Minnesota State Retirement System
Correctional Employees Retirement Fund

GASB Statement Nos. 67 and 68

Accounting and Financial Reporting for Pensions

June 30, 2025

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November 24, 2025

Minnesota State Retirement System
Correctional Employees Retirement Fund
St. Paul, Minnesota

Dear Board of Directors:

This report provides accounting and financial reporting information that is intended to comply with the Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68 for the Correctional Employees Retirement Fund, as amended by GASB Statement No. 82. These calculations have been made on a basis that is consistent with our understanding of these accounting statements.

GASB Statement No. 67 is the accounting standard that applies to the financial reports issued by retirement systems. GASB Statement No. 68 establishes accounting and financial reporting for state and local government employers who provide their employees (including former employees) pension benefits through a trust. GASB Statement No. 82 is an amendment to GASB Statements No. 67, No. 68, and No. 73, intended to improve consistency in the application of the accounting standards.

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of providing reporting and disclosure information that satisfies the requirements of GASB Statements No. 67 and No. 68. The Net Pension Liability is not an appropriate measure for measuring the sufficiency of plan assets to cover the estimated cost of settling the employer's benefit obligation. The Net Pension Liability is not an appropriate measure for assessing the need for or amount of future employer contributions. The calculation of the plan's liability for this report may not be applicable for purposes of funding the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statements No. 67 and No. 68 may produce significantly different results. The information in this report is calculated on a total plan basis. The Minnesota State Retirement System (MSRS) is responsible for preparing the Schedule of Employer Allocations and the Schedule of Pension Amounts by Employer. This report may be provided to parties other than MSRS only in its entirety and only with the permission of MSRS. GRS is not responsible for unauthorized use of this report.

This report is based upon information, furnished to us by MSRS, concerning retirement and ancillary benefits, active members, deferred vested members, retirees and beneficiaries, and financial data. If your understanding of this information is different, please let us know. This information was checked for internal consistency, but it was not audited.

This report complements the actuarial valuation report for funding purposes that was or will be provided to the System and should be considered in conjunction with that report. Please see the actuarial valuation report as of June 30, 2025 for additional discussion of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

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To the best of our knowledge, the information contained within this report is accurate and fairly represents the actuarial position of the Correctional Employees Retirement Fund as of the measurement date. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

Bonita J. Wurst and Sheryl L. Christensen are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,
Gabriel, Roeder, Smith & Company

Bonita J. Wurst

Bonita J. Wurst, ASA, EA, FCA, MAAA

Sheryl Christensen

Sheryl L. Christensen, FSA, EA, FCA, MAAA

BJW/SLC:dj

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SECTION A

EXECUTIVE SUMMARY

Executive Summary
as of June 30, 2025 (Dollars in Thousands)

		2025
Actuarial Valuation Date		June 30, 2025
Measurement Date of the Net Pension Liability		June 30, 2025
Membership		
Number of		
- Service Retirements		3,676
- Survivors		346
- Disability Retirements		345
- Deferred Retirements		1,665
- Terminated Other Non-vested		1,698
- Active Members		4,724
- Total		12,454
Covered-Employee Payroll [1]	$	371,313
Net Pension Liability		
Total Pension Liability	$	2,397,424
Plan Fiduciary Net Position		1,985,814
Net Pension Liability	$	411,610
Plan Fiduciary Net Position as a Percentage of Total Pension Liability		82.83%
Net Pension Liability as a Percentage of Covered-Employee Payroll		110.85%
Development of the Single Discount Rate		
Single Discount Rate		7.00%
Long-Term Expected Rate of Investment Return		7.00%
Long-Term Municipal Bond Rate [2]		5.20%
Last year ending June 30 in the 2026 to 2125 projection period for which projected benefit payments are fully funded		2125
Total Pension Expense/ (Income)	$	50,761

Deferred Outflows and Deferred Inflows of Resources by Source Arising from Current and Prior Periods to be Recognized in Future Pension Expenses

		Deferred Outflows of Resources		Deferred Inflows of Resources
Difference between expected and actual experience in the measurement of the Total Pension Liability	$	54,439	$	-
Changes in assumptions		-		34,147
Net difference between projected and actual earnings on pension plan investments		40,333		118,751
Total	$	94,772	$	152,898

(1) *Assumed equal to actual member contributions divided by employee contribution rate.*

(2) *Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in The Bond Buyer's Index's '20-Bond GO Index' as of June 30, 2025*

Discussion

Accounting Standard

For pension plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans,* establishes standards of financial reporting for separately issued financial reports and specifies the required approach for measuring the pension liability. Similarly, GASB Statement No. 68, *Accounting and Financial Reporting for Pensions,* establishes standards for state and local government employers (as well as non-employer contributing entities) to account for and disclose the net pension liability, pension expense, and other information associated with providing retirement benefits to their employees (and former employees) on their basic financial statements. GASB Statement No. 82, Pension Issues, is an amendment to GASB Statements No. 67, No. 68, and No. 73, intended to improve consistency in the application of the accounting standards.

The following discussion provides a summary of the information that is required to be disclosed under these accounting standards. A number of these disclosure items are provided in this report. However, certain information, such as notes regarding accounting policies and investments, is not included in this report and the retirement system and/or plan sponsor will be responsible for preparing and disclosing that information to comply with these accounting standards.

Financial Statements

GASB Statement No. 68 requires state and local governmental employers to recognize the net pension liability and the pension expense on their financial statements. The net pension liability is the difference between the total pension liability and the plan's fiduciary net position. In traditional actuarial terms, this is analogous to the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

Paragraph 57 of GASB Statement No. 68 states, "Contributions to the pension plan from the employer subsequent to the measurement date of the collective net pension liability and before the end of the employer's reporting period should be reported as a deferred outflow of resources related to pensions." The information contained in this report does not incorporate any contributions made to the Correctional Employees Retirement Fund subsequent to the measurement date of June 30, 2025.

The pension expense recognized each fiscal year is equal to the change in the net pension liability from the beginning of the year to the end of the year, adjusted for deferred recognition of the difference between expected and actual experience in the measurement of the Total Pension Liability, assumption changes and investment experience.

Pension plans that prepare their own, stand-alone financial statements are required to present two financial statements – a Statement of Fiduciary Net Position and a Statement of Changes in Fiduciary Net Position in accordance with GASB Statement No. 67. The *Statement of Fiduciary Net Position* presents the assets and liabilities of the pension plan at the end of the pension plan's reporting period. The *Statement of Changes in Fiduciary Net Position* presents the additions, such as contributions and investment income, and deductions, such as benefit payments and expenses, and net increase or decrease in the fiduciary net position.

Notes to Financial Statements

GASB Statement No. 68 requires the notes of the employer's financial statements to disclose the total pension expense, the pension plan's liabilities and assets, and deferred outflows and inflows of resources related to pensions.

GASB Statement Nos. 67 and 68 require the notes of the financial statements for the employers and pension plans to include certain descriptive information about the pension plans through which the pension benefits are provided. The list of disclosure items should include:

- A description of benefits provided by the plan;
- The classes of employees and number of members covered by the pension plan;
- A description of the plan's funding policy, which includes member and employer contribution requirements;
- The pension plan's investment policies;
- The pension plan's fiduciary net position, net pension liability, and the pension plan's fiduciary net position as a percentage of the total pension liability;
- The net pension liability using a discount rate that is 1% higher and 1% lower than the current discount rate used to calculate the total pension liability and net pension liability for financial reporting purposes;
- Significant assumptions and methods used to calculate the total pension liability;
- Inputs to the discount rates; and
- Certain information about mortality assumptions and the dates of experience studies.

Retirement systems that issue stand-alone financial statements are required to disclose additional information in accordance with GASB Statement No. 67. This information includes:

- The composition of the pension plan's Board and the authority under which benefit terms may be amended;
- A description of how fair value is determined;
- Information regarding certain reserves and investments, which include concentrations of investments greater than or equal to 5%, receivables, and insurance contracts excluded from plan assets; and
- Annual money-weighted rate of return.

MSRS' comprehensive annual financial report, which contains the basic financial statements and related note disclosures for the Correctional Employees Retirement Fund, can be found online at www.mnretire.gov/annual-reports-fy-2025 or obtained from MSRS at 60 Empire Drive, Suite 300, St. Paul, Minnesota, 55103 or requested via email at info@mnretire.gov or telephone at 1.800.657.5757.

Required Supplementary Information

GASB Statement No. 67 requires a 10-year fiscal history of:

- Sources of changes in the net pension liability;
- Information about the components of the net pension liability and related ratios, including the pension plan's fiduciary net position as a percentage of the total pension liability, and the net pension liability as a percent of covered-employee payroll; and
- A comparison of the actual employer contributions to the actuarially determined contributions based on the plan's funding policy.

Measurement of the Net Pension Liability

The net pension liability is to be measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

General Implications of Contribution Allocation Procedure or Funding Policy on Future Expected Plan Contributions and Funded Status

Given the plan's contribution allocation procedure, if there are no changes in benefits, Chapter 356 required contributions are made, and all actuarial assumptions are met (including the assumption of the plan earning 7.00% on an actuarial value of assets basis, as prescribed by statutes), then the following outcomes are expected:

1. The employer normal cost is expected to remain approximately level as a percent of pay;
2. The funded status of the plan is expected to gradually improve and is expected to be 100% funded within the next 23 years; and
3. The unfunded liability will grow initially as a dollar amount for two years (based on the current layered amortization schedule and if contributions are equal to the required amount) before beginning to decline.

The projections in this report are strictly for the purpose of determining the GASB single discount rate and are different from a funding projection for the ongoing plan.

Limitations of Funded Status Measurements

Unless otherwise indicated, a funded status measurement presented in this report is based upon the actuarial accrued liability and the market value of assets. Unless otherwise indicated, with regard to any funded status measurements presented in this report:

1. The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations; in other words, of transferring the obligations to an unrelated third party in an arm's length market value type transaction.
2. The measurement is dependent upon the actuarial cost method which, in combination with the plan's amortization policy, affects the timing and amounts of future contributions. The amounts of future contributions will most certainly differ from those assumed in this report due to future actual experience differing from assumed experience based upon the actuarial assumptions. A funded status measurement in this report of 100% is not synonymous with no required future contributions. If the funded status were 100%, the plan would still require future normal cost contributions (i.e., contributions to cover the cost of the active membership accruing an additional year of service credit).
3. The measurement would produce a different result if the actuarial value of assets were used instead of the market value of assets.

Limitation of Project Scope

Actuarial standards do not require the actuary to evaluate the ability of the plan sponsor or other contributing entity to make required contributions to the plan when due. Such an evaluation was not within the scope of this project and is not within the actuary's domain of expertise. Consequently, the actuary performed no such evaluation.

Timing of the Valuation

An actuarial valuation to determine the total pension liability is required to be performed at least every two years. For employer reporting, the net pension liability and pension expense should be measured as of a date (measurement date) no earlier than the end of the employer's prior fiscal year, consistently applied from period to period. If the actuarial valuation used to determine the total pension liability is not calculated as of the measurement date, the total pension liability is required to be rolled forward from the actuarial valuation date to the measurement date.

The total pension liability shown in this report is based on an actuarial valuation performed as of June 30, 2025 and a measurement date of June 30, 2025.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on pension plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the long-term expected rate of return on pension plan investments is 7.00%; the municipal bond rate is 5.20%*; and the resulting single discount rate is 7.00%.

** Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in The Bond Buyer's Index's '20-Bond GO Index' as of June 30, 2025.*

SECTION B

FINANCIAL STATEMENTS

Statement of Pension Expense Under GASB Statement No. 68
Fiscal Year Ended June 30, 2025 (Dollars in Thousands)

A. Expense		
1. Service Cost	$	61,392
2. Interest on the Total Pension Liability		156,920
3. Current-Period Benefit Changes		-
4. Employee Contributions		(35,646)
5. Projected Earnings on Plan Investments		(125,414)
6. Pension Plan Administrative Expense		1,165
7. Other Changes in Plan Fiduciary Net Position		(16)
8. Recognition of Outflow (Inflow) of Resources due to differences between expected and actual experience in the measurement of the Total Pension Liability		
Arising from Current Reporting Period		10,615
9. Recognition of Outflow (Inflow) of Resources due to assumption changes		
Arising from Current Reporting Period		(5,313)
10. Recognition of Outflow (Inflow) of Resources due to the difference between projected (7.00%) and actual earnings on Pension Plan Investments		
Arising from Current Reporting Period		(13,948)
11. **Increases/(Decreases) from Experience in the Current Reporting Period**	**$**	**49,755**
12. Recognition of Outflow (Inflow) of Resources due to differences between expected and actual experience in the measurement of the Total Pension Liability		
Arising from Prior Reporting Periods		21,068
13. Recognition of Outflow (Inflow) of Resources due to assumption changes		
Arising from Prior Reporting Periods		17,665
14. Recognition of Outflow (Inflow) of Resources due to the difference between projected and actual earnings on Pension Plan Investments		
Arising from Prior Reporting Periods		(37,727)
15. **Total Pension Expense / (Income)**	**$**	**50,761**

Recognition of Deferred Outflows and Inflows of Resources

Differences between expected and actual experience and changes in assumptions are recognized in pension expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pension through the pension plan (active employees and inactive employees) determined as of the beginning of the measurement period.

At the beginning of the current measurement period, the expected remaining service lives of all active employees in the plan was approximately 43,510 years. Additionally, the total plan membership (active employees and inactive employees) was 11,880. As a result, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the current measurement period is 4.0000 years (rounded).

Additionally, differences between projected and actual earnings on plan investments should be recognized in pension expense using a systematic and rational method over a closed five-year period. For this purpose, the deferred outflows and inflows of resources are recognized in the pension expense as a level dollar amount over the closed period identified above.

Statement of Outflows and Inflows
Arising from Current Reporting Period
Fiscal Year Ended June 30, 2025 (Dollars in Thousands)

A. Outflows (Inflows) of Resources due to Liabilities		
1. Difference between expected and actual experience of the Total Pension Liability (gains) or losses	$	42,460
2. Assumption Changes (gains) or losses		(21,253)
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}		4
4. Outflow (Inflow) of Resources to be recognized in the current pension expense for the difference between expected and actual experience of the Total Pension Liability		10,615
5. Outflow (Inflow) of Resources to be recognized in the current pension expense for Assumption Changes		(5,313)
6. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Liabilities	$	5,302
7. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for the difference between expected and actual experience of the Total Pension Liability	$	31,845
8. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for Assumption Changes		(15,940)
9. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Liabilities	$	15,905
B. Outflows (Inflows) of Resources due to Assets		
1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	$	(69,740)
2. Recognition period for Assets {in years}		5
3. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Assets		(13,948)
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	$	(55,792)

Statement of Outflows and Inflows
Arising from Current and Prior Reporting Periods
Fiscal Year Ended June 30, 2025 (Dollars in Thousands)

A. Outflows and Inflows of Resources due to Liabilities and Assets to be Recognized in Current Pension Expense

	Outflows of Resources	Inflows of Resources	Net Outflows/(Inflows) of Resources
1. Due to Liabilities	$ 86,542	$ 42,507	$ 44,035
2. Due to Assets	40,332	92,007	(51,675)
3. Totals	$ 126,874	$ 134,514	$ (7,640)

B. Outflows and Inflows of Resources by Source to be Recognized in Current Pension Expense

	Outflows of Resources	Inflows of Resources	Net Outflows/(Inflows) of Resources
1. Differences between expected and actual experience	$ 32,630	$ 947	$ 31,683
2. Assumption Changes	53,912	41,560	12,352
3. Net Difference between projected and actual earnings on pension plan investments	40,332	92,007	(51,675)
4. Totals	$ 126,874	$ 134,514	$ (7,640)

C. Deferred Outflows and Deferred Inflows of Resources by Source to be Recognized in Future Pension Expenses

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows/ (Inflows) of Resources
1. Differences between expected and actual experience	$ 54,439	$ -	$ 54,439
2. Assumption Changes	-	34,147	(34,147)
3. Net Difference between projected and actual earnings on pension plan investments*	40,333	118,751	(78,418)
4. Total	$ 94,772	$ 152,898	$ (58,126)

D. Deferred Outflows and Deferred Inflows of Resources by Year to be Recognized in Future Pension Expenses

Year Ending June 30	Net Deferred Outflows/ (Inflows) of Resources
2026	$ 6,003
2027	(24,725)
2028	(25,456)
2029	(13,948)
2030	-
Thereafter	-
Total	$ (58,126)

** Paragraph 71(b) of GASB Statement No. 68 requires deferred outflows and inflows arising from differences between projected and actual earnings on pension plan investments to be aggregated and shown as a net amount. For purposes of this valuation, amounts are shown separately for calculation purposes.*

Recognition of Deferred Outflows and Inflows of Resources
Fiscal Year Ended June 30, 2025 (Dollars in Thousands)

Year Established	Initial Amount	Initial Recognition Period	Current Year Recognition	Remaining Recognition	Remaining Recognition Period
Deferred Outflow (Inflow) due to Differences Between Expected and Actual Experience on Liabilities					
2021	$ (4,738)	5.0000	$ (947)	$ -	0.0000
2022	25,674	4.0000	6,418	-	0.0000
2023	34,409	4.0000	8,602	8,603	1.0000
2024	27,981	4.0000	6,995	13,991	2.0000
2025	42,460	4.0000	10,615	31,845	3.0000
Total			**$ 31,683**	**$ 54,439**	
Deferred Outflow (Inflow) due to Assumption Changes					
2021	$ 269,564	5.0000	$ 53,912	$ -	0.0000
2022	(72,164)	4.0000	(18,041)	-	0.0000
2023	(72,825)	4.0000	(18,206)	(18,207)	1.0000
2025	(21,253)	4.0000	(5,313)	(15,940)	3.0000
Total			**$ 12,352**	**$ (34,147)**	
Deferred Outflow (Inflow) due to Differences Between Projected and Actual Earnings on Plan Investments					
2021	$ (274,922)	5.0000	$ (54,985)	$ -	0.0000
2022	201,661	5.0000	40,332	40,333	1.0000
2023	(31,322)	5.0000	(6,264)	(12,530)	2.0000
2024	(84,049)	5.0000	(16,810)	(50,429)	3.0000
2025	(69,740)	5.0000	(13,948)	(55,792)	4.0000
Total			**$ (51,675)**	**$ (78,418)**	
Deferred Outflow (Inflow) due to All Sources					
Total			**$ (7,640)**	**$ (58,126)**	

Statement of Fiduciary Net Position as of June 30, 2025 (Dollars in Thousands)

Assets		**June 30, 2025**
Cash & Short-term Investments	$	59,709
Receivables		3,639
Investment Pools (at fair value)		1,925,986
Securities Lending Collateral		73,145
Capital Assets		-
Total Assets	**$**	**2,062,479**
Total Deferred Outflows of Resources	**$**	**-**
Total Liabilities	**$**	**(76,665)**
Total Deferred Inflows of Resources	**$**	**-**
Net Position Restricted for Pensions	**$**	**1,985,814**

Statement of Changes in Fiduciary Net Position for Year Ended June 30, 2025 (Dollars in Thousands)

1. Net position at market value at beginning of year	**$**	**1,792,602**
Additions		
2. Contributions		
a. Employee	$	35,646
b. Employer		69,796
c. Other sources		-
d. Total contributions	$	105,442
3. Investment income		
a. Investment income/(loss)	$	202,319
b. Investment expenses		(7,165)
c. Net investment income/(loss)	$	195,154
4. Other Additions		16
5. Total Additions *(2.d.) + (3.c.) + (4.)*	**$**	**300,612**
Deductions		
6. Benefits Paid		
a. Annuity benefits	$	(103,706)
b. Refunds		(2,529)
c. Total benefits paid	$	(106,235)
7. Expenses		
a. Other deductions	$	-
b. Administrative		(1,165)
c. Total expenses	$	(1,165)
8. Total deductions *(6.c.) + (7.c.)*	**$**	**(107,400)**
9. Net increase/(decrease) in fiduciary net position *(5.) + (8.)*	**$**	**193,212**
10. Net position at market value at end of year *(1.) + (9.)*	**$**	**1,985,814**
11. State Board of Investment calculated annual investment return for the Correctional Employees Retirement Fund*		11.0%

** The fiscal year 2025 investment return for the Combined Funds is 10.9%.*

SECTION C

REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in Net Pension Liability and Related Ratios
Current Period
Fiscal Year Ended June 30, 2025 (Dollars in Thousands)

A. Total Pension Liability		
1. Service Cost	$	61,392
2. Interest on the Total Pension Liability		156,920
3. Changes of benefit terms		-
4. Difference between expected and actual experience of the Total Pension Liability		42,460
5. Changes of assumptions		(21,253)
6. Benefit payments, including refunds of employee contributions		(106,235)
7. Net change in Total Pension Liability	$	133,284
8. Total Pension Liability – Beginning		2,264,140
9. Total Pension Liability – Ending	**$**	**2,397,424**
B. Plan Fiduciary Net Position		
1. Contributions – Employer	$	69,796
2. Contributions – Employee		35,646
3. Net investment income		195,154
4. Benefit payments, including refunds of employee contributions		(106,235)
5. Pension Plan Administrative Expense		(1,165)
6. Other changes		16
7. Net change in Plan Fiduciary Net Position	$	193,212
8. Plan Fiduciary Net Position – Beginning		1,792,602
9. Plan Fiduciary Net Position – Ending	**$**	**1,985,814**
C. Net Pension Liability, *A.9 - B.9.*	**$**	**411,610**
D. Plan Fiduciary Net Position as a percentage of the Total Pension Liability, *B.9 / A.9.*		**82.83%**
E. Covered-Employee payroll	**$**	**371,313** [1]
F. Net Pension Liability as a percentage of Covered-Employee payroll, *C. / E.*		**110.85%**

[1] *Assumed equal to actual member contributions divided by member contribution rate.*

Schedule of Changes in Net Pension Liability and Related Ratios Multiyear
(Dollars in Thousands)

Last 10 Fiscal Years

Fiscal year ending June 30,	2025	2024	2023	2022	2021	2020	2019	2018	2017	2016
Total Pension Liability										
Service Cost	$ 61,392	$ 56,528	$ 55,557	$ 56,990	$ 47,383	$ 46,258	$ 44,912	$ 85,364	$ 95,522	$ 56,718
Interest on the Total Pension Liability	156,920	147,786	138,597	130,414	123,942	117,205	110,664	108,421	95,307	97,571
Benefit Changes	-	-	950	-	-	-	-	(164,182)	-	-
Difference between Expected and Actual Experience	42,460	27,981	34,409	25,674	(4,738)	7,550	8,180	(3,499)	6,566	(764)
Assumption Changes	(21,253)	-	(72,825)	(72,164)	269,564	-	-	(617,840)	(213,159)	576,552
Benefit Payments	(103,706)	(99,438)	(92,863)	(87,102)	(81,829)	(77,045)	(72,419)	(67,622)	(63,221)	(59,045)
Refunds	(2,529)	(2,809)	(3,345)	(3,240)	(2,136)	(2,488)	(2,484)	(2,052)	(1,466)	(1,895)
Net Change in Total Pension Liability	**$ 133,284**	**$ 130,048**	**$ 60,480**	**$ 50,572**	**$ 352,186**	**$ 91,480**	**$ 88,853**	**$ (661,410)**	**$ (80,451)**	**$ 669,137**
Total Pension Liability - Beginning	**$ 2,264,140**	**$ 2,134,092**	**$ 2,073,612**	**$ 2,023,040**	**$ 1,670,854**	**$ 1,579,374**	**$ 1,490,521**	**$ 2,151,931**	**$ 2,232,382**	**$ 1,563,245**
Total Pension Liability - Ending (a)	**$ 2,397,424**	**$ 2,264,140**	**$ 2,134,092**	**$ 2,073,612**	**$ 2,023,040**	**$ 1,670,854**	**$ 1,579,374**	**$ 1,490,521**	**$ 2,151,931**	**$ 2,232,382**
Plan Fiduciary Net Position										
Employer Contributions	$ 69,796	$ 72,778	$ 58,521	$ 55,104	$ 48,823	$ 43,658	$ 38,245	$ 32,893	$ 31,763	$ 30,678
Employee Contributions	35,646	31,777	29,843	28,270	27,136	26,734	25,686	23,417	22,648	21,953
Pension Plan Net Investment Income	195,154	195,785	130,514	(99,155)	366,352	49,608	80,942	105,263	135,359	(195)
Benefit Payments	(103,706)	(99,438)	(92,863)	(87,102)	(81,829)	(77,045)	(72,419)	(67,622)	(63,221)	(59,045)
Refunds	(2,529)	(2,809)	(3,345)	(3,240)	(2,136)	(2,488)	(2,484)	(2,052)	(1,466)	(1,895)
Pension Plan Administrative Expense	(1,165)	(1,100)	(970)	(909)	(950)	(924)	(856)	(827)	(856)	(906)
Other Changes	16	(21)	9	-	20	(1)	(6)	(2)	(2)	-
Net Change in Plan Fiduciary Net Position	**$ 193,212**	**$ 196,972**	**$ 121,709**	**$ (107,032)**	**$ 357,416**	**$ 39,542**	**$ 69,108**	**$ 91,070**	**$ 124,225**	**$ (9,410)**
Plan Fiduciary Net Position - Beginning	**$ 1,792,602**	**$ 1,595,630**	**$ 1,473,921**	**$ 1,580,953**	**$ 1,223,537**	**$ 1,183,995**	**$ 1,114,887**	**$ 1,023,817**	**$ 899,592**	**$ 909,002**
Plan Fiduciary Net Position - Ending (b)	**$ 1,985,814**	**$ 1,792,602**	**$ 1,595,630**	**$ 1,473,921**	**$ 1,580,953**	**$ 1,223,537**	**$ 1,183,995**	**$ 1,114,887**	**$ 1,023,817**	**$ 899,592**
Net Pension Liability - Ending (a) - (b)	**$ 411,610**	**$ 471,538**	**$ 538,462**	**$ 599,691**	**$ 442,087**	**$ 447,317**	**$ 395,379**	**$ 375,634**	**$ 1,128,114**	**$ 1,332,790**
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	**82.83 %**	**79.17 %**	**74.77 %**	**71.08 %**	**78.15 %**	**73.23 %**	**74.97 %**	**74.80 %**	**47.58 %**	**40.30 %**
Covered-Employee Payroll [1]	**$ 371,313**	**$ 331,010**	**$ 310,865**	**$ 294,479**	**$282,667**	**$278,479**	**$267,563**	**$257,330**	**$248,879**	**$241,242**
Net Pension Liability as a Percentage of Covered-Employee Payroll	**110.85 %**	**142.45 %**	**173.21 %**	**203.64 %**	**156.40 %**	**160.63 %**	**147.77 %**	**145.97 %**	**453.28 %**	**552.47 %**

Notes to Schedule:

(1) Assumed equal to plan member contributions divided by employee contribution rate.

Schedule of Net Pension Liability Multiyear
(Dollars in Thousands)

Last 10 Fiscal Years

Fiscal Year Ending June 30,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered-Employee Payroll	Net Pension Liability as a % of Covered-Employee Payroll
	(a)	(b)	(a) - (b) = (c)	(b)/(c)	(d)	(c)/(d)
2016	$ 2,232,382	$ 899,592	$ 1,332,790	40.30%	$ 241,242	552.47%
2017	2,151,931	1,023,817	1,128,114	47.58	248,879	453.28
2018	1,490,521	1,114,887	375,634	74.80	257,330	145.97
2019	1,579,374	1,183,995	395,379	74.97	267,563	147.77
2020	1,670,854	1,223,537	447,317	73.23	278,479	160.63
2021	2,023,040	1,580,953	442,087	78.15	282,667	156.40
2022	2,073,612	1,473,921	599,691	71.08	294,479	203.64
2023	2,134,092	1,595,630	538,462	74.77	310,865	173.21
2024	2,264,140	1,792,602	471,538	79.17	331,010	142.45
2025	2,397,424	1,985,814	411,610	82.83	371,313	110.85

Schedule of Contributions Multiyear
(Dollars in Thousands)

Last 10 Fiscal Years

Fiscal Year Ending June 30,	Actuarially Determined Contribution (1)	Actual Contributions	Contribution Deficiency (Excess)	Covered-Employee Payroll (2)	Actual Contribution as a % of Covered-Employee Payroll
	(a)	(b)	(a) - (b) = (c)	(d)	(b)/(d)
2016	$ 44,171	$ 30,678	$ 13,493	$ 241,242	12.72%
2017	45,943	31,763	14,180	248,879	12.76
2018	49,665	32,893	16,772	257,330	12.78
2019	43,265	38,245	5,020	267,563	14.29
2020	45,726	43,658	2,068	278,479	15.68
2021	46,781	48,823	(2,042)	282,667	17.27
2022	44,614	55,104	(10,490)	294,479	18.71
2023	45,604	58,521	(12,917)	310,865	18.83
2024	61,369	72,778	(11,409)	331,010	21.99
2025	66,094	69,796	(3,702)	371,313	18.80

Notes to Schedule of Contributions

Methods and Assumptions Used to Determine Fiscal Year Ending June 30, 2025 Contribution Rates Reported in this Schedule:

Notes	(1) Actuarially determined contribution rates are calculated as of each June 30 and apply to the fiscal year beginning on the day after the measurement date.
	(2) Assumed equal to actual member contributions divided by employee contribution rate.
Valuation Date	June 30, 2024
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Remaining Amortization Period	24 years
Asset Valuation Method	5-Year smoothed market; no corridor
Inflation	2.25%
Payroll Growth	3.00%
Salary Increases	Service-based tables ranging from 11.50% with one year of service to 3.00% with 25 or more years of service, including inflation.
Investment Rate of Return	7.00%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2021 valuation pursuant to an experience study of the period 2015-2019.
Healthy Post-Retirement Mortality	PUB-2010 General Retired Mortality Table adjusted for mortality improvements using mortality improvement scale MP-2019.

Other Information

Benefit Increases After Retirement	1.5% per annum.

See separate funding actuarial valuation report as of July 1, 2024 for additional detail. To obtain this report, contact MSRS as noted on page 3. This report is also available online at https://www.mnretire.gov/annual-reports-fy-2024

Schedule of Investment Returns Multiyear

Last 10 Fiscal Years

Fiscal Year Ending June 30,	Annual Return[1]
2016	0.0 %
2017	15.2
2018	10.4
2019	7.3
2020	4.2
2021	30.2
2022	(6.3)
2023	8.9
2024	12.4
2025	11.0

[1] *Annual money-weighted rate of return, net of investment expenses.*

The Minnesota State Board of Investment (SBI) compiled this data and the related investment notes and provided it to MSRS for GASB compliance purposes. MSRS furnished this information to us for inclusion within this report. We did not audit this information. We are not responsible for its accuracy or completeness.

Rate of Return

For the fiscal year ended June 30, 2025, the annual money-weighted rate of return for the Correctional Employees Retirement Fund was 11.0%. The money-weighted rate of return is a method of calculating period-by-period returns on pension plan investments that adjusts for the changing amounts actually invested. For purposes of this schedule, the money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.

To request additional information about the computation of the annual money-weighted rate of return and the investments for the Minnesota Retirement Systems (including the investments for MSRS' defined benefit retirement funds), contact SBI at 60 Empire Drive, Suite 100, St. Paul, Minnesota, 55103, via email at minn.sbi@state.mn.us or telephone at 651.296.3328.

SECTION D

ADDITIONAL FINANCIAL STATEMENT DISCLOSURES

Asset Allocation

Long-Term Expected Return on Plan Assets

The long-term expected rate of return on pension plan investments was determined using a building-block method. Estimates for expected future real rates of return (expected returns, net of inflation) were developed for each asset class using both long-term historical returns and long-term capital market expectation from a number of investment management and consulting organizations. The asset class estimates and the target allocations were then combined to produce a geometric, long-term expected real rate of return for the portfolio. Inflation expectations were applied to derive the nominal rate of return for the portfolio. For each major asset class that is included in the pension fund's target asset allocation as of June 30, 2025, these estimates are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return (Geometric Mean)
Domestic Equity	33.5%	5.10%
International Equity	16.5%	5.30%
Private Markets	25.0%	5.90%
Fixed Income and Cash	25.0%	0.75%
Total	100.0%	

The Minnesota State Board of Investment (SBI) compiled this data and the related investment notes and provided it to MSRS for GASB compliance purposes. MSRS furnished this information to us for inclusion within this report. We did not audit this information. We are not responsible for its accuracy or completeness.

For purposes of this valuation, the long-term expected rate of return assumption is 7.00%. This assumption is based the State Employees Retirement Fund experience study report dated June 29, 2023.

Single Discount Rate

A Single Discount Rate of 7.00% was used to measure the total pension liability. This Single Discount Rate was based on an expected rate of return on pension plan investments of 7.00%. The projection of cash flows used to determine this single discount rate assumed that plan member, employer, and state contributions will be made at the current statutory contribution rates. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the Single Discount Rate, the following presents the plan's net pension liability, calculated using a Single Discount Rate of 7.00%, as well as what the fund's net pension liability would be if it were calculated using a Single Discount Rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate.

Sensitivity of Net Pension Liability to the Single Discount Rate Assumption

(Dollars in Thousands)

	1% Decrease 6.00%	Current Single Discount Rate Assumption 7.00%	1% Increase 8.00%
Total Pension Liability	$ 2,749,038	$ 2,397,424	$ 2,111,116
Net Position Restricted for Pensions	1,985,814	1,985,814	1,985,814
Net Pension Liability	**$ 763,224**	**$ 411,610**	**$ 125,302**

For more information on the calculation of the Single Discount Rate, refer to Section G of this report.

Note that we believe the 8.00% interest rate assumption does not comply with Actuarial Standards of Practice.

GASB Statement No. 68 Reconciliation (Dollars in Thousands)

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)	Deferred Outflows	Deferred Inflows	Total Pension Expense
Balance Beginning of Year	**$ 2,264,140**	**$ 1,792,602**	**$ 471,538**	**$ 179,186**	**$ 196,419**	
Changes for the Year:						
Service Cost	$ 61,392		$ 61,392			$ 61,392
Interest on Total Pension Liability	156,920		156,920			156,920
Interest on Plan Fiduciary Net Position [(1)]		$ 125,414 [(1)]	(125,414)			(125,414)
Changes in Benefit Terms	-		-			-
Liability Experience Gains and Losses	42,460		42,460	$ 31,845	$ -	10,615
Changes in Assumptions	(21,253)		(21,253)	-	15,940	(5,313)
Recognition of Deferred Outflows/(Inflows) of Resources Arising from Prior Reporting Periods						
Liability Experience Gains/(Losses)				(22,015)	(947)	21,068
Assumption Changes				(53,912)	(36,247)	17,665
Investment Gains/(Losses)				(40,332)	(78,059)	(37,727)
Contributions - Employer		69,796	(69,796)			
Contributions - Employees		35,646	(35,646)			(35,646)
Asset Gain/(Loss) [(1)]		69,740 [(1)]	(69,740)	-	55,792	(13,948)
Benefit Payment and Refunds	(106,235)	(106,235)				
Administrative Expenses		(1,165)	1,165			1,165
Other Changes		16	(16)			(16)
Net Changes	**$ 133,284**	**$ 193,212**	**$ (59,928)**	**$ (84,414)**	**$ (43,521)**	**$ 50,761**
Balance End of Year	**$ 2,397,424**	**$ 1,985,814**	**$ 411,610**	**$ 94,772**	**$ 152,898**	

[(1)] *The sum of these items in column (b) equals the net investment income of $195,154.*

Summary of Population Statistics

		Terminated		Recipients			
	Actives	Deferred Retirement	Other Non-Vested	Service Retirement	Disability Retirement	Survivor	Total
Members on July 1, 2024	**4,476**	**1,649**	**1,517**	**3,574**	**338**	**326**	**11,880**
New members	697						**697**
Return to active	47	(28)	(19)	0	0	0	**0**
Terminated non-vested	(189)	0	189	0	0	0	**0**
Service retirements	(106)	(50)	0	156	0	0	**0**
Terminated deferred	(105)	105	0	0	0	0	**0**
Terminated refund/transfer	(81)	(22)	(118)	0	0	0	**(221)**
Deaths	(5)	(2)	0	(62)	(7)	(11)	**(87)**
New beneficiary	0	0	0	0	0	36	**36**
Disabled	(9)	0	0	0	9	0	**0**
Unexpected status changes	(1)	13	129	8	5	(5)	**149**
Net change	248	16	181	102	7	20	**574**
Members on June 30, 2025	**4,724**	**1,665**	**1,698**	**3,676**	**345**	**346**	**12,454**

SECTION E

SUMMARY OF BENEFITS

Summary of Plan Provisions

Following is a summary of the major plan provisions used in the valuation of this report. MSRS is solely responsible for the validity, accuracy and comprehensiveness of this information. If any of the plan provisions shown below are not accurate and complete, the valuation results may differ significantly from those shown in this report and may require a revision of this report.

Plan year	July 1 through June 30.
Eligibility	State employees in covered Correctional service. Certain state employees with 75 percent working time spent in direct contact with inmates or patients are also eligible.
Contributions	Shown as a percent of salary: Effective as of: July 1, 2021 — Member: 9.60%; Regular Employer: 14.40%; Supplemental Employer: 4.45%; Total: 28.45% Supplemental employer contribution remains in effect until the plan is 110% funded on a market value of assets basis for a minimum of three consecutive years. Member contributions are “picked up” according to the provisions of Internal Revenue Code 414(h).
Allowable service	Service during which member contributions were made. May also include certain leave of absence, military service and periods while temporary Worker’s Compensation is paid.
Salary	Includes wages, allowances and fees. Excludes lump sum payments of separation and reduced salary while receiving Worker’s Compensation benefits.
Average salary	Average of the five highest successive years of Salary. Average Salary is based on all Allowable Service if less than five years.
Vesting	Hired before July 1, 2010: 100% vested after 3 years of Allowable Service. Hired after June 30, 2010: 50% vested after 5 years of Allowable Service; 60% vested after 6 years of Allowable Service; 70% vested after 7 years of Allowable Service; 80% vested after 8 years of Allowable Service; 90% vested after 9 years of Allowable Service; and 100% vested after 10 years of Allowable Service.

Contribution rates:

Effective as of	Member	Regular Employer	Supplemental Employer	Total
July 1, 2021	9.60%	14.40%	4.45%	28.45%

Summary of Plan Provisions (Continued)

Retirement

Normal retirement benefit

Age/Service requirement	Age 55 and at least partially vested. Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.
Amount	2.40% (2.20% if first hired after June 30, 2010) of Average Salary for each year of Allowable Service, prorata for completed months, adjusted for partial vesting if applicable.

Early retirement

Age/Service requirement	Age 50 and vested.
Amount	Normal Retirement Benefit based on Allowable Service and Average Salary at retirement date reduced by 5/12% (2/10% if hired before July 1, 2010 and retired before July 1, 2015) per month for each month that the member is under age 55.

Form of payment

Life annuity.

Actuarially equivalent options are:

50%, 75%, or 100% Joint and Survivor, or 15-year certain. If a Joint and Survivor benefit is elected and the beneficiary predeceases the annuitant, the annuitant's benefit increases to the Life Annuity amount. This "bounce back" is subsidized by the plan.

Benefit increases

1.50% per year.

A benefit recipient who has been receiving a benefit for at least 12 full months as of the June 30 of the calendar year immediately before the adjustment will receive a full increase. Members receiving benefits for at least one month but less than 12 full months as of the June 30 of the calendar year immediately before the adjustment will receive a pro rata increase.

Disability

Duty Disability

Age/Service requirement	Physically or mentally unable to perform normal job duties as a direct result of a disability relating to an incident while performing the duties of the job which present inherent dangers to the employee. Members who become disabled after June 30, 2009, will have disability benefits converted to retirement benefits at age 55 instead of age 65.
Amount	50.00% of Average Salary plus 2.40% (2.20% if first hired after June 30, 2010) of Average Salary for each year in excess of 20 years and 10 months of Allowable Service (prorata for completed months).

Summary of Plan Provisions (Continued)

Disability (Continued)	
__Duty Disability (Continued)__	
Amount (Concluded)	Payment begins at disability and ends at age 55 (age 65 if disabled prior to July 1, 2009) or the five-year anniversary of the effective date of the disability benefit, whichever is later. Payments stop earlier if disability ceases or death occurs. Benefits may be paid upon re-employment but salary plus benefit cannot exceed current salary of position held at time of disability. Member is reclassified from disabled to retired at age 55 (age 65 if disabled prior to July 1, 2009). Optional amount continues. Otherwise, normal retirement benefit equal to the disability benefit paid, or an actuarially equivalent option.
__Regular Disability__	
Age/Service requirement	At least one year of covered Correctional service for employees hired before July 1, 2009, or a vested Correctional employee hired after June 30, 2009, and the employee is determined to have a regular disability not related to an incident while performing the duties of the job.
Amount	Normal retirement benefit based on covered Correctional service (minimum of 15 years if hired prior to July 1, 2009) and Average Salary at disability. Payment begins at disability and ends at age 55 (age 65 if disabled prior to July 1, 2009) or the five-year anniversary of the effective date of the disability benefit, whichever is later. Payments stop earlier if disability ceases or death occurs. Benefits may be paid upon re-employment but salary plus benefit cannot exceed current salary of position held at time of disability. Member is reclassified from disabled to retired at age 55 (age 65 if disabled prior to July 1, 2009). Optional amount continues. Otherwise, normal retirement benefit equal to the disability benefit paid, or an actuarially equivalent option.
__Benefit Increases__	Same as for retirement.
Death	
__Surviving spouse benefit__	
Age/Service requirement	Member at any age or former member age 50 or older who dies before retirement or disability benefit commences and was vested. If a former member dies before age 55 and has less than 30 years of Allowable Service, benefits commence when the former member would have been age 55. If an active member dies, benefits may commence immediately, regardless of age.

Summary of Plan Provisions (Continued)

Death (Continued)

<u>**Surviving spouse benefit (Concluded)**</u>

Amount	Surviving spouse receives the 100% Joint and Survivor benefits using the Normal Retirement formula above. If commencement is prior to age 55, the appropriate early retirement formula described above applies except that one-half the monthly reduction factor is used from age 50 to the commencement age and the Rule of 90 does not apply. In lieu of this benefit, the surviving spouse may elect a refund of member contributions with interest or an actuarially equivalent term certain annuity (lump sum payable to estate at death).
Benefit increases	Same as for retirement.

<u>**Surviving dependent children's benefit**</u>

Age/service requirement	If no surviving spouse, all children (biological or adopted) below age 20 who are dependent for more than half of their support on deceased member.
Amount	Actuarially equivalent to surviving spouse 100% Joint and Survivor annuity payable to the later of age 20 or five years. The amount is to be proportionally divided among surviving children.
Benefit increases	Same as for retirement.

<u>**Refund of contributions with interest**</u>

Age/service requirement	Active employee dies and survivor benefits are not payable or a former employee dies before annuity begins. If accumulated member contributions with interest exceed total payments to the surviving spouse and children, then the remainder is paid out.
Amount	Member's contributions with 6.00% interest through June 30, 2011. Beginning July 1, 2011, a member's contributions increase with 4.00% interest. Beginning July 1, 2018, member contributions increase with 3.00% interest.

Termination

<u>**Refund of contributions**</u>

Age/Service requirement	Termination of state service.
Amount	Member's contributions with 6.00% interest through June 30, 2011. Beginning July 1, 2011, a member's contributions increase with 4.00% interest. Beginning July 1, 2018, member contributions increase with 3.00% interest. If a member is vested, a deferred annuity may be elected in lieu of a refund.

Summary of Plan Provisions (Continued)

Death (Continued)	
<u>**Surviving spouse benefit (Concluded)**</u>	
Amount	Surviving spouse receives the 100% Joint and Survivor benefits using the Normal Retirement formula above. If commencement is prior to age 55, the appropriate early retirement formula described above applies except that one-half the monthly reduction factor is used from age 50 to the commencement age and the Rule of 90 does not apply. In lieu of this benefit, the surviving spouse may elect a refund of member contributions with interest or an actuarially equivalent term certain annuity (lump sum payable to estate at death).
Benefit increases	Same as for retirement.
<u>**Surviving dependent children's benefit**</u>	
Age/service requirement	If no surviving spouse, all children (biological or adopted) below age 20 who are dependent for more than half of their support on deceased member.
Amount	Actuarially equivalent to surviving spouse 100% Joint and Survivor annuity payable to the later of age 20 or five years. The amount is to be proportionally divided among surviving children.
Benefit increases	Same as for retirement.
<u>**Refund of contributions with interest**</u>	
Age/service requirement	Active employee dies and survivor benefits are not payable or a former employee dies before annuity begins. If accumulated member contributions with interest exceed total payments to the surviving spouse and children, then the remainder is paid out.
Amount	Member's contributions with 6.00% interest through June 30, 2011. Beginning July 1, 2011, a member's contributions increase with 4.00% interest. Beginning July 1, 2018, member contributions increase with 3.00% interest.
Termination	
<u>**Refund of contributions**</u>	
Age/Service requirement	Termination of state service.
Amount	Member's contributions with 6.00% interest through June 30, 2011. Beginning July 1, 2011, a member's contributions increase with 4.00% interest. Beginning July 1, 2018, member contributions increase with 3.00% interest. If a member is vested, a deferred annuity may be elected in lieu of a refund.

Summary of Plan Provisions (Concluded)

Termination (Continued)	
Deferred benefit	
Age/service requirement	Partially or fully vested.
Amount	Benefit computed under law in effect at termination and increased by the following annual augmentation percentage: (a.) 0.00% before July 1, 1971; (b.) 5.00% from July 1, 1971, to January 1, 1981; (c.) 3.00% thereafter (2.50% if hired after June 30, 2006) until January 1 of the year following attainment of age 55 or January 1, 2012, whichever is earlier; (d.) 5.00% thereafter until the annuity begins (2.50% if hired after June 30, 2006), but before January 1, 2012; (e.) 2.00% from January 1, 2012 to December 31, 2018; and (f.) 0.00% thereafter. Amount is payable at normal or early retirement.
Optional form conversion factors	Actuarially equivalent factors based on the RP-2014 mortality table for healthy annuitants for a member turning age 56 in 2021, reflecting projected mortality improvements using Scale MP-2017, white collar adjustment, male rates set forward two years, female rates set forward one year, blended 70% males, 5.91% post-retirement interest, and 7.50% pre-retirement interest. Reflecting statutory requirements, joint and survivor factors are based on an interest assumption of 6.50%.
Combined service annuity	Members are eligible for combined service benefits if they: (a.) Have sufficient allowable service in total that equals or exceeds the applicable service credit vesting requirement of the retirement plan with the longest applicable service credit vesting requirement; (b.) Have at least six months of allowable service credit in each plan worked under; and (c.) Are not in receipt of a benefit from another plan, or have applied for benefits with an effective date within one year. Members who meet the above requirements must have their benefit based on the following: (a.) Allowable service in all covered plans are combined in order to determine eligibility for early retirement. (b.) Average salary is based on the high five consecutive years during their entire service in all covered plans.
Changes in plan provisions	Changes were made to eligible employment positions; these changes will be reflected as these members are added to the Correctional Plan membership. The threshold to cease supplemental employer contributions was changed from 100% funded for a minimum of three consecutive years to 110% funded for a minimum of three consecutive years (on a market value of assets basis).

SECTION F

ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

Actuarial Methods Used for the Determination of Total Pension Liability and Related Values

Actuarial Cost Method

Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

(i) The annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement; and

(ii) Each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains/(losses), as they occur, reduce (increase) the Total Pension Liability.

Asset Valuation Method

Fair value of assets.

Summary of Actuarial Assumptions Used in the Determination of Total Pension Liability and Related Values

The following assumptions were used in valuing the liabilities and benefits under the plan. Unless otherwise noted, the assumptions are based on the last adopted experience study, dated July 16, 2024 and a review of inflation and investment assumptions included in the State Employees Retirement Fund Experience Study report dated June 29, 2023. The Allowance for Combined Service Annuity assumptions are based on an analysis completed by the LCPR actuary and documented in a report dated February 2025.

Investment return	7.00% per annum.
Single Discount Rate	7.00% per annum.
Salary increases	Reported salary at valuation date increased according to the rate table, to current fiscal year and annually for each future year. Prior fiscal year salary is annualized for members with less than one year of service.
Inflation	2.25% per year.
Payroll growth	3.00% per year.
Mortality rates	
Healthy pre-retirement	Pub-2010 Public Safety Employee Mortality Table adjusted for mortality improvements using mortality improvement scale MP-2021.
Healthy post-retirement	Pub-2010 Public Safety Healthy Retiree Mortality Table adjusted for mortality improvements using mortality improvement scale MP-2021.
Disabled	Pub-2010 Public Safety Disabled Retiree Mortality Table adjusted for mortality improvements using mortality improvement scale MP-2021.
Notes	The Pub-2010 employee mortality table as published by the Society of Actuaries (SOA) contains mortality rates for ages 18 to 80 and the annuitant mortality table contains mortality rates for ages 50 to 120. We have extended the annuitant mortality table as needed for members younger than age 50 who are receiving a benefit by deriving rates based on the employee table and the juvenile table. Similarly, we have extended the employee table as needed for members older than age 80 by deriving rates based on the annuitant table.
Retirement	Members retiring from active status are assumed to retire according to the age-related rates shown in the rate table. Members who have attained the highest assumed retirement age are assumed to retire in one year.
Withdrawal	Service-related rates are based on experience; see table of sample rates.
Disability	Age-related rates based on experience; see table of sample rates. All incidences are assumed to be duty-related.

Summary of Actuarial Assumptions (Continued)

Allowance for combined service annuity	Liabilities for former members are increased by 6.0% for vested members and 111.0% for non-vested members to account for the effect of some participants having eligibility for a Combined Service Annuity.
Administrative expenses	In the valuation year, equal to prior year administrative expenses expressed as a percentage of prior year projected payroll. In each subsequent year, equal to the initial administrative expense percentage applied to payroll for the closed group.
Refund of contributions	For non-vested members, account balances accumulate interest until the assumed commencement date and are discounted back to the valuation date. Active members decrementing after becoming eligible for a benefit are assumed to take the contributions accumulated with interest if larger than the value of the benefit.
Commencement of deferred benefits	Members receiving deferred annuities (including current terminated deferred members) are assumed to begin receiving benefits at age 55.
Percentage married	75% of active male members are assumed to be married and 60% of active female members are assumed to be married. Actual marital status is used for members in payment status.
Age of spouse	Male members are assumed to have a female beneficiary two years younger and female members are assumed to have a male beneficiary two years older.
Form of payment	Married members retiring from active status are assumed to elect the subsidized Joint and Survivor form of annuity as follows: Males: 15% elect 50% Joint & Survivor option 10% elect 75% Joint & Survivor option 65% elect 100% Joint & Survivor option Females: 20% elect 50% Joint & Survivor option 5% elect 75% Joint & Survivor option 60% elect 100% Joint & Survivor option Remaining members and unmarried members are assumed to elect the Straight Life option. Members receiving deferred annuities (including current terminated deferred members) are assumed to elect a straight life annuity, except that current terminated deferred members who terminated prior to July 1, 1997, are assumed to receive the Level Social Security option to age 62.
Eligibility testing	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

Summary of Actuarial Assumptions (Continued)

Decrement operation	Withdrawal decrements do not operate during retirement eligibility. Decrements are assumed to occur mid-fiscal year.
Service credit accruals	It is assumed that members accrue one year of service credit per year.
Pay increases	Pay increases are assumed to happen at the beginning of the fiscal year. This is equivalent to assuming that reported earnings are pensionable earnings for the year ending on the valuation date.
Final average salary	For present value of future benefit purposes, final average salary was calculated in accordance with pay increase assumptions, but was not permitted to fall below the final average salary reported in the data.
Unknown data for certain members	To prepare this report, GRS has used and relied on participant data supplied by the Fund. Although GRS has reviewed the data in accordance with Actuarial Standards of Practice No. 23, GRS has not verified or audited any of the data or information provided. In cases where submitted data was missing or incomplete, the following assumptions were applied: <u>Data for active members</u>: There were 9 members reported with zero or invalid salary. We used prior year salary (7 members), if available, otherwise, high five salary with a 10% load to account for salary increases (2 members). If neither pay or high five salary was available, we assumed a value of $65,000 (0 member). There were 80 members reported with a gender of X or N and 0 members reported with an invalid date of birth. We assumed members are male and age 34 at hire. <u>Data for terminated members</u>: There was 1 member reported with a gender of X or N and 0 members reported with an invalid date of birth. We assumed members are male. There were 33 members reported without a benefit. If available, we calculated benefits for these members using the reported Average Salary, Credited Service and Termination Date provided. If Average Salary was not reported (10 members), we assumed a value of $45,000. There were 0 members reported without Credited Service and 0 members reported without a Termination Date.

Summary of Actuarial Assumptions (Continued)

Unknown data for certain members (Concluded)	<u>Data for members receiving benefits</u>: There were 9 members reported with a gender of X or N. We assumed male gender for retirees and female gender for survivors. There were 0 members reported with a missing or invalid birth date. There was 1 survivor member reported with a certain and life option but with a certain end date prior to the valuation date. This member was excluded from the valuation. There were 2 members reported without a benefit. Due to the small number of members with missing benefits, we made no adjustment to the reported data for members receiving benefits. There were 5 retirees reported with a survivor option and a survivor date of death. We assumed no benefit was payable to the survivor, and the member benefit already reflected the pop-up, if any. There were 26 retirees reported with a bounceback annuity and an unreasonable reduction factor. A factor of 0.80, 0.85 and 0.90 was assumed for the 100%, 75% and 50% joint and survivor annuity, respectively. There are 3 retirees reported with an accelerated benefit election, are younger than the accelerated age, and are missing accelerated benefit amount and end date. Due to the small number of affected members, we did not modify the valuation data. There were retired members reported with a survivor option and a survivor gender of X or N (355 members) and/or survivor date of birth (300 members). We used the valuation assumptions if the survivor gender or date of birth was missing or invalid.

Summary of Actuarial Assumptions (Continued)

Changes in actuarial assumptions since the prior valuation	The following changes in assumptions are effective with the July 1, 2025 valuation, as recommended in the most recent experience study (dated July 16, 2024): • Assumed rates of salary increases were reduced slightly. • Assumed rates of retirement were adjusted resulting in an overall increase in unreduced (Normal) retirements and a slight decrease in reduced retirements. • Assumed rates of withdrawal were changed resulting in an increase in predicted terminations for males with less than 15 years of service, and a decrease in predicted terminations for females. • Assumed rates of disability were changed, resulting in minor changes in predicted disability retirements below age 50 and fewer predicted disability retirements at ages 50 and older. • The mortality table was changed from the Pub-2010 General Mortality Table to the Pub-2010 Public Safety Mortality Table, and the mortality improvement scale was updated from MP-2019 to MP-2021. • Minor changes to form of payment assumptions for retirees. • Minor changes to assumptions made with respect to missing participant data. The combined service annuity load was changed from 17% to 6% for vested terminated members, and from 6% to 111% for non-vested terminated members.

Summary of Actuarial Assumptions (Continued)

Age in 2025	Percentage of Members Dying Each Year*					
	Healthy Post-Retirement Mortality**		Healthy Pre-Retirement Mortality**		Disability Mortality**	
	Male	Female	Male	Female	Male	Female
20	0.04%	0.02%	0.04%	0.02%	0.12%	0.06%
25	0.04	0.02	0.04	0.02	0.13	0.08
30	0.06	0.04	0.06	0.04	0.17	0.12
35	0.07	0.05	0.07	0.05	0.21	0.17
40	0.09	0.06	0.08	0.06	0.24	0.20
45	0.14	0.09	0.09	0.07	0.27	0.22
50	0.18	0.13	0.11	0.08	0.33	0.27
55	0.29	0.25	0.16	0.12	0.45	0.44
60	0.51	0.45	0.27	0.17	0.74	0.71
65	0.87	0.72	0.41	0.21	1.18	1.00
70	1.43	1.15	0.70	0.39	1.74	1.39
75	2.46	1.97	1.25	0.77	2.82	2.09
80	4.46	3.53	2.34	1.60	4.90	3.53
85	8.22	6.32	7.36	5.54	8.29	6.32
90	14.64	11.14	14.64	11.14	14.64	11.14

* *Generally, mortality rates are expected to increase as age increases (with the exception of young ages, where expected mortality may decrease as age increases). In cases where the application of the projection scale would reverse the nature of this trend, standard mortality rates have been adjusted slightly. The adjustment has no material effect on results.*

** *Rates are adjusted for mortality improvements using mortality improvement scale MP-2021 from a base year of 2010.*

Age	Percent of Members Decrementing Each Year	
	Disability Retirement	
	Male	Female
20	0.05%	0.05%
25	0.08	0.08
30	0.11	0.11
35	0.17	0.17
40	0.22	0.22
45	0.25	0.25
50	0.40	0.40
55	0.40	0.40
60	0.40	0.40
65	0.40	0.40
70	0.40	0.40

Summary of Actuarial Assumptions (Concluded)

Age	Percent Retiring
50	3.0%
51	2.5
52	2.5
53	3.5
54	4.0
55	55.0
56	35.0
57	20.0
58	15.0
59	15.0
60	15.0
61	25.0
62	25.0
63	25.0
64	20.0
65	30.0
66	30.0
67	30.0
68	30.0
69	25.0
70+	100.0

Salary Scale	
Year	Increase
1	11.00%
2	6.50
3	4.80
4	4.60
5	4.50
6	4.50
7	4.50
8	4.50
9	4.50
10	4.50
11	4.25
12	4.15
13	3.95
14	3.75
15	3.75
16	3.75
17	3.75
18	3.50
19	3.25
20	3.25
21	3.25
22	3.00
23	3.00
24	3.00
25+	3.00

Percent of Members Terminating (Withdrawing) Each Year		
Year	Males	Females
1	25.00%	28.00%
2	16.00	18.00
3	13.00	15.00
4	11.00	14.00
5	9.00	13.00
6	8.50	9.50
7	6.50	9.00
8	5.75	8.50
9	5.25	8.50
10	4.00	7.00
11	3.25	7.00
12	3.00	7.00
13	3.00	4.50
14	2.50	4.25
15	2.00	3.50
16	1.90	3.50
17	1.80	3.50
18	1.60	3.00
19	1.30	2.75
20	1.00	2.50
21	0.50	2.25
22	0.50	2.00
23	0.50	1.00
24	0.50	0.50
25+	0.00	0.00

SECTION G

CALCULATION OF THE SINGLE DISCOUNT RATE

Calculation of the Single Discount Rate

GASB Statement No. 67 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Fiduciary Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the long-term expected rate of return is used as the discount rate. In years where assets are not projected to be sufficient to meet benefit payments, the use of a municipal bond rate is required, as described in the following paragraph.

The Single Discount Rate (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.00%; the municipal bond rate is 5.20%; and **the resulting single discount rate as of June 30, 2025 is 7.00%**.

The tables in this section provide background for the development of the Single Discount Rate.

The **Projection of Contributions** table shows the development of expected contributions in future years. Normal Cost contributions for future hires are not included (nor are their liabilities).

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years.

The **Present Values of Projected Benefit Payments** table shows the development of the Single Discount Rate. It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

Single Discount Rate Development
Projection of Contributions (Dollars in Thousands)

	Projected Covered-Employee Payroll			Projected Contributions			
Fiscal Year Ending	Payroll for Current Employees	Payroll for New Employees	Total Employee Payroll	Contributions from Current Employees	Employer Contributions for Current Employees	Contributions on Future Payroll toward Current UAL[1]	Total Contributions
	(a)	(b)	(c) = (a) + (b)	(d) = (a) x 9.60%	(e) = (a) x 14.40%[2]	(f)	(g) = (d) + (e) + (f)
2025	$ 371,313		$ 371,313				
2026	381,053	$ 15,993	397,046	$ 36,581	$ 71,829	$ 1,724	$ 110,134
2027	353,528	55,429	408,957	33,939	66,640	5,975	106,554
2028	330,974	90,252	421,226	31,774	62,389	9,729	103,892
2029	312,152	121,711	433,863	29,967	58,841	13,120	101,928
2030	294,877	152,002	446,879	28,308	55,584	16,386	100,278
2031	279,201	181,084	460,285	26,803	52,629	19,521	98,953
2032	264,685	209,409	474,094	25,410	49,893	22,574	97,877
2033	250,902	237,415	488,317	24,087	47,295	25,593	96,975
2034	237,694	265,272	502,966	22,819	44,805	28,596	96,220
2035	224,617	293,438	518,055	21,563	42,340	31,633	95,536
2036	211,384	322,213	533,597	20,293	39,846	34,735	94,874
2037	198,046	351,559	549,605	19,012	37,332	37,898	94,242
2038	184,750	381,343	566,093	17,736	34,825	41,109	93,670
2039	172,057	411,018	583,075	16,517	32,433	44,308	93,258
2040	159,820	440,748	600,568	15,343	30,126	47,513	92,982
2041	147,745	470,840	618,585	14,184	27,850	50,756	92,790
2042	136,233	500,909	637,142	13,078	25,680	53,998	92,756
2043	125,495	530,762	656,257	12,048	23,656	57,216	92,920
2044	115,774	560,170	675,944	11,114	21,823	60,386	93,323
2045	106,522	589,701	696,223	10,226	20,079	63,570	93,875
2046	97,225	619,884	717,109	9,334	18,327	66,824	94,485
2047	88,265	650,358	738,623	8,473	16,638	70,109	95,220
2048	79,958	680,823	760,781	7,676	15,072	73,393	96,141
2049	72,370	711,235	783,605	6,947	13,642	76,671	97,260
2050	65,125	741,988	807,113	6,252	12,276	79,986	98,514
2051	57,924	773,402	831,326	5,561	8,341	48,956	62,858
2052	51,075	805,191	856,266	4,903	7,355	50,969	63,227
2053	44,472	837,482	881,954	4,269	6,404	53,013	63,686
2054	38,078	870,335	908,413	3,656	5,483	55,092	64,231
2055	32,060	903,605	935,665	3,078	4,617	57,198	64,893
2056	26,470	937,265	963,735	2,541	3,812	59,329	65,682
2057	21,186	971,461	992,647	2,034	3,051	61,493	66,578
2058	16,597	1,005,829	1,022,426	1,593	2,390	63,669	67,652
2059	12,914	1,040,185	1,053,099	1,240	1,860	65,844	68,944
2060	9,755	1,074,937	1,084,692	937	1,405	68,043	70,385
2061	7,311	1,109,922	1,117,233	702	1,053	70,258	72,013
2062	5,624	1,145,126	1,150,750	540	810	72,486	73,836
2063	4,381	1,180,891	1,185,272	421	631	74,750	75,802
2064	3,395	1,217,436	1,220,831	326	489	77,064	77,879
2065	2,591	1,254,864	1,257,455	249	373	79,433	80,055
2066	1,932	1,293,247	1,295,179	185	278	81,863	82,326
2067	1,407	1,332,627	1,334,034	135	203	84,355	84,693
2068	1,001	1,373,055	1,374,056	96	144	86,914	87,154
2069	695	1,414,582	1,415,277	67	100	89,543	89,710
2070	466	1,457,270	1,457,736	45	67	92,245	92,357
2071	299	1,501,169	1,501,468	29	43	95,024	95,096
2072	178	1,546,334	1,546,512	17	26	97,883	97,926
2073	98	1,592,809	1,592,907	9	14	100,825	100,848
2074	51	1,640,643	1,640,694	5	7	103,853	103,865
2075	20	1,689,895	1,689,915	2	3	106,970	106,975

[1]. *Equal to total contributions (28.45% of payroll for 25 years and 24.00% of payroll thereafter for new employee payroll) net of new employee normal cost and expenses (17.67% of pay).*

[2]. *Ultimate contribution rate; projected 2025 through 2050 employer contributions are based on a 18.85% of pay contribution.*

Totals may not add due to rounding.

Single Discount Rate Development
Projection of Contributions (Dollars in Thousands, Concluded)

	Projected Covered-Employee Payroll			Projected Contributions			
Fiscal Year Ending	Payroll for Current Employees	Payroll for New Employees	Total Employee Payroll	Contributions from Current Employees	Employer Contributions for Current Employees	Contributions on Future Payroll toward Current UAL[1]	Total Contributions
	(a)	(b)	(c) = (a) + (b)	(d) = (a) x 9.60%	(e) = (a) x 14.40%[2]	(f)	(g) = (d) + (e) + (f)
2076	$ 4	$ 1,740,608	$ 1,740,612	$ -	$ 1	$ 110,180	$ 110,181
2077	1	1,792,830	1,792,831	-	-	113,486	113,486
2078	-	1,846,616	1,846,616	-	-	116,891	116,891
2079	-	1,902,014	1,902,014	-	-	120,397	120,397
2080	-	1,959,075	1,959,075	-	-	124,009	124,009
2081	-	2,017,847	2,017,847	-	-	127,730	127,730
2082	-	2,078,382	2,078,382	-	-	131,562	131,562
2083	-	2,140,734	2,140,734	-	-	135,508	135,508
2084	-	2,204,956	2,204,956	-	-	139,574	139,574
2085	-	2,271,104	2,271,104	-	-	143,761	143,761
2086	-	2,339,238	2,339,238	-	-	148,074	148,074
2087	-	2,409,415	2,409,415	-	-	152,516	152,516
2088	-	2,481,697	2,481,697	-	-	157,091	157,091
2089	-	2,556,148	2,556,148	-	-	161,804	161,804
2090	-	2,632,832	2,632,832	-	-	166,658	166,658
2091	-	2,711,817	2,711,817	-	-	171,658	171,658
2092	-	2,793,172	2,793,172	-	-	176,808	176,808
2093	-	2,876,967	2,876,967	-	-	182,112	182,112
2094	-	2,963,276	2,963,276	-	-	187,575	187,575
2095	-	3,052,174	3,052,174	-	-	193,203	193,203
2096	-	3,143,740	3,143,740	-	-	198,999	198,999
2097	-	3,238,052	3,238,052	-	-	204,969	204,969
2098	-	3,335,193	3,335,193	-	-	211,118	211,118
2099	-	3,435,249	3,435,249	-	-	217,451	217,451
2100	-	3,538,307	3,538,307	-	-	223,975	223,975
2101	-	3,644,456	3,644,456	-	-	230,694	230,694
2102	-	3,753,790	3,753,790	-	-	237,615	237,615
2103	-	3,866,403	3,866,403	-	-	244,743	244,743
2104	-	3,982,395	3,982,395	-	-	252,086	252,086
2105	-	4,101,867	4,101,867	-	-	259,648	259,648
2106	-	4,224,923	4,224,923	-	-	267,438	267,438
2107	-	4,351,671	4,351,671	-	-	275,461	275,461
2108	-	4,482,221	4,482,221	-	-	283,725	283,725
2109	-	4,616,688	4,616,688	-	-	292,236	292,236
2110	-	4,755,188	4,755,188	-	-	301,003	301,003
2111	-	4,897,844	4,897,844	-	-	310,034	310,034
2112	-	5,044,779	5,044,779	-	-	319,335	319,335
2113	-	5,196,123	5,196,123	-	-	328,915	328,915
2114	-	5,352,006	5,352,006	-	-	338,782	338,782
2115	-	5,512,567	5,512,567	-	-	348,945	348,945
2116	-	5,677,944	5,677,944	-	-	359,414	359,414
2117	-	5,848,282	5,848,282	-	-	370,196	370,196
2118	-	6,023,730	6,023,730	-	-	381,302	381,302
2119	-	6,204,442	6,204,442	-	-	392,741	392,741
2120	-	6,390,575	6,390,575	-	-	404,523	404,523
2121	-	6,582,293	6,582,293	-	-	416,659	416,659
2122	-	6,779,762	6,779,762	-	-	429,159	429,159
2123	-	6,983,154	6,983,154	-	-	442,034	442,034
2124	-	7,192,649	7,192,649	-	-	455,295	455,295
2125	-	7,408,428	7,408,428	-	-	468,954	468,954

[1]. *Equal to total contributions (28.45% of payroll for 25 years and 24.00% of payroll thereafter for new employee payroll) net of new employee normal cost and expenses (17.67% of pay).*

[2]. *Ultimate contribution rate; projected 2025 through 2050 employer contributions are based on a 18.85% of pay contribution.*

Totals may not add due to rounding.

Single Discount Rate Development
Projection of Plan Fiduciary Net Position (Dollars in Thousands)

Fiscal Year Ending	Projected Beginning Plan Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 7.00%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
2026	$ 1,985,814	$ 110,134	$ 116,483	$ 1,257	$ 138,745	$ 2,116,953
2027	2,116,953	106,554	122,509	1,167	147,598	2,247,428
2028	2,247,428	103,892	128,239	1,092	156,445	2,378,433
2029	2,378,433	101,928	133,106	1,030	165,382	2,511,606
2030	2,511,606	100,278	138,626	973	174,459	2,646,744
2031	2,646,744	98,953	145,993	921	183,622	2,782,405
2032	2,782,405	97,877	153,132	873	192,837	2,919,114
2033	2,919,114	96,975	161,072	828	202,104	3,056,293
2034	3,056,293	96,220	169,492	784	211,392	3,193,629
2035	3,193,629	95,536	178,253	741	220,682	3,330,853
2036	3,330,853	94,874	187,849	698	229,937	3,467,117
2037	3,467,117	94,242	198,153	654	239,100	3,601,653
2038	3,601,653	93,670	208,558	610	248,142	3,734,297
2039	3,734,297	93,258	218,429	568	257,074	3,865,632
2040	3,865,632	92,982	228,160	527	265,925	3,995,851
2041	3,995,851	92,790	237,955	488	274,698	4,124,895
2042	4,124,895	92,756	246,949	450	283,422	4,253,675
2043	4,253,675	92,920	255,163	414	292,161	4,383,177
2044	4,383,177	93,323	262,557	382	300,986	4,514,548
2045	4,514,548	93,875	269,321	352	309,970	4,648,721
2046	4,648,721	94,485	276,071	321	319,151	4,785,964
2047	4,785,964	95,220	282,503	291	328,563	4,926,953
2048	4,926,953	96,141	288,141	264	338,271	5,072,961
2049	5,072,961	97,260	293,026	239	348,363	5,225,320
2050	5,225,320	98,514	297,569	215	358,916	5,384,966
2051	5,384,966	62,858	301,768	191	368,721	5,514,586
2052	5,514,586	63,227	305,371	169	377,683	5,649,956
2053	5,649,956	63,686	308,500	147	387,068	5,792,063
2054	5,792,063	64,231	311,281	126	396,940	5,941,828
2055	5,941,828	64,893	313,459	106	407,372	6,100,527
2056	6,100,527	65,682	314,966	87	418,456	6,269,611
2057	6,269,611	66,578	315,997	70	430,288	6,450,411
2058	6,450,411	67,652	316,138	55	442,977	6,644,847
2059	6,644,847	68,944	315,187	43	456,665	6,855,226
2060	6,855,226	70,385	313,501	32	471,500	7,083,577
2061	7,083,577	72,013	310,833	24	487,632	7,332,365
2062	7,332,365	73,836	307,142	19	505,237	7,604,278
2063	7,604,278	75,802	302,729	14	524,491	7,901,827
2064	7,901,827	77,879	297,751	11	545,562	8,227,506
2065	8,227,506	80,055	292,259	9	568,624	8,583,917
2066	8,583,917	82,326	286,271	6	593,857	8,973,823
2067	8,973,823	84,693	279,787	5	621,455	9,400,180
2068	9,400,180	87,154	272,816	3	651,624	9,866,139
2069	9,866,139	89,710	265,374	2	684,585	10,375,058
2070	10,375,058	92,357	257,483	2	720,572	10,930,504
2071	10,930,504	95,096	249,165	1	759,834	11,536,268
2072	11,536,268	97,926	240,450	1	802,635	12,196,377
2073	12,196,377	100,848	231,367	-	849,256	12,915,114
2074	12,915,114	103,865	221,953	-	899,995	13,697,020
2075	13,697,020	106,975	212,264	-	955,169	14,546,900

For purposes of this projection, we assumed the 14.4% regular member statutory contribution rate would continue after the plan becomes fully funded.

Totals may not add due to rounding.

Single Discount Rate Development
Projection of Plan Fiduciary Net Position
(Dollars in Thousands, Concluded)

Fiscal Year Ending	Projected Beginning Plan Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 7.00%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
2076	$ 14,546,900	$ 110,180	$ 202,347	$ -	$ 1,015,112	$ 15,469,846
2077	15,469,846	113,486	192,259	-	1,080,179	16,471,252
2078	16,471,252	116,891	182,066	-	1,150,745	17,556,823
2079	17,556,823	120,397	171,831	-	1,227,208	18,732,597
2080	18,732,597	124,009	161,617	-	1,309,988	20,004,977
2081	20,004,977	127,730	151,481	-	1,399,531	21,380,757
2082	21,380,757	131,562	141,479	-	1,496,312	22,867,151
2083	22,867,151	135,508	131,662	-	1,600,833	24,471,830
2084	24,471,830	139,574	122,072	-	1,713,630	26,202,962
2085	26,202,962	143,761	112,748	-	1,835,274	28,069,249
2086	28,069,249	148,074	103,720	-	1,966,374	30,079,977
2087	30,079,977	152,516	95,011	-	2,107,577	32,245,059
2088	32,245,059	157,091	86,640	-	2,259,578	34,575,088
2089	34,575,088	161,804	78,623	-	2,423,118	37,081,388
2090	37,081,388	166,658	70,969	-	2,598,990	39,776,067
2091	39,776,067	171,658	63,687	-	2,788,040	42,672,078
2092	42,672,078	176,808	56,787	-	2,991,175	45,783,274
2093	45,783,274	182,112	50,278	-	3,209,365	49,124,473
2094	49,124,473	187,575	44,170	-	3,443,647	52,711,525
2095	52,711,525	193,203	38,475	-	3,695,131	56,561,383
2096	56,561,383	198,999	33,204	-	3,965,002	60,692,180
2097	60,692,180	204,969	28,366	-	4,254,529	65,123,312
2098	65,123,312	211,118	23,968	-	4,565,071	69,875,532
2099	69,875,532	217,451	20,014	-	4,898,081	74,971,050
2100	74,971,050	223,975	16,501	-	5,255,112	80,433,636
2101	80,433,636	230,694	13,419	-	5,637,831	86,288,742
2102	86,288,742	237,615	10,754	-	6,048,018	92,563,621
2103	92,563,621	244,743	8,484	-	6,487,583	99,287,463
2104	99,287,463	252,086	6,582	-	6,958,570	106,491,537
2105	106,491,537	259,648	5,015	-	7,463,169	114,209,339
2106	114,209,339	267,438	3,750	-	8,003,727	122,476,753
2107	122,476,753	275,461	2,748	-	8,582,756	131,332,222
2108	131,332,222	283,725	1,971	-	9,202,950	140,816,926
2109	140,816,926	292,236	1,383	-	9,867,192	150,974,971
2110	150,974,971	301,003	948	-	10,578,572	161,853,598
2111	161,853,598	310,034	635	-	11,340,398	173,503,395
2112	173,503,395	319,335	414	-	12,156,211	185,978,526
2113	185,978,526	328,915	264	-	13,029,805	199,336,982
2114	199,336,982	338,782	163	-	13,965,240	213,640,841
2115	213,640,841	348,945	98	-	14,966,862	228,956,550
2116	228,956,550	359,414	58	-	16,039,323	245,355,229
2117	245,355,229	370,196	33	-	17,187,603	262,912,995
2118	262,912,995	381,302	18	-	18,417,029	281,711,308
2119	281,711,308	392,741	10	-	19,733,305	301,837,343
2120	301,837,343	404,523	5	-	21,142,533	323,384,394
2121	323,384,394	416,659	3	-	22,651,244	346,452,295
2122	346,452,295	429,159	1	-	24,266,427	371,147,879
2123	371,147,879	442,034	1	-	25,995,561	397,585,473
2124	397,585,473	455,295	-	-	27,846,649	425,887,416
2125	425,887,416	468,954	-	-	29,828,255	456,184,625

For purposes of this projection, we assumed the 14.4% statutory regular member statutory contribution rate would continue after the plan becomes fully funded.

Totals may not add due to rounding.

Single Discount Rate Development
Present Values of Projected Benefits (Dollars in Thousands)

Fiscal Year Ending	Projected Beginning Plan Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)-.5)	(g)=(e)*vf ^((a)-.5)	(h)=(c)/(1+sdr)^(a-.5)
2026	$ 1,985,814	$ 116,483	$ 116,483	$ -	$ 112,608	$ -	$ 112,608
2027	2,116,953	122,509	122,509	-	110,686	-	110,686
2028	2,247,428	128,239	128,239	-	108,283	-	108,283
2029	2,378,433	133,106	133,106	-	105,040	-	105,040
2030	2,511,606	138,626	138,626	-	102,240	-	102,240
2031	2,646,744	145,993	145,993	-	100,629	-	100,629
2032	2,782,405	153,132	153,132	-	98,644	-	98,644
2033	2,919,114	161,072	161,072	-	96,971	-	96,971
2034	3,056,293	169,492	169,492	-	95,365	-	95,365
2035	3,193,629	178,253	178,253	-	93,733	-	93,733
2036	3,330,853	187,849	187,849	-	92,316	-	92,316
2037	3,467,117	198,153	198,153	-	91,010	-	91,010
2038	3,601,653	208,558	208,558	-	89,522	-	89,522
2039	3,734,297	218,429	218,429	-	87,625	-	87,625
2040	3,865,632	228,160	228,160	-	85,541	-	85,541
2041	3,995,851	237,955	237,955	-	83,377	-	83,377
2042	4,124,895	246,949	246,949	-	80,868	-	80,868
2043	4,253,675	255,163	255,163	-	78,091	-	78,091
2044	4,383,177	262,557	262,557	-	75,097	-	75,097
2045	4,514,548	269,321	269,321	-	71,992	-	71,992
2046	4,648,721	276,071	276,071	-	68,969	-	68,969
2047	4,785,964	282,503	282,503	-	65,959	-	65,959
2048	4,926,953	288,141	288,141	-	62,874	-	62,874
2049	5,072,961	293,026	293,026	-	59,757	-	59,757
2050	5,225,320	297,569	297,569	-	56,713	-	56,713
2051	5,384,966	301,768	301,768	-	53,751	-	53,751
2052	5,514,586	305,371	305,371	-	50,834	-	50,834
2053	5,649,956	308,500	308,500	-	47,996	-	47,996
2054	5,792,063	311,281	311,281	-	45,260	-	45,260
2055	5,941,828	313,459	313,459	-	42,595	-	42,595
2056	6,100,527	314,966	314,966	-	40,000	-	40,000
2057	6,269,611	315,997	315,997	-	37,505	-	37,505
2058	6,450,411	316,138	316,138	-	35,067	-	35,067
2059	6,644,847	315,187	315,187	-	32,675	-	32,675
2060	6,855,226	313,501	313,501	-	30,374	-	30,374
2061	7,083,577	310,833	310,833	-	28,145	-	28,145
2062	7,332,365	307,142	307,142	-	25,991	-	25,991
2063	7,604,278	302,729	302,729	-	23,942	-	23,942
2064	7,901,827	297,751	297,751	-	22,008	-	22,008
2065	8,227,506	292,259	292,259	-	20,189	-	20,189
2066	8,583,917	286,271	286,271	-	18,481	-	18,481
2067	8,973,823	279,787	279,787	-	16,881	-	16,881
2068	9,400,180	272,816	272,816	-	15,384	-	15,384
2069	9,866,139	265,374	265,374	-	13,985	-	13,985
2070	10,375,058	257,483	257,483	-	12,681	-	12,681
2071	10,930,504	249,165	249,165	-	11,469	-	11,469
2072	11,536,268	240,450	240,450	-	10,344	-	10,344
2073	12,196,377	231,367	231,367	-	9,302	-	9,302
2074	12,915,114	221,953	221,953	-	8,340	-	8,340
2075	13,697,020	212,264	212,264	-	7,454	-	7,454

Totals may not add due to rounding.

Single Discount Rate Development
Present Values of Projected Benefits
(Dollars in Thousands, Concluded)

Fiscal Year Ending	Projected Beginning Plan Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)-.5)	(g)=(e)*vf ^((a)-.5)	(h)=(c)/(1+sdr)^(a-.5)
2076	$ 14,546,900	$ 202,347	$ 202,347	$ -	$ 6,641	$ -	$ 6,641
2077	15,469,846	192,259	192,259	-	5,897	-	5,897
2078	16,471,252	182,066	182,066	-	5,219	-	5,219
2079	17,556,823	171,831	171,831	-	4,603	-	4,603
2080	18,732,597	161,617	161,617	-	4,046	-	4,046
2081	20,004,977	151,481	151,481	-	3,545	-	3,545
2082	21,380,757	141,479	141,479	-	3,094	-	3,094
2083	22,867,151	131,662	131,662	-	2,691	-	2,691
2084	24,471,830	122,072	122,072	-	2,332	-	2,332
2085	26,202,962	112,748	112,748	-	2,013	-	2,013
2086	28,069,249	103,720	103,720	-	1,730	-	1,730
2087	30,079,977	95,011	95,011	-	1,481	-	1,481
2088	32,245,059	86,640	86,640	-	1,263	-	1,263
2089	34,575,088	78,623	78,623	-	1,071	-	1,071
2090	37,081,388	70,969	70,969	-	903	-	903
2091	39,776,067	63,687	63,687	-	758	-	758
2092	42,672,078	56,787	56,787	-	631	-	631
2093	45,783,274	50,278	50,278	-	522	-	522
2094	49,124,473	44,170	44,170	-	429	-	429
2095	52,711,525	38,475	38,475	-	349	-	349
2096	56,561,383	33,204	33,204	-	282	-	282
2097	60,692,180	28,366	28,366	-	225	-	225
2098	65,123,312	23,968	23,968	-	178	-	178
2099	69,875,532	20,014	20,014	-	139	-	139
2100	74,971,050	16,501	16,501	-	107	-	107
2101	80,433,636	13,419	13,419	-	81	-	81
2102	86,288,742	10,754	10,754	-	61	-	61
2103	92,563,621	8,484	8,484	-	45	-	45
2104	99,287,463	6,582	6,582	-	32	-	32
2105	106,491,537	5,015	5,015	-	23	-	23
2106	114,209,339	3,750	3,750	-	16	-	16
2107	122,476,753	2,748	2,748	-	11	-	11
2108	131,332,222	1,971	1,971	-	7	-	7
2109	140,816,926	1,383	1,383	-	5	-	5
2110	150,974,971	948	948	-	3	-	3
2111	161,853,598	635	635	-	2	-	2
2112	173,503,395	414	414	-	1	-	1
2113	185,978,526	264	264	-	1	-	1
2114	199,336,982	163	163	-	-	-	-
2115	213,640,841	98	98	-	-	-	-
2116	228,956,550	58	58	-	-	-	-
2117	245,355,229	33	33	-	-	-	-
2118	262,912,995	18	18	-	-	-	-
2119	281,711,308	10	10	-	-	-	-
2120	301,837,343	5	5	-	-	-	-
2121	323,384,394	3	3	-	-	-	-
2122	346,452,295	1	1	-	-	-	-
2123	371,147,879	1	1	-	-	-	-
2124	397,585,473	-	-	-	-	-	-
2125	425,887,416	-	-	-	-	-	-
				Totals	$ 2,885,000	$ -	$ 2,885,000

Totals may not add due to rounding.

SECTION H

GLOSSARY OF TERMS

Glossary of Terms

Accrued Service	Service credited under the system which was rendered before the date of the actuarial valuation.
Actuarial Accrued Liability (AAL)	The AAL is the difference between the actuarial present value of all benefits and the actuarial value of future normal costs. The definition comes from the fundamental equation of funding which states that the present value of all benefits is the sum of the Actuarial Accrued Liability and the present value of future normal costs. The AAL may also be referred to as "accrued liability" or "actuarial liability."
Actuarial Assumptions	These assumptions are estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and compensation increases. Actuarial assumptions are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (compensation increases, payroll growth, inflation and investment return) consist of an underlying real rate of return plus an assumption for a long-term average rate of inflation.
Actuarial Cost Method	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the pension trust benefits between future normal cost and actuarial accrued liability. The actuarial cost method may also be referred to as the actuarial funding method.
Actuarial Equivalent	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.
Actuarial Gain (Loss)	The difference in liabilities between actual experience and expected experience during the period between two actuarial valuations is the gain (loss) on the accrued liabilities.
Actuarial Present Value (APV)	The amount of funds currently required to provide a payment or series of payments in the future. The present value is determined by discounting future benefit payments at predetermined rates of interest to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Actuarial Valuation	The actuarial valuation report determines, as of the actuarial valuation date, the service cost, total pension liability, and related actuarial present value of projected benefit payments for pensions performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.
Actuarial Valuation Date	The date as of which an actuarial valuation is performed.
Actuarially Determined Contribution (ADC)	A calculated contribution into a defined benefit pension plan for the reporting period, most often determined based on the funding policy of the plan. Typically, the Actuarially Determined Contribution has a normal cost payment and an amortization payment.

Glossary of Terms

Amortization Method	The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be "open" (meaning, reset each year) or "closed" (the number of years remaining will decline each year).
Amortization Payment	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
Cost-of-Living Adjustments	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan)	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
Covered-Employee Payroll	The payroll of covered employees, which is typically only the pensionable pay and does not include pay above any pay cap.
Deferred Inflows and Outflows of Resources	The deferred inflows and outflows of pension resources are amounts used under GASB Statement No. 68 in developing the annual pension expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in pension expense should be included in the deferred inflows or outflows of resources.
Discount Rate or Single Discount Rate	For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically: 1. The benefit payments to be made while the pension plans' fiduciary net position is projected to be greater than the benefit payments that are projected to be made in the period; and 2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.
Entry Age Actuarial Cost Method (EAN)	The EAN is a funding method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit age(s). The portion of the actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial accrued liability. The sum of the accrued liability plus the present value of all future normal costs is the present value of all benefits.

Glossary of Terms

Fiduciary Net Position	The fiduciary net position is the value of the net assets of the trust restricted for pension benefits.
GASB	The Governmental Accounting Standards Board is an organization that exists with authority to promulgate accounting standards for state and local governmental entities.
Long-Term Expected Rate of Return	The long-term rate of return is the expected return to be earned over the entire trust portfolio based on the asset allocation of the portfolio.
Money-Weighted Rate of Return	The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For purposes of GASB Statement No. 67, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.
Multiple-Employer Defined Benefit Pension Plan	A multiple-employer plan is a defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
Municipal Bond Rate	The Municipal Bond Rate is the discount rate to be used for those benefit payments that occur after the assets of the trust have been depleted.
Net Pension Liability (NPL)	The NPL is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit pension plan.
Non-Employer Contributing Entities	Non-employer contributing entities are entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities. For purposes of the GASB Accounting Statements No. 67 and No. 68 plan members are not considered non-employer contributing entities.
Normal Cost	The actuarial present value of the pension trust benefits allocated to the current year by the actuarial cost method.
Other Postemployment Benefits (OPEB)	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.
Real Rate of Return	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
Service Cost	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.

Glossary of Terms

Total Pension Expense The total pension expense is the sum of the following items that are recognized at the end of the employer's fiscal year:

1. Service Cost
2. Interest on the Total Pension Liability
3. Current-Period Changes in Benefit Terms
4. Employee Contributions
5. Projected Earnings on Plan Investments
6. Pension Plan Administrative Expense
7. Other Changes in Plan Fiduciary Net Position
8. Recognition of Outflow (Inflow) of Resources due to the difference between expected and actual in measurement of the Total Pension Liability
9. Recognition of Outflow (Inflow) of Resources due to Assumption Changes
10. Recognition of Outflow (Inflow) of Resources due to the difference between projected and actual earnings on pension plan investments

Total Pension Liability (TPL) The TPL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.

Unfunded Actuarial Accrued Liability (UAAL) The UAAL is the difference between actuarial accrued liability and valuation assets.

Valuation Assets The valuation assets are the plan fiduciary net position used in determining the net position liability of the plan. For purposes of the GASB Statement No. 67, the asset valuation method is equal to the market value of assets.