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MPSERS ACTUARIAL PAYROLL ASSUMPTIONS

House Bill 5355 substitute (H-2) as reported from committee
Sponsor: Rep. Thomas Albert
Committee: Financial Liability Reform
Complete to 1-24-18

BRIEF SUMMARY:

House Bill 5355 would amend the Public School Employees Retirement Act to phase in lower assumptions for payroll growth for the Michigan Public School Employees' Retirement System (MPSERS) until the assumption reaches 0%, thus indirectly changing the amortization method used to pay off the unfunded actuarial liability (UAL) from a level percent of payroll method to a level dollar method. A more detailed summary of the bill follows.

BACKGROUND:

Currently, the actuary uses a payroll growth assumption of 3.5%—along with assumptions for many other variables—when calculating long-term actuarial assets and liabilities and any shortfall between the two, which is known as the unfunded actuarial liability (UAL). The actuary then calculates annual employer contributions based on what those assumptions determine must be contributed in any given year to meet the long-term liabilities.

The actuary currently uses a "level percent of payroll" amortization method to calculate the annual contribution necessary to pay off the UAL for the remaining years of the amortization period—currently 21 more years. Under this method, the assumption is that a contribution rate based on a fixed percentage of an annually growing payroll will collect higher contributions every year, thus paying off the UAL more slowly initially and back-loading payments more heavily toward the end of the amortization period.

However, if total payroll does not grow as quickly as the actuary assumes, as has been true for MPSERS, then the calculated contribution rate will not achieve the actual annual required contribution necessary to meet those long-term obligations and the UAL increases. Rather than growing, MPSERS-reported payroll has been steadily declining since 2004 by an average annual rate of 2.2%. The resulting shortfall in annual contributions adds to the UAL and requires an increasing contribution rate both because the UAL is higher and because the payroll base to which it is applied is lower.

An alternative method that may be used is a "level dollar" amortization method—which the bill would indirectly accomplish—where the annual contribution total is a fixed sum rather than a percentage of payroll. Under this method, the total contribution necessary over the remaining years of the amortization period is divided into equal annual required payments. On its own, using a level dollar amortization method eliminates any risk

associated with not meeting the assumed payroll growth and allows earlier higher contributions more time to accumulate investment earnings.

DETAILED SUMMARY:

House Bill 5355 would lower the assumption for MPSERS payroll growth rate by 0.5 percentage points each year, beginning in fiscal year (FY) 2021-22, until the assumption is 0%, presumably in FY 2027-28. However, the bill would allow ORS, beginning in FY 2024-25, to reduce the rate by 0.25 percentage points instead in any year in which the direct cost of a 0.5 point reduction would increase the combined pension and retiree health care UAL contribution by 7% or more compared to the previous fiscal year. Once the payroll growth assumption is 0%, the amortization method would shift to level dollar amortization effectively because a fixed percent of payroll contribution rate on an assumed flat payroll would result in a fixed dollar contribution.

Beginning in FY 2021-22, the bill also would revise the current payroll contribution rate floor, which was added by PA 72 of 2017 to prevent the contribution rate charged to MPSERS employers from decreasing in any given year until the UAL was fully paid, to a contribution dollar sum floor instead to align with the effective change from a level percent of payroll amortization method to a level dollar method. [A floor ensures that any subsequent changes in either experience or actuarial assumptions that lower the UAL result in paying off the UAL more quickly rather than reducing the annual contributions and creates stability because making contributions that are higher than otherwise necessary in some years mitigates losses in other years.]

The bill applies only to MPSERS employers that are not universities, which have their own amortization under Section 41a. The bill also applies only to the calculation and amortization for the UAL related to benefits for employees hired prior to February 1, 2018, prior to the implementation of the revised hybrid plan added in PA 72 of 2017, which has its own amortization under Section 41b.

MCL 38.1341

FISCAL IMPACT:

The fiscal impact of House Bill 5355 would vary depending on the extent to which actual payroll growth meets the actuarial payroll growth assumption. Near-term cost changes would affect the state, which currently pays for the share of the MPSERS UAL that exceeds an amount equal to 20.96% of payroll in the annual School Aid budget. However, long-term cost changes could affect both the state and MPSERS employers.

As described above, shifting to a level dollar amortization method generally front-loads payments compared to a level percent of payroll method, which typically creates an initial increase in costs compared to what would have otherwise been anticipated. Those short-term cost increases are offset by long-term savings because contributing those funds into the system earlier also allows them to gain investment returns over a longer period.

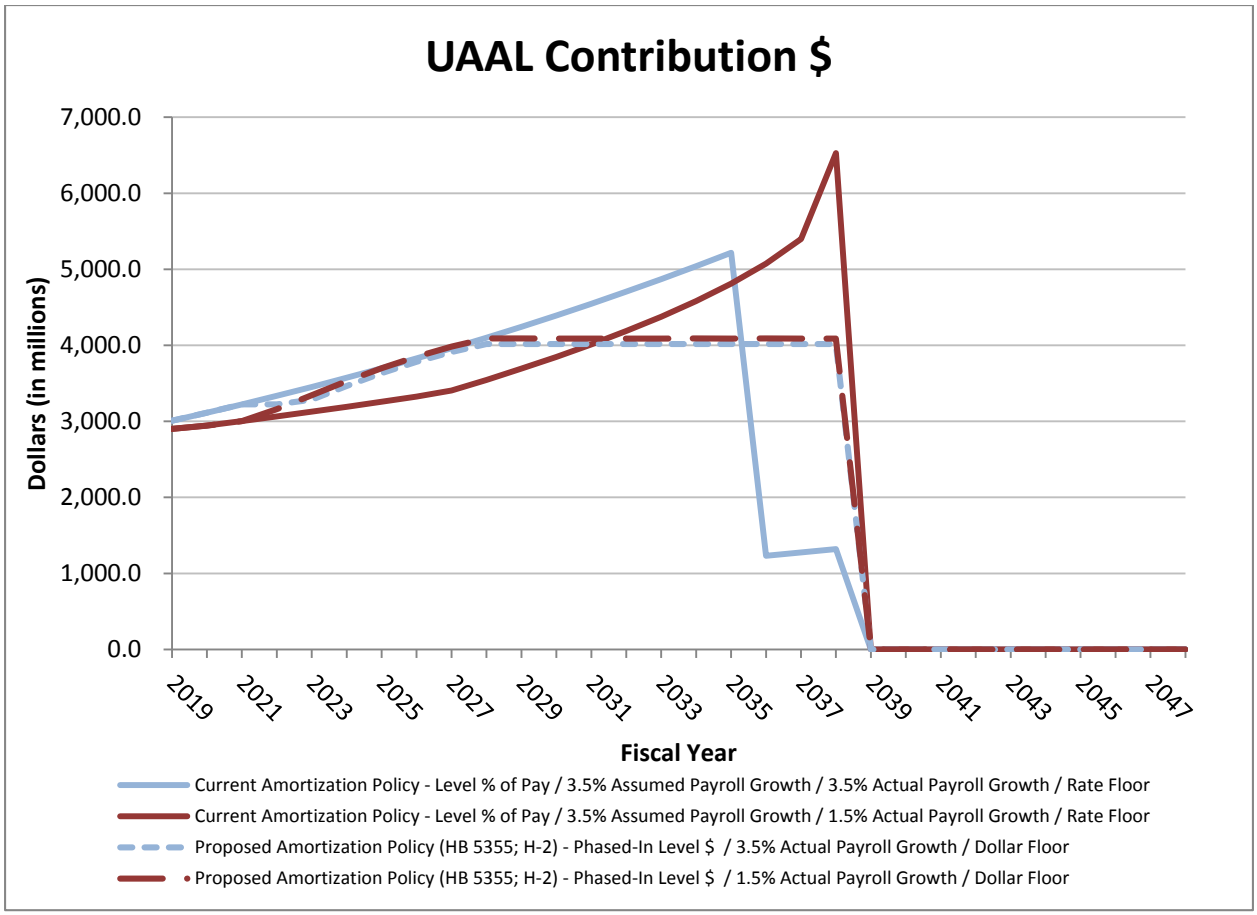
However, if annual payroll actually grows 3.5%, because the bill phases in a lower growth assumption the state would have to contribute less each year for much of the amortization period compared to current law, thus increasing long-term costs. In this case, the long-term costs would increase costs by a cumulative $2.7 billion over 21 years.

However, if payroll misses the currently assumed growth rate, actual collected contributions will fall short of the annual required contribution, thus increasing the UAL and subsequent costs compared to those assumed by the actuary. For example, if annual payroll actually grows 1.5%, the bill's required contributions would equal those we would have seen otherwise initially and then grow each year until the annual cost exceeded current law costs by approximately $576.4 million in FY 2026-27. At that point the comparative costs would decline, and by FY 2031-32, the bill's required contributions would be lower than current law costs. Under this scenario, the bill would save $2.9 billion over the life of the amortization period.

If actual payroll growth continues to decline or remains flat, the bill's required contributions would exceed those required initially by an even greater amount, but also would achieve significantly greater long-term savings.

The figure on page 4 provided by the Office of Retirement Services illustrates the actuarial estimates of the annual fiscal impact of House Bill 5355 compared to the two scenarios described above. The table on page 5 provides the detailed estimates behind the figure.

Neither scenario below estimates an event that would trigger the slower payroll growth rate assumption reduction (0.25 points rather than 0.5) allowed under the bill if the cost of the policy change increases by 7% or more. However, were that to happen, the costs compared to current law in that year would decrease as would overall savings related to the revised assumption



Source: Office of Retirement Services

Table: HB 5355 Fiscal Impact

	UAAL Contributions ($ in Millions)				HB 5355 (H-2) Cost/(Savings) ($ in Millions)	
Fiscal Year	Current Law Actual Payroll Growth = 3.5%	Current Law Actual Payroll Growth = 1.5%	HB 5355 (H-2) PG=3.5%	HB 5355 (H-2) PG=1.5%	If Actual Payroll Growth = 3.5%	If Actual Payroll Growth = 1.5%
2019	$3,008.3	$2,900.5	$3,008.3	$2,900.5	$0.0	0.0
2020	3,113.7	2,943.9	3,113.7	2,943.9	0.0	0.0
2021	3,222.8	3,003.4	3,222.8	3,003.4	0.0	0.0
2022	3,335.6	3,064.8	3,222.8	3,159.9	(112.8)	95.1
2023	3,452.3	3,127.8	3,284.7	3,343.2	(167.6)	215.4
2024	3,573.0	3,191.6	3,465.2	3,528.0	(107.8)	336.4
2025	3,698.0	3,257.5	3,633.3	3,698.4	(64.7)	440.9
2026	3,827.7	3,325.0	3,782.6	3,851.2	(45.1)	526.2
2027	3,961.6	3,406.2	3,912.6	3,982.6	(49.0)	576.4
2028	4,100.2	3,545.4	4,017.4	4,089.4	(82.8)	544.0
2029	4,243.8	3,692.9	4,017.3	4,089.8	(226.5)	396.9
2030	4,392.0	3,847.1	4,015.9	4,089.3	(376.1)	242.2
2031	4,545.9	4,010.6	4,016.7	4,089.1	(529.2)	78.5
2032	4,705.1	4,187.6	4,016.9	4,088.9	(688.2)	(98.7)
2033	4,869.5	4,376.4	4,016.3	4,088.7	(853.2)	(287.7)
2034	5,040.0	4,582.2	4,017.1	4,090.1	(1,022.9)	(492.1)
2035	5,216.4	4,810.7	4,017.7	4,089.2	(1,198.7)	(721.5)
2036	1,232.5	5,074.2	4,016.8	4,089.6	2,784.3	(984.6)
2037	1,275.7	5,397.3	4,017.5	4,088.0	2,741.8	(1,309.3)
2038	1,320.4	6,528.9	4,016.9	4,089.1	2,696.5	(2,439.8)
TOTAL	**$72,134.5**	**$78,274.0**	**$74,832.5**	**$75,392.3**	**$2,698.0**	**(2,881.7)**

Source: Office of Retirement Services

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■ This analysis was prepared by nonpartisan House Fiscal Agency staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.