

Minnesota State Retirement System Judges Retirement Fund

GASB Statements No. 67 and No. 68

Accounting and Financial Reporting for Pensions

June 30, 2025





November 24, 2025

Minnesota State Retirement System
Judges 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 Judges 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 standards.

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 financial 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, as applicable. 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.

To the best of our knowledge, the information contained within this report is accurate and fairly represents the actuarial position of the Judges 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, ASA, EA, FCA, MAAA



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	355
- Survivors	79
- Disability Retirements	10
- Deferred Retirements	22
- Terminated Other Non-vested	1
- Active Members	323
- Total	790
Covered-Employee Payroll	\$ 61,587 ⁽¹⁾

Net Pension Liability	
Total Pension Liability	\$ 470,543
Plan Fiduciary Net Position	319,329
Net Pension Liability	\$ 151,214
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	67.86%
Net Pension Liability as a Percentage of Covered-Employee Payroll	245.53%

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	5.20% ⁽²⁾
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)	\$ 12,597
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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 Total Pension Liability	\$ 13,244	\$ 802
Changes in assumptions	2,695	6,043
Net difference between projected and actual earnings on pension plan investments	6,964	19,562
Total	\$ 22,903	\$ 26,407

⁽¹⁾ Assumed equal to actual employer contributions (not including \$6 million state contribution) divided by employer 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.

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 Judges 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 to 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.

Both GASB Statements No. 67 and No. 68 require the notes to 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 Judges Retirement Fund, can be found online at <https://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
- 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 decline as a percentage of payroll;
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 decline as a dollar amount (based on the current layered amortization schedule and if contributions are equal to the required amount).

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	\$ 10,981
2. Interest on the Total Pension Liability	30,544
3. Current-Period Benefit Changes	-
4. Employee Contributions	(4,578)
5. Projected Earnings on Plan Investments	(20,376)
6. Pension Plan Administrative Expense	83
7. Other Changes in Plan Fiduciary Net Position	-
8. Recognition of Outflow (Inflow) of Resources due to differences between expected and actual experience in the measurement of the Total Pension Liability	
<i>Arising from Current Reporting Period</i>	2,117
9. Recognition of Outflow (Inflow) of Resources due to assumption changes	
<i>Arising from Current Reporting Period</i>	674
10. Recognition of Outflow (Inflow) of Resources due to the difference between projected (7.00%) and actual earnings on Pension Plan Investments	
<i>Arising from Current Reporting Period</i>	(2,295)
11. Increases/(Decreases) from Experience in the Current Reporting Period	\$ 17,150
12. Recognition of Outflow (Inflow) of Resources due to differences between expected and actual experience in the measurement of the Total Pension Liability	
<i>Arising from Prior Reporting Periods</i>	\$ 1,167
13. Recognition of Outflow (Inflow) of Resources due to assumption changes	
<i>Arising from Prior Reporting Periods</i>	891
14. Recognition of Outflow (Inflow) of Resources due to the difference between projected and actual earnings on Pension Plan Investments	
<i>Arising from Prior Reporting Periods</i>	(6,611)
15. Total Pension Expense / (Income)	\$ 12,597

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 3,629 years. Additionally, the total plan membership (active employees and inactive employees) was 763. 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 5.0000 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	\$ 10,584
2. Assumption Changes (gains) or losses	3,369
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}	5
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	2,117
5. Outflow (Inflow) of Resources to be recognized in the current pension expense for Assumption Changes	674
6. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Liabilities	<u>\$ 2,791</u>
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	\$ 8,467
8. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for Assumption Changes	2,695
9. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Liabilities	<u>\$ 11,162</u>

B. Outflows (Inflows) of Resources due to Assets

1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	\$ (11,473)
2. Recognition period for Assets {in years}	5
3. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Assets	<u>(2,295)</u>
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	<u>\$ (9,178)</u>

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	\$ 9,594	\$ 4,745	\$ 4,849
2. Due to Assets	6,964	15,870	(8,906)
3. Total	\$ 16,558	\$ 20,615	\$ (4,057)

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	\$ 3,981	\$ 697	\$ 3,284
2. Assumption Changes	5,613	4,048	1,565
3. Net Difference between projected and actual earnings on pension plan investments	6,964	15,870	(8,906)
4. Total	\$ 16,558	\$ 20,615	\$ (4,057)

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	\$ 13,244	\$ 802	\$ 12,442
2. Assumption Changes	2,695	6,043	(3,348)
3. Net Difference between projected and actual earnings on pension plan investments*	6,964	19,562	(12,598)
4. Total	\$ 22,903	\$ 26,407	\$ (3,504)

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	\$ 1,074
2027	(4,246)
2028	(827)
2029	495
2030	-
Thereafter	-
Total	\$ (3,504)

* 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	\$ (1,481)	5.0000	\$ (297)	\$ 0	0.0000
2022	2,040	5.0000	408	408	1.0000
2023	(2,002)	5.0000	(400)	(802)	2.0000
2024	7,281	5.0000	1,456	4,369	3.0000
2025	10,584	5.0000	2,117	8,467	4.0000
Total			\$ 3,284	\$ 12,442	
Deferred Outflow (Inflow) Due to Assumption Changes					
2021	\$ 24,695	5.0000	\$ 4,939	\$ 0	0.0000
2022	(10,257)	5.0000	(2,052)	(2,052)	1.0000
2023	(9,979)	5.0000	(1,996)	(3,991)	2.0000
2025	3,369	5.0000	674	2,695	4.0000
Total			\$ 1,565	\$ (3,348)	
Deferred Outflow (Inflow) Due to Differences Between Projected and Actual Earnings on Plan Investments					
2021	\$ (48,867)	5.0000	\$ (9,774)	\$ 0	0.0000
2022	34,820	5.0000	6,964	6,964	1.0000
2023	(5,106)	5.0000	(1,021)	(2,043)	2.0000
2024	(13,901)	5.0000	(2,780)	(8,341)	3.0000
2025	(11,473)	5.0000	(2,295)	(9,178)	4.0000
Total			\$ (8,906)	\$ (12,598)	
Deferred Outflow (Inflow) Due to All Sources					
Total			\$ (4,057)	\$ (3,504)	

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

Assets	June 30, 2025
Cash & Short-term Investments	\$ 9,871
Receivables	618
Investment Pools (at fair value)	309,193
Securities Lending Collateral	11,789
Capital Assets	-
Total Assets	\$ 331,471
 Total Deferred Outflows of Resources	 \$ -
Total Liabilities	\$ (12,142)
Total Deferred Inflows of Resources	\$ -
 Net Position Restricted for Pensions	 \$ 319,329

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

1. Net position at market value at beginning of year	\$ 294,703
Additions	
2. Contributions	
a. Employee	\$ 4,578
b. Employer	13,857
c. Other sources	6,000
d. Total contributions	<u>\$ 24,435</u>
3. Investment income	
a. Investment income/(loss)	\$ 33,017
b. Investment expenses	<u>(1,168)</u>
c. Net investment income/(loss)	\$ 31,849
4. Other Additions	<u>-</u>
5. Total Additions (2.d.) + (3.c.) + (4.)	<u>\$ 56,284</u>
Deductions	
6. Benefits Paid	
a. Annuity benefits	\$ (31,575)
b. Refunds	<u>-</u>
c. Total benefits paid	<u>\$ (31,575)</u>
7. Expenses	
a. Other deductions	\$ -
b. Administrative	<u>(83)</u>
c. Total expenses	<u>\$ (83)</u>
8. Total deductions (6.c.) + (7.c.)	<u>\$ (31,658)</u>
9. Net increase/(decrease) in fiduciary net position (5.) + (8.)	<u>\$ 24,626</u>
10. Net position at market value at end of year (1.) + (9.)	<u><u>\$ 319,329</u></u>
 11. State Board of Investment calculated annual investment return for the Judges Retirement Fund*	 10.9%

* 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	\$	10,981
2. Interest on the total pension liability		30,544
3. Changes of benefit terms		-
4. Difference between expected and actual experience of the total pension liability		10,584
5. Changes of assumptions		3,369
6. Benefit payments, including refunds of employee contributions		(31,575)
7. Net change in total pension liability	\$	23,903
8. Total pension liability – beginning		446,640
9. Total pension liability – ending	\$	470,543
B. Plan fiduciary net position		
1. Contributions – employer	\$	19,857 ⁽¹⁾
2. Contributions – employee		4,578
3. Net investment income		31,849
4. Benefit payments, including refunds of employee contributions		(31,575)
5. Pension plan administrative expense		(83)
6. Other changes		-
7. Net change in plan fiduciary net position	\$	24,626
8. Plan fiduciary net position – beginning		294,703
9. Plan fiduciary net position – ending	\$	319,329
C. Net pension liability, A.9 - B.9.	\$	151,214
D. Plan fiduciary net position as a percentage of the total pension liability, B.9 / A.9.		
		67.86%
E. Covered-employee payroll	\$	61,587 ⁽²⁾
F. Net pension liability as a percentage of covered-employee payroll, C. / E.		
		245.53%

⁽¹⁾ Includes \$6 million supplemental State aid.

⁽²⁾ Assumed equal to actual employer contributions (not including \$6 million in State contributions) divided by employer 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	\$ 10,981	\$ 10,043	\$ 11,063	\$ 11,707	\$ 10,204	\$ 9,897	\$ 9,881	\$ 9,857	\$ 9,483	\$ 13,711
Interest on the Total Pension Liability	30,544	29,416	28,538	27,360	29,568	28,721	27,769	26,746	25,367	21,349
Benefit Changes	0	0	295	0	(9,525)	0	0	0	0	0
Experience ⁽¹⁾	10,584	7,281	(2,002)	2,040	(1,481)	(802)	804	1,424	(4,958)	7,135
Assumption Changes	3,369	0	(9,979)	(10,257)	24,695	0	0	0	11,652	(85,756)
Benefit Payments	(31,575)	(30,354)	(29,287)	(28,035)	(27,038)	(26,272)	(25,233)	(23,585)	(22,785)	(22,378)
Refunds	0	(272)	0	0	0	(30)	0	0	(309)	0
Net Change in Total Pension Liability	\$ 23,903	\$ 16,114	\$ (1,372)	\$ 2,815	\$ 26,423	\$ 11,514	\$ 13,221	\$ 14,442	\$ 18,450	\$ (65,939)
Total Pension Liability - Beginning	446,640	430,526	431,898	429,083	402,660	391,146	377,925	363,483	345,033	410,972
Total Pension Liability - Ending (a)	\$ 470,543	\$ 446,640	\$ 430,526	\$ 431,898	\$ 429,083	\$ 402,660	\$ 391,146	\$ 377,925	\$ 363,483	\$ 345,033
Plan Fiduciary Net Position										
Employer Contributions ⁽²⁾	\$ 19,857	\$ 19,534	\$ 18,245	\$ 18,248	\$ 17,916	\$ 17,767	\$ 17,287	\$ 17,027	\$ 13,758	\$ 10,219
Employee Contributions	4,578	4,420	4,121	4,214	4,166	4,168	4,049	3,973	3,932	3,763
Pension Plan Net Investment Income	31,849	32,493	22,013	(17,022)	64,934	8,955	14,491	19,265	24,729	(186)
Benefit Payments	(31,575)	(30,354)	(29,287)	(28,035)	(27,038)	(26,272)	(25,233)	(23,585)	(22,785)	(22,378)
Refunds	0	(272)	0	0	0	(30)	0	0	(309)	0
Pension Plan Administrative Expense	(83)	(105)	(76)	(72)	(77)	(113)	(87)	(66)	(89)	(93)
Other Changes	0	0	0	0	0	0	0	0	0	0
Net Change in Plan Fiduciary Net Position	\$ 24,626	\$ 25,716	\$ 15,016	\$ (22,667)	59,901	4,475	10,507	16,614	19,236	(8,675)
Plan Fiduciary Net Position - Beginning	294,703	268,987	253,971	276,638	216,737	212,262	201,755	185,141	165,905	174,580
Plan Fiduciary Net Position - Ending (b)	\$ 319,329	\$ 294,703	\$ 268,987	\$ 253,971	\$ 276,638	\$ 216,737	\$ 212,262	\$ 201,755	\$ 185,141	\$ 165,905
Net Pension Liability - Ending (a) - (b)	\$ 151,214	\$ 151,937	\$ 161,539	\$ 177,927	\$ 152,445	\$ 185,923	\$ 178,884	\$ 176,170	\$ 178,342	\$ 179,128
Plan Fiduciary Net Position as a Percentage										
of Total Pension Liability	67.86 %	65.98 %	62.48 %	58.80 %	64.47 %	53.83 %	54.27 %	53.38 %	50.94 %	48.08 %
Covered-Employee Payroll⁽³⁾	\$ 61,587	\$ 58,849	\$ 54,422	\$ 54,436	\$ 52,960	\$ 52,298	\$ 50,164	\$ 49,009	\$ 47,813	\$ 45,418
Net Pension Liability as a Percentage										
of Covered-Employee Payroll	245.53 %	258.18 %	296.83 %	326.86 %	287.85 %	355.51 %	356.60 %	359.46 %	373.00 %	394.40 %

⁽¹⁾ Includes impact of changes in expected timing of future post-retirement benefit increases.

⁽²⁾ Includes \$3 million supplemental State aid for fiscal year ending 2017 and \$6 million annual supplemental State aid thereafter; includes \$293 thousand one-time State aid for fiscal year ending 2024.

⁽³⁾ Assumed equal to actual employer contributions (not including \$6 million in state contributions) divided by employer 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	\$ 345,033	\$ 165,905	\$ 179,128	48.08%	\$ 45,418	394.40%
2017	363,483	185,141	178,342	50.94	47,813	373.00
2018	377,925	201,755	176,170	53.38	49,009	359.46
2019	391,146	212,262	178,884	54.27	50,164	356.60
2020	402,660	216,737	185,923	53.83	52,298	355.51
2021	429,083	276,638	152,445	64.47	52,960	287.85
2022	431,898	253,971	177,927	58.80	54,436	326.86
2023	430,526	268,987	161,539	62.48	54,422	296.83
2024	446,640	294,703	151,937	65.98	58,849	258.18
2025	470,543	319,329	151,214	67.86	61,587	245.53

Schedule of Contributions Multiyear (Dollars in Thousands)

Last 10 Fiscal Years

Fiscal Year Ending June 30,	Actuarially Determined Contribution ⁽¹⁾	Actual Contributions ⁽²⁾	Contribution Deficiency (Excess)	Covered- Employee Payroll ⁽³⁾	Actual Contributions as a % of Covered- Employee Payroll
	(a)	(b)	(a) - (b) = (c)	(d)	(b)/(d)
2016	\$ 15,644	\$ 10,219	\$ 5,425	\$ 45,418	22.50%
2017	16,790	13,758	3,032	47,813	28.77
2018	18,032	17,027	1,005	49,009	34.74
2019	17,491	17,287	204	50,164	34.46
2020	18,304	17,767	537	52,298	33.97
2021	18,167	17,916	251	52,960	33.83
2022	15,661	18,248	(2,587)	54,436	33.52
2023	15,155	18,245	(3,090)	54,422	33.53
2024	18,313	19,534	(1,221)	58,849	33.19
2025	18,178	19,857	(1,679)	61,587	32.24

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⁾ Includes supplemental state aid of \$3,000 for fiscal year ending June 30, 2017 and \$6,000 annual supplemental state aid thereafter.
- ⁽³⁾ Assumed equal to actual employer contributions (not including \$6 million in State contributions) divided by employer 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 Increases	2.50%
Salary Increases	2.50%
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, dated June 30, 2020.
Healthy Post-Retirement Mortality	Pub-2010 General annuitant generational mortality tables, projected with mortality improvement scale MP-2019 from a base year of 2010.

Other Information

Benefit Increases After Retirement	1.50% per year.
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	(0.1) %
2017	15.2
2018	10.5
2019	7.2
2020	4.2
2021	30.1
2022	(6.2)
2023	8.8
2024	12.3
2025	10.9

⁽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 Judges Retirement Fund was 10.9%. 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 1.651.296.3328.

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 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:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return (Geometric Mean)</u>
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	<u>100.0%</u>	

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 on 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 the 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 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 and future contributions were 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 fund'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	Current Single Discount Rate Assumption	1% Increase
	6.00%	7.00%	8.00%
Total Pension Liability	\$517,210	\$470,543	\$430,441
Net Position Restricted for Pensions	319,329	319,329	319,329
Net Pension Liability	\$197,881	\$151,214	\$111,112

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	\$ 446,640	\$ 294,703	\$ 151,937	\$ 25,508	\$ 35,549	
Changes for the Year:						
Service Cost	\$ 10,981		\$ 10,981			\$ 10,981
Interest on Total Pension Liability	30,544		30,544			30,544
Interest on Plan Fiduciary Net Position		\$ 20,376 ⁽¹⁾	(20,376)			(20,376)
Changes in Benefit Terms	-		-			-
Liability Experience Gains and Losses	10,584		10,584	\$ 8,467	\$ -	2,117
Changes in Assumptions	3,369		3,369	2,695	-	674
Recognition of Deferred Outflows/(Inflows) of Resources Arising from Prior Reporting Periods						
Liability Experience Gains/(Losses)				(1,864)	(697)	1,167
Assumption Changes				(4,939)	(4,048)	891
Investment Gains/(Losses)				(6,964)	(13,575)	(6,611)
Contributions - Employer		19,857	(19,857)			
Contributions - Employees		4,578	(4,578)			(4,578)
Asset Gain/(Loss)		11,473 ⁽¹⁾	(11,473)	-	9,178	(2,295)
Benefit Payments and Refunds	(31,575)	(31,575)	-			
Administrative Expenses		(83)	83			83
Other Changes						
Net Changes	\$ 23,903	\$ 24,626	\$ (723)	\$ (2,605)	\$ (9,142)	\$ 12,597
Balance End of Year	\$ 470,543	\$ 319,329	\$ 151,214	\$ 22,903	\$ 26,407	

(1) The sum of these items in column (b) equals the net investment income of \$31,849.

Summary of Population Statistics

	Actives*	Terminated		Recipients			Total
		Deferred Retirement	Other Non-Vested	Service Retirement	Disability Retirement	Survivor	
Members on July 1, 2024	318	21	1	336	10	77	763
New members	32	0	0	0	0	0	32
Return to active	0	0	0	0	0	0	0
Terminated non-vested	0	0	0	0	0	0	0
Service retirements	(21)	(4)	0	25	0	0	0
Terminated deferred	(5)	5	0	0	0	0	0
Terminated refund/transfer	0	0	0	0	0	0	0
Deaths	(1)	0	0	(8)	0	(2)	(11)
New beneficiary	0	0	0	0	0	4	4
Disabled	0	0	0	0	0	0	0
Unexpected status changes	0	0	0	2	0	0	2
Net change	5	1	0	19	0	2	27
Members on June 30, 2025	323	22	1	355	10	79	790

* Includes 4 Tier 1 active Judges as of June 30, 2025 who have reached the maximum benefit formula (employee contributions are directed to the Unclassified Employees Retirement Plan).

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	A judge or justice of any court. If the member was active prior to January 1, 1974, benefits may be computed according to provisions of the prior plan.
Tier 1 / Tier 2 member	Tier 1 includes judges or justices first appointed or elected before July 1, 2013, and Tier 2 includes judges or justices first appointed or elected after June 30, 2013. A judge or justice with less than five years of service as of December 30, 2013, may make a one-time irrevocable election into Tier 2. For the purpose of this valuation, we have assumed no Tier 1 members elected Tier 2 benefits as of the valuation date.
Contributions	
Member	9.00% of salary for Tier 1 members, 7.00% of salary for Tier 2 members. Tier 1 member contributions after maximum benefit is reached are redirected to the Unclassified Employees Retirement Plan.
Employer	22.50% of salary. Member contributions are "picked up" according to the provisions of Internal Revenue Code 414(h).
State contributions	\$6,000,000 per year until the Plan is 110% funded on an actuarial value of assets basis for a minimum of three consecutive years.
Allowable service	Service as a judge. Credit may also be earned for uncredited judicial service if the appropriate employee contributions, with interest, are made.
Salary	Salary set by law.
Average salary	Average of the five highest years of salary of the last 10 years prior to termination of judicial service.

Summary of Plan Provisions (Continued)

Retirement

Normal retirement benefit

Age/Service requirement

First appointed as a judge before July 1, 2013 (Tier 1):

(a.) Age 65 and five years of Allowable Service

(b.) Age 70 (mandatory retirement age)

First appointed as a judge after June 30, 2013 (Tier 2):

(a.) Age 66 and five years of Allowable Service

(b.) Age 70 (mandatory retirement age)

Judges appointed before July 1, 2013, with less than five years of allowable service on or before December 31, 2013, may make a one-time election for the Tier 2 benefit package.

Amount

First appointed as a judge before July 1, 2013 (Tier 1): 2.70% of Average Salary for each year of Allowable Service prior to July 1, 1980, and 3.20% of Average Salary for each year of Allowable Service after June 30, 1980. Maximum benefit equal to 76.80% of Average Salary.

First appointed as a judge after June 30, 2013 (Tier 2): 2.50% of Average Salary for each year of Allowable Service.

Tier 1 who elected into Tier 2: 3.20% of Average Salary for each year of Allowable Service prior to January 1, 2014, plus 2.50% of Average Salary for each year of Allowable Service after December 31, 2013.

Early retirement

Age/Service requirement

Age 60 and five years of Allowable Service.

Amount

Normal Retirement Benefit based on Allowable Service and Average Salary at retirement date with reduction of 0.50% for each month the member is under Normal Retirement Age at time of retirement.

Form of payment

Life annuity. Actuarially equivalent options are:

(a.) 50%, 75% or 100% joint and survivor with no bounce back feature

(b.) 50%, 75% or 100% with bounce back feature

(c.) 15-year certain and life thereafter

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.

Summary of Plan Provisions (Continued)

Disability

Disability benefit

**Age/Service
requirement**

Permanent inability to perform the function of judge.

Amount

No benefit is paid by the Fund. Instead salary is continued for one year but not beyond age 70. Employee contributions continue and Allowable Service is earned. If disability continues after the first year (or at age 70 if earlier), the larger of 25.00% of Average Salary or the Normal Retirement Benefit, without reduction.

Retirement after disability

**Age/Service
requirement**

Member is still disabled after salary payments cease after one year or at age 70, if earlier.

Amount

No change in disability benefit amount from pre-retirement computed benefit amount.

Form of payment

Same as for retirement.

Benefit increases

Same as for retirement.

Death

Survivor's benefit

Age/service requirement

Active or disabled member dies before retirement or a former member eligible for a deferred annuity dies.

Amount

Larger of 25% of Average Salary or 60% of Normal Retirement Benefit earned at date of death. If member dies after age 60 with five or more years of service, spouse may receive the 100% joint and survivor benefit the member had earned as of date of death.

Benefit paid to spouse for life. If no spouse, benefit is paid to surviving dependent children until child marries, dies, or attains age 18 (age 22 if full-time student).

Benefit increases

Same as for retirement.

Refund of contributions

Age/service requirement

Member dies prior to retirement or former member eligible for a deferred annuity dies and survivors' benefits are not payable.

Amount

Member's contributions with 6.00% interest through June 30, 2011. Beginning July 1, 2011, a member's contributions increase at 4.00% interest. Beginning July 1, 2018, a member's contributions increase at 3.00% interest.

Summary of Plan Provisions (Continued)

Termination	
<u>Refund of contributions</u>	
Age/Service requirement	Termination of service as a judge.
Amount	Member's contributions with 6.00% interest through June 30, 2011. Beginning July 1, 2011, a member's contributions increase at 4.00% interest. Beginning July 1, 2018, a member's contributions increase at 3.00% interest. If a member is vested, a deferred annuity may be elected in lieu of a refund.
<u>Deferred benefit</u>	
Age/service requirement	Five years of Allowable Service.
Amount	Benefit computed under law in effect at termination. Amount is payable at normal or early retirement. If a member terminated employment prior to July 1, 1997 but was not eligible to commence their pension before July 1, 1997, an actuarial increase shall be made for the change in the post-retirement interest rates from 5.00% to 6.00%.
<u>Form of payment</u>	Same as for retirement.
Optional form conversion factors	Effective July 1, 2019 and phased in over a 24-month period, actuarially equivalent factors based on the RP-2014 mortality table for healthy annuitants for a member turning age 66 in 2021, reflecting projected mortality improvements using Scale MP-2017, white collar adjustment, blended 70% males, 5.65% 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%.

Summary of Plan Provisions (Concluded)

Combined service annuity	<p>Members are eligible for combined service benefits if they:</p> <ul style="list-style-type: none">(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. <p>Members who meet the above requirements must have their benefit based on the following:</p> <ul style="list-style-type: none">(a.) Allowable service in all covered plans are combined in order to determine eligibility for early retirement; and(b.) Average salary is based on the high five consecutive years during their entire service in all covered plans.
Changes in plan provisions	<p>The threshold to cease supplemental employer contributions was changed from the earlier of July 1, 2048 or 100% funded for three consecutive years to 110% funded for three consecutive years (on an actuarial value of assets basis).</p>

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 for 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	2.50% per year.
Payroll growth	2.50% per year.
Inflation	2.25% per year.
Mortality rates	
Healthy pre-retirement	Pub-2010 General Employee Mortality Table, Above Median Income, adjusted for mortality improvements using mortality improvement scale MP-2021.
Healthy post-retirement	Pub-2010 General Healthy Retiree Mortality Table Above Median Income, adjusted for mortality improvements using mortality improvement scale MP-2021.
Disabled	Pub-2010 General 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	None.
Disability	Age-related rates based on experience; see table of sample rates.
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.

Summary of Actuarial Assumptions (Continued)

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 Normal Retirement Age.
Percentage married	Marital status as indicated by data.
Age of spouse	Male members are assumed to have a female beneficiary three years younger and female members are assumed to have a male beneficiary two years older.
Form of payment	Members are assumed to elect a life annuity.
Allowance for combined service annuity	None.
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.
Decrement operation	Decrements are assumed to occur mid-fiscal year.
Service credit accruals	It is assumed that members accrue one year of service credit per year.
Benefit service	Exact fractional service is used to determine the amount of benefit payable.
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	<p>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.</p> <p>There were no members reported with missing or invalid birth dates. In cases where submitted data was missing or incomplete, the following assumptions were applied:</p>

Summary of Actuarial Assumptions (Continued)

Unknown data for certain members (Concluded)

Data for active members:

There were 4 Tier 1 members who have reached the 24-year service cap. We assumed these members earned the greater of the sum of the salaries reported under the Judges and Unclassified Plan or \$197,429 for the July 1, 2024 to June 30, 2025 plan year.

There were no members reported with missing service.

There were 5 members reported with a gender of X or N. We assumed female gender.

Data for terminated members:

There were no members reported without a benefit and no members reported with a missing or invalid gender or birthdate.

Data for members receiving benefits:

There were 3 members reported with a gender of N or X. We assumed male gender for retirees and female gender for survivors.

There was 1 member 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 was 1 retiree reported with a survivor bounceback option and a survivor date of death. We assumed no benefit was payable to the survivor and the member benefit already reflected the increase to the life annuity value (i.e. bounce back) if applicable.

There were 3 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 were no survivors reported on the data file with an expired benefit.

There were retired members reported with a survivor option and an invalid or missing survivor gender (37 members) and/or survivor date of birth (30 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 retirement were adjusted resulting in an overall increase in unreduced (Normal) retirements and a decrease in reduced (Early) retirements.
 - The mortality table was changed from the Pub-2010 General Mortality Table to the Pub-2010 General Mortality Table, Above Median Income, and the mortality improvement scale was updated from MP-2019 to MP-2021.
 - Minor changes to assumptions made with respect to missing participant data.
-

Summary of Actuarial Assumptions (Concluded)

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%	0.01%	0.04%	0.01%	0.42%	0.25%
25	0.03	0.01	0.03	0.01	0.33	0.20
30	0.04	0.02	0.04	0.02	0.50	0.36
35	0.06	0.03	0.06	0.03	0.71	0.57
40	0.08	0.04	0.08	0.04	0.90	0.76
45	0.11	0.06	0.09	0.05	1.12	0.96
50	0.25	0.19	0.12	0.07	1.52	1.33
55	0.36	0.26	0.18	0.11	1.99	1.68
60	0.55	0.38	0.28	0.17	2.51	1.98
65	0.81	0.56	0.40	0.25	3.02	2.12
70	1.26	0.89	0.56	0.38	3.56	2.47
75	2.12	1.57	0.83	0.63	4.52	3.43
80	3.84	2.90	1.31	1.08	6.43	5.35
85	7.17	5.56	5.97	4.73	9.73	8.62
90	12.66	10.5	12.66	10.5	15.01	12.89

* 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.

Percentage of Eligible Members Retiring each Year				
Age	Disabled Retirement	Healthy Retirement for Members Appointed		
		Age	Prior to July 1, 2013	On or After July 1, 2013
20	0.000%	60	1.0	1.0
25	0.000	61	1.0	1.0
30	0.000	62	5.0	5.0
35	0.000	63	5.0	5.0
40	0.006	64	9.0	9.0
45	0.018	65	30.0	9.0
50	0.030	66	20.0	30.0
55	0.072	67	20.0	20.0
60	0.186	68	30.0	30.0
65	0.000	69	40.0	40.0
70	0.000	70	100.0	100.0

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 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 plan 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)

Fiscal Year Ending	Projected Covered-Employee Payroll			Projected Contributions				
	Payroll for Current Employees	Payroll for New Employees	Total Employee Payroll	Employer		Contributions on Future Payroll toward Current UAL ¹	Additional State Contributions ²	Total Contributions
				Contributions from Current Employees	Contributions for Current Employees			
	(a)	(b)	(c) = (a) + (b)	(d)	(e)	(f)		(g) = (d) + (e) + (f)
2025	\$ 61,587		\$ 61,587					
2026	64,500	\$ 1,234	65,734	\$ 4,754	\$ 14,512	\$ 148	\$ 6,000	\$ 25,414
2027	63,388	3,990	67,378	4,574	14,262	477	6,000	25,313
2028	61,998	7,064	69,062	4,490	13,949	844	6,000	25,283
2029	60,311	10,478	70,789	4,365	13,570	1,252	6,000	25,187
2030	58,400	14,158	72,558	4,212	13,140	1,692	6,000	25,044
2031	56,522	17,850	74,372	3,998	12,717	2,133	6,000	24,849
2032	54,620	21,612	76,232	3,848	12,290	2,583	6,000	24,720
2033	52,580	25,557	78,137	3,692	11,831	3,054	6,000	24,576
2034	50,420	29,671	80,091	3,486	11,345	3,546	6,000	24,377
2035	48,223	33,870	82,093	3,320	10,850	4,047	6,000	24,218
2036	45,779	38,366	84,145	3,084	10,300	4,585	6,000	23,969
2037	43,010	43,239	86,249	2,893	9,677	5,167	6,000	23,737
2038	40,311	48,094	88,405	2,659	9,070	5,747	6,000	23,476
2039	37,657	52,958	90,615	2,519	8,473	6,329	6,000	23,320
2040	34,899	57,982	92,881	2,361	7,852	6,929	6,000	23,142
2041	32,070	63,133	95,203	2,189	7,216	7,544	6,000	22,949
2042	29,324	68,259	97,583	2,017	6,598	8,157	6,000	22,772
2043	26,507	73,515	100,022	1,834	5,964	8,785	6,000	22,583
2044	23,626	78,897	102,523	1,644	5,316	9,428	6,000	22,388
2045	20,855	84,231	105,086	1,456	4,692	10,066	6,000	22,214
2046	18,035	89,678	107,713	1,261	4,058	10,716	6,000	22,035
2047	15,185	95,221	110,406	1,063	3,417	11,379	6,000	21,859
2048	12,563	100,603	113,166	879	2,827	12,022	6,000	21,728
2049	10,080	105,915	115,995	706	2,268	12,657	6,000	21,631
2050	7,730	111,165	118,895	541	1,739	13,284	6,000	21,565
2051	5,788	116,080	121,868	405	1,302	13,872	6,000	21,579
2052	4,220	120,694	124,914	295	950	14,423	6,000	21,668
2053	2,856	125,181	128,037	200	643	14,959	6,000	21,802
2054	1,767	129,471	131,238	124	398	15,472	6,000	21,993
2055	1,136	133,383	134,519	80	256	15,939	-	16,274
2056	691	137,191	137,882	48	155	16,394	-	16,598
2057	378	140,951	141,329	26	85	16,844	-	16,955
2058	131	144,731	144,862	9	30	17,295	-	17,334
2059	37	148,447	148,484	3	8	17,739	-	17,750
2060	-	152,196	152,196	-	-	18,187	-	18,187
2061	-	156,001	156,001	-	-	18,642	-	18,642
2062	-	159,901	159,901	-	-	19,108	-	19,108
2063	-	163,898	163,898	-	-	19,586	-	19,586
2064	-	167,996	167,996	-	-	20,076	-	20,076
2065	-	172,196	172,196	-	-	20,577	-	20,577
2066	-	176,501	176,501	-	-	21,092	-	21,092
2067	-	180,913	180,913	-	-	21,619	-	21,619
2068	-	185,436	185,436	-	-	22,160	-	22,160
2069	-	190,072	190,072	-	-	22,714	-	22,714
2070	-	194,824	194,824	-	-	23,281	-	23,281
2071	-	199,694	199,694	-	-	23,863	-	23,863
2072	-	204,687	204,687	-	-	24,460	-	24,460
2073	-	209,804	209,804	-	-	25,072	-	25,072
2074	-	215,049	215,049	-	-	25,698	-	25,698
2075	-	220,425	220,425	-	-	26,341	-	26,341

¹ Equal to total contributions (29.50% of new employee payroll) net of new employee normal cost and expenses (17.55% of pay).

² Additional State contributions equal to \$6 million are assumed to stop after 29 years.

Totals may not add due to rounding.



Single Discount Rate Development

Projection of Contributions (Dollars in Thousands, Concluded)

Fiscal Year Ending	Projected Covered-Employee Payroll			Projected Contributions				
	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	Additional State Contributions ²	Total Contributions
	(a)	(b)	(c) = (a) + (b)	(d)	(e)	(f)		(g) = (d) + (e) + (f)
2076	\$ -	\$ 225,936	\$ 225,936	\$ -	\$ -	\$ 26,999	\$ -	\$ 26,999
2077	-	231,584	231,584	-	-	27,674	-	27,674
2078	-	237,374	237,374	-	-	28,366	-	28,366
2079	-	243,308	243,308	-	-	29,075	-	29,075
2080	-	249,391	249,391	-	-	29,802	-	29,802
2081	-	255,626	255,626	-	-	30,547	-	30,547
2082	-	262,016	262,016	-	-	31,311	-	31,311
2083	-	268,567	268,567	-	-	32,094	-	32,094
2084	-	275,281	275,281	-	-	32,896	-	32,896
2085	-	282,163	282,163	-	-	33,718	-	33,718
2086	-	289,217	289,217	-	-	34,561	-	34,561
2087	-	296,447	296,447	-	-	35,425	-	35,425
2088	-	303,858	303,858	-	-	36,311	-	36,311
2089	-	311,455	311,455	-	-	37,219	-	37,219
2090	-	319,241	319,241	-	-	38,149	-	38,149
2091	-	327,222	327,222	-	-	39,103	-	39,103
2092	-	335,403	335,403	-	-	40,081	-	40,081
2093	-	343,788	343,788	-	-	41,083	-	41,083
2094	-	352,383	352,383	-	-	42,110	-	42,110
2095	-	361,192	361,192	-	-	43,162	-	43,162
2096	-	370,222	370,222	-	-	44,242	-	44,242
2097	-	379,478	379,478	-	-	45,348	-	45,348
2098	-	388,965	388,965	-	-	46,481	-	46,481
2099	-	398,689	398,689	-	-	47,643	-	47,643
2100	-	408,656	408,656	-	-	48,834	-	48,834
2101	-	418,872	418,872	-	-	50,055	-	50,055
2102	-	429,344	429,344	-	-	51,307	-	51,307
2103	-	440,078	440,078	-	-	52,589	-	52,589
2104	-	451,080	451,080	-	-	53,904	-	53,904
2105	-	462,357	462,357	-	-	55,252	-	55,252
2106	-	473,916	473,916	-	-	56,633	-	56,633
2107	-	485,763	485,763	-	-	58,049	-	58,049
2108	-	497,907	497,907	-	-	59,500	-	59,500
2109	-	510,355	510,355	-	-	60,987	-	60,987
2110	-	523,114	523,114	-	-	62,512	-	62,512
2111	-	536,192	536,192	-	-	64,075	-	64,075
2112	-	549,597	549,597	-	-	65,677	-	65,677
2113	-	563,337	563,337	-	-	67,319	-	67,319
2114	-	577,420	577,420	-	-	69,002	-	69,002
2115	-	591,856	591,856	-	-	70,727	-	70,727
2116	-	606,652	606,652	-	-	72,495	-	72,495
2117	-	621,818	621,818	-	-	74,307	-	74,307
2118	-	637,364	637,364	-	-	76,165	-	76,165
2119	-	653,298	653,298	-	-	78,069	-	78,069
2120	-	669,630	669,630	-	-	80,021	-	80,021
2121	-	686,371	686,371	-	-	82,021	-	82,021
2122	-	703,530	703,530	-	-	84,072	-	84,072
2123	-	721,119	721,119	-	-	86,174	-	86,174
2124	-	739,146	739,146	-	-	88,328	-	88,328
2125	-	757,625	757,625	-	-	90,536	-	90,536

¹ Equal to total contributions (29.50% of new employee payroll) net of new employee normal cost and expenses (17.55% of pay).

² Additional State contributions equal to \$6 million are assumed to stop after 29 years.

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	\$ 319,329	\$ 25,414	\$ 32,716	\$ 90	\$ 22,099	\$ 334,035
2027	334,035	25,313	33,807	89	23,087	348,540
2028	348,540	25,283	34,903	87	24,064	362,898
2029	362,898	25,187	35,905	84	25,031	377,126
2030	377,126	25,044	37,212	82	25,977	390,854
2031	390,854	24,849	38,389	79	26,891	404,126
2032	404,126	24,720	39,474	76	27,779	417,074
2033	417,074	24,576	40,516	74	28,644	429,704
2034	429,704	24,377	41,381	71	29,492	442,121
2035	442,121	24,218	42,173	68	30,328	454,426
2036	454,426	23,969	42,965	64	31,154	466,519
2037	466,519	23,737	43,846	60	31,962	478,313
2038	478,313	23,476	44,580	56	32,754	489,906
2039	489,906	23,320	45,198	53	33,539	501,514
2040	501,514	23,142	45,794	49	34,325	513,138
2041	513,138	22,949	46,283	45	35,115	524,874
2042	524,874	22,772	46,688	41	35,917	536,833
2043	536,833	22,583	47,018	37	36,736	549,097
2044	549,097	22,388	47,305	33	37,578	561,726
2045	561,726	22,214	47,467	29	38,451	574,894
2046	574,894	22,035	47,609	25	39,362	588,657
2047	588,657	21,859	47,720	21	40,315	603,090
2048	603,090	21,728	47,657	18	41,324	618,467
2049	618,467	21,631	47,499	14	42,402	634,986
2050	634,986	21,565	47,214	11	43,566	652,892
2051	652,892	21,579	46,669	8	44,839	672,632
2052	672,632	21,668	45,878	6	46,251	694,667
2053	694,667	21,802	44,956	4	47,830	719,339
2054	719,339	21,993	43,850	2	49,602	747,081
2055	747,081	16,274	42,478	2	51,394	772,270
2056	772,270	16,598	40,986	1	53,220	801,101
2057	801,101	16,955	39,413	1	55,304	833,947
2058	833,947	17,334	37,796	-	57,672	871,157
2059	871,157	17,750	36,090	-	60,350	913,168
2060	913,168	18,187	34,349	-	63,366	960,371
2061	960,371	18,642	32,588	-	66,746	1,013,171
2062	1,013,171	19,108	30,829	-	70,519	1,071,969
2063	1,071,969	19,586	29,072	-	74,711	1,137,194
2064	1,137,194	20,076	27,321	-	79,354	1,209,303
2065	1,209,303	20,577	25,577	-	84,479	1,288,783
2066	1,288,783	21,092	23,844	-	90,120	1,376,151
2067	1,376,151	21,619	22,125	-	96,313	1,471,958
2068	1,471,958	22,160	20,427	-	103,097	1,576,787
2069	1,576,787	22,714	18,755	-	110,511	1,691,257
2070	1,691,257	23,281	17,117	-	118,600	1,816,022
2071	1,816,022	23,863	15,519	-	127,409	1,951,775
2072	1,951,775	24,460	13,971	-	136,985	2,099,249
2073	2,099,249	25,072	12,480	-	147,381	2,259,221
2074	2,259,221	25,698	11,056	-	158,649	2,432,513
2075	2,432,513	26,341	9,705	-	170,848	2,619,997

For purposes of this projection, we assumed the 22.5% regular employer 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	\$ 2,619,997	\$ 26,999	\$ 8,437	\$ -	\$ 184,038	\$ 2,822,597
2077	2,822,597	27,674	7,258	-	198,284	3,041,298
2078	3,041,298	28,366	6,174	-	213,654	3,277,144
2079	3,277,144	29,075	5,189	-	230,222	3,531,253
2080	3,531,253	29,802	4,306	-	248,065	3,804,814
2081	3,804,814	30,547	3,526	-	267,267	4,099,102
2082	4,099,102	31,311	2,847	-	287,917	4,415,483
2083	4,415,483	32,094	2,264	-	310,110	4,755,422
2084	4,755,422	32,896	1,773	-	333,950	5,120,496
2085	5,120,496	33,718	1,367	-	359,548	5,512,395
2086	5,512,395	34,561	1,036	-	387,021	5,932,942
2087	5,932,942	35,425	771	-	416,498	6,384,095
2088	6,384,095	36,311	564	-	448,117	6,867,959
2089	6,867,959	37,219	404	-	482,024	7,386,797
2090	7,386,797	38,149	284	-	518,379	7,943,041
2091	7,943,041	39,103	196	-	557,352	8,539,300
2092	8,539,300	40,081	132	-	599,126	9,178,374
2093	9,178,374	41,083	87	-	643,897	9,863,267
2094	9,863,267	42,110	56	-	691,876	10,597,196
2095	10,597,196	43,162	35	-	743,288	11,383,611
2096	11,383,611	44,242	21	-	798,374	12,226,206
2097	12,226,206	45,348	13	-	857,394	13,128,935
2098	13,128,935	46,481	7	-	920,625	14,096,033
2099	14,096,033	47,643	4	-	988,361	15,132,034
2100	15,132,034	48,834	2	-	1,060,923	16,241,789
2101	16,241,789	50,055	1	-	1,138,647	17,430,490
2102	17,430,490	51,307	1	-	1,221,900	18,703,696
2103	18,703,696	52,589	-	-	1,311,068	20,067,353
2104	20,067,353	53,904	-	-	1,406,569	21,527,826
2105	21,527,826	55,252	-	-	1,508,849	23,091,926
2106	23,091,926	56,633	-	-	1,618,383	24,766,943
2107	24,766,943	58,049	-	-	1,735,683	26,560,675
2108	26,560,675	59,500	-	-	1,861,295	28,481,469
2109	28,481,469	60,987	-	-	1,995,801	30,538,258
2110	30,538,258	62,512	-	-	2,139,829	32,740,599
2111	32,740,599	64,075	-	-	2,294,047	35,098,721
2112	35,098,721	65,677	-	-	2,459,170	37,623,568
2113	37,623,568	67,319	-	-	2,635,966	40,326,853
2114	40,326,853	69,002	-	-	2,825,254	43,221,108
2115	43,221,108	70,727	-	-	3,027,911	46,319,746
2116	46,319,746	72,495	-	-	3,244,877	49,637,118
2117	49,637,118	74,307	-	-	3,477,155	53,188,580
2118	53,188,580	76,165	-	-	3,725,821	56,990,566
2119	56,990,566	78,069	-	-	3,992,026	61,060,661
2120	61,060,661	80,021	-	-	4,277,000	65,417,681
2121	65,417,681	82,021	-	-	4,582,060	70,081,763
2122	70,081,763	84,072	-	-	4,908,616	75,074,451
2123	75,074,451	86,174	-	-	5,258,177	80,418,801
2124	80,418,801	88,328	-	-	5,632,355	86,139,484
2125	86,139,484	90,536	-	-	6,032,879	92,262,900

For purposes of this projection, we assumed the 22.5% regular employer 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	\$ 319,329	\$ 32,716	\$ 32,716	\$ -	\$ 31,628	\$ -	\$ 31,628
2027	334,035	33,807	33,807	-	30,544	-	30,544
2028	348,540	34,903	34,903	-	29,471	-	29,471
2029	362,898	35,905	35,905	-	28,335	-	28,335
2030	377,126	37,212	37,212	-	27,445	-	27,445
2031	390,854	38,389	38,389	-	26,460	-	26,460
2032	404,126	39,474	39,474	-	25,428	-	25,428
2033	417,074	40,516	40,516	-	24,392	-	24,392
2034	429,704	41,381	41,381	-	23,283	-	23,283
2035	442,121	42,173	42,173	-	22,176	-	22,176
2036	454,426	42,965	42,965	-	21,115	-	21,115
2037	466,519	43,846	43,846	-	20,138	-	20,138
2038	478,313	44,580	44,580	-	19,136	-	19,136
2039	489,906	45,198	45,198	-	18,132	-	18,132
2040	501,514	45,794	45,794	-	17,169	-	17,169
2041	513,138	46,283	46,283	-	16,217	-	16,217
2042	524,874	46,688	46,688	-	15,289	-	15,289
2043	536,833	47,018	47,018	-	14,390	-	14,390
2044	549,097	47,305	47,305	-	13,530	-	13,530
2045	561,726	47,467	47,467	-	12,689	-	12,689
2046	574,894	47,609	47,609	-	11,894	-	11,894
2047	588,657	47,720	47,720	-	11,142	-	11,142
2048	603,090	47,657	47,657	-	10,399	-	10,399
2049	618,467	47,499	47,499	-	9,686	-	9,686
2050	634,986	47,214	47,214	-	8,999	-	8,999
2051	652,892	46,669	46,669	-	8,313	-	8,313
2052	672,632	45,878	45,878	-	7,637	-	7,637
2053	694,667	44,956	44,956	-	6,994	-	6,994
2054	719,339	43,850	43,850	-	6,376	-	6,376
2055	747,081	42,478	42,478	-	5,772	-	5,772
2056	772,270	40,986	40,986	-	5,205	-	5,205
2057	801,101	39,413	39,413	-	4,678	-	4,678
2058	833,947	37,796	37,796	-	4,192	-	4,192
2059	871,157	36,090	36,090	-	3,741	-	3,741
2060	913,168	34,349	34,349	-	3,328	-	3,328
2061	960,371	32,588	32,588	-	2,951	-	2,951
2062	1,013,171	30,829	30,829	-	2,609	-	2,609
2063	1,071,969	29,072	29,072	-	2,299	-	2,299
2064	1,137,194	27,321	27,321	-	2,019	-	2,019
2065	1,209,303	25,577	25,577	-	1,767	-	1,767
2066	1,288,783	23,844	23,844	-	1,539	-	1,539
2067	1,376,151	22,125	22,125	-	1,335	-	1,335
2068	1,471,958	20,427	20,427	-	1,152	-	1,152
2069	1,576,787	18,755	18,755	-	988	-	988
2070	1,691,257	17,117	17,117	-	843	-	843
2071	1,816,022	15,519	15,519	-	714	-	714
2072	1,951,775	13,971	13,971	-	601	-	601
2073	2,099,249	12,480	12,480	-	502	-	502
2074	2,259,221	11,056	11,056	-	415	-	415
2075	2,432,513	9,705	9,705	-	341	-	341

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 ((a)-.5)	(g)=(e)*vf ^a ((a)-.5)	(h)=(c)/(1+sdr) ^a ((a)-.5)
2076	\$ 2,619,997	\$ 8,437	\$ 8,437	\$ -	\$ 31,628	\$ -	\$ 277
2077	2,822,597	7,258	7,258	-	30,544	-	223
2078	3,041,298	6,174	6,174	-	29,471	-	177
2079	3,277,144	5,189	5,189	-	28,335	-	139
2080	3,531,253	4,306	4,306	-	27,445	-	108
2081	3,804,814	3,526	3,526	-	26,460	-	83
2082	4,099,102	2,847	2,847	-	25,428	-	62
2083	4,415,483	2,264	2,264	-	24,392	-	46
2084	4,755,422	1,773	1,773	-	23,283	-	34
2085	5,120,496	1,367	1,367	-	22,176	-	24
2086	5,512,395	1,036	1,036	-	21,115	-	17
2087	5,932,942	771	771	-	20,138	-	12
2088	6,384,095	564	564	-	19,136	-	8
2089	6,867,959	404	404	-	18,132	-	6
2090	7,386,797	284	284	-	17,169	-	4
2091	7,943,041	196	196	-	16,217	-	2
2092	8,539,300	132	132	-	15,289	-	1
2093	9,178,374	87	87	-	14,390	-	1
2094	9,863,267	56	56	-	13,530	-	1
2095	10,597,196	35	35	-	12,689	-	0
2096	11,383,611	21	21	-	11,894	-	0
2097	12,226,206	13	13	-	11,142	-	0
2098	13,128,935	7	7	-	10,399	-	0
2099	14,096,033	4	4	-	9,686	-	0
2100	15,132,034	2	2	-	8,999	-	0
2101	16,241,789	1	1	-	8,313	-	0
2102	17,430,490	1	1	-	7,637	-	0
2103	18,703,696	-	-	-	6,994	-	0
2104	20,067,353	-	-	-	6,376	-	0
2105	21,527,826	-	-	-	5,772	-	0
2106	23,091,926	-	-	-	5,205	-	0
2107	24,766,943	-	-	-	4,678	-	0
2108	26,560,675	-	-	-	4,192	-	0
2109	28,481,469	-	-	-	3,741	-	0
2110	30,538,258	-	-	-	3,328	-	-
2111	32,740,599	-	-	-	2,951	-	-
2112	35,098,721	-	-	-	2,609	-	-
2113	37,623,568	-	-	-	2,299	-	-
2114	40,326,853	-	-	-	2,019	-	-
2115	43,221,108	-	-	-	1,767	-	-
2116	46,319,746	-	-	-	1,539	-	-
2117	49,637,118	-	-	-	1,335	-	-
2118	53,188,580	-	-	-	1,152	-	-
2119	56,990,566	-	-	-	988	-	-
2120	61,060,661	-	-	-	843	-	-
2121	65,417,681	-	-	-	714	-	-
2122	70,081,763	-	-	-	601	-	-
2123	75,074,451	-	-	-	502	-	-
2124	80,418,801	-	-	-	415	-	-
2125	86,139,484	-	-	-	341	-	-
Totals					<u>\$ 566,624</u>	<u>\$ -</u>	<u>\$ 566,624</u>

Totals may not add due to rounding.



SECTION H

GLOSSARY OF TERMS

Glossary of Terms

<i>Accrued Service</i>	Service credited under the system which was rendered before the date of the actuarial valuation.
<i>Actuarial Accrued Liability (AAL)</i>	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."
<i>Actuarial Assumptions</i>	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.
<i>Actuarial Cost Method</i>	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.
<i>Actuarial Equivalent</i>	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.
<i>Actuarial Gain (Loss)</i>	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.
<i>Actuarial Present Value (APV)</i>	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.
<i>Actuarial Valuation</i>	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.
<i>Actuarial Valuation Date</i>	The date as of which an actuarial valuation is performed.
<i>Actuarially Determined Contribution (ADC)</i>	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

<i>Amortization Method</i>	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).
<i>Amortization Payment</i>	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
<i>Cost-of-Living Adjustments</i>	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
<i>Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan)</i>	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.
<i>Covered-Employee Payroll</i>	The payroll of covered employees, which is typically only the pensionable pay and does not include pay above any pay cap.
<i>Deferred Inflows and Outflows of Resources</i>	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.
<i>Discount Rate or Single Discount Rate</i>	<p>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:</p> <ol style="list-style-type: none">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; and2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.
<i>Entry Age Actuarial Cost Method or Entry Age Normal (EAN)</i>	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

<i>Fiduciary Net Position</i>	The fiduciary net position is the value of the net assets of the trust restricted for pension benefits.
<i>GASB</i>	The Governmental Accounting Standards Board is an organization that exists with authority to promulgate accounting standards for state and local governmental entities.
<i>Long-Term Expected Rate of Return</i>	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.
<i>Money-Weighted Rate of Return</i>	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.
<i>Multiple-Employer Defined Benefit Pension Plan</i>	A multiple-employer plan is a defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
<i>Municipal Bond Rate</i>	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.
<i>Net Pension Liability (NPL)</i>	The NPL is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit pension plan.
<i>Non-Employer Contributing Entities</i>	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.
<i>Normal Cost</i>	The actuarial present value of the pension trust benefits allocated to the current year by the actuarial cost method.
<i>Other Postemployment Benefits (OPEB)</i>	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.
<i>Real Rate of Return</i>	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
<i>Service Cost</i>	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.