INDEPENDENT FISCAL OFFICE

Second Floor, Rachel Carson State Office Building
400 Market Street
Harrisburg, Pennsylvania 17105

December 18, 2015

Governor Tom Wolf
225 Main Capitol Building
Harrisburg, PA 17120

Senator Patrick Browne, Chairman
Senate Appropriations Committee
281 Main Capitol Building
Harrisburg, PA 17120

Senator Vincent Hughes, Democratic Chairman
Senate Appropriations Committee
545 Main Capitol Building
Harrisburg, PA 17120

Senator John Eichelberger, Jr., Chairman
Senate Finance Committee
169 Main Capitol Building
Harrisburg, PA 17120

Senator John Blake, Democratic Chairman
Senate Finance Committee
17 East Wing
Harrisburg, PA 17120

Representative William Adolph, Jr., Chairman
House Appropriations Committee
245 Main Capitol Building
Harrisburg, PA 17120

Representative Joseph Markosek, Democratic Chairman
House Appropriations Committee
512E Main Capitol Building
Harrisburg, PA 17120

Representative Bernie O'Neil, Chairman
House Finance Committee
47 East Wing
Harrisburg, PA 17120

Representative Jake Wheatley Jr., Democratic Chairman
House Finance Committee
36 East Wing
Harrisburg, PA 17120

Dear Honorable Governor, Senators and Representatives:

Statute requires the Independent Fiscal Office (IFO) to study and analyze the implementation of shared-risk contributions for members of the Public School Employees' Retirement System (PSERS) and the State Employees' Retirement System (SERS).[1] This letter responds to the statutory requirement that the study be transmitted by December 31, 2015.

---

[1] See 24 PA.C.S. § 8536 and 71 PA.C.S. § 5957.

Introduction

Shared-risk member contributions for PSERS and SERS (the systems) were introduced by Act 120 of 2010.[2] Under the relevant provisions, certain active members of the systems are subject to a higher employee contribution rate if the actual investment rate of return for an applicable time period falls more than one percentage point below the assumed investment rate of return adopted by the respective governing board. Currently, the governing boards of PSERS and SERS each have adopted an assumed 7.5 percent investment rate of return.[3,4]

The first applicable time period for the determination of shared-risk contributions was July 1, 2011 to June 30, 2014 for PSERS and January 1, 2011 to December 31, 2013 for SERS. As reported by the systems' actuaries, the three-year average investment rates of return for PSERS and SERS were 8.7 percent and 9.3 percent, respectively.[5] These rates of return were above the applicable statutory thresholds; therefore, shared-risk contributions were not implemented for active members of either system.

The next applicable time period for determination of shared-risk contributions runs from July 1, 2011 to June 30, 2017 for PSERS and January 1, 2011 to December 31, 2016 for SERS. If the investment rate of return for the systems falls below the statutory threshold, the earliest that shared-risk contributions could be implemented is January 1, 2018 for PSERS and July 1, 2017 for SERS.[6]

The following two sections describe the shared-risk provisions and the time period for the rate of return evaluation in additional detail. The final section discusses the investment rates of return for the two systems.

Shared-Risk Provisions

Active members of PSERS who are in classes T-E and T-F (employed after June 30, 2011) and members of SERS who are in classes A-3 and A-4 (employed after December 31, 2010) are subject to the shared-risk provisions. A decision to implement a shared-risk contribution is based on a comparison of the actual investment rate of return to the assumed rate of return adopted by the governing board for calculation of the normal contribution rate.[7]

If the actual investment rate of return is more than one percentage point less than the assumed rate adopted by the board, the shared-risk employee contribution rate shall increase by 0.5 percentage points,

---

[2] See 24 PA.C.S. § 8321 and 71 PA.C.S. § 5501.1 for the specific statutory provisions.
[3] The statutory language triggering implementation appears to be slightly different for PSERS and SERS. For PSERS, shared-risk is implemented if the actual return is less than the assumed return "by an amount of 1% or more." For SERS, it is implemented if the assumed return "is more than 1% greater" than the actual return. For the purpose of this analysis, we use a variance of more than one percentage point as the threshold. We assume the references to a "1%" differential in the statute actually mean one percentage point.
[4] The assumed rate for SERS was 8.0 percent in calendar year 2011; therefore, the compound annual assumed rate for SERS in the first three-year period encompassing 2011 through 2013 was 7.7 percent.
[5] For PSERS, see pages 8-9 of the Actuarial Valuation for June 30, 2014. For SERS, see page 19 of the 2014 Actuarial Report.
[6] The statute specifies a July 1 implementation date for SERS, but it does not explicitly specify a date for PSERS. The analysis assumes that implementation of a PSERS shared-risk rate will be implemented six months after the end of the applicable time period used for the measurement of investment returns.
[7] Returns referenced in this document are computed net of fees.

and the total employee contribution rate (base plus shared-risk) will increase by that amount.[8] The shared-risk contribution rate cannot increase by more than 0.5 percentage points in any applicable period, and the maximum cumulative increase is 2.0 percentage points. The shared-risk employee contribution rate shall decrease by 0.5 percentage points if the actual investment rate of return meets or exceeds the assumed rate of return adopted by the board, but it cannot fall below zero. The table below displays the employee contribution rates for the affected classes of active members.

Employee Contribution Rates

System	Class[1]	Base	Shared-Risk[2]	Maximum[3]
PSERS	T-E	7.50%	8.00%	9.50%
PSERS	T-F	10.30	10.80	12.30
SERS	A-3	6.25	6.75	8.25
SERS	A-4	9.30	9.80	11.30

[1] Classes T-F and A-4 represent employees who chose a higher contribution rate to receive benefits above the level provided by the base rate.
[2] Represents one shared-risk increment of 0.5 percentage points.
[3] The base rate plus a maximum 2.0 percentage points for the shared-risk contribution.

Under certain circumstances, the shared-risk employee contribution rate shall be zero, and the employee rate shall be reset to the base rate. This result occurs if (1) the final employer contribution rate is lower than the employer contribution required by the statute applicable to the respective system, or (2) the applicable system is fully funded on an actuarial basis.[9] An additional requirement for PSERS is that there will be no increase in the employee rate if there has not been an equivalent increase in the employer rate over the previous three-year period.

Time Period for Rate of Return Evaluation

A determination of the shared-risk employee contribution rate is made every three years. It is based on a rate of return comparison for the most recent ten-year period that begins no earlier than July 1, 2011 for PSERS and January 1, 2011 for SERS. However, until the shared-risk provisions have been in effect for ten years, the statute specifies a phase-in at the three-, six- and nine-year intervals. The following table displays the relevant look-back periods for each system. For the purpose of this analysis, the office assumes that any increase or decrease in the shared-risk rate would be applied to payrolls beginning six months after the end of the appropriate look-back period.[10]

[8] See footnote 3.
[9] The full-funding exception applies to the employees in a system whose actuarial funded status reaches 100 percent or more or whose accrued liability contributions are zero or less, depending on the system.
[10] See footnote 6.

Look-Back Periods for Shared-Risk Contributions		
Look-Back Period	**PSERS**	**SERS**
1. Three years	July 1, 2011 to June 30, 2014	January 1, 2011 to December 31, 2013
2. Six years	July 1, 2011 to June 30, 2017	January 1, 2011 to December 31, 2016
3. Nine years	July 1, 2011 to June 30, 2020	January 1, 2011 to December 31, 2019
4. Ten years - fully phased in	July 1, 2013 to June 30, 2023	January 1, 2013 to December 31, 2022
5. Subsequent interval	July 1, 2016 to June 30, 2026	January 1, 2016 to December 31, 2025

Rates of Return

The first look-back period has concluded, and the actual investment rate of return has been reported by the actuaries for each system.[11] For both PSERS and SERS, the actual rate exceeded the rate adopted by the board. (See the tables below and on the next page.) Therefore, the calculated shared-risk rate was zero, and no change to the employee contribution rate was implemented.

The second look-back period has commenced, and it includes the period encompassed by the first look-back period plus three additional years. To date, PSERS has reported investment results for one additional fiscal year (ending June 30, 2015) and SERS has reported investment results for one additional calendar year (2014) and three-quarters of another (2015). The second look-back period, consisting of 24 calendar quarters, has not concluded; however, actual investment returns have been reported for 16 of those quarters for PSERS and 19 quarters for SERS. The actual returns, the rates adopted by the boards and the differences between the two are displayed below in separate tables for PSERS and SERS.

PSERS Rates of Return

Fiscal Year Ending	Actual	AARR[1]	Variance[2]
2012	3.4%	7.5%	-4.1
2013	8.0	7.5	0.5
2014	14.9	7.5	7.4
2012 - 2014[3]	**8.7**	**7.5**	**1.2**
2015[4]	3.0	7.5	-4.5
2016	tbd	*7.5*	tbd
2017	tbd	*7.5*	tbd
2012 - 2017	**tbd**	***7.5***	**tbd**

[1] Assumed Actuarial Rate of Return, which is the rate of return adopted by the board for use in computing the normal contribution rate. The PSERS board reduced the assumed rate from 8.0% to 7.5% on March 11, 2011.
[2] The difference, in percentage points, between the actual return and the AARR.
[3] As reported in PSERS' June 30, 2014 actuarial report.
[4] PSERS press release dated October 6, 2015.
Notes: tbd = to be determined. Periods that have not concluded are italicized.

[11] See footnote 5.

SERS Rates of Return			
Calendar Year	**Actual**	**AARR[1]**	**Variance[2]**
2011	2.7%	8.0%	-5.3
2012	12.0	7.5	4.5
2013	13.6	7.5	6.1
2011 - 2013[3]	**9.3**	**7.7**	**1.7**
2014[3]	6.4	7.5	-1.1
2015[4]	*-0.2*	*7.5*	*-7.7*
2016	tbd	*7.5*	tbd
2011 - 2016	**tbd**	***7.6***	**tbd**

[1] Assumed Actuarial Rate of Return, which is the rate of return adopted by the board for use in computing the normal contribution rate. The SERS board reduced the assumed rate from 8.0% to 7.5% on May 2, 2012.
[2] The difference, in percentage points, between the actual return and the AARR.
[3] As reported in SERS' 2014 actuarial report.
[4] Represents the annual rate of return for the first three quarters of the calendar year, as calculated by the IFO. Quarterly rates of return were obtained from SERS press releases dated June 10, 2015, September 16, 2015 and December 9, 2015.
Notes: tbd = to be determined. Periods that have not concluded are italicized.

The IFO estimates that a shared-risk employee contribution will be required if the actual investment rate of return falls below 1.24 percent per quarter (5.1 percent annual rate) in the remaining eight quarters of the look-back period for PSERS and 1.11 percent per quarter (4.5 percent annual rate) in the remaining five quarters of the look-back period for SERS. These estimated rates are approximate, and they are based on the information published in actuarial reports and in press releases from the systems. The actuaries for each system will make the official computations.

Please contact me if you have questions regarding this report.

Sincerely,

(signed)

Matthew Knittel
Director