RFP#15-051-04
Addendum #1

Marinette County

Other Postemployment Benefits

Actuarial Valuation Report

For The Fiscal Year Beginning January 1, 2014

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Introduction

Marinette County (the County) has requested an actuarial valuation in order to comply with the Governmental Accounting Standards Board's (GASB) Statement 45 "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions (OPEB)".

This report presents the results of the actuarial valuation, as of January 1, 2014, of the postemployment medical benefit plans offered to retired employees of Marinette County. The primary results of the valuation include the actuarial accrued liability and annual required contribution as defined by Statement 45. This report also includes the financial statement OPEB liability items for the fiscal year ending December 31, 2013.

The liabilities shown in this report include the value of the retiree health insurance, plus an amount for the excise tax (Cadillac Tax) for retirees that will begin in 2018. This report excludes the County's liability for unused sick leave at retirement. The value of unused sick leave may be used to pay the retiree's share of health insurance costs after retirement. The County currently has a procedure in place to account for the value of the unused sick leave as it is earned in the year of employment.

The actuarial computations included in this report were prepared solely to provide sufficient information for the County to comply with the GASB 45 accounting requirements. Computations for other purposes may differ significantly from the results shown in this report. Use of information provided in this report may not be appropriate for other purposes. This report should be reviewed in its entirety only.

Executive Summary

The County has adopted a plan that provides postemployment medical benefits for eligible retirees and their dependents. Eligible retirees are allowed to continue to receive coverage under the employer-provided group medical plan by paying a portion of the premium.

Below is a summary of the valuation results. Additional detail is provided in other sections of this report.

	Number Eligible	Actuarial Accrued Liability	Annual Required Contribution	Pay-As-You-Go Cost
Courthouse	132	$12,172,471	$1,192,845	$448,341
Landfill	3	$159,522	$13,706	$9,725
Highway	29	$2,792,119	$265,101	$232,365
Mgmt. Protected	5	$596,261	$59,965	$0
Non-represented	53	$4,856,100	$442,680	$378,663
Total	222	$20,576,473	$1,974,297	$1,069,094

The Actuarial Accrued Liability represents the liability for past service (service prior to January 1, 2014). The Annual Required Contribution is the benefit amount to be recognized in the 2014 fiscal year financial statement according to Statement 45, using the level percent of payroll amortization method. The Subsidy will be explained later in this report.

The Pay-As-You-Go Cost is the estimated cost of benefits expected to be paid in fiscal year 2014. The above amount excludes the value of the implicit rate subsidy, which is explained on the following page. The Pay-As-You-Go Cost including the implicit rate subsidy is $1,271,795.

Statement 45 was issued by GASB in August, 2004. This report has been prepared in accordance with this Statement. The report has also been prepared in accordance with generally accepted actuarial principles and the requirements of Actuarial Standard of Practice No. 6 "Measuring Retiree Group Benefit Obligations".

Description of the Substantive Plan

One objective of accounting standards is to reflect the terms of the agreement or transaction that takes place between the employer and the employee involving the exchange of services for the promise of a deferred benefit. The substantive plan is the understanding between the employer and the employee resulting from past practice and written and oral communications. The description of the substantive plan used for the purpose of this valuation was based on the most-recent labor agreements and plan summary documents provided by the County.

Certain retired employees have access to group medical coverage through the County's insured group plan. Retiring employees may be eligible to receive up to 8 years of health insurance. The majority is paid by the county. See page 34 for a more detailed description of the eligibility requirements and benefits available to retirees.

Implicit Rate Subsidy

Health care costs generally increase as the insured ages. Group insurance premium rates reflect the average cost of those covered and do not usually vary by age. Since the actual expected cost of the retiree may be higher due to the retiree being older than the average employee, the payment of the average premium or cost implies there is a rate subsidy from the employer. This rate subsidy is considered a benefit subject to OPEB valuation. Therefore, unless the premium rate for retirees is set to fully recover their health costs, the premium for retired employees is artificially understated. This is called the implicit rate subsidy. The OPEB liability will include the cost of the implicit rate subsidy.

The Executive Summary section of this report shows the Pay-As-You-Go cost including the Implicit Rate Subsidy. This value is shown for informational purposes. If the County were to include this value in accounting for retiree costs without making a corresponding adjustment when accounting for active employees, costs would be overstated.

The group benefit plan is described in further detail starting on page 22.

Valuation Process

There are several steps in performing a valuation of postemployment medical benefits.

Collect Participant Data: A complete census of all active employees of the County eligible for group medical coverage and all retired employees currently receiving benefits is collected. Census data as of December, 2013 was used in the valuation.

Plan Provisions: The terms of the plan are determined, including the conditions under which an employee may qualify for benefits, such as age and service requirements, and the duration of coverage after the employee retires.

Cost of Coverage: The current cost of coverage, or the current premium charges for each participant and the amount of any contributions to be made by retirees are determined.

Assumptions Regarding Future Events: A number of assumptions regarding future events are developed. These assumptions are made such that they are appropriate for the current group of plan participants. These assumptions predict future employee turnover, retirement, participation, mortality or life expectancy, the cost of medical benefits in future years, and the discount rate appropriate for determining present values.

Model: Using the plan provisions and assumptions, the actuarial valuation model is built which projects for each employee the dollar amount of benefits that will be paid in each future year and the probability of each employee satisfying the requirements for receipt of those benefits.

Determine the Present Value of Future Benefits: The present value of all future benefits expected to be paid to all current active and retired employees of the County is calculated using a discount assumption to discount the amount of projected future benefit payments back to the valuation date.

Allocation of the Present Value of Future Benefits: The present value of future benefits is then allocated between the value attributable to prior service, service in the current year, and future service. The portion of the present value of future benefits attributable to service in the current year is a component of the current year's annual required contribution. The portion attributable to prior service, to the extent that it has not been recognized in prior years, is either recognized immediately, or amortized. The portion attributable to future service is recognized in future years.

Choice of Assumptions

To select assumptions to be used in the valuation, a number of factors are considered. These factors include the level of benefits provided by the plan, the ages at which these benefits become available, recent experience of the group, experience of employees in the Wisconsin Retirement System (WRS), the insights and observations of the administration, and the actuary's best estimate of the likelihood of certain events, given experience with other plans under similar circumstances.

It was not possible to develop reasonable withdrawal, disability, and mortality assumptions based on the experience of the County due to its size. To obtain more reliable experience, other sources were used.

The most relevant and credible source of experience available is the Wisconsin Retirement System's Three-Year Experience Study for the period 2009 through 2011. This experience study was used to determine the assumptions that are used to perform the actuarial pension valuation of the WRS. It was decided that the assumptions reflecting the experience of WRS for mortality, disability, and withdrawal or turnover should be used in the valuation of the County's postemployment medical benefit plan. WRS experience was also used, along with County experience, to develop retirement rates.

Discount Assumption

The discount assumption reflects the time value of money as of the valuation date. This assumption is to be based on the estimated long-term investment yield on the investments that are to be used to finance the payment of benefits. For purposes of determining the net periodic cost for the valuation, a discount assumption of 4.0% was used.

Once the County establishes a segregated fund to finance the payment of the OPEB obligation, the expected rate of return on that fund will be reflected in future valuations. If that rate varies from the rate chosen for this valuation, future calculated liabilities could vary significantly from those shown in this report.

Health Care Trend Assumption

Medical costs have been increasing at a rate higher than general inflation for a long time. This valuation assumes that medical costs will continue to increase at a rate that is higher than the general inflation rate. The medical cost increase represents the combination of the inflation in the price of health care services, changes in utilization (other than age-related changes), technological advances in medical care, and changes in the health status of plan participants.

The 2015 and 2016 trend rates reflect the average annual change in costs (and premiums) from 2008 to 2012. Rates for 2025 and beyond are based on projections of the Office of the Actuary at the Centers for Medicare & Medicaid Services, as published in *National Health Expenditures Projections: 2012-2022.* Rates for 2017 through 2024 are scaled between the 2016 and 2025 rates. For purposes of this valuation, average premium rates and claims costs for future years are assumed to increase at the rate set forth in the following schedule.

Year	Trend Rate	Year	Trend Rate
2015-2016	8.0%	2021-2022	6.5%
2017-2018	7.5%	2023-2024	6.0%
2019-2020	7.0%	2025+	5.5%

Valuation Results

Number of Participants

This valuation is based on the assumption that all employees currently covered under the health plan will receive health benefits at retirement if they meet the eligibility requirements described elsewhere in this report. Following are the number of participants by employee category included in this valuation.

	Actives	Retirees	Total
Courthouse	104	28	132
Landfill	2	1	3
Highway	17	12	29
Mgmt. Protected	5	0	5
Non-represented	32	21	53
Total	160	62	222

Actuarial Present Value of Total Projected Benefits

The Actuarial Present Value of Total Projected Benefits (APV) is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Set forth below are the results of the valuation of the present value of future benefits as of December 31, 2014.

	Actives	Retirees	Total
Courthouse	$16,249,849	$2,047,978	$18,297,827
Landfill	$146,020	$33,757	$179,777
Highway	$3,254,017	$1,052,191	$4,306,208
Mgmt. Protected	$900,590	$0	$900,590
Non-represented	$5,516,573	$1,494,780	$7,011,353
Total	$26,067,049	$4,628,706	$30,695,755

Actuarial Accrued Liability

The Actuarial Accrued Liability (AAL) is defined as the actuarial present value of benefits allocated to all periods prior to the valuation year. The projected unit credit actuarial cost method was used to allocate costs to various years. Below is the calculated AAL as of December 31, 2014. The AAL below excludes the normal cost for the year.

	Actives	Retirees	Total
Courthouse	$10,124,493	$2,047,978	$12,172,471
Landfill	$125,765	$33,757	$159,522
Highway	$1,739,928	$1,052,191	$2,792,119
Mgmt. Protected	$596,261	$0	$596,261
Non-represented	$3,361,320	$1,494,780	$4,856,100
Total	$15,947,767	$4,628,706	$20,576,473

Actuarial Value of Assets

The actuarial value of assets at January 1, 2014 is equal to the market value of assets reported as of January 1, 2014 of $172,102.

Annual Required Contribution of the Employer

The Annual Required Contribution (ARC) of the employer is the portion of the present value of future benefits that is to be recognized in the current fiscal year. It is made up of several components:

- The normal cost, or the portion of the present value of future benefits attributable to service in the current year,
- The interest cost on the normal cost and the annual amortization amount, which are determined as of the beginning of the plan year,
- Amortization of the Unfunded AAL resulting from plan amendments, actuarial gains or losses, or the adoption of the plan,

The GASB standards allow two different amortization methods. These two are the level dollar and the level percentage of payroll methods. The ARC shown below was calculated using the level percent amortization method, amortizing the unfunded actuarial accrued liability as of the valuation date ($20,404,708) over 24 years (30 years from the GASB implementation date of July 1, 2008). Below are the components of the ARC calculated for the year January 1, 2014 through December 31, 2014.

	Normal Cost	Interest Cost	Amortization of AAL	Total ARC
Courthouse	$575,379	$45,879	$571,587	$1,192,845
Landfill	$5,096	$527	$8,083	$13,706
Highway	$125,013	$10,196	$129,892	$265,101
Mgmt. Protected	$31,031	$2,306	$26,628	$59,965
Non-represented	$184,370	$17,026	$241,284	$442,680
Total	$920,889	$75,934	$977,473	$1,974,296

In future years, there will be gains or losses on the AAL. Gains or losses are defined as the changes in the AAL that are less than, or greater than expected, respectively. Gains and losses are currently being amortized over 24 years.

Annual OPEB Cost

The Annual OPEB Cost is the measure of an employer's cost of participating in an OPEB plan. It is made up of several components:

- The Annual Required Contribution (ARC),
- Interest on the beginning balance of the net OPEB obligation,
- Less an adjustment to the ARC for amortization of past contribution deficiencies.

Below are the components of the Annual OPEB Cost calculated for the year January 1, 2014 through December 31, 2014.

Annual Required Contribution	$1,974,297
Interest on Net OPEB Obligation	$222,128
Adjustment to ARC	($276,062)
Annual OPEB Cost	$1,920,363

Schedule of Funding Progress

The schedule of funding progress presents information about the plan's funding progress for the most recent and preceding valuations.

Actuarial Valuation Date	January 1, 2012	January 1, 2014
Actuarial Value of Assets	$0	$172,102
Actuarial Accrued Liability	$21,743,204	$20,576,473
Unfunded AAL (UAAL)	$21,743,204	$20,404,371
Funded Ratio	0.0%	0.8%
Covered Payroll	$16,264,867	$ 9,161,651
UAAL as a % of Covered Payroll	133.7%	222.7%

Employer OPEB Contribution

The Employer OPEB contribution as defined under GASB 45 is the estimated aggregate age-adjusted premium (which reflects the implicit rate subsidy) less the amount paid by the retiree and/or others. The contribution includes the Pay-As-You-Go cost plus the Implicit Rate Subsidy. The contribution reflects costs for retirees only. Shown below are the components of the employer OPEB contribution amounts for the next two fiscal years.

Fiscal Year-Ending	12/31/14
Pay-As-You-Go Cost	$1,069,094
Implicit Rate Subsidy	$202,701
Employer OPEB Contribution	$1,271,795

Net OPEB Obligation

The following table shows the components of the County's annual OPEB costs, the amount actually contributed, and changes in the County's net OPEB obligation for the most recent and two preceding fiscal years. The contributions do not include any additional amounts beyond the expected benefit payments for the year.

Fiscal Year ending	12/31/12	12/31/13	12/31/14
Annual Required Contribution (ARC)	$2,017,671	$1,915,038	$1,974,297
Interest on Net OPEB Obligation	$176,381	$203,260	$222,128
Adjustment to ARC	($190,956)	($244,171)	($276,062)
Annual OPEB Cost	$2,003,096	$1,874,127	$1,920,363
Employer OPEB Contribution	($1,296,633)	($1,402,440)	($1,271,795)
Increase in Net OPEB Obligation	$706,463	$471,687	$648,568
Net OPEB Obligation - Start of Year	$4,375,043	$5,081,506	$5,553,193
Net OPEB Obligation - End of Year	$5,081,506	$5,553,193	$6,201,761

Cash Flow Projections

The liability set forth above will be satisfied through the payment of benefits for current and future retirees. Using the same assumptions for retirement, mortality, and increases in claims costs that were used to perform the valuation, the cash requirements were projected for each of the next thirty years.

The cash flow projection shows costs under the current funding (Pay-as-You-Go), compared to the Annual Required Contribution (ARC). The Total ARC equals the sum of the Normal Cost, Interest Cost, and Amortization Payment. The following page shows total Pay-As-You-Go cash flows and the ARC for the level percent of payroll method.

This cost projection is valid only if the plan is funded and the employer makes annual contributions to the plan equal to the ARC. The ARC will be higher than those shown if the plan is not funded.

Marinette County
30 Year Cash Flow Projection

Fiscal Year Beginning In	Pay-As You-Go Cost	Implicit Rate Subsidy	Normal Cost	Level % of Payroll Amortization			
				Before ARC UAAL	Amort. Payment	Interest Cost	Total ARC
2014	$1,069,094	$202,701	$920,889	$19,950,377	$977,473	$75,934	$1,974,297
2015	1,151,176	233,029	918,347	19,731,820	1,001,910	76,810	1,997,067
2016	1,212,983	288,541	908,463	19,479,106	1,026,958	77,416	2,012,836
2017	1,169,619	265,829	897,342	19,190,234	1,052,632	77,999	2,027,972
2018	1,316,507	268,597	881,724	18,863,106	1,078,948	78,428	2,039,100
2019	1,408,219	309,520	856,013	18,495,525	1,105,921	78,478	2,040,412
2020	1,265,621	274,921	831,698	18,085,188	1,133,569	78,610	2,043,877
2021	1,254,202	297,671	795,589	17,629,683	1,161,909	78,299	2,035,797
2022	1,416,512	315,352	763,020	17,126,486	1,190,956	78,159	2,032,135
2023	1,526,377	318,890	722,265	16,572,951	1,220,730	77,721	2,020,715
2024	1,565,261	297,086	675,480	15,966,309	1,251,248	77,068	2,003,797
2025	1,661,087	335,995	628,018	15,303,663	1,282,530	76,422	1,986,969
2026	1,704,068	328,131	573,315	14,581,979	1,314,593	75,516	1,963,423
2027	1,646,973	321,323	537,035	13,798,081	1,347,458	75,379	1,959,871
2028	1,708,182	307,585	505,080	12,948,648	1,381,144	75,449	1,961,673
2029	1,641,264	282,318	476,198	12,030,204	1,415,673	75,675	1,967,546
2030	1,698,995	322,162	437,320	11,039,113	1,451,065	75,536	1,963,921
2031	1,629,916	313,387	399,051	9,971,570	1,487,341	75,456	1,961,849
2032	1,569,610	296,337	353,142	8,823,598	1,524,525	75,106	1,952,772
2033	1,619,411	314,659	308,501	7,591,036	1,562,638	74,846	1,945,985
2034	1,493,622	236,684	262,557	6,269,534	1,601,704	74,571	1,938,833
2035	1,577,070	271,998	220,134	4,854,544	1,641,746	74,475	1,936,357
2036	1,590,989	238,899	181,106	3,341,309	1,682,790	74,556	1,938,452
2037	1,664,208	301,956	144,584	1,724,860	1,724,860	74,777	1,944,221
2038	1,672,896	325,595	114,488	0	0	4,580	119,068
2039	1,606,078	347,930	90,343	0	0	3,614	93,957
2040	1,459,008	313,264	71,210	0	0	2,848	74,058
2041	1,321,187	288,937	55,965	0	0	2,238	58,203
2042	1,062,644	191,551	45,074	0	0	1,803	46,877
2043	947,978	167,941	36,172	0	0	1,447	37,619

Fiscal Year 2013 Values

Actuarial Accrued Liability

The Actuarial Accrued Liability (AAL) as of December 31, 2013 is estimated to be the same as the AAL as of January 1, 2014.

Courthouse	$11,666,169
Landfill	$164,971
Highway	$2,358,942
Mgmt. Protected	$543,490
Non-represented	$5,406,622
Total	$20,140,194

Annual Required Contribution of the Employer

The normal cost for the year-ending December 31, 2013 was calculated using the normal cost from the 2014 valuation year discounted 4.0%. The interest cost for the year-ending December 31, 2013 was calculated using the interest from the 2014 valuation year.

The ARC for the year-ending December 31, 2013 is:

	Normal Cost	Interest Cost	Amortization of AAL	Total ARC
Courthouse	$553,249	$45,879	$557,645	$1,156,773
Landfill	$4,900	$527	$7,886	$13,313
Highway	$120,205	$10,196	$126,724	$257,125
Mgmt. Protected	$29,838	$2,306	$25,979	$58,123
Non-represented	$177,279	$17,026	$235,399	$429,704
Total	$885,471	$75,934	$953,633	$1,915,038

Annual OPEB Cost

Below are the components of the Annual OPEB Cost calculated for the year January 1, 2013 through December 31, 2013.

Annual Required Contribution	$1,915,038
Interest on Net OPEB Obligation	$203,260
Adjustment to ARC	($244,171)
Annual OPEB Cost	$1,874,127

Employer OPEB Contribution

The Employer OPEB contribution as defined under GASB 45 is the estimated aggregate age-adjusted premium (which reflects the implicit rate subsidy) less the amount paid by the retiree and/or others. The contribution includes the Pay-As-You-Go cost plus the Implicit Rate Subsidy. The contribution reflects costs for retirees only. Shown below are the components of the employer OPEB contribution amounts for the 2013 fiscal year.

Pay-As-You-Go Cost	$1,123,189
Implicit Rate Subsidy	$279,251
Employer OPEB Contribution	$1,402,440

Net OPEB Obligation

The following table shows the components of the County's annual OPEB costs, the amount actually contributed, and changes in the County's net OPEB obligation for the 2013 fiscal year.

Annual Required Contribution (ARC)	$1,915,038
Interest on Net OPEB Obligation	$203,260
Adjustment to ARC	($244,171)
Annual OPEB Cost	$1,874,127
Employer OPEB Contribution	($1,402,440)
Increase in Net OPEB Obligation	$471,687
Net OPEB Obligation - Start of Year	$5,081,506
Net OPEB Obligation - End of Year	$5,553,193

Summary of Actuarial Assumptions and Methods

Valuation Date

The valuation date is January 1, 2014.

Discount Rate

A rate of 4.00% was used to discount expected liabilities to the valuation date.

Health Care Trend Rate

Average claims costs for future years are assumed to increase at the rate set forth in the following schedule.

Year	Trend Rate	Year	Trend Rate
2015-2016	8.0%	2021-2022	6.5%
2017-2018	7.5%	2023-2024	6.0%
2019-2020	7.0%	2025+	5.5%

Mortality

Mortality rates are a blend of the Death-In-Service and Retired Lives mortality rates from the "*Wisconsin Retirement System 2009 – 2011 Experience Study*". Following are sample rates:

	Age 45	Age 50	Age 55	Age 60	Age 65
Male	.0717%	.0966%	.2228%	.4177%	.8358%
Female	.0519%	.0765%	.1345%	.2569%	.5165%

Disability

Disability rates are from the "*Wisconsin Retirement System 2009 – 2011 Experience Study*". Following are sample rates:

	Age 35	Age 40	Age 45	Age 50	Age 55
Male	.01%	.04%	.07%	.15%	.29%
Female	.04%	.05%	.07%	.11%	.20%

Retirement

Retirement rates are developed from County experience. Assumed rates are:

Ages	Rate	Ages	Rate	Ages	Rate
55 - 56	10%	64	25%	71+	100%
57 - 61	20%	65 - 67	35%		
62 - 63	30%	68 - 70	100%		

Turnover

Rates of termination of employment for reasons other than retirement and death are the select and ultimate withdrawal rates from the "*Wisconsin Retirement System 2009 – 2011 Experience Study*". Following are sample rates:

Age	Service Years	Male	Female
All	1	13.0%	13.5%
All	3	6.8%	8.0%
All	5	4.5%	6.0%
All	7	3.5%	4.5%
All	9	2.5%	3.8%
Under 30	10 & up	2.5%	3.3%
40	10 & up	1.6%	2.2%
45	10 & up	1.3%	1.8%
50	10 & up	1.1%	1.6%
55+	10 & up	0.0%	0.0%

Participation

100% of the eligible retirees and dependents are assumed to be covered until the period of County-paid benefits ends.

Spousal Coverage

The calculations for all active employees assume that 70% have a spouse and/or dependents that will also be covered upon retirement. These assumptions are based on the number of active and retired employees that currently have group medical family coverage. For current and future retirees, the age of the male spouse is assumed to be 2 years older than the female.

Cadillac Tax

The impact of the excise tax on high cost health plans was estimated based on a number of assumptions. The tax equals 40% of the value of a plan that exceeds a threshold amount. The tax will begin in 2018. The 2018 threshold amounts used in this estimate are $11,850 for individuals and $30,950 for families. These amounts will be increased by the Consumer Price Index (CPI) plus 1% for 2019 and by CPI for each year after 2019. CPI was assumed to be 3.0% per year.

Per Capita Benefit Costs

Health benefit costs were based on group medical premiums for the period January 1, 2014 through December 31, 2014. Following are the annual premium rates that were used to develop the starting per capita benefit costs.

Single	EE/Spouse	EE/Child	Family
$10,836.24	$32,714.76	$23,195.04	$18,215.88

These premiums were converted to age-specific charges using Actuarial & Health Care Solutions, LLC rating model factors. Illustrative annual benefit costs for the period January 1, 2014 through December 31, 2014 are as follows:

	Employee		Dependents	
Age	Male	Female	Male	Female
55	$12,039	$13,192	$16,091	$15,785
57	$13,184	$14,072	$16,121	$15,834
59	$14,402	$15,107	$16,923	$15,832
61	$15,692	$16,311	$17,370	$17,331
63	$17,056	$17,701	$17,644	$17,222
65	$6,900	$7,091	$6,900	$7,091

Administrative Expenses

Administrative costs are included in the above per capita benefit costs.

Retiree Contributions

Retirees are expected to contribute the same percentage of premium in all years. The percentages used for this valuation are the 2014 contribution rate percentages shown on page 34 of this report.

Cost method

The Projected Unit Credit actuarial cost method was used to allocate the value of benefits to valuation years.

Salary Increases

Future salaries are expected to increase at an annual rate of 2.50%.

Methodology

Participant data as of December, 2013 was collected. The valuation includes employees currently covered under the County health plan. Retirees eligible for Medicare and paying 100% of the premium are excluded. This report does not reflect the effect of employees hired in the future.

A projection of the population to retirement was made using the rates of retirement, mortality, disability, and termination. For those retirees eligible for coverage, a projection of claims was made for each year of retirement using mortality and trend assumptions. The resulting cash flows were then discounted to the valuation date.

Data Sources

Marinette County furnished participant, premium rate, and medical benefit plan information. Data was reviewed for reasonableness and consistency, but no audit was performed.

Changes Since The Prior Valuation

Following is a list of changes made since the prior valuation for the County:

Cadillac Tax – The current valuation includes an estimate for the expected tax to be levied beginning in 2018

Per Capita Benefit Costs – The annual per capita benefit costs and trends are expected to be different from the prior valuation. Below is a comparison of the old valuation and new valuation employee annual medical costs for the plan year beginning January 1, 2025.

	Retiree Old		Retiree New		Dependent Old		Dependent New	
Age	Male	Female	Male	Female	Male	Female	Male	Female
55	$30,004	$33,033	$24,980	$27,371	$33,013	$36,346	$33,388	$32,752
57	$32,852	$35,210	$27,355	$29,198	$35,532	$38,082	$33,450	$32,853
59	$35,879	$37,750	$29,882	$31,345	$37,690	$39,655	$35,112	$32,850
61	$39,087	$40,691	$32,560	$33,844	$39,706	$41,336	$36,040	$35,960
63	$42,473	$44,069	$35,389	$36,727	$43,573	$45,210	$36,610	$35,735
65	$15,275	$15,592	$14,316	$14,713	$15,275	$15,592	$14,316	$14,713

Turnover, Disability, and Mortality Rates - The prior valuation rates were based on the WRS 2006 to 2008 Experience Study. The current valuation uses rates based on the WRS 2009 to 2011 Experience Study.

Retirement Rates - The retirement rates have been changed since the prior valuation.

Spousal Coverage - The current valuation assumes different levels of family coverage than the previous valuation.

Retirees are no longer eligible to continue health coverage by paying 100% of the premium. The previous valuation assumed 25% of retirees would pay 100% of the premium to continue coverage after the County-paid benefits ended.

The effect of the above changes on the OPEB Actuarial Accrued Liability, or AAL, is shown below.

	AAL in 1000's
AAL as of 12/31/12 from prior valuation.	$21,743
Expected increase due to interest and the accrual of additional service by active participants.	$812
Effect of Cadillac tax.	$1,847
Effect of changes in per capita benefit costs and health care trend.	$(2,963)
Effect of changes in mortality, retirement, disability, and termination rates.	$306

Effect of changes in spousal coverage assumptions.	$451
Elimination of coverage for self-pay retirees.	$(811)
All other causes – Fewer/more retiring or terminating employment than expected, etc.	$(809)
Total changes since 12/31/12.	$(1,167)
AAL as of 12/31/14.	$20,576

Summary of Benefit Provisions

The County provides medical (including prescription drugs) coverage for active and retired employees through the County's insured group plan. Following is a description of the plan benefits.

Calendar Year Deductible	Network Providers Non-Network	$350 per Member, $700 per family $600 per Member, $1,200 per family
Co-Insurance	After satisfaction of the deductible, the Plan pays:	
	Network Providers	90% of the first $5,500 per member, $11,000 per family, 100% thereafter
	Non Network	70% of the first $3,667 per member, $7,333 per family, 100% thereafter
Out of Pocket Maximums (Excluding deductible)	Network Providers Non-Network	$550 per Member, $1,100 family $1,100 per Member, $2,200 family
Prescription Drug Coverage	Retail Mail Order	$7 Copay Generic, $15 Copay Brand $12 Copay Generic, $30 Copay Brand

Actuarial Certification

I, Richard J. Marchel, am employed as a Consulting Actuary by the firm Actuarial & Health Care Solutions, LLC (AHCS). I am a member of the American Academy of Actuaries (MAAA) and meet their "General Qualification Standards for Public Statements of Actuarial Opinion" relating to postemployment welfare plans. AHCS has been retained by Marinette County for the purpose of determining the County's liability for non-pension postemployment benefits. The valuation is being performed in order to determine the cost and liability associated with these benefits in accordance with the reporting requirements of the Government Accounting Standards Board's Statement 45, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions".

In my opinion,

- This valuation has been conducted in accordance with generally accepted actuarial principles and practices.
- The calculations are based on actuarial assumptions relevant to contract provisions and appropriate to the purpose for which this statement is prepared.
- The results shown in this report are reasonable actuarial results.

Actuarial methods, considerations, and analysis used in forming my opinion conform to Actuarial Standard of Practice No. 6, "Measuring Retiree Group Benefit Obligations", and adopted December 2001.

The results shown in this report are reasonable actuarial results. However, a different set of results could be considered reasonable results. The reason for this is that actuarial standards of practice describe a "best-estimate" range of each assumption, rather than a single best-estimate value. Thus, reasonable results differing from those presented in this report could have developed by selecting different points within the best-estimate ranges for various assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to a number of factors including, but not limited to the following: plan experience differing from that anticipated by the demographic or economic assumptions, changes in plan provisions, changes in applicable law, or other items.

AHCS Consulting Actuary

Richard J. Marchel

Richard J. Marchel, FSA, MAAA
March 21, 2014

Glossary of Key Terms

Actuarial Accrued Liability (AAL)

The actuarial present value of benefits attributed to employee service rendered to a particular date. Prior to an employee's eligibility date, the actuarial accrued liability as of a particular date for an employee is the portion of the actuarial present value of total projected benefits attributed to the employee's service rendered to that date. On and after the eligibility date, it is equal to the present value of all future benefits.

Actuarial Present Value of Total Projected Benefits (APV)

The present value of all benefits expected to be paid to retirees, their beneficiaries, and any covered dependents, pursuant to the terms of the postemployment plan.

Annual Required Contribution (ARC)

The amount recognized in an employer's financial statements as the cost of a postemployment benefit plan for a period. Components include normal cost, interest cost, and amortization of the unfunded actuarial accrued liability.

Cadillac Tax

A 40 percent excise tax that will be imposed on the value of health insurance benefits exceeding a certain threshold, beginning in 2018. This excise tax is part of the Patient Protection and Affordable Care Act.

Discount Rate

The rate used to reflect the time value of money. The discount rate is used to determine the present value, as of the valuation date, of future cash flows currently expected to be required to satisfy the postemployment benefit obligation.

Employer OPEB Contributions

The estimated aggregate age-adjusted premiums (which reflect the implicit rate subsidy) less the amounts paid by the retiree and/or others.

Implicit Rate Subsidy

Health care costs generally increase as the insured ages. Group insurance premium rates reflect the average cost of those covered and do not usually vary by age. Since the actual expected cost of the retiree may be higher due to the retiree being older than the average employee, the payment of the average premium or cost implies there is a rate subsidy from the employer. This rate subsidy is considered a benefit subject to OPEB valuation. Therefore, unless the premium rate for retirees is set to fully recover their health costs, the premium for retired employees is artificially understated. This is called the implicit rate subsidy.

Interest Cost

Interest on the normal cost and amortization payment to the end of the year.

Normal Cost

The portion of the expected postemployment benefit obligation attributed to employee service during a period.

Pay-As-You-Go

A method of expensing retiree medical benefits which recognizes as an expense, in the income statement, the cash currently paid in the form of retiree benefits. Pay-as-you-go costs in this report reflect average group insurance premium rates and do not include the implicit rate subsidy cost.

Per Capita Benefit Cost by Age

The current cost of providing postemployment health care benefits for one year at each age from the youngest age to the oldest age at which plan participants are expected to receive benefits under the plan.

Plan Assets

Assets which have been irrevocably dedicated to the payment of benefits under the plan.

Postemployment Benefits

All forms of benefits, other than retirement income (pensions), provided by the employer to the retiree, including, but not limited to, health care, life insurance and legal assistance.

Substantive Plan

The terms of the postemployment benefit plan as understood by an employer that provides the postemployment benefit and the employees who render services in exchange for those benefits.

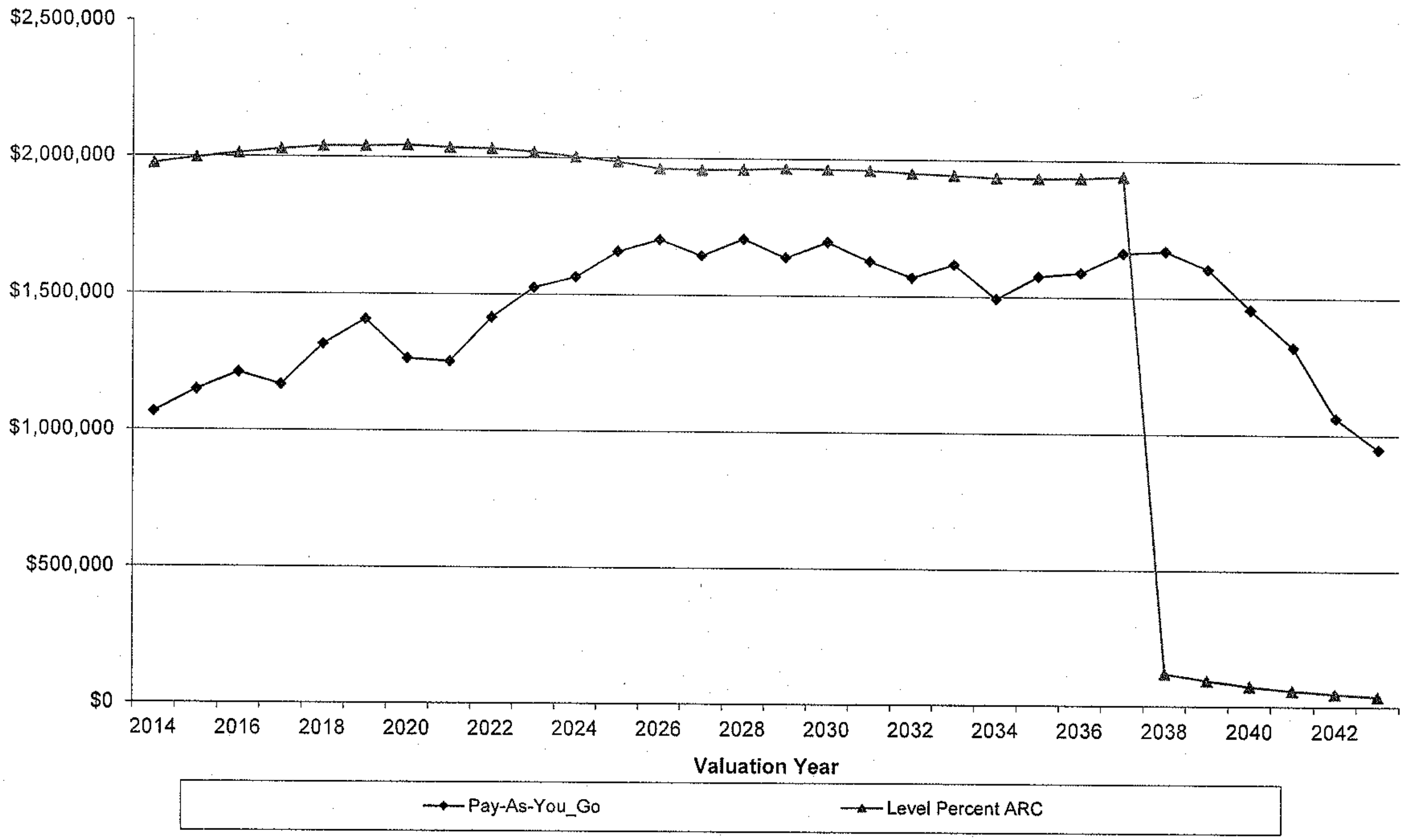
Valuation Date

The date as of which the plan assets and obligations are measured.

Attachments

Page 26 is a chart representing the 30 year cash flow exhibit. Pages 27 to 32 are detailed exhibits by employee category summarizing employee counts and cost information. Page 33 lists the number of active employees summarized by age and length of service categories. Page 34 summarizes the benefits available to retirees and the eligibility requirements for receiving those benefits.

Marinette County Chart of Cash Flow Expenses



AHCS Retiree Health Valuation Model

Marinette County Total - Valuation Year January, 2014 - December, 2014

Post-Retirement Medical Forecast Summary

		Actives			Retirees			Total		
		Employee	Dependent	Total	Employee	Dependent	Total	Employee	Dependent	Total
Number		160	112	272	62	47	109	222	159	381
Average Age		50.09	50.40	50.13	62.34	61.04	61.78			
APV										
	Medical	$12,211,874	$8,923,649	$21,135,523	$2,115,111	$1,557,789	$3,672,900	$14,326,985	$10,481,438	$24,808,423
	Rx	2,846,967	2,084,559	4,931,526	536,179	419,627	955,806	3,383,146	2,504,186	5,887,332
	Self-pay Medical	-	-	-	-	-	-	-	-	-
	Self-pay Rx	-	-	-	-	-	-	-	-	-
	Total	$15,058,841	$11,008,208	$26,067,049	$2,651,290	$1,977,416	$4,628,706	$17,710,131	$12,985,624	$30,695,755
AAL										
	Medical	$7,528,786	$5,348,347	$12,877,133	$2,115,111	$1,557,789	$3,672,900	$9,643,897	$6,906,136	$16,550,033
	Rx	1,772,274	1,298,360	3,070,634	536,179	419,627	955,806	2,308,453	1,717,987	4,026,440
	Self-pay Medical	-	-	-	-	-	-	-	-	-
	Self-pay Rx	-	-	-	-	-	-	-	-	-
	Total	$9,301,060	$6,646,707	$15,947,767	$2,651,290	$1,977,416	$4,628,706	$11,952,350	$8,624,123	$20,576,473
Normal Cost										
	Medical	$427,852	$312,654	$740,506				$427,852	$312,654	$740,506
	Rx	104,040	76,345	180,385				104,040	76,345	180,385
	Self-pay Medical	-	-	-				-	-	-
	Self-pay Rx	-	-	-				-	-	-
	Total	$531,892	$388,999	$920,891				$531,892	$388,999	$920,891

AHCS Retiree Health Valuation Model

Marinette County Courthouse - Valuation Year January, 2014 - December, 2014

Post-Retirement Medical Forecast Summary

	Actives			Retirees			Total		
	Employee	Dependent	Total	Employee	Dependent	Total	Employee	Dependent	Total
Number	104	73	177	28	20	48	132	93	225
Average Age	50.59	51.41	50.93	62.18	63.45	62.71			
APV									
Medical	$7,706,172	$5,331,436	$13,037,608	$998,107	$607,522	$1,605,629	$8,704,279	$5,938,958	$14,643,237
Rx	1,849,370	1,362,871	3,212,241	256,460	185,889	442,349	2,105,830	1,548,760	3,654,590
Self-pay Medical	-	-	-	-	-	-	-	-	-
Self-pay Rx	-	-	-	-	-	-	-	-	-
Total	$9,555,542	$6,694,307	$16,249,849	$1,254,567	$793,411	$2,047,978	$10,810,109	$7,487,718	$18,297,827
AAL									
Medical	$4,845,140	$3,243,352	$8,088,492	$998,107	$607,522	$1,605,629	$5,843,247	$3,850,874	$9,694,121
Rx	1,172,103	863,898	2,036,001	256,460	185,889	442,349	1,428,563	1,049,787	2,478,350
Self-pay Medical	-	-	-	-	-	-	-	-	-
Self-pay Rx	-	-	-	-	-	-	-	-	-
Total	$6,017,243	$4,107,250	$10,124,493	$1,254,567	$793,411	$2,047,978	$7,271,810	$4,900,661	$12,172,471
Normal Cost									
Medical	$270,962	$186,357	$457,319				$270,962	$186,357	$457,319
Rx	67,834	50,226	118,060				67,834	50,226	118,060
Self-pay Medical	-	-	-				-	-	-
Self-pay Rx	-	-	-				-	-	-
Total	$338,796	$236,583	$575,379				$338,796	$236,583	$575,379

AHCS Retiree Health Valuation Model

Marinette County Oconto County Landfill - Valuation Year January, 2014 - December, 2014

Post-Retirement Medical Forecast Summary

	Actives			Retirees			Total		
	Employee	Dependent	Total	Employee	Dependent	Total	Employee	Dependent	Total
Number	2	1	3	1	-	1	3	1	4
Average Age	57.50	65.00	51.67	64.00	-	64.00			
APV									
Medical	$67,326	$43,513	$110,839	$23,661	$0	$23,661	$90,987	$43,513	$134,500
Rx	19,839	15,342	35,181	10,096	-	10,096	29,935	15,342	45,277
Self-pay Medical	-	-	-	-	-	-	-	-	-
Self-pay Rx	-	-	-	-	-	-	-	-	-
Total	$87,165	$58,855	$146,020	$33,757	$0	$33,757	$120,922	$58,855	$179,777
AAL									
Medical	$57,488	$37,564	$95,052	$23,661	$0	$23,661	$81,149	$37,564	$118,713
Rx	17,298	13,415	30,713	10,096	-	10,096	27,394	13,415	40,809
Self-pay Medical	-	-	-	-	-	-	-	-	-
Self-pay Rx	-	-	-	-	-	-	-	-	-
Total	$74,786	$50,979	$125,765	$33,757	$0	$33,757	$108,543	$50,979	$159,522
Normal Cost									
Medical	$2,232	$1,474	$3,706				$2,232	$1,474	$3,706
Rx	777	615	1,392				777	615	1,392
Self-pay Medical	-	-	-				-	-	-
Self-pay Rx	-	-	-				-	-	-
Total	$3,009	$2,089	$5,098				$3,009	$2,089	$5,098

AHCS Retiree Health Valuation Model

Marinette County Highway - Valuation Year January, 2014 - December, 2014

Post-Retirement Medical Forecast Summary

	Actives			Retirees			Total		
	Employee	Dependent	Total	Employee	Dependent	Total	Employee	Dependent	Total
Number	17	12	29	12	10	22	29	22	51
Average Age	48.00	46.08	47.21	61.67	59.40	60.64			
APV									
Medical	$1,414,035	$1,264,071	$2,678,106	$420,890	$446,256	$867,146	$1,834,925	$1,710,327	$3,545,252
Rx	336,493	239,418	575,911	95,206	89,839	185,045	431,699	329,257	760,956
Self-pay Medical	-	-	-	-	-	-	-	-	-
Self-pay Rx	-	-	-	-	-	-	-	-	-
Total	$1,750,528	$1,503,489	$3,254,017	$516,096	$536,095	$1,052,191	$2,266,624	$2,039,584	$4,306,208
AAL									
Medical	$758,688	$668,233	$1,426,921	$420,890	$446,256	$867,146	$1,179,578	$1,114,489	$2,294,067
Rx	182,905	130,102	313,007	95,206	89,839	185,045	278,111	219,941	498,052
Self-pay Medical	-	-	-	-	-	-	-	-	-
Self-pay Rx	-	-	-	-	-	-	-	-	-
Total	$941,593	$798,335	$1,739,928	$516,096	$536,095	$1,052,191	$1,457,689	$1,334,430	$2,792,119
Normal Cost									
Medical	$54,040	$48,102	$102,142				$54,040	$48,102	$102,142
Rx	13,404	9,467	22,871				13,404	9,467	22,871
Self-pay Medical	-	-	-				-	-	-
Self-pay Rx	-	-	-				-	-	-
Total	$67,444	$57,569	$125,013				$67,444	$57,569	$125,013

AHCS Retiree Health Valuation Model

Marinette County Management Protected - Valuation Year January, 2014 - December, 2014

Post-Retirement Medical Forecast Summary

		Actives			Retirees			Total		
		Employee	Dependent	Total	Employee	Dependent	Total	Employee	Dependent	Total
Number		5	4	9	-	-	-	5	4	9
Average Age		47.20	39.50	43.78						
APV										
	Medical	$431,140	$349,147	$780,287				$431,140	$349,147	$780,287
	Rx	68,662	51,641	120,303				68,662	51,641	120,303
	Self-pay Medical	-	-	-				-	-	-
	Self-pay Rx	-	-	-				-	-	-
	Total	$499,802	$400,788	$900,590				$499,802	$400,788	$900,590
AAL										
	Medical	$286,449	$229,005	$515,454				$286,449	$229,005	$515,454
	Rx	46,109	34,698	80,807				46,109	34,698	80,807
	Self-pay Medical	-	-	-				-	-	-
	Self-pay Rx	-	-	-				-	-	-
	Total	$332,558	$263,703	$596,261				$332,558	$263,703	$596,261
Normal Cost										
	Medical	$14,886	$11,967	$26,853				$14,886	$11,967	$26,853
	Rx	2,385	1,793	4,178				2,385	1,793	4,178
	Self-pay Medical	-	-	-				-	-	-
	Self-pay Rx	-	-	-				-	-	-
	Total	$17,271	$13,760	$31,031				$17,271	$13,760	$31,031

AHCS Retiree Health Valuation Model

Marinette County Non-represented - Valuation Year January, 2014 - December, 2014

Post-Retirement Medical Forecast Summary

	Actives			Retirees			Total		
	Employee	Dependent	Total	Employee	Dependent	Total	Employee	Dependent	Total
Number	32	22	54	21	17	38	53	39	92
Average Age	49.56	50.73	50.04	62.86	59.18	61.21			
APV									
Medical	$2,593,201	$1,935,482	$4,528,683	$672,453	$504,011	$1,176,464	$3,265,654	$2,439,493	$5,705,147
Rx	572,603	415,287	987,890	174,417	143,899	318,316	747,020	559,186	1,306,206
Self-pay Medical	-	-	-	-	-	-	-	-	-
Self-pay Rx	-	-	-	-	-	-	-	-	-
Total	$3,165,804	$2,350,769	$5,516,573	$846,870	$647,910	$1,494,780	$4,012,674	$2,998,679	$7,011,353
AAL									
Medical	$1,581,021	$1,170,193	$2,751,214	$672,453	$504,011	$1,176,464	$2,253,474	$1,674,204	$3,927,678
Rx	353,859	256,247	610,106	174,417	143,899	318,316	528,276	400,146	928,422
Self-pay Medical	-	-	-	-	-	-	-	-	-
Self-pay Rx	-	-	-	-	-	-	-	-	-
Total	$1,934,880	$1,426,440	$3,361,320	$846,870	$647,910	$1,494,780	$2,781,750	$2,074,350	$4,856,100
Normal Cost									
Medical	$85,732	$64,754	$150,486				$85,732	$64,754	$150,486
Rx	19,640	14,244	33,884				19,640	14,244	33,884
Self-pay Medical	-	-	-				-	-	-
Self-pay Rx	-	-	-				-	-	-
Total	$105,372	$78,998	$184,370				$105,372	$78,998	$184,370

Marinette County

Number of Active Employees By Age and Years of Service Using Employees As of December, 2013

Age and Completed Years of Service At 1/1/2014

Years of Service

Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	Total
0 - 19										0
20 - 24										0
25 - 29	1	1								2
30 - 34		2	3							5
35 - 39	1	4	11	5						21
40 - 44	1	2	6	3	1					13
45 - 49	2	3	6	8	5	2				26
50 - 54	2	5	10	5	6	4	3			35
55 - 59	3	4	8	5	6	6	2	5		39
60 - 64		2	4	1	2	2	1	1		13
65 - 69		1	1		1					3
70+				1		1		1		3
Total	10	24	49	28	21	15	6	7	0	160

Average Age 50.09 Average Service 16.16

Marinette County Summary of Retiree Health Benefits

Union/Group (2)	Eligibility Age	Eligibility Service	Benefit Period	Benefits End At (3)	Retiree Contribution	2014 Contribution Rate	Sick Leave Balance
Courthouse Hired Prior to 1/1/12	55+	20+	8 Years	70	Active Rate (1)	13% HRA, 15% Non-HRA	See (4)
Courthouse Hired Prior to 1/1/12	62+	15+	8 Years	70	Active Rate (1)	13% HRA, 15% Non-HRA	See (4)
Non-represented Hired Before 12/16/08	55+	20+	8 Years	70	Active Rate (1)	15%	See (4)
Non-represented Hired Before 12/16/08	62+	15+	8 Years	70	Active Rate (1)	15%	See (4)
Management Protected Category Hired Before 12/16/08	50+	20+	8 Years	65	Active Rate (1)	15%	See (4)
Management Protected Category Hired Before 12/16/08	57+	15+	8 Years	65	Active Rate (1)	15%	See (4)
Highway Hired Prior to 05/01/2010	55+	20+	8 Years	70	Active Rate (1)	13% HRA, 15% Non-HRA	See (4)
Highway Hired Prior to 05/01/2010	62+	15+	8 Years	70	Active Rate (1)	13% HRA, 15% Non-HRA	See (4)

(1) Contributions for Non-represented retirees are frozen at the contribution percentage rate at the time of retirement. For all others, the contribution percentage rate will change throughout the years of retirement as the contracted percentage rate changes for actives.

(2) All Other employees hired after the hire dates above are not eligible for retiree health insurance benefits.

(3) Benefits end the earlier of the benefit period or this age, whichever comes first.

(4) The value of unused sick leave is deposited into an HRA account at retirement and can be used to pay for the retiree's share of premium.

All must be eligible for retirement under WRS standards in order to be eligible for retiree health benefits.

Contributions range from 2.5% to 15% for those that retired prior to 1/14.

All retirees receive health insurance (County pays their portion/employee pays their portion) in the month of retirement. Courthouse, highway, and non-represented retirees also receive health insurance the month after retirement in addition to the above.