Scio Township Retiree Health Care Plan

Biennial Actuarial Valuation
as of March 31, 2023

800.521.0498 | P: 248.799.9000 | www.grsconsulting.com

May 24, 2023

Board of Trustees
Scio Township Retiree Health Care Plan
827 North Zeeb Road
Ann Arbor, Michigan 48103

Dear Board Members:

The results of the March 31, 2023 biennial actuarial valuation of the Scio Township Retiree Health Care Plan are presented in this report. This report was prepared at the request of the Board, and is intended for use by the Board and those designated and approved by the Board. This report may be provided to parties only in its entirety and only with permission of the Board. GRS is not responsible for unauthorized use of this report.

The purpose of the valuation was to measure the Plan's funding progress and to determine a reasonable Actuarially Determined Employer Contribution (ADEC) in accordance with GASB Statement Nos. 74 and 75 for the fiscal years beginning April 1, 2023 and April 1, 2024. This report should not be relied on for any purpose other than the purposes described herein. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results. Disclosure requirements for GASB Statement Nos. 74 and 75 and Public Act 202 of 2017 are issued in a separate report.

The computed contributions in this report were determined using the actuarial assumptions and methods adopted by the Board. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. Additional information about the actuarial assumptions is included in Section C of this report.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed. This report includes risk metrics on pages A-7 and A-8, but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

The findings in this report are based on data and other information through March 31, 2023. The valuation was based upon information furnished by the Township, concerning retiree health care benefits, financial transactions, plan provisions and retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the Township. Any questions resulting from the review are provided to the Township and resolved. Any data adjustments needed as a result of this process are made manually by GRS, based on instructions provided by the Township.

One Towne Square | Suite 800 | Southfield, Michigan 48076-3723

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.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement plans. To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the Scio Township Retiree Health Care Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

Heidi G. Barry and Kevin T. Noelke are Members of the American Academy of Actuaries (MAAA). These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

Gabriel, Roeder, Smith & Company would be pleased to review this valuation and report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,
Gabriel, Roeder, Smith & Company

Heidi G. Barry, ASA, FCA, MAAA

Kevin T. Noelke, ASA, FCA, MAAA

HGB/KTN:dj

C3603

Table of Contents

Section	Page	
A		**Valuation Results and Comments**
	1	Funding Objective
	2-4	Summary of Results as of March 31, 2023
	5	Comments
	6	Other Observations
	7-8	Risk Measures
B		**Summary of Benefit Provisions Evaluated and Valuation Data**
	1-2	Summary of Benefit Provisions Evaluated
	3	Asset Information Submitted for Valuation
	4	Member Demographic Data
C		**Valuation Methods and Actuarial Assumptions**
	1-2	Actuarial Assumptions Used for the Valuation
	3	Miscellaneous and Technical Assumptions
		Appendix
	1-2	Glossary

SECTION A

VALUATION RESULTS AND COMMENTS

Funding Objective

The funding objective of the Retiree Health Care (RHC) Plan is to establish and receive contributions, calculated as level dollar amounts, which will remain approximately level from year to year and will not have to be increased for future generations of citizens. **Effective April 1, 2023: it is the intention of the Board to maintain a 50% funded status each measurement period.**

The biennial actuarial valuation measures the relationship between RHC Plan obligations and assets and determines the contribution amounts for the ensuing years. The RHC Plan is supported by contributions from the plan sponsor. While there are currently no RHC Plan assets, it is our understanding that the Township intends to begin making contributions for the fiscal year beginning April 1, 2023.

The flow of activity constituting the valuation may be summarized as follows:

A. Covered member information about each person receiving RHC benefits. Effective April 1, 2023, the Plan does not cover any active or deferred vested participants.

B. Financial Information (assets, revenues, and expenditures)

C. Benefit Provisions (Plan Ordinance or similar document)

D. Actuarial Assumptions about the volume and incidence of future activities

E. Actuarial Cost Method (Individual Entry-Age) for allocating benefit costs to time periods

F. Mathematical linking of the person information, financial information, benefit provisions, experience estimates and actuarial cost method

G. Determination of:
- Contribution for the plan year
- Current funded condition

Items A, B and C are provided by Scio Township staff and constitute the current knowns about the RHC Plan. Since the majority of activities will occur in the future, estimates must be made about these future activities (Item F).

Computed contributions for the fiscal year beginning April 1, 2023 and April 1, 2024 are shown on page A-2. This report describes the current actuarial condition of the plan, determines the Actuarially Determined Employer Contribution (ADEC), and analyzes the changes in principal values.

Summary of Results as of March 31, 2023

Actuarially Determined Employer Contribution (ADEC)

We recommend the adherence to a funding policy that targets a 100% funded status, such as a policy used to calculate the ADEC under GASB Statement Nos. 74 and 75. This would fund the normal cost of the Plan (if any) as well as an amortization payment that seeks to pay off the Unfunded Actuarial Accrued Liability (UAAL) over a closed period. **Contributions for a 50% Funding Target are shown on the next page.**

The contributions calculated in this report are determined actuarially based on the plan provisions in effect as of the valuation date and the actuarial assumptions adopted by the Board. Valuations are expected to be performed biennially. Therefore, the following table produces the ADEC for the Fiscal Years beginning April 1, 2023 and April 1, 2024.

Contributions for 100% Funding Target	10-Year Closed Amortization Period
Fiscal Year Beginning April 1, 2023	
Employer Normal Cost	$ -
Amortization of Unfunded Actuarial Accrued Liability	45,984
Actuarially Determined Employer Contribution (ADEC)	**$ 45,984**
Fiscal Year Beginning April 1, 2024	
Employer Normal Cost	$ -
Amortization of Unfunded Actuarial Accrued Liability	45,984
Actuarially Determined Employer Contribution (ADEC)	**$ 45,984**

The Unfunded Actuarial Accrued Liability (UAAL) was amortized as a level dollar amount over a closed period of 10 years for the Fiscal Year beginning April 1, 2023 and a closed period of 9 years for the Fiscal Year beginning April 1, 2024.

The ADECs shown above were calculated based on the assumption of pre-funding. If the ADEC were to be calculated on a pay-as-you-go basis, the sum of the total contributions made to the plan would be higher due to lost investment opportunity.

Summary of Results as of March 31, 2023

Contributions for a 50% Funding Target

It is our understanding that the Board intends to make contributions and/or payments from the Plan in order to keep the funded status as close to 50% as possible. The intent is to avoid the funded status dropping below 40%, in which case the Plan would be classified as "Underfunded" as defined in Public Act 202 of 2017. The following table produces contributions for the Fiscal Years beginning April 1, 2023 and April 1, 2024 that will target this purpose.

Contributions for 50% Funding Target		
Fiscal Year Beginning April 1, 2023		
Expected Present Value of Future Benefits on March 31, 2024	$	336,321
50% Funding Target		168,161
Annual Contribution Target*	**$**	**195,456**
Fiscal Year Beginning April 1, 2024		
Expected Present Value of Future Benefits on March 31, 2025	$	323,856
50% Funding Target		161,928
Annual Contribution Target*	**$**	**15,840**

** Assumes mid-year cash flows and a 6.00% investment return assumption. The contribution target is net of projected benefit payments.*

The above contribution targets rely heavily on actuarial assumptions used in this report, particularly the following:

- An assumed investment return of 6.00%. It is our understanding that assets for this plan will be invested with the Municipal Employees' Retirement System of Michigan (MERS);
- A utilization percentage of 75%. Historically, retirees in this plan have not used their maximum reimbursement amount. See page B-1 for a history of benefit payments and utilization;
- An annual increase in the maximum reimbursement amounts of 2.50%; and
- Mortality Tables as described on page C-2.

We trust that the Board understands that the above methodology is not based on a specific actuarial cost method, and the Plan will not reach 100% funded in the foreseeable future based on this methodology.

Summary of Results as of March 31, 2023

Development of the Funded Status of the Plan

The Present Value of Future Benefit Payments (PVFB) is the present value of all benefits projected to be paid from the plan for past and future service. The Actuarial Accrued Liability is the portion of the PVFB allocated to past service by the Plan's actuarial cost method. The following table produces the funded status for the Plan as of the valuation date.

Calculations for	Plan Totals
A. Present Value of Future Benefits	
i) Retiree Opt-Ins	$ 348,499
ii) Retiree Opt-Outs	-
iii) Active Members	-
Total Present Value of Future Benefits	$ 348,499
B. Present Value of Future Normal Costs	-
C. Actuarial Accrued Liability (A.-B.)	$ 348,499
D. Valuation Assets	-
E. Unfunded Actuarial Accrued Liability (C.-D.)	$ 348,499
F. Funded Status (D./C.)	0.0%

The funded status is intended to measure progress towards achieving the funding target based on the Plan's funding policy. By itself, the funded status may not necessarily indicate the need for or amount of future contributions. The funded status is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the benefits.

Comments

Plan Experience: Plan experience for this valuation was unfavorable (prior to changes in plan provision and actuarial assumptions) when compared to the prior valuation. Plan experience was primarily attributed to the following:

- Two retirees opting-in to coverage (loss);
- Retiree mortality less than expected (loss);
- Retiree benefits increased less than expected (gain); and
- Fewer retirements than expected (gain).

Plan Provisions: Effective April 1, 2023, this Plan will provide medical insurance benefits to "Eligible Retirees" who retired before April 1, 2023 and met eligibility requirements as described in Section 34 of the Scio Township Employee Handbook. There are currently 11 Eligible Retirees covered by this plan. Actives and other inactive members of Scio Township (who were valued in the valuation performed as of March 31, 2021) are no longer covered by this plan. This change decreased liabilities by approximately $856 thousand (prior to changes in actuarial assumptions).

Actuarial Assumptions: Effective with the March 31, 2023 valuation, the investment return assumption was increased from 2.27% to 6.00% and the benefit utilization assumption was lowered from 90% to 75%, which lowered liabilities by about $242 thousand. Please note that this is the near-term impact of the changes. In the long-run, the cost of the plan will be determined by the actual experience, not the assumptions used. A history of the utilization of benefits is shown on page B-1. Please see the paragraph below for additional comments regarding the investment return assumption.

Investment Return Assumption: One of the key assumptions used in this valuation is the rate of return on assets that will be used to pay Plan benefits. A lower assumed investment return would result in higher calculated contributions. It is our understanding that a Trust will be established prior to the FYE March 31, 2024 with the Municipal Employees' Retirement System of Michigan (MERS). Therefore, we have calculated the liability and the resulting contributions using an assumed rate of 6.00%.

It may be appropriate to reevaluate this assumption in subsequent valuations once the Trust has been established. It is also our understanding that Retiree Health Care (RHC) assets will not be used to pay retiree health care benefits, and actual benefit payments as reported by the Township will be paid outside of the Trust, once established. **If staff intends to operate this Trust in a different manner, please contact us before relying on the results of this report.**

Public Act 202 of 2017: The Michigan State Treasurer has established uniform actuarial assumptions as required by Public Act 202 (PA 202) of 2017 for use with the annual Form 5572 (Retirement System Annual Report). Please see the GASB Statement Nos. 74 and 75 report as of March 31, 2023 for these calculations.

Conclusion: It is the actuary's opinion that the required contribution amounts determined by this actuarial valuation are sufficient to meet the RHC Plan's funding objective presuming timely receipt of required contributions.

Other Observations

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

Given the Retiree Health Care (RHC) Plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the RHC Plan earning 6.00% on the Market Value of Assets), it is expected that:

1. The Unfunded Actuarial Accrued Liabilities (UAAL) will be fully amortized in 10 years if contributions are made based on a 100% funding target. If contributions are made based on a 50% funding target, the UAAL will NOT be fully amortized; and
2. The funded status of the RHC Plan will remain between 50% and 100% funded, depending on the funding methodology.

The above statements assume that the full ADEC or Contribution Target is contributed each year based on one of the funding targets shown on pages A-2 and A-3. The computed contributions shown on page A-3 may be considered as minimum contribution amounts that complies with the Board's funding intentions. The timely receipt of the actuarially determined contributions is critical to support the financial health of the Plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

Limitations of Funded Status Measurements

Unless otherwise indicated, a funded status measurement presented in this report is based upon the Actuarial Accrued Liability (using a 6.00% discount rate) and the valuation assets. Unless otherwise indicated, with regard to any funded status measurements presented in this report:

1. The measurement is inappropriate for assessing the sufficiency of RHC Plan assets to cover the estimated cost of settling the RHC Plan's benefit obligations, for example: transferring the liability to an unrelated third party in a market value type transaction.
2. The measurement is dependent upon the Actuarial Cost Method which, in combination with the RHC Plan's amortization policy, affects the timing and amounts of future contributions. The amounts of future contributions will most certainly differ from those assumed in this report due to future actual experience differing from assumed experience based upon the actuarial assumptions. A funded status measurement in this report of 100% is not necessarily synonymous with no required future contributions.

Risk Measures

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

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 due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the System's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. **Investment Risk (applicable to a pre-funded plan)** – actual investment returns may differ from the expected returns;
2. **Asset/Liability Mismatch (applicable to a pre-funded plan)** – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. **Contribution Risk** – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees or other relevant contribution base. The continuing ability of the plan sponsor to make the contributions necessary to fund the plan is outside our scope of expertise and was not performed by GRS;
4. **Inflation Risk** – actual inflation trend rates and/or changes in healthcare plan designs may differ from expected resulting in actual future accrued liability and contributions differing from expected;
5. **Longevity Risk** – members may live longer or shorter than expected and receive pensions for a period of time other than assumed; and
6. **Other Demographic Risks** – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

Risk Measures

Actuarial Valuation Date (3/31)	(1) Valuation Assets	(2) Actuarial Accrued Liability (AAL)	(3) Unfunded AAL (UAAL) (2) - (1)	(4) Funded Status (1) / (2)	(5) Retiree Liabilities (RetLiab)	(6) RetLiab / AAL (5)/(2)
2021*	$ -	$ 1,212,296	$ 1,212,296	0.0%	$ 271,441	22.4%
2023*	-	348,499	348,499	0.0%	348,499	100.0%

** Revised actuarial assumptions.*

(4). In a pre-funded plan, the funded status is the most widely known measure of a plan's financial strength, but the trend in the funded status is much more important than the absolute ratio. The funded status should trend to 100%. As it approaches 100%, it is important to re-evaluate the level of investment risk in the portfolio and potentially to re-evaluate the assumed rate of return.

(5) and (6). The ratio of retiree liabilities to total accrued liabilities gives an indication of the maturity of the system. As the ratio increases, cash flow needs increase, and the liquidity needs of the portfolio change. A ratio on the order of 50% indicates a maturing system.

SECTION B

SUMMARY OF BENEFIT PROVISIONS EVALUATED AND VALUATION DATA

Plan Provisions Valued as of March 31, 2023

Plan Participants

Effective April 1, 2023, this Plan will provide medical insurance benefits to "Eligible Retirees" who retired before April 1, 2023 and met eligibility requirements as described in Section 34 of the Scio Township Employee Handbook (as that section existed prior to Michigan Resolution #2023-13 for Scio Township). There were 11 Eligible Retirees established by this Resolution.

Retiree Medical Benefit Eligibility effective April 1, 2023

The Township will provide medical insurance benefits to Eligible Retirees. Such benefits cease at the death of the retiree. This benefit shall not be available to an Eligible Retiree if other comparable medical insurance coverage, equal to or better than that available through the Township, is available through a previous employer, a spouse's employer, or another retirement plan. When available, an Eligible Retiree shall acquire federal medical benefits to reduce the overall cost of retiree medical insurance coverage.

Retiree Medical Benefit Amount

Eligible Retirees may receive reimbursement of retiree health care expenses up to the annual maximum amount for life. The annual maximum is adjusted up or down each fiscal year by the lesser of the following calculation: (1) the percent of change in the State of Michigan inflation rate used for property tax adjustments for the previous calendar year (Michigan Headlee Inflation rate, MCL 211.54d), or (2) the percent of change in Scio Township General Fund fiscal year-end revenues as determined by comparing the difference between the current and prior fiscal year end audits. The fiscal year runs from April 1 to March 31. A partial history of maximum reimbursement and benefit payments is shown below:

Fiscal Year	Maximum Reimbursement	Benefit Payments	Number of Retirees	Utilization Percentage
2013-14	$ 3,655	$ 10,605	4	73%
2014-15	3,535	10,764	5	61%
2015-16	3,588	10,938	5	61%
2016-17	3,646	10,563	5	58%
2017-18	3,521	10,659	5	61%
2018-19	3,553	14,512	6	68%
2019-20	3,628	11,947	7	47%
2020-21	3,715	13,905	8	47%
2021-22	3,735	18,040	10	48%
2022-23	3,875	18,427	11	43%

Plan Provisions Valued as of March 31, 2023

<u>Retiree Medical Benefit Eligibility prior to April 1, 2023</u>

General Township employees and elected officials are eligible for retiree health if they retire from active employment under Rule of 80 (age plus service is equal to or greater than 80) and are at least age 60 with at least 10 years of continuous full-time employment.

This is a brief summary of the Retiree Health Care Plan provisions. In the event that any description contained herein differs from the actual eligibility or benefit, the appropriate employee contract or governing document will prevail.

Asset Information Submitted for Valuation as of March 31, 2023

Market Value of Assets		
Cash	$	-
Investments		-
Liabilities		-
Other		-
Total	$	-

Revenues and Expenditures		
Balance - March 31, 2022	$	-
Revenues		
Employees’ contributions		-
Employer's contributions		-
Recognized investment income		-
Other		-
Total	$	-
Expenditures		
Benefit payments	$	-
Refund of member contributions		-
Administrative and investment expense		-
Total	$	-
Balance - March 31, 2023	$	-

Member Demographic Data as of March 31, 2023
Retirees and Beneficiaries

By Attained Age

Current Retirees Eligible for Benefits	
Attained Age	Retirees
60-64	1
65-69	4
70-74	1
75-79	2
80-84	0
85-89	2
90-94	1
Totals	**11**

Active and Deferred Vested Members

None.

SECTION C

VALUATION METHODS AND ACTUARIAL ASSUMPTIONS

Actuarial Assumptions Used for the Valuation

Demographic assumptions used for Scio Township are derived from the most recent MERS (Municipal Retirement System of Michigan) pension and OPEB valuations. Although there are some members of the Retiree Health Plan that do not participate in the MERS defined benefit pension plan (based on date of hire), we have assumed those members will behave in a manner similar to the members that do participate in the MERS defined benefit and OPEB plans and have applied the same assumptions.

We have reviewed the assumptions with the plan sponsor and believe the assumptions reasonably represent the future expectations of the covered members. We are relying on the reasonableness of the assumptions as described in the most recent experience study report along with the plan sponsor's assessment.

We have set the price inflation assumptions based on our expectations of future price inflation.

Actuarial Cost Method

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

- The annual service 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
- Each annual service cost is a constant percentage of the member's year by year projected covered pay.

Assumed Discount (Interest) Rate

It is our understanding that a Trust will be established prior to the FYE March 31, 2024 with the Municipal Employees' Retirement System of Michigan (MERS). Therefore, we have calculated the liability and the resulting contributions using an assumed rate of 6.00% per annum as of March 31, 2023.

Inflation

The long-term annual assumed rate of price inflation is 2.50% annually. This rate is consistent with the MERS defined benefit pension valuation and our expectation of future price inflation.

Payroll Growth

There are no active members in this plan, and benefits are not payroll related.

Actuarial Assumptions Used for the Valuation

Mortality Rates

The rates of mortality used for individual members are based upon the sex distinct Pub-2010 tables, as published by the Society of Actuaries, and include a margin for future mortality improvements projected using a fully generational improvement scale.

- **Healthy Post-Retirement Mortality:** Sex distinct Pub-2010 General Healthy Retiree tables scaled by a factor of 106%. The base year is 2010 and future mortality improvements are assumed each year using scale MP-2019, as published by the Society of Actuaries.

- **Disability Retirement Mortality:** Sex distinct PubNS-2010 Disabled tables without adjustment. The base year is 2010 and future mortality improvements are assumed each year using scale MP-2019, as published by the Society of Actuaries.

Note that the Pub-2010 tables do not include rates at all ages. For purposes of selecting mortality rates that are not otherwise published, we use the corresponding Employee or Healthy Retiree rates as applicable. Sample Healthy Post-Retirement rates are shown below:

Fully Generational Healthy Mortality Tables				
Sample Ages in 2023	Probability of Dying Next Year		Future Life Expectancy (Years)	
	Men	Women	Men	Women
55	0.44%	0.31%	30.36	33.24
60	0.67%	0.43%	25.66	28.38
65	0.97%	0.63%	21.17	23.65
70	1.50%	1.01%	16.91	19.11
75	2.53%	1.78%	12.99	14.87
80	4.54%	3.27%	9.54	11.06

Disability, Retirement and Withdrawal Rates

None.

Miscellaneous and Technical Assumptions
as of March 31, 2023

Assumed Annual Increase in Maximum Stipend	The maximum stipend was assumed to increase at the rate of the price inflation assumption.
Decrement Operation	Disability and withdrawal do not operate during retirement eligibility.
Decrement Timing	Decrements of all types are assumed to occur mid-year.
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.
Opt-In/Election Percentage	100%.
Marriage Assumption	0% - Spouses are not eligible for coverage.
Utilization Percentage	75% of liabilities for retirees as of the valuation date were reflected in this valuation.

APPENDIX

GLOSSARY OF TERMS

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 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.

Glossary of Terms

Amortization Method	The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be “open” (meaning, reset each year) or “closed” (the number of years remaining will decline each year).
Amortization Payment	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
Cost-of-Living Adjustments	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
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 age(s). The portion of the actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial accrued liability. The sum of the accrued liability plus the present value of all future normal costs is the present value of all benefits.
GASB	The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.
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.
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 health care benefits regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.
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.