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BILL ANALYSIS



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Senate Bill 102 (Substitute S-4 as reported)

Sponsor: Senator Phil Pavlov

Committee: Appropriations

Date Completed: 11-30-16

CONTENT

The bill would amend the Public School Employees Retirement Act to do the following:

- Place all new school employees hired on or after July 1, 2017, into a 401k or 401k-style plan (i.e., a "defined contribution" plan) and eliminate the existing "hybrid" plan as an option for new employees. (Employees currently in the hybrid plan would remain in it.)
- Place all existing school employees who chose the existing defined contribution option upon employment (which was a choice beginning in September 2012) into the new defined contribution (DC) plan.
- Specify the new defined contribution plan to be one in which the employer would deposit 4% of the employee's salary into a 401k or 401k-style plan, and matches the employee's contributions up to another 3% of salary (for a maximum possible employer contribution of 7% of salary, when an employee contributed at least 3%). (This is the same structure as the DC plan in place for State employees hired since March 31, 1997.)
- Require that the existing unfunded accrued liability associated with the pension plan (and any "regular" changes to that liability due to variations in actual experience compared to actuarial assumptions) be amortized over the next 21 years, ending with fiscal year 2037-38.
- Require that any additional unfunded accrued liability associated with any changes in the assumed rates of return on the pension portfolio's assets that occurred after the closure of the existing defined benefit component of the hybrid plan be amortized over 40 years, beginning October 1, 2017, and ending September 30, 2057.
- Require that the unfunded actuarial accrued liability rate continue to be a level percentage of payroll (and continue to be levied across all payroll, old and new).
- Require the approval of the State Treasurer, in addition to the existing approval required of the Retirement Board and the Director of the Department of Technology, Management, and Budget, to change the assumed rates of return on the pension system's assets.
- Specify that employees in the new defined contribution plan would be subject to the vesting requirements already found in Section 132 (i.e., immediately vested in their own contributions; 50% vested in employer contributions after two years; 75% vested after three years; and, 100% vested in employer contributions after four years of service).

MCL 38.1305 et al.

FISCAL IMPACT

Under the bill, there would be two areas of cost increases, with a third area that would be an actuarially recommended best practice in funding, whether the plan was open or closed. Each of the three is discussed below, and [Table 1](#) illustrates the costs across all three areas, and indicates whether the cost would be to the Michigan Public School Employees' Retirement System (MPSERS), the State Employees' Retirement System (SERS), or the Judges Retirement System (JRS).

Table 1

Estimated Costs under Senate Bill (SB) 102 (S-3), Including Best Practice (Not Required) and Required Cost Increases (Dollars in Millions)							
Fiscal Year	Best Practice: Accelerated (MPSERS)	Lower Rates of Return in Out-Years (MPSERS)	Lower Rates of Return in Out-Years (SERS)	Lower Rates of Return in Out-Years (JRS)	Additional Normal Cost (MPSERS)	Total INCLUDING Accelerated Funding	SB 102 Total EXCLUDING Accelerated Funding
2017-18	\$591	\$0	\$0	\$0	\$16	\$607	\$16
2018-19	498	286	54	0.5	29	868	370
2019-20	417	296	54	0.5	42	810	393
2021-22	346	306	54	0.5	56	763	417
2022-23	288	317	54	0.5	71	731	443
Five-Year	\$2,140	\$1,205	\$216	\$2	\$214	\$3,777	\$1,637
Total*	(\$4,898)	\$23,100	\$972	\$8	\$9,000	\$28,182	\$33,080
*30-Year Total for Best Practice: Accelerated							
*40-Year Total for Lower Rates of Return in Out-Years MPSERS; 30-Year Total for SERS and JRS							
*30-Year Total for Additional Normal Cost							

Recommended Best Practice: Accelerated Funding

If the hybrid plan were closed to newly hired employees, the Office of Retirement Services (ORS) has indicated that, even though the Governmental Accounting Standards Board (GASB) does not "require" accelerated payments, it remains an actuarially recommended best practice to accelerate funding for a closed system for cash flow reasons, among other reasons. However, since the projected funded ratio does not reach 80% until 2030, even if the plan remains open, it could be argued that the amortization of the existing unfunded actuarial accrued liabilities (UAAL) should be accelerated, even if the plan were to remain open to new employees. (The existing UAAL was roughly \$26.7 billion as of the 2015 valuation.) Conversely, even if funding is accelerated, the projected asset levels are not significantly different from the asset levels that are estimated for a nonaccelerated environment, and when the UAAL is paid off, there is no difference between the asset levels under an accelerated scenario compared to a nonaccelerated scenario.

In the past, GASB rules prescribed accelerated funding by moving contribution rates from a level percentage of payroll to a level dollar amount. However, those rules are no longer in existence, meaning that the use of a level dollar amortization is not required for a closed plan. In addition, Senate Bill 102 (S-3) would require contribution rates to remain calculated as a level percentage of payroll.

If the best practice of accelerated funding were implemented, even though not required, the short-term cost (using estimates provided by ORS) would be \$591.0 million in the first year, summing to \$2.1 billion over five years, but would result in long-term savings estimated at \$4.9 billion over 30 years, as the accelerated funding resulted in additional investment earnings. Again, however, this is likely a good practice regardless of the system's open or closed status.

Required Cost Increase: Lower Assumed Rates of Return in Out-Years

When a system is closed, and after any old UAAL has been paid off (i.e., there are no longer large "mortgage" payments coming into the system), the Bureau of Investments in the Department of Treasury has indicated that it will need to become more conservative in its investment strategy to meet the cash flow needs of the system, needing cash on hand to make pension payments. (This is also the recommendation of the State's actuaries.)

Essentially, the reason for this is that when the existing UAAL is paid off (anticipated in 2038) and the large dollar contributions currently being made to pay down the UAAL are finished, it is likely that the assumed rate of investment return would need to be reduced from 7% to something that would be less risky in order to preserve principal and provide enough cash on hand to make payments to what would basically be a retiree-only system. The additional dollar costs vary and are based on how much lower the assumed rate of return becomes.

While the accelerated funding described above would be considered a best practice by GASB and ORS, the additional cost related to lowering the assumed rates of return in out-years would be more along the lines of a required cost increase. The Office of Retirement Services has provided information from the actuary indicating that, with the closure of the hybrid plan, the UAAL would increase above the current estimate of \$26.7 billion depending on what rates of return are assumed in out-years, requiring additional funding to pay down the higher UAAL, which is separate from the question of accelerating funding on the current UAAL.

Estimates of the costs of lowering the assumed rate of return to 5%, if they were amortized on the same schedule as the existing UAAL (roughly 20 years), are \$450.0 million in fiscal year 2018-19, growing 3.5% per year, for a total cost of \$12.7 billion. Estimates of the costs, if they were instead amortized on a 30-year schedule, are \$348.0 million in fiscal year 2018-19, growing 3.5% per year, for a total cost of \$17.0 billion. Estimates of the costs, if they were amortized on a 40-year schedule, are \$286.0 million in fiscal year 2018-19, growing 3.5% per year, for a total cost of \$23.1 billion. The bill specifies that these additional MPSERS costs would be amortized on a 40-year schedule.

The additional costs to fund the reduction in the assumed rates of return in the MPSERS plan in out-years would be borne by the School Aid Fund until the total UAAL payment, expressed as a percentage of payroll, dropped below 20.96%. The reason for this is the cap on the rate employers (schools) pay toward the UAAL, as enacted under Public Act 300 of 2012. If the existing UAAL were paid off and this "new" UAAL tied to the lowered rates of return were all that remained, at that point the remaining UAAL would be borne by employers (schools).

In addition to the costs described above for the MPSERS plan related to lowering rates of return in the out-years, there would be companion costs in the State Employees' Retirement System and in the Judges Retirement System. Both SERS and JRS are closed systems, but to date, the assets in those systems have been invested along with the MPSERS assets, and an 8% rate of return has been assumed to continue in the out-years because of MPSERS' open status.

However, if MPSERS were closed, ORS has provided cost estimates based on lowering the rates of return for SERS and JRS in the out-years, with the same investment assumptions as used for the cost estimates for MPSERS. The estimate for the SERS cost is \$54.0 million per year, from FY 2018-19 through FY 2035-36 (when the SERS UAAL is projected to be paid off), for a total State cost of \$972.0 million over that time period. The estimate for the JRS cost is \$450,000 per year, from FY 2018-19 through FY 2035-36 (when the JRS UAAL is projected to be paid off). These costs would be part of the State budget, funded with a combination of General Fund/General Purpose funds, Federal funds, and State restricted funds in the proportion that those funding sources support salaries.

Required Cost Increase: Normal Costs

Assuming all new employees would contribute at least enough to maximize the employer match (i.e., contribute at least 3% of pay), and thereby receive a total of 7% in employer contributions (4% mandatory plus 3% matching), the additional normal cost once the entire system became part of a defined contribution-only plan is estimated at 2.83% of payroll. This is derived by looking at the difference between the 7% employer "normal" cost of a SERS-

style DC plan and the current 4.17% "normal" cost of the existing hybrid plan (3.17% for the pension component, and 1.0% for the DC match).

The additional normal cost of 2.83% yearly would be an estimated \$16.0 million in the first year (which is a combination of converting existing DC-only participants to the new DC plan, plus new payroll), growing over time as more payroll moved into the SERS-style DC plan. By the time the entire payroll was part of the DC plan, the cost differential could approach the \$600 million/year range, assuming payroll growth over time. The estimated five-year additional cost would be \$214.0 million, and the 30-year additional cost would be \$9.0 billion, above the estimated hybrid costs. All of the increase in normal costs would be borne by employers (school districts, intermediate school districts, community colleges, participating charter schools, and participating libraries), and not by the School Aid Fund.

If participation were not 100% in the DC matching plan, these estimates would be adjusted by the actual participation. The State Employees' Retirement System DC plan is currently assuming 90% contribution on the 3% match when determining appropriations for budgets. Therefore, the costs estimated above would be 10% lower if the same 90% participation rate were assumed and budgeted.

It should be noted that the dollar estimates provided in the text above rely upon estimates made for payroll in the system over the next 30 years and beyond. To the extent the actual payroll deviates from the estimates, the dollar impacts shown above also would fluctuate. The percentages, however, would not change, with the exception of potential minor fluctuations in the hybrid normal cost that could occur over time if and when changes are made to underlying actuarial assumptions.

Other Considerations

From the employer's perspective, moving to a DC-only plan would eliminate the potential for future unfunded accrued liabilities that could occur in a defined benefit plan if market performance were less than the assumed 7% rate of return or if other actuarial experience deviated from actuarial assumptions, but would cost more on a yearly normal cost basis due to the structure of the plan (roughly 7% normal cost compared to roughly 4% normal cost, applied to salary). From an employee's perspective, a DC-only plan can be more portable, but risk is assumed entirely by the employee.

Career Employee Example

Table 2 illustrates what a career employee might receive under the proposed DC plan, compared to what the same employee would receive under the hybrid plan. It is important to note that the table shows two scenarios: 1) the employee contributes into the proposed DC plan the same dollar amount that he or she is currently contributing into the hybrid plan (roughly 5.5% for the pension component plus 2% for the DC component, or roughly 7.5% of total salary), and 2) the employee contributes the minimum amount necessary to maximize the employer match (i.e., the employee contributes 3% of salary).

The parameters for the following example assume that the employee started at age 25, worked 35 years, and had a starting salary of \$36,000, and that salary grew by 2% per year. The table below shows various estimated monthly benefit levels based on differing market rates of return.

Table 2

Estimated Pre-Tax Monthly Benefit upon Retirement: Hybrid and Proposed DC Plan Career Employee, Starts at Age 25 at \$36,000, Yearly Wage Growth 2%, Retires at Age 60			
ESTIMATED MONTHLY BENEFIT FROM AGE 60 to AGE 87^a			
Assumed Rate of Return	Hybrid (DB and DC)^b	SERS-Style DC if Employee Contributes Same as Hybrid (~7.5%)	SERS-Style DC if Employee Contributes Only 3%
4%	\$3,500	\$2,580	\$1,770
5%	\$3,680	\$3,450	\$2,370
6%	\$3,930	\$4,600	\$3,200
7%	\$4,260	\$6,200	\$4,300
DB means Defined Benefit (pension); DC means Defined Contribution (i.e., a 401k or similar). SERS means State Employees Retirement System, which provides a 4% mandatory employer contribution plus 3% employer matching.			
^a Age 87 was chosen because the Social Security Administration says a person age 25 today has a life expectancy of 87.5.			
^b These scenarios spend the DC balance to \$0 by age 87. If a person lives past age 87, the hybrid pension component would continue, at \$2,970 monthly pre-tax.			
Note: The "SERS-Style DC if Employee Contributes Same as Hybrid (~7.5%)" analysis assumes that what a hybrid employee is currently contributing is what a new hire would contribute in the proposed DC-only plan, which would mean that roughly 14.5% of the employee's salary in total (~7.5% employee, 7% employer) was deposited into the employee's 401k. The "SERS-Style DC if Employee Contributes Only 3%" analysis assumes that a new hire contributes the minimum amount necessary (3%) to generate the maximum employer matching, which would mean that a total of 10% of the employee's salary (3% employee, 7% employer) was deposited into the employee's 401k. Under this second scenario, then, the employee would have lower contributions into the 401k but more disposable income.			
Any deviations in the actual rate of return compared to the assumed rate of return would affect the 401k/DC balances for both the hybrid and the proposed DC-only plan. However, the hybrid's pension component would not be affected.			

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.