

Chippewa County

Actuarial Valuation Report (GASB 74 / 75)

As of January 1, 2017

Prepared for the Years Ending:

December 31, 2017 and December 31, 2018

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Overview of GASB 74 and 75

GASB - Acronym that stands for Governmental Accounting Standards Board. This is the accounting board that sets standards for governmental entities. Following GASB standards allows for the preparation of financial statements that are in conformity with Generally Accepted Accounting Principles (GAAP).

Before Statements 74 and 75, GASB statement 45 established the reporting standards for Other Postemployment Benefit (“OPEB”) plans. It was designed to recognize the Other Postemployment Benefits earned by employees throughout their working career vs. when they are paid in retirement - accrual accounting vs. “pay-as-you-go” accounting. Additionally, each eligible active employee earns benefits each year representing benefits to be paid in retirement or a “Service Cost”. These amounts are reflected in the financial statement each year so that OPEB benefits for an eligible employee shall be fully charged to the financial statement when that eligible employee terminates employment.

In 2012 GASB issued GASB Statements 67 and 68 to update and standardize the financial reporting of pension liabilities. This increased the transparency of pension liabilities by moving them to the balance sheet and made financial statement disclosures of pension liabilities more comparable between municipal entities. GASB Statements 74 and 75 are designed to have the same effect on OPEB plans.

GASB 74 and 75 require retiree medical plans to disclose information about asset and liability levels and show historical contribution information. GASB 74 only applies in situations where a separate trust is established to prefund these benefits. GASB 75 requires employers to perform periodic actuarial valuations to determine annual accounting costs and to keep a running tally of the extent to which these amounts are over or under funded.

GASB 74 and 75 apply to those benefits provided after retirement, except for pension benefits, such as medical, dental and life insurance. The philosophy behind the accounting standard is that these postemployment benefits are part of the compensation earned by employees in return for their services, and the cost of these benefits should be recognized while employees are providing those services, rather than after they have retired. This philosophy has already been applied for years to defined benefit pensions; GASB 74 and 75 extend this practice to all other postemployment benefits.

The process of determining the liability for OPEB benefits is based on many assumptions about future events. The key actuarial assumptions are:

- Turnover and retirement rates: How likely is it that an employee will qualify for postemployment benefits and when will they start?
- Medical inflation and per capita cost assumptions: When an employee starts receiving postemployment benefits many years from now, how much will be paid each year for the benefits and how rapidly will the costs grow?
- Mortality assumption: How long is a retiree likely to receive benefits?
- Discount rate assumption: What is the present value of those future benefit payments in terms of today’s dollars?

Since the liability is being recognized over the employee’s whole career with the County, the present value is divided into three pieces: the part that is attributed to past years (the “Total OPEB Liability” or “Past Service Liability”), the part that is being earned this year (the “Service Cost”), and the part that will be earned in future years (the “Future Service Liability”).

Actuarial Valuation Opinion

This report presents results of the actuarial valuation of the Chippewa County Retiree Health Benefit Program ("the Plan") and the MERS Retiree Health Funding Vehicle as of January 1, 2017. In our opinion, this report is complete and accurate and represents fairly the actuarial position of the Plan for the purposes stated herein.

The Chippewa County provided the participant data, financial information and plan descriptions used in this valuation. The actuary has analyzed the data and other information provided for reasonableness, but has not independently audited the data or other information provided. The actuary has no reason to believe the data or other information provided is not complete and accurate and knows of no further information that is essential to the preparation of the actuarial valuation.

Actuarial information under Government Accounting Standards Board Statement No. 75 (GASB No. 75) is for purposes of fulfilling employer financial accounting requirements. The results have been prepared on a basis consistent with our understanding of GASB No. 75 and are based upon assumptions prescribed by the County. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein.

In our opinion, all costs, liabilities, rates of interest, and other factors underlying these actuarial computations have been determined on the basis of actuarial assumptions and methods that are each reasonable (or consistent with authoritative guidance) for the purposes herein taking into account the experience of the Plan and future expectations.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operations of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in program provisions or applicable law.

Our scope for this actuarial valuation did not include analyzing the potential range of such future measurements, and we did not perform that analysis.

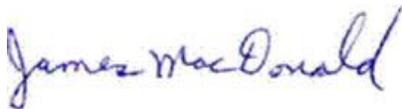
The undersigned with actuarial credentials collectively meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

This report was prepared solely for the benefit and internal use of the plan sponsor. This report is not intended for the benefit of any other party and may not be relied upon by any third party for any purpose, and Jefferson Solutions, Inc. accepts no responsibility or liability with respect to any party other than the plan sponsor.

To the best of our knowledge, no employee of the Jefferson Solutions, Inc. is an officer or director of the employer. In addition, we are not aware of any relationship between the Jefferson Solutions, Inc. and the employer that may impair or appear to impair the objectivity of the work detailed in this report.

Jefferson Solutions, Inc.

November 7, 2017



James MacDonald, FSA, EA, MAAA

Specialist Leader



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Project Leader

Executive Summary

Governmental Accounting Requirements and Report Purposes

The Governmental Accounting Standards Board released the Statement of Governmental Accounting Standards No. 74 and No. 75 in June 2015. These statements require trusts (GASB No. 74) and employers (GASB No. 75) to accrue the cost of post-employment benefits other than pensions ("OPEB") while eligible employees are providing services to the employer. The Chippewa County ("the County") will adopt GASB No. 75 for the fiscal year ending December 31, 2017.

The purposes of this actuarial valuation report are to provide the County with:

- 1) Status of the retiree health benefit program's accrued liabilities (Total OPEB Liability) using the most recent census data and health plan rates;
- 2) Projected cash contributions (pay-as-you-go costs); and
- 3) Projected GASB No. 75 expense for the current fiscal year. GASB No. 75 disclosure information to fulfill the County's financial reporting requirements is provided in this valuation report.

Funding Policy

The plan Retiree Health Benefit Program is currently funded in an OPEB trust that is maintained by the Municipal Employees' Retirement System of Michigan (MERS).

The key measures from the actuarial valuation of retiree health benefits with valuation date of January 1, 2017 and measurement date of January 1, 2017 are:

	January 1, 2017		January 1, 2018	
Present Value of Future Benefits	\$	19,140,650	\$	19,958,506
Total OPEB liability	\$	18,431,916	\$	19,278,324
Assets in MERS OPEB Trust	\$	\$7,217,672		NA ¹
		Fiscal Year Ending		
		December 31, 2017		December 31, 2018
OPEB Expense	\$	(4,013,653)	\$	(3,942,914)
Projected cash and implicit contributions	\$	1,071,354	\$	1,088,916

Increase in OPEB expense from that based on GASB 45 requirements and prior year's discount rate:

GASB 74/75 Net OPEB expense	\$	(4,013,653)
GASB 45 Net OPEB expense		1,764,127
Decrease in Expense for the year ending December 31, 2017	\$	<u>(5,777,780)</u>

OPEB Liability and Participant Information:

	January 1, 2017		January 1, 2018		Head Count
Active	\$	8,078,177	\$	9,004,326	74
Retired		10,353,739	\$	10,273,998	77
Total OPEB liability	\$	<u>18,431,916</u>	\$	<u>19,278,324</u>	<u>151</u>

Continued

¹ Information was not available at the time report was prepared

Executive Summary (Continued)

Significant Changes from the Previous Actuarial Valuation

- The County previously reported OPEB results under GASB 45. The following items that were impacted by the adoption of GASB 75 include:
 - Increasing the Discount rate from 5.00% to 8.00%

Key Assumptions:

Census Collection Date	January 1, 2017
Discount Rate	8.00%
Year 1 Pre 65 Inflation Rates (Medical / RX)	11.69% / (30.69%)
Year 2 Inflation Rate	9.50%
Ultimate Inflation Rate	5.00%
Year Ultimate Inflation Rate is Reached	2027
Actuarial Cost Method	Entry Age Normal (Percent of Salary)

Discount Rate Comment:

Because this is a funded plan the discount rate is based on the expected long term yield on plan assets. To comply with this provision, the *expected rate of return on the pension MERS fund* will be used. The discount rate of 8.00% is expected to be used by MERS for the January 1, 2017 reporting period.

Cash Costs vs. Implicit Rate Subsidy:

GASB No. 75 requires that employers recognize the expected claims of the retiree population less the expected contributions by those retirees. This is not necessarily the same determination as the expected cash payments of the employer for retiree health benefits. The difference is that many post-employment health plans (including the County’s program) charge the same premium rates for all participants in a non-Medicare plan regardless of their age. This single premium rate is called a blended premium rate because it blends the expected claims of both active and retired participants. Retirees are generally older than the average participant in a non-Medicare plan, which means they are expected to generate higher claims than the average participant of the plan; therefore, they are receiving a subsidy even if they pay 100% of the blended premium rate because they would be paying less in premiums than their claims costs. This subsidy is referred to as the “Implicit Rate Subsidy”.

Another way of considering the Implicit Rate Subsidy is to assume the retirees were removed from a blended plan and, instead, separately rated. In this scenario, the premium rate for the remaining active population would be lower; therefore, the retirees’ premium rate is being subsidized by the premiums for active employees. Since the employer generally pays a portion of the premiums for the active employees, this subsidy creates a liability for the employer.

By comparison, the cash costs are the actual dollars paid by the employer to cover a portion or all of the retirees’ premium rates. This is sometimes referred to as the “Explicit Rate Subsidy”. This is the benefit that is explicitly stated by the County that will be paid on behalf of retirees.

GASB 75 reports are required to value both the Implicit Rate Subsidy and the Explicit Rate Subsidy.

Overview of OPEB Plan

1. **PLAN TYPES:** The County provides medical, dental and vision insurance benefits to its eligible retirees. The benefits are provided through fully insured plans that are sponsored by a regional health insurance consortium. Benefits are provided the retiree and covered dependents
2. **ELIGIBILITY AND BENEFIT COST SHARING:** The following eligibility rules apply to the County's plan:

Non-Union, AFSCME-Courthouse, AFSCME-Circuit, AFSCME-Probate, and Elected Officials:

Hired Prior to 1984

- 20 years of service/55 years old - 100% coverage. Lifetime benefit.
- 15 years of service/55 years old - 75% coverage. Lifetime benefit.
- 10 years of service/50 years old - 50% coverage. Lifetime benefit.

Hired between 01-01-1985 and 12-31-2004

- 20 years of service/55 years old - 100% coverage. Benefits paid for 15 years.
- 15 years of service/55 years old - 75% coverage. Benefits paid for 10 years.
- 10 years of service/50 years old - 50% coverage. Benefits paid for 5 years.

Hired on or after 01-01-2005

- No Retiree Health Care Provided

EDC (Future benefits are limited to one individual for 100% coverage for 15 years):

- 20 years of service/55 years old - 100% coverage. Lifetime benefit. (2 retirees)
- 10 years of service/50 years old - 50% coverage. Lifetime benefit. (1 retiree)

No retiree Health Care Provided to EDC employees hired on or after 01-01-1990.

Central Dispatch and Senior Dispatcher:

- 20 years of service/55 years old - 100% coverage. Benefits paid for 15 years.
- 15 years of service/55 years old - 75% coverage. Benefits paid for 10 years.
- 10 years of service/50 years old - 50% coverage. Benefits paid for 5 years.

Hired on or after 01-01-2008

- No Retiree Health Care Provided. There is one exception for one employee.

Road Patrol and Corrections:

- 20 years of service/55 years old - 100% coverage. Benefits paid for 15 years.
- 15 years of service/55 years old - 75% coverage. Benefits paid for 10 years.
- 10 years of service/50 years old - 50% coverage. Benefits paid for 5 years.

Hired on or after 01-01-2006

- No Retiree Health Care Provided.

Health Department:

Hired Prior to 1984

- 20 years of service/55 years old - 100% coverage. Lifetime benefit.
- 15 years of service/55 years old - 75% coverage. Lifetime benefit.
- 10 years of service/50 years old - 50% coverage. Lifetime benefit.

Hired between 01-01-1985 and 12-31-2004

- 20 years of service/55 years old - 100% coverage. Benefits paid for 15 years.
- 15 years of service/55 years old - 75% coverage. Benefits paid for 10 years.
- 10 years of service/50 years old - 50% coverage. Benefits paid for 5 years.

Hired on or after 01-01-2005

- No Retiree Health Care Provided

Continued

Overview of OPEB Plan (Continued)

3. **DURATION OF BENEFITS:** Benefits are payable for the lifetime of the retiree or for a limited period as described on page 5.
4. **SURVIVING SPOUSE BENEFITS:** Spouses of deceased retirees may continue coverage in the plan by continuing to pay 100% of the premiums under COBRA provisions. Spouses of elected officials with more than 20 years of service may continue coverage in the plan by continuing to pay 100% of the premiums.

Annual Gross Premiums:

		01/01/2017 - 12/31/2017			
		Single Coverage		Two Person Coverage	
PLAN		Pre 65	Post 65	Pre 65	Post 65
Medical		\$3,986.76	\$5,125.92	\$9,567.96	\$10,251.84
Prescription Drug		\$1,196.64	\$3,386.28	\$2,872.08	\$6,772.56
Dental		\$369.00	\$369.00	\$738.12	\$738.12
Vision		\$79.80	\$79.80	\$159.60	\$159.60
		01/01/2018 - 12/31/2018			
		Single Coverage		Two Person Coverage	
PLAN		Pre 65	Post 65	Pre 65	Post 65
Medical		\$4,452.96	\$5,442.12	\$10,686.96	\$10,884.24
Prescription Drug		\$829.44	\$3,135.00	\$1,990.80	\$6,270.00
Dental		\$407.40	\$397.56	\$814.80	\$795.12
Vision		\$79.20	\$64.92	\$158.52	\$129.84

Principal Results

This section provides a summary of the actuarial valuation results. All information is provided as of the measurement date except for census data. The valuation results were based on January 1, 2017 census data. All liabilities are net of expected retiree contributions.

	January 1,	
	2017	2018
Present Value of Future Benefits		
Actives	\$ 8,786,911	\$ 9,684,508
Retired	10,353,739	10,273,998
Total	\$ 19,140,650	\$ 19,958,506
Total OPEB Liability (Individual Entry Age Normal)		
Active	\$ 8,078,177	\$ 9,004,326
Retired	10,353,739	10,273,998
Total	\$ 18,431,916	\$ 19,278,324
OPEB Assets in MERS Trust	\$ 7,217,672	\$ 7,217,672
December 31,		
OPEB Costs:		
Service Cost	\$ 151,360	\$ 154,387
Interest on Net OPEB Liability (Asset)	1,431,700	1,498,709
Expected Investment Earnings	(534,560)	(533,857)
Deferred (Inflows)/Outflows from Expected & Actual Experience	(5,062,153)	(5,062,153)
Net OPEB Expense	\$ (4,013,653)	\$ (3,942,914)
Funded Ratio	39.16%	NA ²
Annual Covered Payroll	\$3,620,445	\$3,692,854
Net OPEB Liability (Asset) as % of Covered Payroll	509.11%	522.04%

Key Assumptions:

Census Collection Date	January 1, 2017
Discount Rate	8.00%
Year 1 Pre 65 Inflation Rates (Medical / RX)	11.69% / (30.69%)
Year 2 Inflation Rate	9.50%
Ultimate Inflation Rate	5.00%
Year Ultimate Inflation Rate is Reached	2027
Actuarial Cost Method	Entry Age Normal (Percent of Salary)

Continued

² Information was not available at the time report was prepared

Principal Results (Continued)

	Component Totals			
	County	Health Dept.	EDC	Total
Present Value of Future Benefits				
Actives	\$ 6,212,156	\$ 2,411,102	\$ 163,654	8,786,911
Retired	6,144,391	3,926,101	283,247	10,353,739
Total	<u>\$ 12,356,547</u>	<u>\$ 6,337,203</u>	<u>\$ 446,901</u>	<u>19,140,650</u>
Total OPEB Liability (Individual Entry Age Normal)				
Active	\$ 5,694,456	\$ 2,222,806	\$ 160,915	8,078,177
Retired	6,144,391	3,926,101	283,247	10,353,739
Total	<u>\$ 11,838,847</u>	<u>\$ 6,148,907</u>	<u>\$ 444,162</u>	<u>18,431,916</u>
OPEB Costs: December 31, 2017				
Service Cost	\$ 114,650	\$ 35,453	\$ 1,257	151,360
Interest on Net OPEB Liability (Asset)	923,622	473,401	34,676	1,431,700
Expected Investment Earnings	(452,419)	(55,117)	(27,024)	(534,560)
Deferred (Inflows)/Outflows from Expected & Actual Experience	(2,713,675)	(2,059,987)	(288,491)	(5,062,153)
Net OPEB Expense	<u>\$ (926,035)</u>	<u>\$ (1,219,699)</u>	<u>\$ (234,891)</u>	<u>(4,013,653)</u>

Summary of Assets

The Retiree Health Funding Vehicle (RHFV) is currently funded in an OPEB trust that is maintained by the Municipal Employees' Retirement System of Michigan (MERS). The OPEB funds are invested in a diversified portfolio.

Contribution requirements are also negotiated between the County and employees at varying levels. The Health Department contributes 100% of the cost of current-year premiums for eligible retirement plan members. For the fiscal year ending December 31, 2017, the Health Department and Economic Development Corporation contributed \$435,763 and \$120,356 to the plan. The County contributed \$1,196,417 to the plan. These figures are inclusive of the implicit subsidy.

Below is a summary of the assets as of the valuation date January 1, 2017:

	County		Health		EDC		Total
Balance as of 01/01/2016	\$ 4,646,199	\$	825,603	\$	283,371	\$	5,755,172
Contributions	1,196,417		435,763		120,356		1,752,537
Fees	(12,368)		(2,148)		(780)		(15,294)
Gains and Losses	575,675		96,898		3,080		675,653
Premiums Paid	(457,112)		(435,763)		(57,520)		(950,396)
Ending Balance 01/01/2017	<u>\$ 5,948,811</u>	\$	<u>920,353</u>	\$	<u>348,507</u>	\$	<u>7,217,672</u>

Asset Allocation as of September 30, 2017:

	County	Health	EDC
MERS CAPITAL APPR PORT (80/20)	51.10%	50.10%	NA
MERS TOTAL MARKET PORTFOLIO	48.90%	49.90%	NA
Short Term Bonds	NA	NA	100.00%

Changes in the Net OPEB Liability

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	(a)	(b)	(a) - (b)
Balances at 01/01/2016	\$ 35,070,125	\$ 5,755,172	\$ 29,314,953
Changes for the Year:	-		
Service Cost	2,665,399	-	2,665,399
Interest	1,686,503	-	1,686,503
Difference between expected and actual experience	(17,904,291)	-	(17,904,291)
Change in Actuarial Cost Method	665,255		
Contributions - Employer	-	1,752,537	(1,752,537)
Net Investment Income	-	675,653	(675,653)
Benefit Payments	(3,751,075)	(950,396)	(2,800,679)
Administrative Expenses	-	(15,294)	15,294
Net Changes	\$ (16,638,209)	\$ 1,462,500	\$ (18,100,709)
Balances at 01/01/2017	\$ 18,431,916	\$ 7,217,672	\$ 11,214,244

Key Assumptions:

Census Collection Date	January 1, 2017
Discount Rate	8.00%
Year 1 Pre 65 Inflation Rates (Medical / RX)	11.69% / (30.69%)
Year 2 Inflation Rate	9.50%
Ultimate Inflation Rate	5.00%
Year Ultimate Inflation Rate is Reached	2027
Actuarial Cost Method	Entry Age Normal (Percent of Salary)

Continued

Changes in the Net OPEB Liability (Continued)

	County Component		
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	(a)	(b)	(a) - (b)
Balances at 01/01/2016	\$ 17,616,773	\$ 4,646,199	\$ 12,970,574
Changes for the Year:	-		
Service Cost	1,702,319	-	1,702,319
Interest	849,647	-	849,647
Difference between expected and actual experience	(6,916,395)	-	(6,916,395)
Change in Actuarial Cost Method	512,401		
Contributions - Employer	-	1,196,417	(1,196,417)
Net Investment Income	-	575,675	(575,675)
Benefit Payments	(1,925,898)	(457,112)	(1,468,786)
Administrative Expenses	-	(12,368)	12,368
Net Changes	\$ (5,777,926)	\$ 1,302,612	\$ (7,080,538)
Balances at 01/01/2017	\$ 11,838,847	\$ 5,948,811	\$ 5,890,036

	Health Dept. Component		
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	(a)	(b)	(a) - (b)
Balances at 01/01/2016	\$ 12,222,665	\$ 825,603	\$ 11,397,062
Changes for the Year:	-		
Service Cost	681,586	-	681,586
Interest	583,314	-	583,314
Difference between expected and actual experience	(6,102,358)	-	(6,102,358)
Change in Actuarial Cost Method	155,593		
Contributions - Employer	-	435,763	(435,763)
Net Investment Income	-	96,898	(96,898)
Benefit Payments	(1,391,893)	(435,763)	(956,130)
Administrative Expenses	-	(2,148)	2,148
Net Changes	\$ (6,073,758)	\$ 94,750	\$ (6,168,508)
Balances at 01/01/2017	\$ 6,148,907	\$ 920,353	\$ 5,228,554

Continued

Changes in the Net OPEB Liability (Continued)

	EDC Component		
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	(a)	(b)	(a) - (b)
Balances at 01/01/2016	\$ 1,481,858	\$ 283,371	\$ 1,198,487
Changes for the Year:	-		
Service Cost	31,774	-	31,774
Interest	69,943	-	69,943
Difference between expected and actual experience	(956,237)	-	(956,237)
Change in Actuarial Cost Method	(2,739)		
Contributions - Employer	-	120,356	(120,356)
Net Investment Income	-	3,080	(3,080)
Benefit Payments	(180,437)	(57,520)	(122,917)
Administrative Expenses	-	(780)	780
Net Changes	\$ (1,037,696)	\$ 65,136	\$ (1,102,832)
Balances at 01/01/2017	\$ 444,162	\$ 348,507	\$ 95,655

Development of Total OPEB Liability

	January 1, 2017	January 1, 2018
Present Value of Future Benefits		
Active Participants	\$ 8,786,911	\$ 9,684,508
Retired Participants	10,353,739	10,273,998
Total Present Value of Future Benefits	\$ 19,140,650	\$ 19,958,506
Less: Total Present Value of Future Normal Costs	708,734	680,182
Total OPEB Liability	\$ 18,431,916	\$ 19,278,324

Key Assumptions:

Census Collection Date	January 1, 2017
Discount Rate.....	8.00%
Year 1 Pre 65 Inflation Rates (Medical / RX).....	11.69% / (30.69%)
Year 2 Inflation Rate	9.50%
Ultimate Inflation Rate	5.00%
Year Ultimate Inflation Rate is Reached	2027
Actuarial Cost Method.....	Entry Age Normal (Percent of Salary)

Continued

Development of Total OPEB Liability (Continued)

	Component Totals			
	County	Health Dept.	EDC	Total
Present Value of Future Benefits				
Active Participants	\$ 6,212,156	\$ 2,411,102	\$ 163,654	\$ 8,786,911
Retired Participants	6,144,391	3,926,101	283,247	10,353,739
Total Present Value of Future Benefits	\$ 12,356,547	\$ 6,337,203	\$ 446,901	\$ 19,140,650
Less: Total Present Value of Future Normal Costs	517,700	188,296	2,739	708,734
Total OPEB Liability	\$ 11,838,847	\$ 6,148,907	\$ 444,162	\$ 18,431,916

Actuarially Determined Contribution

	December 31, 2017
Net OPEB Liability	\$ 11,214,244
Service Cost	\$ 151,360
30.00 year amortization of NOL at 8.00%	996,133
Actuarially Determined Contribution	\$ 1,147,493
Actual Contribution	1,071,354
Contribution deficiency ³	\$ 76,139
Covered payroll	\$3,620,445
Actuarially determined contribution as a % of covered payroll	31.69%

Key Assumptions:

Census Collection Date	January 1, 2017
Discount Rate	8.00%
Year 1 Pre 65 Inflation Rates (Medical / RX)	11.69% / (30.69%)
Year 2 Inflation Rate	9.50%
Ultimate Inflation Rate	5.00%
Year Ultimate Inflation Rate is Reached	2027
Actuarial Cost Method	Entry Age Normal (Percent of Salary)

³ Amortization period is based on average remaining service period for active employees.

Actuarial Gain / Loss

December 31, 2017:

1. Total OPEB Liability at beginning of year	\$ 35,070,125
2. Fiduciary Net Position at prior valuation date	-
3. Net OPEB Liability at prior valuation date [1. - 2.]	\$ 35,070,125
4. Service Cost for prior periods	2,665,399
5. Employer Contributions	(3,751,075)
6. Interest to current valuation date	1,686,503
7. Changes in Assumptions	-
8. Expected Net OPEB Liability [3. + 4. + 5. + 6. + 7.]	\$ 35,670,952
9. Total GASB 45 OPEB liability at 01/01/2017 based on current census and actuarial assumptions	17,766,661
10. Fiduciary Net Position at current valuation date	-
11. Net OPEB Liability at end of period [9. - 10.]	<u>17,766,661</u>
Total Actuarial Gain [11. - 8.]	<u>\$ (17,904,291)</u>

Key Assumptions:

Census Collection Date	January 1, 2017
Discount Rate.....	8.00%
Year 1 Pre 65 Inflation Rates (Medical / RX)	11.69% / (30.69%)
Year 2 Inflation Rate	9.50%
Ultimate Inflation Rate	5.00%
Year Ultimate Inflation Rate is Reached	2027
Actuarial Cost Method	Entry Age Normal (Percent of Salary)

Continued

Actuarial Gain / Loss (Continued)

	Component Totals			
	County	Health Dept.	EDC	Total
1. Total OPEB Liability at beginning of year	\$ 17,616,773	\$ 12,222,665	\$ 1,481,858	\$ 35,070,125
2. Fiduciary Net Position at prior valuation date	-	-	-	-
3. Net OPEB Liability at prior valuation date [1. - 2.]	\$ 17,616,773	\$ 12,222,665	\$ 1,481,858	\$ 35,070,125
4. Service Cost for prior periods	1,702,319	681,586	31,774	2,665,399
5. Employer Contributions	(1,925,898)	(1,391,893)	(180,437)	(3,751,075)
6. Interest to current valuation date	849,647	583,314	69,943	1,686,503
7. Changes in Assumptions	-	-	-	-
8. Expected Net OPEB Liability [3. + 4. + 5. + 6. + 7.]	\$ 18,242,841	\$ 12,095,672	\$ 1,403,138	\$ 35,670,952
9. Total GASB 45 OPEB liability at 01/01/2017 based on current census and actuarial assumptions	11,326,446	5,993,314	446,901	17,766,661
10. Fiduciary Net Position at current valuation date	-	-	-	-
11. Net OPEB Liability at end of period [9. - 10.]	11,326,446	5,993,314	446,901	17,766,661
 Total Actuarial Gain [11. - 8.]	 \$ (6,916,395)	 \$ (6,102,358)	 \$ (956,237)	 \$ (17,904,291)

Key Assumptions:

- Census Collection DateJanuary 1, 2017
- Discount Rate 8.00%
- Year 1 Pre 65 Inflation Rates (Medical / RX) 11.69% / (30.69%)
- Year 2 Inflation Rate 9.50%
- Ultimate Inflation Rate 5.00%
- Year Ultimate Inflation Rate is Reached2027
- Actuarial Cost Method Entry Age Normal (Percent of Salary)

Schedule of Deferred Outflows and Deferred Inflows of Resources

Fiscal Year	Initial Amount	Deferred Outflows of Resource	Deferred Inflows of Resources	Initial Years	Remaining Years	Deferred Outflows/(Inflows) Recognized in Fiscal Period
Liability (gain) / loss attributable to experience						
12/31/2017	(\$17,904,290)	-	(\$17,904,290)	3.53689	2.53689	(\$5,062,153)
12/31/2018			-	3.53689	1.53689	(\$5,062,153)
12/31/2019			-	3.53689	0.53689	(\$5,062,153)
12/31/2020			-	3.53689	0.00000	(\$2,717,831)
12/31/2021			-		0.00000	NA
Thereafter			-		0.00000	NA

10-Year Projection of Employer Benefit Payments

Presented in this section are the projected employer benefit payments for the next ten years based on the program design effective in the 01/01/2017 - 12/31/2017 fiscal year. These projected benefit payments are based on the actuarial methods and assumptions are described in the section(s) Actuarial Methods on page 24 and Assumptions And Methodology beginning on page 25. If actual experience differs from those expected by the actuarial assumptions, the actual benefit payments will vary from those presented below.

Period	Explicit Subsidy	Implicit Subsidy	Grand Total
12/31/2017	\$1,043,904	\$27,451	\$1,071,355
12/31/2018	\$1,109,882	(\$20,966)	\$1,088,916
12/31/2019	\$1,209,966	(\$23,448)	\$1,186,518
12/31/2020	\$1,323,520	\$10,131	\$1,333,651
12/31/2021	\$1,417,801	\$45,992	\$1,463,793
12/31/2022	\$1,511,679	\$67,894	\$1,579,573
12/31/2023	\$1,616,557	\$84,541	\$1,701,098
12/31/2024	\$1,684,124	\$117,973	\$1,802,097
12/31/2025	\$1,768,753	\$110,384	\$1,879,137
12/31/2026	\$1,886,901	\$117,899	\$2,004,800

Assumption Sensitivity (All Components)

This section provides information about the sensitivity of the Total OPEB Liability to certain assumptions made in this actuarial valuation. The discount rate and benefit cost trend rate are the most significant assumptions used in this valuation. The table below shows the effect of increasing and decreasing those assumptions by 100 basis points above/below their projected levels in all future years.

DISCOUNT RATE SENSITIVITY:

Discount Rate Plus 1.00%	January 1, 2017
Current OPEB Liability	\$18,431,916
OPEB Liability - Discount Plus 1.00%	\$16,825,221
Decrease	(\$1,606,695)
Percent Decrease	(8.72%)

Discount Rate Minus 1.00%	January 1, 2017
Current OPEB Liability	\$18,431,916
OPEB Liability - Discount Minus 1.00%	\$20,286,505
Increase	\$1,854,589
Percent Increase	10.06%

TREND SENSITIVITY:

Trend Plus 1.00%	January 1, 2017
Current OPEB Liability	\$18,431,916
OPEB Liability - Trend Plus 1.00%	\$20,332,807
Increase	\$1,900,891
Percent Increase	10.31%

Trend Minus 1.00%	January 1, 2017
Current OPEB Liability	\$18,431,916
OPEB Liability - Trend Minus 1.00%	\$16,778,361
Decrease	(\$1,653,555)
Percent Decrease	(8.97%)

Summary of Demographic Information

This section details the statistics related to the participants in the post-employment benefit plan. The census collection date is January 1, 2017.

The file that was used to prepare the GASB 75 valuation was provided by the County. Our understanding is that this file represents the population of the County’s active and retired employees as of January 1, 2017, the census collection date.

CENSUS RECONCILIATION COMMENT: The census file contained 437 records. The GASB 75 valuation excluded 286 records because the employee may have been hired after the census collection date (January 1, 2017) or the records represented individuals that are not entitled to benefits.

Summary by Component:

	Actives	Retirees	Total
County	53	41	94
Health Dept.	20	33	53
EDC	1	3	4
Total	74	77	151

All Active and Retired Employees:

	Actives	Retirees	Total
Male	16	30	46
Female	58	47	105
Total	74	77	151

All Active Employees:

Age	Not Currently Eligible to Retire	Currently Eligible to Retire ⁴	TOTAL
29 and Under	-	-	-
30 - 34	-	-	-
35 - 39	6	-	6
40 - 44	11	-	11
45 - 49	16	-	16
50 - 54	-	13	13
55 - 59	-	15	15
60 - 64	-	9	9
65 and Over	-	4	4
Total	33	41	74
Average Age	50.5		
Average Service	20		

Continued

⁴ These active employees have met the minimum age and service requirements needed to vest in an OPEB benefit upon retirement.

Summary of Demographic Information (Continued)

All Current Retirees:

Age	Retirees	Spouses	TOTAL
54 and Under	-	-	-
55 - 59	6	-	6
60 - 64	16	1	17
65 - 69	18	1	19
70 - 74	14	2	16
75 - 79	13	1	14
80 and Over	10	-	10
Total	77	5	82

Average Age for Retired Employees: 69.3

Continued

Summary of Demographic Information (Continued)

Age	Years of Service								TOTAL	
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 Plus		
<20	-	-	-	-	-	-	-	-	-	-
20 to 24	-	-	-	-	-	-	-	-	-	-
25 to 29	-	-	-	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	-	-	-	-	-
35 to 39	-	-	3	3	-	-	-	-	-	6
40 to 44	-	-	3	6	2	-	-	-	-	11
45 to 49	-	-	2	3	7	4	-	-	-	16
50 to 54	-	-	3	4	5	-	-	1	-	13
55 to 59	-	-	1	3	3	5	3	-	-	15
60 to 64	-	-	-	4	1	2	2	-	-	9
65 Plus	-	-	-	1	1	1	1	-	-	4
TOTAL	-	-	12	24	19	12	6	1	-	74

Average Age 50.5

Average Service 20

Actuarial Methods

Actuarial Cost Method

The Actuarial Cost Method used to determine the Total OPEB Liability and the Annual Required Contribution is the Entry Age Normal (EAN) method as prescribed by GASB No. 75. This method is in the family of future benefit cost methods, which requires an estimate of the projected benefit payable at retirement to determine costs and liabilities.

The Normal Cost (or Service Cost) is the annual allocation required for each participant from entry date to the assumed retirement date so that the accumulated allocation at retirement is equal to the liability for the projected benefit. The projected benefits are based on estimates of future years of service and projected health benefit costs. The normal cost is developed as a level percent of compensation as prescribed by GASB No. 75.

The Present Value of Future Benefits is equal to the value of the projected benefit payable at retirement discounted back to the participant's current age. Discounts include such items as interest and mortality. The present value of future normal cost allocations is equal to the discounted value of the normal costs allocated from the member's current age to retirement age.

The difference between the Present Value of Future Benefits and the present value of future normal cost allocations represents the Total OPEB Liability at the participant's current age.

The Total OPEB Liability for participants currently receiving payments is calculated as the actuarial present value of future benefits expected to be paid. No normal cost is allocated for these participants.

Financial and Census Data

The County provided the participant data, financial information and plan descriptions used in this valuation. The actuary has checked the data for reasonableness, but has not independently audited the data. The actuary has no reason to believe the data is not complete and accurate, and knows of no further information that is essential to the preparation of the actuarial valuation.

Plan Fiduciary Net Position

Market value of assets as of the measurement date is \$7,217,672.

Method Changes Since Last Year

The County changed the actuarial cost method from GASB 45 to GASB 75 starting with the reporting for the 01/01/2017 - 12/31/2017 fiscal year.

Assumptions and Methodology

Economic Assumptions

- DISCOUNT RATE:** An interest rate of 8.00% was used.
- ASSET VALUATION METHOD:** The actuarial value of assets is equal to the Market Value of the Plan’s assets as of the valuation date.
- PAYROLL GROWTH:** 2.00% per year.
- TREND:** It was assumed that health care costs would increase in accordance with the trend rates in the following table:

Year	Medical (Pre 65 / Post 65)	RX (Pre 65 / Post 65)	Dental	Vision
2017	11.69% / 6.17%	(30.69%) / (7.42%)	10.41%	(0.75%)
2018	9.50%	9.50%	5.00%	1.00%
2019	9.00%	9.00%	4.00%	1.00%
2020	8.50%	8.50%	3.00%	1.00%
2021	8.00%	8.00%	2.00%	1.00%
2022	7.50%	7.50%	1.00%	1.00%
2023	7.00%	7.00%	1.00%	1.00%
2024	6.50%	6.50%	1.00%	1.00%
2025	6.00%	6.00%	1.00%	1.00%
2026	5.50%	5.50%	1.00%	1.00%
2027	5.00%	5.00%	1.00%	1.00%

Demographic Assumptions

- CENSUS COLLECTION DATE:** The census used in this report represents the eligible population as of January 1, 2017. The valuation date and the measurement date is January 1, 2017.
- MORTALITY:** RP-2000 Combined Healthy Participant Table Projected 10 Years using Projection Scale AA
- RETIREMENT RATES:** The following are representative assumed retirement rates for eligible employees:

Age	Pension Plan	
	Defined Benefit	Defined Contribution
50	0.20000	0.23000
55	0.20000	0.30000
60	0.21000	0.43000
65	0.25000	0.50000
70	1.00000	1.00000

Continued

Assumptions and Methodology (Continued)

8. **TERMINATION RATES:** These rates represent the percentage of employees who will terminate employment at the given age each year, for reasons other than death, or retirement:

Service	Rate
0	0.20000
1	0.17000
5	0.06500
10	0.05000
15	0.03700
20	0.03000
25	0.02700
30	0.02600
34 and over	0.02400

Benefit Assumptions

- 9. **PARTICIPATION RATE:** It was assumed that 100% of future retirees eligible for coverage will elect the benefit.
- 10. **PERCENT MARRIED:** It was assumed that 70% of future retirees will be married, with male spouses assumed to be 3 years older than female spouses. For current retirees, actual census information was used.
- 11. **PER CAPITA COSTS:** The following rates were used in the development of per capita costs:

Plan	Individual Coverage		Two Person Coverage	
	Pre 65	Post 65	Pre 65	Post 65
01/01/2017 - 12/31/2017:				
Medical	\$3,986.76	\$5,125.92	\$9,567.96	\$10,251.84
Prescription Drug	\$1,196.64	\$3,386.28	\$2,872.08	\$6,772.56
Dental	\$369.00	\$369.00	\$738.12	\$738.12
Vision	\$79.80	\$79.80	\$159.60	\$159.60
01/01/2018 - 12/31/2018:				
Medical	\$4,452.96	\$5,442.12	\$10,686.96	\$10,884.24
Prescription Drug	\$829.44	\$3,135.00	\$1,990.80	\$6,270.00
Dental	\$407.40	\$397.56	\$814.80	\$795.12
Vision	\$79.20	\$64.92	\$158.52	\$129.84

Continued

Assumptions and Methodology (Continued)

12. **IMPLICIT SUBSIDY:** GASB No. 75 requires that employers recognize the expected claims of the retiree population less the expected contributions by those retirees. This is not necessarily the same determination as the expected cash payments of the employer for retiree health benefits. The difference is that many post-employment health plans (including the County’s program) charge the same premium rates for all participants in a non-Medicare plan regardless of their age. This single premium rate is called a blended premium rate because it blends the expected claims of both active and retired participants. Retirees are generally older than the average participant in a non-Medicare plan, which means they are expected to generate higher claims than the average participant of the plan; therefore, they are receiving a subsidy even if they pay 100% of the blended premium rate because they would be paying less in premiums than their claims costs. This subsidy is referred to as the “Implicit Rate Subsidy”.

The following age-based factors were used to adjust for the implicit subsidy and are based on an average age of 44. The following example is for the Medical plan.

Age	Factor	Medical
20	61.10%	\$2,435.79
25	65.82%	\$2,624.04
30	71.96%	\$2,868.86
35	79.84%	\$3,183.01
40	89.89%	\$3,583.76
44	100.00%	\$3,986.76
45	102.70%	\$4,094.40
50	119.06%	\$4,746.53
55	140.04%	\$5,583.14
60	167.13%	\$6,663.11

See example of how this implicit subsidy is applied on page 28.

Other Assumptions

- 13. **ACTUARIAL VALUE OF ASSETS:** None
- 14. **ADMINISTRATIVE EXPENSES:** Included in the premiums used

Calculation of Per Capita Costs

Example for a female assumed to be 55 with a spouse assumed to be 58:

	Individual		Covered Spouse	
	Pre 65	Post 65	Pre 65	Post 65
1. Medical and RX Costs Component				
2. Medical Premium	\$3,986.76	\$5,125.92	\$9,567.96	\$10,251.84
3. RX Premium	\$1,196.64	\$3,386.28	\$2,872.08	\$6,772.56
4. Less Individual Med / RX (2 + 3)	-	-	\$5,183.40	\$8,512.20
5. Total RX and Medical (2 + 3 - 4)	\$5,183.40	\$8,512.20	\$7,256.64	\$8,512.20
6. Medical and RX Adjustment Factor	1.40042	1.40042	1.557175	1.557175
7. Age Adjusted Medical and RX (5 * 6)	\$7,258.94	11,920.66	11,299.86	13,254.99
8. Dental	\$369.00	\$369.00	\$738.12	\$738.12
9. Vision	\$79.80	\$79.80	\$159.60	\$159.60
10. Less Individual Dental and Vision (8 + 9)	-	-	\$448.80	\$448.80
11. Gross OPEB (7 + 8 + 9 - 10)	\$7,707.74	\$12,369.46	\$11,748.78	\$13,703.91
12. Contribution Percentage	50%	50%	50%	50%
13. Retiree Contribution ([5 + 8 + 9 - 10] * 12)	\$2,816.10	\$4,480.50	\$3,852.78	\$4,480.56
Net Cost to County (11 - 13)	\$4,891.64	\$7,888.96	\$7,896.00	\$9,223.35

Glossary

Brief explanations of terms used in this report:

Annual OPEB Expense

The amount recognized by an employer in each accounting period for contributions to a defined benefit OPEB plan on the modified accrual basis of accounting. The reported figure for Annual OPEB Expense is (\$4,013,653) and can be found on page 7.

Collective deferred outflows of resources and deferred inflows of resources related to OPEB

Deferred outflows of resources and deferred inflows of resources related to OPEB arising from certain changes in the collective net OPEB liability or collective total OPEB liability. These figures appear on page 18.

Covered Payroll

Annual compensation paid (or expected to be paid) to active employees covered by an OPEB plan, in aggregate. The amount reported for this item is \$3,620,445 and it appears on page 7.

Net OPEB liability (NOL)

The liability of employers and nonemployer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is administered through a trust that meets the criteria of the GASB Statements. This information is presented on page 10. The reported NOL is \$11,214,244.

Normal Cost or Service Cost

The portion of the Total Present Value of Future Benefits attributed to employee service during the current fiscal year by the actuarial cost method. These terms are used interchangeably. Service cost appears as a component of the annual OPEB costs. The reported amount for service cost is \$151,360 and can be found on page 7.

Other Postemployment Benefits (OPEB)

Retiree health care benefits and post-employment benefits provided separately from a pension plan (excluding termination offers and benefits).

Plan Fiduciary Net Position (FNP)

Set equal to the market value of assets as of the measurement date. Asset information is presented on page 9. The amount reported for OPEB assets is \$7,217,672.

Present Value of Future Benefits (PVFB)

The value, as of the valuation date, of the projected benefits payable to all members for their accrued service and their expected future service, discounted to reflect the time value (present value) of money and adjusted for the probabilities of retirement, withdrawal, death and disability. The total figure reported for this item is \$19,140,650 and can be found on page 13.

Total OPEB liability (TOL)

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service in conformity with the GASB Statements. The TOL is the liability of employers and nonemployer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is not administered through a trust that meets the criteria of the GASB Statements. The figure reported for this item is \$18,431,916 and can be found on page 13.

Suggested Footnotes for OPEB (GASB 75)

Primary Government

The County provides post- retirement hospitalization to employees of the government pursuant to the terms of union contracts. Additionally, some elected County officials who served more than 20 years and are retired receive post retirement hospitalization, pursuant to Board of Commissioner’s resolution.

The Health Department provides post-retirement health care insurance to retirement employees; hired prior to May 1, 2008 for non-union and January 1, 2007 for union, of the government pursuant to the terms of personnel policy for a group insurance plan.

Plan description

The County administers a single-employer healthcare plan (“the Retiree Health Plan”). The plan provides lifetime healthcare insurance for eligible retirees through the County’s group health insurance plan, which covers both active and retired members. Benefit provisions are established through negotiations between the various agencies and employees. The Retiree Health Plan does not issue a publicly available financial report.

Benefits provided.

The County provides post-employment medical, prescription drug, dental and vision benefits for certain eligible retirees.

Employees covered by benefit terms.

As of January 1, 2017, the following employees were covered by the benefit terms (County / Health Dept. / EDC):

<i>Inactive employees or beneficiaries currently receiving benefit payments (41 / 33 / 3)</i>	77
<i>Inactive employees entitled to but not yet receiving benefit payments</i>	-
<i>Active Employees (53 / 20 / 1)</i>	74
<i>Total Participants covered by OPEB Plan</i>	151

Funding Policy

Contribution requirements are also negotiated between the County and employees at varying levels. The Health Department contributes 100% of the cost of current-year premiums for eligible retirement plan members. For the fiscal year 2016, the Health Department and Economic Development Corporation contributed \$435,763 and \$120,356 to the plan. The County contributed \$\$1,196,417 to the plan.

Total OPEB Liability

The County’s total OPEB liability of \$18,431,916 was measured as of , and was determined by an actuarial valuation as of that date.

Total Net OPEB Liability

As of January 1, 2017, there were no assets in the County’s OPEB trust. The total net OPEB liability of \$18,431,916.

Actuarial assumptions and other inputs.

The total OPEB liability in the \$18,431,916 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Discount Rate	8.00%
Healthcare Cost Trend Rates:	
Current Year Pre 65 Trend	11.69%
Second Year Trend	9.50%
Decrement	1.00%
Ultimate Trend	5.00%
Year Ultimate Trend is Reached	2027
Salary Increases	2.00%

Continued

Suggested Footnotes for OPEB (GASB 75) (Continued)

The discount rate was based on the County's expected rate of return on the assets held in the MERS trust January 1, 2017.

Mortality rates were based on the RP-2000 Combined Healthy Participant Table Projected 10 Years using Projection Scale AA.

Changes in the Total OPEB Liability

	County	Health Dept.	EDC	Total
OPEB Liability Beginning of Year	\$ 17,616,773	\$ 12,222,665	\$ 1,481,858	\$ 35,070,125
Changes for the Year:				
Service Cost	1,702,319	681,586	31,774	2,665,399
Interest	849,647	583,314	69,943	1,686,503
Changes of benefit terms	-	-	-	-
Assumption Changes and Difference Between Actual and Expected Experience	(6,916,395)	(6,102,358)	(956,237)	(17,904,291)
Change in Actuarial Cost Method	512,401	155,593	(2,739)	665,255
Benefit payments	(1,925,898)	(1,391,893)	(180,437)	(3,751,075)
OPEB Liability End of Year	<u>\$ 11,838,847</u>	<u>\$ 6,148,907</u>	<u>\$ 444,162</u>	<u>\$ 18,431,916</u>

Changes in the Net OPEB Liability

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
Balances at 01/01/2016	\$ 35,070,125	\$ 5,755,172	\$ 29,314,953
Changes for the Year:	-	-	-
Service Cost	2,665,399	-	2,665,399
Interest	1,686,503	-	1,686,503
Difference between expected and actual experience	(17,904,291)	-	(17,904,291)
Change in Actuarial Cost Method	665,255	-	665,255
Contributions - Employer	-	1,752,537	(1,752,537)
Net Investment Income	-	675,653	(675,653)
Benefit Payments	(3,751,075)	(950,396)	(2,800,679)
Administrative Expenses	-	(15,294)	15,294
Net Changes	<u>\$ (16,638,209)</u>	<u>\$ 1,462,500</u>	<u>\$ (18,100,709)</u>
Balances at 01/01/2017	<u>\$ 18,431,916</u>	<u>\$ 7,217,672</u>	<u>\$ 11,214,244</u>

Continued

JEFFERSON SOLUTIONS, INC.

Suggested Footnotes for OPEB (GASB 75) (Continued)

Sensitivity of the total OPEB liability to changes in the discount rate.

The January 1, 2017 was prepared using a discount rate of 8.00%. If the discount rate were 1% higher than what was used in this valuation, the Total OPEB Liability would decrease to \$16,825,221 or by 8.72%. If the discount rate were 1% lower than was used in this valuation, the Total OPEB Liability would increase to \$20,286,505 or by 10.06%.

	Discount Rate		
	1% Decrease	Baseline 8.00%	1% Increase
Total OPEB Liability	\$20,286,505	\$18,431,916	\$16,825,221

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates.

The January 1, 2017 was prepared using an initial trend rate of 11.69%. If the trend rate were 1% higher than what was used in this valuation, the Total OPEB Liability would increase to \$20,332,807 or by 10.31%. If the trend rate were 1% lower than was used in this valuation, the Total OPEB Liability would decrease to \$16,778,361 or by 8.97%.

	Healthcare Cost Trend Rates		
	1% Decrease	Baseline 11.69%	1% Increase
Total OPEB Liability	\$16,778,361	\$18,431,916	\$20,332,807

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended December 31, 2017, the County recognized an OPEB expense of (\$4,013,653). At December 31, 2017, the County reported deferred outflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Increase in January 1, 2017 OPEB liability due to actuarial experience different from expected and actuarial assumption changes	-	\$17,904,290
Changes in assumptions or other inputs	-	-
Total	-	\$17,904,290

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

For the Year Ending December 31,	
2,017	(\$5,062,153)
2018	(\$5,062,153)
2019	(\$5,062,153)
2020	(\$2,717,831)
2021	-
Thereafter	-
Total	(\$17,904,290)

Schedules of Required Supplementary Information (GASB 75)

Schedule of Changes in the County's Total OPEB Liability and Related Ratios

Last 10 Fiscal Years (as applicable)

	County	Health Dept.	EDC	Total
OPEB Liability Beginning of Year	\$ 17,616,773	\$ 12,222,665	\$ 1,481,858	\$ 35,070,125
Changes for the Year:				
Service Cost	1,702,319	681,586	31,774	2,665,399
Interest	849,647	583,314	69,943	1,686,503
Changes of benefit terms	-	-	-	-
Assumption Changes and Difference Between Actual and Expected Experience	(6,916,395)	(6,102,358)	(956,237)	(17,904,291)
Change in Actuarial Cost Method	512,401	155,593	(2,739)	665,255
Benefit payments	(1,925,898)	(1,391,893)	(180,437)	(3,751,075)
OPEB Liability End of Year	\$ 11,838,847	\$ 6,148,907	\$ 444,162	\$ 18,431,916
Covered payroll	\$2,639,575	\$935,434	\$45,436	\$3,620,445
Total OPEB liability as a percentage of covered payroll	448.51%	657.33%	977.56%	509.11%

Suggested Footnotes for OPEB (GASB 74)

Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions, requires governments to account for other post-employment benefits (OPEB) on an accrual basis, rather than on a pay-as-you-go basis. The effect is the recognition of an actuarially determined expense on the Statement of Activities when a future retiree earns their post-employment benefits, rather than when they use their post-employment benefit. The post-employment benefit liability is recognized on the Statement of Net Position over time.

GASB Statement 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* establishes financial reporting standards for state and local governmental OPEB plans - defined benefit OPEB plans and defined contribution OPEB plans - that are administered through trusts or equivalent arrangements (hereafter jointly referred to as trusts) in which:

- a. Contributions from employers to the OPEB plan and earnings on those contributions are irrevocable.
- b. OPEB plan assets are dedicated to providing OPEB to plan members in accordance with the benefit terms.
- c. OPEB plan assets are legally protected from the creditors of employers, nonemployer contributing entities, and the OPEB plan administrator.

Plan Description.

The County administers a single-employer defined benefit OPEB plan. The County funds OPEB contributions using a trust vehicle that is maintained by The Municipal Employees' Retirement System (MERS). MERS of Michigan is an independent, professional retirement services company that was created to administer the retirement plans for Michigan municipalities on a not-for-profit basis. Retiree Health Funding Vehicle (RHFV) and Investment Services Program (ISP) is responsible for administering the trust for the County.

As of the most recent valuation date, January 1, 2017 the plan had 77 retired members and 74 active members. The plan remains open to new entrants.

Benefits are established by the County's Board of Directors. The Board of Directors may change or amend funding provisions and negotiate to modify the OPEB. Transfers and investment changes must be made in accordance with plan provisions.

OPEB plan investments.

The primary asset classes include:

Asset Class	Portfolio Allocation	Amount in Trust as of September 30, 2017
County:		
MERS CAPITAL APPR PORT (80/20)	51.10%	\$3,366,927
MERS TOTAL MARKET PORTFOLIO	48.90%	\$3,224,568
Total for County		\$6,591,495
EDC:		
Short Term Bonds	100%	\$421,455
Total for EDC		\$421,455
Health Department:		
MERS CAPITAL APPR PORT (80/20)	50.10%	\$625,046
MERS TOTAL MARKET PORTFOLIO	49.90%	\$621,442
Total for Health Department		\$1,246,488
Total		\$8,259,438

Continued

Suggested Footnotes for OPEB (GASB 74) (Continued)

The weighted average return on investments through September 30, 2017 was 10.38%.

The County’s Board of Directors is the Governing Body that can make changes in the fund choices or allocations. This task is accomplished by submitting to the MERS RHFV Administrator a designated MERS form and supporting certified minutes stating the Governing Body approval.

Receivables.

As of December 31, 2017 no amounts were due to the trust.

Total OPEB Liability

The County’s total OPEB liability of \$18,431,916 was measured as of , and was determined by an actuarial valuation as of that date.

Actuarial assumptions and other inputs.

The total OPEB liability in the \$18,431,916 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Discount Rate	8.00%
Healthcare Cost Trend Rates:	
Current Year Pre 65 Trend	11.69%
Second Year Trend	9.50%
Decrement	1.00%
Ultimate Trend	5.00%
Year Ultimate Trend is Reached	2027
Salary Increases	2.00%
Long Term Rate of Return	8.00%

Future Contributions: It is assumed that future contributions to the plan will be based on annual OPEB costs using an amortization factor of 30 years.

The discount rate was based on the County’s expected rate of return on the assets held in the MERS trust January 1, 2017.

Mortality rates were based on the RP-2000 Combined Healthy Participant Table Projected 10 Years using Projection Scale AA.

Changes in the Total OPEB Liability

	December 31, 2017	December 31, 2018
OPEB Liability Beginning of Year	\$ 35,070,125	\$ 18,431,916
Changes for the Year:		
Service Cost	2,665,399	151,360
Interest	1,686,503	1,431,700
Changes of benefit terms	-	-
Assumption Changes and Difference Between Actual and Expected Experience	(17,904,291)	334,704
Change in Actuarial Cost Method	665,255	-
Benefit payments	(3,751,075)	(1,071,355)
OPEB Liability End of Year	\$ 18,431,916	\$ 19,278,325

Continued

Suggested Footnotes for OPEB (GASB 74) (Continued)

Changes in the Total Net OPEB Liability

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	(a)	(b)	(a) - (b)
Balances at 01/01/2016	\$ 35,070,125	\$ 5,755,172	\$ 29,314,953
Changes for the Year:	-		
Service Cost	2,665,399	-	2,665,399
Interest	1,686,503	-	1,686,503
Difference between expected and actual experience	(17,904,291)	-	(17,904,291)
Change in Actuarial Cost Method	665,255		
Contributions - Employer	-	1,752,537	(1,752,537)
Net Investment Income	-	675,653	(675,653)
Benefit Payments	(3,751,075)	(950,396)	(2,800,679)
Administrative Expenses	-	(15,294)	15,294
Net Changes	\$ (16,638,209)	\$ 1,462,500	\$ (18,100,709)
Balances at 01/01/2017	\$ 18,431,916	\$ 7,217,672	\$ 11,214,244

Sensitivity of the total OPEB liability to changes in the discount rate.

The January 1, 2017 was prepared using a discount rate of 8.00%. If the discount rate were 1% higher than what was used in this valuation, the Total OPEB Liability would decrease to \$16,825,221 or by 8.72%. If the discount rate were 1% lower than was used in this valuation, the Total OPEB Liability would increase to \$20,286,505 or by 10.06%.

	Discount Rate		
	1% Decrease	Baseline 8.00%	1% Increase
Total OPEB Liability	\$20,286,505	\$18,431,916	\$16,825,221

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates.

The January 1, 2017 was prepared using an initial trend rate of 11.69%. If the trend rate were 1% higher than what was used in this valuation, the Total OPEB Liability would increase to \$20,332,807 or by 10.31%. If the trend rate were 1% lower than was used in this valuation, the Total OPEB Liability would decrease to \$16,778,361 or by 8.97%.

	Healthcare Cost Trend Rates		
	1% Decrease	Baseline 11.69%	1% Increase
Total OPEB Liability	\$16,778,361	\$18,431,916	\$20,332,807

Continued

JEFFERSON SOLUTIONS, INC.

Suggested Footnotes for OPEB (GASB 74) (Continued)

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended December 31, 2017, the County recognized an OPEB expense of (\$4,013,653). At December 31, 2017, the County reported deferred outflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Increase in January 1, 2017 OPEB liability due to actuarial experience different from expected and actuarial assumption changes	-	\$17,904,290
Changes in assumptions or other inputs	-	-
Total	-	\$17,904,290

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

For the Year Ending December 31,	
2,017	(\$5,062,153)
2018	(\$5,062,153)
2019	(\$5,062,153)
2020	(\$2,717,831)
2021	-
Thereafter	-
Total	(\$17,904,290)

Schedules of Required Supplementary Information (GASB 74)

Schedule of Changes in the County's Total OPEB Liability and Related Ratios

Last 10 Fiscal Years (as applicable)

	Year 01 <u>12/31/2017</u>	Year 02 <u>12/31/2018</u>
OPEB Liability Beginning of Year	\$ 35,070,125	\$ 18,431,916
Changes for the Year:		
Service Cost	2,665,399	151,360
Interest	1,686,503	1,431,700
Changes of benefit terms	-	-
Assumption Changes and Difference Between Actual and Expected Experience	(17,904,291)	334,704
Change in Actuarial Cost Method	665,255	-
Benefit payments	<u>(3,751,075)</u>	<u>(1,071,355)</u>
OPEB Liability End of Year	\$ 18,431,916	\$ 19,278,325
Less: Assets in OPEB Trust	<u>7,217,672</u>	TBD
Net OPEB Liability	<u>\$ 11,214,244</u>	<u>\$ 19,278,325</u>
Covered payroll	\$3,620,445	\$3,692,854
Total OPEB liability as a percentage of covered payroll	509.11%	522.04%
Funded Ratio	39.16%	NA