

# PERAC

COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

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## MEMORANDUM

TO: Peabody Retirement Board

FROM: John W. Parsons, Esq., Executive Director

RE: Approval of Funding Schedule

DATE: July 27, 2022

This Commission is hereby furnishing you with approval of the revised funding schedule the Board recently adopted (copy enclosed). The schedule assumes payments are made quarterly during the fiscal year. The schedule is effective in FY23 (since the amount under the prior schedule was maintained in FY23). While this schedule is acceptable under Chapter 32, we do not recommend it for the reasons outline below.

In our memorandums dated December 9, 2014, December 5, 2016, October 4, 2018, and July 14, 2020, we indicated that we had several concerns about the plan assumptions and methodology. We now reiterate many of these concerns.

The revised schedule maintains the 7.75% investment return assumption used in the 2016, 2018, and 2020 valuations. We are generally recommending an assumption of 6.75% to 7.0% in our 2022 actuarial valuations. There are 10 systems (including Peabody) that currently use an assumption of 7.75% or higher. For comparison, there are 77 systems that currently use an assumption of 7.25% or lower. Of these, 40 use an assumption of 7.0% or lower. These figures will increase as more 2022 valuations are completed. The 7.75% assumption is outside the high end of our reasonable range (which is 7.35%), meaning that if PERAC were your actuary, we would disclose this fact and the results of the valuation using our recommended assumptions.

The System maintained the SOA Pub-2010 mortality assumption in this valuation. We completed a study of retiree mortality for local systems in 2019. As part of our study, we found that our experience was not consistent with the public retirement system mortality tables. More importantly, mortality improvement is only considered until 2025. Normally this assumption is not limited.

In prior memorandums we also mentioned our concerns regarding the salary increase assumption of 3.0%. This valuation used that assumption once again. This assumption is the lowest used by



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any system under Chapter 32. We expect over the long term that this assumption will need to be increased (and/or the investment return assumption decreased) which will increase plan liabilities.

Overall, your assumptions are significantly less conservative than the current standard PERAC assumption set, which we continue to believe is reasonable. We estimate your actuarial liability would be about 10% higher using a 7.0% investment return assumption and the PERAC standard assumptions. This would increase the unfunded actuarial liability by approximately \$34 million and reduce the funded ratio by more than 5.0%.

With respect to the amortization period of the unfunded actuarial liability (UAL), we would have preferred a schedule be adopted that more aggressively amortizes the UAL. The schedule completes the amortization of the UAL in FY36. For the past six years, we have been recommending that systems determine schedules to fully fund the UAL by FY35. This provides more flexibility in the event of a market downturn.

The adopted schedule maintains the FY23 amount from the current schedule. However, the FY24 appropriation is about \$500,000 lower than that of the current schedule and the FY25 appropriation is more than \$1.2 million lower than that of the current schedule. The Board selected a schedule that maintains the prior assumptions and payoff date. In essence, the System used investment gains in 2020 and 2021 to lower future appropriation amounts. If PERAC were the actuary for the plan, we would not have provided such an alternative for consideration. Instead, we would have used the gains to reduce the length of the schedule and at least maintain the FY24 and FY25 amounts from the current schedule.

We are available to discuss these issues further. If you have any questions, please contact PERAC's Actuary, John Boorack, at (617) 666-4446, extension 935.

JWP/jfb

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**Appropriation Forecast**

Fiscal Year	Employee Contribution	Employer Normal Cost with Interest	Amortization Payments with Interest	Employer Total Cost with Interest	Employer Total Cost % of Payroll	Unfunded Liability	Funded Ratio %**
2023	\$4,530,681	\$1,447,497	\$13,915,238	\$15,362,735	30.5	\$147,194,730	56.9
2024	4,784,194	1,459,664	14,632,308	16,091,972	30.6	144,409,460	61.0
2025	5,051,349	1,469,994	15,215,027	16,685,021	30.3	140,827,521	64.8
2026	5,332,860	1,478,298	15,820,990	17,299,288	30.1	136,379,633	68.3
2027	5,629,477	1,484,373	16,451,127	17,935,500	29.8	130,975,215	71.7
2028	5,941,992	1,488,001	17,106,401	18,594,402	29.6	124,515,730	74.8
2029	6,271,233	1,488,949	17,593,730	19,082,679	29.1	116,894,031	77.9
2030	6,618,073	1,486,970	18,297,480	19,784,450	28.9	108,189,599	80.9
2031	6,983,429	1,481,798	19,029,379	20,511,177	28.6	98,100,024	83.4
2032	7,368,266	1,473,149	19,790,554	21,263,703	28.4	86,489,537	86.0
2033	7,773,596	1,460,721	20,582,176	22,042,897	28.2	73,210,707	88.7
2034	8,200,486	1,444,191	21,405,463	22,849,654	27.9	58,103,497	91.4
2035	8,650,054	1,423,216	22,261,682	23,684,898	27.7	40,994,237	94.2
2036	9,123,478	1,397,428	23,152,149	24,549,577	27.5	21,694,518	97.1
2037	9,621,993	1,366,437	0	1,366,437	1.5	(0)	100.0
2038	10,146,899	1,329,828	0	1,329,828	1.4	(0)	100.0
2039	10,699,563	1,287,156	0	1,287,156	1.3	(0)	100.0
2040	11,181,043	1,345,078	0	1,345,078	1.3	(0)	100.0
2041	11,684,190	1,405,607	0	1,405,607	1.3	(0)	100.0
2042	12,209,979	1,468,859	0	1,468,859	1.3	(0)	100.0
2043	12,759,428	1,534,958	0	1,534,958	1.3	(0)	100.0
2044	13,333,602	1,604,031	0	1,604,031	1.3	(0)	100.0
2045	13,933,614	1,676,212	0	1,676,212	1.3	(0)	100.0
2046	14,560,627	1,751,642	0	1,751,642	1.3	(0)	100.0
2047	15,215,855	1,830,466	0	1,830,466	1.3	(0)	100.0
2048	15,900,568	1,912,837	0	1,912,837	1.3	(0)	100.0
2049	16,616,094	1,998,914	0	1,998,914	1.3	(0)	100.0
2050	17,363,818	2,088,866	0	2,088,866	1.3	(0)	100.0
2051	18,145,190	2,182,865	0	2,182,865	1.3	(0)	100.0
2052	18,961,724	2,281,093	0	2,281,093	1.3	(0)	100.0
2053	19,815,001	2,383,743	0	2,383,743	1.3	(0)	100.0
2054	20,706,676	2,491,011	0	2,491,011	1.3	(0)	100.0

\*\* Beginning of Fiscal Year