TRS-Care Retiree Health Care Plan Teacher Retirement System of Texas

GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans

Actuarial Valuation for Fiscal Year Ending August 31, 2023





November 2, 2023

Board of Trustees Teacher Retirement System of Texas 1000 Red River Street Austin, TX 78701-2698

Subject: Actuary's Certification of the GASB Statement No. 74 Actuarial Valuation as of August 31, 2023 for TRS-Care

Submitted in this report are the results of an Actuarial Valuation of the liabilities associated with the employer financed retiree health benefits provided through TRS-Care, a benefit program designed to provide post-retirement medical benefits for certain members of the Teacher Retirement System of Texas (TRS). The date of the valuation was August 31, 2022. Update procedures were used to roll forward the total OPEB liability to August 31, 2023. This report was prepared at the request of TRS.

The actuarial calculations were prepared for purposes of complying with the requirements of Statement No. 74 of the Governmental Accounting Standards Board (GASB). The calculations reported herein have been made on a basis consistent with our understanding of this accounting standard. Determinations of the liability associated with the benefits described in this report for purposes other than satisfying the financial reporting requirements of TRS-Care and participating employers may produce significantly different results. Actuarial valuations of the post-retirement benefits are performed annually.

The valuation was based upon information, furnished by TRS, concerning retiree health benefits, members' census, and financial data. Data was checked for internal consistency but was not otherwise audited. Certain actuarial assumptions applicable only to the TRS-Care OPEB valuation have changed since the prior report. These changes are disclosed in the assumptions section of this report.

The following Annual Comprehensive Financial Report (ACFR) schedules were prepared by GRS and can be found in Sections D and E of this report:

- 1. Key Actuarial Assumptions and Methods
- Schedule of Retirees and Beneficiaries Added and Removed from Rolls

GRS is not responsible for any trend data schedules not found in this report.

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The current objective is to fund the Trust in order to maintain benefits through individual biennial periods. There is no arrangement into which the participating employers would make contributions to advance-fund the obligation. However, a Trust does exist into which participating employers are making contributions based on the current funding policy.

The Net OPEB Liability (NOL) decreased by \$1.8 billion, from \$23.9 billion as of August 31, 2022 to \$22.1 billion as of August 31, 2023. The decrease was primarily due to a favorable claims experience.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

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.

To the best of our knowledge, this report is complete and accurate. The assumptions and methods used for financial reporting purposes are reasonable and in accordance with generally accepted actuarial principles set by the Actuarial Standards of Practice (ASOPs). Joseph Newton and Blake Orth are members of the American Academy of Actuaries and meet the Qualification Standards of the Academy of Actuaries to render the actuarial opinion herein. The signing individuals are independent of the plan sponsor.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

Joseph P. Newton, FSA, EA, FCA, MAAA

Pension Market Leader

Blake Orth, FSA, EA, MAAA Consultant and Actuary

Blake Outh



Auditor's Note – This information is intended to assist in preparation of the financial statements of the Teacher Retirement System of Texas. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.



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SECTION A

EXECUTIVE SUMMARY

Executive Summary as of August 31, 2023

		2023
Actuarial Valuation Date		August 31, 2022
OPEB Plan's Fiscal Year Ending Date (Reporting Date)	,	August 31, 2023
Membership*		
Number of		100 210
- Retirees and Beneficiaries		188,218 13,971
- Inactive, Nonretired Members - Active Members		•
- Active Members - Total		757,626 959,815
Covered Payroll	\$	42,687,428,308
Net OPEB Liability		
Total OPEB Liability	\$	26,028,070,267
Plan Fiduciary Net Position		3,889,765,203
Net OPEB Liability	\$	22,138,305,064
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability		14.94 %
Net OPEB Liability as a Percentage of Covered Payroll		51.86 %
Development of the Single Discount Rate		
Single Discount Rate		4.13 %
Long-Term Municipal Bond Rate**		4.13 %

^{*} Membership counts shown above are as of the valuation date.



^{**} Source. Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in the Fidelity "20-Year Municipal GO AA Index" as of August 31, 2023.

Discussion

Accounting Standard

For post-employment benefit (OPEB) plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 74, "Financial Reporting for Postemployment Benefit Plans other than Pension Plans," establishes standards of financial reporting for separately issued financial reports of state and local government OPEB plans.

Reporting under GASB 74 is effective for plan fiscal years commencing after June 15, 2016.

The following discussion provides a summary of the information that is required to be disclosed under this new accounting standard. 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 internal staff will be responsible for preparing that information to comply with this accounting standard.

Financial Statements

GASB Statement No. 74 requires defined benefit OPEB plans to present two financial statements: a statement of fiduciary net position and a statement of changes in fiduciary net position.

The statement of fiduciary net position presents the following items as of the end of the OPEB plan's reporting period:

- Assets;
- Receivables and Deferred Outflow of Resources;
- Investments;
- Liabilities and Deferred Inflow of Resources; and
- Fiduciary net position (assets, plus deferred outflows, minus liabilities, minus deferred inflows).

The statement of changes in fiduciary net position presents the following for the plan's reporting period:

- Additions, such as contributions and investment income;
- Deductions, such as benefit payments and expenses; and
- Net increase or decrease in the fiduciary net position (the difference between additions and deductions).



Notes to Financial Statements

GASB Statement No. 74 also requires the notes of the plan's financial statements to include additional disclosure information. This disclosure information should include:

• Plan Description:

- The name of the OPEB plan, the administrator of the OPEB plan, and the identification of whether the OPEB plan is a single-employer, agent, or cost-sharing OPEB plan.
- The number of participating employers (if agent or cost-sharing OPEB plan) and the number of nonemployer contributing entities.
- The composition of the OPEB plan's Board and the authority under which benefit terms may be amended.
- The number of plan members by category and if the plan is closed.
- The authority under which benefit terms are established or may be changed, the types of benefits provided, and the classes of plan members covered. A brief description of the benefits and the description of automatic postemployment benefit changes and the sharing of benefit-related costs with inactive plan members.
- A brief description of contribution requirements, including (a) identification of the authority under which contribution requirements of employers, nonemployer contributing entities, and plan members are established or may be amended; (b) the contribution rates of the employer, nonemployer contributing entities, and plan members; and (c) legal or contractual maximum contribution rates. If the OPEB plan of the entity that administers the OPEB plan has the authority to establish or amend contribution requirements, disclose the basis for determining contributions.

Plan Investments:

- A description of investment policies, including procedures for making and amending investment decisions; policies for asset allocation; and description of any significant changes in investment policy occurring during the reporting period.
- o Identification of investments that represent 5% or more of the fiduciary net position.
- o The annual money-weighted rate of return on the OPEB plan investments.

Receivables:

- The terms of any long-term contracts for contributions to the OPEB plan and the outstanding balance on any such long-term contracts.
- Allocated insurance contracts excluded from OPEB plan assets.

• Reserves:

- A description of the policy related to reserves;
- The authority for the reserve policy;
- The conditions under which the reserves can be used; and
- The balances of the reserves.



Notes to Financial Statements (Continued)

In addition, Single-Employer and Cost-Sharing OPEB plans should disclose the following information in notes to financial statements:

- The components of the net OPEB liability:
 - The total OPEB liability;
 - The fiduciary net position;
 - o The net OPEB liability; and
 - The OPEB plan's fiduciary net position as a percentage of the total OPEB liability.
- Significant assumptions and other inputs used to measure the total OPEB liability:
 - Significant assumptions include inflation, healthcare cost trend rates, salary changes, ad hoc postemployment benefit changes, and the sharing of benefit-related costs with inactive plan members.
 - o If applicable, the patterns of practice relied upon for projecting the sharing of benefit-related costs with inactive plan members.
 - o The source of the assumptions for mortality.
 - The dates of experience studies on which assumption are based.
- Measure of the net OPEB liability using +/- 1% on the healthcare trend rate.
- On the discount rate:
 - The discount rate used and the change in the discount rate since the prior fiscal year-end.
 - Assumptions about projected cash flows.
 - The long-term expected rate of return on OPEB investments and a description of how it was determined.
 - o The municipal bond rate used and the source of that rate.
 - The periods of projected benefit payments to which the long-term expected rate of return are used.
 - The assumed asset allocation of the portfolio and the long-term expected real rate of return for each major asset class, and whether the returns are arithmetic or geometric.
 - Measure of the net OPEB liability using +/- 1% on the discount rate.
- The date of the valuation and, if applicable, the fact that update procedures were used to roll forward the total OPEB liability.

Required Supplementary Information

For Single-Employer and Cost-Sharing OPEB Plans, GASB Statement No. 74 requires a 10-year fiscal history of:

- Sources of changes in the net OPEB liability;
- Information about the components of the net OPEB liability and related ratios, including the OPEB plan's fiduciary net position as a percentage of the total OPEB liability, and the net OPEB liability as a percent of covered-employee payroll;
- Comparison of the actual employer contributions to the actuarially determined contributions based on the plan's funding policy along with the significant methods and assumptions used in calculating the actuarially determined contributions; and
- The annual money-weighted rate of return on OPEB plan investments for each year.

For Agent OPEB Plans, GASB Statement No. 74 requires a 10-year history of the annual money-weighted rate of return on OPEB plan investments.



Required Supplementary Information (Continued)

Notes to the required schedules should include factors that significantly affect trends in the amounts reported (for example, changes of benefit terms, changes in the size or composition of the population covered, or the use of different assumptions). Information about investment-related factors that significantly affect trends in the amounts reported should be limited to those factors over which the OPEB plan or the participating governments have influence.

Measurement of the Net OPEB Liability

The net OPEB liability is to be measured as the total OPEB liability, less the amount of the OPEB 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). The net OPEB liability should be measured as of the OPEB plan's most recent fiscal year end.

Frequency and Timing of the Actuarial Valuation

An actuarial valuation to determine the total OPEB liability is required to be performed at least every two years. If the actuarial valuation is not calculated as of the plan's fiscal year end, the total OPEB liability is required to be rolled forward from the actuarial valuation date to the OPEB plan's fiscal year end. If update procedures are used to roll forward the total OPEB liability, the date of the actuarial valuation must be no more than 24 months earlier than the OPEB plan's most recent fiscal year-end.

The total OPEB liability shown in this report is based on an actuarial valuation performed as of August 31, 2022. Update procedures were used to roll forward the total OPEB liability to August 31, 2023.

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 OPEB 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 municipal bond rate is 4.13% (based on the daily rate closest to but not later than the measurement date of the Fidelity "20-Year Municipal GO AA Index"), and the resulting Single Discount Rate is 4.13%. Because the investments are held in cash and there is no intentional objective to advance fund the benefits, the Single Discount Rate is equal to the prevailing municipal bond rate.



Actuarial Assumptions

The actuarial assumptions used to value the liabilities are outlined in detail in Section I. The assumptions include details on the healthcare trend assumption, the aging factors, as well as the cost method used to develop the OPEB expense. The demographic assumptions were based on the experience study covering the period ending August 31, 2021, as conducted for the retirement plan.

Future Uncertainty or Risk

Future results may differ from those anticipated in this valuation. Reasons include, but are not limited to:

- Actual medical trend differing from expected;
- Changes in the healthcare plan designs offered to active and retired members; and
- Participant behavior differing from expected, e.g.,
 - Elections at retirement;
 - One-person versus two-person coverage elections; and
 - o Time of retirement or termination.

Benefits Valued

The benefit provisions that were valued are described in Section F. The valuation is required to be performed on the current benefit terms and existing legal agreements. Consideration is to be given to the written plan document as well as other communications between the employer and plan members and an established pattern of practice for cost sharing. The summary of major plan provisions is designed to outline principal plan benefits. If the plan summary is not in accordance with the actual provisions, please alert the actuaries, so they can both be sure the proper provisions are valued.



SECTION B

FINANCIAL STATEMENTS

Statement of Fiduciary Net Position as of August 31, 2023

	2023			
Assets				
Cash and Deposits	\$	3,661,961,810		
Receivables				
Interest and Dividends	\$	14,918,871		
Due from State's General Fund		42,255,663		
Due from Employers		41,160,121		
Other		333,977,584		
Total Receivables	\$	432,312,239		
Investments				
Capital Assets		7,599,880		
Total Investments	\$	7,599,880		
Total Assets	\$	4,101,873,929		
Liabilities				
Payables				
Accounts Payable	\$	470,437		
Accrued Expenses		33,180,932		
Health Care Claims Payable		178,457,357		
Total Liabilities	\$	212,108,726		
Total Deferred Outflow of Resources	\$	0		
Total Deferred Inflow of Resources	\$	0		
Net Position Restricted for OPEB	\$	3,889,765,203		



Statement of Changes in Fiduciary Net Position as of August 31, 2023

	 2023
Additions	
Contributions	
Employer	
Paid at Employer Contribution Rate	\$ 320,154,894
Paid at State's Contribution Rate (Federal/Private Funding)	59,248,095
Surcharge for Employment after Retirement	14,548,344
Total Employer Contributions	\$ 393,951,333
Nonemployer contributing entities	
State of Texas - Paid at State's Contribution Rate	\$ 474,356,993
State of Texas - Supplemental Appropriations	21,285,114
Other - Federal Funding	0
Total Nonemployer contributing entities	\$ 495,642,107
Active Employees	\$ 277,468,284
Total Contributions	\$ 1,167,061,724
Net Investment Income	\$ 130,069,098
Other	\$ 40,306,480
Total Additions	\$ 1,337,437,302
Deductions	
Benefit Payments	
Claims and Premiums (net of Rx rebates/discounts)	\$ 1,044,964,260
Retiree Contributions	(502,154,458)
Total Benefit Payments	\$ 542,809,802
OPEB Plan Administrative Expense	\$ 22,799,515
Total Deductions	\$ 565,609,317
Net Increase in Net Position	\$ 771,827,985
Net Position Restricted for OPEB	
Beginning of Year	\$ 3,117,937,218
End of Year	\$ 3,889,765,203





REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear

Fiscal year ending August 31,		2023	2022	2021	2020	2019	2018	2017
Total OPEB liability								
Service cost	\$	1,167,928,039 \$	2,329,443,972 \$	2,123,507,091 \$	2,580,691,142 \$	2,306,960,681 \$	2,284,418,391 \$	4,312,406,330
Interest on the total OPEB liability		1,070,343,014	818,451,306	951,216,433	1,304,452,406	1,904,512,142	1,524,880,074	2,356,367,107
Changes of benefit terms		0	0	0	0	0	0	(18,610,362,725)
Difference between expected and								
actual experience		(2,155,814,819)	(4,519,113,086)	(4,029,449,914)	(11,973,222,812)	(7,950,584,096)	2,979,259,557	(1,027,633,765)
Changes of assumptions		(573,518,685)	(12,067,408,357)	2,553,299,164	64,949,900	2,133,218,962	936,861,770	(19,563,767,793)
Benefit payments		(542,809,802)	(613,142,398)	(495,695,506)	(549,284,060)	(540,350,553)	(881,714,310)	(995,486,176)
Net change in total OPEB liability		(1,033,872,253)	(14,051,768,563)	1,102,877,268	(8,572,413,424)	(2,146,242,864)	6,843,705,482	(33,528,477,022)
Total OPEB liability - beginning		27,061,942,520	41,113,711,083	40,010,833,815	48,583,247,239	50,729,490,103	43,885,784,621	77,414,261,643
Total OPEB liability - ending (a)	\$	26,028,070,267 \$	27,061,942,520 \$	41,113,711,083 \$	40,010,833,815 \$	48,583,247,239 \$	50,729,490,103 \$	43,885,784,621
Plan fiduciary net position								
Employer contributions	\$	393,951,333 \$	370,735,616 \$	334,027,999 \$	324,973,591 \$	305,363,084 \$	296,098,420 \$	215,360,520
Nonemployer contributing entities contribution	ons	495,642,107	534,341,296	452,857,917	666,588,103	482,056,189	789,869,467	324,661,809
Employee contributions		277,468,284	263,328,449	250,413,572	243,532,120	227,338,454	221,325,377	213,241,179
OPEB plan net investment income		130,069,098	13,537,557	9,226,940	25,536,560	25,046,771	10,127,259	4,696,973
Benefit payments		(542,809,802)	(613,142,398)	(495,695,506)	(549,284,060)	(540,350,553)	(881,714,310)	(995,486,176)
OPEB plan administrative expense		(22,799,515)	(18,465,602)	(7,906,384)	(7,068,610)	(6,006,229)	(6,672,488)	(4,953,492)
Other		40,306,480	28,359,830	0	17,879	0	(29,995,078)	529,020
Net change in plan fiduciary net position		771,827,985	578,694,748	542,924,538	704,295,583	493,447,716	399,038,647	(241,950,167)
Plan fiduciary net position - beginning		3,117,937,218	2,539,242,470	1,996,317,932	1,292,022,349	798,574,633	399,535,986	641,486,153
Plan fiduciary net position - ending (b)	\$	3,889,765,203 \$	3,117,937,218 \$	2,539,242,470 \$	1,996,317,932 \$	1,292,022,349 \$	798,574,633 \$	399,535,986
Net OPEB liability - ending (a) - (b)	\$	22,138,305,064 \$	23,944,005,302 \$	38,574,468,613 \$	38,014,515,883 \$	47,291,224,890 \$	49,930,915,470 \$	43,486,248,635
Plan fiduciary net position as a percentage								
of total OPEB liability		14.94 %	11.52 %	6.18 %	4.99 %	2.66 %	1.57 %	0.91 %
Covered-employee payroll	\$	42,687,428,308 \$	40,512,069,077 \$	38,525,164,923 \$	37,466,480,000 \$	34,975,146,769 \$	34,050,058,000 \$	32,806,335,231
Net OPEB liability as a percentage of								
covered-employee payroll		51.86 %	59.10 %	100.13 %	101.46 %	135.21 %	146.64 %	132.55 %
Notes to Schedule:								
Single Discount Rate		4.13%	3.91 %	1.95 %	2.33 %	2.63 %	3.69 %	3.42 %
Single Discount Rate Changes of assumptions reflect the effects of order or the control of the	changes in					2.63 %	3.69 %	3.42

Changes of assumptions reflect the effects of changes in the single discount rate each period. The single discount rate at the beginning of FYE 2017 was 2.98%.

²⁰¹⁷ Changes of assumptions - Assuming Medicare Part D reimbursements will continue (removed the phase out assumption).



²⁰²³ Changes of assumptions - Revised demographic and economic assumptions based on the TRS experience study.

²⁰²² Changes of assumptions - Lower participation rates and updates to the health care trend assumptions.

²⁰²⁰ Changes of assumptions - Lowering the participation rate assumption for employees who retire after the age of 65 and lowering the ultimate health care trend assumption to reflect the repeal of the excise (Cadillac) tax on high-cost employer health plans.

²⁰¹⁹ Changes of assumptions - Lower participation rates and updates to the health care trend assumptions.

²⁰¹⁸ Changes of assumptions - Updated health care trend assumption and revised demographic and economic assumptions based on the TRS experience study.

²⁰¹⁷ Changes of benefit terms - Effective January 1, 2018, only one health plan option will be offered and all retirees will be required to contribute monthly premiums for coverage.

Schedule of the Net OPEB Liability Multiyear

	Total			Plan Net Position		Net OPEB Liability
FY Ending	OPEB	Plan Net	Net OPEB	as a % of Total	Covered	as a % of
August 31,	Liability	Position	Liability	OPEB Liability	Payroll	Covered Payroll
2017	\$ 43,885,784,621	\$ 399,535,986	\$ 43,486,248,635	0.91 %	\$ 32,806,335,231	132.55 %
2018	50,729,490,103	798,574,633	49,930,915,470	1.57 %	34,050,058,000	146.64 %
2019	48,583,247,239	1,292,022,349	47,291,224,890	2.66 %	34,975,146,769	135.21 %
2020	40,010,833,815	1,996,317,932	38,014,515,883	4.99 %	37,466,480,000	101.46 %
2021	41,113,711,083	2,539,242,470	38,574,468,613	6.18 %	38,525,164,923	100.13 %
2022	27,061,942,520	3,117,937,218	23,944,005,302	11.52 %	40,512,069,077	59.10 %
2023	26,028,070,267	3,889,765,203	22,138,305,064	14.94 %	42,687,428,308	51.86 %





NOTES TO FINANCIAL STATEMENTS

Net OPEB Liability as of August 31, 2023

	Total OPEB Liability	Plan Fiduciary Net Position		Ne	t OPEB Liability
Beginning balance	\$ 27,061,942,520	\$	3,117,937,218	\$	23,944,005,302
Service cost	1,167,928,039				1,167,928,039
Interest on the total OPEB liability	1,070,343,014				1,070,343,014
Changes of benefit terms	0				0
Difference between expected					
and actual experience	(2,155,814,819)				(2,155,814,819)
Changes of assumptions	(573,518,685)				(573,518,685)
Employer contributions			393,951,333		(393,951,333)
Nonemployer contributing entities			495,642,107		(495,642,107)
Employee contributions			277,468,284		(277,468,284)
Net investment income			130,069,098		(130,069,098)
Benefit payments	(542,809,802)		(542,809,802)		0
Administrative expense			(22,799,515)		22,799,515
Other			40,306,480		(40,306,480)
Net changes	(1,033,872,253)		771,827,985		(1,805,700,238)
Ending balance	\$ 26,028,070,267	\$	3,889,765,203	\$	22,138,305,064

Only the components of the ending Net OPEB Liability are required disclosures.

Single Discount Rate

A Single Discount Rate of 4.13% was used to measure the total OPEB liability. Because the investments are held in cash and there is no intentional objective to advance fund the benefits, the Single Discount Rate is equal to the prevailing municipal bond rate.

Roll Forward Disclosure

The actuarial valuation was performed as of August 31, 2022. Update procedures were used to roll forward the total OPEB liability to August 31, 2023.



Summary of Membership Information

The following table provides a summary of the number of participants in the plan as of August 31, 2022:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	188,218
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	13,971
Active Plan Members	757,626
Total Plan Members	959,815

Per GASB's guidance, dependents of current retirees receiving benefits are not included in the counts shown above.

Note: Membership information should be disclosed as of the measurement date (August 31, 2023). It is the responsibility of the plan sponsor to disclose the membership counts as of August 31, 2023.

The Average Expected Remaining Service Life (AERSL) of 9.2215 is based on the membership information as of the beginning of the fiscal year. The AERSL of the active employees was 11.6825 years. This calculates to a total remaining service years of 11.6825*757,626 = 8,850,966 years. Divided by the total membership of 959,815 as of August 31, 2022 yields an AERSL of 9.2215.



Actuarial Assumptions and Methods

Valuation Date: August 31, 2022; rolled forward to August 31, 2023

Methods and Assumptions:

Actuarial Cost Method Individual Entry-Age Normal

Inflation 2.30%

Single Discount Rate 4.13% as of August 31, 2023

Salary Increases 2.95% to 8.95%, including inflation

Demographic Assumptions The rates of mortality, retirement, termination and disability incidence are identical to the

assumptions used to value the pension liabilities of the Teachers Retirement System of Texas (TRS). The demographic assumptions were developed in the experience study

performed for TRS for the period ending August 31, 2021.

Mortality Assumption The post-retirement mortality rates for healthy lives were based on the 2021 TRS of Texas

Healthy Pensioner Mortality Tables, with full generational projection using the ultimate rates of Scale MP 2021. The active mortality rates were based on PUB(2010), Amount-Weighted, Below-Median Income, Teacher male and female tables (with a two-year set forward for males), also with full generational mortality using the ultimate rates of Scale

MP 2021.

Health Care Trend Rates: Initial medical trend rates of 7.75% for Medicare retirees and 7.00% for non-Medicare

retirees. Initial prescription drug trend rate of 7.75% for all retirees.

Initial trend rates decrease to an ultimate trend rate of 4.25% over a period of 12 years.

Election Rates Normal Retirement: 62% participation prior to age 65 and 25% participation after age 65;

30% of pre-65 retirees are assumed to discontinue coverage at age 65.

Aging Factors Based on plan specific experience.

Expenses Third party administrative expenses related to the delivery of health care benefits are

included in the age-adjusted claims costs.

Ad Hoc Post-Employment

Benefit Changes

None

Other Information:

Notes Assumption changes include a discount rate change from 3.91% as of August 31, 2022 to

4.13% as of August 31, 2023, and revised demographic and economic assumptions based on

the TRS experience study.



Sensitivity of Net OPEB Liability to the Single Discount Rate Assumption

Regarding the sensitivity of the net OPEB liability to changes in the Single Discount Rate, the following presents the plan's net OPEB liability, calculated using a Single Discount Rate of 4.13%, as well as what the plan's net OPEB liability would be if it were calculated using a Single Discount Rate that is one percent lower or one percent higher:

Current Single Discount								
1% Decrease	Rate Assumption	1% Increase						
3.13%	4.13%	5.13%						
\$ 26,074,313,528	\$ 22,138,305,064	\$ 18,926,429,065						

Sensitivity of Net OPEB Liability to the Healthcare Cost Trend Rate Assumption

Regarding the sensitivity of the net OPEB liability to changes in the healthcare cost trend rates, the following presents the plan's net OPEB liability, calculated using the assumed trend rates as well as what the plan's net OPEB liability would be if it were calculated using a trend rate that is one percent lower or one percent higher:

	Current Healthcare Cost	
1% Decrease	Trend Rate Assumption	1% Increase
\$ 18,229,786,300	\$ 22,138,305,064	\$ 27,166,627,825





ADDITIONAL ACFR SCHEDULES

Schedule of Retirees and Beneficiaries Added and Removed from Rolls

	Add	ed to Rolls	Remov	ed f	rom Rolls	Rolls-End of Year					
					_				% Increase	A۱	verage
Ended		Annual			Annual			Annual	in Annual	Α	nnual
August 31,	Number	Allowances	Number	A	Allowances	Number		Allowances *	Allowances	Allo	wances
(1)	(2)	(3)	(4)		(5)	(6)		(7)	(8)		(9)
2008						198,968	\$	605,932,252	NA	\$	3,045
2009	12,158	\$ 54,271,769	8,192	\$	19,365,868	202,934	\$	694,017,558	14.5%	\$	3,420
2010	14,996	\$ 71,136,696	7,924	\$	21,837,784	210,006	\$	757,979,912	9.2%	\$	3,609
2011	20,467	\$ 109,331,023	8,019	\$	24,802,618	222,454	\$	898,001,599	18.5%	\$	4,037
2012	19,407	\$ 92,279,848	8,220	\$	28,700,248	233,641	\$	768,682,199	(14.4%)	\$	3,290
2013	19,798	\$ 98,603,255	10,176	\$	25,946,471	243,263	\$	824,715,257	7.3%	\$	3,390
2014	18,916	\$ 97,956,524	10,656	\$	27,648,497	251,523	\$	933,885,969	13.2%	\$	3,713
2015	19,171	\$ 106,177,651	11,116	\$	31,400,277	259,578	\$	1,050,329,854	12.5%	\$	4,046
2016	20,883	\$ 120,035,127	12,250	\$	48,462,388	268,211	\$	1,132,169,358	7.8%	\$	4,221
2017	19,121	\$ 105,535,109	13,113	\$	59,695,737	274,219	\$	986,039,302	(12.9%)	\$	3,596
2018	11,101	\$ 79,394,032	48,958	\$	150,243,653	236,362	\$	955,490,192	(3.1%)	\$	4,042
2019	14,066	\$ 95,931,742	21,253	\$	69,775,594	229,175	\$	839,871,317	(12.1%)	\$	3,665
2020	13,222	\$ 88,444,718	18,420	\$	55,330,044	223,977	\$	810,214,242	(3.5%)	\$	3,617
2021	14,086	\$ 101,038,519	15,596	\$	47,372,703	222,467	\$	818,071,372	1.0%	\$	3,677
2022	16,212	\$ 113,328,143	16,906	\$	55,044,005	221,773	\$	806,426,537	(1.4%)	\$	3,636
2023	12,104	\$ 100,377,443	14,305	\$	49,149,837	219,572	\$	816,330,849	1.2%	\$	3,718

^{*}Expected employer provided claims and expenses (net of retiree premiums)

Headcounts include dependents. Annual allowances in Column (7) include increases due to health care inflation and the impact of plan changes. As a result, the annual allowances are not equal to the beginning of year allowances plus the "Added to rolls" allowances minus the "Removed from Rolls" allowances.



SECTION **F**

SUMMARY OF BENEFITS

Summary of Benefits

Plan Participants

Members of the Teacher Retirement System of Texas are eligible to receive retiree health care benefits.

Benefit Eligibility

Eligibility conditions for retiree health care benefits are as follows:

A retiree cannot be eligible for health care coverage as an employee or retiree of the State of Texas, or a public college or university in the State of Texas.

Service Retirees Who Retire after September 1, 2005: to be eligible for TRS-Care, the member must have at least 10 years of service credit in the system. This service credit may include up to five years of military service credit, but it may not include any other special or equivalent service credit purchased.

Additionally, the member must meet one of the following requirements: the sum of the retiree's age and years of service credit in the system equals or exceeds 80 at the time of retirement, regardless of whether the retiree had a reduction in the retirement annuity for early age (years of service credit can include all purchased service); or the retiree has 30 or more years of service credit in the retirement system at the time of retirement (years of service credit can include all purchased service).

Vested Terminated participants are eligible for TRS-Care if they meet the eligibility requirements for TRS-Care at the time of retirement.

Health Care Benefit Provided by Plan

Member: Beginning January 1, 2018, all members (except certain disabled retirees) must contribute toward the cost of coverage. Prior to this date, retirees could elect basic coverage at no cost for themselves.

Spouse: Members must contribute towards cost of spouse coverage.

Dependent: Members must contribute towards cost of coverage for dependent children.

Surviving Spouse Retirement Benefits

Surviving Spouses are eligible to elect coverage if they were married to the retiree of TRS at the time of the retiree's death and the retiree qualified, or would have qualified, for coverage under the following:

Surviving Spouses of active TRS members are eligible if the member had 10 or more years of actual service credit in Texas public schools and made contributions to the Texas Public Retired Employees Group Insurance Fund.



Summary of Benefits

Disabled Retirement Benefits

Health Care Benefit Eligibility Conditions:

Any age with 10 years of service.

With less than 10 years of service, coverage ends when the disability retirement benefit ends.

Health Care Benefit Provided by Plan:

Member: For non-Medicare retirees who have taken disability retirement under the TRS pension on or before January 1, 2017 and are taking disability retirement benefits from the TRS pension, TRS pays 100% of the coverage. All other members must contribute towards the cost of coverage.

Spouse: Members must contribute towards cost of spouse coverage.

Dependent: Members must contribute towards cost of coverage for dependent children.



TRS-Care Benefit Levels

January 1, 2024 – December 31, 2024

	Dedu	ctible	Maximum Out-of-Pocket				
Plan	Individual	Individual Family Ir		Family			
TRS-Care Standard	TRS-Care Standard						
Retirees or Surviving Spouses not eligible for Medicare	\$1,600 In-Network \$3,200 Out-of-Network	\$3,200 In-Network \$6,400 Out-of-Network	\$5,650 In-Network \$11,300 Out-of-Network	\$11,300 In-Network \$22,600 Out-of-Network			
TRS-Care Alternative Medical Plan							
Retirees or Surviving Spouses Enrolled in Medicare Part A and eligible for Part B	\$1,300	\$2,600	\$7,150	\$14,300			
Retirees or Surviving Spouses not enrolled in Medicare Part A but eligible for Part B	licare Part A but \$1,300 \$2,600 \$7,150		\$7,150	\$14,300			
Medicare Advantage for TRS-Care	Medicare Advantage for TRS-Care						
All	\$400	N/A	\$3,500	N/A			

Maximum Out-of-Pocket includes deductibles, coinsurance, co-pays and out-of-pocket expenses.



TRS-Care Monthly Retiree Contribution Rates

January 1, 2024 – December 31, 2024

Coverage Tier	Non-Medicare Retiree Premiums	Non-Medicare Disability and Retiree Premiums*	Medicare Retiree Premiums
Retiree/Surviving Spouse Only	\$200	\$0	\$135
Retiree and Spouse	\$689	\$489	\$529
Retiree/Surviving Spouse and Child(ren)	\$408	\$208	\$468
Retiree and Family	\$999	\$799	\$1,020

^{*\$0} retiree contribution for disability retires who: (1) are retired as a disability retiree on or before 1/1/2017; (2) are currently receiving disability retirement benefits; and (3) are not eligible to enroll in Medicare.





DEVELOPMENT OF BASELINE CLAIMS COSTS

Development of Baseline Claims Cost

Data Source

TRS-Care maintains a substantial amount of data for all its covered members for many years of coverage. Claims and exposures during the period from January 1, 2021 through December 31, 2022, were used for the development of the Baseline Costs. These were compared to industry data for reasonableness. The actual claims and exposures were available by age, sex, status, member type, plan coverage, etc. The actual claims and exposure data were reliable and credible for the development of reasonable Baseline Costs.

Baseline Costs

An OPEB Valuation is a projection of long-term benefit costs. As a starting point, baseline costs must be developed for the initial year of the projection. Projections of future costs, many years ahead, are based upon these initial year costs. Care must be taken to ensure that reasonable Baseline Costs are developed for each relevant Costing Variable.

Baseline Costs for this OPEB Valuation take the form of tables of current costs of benefits for retirees (and their dependents and survivors), separately by:

- Age (20 through 110)
- Sex (M and F)
- Benefit type (medical, prescription drug)

Costing Variables

Baseline Costs vary depending on many different factors or characteristics of each member. For example, age is possibly the most obvious variable that affects the cost of medical coverage, but they may have different patterns based on the benefit package chosen. For the purpose of the OPEB valuation, membership status and disability status were deemed not to be necessary Costing Variables, and the claims for all retirees and spouses were combined. Separate claims estimates were developed for children.

Methodology

Aging Table

Due to the size of TRS and its unique membership, gender distinct aging tables have been developed for both medical and prescription drug claims. The average increases at each age were developed and smoothed based on the actual TRS claims experience.

The claims cost developed are appropriate for the unique distribution of age and sex currently experienced by the plan. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, the actuarial process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. This process more accurately reflects health care costs in the retired population over the projection period.



<u>Administration Expenses</u>

Administration expenses are included in the monthly per capita costs based on expected expenses per member in the separate cost categories based on the following table:

Monthly Fee Per Member	Non-Medicare Retirees	Medicare Retirees
Medical Administrative Fees	\$17.56	\$0.20
Rx Administrative Fee*	2.09	8.00
Other Admin Fee	8.67	8.67
PCORI Fee	0.26	0.00
Total	\$28.58	\$16.87

^{*}Includes \$0.25 drug savings review fee for Non-Medicare retirees.

Adjustments to Historical Claims

The claims data used to develop the baseline costs consisted of claims incurred during the period from January 1, 2021 through December 31, 2022. These claims were increased by trend to develop the expected claims that will be incurred in the year beginning January 1, 2024 and ending December 31, 2024.

Rx Rebates and Medicare Part D Reimbursements

The projected prescription drug claims are net of all expected rebates and reimbursements. Effective January 1, 2017, all Medicare enrolled retirees are required to participate in the Medicare Part D Plan.

Medicare Advantage Plan

Medical benefits for Medicare enrolled retirees are provided through a fully-insured Medicare Advantage plan. The age-adjusted medical costs for Medicare retirees were based on the demographics of the covered population and the Medicare Advantage premiums. Also, beginning January 1, 2018, enrollees with Medicare Part B only were transitioned to a fully insured Medicare Advantage plan.



Monthly Per Capita Costs

Baseline Costs for Pre-65 Retirees and Spouses Calendar Year 2024

	Medical		Prescription Drug		
Age	Male	Female	Male	Female	
55	\$889.84	\$937.88	\$218.85	\$228.82	
57	\$923.98	\$940.31	\$224.94	\$231.11	
60	\$977.66	\$943.98	\$233.21	\$234.58	
62	\$1,015.16	\$946.44	\$238.14	\$236.88	
64	\$1,054.11	\$948.91	\$242.60	\$239.18	

Baseline Costs for Post-65 Retirees and Spouses Calendar Year 2024

	Medicare A&B			B Only				
	Med	lical*	Prescription Drug		Medical		Prescription Drug	
Age	Male	Female	Male	Female	Male	Female	Male	Female
65	\$46.49	\$41.71	\$233.11	\$228.97	\$320.07	\$287.12	\$233.11	\$228.97
70	\$55.71	\$49.24	\$241.24	\$234.37	\$383.53	\$339.02	\$241.24	\$234.37
75	\$63.19	\$55.19	\$246.57	\$239.69	\$435.01	\$379.96	\$246.57	\$239.69
80	\$68.92	\$59.55	\$249.15	\$244.94	\$474.50	\$409.93	\$249.15	\$244.94
85	\$72.92	\$62.31	\$249.39	\$250.11	\$502.02	\$428.95	\$249.39	\$250.11
90	\$74.48	\$63.20	\$249.39	\$250.11	\$512.77	\$435.09	\$249.39	\$250.11

^{*}Blended per-capita medical claims for retirees who are enrolled in either the fully-insured Medicare Advantage plan or the self-insured Alternative and Part A Only options.

Baseline Costs for Children Calendar Year 2024

Medical		Prescription Drug		
	Non-		Non-	
Medicare	Medicare	Medicare	Medicare	
\$9.30	\$298.34	\$382.52	\$107.03	





SUMMARY OF PARTICIPANT DATA

Summary of Participant Data

Counts of Retirees and Beneficiaries by Age as of August 31, 2022

Age	Retirees	Survivors	Spouses	Children	Total
Under 25	0	38	2	5,431	5,471
25-29	0	10	0	1,126	1,136
30-34	1	2	1	117	121
35-39	19	9	16	138	182
40-44	50	8	22	92	172
45-49	162	27	78	59	326
50-54	2,424	68	454	33	2,979
55-59	12,074	146	1,669	23	13,912
60-64	29,804	379	5,240	8	35,431
65-69	32,260	530	4,100	9	36,899
70-74	38,938	847	5,517	1	45,303
75-79	31,652	1,111	5,077	1	37,841
80-84	18,797	1,141	2,880	1	22,819
85-89	10,240	1,009	1,167	0	12,416
90-94	4,453	535	266	0	5,254
95-99	1,172	145	27	0	1,344
100 and over	154	13	0	0	167
Total	182,200	6,018	26,516	7,039	221,773

Counts of Terminated Vested Participants by Age as of August 31, 2022

Age	Total
Under 35	3
35-39	125
40-44	1,324
45-49	2,524
50-54	3,498
55-59	3,246
60-64	2,242
65 and over	1,009
Total	13,971

The total OPEB liability as of August 31, 2023 was based on a roll forward of the August 31, 2022 valuation.



Distribution of Active Members by Age and by Years of Service As of August 31, 2022

	Years of Credited Service											
	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 +	Total
Attained	Count &	Count &	Count &	Count &	Count &	Count &	Count &	Count &	Count &	Count &	Count &	Count &
Age	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.
Under 25	13,209	4,886	1,693	662	239							20,689
Olider 25	\$29,407	\$36,738	\$28,397	\$26,229	\$28,747							\$30,946
	, -, -	, ,	, -,	, -,	, -,							, , -
25-29	16,679	14,348	13,714	10,476	14,541	78						69,836
	\$36,190	\$47,121	\$49,153	\$51,089	\$52,259	\$39,963						\$46,567
30-34	11,116	7,518	8,424	7,856	43,141	8,268	102					86,425
30-34	\$32,411	\$42,513	\$43,804	\$48,238	\$56,603	\$60,880	\$50,759					\$50,660
	, - ,	, ,-	, -,	, -,	, ,	, ,	, ,					, ,
35-39	9,136	6,097	6,975	6,080	29,684	28,913	8,450	82				95,417
	\$30,788	\$40,148	\$41,185	\$44,222	\$53,145	\$63,656	\$66,426	\$54,363				\$53,094
40-44	7,768	5,202	6,151	5,538	24,614	19,888	28,564	6,730	62			104,517
40-44	\$30,848	\$40,285	\$40,686	\$43,252	\$49,923	\$60,555	\$68,155	\$70,852	\$60,608			\$55,488
	φοσ,ο .σ	ψ 10,200	ψ 10,000	Ψ .0,202	ψ .5/525	ψου,σσσ	¥00,100	ψ. 0,002	φοσ,σσσ			φου, ισσ
45-49	6,063	4,186	5,044	4,495	20,947	15,547	19,473	22,598	4,884	40		103,277
	\$30,904	\$39,256	\$39,462	\$42,144	\$47,505	\$56,137	\$64,051	\$72,755	\$75,281	\$59,497		\$56,832
50-54	E 2E0	2 576	4 205	2 005	10154	14024	17.256	17,010	17.615	2 211	38	105,223
30-34	5,359 \$30,100	3,576 \$37,938	4,295 \$38,400	3,885 \$39,744	18,154 \$45,259	14,824 \$52,254	17,256 \$58,809	\$66,180	17,615 \$76,452	3,211 \$78,359	\$68,576	\$56,584
	750,100	737,330	750,400	755,744	743,233	732,234	750,005	700,100	₹70, 4 32	710,333	700,570	750,504
55-59	4,072	2,671	3,205	2,968	13,384	11,030	13,986	12,927	8,296	6,875	1,371	80,785
	\$27,709	\$35,259	\$35,586	\$36,968	\$41,451	\$47,808	\$52,718	\$57,104	\$67,226	\$79,014	\$78,785	\$51,957
60-64	2,691	1,729	2,248	2,009	9,645	7,408	9,979	8,859	5,809	3,293	2,652	56,322
	\$25,812	\$32,521	\$33,395	\$34,500	\$38,800	\$44,128	\$49,398	\$53,236	\$58,405	\$67,208	\$80,399	\$48,108
65 +	2,008	1,238	1,635	1,558	6,617	4,870	5,124	4,507	3,383	2,178	2,017	35,135
	\$21,551	\$27,637	\$28,656	\$29,325	\$33,393	\$38,351	\$44,758	\$50,171	\$53,628	\$58,406	\$69,911	\$42,205
Total	78,101	51,451	53,384	45,527	180,966	110,826	102,934	72,713	40,049	15,597	6,078	757,626
	\$31,337	\$41,091	\$41,747	\$44,117	\$49,632	\$56,301	\$60,572	\$64,460	\$69,828	\$73 <i>,</i> 459	\$76 <i>,</i> 480	\$51,938

The total OPEB liability as of August 31, 2023 was based on a roll forward of the August 31, 2022 valuation.





VALUATION METHODS AND ACTUARIAL ASSUMPTIONS

Valuation Methods and Actuarial Assumptions

Valuation Methods

Actuarial Cost Method – Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using the **Individual Entry Age Normal 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 Net OPEB Liability.



Actuarial Assumptions

This actuarial valuation of the OPEB offered through TRS-Care is similar to the actuarial valuations performed for the Teacher Retirement System of Texas, except that the OPEB valuation is more complex. All the demographic assumptions (rates of retirement, termination, and disability) and most of the economic assumptions (general inflation and salary increases) used in this OPEB Valuation were identical to those used in the respective TRS valuation. Since the assumptions were based upon a recent actuarial experience study and they were reasonable for this OPEB Valuation, they were employed in this report.

The following assumptions used for members of TRS are identical to the assumptions employed in the August 31, 2022 TRS annual actuarial valuation:

- Rates of Mortality
- Rates of Retirement
- Rates of Termination
- Rates of Disability Incidence
- General Inflation
- Wage Inflation
- Salary Increases

Economic Assumptions

The discount rate assumption was 4.13% as of the reporting date.



Health Care Trend Assumptions

Health cost increases are displayed in the following table:

				Pre-65	Post-65
	Pre-65	Post-65		Retiree	Retiree
Year	Medical	Medical	Rx	Premiums	Premiums
2025	7.00%	7.75%	7.75%	7.15%	7.75%
2026	6.75%	52.45%*	7.25%	6.85%	12.00%
2027	6.50%	6.75%	6.75%	6.55%	6.75%
2028	6.25%	6.25%	6.25%	6.25%	6.25%
2029	6.00%	6.00%	6.00%	6.05%	6.05%
2030	5.75%	5.75%	5.75%	5.75%	5.75%
2031	5.50%	5.50%	5.50%	5.55%	5.55%
2032	5.25%	5.25%	5.25%	5.25%	5.25%
2033	5.00%	5.00%	5.00%	5.05%	5.05%
2034	4.75%	4.75%	4.75%	4.75%	4.75%
2035	4.50%	4.50%	4.50%	4.50%	4.50%
2036	4.50%	4.50%	4.50%	4.50%	4.50%
2037 & Beyond	4.25%	4.25%	4.25%	4.25%	4.25%

Baseline claims were developed for calendar year 2024. Trend increases are assumed to occur January 1 of each year beginning January 1, 2025. Trend for retiree premiums is based on weighting of medical and Rx trend. Short-term trend is based on expectations of GRS healthcare actuaries and TRS staff. The ultimate trend assumption of 4.25% is based on 2.30% inflation assumption plus 1.95% long-term real GDP growth.

*The 52.45% increase in 2026 is due to the expected growth of the fully-insured Medicare Advantage premiums, which are currently very low dollar amounts.



Aging Factors

In any given year, the cost of medical and pharmacy benefits vary by age. As the ages of employees and retirees in the covered population increase so does the cost of benefits. Morbidity tables are employed to develop Per Capita Costs at every relevant age. The following table represents the percent by which the cost of benefits for non-disabled lives at one age is higher than the cost for the previous age. For example, according to the following table, the cost of benefits for a male age 56 is 1.90% higher than for one age 55. As discussed previously, disabled lives exhibited minimal variation by age and sex. These percentages below are separate from the annual Medical Trend, which operates to increase costs independent of and in addition to the Aging Factors shown below. These factors were developed based on actual experience data gathered from TRS-Care.

	Cost Increase by Age						
Sample	Me	dical	Rx				
Ages	Male Female		Male	Female			
45	0.00%	0.00%	0.00%	0.00%			
50	0.00%	0.00%	0.00%	0.00%			
55	1.90%	0.13%	1.42%	0.50%			
60	1.90%	0.13%	1.08%	0.49%			
65	4.26%	3.92%	0.79%	0.47%			
70	2.93%	2.67%	0.54%	0.46%			
75	2.04%	1.81%	0.30%	0.44%			
80	1.36%	1.14%	0.07%	0.42%			
85	0.81%	0.58%	0.00%	0.00%			
90	0.00%	0.00%	0.00%	0.00%			

Election Percentages

Normal Retirement: It was assumed that 62% of members retiring prior to attainment of age 65 and 25% of members retiring after attainment of age 65 would choose to receive retiree health care benefits. 30% of pre-65 retirees were assumed to discontinue their coverage at age 65.

Disability Retirement: It was assumed that 100% of members retiring through disability retirement would choose to receive retiree health care benefits.

Death while Active: It was assumed that 15% of the eligible spouses of employees who die while actively employed would choose to receive retiree health care benefits.

Two-Person Coverage: Of those assumed to elect coverage, 15% were assumed to elect two-person coverage, if eligible. For those that elect two-person coverage, it was assumed that coverage would continue to the spouse upon death of the retiree, if eligible.

Benefit Election of Vested Terminated Members

Vested terminated members were assumed to commence their retirement at the earliest age the member is eligible for unreduced retirement. The assumed rates of participation and two-person coverage were the same as those used for Normal Retirement. Because vested terminated members with less than 15 years of coverage would need to delay their retirement past the age of 65 in order to be eligible for TRS-Care, only vested terminated members with at least 15 years of service are assumed to participate in TRS-Care.



Medicare Part D Reimbursements

Medicare eligible members participate in an Employer Group Waiver Plan (EGWP) with a "Wrap" feature. The key components which are expected to reduce costs include:

- 1. Under a standard or model Medicare Part D program, a member is responsible for 100 percent of the prescription costs from the initial coverage limit to the catastrophic coverage limit. This coverage gap is also known as the "donut hole". The discount is also applied to the member's true out of pocket costs which allows federal catastrophic coverage to be reached sooner. The "donut hole" coverage gap is reduced incrementally between 2011 and 2020.
- 2. As the coverage gap diminishes, the sponsor's "Wrap" supplemental benefits within the "donut hole" decreases.
- 3. Federal prescription drug subsidies must be used to reduce the cost of providing benefits to Medicare eligible members, resulting in lower premium rates. This feature allows the sponsor to reflect certain EGWP-Wrap savings in the GASB 75 valuation.

In order to reflect the substantive plan, the age-rated prescription drug claims shown in Section G are net of EGWP related reimbursements. Per paragraph B47 from Appendix B of GASB Statement No. 75, "In contrast, the Board concluded that Medicare benefits that an employer is providing as a conduit for the federal government, such as through an Employer Group Waiver Plan in which eligible employees are enrolled in Medicare Part D, are not part of the substantive OPEB plan offered by the employer because the federal government is primarily responsible for and has assumed the risks associated with providing the benefits." By adjusting the claims downward by the EGWP related reimbursements, the projected future benefits reflect the risks borne by TRS-Care.



Miscellaneous and Technical Assumptions

Administrative Expenses Third party administrative expenses related to the delivery of health

care benefits are included in the age-adjusted claims discussed in

Section G.

Rx RebatesThe age-rated prescription drug claims shown in Section G are net of

expected pharmaceutical manufacturer rebates.

Pay Increase Timing Beginning of (fiscal year). This is equivalent to assuming that reported

pays represent amounts paid to members during the year ended on

the valuation date.

Decrement TimingRetirement decrements are assumed to occur 9 months after the

valuation date. Termination decrements are assumed to occur at the beginning of the year. All other decrements are assumed to occur

mid-year.

Decrement Operation Disability is added to the retirement decrement during retirement

eligibility. The withdrawal decrement ends at normal retirement

eligibility.

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.

Spousal Age Difference Male spouses are assumed to be three years older than female

spouses.

Medicare Coverage 90% of members hired before 1986 and 100% of members hired after

1986 were assumed to be eligible for Medicare on attainment of age 65. All future disabled retirees were assumed to be eligible for Medicare at age 65. For disabled retirees who are younger than 65, 25% were assumed to be eligible for Medicare coverage at time of

disability.

Experience StudiesThe demographic assumptions were based on the experience study

performed for the Teachers Retirement System of Texas for the

period ending August 31, 2021.

The OPEB specific assumptions (health care trend, plan participation,

etc.) are reviewed during each OPEB valuation and updated as

needed.



Assumption Changes and Plan Experience

Assumption, Method, and Plan Changes

- 1. The discount rate changed from 3.91% as of August 31, 2022 to 4.13% as of August 31, 2023. This change decreased the TOL.
- 2. Demographic and economic assumptions were updated based on the experience study performed for TRS for the period ending August 31, 2021.

Difference Between Expected and Actual Experience

The primary driver of the \$2.2 billion experience gain was favorable claims experience, which resulted in lower overall 2024 retiree claims estimates than previously assumed.



SECTION J

GLOSSARY OF TERMS

Accrued Service Service credited under the system that 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 OPEB 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 payments at predetermined rates of interest and probabilities of

payment.

Actuarial Valuation The actuarial valuation report determines, as of the actuarial valuation

date, the service cost, total OPEB liability, and related actuarial present

value of projected benefit payments for OPEB.

Actuarial Valuation Date The date as of which an actuarial valuation is performed.



Actuarially Determined
Contribution (ADC) or Annual
Required Contribution (ARC)

A calculated contribution into an OPEB 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.

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 OPEB Plan (cost-sharing OPEB plan)

A multiple-employer defined benefit OPEB plan in which the OPEB obligations to the employees of more than one employer are pooled and OPEB plan assets can be used to pay the benefits of the employees of any employer that provides benefits through the OPEB plan.

Covered-Employee Payroll

The payroll of employees that are provided with benefits through the OPEB plan.

Deferred Inflows and Outflows

The deferred inflows and outflows of OPEB resources are amounts used under GASB Statement No. 75 in developing the annual OPEB expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in the OPEB expense should be included in the deferred inflows or outflows of resources.

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 OPEB 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 cost 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 ages(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.

Fiduciary Net Position

The fiduciary net position is the market value of the assets of the trust dedicated to the defined benefit provisions.

GASB

The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for 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. 74, the money-weighted rate of return is calculated as the internal rate of return on OPEB plan investments, net of OPEB plan investment expense.

Multiple-Employer Defined Benefit OPEB Plan

A multiple-employer plan is a defined benefit OPEB plan that is used to provide OPEB payments 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 OPEB Liability (NOL)

The NOL is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan.

Non-Employer Contributing Entities

Non-employer contributing entities are entities that make contributions to an OPEB plan that is used to provide OPEB payments to the employees of other entities. For purposes of the GASB accounting statements, plan members are not considered non-employer contributing entities.



Normal Cost

The portion of the actuarial present value allocated to a valuation year is called the normal cost. For purposes of application to the requirements of this Statement, the term normal cost is the equivalent of service cost.

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.

Total OPEB Expense

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

- Service Cost
- 2. Interest on the Total OPEB Liability
- 3. Current-Period Benefit Changes
- 4. Employee Contributions (made negative for addition here)
- 5. Projected Earnings on Plan Investments (made negative for addition here)
- 6. OPEB Plan Administrative Expense
- 7. Other Changes in Plan Fiduciary Net Position
- 8. Recognition of Outflow (Inflow) of Resources due to Liabilities
- 9. Recognition of Outflow (Inflow) of Resources due to Assets

Total OPEB Liability (TOL)

The TOL 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 assets used in determining the unfunded liability of the plan. For purposes of GASB Statement Nos. 74 and 75, the valuation assets are equal to the market value of assets.

