NOTE 6 - EMPLOYEE RETIREMENT AND BENEFITS

Plan Description: The Road Commission participates in the Municipal Employees Retirement System (MERS) of Michigan. MERS is an agent multiple-employer, statewide public employee pension plan established by the Michigan Legislature under PA 135 of 1945 and administered by a nine member Retirement Board. MERS is a nonprofit organization that was granted independence from the State of Michigan pursuant to Public Act 220 of 1996, effective August 15, 1996. MERS issues a publicly available financial report that includes financial statements and required supplementary information. This report may be obtained by accessing the MERS Website at www.mersofmich.com or in writing to MERS at 1134 Municipal Way, Lansing, Michigan 48917.

Benefits Provided--Defined Benefit: The Road Commission's defined benefit pension plan provides certain retirement, disability, and death benefits to plan members and beneficiaries. PA 427 of 1984 established and amends the benefit provisions of the participants in MERS.

Divisions - For the 2016 Valuation

	01-Comm/Sal/ Non-Union Closed	10-Union Closed	11-Hourly Non-Union Closed	12-Non-Union after 10/14 & Union after 10/11 Open
Benefit Multiplier:	2.5%-80% max	2.50%-80% max	2.50%-80% max	1.70%-no max
Normal Retirement Age:	60	60	60	60
Vesting:	10 years	10 years	10 years	10 years
Early Retirement (unreduced):	55/20	-	55/20	-
Early Retirement (reduced)	50/25; 55/15	50/25; 55/15	50/25; 55/15	50/25; 55/15
Final Average Compensation:	3 years	5 years	3 years	5 years
COLA for Future Retirees:	2.50% (non-comp.)	2.50% (non-comp.)	2.50% (non-comp.)	-
COLA for Current Retirees:	2.50% (non-comp.)	2.50% (non-comp.)	2.50% (non-comp.)	-
Employee Contributions:	0%	0%	0%	0%
Act 88:	Yes	Yes	Yes	Yes

Employees Covered by Benefit Terms

At the December 31, 2016 valuation date, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits	47
Inactive employees entitled to but not yet receiving benefits	2
Active employees	17
	66

NOTE 6 - EMPLOYEE RETIREMENT AND BENEFITS (continued)

Contributions: Article 9, Section 24 of the State of Michigan constitution requires that financial benefits arising on account of employee service rendered in each year be funded during that year. Accordingly, MERS retains an independent actuary to determine the annual contribution. The employer is required to contribute amounts at least equal to the actuarially determined rate, as established by the MERS Retirement Board. The actuarially determined rate is the estimated amount necessary to finance the cost of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The employer may establish contribution rates to be paid by its covered employees.

The required monthly employer contribution at December 31, 2017 for open divisions is shown as a percent of pay contribution and for closed divisions is shown as a monthly dollar contribution as follows:

01 – Comm/Sal/Non-Union	$4,899
10 – Union	$29,349
11 – Hourly Non-Union	$10,672
21 – Non-Union after 10/14; Union after 10/11	0.34%

Net Pension Liability

The Road Commission's net pension liability reported at December 31, 2017 was measured as of December 31, 2016, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as December 31, 2016. Update procedures were used to roll forward the total pension liability to the measurement date.

Actuarial Assumptions. The total pension liability in the December 31, 2016 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50 percent
Salary increases	3.75 percent, average, including inflation in the long-term
Investment rate of return	7.75 percent, net of investment expense, including inflation

Although no specific price inflation assumptions are needed for the valuation, the 2.5% long-term wage inflation assumption would be consistent with a price inflation of 3%-4%.

Mortality rates used were based on the RP-2014 Health Annuitant Mortality Table (with rates multiplied by 105%), the RP-2014 Employee Mortality Tables, and the RP-2014 Juvenile Mortality Tables using a 50% Male and 50% Female blend. For disabled retirees, the regular mortality table is used with a 10-year set forward in ages to reflect the higher expected mortality rates of disabled members.

The actuarial assumptions used in valuation were based on the results of the most recent actuarial experience study covering the period from January 1, 2009, through December 31, 2013.

NOTE 6 - EMPLOYEE RETIREMENT AND BENEFITS (continued)

The long-term expected rate of return on pension plan investments was determined using a model method in which the best-estimate ranges of expected future real rates of return (expected returns, net of investment and administrative expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

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

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	57.5%	5.02%
Global Fixed Income	20.0%	2.18%
Real Assets	12.5%	4.23%
Diversifying Strategies	10.0%	6.56%

Discount Rate. The discount rate used to measure the total pension liability is 8.00% for 2016. The projection of cash flows used to determine the discount rate assumes that employer and employee contributions will be made at the rates agreed upon for employees and the actuarially determined rates for employers. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to pay all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

NOTE 6 - EMPLOYEE RETIREMENT AND BENEFITS (continued)

Changes in the Net Pension Liability:

	Increases (Decreases)		
	Total Pension Liability	**Plan Fiduciary Net Position**	**Net Pension Liability**
Balances at December 31, 2016	$ 12,420,687	$ 4,842,696	$ 7,577,991
Service cost	100,440	-	100,440
Interest on total pension liability	959,506	-	959,506
Changes in benefits	-	-	-
Difference between expected and actual experience	80,984	-	80,984
Changes in assumptions	-	-	-
Employer contributions	-	900,439	(900,439)
Employee contributions	-	-	-
Net investment income	-	633,114	(633,114)
Benefit payments, including employer refunds	(954,157)	(954,157)	
Administrative expense	-	(10,019)	10,019
Other changes	5,343	-	5,343
Net Changes	192,116	569,377	(377,261)
Balances as of December 31, 2017	12,612,803	5,412,073	7,200,730

Sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the Road Commission, calculated using the discount rate of 8.00%, as well as what the Road Commission's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (7.00%) or 1-percentage-point higher (9.00%) than the current rate:

	1% Decrease (7.00%)	**Current Discount Rate (8.00%)**	**1% Increase (9.00%)**
Net pension liability at 12/31/17		$ 7,200,730	
Change in net pension liability at 12/31/17	$ 1,209,183		$ (1,046,558)

Pension plan fiduciary net position. Detailed information about the pension plan's fiduciary net position is available in the separately issued MERS financial report.

NOTE 6 - EMPLOYEE RETIREMENT AND BENEFITS (continued)

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended December 31, 2017, the Road Commission recognized pension expense of $1,115,405. At December 31, 2017, the Road Commission reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 40,492	$ -
Changes in assumptions	-	
Net difference between projected and actual earnings on pension plan investments		100,968
Contribution subsequent to the measurement date *	-	-
Total	$ 40,492	$ 100,968

* There is no amount reported as deferred outflows of resources resulting from contributions subsequent to the measurement date as measurement date and year end are both December 31, 2017.

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recorded in pension expense as follows:

Year Ended December 31:	
2018	$ 53,221
2019	12,729
2020	(76,777)
2021	(49,649)

NOTE 7 – OTHER POST-EMPLOYMENT BENEFITS

Plan Description – The Iron County Road Commission Retiree Medical Plan is a single employer plan administered by Iron County Road Commission. The Plan provides post-employment health care benefits and life insurance benefits, in accordance with the provision of Article 50, Section 9, and Article 51, Section 2 of the union agreement for all retirees who were hired by the Road Commission and retire under the provided Michigan Municipal Employees' Retirement System. The post-employment health care benefit provides that the Road Commission will continue to pay the monthly hospitalization insurance plan premium for the retiree only, without the specific drug and dental program, provided he/she makes application for the Medicare card, prior to the effective date of Medicare coverage. The post-employment health care benefit is for retirees hired before February 1, 1986. Employees hired after February 1, 1986 will be eligible for health insurance coverage for one year as long as the retiree has not yet reached the age of 65. The post-employment life insurance benefit provides that the Road Commission will pay for $8,000 of term life insurance coverage for each retiree hired before September 13, 2011. Currently, 24 retirees are eligible for these post-employment benefits. The Plan does not issue a stand alone financial report.

Funding Policy – As of December 31, 2017, the Road Commission has not established a trust to fund the OPEB obligation. The Road Commission's policy is to finance these benefits on a pay-as-you-go basis. During the year 2017, expenditures of $167,882 were recognized for post-employment health care benefits, and $11,198 for life insurance benefits, for total contributions in the amount of $179,080.

Annual OPEB Cost and Net OPEB Obligation – The Road Commission's annual OPEB cost (expense) is calculated based on the annual required contribution (ARC) of the employer. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and to amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years. The following table shows the components of the Road Commission's annual OPEB cost for the year, the amount actually contributed to the plan, and changes in the Road Commission's annual net OPEB obligation to the Retiree Medical Plan:

	2015	2016	2017
Annual Required Contribution	$ 583,126	$ 646,180	$ 732,320
Amount Contributed			
Payments of Current Premiums	(225,763)	(208,025)	(179,080)
Increase in Net OPEB Obligation	$ 357,363	$ 438,155	$ 553,240
Adjustment for Interest and Amortization	26,129	37,776	49,909
Adjustment to ARC	(92,325)	(150,758)	(229,638)
OPEB Obligation - Beginning of Year	653,237	944,404	1,269,577
OPEB Obligation - End of Year	$ 944,404	$ 1,269,577	$ 1,643,088

NOTE 7 – OTHER POST-EMPLOYMENT BENEFITS (continued)

The Road Commission's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for fiscal year 2017 is as follows:

	2015	2016	2017
Annual OPEB Costs	516,930	533,198	552,591
Percentage Contributed	44%	39%	32%
Net OPEB Obligation	944,404	1,269,577	1,643,088

Funded Status and Funding Progress – As of January 1, 2015, the actuarial accrued liability for benefits was $4,011,437, all of which was unfunded. The covered payroll (annual payroll of active employees covered by the plan) was unavailable, and the ratio of the unfunded actuarial accrued liability to the covered payroll was unavailable.

Valuation Date	Value of Assets	Accrued Liability	Liability (UAL)	Funded Ratio	Covered Payroll	of Covered Payroll
01/01/09	$ -	$ 5,471,703	$ 5,471,703	0%	n/a	n/a
01/01/12	-	4,544,508	4,544,508	0%	n/a	n/a
01/01/15	-	4,011,437	4,011,437	0%	n/a	n/a

Actuarial valuation of an ongoing plan involves estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information following these notes, present multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Actuarial Methods and Assumptions – Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and the plan member to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the January 1, 2015 actuarial valuation, the alternative method under GASB Statement No. 45 was used:

Actuarial Cost Method:	Entry Age Normal (level percent)
Amortization Method:	Level percent, closed
Remaining Amortization Period:	8 years (average future service)
Asset Valuation Method:	Not applicable

NOTE 7 – OTHER POST-EMPLOYMENT BENEFITS (continued)

The actuarial assumptions include a discount rate of 4%, turnover rates ranging from .75% to 5% based on age, retirement rates ranging from 5% to 100% based on age, and medical inflation rates of 8.0% graded down 0.5% per year to an ultimate rate of 5.0% for pre-65 and 5.0% in all years for post-65.