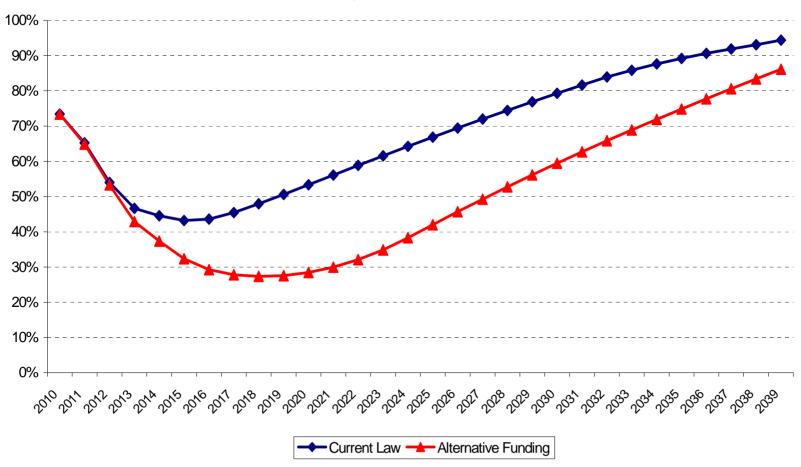


Public School Employees' Retirement System of Pennsylvania Market Returns and Pension Rate Floors Set by User and are the same for both Current and Alternative Funding Market Returns Scenario 1

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Projection of Funded Ratio



Projection Showing Alternative Funding Proposal

FOR EXAMPLE PURPOSES ONLY

with level percent of pay amortization beginning FY2011.

- Fresh-start asset smoothing over 10 years beginning FY2010.

Fiscal Year

Market Rate

of Return

(2.82)

(26.54)

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

8.00

22.93 %

Pension

Rate

Floor

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00 %

Employee

Contribution

Rate

7.21

7.25

7.29

7.32

7.34

7.36

7.38

7.40

7.41

7.43

7.44

7.45

7.46

7.46

7.47

7.47

7.48

7.48

7.48

7.48

7.49

7.49

7.49

7.49

7.49

7.49

7.49

7.49

7.50

7.50

7.50

7.50

%

Employer

Normal

Cost

6.68

6.68

7.35

8.97

8.91

8.75

8.55

8.36

8.17

7.98

7.80

7.66

7.56

7.48

7.42

7.39

7.36

7.33

7.30

7.26

7.22

7.17

7.11

7.05

6.97

6.88

6.79

6.69

6.59

6.49

6.39

6.62 %

- PUC funding method is used beginning FY2011.

Appropriation

Pavroll

(thousands)

11.821.951

12.881.244

12,402,702

12,899,000

13.297.917

13,703,700

14,132,543

14,586,335

15.066,759

15.573.718

16,142,656

16,775,322

17,455,288

18.162.732

18.892.698

19,647,596

20,410,266

21,193,946

22,003,426

22,834,366

23,685,324

24.555,722

25,449,735

26,363,516

27,298,062

28,257,334

29,244,417

30,273,768

31,352,280

32,474,039

33,646,269

34,868,123

Fiscal

Year

Ending

June

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

2023

2024

2025

2026

2027

2028

2029

2030

2031

2032

2033

2034

2035

2036

2037

2038

Public School Employees' Retirement System of Pennsylvania Projection of Contribution Rates and Funded Ratios As of June 30, 2008

Other Special Funding Provisions

Preliminary

Employer

Pension Rate

5.67 %

6.44

3.31

2.45

13.59

14.53

15.89

17.08

18.12

19.13

20.13

21.10

22.07

23.07

23.34

23.58

23.81

24.01

24.18

24.31

24.41

24.50

24.56

24.61

24.66

24.69

24.70

24.71

24.69

24.68

24.65

24.62

- Ten year vesting.

Unfunded

Liability

Rate

(0.95) %

(0.24)

(3.37)

(4.90)

4.62

5.62

7.14

8.53

9.76

10.96

12.15

13.30

14.41

15.51

15.86

16.16

16.42

16.65

16.85

17.01

17.15

17.28

17.39

17.50

17.61

17.72

17.82

17.92

18.00

18.09

18.16

18.23

Alternative Benefit Provisions for Members Enrolled after 6/30/10

- An 8.0% conversion rate is used to determine annuity equivalent of member contribution.

- The Total Employer Pension Contribution Rate is limited to the prior FY contribution plus:

Total

Employer

Contribution

Rate

6.46

7.13

4.76

4.78

8.22

11.71

16.20

17.81

18.84

19.83

20.82

21.76

22.72

23.70

23.97

24.21

24.44

24.64

24.81

24.94

25.04

25.13

25.19

25.24

25.29

25.32

25.33

25.34

25.32

25.31

25.28

25.25

%

\$

Projected Total

Employer

Contribution

(thousands)

590,369

616,572

1.093.089

1,604,703

2,289,472

2,597,826

2.838,577

3.088.268

3.360.901

3,650,310

3.965.841

4.304.567

4,528,580

4,756,683

4.988.269

5,222,188

5.459,050

5,694,891

5.930.805

6.170.853

6,410,788

6,654,151

6,903,680

7,154,757

7,407,611

7,671,373

7,938,397

8,219,179

8,505,777

8,804,201

Funded

Ratio

85.8

88.2

87.3

83.0

78.8

74.9

71.6

68.4

65.2

62.0

58.9

56.0

55.4

55.2

55.3

55.6

56.1

56.8

57.7

58.8

60.0

61.4

62.8

64.4

66.1

67.8

69.7

71.7

73.9

76.1

78.5

81.1

Unfunded

Accrued

Liability

(\$ Millions)

9,438.0

8,372,2

9,027.7

12,468.1

16,116.0

19,699.6

23,015.0

26,415.1

29,967.7

33,657.7

37,463.1

41,358.5

43,197.0

44,759.1

46.144.3

47,342.3

48,344.2

49,142.6

49.731.8

50,107.2

50,266.0

50,206.4

49,927.7

49,413.2

48,642.8

47,594.1

46,241.7

44,557.2

42,508.9

40,061.5

37,176.0

33,809.6

\$

GASB

Compliant?

ves

ves

ves

ves

ves

yes

yes

ves

yes

yes

ves

ves

yes

3.46% for FY2011, 3.50% for FY2012 and 4.50% for FY2013 and after.

Health

Care

Contribution

0.69

0.76

0.78

0.76

0.75

0.74

0.73

0.72

0.70

0.69

0.66

0.65

0.63

0.63

0.63

0.63

0.63

0.63

0.63

0.63

0.63

0.63

0.63

0.63

0.63

0.63

0.63

0.63

0.63

0.63

0.63

0.74 %

Public School Employees' Retirement System of Pennsylvania

Market Returns and Pension Rate Floors Set by User and are the same for both Current and Alternative Funding

Market Returns Scenario 1

Alternative Funding Assumptions:

- Fresh-start accrued liability payments over 30 years with level percent of pay amortization beginning FY2011.
- PUC funding method is used beginning FY2011.
- Fresh-start asset smoothing over 10 years beginning FY2010.

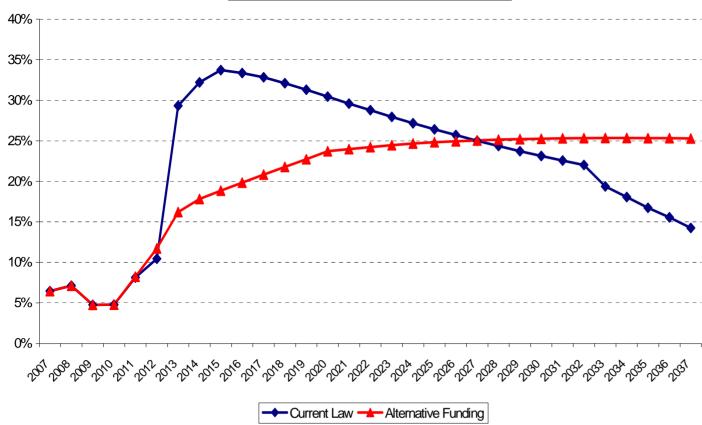
Alternative Benefit Provisions for Members Enrolled after 6/30/10

- Ten year vesting.
- An 8.0% conversion rate is used to determine annuity equivalent of member contribution.

Other Special Funding Provisions

- The Total Employer Pension Contribution Rate is limited to the prior FY contribution plus: 3.46% for FY2011. 3.50% for FY2012 and 4.50% for FY2013 and after.

Projection of Total Employer Contribution Rate



The Board at its January 2009 meeting adopted to reduce the interest rate from 8.50% to 8.25% for the June 30, 2008 valuation and to 8.00% thereafter.

This projection model was created at the request of, and sole use by, PSERS. Any unauthorized user should contact PSERS or Buck for proper interpretation of results.

Public School Employees' Retirement System of Pennsylvania

Market Returns and Pension Rate Floors Set by User and are the same for both Current and Alternative Funding

Market Returns Scenario 1

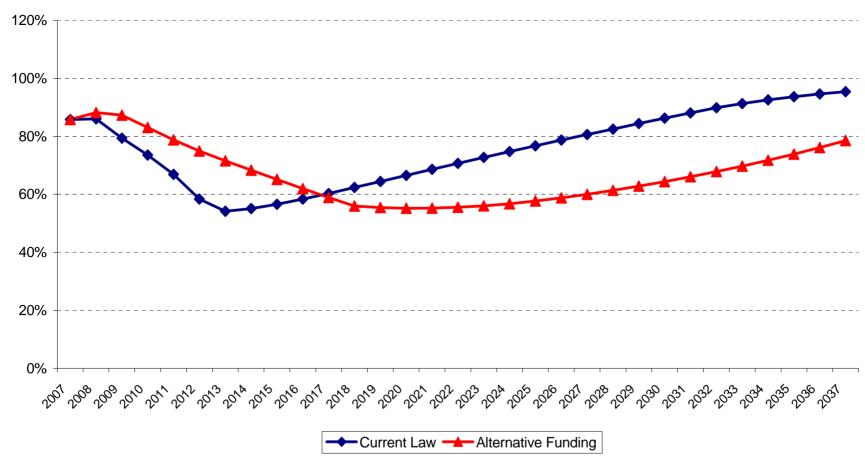
Alternative Funding Assumptions:

- Fresh-start accrued liability payments over 30 years with level percent of pay amortization beginning FY2011.
- PUC funding method is used beginning FY2011.
- Fresh-start asset smoothing over 10 years beginning FY2010.

Alternative Benefit Provisions for Members Enrolled after 6/30/10

- Ten year vesting.
- An 8.0% conversion rate is used to determine annuity equivalent of member contribution. Other Special Funding Provisions
- The Total Employer Pension Contribution Rate is limited to the prior FY contribution plus: 3.46% for FY2011, 3.50% for FY2012 and 4.50% for FY2013 and after.

Projection of Funded Ratio



Alternative Proposal:

Alternative Funding Assumptions:

- Fresh-start accrued liability payments over 30 years with level percent of pay amortization beginning FY2011
- PUC funding method is used beginning FY2011
- Asset smoothing over 10 years beginning FY2010

Alternative Benefit Provisions for Members Enrolled after 6/30/10

- -Ten year vesting.
- An 8.0% conversion rate is used to determine annuity equivalent of member contributions
 Other Special Funding Provisions
- -The Total Employer Pension Contribution Rate is limited to the prior FY contribution plus:
- 3.46% for FY2011, 3.50% for FY 2012 and 4.5% for FY2013 and after.

Governor's Proposal:

Alternative Funding Assumptions:

- -Fresh-start accrued liability payments over 30 years.
- -- If applicable, the FYE 2011 rate is limited to the FYE 2010 pension rate + 1% and all succeeding years are limited to the prior FYE's pension rate + 3%.

Projection of Total Employer Contribution Rate
As Percentage of Payroll



Alternative Proposal:

Alternative Funding Assumptions:

- Fresh-start accrued liability payments over 30 years with level percent of pay amortization beginning FY2011
- PUC funding method is used beginning FY2011
- Asset smoothing over 10 years beginning FY2010

<u>Alternative Benefit Provisions for Members Enrolled after</u> 6/30/10

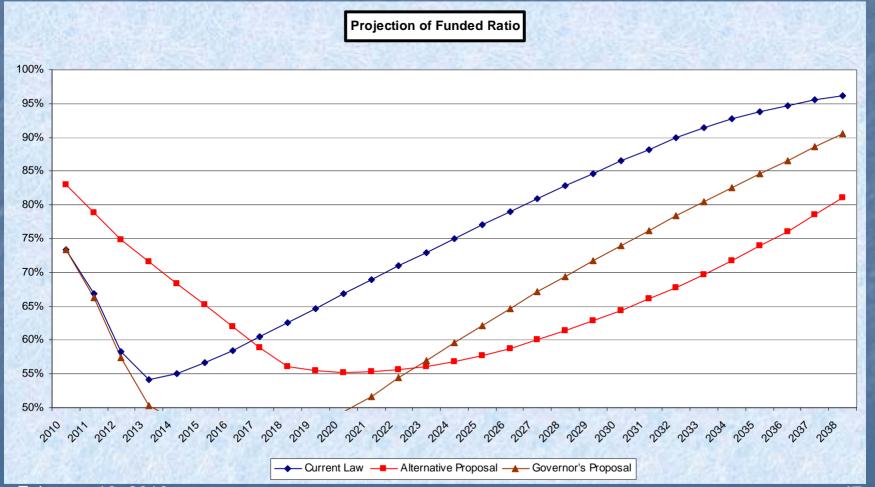
- -Ten year vesting.
- An 8.0% conversion rate is used to determine annuity equivalent of member contributions

 <u>Other Special Funding Provisions</u>
- -The Total Employer Pension Contribution Rate is limited to the prior FY contribution plus:
- 3.46% for FY2011, 3.50% for FY 2012 and 4.50% for FY2013 and after.

Governor's Proposal:

Alternative Funding Assumptions:

- -Fresh-start accrued liability payments over 30 years.
- -- If applicable, the FYE 2011 rate is limited to the FYE 2010 pension rate + 1% and all succeeding years are limited to the prior FYE's pension rate + 3%.



- Whatever solution is developed, however, should be governed by the following principles:
 - It must be actuarially reasonable
 - It should have an employer contribution rate that at a minimum, should be the employer normal cost plus some reasonable amount to amortize the System's unfunded liability
 - It should be able to withstand reasonable stress tests
 - It should reflect fiscally doable increases in the employer contribution rate to a reasonable plateau
 - To the extent possible, it should have budgetary predictability
 - It should incorporate provisions to avoid/mitigate a future funding crisis, e.g. a employer contribution rate floor set at the employer normal cost

- It should avoid undue risk, e.g. avoid excessive reliance on POB's
- It should set the policy with respect to future COLA's, i.e. either:
 - Are they to continue on an automatic or ad hoc basis, in which case they should be prefunded to reduce overall costs; or
 - Are they are to be discontinued for all or some portion of present and/or future retirees
- It should address the potential of future benefit enhancements, e.g., when and at what funding level will they be permissible, if at all

- It must provide an adequate pension benefit at a reasonable cost that will attract and retain employees, and reasonably sustain them when retired
- The proposed solution must be politically acceptable or reasonably "sellable" to the General Assembly, the Governor, the public, PSERS' constituent groups, the media, etc.
- The proposed solution must be legally correct/defensible, i.e. not subject to potentially successful litigation

- There is no silver bullet to resolve PSERS' funding issues
 - Solution will likely be a combination of several approaches and will only smooth out the rate plateau and lower the peak
- Under all options, however, there will be a need for significant additional funding to the System
- Increases in the employer contribution rate will occur before FY 2012-2013
 - The FY 2010-2011 rate will be 8.22% compared to 4.78% for FY 2009-2010
 - The FY 2011-2012 rate is projected to exceed the FY 2010-2011 rate

- Converting the System to a DC or Hybrid plan will not effect the current liabilities or resolve the immediate funding concerns
 - In fact it may aggravate the Commonwealth's and School Employer's cash flow problems as they will be supporting two pension plans
- Politically, some prospective benefit cuts are probably inevitable, even if only symbolic in nature with respect to resolving the rate spike
- Similarly, politically, benefit enhancements are not likely now or in the near future

- Finally, this issue posits the fundamental question/dilemma of what level of benefits and employer contribution rate are affordable for the Commonwealth and School Employers versus what is an adequate level of retirement benefits for school employees, both active and retired
 - Is a plan with an annual employer normal cost of 8%+/- affordable?
 - What impact will possible structural changes have on the attraction and retention of school employees?
 - Will structural changes create a larger problem by substituting inadequate and unsecured retirement options that may ultimately cause future retirees to rely on other government programs, each with their own funding issues?

- As such, the resolution of the current funding issues confronting PSERS is a vital imperative for the Agency and represents the greatest challenge the Agency has faced in its history
- Therefore PSERS is committed to providing all available assistance to the Governor, General Assembly and School Employers to solve the rate spike and future funding issues, ASAP
 - PSERS will continue to be very public with the issue in an attempt to raise awareness
 - Will keep you apprised of developments in the coming year

Questions?

