



Date: May 22, 2020

Addendum #: 1

Project Name: Actuarial Services to Value Other Post-Employment Benefits in Compliance with GASB “OPEB Services”

Bid Due Date: Friday, May 29, 2020 at 2:00PM

This addendum will answer any questions/clarifications recently submitted.

1. **A copy of the most recent OPEB actuarial report, including determining of Actuarially Determined Contribution and PA202 information.**

Attached.

2. **Please confirm the scope of work is for two “full” actuarial valuations (FY 2019-20 and 2021-22) and two “roll-forward” evaluations (FY 2020-21 and FY 2022-23).**

Yes, that is correct.

3. **Is the actuarially determined contribution usually provided in the GASB 75 report or would TCL&P prefer it in a separate report?**

It has been provided in a separate report, but either way is fine.

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Actuaries & Consultants

November 12, 2019

Ms. Kelli Schroeder, PHR, SHRM-CP
Manager of Human Resources & Communications
Traverse City Light & Power
1131 Hastings Street
Traverse City, MI 49686

Re: Fiscal Year 2019 Actuarially Determined Contribution for Other Postemployment Benefits

Dear Kelli:

The Michigan Community Engagement and Finance Division, Bureau of Local Government requires the reporting of an Annual Required Contribution (“ARC”) in conjunction with OPEB financial reporting. ARC is defined in Public Act 202 of 2017 as “the sum of the normal cost payment and the annual amortization payment for past service costs to fund the unfunded actuarial accrued liability”. Governmental Accounting Standards Board Statement No. 75 replaced the ARC with the Actuarially Determined Contribution (“ADC”). The ADC is calculated in the same way as the ARC.

The following provides the ADC for Fiscal Year 2019. All assumptions, methods, and results are based on the GASB 75 Actuarial Valuation Report for the Fiscal Year ending June 30, 2018 dated December 3, 2018. It is noted that these results are a roll-forward calculation based on the Fiscal Year 2018 full valuation.

Normal Cost	\$3,128
Interest on Normal Cost	<u>235</u>
Normal Cost Component	\$3,363
Actuarial Accrued Liability (AAL)	\$5,514,338
Actuarial Value of Assets	<u>3,611,936</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$1,902,401
Amortization Period (years)	30
Investment Rate of Return	7.50%
Amortization Factor	12.6961
Annual Amortization	\$149,841
Interest on Amortization Payment	<u>11,238</u>
Amortization Component	\$161,079

Ms. Kelli Schroeder, PHR, SHRM-CP
November 12, 2019
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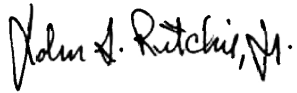
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Normal Cost Component	\$3,363
Amortization Component	<u>161,079</u>
Actuarially Determined Contribution	\$164,442

Let me know if any questions arise.

Sincerely,

Menard Consulting, Inc.



John Ritchie, ASA, MAAA

MC, Inc.

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September 24, 2019

Ms. Karla Myers-Beman
Controller
Traverse City Light & Power
1131 Hastings Street
Traverse City, MI 49686

RE: GASB 75 Roll Forward Results for Fiscal Year 2019

Dear Karla:

Paragraph 28 of GASB Statement No. 75 states that an actuarial valuation of the net OPEB liability should be performed at least biennially given that significant changes have not occurred since the last full valuation. As represented to me, there have been no significant changes to the Postretirement Health Plan since the last full valuation, so a full actuarial valuation for Fiscal Year 2019 is not required. As such, this letter provides amounts required for financial reporting requirements under GASB Statement No. 75 for Fiscal Year 2019.

Unless otherwise noted, all assumptions, methods, and results are based on the Fiscal Year 2018 GASB 75 Actuarial Report dated December 3, 2018.

Results

	<u>Fiscal Year 2019</u>
Total OPEB Liability	\$5,514,337
Plan Fiduciary Net Position	<u>3,611,936</u>
Net OPEB Liability	\$1,902,401
OPEB Expense	\$422,458

OPEB Expense	
	<u>Fiscal Year 2019</u>
Service Cost	\$3,128
Interest on Service Cost	<u>235</u>
Total	\$3,363
Interest Cost	390,609
Difference Between Expected & Actual Experience	(218,876)
Changes of Assumptions and Other Inputs	<u>247,362</u>
Total	\$422,458

Approach

The Net OPEB Liability and Service Cost for Fiscal Year 2019 are determined by calculating the Fiscal Year 2018 results one year later. Starting costs and trend rates are appropriately adjusted to reflect the passage of one year.

The amortization for the net difference between projected and actual earnings on OPEB plan investments is shown below.

Actual Earnings	\$78,435
Projected Earnings	<u>240,376</u>
Difference	(\$161,940)
Amortization Period	5.00 years
<u>Amortization Schedule</u>	
Fiscal Years 2019 - 2023:	(\$32,388)

In addition, the Other Changes component is as follows.

<u>Other Changes</u>	
Net OPEB Liability, New Assumption	\$1,902,401
Net OPEB Liability, Prior Assumption	<u>2,171,964</u>
Difference	(\$269,563)
Average Expected Remaining Service Lives	2.16 years
<u>Amortization Schedule</u>	
Fiscal Years 2019 - 2020:	(\$124,604)
Fiscal Year 2021:	(\$20,355)

The changes above are included in the Fiscal Year 2019 Expense calculation.

The resulting Deferred Outflows/Inflows of Resources is shown below.

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference Between Expected & Actual Experience	\$0	\$87,046
Changes of Assumptions and Other Inputs	445,479	173,832
Net Difference Between Projected & Actual Earnings on OPEB Plan Investments	<u>144,457</u>	<u>145,478</u>
Total	\$589,936	\$406,357

Future Deferred Outflows/Inflows of Resources is shown below.

Fiscal Year Ending:	<u>Outflows</u>	<u>Inflows</u>
June 30, 2020	\$442,320	\$306,879
June 30, 2021	77,872	99,477
June 30, 2022	37,356	0
June 30, 2023	32,388	0

Sensitivity Testing of the Net OPEB liability

Discount Rate			
	<u>1% Increase</u>	<u>Valuation Rate</u>	<u>1% Decrease</u>
Net OPEB Liability	\$1,377,866	\$1,902,401	\$2,530,472
Change	(27.57%)		33.01%

Health Care Trend			
	<u>1% Increase</u>	<u>Valuation Rate</u>	<u>1% Decrease</u>
Net OPEB Liability	\$2,539,679	\$1,902,401	\$1,362,522
Change	33.50%		(28.38%)

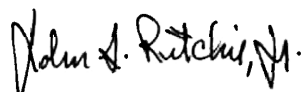
Change in Liability

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
Balances as of 6/30/2018	\$5,383,439	\$3,343,884	\$2,039,555
Changes for the year:			
Service Cost	\$3,363	\$0	\$3,363
Interest on Total OPEB Liability	390,609	0	390,609
Changes of Benefit Terms	0	0	0
Difference Between Expected & Actual Experience	0	(161,940)	161,940
Changes of Assumptions and Other Inputs	0	0	0
Contributions – Employer	0	0	0
Contributions - Active & Inactive Employees	0	0	0
Net Investment Income	0	78,435	(78,435)
Benefit Payments	(350,628)	0	(350,628)
Administrative Expenses	0	(5,561)	5,561
Other Changes	<u>87,555</u>	<u>357,118</u>	<u>(269,563)</u>
Net Changes	\$130,899	\$268,052	(\$137,153)
Balances as of 6/30/2019	\$5,514,337	\$3,611,936	\$1,902,401

Please contact me if any questions arise.

Sincerely,

Menard Consulting, Inc.



John Ritchie, ASA, MAAA

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November 4, 2019

Ms. Karla Myers-Beman
 Controller
 Traverse City Light & Power
 1131 Hastings Street
 Traverse City, MI 49686

Re: Fiscal Year 2019 OPEB Roll-Forward Results Under Public Act 202 Uniform Assumptions

Dear Karla:

Per Public Act 202 of 2017 (“The Act”), the State Treasurer requires plan sponsors to determine the funded status and Actuarially Determined Contribution (“ADC”) under GASB 75 rules using certain uniform assumptions. The intent of the rule is to allow users of financial statements to compare retirement systems on a standard basis.

The following table provides the assumptions used in the GAAP valuation as well as those designated as standard assumptions in The Act. All other assumptions and methods are based on the GASB 75 Actuarial Valuation Report for the Fiscal Year ending June 30, 2018 dated December 3, 2018. It is noted that these results are a roll-forward calculation based on the Fiscal Year 2018 full valuation.

	GAAP Valuation	State Standard
Investment Rate of Return	7.50%	7.00%
Discount Rate	7.50%	7.00% Before Cross-Over Point; 3.00% After Cross-Over Point
Salary Increase	5.00%	3.50%
Mortality Table	RP-2014	RP-2014
<u>Heath Care Inflation</u>		
Pre-Medicare	Varies by plan	8.50% decreasing 0.25% per year to 4.50%
Medicare Eligible	Varies by plan	7.00% decreasing 0.25% per year to 4.50%
Amortization	Level Dollar	Level Dollar
Amortization Period	N/A	30 years

Ms. Karla Myers-Beman
November 4, 2019
Page 2

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The following provides the Funded Status for the Fiscal Year 2019 OPEB Roll-Forward calculation under GASB 75 rules using the Standard Assumptions.

Total OPEB Liability	\$5,918,850
Plan Fiduciary Net Position	<u>3,611,936</u>
Net OPEB Liability	\$2,306,914
Funded Ratio	61.02%

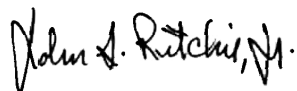
The following provides the ADC for Fiscal Year 2019 using the Standard Assumptions.

Normal Cost	\$3,396
Interest on Normal Cost	<u>254</u>
Normal Cost Component	\$3,888
Actuarial Accrued Liability (AAL)	\$5,918,850
Actuarial Value of Assets	<u>3,611,936</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$2,306,914
Amortization Period (years)	30
Investment Rate of Return	7.00%
Amortization Factor	13.2777
Annual Amortization	\$173,744
Interest on Amortization Payment	<u>12,162</u>
Amortization Component	\$185,906
Normal Cost Component	\$3,888
Amortization Component	<u>185,906</u>
Actuarially Determined Contribution	\$189,794

Let me know if any questions arise.

Sincerely,

Menard Consulting, Inc.



John Ritchie, ASA, MAAA

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Actuaries & Consultants

Actuarial Valuation of Other Postemployment Benefits
In accordance with GASB Statements No. 74 & No. 75

For the Fiscal Year Ending June 30, 2018

**Traverse City Light & Power
Postretirement Health Plan**

December 3, 2018

Menard Consulting, Inc.
1690 W. Lake Street, Suite F
Addison, IL 60101

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Appendix A – Retirement Rates

Executive Summary

This report details the data, assumptions, and underlying methodology used in the GASB 74/75 actuarial valuation for Fiscal Year 2018.

The following exhibit illustrates the Net OPEB Liability and OPEB Expense.

<u>Total OPEB Liability</u>	
Active Employees	\$321,214
Inactive Employees Entitled to But Not Yet Receiving Benefits	0
Inactive Employees Currently Receiving Benefits	<u>5,062,225</u>
TOTAL	\$5,383,439
Plan Fiduciary Net Position	\$3,343,884
Net OPEB Liability	\$2,039,555
OPEB Expense	\$530,432

Refer to the “Glossary” section of this report for definitions of GASB 75 terms.

Statement of Actuarial Opinion

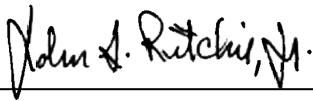
This report documents the results of an actuarial valuation for Traverse City Light & Power of their Postretirement Health Plan. The primary purpose of the valuation is to determine the obligations and costs for Fiscal Year 2018 in accordance with Government Accounting Standard No. 74 (“GASB 74”) and Government Accounting Standard No. 75 (“GASB 75”). Determinations for purposes other than meeting the Employer’s financial accounting requirements may be significantly different from the results herein.

In performing the valuation, I relied on information and data regarding plan provisions, plan participants, and benefit payments provided by Traverse City Light & Power personnel. An audit of the information was not performed, but the information was reviewed for reasonableness as appropriate based on the purpose of this valuation. The accuracy of the results is dependent upon the accuracy and completeness of the underlying information. All of the information was relied upon in drawing conclusions.

The valuation results in this report involve actuarial calculations that require assumptions about future events. Traverse City Light & Power is responsible for the selection of assumptions. I believe that the assumptions used in this valuation are reasonable and appropriate for the purposes for which they have been used.

To the best of my knowledge, all calculations are in accordance with requirements of applicable financial accounting standards, including GASB 74 and GASB 75, and the procedures followed and presentation of results conform to generally accepted actuarial principles and practices. I meet the Qualification Standards of the American Academy of Actuaries to render this Actuarial Opinion. There is no relationship between Traverse City Light & Power and Menard Consulting, Inc. that impairs objectivity.

The information contained in this report was prepared for use by the Traverse City Light & Power and its auditors. It is not intended or necessarily suitable for other purposes. It is intended to be used in its entirety to avoid misrepresentations.



John S. Ritchie, ASA, MAAA
Member, American Academy of Actuaries
Membership Number: 30294
John.Ritchie@MenardConsult.com

Notes to Financial Statements

Changes in the Net OPEB Liability

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
Balances as of 6/30/2017 ⁽¹⁾	\$5,596,053	\$2,929,135	\$2,666,918
Changes for the year:			
Service Cost	\$2,852	\$0	\$2,852
Interest on Total OPEB Liability	406,878	0	406,878
Changes of benefit terms	0	0	0
Difference Between Expected & Actual Experience	(269,497)	(24,842)	(244,655)
Changes of Assumptions and Other Inputs	28,188	0	28,188
Contributions – Employer	0	229,388	(229,388)
Contributions - Active & Inactive Employees	0	0	0
Net Investment Income	0	191,582	(191,582)
Benefit Payments ⁽²⁾	(342,038)	0	(342,038)
Administrative Expenses	0	(6,221)	6,221
Other Changes	<u>(38,996)</u>	<u>24,842</u>	<u>(63,838)</u>
Net Changes	(\$212,614)	\$414,749	(\$627,363)
Balances as of 6/30/2018	\$5,383,439	\$3,343,884	\$2,039,555

(1) Fiscal Year 2017 GASB 75 valuation results excluding City employees and retirees.

(2) Includes the Implicit Rate Subsidy.

OPEB Expense

Service Cost	\$2,653
Interest on Service Cost	<u>199</u>
Total	\$2,852
Interest Cost	406,878
Difference Between Expected & Actual Experience	(251,264)
Changes of Assumptions and Other Inputs	<u>371,966</u>
Total	\$530,432

Notes to Financial Statements
(Continued)

Deferred Outflows/Inflows of Resources

The Deferred Outflows/Inflows of Resources Schedule for the last valuation is shown below.

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Difference Between Expected & Actual Experience	\$0	\$184,536
Changes of Assumptions	1,171,346	0
Net Difference Between Projected & Actual Earnings on OPEB Plan Investments	<u>0</u>	<u>290,956</u>
Total	\$1,171,346	\$475,492

The Deferred Outflows/Inflows of Resources Schedule for this valuation is shown below.

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Difference Between Expected & Actual Experience	\$0	\$270,539
Changes of Assumptions	826,492	37,920
Net Difference Between Projected & Actual Earnings on OPEB Plan Investments	<u>4,968</u>	<u>203,312</u>
Total	\$831,460	\$511,772

Notes to Financial Statements
(Continued)

Significant Assumptions

Health Care Trend Rates

Initial Health Care Cost Trend Rate ⁽¹⁾

- Plan #1 High	6.00%
- Plan #1 High Wrap	7.00%
- HDHP with HSA	4.00%
- AMWINS	7.00%

Ultimate Health Care Cost Trend Rate

- HDHP with HSA	Constant for all years
- All Other Plans	4.50%

Fiscal Year the Ultimate Rate is Reached

Fiscal Year 2028

Additional Information

Valuation Date	July 1, 2017
Measurement Date	June 30, 2018
Actuarial Cost Method	Entry Age Normal
Discount Rate	7.50%
Inflation Rate	2.50%
Salary Rate Increase	5.00%
Funded Ratio (Fiduciary Net Position as a percentage of Total OPEB Liability)	62.11%
Covered Payroll	\$2,426,619
Net OPEB Liability as a Percentage of Covered Payroll	84.05%

(1) Trend rates for 2019 to 2020. Trend rates for 2018 to 2019 are known and are used.

Notes to Financial Statements
(Continued)

Discount Rate

The projection of cash flows used to determine the discount rate showed that the OPEB plan's fiduciary net position is projected to be sufficient to make projected benefit payments during the entire valuation projection horizon. As such, the discount rate used to measure the Total OPEB Liability is 7.5%, which is the single equivalent discount rate taking into account the long-term expected rate of return on OPEB plan investments.

The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
U.S. Stocks	34.5%	7.0%
International Stocks	5.0%	8.0%
Emerging Market Stocks	5.0%	12.0%
U.S. Bonds	20.0%	6.0%
Global Bonds	15.0%	7.0%
Global Real Estate	7.0%	8.0%
Commodities	5.0%	8.0%
Private Equity	7.0%	12.0%
Cash	<u>1.5%</u>	0.5%
Total	100.0%	

Deferred Outflows/Inflows of Resources – Development

The differences in experience, changes in assumption, and investment earnings shown below are for those changes from the last valuation.

Difference Between Expected & Actual Experience

Total OPEB Liability, Actual Experience	\$5,383,439
Total OPEB Liability, Expected Experience	<u>5,652,936</u>
Difference	(\$269,497)
Average Expected Remaining Service Lives	2.17 years
<u>Amortization Schedule</u>	
Fiscal Years 2018 - 2019:	(\$124,109)
Fiscal Year 2020:	(\$21,279)

Changes of Assumptions

<u>Change in Trend Rates</u>	
Total OPEB Liability, New Assumption	\$5,383,439
Total OPEB Liability, Prior Assumption	<u>5,710,113</u>
Difference	(\$326,675)
Average Expected Remaining Service Lives	2.17 years
<u>Amortization Schedule</u>	
Fiscal Years 2018 - 2019:	(\$150,440)
Fiscal Year 2020:	(\$25,794)

<u>Change in Mortality Assumption</u>	
Total OPEB Liability, New Assumption	\$5,383,439
Total OPEB Liability, Prior Assumption	<u>5,028,576</u>
Difference	\$354,862
Average Expected Remaining Service Lives	2.17 years
<u>Amortization Schedule</u>	
Fiscal Years 2018 - 2019:	\$163,421
Fiscal Year 2020:	\$28,020

Deferred Outflows/Inflows of Resources – Development
(Continued)

<u>Other Changes</u>	
Total OPEB Liability, New Assumption	\$5,383,439
Total OPEB Liability, Prior Assumption	<u>5,422,435</u>
Difference	(\$38,996)
Average Expected Remaining Service Lives	2.17 years
<u>Amortization Schedule</u>	
Fiscal Years 2018 - 2019:	(\$17,958)
Fiscal Year 2020:	(\$3,079)

Net Difference Between Projected & Actual Earnings on OPEB Plan Investments

Actual Earnings	\$191,582
Projected Earnings	<u>216,424</u>
Difference	(\$24,842)
Amortization Period ⁽¹⁾	5.00 years
<u>Amortization Schedule</u>	
Fiscal Years 2018 - 2022:	(\$4,968)

(1) The difference between projected and actual earnings on OPEB plan investments should be recognized over a closed five-year period.

Future Deferred Outflows/Inflows of Resources

Fiscal Year Ending:	<u>Outflows</u>	<u>Inflows</u>
June 30, 2019	\$409,886	\$289,184
June 30, 2020	376,090	148,434
June 30, 2021	40,516	74,153
June 30, 2022	4,968	0

Sensitivity Testing of the Net OPEB liability

Discount Rate			
	<u>1% Increase</u>	<u>Valuation Rate</u>	<u>1% Decrease</u>
Net OPEB Liability	\$1,520,136	\$2,039,555	\$2,663,596
Change	(25.47%)		30.60%

Health Care Trend			
	<u>1% Increase</u>	<u>Valuation Rate</u>	<u>1% Decrease</u>
Net OPEB Liability	\$2,678,854	\$2,039,555	\$1,500,267
Change	31.35%		(26.44%)

Expected Cash Flows

<u>Fiscal Year</u>	<u>Estimated Benefit Payments</u>
2018	\$342,038
2019	349,982
2020	363,984
2021	364,129
2022	380,600
2023	387,780
2024	375,754
2025	382,595
2026	406,523
2027	401,609
2028	395,281

The projection of future cash flows is based on a closed group valuation. It does not take into account the impact of future new hires. It also includes the Implicit Rate Subsidy.

Participant Data

Counts and Statistics

Census Date	July 2018
Participants	
Active Employees	34
Inactive Employees Entitled to But Not Yet Receiving Benefits	0
Inactive Employees Currently Receiving Benefits	<u>38</u>
TOTAL	72
Average Ages	
Active Employees	41.3
Inactive Employees Entitled to But Not Yet Receiving Benefits	-----
Inactive Employees Currently Receiving Benefits	65.8
Average Service	
Active Employees	9.5

Actuarial Methods and Assumptions

Actuarial Methods

Valuation Date	July 1, 2017
Measurement Date	June 30, 2018
Participant Data	Employee and retiree data were supplied by the plan sponsor as of the census date. Data on persons receiving benefits was supplied by the plan sponsor.
Fiscal Year	July 1 – June 30
Actuarial Cost Method	Entry Age Normal
Changes Since Last Actuarial Valuation	Starting per capita costs were updated using most recent premiums. Health Care Trend Rates were reset based on recent experience. The Mortality assumption was changed to the RP-2014 Combined Annuitant Mortality Table for males and females.
Nature of Actuarial Calculations	<p>The results are estimates based on assumptions about future events. Assumptions may be made about participant data or other factors. All approximations and assumptions are noted. Reasonable efforts were made in this valuation to ensure that significant items in the context of the actuarial liabilities or costs are treated appropriately, and not excluded or included inappropriately.</p> <p>Actual future experience will differ from the assumptions used. As these differences arise, the expense for accounting purposes will be adjusted in future valuations to reflect such actual experience.</p> <p>The numbers are not rounded, but this is for convenience only and should not imply precision which is not inherent in actuarial calculations.</p>

Actuarial Methods and Assumptions
(Continued)

Actuarial Assumptions

Discount Rate	7.50%				
Salary Rate Increase	5.00%				
Expected Rate of Return on Assets	7.50%				
Health Care Trend		Plan #1	Plan #1	HDHP	
	<u>Period</u>	<u>High</u>	<u>High Wrap</u>	<u>with HSA</u>	<u>AMWINS</u>
(1) Know rate	FY18 – FY19	1.40% ⁽¹⁾	(13.46%) ⁽¹⁾	1.41% ⁽¹⁾	0.90% ⁽¹⁾
	FY19 – FY20	6.00%	7.00%	4.00%	7.00%
	FY20 – FY21	5.81%	6.69%	4.00%	6.69%
	FY21 – FY22	5.63%	6.38%	4.00%	6.38%
	FY22 – FY23	5.44%	6.06%	4.00%	6.06%
	FY23 – FY24	5.25%	5.75%	4.00%	5.75%
	FY24 – FY25	5.06%	5.44%	4.00%	5.44%
	FY25 – FY26	4.88%	5.13%	4.00%	5.13%
	FY26 – FY27	4.69%	4.81%	4.00%	4.81%
	FY27 – FY28	4.50%	4.50%	4.00%	4.50%
	Subsequent	4.50%	4.50%	4.00%	4.50%
Retiree Contribution Trend	Same as Health Care Trend				
Mortality	RP-2014 Combined Annuitant Mortality Table for males and females.				

Actuarial Methods and Assumptions
(Continued)

Disability Rates	<p>Rates used are from the Municipal Employees' Retirement System of Michigan Actuarial Valuation Report.</p> <p>85% of disabilities are assumed to be non-duty and 15% are assumed to be duty-related.</p>																												
	<table border="1"> <thead> <tr> <th><u>Age</u></th> <th><u>Rate</u></th> <th><u>Age</u></th> <th><u>Rate</u></th> </tr> </thead> <tbody> <tr> <td>20</td> <td>0.02%</td> <td>45</td> <td>0.11%</td> </tr> <tr> <td>25</td> <td>0.02%</td> <td>50</td> <td>0.24%</td> </tr> <tr> <td>30</td> <td>0.02%</td> <td>55</td> <td>0.60%</td> </tr> <tr> <td>35</td> <td>0.06%</td> <td>60</td> <td>0.60%</td> </tr> <tr> <td>40</td> <td>0.06%</td> <td>65</td> <td>0.60%</td> </tr> </tbody> </table>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	20	0.02%	45	0.11%	25	0.02%	50	0.24%	30	0.02%	55	0.60%	35	0.06%	60	0.60%	40	0.06%	65	0.60%				
<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>																										
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Retirement Rates	<p>Rates used are from the Municipal Employees' Retirement System of Michigan Actuarial Valuation Report.</p> <p>See Appendix A for Sample Rates</p>																												
Withdrawal Rates	<p>Rates used are from the Municipal Employees' Retirement System of Michigan Actuarial Valuation Report. Base rates are multiplied by a Scaling Factor of 90%.</p>																												
	<table border="1"> <thead> <tr> <th><u>Years of Service</u></th> <th><u>Rate</u></th> <th><u>Years of Service</u></th> <th><u>Rate</u></th> </tr> </thead> <tbody> <tr> <td>0</td> <td>18.00%</td> <td>10</td> <td>4.50%</td> </tr> <tr> <td>1</td> <td>15.30%</td> <td>15</td> <td>3.33%</td> </tr> <tr> <td>2</td> <td>12.60%</td> <td>20</td> <td>2.70%</td> </tr> <tr> <td>3</td> <td>9.90%</td> <td>25</td> <td>2.43%</td> </tr> <tr> <td>4</td> <td>8.10%</td> <td>30</td> <td>2.34%</td> </tr> <tr> <td>5</td> <td>5.85%</td> <td>34 & Over</td> <td>2.16%</td> </tr> </tbody> </table>	<u>Years of Service</u>	<u>Rate</u>	<u>Years of Service</u>	<u>Rate</u>	0	18.00%	10	4.50%	1	15.30%	15	3.33%	2	12.60%	20	2.70%	3	9.90%	25	2.43%	4	8.10%	30	2.34%	5	5.85%	34 & Over	2.16%
<u>Years of Service</u>	<u>Rate</u>	<u>Years of Service</u>	<u>Rate</u>																										
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5	5.85%	34 & Over	2.16%																										
Coverage Status	<p>Active employees are assumed to continue into retirement in their current plan and coverage level. Employees who waived active medical coverage are assumed to not participate in the retiree medical plan.</p>																												

Actuarial Methods and Assumptions
(Continued)

Starting Per Capita Costs	Plan #1 High		HDHP with HSA														
	<u>Age</u>	<u>Retiree</u>	<u>Spouse</u>	<u>Retiree</u>	<u>Spouse</u>												
	55	\$10,638	\$15,063	\$9,286	\$12,406												
	57	11,506	16,293	10,044	13,419												
	60	12,943	18,327	11,298	15,094												
	62	13,999	19,822	12,220	16,326												
	64	15,141	21,440	13,217	17,658												
		Plan #1 High Wrap		AMWINS													
	<u>Age</u>	<u>Retiree</u>	<u>Spouse</u>	<u>Retiree</u>	<u>Spouse</u>												
	65	\$6,932	\$6,932	\$4,807	\$4,807												
	67	7,354	7,354	5,099	5,099												
	70	7,997	7,997	5,545	5,545												
	75	9,004	9,004	6,243	6,243												
	80 & Older	9,941	9,941	6,893	6,893												
Retiree Contributions	Retiree: None Spouse: 100% of the premium																
Morbidity	<table border="1"> <thead> <tr> <th><u>Age</u></th> <th><u>Rate Per Age</u></th> </tr> </thead> <tbody> <tr> <td>Under 65</td> <td>4.00%</td> </tr> <tr> <td>65 – 69</td> <td>3.00%</td> </tr> <tr> <td>70 – 74</td> <td>2.50%</td> </tr> <tr> <td>75 – 80</td> <td>2.00%</td> </tr> <tr> <td>81 & Older</td> <td>0.00%</td> </tr> </tbody> </table>					<u>Age</u>	<u>Rate Per Age</u>	Under 65	4.00%	65 – 69	3.00%	70 – 74	2.50%	75 – 80	2.00%	81 & Older	0.00%
<u>Age</u>	<u>Rate Per Age</u>																
Under 65	4.00%																
65 – 69	3.00%																
70 – 74	2.50%																
75 – 80	2.00%																
81 & Older	0.00%																
Election at Retirement	80%																
Marital Status	50% of active employees electing retiree coverage are assumed to elect spousal coverage with males three years older than females.																

Actuarial Methods and Assumptions (Continued)

Starting Per Capita Costs Development

Pre-Medicare retiree starting costs are based on the premiums rates. The same rates are charged for actives and retirees. When an employer provides benefits to both active employees and retirees through the same plan, the benefits to retirees should be segregated and measured independently for actuarial measurement purposes. The projection of future retiree benefits should be based on claims costs, or age-adjusted premiums approximating claims costs, for retirees, in accordance with Actuarial Standards issued by the Actuarial Standards Board. As such, premiums were estimated for retirees as if they were rated on a stand-alone basis. These costs were then disaggregated into age-specific starting costs based on average ages and assumptions on the relationship between costs and increasing age (Morbidity).

Summary of Eligibility & Coverage

Eligibility Provisions

Division 01 (Non-Union Admin)

Normal Retirement: Attainment of age 60 and 10 years of service

Early Retirement: Attainment of age 55 and 25 years of service

Non-Duty Disability & Non-Duty Death-in-Service: 10 years of service

Duty Disability & Duty Death-in-Service: Any time

Division 10 (Union Closed)

Normal Retirement: Attainment of age 60 and 6 years of service

Early Retirement: Attainment of age 50 and 25 years of service

Non-Duty Disability & Non-Duty Death-in-Service: 6 years of service

Duty Disability & Duty Death-in-Service: Any time

Division 12

Normal Retirement: Attainment of age 60 and 6 years of service

Early Retirement: Attainment of age 55 and 25 years of service

Non-Duty Disability & Non-Duty Death-in-Service: 6 years of service

Duty Disability & Duty Death-in-Service: Any time

Medical & Prescription Drug Coverage

	Retiree	Spouse
Normal Retirement Early Retirement Non-Duty Disability Duty Disability	100% of the single premium paid for the life of the retiree	Pays entire premium
Non-Duty Death-in-Service Duty Death-in-Service	Not applicable	Pays entire premium

Coverage ends upon the attainment of Medicare eligibility for those hired on or after July 1, 2017.

Comments

Pre-Medicare retirees in the HDHP Plan are assumed to elect the AMWINS Plan upon attaining Medicare eligibility. Pre-Medicare retirees in the Plan #1 High Plan are assumed to elect the Plan #1 High Wrap Plan upon attaining Medicare eligibility.

Glossary

Total OPEB Liability

The Total OPEB liability the portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service. It is the liability of employers and non-employer contributing entities to employees for benefits provided through a defined benefit OPEB plan. This item was referred to as the Actuarial Accrued Liability in the GASB 45 Statement.

Active Employees – Individuals employed at the end of the reporting or measurement period.

Inactive Employees Entitled to But Not Yet Receiving Benefits – Individuals no longer employed by an employer in the OPEB plan or the beneficiaries of those individuals who have accumulated benefits under the terms of an OPEB plan but are not yet receiving benefit payments.

Inactive Employees Currently Receiving Benefits – Individuals no longer employed by an employer in the OPEB plan or the beneficiaries of those individuals who have accumulated benefits under the terms of an OPEB plan and are currently receiving benefits.

Fiduciary Net Position

OPEB plan assets held in a GASB-compliant Trust.

Net OPEB Liability

OPEB plan assets held in a GASB-compliant Trust. This item was referred to as the Unfunded Actuarial Accrued Liability in the GASB 45 Statement.

Deferred Outflows/Inflows of Resources

Changes in the Net OPEB Liability that have not been included in OPEB Expense are required to be reported as Deferred Outflows of Resources or Deferred Inflows of Resources related to OPEB.

Entry Age Actuarial Cost Method

A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s).

Other Postemployment Benefits (OPEB)

Benefits (such as death benefits, life insurance, disability, and long-term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.

Service Cost

The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.

Appendix A

Retirement Rates

Appendix A – Retirement Rates

Normal Retirement F(N) Not Adopted								
<u>Age</u>	<u>Without F50, F55, F(N)</u>	<u>With F55</u>	<u>With F50</u>		<u>Age</u>	<u>Without F50, F55, F(N)</u>	<u>With F55</u>	<u>With F50</u>
50			22%		61	24%	24%	24%
51			22%		62	24%	24%	24%
52			22%		63	24%	24%	24%
53			22%		64	27%	27%	27%
54			24%		65	30%	30%	30%
55		18%	18%		66	30%	30%	30%
56		15%	14%		67	30%	30%	30%
57		10%	16%		68	30%	30%	30%
58		15%	18%		69	30%	30%	30%
59		20%	18%		70	100%	100%	100%
60	20%	20%	20%					

Normal Retirement F(N) Adopted							
<u>Age</u>	<u>Rate</u>		<u>Age</u>	<u>Rate</u>		<u>Age</u>	<u>Rate</u>
40	22%		48	22%		56	14%
41	22%		49	22%		57	16%
42	22%		50	22%		58	18%
43	22%		51	22%		59	18%
44	22%		52	22%		60	20%
45	22%		53	22%		61	24%
46	22%		54	24%		62	24%
47	22%		55	18%		63	24%
						64	27%
						65	30%
						66	30%
						67	30%
						68	30%
						69	30%
						70	100

Appendix A – Retirement Rates
(Continued)

Early Retirement	
<u>Age</u>	<u>Rate</u>
50	1.60%
51	1.60%
52	2.30%
53	3.30%
54	4.50%
55	3.50%
56	3.25%
57	3.00%
58	4.25%
59	5.75%