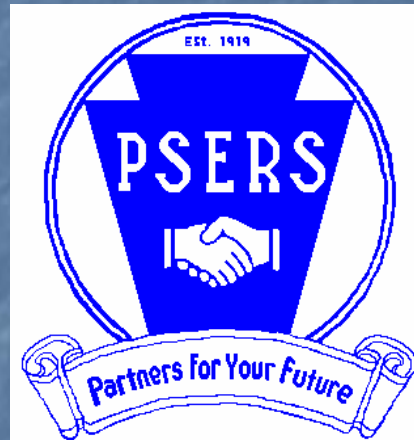


An Update on PSERS

Rate Spike/Plateau Presentation



December 11, 2009

PSEERS' Overview

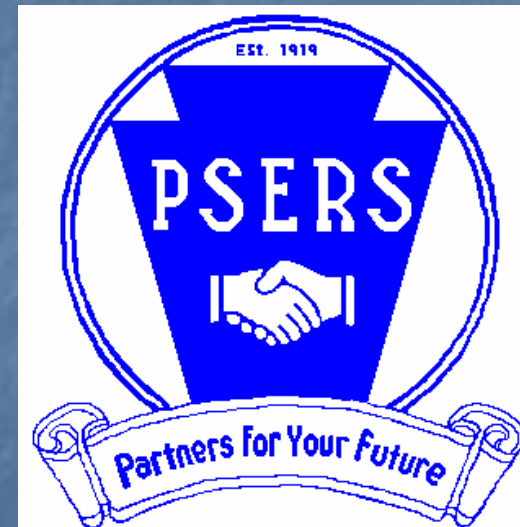


PSERS' Overview

- 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 Employees' 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
 - 2009- Changes in legislators and State Treasurer who serve on PSERS board
- PSERS serves over 547,000 members

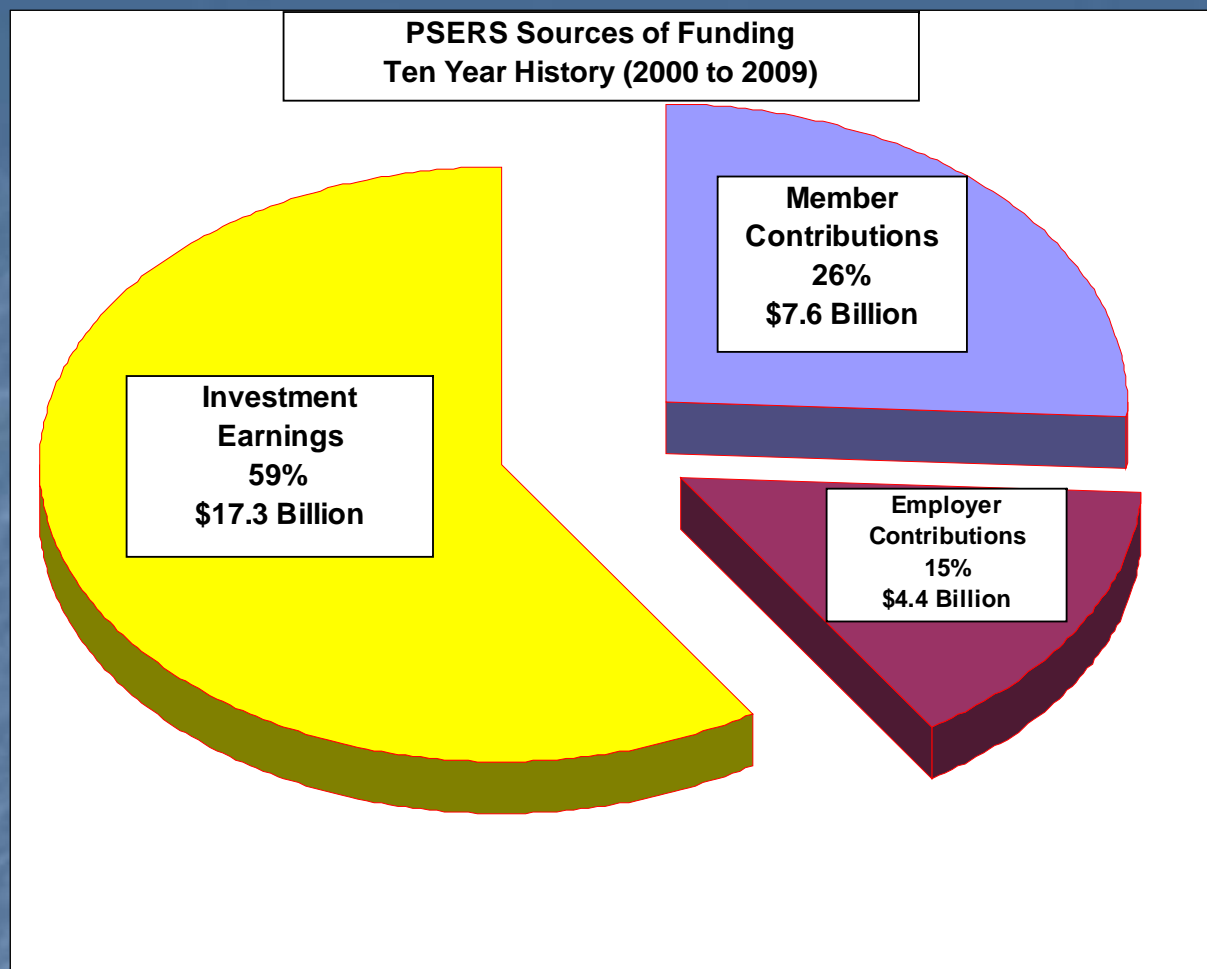
**PSERS manages
assets of approximately \$46.0
billion as of September 30, 2009**

**PSERS is the 12th largest state-
sponsored 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' 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)
September 30, 2009	\$46.0 billion (unaudited)

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



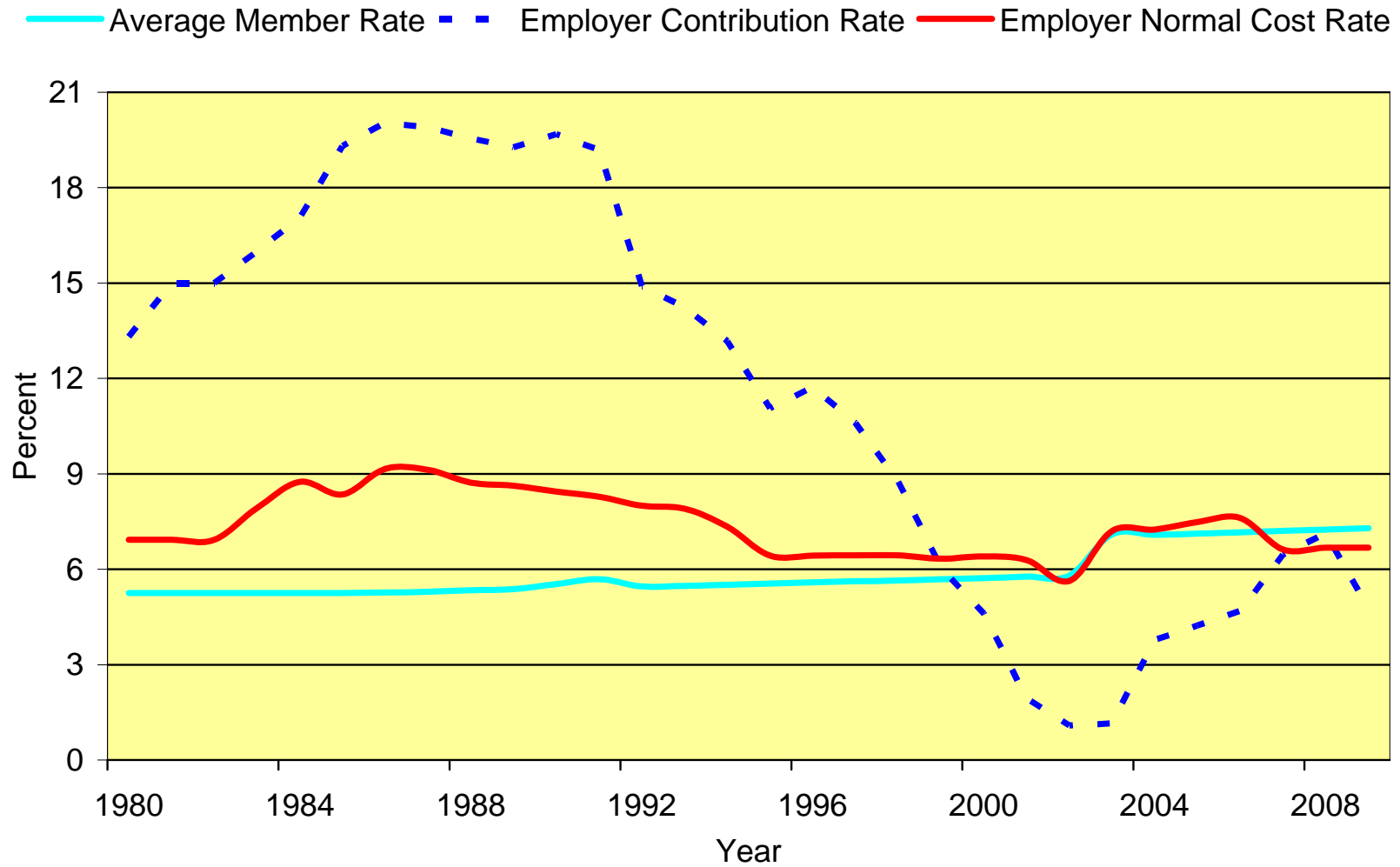
Employer Contribution Rate

- 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 %	\$ 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
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



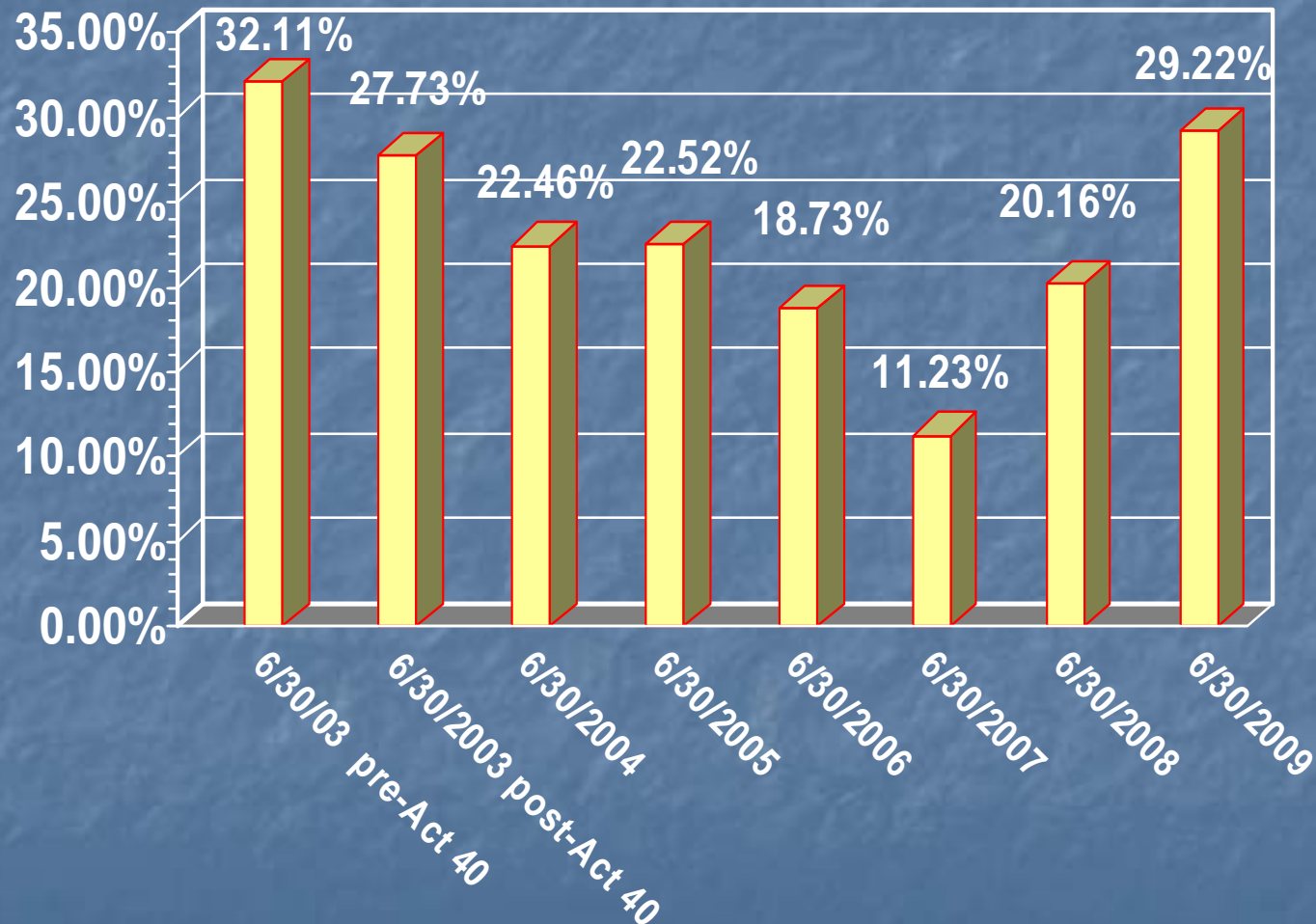
Employer Contribution Rate Spike

- 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
 - Assumption and cost method changes increase
 - 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

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



Options to resolve the rate spike



Options

- **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**

Options

- **Increase Funding to the System:**
 - **Increased employer contributions**
 - Employer rates 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

Options

- **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

Options

- **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

Options

- 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

Options

- **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 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/community/financial_reports/4574

Conclusions

Conclusions

- 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

Conclusions

- 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

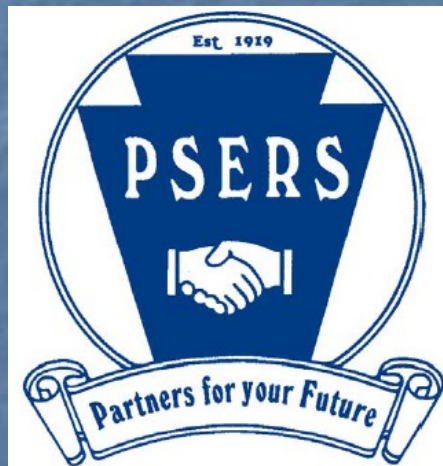
Conclusions

- 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?

Conclusions

- 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?



Rate Projection Assumptions

- The employer rate projections contained in this presentation are simply that; projections based on certain assumptions
- Therefore the projected rates can change
- The rates may decrease with investment performance over PSERS' 8.0% actuarial assumption and vice versa
- Also the projected employer rates and related data are impacted by actual experience that varies from the mortality, salary growth, and other economic and demographic assumptions of the System
- Benefit enhancements will also impact the rate projections