School Employees Retirement System of Ohio

Schedule of Employer Allocations and
Schedule of OPEB Amounts by Employer

As of and For the Year Ended June 30, 2017

Contents

Note 1. Nature of Entity

School Employees Retirement System of Ohio (SERS) is a statewide, cost-sharing, multiple-employer, defined benefit public employee retirement system. Established by state law in 1937, SERS provides retirement, disability, and survivor benefits to non-teaching employees of Ohio's public K-12 school districts, vocational, technical, and community schools, community colleges, and the University of Akron.

SERS is governed by Chapter 3309 of the Ohio Revised Code. These statutes assign the authority to establish and amend the benefit provisions of the plan to the State Legislature. The operation of SERS and the direction of its policies are the responsibility of the Retirement Board of SERS. The Retirement Board has fiduciary responsibility for the oversight of the general administration and management of SERS. The Board is composed of nine members: four elected employee members; two elected retiree members; and three appointed investment expert members. One investment expert is appointed by the Governor, a second one by the State Treasurer, and the third one jointly by the Speaker of the House and President of the Senate.

Defined benefit plan: A traditional defined benefit plan was established in 1937 (the DB Pension Plan). A summary of the benefit provisions can be found in SERS' Comprehensive Annual Financial Report (CAFR).

Health care plan: A cost-sharing, multiple-employer, defined benefit OPEB plan (the OPEB Plan) that provides various levels of health care to retired, disabled and beneficiaries, as well as their dependents. A summary of the benefit provisions can be found in SERS' Comprehensive Annual Financial Report (CAFR).

SERS' CAFR can be accessed on its website at www.ohsers.org.

Note 2. Summary of Significant Accounting Policies

Nature of schedules: Employers participating in a cost-sharing OPEB plan, and any non-employer contributing entities that meet the definition of a special funding situation, are required to recognize their proportionate share of the collective OPEB amounts for OPEB benefits provided to members through the SERS plan. The Health Care Plan is financed through a combination of employer contributions, recipient premiums, investment returns, and any funds received on behalf of SERS' participation in Medicare programs. The Board seeks to maintain a funded ratio of at least 90% for basic benefits. If the basic benefit funded ratio is less than 70%, the entire 14% of the employers' contributions will be allocated to basic benefits. If the funded ratio is at least 70% but less than 80%, the minimum portion of the employers' contribution allocated to basic benefits is 13.50% of payroll; the remaining 0.50% may be allocated to the Heath Care Fund at the Board's discretion. If the funded ratio is at least 80% but less than 90%, at least 13.25% of the employers' contribution will be allocated to basic benefits with the remaining 0.75% being allocated to the Health Care Fund at the Board's discretion. If the funded ratio is 90% or greater, the Health Care Fund may receive any portion of the employers' contribution that is not needed to fund basic benefits. In addition, there is a health care surcharge designed to compensate for low-wage salaries, levied against employers, and exclusively for funding health care coverage. A surcharge is payable for any annual payroll salaries falling below the minimum salary threshold; however, the surcharge amount is capped at 2.0% of each employer's payroll and 1.5% of statewide reported payroll.

SERS does not have a special funding situation and accordingly has no non-employer contributing entities.

Note 2. Summary of Significant Accounting Policies

The Schedule of Employer Allocations presents the contributions for each employer for the year ended June 30, 2017 and the respective allocation percentage. The Schedule of OPEB Amounts by Employer presents the proportionate share of total net OPEB liability as of June 30, 2017 and total deferred outflows of resources, total deferred inflows of resources, and total OPEB expense for the year ended June 30, 2017 for all SERS employers. The OPEB expense includes the amortization of the current year differences between expected and actual economic and demographic experience, differences between projected and actual investment earnings (net) on Plan investments, and the impact of changes of assumptions about future economic or demographic factors or other inputs. The OPEB expense does not include amortization of deferred inflows and deferred outflows recognized during previous periods.

Measurement focus and basis of accounting: The financial transactions are recorded using the economic resources measurement focus and the accrual basis of accounting. Employer contributions are recognized as revenue when due pursuant to statutory or contractual requirements.

Use of estimates: The preparation of the Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer (Schedules) in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts, and changes therein, and disclosures. Actual results could differ from those estimates and differences could be material.

Basis of allocation: In determining the proportionate share of the net OPEB liability and corresponding employer OPEB amounts for a cost-sharing plan, the basis should be consistent with the manner in which contributions are made to the OPEB Plan, excluding those contributions to separately finance specific liabilities of an individual employer. SERS has determined that the actual contributions made to the DB Pension Plan plus actual surcharge contributions made to the OPEB Plan represents an appropriate allocation basis because the total of these two amounts is most representative of the level of future contributions to the OPEB Plan.

As described in Note 2, “Nature of schedules”, the portion of the 14% employers’ contributions allocated to the OPEB Plan may vary from year-to-year and may at times be 0%. In addition, the surcharge contributions made to the OPEB Plan are not made by all employers due to the minimum salary threshold, but potentially all employers have participants in the OPEB Plan and all employers do make contributions to the OPEB Plan when any portion of the 14% employers’ contributions is allocated to the OPEB Plan. Therefore, SERS did not deem (i) the amount of the 14% employers’ contributions allocated to the OPEB Plan or (ii) the surcharge contributions made to the OPEB Plan to be an appropriate allocation basis individually or combined.

Note 3. Contributions

The fiscal year 2017 actual employer contribution total used as the denominator for the allocation calculation in the Schedule of Employer Allocations can be reconciled to SERS' fiscal year 2017 CAFR as follows:

Defined Benefit Plan Employer Contributions - CAFR Total	$ 467,796,738
Service credits and ARP payments paid by employees	(1,073,600)
Employer penalties	(291,019)
Other employer payments and miscellaneous revenue	2,950,194
	469,382,313
OPEB Employer Contributions - CAFR Total	47,672,886
Other employer payments and miscellaneous revenue	(1,879)
	47,671,007
Total Contributions - Schedule of Employer Allocations	$ 517,053,320

Funding by employer contributions for FY2017 was at 0% of the 14% contributions due to a change in Pension funding policy in June 2015. Therefore, in FY2017, all employer contributions for OPEB are a result of the health care surcharge. The surcharge minimum salary was $23,500 for FY2017.

Note 4. Deferred Outflows and Deferred Inflows

Deferred outflows of resources are the consumption of net position by SERS that is applicable to future reporting periods. Deferred inflows are the acquisition of net position by SERS that is applicable to a future reporting period. Other than differences between projected and actual investment earnings, deferred inflows and outflows of resources are recognized in OPEB expense beginning in the current period, using a straight line method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with OPEBs through SERS (active and inactive), determined as of the beginning of the measurement period. Net deferred inflows (or outflows) of resources pertaining to differences between projected and actual investment earnings are similarly recognized over a closed five year period.

The future amortization of the deferred outflows and inflows for the year ended June 30, 2017 is as follows:

	Deferred Outflows**	Deferred Inflows**
2018	$ 17,759,722	$ 111,804,262
2019	17,759,722	111,804,262
2020	13,497,390	85,396,467
2021	-	1,771,776
	$ 49,016,834	$ 310,776,767

** The change in proportionate share of contributions as reflected on the Schedule of OPEB Amounts by Employer results in deferred outflows and inflows. These amounts will amortized at the employer level over the average expected remaining service life of all members.

Note 5. OPEB Expense

The components of OPEB expense for the year ended June 30, 2017:

Service Cost	$ 183,787,494
Interest on the Total OPEB Liability	94,687,883
Projected Earnings	(26,871,875)
Admin Expense	2,582,204
Recognition of Outflow (Inflow) of current period differences in changes of assumptions	(92,272,766)
Recognition of Outflow (Inflow) of current period differences in expected and actual earnings of plan investments	(1,771,774)
Total OPEB Expense	$ 160,141,166

The average of the expected remaining service lives of all members for fiscal year 2017 is 3.76 years.

Note 6. Net OPEB Liability and Actuarial Information

The net OPEB liability is the portion of the actuarial present value of projected benefit payments related to past periods. The net OPEB liability for the employers is based on the allocation percentages from the Schedule of Employer Allocations.

The components of the net OPEB liability as of June 30, 2017 are as follows:

	Total OPEB Liability (a)	Fiduciary Net Position (b)	Net OPEB Liability (Surplus) (a) - (b)	Fiduciary Net Position as a Percent of Total OPEB Liability (b) / (a)
OPEB	$ 3,065,846,821	$ 382,109,560	$ 2,683,737,261	12.46%

The activity related to the net OPEB liability for fiscal year 2017 is set forth in the following table:

Net OPEB liability, July 1, 2016	$ 2,850,369,919
Total OPEB expense	160,141,166
Change in deferred outflows of resources	49,016,834
Change in deferred inflows of resources	(310,776,767)
Employer contributions	(65,013,891)
Net OPEB liability, June 30, 2017	$ 2,683,737,261

The total OPEB liability is determined by SERS' actuaries in accordance with GASB Statement No. 74, as part of their annual actuarial valuation for each retirement plan. Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts (e.g., salaries, credited service) and assumptions about the probability of occurrence of events far into the future (e.g., mortality, disabilities, retirements, employment terminations). Actuarially determined amounts are subject to continual review and potential modifications, as actual results are compared with past expectations and new estimates are made about the future.

Note 6. Net OPEB Liability and Actuarial Information (Continued)

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employers and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing benefit costs between the employers and plan members to that point. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential effects of legal or contractual funding limitations.

Actuarial calculations reflect a long-term perspective. For a newly hired employee, actuarial calculations will take into account the employee's entire career with the employer and also take into consideration the benefits, if any, paid to the employee after termination of employment until the death of the employee and any applicable contingent annuitant. In many cases, actuarial calculations reflect several decades of service with the employer and the payment of benefits after termination.

Key methods and assumptions used in calculating the total OPEB liability in the latest actuarial valuation are presented below:

Valuation Date	June 30, 2017
Actuarial Assumptions	
Experience Study Date	5 year period ended June 30, 2015
Investment Rate of Return	7.50% net of investment expense, including inflation
Inflation	3.00%
Wage Increases	3.50% - 18.20%
Municipal Bond Index Rate	
Prior Measurement Date	2.92%
Measurement Date	3.56%
Single Equivalent Interest Rate, net of plan investment expense, including price inflation	
Prior Measurement Date	2.98%
Measurement Date	3.63%
Medical Trend Assumption	
Pre-Medicare	7.50% - 5.00%
Medicare	5.50% - 5.00%
Mortality Assumptions	Mortality rates were based on the RP-2014 Blue Collar Mortality Table with fully generational projection and Scale BB, 120% of male rates and 110% of female rates. RP-2000 Disabled Mortality Table with 90% for male rates and 100% for female rates set back five years.

Note 6. Net OPEB Liability and Actuarial Information (Continued)

The long-term expected rate of return on plan assets is reviewed as part of the actuarial five-year experience study. The most recent study covers fiscal years 2010 through 2015, and was adopted by the Board on April 21, 2016. Several factors are considered in evaluating the long-term rate of return assumption including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return were developed by the investment consultant for each major asset class. These ranges were combined to produce the long-term expected rate of return, 7.50%, by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The capital market assumptions developed by the investment consultant are intended for use over a 10-year horizon and may not be useful in setting the long-term rate of return for funding pension plans which covers a longer timeframe. The assumption is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class, as used in the June 30, 2015 five-year experience study, are summarized as follows:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Cash	1.00%	0.50%
US Stocks	22.50%	4.75%
Non-US Stocks	22.50%	7.00%
Fixed Income	19.00%	1.50%
Private Equity	10.00%	8.00%
Real Assets	15.00%	5.00%
Multi-Asset Strategy	10.00%	3.00%

The discount rate used to measure the total OPEB liability at June 30, 2017 was 3.63%. The discount rate used to measure total OPEB liability prior to June 30, 2017 was 2.98%. The projection of cash flows used to determine the discount rate assumed that contributions will be made from members and the System at the state statute contribution rate of 2.00% of projected covered employee payroll each year, which includes a 1.50% payroll surcharge and 0.50% of contributions from the basic benefits plan. Based on these assumptions, the OPEB plan's fiduciary net position was projected to become insufficient to make future benefit payments during the fiscal year ending June 30, 2025. Therefore, the long-term expected rate of return on OPEB plan assets was used to present value the projected benefit payments through the fiscal year ending June 30, 2024 and the Fidelity General Obligation 20-year Municipal Bond Index rate of 3.56%, as of June 30, 2017 (i.e. municipal bond rate), was used to present value the projected benefit payments for the remaining years in the projection. The total present value of projected benefit payments from all years was then used to determine the single rate of return that was used as the discount rate. The projection of future benefit payments for all current plan members was until the benefit payments ran out.

Note 6. Net OPEB Liability and Actuarial Information (Continued)

The net OPEB liability is sensitive to changes in the discount rate and the health care cost trend rate. The following table presents the net OPEB liability of SERS, what SERS' net OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower (2.63%) and higher (4.63%) than the current discount rate (3.63%).

	1% Decrease	Current Discount	1% Increase
Rate	2.63%	3.63%	4.63%
Net OPEB Liability	$ 3,240,954,465	$ 2,683,737,261	$ 2,242,278,957

The following table presents the OPEB liability of SERS, what SERS' net OPEB liability would be based on health care cost trend rates that are 1 percentage point lower (6.5% decreasing to 4.0%) and higher (8.5% decreasing to 6.0%) than the current rate.

	1% Decrease	Current Trend Rate	1% Increase
Rate	6.5% decreasing to 4.0%	7.5% decreasing to 5.0%	8.5% decreasing to 6.0%
Net OPEB Liability	$ 2,177,651,679	$ 2,683,737,261	$ 3,353,550,196

Note 7. Short-Term Solvency Test

SERS' financing objective is to pay for OPEB benefits through contributions that remain approximately level from year to year as a percent of member payroll.

If the contributions are level in concept and soundly executed, SERS will pay all promised benefits when due, which is the ultimate test of financial soundness. Testing for level contribution rates is the long-term test.

A short-term solvency test is one means of checking a system's progress under its funding program. In a short-term solvency test, the present assets (cash and investments) are compared with:

1. Active member contributions on deposit.

2. The liabilities for future benefits to present retired lives.

3. The liabilities for service already rendered by active members.

Under the level percent of payroll financing, liabilities for active member contributions on deposit and the liabilities for future benefits to present retirees and beneficiaries will be fully covered by present assets except in rare circumstances. In addition, liabilities for active member benefits earned or to be earned in the future will be partially covered by the remainder of present assets. Generally, if SERS has been using level cost financing, the funded portion of active member benefits will increase over time.

Note 7. Short-Term Solvency Test (Continued)

Health Care Solvency Test
($ in millions)

	Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Asset		
Valuation as of June 30,	(1) Active Member Contributions	(2) Retired Members and Beneficiaries	(3) Active Members (Employer Financed Portion)	Actuarial Value of Assets	(1)	(2)	(3)
2017	$ -	$ 916	$ 1,480	$ 382	100.0%	42.0%	0.0%
2016	-	918	1,489	370	100.0%	40.3%	0.0%
2015	-	979	1,446	408	100.0%	41.7%	0.0%
2014	-	968	1,508	414	100.0%	42.8%	0.0%
2013	-	1,157	1,761	379	100.0%	32.8%	0.0%
2012	-	1,074	1,617	355	100.0%	33.1%	0.0%
2011	-	897	1,513	356	100.0%	39.7%	0.0%
2010	-	970	1,399	325	100.0%	33.5%	0.0%
2009	-	1,895	2,385	376	100.0%	19.8%	0.0%
2008	-	2,148	2,711	393	100.0%	18.3%	0.0%