Novato Unified School District

Actuarial Study of
Retiree Health Liabilities Under GASB 74/75
Valuation Date: June 30, 2022
Measurement Date: June 30, 2022
For Fiscal Year-End: June 30, 2022

Prepared by:
Total Compensation Systems, Inc.

Date: February 1, 2023

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Novato Unified School District
Actuarial Study of Retiree Health Liabilities

PART I: EXECUTIVE SUMMARY

A. Introduction

This report was produced by Total Compensation Systems, Inc. for Novato Unified School District to determine the liabilities associated with its current retiree health program as of a June 30, 2022 measurement date and to provide the necessary information to determine accounting entries for the fiscal year ending June 30, 2022. This report may not be suitable for other purposes such as determining employer contributions or assessing the potential impact of changes in plan design.

Different users of this report will likely be interested in different sections of information contained within. We anticipate that the following portions may be of most interest depending on the reader:

- A high level comparison of key results from the current year to the prior year is shown on this page.
- The values we anticipate will be disclosed in the June 30, 2022 year-end financials are shown on pages 2 and 3.
- Additional accounting information is shown on page 12 and Appendices C and D.
- Description and details of measured valuation liabilities can be found beginning on page 10.
- Guidance regarding the next actuarial valuation for the June 30, 2023 measurement date is provided on page 13.

B. Key Results

Novato Unified School District uses an Actuarial Measurement Date that is the same as its Fiscal Year-End. This means that these actuarial results measured as of June 30, 2022 will be used directly for the June 30, 2022 Fiscal Year-End.

Key Results	**Current Year** *June 30, 2022 Measurement Date* *for June 30, 2022 Fiscal Year-End*	**Prior Year** *June 30, 2021 Measurement Date* *for June 30, 2021 Fiscal Year-End*
Total OPEB Liability (TOL)	$1,161,823	$1,319,622
Fiduciary Net Position (FNP)	$0	$0
Net OPEB Liability (NOL)	$1,161,823	$1,319,622
Service Cost *(for year following)*	$91,260	$121,444
Estimated Pay-as-you-go Amount *(for year following)*	$63,693	$63,175
GASB 75 OPEB Expense *(for year ending)*	$98,200	$114,379

Refer to results section beginning on page 10 or the glossary on page 26 for descriptions of the above items.

Key Assumptions	**Current Year** *June 30, 2022 Measurement Date* *for June 30, 2022 Fiscal Year-End*	**Prior Year** *June 30, 2021 Measurement Date* *for June 30, 2021 Fiscal Year-End*
Valuation Interest Rate	3.54%	2.16%
Expected Rate of Return on Assets	N/A	N/A
Long-Term Medical Trend Rate	4.00%	4.00%
Projected Payroll Growth	2.75%	2.75%

The following table shows the “pay as you go” projection of annual payments for the employer share of retiree health costs. Although actual payments are certain to vary from those shown below, these projections can be useful for planning purposes. See page 11 for amounts below broken out by employee classification, if applicable.

Year Beginning July 1	***Projected Benefit Payments***
2022	$63,693
2023	$76,065
2024	$86,923
2025	$89,166
2026	$104,163
2027	$109,181
2028	$128,864
2029	$121,328
2030	$116,303
2031	$131,880

C. Summary of GASB 75 Accounting Results

1. Changes in Net OPEB Liability

The following table shows the reconciliation of the June 30, 2021 Net OPEB Liability (NOL) in the prior valuation to the June 30, 2022 NOL. A more detailed version of this table can be found on page 12.

	TOL	***FNP***	***NOL***
Balance at June 30, 2021 Measurement Date	**$1,319,622**	**$0**	**$1,319,622**
Service Cost	$121,444	$0	$121,444
Interest on TOL / Return on FNP	$29,133	$0	$29,133
Employer Contributions	$0	$63,175	($63,175)
Benefit Payments	($63,175)	($63,175)	$0
Administrative Expenses	$0	$0	$0
Experience (Gains)/Losses	($163,563)	$0	($163,563)
Changes in Assumptions	($81,638)	$0	($81,638)
Other	$0	$0	$0
Net Change	($157,799)	$0	($157,799)
Actual Balance at June 30, 2022 Measurement Date	**$1,161,823**	**$0**	**$1,161,823**

2. Deferred Inflows and Outflows

Changes in the NOL arising from certain sources are recognized on a deferred basis. The following tables show the balance of each deferral item as of the measurement date and the scheduled future recognition. A reconciliation of these balances can be found on page 12 while the complete deferral history is shown beginning on page 23.

Balances at June 30, 2022 Fiscal Year-End	*Deferred Outflows*	*Deferred Inflows*
Differences between expected and actual experience	$0	($246,019)
Changes in assumptions	$24,126	($276,891)
Differences between projected and actual return on assets	$0	$0
Total	$24,126	($522,910)

To be recognized fiscal year ending June 30:	*Deferred Outflows*	*Deferred Inflows*
2023	$3,136	($55,513)
2024	$3,136	($55,513)
2025	$3,136	($55,513)
2026	$3,136	($55,513)
2027	$3,136	($55,513)
Thereafter	$8,446	($245,345)
Total	$24,126	($522,910)

3. OPEB Expense

Under GASB 74 and 75, OPEB expense includes service cost, interest cost, administrative expenses, and change in TOL due to plan changes, adjusted for deferred inflows and outflows. OPEB expense can also be derived as change in net position, adjusted for employer contributions, which can be found on page 12.

To be recognized fiscal year ending June 30, 2022	*Expense Component*
Service Cost	$121,444
Interest Cost	$29,133
Expected Return on Assets	$0
Administrative Expenses	$0
Recognition of Experience (Gain)/Loss Deferrals	($25,349)
Recognition of Assumption Change Deferrals	($27,028)
Recognition of Investment (Gain)/Loss Deferrals	$0
Employee Contributions	$0
Changes in Benefit Terms	$0
Net OPEB Expense for fiscal year ending June 30, 2022	$98,200

4. Adjustments

We are unaware of any adjustments that need to be made.

5. Trend and Interest Rate Sensitivities

The following presents what the Net OPEB Liability would be if it were calculated using a discount rate assumption or a healthcare trend rate assumption one percent higher or lower than the current assumption.

Net OPEB Liability at June 30, 2022 Measurement Date	*Discount Rate*	*Healthcare Trend Rate*
1% Decrease in Assumption	$1,220,808	$1,132,334
Current Assumption	$1,161,823	$1,161,823
1% Increase in Assumption	$1,104,245	$1,192,390

D. Description of Retiree Benefits

Following is a description of the current retiree benefit plan:

	Certificated	***Classified***	***Management***
Benefit types provided	Medical, dental and vision	Medical, dental and vision	Medical, dental and vision
Duration of Benefits	To age 65	To age 65	To age 65
Required Service	5 years; Prorated for 5 to 10 years	5 years; Prorated for 5 to 15 years	5 years; Prorated for 5 to 15 years
Minimum Age	55	55	55
Dependent Coverage	Yes	Yes	Yes
District Contribution %	100% to cap	100% to cap	100% to cap
District Cap	$200 per month	$200 per month	$200 per month

E. Summary of Valuation Data

This report is based on census data provided to us as of October, 2023. Distributions of participants by age and service can be found on page 17. For non-lifetime benefits, the active count below excludes employees for whom it is not possible to receive retiree benefits (e.g. employees who are already older than the maximum age to which benefits are payable or who will not accrue the required service prior to reaching the maximum age).

	Current Year *June 30, 2022 Valuation Date* *June 30, 2022 Measurement Date*	**Prior Year** *June 30, 2020 Valuation Date* *June 30, 2021 Measurement Date*
Active Employees eligible for future benefits		
Count	585	655
Average Age	47.6	47.2
Average Years of Service	10.6	10.2
Retirees currently receiving benefits		
Count	37	23
Average Age	62.2	62.2

We were not provided with information about any terminated, vested employees.

F. Certification

The actuarial information in this report is intended solely to assist Novato Unified School District in complying with Governmental Accounting Standards Board Accounting Statement 74 and 75 and, unless otherwise stated, fully and fairly discloses actuarial information required for compliance. Nothing in this report should be construed as an accounting opinion, accounting advice or legal advice. TCS recommends that third parties retain their own actuary or other qualified professionals when reviewing this report. TCS's work is prepared solely for the use and benefit of Novato Unified School District. Release of this report may be subject to provisions of the Agreement between Novato Unified School District and TCS. No third party recipient of this report product should rely on the report for any purpose other than accounting compliance. Any other use of this report is unauthorized without first consulting with TCS.

This report is for fiscal year July 1, 2021 to June 30, 2022, using a measurement date of June 30, 2022. The calculations in this report have been made based on our understanding of plan provisions and actual practice at the time we were provided the required information. We relied on information provided by Novato Unified School District. Much or all of this information was unaudited at the time of our evaluation. We reviewed the information provided for reasonableness, but this review should not be viewed as fulfilling any audit requirements. We relied on the following materials to complete this study:

- We used paper reports and digital files containing participant demographic data from the District personnel records.

- We used relevant sections of collective bargaining agreements provided by the District.

All costs, liabilities, and other estimates are based on actuarial assumptions and methods that comply with all applicable Actuarial Standards of Practice (ASOPs). Each assumption is deemed to be reasonable by itself, taking into account plan experience and reasonable future expectations and in combination represent our estimate of anticipated experience of the Plan.

This report contains estimates of the Plan's financial condition and future results only as of a single date. Future results can vary dramatically and the accuracy of estimates contained in this report depends on the actuarial assumptions used. This valuation cannot predict the Plan's future condition nor guarantee its future financial soundness. Actuarial valuations do not affect the ultimate cost of Plan benefits, only the timing of Plan contributions. While the valuation is based on individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. Determining results using alternative assumptions (except for the alternate discount and trend rates shown in this report) is outside the scope of our engagement.

Future actuarial measurements may differ significantly from those presented in this report due to factors such as, but not limited to, 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 measurement methodology (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. We were not asked to perform analyses to estimate the potential range of such future measurements.

The signing actuary is independent of Novato Unified School District and any plan sponsor. TCS does not intend to benefit from and assumes no duty or liability to other parties who receive this report. TCS is not aware of any relationship that would impair the objectivity of the opinion.

On the basis of the foregoing, I hereby certify that, to the best of my knowledge and belief, this report is complete and has been prepared in accordance with generally accepted actuarial principles and practices and all applicable Actuarial Standards of Practice. I meet the Qualifications Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

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PART II: LIABILITIES AND COSTS FOR RETIREE BENEFITS

A. Introduction.

We calculated the actuarial present value of projected benefit payments (APVPBP) separately for each participant. We determined eligibility for retiree benefits based on information supplied by Novato Unified School District. We then selected assumptions that, based on plan provisions and our training and experience, represent our best prediction of future plan experience. For each participant, we applied the appropriate assumption factors based on the participant's age, sex, length of service, and employee classification.

The actuarial assumptions used for this study are summarized beginning on page 14.

B. Liability for Retiree Benefits.

For each participant, we projected future premium costs using an assumed trend rate (see Appendix C). We multiplied each year's benefit payments by the probability that benefits will be paid; i.e. based on the probability that the participant is living, has not terminated employment, has retired and remains eligible. The probability that benefit will be paid is zero if the participant is not eligible. The participant is not eligible if s/he has not met minimum service, minimum age or, if applicable, maximum age requirements.

The product of each year's benefit payments and the probability the benefit will be paid equals the expected cost for that year. We multiplied the above expected cost figures by the probability that the retiree would elect coverage. A retiree may not elect to be covered if retiree health coverage is available less expensively from another source (e.g. Medicare risk contract) or the retiree is covered under a spouse's plan. Finally, we discounted the expected cost for each year to the measurement date June 30, 2022 at 3.54% interest.

For any ***current retirees***, the approach used was similar. The major difference is that the probability of payment for current retirees depends only on mortality and age restrictions (i.e. for retired employees the probability of being retired and of not being terminated are always both 100%).

The value generated from the process described above is called the actuarial present value of projected benefit payments (APVPBP). We added APVPBP for each participant to get the total APVPBP for all participants which is the estimated present value of all future retiree health benefits for all **current** participants. The APVPBP is the amount on June 30, 2022 that, if all actuarial assumptions are exactly right, would be sufficient to expense all promised benefits until the last participant dies or reaches the maximum eligibility age. However, for most actuarial and accounting purposes, the APVPBP is not used directly but is instead apportioned over the lifetime of each participant as described in the following sections.

C. Actuarial Accrual

Accounting principles provide that the cost of retiree benefits should be "accrued" over employees' working lifetime. For this reason, the Governmental Accounting Standards Board (GASB) issued in June of 2015 Accounting Standards 74 and 75 for retiree health benefits. These standards apply to all public employers that pay any part of the cost of retiree health benefits for current or future retirees (including early retirees), whether they pay directly or indirectly (via an "implicit rate subsidy").

To actuarially accrue retiree health benefits requires determining the amount to expense each year so that the liability accumulated at retirement is, on average, sufficient (with interest) to cover all retiree health expenditures without the need for additional expenses. There are many different ways to determine the annual accrual amount. The calculation method used is called an "actuarial cost method" and uses the APVPBP to develop expense and liability figures. Furthermore, the APVPBP should be accrued over the working lifetime of employees.

In order to accrue the APVPBP over the working lifetime of employees, actuarial cost methods apportion the APVPBP into two parts: the portions attributable to service rendered prior to the measurement date (the past service liability or Total OPEB Liability (TOL) under GASB 74 and 75) and to service after the measurement date but prior to retirement (the future service liability or present value of future service costs). Of the future service liability, the portion attributable to the single year immediately following the measurement date is known as the normal cost or Service Cost under GASB 74 and 75.

The service cost can be thought of as the value of the benefit earned each year if benefits are accrued during the working lifetime of employees. The actuarial cost method mandated by GASB 75 is the "entry age actuarial cost method". Under the entry age actuarial cost method, the actuary determines the service cost as the annual amount needing to be expensed from hire until retirement to fully accrue the cost of retiree health benefits. Under GASB 75, the service cost is calculated to be a level percentage of each employee's projected pay.

D. Actuarial Assumptions

The APVPBP and service cost are determined using several key assumptions:

- The current ***cost of retiree health benefits*** (often varying by age, Medicare status and/or dependent coverage). The higher the current cost of retiree benefits, the higher the service cost.

- The ***"trend" rate*** at which retiree health benefits are expected to increase over time. A higher trend rate increases the service cost. A "cap" on District contributions can reduce trend to zero once the cap is reached thereby dramatically reducing service costs.

- ***Mortality rates*** varying by age and sex (and sometimes retirement or disability status). If employees die prior to retirement, past contributions are available to fund benefits for employees who live to retirement. After retirement, death results in benefit termination or reduction. Although higher mortality rates reduce service costs, the mortality assumption is not likely to vary from employer to employer.

- ***Employment termination rates*** have the same effect as mortality inasmuch as higher termination rates reduce service costs. Employment termination can vary considerably between public agencies.

- The ***service requirement*** reflects years of service required to earn full or partial retiree benefits. While a longer service requirement reduces costs, cost reductions are not usually substantial unless the service period exceeds 20 years of service.

- ***Retirement rates*** determine what proportion of employees retire at each age (assuming employees reach the requisite length of service). Retirement rates often vary by employee classification and implicitly reflect the minimum retirement age required for eligibility. Retirement rates also depend on the amount of pension benefits available. Higher retirement rates increase service costs but, except for differences in minimum retirement age, retirement rates tend to be consistent between public agencies for each employee type.

- ***Participation rates*** indicate what proportion of retirees are expected to elect retiree health benefits if a significant retiree contribution is required. Higher participation rates increase costs.

- The ***discount rate*** estimates investment earnings for assets earmarked to cover retiree health benefit liabilities. The discount rate depends on the nature of underlying assets for funded plans. The rate used for a funded plan is the **real** rate of return expected for plan assets plus the long term inflation assumption. For an unfunded plan, the discount rate is based on an index of 20 year General Obligation municipal bonds rated AA or higher. For partially funded plans, the discount rate is a blend of the funded and unfunded rates.

E. Total OPEB Liability

The assumptions listed above are not exhaustive, but are the most common assumptions used in actuarial cost calculations. If all actuarial assumptions are exactly met and an employer expensed the service cost every year for all past and current employees and retirees, a sizeable liability would have accumulated (after adding interest and subtracting retiree benefit costs). The liability that would have accumulated is called the Total OPEB Liability (TOL). The excess of TOL over the value of plan assets is called the Net OPEB Liability (NOL). Under GASB 74 and 75, in order for assets to count toward offsetting the TOL, the assets have to be held in an irrevocable trust that is safe from creditors and can only be used to provide OPEB benefits to eligible participants.

Changes in the TOL can arise in several ways - e.g., as a result of plan changes or changes in actuarial assumptions. Change in the TOL can also arise from actuarial gains and losses. Actuarial gains and losses result from differences between actuarial assumptions and actual plan experience. GASB 75 allows certain changes in the TOL to be deferred (i.e. deferred inflows and outflows of resources).

Under GASB 74 and 75, a portion of actuarial gains and losses can be deferred as follows:

- Investment gains and losses are deferred five years.

- Experience gains and losses are deferred over the Expected Average Remaining Service Lives (EARSL) of plan participants. In calculating the EARSL, terminated employees (primarily retirees) are considered to have a working lifetime of zero. This often makes the EARSL quite short.

- Liability changes resulting from changes in economic and demographic assumptions are also deferred based on the EARSL.

- Liability changes resulting from plan changes, for example, cannot be deferred.

F. Valuation Results

This section details the measured values of the concepts described on the previous pages.

1. Actuarial Present Value of Projected Benefit Payments (APVPBP)

Actuarial Present Value of Projected Benefit Payments as of June 30, 2022 Valuation Date

	Total	*Certificated*	*Classified*	*Management*
Active: Pre-65 Benefit	$1,870,100	$1,200,479	$536,209	$133,412
Post-65 Benefit	$0	$0	$0	$0
Subtotal	$1,870,100	$1,200,479	$536,209	$133,412
Retiree: Pre-65 Benefit	$170,468	$93,088	$74,790	$2,590
Post-65 Benefit	$0	$0	$0	$0
Subtotal	$170,468	$93,088	$74,790	$2,590
Grand Total	$2,040,568	$1,293,567	$610,999	$136,002
Subtotal Pre-65 Benefit	$2,040,568	$1,293,567	$610,999	$136,002
Subtotal Post-65 Benefit	$0	$0	$0	$0

2. Service Cost

The service cost represents the value of the benefit earned during a single year of employment. It is the APVPBP spread over the expected working lifetime of the employee and divided into annual segments. We applied an "entry age" actuarial cost method to determine funding rates for active employees. The table below summarizes the calculated service cost.

Service Cost Valuation Year Beginning July 1, 2022

	Total	*Certificated*	*Classified*	*Management*
# of Eligible Employees	585	345	204	36
First Year Service Cost				
Pre-65 Benefit	$91,260	$49,680	$36,108	$5,472
Post-65 Benefit	$0	$0	$0	$0
Total	$91,260	$49,680	$36,108	$5,472

Accruing retiree health benefit costs using service costs levels out the cost of retiree health benefits over time and more fairly reflects the value of benefits "earned" each year by employees. While the service cost for each employee is targeted to remain level as a percentage of covered payroll, the service cost as a dollar amount would increase each year based on covered payroll. Additionally, the overall service cost may grow or shrink based on changes in the demographic makeup of the employees from year to year.

3. Total OPEB Liability and Net OPEB Liability

If actuarial assumptions are borne out by experience, the District will fully accrue retiree benefits by expensing an amount each year that equals the service cost. If no accruals had taken place in the past, there would be a shortfall of many years' accruals, accumulated interest and forfeitures for terminated or deceased employees. This shortfall is called the Total OPEB Liability. We calculated the Total OPEB Liability (TOL) as the APVPBP minus the present value of future service costs. To the extent that benefits are funded through a GASB 74 qualifying trust, the trust's Fiduciary Net Position (FNP) is subtracted to get the NOL. The FNP is the value of assets adjusted for any applicable payables and receivables as shown in the table on page 15.

Total OPEB Liability and Net OPEB Liability as of June 30, 2022 Valuation Date

	Total	*Certificated*	*Classified*	*Management*
Active: Pre-65 Benefit	991,355	$657,267	$258,930	$75,158
Active: Post-65 Benefit	$0	$0	$0	$0
Subtotal	$991,355	$657,267	$258,930	$75,158
Retiree: Pre-65 Benefit	$170,468	$93,088	$74,790	$2,590
Retiree: Post-65 Benefit	$0	$0	$0	$0
Subtotal	$170,468	$93,088	$74,790	$2,590
Subtotal: Pre-65 Benefit	$1,161,823	$750,355	$333,720	$77,748
Subtotal: Post-65 Benefit	$0	$0	$0	$0
Total OPEB Liability (TOL)	$1,161,823	$750,355	$333,720	$77,748
Fiduciary Net Position as of June 30, 2022	$0			
Net OPEB Liability (NOL)	$1,161,823			

4. "Pay As You Go" Projection of Retiree Benefit Payments

We used the actuarial assumptions shown in Appendix C to project the District's ten year retiree benefit outlay. Because these cost estimates reflect average assumptions applied to a relatively small number of participants, estimates for individual years are **certain** to be ***in***accurate. However, these estimates show the size of cash outflow.

The following table shows a projection of annual amounts needed to pay the District's share of retiree health costs.

Year Beginning July 1	*Total*	*Certificated*	*Classified*	*Management*
2022	$63,693	$42,054	$20,343	$1,296
2023	$76,065	$41,458	$32,336	$2,271
2024	$86,923	$46,364	$39,124	$1,435
2025	$89,166	$42,897	$43,916	$2,353
2026	$104,163	$57,537	$44,679	$1,947
2027	$109,181	$65,318	$41,236	$2,627
2028	$128,864	$77,774	$46,426	$4,664
2029	$121,328	$70,670	$44,302	$6,356
2030	$116,303	$70,403	$38,146	$7,754
2031	$131,880	$79,646	$41,943	$10,291

G. Additional Reconciliation of GASB 75 Results

The following table shows the reconciliation of the June 30, 2021 Net OPEB Liability (NOL) in the prior valuation to the June 30, 2022 NOL. For some plans, it will provide additional detail and transparency beyond that shown in the table on Page 2.

	TOL	*FNP*	*NOL*
Balance at June 30, 2021	**$1,319,622**	**$0**	**$1,319,622**
Service Cost	$121,444	$0	$121,444
Interest on Total OPEB Liability	$29,133	$0	$29,133
Expected Investment Income	$0	$0	$0
Administrative Expenses	$0	$0	$0
Employee Contributions	$0	$0	$0
Employer Contributions to Trust	$0	$0	$0
Employer Contributions as Benefit Payments	$0	$63,175	($63,175)
Benefit Payments from Trust	$0	$0	$0
Expected Benefit Payments from Employer	($63,175)	($63,175)	$0
Expected Balance at June 30, 2022	**$1,407,024**	**$0**	**$1,407,024**
Experience (Gains)/Losses	($163,563)	$0	($163,563)
Changes in Assumptions	($81,638)	$0	($81,638)
Changes in Benefit Terms	$0	$0	$0
Investment Gains/(Losses)	$0	$0	$0
Other	$0	$0	$0
Net Change during 2022	($157,799)	$0	($157,799)
Actual Balance at June 30, 2022*	**$1,161,823**	**$0**	**$1,161,823**

***** May include a slight rounding error.

Changes in the NOL arising from certain sources are recognized on a deferred basis. The deferral history for Novato Unified School District is shown beginning on page 23. The following table summarizes the beginning and ending balances for each deferral item. The current year expense reflects the change in deferral balances for the measurement year.

Deferred Inflow/Outflow Balances Fiscal Year Ending June 30, 2022

	Beginning Balance	*Change Due to New Deferrals*	*Change Due to Recognition*	*Ending Balance*
Experience (Gains)/Losses	($107,805)	($163,563)	$25,349	($246,019)
Assumption Changes	($198,155)	($81,638)	$27,028	($252,765)
Investment (Gains)/Losses	$0	$0	$0	$0
Deferred Balances	($305,960)	($245,201)	$52,377	($498,784)

The following table shows the reconciliation of Net Position (NOL less the balance of any deferred inflows or outflows). When adjusted for contributions, the change in Net Position is equal to the OPEB expense shown previously on page 3.

OPEB Expense Fiscal Year Ending June 30, 2022

	Beginning Net Position	*Ending Net Position*	*Change*
Net OPEB Liability (NOL)	$1,319,622	$1,161,823	($157,799)
Deferred Balances	($305,960)	($498,784)	($192,824)
Net Position	$1,625,582	$1,660,607	$35,025
Adjust Out Employer Contributions			$63,175
OPEB Expense			$98,200

H. Procedures for Future Valuations

GASB 74/75 require annual measurements of liability with a full actuarial valuation required every two years. This means that for the measurement date one year following a full actuarial valuation, a streamlined "roll-forward" valuation may be performed in place of a full valuation. The following outlines the key differences between full and roll-forward valuations.

	Full Actuarial Valuation	Roll-Forward Valuation
Collect New Census Data	Yes	No
Reflect Updates to Plan Design	Yes	No
Update Actuarial Assumptions	Yes	Typically Not
Update Valuation Interest Rate	Yes	Yes
Actual Assets as of Measurement Date	Yes	Yes
Timing	4-6 weeks after information is received	1-2 weeks after information is received
Fees	Full	Reduced
Information Needed from Employer	Moderate	Minimal
Required Frequency	At least every two years	Each year, unless a full valuation is performed

The majority of employers use an alternating cycle of a full valuation one year followed by a roll-forward valuation the next year. However, a full valuation may be required or preferred under certain circumstances. Following are examples of actions that could cause the employer to consider a full valuation instead of a roll-forward valuation.

- The employer adds or terminates a group of participants that constitutes a significant part of the covered group.
- The employer considers or implements changes to retiree benefit provisions or eligibility requirements.
- The employer considers or puts in place an early retirement incentive program.
- The employer desires the measured liability to incorporate more recent census data or assumptions.

We anticipate that the next valuation we perform for Novato Unified School District will be a roll-forward valuation with a measurement date of June 30, 2023 which will be used for the fiscal year ending June 30, 2023. Please let us know if Novato Unified School District would like to discuss whether another full valuation would be preferable based on any of the examples listed above.

PART III: ACTUARIAL ASSUMPTIONS AND METHODS

Following is a summary of actuarial assumptions and methods used in this study. The District should carefully review these assumptions and methods to make sure they reflect the District's assessment of its underlying experience. It is important for Novato Unified School District to understand that the appropriateness of all selected actuarial assumptions and methods are Novato Unified School District's responsibility. Unless otherwise disclosed in this report, TCS believes that all methods and assumptions are within a reasonable range based on the provisions of GASB 74 and 75, applicable actuarial standards of practice, Novato Unified School District's actual historical experience, and TCS's judgment based on experience and training.

A. ACTUARIAL METHODS AND ASSUMPTIONS:

ACTUARIAL COST METHOD: GASB 74 and 75 require use of the entry age actuarial cost method.

Entry age is based on the age at hire for eligible employees. The attribution period is determined as the difference between the expected retirement age and the age at hire. The APVPBP and present value of future service costs are determined on a participant by participant basis and then aggregated.

SUBSTANTIVE PLAN: As required under GASB 74 and 75, we based the valuation on the substantive plan. The formulation of the substantive plan was based on a review of written plan documents as well as historical information provided by Novato Unified School District regarding practices with respect to employer and employee contributions and other relevant factors.

B. ECONOMIC ASSUMPTIONS:

Economic assumptions are set under the guidance of Actuarial Standard of Practice 27 (ASOP 27). Among other things, ASOP 27 provides that economic assumptions should reflect a consistent underlying rate of general inflation. For that reason, we show our assumed long-term inflation rate below.

INFLATION: We assumed 2.50% per year used for pension purposes. Actuarial standards require using the same rate for OPEB that is used for pension.

INVESTMENT RETURN / DISCOUNT RATE: We assumed 3.54% per year net of expenses. This is based on the Bond Buyer 20 Bond Index.

TREND: We assumed 4.00% per year. Our long-term trend assumption is based on the conclusion that, while medical trend will continue to be cyclical, the average increase over time cannot continue to outstrip general inflation by a wide margin. Trend increases in excess of general inflation result in dramatic increases in unemployment, the number of uninsured and the number of underinsured. These effects are nearing a tipping point which will inevitably result in fundamental changes in health care finance and/or delivery which will bring increases in health care costs more closely in line with general inflation. We do not believe it is reasonable to project historical trend vs. inflation differences several decades into the future.

PAYROLL INCREASE: We assumed 2.75% per year. Since benefits do not depend on salary (as they do for pensions), this assumption is only used to determine the accrual pattern of the Actuarial Present Value of Projected Benefit Payments.

FIDUCIARY NET POSITION (FNP): The following table shows the beginning and ending FNP numbers that were provided by Novato Unified School District.

Fiduciary Net Position as of June 30, 2022

	06/30/2021	*06/30/2022*
Cash and Equivalents	$0	$0
Contributions Receivable	$0	$0
Total Investments	$0	$0
Capital Assets	$0	$0
Total Assets	$0	$0
Benefits Payable	$0	$0
Fiduciary Net Position	$0	$0

C. NON-ECONOMIC ASSUMPTIONS:

Economic assumptions are set under the guidance of Actuarial Standard of Practice 35 (ASOP 35). See Appendix C, Paragraph 52 for more information.

MORTALITY

Participant Type	*Mortality Tables*
Certificated	2020 CalSTRS Mortality
Classified	2017 CalPERS Mortality for Miscellaneous and Schools Employees

RETIREMENT RATES

Employee Type	*Retirement Rate Tables*
Certificated	Hired 2012 and earlier: 2020 CalSTRS 2.0%@60 Rates
	Hired 2013 and later: 2020 CalSTRS 2.0%@62 Rates
Classified	Hired 2012 and earlier: 2017 CalPERS 2.0%@55 Rates for Schools Employees
	Hired 2013 and later: 2017 CalPERS 2.0%@62 Rates for Schools Employees
Management	Hired 2012 and earlier: 2017 CalPERS 2.0%@55 Rates for Schools Employees
	Hired 2013 and later: 2017 CalPERS 2.0%@62 Rates for Schools Employees

COSTS FOR RETIREE COVERAGE

Actuarial Standard of Practice 6 (ASOP 6) Section 3.7.7(c)(3) provides that unadjusted premium may be used as the basis for retiree liabilities if retiree premium rates are not subsidized by active premium rates. We evaluated active and retiree rates and determined that there is not likely to be a subsidy between active and retiree rates. Therefore, retiree liabilities are based on actual employer contributions. Liabilities for active participants are based on the first year costs shown below. Subsequent years' costs are based on first year costs adjusted for trend and limited by any District contribution caps.

Participant Type	*Future Retirees Pre-65*	*Future Retirees Post-65*
Certificated	Dental/Vision only: $1,932	
	Electing Medical: $2,400	
Classified	Dental/Vision only: $1,932	
	Electing Medical: $2,400	
Management	Dental/Vision only: $1,932	
	Electing Medical: $2,400	

PARTICIPATION RATES

Employee Type	*<65 Non-Medicare Participation %*	*65+ Medicare Participation %*
Certificated	Dental/Vision Only: 65%	
	Electing Medical: 35%	
Classified	Dental/Vision Only: 65%	
	Electing Medical: 35%	
Management	Dental/Vision Only: 65%	
	Electing Medical: 35%	

TURNOVER

Employee Type	*Turnover Rate Tables*
Certificated	2020 CalSTRS Termination Rates
Classified	2017 CalPERS Termination Rates for School Employees

SPOUSE PREVALENCE

To the extent not provided and when needed to calculate benefit liabilities, 80% of retirees assumed to be married at retirement. After retirement, the percentage married is adjusted to reflect mortality.

SPOUSE AGES

To the extent spouse dates of birth are not provided and when needed to calculate benefit liabilities, female spouse assumed to be three years younger than male.

PART IV: APPENDICES

APPENDIX A: DEMOGRAPHIC DATA BY AGE

ELIGIBLE ACTIVE EMPLOYEES BY AGE AND EMPLOYEE CLASS

Age	*Total*	*Certificated*	*Classified*	*Management*
Under 25	4	1	3	0
25 – 29	19	16	3	0
30 – 34	46	31	12	3
35 – 39	55	39	12	4
40 – 44	87	56	22	9
45 – 49	95	62	28	5
50 – 54	100	55	35	10
55 – 59	107	58	47	2
60 – 64	72	27	42	3
65 and older	0	0	0	0
Total	585	345	204	36

ELIGIBLE ACTIVE EMPLOYEES BY AGE AND SERVICE

	Total	*Under 5 Years of Service*	*5 – 9 Years of Service*	*10 – 14 Years of Service*	*15 –19 Years of Service*	*20 – 24 Years of Service*	*25 – 29 Years of Service*	*30 – 34 Years of Service*	*Over 34 Years of Service*
Under 25	4	4							
25 – 29	19	14	5						
30 – 34	46	29	16	1					
35 – 39	55	24	19	9	3				
40 – 44	87	36	24	13	12	2			
45 – 49	95	35	20	8	12	20			
50 – 54	100	24	20	21	18	10	7		
55 – 59	107	25	16	25	19	13	6	3	
60 – 64	72	8	9	17	18	11	5	3	1
65 and older	0								
Total	585	199	129	94	82	56	18	6	1

ELIGIBLE RETIREES BY AGE AND EMPLOYEE CLASS

Age	*Total*	*Certificated*	*Classified*	*Management*
Under 50	0	0	0	0
50 – 54	0	0	0	0
55 – 59	4	1	3	0
60 – 64	33	20	12	1
65 – 69	0	0	0	0
70 – 74	0	0	0	0
75 – 79	0	0	0	0
80 – 84	0	0	0	0
85 – 89	0	0	0	0
90 and older	0	0	0	0
Total	37	21	15	1

APPENDIX B: ADMINISTRATIVE BEST PRACTICES

It is outside the scope of this report to make specific recommendations of actions Novato Unified School District should take to manage the liability created by the current retiree health program. The following items are intended only to allow the District to get more information from this and future studies. Because we have not conducted a comprehensive administrative audit of Novato Unified School District's practices, it is possible that Novato Unified School District is already complying with some or all of these suggestions.

- We suggest that Novato Unified School District maintain an inventory of all benefits and services provided to retirees – whether contractually or not and whether retiree-paid or not. For each, Novato Unified School District should determine whether the benefit is material and subject to GASB 74 and/or 75.

- Under GASB 75, it is important to isolate the cost of retiree health benefits. Novato Unified School District should have all premiums, claims and expenses for retirees separated from active employee premiums, claims, expenses, etc. To the extent any retiree benefits are made available to retirees over the age of 65 – ***even on a retiree-pay-all basis*** – all premiums, claims and expenses for post-65 retiree coverage should be segregated from those for pre-65 coverage. Furthermore, Novato Unified School District should arrange for the rates or prices of all retiree benefits to be set on what is expected to be a self-sustaining basis.

- Novato Unified School District should establish a way of designating employees as eligible or ineligible for future OPEB benefits. Ineligible employees can include those in ineligible job classes; those hired after a designated date restricting eligibility; those who, due to their age at hire cannot qualify for District-paid OPEB benefits; employees who exceed the termination age for OPEB benefits, etc.

- Several assumptions were made in estimating costs and liabilities under Novato Unified School District's retiree health program. Further studies may be desired to validate any assumptions where there is any doubt that the assumption is appropriate. (See Part III of this report for a summary of assumptions.) For example, Novato Unified School District should maintain a retiree database that includes – in addition to date of birth, gender and employee classification – retirement date and (if applicable) dependent date of birth, relationship and gender. It will also be helpful for Novato Unified School District to maintain employment termination information – namely, the number of OPEB-eligible employees in each employee class that terminate employment each year for reasons other than death, disability or retirement.

APPENDIX C: GASB 74/75 ACCOUNTING ENTRIES AND DISCLOSURES

This report does not necessarily include the entire accounting values. As mentioned earlier, there are certain deferred items that are employer-specific. The District should consult with its auditor if there are any questions about what, if any, adjustments may be appropriate.

GASB 74/75 include a large number of items that should be included in the Note Disclosures and Required Supplementary Information (RSI) Schedules. Many of these items are outside the scope of the actuarial valuation. However, following is information to assist the District in complying with GASB 74/75 disclosure requirements:

Paragraph 50: **Information about the OPEB Plan**

Most of the information about the OPEB plan should be supplied by Novato Unified School District. Following is information to help fulfill Paragraph 50 reporting requirements.

50.c: Following is a table of plan participants

	Number of Participants
Inactive Employees Currently Receiving Benefit Payments	37
Inactive Employees Entitled to But Not Yet Receiving Benefit Payments*	0
Participating Active Employees	585
Total Number of participants	622

*We were not provided with information about any terminated, vested employees

Paragraph 51: **Significant Assumptions and Other Inputs**

Shown in Part III.

Paragraph 52: **Information Related to Assumptions and Other Inputs**

The following information is intended to assist Novato Unified School District in complying with the requirements of Paragraph 52.

52.b: Mortality Assumptions Following are the tables the mortality assumptions are based upon. Inasmuch as these tables are based on appropriate populations, and that these tables are used for pension purposes, we believe these tables to be the most appropriate for the valuation.

Mortality Table	2017 CalPERS Mortality for Miscellaneous and Schools Employees
Disclosure	The mortality assumptions are based on the 2017 CalPERS Mortality for Miscellaneous and Schools Employees table created by CalPERS. CalPERS periodically studies mortality for participating agencies and establishes mortality tables that are modified versions of commonly used tables. This table incorporates mortality projection as deemed appropriate based on CalPERS analysis.

Mortality Table	2017 CalPERS Retiree Mortality for Miscellaneous and Schools Employees
Disclosure	The mortality assumptions are based on the 2017 CalPERS Retiree Mortality for Miscellaneous and Schools Employees table created by CalPERS. CalPERS periodically studies mortality for participating agencies and establishes mortality tables that are modified versions of commonly used tables. This table incorporates mortality projection as deemed appropriate based on CalPERS analysis.

Mortality Table	2020 CalSTRS Mortality
Disclosure	The mortality assumptions are based on the 2020 CalSTRS Mortality table created by CalSTRS. CalSTRS periodically studies mortality for participating agencies and establishes mortality tables that are modified versions of commonly used tables. This table incorporates mortality projection as deemed appropriate based on CalSTRS analysis.

52.c: Experience Studies Following are the tables the retirement and turnover assumptions are based upon. Inasmuch as these tables are based on appropriate populations, and that these tables are used for pension purposes, we believe these tables to be the most appropriate for the valuation.

Retirement Tables

Retirement Table	2017 CalPERS 2.0%@55 Rates for Schools Employees
Disclosure	The retirement assumptions are based on the 2017 CalPERS 2.0%@55 Rates for Schools Employees table created by CalPERS. CalPERS periodically studies the experience for participating agencies and establishes tables that are appropriate for each pool.

Retirement Table	2017 CalPERS 2.0%@62 Rates for Schools Employees
Disclosure	The retirement assumptions are based on the 2017 CalPERS 2.0%@62 Rates for Schools Employees table created by CalPERS. CalPERS periodically studies the experience for participating agencies and establishes tables that are appropriate for each pool.

Retirement Table	2020 CalSTRS 2.0%@60 Rates
Disclosure	The retirement assumptions are based on the 2020 CalSTRS 2.0%@60 Rates table created by CalSTRS. CalSTRS periodically studies the experience for participating agencies and establishes tables that are appropriate for each pool.

Retirement Table	2020 CalSTRS 2.0%@62 Rates
Disclosure	The retirement assumptions are based on the 2020 CalSTRS 2.0%@62 Rates table created by CalSTRS. CalSTRS periodically studies the experience for participating agencies and establishes tables that are appropriate for each pool.

Turnover Tables

Turnover Table	2017 CalPERS Termination Rates for School Employees
Disclosure	The turnover assumptions are based on the 2017 CalPERS Termination Rates for School Employees table created by CalPERS. CalPERS periodically studies the experience for participating agencies and establishes tables that are appropriate for each pool.

Turnover Table	2020 CalSTRS Termination Rates
Disclosure	The turnover assumptions are based on the 2020 CalSTRS Termination Rates table created by CalSTRS. CalSTRS periodically studies the experience for participating agencies and establishes tables that are appropriate for each pool.

For other assumptions, we use actual plan provisions and plan data.

52.d: The alternative measurement method was not used in this valuation.

52.e: NOL using alternative trend assumptions The following table shows the Net OPEB Liability with a healthcare cost trend rate 1% higher and 1% lower than assumed in the valuation.

	Trend 1% Lower	Valuation Trend	Trend 1% Higher
Net OPEB Liability	$1,132,334	$1,161,823	$1,192,390

Paragraph 53: **Discount Rate**

The following information is intended to assist Novato Unified School District to comply with Paragraph 53 requirements.

53.a: A discount rate of 3.54% was used in the valuation. The interest rate used in the prior valuation was 2.16%.

53.b: We assumed that all contributions are from the employer.

53.c: There are no plan assets.

53.d: The interest assumption reflects a municipal bond rate. We used the Bond Buyer 20 Index at June 30, 2022 resulting in a rate of 3.54%.

53.e: Not applicable.

53.f: There are no plan assets.

53.g: The following table shows the Net OPEB liability with a discount rate 1% higher and 1% lower than assumed in the valuation.

	Discount Rate 1% Lower	Valuation Discount Rate	Discount Rate 1% Higher
Net OPEB Liability	$1,220,808	$1,161,823	$1,104,245

Paragraph 55: **Changes in the Net OPEB Liability**

Please see reconciliation on pages 2 or 12.

Paragraph 56: **Additional Net OPEB Liability Information**

The following information is intended to assist Novato Unified School District to comply with Paragraph 56 requirements.

56.a: The valuation date is June 30, 2022.
The measurement date is June 30, 2022.
56.b: We are not aware of a special funding arrangement.
56.c: The interest assumption changed from 2.16% to 3.54%.
56.d: There were no changes in benefit terms since the prior measurement date.
56.e: Not applicable
56.f: To be determined by the employer
56.g: To be determined by the employer
56.h: Other than contributions after the measurement, all deferred inflow and outflow balances are shown on page 12 and in Appendix D
56.i: Future recognition of deferred inflows and outflows is shown in Appendix D

Paragraph 57: **Required Supplementary Information**

57.a: Please see reconciliation on pages 2 or 12. Please see the notes for Paragraph 244 below for more information.
57.b: These items are provided on pages 2 and 12 for the current valuation, except for covered payroll, which should be determined based on appropriate methods.
57.c: We have not been asked to calculate an actuarially determined contribution amount. We assume the District contributes on an ad hoc basis, but in an amount sufficient to fully fund the obligation over a period not to exceed 16 years.
57.d: We are not aware that there are any statutorily or contractually established contribution requirements.

Paragraph 58: **Actuarially Determined Contributions**

We have not been asked to calculate an actuarially determined contribution amount. We assume the District contributes on an ad hoc basis, but in an amount sufficient to fully fund the obligation over a period not to exceed 16 years.

Paragraph 244: **Transition Option**

Prior periods were not restated due to the fact that prior valuations were not rerun in accordance with GASB 75. It was determined that the time and expense necessary to rerun prior valuations and to restate prior financial statements was not justified.

APPENDIX D: DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES

EXPERIENCE GAINS AND LOSSES

Measurement Period	Experience (Gain)/Loss	Original Recognition Period (Years)	Increase (Decrease) in OPEB Expense Arising from the Recognition of Effects of Experience Gains and Losses (Measurement Periods)								
			Amounts Recognized in OPEB Expense through 2021	2022	Amounts to be Recognized in OPEB Expense after 2022	2023	2024	2025	2026	2027	Thereafter
2019-20	($129,807)	11.8	($22,002)	($11,001)	($96,804)	($11,001)	($11,001)	($11,001)	($11,001)	($11,001)	($41,799)
2021-22	($163,563)	11.4	$0	($14,348)	($149,215)	($14,348)	($14,348)	($14,348)	($14,348)	($14,348)	($77,475)
Net Increase (Decrease) in OPEB Expense			**($22,002)**	**($25,349)**	**($246,019)**	**($25,349)**	**($25,349)**	**($25,349)**	**($25,349)**	**($25,349)**	**($119,274)**

CHANGES OF ASSUMPTIONS

Increase (Decrease) in OPEB Expense Arising from the Recognition of Effects of Changes of Assumptions (Measurement Periods)

Measurement Period	Changes of Assumptions	Original Recognition Period (Years)	Amounts Recognized in OPEB Expense through 2021	2022	Amounts to be Recognized in OPEB Expense after 2022	2023	2024	2025	2026	2027	Thereafter
2018-19	$32,966	11.5	$8,601	$2,867	$21,498	$2,867	$2,867	$2,867	$2,867	$2,867	$7,163
2019-20	($271,421)	11.8	($46,004)	($23,002)	($202,415)	($23,002)	($23,002)	($23,002)	($23,002)	($23,002)	($87,405)
2020-21	$3,166	11.8	$269	$269	$2,628	$269	$269	$269	$269	$269	$1,283
2021-22	($81,638)	11.4	$0	($7,162)	($74,476)	($7,162)	($7,162)	($7,162)	($7,162)	($7,162)	($38,666)
Net Increase (Decrease) in OPEB Expense			**($37,134)**	**($27,028)**	**($252,765)**	**($27,028)**	**($27,028)**	**($27,028)**	**($27,028)**	**($27,028)**	**($117,625)**

INVESTMENT GAINS AND LOSSES

Increase (Decrease) in OPEB Expense Arising from the Recognition of Effects of Investment Gains and Losses (Measurement Periods)

Measurement Period	Investment (Gain)/Loss	Original Recognition Period (Years)	Amounts Recognized in OPEB Expense through 2021	2022	Amounts to be Recognized in OPEB Expense after 2022	2023	2024	2025	2026	2027	Thereafter
2021-22	$0	0	$0	$0	$0						
Net Increase (Decrease) in OPEB Expense			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

APPENDIX E: GLOSSARY OF RETIREE HEALTH VALUATION TERMS

Note: The following definitions are intended to help a *non*-actuary understand concepts related to retiree health valuations. Therefore, the definitions may not be actuarially accurate.

Actuarial Cost Method:	A mathematical model for allocating OPEB costs by year of service. The only actuarial cost method allowed under GASB 74/75 is the entry age actuarial cost method.
Actuarial Present Value of Projected Benefit Payments:	The projected amount of all OPEB benefits to be paid to current and future retirees discounted back to the valuation or measurement date.
Deferred Inflows/Outflows of Resources:	A portion of certain items that can be deferred to future periods or that weren't reflected in the valuation. The former includes investment gains/losses, actuarial gains/losses, and gains/losses due to changes in actuarial assumptions or methods. The latter includes contributions made to a trust subsequent to the measurement date but before the statement date.
Discount Rate:	Assumed investment return net of all investment expenses. Generally, a higher assumed interest rate leads to lower service costs and total OPEB liability.
Fiduciary Net Position:	Net assets (liability) of a qualifying OPEB "plan" (i.e. qualifying irrevocable trust or equivalent arrangement).
Implicit Rate Subsidy:	The estimated amount by which retiree rates are understated in situations where, for rating purposes, retirees are combined with active employees and the employer is expected, in the long run, to pay the underlying cost of retiree benefits.
Measurement Date:	The date at which assets and liabilities are determined in order to estimate TOL and NOL.
Mortality Rate:	Assumed proportion of people who die each year. Mortality rates always vary by age and often by sex. A mortality table should always be selected that is based on a similar "population" to the one being studied.
Net OPEB Liability (NOL):	The Total OPEB Liability minus the Fiduciary Net Position.
OPEB Benefits:	Other Post Employment Benefits. Generally, medical, dental, prescription drug, life, long-term care or other postemployment benefits that are not pension benefits.
OPEB Expense:	This is the amount employers must recognize as an expense each year. The annual OPEB expense is equal to the Service Cost plus interest on the Total OPEB Liability (TOL) plus change in TOL due to plan changes minus projected investment income; all adjusted to reflect deferred inflows and outflows of resources.
Participation Rate:	The proportion of retirees who elect to receive retiree benefits. A lower participation rate results in lower service cost and a TOL. The participation rate often is related to retiree contributions.

Pay As You Go Cost:	The projected benefit payments to retirees in a given year as estimated by the actuarial valuation. Actual benefit payments are likely to differ from these estimated amounts. For OPEB plans that do not pre-fund through an irrevocable trust, the Pay As You Go Cost serves as an estimated amount to budget for annual OPEB payments.
Retirement Rate:	The proportion of active employees who retire each year. Retirement rates are usually based on age and/or length of service. (Retirement rates can be used in conjunction with the service requirement to reflect both age and length of service). The more likely employees are to retire early, the higher service costs and actuarial accrued liability will be.
Service Cost:	The annual dollar value of the "earned" portion of retiree health benefits if retiree health benefits are to be fully accrued at retirement.
Service Requirement:	The proportion of retiree benefits payable under the OPEB plan, based on length of service and, sometimes, age. A shorter service requirement increases service costs and TOL.
Total OPEB Liability (TOL):	The amount of the actuarial present value of projected benefit payments attributable to participants' past service based on the actuarial cost method used.
Trend Rate:	The rate at which the employer's share of the cost of retiree benefits is expected to increase over time. The trend rate usually varies by type of benefit (e.g. medical, dental, vision, etc.) and may vary over time. A higher trend rate results in higher service costs and TOL.
Turnover Rate:	The rate at which employees cease employment due to reasons other than death, disability or retirement. Turnover rates usually vary based on length of service and may vary by other factors. Higher turnover rates reduce service costs and TOL.
Valuation Date:	The date as of which the OPEB obligation is determined by means of an actuarial valuation. Under GASB 74 and 75, the valuation date does not have to coincide with the statement date, but can't be more than 30 months prior.