Boston Retirement System

REVISED
5:20 pm, Jun 08, 2026

June 8, 2026

Alex G. Geourntas, City Clerk
Boston City Council
Boston City Hall, Room 601
Boston, MA 02201

RE: FY27 Retiree Cost-of-Living Adjustment (COLA) & COLA Base Vote

Dear Clerk Geourntas:

Please find this as a follow-up to notice we previously filed on April 22, 2026. As you know, the Boston Retirement Board received public comment relative to retiree FY26 Cost of Living Adjustment ("COLA") and COLA base at its meeting of May 27, 2026. However, the actual vote is scheduled for June 18, 2026, at 10:00 a.m. in Room 801 of Boston City Hall, *see* https://www.boston.gov/public-notices/16492906. Kindly note that the start time was moved from 9:00 a.m. to 10:00 a.m.

Attached you will find a cost memorandum relative to the additional costs associated with increasing the System's COLA base, as well as a preliminary valuation of the Retirement System as of January 1, 2026 prepared by our actuary. We note that the COLA base is currently set at $15,000.

As always, I remain available should you have any questions or concerns. Thank you.

Respectfully submitted,
BOSTON RETIREMENT SYSTEM

By: _____
TIMOTHY J. SMYTH, ESQUIRE
Executive Officer

Attachments.

Segal

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May 27, 2026

Boston Retirement Board
City Hall, Room 816
Boston, MA 02201

Re: Cost of Increasing the COLA Base Effective July 1, 2026

Dear Board Members:

As requested, we have estimated the cost of increasing the Cost-of-Living Adjustment (COLA) base from $15,000 to $16,000, $17,000 and $18,000 for both the Boston Retirement System (BRS) excluding Teachers and the Teachers. We have assumed the base would be increased effective July 1, 2026 and that the additional cost would first be reflected in the fiscal 2027 appropriation. The estimates in this report are based on the January 1, 2026 Preliminary Actuarial Valuation Results of the Boston Retirement System.

As of January 1, 2026, the actuarial accrued liability for the BRS excluding Teachers is $9,598 million. When compared to the actuarial value of assets of $8,992 million, the unfunded actuarial accrued liability is $606 million, and the actuarial accrued liability is 93.7% funded.

The funding schedule included in the January 1, 2026 preliminary actuarial valuation report fully funds the liabilities of the BRS excluding Teachers by June 30, 2028, if all assumptions are met and there are no changes in the plan of benefits or actuarial assumptions. The fiscal 2027 Actuarially Determined Contribution (appropriation) is approximately $501 million, and the appropriations for fiscal 2028 through fiscal 2031 decrease from $400 million to $250 million while the funded percentage is projected to approach 105%. The components of this schedule are shown below.

Fiscal Year Ended June 30,	Employer Normal Cost	Amortization of Unfunded Actuarial Accrued Liability	Actuarially Determined Contribution	Unfunded Actuarial Accrued Liability at Beginning of Fiscal Year	Funded Percentage as of January 1 Preceding Beginning of Fiscal Year
2027	$112,400,748	$388,476,313	$500,877,061	$626,209,223	93.7%
2028	116,458,063	283,541,937	400,000,000	254,136,481	97.5%
2029	120,661,006	229,338,994	350,000,000	-31,434,432	100.3%
2030	125,014,779	174,985,221	300,000,000	-278,766,793	102.5%
2031	129,524,769	120,475,231	250,000,000	-485,060,904	104.2%

COLA base increase for the BRS excluding Teachers

We have estimated the additional unfunded liability and employer normal cost if the COLA base is increased for the BRS excluding Teachers effective July 1, 2026 from $15,000 to $16,000, $17,000 and $18,000, as shown in the table below.

Cost Element	January 1, 2026 Valuation Results	Increase if COLA Base Changes to $16,000	Increase if COLA Base Changes to $17,000	Increase if COLA Base Changes to $18,000
• Unfunded actuarial accrued liability projected to July 1, 2026	$626,209,223	$31,103,208	$61,892,606	$92,354,013
– Percent increase	–	5.0%	9.9%	14.7%
• Employer normal cost projected to July 1, 2026	$112,400,748	$776,795	$1,540,201	$2,290,220
– Percent increase	–	0.7%	1.4%	2.0%

Shown below are four scenarios for funding the increase to the unfunded actuarial accrued liability and employer normal cost for each of the three COLA base increase scenarios.

- The first funding scenario funds the increased cost of the higher COLA base by fiscal 2028 (over two years), the date by which the remaining liability for the BRS excluding Teachers is fully funded. The second, third, and fourth scenarios extend the funding of the increase in the COLA base beyond the full funding of the existing unfunded liability.
- For all funding scenarios, the cost of the higher COLA is added to the funding schedule amounts shown above. The increase in the unfunded liability resulting from the change is amortized in level-dollar installments over the amortization period, in addition to funding the increase to the employer normal cost which is assumed to increase 3.25% annually.
- For all scenarios, the funded percentage is projected to approach 105% once the additional COLA is funded.

Projected Appropriations: Current Schedule and With $16,000 COLA Base

Fiscal Year Ended	Current Funding Schedule	Fund COLA Increase by Fiscal 2028	Fund COLA Increase by Fiscal 2029	Fund COLA Increase by Fiscal 2030	Fund COLA Increase by Fiscal 2031
2027	**$500,877,061**	**$517,724,097**	**$512,720,537**	**$510,224,315**	**$508,731,015**
2028	**400,000,000**	**416,872,282**	**411,868,721**	**409,372,500**	**407,879,200**
2029	**350,000,000**	No Change	**361,894,788**	**359,398,566**	**357,905,266**
2030	**300,000,000**	No Change	No Change	**309,425,480**	**307,932,180**
2031	**250,000,000**	No Change	No Change	No Change	**257,959,968**

Projected Appropriations: Current Schedule and With $17,000 COLA Base

Fiscal Year Ended	Current Funding Schedule	Fund COLA Increase by Fiscal 2028	Fund COLA Increase by Fiscal 2029	Fund COLA Increase by Fiscal 2030	Fund COLA Increase by Fiscal 2031
2027	**$500,877,061**	**$534,395,607**	**$524,438,968**	**$519,471,710**	**$516,500,176**
2028	**400,000,000**	**433,568,603**	**423,611,963**	**418,644,705**	**415,673,172**
2029	**350,000,000**	No Change	**373,663,647**	**368,696,389**	**365,724,855**
2030	**300,000,000**	No Change	No Change	**318,749,752**	**315,778,218**
2031	**250,000,000**	No Change	No Change	No Change	**265,833,316**

Projected Appropriations: Current Schedule and With $18,000 COLA Base

Fiscal Year Ended	Current Funding Schedule	Fund COLA Increase by Fiscal 2028	Fund COLA Increase by Fiscal 2029	Fund COLA Increase by Fiscal 2030	Fund COLA Increase by Fiscal 2031
2027	**$500,877,061**	**$550,884,265**	**$536,027,311**	**$528,615,340**	**$524,181,320**
2028	**400,000,000**	**450,081,636**	**435,224,683**	**427,812,711**	**423,378,692**
2029	**350,000,000**	No Change	**385,301,534**	**377,889,562**	**373,455,543**
2030	**300,000,000**	No Change	No Change	**327,968,911**	**323,534,892**
2031	**250,000,000**	No Change	No Change	No Change	**273,616,819**

COLA base increase for the Teachers

We have estimated the additional unfunded liability and employer normal cost if the COLA base is increased for the Teachers effective July 1, 2026 from $15,000 to $16,000, $17,000 and $18,000, as shown in the table below.

Cost Element	January 1, 2026 Valuation Results	Increase if COLA Base Changes to $16,000	Increase if COLA Base Changes to $17,000	Increase if COLA Base Changes to $18,000
• Unfunded actuarial accrued liability projected to July 1, 2026	$2,305,466,086	$15,577,937	$31,130,265	$46,653,919
– Percent increase	–	0.7%	1.4%	2.0%
• Employer normal cost projected to July 1, 2026	$25,305,941	$278,889	$557,287	$835,078
– Percent increase	–	1.1%	2.2%	3.3%

Caveats and disclosures

These cost estimates are based on the assumptions used in the most recent actuarial valuation of the Boston Retirement System. To the extent there is adverse experience, employer contributions will increase and the cost related to a change in the COLA base may be different than expected. For example, if members live longer than assumed under the current mortality table assumption, the cost of increasing the COLA base will be higher than shown.

Please refer to the Preliminary Results of the January 1, 2026 Actuarial Valuation, dated May 27, 2026, for the data, assumptions and plan of benefits underlying these calculations. A more detailed discussion of the risks that may affect the System will be included in the final actuarial valuation report.

This report has been prepared in accordance with generally accepted actuarial principles and practices for the exclusive use and benefit of the Board, based upon information provided by the staff of the Retirement System and the System's other service providers.

This report should only be copied, reproduced, or shared with other parties in its entirety as necessary for the proper administration of the System.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Segal makes no representation or warranty as to the future status of the System and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is encouraged to discuss any issues raised in this report with the Board's legal, tax and other advisors before taking, or refraining from taking, any action.

Segal does not provide investment, legal, accounting, or tax advice and is not acting as a fiduciary to the System. This valuation is based on Segal's understanding of applicable

guidance in these areas and of the System's provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.

The actuarial calculations were directed under my supervision. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in this actuarial valuation is complete and accurate. The assumptions used in this actuarial valuation were selected by the Board based upon our analysis and recommendations. In my opinion, the assumptions are reasonable and take into account the experience of the Boston Retirement System and reasonable expectations. In addition, in my opinion, the combined effect of these assumptions is expected to have no significant bias.

Please let us know if you have any questions or need any additional information.

Sincerely,

Kathleen A. Riley, FSA, MAAA, EA
Senior Vice President and Chief Actuary

cc: Timothy J. Smyth, Esq.

Boston Retirement System

Preliminary Actuarial Valuation Results as of January 1, 2026

May 27, 2026 / Kathleen A. Riley, FSA, MAAA, EA / Andrew R. Luongo, ASA, MAAA, EA

Segal

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Preliminary Results: BRS Excluding Teachers

Participant information

The table below summarizes the data used in this year's valuation, compared to the data used in the prior year's valuation.

Demographic Data	December 31, 2025	December 31, 2024	Change
Active participants in valuation:			
• Number	16,670	16,207	2.9%
• Average age	44.7	44.9	-0.2
• Average years of service	10.7	10.9	-0.2
• Average compensation[1]	$88,299	$84,574	4.4%
Inactive participants:			
• Inactive vested participants	842	897	-6.1%
• Inactive participants due a refund of employee contributions	12,370	11,864	4.3%
Retired participants:			
• Number in pay status	7,031	6,954	1.1%
• Average age	73.9	73.7	0.2
• Average monthly benefit	$4,108	$3,953	3.9%
Disabled participants:			
• Number in pay status	1,584	1,603	-1.2%
• Average age	70.5	70.3	0.2
• Average monthly benefit	$5,538	$5,331	3.9%
Beneficiaries:			
• Number in pay status	1,645	1,659	-0.8%
• Average age	75.6	75.9	-0.3
• Average monthly benefit	$2,609	$2,519	3.6%

[1] Compensation figures are for the prior year and reflect annualized salaries for participants hired during the year.
Calendar year 2025 compensation figures were increased by 2.1% for Police and 7.7% for Fire to capture as of yet unrecognized salary increases.
Calendar year 2024 compensation figures were decreased by 8.7% for Police to estimate retroactive payments made during the year.

Financial information

- During the plan year ending December 31, 2025, the rate of return on the market value of assets was 14.27%. The return on the actuarial value of assets was 7.61% for the plan year ending December 31, 2025, resulting in an actuarial gain of $58.4 million when measured against the assumed rate of return of 6.90%.

- As of December 31, 2025, the actuarial value of assets was $8,992.3 million, or 97.5% of the market value of assets of $9,225.8 million (as reported in the Annual Statement).
  - As of December 31, 2024, the actuarial value of assets was 103.5% of the market value of assets.

- The actuarial value of assets does not reflect the unrecognized investment gain as of December 31, 2025 of $233.5 million. This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment losses derived from future experience.
  - This implies that earning the assumed rate of investment return (net of expenses) on a market value basis will result in investment gains on the actuarial value of assets in the next few years.
  - The projected unfunded actuarial accrued liability in the funding schedule shown later in this report does not reflect the recognition of the deferred investment gain.

Experience analysis

- The unfunded liability was expected to decrease by $398.6 million from $977.2 million as of January 1, 2025 to $578.6 million as of January 1, 2026. The actual unfunded liability of $517.5 million as of January 1, 2026, before consideration of any changes, is $61.1 million lower than expected.
- The development of the unfunded liability since the prior valuation is shown below:

Unfunded Actuarial Accrued Liability	Amount (Millions)
January 1, 2025 unfunded actuarial accrued liability	$977.2
January 1, 2026 projected unfunded actuarial accrued liability	578.6
Changes in unfunded actuarial accrued liability:	
• Net gain from investments	-58.4
• Net gain from administrative expenses	-1.9
• Net loss due to salaries increasing more than expected for continuing actives	10.5
• Net gain due to mortality experience	-13.7
• Net loss from other experience	2.4
Net experience gain	-$61.1
January 1, 2026 unfunded actuarial accrued liability (before consideration of any changes)	**$517.5**

- A discussion of the investment return assumption, mortality assumption, and other assumptions is on the following pages. We recommend an update to the mortality assumption with this valuation to new mortality tables recently released by the Society of Actuaries. In addition, we have provided an estimated impact of a change to the investment return assumption.

Assumptions review

Mortality assumption

- Current assumption:
  - Groups 1 and 2
    - Healthy: Pub-2010 General Employee, Healthy Retiree and Contingent Survivor Amount-weighted Mortality Tables set forward one year, projected generationally using Scale MP-2021
    - Disabled: Pub-2010 General Healthy Retiree Amount-weighted Mortality Tables set forward one year, projected generationally using Scale MP-2021
  - Group 4
    - Healthy: Pub-2010 Safety Employee, Healthy Retiree and Contingent Survivor Amount-weighted Mortality Tables, projected generationally using Scale MP-2021
    - Disabled: Pub-2010 Disabled Retiree Amount-weighted Mortality Tables, projected generationally using Scale MP-2021
- Experience:
  - The actual and expected deaths, by status, are shown below for the most recent five valuations. The underlying mortality table was most recently updated with the January 1, 2020 valuation.

Years	Healthy Retirees Expected	Healthy Retirees Actual	Disabled Retirees Expected	Disabled Retirees Actual	Beneficiaries Expected	Beneficiaries Actual
2018-2019	501.42	530	102.14	135	232.74	279
2020-2021	477.24	619	92.16	140	199.84	260
2022-2023	455.66	546	87.60	115	194.16	274
2024	232.72	289	45.77	57	89.91	160
2025	231.41	280	47.09	78	84.87	141
8 Year Average	**237**	**283**	**47**	**66**	**100**	**139**

- Proposed assumption:
  - In May 2025, after the preliminary January 1, 2025 valuation results were prepared, the Society of Actuaries released new mortality tables for public sector employees. This Pub-2016 family of tables updates the mortality rates for General Employees, Teachers, and Public Safety.
  - Groups 1 and 2
    - Healthy: Pub-2016 General Employee, Healthy Retiree and Contingent Survivor Amount-weighted Mortality Tables, projected generationally using Scale MP-2021
    - Disabled: Pub-2016 General Healthy Retiree Amount-weighted Mortality Tables set forward one year, projected generationally using Scale MP-2021
  - Group 4
    - Healthy: Pub-2016 Safety Employee, Healthy Retiree and Contingent Survivor Amount-weighted Mortality Tables, projected generationally using Scale MP-2021
    - Disabled: Pub-2016 Disabled Retiree Amount-weighted Mortality Tables, projected generationally using Scale MP-2021
- Impact of assumption change:
  - Changing the mortality assumption increases the unfunded liability by approximately $88.2 million and the normal cost by approximately $2.1 million

Investment return assumption

- The System's investment advisor (NEPC) has calculated the following expected rates of return:
  - 10-year time horizon: 5.9%
  - 30-year time horizon: 7.5%
- Based on the current target asset allocation, Segal Marco Advisors' capital market expectations as of December 31, 2025 and a building block approach, we calculate the following expected geometric rates of return (see next page for additional detail):
  - 10-year time horizon: 6.74%
  - 15-year time horizon: 6.75%
  - 20-year time horizon: 6.77%
- After reviewing this information, in our opinion, the current investment return assumption of 6.90% is reasonable.
- For illustration purposes, we have included results that use a 6.80% investment return assumption for consideration in a future valuation.

Segal Marco Advisors Capital Market Assumptions as of December 31, 2025

Arithmetic Returns by Asset Class	Domestic Equity	International Developed Markets Equity	Emerging Markets Equity	Core Fixed Income	High Yield Fixed Income	Emerging Market Debt	Core Real Estate	Hedge Fund, GTAA, Risk Parity, etc.	Private Credit	Private Equity
Nominal Expected Return as of December 31, 2025										
5 Year Time Horizon	8.23%	8.33%	9.63%	4.23%	5.33%	5.53%	6.13%	5.03%	7.93%	11.83%
10 Year Time Horizon	8.23%	8.33%	9.63%	4.23%	5.33%	5.53%	6.13%	5.03%	7.93%	11.83%
15 Year Time Horizon	8.26%	8.36%	9.66%	4.26%	5.36%	5.56%	6.16%	5.06%	7.96%	11.86%
20 Year Time Horizon	8.30%	8.40%	9.70%	4.30%	5.40%	5.60%	6.20%	5.10%	8.00%	11.90%
Target Allocation	**25.00%**	**14.00%**	**7.00%**	**20.00%**	**4.00%**	**3.00%**	**10.00%**	**5.00%**	**5.00%**	**7.00%**

Returns for Total Portfolio	(1) Forward Looking Expected Arithmetic Return	(2) Forward Looking Expected Geometric Return	(3) Median Geometric Return
Nominal Expected Return as of December 31, 2025			
5 Year Time Horizon	7.19%	6.78%	6.68%
10 Year Time Horizon	7.19%	6.74%	6.69%
15 Year Time Horizon	7.22%	6.75%	6.72%
20 Year Time Horizon	7.26%	6.77%	6.75%

Review of other assumptions

- Administrative expense assumption
  - We recommend resetting the administrative expense assumption to $10,500,000, based on budgeted expenses provided by the Retirement System.
- We do not recommend any changes in the salary increase, retirement, turnover, disability or other assumptions at this time.

Summary of preliminary valuation results

The table below summarizes the results of the January 1, 2026 actuarial valuation, using a 6.90% and a 6.80% investment return assumption and the recommended assumption changes described earlier, and the January 1, 2025 results.

Component	January 1, 2026, as Amount 6.80% Assumption	January 1, 2026, as Percent of Projected Payroll 6.80% Assumption	January 1, 2026, as Amount 6.90% Assumption	January 1, 2026, as Percent of Projected Payroll 6.90% Assumption	January 1, 2025, as Amount 6.90% Assumption	January 1, 2025, as Percent of Projected Payroll 6.90% Assumption
1. Total normal cost	$262,801,607	17.18%	$256,901,553	16.80%	$239,477,803	16.82%
2. Administrative expenses	10,500,000	0.69%	10,500,000	0.69%	10,500,000	0.74%
3. Expected employee contributions	-156,783,968	-10.25%	-156,783,968	-10.25%	-145,141,556	-10.20%
4. Employer normal cost: (1) + (2) + (3)	**$116,517,640**	**7.62%**	**$110,617,585**	**7.23%**	**$104,836,247**	**7.36%**
5. Actuarial accrued liability	9,701,800,524		9,597,916,920		9,173,008,955	
6. Actuarial value of assets	8,992,254,528		8,992,254,528		8,195,838,215	
7. Unfunded actuarial accrued liability: (5) - (6)	**$709,545,996**		**$605,662,392**		**$977,170,740**	
8. Funded percentage based on AVA	92.69%		93.69%		89.35%	
9. Market value of assets (MVA)	$9,225,754,072		$9,225,754,072		$7,917,574,100	
10. Funded percentage based on MVA	95.09%		96.12%		86.31%	
11. Projected payroll	$1,529,412,439		$1,529,412,439		$1,423,522,652	

Funding schedules

January 1, 2025 Funding Schedule – Revised in March, 2026

At the March 6, 2026 Board meeting, the Board approved a revision to the funding schedule adopted with the January 1, 2025 valuation.

The revised schedule was prepared with a preliminary estimate of the 2025 financial experience, including a $32 million excess contribution made for fiscal 2026, and included an experience loss to estimate the impact of vacation buyback adjustments that were expected to cause a loss with the January 1, 2026 valuation. The fiscal 2027 appropriation was lowered to $500,877,061 and the System was expected to be fully funded by June 30, 2028 if all assumptions were met and there were no changes in the plan of benefits or actuarial assumptions. Employer contributions for fiscal 2028 through fiscal 2031 decrease from $400 million to $250 million while the funded percentage approaches 105%. This schedule is shown below.

(1) Fiscal Year Ended June 30	(2) Employer Normal Cost	(3) Amortization of Unfunded Inactive Sheriff Liability	(4) Amortization of Remaining Unfunded Actuarial Accrued Liability	(5) Actuarially Determined Contribution (ADC): (2) + (3) + (4)	(6) Unfunded Actuarial Accrued Liability at Beginning of Fiscal Year	(7) Percent Increase in ADC Over Prior Year	(8) Funded Percentage as of January 1 Preceding Beginning of Fiscal Year
2026	$98,291,098	$2,237,070	$426,710,844	$527,239,012	$1,010,320,829	- -	89.4%
2027	108,614,316	2,237,070	390,025,675	500,877,061	593,225,217	-5.00%	94.0%
2028	112,527,802	2,237,070	285,235,128	400,000,000	216,700,563	-20.14%	97.9%
2029	116,581,533	0	233,418,467	350,000,000	-73,715,759	-12.50%	100.7%
2030	120,780,514	0	179,219,486	300,000,000	-326,317,513	-14.29%	103.0%
2031	125,129,924	0	124,870,076	250,000,000	-538,337,719	-16.67%	104.7%

Notes:
Fiscal 2026 Actuarially Determined Contribution set equal to budgeted amount.
Actuarially Determined Contributions are assumed to be paid on July 1.
Item (2) reflects 3.25% growth in payroll, as well as a 0.15% adjustment to total normal cost to reflect the effects of mortality improvements due to the generational mortality assumption.
Projected normal cost does not reflect the future impact of pension reform for future hires.
Projected unfunded actuarial accrued liability does not reflect the recognition of deferred investment gains or losses.

January 1, 2026 Funding Schedule

The funding schedule based on the preliminary January 1, 2026 valuation results, using the same parameters as the funding schedule adopted in March, 2026, is shown below.

The schedule continues to fully fund the System by June 30, 2028 with appropriations that follow the same pattern as the currently approved schedule.

(1) Fiscal Year Ended June 30	(2) Employer Normal Cost	(3) Amortization of Unfunded Inactive Sheriff Liability	(4) Amortization of Remaining Unfunded Actuarial Accrued Liability	(5) Actuarially Determined Contribution (ADC): (2) + (3) + (4)	(6) Unfunded Actuarial Accrued Liability at Beginning of Fiscal Year	(7) Percent Increase in ADC Over Prior Year	(8) Funded Percentage as of January 1 Preceding Beginning of Fiscal Year
2027	$112,400,748	$2,237,070	$386,239,243	$500,877,061	$626,209,223	- -	93.7%
2028	116,458,063	2,237,070	281,304,867	400,000,000	254,136,481	-20.14%	97.5%
2029	120,661,006	0	229,338,994	350,000,000	-31,434,432	-12.50%	100.3%
2030	125,014,779	0	174,985,221	300,000,000	-278,766,793	-14.29%	102.5%
2031	129,524,769	0	120,475,231	250,000,000	-485,060,904	-16.67%	104.2%

Notes:
Fiscal 2027 Actuarially Determined Contribution set equal to budgeted amount.
Actuarially Determined Contributions are assumed to be paid on July 1.
Item (2) reflects 3.25% growth in payroll, as well as a 0.15% adjustment to total normal cost to reflect the effects of mortality improvements due to the generational mortality assumption.
Projected normal cost does not reflect the future impact of pension reform for future hires.
Projected unfunded actuarial accrued liability does not reflect the recognition of deferred investment gains or losses.

Preliminary Results: Teachers

Participant information

The table below summarizes the data used in this year's valuation, compared to the data used in the prior year's valuation.

Demographic Data	December 31, 2025	December 31, 2024	Change
Active participants in valuation:			
• Number	6,766	6,760	0.1%
• Average age	42.8	42.7	0.1
• Average years of service	11.6	11.4	0.2
• Average compensation[2]	$119,674	$114,585	4.4%
Inactive participants:			
• Inactive vested participants	474	504	-6.0%
• Inactive participants due a refund of employee contributions	3,128	3,120	0.3%
Retired participants:			
• Number in pay status	4,403	4,388	0.3%
• Average age	75.8	75.5	0.3
• Average monthly benefit	$5,197	$5,118	1.5%
Disabled participants:			
• Number in pay status	98	104	-5.8%
• Average age	70.4	70.7	-0.3
• Average monthly benefit	$4,051	$3,971	2.0%
Beneficiaries:			
• Number in pay status	352	346	1.7%
• Average age	75.5	75.0	0.5
• Average monthly benefit	$2,525	$2,461	2.6%

[2] Compensation figures are for the prior year and reflect annualized salaries for participants hired during the year. Calendar year 2024 compensation figures were increased by 1% to estimate unsettled contracts.

Financial information

- During the plan year ending December 31, 2025, the rate of return on the market value of assets was 11.93%. The return on the actuarial value of assets was 8.03% for the plan year ending December 31, 2025, resulting in an actuarial gain of $27.5 million when measured against the assumed rate of return of 7.00%.

- As of December 31, 2025, the actuarial value of assets was $2,933.4 million, or 96.4% of the market value of assets of $3,043.5 million (as reported in the Annual Statement).
  - As of December 31, 2024, the actuarial value of assets was 99.8% of the market value of assets.

- The actuarial value of assets does not reflect the unrecognized investment gain as of December 31, 2025 of $110.1 million. This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment losses derived from future experience.
  - This implies that earning the assumed rate of investment return (net of expenses) on a market value basis will result in investment gains on the actuarial value of assets in the next few years.

Experience analysis

- The unfunded liability was expected to decrease by $115.8 million from $2,416.0 million as of January 1, 2025 to $2,300.2 million as of January 1, 2026. The actual unfunded liability of $2,235.6 million as of January 1, 2026, before consideration of any changes, is $64.6 million lower than expected.
- The development of the unfunded liability since the prior valuation is shown below:

Unfunded Actuarial Accrued Liability	Amount (Millions)
January 1, 2025 unfunded actuarial accrued liability	$2,416.0
January 1, 2026 projected unfunded actuarial accrued liability	2,300.2
Changes in unfunded actuarial accrued liability:	
• Net gain from investments	-27.5
• Net gain from administrative expenses	-1.6
• Net gain due to salaries increasing less than expected for continuing actives	-3.2
• Net loss due to mortality experience	9.0
• Net gain from other experience	-41.3
Net experience gain	-$64.6
January 1, 2026 unfunded actuarial accrued liability (before consideration of any changes)	**$2,235.6**

- A discussion of the investment return assumption, mortality assumption, and other assumptions is on the following pages. We recommend an update to the mortality assumption with this valuation to new mortality tables recently released by the Society of Actuaries. In addition, we recommend a change from the headcount-weighted tables to the amount-weighted tables to better align the assumption with the underlying measurement of liabilities.

Assumptions review

Mortality assumption

- Current assumption:
  - Healthy: Pub-2010 Teacher Employee, Healthy Retiree and Contingent Survivor Headcount-weighted Mortality Tables, projected generationally using Scale MP-2021
  - Disabled: Pub-2010 Teacher Healthy Retiree Headcount-weighted Mortality Tables, projected generationally using Scale MP-2021
- Experience:
  - The actual and expected deaths, by status, are shown below for the most recent five valuations. The underlying mortality table was most recently updated with the January 1, 2020 valuation.

Years	Healthy Retirees Expected	Healthy Retirees Actual	Disabled Retirees Expected	Disabled Retirees Actual	Beneficiaries Expected	Beneficiaries Actual
2018-2019	199.18	231	9.72	13	20.86	24
2020-2021	197.68	256	5.48	12	28.92	33
2022-2023	209.12	245	4.54	15	32.20	44
2024	109.43	103	1.90	5	16.22	13
2025	114.88	127	2.08	7	16.58	17
8 Year Average	**104**	**120**	**3**	**7**	**14**	**16**

- Proposed assumption:
  - In May 2025, after the preliminary January 1, 2025 valuation results were prepared, the Society of Actuaries released new mortality tables for public sector employees. This Pub-2016 family of tables updates the mortality rates for General Employees, Teachers, and Public Safety.
  - In addition, we recommend changing the mortality assumption from headcount-weighted to amount-weighted mortality tables to better align the assumption with the underlying measurement of liabilities. Because pension obligations are more sensitive to members with larger benefit amounts, amount-weighted tables provide a more representative basis for valuing the Teacher pension obligations.
  - Healthy: Pub-2016 Teacher Employee, Healthy Retiree and Contingent Survivor Amount-weighted Mortality Tables, projected generationally using Scale MP-2021
  - Disabled: Pub-2016 Teacher Healthy Retiree Amount-weighted Mortality Tables, projected generationally using Scale MP-2021
- Impact of assumption change:
  - Changing the mortality assumption decreases the unfunded liability by approximately $6.8 million and the normal cost by less than $0.1 million.

Investment return assumption

- PRIT's investment advisor (NEPC) has calculated the following expected rates of return:
  - 10-year time horizon: 6.3%
  - 30-year time horizon: 7.8%
- Based on the current target asset allocation, Segal Marco Advisors' capital market expectations as of December 31, 2025 and a building block approach, we calculate the following expected geometric rates of return (see next page for additional detail):
  - 10-year time horizon: 6.88%
  - 15-year time horizon: 6.89%
  - 20-year time horizon: 6.91%
- After reviewing this information, in our opinion, the current investment return assumption of 7.00% is reasonable.

Segal Marco Advisors Capital Market Assumptions as of December 31, 2025

Arithmetic Returns by Asset Class	Domestic Equity	International Developed Markets Equity	Emerging Markets Equity	Core Fixed Income	High Yield Fixed Income	Core Real Estate	Commodities	Hedge Fund, GTAA, Risk Parity, etc.	Private Credit	Private Equity
Nominal Expected Return as of December 31, 2025										
5 Year Time Horizon	8.23%	8.33%	9.63%	4.23%	5.33%	6.13%	6.63%	5.03%	7.93%	11.83%
10 Year Time Horizon	8.23%	8.33%	9.63%	4.23%	5.33%	6.13%	6.63%	5.03%	7.93%	11.83%
15 Year Time Horizon	8.26%	8.36%	9.66%	4.26%	5.36%	6.16%	6.66%	5.06%	7.96%	11.86%
20 Year Time Horizon	8.30%	8.40%	9.70%	4.30%	5.40%	6.20%	6.70%	5.10%	8.00%	11.90%
Target Allocation	**23.00%**	**9.00%**	**4.00%**	**15.00%**	**9.00%**	**10.00%**	**4.00%**	**10.00%**	**0.00%**	**16.00%**

Returns for Total Portfolio	(1) Forward Looking Expected Arithmetic Return	(2) Forward Looking Expected Geometric Return	(3) Median Geometric Return
Nominal Expected Return as of December 31, 2025			
5 Year Time Horizon	7.38%	6.93%	6.82%
10 Year Time Horizon	7.39%	6.88%	6.83%
15 Year Time Horizon	7.42%	6.89%	6.86%
20 Year Time Horizon	7.45%	6.91%	6.89%

Review of other assumptions

- Administrative expense assumption
  - We recommend resetting the administrative expense assumption to $4,500,000, based on budgeted expenses provided by the Retirement System.
- We do not recommend any changes in the salary increase, retirement, turnover, disability or other assumptions at this time.

Summary of preliminary valuation results

The table below summarizes the results of the January 1, 2026 actuarial valuation, using the 7.00% investment return assumption and reflecting the recommended mortality assumption change described earlier, and the January 1, 2025 results.

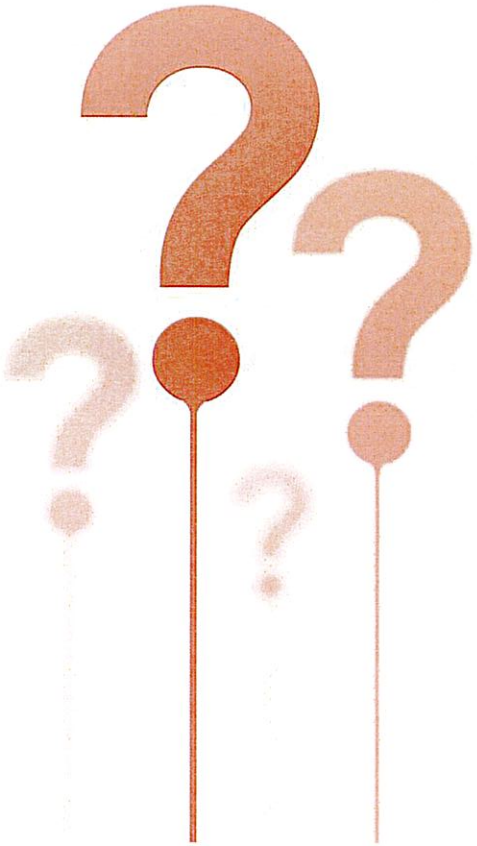
Component	January 1, 2026, as Amount	January 1, 2026, as Percent of Projected Payroll	January 1, 2025, as Amount	January 1, 2025, as Percent of Projected Payroll
1. Total normal cost	$113,164,024	13.28%	$109,140,666	13.38%
2. Administrative expenses	4,500,000	0.53%	4,500,000	0.55%
3. Expected employee contributions	-92,759,544	-10.88%	-88,697,003	-10.88%
4. Employer normal cost: (1) + (2) + (3)	**$24,904,480**	**2.92%**	**$24,943,663**	**3.06%**
5. Actuarial accrued liability	5,162,146,269		5,027,832,234	
6. Actuarial value of assets	2,933,368,080		2,611,856,272	
7. Unfunded actuarial accrued liability: (5) - (6)	**$2,228,778,189**		**$2,415,975,962**	
8. Funded percentage based on AVA	56.82%		51.95%	
9. Market value of assets (MVA)	$3,043,465,924		$2,617,523,450	
10. Funded percentage based on MVA	58.96%		52.06%	
11. Projected payroll	$852,218,023		$815,418,311	

Strategies to Consider When Approaching Full Funding

- When a retirement system is fully funded or approaching full funding, small experience fluctuations can result in significant changes in the employer cost because fluctuations may be large relative to the remaining unfunded liability and the number of years remaining on the funding schedule may be small. Managing employer contribution volatility and maintaining full funding are equally important.
- The Board may want to lower the investment return assumption to increase the likelihood of achieving the assumption, assuming no change in the System's asset allocation.
- To provide a buffer for employer contributions once the System is fully funded, you may consider funding more than 100% of the actuarial accrued liabilities, e.g. 105% of the actuarial accrued liabilities.
- Another approach to consider for mitigating contribution volatility is a layered amortization approach. With layered amortization, changes in the unfunded liability due to experience gains or losses, changes in assumptions, or a change in the plan of benefits are identified and then amortized over a fixed time period. The amortization period could be as long as 10 to 15 years and the amortization payments can be level dollar payments or payments that are level as a percentage of payroll.
- MGL Chapter 32 currently requires the unfunded liability to be fully amortized by June 30, 2040. As we get closer to that date, MGL Chapter 32 may be amended to allow for layered amortization or the full funding date may be extended.
- Once a System is fully funded, the employer(s) may redirect all or a portion of the retirement contribution that was allocated to reduce the System's unfunded liability to the employer's OPEB liability. Future contributions could be redirected back to the System if necessary.
- We can model these strategies and show the impact of future investment volatility.

Caveats and Questions

- It is important to note that this actuarial valuation is based on plan assets as of December 31, 2025. The Plan's actuarial status is not based on the daily fluctuations of the market, but on the market values on the last day of the Plan Year. While it is impossible to determine how the market will perform in the future, and how that will affect the results of next year's valuation, Segal is available to prepare projections of potential outcomes upon request.
- Projections, by their nature, are not a guarantee of future results. The projections are intended to serve as estimates of future outcomes, based on the information available to us and the assumptions described herein. Emerging results may differ significantly if the actual experience proves to be different from these assumptions.
- A discussion of the risks inherent in the measurement of pension plan obligations will be included in the January 1, 2026 Actuarial Valuation and Review.



Disclosures

- This report was prepared in accordance with generally accepted actuarial principles and practices for the exclusive use and benefit of the Board, based upon information provided by the staff of the Retirement System and the System's other service providers.
- The actuarial assumptions and plan provisions used for this valuation are as described in Section 5 of the January 1, 2025 Actuarial Valuation and Review dated August 8, 2025, except for the changes noted previously. The financial information used in this valuation is as of December 31, 2025.
- The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements and changes in plan provisions or applicable law.
- An actuarial valuation is a measurement at a specific date – it is not a prediction of a plan's future financial condition. We have not been retained to perform an analysis of the potential range of financial measurements, except where otherwise noted.
- Segal makes no representation or warranty as to the future status of the Retirement System and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is encouraged to discuss any issues raised in this report with the System's legal, tax and other advisors before taking, or refraining from taking, any action.
- Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and

user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

- The actuarial calculations were directed under the supervision of Kathleen A. Riley, FSA, MAAA, EA. She is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of her knowledge, the information supplied in this actuarial valuation is complete and accurate. The assumptions used in this actuarial valuation were selected by the Boston Retirement Board based upon our analysis and recommendations. In her opinion, the assumptions are reasonable and take into account the experience of the Boston Retirement System and reasonable expectations. In addition, in her opinion, the combined effect of these assumptions is expected to have no significant bias.