

February 14, 2018

PERSONAL & CONFIDENTIAL

Heather Cameron
Gladwin County Road Commission
301 S. State Street,
Gladwin, MI 48624

RE: Gladwin County Road Commission Other Post-Employment Benefits Plan

Dear Heather:

Transmitted via email, this is a copy of your OPEB accounting report for the fiscal year ending December 31, 2018. This information is intended to assist you in complying with Governmental Accounting Standards Board Statement No. 74 (GASB 74) Financial Reporting for Postemployment Benefit Plans Other than Pension Plans, and Statement No. 75 (GASB 75) Accounting and Financial Reporting for Postemployment Benefits Other than Pensions.

Because GASB 75 is new this year, please discuss these results with your accountants and let us know if additional information is needed.

If you have any questions about this report, please call me at (616) 742-9244.

Sincerely,



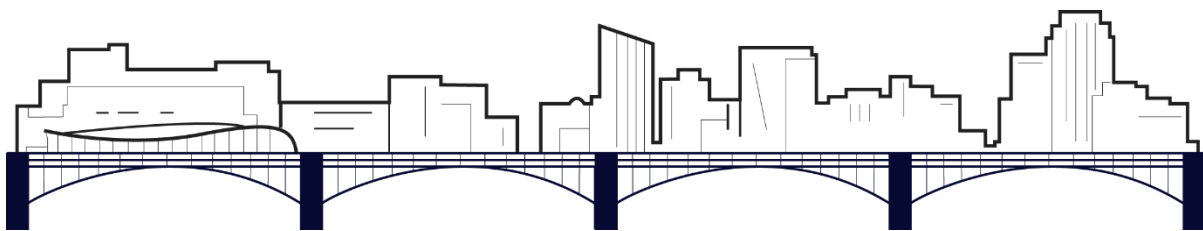
Christian R. Veenstra, FCA, ASA, MAAA
President / Enrolled Actuary

Enclosure

Gladwin County Road Commission Other Post-Employment Benefits Plan

Accounting Report

for the Period Ending December 31, 2018
under GASB Statement 74 & 75



WATKINS ROSS | 200 OTTAWA AVE N.W. | SUITE 600 | GRAND RAPIDS, MI 49503 | 616.456.9696

Report presented by:



February 2019

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INTRODUCTION AND CERTIFICATION

The schedules included in this report have been prepared in order to provide the information necessary to comply with Governmental Accounting Standards Board (GASB) Statement Nos. 74 and 75. This information may, at the discretion of management of the plan sponsor and its auditor, be used for the preparation of its financial statements. The calculations herein have been made based on our understanding of GASB 74 and 75, and may be inappropriate for other purposes.

The calculations summarized in this report involve actuarial calculations that require assumptions about future events. We believe that the assumptions used in the report are within the range of possible assumptions that are reasonable and appropriate for the purposes for which they have been used. However, other assumptions are also reasonable and appropriate and their use would produce different results.

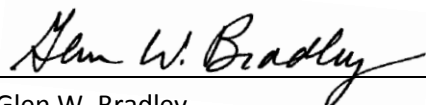
This report contains additional information and details related to plan provisions and recommended contribution calculations.

This report was prepared on the basis of participant data and asset values as reported to us by the plan sponsor. Watkins Ross relied upon the data as submitted, and has no reason to believe that any information, which would have a material effect on the results of this valuation, was not considered in the preparation of the report.

The actuary certifying this report represents himself as meeting the Qualification Standards of the American Academy of Actuaries to render actuarial opinions contained in the report.

Prepared by:

Certified by:



Glen W. Bradley
Senior Pension Analyst



Joseph Shackelford, ASA, MAAA
Health Actuary

PLAN DESCRIPTION

Summary of Significant Accounting Policies

For purposes of measuring the net Other Post-Employment Benefits (OPEB) liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expenses, information about the fiduciary net position of the Gladwin County Road Commission Other Post-Employment Benefits Plan and additions to/deductions from the Road Commission's fiduciary net position have been determined on the same basis as they are reported by the Gladwin County Road Commission. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Plan Description


Gladwin County Road Commission Other Post-Employment Benefits Plan is a single employer plan established and administered by **Gladwin County Road Commission** and can be amended at its discretion.

Benefits Provided

A summary of plan provisions is available on page 12.

Summary of Plan Participants

As of December 31, 2018, Retirement Plan membership consisted of the following:

	
Inactive plan members receiving or entitled to future benefits	29
Covered Spouse	17
Active plan members	<u>18</u>
Total participants	64

Contributions

The Gladwin County Road Commission OPEB was established and is being funded under the authority of the Road Commission and under agreements with the unions representing various classes of employees. The plan's funding policy is that the employer will fund the plan on a pay-as-you-go basis with an annual contribution to the OPEB Trust of \$25,000. Currently, benefit payments are made from general operating funds. There are no long term contracts for contributions to the plan.

ASSUMPTIONS AND METHODS

The Road Commission's OPEB liability was measured as of December 31, 2018.

Actuarial Assumptions

The total OPEB liability was determined by an actuarial valuation as of December 31, 2018 and the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Salary increases	3.00%
Investment rate of return	7.75%
20-year Aa Municipal bond rate	3.00%
Mortality	RP-2014 adjusted to 2006 Total Data Set, Headcount-weighted, MP-2018 no pre-retirement mortality

The long-term expected rate of return on retirement plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of retirement plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the retirement plan's target asset allocation are summarized in the following table:

Asset Class	Target Allocation (%)	Long-Term Expected Real Rate of Return(%)
Global equity	55.5	6.15
Global fixed income	18.5	1.26
Real assets	13.5	7.22
Diversifying strategies	12.5	5.00

The sum of each target allocation times its long-term expected real rate is 5.25%.

The long-term expected rate of return after including inflation is 7.75%.

Discount Rate

The discount rate used to measure the total OPEB liability was **3.0%**. The assets are not projected to be sufficient to make projected future benefit payments of current plan members. For projected benefits that are covered by projected assets, the long-term expected rate was used to discount the projected benefits. From the year that benefit payments were not projected to be covered by the projected assets (the "depletion date"), projected benefits were discounted at a discount rate reflecting a 20-year AA/Aa tax-exempt municipal bond yield. A single equivalent discount rate that yields the same present value of benefits is calculated. This discount rate is used to determine the Total OPEB Liability. The discount rate at 12/31/2017 was 7.5%.

NET OPEB LIABILITY

Changes in the Net OPEB Liability

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
Balance at December 31, 2017	\$6,297,524 ¹	\$189,524	\$6,108,000
Changes during the Year			
Service Cost	79,743		79,743
Interest	187,374		187,374
Experience (Gains)/Losses	(1,008,245)		(1,008,245)
Change in plan terms	0		0
Change in actuarial assumptions	3,336,801		3,336,801
Contributions to OPEB trust		25,000	(25,000)
Contributions/benefit paid from general operating funds		262,921	(262,921)
Net Investment Income		(7,542)	7,542
Benefit Payments; Including Refunds of Employee Contributions	(262,921)	(262,921)	0
Administrative Expenses		(472)	472
Other Changes		<u>0</u>	<u>0</u>
Total Changes	2,332,752	16,986	2,315,766
Balance at December 31, 2018	\$8,630,276	\$206,510	\$8,423,766

Net OPEB Liability – Discount and Trend Rate Sensitivities

The following presents the net OPEB liability (NOL) of the Road Commission, calculated using trend and discount rates 1% higher and lower than base assumptions:

	1% Decrease	Current Rate	1% Increase
Discount			
Total OPEB Liability	\$10,049,484	\$8,630,276	\$7,503,640
Plan Fiduciary Net Position	<u>206,510</u>	<u>206,510</u>	<u>206,510</u>
Net OPEB Liability	\$9,842,974	\$8,423,766	\$7,297,130
Trend			
Total OPEB Liability	\$7,463,594	\$8,630,276	\$10,092,307
Plan Fiduciary Net Position	<u>206,510</u>	<u>206,510</u>	<u>206,510</u>
Net OPEB Liability	\$7,257,084	\$8,423,766	\$9,885,797

¹ As reported in the 12/31/2017 Notes to the Financial Statement.

OPEB EXPENSE

Components of Road Commission's OPEB Expense for the Fiscal Year Ending December 31, 2018

Below are the components of the Total OPEB Expense:

	Fiscal Year Ending 12/31/2018
Service Cost	\$79,743
Interest on Total OPEB Liability	187,374
Experience (Gains)/Losses	(496,672)
Changes of Assumptions	1,643,744
Changes in plan terms	0
Employee Contributions	0
Projected Earnings on OPEB Plan Investments	(14,670)
Investment Earnings (Gains)/Losses	4,442
Administrative Expenses	472
Other Changes in Fiduciary Net Position	<u>0</u>
Total OPEB Expense	\$1,404,432

OPEB LIABILITY

OPEB Plan Fiduciary Net Position

The OPEB Plan Fiduciary Net Position as of December 31, 2018 is \$206,510

Deferred Inflows and Outflows of Resources Related to OPEB Plan

	Deferred Outflows Of Resources	Deferred Inflows Of Resources
Experience (Gains)/Losses	0	511,573
Changes of Assumptions	1,693,057	0
Investment Earnings (Gains)/Losses	<u>17,770</u>	<u>0</u>
Total	\$1,710,827	\$511,573

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year Ended December 31,	Amount Recognized
2018	\$1,151,514
2019	38,854
2020	4,442
2021	4,444
2022	0
Thereafter	0

Reconciliation of Net OPEB Liability

	Net OPEB Liability
Net OPEB Liability December 31, 2017	\$6,108,000
Total OPEB expense	1,404,432
Contributions	(287,921)
Change in deferred outflows of resources	1,710,827
Change in deferred inflows of resources	<u>(511,573)</u>
Net OPEB Liability December 31, 2018	\$8,423,766

Total OPEB Liability by Participant Status

	Total OPEB Liability
Active participants	\$3,658,224
Inactive participants receiving benefits	<u>4,972,052</u>
Total	\$8,630,276

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

Changes in Net OPEB Liability and Related Ratios

	Fiscal Year Ending 12/31/2018
Total OPEB Liability	
Service Cost	\$79,743
Interest	187,374
Changes of Benefit Terms	0
Difference between Expected and Actual Experience	(1,008,245)
Change of Assumptions	3,336,801
Benefit Payments (Including Refunds of Employee Contributions)	(262,921)
Net Change in Total OPEB Liability	2,332,752
Total OPEB Liability – Beginning	6,297,524
Total OPEB Liability – Ending (a)	8,630,276
Plan Fiduciary Net Position	
Contributions to OPEB trust	25,000
Contributions/benefit payments made from general operating funds	262,921
Net Investment Income	(7,542)
Benefit Payments (Including Refunds of Employee Contributions)	(262,921)
Administrative Expenses	(472)
Other	0
Net Change in Fiduciary Net Position	16,986
Plan Fiduciary Net Position – Beginning	189,524
Plan Fiduciary Net Position – Ending (b)	206,510
Net OPEB Liability – Ending (a)-(b)	\$8,423,766
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	2.39%
Covered Employee Payroll	\$1,769,048
Net OPEB Liability as Percentage of Payroll	487.8%

Schedule of Employer Contributions

	Fiscal Year Ending December 31,	
	<u>2019</u>	<u>2018</u>
Service cost	\$163,270	\$82,135
Amortization of unfunded liability	<u>1,839,368</u> ¹	<u>1,127,521</u>
Actuarially Determined Employer Contribution	\$2,002,638	\$1,209,656
Employer Contribution (benefit payments)	<u>TBD</u>	<u>287,921</u>
Contribution Deficiency/(Excess)	TBD	921,735
Covered Employee Payroll	Not avail	\$1,769,048
Contribution as a Percentage of Covered Payroll	Not avail	68.38%

¹ Based on 6-year, level dollar, amortization of unfunded liability; alternative funding scenarios could be considered

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

STATE OF MICHIGAN PUBLIC ACTS 530 AND 202 INFORMATION

Financial information	2018
Assets (Fiduciary net position)	206,510
Liabilities (Total OPEB Liability)	8,630,276
Funded ratio for the Plan Year	2.39%
Actuarially Recommended Contribution (ARC)	1,209,656
Is ARC calculated in compliance with No. Letter 2018-3?	Yes

Membership	2018
Active members	18
Retirees and Beneficiaries	29
Premiums paid on behalf of the retirants	262,921

Actuarial Assumptions	2018
Actuarially assumed rate of investment return	7.75%
Discount rate	3.00%
Amortization method used for funding unfunded liability	Level \$
Amortization period used for funding unfunded liability	6 years
Is each division closed to new employees	No
Healthcare inflation assumption (see page 10 of this report)	

Uniform Assumptions	2018
Actuarial value of assets using uniform assumptions	206,510
Actuarial accrued liability using uniform assumptions	8,630,276
Funded ratio using uniform assumptions	2.39%
Annual Required contribution (ARC) using uniform assumptions	488,870

Information for Summary Report (minimum required contribution) ¹	2018
Retiree insurance premiums for the year (1)	262,921
Normal cost as a percent of covered payroll (2)	10.02%
Covered payroll for employees hired after June 30, 2018 (3)	N/A
Normal cost for employees hired after June 30, 2018 (4) = (2)X(3)	N/A
Minimum required contribution under PA 202 (1) + (4)	262,921

¹ Senate Bill 686 requires that a local unit is must contribute at least both of the following – Normal cost for employees first hired after June 30, 2018 and retiree premiums due to retirants in the retirement system; In order to obtain 40% funding, higher contributions may be needed.

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

Assumptions and methods for Calculation of Actuarially Determined Contribution

Valuation date December 31, 2018

Actuarial Methods

Cost method Entry Age Normal (level percentage of compensation)

Asset valuation method Market value

Actuarial Assumptions

Discount rate – 3.00%

Rationale – Average effective rate consisting of long term return on assets and 20-year Aa Municipal Bond

20-year Aa Municipal Bond Rate – 3.00%

Rationale – December 31, 2018 bond rate

Salary scale – 3.00%

Rationale – Expected future pay increases provided by client

Return on plan assets – 7.75%

Rationale – Consistent with plan investment experience

Mortality rates – RP-2014 adjusted to 2006 Total Data Set, Headcount-weighted, MP-2018 no pre-retirement mortality

Rationale – Contemporary table consistent with Uniform Assumptions under Public Act 202

Utilization – 100% of covered employees at the valuation date will elect coverage at retirement; actual coverage used for non-active

Rationale – historical

Turnover rates - None

Rationale – Small active group

Marital assumption – Current marital status assumed at retirement age

Rationale – Consistent with current employer demographic

Retirement Rates – 100% of employees retire at first age eligible

Rationale – Based on the normal retirement date of pension benefits and consistent with experience

Age of Spouse – Female spouse is assumed to be 3 years younger than a Male employee. Actual age is used for spouses of current retirees

Rationale – historical

Implicit Subsidy – Not applicable

Rationale – Premiums are age-graded

Medical Trend – Pre-Medicare, 8.5% graded down to 4.5% by 0.25% per year; Post-Medicare, 7.0% graded down to 4.5% by .25% per year

Rationale – Consistent with Uniform Assumptions under Public Act 202

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

Annual per-capita costs valued – Sample rates below

Age	Rate
20	1,769.29
25	2,797.40
30	3,162.40
35	3,404.78
40	3,560.84
45	4,023.38
50	4,976.26
55	6,213.33
60	7,561.92
65 (both+)	5,640.00

Active employees who opt-out of employer provided medical coverage are assumed to not elect coverage at retirement

Neither the retiree nor the spouse is covered at the Post-Medicare rate until both are eligible for Medicare.
Rationale – Based on current plan provisions and premiums in effect during 2018

Michigan Public Employer Annual Cost Limitations – See rates below

Rationale – Actual State of Michigan hard caps

Year	Single	Two Person
2019	6,685.17	13,980.75

Inflation on Michigan hard caps – 3.0%

Rationale – Based on history of increases

Data Collection

Date and form of data - All personnel and asset data was prepared by the plan sponsor or a representative and was generally relied upon as being correct and complete without audit by Watkins Ross

Assumption changes since prior valuation

- Discount rate decreased from 7.5% to 3%
- Medical Trend increases changed from 6% to the uniform rates under PA 202
- Mortality table changed from the 2011 Period Life Table for males and females to the uniform rates under PA 202
- Salary Scale increased from 2.8% to 3%
- PA 152 Hard Cap limits changed from the same Trend rate applied to medical premiums to a 3% per year inflation trend

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Difference between Actual and Expected Experience

Year	Difference between expected and actual Experience	Recognition period (years)	Amount Recognized in Year Ended December 31,					Deferred Outflow of Resources	Deferred Inflow of Resources
			2018	2019	2020	2021	2022		
2018	(1,008,245)	2.03	(496,672)	(496,672)	(14,900)	-	-	(511,573)	
Net recognized in OPEB expense			\$ (496,672)	\$ (496,672)	\$ (14,900)	\$ -	\$ -	\$ (511,573)	

Schedule of Changes in Assumptions

Year	Changes in Assumptions	Recognition period (years)	Amount Recognized in Year Ended December 31,					Deferred Outflow of Resources	Deferred Inflow of Resources
			2018	2019	2020	2021	2022		
2018	3,336,801	2.03	1,643,744	1,643,744	49,312	-	-	1,693,057	
Net recognized in OPEB expense			\$ 1,643,744	\$ 1,643,744	\$ 49,312	\$ -	\$ -	\$ 1,693,057	

Schedule of Differences between Projected and Actual Earnings on OPEB Plan Investments

Year	Difference between expected and actual earnings on OPEB assets	Recognition period (years)	Amount Recognized in Year Ended December 31,					Deferred Outflow of Resources	Deferred Inflow of Resources
			2018	2019	2020	2021	2022		
2018	22,212	5	4,442	4,442	4,442	4,442	4,444	17,770	
Net recognized in OPEB expense			\$ 4,442	\$ 4,442	\$ 4,442	\$ 4,442	\$ 4,444	\$ 17,770	

Total Deferred Outflow/(Inflow) of Resources

	Amount Recognized in Year Ended December 31,			
	2019	2020	2021	2022
Total Deferred Outflow/(Inflow) of Resources	\$ 1,151,514	\$ 38,854	\$ 4,442	\$ 4,444

SUMMARY OF PLAN PROVISIONS

Participation eligibility

Full time employees hired prior to August 19, 2009

Retirement eligibility

The earlier of:

- (1) Attainment of age 55 with 30 years of service
- (2) Attainment of age 60 with 25 years of service
- (3) Age 62 with any years of service

Summary of Benefits

The Road Commission pays the premium for retiree and dependents up to the Public Act 152 (PA 152) Hard Cap Limits

Retiree - Medical coverage for life

Spouse - Medical coverage for the life of the spouse, continuing after death of retiree as long as the retiree elected a Joint and Survivor annuity from the pension at retirement

Retiree/Spouse Contribution

Premium cost in excess of the PA 152 Hard Cap Limits

Changes Since Prior Valuation

None

GLOSSARY

A number of special terms and concepts are used in connection with OPEB plans and the OPEB accounting report. The following list reviews a number of these terms and provides a brief discussion of their meaning.

Accrued Benefit - Each participant has an accrued benefit under the plan. This is the amount of monthly benefit already earned. It is based on past employment with the Employer and is payable at normal retirement.

Actuarial Cost Method - This is a mathematical formula which is used to allocate the present value of projected benefits to past and future plan years.

Amortization – The difference between actual and expected investment returns, the difference between actual and expected experience, and the impact of any plan or assumption changes will be amortized and paid over future years.

Depletion Date (Cross-over Point) – The projected date (if any) where plan assets, including future contributions, are no longer sufficient to pay Projected Benefit Payments to current members.

Long-term expected rate of return – The rate of return based on the nature and mix of current and expected plan investments and over the time period from when an employee is hired to when all benefits to the employee have been paid.

Market Value of Assets – The market value of all assets in the fund including any accrued contribution for the previous plan year, which was not paid by the end of the year.

Measurement Date – The date the Total OPEB Liability, Fiduciary Net Position, and Net OPEB Liability are determined.

Net OPEB Liability (NOL) – The Total OPEB Liability less the Plan Fiduciary Net Position.

Plan Fiduciary Net Position – The market value of plan assets as of the measurement date.

OPEB Expense (OE) – The change in the Net OPEB Liability (NOL) recognized in the current measurement period. Changes to the NOL not fully recognized in a given year's OPEB expense will be maintained as deferred inflows and deferred outflows. These will be recognized incrementally in the OPEB expense over time.

Present Value - The present value of a future payment or a series of payments is the amount of each payment, discounted to recognize the time value of money, and further reduced for the probability that the payment might not be made because of death, disability or termination of employment.

Present Value of Accumulated Benefits - The discounted value of all monthly benefit payments due in the future, based on current accrued benefits.

GLOSSARY

Present Value of Vested Accumulated Benefits - The discounted value of all monthly benefit payments due in the future, based on current vested benefits.

Projected Benefit Obligation - The value of benefits earned to the measurement date, but based on anticipated salary levels at retirement, computed in accordance with Generally Accepted Accounting Principles (GAAP) accounting rules.

Projected Benefit Payments – All benefits projected to be payable to current active and inactive participants as a result of their past service and their expected future service.

Real Rate of Return – The rate of return on an investment after the adjustment to eliminate inflation.

Service Cost - The value of benefits earned during the current year computed in accordance with GAAP accounting rules.

Single Equivalent Discount Rate – The single rate that gives the same total present value as discounting the Projected Benefit Payments with the long-term expected rate of return until the Depletion Date and discounting any remaining Projected Benefit Payments with the yield on a 20-year AA/Aa tax-exempt municipal bond index.

Total OPEB Liability (TOL) – The actuarial present value of the accrued benefit determined under the Entry Age actuarial cost method calculated using the blended Single Equivalent Discount Rate.