Commonwealth of Pennsylvania

State Employees' Retirement System & Public School Employees' Retirement System

Overview of SERS & PSERS Pension Benefits and COLAs

Leonard Knepp
SERS Executive Director

Jeffrey Clay
PSERS Executive Director

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Presentation Topics

- Overview of SERS & PSERS
- Funding Sources
- Funding Issues
- Rate Spike Options
- SERS & PSERS Defined Benefit Plan Structure
- Retirement Benefit Options
- Retirement Benefit Examples
- Comparison to Other State Retirement Plans
- Benefit Adequacy
- COLAS

Overview of SERS & PSERS

- **The State Employees' Retirement System (SERS) and the Public School Employees' Retirement System (PSERS) are governmental, cost-sharing, defined benefit pension plans for Pennsylvania state and school employees.**

- **Because they are governmental plans, they are not subject to the federal Employee Retirement Income Security Act (ERISA).**

- **SERS was established in 1923 and PSERS was established in 1917 and thus are two of the oldest public pension plans in the United States.**

  - **SERS primary "plan document" is the State Employees' Retirement Code, 71 Pa.C.S. §5101 et seq.**

  - **PSERS primary "plan document" is the Public School Employees' Retirement Code, 24 Pa.C.S. §8101 et seq.**

Overview of SERS & PSERS

- SERS is governed by a 11 person Board of Trustees covering 108 Commonwealth and non-Commonwealth employers.
- PSERS is governed by a 15 person Board of Trustees and has over 730 school employers.
- In addition to administering a DB pension plan, PSERS sponsors the Health Options Program (HOP).
    - The HOP is a voluntary group health insurance program for over 61,000 PSERS annuitants, their spouses (including surviving spouses) and dependents.
    - Funding is through the premium payments of the participants, with no direct funding by the employers or PSERS.
    - PSERS also offers a Premium Assistance Benefit that provides eligible annuitants up to $100.00 per month or their actual out-of-pocket costs for health insurance, whichever is less.
- SERS does not administer a retiree health benefit plan. The majority of SERS retired members worked for agencies that participate in the Retired Employee Health Program administered by the Pennsylvania Employees Benefit Trust Fund.
- SERS administers a voluntary Deferred Compensation Plan in accordance with Internal Revenue Code Section 457(b).

Overview of SERS & PSERS

Overview	SERS	PSERS
Total Assets (as of 12/31/07)	$35.5 billion	$67.4 billion
Benefit Payments (annual)	$2 billion	$4 billion
Funded Ratio	92.70%	85.80%
Active Members	110,000	264,000
Retired Members	102,000	168,000
Average Age of Retirees (normal retirement)	73	73
Percent of Retirees Withdrawing Their Accumulated Deductions	91%	80%

Retirees by Type of Retirement	SERS	PSERS
Normal	49%	49%
Early	35%	42%
Disability	7%	4%
Other (beneficiary & survivor)	9%	5%

Average Monthly Pension by Type of Retirement	SERS	PSERS
Normal	$1,670	$1,930
Early	$1,140	$1,700
Disability	$1,050	$1,360
Other (beneficiary & survivor)	$690	$780

In general, the numbers represent PSERS fiscal year end, 6/30/07, and SERS fiscal year end, 12/31/06.

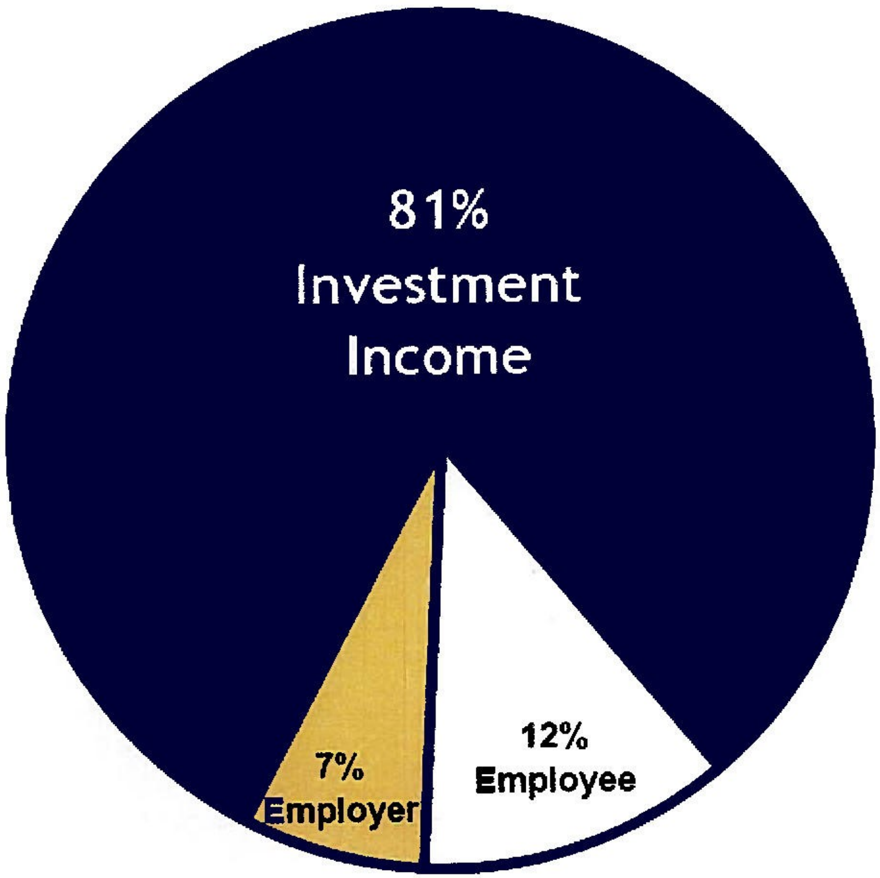
Funding Sources

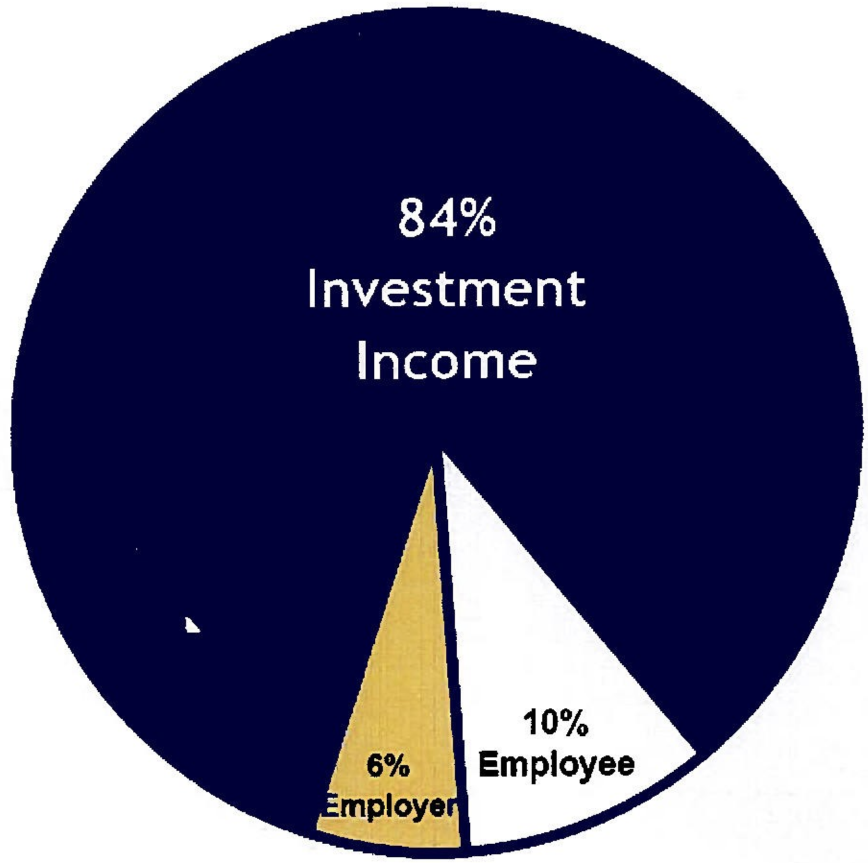
- **SERS and PSERS are funded by three sources.**
  1. **Employer contributions**
  2. **Employee contributions**
  3. **Investment income**

- **Investment income is the primary source of funding for the pension benefits, dwarfing the contributions from both, employers and employees.**

Funding Sources

PSERS **10 Year Period** **SERS**





Funding Issues

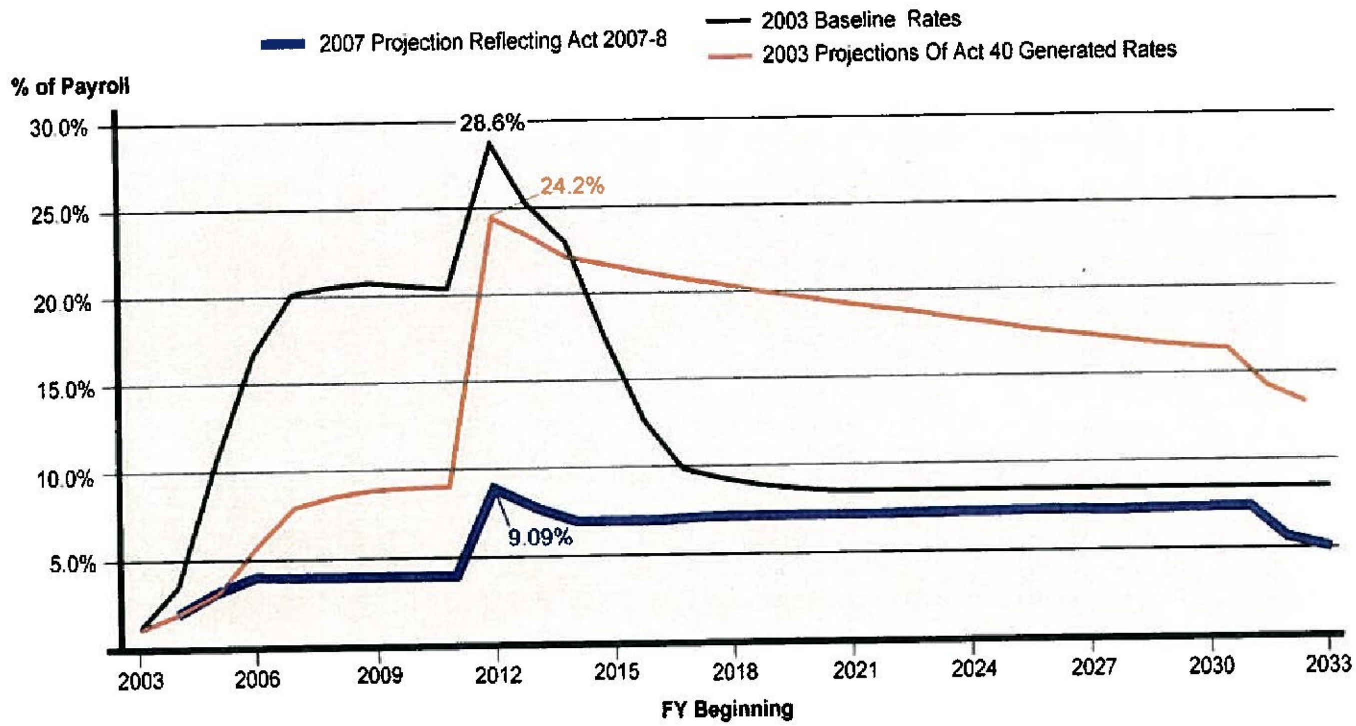
Both SERS and PSERS project a large increase in employer rates, beginning in 2012/2013.

Multiple factors contribute to the projected increase:

- **2000-2002 bear market investment losses**
- **Act 2001-9 benefit enhancements**
- **Act 2002-38 COLA**
- **Employer contributions below normal cost**
- **Act 2003-40 reamortization of liabilities (resulted in changes to funding methodology)**

While the employer rate increase was originally projected to spike at 32.1% for PSERS and 28.6% for SERS, both systems' strong investment returns have dropped the expected spikes.

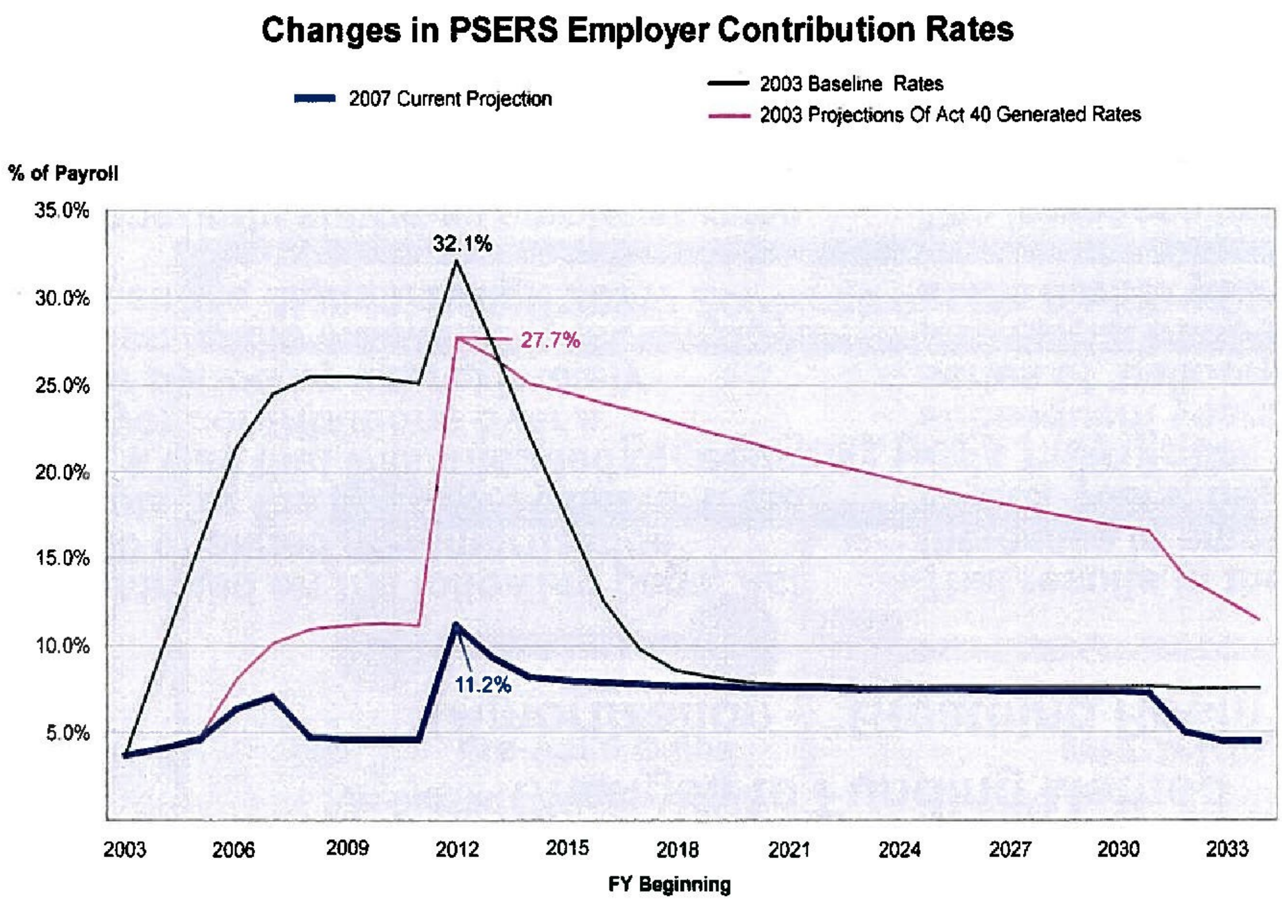
Changes in SERS Employer Contribution Rate Projections



SERS currently projects a 2012/2013 rate of less than 9%*, versus a current rate of 4%.

*SERS' current actuarial projection for 2012/2013 is 9.09% is based on data as of 12/31/06. SERS expects the rate to be less than 9% when it is recalculated based on 12/31/07 data.

Funding Issues



PSERS currently projects a 2012/2013 rate of 11.23%, versus the current rate of 7.13%

Changes to Funding Method
(Amortization - “Breathing Room”)

As illustrated on the following page, Act 2003-40 changed the amortization schedule for the pension systems. It did this in a way that was intended to reduce employer contributions over a 10-year period by approximately $5 billion, while maintaining the employer rate in single digits through 2011.

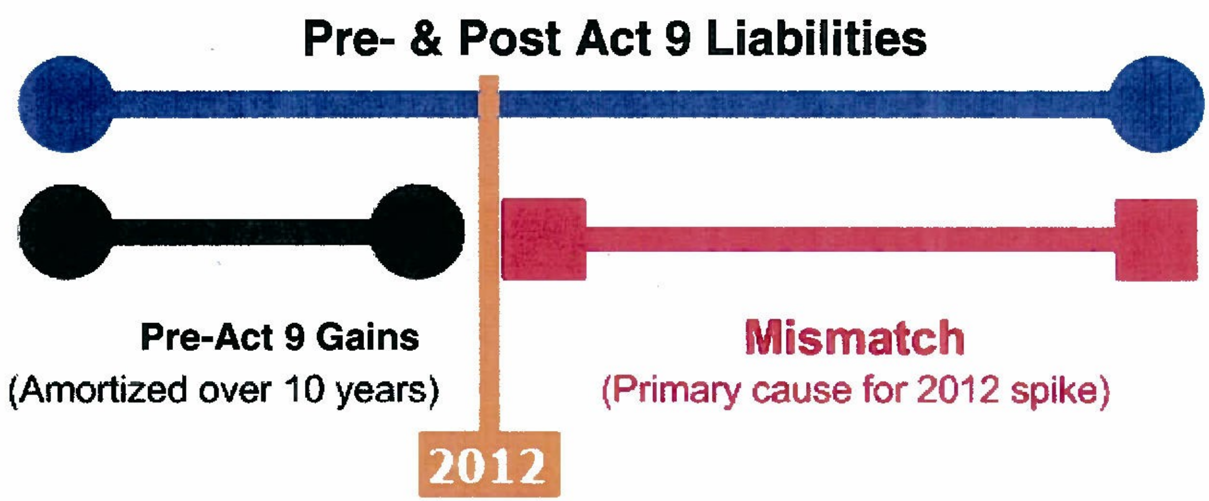
To temporarily suppress employer rates, Act 40 amortized pre-Act 9 liabilities (in reality only gains) over 10 years, and post-Act 9 liabilities (including all of the bear market losses) over 30 years.

That results in the expected sharp increases in employer contribution rates in later years, beginning July 1, 2012. The rates in 2012 and subsequent years can be viewed as a series of ‘balloon payments’ – the intentional trade-off for paying lower rates in the earlier years.

The increases are necessitated by financing costs and the opportunity loss in not having the contribution monies available to invest and compound in the immediate period.

Changes to Funding Method (Amortization - "Breathing Room")

Act 40 Amortization Schedule of Pre- & Post-Act 9 Liabilities



Rate Spike Options

- Although some criticize Acts 38 and 40, the Acts were intended to provide fiscal "breathing room" to both the Commonwealth and school employers so that a more permanent and sustainable solution could be found to SERS and PSERS' funding issues.

- There has been both increased awareness of the pending rate increase and discussions of alternative solutions.

Rate Spike Options

Some of these alternative solutions include:

- **A proposal to raise the employer contribution rate floor.**
  - **SB 826- This proposal seeks to increase the Act 40 employer contribution pension rate floor for PSERS from 4% to 6.44% plus the premium assistance contribution (current rate) and increase the minimum employer rate for SERS from 4% to 5%.**

Rate Spike Options

- This proposal will help to avoid future under funding of the Systems.
- This legislation, however, does not in and of itself eliminate the present projected rate spike.
  - For SERS- Reflecting earnings through 2006, the projected impact of SB 826 causes the currently projected rate spike of 9.09% to drop to 8.76%. When the effect of 2007 earnings is included, both projections will be lowered significantly.
  - For PSERS- Reflecting the 22.93% rate of return for FY 2006/2007, the projected impact of SB 826 causes the current rate spike of 11.23% to drop to 10.50%.

Rate Spike Options

- Another option includes increasing employer contributions in a predictable and controlled manner that will permit the Commonwealth and school employers to adequately budget for the increases and spread out their impact.

  - For example, increase the employer pension rate for PSERS beginning in FY 2008/2009 through 2011/2012 as follows:

7.25%-7.75%-8.50%-9.00%

  - The projected rate spike for PSERS drops to 10.08% and the rate plateau is smoothed out.

Rate Spike Options

- Another option that has been discussed is an actuarial "fresh start."
  - The idea is to mark PSERS' assets to market value as of the June 30, 2007 valuation and then resume 5-year smoothing method phased in over 5 years beginning with the 6/30/2008 valuation.
  - Finally, re-amortize all existing and future gains and losses over 30 years.
  - This proposal would essentially smooth out the rate spike.
    - For example, for PSERS the rate would instead spike at the current fiscal year rate of 7.13% and then continue to decline. The rate spike in FY 2012/2013 would decline to 6.65%.
  - Because it is anticipated SERS' peak rate will be significantly less than 9%, a "Fresh Start" would have little positive impact on SERS' rates.
  - A "Fresh Start" could expose the Systems to the risk of great volatility in rate swings in the initial years, before the full five-year smoothing is restored.

SERS & PSERS Defined Benefit Plan Structure

- In a defined benefit plan, employers are expected to contribute to the plan.
- A fully funded defined benefit plan does not mean that employers do not need to contribute to the plan.
- The normal cost is the cost of the current year's benefits owed for current employees. The normal cost assumes 8.5% investment return and other actuarial assumptions.
- A plan is considered well funded when the employers pays the normal cost and amortizes the Unfunded Actuarial Liability over a reasonable period of years.
- The pension benefit is paid as an annuity for the lifetime of the member. The cost of this benefit is pre-funded before the member retires.
- The current normal cost for SERS is 8.21% and the current normal cost for PSERS is 6.68%.

SERS and PSERS Defined Benefit Plan

- Benefit not tied to investment returns
- Fixed formula
- Paid as annuity
- Pre-funded
- Disability benefit for eligible members

SERS & PSERS Defined Benefit Plan Structure

- The member's pension benefit is based on a fixed formula that is defined by the PA legislature in the respective Retirement Codes.
- The pension benefit for SERS and PSERS members is calculated using a fixed formula. For most members, the formula is:

2.5% X Final Average Salary X Years of Service = Pension Benefit

SERS & PSERS Defined Benefit Plan Structure

<table>
<tr><th></th><th>Normal Retirement Qualifications</th><th>Early Retirement Qualifications</th><th>Employee Contribution</th><th>Benefit Multiplier "benefit accrual rate"</th><th>Final Average Salary Period</th><th>Post Retirement Increases (COLAs)</th><th>Option to Withdraw Lump Sum</th></tr>
<tr><td>SERS</td><td>60 age and 3 YOS*
Or
35 YOS</td><td>5 YOS</td><td>6.25% for most members</td><td rowspan="2">2.5% for most members</td><td rowspan="2">3 highest years</td><td rowspan="2">Ad hoc</td><td rowspan="2">Yes, up to all of employee contributions and interest</td></tr>
<tr><td>PSERS</td><td>62 age with at least 1 YOS
Or
60 age and 30 YOS
Or
35 YOS</td><td>55 age and 25 YOS

5 YOS</td><td>Between 5.25% and 7.5% (depending on hiring date and employee election)</td></tr>
</table>

*** YOS – Years of Service**

SERS & PSERS Defined Benefit Plan Structure

- Early retirement is available to SERS and PSERS members who are under age 60 for SERS and under age 62 for PSERS and have at least five years of credited service.
    - An early retirement factor is used to reduce the monthly benefit based on the member's age, sex, and years of service at time of retirement.

- PSERS also offers a special early retirement benefit.
    - A special early retirement is available for members who are at least age 55 and have 25 or more years of credited service ("55/25")
    - A "55/25" retirement is reduced by three (3) percent per year or 1/4 percent per month for the period the member is under normal retirement.
    - The reduction under this method of retirement cannot exceed 15 percent of the annual maximum benefit.

Retirement Benefit Options

SERS & PSERS members have several options in the way they receive their pension benefits.

- **Maximum Single Life Annuity (MSLA)** – Provides the highest monthly annuity for as long as you live. If at your death, you have not received an amount equal to your total contributions and interest, the balance will be paid to your beneficiary. The monthly annuity benefit ceases at your death.
- **Option 1** - Provides a reduced monthly annuity for as long as you live. In general, if at the time of your death, you have not received an amount equal to the Initial Present Value of your account, the balance will be paid to your beneficiary.
- **Option 2** - Provides a reduced monthly annuity for as long as you live and, following your death, provides your Designated Survivor with an equal monthly lifetime annuity.
- **Option 3** - Provides a reduced monthly annuity for as long as you live and, following your death, provides your Designated Survivor with a lifetime monthly annuity of approximately one-half of your monthly annuity.
- **Special Option** – Provides a monthly annuity designed to your specific requirements and subject to certain conditions.

The MSLA is the basic option. Any other option reduces the member's monthly benefit. All options are calculated to be actuarially equivalent to the MSLA.

Withdrawal Option – withdrawing your accumulated deductions

- SERS & PSERS members may elect to withdraw in a lump sum all or part of their contributions and interest statutorily credited at 4% (accumulated deductions).
- According to a 2004 Joint State Government Commission study the option to withdraw all your contributions and interest (Lump Sum) is uncommon among defined benefit plans across the nation.
- Most SERS & PSERS members elect to withdraw a portion or all of their accumulated deductions and receive a reduced annuity for life.

Differences Among Retirement Benefit Options

This SERS example is based on $50,000 final average salary, 2.5% benefit accrual rate, age 60 with 25 years of service, designated survivor is age 60, and total accumulated deductions are $50,400.

Retirement Option	Monthly Benefit	Duration Member	Death Benefit	Duration Survivor
MSLA	$2,600	Life	Balance of Accumulated Deductions	--
Option 1 ($590,000 Present Value)	$2,550	Life	Balance of Present Value at Retirement Less Annuity Payments	--
Option 2	$2,340	Life	$2,340/mo	Life
Option 3	$2,460	Life	$1,230/mo	Life
Withdrawal Option (You decide to withdraw your total accumulated deductions at retirement.)				
Adjusted MSLA	$2,380	Life	None	--
Adjusted Option 1 ($540,600 PV)	$2,340	Life	Balance of Present Value at Retirement Less Annuity Payments	--
Adjusted Option 2	$2,140	Life	$2,140/mo	Life
Adjusted Option 3	$2,250	Life	$1,130/mo	Life

Comparison to Other State Retirement Plans

Feature	PSERS	SERS
Normal Retirement	The PA systems are relatively strict regarding retirement based on years of service, but relaxed for benefits based wholly or primarily on age.	
Early Retirement	Among the most liberal requirements	Among the most liberal requirements
Social Security Coverage	Similar to most	Similar to most
Employee Contribution	Among the highest for Social Security covered plans	Somewhat higher than most
Vesting Period	Same as most	Same as most
Benefit Multiplier	Among the highest	Among the highest
FAS Period	Same as most	Same as most
Benefit Limitation	Same as most	Same as most
Postretirement Increases	Less favorable than most	Less favorable than most
State Income Taxation	More favorable than most	More favorable than most
Withdrawal Option	Among the most favorable	Among the most favorable

Source: Joint State Government Commission

Benefit Adequacy

- SERS and PSERS appear to be among the more favorable statewide plans because of:
  - Higher benefit accrual rates
  - Option of withdrawal of contributions and interest

- According to a 2006 study by the National Association of State Retirement Administrators (NASRA) the median benefit accrual rate for plans whose employees are Social Security eligible is 1.85% for each year of service and the median benefit accrual rate for plans whose members are not Social Security eligible is 2.2%.
  - PSERS' members are Social Security eligible and the benefit accrual rate is either 2.0% or 2.5%.
  - For most of SERS' members who are Social Security eligible, the benefit accrual rate is 2.5% or higher.

- According to the 2004 Joint State Government Commission study, Pennsylvania's lump sum withdrawal option is one of the most favorable provisions in the nation.
  - SERS and PSERS permit a retiree to withdraw an amount equal to all employee contributions and interest with a corresponding dollar for dollar reduction in the Present Value of the account. Only two other systems allow this.
  - One plan permits any actuarially equivalent option approved by the system's board, and one allows withdrawal of half the benefit. Six permit withdrawal of a defined contribution or cash balance account. Fourteen plans permit withdrawal of a limited term of the benefit, of which twelve set the maximum period at three years.
  - 51 plans make no provision for a cash withdrawal.

Benefit Adequacy

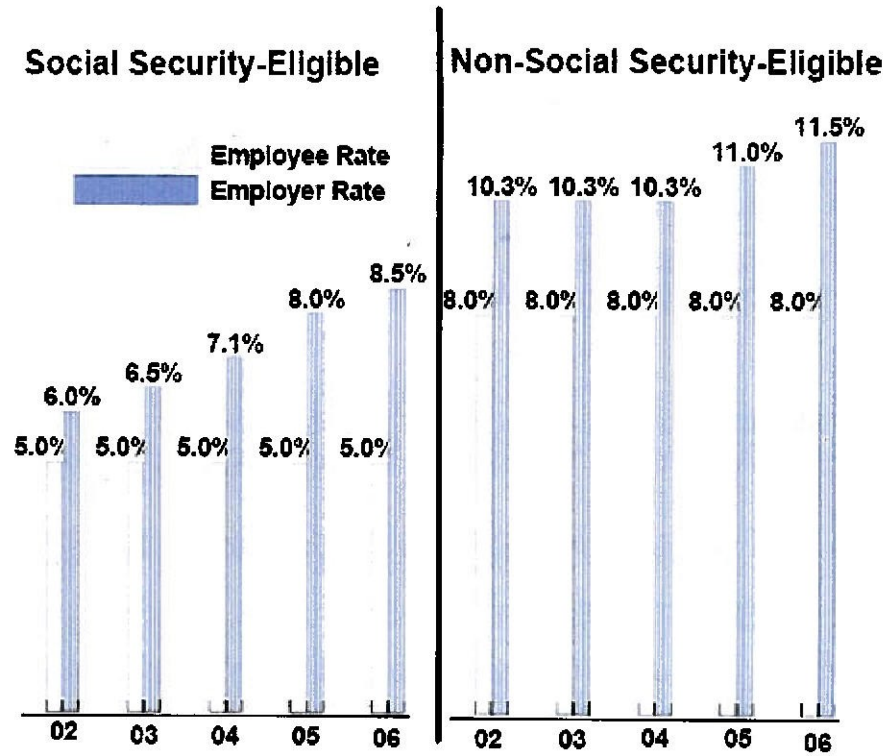
While SERS and PSERS appear to be among the more favorable statewide plans, there are certain characteristics that are less favorable than other plans including:

- **Higher employee contribution rate**
- **Lack of explicit guaranteed inflation protection**

Benefit Adequacy

- **Most of SERS' members contribute 6.25% towards their retirement benefit.**
- **PSERS' members contribute between 5.25% and 7.50% toward their retirement benefit.**
  - **The average for FY 2007 is 7.29%**
- **Both SERS and PSERS members are Social Security-eligible.**
- **Based on a 2006 NASRA survey, both SERS and PSERS members contribute more than the median towards their retirement benefit.**

Figure M: Median Contribution Rates, FY 01 to FY 06



Source: NASRA

COLAs

- Annuitant members of SERS and PSERS have been granted Cost of Living Adjustments (COLAs), on a periodic basis, through legislative approval of the Pennsylvania General Assembly.

- The General Assembly has statutorily provided COLAs approximately every four to five years.

- These COLAs are permanent supplemental increases to the member's annuity, providing an increased annuity that then becomes the base amount on which future COLAs are calculated. Each new COLA, therefore, is compounded upon all previously granted COLAs.

- This type of permanent, pension-integrated COLA has been permitted only since adoption of amending language to the Constitution of Pennsylvania "authorizing the increase of retirement allowances or pensions of members" of governmental pension systems (Article III, §26; Amendment of November 8, 1955).

- Beneficiaries and surviving spouses of deceased SERS and PSERS annuitants are <u>not</u> eligible to receive COLA increases. The Constitution restricts COLAs to "members" of the retirement system. (Article III, § 26 of the Pennsylvania Constitution) A previous attempt to amend the Constitution to allow supplemental increases for beneficiaries and surviving spouses failed.

How COLAs are funded

- Each COLA creates a new unfunded liability that must be paid.
- The Retirement Codes do not provide any mechanism for advance funding for COLAs.
- Future COLAs cannot be paid from existing assets of the funds.
- Each COLA therefore requires new funding.
- By law the COLA cost is amortized (financed) over 10 years and added to the employer contribution rate.
- Amortizations payments include a financing charge – like a car loan, the total paid is much higher than the "sticker price."

- Bottom line: COLAs always increase employer/taxpayer costs.

Sample costs to replicate the most recent COLA

Cost of 2002/03 COLA

	Initial Cost	Annual Cost
SERS	$652.3 million	$99.3 million
PSERS	$1.1 billion	$208.3 million
Total	**$1.752 billion**	**$307.6 million**

Estimated cost of replicating 2002/03 COLA*

	Initial Cost	Annual Cost
SERS	$1.04 billion	$158.6 million
PSERS	$1.98 billion	$346.8 million
Total	**$3.02 billion**	**$505.4 million**

*Estimate prepared in 2006 and would be higher now; annual costs would be in addition to the ongoing cost of amortizing the 2002/03 COLA.

Sample costs to create an automatic COLA

Estimated cost of an automatic annual COLA of Urban CPI with a 3% cap*

	Initial Cost	Annual Cost
SERS	$6.6 billion	$1.2 billion
PSERS	$14.3 billion	$2.7 billion
Total	**$20.9 billion**	**$3.9 billion**

- **<u>Because this would be an annual COLA, increased costs would continue indefinitely, even after the initial $20.9 billion unfunded liability is amortized.</u>**

* Estimate generated by Legislative Budget & Finance Committee in its 2006 study, "Potential Costs and Impacts of HB 130 (Early Retirement Incentives) and HB 131 (Cost-of-Living Increases)."

COLAs

The most recent ad hoc COLA adjustments in Pennsylvania have been calculated to be equivalent to at least one-half the increase in the Consumer Price Index (CPI) since the immediately preceding COLA.

According to the 2004 study by the Joint State Government Commission:

- **Sixteen other statewide plans also grant COLAs on an ad hoc basis.**
- **Systems that grant automatic COLAs use a wide variety of formulas. The most common is based on the CPI, as determined by the federal Department of Labor; the CPI is used in some manner by 38 plans.**
- **Among these, 14 simply cap the increase at a stated percentage, which ranges from 2% to 6%, with the most common cap being 3%, used by eight systems.**
- **Twenty-four plans use the CPI in a more complex formula, which may include a cap in combination with other limitations, such as offset, percentage of CPI, or dollar amount.**
- **The major alternative to CPI is flat percentage, where retirees receive the stated percentage increase. Fifteen plans use flat percentage, ranging from 1.5% to 3.5%, with a 3% limit (ten plans) predominating.**
- **Two other plans grant a flat percentage plus an additional percentage contingent on available funding; another plan uses a 3% flat percentage subject to a dollar limitation. Three systems guarantee a purchasing power floor. In 15 systems, the adjustment is wholly or partially conditional upon investment returns.**

COLAs

SERS & PSERS History

- Since 1967, permanent supplemental increases were granted ten times for PSERS and nine times for SERS. Each of the COLAs applied a different formula for calculation of the supplemental increase.

- PSERS: 1967, 1969, 1971, 1974, 1979, 1984, 1989, 1994, 1998 and 2002/2003.
- SERS: 1968, 1974, 1975 (limited), 1979, 1984, 1989, 1994, 1998, and 2002/2003.

- The two most recent COLAs, provided under Act 1998–88 and Act 2002-38, were specifically designed to ensure that the annuities of all PSERS and SERS members were provided an increase in an amount that replaced, at minimum, one-half of the loss in purchasing power experienced through inflation since the member's year of retirement.

PSERS

- During the early 1960's, temporary (January 1, 1960 through June 30, 1963), straight-dollar amount ($60 per year of credited service) supplemental annuities were legislated.

- From 1919 through 1959, PSERS annuitants were simply guaranteed a minimum pension amount, which was occasionally increased through legislative action (i.e., $20/month in 1935; $50/month in 1959; $150/month in 1965).