Vermont State Teachers' Retirement System

Actuarial Valuation and Review as of June 30, 2025

Segal

Segal

101 North Wacker Drive, Suite 1800
Chicago, IL 60606-172
segalco.com
T 312.984.8500

October 24, 2025

Board of Trustees
Vermont State Teachers' Retirement System
Montpelier, Vermont 05609

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2025, of the Vermont State Teachers' Retirement System (VSTRS). It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for the fiscal year ending June 30, 2027.

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

Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report, and we have no reason to believe there are facts or circumstances that would affect the validity of these results.

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.

Board of Trustees
Vermont State Teachers' Retirement System
October 24, 2025

The actuarial calculations were directed under the supervision of Matthew A. Strom, FSA, MAAA, EA. I am a member of the American Academy of Actuaries and I 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 investment return and inflation assumptions were selected by the Vermont Pension Investment Commission (VPIC). The remaining actuarial 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 System and reasonable expectations. In addition, in my opinion, the combined effect of these assumptions is expected to have no significant bias.

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 System's legal, tax and other advisors before taking, or refraining from taking, any action.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal

Matthew A. Strom, FSA, MAAA, EA
Senior Vice President and Actuary

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present a valuation of the System as of June 30, 2025, pursuant to section 1942, subsection (n), of Title 16, Chapter 55, Vermont Statutes Annotated, relating to the Vermont State Teachers' Retirement System. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits.

The contribution requirements presented in this report are based on:

- The benefit provisions of the System, as administered by the Board;
- The characteristics of covered active members, inactive members, deferred members, and retired members and beneficiaries as of June 30, 2025, provided by the Office of the State Treasurer;
- The unaudited assets of the System as of June 30, 2025, provided by the Office of the State Treasurer;
- Economic assumptions regarding future salary increases, inflation, and investment earnings;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc.; and
- The funding policy prescribed by State statute.

Certain disclosure information required by GASB Statements No. 67 and 68 as of June 30, 2025, for the System is provided in separate reports.

Valuation highlights

Developments since last valuation

- **Asset returns:** The rate of return on the market value of assets was 11.2% for the year ending June 30, 2025. The effective return on the actuarial value of assets, a notional value that smooths investment gains and losses over five years and is used to develop the actuarially determined contribution (ADC) and funded status, was 7.8% for the same period due to the recognition of a portion of this year's investment gain and a portion of prior years' investment gains and losses. This resulted in an actuarial gain when measured against the assumed rate of return of 7.0%. This actuarial investment gain decreased the employer contribution rate by 0.3% of pay. We advise the Board to continue to monitor actual and anticipated investment returns relative to the assumed long-term rate of return on investments.
- **Contributions:** Actual contributions made during the fiscal year ending June 30, 2025, of $213.7 million were 106.2% of the actuarially determined contribution (ADC). In the prior fiscal year, actual contributions were 114.3% of the prior year ADC.
- **Experience:** The actuarial loss of $26.0 million, or 0.5% of actuarial accrued liability, is due to an investment gain of $22.0 million, or 0.5% of actuarial accrued liability, offset by a loss from sources other than investments of $48.0 million, or 1.0% of the actuarial accrued liability. This loss was primarily due to: actual salary and/or service increases that were greater than assumed; members retiring earlier than expected; and actual 2026 COLAs that were greater than assumed. Additional detail regarding this loss is shown in Section 2, "Non-investment experience".

Actuarial valuation results

- **Funded ratio:** The funded ratio (the ratio of the actuarial value of assets to actuarial accrued liability) is 63.4%, compared to the prior year funded ratio of 61.2%. This ratio is one measure of funding status, and its history is a measure of funding progress. Using the market value of assets, the funded ratio is 65.3%, compared to 61.0% as of the prior valuation date. These measurements are not necessarily appropriate for assessing the sufficiency of the plan assets to cover the estimated cost of settling the System's benefit obligation or the need for or the amount of future contributions.
- **Actuarially determined contribution (ADC):** The results of this June 30, 2025, actuarial valuation are used to determine the ADC for the fiscal year ending June 30, 2027, and to estimate the ADC for the fiscal year ending June 30, 2028. The ADC for fiscal 2027 is $220.9 million, an increase of $8.2 million from fiscal 2026. Last year's estimate of the ADC for fiscal 2027 is $3.4 million less than this year's actual amount. This is due to the net demographic loss. The estimated fiscal 2028 actuarially determined contribution is $225.8 million.

- **Unfunded actuarial accrued liability (UAAL):** The UAAL is $1,751.3 million, which is a decrease of $35.7 million since the prior valuation.
- **Asset smoothing:** The actuarial value of assets is 97.2% of the market value of assets. The investment experience in the past years has only been partially recognized in the actuarial value of assets. As the deferred net gain is recognized in future years, the cost of the System is likely to decrease unless the net gain is offset by future experience. The recognition of the deferred net market gain of $87.8 million will also have an impact on the future funded ratio. If the net deferred gain were recognized immediately in the actuarial value of assets, the preliminary contribution requirement would decrease from 25.5% to about 24.4% of projected payroll.
- **GASB accounting:** This report constitutes an actuarial valuation for the purpose of determining the actuarially determined contribution under the System's funding policy and measuring the progress of that funding policy. The Net Pension Liability (NPL) and pension expense under Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68, for inclusion in the System's and employer's financial statements as of June 30, 2025, will be provided separately. The accounting disclosures will utilize different methodologies from those employed in the funding valuation, as required by the GASB. However, the ADC in this valuation is expected to be used as the ADC for GASB financial reporting.

Funding considerations

- **Funding method:** Segal strongly recommends an actuarial funding policy that targets 100% funding of the actuarial accrued liability. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the unfunded actuarial accrued liability and the principal balance. The funding policy set in the Vermont State Pension Code meets this standard. Section 1944, subsection (c)(4), of Title 16, Chapter 55, Vermont Statutes Annotated calls for annual payments on the unfunded actuarial accrued liability to be made over a closed period ending on June 30, 2038. The amount of each annual payment is calculated assuming that the amortization period will remain closed and that the amortization amount will increase annually at the rate of 3% over the preceding year.
- **Post-retirement Adjustment Allowance Account:** Act 114 established the Post-Retirement Adjustment Allowance Account (PAAA), which will be used to provide funding for post-retirement adjustment formula enhancements or other benefits that may accrue to eligible members. The first PAAA contribution occurred on June 30, 2024. As of June 30, 2025, the accumulated account balance is $10,337,252. The PAAA is excluded from the assets of the System for funding purposes. See Section 3, Exhibit D for details.

Risk

- **Snapshot date:** It is important to note that this actuarial valuation is based on plan assets as of June 30, 2025. The System's funded status does not reflect short-term economic fluctuations but rather is based on the market values on the last day of the plan year. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.
- **Understanding risk:** Since the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly as actual experience proves to be different from the assumptions. We have included a brief discussion of some risks that may affect the System in Section 2, "Risk". A more detailed assessment of the risks would provide the Board with a better understanding of the inherent risks in the System. This assessment may include scenario testing, sensitivity testing, stress testing and stochastic modeling. We recently conducted a detailed analysis of the potential range of the impact of investment, inflationary, employment, and other demographic risks relative to the Plan's future financial condition.

Summary of key valuation results

Valuation Result	Current	Prior
Contributions for fiscal year:		
• Actuarially determined employer contributions for fiscal 2027 (and 2026)	$220,905,084	$212,752,627
• Estimated actuarially determined employer contributions for fiscal 2028 (and 2027)	225,779,697	217,500,083
Actuarial accrued liability for plan year beginning:	**July 1, 2025**	**July 1, 2024**
• Retired members and beneficiaries	$2,907,211,130	$2,819,623,709
• Deferred members as reported by the System	65,672,757	64,578,639
• Inactive members as reported by the System	94,840,681	84,286,001
• Active members	1,721,761,371	1,633,860,426
• **Total**	**$4,789,485,939**	**$4,602,348,775**
• Employer normal cost for plan year beginning	$42,465,059	$40,208,397
Assets for plan year beginning:		
• Market value of assets (MVA)	$3,125,986,373	$2,808,813,254
• Actuarial value of assets (AVA)	3,038,152,299	2,815,334,500
• Actuarial value of assets as a percentage of market value of assets	97.19%	100.23%
Funded status for plan year beginning:		
• Unfunded actuarial accrued liability on market value of assets	$1,663,499,566	$1,793,535,521
• Funded percentage on MVA basis	65.27%	61.03%
• Unfunded actuarial accrued liability on actuarial value of assets	$1,751,333,640	$1,787,014,275
• Funded percentage on AVA basis	63.43%	61.17%
• Remaining amortization period (years)	13	14

Section 1: Actuarial Valuation Summary

Valuation Result	Current	Prior
Key assumptions:	**July 1, 2025**	**July 1, 2024**
• Net investment return	7.00%	7.00%
• Inflation rate	2.30%	2.30%
Demographic data for plan year beginning:		
• Number of retired members and beneficiaries	10,772	10,625
• Number of deferred members as reported by the System	1,057	1,050
• Number of inactive members as reported by the System	3,612	3,500
• Number of active members	10,526	10,567
• Total payroll	$809,117,204	$774,174,896
• Average payroll	76,868	73,263
• Total monthly benefits for all retired members and beneficiaries	22,443,858	21,475,087
• Average monthly benefit for all retired members and beneficiaries	2,084	2,021

Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Input Item	Description
Plan provisions	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Member information	An actuarial valuation for a plan is based on data provided to the actuary by the System. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Financial information	Part of the cost of a plan will be paid from existing assets — the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the System. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
Actuarial assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of participants in each year, as well as forecasts of the plan's benefits for each of those events. In addition, the benefits forecasted for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

Section 1: Actuarial Valuation Summary

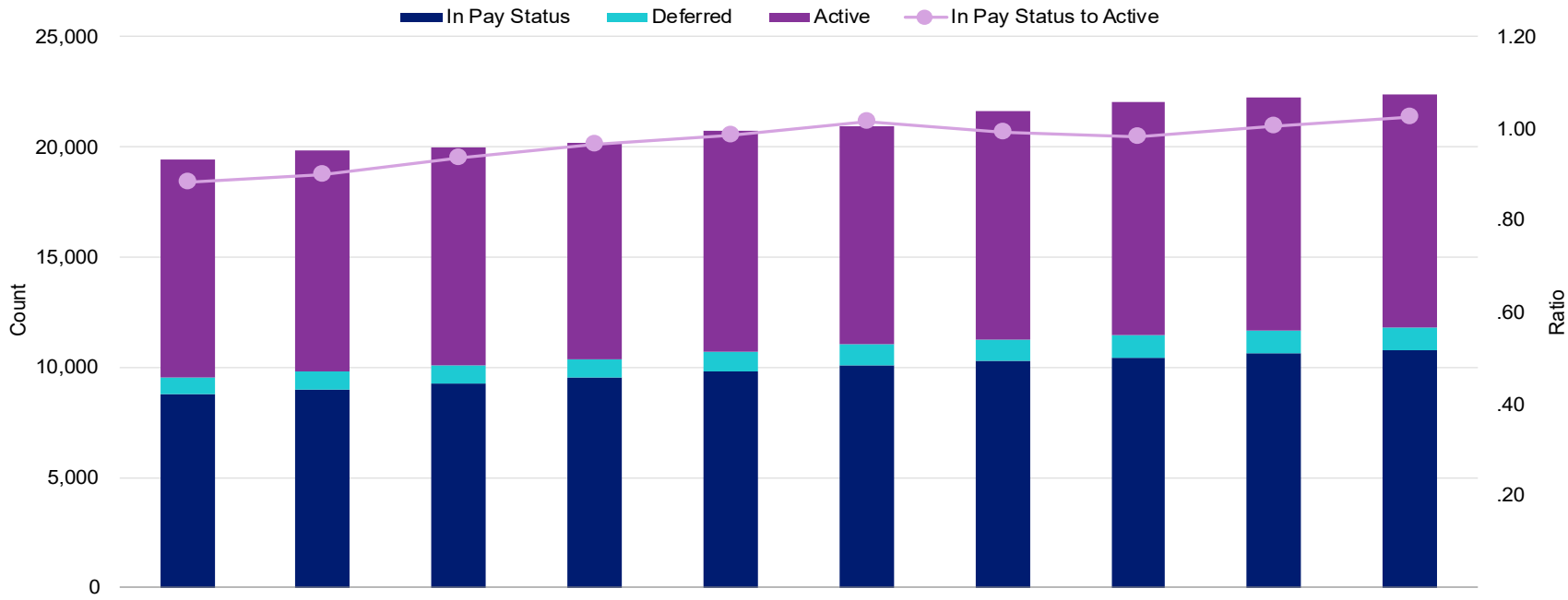
The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The actuarial valuation is prepared at the request of the System and Board. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement at a specific date — it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- If the System is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice and is not acting as a fiduciary to the System. The 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 System should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by the System upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

Section 2: Actuarial Valuation Results

Member information

Member Population as of June 30



Legend	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
In Pay Status	8,763	9,021	9,269	9,514	9,843	10,106	10,295	10,431	10,625	10,772
Deferred[1]	747	763	787	819	887	911	938	998	1,050	1,057
Active	9,919	10,028	9,892	9,862	9,996	9,955	10,387	10,618	10,567	10,526
In Pay Status to Active	0.88	0.90	0.94	0.96	0.98	1.02	0.99	0.98	1.01	1.02

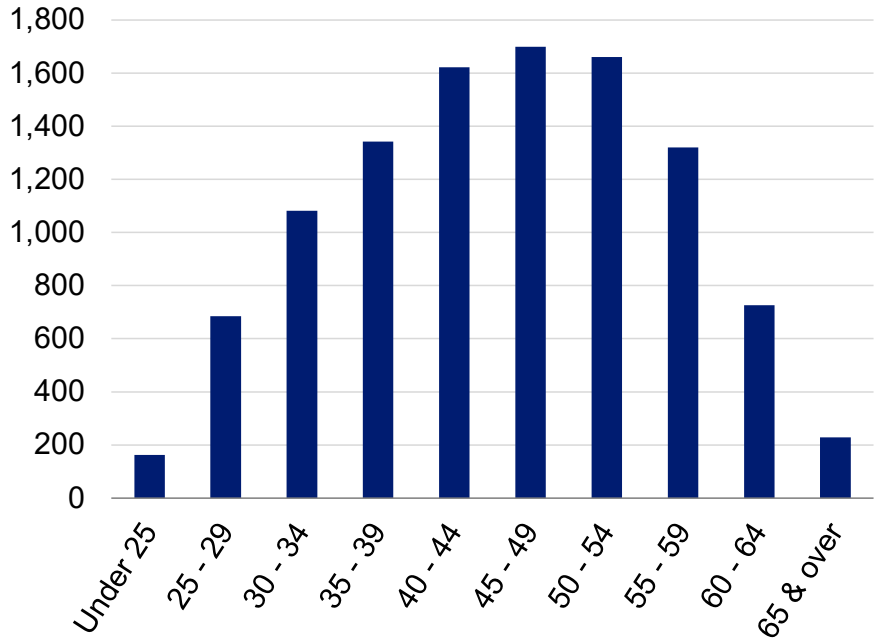
[1] Excludes inactive members as reported by the System.

Active members

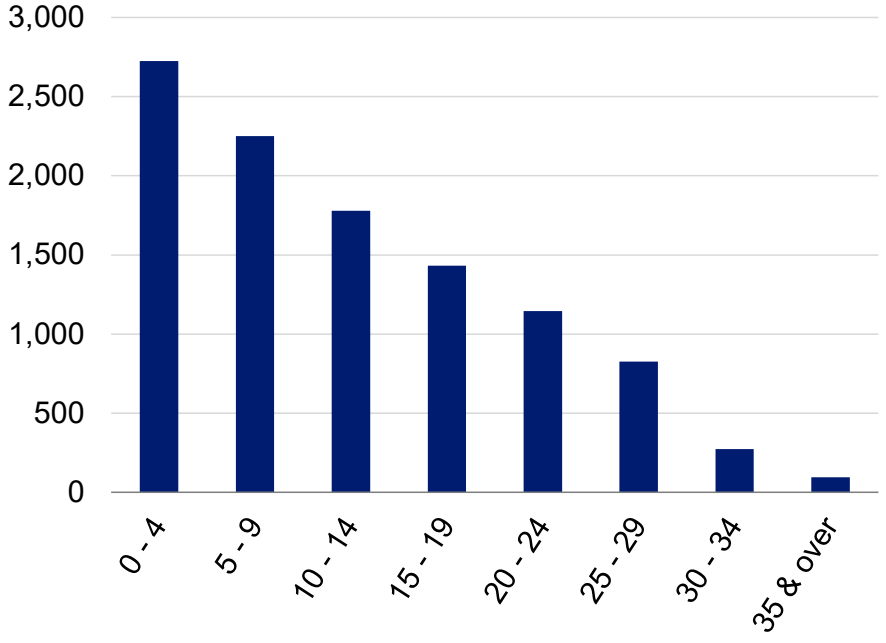
Demographic Data	June 30, 2025	June 30, 2024	Change
Active members	10,526	10,567	−0.4%
Average age	45.7	45.5	0.2
Average years of credited service	12.3	12.1	0.2
Average payroll	$76,868	$73,263	4.9%

Distribution of Active Members as of June 30, 2025

Actives by Age



Actives by Years of Service



Inactive and deferred members

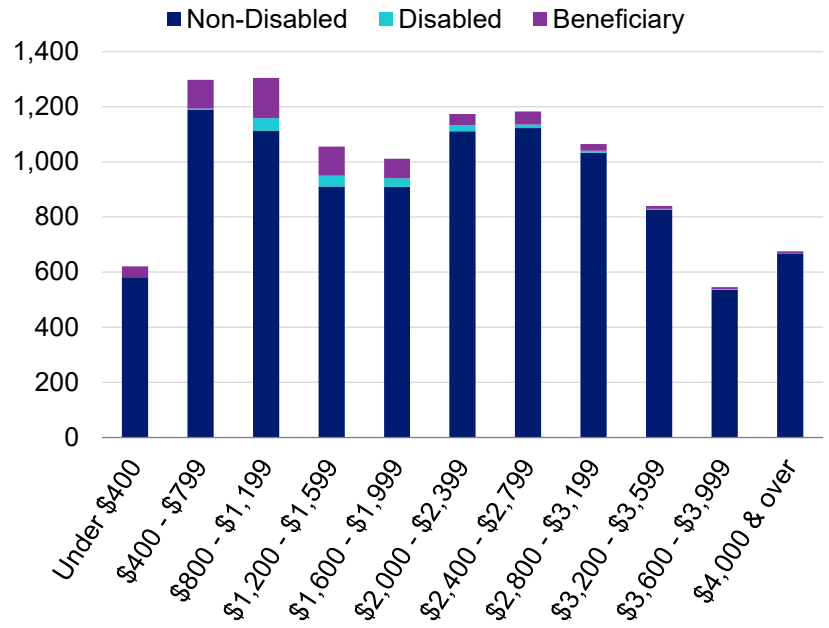
- In this year's valuation, there were 3,612 inactive members as reported by the System. A member is reported as inactive if they have withdrawn from active employment within the six-year period preceding the valuation date, or if they withdrew prior to the six-year period preceding the valuation date, but do not have a vested right to a deferred or immediate vested benefit and have not taken a refund of their employee contributions.
- In addition, there were 1,057 deferred members as reported by the System. A member is reported as deferred if they have withdrawn from active employment prior to the six-year period preceding the valuation date and have a vested right to a deferred or immediate vested benefit.

Retired members and beneficiaries

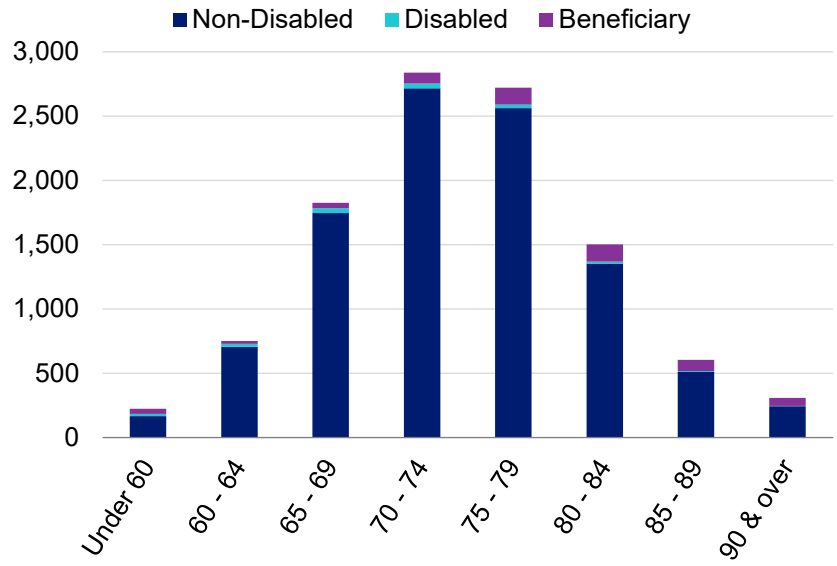
Demographic Data	June 30, 2025	June 30, 2024	Change
Retired members (including disability)	10,169	10,032	1.4%
Average age	74.5	74.1	0.4
Average amount	$2,121	$2,059	3.0%
Beneficiaries	603	593	1.7%
Total monthly amount	$22,443,858	$21,475,087	4.5%

Distribution of Retired Members and Beneficiaries as of June 30, 2025

By Type and Monthly Amount



By Type and Age



Historical plan population

Member Data Statistics: 2016 – 2025
Active Members versus Retired Members[1]

Year Ended June 30	Active Members Count	Active Members Average Age	Active Members Average Service	Retired Members Count	Retired Members Average Age	Retired Members Average Monthly Amount
2016	9,919	45.9	12.7	8,259	70.8	$1,641
2017	10,028	45.8	12.6	8,581	71.2	1,683
2018	9,892	45.7	12.6	8,809	71.7	1,726
2019	9,862	45.7	12.7	9,040	72.1	1,771
2020	9,996	45.4	12.4	9,340	72.5	1,830
2021	9,955	45.3	12.3	9,573	72.8	1,874
2022	10,387	45.2	12.1	9,758	73.2	1,939
2023	10,618	45.4	12.0	9,875	73.7	2,008
2024	10,567	45.5	12.1	10,032	74.1	2,059
2025	10,526	45.7	12.3	10,169	74.5	2,121

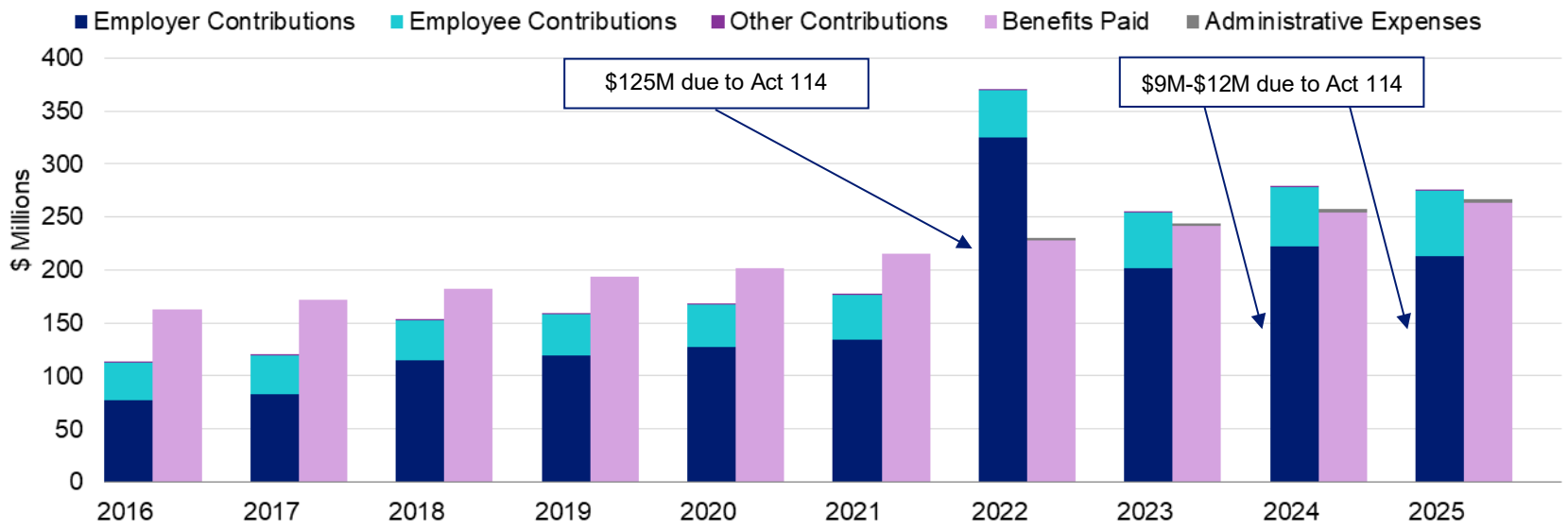
[1] Not including beneficiaries.

Financial information

Retirement plan funding anticipates that, over the long term, both contributions and investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments. Retirement plan assets change as a result of the net impact of these income and expense components. Benefits have exceeded employer and member contributions for all years shown except for 2022 through 2025 (due to additional contributions required under Act 114).

Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits C through F.

Comparison of Contributions to Benefits Paid
for Years Ended June 30, 2016 – 2025



Section 2: Actuarial Valuation Results

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Vermont Pension Investment Commission has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. A characteristic of the asset valuation method is that, over time, it is more likely to produce an actuarial value of assets that is less than the market value of assets. The asset method provides a degree of conservatism to increase the likelihood that benefits are funded. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

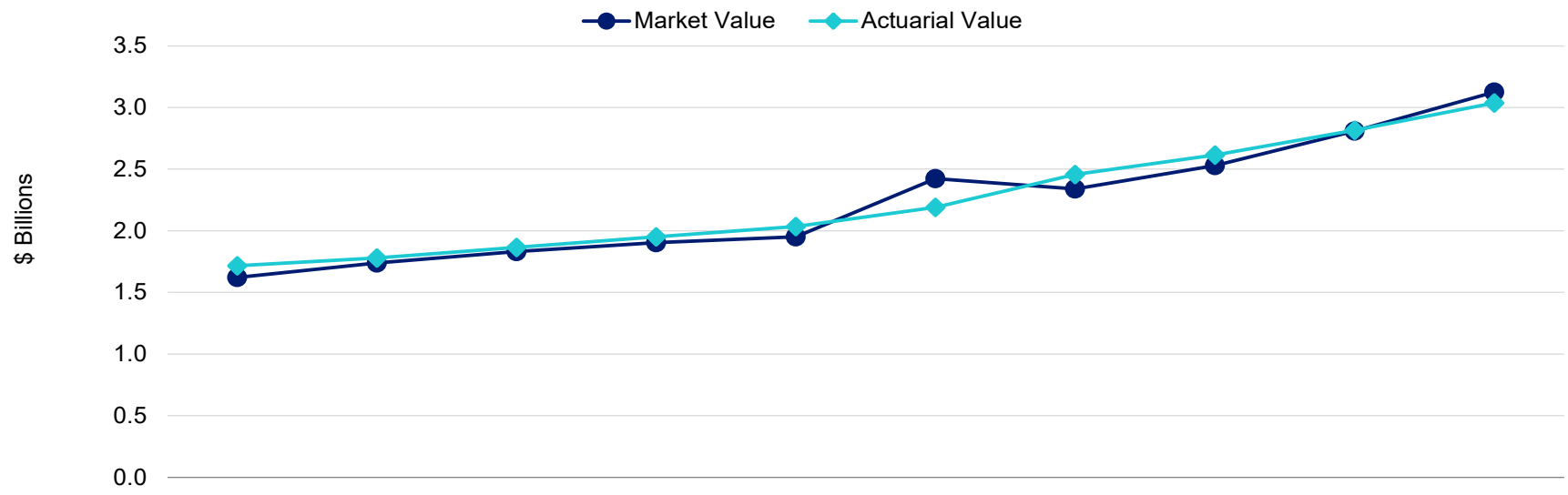
Determination of Actuarial Value of Assets for Year Ended June 30, 2025

	Step	Amount
1.	Actuarial value of assets, June 30, 2024	$2,815,334,500
2.	Net new money[1], including expected investment income (7.00%)	200,859,281
3.	Preliminary asset value: **1 + 2**	3,016,193,781
4.	Smoothing adjustment	
a.	Market value, June 30, 2025	$3,125,986,373
b.	Preliminary asset value: **3**	3,016,193,781
c.	Unrecognized appreciation: **4a – 4b**	109,792,592
d.	Adjustment percentage	20%
e.	Total smoothing adjustment: **4c x 4d**	21,958,518
5.	Preliminary actuarial value of assets as of June 30, 2025: **3 + 4e**	3,038,152,299
6.	Adjustment to be within 20% corridor	0
7.	**Final actuarial value of assets as of June 30, 2025: 5 + 6**	**$3,038,152,299**
8.	Actuarial value as a percentage of market value: **7 ÷ 4a**	97.19%

[1] Net new money is comprised of contributions, interest, and dividends, less benefit payments and expenses.

Asset history for years ended June 30

Market Value of Assets versus Actuarial Value of Assets

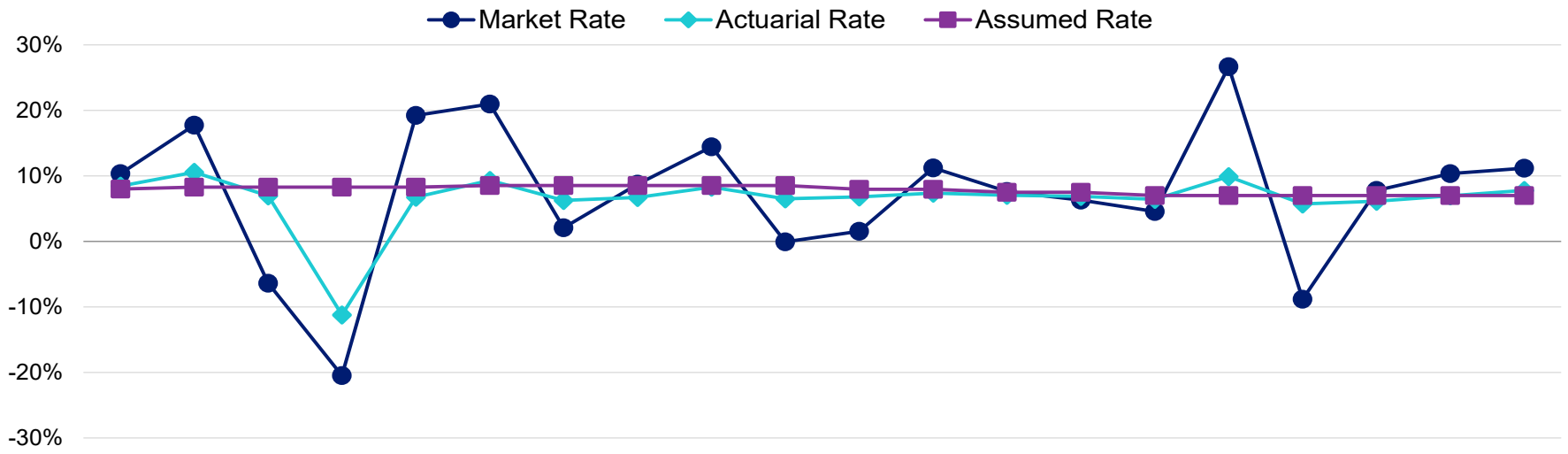


Legend	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Market value[1]	$1.62	$1.74	$1.83	$1.90	$1.95	$2.42	$2.34	$2.53	$2.81	$3.13
Actuarial value[1]	1.72	1.78	1.87	1.95	2.04	2.19	2.46	2.62	2.82	3.04
Actuarial to Market	1.06	1.02	1.02	1.02	1.04	0.90	1.05	1.03	1.00	0.97

[1] In $ billions

Historical investment returns

Market and Actuarial Rates of Return versus Assumed Rate for Years Ended June 30



Legend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Market rate	10.4%	17.7%	−6.4%	−20.5%	19.2%	21.0%	2.1%	8.7%	14.4%	−0.1%	1.5%	11.2%	7.6%	6.3%	4.6%	26.6%	−8.9%	7.8%	10.3%	11.2%
Actuarial rate	8.4%	10.5%	6.9%	−11.2%	6.8%	9.3%	6.3%	6.7%	8.3%	6.5%	6.8%	7.3%	7.0%	6.9%	6.4%	9.9%	5.7%	6.1%	6.9%	7.8%
Assumed rate	8.0%	8.25%	8.25%	8.25%	8.25%	8.5%	8.5%	8.5%	8.5%	8.5%	7.95%	7.95%	7.5%	7.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%

Average Rates of Return	Market Value	Actuarial Value
Most recent five-year average return:	8.68%	7.22%
Most recent ten-year average return:	7.64%	7.07%
Most recent 15-year average return:	7.91%	7.16%
Most recent 20-year average return:	6.91%	6.50%

Actuarial experience

To calculate the actuarially determined contribution (ADC), assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Assumptions should consider experience and should be based on reasonable expectations for the future. Each year actual experience is compared to that projected by the assumptions. Differences are reflected in the actuarial valuation.

Assumptions are not changed if experience is believed to be a short-term development that will not continue over the long term. On the other hand, if experience is expected to continue, assumptions are changed.

The net experience loss is $26,000,645 which includes $21,958,518 from investment gains and $47,959,163 in net losses from all other sources. The net experience variation from individual sources other than investments was 1.0% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

Actuarial Experience for Year Ended June 30, 2025

	Assumption	Amount
1.	Net gain/(loss) from investments[1]	$21,958,518
2.	Gain/(loss) from administrative expenses	536,792
3.	Net gain/(loss) from other experience	−48,495,955
4.	**Net experience gain/(loss): 1 + 2 + 3**	**−$26,000,645**

[1] Details on next page

Investment experience

Actuarial planning is long term. The obligations of a pension plan are expected to continue for the lifetime of all its participants.

The assumed long-term rate of return of 7.00% considers past experience, the asset allocation policy of the System and future expectations.

Investment Experience
Year Ended (YE) – June 30, 2025, versus June 30, 2024

	Item	YE 2025 Market Value	YE 2025 Actuarial Value	YE 2024 Market Value	YE 2024 Actuarial Value
1.	Net investment income	$313,515,277	$219,159,957	$262,314,863	$182,067,779
2.	Average value of assets	2,810,642,175	2,817,163,421	2,537,490,104	2,624,258,434
3.	Rate of return: **1 ÷ 2**	11.15%	7.78%	10.34%	6.94%
4.	Assumed rate of return	7.00%	7.00%	7.00%	7.00%
5.	Expected investment income: **2 x 4**	$196,744,952	$197,201,439	$177,624,307	$183,698,090
6.	**Net investment gain/(loss): 1 – 5**	**$116,770,325**	**$21,958,518**	**$84,690,556**	**−$1,630,311**

Non-investment experience

Administrative expenses

Administrative expenses for the year ended June 30, 2025, totaled $3,255,773, as compared to the assumption of $3,649,150. This resulted in an experience gain of $536,792 for the year, including an adjustment for interest.

Other experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- Mortality experience (more or fewer than expected deaths)
- The extent of turnover among members
- Retirement experience (earlier or later than projected)
- The number of disability retirements (more or fewer than projected)
- Salary and service increases (greater or smaller than projected)
- Actual COLAs paid (more or less than assumed)

The net loss from this other experience for the year ended June 30, 2025 amounted to $48,495,955, which is 1.0% of the actuarial accrued liability.

Unexpected Liability Changes Due to Demographic Experience for Year Ended June 30

Liability Change	2025	2024	2023	2022	2021	Average
Net turnover	$7,671,080	$12,387,965	$10,355,606	−$8,153,540	−$10,518,767	$2,348,469
Retirement	−20,227,347	−19,689,024	−13,111,226	−13,883,165	−16,872,089	−16,756,570
Mortality	3,692,143	−3,734,817	1,281,703	5,596,133	1,761,346	1,719,302
Disability retirements	−130,498	28	−418,493	44,922	−560,942	−212,997
Salary/service increases	−14,064,243	−9,677,386	−1,961,824	7,256,908	9,493,027	−1,790,704
COLA experience[1]	−8,404,403	−18,394,263	5,467,039	−28,712,344	−22,593,555	−14,527,505
Miscellaneous[2]	−17,032,687	−20,835,916	−15,110,615	−11,032,228	−6,407,934	−14,083,876
Total	**−$48,495,955**	**−$59,943,413**	**−$13,497,810**	**−$48,883,314**	**−$45,698,914**	**−$43,303,881**

Actuarial assumptions

There are no assumption changes reflected in this report. Details on actuarial assumptions and methods are in Section 4, Exhibit G.

Plan provisions

There were no changes in plan provisions since the prior valuation. A summary of plan provisions is in Section 4, Exhibit H.

[1] COLA experience loss for 2025 is due to actual 2026 COLAs being greater than expected (3.00% actual versus 2.30% expected for Group A, 1.50% actual versus 1.20% expected for Groups B and C).

[2] Miscellaneous gains and losses are comprised of all demographic gains and losses that are not individually listed in the table above. Some of the largest attributing items typically include data updates, show-up/drop-off records (records that were not previously valued, or records that were previously valued that are no longer being valued), and actual timing of cash flows being different than assumed.

Development unfunded actuarial accrued liability

Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2025

	Item	Amount
1.	Unfunded actuarial accrued liability at beginning of year	$1,787,014,275
2.	Normal cost at beginning of year	91,797,174
3.	Total contributions	−275,357,734
4.	Interest on 1, 2 & 3	121,879,280
5.	Expected unfunded actuarial accrued liability: **1 + 2 + 3 + 4**	$1,725,332,995
6.	Changes due to:	
	a. Net experience (gain)/loss	$26,000,645
	b. Assumptions	0
	c. Funding method	0
	d. Plan provisions	0
	e. Total changes	26,000,645
7.	**Unfunded actuarial accrued liability at end of year: 5 + 6e**	**$1,751,333,640**

Actuarially determined contribution

The actuarially determined contribution is equal to the employer normal cost payment and a payment on the unfunded actuarial accrued liability. The statute governing the System specifies the funding policy used to calculate the actuarially determined contribution based on a closed amortization period ending on June 30, 2038. As of July 1, 2025, there are 13 years remaining on this schedule.

The actuarially determined contribution for the fiscal year ending June 30, 2026, is $212,752,627 based on the June 30, 2024, actuarial valuation. The results of this June 30, 2025, actuarial valuation with the additional Act 114 contributions are used to determine the actuarially determined contribution for the fiscal year ending June 30, 2027, and to estimate the actuarially determined contribution for the fiscal year ending June 30, 2028, as shown in Section 2, “Projection of actuarially determined contribution for following two fiscal years”.

The preliminary contribution requirement as of July 1, 2025, is based on the data previously described, the actuarial assumptions and plan provisions described in Section 4, including all changes affecting future costs adopted at the time of the actuarial valuation, and actuarial gains and losses.

Preliminary Contribution Requirement for Year Beginning July 1

	Contribution	2025 Amount	2025 Percent of Projected Payroll[1]	2024 Amount	2024 Percent of Projected Payroll[1]
1.	Total normal cost, adjusted for timing[2]	$96,444,878	11.38%	$91,306,585	11.26%
2.	Administrative expenses	3,812,979	0.45%	3,649,150	0.45%
3.	Expected employee contributions	−57,792,798	−6.82%	−54,747,338	−6.75%
4.	Employer normal cost: **1 + 2 + 3**	$42,465,059	5.01%	$40,208,397	4.96%
5.	Actuarial accrued liability	4,789,485,939		4,602,348,775	
6.	Actuarial value of assets	3,038,152,299		2,815,334,500	
7.	Unfunded actuarial accrued liability: **5 – 6**	$1,751,333,640		$1,787,014,275	
8.	Payment on unfunded actuarial accrued liability, adjusted for timing[2]	173,377,540	20.46%	167,160,803	20.61%
9.	**Preliminary contribution requirement: 4 + 8**	**$215,842,599**	**25.47%**	**$207,369,200**	**25.57%**
10.	Projected payroll	847,328,659		810,922,146	

[1] Amounts may not add due to rounding.
[2] Contributions are assumed to be paid at the middle of the year.

Section 2: Actuarial Valuation Results

The current funding policy is intended to result in predictable employer contributions that eliminate the unfunded actuarial accrued liability within 13 years, thereby providing benefit security to plan participants while balancing the needs of current and future contributors to the plan.

Based on the current funding methodology, the actuarially determined contribution is expected to remain level as a percentage of payroll and the funded ratio is expected to increase gradually over time.

The actuarially determined contribution under the funding policy is a “Reasonable Actuarially Determined Contribution” as required under Actuarial Standard of Practice No. 4 Measuring Pension Obligations and Determining Pension Plan Costs or Contributions.

Reconciliation of preliminary contribution requirement

Reconciliation of Preliminary Contribution Requirement from July 1, 2024, to July 1, 2025

Step	Amount	Percent of Projected Payroll
Preliminary contribution requirement as of July 1, 2024	$207,369,200	25.57%
Changes in preliminary contribution requirement		
• Effect of plan amendment(s)	0	0.00%
• Effect of change in asset method	0	0.00%
• Effect of expected change in amortization payment due to payroll growth	5,014,824	0.62%
• Effect of change in amortization period	0	0.00%
• Effect of change in administrative expense assumption	0	0.00%
• Effect of change in other actuarial assumptions	0	0.00%
• Effect of contributions (more)/less than actuarially determined contribution	−1,356,724	−0.17%
• Effect of investment (gain)/loss	−2,173,837	−0.27%
• Effect of other gains and losses on accrued liability	4,747,834	0.59%
• Net effect of other changes, including composition and number of members, payroll[1]	2,241,302	−0.87%
• **Total change**	**$8,473,399**	**−0.10%**
Preliminary contribution requirement as of July 1, 2025	**$215,842,599**	**25.47%**

[1] The percent of payroll value includes the effect of the change in projected payroll basis. All percentages for previous items are calculated on the basis of prior year projected payroll. This percent of payroll value includes an additional element to account for the fact that the percentage in the "Preliminary contribution requirement as of July 1, 2025" row is based on projected payroll from the current valuation. It is possible that the dollar amount of change may be positive while the percent of payroll value is negative, and vice versa. It is expected that the dollar amount as a percentage of prior year projected payroll will not match the percent of payroll value.

Amortization schedule for unfunded actuarial accrued liability – schedule of contributions required by statute

Unfunded Liability Amortization Schedule

As of July 1	Balance	Additional Act 114 State Contribution[1] (Year Following)	Amortization Payment[2] (Year Following)	Funded Percentage
2025	$1,751,333,640	$15,000,000	$171,337,978	63.43%
2026	1,681,177,492	15,000,000	177,166,073	65.78%
2027	1,600,081,785	15,000,000	180,728,516	68.41%
2028	1,509,624,358	15,000,000	184,256,558	71.10%
2029	1,409,185,477	15,000,000	187,717,355	73.84%
2030	1,298,135,997	15,000,000	191,065,148	76.63%
2031	1,175,850,071	15,000,000	194,234,055	79.48%
2032	1,041,726,186	15,000,000	197,124,974	82.37%
2033	895,223,240	15,000,000	199,579,585	85.32%
2034	735,926,018	15,000,000	201,322,332	88.30%
2035	563,675,279	0	201,806,923	91.31%
2036	394,381,844	0	207,861,131	94.11%
2037	206,975,348	0	214,096,965	97.00%
2038	0	0	0	100.00%

[1] Under Act 114, beginning in FY24, the State began contributing an additional payment that grows to $15 million in FY26 and remains at that level until the fund reaches 90%.
[2] The annual payment to amortize the unfunded actuarial liability is calculated based upon installments increasing at a rate of 3% per year.

Projection of actuarially determined contribution for following two fiscal years

On the basis of the June 30, 2025, actuarial valuation, the employer normal cost rate is 5.01%. The payment on the unfunded liability is added to the employer normal cost to determine the actuarially determined contribution for the fiscal year ending June 30, 2027, and to estimate the actuarially determined contribution for the fiscal year ending June 30, 2028, as shown below. The final actuarially determined contribution for fiscal 2028 will be determined with the next valuation.

Actuarially Determined Contribution: 2027 – 2028

Fiscal Year Ended June 30	Projected Payroll[1]	Employer Normal Cost Rate	Projected Employer Normal Cost	Projected Unfunded Liability Payment	Projected Total Contributions
2027	$872,748,519	5.01%	$43,739,011	$177,166,073	$220,905,084
2028	898,930,974	5.01%	45,051,181	180,728,516	225,779,697

Pursuant to Section 1944, subsection (b)(2), of Title 16, Chapter 55, Vermont Statutes Annotated, if expected employee contributions were 5.00% for all Group C active members, the employer normal cost rate would be 6.83%, which would result in an employer normal cost for fiscal 2027 of $59,628,167 and a total employer contribution requirement of $236,794,240. For fiscal 2028, the total employer contribution requirement would be $242,145,528.

[1] In these projections, total payroll is assumed to increase by 3% each year.

History of employer contributions

History of Employer Contributions: 2017 – 2026
Actuarially Determined Contribution (ADC) versus Actual Employer Contribution (AEC)

Year Ended June 30	ADC Amount[1]	ADC Percentage of Projected Payroll	AEC Amount	AEC Percentage of Projected Payroll	Percent Contributed
2017	$82,659,576	14.39%	$82,887,174	14.43%	100.28%
2018	88,409,437	14.64%	114,598,921	18.97%	129.62%
2019	105,640,777	16.13%	119,174,913	18.20%	112.81%
2020	126,197,389	19.30%	126,941,582	19.41%	100.59%
2021	132,141,701	19.51%	134,541,278	19.86%	101.82%
2022	196,206,504	28.44%	325,244,828	47.14%	165.77%
2023	194,961,651[2]	26.50%	201,925,261	27.45%	103.57%
2024	194,281,051	24.96%	222,021,255[3]	28.52%	114.28%
2025	201,182,703	24.81%	213,655,777	26.35%	106.20%
2026	212,752,627	25.11%	—	—	—

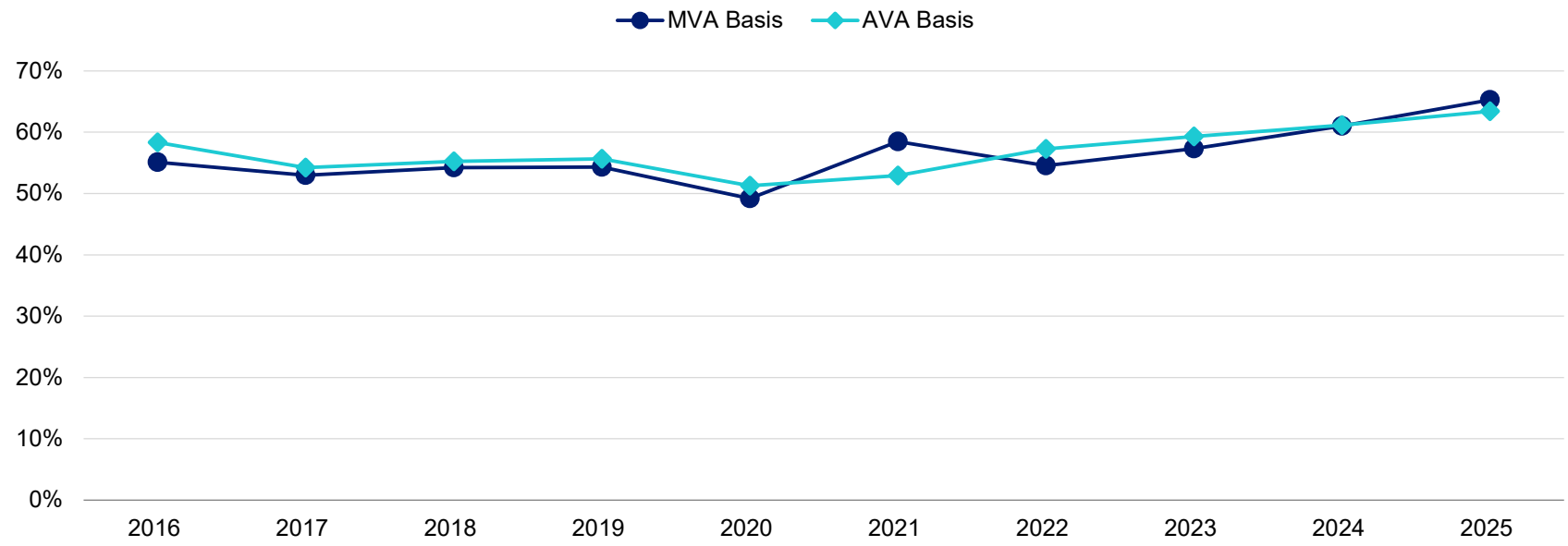
[1] Budgeted contribution amount from prior valuation report.

[2] The actuarially determined contribution for fiscal year ended June 30, 2023, of $205,161,651 calculated as part of the June 30, 2021, actuarial valuation, was recertified to $194,961,651 at the June 9, 2022, board meeting to reflect the additional funding and benefit changes from Act 114 and Act 173.

[3] In 2024, the Legislature passed H.839, which included postretirement adjustment modifications for Group B and Group C members. Specifically, the maximum net percentage increase in CPI used to determine the postretirement adjustment amount was modified to reflect the following: 8% for Group C members who are first eligible for normal retirement on or after July 1, 2022; 10% for Group B members and all other Group C members. See Section 4, Exhibit H for details. Additionally, H.839 also included the transfer of $9,340,000 of Education Fund dollars to the Vermont Teachers' Retirement Fund, established in 16 V.S.A. § 1944, to fund the present value of these postretirement adjustment modifications. The Actual Employer Contribution amount of $222,021,255 for the fiscal year ended June 30, 2024, includes this additional $9,340,000.

History of funded percentage

A history of the most recent years of funded percentage as of June 30th is shown below.



Low-Default-Risk Obligation Measure (LDROM)

In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) Measuring Pension Obligations and Determining Pension Plan Costs or Contributions. One of the revisions to ASOP 4 requires the disclosure of a Low-Default-Risk Obligation Measure (LDROM) when performing a funding valuation. The LDROM presented in this report is calculated using the same methodology and assumptions used to determine the Actuarial Accrued Liability (AAL) used for funding, except for the discount rate. The LDROM is required to be calculated using "a discount rate…derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future."

The LDROM is a calculation assuming a plan's assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in December of the measurement period, by The Bond Buyer (www.bondbuyer.com), is 5.20% for use effective June 30, 2025. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan's funded status or Actuarially Determined Contribution. The plan's expected return on assets, currently 7.00%, is used for these calculations.

As of June 30, 2025, the LDROM for the System is $5.93 billion. The difference between the plan's AAL of $4.79 billion and the LDROM, or $1.14 billion, can be thought of as the increase in the AAL if the entire portfolio were invested in low-default-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the plan's diversified portfolio compared to investing only in low-default-risk securities.

ASOP 4 requires commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits. In general, if plan assets were invested exclusively in low-default-risk securities, the funded status would be lower and the Actuarially Determined Contribution would be higher. While investing in a portfolio with low-default-risk securities may be more likely to reduce investment volatility and the volatility of employer contributions, it also may be more likely to result in higher employer contributions or lower benefits.

Risk

The actuarial valuation results are dependent on a single set of assumptions; however, there is a risk that emerging results may differ significantly as actual experience proves to be different from the current assumptions.

- Economic and Other Related Risks. Potential implications for the System due to the following economic effects (that were not reflected as of the valuation date) include:
  - Volatile financial markets and investment returns lower than assumed
  - High inflationary environment impacting salary increases and COLAs
- Investment Risk (the risk that returns will be different than expected)

  If the actual return on market value for the prior plan year were 1% different (either higher or lower), the unfunded actuarial liability would change by 1.60%, or about $28,106,422, disregarding the asset smoothing method.

  Since the System's assets are much larger than contributions, investment performance may create volatility in the actuarially determined contribution requirements. For example, for the prior plan year, if the actual return on market value were 1% different, the actuarially determined contribution would increase or decrease by $2,689,909, disregarding the asset smoothing method.

  The market value rate of return over the last 20 years has ranged from a low of -20.5% to a high of 26.6%.
- Longevity Risk (the risk that mortality experience will be different than expected)

  The actuarial valuation includes an expectation of future improvement in life expectancy. Emerging plan experience that does not match these expectations will result in either an increase or decrease in the actuarially determined contribution.
- Contribution Risk (the risk that actual contributions will be different from actuarially determined contribution)

  The System's funding policy requires payment of the actuarially determined contribution. As long as this policy is adhered to, contribution risk is negligible.
- Demographic Risk (the risk that participant experience will be different than assumed)

  Examples of this risk include:
  - Actual retirements occurring earlier or later than assumed. The value of retirement plan benefits is sensitive to the rate of benefit accruals and any early retirement subsidies that apply.
  - More or less active participant turnover than assumed.
  - Salary increases more or less than assumed.

Section 2: Actuarial Valuation Results

- There are external factors including legislative or financial reporting changes that could impact the System's funding and disclosure requirements. While we do not assume any changes in such external factors, it is important to understand that they could have significant consequences for the System.
- Actual Experience Over the Last Five Years

  Past experience can help demonstrate the sensitivity of key results to the System's actual experience. Over the past five years:
  - The non-investment gain(loss) for a year has ranged from a loss of $59,943,413 to a loss of $13,497,810.

Plan Year Ended	Investment Gain/(Loss)	Administrative Expense Gain/(Loss)	Other Gains and (Losses)
2021	$57,785,688	N/A	−$45,698,914
2022	−29,490,344	$144,271	−48,883,314
2023	−21,692,082	797,077	−13,497,810
2024	−1,630,311	−413,238	−59,943,413
2025	21,958,518	536,792	−48,495,955

  - The funded percentage on the actuarial value of assets has ranged from a low of 51.3% to a high of 63.4% over the past ten years.
- Maturity Measures
  - As pension plans mature, the cash needed to fulfill benefit obligations will increase over time. Therefore, cash flow projections and analysis should be performed to assure that the System's asset allocation is aligned to meet emerging pension liabilities.
  - Currently the System has an in-pay-status member to active member ratio of 1.02.
  - For the prior year, benefits and administrative expenses paid were $8.6 million less than contributions received. Plans where benefits and administrative expenses are close to contributions received may begin to have a need for a larger allocation to income generating assets, which can create a drag on investment return.

Actuarial balance sheet

An overview of the System's funding is given by an Actuarial Balance Sheet. In this approach, first the amount and timing of all future payments that will be made by the System for current members is determined. Then these payments are discounted at the valuation interest rate to the date of the valuation, thereby determining the present value, referred to as the "liability" of the System.

Second, this liability is compared to the assets. The "assets" for this purpose include the net amount of assets already accumulated by the System, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments for the unfunded actuarial accrued liability.

Actuarial Balance Sheet

Item	Year Ended June 30, 2025	Year Ended June 30, 2024
Liabilities		
Present value of benefits for retired members and beneficiaries	$2,907,211,130	$2,819,623,709
Present value of benefits for inactive former members	160,513,438	148,864,640
Present value of benefits for active members	2,774,522,813	2,638,887,283
Total liabilities	**$5,842,247,381**	**$5,607,375,632**
Current and future assets		
Total valuation value of assets	$3,038,152,299	$2,815,334,500
Present value of future contributions by members	694,955,938	666,088,918
Present value of future employer contributions for:		
• Entry age cost	357,805,504	338,937,939
• Unfunded actuarial accrued liability	1,751,333,640	1,787,014,275
Total of current and future assets	**$5,842,247,381**	**$5,607,375,632**

Section 3: Supplemental Information

Exhibit A: Table of plan demographics

Category	Year Ended June 30, 2025	Year Ended June 30, 2024	Change From Prior Year
Active members in valuation:			
• Number	10,526	10,567	−0.4%
• Average age	45.7	45.5	0.2
• Average years of credited service	12.3	12.1	0.2
• Total payroll	$809,117,204	$774,174,896	4.5%
• Average payroll	76,868	73,263	4.9%
• Total active vested members	7,863	7,810	0.7%
Inactive members:			
• Number of deferreds as reported by the System	1,057	1,050	0.7%
• Number of inactives as reported by the System	3,612	3,500	3.2%
Retired members:			
• Number in pay status	10,003	9,864	1.4%
• Average age	74.6	74.2	0.4
• Average monthly benefit	$2,128	$2,066	3.0%
Disabled members:			
• Number in pay status	166	168	−1.2%
• Average age	70.9	70.4	0.5
• Average monthly benefit	$1,695	$1,649	2.8%

Section 3: Supplemental Information

Category	Year Ended June 30, 2025	Year Ended June 30, 2024	Change From Prior Year
Beneficiaries:			
• Number in pay status	603	593	1.7%
• Average age	77.1	76.7	0.4
• Average monthly benefit	$1,448	$1,378	5.1%

Exhibit B: Reconciliation of member data

	Active Members	Deferreds	Inactives	Disability Retirees	Retired Members	Beneficiaries	Total
Number as of July 1, 2024	**10,567**	**1,050**	**3,500**	**168**	**9,864**	**593**	**25,742**
New members	623	N/A	150	0	13	N/A	786
Inactives as reported by the System	-653	-22	675	N/A	N/A	N/A	0
Deferreds as reported by the System	N/A	106	-106	N/A	N/A	N/A	0
Retirements	-259	-61	-30	N/A	350	N/A	0
New disabilities	-4	0	0	4	0	N/A	0
Return to work from disability	1	N/A	N/A	-1	N/A	N/A	0
Died with beneficiary	-2	0	0	-1	-38	41	0
Died without beneficiary	0	-1	-2	-4	-185	-30	-222
Refund of contributions	-28	-5	-305	0	0	0	-338
Rehire	281	-10	-270	N/A	-1	N/A	0
Certain period expired	N/A	N/A	0	0	0	-4	-4
Data adjustments	0	0	0	0	0	3	3
Number as of July 1, 2025	**10,526**	**1,057**	**3,612**	**166**	**10,003**	**603**	**25,967**

Exhibit C: Summary statement of income and expenses on a market value basis

Year Ended June 30, 2025 versus Year Ended June 30, 2024

Item	Income and Expenses	Assets as of YE 2025	Income and Expenses	Assets as of YE 2024
Net assets at market value at the beginning of the year		**$2,808,813,254**		**$2,527,709,397**[1]
Contribution and other income:				
• Employer contributions	$213,655,777		$222,021,255	
• Member contributions	60,756,113		56,091,622	
• Accumulated value of PAAA contributions	10,337,252		8,872,415	
• Administrative expenses	−3,255,773		−4,022,625	
• **Net contribution income**		**$281,493,369**		**$282,962,667**
• **Net other income and transfers in from other Funds**		**$945,844**		**$630,607**
Investment income:				
• Interest, dividends and other income	$14,464,390		$27,988,652	
• Asset appreciation	299,050,887		235,098,630	
• Investment fees	−4,968,665		−2,742,900	
• **Net investment income**		**$308,546,612**		**$260,344,382**
• **Total income available for benefits**		**$590,985,825**		**$543,937,656**
Benefit payments:				
• Retirement benefits	−$259,274,174		−$250,398,843	
• Refunds of contributions	−3,394,728		−2,670,864	
• Death claims	−280,647		−322,290	
• Transfers to other pension trust funds	−525,905		−569,387	

[1] This amount was reported as $2,528,481,816 in the prior valuation report and was subsequently revised related to a minor adjustment in accrued expenses.

Section 3: Supplemental Information

Item	Income and Expenses	Assets as of YE 2025	Income and Expenses	Assets as of YE 2024
• **Net benefit payments**		**−$263,475,454**		**−$253,961,384**
Change in reserve for future benefits		**$327,510,371**		**$289,976,272**
Preliminary net assets at market value at the end of the year		$3,136,323,625		$2,817,685,669
Less accumulated value of PAAA contributions[1]		10,337,252		8,872,415
Net assets at market value at the end of the year		**$3,125,986,373**		**$2,808,813,254**

[1] See Exhibit D for details. The Post-Retirement Adjustment Allowance Account is excluded from the assets of the System for funding purposes.

Exhibit D: Calculation of the post-retirement adjustment allowance account

Post-Retirement Adjustment Allowance Account (PAAA) Contributions

Year Ended June 30	PAAA Contribution Date	PAAA Contribution Amount	Accumulated Value of PAAA Contributions[1]
2024	06/30/2024	$8,872,415	$9,862,095
2025	06/30/2025	475,157	475,157
Total			**$10,337,252**

[1] For valuation purposes, PAAA contributions are assumed to accrue interest via the Market Value Rate of Return experienced during each fiscal year since the contribution was made, reflective of the date that the contribution was made. If not otherwise stated, an assumed PAAA contribution date of June 30th of the respective fiscal year was used for interest/investment return accumulation purposes. The "Total" amount reflects the assumed accumulated value of all PAAA contributions plus interest/investment return deemed to have accrued as of June 30, 2025. The actual accumulated value of all PAAA contributions plus interest/investment return may be different than the "Total" amount used for valuation purposes.

Exhibit E: Summary statement of plan assets

Year Ended June 30, 2025 versus Year Ended June 30, 2024

Item	Investments	Assets as of YE 2025	Investments	Assets as of YE 2024
Cash and accounts receivable				
• Cash equivalents		$73,828,408		$129,797,215
• Total accounts receivable		56,208,988		65,076,919
• Prepaid expenses		218,700		83,130
• Capital assets, net of depreciation		31,809		39,159
Investments:				
• Fixed Income	$692,525,603		$647,390,259	
• Equities	95,257,713		76,149,880	
• Mutual and commingled funds	1,342,951,995		1,117,216,098	
• Private partnership	1,003,480,379		939,868,243	
• **Total investments at market value**		**$3,134,215,690**		**$2,780,624,480**
Total assets		**$3,264,503,595**		**$2,975,620,903**
Accounts payable				
• Total accounts payable		−$128,179,970		−$157,935,234
Preliminary net assets at market value		**$3,136,323,625**		**$2,817,685,669**
Less accumulated value of PAAA contributions[1]		10,337,252		8,872,415
Net assets at market value		**$3,125,986,373**		**$2,808,813,254**
Net assets at actuarial value		**$3,038,152,299**		**$2,815,334,500**

[1] See Exhibit D for details. The Post-Retirement Adjustment Allowance Account is excluded from the assets of the System for funding purposes.

Exhibit F: Development of the fund through June 30, 2025

Year Ended June 30	Employer Contributions	Member Contributions	Net Other Income	Net Investment Return[1]	Admin. Expenses	Benefit Payments[2]	Market Value of Assets at Year-End	Actuarial Value of Assets at Year-End	Actuarial Value as a Percent of Market Value
2016	$76,947,869	$35,408,763	$464,668	$19,877,270	-$2,163,853	-$162,751,409	$1,620,899,749	$1,716,296,235	105.89%
2017	82,887,174	36,142,411	241,526	173,166,614	-2,623,838	-172,156,063	1,738,557,573	1,779,592,227	102.36%
2018	114,598,921	37,888,566	468,500	125,566,281	-2,448,365	-182,258,923	1,832,372,553	1,866,120,413	101.84%
2019	119,174,913	39,075,342	348,096	109,429,147	-2,714,661	-193,196,825	1,904,488,565	1,950,859,980	102.43%
2020	126,941,582	40,598,283	408,259	83,105,318	-2,814,955	-201,237,170	1,951,489,882	2,035,713,611	104.32%
2021	134,541,278	42,199,015	399,815	512,194,450	-2,782,425	-215,248,507	2,422,793,508	2,191,650,755	90.46%
2022	325,244,828	44,597,049	466,281	-223,275,025	-2,715,251	-227,698,445	2,339,412,945	2,457,374,321	105.04%
2023	201,925,261	51,997,621	554,696	178,491,952	-2,273,594	-241,627,065	2,528,481,816	2,615,250,146	103.43%
2024	222,021,255	56,091,622	630,607	260,344,382	-4,022,625	-253,961,384	2,808,813,254	2,815,334,500	100.23%
2025	213,655,777	60,756,113	945,844	308,546,612	-3,255,773	-263,475,454	3,125,986,373	3,038,152,299	97.19%

[1] On a market basis, net of investment fees.
[2] Includes “other expenses”.

Section 4: Actuarial Valuation Basis

Exhibit G: Actuarial assumptions, methods and models

Rationale for assumptions

The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the Actuarial Experience Review dated September 28, 2023 (as prepared by Segal) and in the Economic Experience Study (as prepared by the Gabriel Roeder Smith actuarial consulting firm) adopted by the Vermont Pension Investment Commission during their meeting on July 25, 2023.

Inflation

2.30%

Investment return

7.00%

The investment return assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes, as well as the System's target asset allocation.

Salary increases

Salary increases include an assumed inflation rate of 2.30%.

Age	Annual Rate of Salary Increase (%)
20	8.50
25	7.53
30	6.36
35	5.77
40	5.27
45	4.67
50	4.18
55	3.77
60	3.57
65	3.19

Cost-of-living adjustments (COLA)

For active Group C members who are first eligible for normal retirement on or after July 1, 2022:

- Assumed to occur on January 1 following two years of retirement at the rate of 1.20% per annum (beginning two years after the attainment of age 62 for members who elect reduced early retirement). The January 1, 2026, COLA is expected to be 1.50%.

For all other members:

- **Group A**
  - Assumed to occur on January 1 following one year of retirement at the rate of 2.30% per annum. The January 1, 2026, COLA is expected to be 3.00%.
- **Group B/C**
  - Assumed to occur on January 1 following one year of retirement at the rate of 1.20% per annum (beginning one year after the attainment of age 62 for Group C members who elect reduced early retirement). The January 1, 2026, COLA is expected to be 1.50%.

Post-retirement adjustment allowance account (PAAA)

No liability is included in this actuarial valuation for benefits that may be provided by the Post-Retirement Adjustment Account in the future.

PAAA contributions

For valuation purposes, PAAA contributions are assumed to accrue interest via the Market Value Rate of Return experienced during each fiscal year since the contribution was made, reflective of the date that the contribution was made. If not otherwise stated, an assumed PAAA contribution date of June 30th of the respective fiscal year was used for interest/investment return accumulation purposes. The “Total” amount reflects the assumed accumulated value of all PAAA contributions plus interest/investment return deemed to have accrued as of June 30, 2025. The actual accumulated value of all PAAA contributions plus interest/investment return may be different than the “Total” amount used for valuation purposes. See Section 3, Exhibit D for details.

Mortality rates

Pre-retirement

- **All groups**
  - PubT-2010 Teacher Employee Amount-Weighted Table with generational projection using scale MP-2021.

Healthy post-retirement - retirees

- **All groups**
  - PubT-2010 Teacher Healthy Retiree Amount-Weighted Table, with credibility adjustments of 103% and 93% for the Male and Female tables, respectively, with generational projection using scale MP-2021.

Healthy post-retirement - beneficiaries

- **All groups**
  - Pub-2010 Contingent Survivor Amount-Weighted Table with generational projection using scale MP-2021.

Disabled post-retirement

- **All groups**
  - PubNS-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table with generational projection using scale MP-2021.

The tables with the generational projection to the ages of members as of the measurement date reasonably reflect the mortality experience of the System as of the measurement date. The mortality tables were then adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

Separation from service before retirement (due to withdrawal and disability)

Representative values of the assumed annual rates of withdrawal and disability are as follows:

Age	Withdrawal Rate (%) Male/Female	Disability Rate (%) Male	Disability Rate (%) Female
25	9.00	0.0060	0.0068
30	5.80	0.0084	0.0068
35	3.50	0.0108	0.0068
40	1.90	0.0168	0.0094
45	1.20	0.0276	0.0204
50	0.85	0.0720	0.0629
55	0.75	0.0480	0.0425
60	0.75	0.1584	0.0748
65	0.75	0.3888	0.1777

Retirement rates

Age	Group A <30 Years of Service Male/Female	Group A 30+ Years of Service Male/Female	Group C Grandfathered All Members Male/Female
50	0.00%	40.00%	40.00%
51	0.00	20.00	20.00
52	0.00	20.00	20.00
53	0.00	20.00	20.00
54	0.00	20.00	20.00
55	7.50	20.00	10.00
56	7.50	10.00	10.00
57	7.50	10.00	10.00
58	7.50	10.00	10.00
59	12.50	10.00	12.50
60	30.00	30.00	15.00
61	25.00	25.50	17.00
62	30.00	25.00	30.00
63	30.00	22.00	35.00
64	30.00	22.00	40.00
65	40.00	33.00	50.00
66	40.00	33.00	50.00
67	40.00	33.00	50.00
68	50.00	22.00	50.00
69	50.00	33.00	50.00
70+	100.00	100.00	100.00

Retirement rates (continued)

Age	Group C Non-Grandfathered Before Rule of 90 Male/Female	Group C Non-Grandfathered 1st Year after Rule of 90 Male/Female	Group C Non-Grandfathered 1+ Years after Rule of 90 Male/Female
<56	2.50%	22.50%	20.00%
56	5.00	22.50	15.00
57	5.00	22.50	15.00
58	5.00	22.50	10.00
59	5.00	22.50	12.50
60	7.50	22.50	12.50
61	12.50	22.50	15.00
62	15.00	22.50	15.00
63	20.00	22.50	17.50
64	25.00	22.50	20.00
65	35.00	35.00	35.00
66	35.00	35.00	35.00
67	35.00	35.00	35.00
68	35.00	35.00	35.00
69	35.00	35.00	35.00
70+	100.00	100.00	100.00

Inactive members as reported by the system

Not Vested: Valuation liability equals 100% of accumulated contributions.

Vested: Valuation liability is based on accrued benefit and members are assumed to retire as follows:

- **Group A:**
  - 10% of members are assumed to retire from Early Retirement Age for each year until Normal Retirement Age, then 100% of members are assumed to retire at their Normal Retirement Age.
- **Group C-NGF:**
  - 15% of members are assumed to retire from Early Retirement Age for each year until Normal Retirement Age, then 100% of members are assumed to retire at their Normal Retirement Age.
- **Group C-GF:**
  - 50% of members are assumed to retire from age 62-69, then 100% at age 70.

Deferred members as reported by the system

Valuation liability is based on accrued benefit and members are assumed to retire as follows:

- **Group A:**
  - 10% of members are assumed to retire from Early Retirement Age for each year until Normal Retirement Age, then 100% of members are assumed to retire at their Normal Retirement Age.
- **Group C-NGF:**
  - 15% of members are assumed to retire from Early Retirement Age for each year until Normal Retirement Age, then 100% of members are assumed to retire at their Normal Retirement Age.
- **Group C-GF:**
  - 50% of members are assumed to retire from age 62-69, then 100% at age 70.

Unknown data for members

Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.

Future administrative expenses

0.45% of projected payroll.

Percent married

85% of male members and 35% of female members are assumed to be married.

Age of spouse

Females are assumed to be three years younger than males.

Benefit election

All members are assumed to elect the single life annuity option.

Actuarial value of assets

The amount of the assets for valuation purposes equals the preliminary asset value plus 20% of the difference between market and preliminary asset values. The preliminary asset value is equal to the previous year's asset value (for valuation purposes) adjusted for contributions less benefit payments and expenses plus expected investment income. If necessary, a further adjustment is made to ensure that the valuation assets are within 20% of the market value.

Actuarial cost method

Entry Age Actuarial Cost Method. Entry Age is the age at date of employment or, if date is unknown, current age minus years of service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salary, with Normal Cost determined using the plan of benefits applicable to each member.

Models

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 direction of the supervising actuary.

Justification for change in actuarial assumptions

There have been no changes in actuarial assumptions since the last valuation.

Exhibit H: Summary of plan provisions

This exhibit summarizes the major provisions of the System included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Effective date

July 1, 1947

Creditable service

Service as a member plus purchased service.

Average final compensation (AFC)

Average annual compensation during highest 3 consecutive years.

Grandfathered status

Group C members who were within five years of normal retirement eligibility as defined prior to July 1, 2010, are “grandfathered”.

Normal retirement eligibility

- **Group A**
  - Age 60 or 30 years of creditable service.
- **Group C**
  - Grandfathered:
    - Age 62 or 30 years of creditable service.
  - Non-grandfathered:
    - Age 65 or age plus creditable service equal to 90.

Normal retirement amount

- **Group A**
  - Member annuity based on accumulated contributions plus a pension, which, with member annuity, equals 1/60th of AFC times creditable service.
- **Group C**
  - Grandfathered:
    - Member annuity based on accumulated contributions plus a pension, which, with member annuity, equals 1/80th of AFC times creditable service prior to July 1, 1990, plus 1/60th of AFC times creditable service after July 1, 1990.
  - Non-grandfathered:
    - Member annuity based on accumulated contributions plus a pension, which, with member annuity, equals 1/80th of AFC times creditable service prior to July 1, 1990, plus 1/60th of AFC times creditable service after July 1, 1990, up to 20 years of service, plus 1/50th of AFC for years of service after 20. If a member already has 20 or more years of service on June 30, 2010, the 1/50th will be applied to all service accrued after July 1, 2010.

The minimum benefit applicable for Group A members after 30 years of creditable service (pro-rata for service less than 30 years) is subject to 16 V.S.A. § 1937(b)(2).

Maximum benefit applicable to Group C: Grandfathered maximum benefit is 50% of AFC up to June 30, 2010. May continue to accrue up to 53.34% of AFC with service earned after July 1, 2010. Non-grandfathered maximum benefit is 60% of AFC.

Early retirement eligibility

- **Group A**
  - Age 55.
- **Group C**
  - Age 55 with 5 years of creditable service.

Early retirement amount

- **Group A**
  - Actuarial equivalent of normal retirement allowance using AFC and creditable service at early retirement.
- **Group C**
  - Grandfathered:
    - Accrued normal benefit reduced 6% for each year prior to age 62.
  - Non-grandfathered:
    - Accrued normal benefit reduced by actuarial reduction from normal retirement age.

Vesting

- **All groups**
  - 5 years of creditable service.

Disability retirement eligibility

- **All groups**
  - Total and permanent disability after 5 years of creditable service (5 years preceding retirement served in State).

Disability retirement amount

- **All groups**
  - Calculated as a service allowance based on AFC and creditable service at disability retirement, subject to a 25% of AFC minimum.

Death benefit eligibility

- **Group A**
  - Age 60 or 30 years of creditable service; 10 years of creditable service if in service at death.
- **Group C**
  - Age 55 and 5 years of creditable service or 10 years of creditable service.

Death benefit amount

- **All groups**
  - Accrued allowance paid under 100% survivorship option. If the eligibility requirements are not met or if beneficiary so elects, the member's accumulated contributions are paid to the beneficiary or estate. Certain children's benefits may also be payable.

Post-retirement adjustments

- **Group A**
  - Allowances in payment for at least one year increased on each January 1 by the net percentage increase in Consumer Price Index (CPI). The maximum net percentage increase in CPI is capped at 5%. If the net percentage increase in CPI is less than 0%, members will not receive an increase.
- **Group B**
  - Allowances in payment for at least one year increased on each January 1 by half of the net percentage increase in CPI. The maximum net percentage increase in CPI is capped at 10%. If the net percentage increase in CPI is less than 0%, members will not receive an increase.
- **Group C**
  - For active members who are first eligible for normal retirement on or after July 1, 2022:
    - Allowances in payment for at least two years increased on each January 1 by half of the net percentage increase in CPI. The maximum net percentage increase in CPI is capped at 8%. If the net percentage increase in CPI is less than 0%, members will not receive an increase. For members receiving a reduced early retirement allowance, the adjustment will not apply before age 62 for grandfathered members or age 65 for non-grandfathered members.
  - For all other members:
    - Allowances in payment for at least one year increased on each January 1 by half of the net percentage increase in CPI. The maximum net percentage increase in CPI is capped at 10%. If the net percentage increase in CPI is less than 0%, members will not receive an increase. For members receiving a reduced early retirement allowance, the adjustment will not apply before age 62 for grandfathered members or age 65 for non-grandfathered members.

Post-retirement adjustment allowance account

Act 114 (2022) established the Post-Retirement Adjustment Allowance Account, which will be used to provide funding for post-retirement adjustment formula enhancements or other benefits that may accrue to eligible members. The Account is to be funded by transfers or appropriations from the General Fund Balance Reserve by the General Assembly, including interest, and is subordinate to the retirement benefits provided by the System. Payment of any additional benefits as a result of the existence of this Account is contingent on a recommendation by the Board and satisfaction of three criteria:

1. An evaluation has been conducted pursuant to section 1949(b) of 16 V.S.A.;
2. The actuary has certified that the System has a funded ratio of at least 80% in the most recent fiscal year; and
3. The actuary has certified that the Account has sufficient assets to pay for the present value of any additional benefit being recommended.

Refund of contributions

If no other beneficiary is payable, a terminated member receives his accumulated contributions with interest.

Member contribution rates

- **Group A**
  - 5.5% of earnable compensation. Contributions stop after 25 years of creditable service.
- **Group C**
  - Member contributions as a percentage of earnable compensation are described in the table below:

Earnable Compensation	FY25+
$0-$40K	6.15%
$40K-$50K	6.20%
$50K-$60K	6.30%
$60K-$70K	6.40%
$70K-$80K	6.55%
$80K-$90K	6.80%
$90K-$100K	7.10%
$100K+	7.35%

Changes in plan provisions

There were no changes in plan provisions since the prior valuation.

Section 5: Additional Summary Tables of Member Data

Table 1: Members in active service as of June 30, 2025, by age, years of credited service, and average payroll – all teachers

Years of Credited Service

Age	Total	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 & over
Under 25	164	164	—	—	—	—	—	—	—
	$48,528	$48,528	—	—	—	—	—	—	—
25 - 29	683	499	184	—	—	—	—	—	—
	$56,722	$55,268	$60,664	—	—	—	—	—	—
30 - 34	1,084	455	501	128	—	—	—	—	—
	$63,412	$58,451	$65,574	$72,583	—	—	—	—	—
35 - 39	1,341	356	427	467	91	—	—	—	—
	$71,035	$60,882	$70,388	$76,805	$84,181	—	—	—	—
40 - 44	1,623	396	358	412	366	91	—	—	—
	$76,609	$65,329	$73,571	$80,101	$85,306	$86,861	—	—	—
45 - 49	1,700	324	295	288	364	339	90	—	—
	$81,928	$68,282	$73,267	$82,356	$89,244	$91,267	$93,313	—	—
50 - 54	1,658	235	219	211	250	343	340	60	—
	$85,651	$68,892	$76,307	$79,773	$87,094	$93,928	$94,859	$100,556	—
55 - 59	1,320	157	147	156	209	199	267	165	20
	$86,453	$70,528	$78,165	$82,347	$85,383	$91,168	$94,359	$94,823	$94,070
60 - 64	726	92	87	92	118	145	110	45	37
	$83,756	$67,041	$77,100	$80,285	$83,309	$88,322	$91,981	$98,533	$90,708
65 & over	227	46	32	25	34	29	19	12	30
	$78,736	$64,580	$70,504	$76,983	$84,962	$79,960	$91,237	$90,400	$89,862
Total	**10,526**	**2,724**	**2,250**	**1,779**	**1,432**	**1,146**	**826**	**282**	**87**
	$76,868	**$61,748**	**$70,750**	**$79,184**	**$86,386**	**$91,038**	**$94,063**	**$96,447**	**$91,189**

Table 2: Summary of retired members and beneficiaries data by benefit amount – all teachers

Allowance Level	Service Pensioner Count	Service Pensioner Annual Allowance Amount	Disability Pensioner Count	Disability Pensioner Annual Allowance Amount	Beneficiary Count	Beneficiary Annual Allowance Amount
$0 – $500	2	$454	0	$0	0	$0
501 – 1,000	8	6,199	0	0	0	0
1,001 – 1,500	15	19,635	0	0	1	1,476
1,501 – 2,000	27	48,137	0	0	3	5,158
2,001 – 2,500	52	119,371	0	0	8	18,170
2,501 – 3,000	78	214,547	0	0	8	22,469
3,001 – 3,500	109	355,063	0	0	6	19,839
3,501 – 4,000	91	342,643	0	0	4	14,991
4,001 – 4,500	121	513,873	0	0	6	25,736
4,501 – 5,000	140	666,283	0	0	4	18,891
5,001 – 5,500	131	687,680	0	0	13	68,254
5,501 – 6,000	133	765,327	0	0	14	81,246
6,001 – 6,500	130	813,054	0	0	9	56,134
6,501 – 7,000	126	848,568	0	0	12	80,150
7,001 – 7,500	144	1,047,167	0	0	7	50,542
7,501 – 8,000	129	1,002,021	1	7,695	14	109,363
8,001 – 8,500	104	858,723	0	0	11	90,566
8,501 – 9,000	117	1,025,254	1	8,752	8	70,045
9,001 – 9,500	99	917,989	1	9,147	12	110,176
9,501 – 10,000	96	935,961	1	9,758	11	106,911
10,001 – 10,500	128	1,314,161	3	30,621	20	205,324
10,501 – 11,000	112	1,202,115	2	21,528	18	193,015
11,001 – 11,500	119	1,339,800	4	44,817	13	146,487
11,501 – 12,000	108	1,269,696	6	70,021	15	176,775
12,001 – 12,500	132	1,617,519	10	122,962	14	171,148
12,501 – 13,000	123	1,569,729	2	25,838	12	152,948
13,001 – 13,500	130	1,723,163	8	106,474	13	172,176
13,501 – 14,000	108	1,486,631	6	82,473	18	247,246
14,001 – 14,500	93	1,323,442	3	42,699	19	270,292
14,501 – 15,000	95	1,399,940	5	74,302	14	206,413

Table 2: Summary of retired members and beneficiary data by benefit amount – all teachers (continued)

Allowance Level	Service Pensioner Count	Service Pensioner Annual Allowance Amount	Disability Pensioner Count	Disability Pensioner Annual Allowance Amount	Beneficiary Count	Beneficiary Annual Allowance Amount
$15,001 – $15,500	108	$1,645,516	6	$92,670	11	$167,211
15,501 – 16,000	87	1,369,465	3	47,092	10	158,024
16,001 – 16,500	97	1,574,975	3	48,691	8	130,039
16,501 – 17,000	88	1,475,088	4	66,838	15	251,121
17,001 – 17,500	91	1,569,884	6	103,100	8	137,979
17,501 – 18,000	102	1,809,663	3	53,045	11	195,290
18,001 – 18,500	94	1,715,889	4	72,768	8	146,069
18,501 – 19,000	95	1,781,003	4	74,740	12	225,521
19,001 – 19,500	89	1,714,326	3	57,786	9	172,609
19,501 – 20,000	105	2,072,802	4	79,057	8	157,761
20,001 – 20,500	102	2,066,381	5	101,182	8	162,414
20,501 – 21,000	90	1,866,395	2	41,601	8	166,172
21,001 – 21,500	102	2,165,783	4	84,945	9	191,493
21,501 – 22,000	90	1,958,431	1	21,915	8	174,240
22,001 – 22,500	98	2,182,559	7	155,623	9	200,766
22,501 – 23,000	88	2,001,488	2	45,612	7	159,933
23,001 – 23,500	85	1,978,587	2	46,792	4	92,908
23,501 – 24,000	95	2,256,779	3	71,316	5	118,382
24,001 – 24,500	107	2,594,588	2	48,332	6	145,139
24,501 – 25,000	118	2,919,855	5	123,761	7	173,208
25,001 – 25,500	111	2,800,438	3	75,625	5	125,767
25,501 – 26,000	133	3,427,650	3	77,243	4	102,723
26,001 – 26,500	133	3,493,010	1	26,307	4	104,720
26,501 – 27,000	120	3,211,665	1	26,714	2	53,075
27,001 – 27,500	111	3,024,175	1	27,013	5	136,083
27,501 – 28,000	116	3,220,383	3	83,557	2	55,077
28,001 – 28,500	99	2,795,887	1	28,344	3	84,781
28,501 – 29,000	103	2,962,457	2	57,169	6	172,854
29,001 – 29,500	125	3,655,546	0	0	4	116,784
29,501 – 30,000	113	3,363,363	1	29,752	6	178,456

Table 2: Summary of retired members and beneficiary data by benefit amount – all teachers (continued)

Allowance Level	Service Pensioner Count	Service Pensioner Annual Allowance Amount	Disability Pensioner Count	Disability Pensioner Annual Allowance Amount	Beneficiary Count	Beneficiary Annual Allowance Amount
$30,001 – $30,500	108	$3,267,613	4	$120,849	1	$30,474
30,501 – 31,000	116	3,565,965	1	30,629	8	246,793
31,001 – 31,500	116	3,629,268	0	0	6	187,665
31,501 – 32,000	122	3,872,542	1	31,915	4	127,098
32,001 – 32,500	125	4,031,461	2	64,562	7	225,804
32,501 – 33,000	119	3,896,179	3	98,202	7	229,682
33,001 – 33,500	113	3,756,231	0	0	1	33,042
33,501 – 34,000	99	3,338,691	1	33,513	1	33,941
34,001 – 34,500	111	3,798,772	0	0	0	0
34,501 – 35,000	98	3,404,758	1	34,562	0	0
35,001 – 35,500	104	3,663,761	1	35,136	2	70,464
35,501 – 36,000	123	4,395,249	1	35,842	6	214,953
36,001 – 36,500	104	3,770,279	1	36,247	3	109,047
36,501 – 37,000	119	4,376,616	0		1	36,511
37,001 – 37,500	88	3,277,206	1	37,333	6	223,087
37,501 – 38,000	119	4,491,117	2	75,482	3	112,735
38,001 – 38,500	118	4,513,842	0	0	3	114,659
38,501 – 39,000	109	4,221,830	0	0	3	116,051
39,001 – 39,500	99	3,888,017	0	0	2	78,700
39,501 – 40,000	80	3,180,006	0	0	0	0
Over 40,000	1,718	83,022,600	5	216,534	20	940,394
Total	**10,003**	**$255,470,179**	**166**	**$3,376,479**	**603**	**$10,479,640**

Table 3A: Summary of retired member data by age, years of credited service, and average annual allowance – service pensioners

Years of Credited Service at Retirement

Age	Total	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 & over
Under 60	167	3	6	6	15	12	2	108	15
	$41,367	$9,328	$2,256	$9,463	$10,738	$14,198	$13,832	$52,172	$54,413
60 - 64	707	6	21	37	74	48	132	323	66
	$36,518	$4,953	$4,408	$8,561	$13,239	$20,008	$39,384	$46,917	$46,767
65 - 69	1745	22	155	210	247	246	230	437	198
	$27,955	$11,114	$6,179	$10,609	$16,450	$23,765	$38,159	$40,845	$44,524
70 - 74	2719	35	231	346	400	392	283	703	329
	$25,947	$9,229	$6,605	$9,413	$16,890	$23,995	$35,241	$36,233	$42,059
75 - 79	2562	32	169	390	326	361	245	773	266
	$24,039	$8,085	$6,451	$9,296	$15,717	$22,170	$29,784	$32,880	$40,497
80 - 84	1348	25	73	231	187	206	113	407	106
	$20,726	$5,168	$6,822	$8,089	$13,192	$19,652	$25,173	$29,618	$38,006
85 - 89	511	17	17	88	77	93	61	108	50
	$19,118	$4,400	$6,125	$8,163	$12,811	$17,461	$23,587	$28,399	$35,121
90 & over	244	7	12	35	38	32	28	65	27
	$16,874	$1,736	$6,061	$7,399	$12,004	$14,755	$16,856	$24,130	$29,800
Total	**10,003**	**147**	**684**	**1,343**	**1,364**	**1,390**	**1,094**	**2,924**	**1,057**
	$25,539	**$7,484**	**$6,366**	**$9,181**	**$15,391**	**$21,964**	**$32,933**	**$36,326**	**$41,549**

Table 3B: Summary of retired member data, by age, years of credited service, and average annual allowance – disability pensioners

Years of Credited Service at Retirement

Age	Total	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 & over
Under 60	16	—	1	2	4	4	5	—	—
	$26,497	—	$12,474	$15,765	$21,740	$30,751	$33,995	—	—
60 - 64	23	—	2	5	5	7	4	—	—
	$23,239	—	$12,079	$15,372	$20,287	$27,395	$35,071	—	—
65 - 69	37	—	3	7	11	12	4	—	—
	$21,693	—	$14,382	$17,484	$19,483	$26,496	$26,208	—	—
70 - 74	38	—	8	13	8	8	1	—	—
	$17,171	—	$13,093	$13,450	$15,126	$28,862	$21,010	—	—
75 - 79	28	—	5	3	4	9	7	—	—
	$19,081	—	$14,491	$12,850	$19,843	$18,502	$25,342	—	—
80 - 84	15	—	1	4	2	4	4	—	—
	$19,459	—	$21,456	$16,009	$15,081	$19,442	$24,616	—	—
85 - 89	7	—	—	2	3	1	1	—	—
	$14,526	—	—	$10,745	$12,454	$7,695	$35,136	—	—
90 & over	2	—	—	—	—	—	2	—	—
	$17,527	—	—	—	—	—	$17,527	—	—
Total	**166**	**—**	**20**	**36**	**37**	**45**	**28**	**—**	**—**
	$20,340	**—**	**$13,921**	**$14,714**	**$18,124**	**$24,791**	**$27,934**	**—**	**—**

Appendix A: Definition of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Term	Definition
Actuarial accrued liability for actives	The equivalent of the accumulated normal costs allocated to the years before the valuation date.
Actuarial accrued liability for retirees and beneficiaries	Actuarial Present Value of lifetime benefits to existing retirees and beneficiaries. This sum takes account of life expectancies appropriate to the ages of the annuitants and the interest that the sum is expected to earn before it is entirely paid out in benefits.
Actuarial cost method	A procedure allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability that are used to determine the actuarially determined contribution.
Actuarial gain or loss	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield actuarial liabilities that are larger than projected.
Actuarially equivalent	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial present value	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is: Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.) Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and Discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Appendix A: Definition of Pension Terms

Term	Definition
Actuarial present value of future benefits	The Actuarial Present Value of benefit amounts expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The Actuarial Present Value of Future Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund of member contributions or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan, as well as Actuarially Determined Contributions.
Actuarial value of assets	The value of the Plan's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the Actuarially Determined Contribution.
Actuarially determined	Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the Plan.
Actuarially determined contribution	The employer's contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the Plan's funding policy. The ADC consists of the Employer Normal Cost and the Amortization Payment.
Amortization method	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the Unfunded Actuarial Accrued Liability. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the Unfunded Actuarial Accrued Liability. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
Amortization payment	The portion of the pension plan contribution, or ADC, that is intended to pay off the Unfunded Actuarial Accrued Liability.
Assumptions or actuarial assumptions	The estimates upon which the cost of the Plan is calculated, including: **Investment return** — the rate of investment yield that the Plan will earn over the long-term future; **Mortality rates** — the rate or probability of death at a given age for employees and retirees; **Retirement rates** — the rate or probability of retirement at a given age or service; **Disability rates** — the rate or probability of disability retirement at a given age; **Withdrawal rates** — the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; **Salary increase rates** — the rates of salary increase due to inflation, real wage growth and merit and promotion increases.

Appendix A: Definition of Pension Terms

Term	Definition
Closed amortization period	A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 20 years, it is 19 years at the end of one year, 18 years at the end of two years, etc. See Open Amortization Period.
Decrements	Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.
Defined benefit plan	A retirement plan in which benefits are defined by a formula based on the member's compensation, age and/or years of service.
Defined contribution plan	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
Employer normal cost	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Experience study	A periodic review and analysis of the actual experience of the Plan that may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified based on recommendations from the Actuary.
Funded ratio	The ratio of the Actuarial Value of Assets (AVA) to the Actuarial Accrued Liability (AAL). Plans sometimes also calculate a market funded ratio, using the Market Value of Assets (MVA), rather than the AVA.
GASB 67 and GASB 68	Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.
Investment return	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.
Net Pension Liability (NPL)	The Net Pension Liability is equal to the Total Pension Liability minus the Plan Fiduciary Net Position.
Normal cost	The portion of the Actuarial Present Value of Future Benefits and expenses, if applicable, allocated to a valuation year by the Actuarial Cost Method. Any payment with respect to an Unfunded Actuarial Accrued Liability is not part of the Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of member contributions and employer Normal Cost unless otherwise specifically stated.
Open amortization period	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in each future year in determining the Amortization Period.

Appendix A: Definition of Pension Terms

Term	Definition
Plan Fiduciary Net Position	Market value of assets.
Service costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Total Pension Liability (TPL)	The actuarial accrued liability under the entry age normal cost method and based on the blended discount rate as described in GASB 67 and 68.
Unfunded actuarial accrued liability	The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative, in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus or an Overfunded Actuarial Accrued Liability.
Valuation date or actuarial valuation date	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

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