

# Bay County Retiree Health Care Plan

Actuarial Valuation Report

For County Employers Other Than BABH

as of December 31, 2017



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February 28, 2019

Bay County Voluntary Employees' Beneficiary  
Association (VEBA) – Board of Trustees  
Bay City, Michigan

Dear Board Members:

The results of the December 31, 2017 Actuarial Valuation of the assets and liabilities associated with the employer financed retiree health benefits provided by Bay County Employers other than BABH via the Bay County Voluntary Employees' Beneficiary Association are presented in this report.

This report was prepared at the request of the Board and is intended for use by the VEBA, Bay County, and each Employer, and those designated or approved by the Board. This report may be provided to parties other than the VEBA and Board only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purposes of the valuation are to measure the System's funding progress, and to determine the Actuarially Computed Employer Contribution for the fiscal years ending December 31, 2018 and December 31, 2019. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The contribution in this report is determined using the actuarial assumptions and methods disclosed in Section E of this report.

This valuation assumed the continuing ability of the plan sponsors to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsors are actually able to do so is outside our scope of expertise and was not performed.

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 operation 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 plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

The findings in this report are based on data and other information through December 31, 2017. The valuation was based upon information furnished by Bay County and each Employer, concerning health benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-to-year consistency with the last valuation, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by Bay County and the Employers.

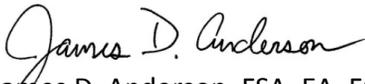
This report was prepared using assumptions adopted by the Board. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. Additional information about the actuarial assumptions is included in the section of this report entitled Actuarial Cost Methods and Actuarial Assumptions.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Bay County Employers other than BABH as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

James D. Anderson and Shana M. Neeson are Members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

Respectfully submitted,

  
James D. Anderson, FSA, EA, FCA, MAAA

  
Shana M. Neeson, ASA, FCA, MAAA

JDA/SMN:rmn



# EXECUTIVE SUMMARY

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# Executive Summary

## Actuarially Computed Employer Contribution

Please note that beginning with the fiscal year ending December 31, 2017, GASB Statement No. 43 was replaced by GASB Statement No. 74. Also, beginning with the fiscal year ending December 31, 2018, GASB Statement No. 45 was replaced by GASB Statement No. 75. A separate GASB report will be required to comply with the actuarial requirements of GASB Statement No. 75 for the fiscal year ending December 31, 2018. As such, there is no longer an “Annual Required Contribution” calculated in the valuation report. Therefore, we have determined the “Actuarially Computed Employer Contribution.”

We have calculated the Actuarially Computed Employer Contribution for the fiscal years ending December 31, 2018 and December 31, 2019 under the interest rate assumption of 7.00%. Below is a summary of the results. The Actuarially Computed Employer Contributions and estimated claims and premiums shown below include the impact of any implicit rate subsidy present in your pre-65 rates.

For additional details please see the Section titled “Valuation Results.”

<b>Fiscal Year Ending</b>	<b>Actuarially Computed Employer Contribution</b>	<b>Estimated Claims and Premiums Paid for Retirees</b>
December 31, 2018	\$ 9,966,040	\$ 6,081,438
December 31, 2019	9,913,517	6,556,093

## Liabilities and Assets – as of December 31, 2017

1. Present Value of Future Benefit Payments	\$138,019,045
2. Actuarial Accrued Liability	125,410,425
3. Plan Assets	34,939,774
4. Unfunded Actuarial Accrued Liability (2) – (3)	90,470,651
5. Funded Ratio (3)/(2)	27.9%

The Present Value of Future Benefit Payments (PVFB) is the present value of all benefits projected to be paid from the plan for past and future service to current members. The Actuarial Accrued Liability is the portion of the PVFB allocated to past service by the Plan’s funding method (see the Section titled “Actuarial Cost Methods and Actuarial Assumptions”).

## **SECTION A**

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### **VALUATION RESULTS**

## Bay County Employers Excluding BABH - Results by Division as of December 31, 2017

	General County	DWS	Library	Medical Care Facility	Sheriff's Deptment	Road Commission	Total
A. Present Value of Future Benefits							
i) Retirees and Beneficiaries	\$ 21,415,055	\$ 8,115,627	\$ 1,021,609	\$ 24,999,740	\$ 6,345,718	\$ 18,147,027	\$ 80,044,776
ii) Vested Terminated Members	0	0	0	0	0	0	0
iii) Active Members	<u>19,841,723</u>	<u>5,164,327</u>	<u>1,295,496</u>	<u>14,388,784</u>	<u>5,223,624</u>	<u>12,060,315</u>	<u>57,974,269</u>
Total Present Value of Future Benefits	41,256,778	13,279,954	2,317,105	39,388,524	11,569,342	30,207,342	138,019,045
B. Present Value of Future Normal Costs	3,705,546	1,836,178	283,325	1,910,386	1,238,744	3,634,441	12,608,620
C. Actuarial Accrued Liability (A.-B.)	37,551,232	11,443,776	2,033,780	37,478,138	10,330,598	26,572,901	125,410,425
D. Actuarial Value of Assets	11,432,434	5,760,410	2,076,533	10,943,671	3,625,221	1,101,505	34,939,774
E. Unfunded Actuarial Accrued Liability (C.-D.)	26,118,798	5,683,366	(42,753)	26,534,467	6,705,377	25,471,396	90,470,651
F. Funded Ratio (D./C.)	30.4%	50.3%	102.1%	29.2%	35.1%	4.1%	27.9%
<b>G. Fiscal Year Ending December 31, 2018</b>							
i) Employer Normal Cost	\$ 578,217	\$ 225,130	\$ 44,954	\$ 301,828	\$ 157,005	\$ 404,476	\$ 1,711,610
ii) Amortization of UAAL*	<u>2,201,102</u>	<u>358,112</u>	<u>(3,603)</u>	<u>2,318,632</u>	<u>565,080</u>	<u>2,815,107</u>	<u>8,254,430</u>
Actuarially Computed Employer Contribution	\$ <b>2,779,319</b>	\$ <b>583,242</b>	\$ <b>41,351</b>	\$ <b>2,620,460</b>	\$ <b>722,085</b>	\$ <b>3,219,583</b>	\$ <b>9,966,040</b>
<b>H. Fiscal Year Ending December 31, 2019</b>							
Actuarially Computed Employer Contribution	\$ <b>2,738,647</b>	\$ <b>602,198</b>	\$ <b>38,737</b>	\$ <b>2,594,802</b>	\$ <b>715,615</b>	\$ <b>3,223,518</b>	\$ <b>9,913,517</b>

\* The Unfunded Actuarial Accrued Liabilities (UAAL) were amortized over a closed period for all Employers. The UAAL was amortized for each Employer as follows for the fiscal year ending December 31, 2018 and decreasing by one each year thereafter:

Employer	Method	Period
General County	Level Dollar	24 years
DWS	Level Percent of Payroll	24 years
Library	Level Dollar	24 years
Medical Care Facility	Level Dollar	22 years
Sheriff's Deptment	Level Dollar	24 years
Road Commission	Level Dollar	14 years

The long-term rate of investment return used in this valuation is 7.00%.

## Comments

**Comment A:** The Actuarially Computer Employer Contribution has decreased from the Annual Required Contribution last valuation. Factors contributing to this decrease include, but are not limited to:

- Increasing the long-term rate of investment return from 5.00% to 7.00% and updating the mortality tables and other demographic assumptions to be consistent with the pension assumptions. These changes resulted in an actuarially accrued liability decrease of approximately \$30 million;
- More favorable premium/claim experience than expected for all groups except for DWS current and future pre-65 retirees and Road Commission future retirees;
- Removing the excise tax load to the liabilities to account for future excise taxes for Cadillac Plans under the Patient Protection and Affordable Care Act (PPACA) for Library;
- An adjustment to the retiree benefit election assumption in order to better reflect actual Plan experience for the General County and the Sheriff's Department; and
- Benefit changes reported regarding retiree cost shares applicable to the Road Commission.

Partially offsetting these factors were increases due to:

- Less favorable premium/claim experience than expected for DWS current and future pre-65 retirees and Road Commission future retirees;
- Resetting the health care trend cost rate;
- Benefit changes reported regarding retiree cost shares applicable to the Medical Care Facility; and
- Clarification of the General County groups eligible for life insurance upon retirement.

**Comment B:** One of the key assumptions used in any valuation of the cost of postemployment benefits is the rate of return on the assets that will be used to pay Plan benefits. Higher assumed investment returns will result in a lower Actuarially Computed Employer Contribution. Lower returns will tend to increase the Actuarially Computed Employer Contribution. As requested by the plan sponsor, we have calculated the liability and the resulting Actuarially Computed Employer Contribution using an assumed annual rate of investment return of 7.00%.

**Comment C:** The plan sponsor is required by GASB to perform actuarial valuations at least biennially or more frequent if significant changes in the OPEB are made in the interim.

**Comment D:** The contribution rates shown include amortization of the unfunded actuarial accrued liability over a closed 14-year period for Road Commission, a closed 22-year period for Medical Care Facility, and a closed 24-year period for all other groups for the fiscal year ending December 31, 2018 and decreasing by one each year thereafter.

**Comment E:** The asset split between the various groups was provided by the County.

## Comments

**Comment F:** This valuation covers the retiree health benefits provided by all units of the Bay County Voluntary Employees' Beneficiary Association, except the Bay-Arenac Behavioral Health Authority. These benefits differ between the various groups but in general include: medical, dental, vision, prescription drug coverage and life insurance.

**Comment G:** The "Cadillac" tax is a 40% excise tax paid by the coverage provider (employer and/or insurer) on the value of health plan costs in excess of certain thresholds, effective in 2022. The initial thresholds are \$10,200 for single coverage or \$27,500 for family coverage. Many plans are below the thresholds today, but are likely to exceed them in the next decade. The thresholds will be indexed at CPI-U, which is lower than the medical inflation rates affecting the cost of the plans. There is considerable uncertainty about how the tax would be applied, and considerable latitude in grouping of participants for tax purposes. Combining early retiree and Medicare eligible retiree costs is allowed and can keep plans under the thresholds for a longer period of time. For this valuation, there was no load applied to the health care liabilities to approximate the cost for future excise tax, based on the current plan provisions and assumptions. We have not identified any other specific provision of health care reform that would be expected to have a significant impact on the measured obligation. As additional guidance on the legislation is issued, we will review and monitor the impact.

**Comment H:** The GASB issued Statement Nos. 74 and 75 for OPEB valuations similar to the new pension standards. GASB Statement No. 74 for the plan OPEB disclosures is effective for fiscal years beginning after June 15, 2016. GASB Statement No. 75 for employer OPEB disclosures is effective for employer fiscal years beginning after June 15, 2017. The GASB implementation guides for Statement Nos. 74 and 75 provide additional clarification related to the implementation of these Statements. It is our understanding that the County will need to comply with GASB Statement No. 75 beginning with the fiscal year ending December 31, 2018. The basis for the GASB Statement No. 75 information is expected to be this valuation (as of December 31, 2017).

**Comment I:** Michigan Public Act 202 of 2017 created new reporting and other requirements for local units of government. As such, we can work with the Bay County Voluntary Employees' Beneficiary Association (VEBA) – Board of Trustees, Bay County, and each Employer to develop funding policies to document Plan procedures and facilitate compliance.

**Comment J:** Unless otherwise indicated, a funded status measurement presented in this report is based upon the actuarial accrued liability and the market value of assets. Unless otherwise indicated, with regards to any funded status measurements presented in this report:

- The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations, and
- The measurement is inappropriate for assessing the need for or the amount of future employer contributions.

**SECTION B**

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**RETIREE PREMIUM RATE DEVELOPMENT**

# Retiree Premium Rate Development

Initial retiree premiums rates were developed for two classes of retirees (pre-65 and post-65), and for each of the following Bay County Divisions:

1. Library (fully-insured)
2. Bay Medical Care Facility (partially fully-insured and self-insured)
3. Road Commission (partially fully-insured and self-insured)
4. Department of Water and Sewer – DWS – (partially fully-insured and self-insured)
5. General and Sheriff's Divisions (partially fully-insured and self-insured)

## Fully-Insured Rate Development

### Library

Initial premium rates were developed for the two classes of retirees (pre-65 and post-65). The February 1, 2018 BCBS and The Hartford fully-insured rates provided by Bay County Library were utilized to determine the appropriate premium rates. The pre-65 fully-insured premiums are blended rates based on the combined experience of active and pre-65 retired members; therefore, there is an implicit employer subsidy for the non-Medicare eligible retirees since the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees. The true per capita cost for the pre-65 retirees is developed by adjusting the demographic differences between the active employees and retirees to reflect this implicit rate subsidy for the retirees. For the post-65 retirees, the fully-insured premium rate was used as the basis of the initial per capita cost without adjustments since the rate reflects the demographics of the post-65 retiree group.

For the current active employees, the only group/division available upon retirement is BCBS division 0006 pre-65 and The Hartford plan post-65.

The Library segment utilizes a Health Reimbursement Account (HRA) to offset the retiree out-of-pocket expenses. A load is included in the valuation to estimate the impact of the HRA on the OPEB liabilities.

# Retiree Premium Rate Development

## Blended Rate Development

### Medical Care Facility

Premium rates for the Medical Care Facility were developed separately for the pre-65 self-insured portion and the post-65 Medicare Advantage fully-insured portion.

The pre-65 rates were calculated using incurred claims and exposure data for the period of January 2015 through December 2017, paid through December 31, 2017, adjusted for catastrophic claims, plus the load for administration, network access fee, and stop loss premiums. The self-insured medical and prescription drug data were provided by the Medical Care Facility. The medical data was analyzed for the pre-65 and post-65 participants separately since Medicare is available for the post-65 participants who have moved to a fully-insured Medicare Advantage plan. Furthermore, since the prescription drug claims and the medical claims exhibit different trends and claim payment patterns, we analyzed these claims separately as well. Due to the very small number of retirees, the experience from the active employees and their dependents was incorporated into the premium development.

For the post-65 retirees, the initial premium rates were developed using the fully-insured Medicare Advantage rates, effective January 1, 2018 through December 31, 2018, provided by the Medical Care Facility.

In a Medicare Advantage Program, the liability is based on the difference between the present value of future claims minus the present value of future reimbursements from CMS. Each of these items will experience future growth under arguably differing forces. Recently announced changes to the Medicare Advantage program will most likely result in decreases in the reimbursements from CMS within the next few years. This, in turn, will cause the net employer cost to trend upward at a rate above usual market trends for healthcare costs. When the plan is insured, this effect is buried in the rates being charged by the insurer. To account for this expectation, we have increased the fully-insured Medicare rates to account for the expected CMS reimbursement lagging behind medical increases. This adjustment will be revisited at the time of the next valuation.

# Retiree Premium Rate Development

## Road Commission

Premium rates for the Road Commission were developed separately for the pre-65 self-insured portion and the post-65 Medicare Advantage fully-insured portion.

The pre-65 rates were calculated using incurred claims and exposure data for the period of January 2015 through December 2017, paid through March 31, 2018, adjusted for catastrophic claims, plus the load for administration, network access fee, and stop loss premiums. The self-insured medical and prescription drug data were provided by the Road Commission. The medical data was analyzed for the pre-65 and post-65 participants separately since Medicare is available for the post-65 participants who have moved to a fully-insured Medicare Advantage plan. Furthermore, since the prescription drug claims and the medical claims exhibit different trends and claim payment patterns, we analyzed these claims separately as well. The experience from the active employees and their dependents was used as a reference point when developing the initial pre-65 retiree premium rates.

For the post-65 retirees, the initial premium rates were developed using the fully-insured Medicare Advantage rates, effective January 1, 2018 through December 31, 2018, provided by the Road Commission.

In a Medicare Advantage Program, the liability is based on the difference between the present value of future claims minus the present value of future reimbursements from CMS. Each of these items will experience future growth under arguably differing forces. Recently announced changes to the Medicare Advantage program will most likely result in decreases in the reimbursements from CMS within the next few years. This, in turn, will cause the net employer cost to trend upward at a rate above usual market trends for healthcare costs. When the plan is insured, this effect is buried in the rates being charged by the insurer. To account for this expectation, we have increased the fully-insured Medicare rates to account for the expected CMS reimbursement lagging behind medical increases. This adjustment will be revisited at the time of the next valuation.

For current active employees, the only plan available upon retirement is BCBS group 0014 for pre-65 participants and Option I: 600 for post-65 participants. We have developed separate premium rates for future retirees to reflect the benefit differences.

# Retiree Premium Rate Development

## Department of Water and Sewer – DWS

Premium rates for Department of Water and Sewer were developed separately for the self-insured and the post-65 Medicare Advantage fully-insured portion.

The self-insured initial premium rates were developed for pre-65 coverage only. The pre-65 rates were calculated by using incurred claims and exposure data for the period of January 2015 through December 2017, paid through March 31, 2018, adjusted for catastrophic claims, plus the load for administration, network access fee, and stop loss premiums. The self-insured medical and prescription drug data were provided by the Department of Water and Sewer. The medical data was analyzed for the pre-65 and post-65 participants separately since Medicare is available for the post-65 participants who have moved to a fully-insured Medicare Advantage plan. Furthermore, since the prescription drug claims and the medical claims exhibit different trends and claim payment patterns, we analyzed these claims separately as well. The experience from the active employees and their dependents was used as a reference point when developing the initial pre-65 retiree premium rates.

For the post-65 retirees, the initial premium rates were developed using the fully-insured Medicare Advantage rates, effective January 1, 2018 through December 31, 2018, provided by the Department of Water and Sewer.

In a Medicare Advantage Program, the liability is based on the difference between the present value of future claims minus the present value of future reimbursements from CMS. Each of these items will experience future growth under arguably differing forces. Recently announced changes to the Medicare Advantage program will most likely result in decreases in the reimbursements from CMS within the next few years. This, in turn, will cause the net employer cost to trend upward at a rate above usual market trends for healthcare costs. When the plan is insured, this effect is buried in the rates being charged by the insurer. To account for this expectation, we have increased the fully-insured Medicare rates to account for the expected CMS reimbursement lagging behind medical increases. This adjustment will be revisited at the time of the next valuation.

For current active employees, the only plans available upon retirement are BCBS groups 0025, 0026, 0052, and 0054 for pre-65 participants and suffix 601 for post-65 participants. We have developed separate premium rate for future retirees to reflect the benefit differences.

# Retiree Premium Rate Development

## Bay County General and Sheriff

Premium rates for Bay County General and Sheriff were developed separately for the pre-65 self-insured portion and the post-65 Medicare Advantage fully-insured portion.

The pre-65 rates were calculated using incurred medical claims and exposure data for the period of January 2015 through December 2017, paid through June 30, 2018, and paid prescription drug claims for the period of January 2015 through December 2017, adjusted for catastrophic claims, plus the load for administration, network access fee, and stop loss premiums. The self-insured medical and prescription drug data were provided by the County. The medical data was analyzed for the pre-65 and post-65 participants separately since Medicare is available for the post-65 participants and has a significant impact on the claim experience. Furthermore, since the prescription drug claims and the medical claims exhibit different trends and claim payment patterns, we analyzed these claims separately as well. Due to the very small number of retirees, the experience from the active employees and their dependents was incorporated into the premium development.

For the post-65 retirees, the initial premium rates were developed using the fully-insured Medicare Advantage rates, effective January 1, 2018 through December 31, 2018, provided by the County.

In a Medicare Advantage Program, the liability is based on the difference between the present value of future claims minus the present value of future reimbursements from CMS. Each of these items will experience future growth under arguably differing forces. Recently announced changes to the Medicare Advantage program will most likely result in decreases in the reimbursements from CMS within the next few years. This, in turn, will cause the net employer cost to trend upward at a rate above usual market trends for healthcare costs. When the plan is insured, this effect is buried in the rates being charged by the insurer. To account for this expectation, we have increased the fully-insured Medicare rates to account for the expected CMS reimbursement lagging behind medical increases. This adjustment will be revisited at the time of the next valuation.

# Retiree Premium Rate Development

## All Groups

Age graded and sex distinct premiums are utilized in this valuation. The premiums developed by the preceding processes are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process “distributes” the average premium over all age/sex combinations and assigns a unique premium for each specific age/sex combination. The age/sex specific premiums more accurately reflect the health care utilization and cost at that age.

### Future Retirees

Expected Health Care Cost by Age for Medical and Prescription Drugs						
	General County		DWS		Library	
Age	Male	Female	Male	Female	Male	Female
45	\$ 406.20	\$ 560.62	\$ 469.25	\$ 647.63	\$ 470.22	\$ 570.72
50	528.92	651.58	611.02	752.72	550.09	629.92
55	696.00	759.93	804.04	877.89	658.84	700.45
60	898.93	885.13	1,038.46	1,022.52	790.91	781.94
64	1,093.12	1,031.61	1,262.79	1,191.73	917.31	877.27
65	469.75	443.07	477.95	450.80	557.59	537.61
70	511.73	495.18	520.66	503.82	589.03	576.63
75	549.61	536.29	559.20	545.65	617.39	607.42

Expected Health Care Cost by Age for Medical and Prescription Drugs						
	Medical Care Facility		Sheriff's Department		Road Commission	
Age	Male	Female	Male	Female	Male	Female
45	\$ 458.30	\$ 632.51	\$ 406.20	\$ 560.62	\$ 649.32	\$ 896.14
50	596.75	735.14	528.92	651.58	845.48	1,041.55
55	785.26	857.39	696.00	759.93	1,112.56	1,214.75
60	1,014.21	998.65	898.93	885.13	1,436.93	1,414.89
64	1,233.30	1,163.91	1,093.12	1,031.61	1,747.35	1,649.03
65	417.60	393.88	469.75	443.07	566.46	534.28
70	454.92	440.20	511.73	495.18	617.08	597.12
75	488.59	476.76	549.61	536.29	662.75	646.70

# Retiree Premium Rate Development

## Current Retirees

Expected Health Care Cost by Age for Medical and Prescription Drugs						
	General County		DWS		Library	
Age	Male	Female	Male	Female	Male	Female
45	\$ 406.20	\$ 560.62	\$ 526.69	\$ 726.90	\$ 483.83	\$ 589.50
50	528.92	651.58	685.81	844.85	567.81	651.76
55	696.00	759.93	902.45	985.34	682.16	725.91
60	898.93	885.13	1,165.57	1,147.68	821.03	811.59
64	1,093.12	1,031.61	1,417.36	1,337.60	953.94	911.84
65	469.75	443.07	593.54	559.82	557.59	537.61
70	511.73	495.18	646.58	625.66	589.03	576.63
75	549.61	536.29	694.43	677.61	617.39	607.42

Expected Health Care Cost by Age for Medical and Prescription Drugs						
	Medical Care Facility		Sheriff's Department		Road Commission	
Age	Male	Female	Male	Female	Male	Female
45	\$ 458.30	\$ 632.51	\$ 406.20	\$ 560.62	\$ 608.90	\$ 840.36
50	596.75	735.14	528.92	651.58	792.85	976.72
55	785.26	857.39	696.00	759.93	1,043.31	1,139.14
60	1,014.21	998.65	898.93	885.13	1,347.49	1,326.81
64	1,233.30	1,163.91	1,093.12	1,031.61	1,638.58	1,546.38
65	417.60	393.88	469.75	443.07	528.90	498.86
70	454.92	440.20	511.73	495.18	576.16	557.52
75	488.59	476.76	549.61	536.29	618.81	603.82

The dental and vision premium rates were not “age graded” for this valuation because dental and vision claims do not vary significantly by age. The monthly dental and vision premium rates used in this valuation are shown below:

Group	Dental and Vision			
	Pre-65		Post-65	
	One-Person	Two-Person	One-Person	Two-Person
Road Commission	\$38.29	\$76.59	\$36.75	\$73.50
DWS	38.29	76.58	36.75	73.50
Medical Care Facility	24.42	48.82	22.85	45.70

James E. Pranschke is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to certify the per capita retiree health care rates shown above.

  
 James E. Pranschke, FSA, MAAA

## SECTION C

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### SUMMARY OF BENEFITS

# Bay County Retiree Health Care Plan – General County

## Summary of the Benefit Provisions as of December 31, 2017

Leaving Employment as a Result of	Eligibility for Pension Benefit	Eligibility for Retiree Health Benefit	When do retiree health benefits commence?	Coverage Provided by Employer		Retiree Health Care Provider(s)	Type of Insurance	Third Party Administrator	Retiree Share of Cost for		
				Retiree	Spouse				Retiree	Spouse (while Retiree is alive)	Spouse (after Retiree's death)
<b>Normal/Early Retirement</b>	Dispatchers: 25 yrs of svc regardless of age ** 30 yrs of svc regardless of age Age 55 with 8/10* yrs of svc ** Age 55 with 25 yrs of svc Age 60 with 8/10* yrs of svc Nurses: Age 55 with 8/10* yrs of svc ** Age 55 with 30 yrs of svc Age 60 with 8 yrs of svc Age 62 with 10 <sup>†</sup> yrs of svc Circuit Court G.E.L.C.: Age 55 with 8/10 <sup>®</sup> yrs of svc ** Age 55 with 30 yrs of svc Age 60 with 8/10 <sup>®</sup> yrs of svc Age 62 with 10 <sup>†</sup> yrs of svc Probate Court USWA: Age 55 with 8 yrs of svc ** Age 55 with 30 yrs of svc Age 60/62 <sup>^</sup> with 8 yrs of svc Remaining General Groups: Age 55 with 8/10* yrs of svc ** Age 55 with 30 yrs of svc Age 60 with 8/10* yrs of svc Age 62 with 10 <sup>†</sup> yrs of svc 25% yrs of svc regardless of age <sup>^</sup>	Dispatchers: Age 55 with 8/10* yrs of svc 25 yrs of svc regardless of age Age 60 with 8/10* yrs of svc Age 55 with 25 yrs of svc 30 yrs regardless of age Nurses: Age 55 with 8/10* yrs of svc Age 60 with 8/10* yrs of svc Circuit Court G.E.L.C.: Age 55 with 8/10 <sup>®</sup> yrs of svc Age 60 with 8/10 <sup>®</sup> yrs of svc Probate Court USWA: Age 55 with 8 yrs of svc Age 60 with 8 yrs of svc Remaining General Groups: Age 55 with 8/10* yrs of svc Age 60 with 8/10* yrs of svc	Immediately	Medical Prescription drug Life Insurance  ** life insurance as a retiree is provided to the following units only Non-Rep, USW FT, BCAMPS, USW-Probate**	Medical Prescription drug N/A	BCBS EHIM Hartford	self-insured self-insured TERM	BCBS EHIM	See Schedule A See Schedule A See Schedule F	See Schedule A See Schedule A N/A	See Schedule A See Schedule A N/A
<b>Deferred Vested Termination</b>	Dispatchers: 8/10* yrs of svc Nurses: 8/10 <sup>†</sup> yrs of svc Circuit Court G.E.L.C.: 8/10 <sup>®</sup> yrs of svc Probate Court USWA: 8 yrs of svc Remaining General Groups: 8/10* yrs of svc	Dispatchers: N/A Nurses: N/A Circuit Court G.E.L.C.: N/A Probate Court USWA: N/A Remaining General Groups: N/A	N/A	Medical Prescription drug Life Insurance	Medical Prescription drug N/A	N/A N/A N/A			N/A N/A N/A	N/A N/A N/A	N/A N/A N/A
<b>Non-Duty Disability</b>	10 or more yrs of credited svc	10 or more yrs of credited svc	Immediately	Medical Prescription drug Life Insurance	Medical Prescription drug	BCBS EHIM Hartford	self-insured self-insured TERM	BCBS EHIM	See Schedule A See Schedule A See Schedule F	See Schedule A See Schedule A N/A	See Schedule A See Schedule A N/A
<b>Duty Disability</b>	No age or svc requirement	No age or svc requirement	Immediately	Medical Prescription drug Life Insurance	Medical Prescription drug	BCBS EHIM Hartford	self-insured self-insured TERM	BCBS EHIM	See Schedule A See Schedule A See Schedule F	See Schedule A See Schedule A N/A	See Schedule A See Schedule A N/A
<b>Non-Duty Death-in-Svc</b>	10 or more yrs of credited svc	10 or more yrs of credited svc	Immediately		Medical Prescription drug	BCBS Hartford	self-insured self-insured	BCBS EHIM			See Schedule A See Schedule A
<b>Duty Death-in-Svc</b>	No age or svc requirement Benefits begin upon termination of Worker's Compensation	No age or svc requirement	Immediately		Medical Prescription drug	BCBS EHIM	self-insured self-insured	BCBS EHIM			See Schedule A See Schedule A

Medicare Reimbursement is not offered to any members.  
 @ Members hired after 1/1/2006  
 \* Members hired after 1/1/2007  
 % Members hired on or before 1/1/2012 only  
 # Members hired after 1/1/2012  
 ^ Elected Officials and Department Heads Only  
 \*\* Eligible for retirement with a reduced pension

General County part-time members do not qualify for retiree health care. They do not have access to the plan. Employees hired after 1/1/2012 are not eligible for health care in retirement (no medical, no prescription drug, and no life insurance).

# Bay County Retiree Health Care Plan – DWS

## Summary of the Benefit Provisions as of December 31, 2017

Leaving Employment as a Result of	Eligibility for Pension Benefit	Eligibility for Retiree Health Benefit	When do retiree health benefits commence?	Coverage Provided by Employer		Retiree Health Care Provider(s)	Type of Insurance	Third Party Administrator	Retiree Share of Cost for		
				Retiree	Spouse				Retiree	Spouse (while Retiree is alive)	Spouse (after Retiree's death)
<b>Normal/Early Retirement</b>	30 yrs of svc regardless of age	30 yrs of svc regardless of age	Immediately	Medical	Medical	BCBS	self-insured	BCBS	Hourly See Schedule B, Salary See Schedule C	Hourly See Schedule B, Salary See Schedule C	Hourly See Schedule B, Salary See Schedule C
	Age 55 with 8/10 <sup>^</sup> yrs of svc **	Age 55 with 8/10 <sup>^</sup> yrs of svc		Prescription drug	Prescription drug	BCBS	self-insured	BCBS	Hourly See Schedule B, Salary See Schedule C	Hourly See Schedule B, Salary See Schedule C	Hourly See Schedule B, Salary See Schedule C
	Age 60 with 8/10 <sup>^</sup> yrs of svc	Age 60 with 8/10 <sup>^</sup> yrs of svc		Dental	Dental	BCBS	self-insured	BCBS	Hourly - 100%, Salary See Schedule C	Hourly - N/A, Salary See Schedule C	Hourly - N/A, Salary See Schedule C
				Vision	Vision	BCBS	self-insured	BCBS	Hourly - 100%, Salary See Schedule C	Hourly - N/A, Salary See Schedule C	Hourly - N/A, Salary See Schedule C
				Life Insurance	Salary Only	LINCOLN	Life	LINCOLN	See Schedule I	N/A	N/A
<b>Deferred Vested Termination</b>	8/10 <sup>^</sup> yrs of svc	n/a		Medical Prescription drug Dental Vision Life Insurance	Medical Prescription drug Dental Vision	N/A N/A N/A N/A			N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A
<b>Non-Duty Disability</b>	10 yrs of svc	8/10 <sup>^</sup> yrs of svc	Immediately	Medical	Medical	BCBS	self-insured	BCBS	Hourly See Schedule B, Salary See Schedule C	Hourly See Schedule B, Salary See Schedule C	Hourly See Schedule B, Salary See Schedule C
				Prescription drug	Prescription drug	BCBS	self-insured	BCBS	Hourly See Schedule B, Salary See Schedule C	Hourly See Schedule B, Salary See Schedule C	Hourly See Schedule B, Salary See Schedule C
				Dental	Dental	BCBS	self-insured	BCBS	Hourly - 100%, Salary See Schedule C	Hourly - N/A, Salary See Schedule C	Hourly - N/A, Salary See Schedule C
				Vision	Vision	BCBS	self-insured	BCBS	Hourly - 100%, Salary See Schedule C	Hourly - N/A, Salary See Schedule C	Hourly - N/A, Salary See Schedule C
				Life Insurance	Salary Only	LINCOLN	Life	LINCOLN	See Schedule I	N/A	N/A
<b>Duty Disability</b>	No age or svc requirement	No age or svc requirement	Immediately	Medical	Medical	BCBS	self-insured	BCBS	Hourly See Schedule B, Salary See Schedule C	Hourly See Schedule B, Salary See Schedule C	Hourly See Schedule B, Salary See Schedule C
				Prescription drug	Prescription drug	BCBS	self-insured	BCBS	Hourly See Schedule B, Salary See Schedule C	Hourly See Schedule B, Salary See Schedule C	Hourly See Schedule B, Salary See Schedule C
				Dental	Dental	BCBS	self-insured	BCBS	Hourly - 100%, Salary See Schedule C	Hourly - N/A, Salary See Schedule C	Hourly - N/A, Salary See Schedule C
				Vision	Vision	BCBS	self-insured	BCBS	Hourly - 100%, Salary See Schedule C	Hourly - N/A, Salary See Schedule C	Hourly - N/A, Salary See Schedule C
				Life Insurance		LINCOLN	Life	LINCOLN	See Schedule I	N/A	N/A
<b>Non-Duty Death-in-Svc</b>	10 yrs of svc	8/10 <sup>^</sup> yrs of svc	Immediately	Medical	Medical	BCBS	self-insured	BCBS			Hourly See Schedule B, Salary See Schedule C
				Prescription drug	Prescription drug	BCBS	self-insured	BCBS			Hourly See Schedule B, Salary See Schedule C
				Dental	Dental						
				Vision	Vision						
<b>Duty Death-in-Svc</b>	No age or svc requirement	No age or svc requirement	Immediately	Medical	Medical	BCBS	self-insured	BCBS			Hourly See Schedule B, Salary See Schedule C
				Prescription drug	Prescription drug	BCBS	self-insured	BCBS			Hourly See Schedule B, Salary See Schedule C
	Benefits begin upon termination of Worker's Compensation			Dental	Dental						Hourly See Schedule B, Salary See Schedule C
				Vision	Vision						Hourly See Schedule B, Salary See Schedule C

Medicare Reimbursement is not offered to any members.

<sup>^</sup> Members hired after 7/1/2008

<sup>\*\*</sup> Eligible for retirement with a reduced pension

DWS part-time members do not qualify for retiree health care. They do not have access to the plan.

# Bay County Retiree Health Care Plan – Library

## Summary of the Benefit Provisions as of December 31, 2017

Leaving Employment as a Result of	Eligibility for Pension Benefit	Eligibility for Retiree Health Benefit	When do retiree health benefits commence?	Coverage Provided by Employer		Retiree Health Care Provider(s)	Type of Insurance	Retiree Share of Cost for		
				Retiree	Spouse			Retiree	Spouse (while Retiree is alive)	Spouse (after Retiree's death)
<b>Normal/Early Retirement</b>	Age 55 with 8/101 yrs of svc ** Age 55 with 30 yrs of svc Age 60 with 8/101 yrs of svc	Age 55 with 8/101 yrs of svc Age 60 with 8/101 yrs of svc	Immediately	Medical  Prescription drug  Dental - N/A Vision - N/A Life Insurance - N/A	Medical - N/A  Prescription drug - N/A  Dental - N/A Vision - N/A	BCBS  BCBS  N/A N/A N/A	fully-insured  fully-insured  N/A N/A N/A	Retired age 55 with 30+ years - 50% Retired between age 60 and 65 - 50%, Retired after age 65 - 0% Retired age 55 with 30+ years - 50% Retired between age 60 and 65 - 50%, Retired after age 65 - 0% N/A N/A N/A	N/A  N/A  N/A N/A N/A	N/A  N/A  N/A N/A N/A
<b>Deferred Vested Termination</b>	ICEA/PERA 1203, ICEA/PERA 612, UWUA 542: 8/101 yrs of svc Remaining Library Groups: 8 yrs of svc	ICEA/PERA 1203, ICEA/PERA 612, UWUA 542: N/A Remaining Library Groups: N/A		Medical Prescription drug Dental - N/A Vision - N/A Life Insurance - N/A	Medical - N/A Prescription drug - N/A Dental - N/A Vision - N/A	N/A N/A N/A N/A N/A		N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A
<b>Non-Duty Disability</b>	10 or more yrs of credited svc	ICEA/PERA 1203, ICEA/PERA 612, UWUA 542: 10 or more yrs of credited svc Remaining Library Groups: 10 or more yrs of credited svc	Immediately	Medical Prescription drug Dental - N/A Vision - N/A Life Insurance - N/A	Medical - N/A Prescription drug - N/A Dental - N/A Vision - N/A	BCBS BCBS N/A N/A N/A	fully-insured fully-insured	10 or more yrs of credited svc - 50% 10 or more yrs of credited svc - 50% N/A N/A N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A
<b>Duty Disability</b>	No age or svc requirement	ICEA/PERA 1203, ICEA/PERA 612, UWUA 542: No age or svc requirement Remaining Library Groups: 10 or more yrs of credited svc	Immediately	Medical Prescription drug Dental - N/A Vision - N/A Life Insurance - N/A	Medical - N/A Prescription drug - N/A Dental - N/A Vision - N/A	BCBS BCBS N/A N/A N/A	fully-insured fully-insured	No age or svc requirement - 50% No age or svc requirement - 50% N/A N/A N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A
<b>Non-Duty Death-in-Svc</b>	10 or more yrs of credited svc	ICEA/PERA 1203, ICEA/PERA 612, UWUA 542: 10 or more yrs of credited svc Remaining Library Groups: 10 or more yrs of credited svc	Immediately		Medical - N/A Prescription drug - N/A Dental - N/A Vision - N/A	BCBS BCBS N/A N/A	fully-insured fully-insured			N/A N/A N/A N/A
<b>Duty Death-in-Svc</b>	No age or svc requirement Benefits begin upon termination of Worker's Compensation	ICEA/PERA 1203, ICEA/PERA 612, UWUA 542: No age or svc requirement Remaining Library Groups: 10 or more yrs of credited svc	Immediately		Medical - N/A Prescription drug - N/A Dental - N/A Vision - N/A	BCBS BCBS N/A N/A	fully-insured fully-insured			N/A N/A N/A N/A

Medicare Reimbursement is not offered to any members.

1 Members hired after 3/1/2008

\*\* Eligible for retirement with a reduced pension

# Bay County Retiree Health Care Plan – Medical Care Facility

## Summary of the Benefit Provisions as of December 31, 2017

Leaving Employment as a Result of	Eligibility for Pension Benefit	Eligibility for Retiree Health Benefit	When do retiree health benefits commence?	Coverage Provided by Employer		Retiree Health Care Provider(s)	Type of Insurance	Third Party Administrator	Retiree Share of Cost for		
				Retiree	Spouse				Retiree	Spouse (while Retiree is alive)	Spouse (after Retiree's death)
<b>Normal/Early Retirement</b>	30 yrs of svc regardless of age Age 55 with 8/10 <sup>+</sup> yrs of svc ** Age 55 with 25 <sup>+</sup> yrs of svc Age 60 with 8/10 <sup>+</sup> yrs of svc	Members Hired Before April 19, 2007: Age 55 with 8 yrs of svc Age 60 with 8 yrs of svc 30 yrs of svc regardless of age Members Hired After April 19, 2007: Age 55 with 25 yrs of svc 30 yrs of svc regardless of age Members Hired after January 15, 2010: Not eligible for health insurance	Immediately  To be eligible for health insurance employee must have been FT at time of retirement.	Medical Prescription drug Dental Vision  Life Insurance	Medical Prescription drug Dental Vision	BCBSM BCBSM BCBSM BCBSM	self-insured self-insured self-insured	BCBSM BCBSM BCBSM	Medical and Prescription Drug If retired before 1/15/2010 - None If retired after 1/15/2010 - See Below <u>Dental and Vision</u> If retired before 1/1/2001 - N/A, If retired 1/1/2001 - 1/15/2010 - 0% If retired after 1/15/2010 - See Below	Medical and Prescription Drug If retired before 1/15/2010 - None If retired after 1/15/2010 - See Below <u>Dental and Vision</u> If retired before 1/1/2001 - N/A, If retired 1/1/2001 - 1/15/2010 - 0% If retired after 1/15/2010 - See Below	Medical and Prescription Drug If retired before 1/15/2010 - None If retired after 1/15/2010 - See Below <u>Dental and Vision</u> If retired before 1/1/2001 - N/A, If retired 1/1/2001 - 1/15/2010 - 0% If retired after 1/15/2010 - See Below
<b>Deferred Vested Termination</b>	8/10 <sup>+</sup> yrs of svc **	N/A	N/A	Medical Prescription drug Dental Vision Life Insurance	Medical Prescription drug Dental Vision N/A	N/A N/A N/A N/A N/A	N/A	N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A
<b>Non-Duty Disability</b>	10 or more yrs of credited svc	10 or more yrs of credited svc  Members Hired after January 15, 2010: Not eligible for health insurance	Immediately	Medical Prescription drug Dental Vision Life Insurance	Medical Prescription drug Dental Vision	BCBSM BCBSM BCBSM BCBSM	self-insured self-insured self-insured	BCBSM BCBSM BCBSM	Medical, Prescription Drug, Dental, and Vision Same as described above	Medical, Prescription Drug, Dental, and Vision Same as described above	Medical, Prescription Drug, Dental, and Vision Same as described above
<b>Duty Disability</b>	No age or svc requirement	No age or svc requirement  Members Hired after January 15, 2010: Not eligible for health insurance	Immediately	Medical Prescription drug Dental Vision Life Insurance	Medical Prescription drug Dental Vision	BCBSM BCBSM BCBSM BCBSM	self-insured self-insured self-insured	BCBSM BCBSM BCBSM	Medical, Prescription Drug, Dental, and Vision Same as described above	Medical, Prescription Drug, Dental, and Vision Same as described above	Medical, Prescription Drug, Dental, and Vision Same as described above
<b>Non-Duty Death-in-Svc</b>	10 or more yrs of credited svc	10 or more yrs of credited svc  Members Hired after January 15, 2010: Not eligible for health insurance	Immediately		Medical Prescription drug Dental Vision	BCBSM BCBSM BCBSM BCBSM	self-insured self-insured self-insured	BCBSM BCBSM BCBSM			Medical, Prescription Drug, Dental, and Vision Same as described above
<b>Duty Death-in-Svc</b>	No age or svc requirement Benefits begin upon termination of Worker's Compensation	Immediately  Members Hired after January 15, 2010: Not eligible for health insurance	Immediately		Medical Prescription drug Dental Vision	BCBSM BCBSM BCBSM BCBSM	self-insured self-insured self-insured	BCBSM BCBSM BCBSM			Medical, Prescription Drug, Dental, and Vision Same as described above

Medicare Reimbursement is not offered to any members.  
 \*\* Eligible for retirement with a reduced pension.  
 + Members hired before 7/30/2015 only  
 § Members hired on or after 7/30/2015

For pre-Medicare eligible retirees after 1/15/2010, coverage is equivalent to that provided to active employees, including co-pays, deductibles, premium sharing, etc. The retiree share of the premiums is negotiated with the Union each year, in order to remain under the cost share caps stipulated by PA 152.

Medical Care Facility part-time members do not qualify for retiree health care. They do not have access to the plan; they are only eligible as provided by COBRA.

# Bay County Retiree Health Care Plan – Sheriff’s Department

## Summary of the Benefit Provisions as of December 31, 2017

Leaving Employment as a Result of	Eligibility for Pension Benefit	Eligibility for Retiree Health Benefit	When do retiree health benefits commence?	Coverage Provided by Employer		Retiree Health Care Provider(s)	Type of Insurance	Retiree Share of Cost for		
				Retiree	Spouse			Retiree	Spouse (while Retiree is alive)	Spouse (after Retiree's death)
<b>Normal/Early Retirement</b>	Road Patrol: Age 55 with 8/10* yrs of svc ** 25 yrs of svc regardless of age Age 60 with 8/10* yrs of svc Road Patrol Supervisory Unit: Age 55 with 8/10 <sup>o</sup> yrs of svc ** 25 yrs of svc regardless of age Age 60 with 8/10 <sup>o</sup> yrs of svc Correction Facility Officers: Age 55 with 8/10* yrs of svc ** Age 55 with 25 yrs of svc 25 yrs of svc regardless of age ** Age 60 with 8/10* yrs of svc	Road Patrol: Age 55 with 8/10* yrs of svc 25 yrs of svc regardless of age Age 60 with 8/10* yrs of svc Road Patrol Supervisory Unit: Age 55 with 8/10 <sup>o</sup> yrs of svc 25 yrs of svc regardless of age Age 60 with 8/10 <sup>o</sup> yrs of svc Correction Facility Officers: Age 55 with 8/10* yrs of svc 25 yrs of svc regardless of age Age 60 with 8/10* yrs of svc	Immediately	Medical Prescription drug Life Insurance	Medical Prescription drug	BCBS EHIM N/A	self-insured self-insured N/A	See Schedule A See Schedule A N/A	See Schedule A See Schedule A N/A	See Schedule A See Schedule A N/A
<b>Deferred Vested Termination</b>	Road Patrol: 8/10* yrs of svc Road Patrol Supervisory Unit: 8/10 <sup>o</sup> yrs of svc Correction Facility Officers: 8/10* yrs of svc	Road Patrol: N/A Road Patrol Supervisory Unit: N/A Correction Facility Officers: N/A	N/A	Medical Prescription drug Life Insurance	Medical Prescription drug	N/A N/A N/A		N/A N/A N/A	N/A N/A N/A	N/A N/A N/A
<b>Non-Duty Disability</b>	10 or more yrs of credited svc	Road Patrol: 10 or more yrs of credited svc Road Patrol Supervisory Unit: 10 or more yrs of credited svc Correction Facility Officers: 10 or more yrs of credited svc	Immediately	Medical Prescription drug Life Insurance	Medical Prescription drug	BCBS EHIM N/A	self-insured self-insured	See Schedule A See Schedule A N/A	See Schedule A See Schedule A N/A	See Schedule A See Schedule A N/A
<b>Duty Disability</b>	No age or svc requirement	Road Patrol: No age or svc requirement Road Patrol Supervisory Unit: No age or svc requirement Correction Facility Officers: No age or svc requirement	Immediately	Medical Prescription drug Life Insurance	Medical Prescription drug	BCBS EHIM N/A	self-insured self-insured	See Schedule A See Schedule A N/A	See Schedule A See Schedule A N/A	See Schedule A See Schedule A N/A
<b>Non-Duty Death-in-Svc</b>	10 or more yrs of credited svc	Road Patrol: 10 or more yrs of credited svc Road Patrol Supervisory Unit: 10 or more yrs of credited svc Correction Facility Officers: 10 or more yrs of credited svc	Immediately		Medical Prescription drug	BCBS EHIM	self-insured self-insured			See Schedule A See Schedule A
<b>Duty Death-in-Svc</b>	No age or svc requirement Benefits begin upon termination of Worker's Compensation	Road Patrol: No age or svc requirement Road Patrol Supervisory Unit: No age or svc requirement Correction Facility Officers: No age or svc requirement	Immediately		Medical Prescription drug	BCBS EHIM	self-insured self-insured			See Schedule A See Schedule A

Medicare Reimbursement is not offered to any members.  
 @ Members hired after 1/1/2006  
 \* Members hired after 1/1/2007  
 \*\* Eligible for retirement with a reduced pension

Employees hired after 1/1/2012 are not eligible for health care in retirement.

# Bay County Retiree Health Care Plan – Road Commission

## Summary of the Benefit Provisions as of December 31, 2017

Leaving Employment as a Result of	Eligibility for Pension Benefit	Eligibility for Retiree Health Benefit	When do retiree health benefits commence?	Coverage Provided by Employer		Retiree Health Care Provider(s)	Type of Insurance	Third Party Administrator	Retiree Share of Cost for		
				Retiree	Spouse				Retiree	Spouse (while Retiree is alive)	Spouse (after Retiree's death)
<b>Normal/Early Retirement</b>	30 yrs of svc regardless of age Age 55 with 8/10* yrs of svc ** Age 60 with 8/10* yrs of svc	15 yrs of svc regardless of age	Immediately	Medical Prescription drug Dental Vision Life Insurance	Medical Prescription drug Dental Vision	BCBS BCBS BCBS BCBS Lincoln Financial	self-insured self-insured self-insured self-insured Whole Life	BCBS BCBS BCBS BCBS	See Below See Below Yes Yes See Schedule G	See Below See Below Yes Yes N/A	See Below See Below Yes Yes N/A
<b>Deferred Vested Termination</b>	8 yrs of svc	N/A	N/A	Medical Prescription drug Dental Vision Life Insurance	Medical Prescription drug Dental Vision	N/A N/A N/A N/A N/A	N/A	N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A
<b>Non-Duty Disability</b>	10 or more yrs of credited svc	15 yrs of svc regardless of age	Immediately	Medical Prescription drug Dental Vision Life Insurance	Medical Prescription drug Dental Vision	BCBS BCBS BCBS BCBS Lincoln Financial	self-insured self-insured self-insured self-insured Whole Life	BCBS BCBS BCBS BCBS	See Below See Below Yes Yes See Schedule G	See Below See Below Yes Yes N/A	See Below See Below Yes Yes N/A
<b>Duty Disability</b>	No age or svc requirement	No age or svc requirement	Immediately	Medical Prescription drug Dental Vision Life Insurance	Medical Prescription drug Dental Vision	BCBS BCBS BCBS BCBS Lincoln Financial	self-insured self-insured self-insured self-insured Whole Life	BCBS BCBS BCBS BCBS	See Below See Below Yes Yes See Schedule G	See Below See Below Yes Yes N/A	See Below See Below Yes Yes N/A
<b>Non-Duty Death-in-Svc</b>	10 or more yrs of credited svc	15 yrs of svc regardless of age	Immediately		Medical Prescription drug Dental Vision	BCBS BCBS BCBS BCBS	self-insured self-insured self-insured self-insured	BCBS BCBS BCBS BCBS			See Below See Below Yes Yes
<b>Duty Death-in-Svc</b>	No age or svc requirement Benefits begin upon termination of Worker's Compensation	No age or svc requirement	Immediately		Medical Prescription drug Dental Vision	BCBS BCBS BCBS BCBS	self-insured self-insured self-insured self-insured	BCBS BCBS BCBS BCBS			See Below See Below Yes Yes

Medicare Reimbursement is not offered to any members.

\* Members hired after 1/1/2007

\*\* Eligible for retirement with a reduced pension

Deferred vested members are not eligible for life insurance.

Employees hired on or after 1/1/2016 are not eligible for health care in retirement. Employees hired on or after 1/1/2016 continue to be eligible for life insurance coverage upon retirement.

Effective 1/1/2016 retiree contributions towards coverage will be the same as active member contributions.

# Bay County Retiree Health Care Plan – Excluding BABH Summary of the Benefit Provisions as of December 31, 2017

## Schedule A – General County and Sheriff’s Department For those hired on or after January 1, 2006

#	Division Name	#	Division Name
14	Circuit Court G.E.L.C	32	Road Patrol Supervisory Unit

## For those hired on or after January 1, 2007

#	Division Name	#	Division Name
1	Elected Officials and Dept. Heads	8	USWA General
2	Judges	10	Nurses
3	General County	11	Sheriff’s-Road Patrol
4	General Circuit Court	12	Sheriff’s Correctional Facility Officers
5	General District Court	13	Dispatchers
6	General Probate Court	15	District Court AFSCME
7	BCAMPS	16	Probate Court USWA

## Retiree Health Insurance Premium Contribution

Retiree Health Insurance Coverage - % paid by the employer based on years of service at retirement  
(Subject to eligibility).

Years of Service	Hired Before Effective Date				Hired On or After Effective Date			
	Employer Paid (%)	Retiree Paid (%)	Employer Paid Spousal Coverage	Retiree Paid Spousal Coverage	Employer Paid (%)	Retiree Paid (%)	Employer Paid Spousal Coverage	Retiree Paid Spousal Coverage
8	85%	15%	50%	50%	N/A	N/A	N/A	N/A
9	85%	15%	50%	50%	N/A	N/A	N/A	N/A
10	85%	15%	50%	50%	55%	45%	0%	100%
11	85%	15%	50%	50%	55%	45%	0%	100%
12	85%	15%	50%	50%	55%	45%	0%	100%
13	85%	15%	50%	50%	55%	45%	0%	100%
14	85%	15%	50%	50%	55%	45%	0%	100%
15	85%	15%	50%	50%	80%	20%	0%	100%
16	85%	15%	50%	50%	80%	20%	0%	100%
17	85%	15%	50%	50%	80%	20%	0%	100%
18	85%	15%	50%	50%	80%	20%	0%	100%
19	85%	15%	50%	50%	80%	20%	0%	100%
20	85%	15%	50%	50%	85%	15%	15%	85%
21	85%	15%	50%	50%	85%	15%	15%	85%
22	85%	15%	50%	50%	85%	15%	15%	85%
23	85%	15%	50%	50%	85%	15%	15%	85%
24	85%	15%	50%	50%	85%	15%	15%	85%
25	85%	15%	50%	50%	85%	15%	40%	60%
26	85%	15%	50%	50%	85%	15%	40%	60%
27	85%	15%	50%	50%	85%	15%	40%	60%
28	85%	15%	50%	50%	85%	15%	40%	60%
29	85%	15%	50%	50%	85%	15%	40%	60%
30	85%	15%	50%	50%	85%	15%	50%	50%
31	85%	15%	50%	50%	85%	15%	50%	50%
32	85%	15%	50%	50%	85%	15%	50%	50%
33	85%	15%	50%	50%	85%	15%	50%	50%
34	85%	15%	50%	50%	85%	15%	50%	50%
35	85%	15%	50%	50%	85%	15%	50%	50%
36	85%	15%	50%	50%	85%	15%	50%	50%
37	85%	15%	50%	50%	85%	15%	50%	50%
38	85%	15%	50%	50%	85%	15%	50%	50%
39	85%	15%	50%	50%	85%	15%	50%	50%
40	85%	15%	50%	50%	85%	15%	50%	50%

# Bay County Retiree Health Care Plan – Excluding BABH

## Summary of the Benefit Provisions as of December 31, 2017

### Schedule B

#### Department of Water Sewer-Hourly Employees – Division 28

#### Retiree Health Insurance Premium Contribution

Retiree Health Insurance Coverage - % paid by the employer based on years of service at retirement (subject to eligibility)

Years of Service	Hired Before January 1, 2003				Hired Between January 1, 2003 and January 1, 2008				Hired After January 1, 2008			
	Employer Paid (%)	Retiree Paid (%)	Employer Paid Spousal Coverage	Retiree Paid Spousal Coverage	Employer Paid (%)	Retiree Paid (%)	Employer Paid Spousal Coverage	Retiree Paid Spousal Coverage	Employer Paid (%)	Retiree Paid (%)	Employer Paid Spousal Coverage	Retiree Paid Spousal Coverage
8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10	100%	0%	100%	0%	50%	50%	0%	100%	25%	75%	0%	100%
11	100%	0%	100%	0%	50%	50%	0%	100%	25%	75%	0%	100%
12	100%	0%	100%	0%	50%	50%	0%	100%	25%	75%	0%	100%
13	100%	0%	100%	0%	50%	50%	0%	100%	25%	75%	0%	100%
14	100%	0%	100%	0%	50%	50%	0%	100%	25%	75%	0%	100%
15	100%	0%	100%	0%	100%	0%	0%	100%	50%	50%	0%	100%
16	100%	0%	100%	0%	100%	0%	0%	100%	50%	50%	0%	100%
17	100%	0%	100%	0%	100%	0%	0%	100%	50%	50%	0%	100%
18	100%	0%	100%	0%	100%	0%	0%	100%	50%	50%	0%	100%
19	100%	0%	100%	0%	100%	0%	0%	100%	50%	50%	0%	100%
20	100%	0%	100%	0%	100%	0%	50%	50%	75%	25%	0%	100%
21	100%	0%	100%	0%	100%	0%	50%	50%	75%	25%	0%	100%
22	100%	0%	100%	0%	100%	0%	50%	50%	75%	25%	0%	100%
23	100%	0%	100%	0%	100%	0%	50%	50%	75%	25%	0%	100%
24	100%	0%	100%	0%	100%	0%	50%	50%	75%	25%	0%	100%
25	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
26	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
27	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
28	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
29	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
30	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
31	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
32	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
33	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
34	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
35	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
36	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
37	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
38	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
39	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%
40	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	0%	100%

# Bay County Retiree Health Care Plan – Excluding BABH

## Summary of the Benefit Provisions as of December 31, 2017

### Schedule C

#### Department of Water Sewer-Salary Employees – Division 29

#### Retiree Health Insurance Premium Contribution

Retiree Health Dental and Vision Insurance Coverage - % paid by the employer based on years of service at retirement  
(subject to eligibility)

Years of Service	Hired Before June 1, 2007				Hired After June 1, 2007			
	Employer Paid (%)	Retiree Paid (%)	Employer Paid Spousal Coverage	Retiree Paid Spousal Coverage	Employer Paid (%)	Retiree Paid (%)	Employer Paid Spousal Coverage	Retiree Paid Spousal Coverage
8	100%	0%	100%	0%	N/A	N/A	N/A	N/A
9	100%	0%	100%	0%	N/A	N/A	N/A	N/A
10	100%	0%	100%	0%	25%	75%	0%	100%
11	100%	0%	100%	0%	25%	75%	0%	100%
12	100%	0%	100%	0%	25%	75%	0%	100%
13	100%	0%	100%	0%	25%	75%	0%	100%
14	100%	0%	100%	0%	25%	75%	0%	100%
15	100%	0%	100%	0%	50%	50%	0%	100%
16	100%	0%	100%	0%	50%	50%	0%	100%
17	100%	0%	100%	0%	50%	50%	0%	100%
18	100%	0%	100%	0%	50%	50%	0%	100%
19	100%	0%	100%	0%	50%	50%	0%	100%
20	100%	0%	100%	0%	75%	25%	0%	100%
21	100%	0%	100%	0%	75%	25%	0%	100%
22	100%	0%	100%	0%	75%	25%	0%	100%
23	100%	0%	100%	0%	75%	25%	0%	100%
24	100%	0%	100%	0%	75%	25%	0%	100%
25	100%	0%	100%	0%	100%	0%	0%	100%
26	100%	0%	100%	0%	100%	0%	0%	100%
27	100%	0%	100%	0%	100%	0%	0%	100%
28	100%	0%	100%	0%	100%	0%	0%	100%
29	100%	0%	100%	0%	100%	0%	0%	100%
30	100%	0%	100%	0%	100%	0%	0%	100%
31	100%	0%	100%	0%	100%	0%	0%	100%
32	100%	0%	100%	0%	100%	0%	0%	100%
33	100%	0%	100%	0%	100%	0%	0%	100%
34	100%	0%	100%	0%	100%	0%	0%	100%
35	100%	0%	100%	0%	100%	0%	0%	100%
36	100%	0%	100%	0%	100%	0%	0%	100%
37	100%	0%	100%	0%	100%	0%	0%	100%
38	100%	0%	100%	0%	100%	0%	0%	100%
39	100%	0%	100%	0%	100%	0%	0%	100%
40	100%	0%	100%	0%	100%	0%	0%	100%

# Bay County Retiree Health Care Plan – Excluding BABH Summary of the Benefit Provisions as of December 31, 2017

## Schedule F General County Life Insurance Benefits

Division	Member Retired	Life Insurance Amount
Elected Officials Department Heads Judges General County General Circuit Court General District Court General Probate Court BCAMPS	3/1/1998 to Present	\$10,000
USWA General Probate Court USWA	1/1/2010 to Present	

Employees hired after 1/1/2012 are not eligible for retiree life insurance coverage.

## Schedule G Road Commission Life Insurance Benefits

Division	Member Retired	Life Insurance Amount
AFSCME	Prior to 1/31/1989	\$ 1,000
	2/1/1989 to 1/31/1998	2,500
	2/1/1998 to 1/31/2008	5,000
	2/1/2008 to Present	10,000
Administrative Employees	Prior to 1/1/2007	5,000
	1/1/2007 to Present	10,000
Commissioners	1/1/2007 to Present	10,000

Employees hired on or after 1/1/2016 continue to be eligible for life insurance coverage upon retirement.

# Bay County Retiree Health Care Plan – Excluding BABH

## Summary of the Benefit Provisions as of December 31, 2017

### Schedule H Medical Care Facility Life Insurance Benefits

<b>Member Retired</b>	<b>Life Insurance Amount</b>
Prior to 1/1/1975	\$ 0
1/1/1975 to 12/31/1995	2,500
1/1/1996 to 12/31/1998	3,500
1/1/1999 to Present	5,000

### Schedule I DWS Salaried Members Only Life Insurance Benefits

<b>Member Retired</b>	<b>Life Insurance Amount</b>
Prior to 3/13/2008	\$ 5,000
On 3/13/2008	20,000
3/14/2008 to Present	10,000

## **SECTION D**

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### **SUMMARY OF VALUATION DATA**

## Bay County Employers Excluding BABH - Total Active Members as of December 31, 2017 by Age and Years of Service\*

Age	Years of Service to Valuation Date							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.
15-19	4							4
20-24	32	2						34
25-29	48	19						67
30-34	52	23	8	1				84
35-39	38	29	14	11	1			93
40-44	25	20	12	18	6	3		84
45-49	24	16	15	21	19	4		99
50-54	28	11	16	26	20	20	15	136
55-59	11	15	23	20	18	12	9	108
60-64	12	4	9	13	10	5	6	59
65 & Over	4	1	5	3	4		3	20
<b>Totals</b>	<b>278</b>	<b>140</b>	<b>102</b>	<b>113</b>	<b>78</b>	<b>44</b>	<b>33</b>	<b>788</b>

\* Excludes various employees, see the comments under each individual group's exhibit.

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Age:** 44.7 years  
**Service:** 11.4 years

**Bay County - General County  
Active Members as of December 31, 2017  
by Age and Years of Service\***

Age	Years of Service to Valuation Date							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.
20-24	3							3
25-29	17							17
30-34	25	3	1					29
35-39	16	10	6	6				38
40-44	10	4	7	8	1			30
45-49	8	4	12	15	7	1		47
50-54	13	3	8	12	10	7	7	60
55-59	6	8	9	12	10	6	8	59
60-64	5	2	5	8	5	3	3	31
65 & Over	4		3	1	4			12
<b>Totals</b>	<b>107</b>	<b>34</b>	<b>51</b>	<b>62</b>	<b>37</b>	<b>17</b>	<b>18</b>	<b>326</b>

\* Excludes 71 part-time employees. Includes 116 employees hired after 1/1/2012.

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Age:** 47.7 years  
**Service:** 12.7 years

**Bay County – DWS**  
**Active Members as of December 31, 2017**  
**by Age and Years of Service**

Age	Years of Service to Valuation Date							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.
20-24	1							1
25-29	3							3
30-34	3	2						5
35-39	3	4						7
40-44	5	1						6
45-49	2	3		1		1		7
50-54	4		2	2		5		13
55-59	3	1	1	1				6
60-64	3			1		1		5
65 & Over								
<b>Totals</b>	<b>27</b>	<b>11</b>	<b>3</b>	<b>5</b>		<b>7</b>		<b>53</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Age:** 45.8 years  
**Service:** 8.5 years

**Bay County - Library**  
**Active Members as of December 31, 2017**  
**by Age and Years of Service**

Age	Years of Service to Valuation Date							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.
20-24								
25-29								
30-34								
35-39		4						4
40-44				1				1
45-49		2		1				3
50-54		2		2	1			5
55-59			4	1				5
60-64		1	1	1	2		2	7
65 & Over			1	1				2
<b>Totals</b>		<b>9</b>	<b>6</b>	<b>7</b>	<b>3</b>		<b>2</b>	<b>27</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Age:** 53.5 years  
**Service:** 15.8 years

**Bay County - Medical Care Facility  
Active Members as of December 31, 2017  
by Age and Years of Service\***

Age	Years of Service to Valuation Date							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.
15-19	4							4
20-24	25	2						27
25-29	22	15						37
30-34	15	10	7	1				33
35-39	12	8	2	3	1			26
40-44	7	11	2	5	4	3		32
45-49	10	5	2	2	2	2		23
50-54	9	5	3	6	1	4	7	35
55-59	2	6	5	5	3	4	1	26
60-64	4	1	3	1	1		1	11
65 & Over		1		1				2
<b>Totals</b>	<b>110</b>	<b>64</b>	<b>24</b>	<b>24</b>	<b>12</b>	<b>13</b>	<b>9</b>	<b>256</b>

\* Excludes 52 part-time employees. Includes 155 employees hired after 1/15/2010.

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Age:** 40.1 years  
**Service:** 9.0 years

**Bay County – Sheriff’s Department  
Active Members as of December 31, 2017  
by Age and Years of Service\***

Age	Years of Service to Valuation Date							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.
20-24	3							3
25-29	6	3						9
30-34	6	6						12
35-39	4	3	5	2				14
40-44	2	2	2	4	1			11
45-49	3			2	6			11
50-54		1		3	2	2	1	9
55-59			1			1		2
60-64				1	1	1		3
65 & Over							3	3
<b>Totals</b>	<b>24</b>	<b>15</b>	<b>8</b>	<b>12</b>	<b>10</b>	<b>4</b>	<b>4</b>	<b>77</b>

\* Includes 27 employees hired after 1/1/2012.

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Age:** 41.0 years  
**Service:** 12.1 years

**Bay County - Road Commission  
Active Members as of December 31, 2017  
by Age and Years of Service\***

Age	Years of Service to Valuation Date							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.
20-24								
25-29		1						1
30-34	3	2						5
35-39	3		1					4
40-44	1	2	1					4
45-49	1	2	1		4			8
50-54	2		3	1	6	2		14
55-59			3	1	5	1		10
60-64				1	1			2
65 & Over			1					1
<b>Totals</b>	<b>10</b>	<b>7</b>	<b>10</b>	<b>3</b>	<b>16</b>	<b>3</b>		<b>49</b>

\* Excludes 7 employees hired after 1/1/2016.

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Age:** 48.3 years  
**Service:** 14.7 years

## Bay County Employers Excluding BABH Inactive Members as of December 31, 2017

### Number of Retiree and Beneficiary Contracts

	Opt-Out/ Ineligible	One-Person Coverage	Two-Person Coverage*	Total
Male	88	72	125	285
Female	198	235	112	545
<b>Total</b>	<b>286</b>	<b>307</b>	<b>237</b>	<b>830</b>

\* Includes family coverage.

Age	Current Retirees						
	Number of Those Covered						
	General County	DWS	Library	Medical Care Facility	Sheriff's Dept	Road Commission	Total
0-44	1	1		1			3
45-49				2	4		6
50-54	1			3	6	6	16
55-59	11	2	1	22	5	10	51
60-64	44	11	3	28	7	14	107
65-69	43	9	3	45	11	13	124
70-74	42	5	2	26	9	18	102
75-79	26	2		9	4	8	49
80-84	9	1	2	12	4	8	36
85-89	8		2	10	3	8	31
90-94	9	1		3	1	2	16
95 +	1		1			1	3
<b>Totals</b>	<b>195</b>	<b>32</b>	<b>14</b>	<b>161</b>	<b>54</b>	<b>88</b>	<b>544</b>

There are no terminated members eligible for deferred Plan benefits.

## Bay County Employers Excluding BABH Reported Financial Information (Market Value)

	<u>December 31, 2017</u>
<b>Additions</b>	
Contributions	
Employer	\$ 298,447
Nonemployer contributing entities	0
Active Employees	0
Member	0
<b>Total Contributions</b>	<u>\$ 298,447</u>
Investment Income	
Total Investment Income	\$ 4,034,939
Less Investment Expense	<u>(102,440)</u>
<b>Net Investment Income</b>	<u>\$ 3,932,499</u>
Other Miscellaneous income	<u>\$ 0</u>
<b>Total Additions</b>	<u>\$ 4,230,946</u>
 <b>Deductions</b>	
Health Benefit Payments and Refunds	\$ 0
OPEB Plan Administrative Expense	<u>43,437</u>
<b>Total Deductions</b>	<u>\$ 43,437</u>
 <b>Net Increase in Net Position</b>	 \$ 4,187,509
 <b>Net Position Restricted for OPEB</b>	
Beginning of Year	<u>\$ 30,752,265</u>
End of Year	<u>\$ 34,939,774</u>

## **SECTION E**

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### **ACTUARIAL COST METHODS AND ACTUARIAL ASSUMPTIONS**

# Actuarial Methods for Bay County Employers Excluding BABH as of December 31, 2017

**Actuarial Cost Method.** Normal cost and the allocation of benefit values between service rendered before and after the valuation date was determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

- (i) the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement; and
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains (losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

**Financing of Unfunded Actuarial Accrued Liabilities.** Unfunded Actuarial Accrued Liabilities (UAAL) (full funding credit if assets exceed liabilities) were amortized as a level percent of payroll for DWS and as a level dollar amount for all other groups. The UAAL was determined using the actuarial value of assets and actuarial accrued liability calculated as of the valuation date and projected to the beginning of the fiscal year at the assumed rate of investment return.

**Actuarial Value of Assets.** The Actuarial Value of Assets is set equal to the reported market value of assets. The County reported the asset split between the various groups.

**Amortization Factors.** The following amortization factors were used in developing the Actuarially Computed Employer Contribution for the fiscal years shown:

	Fiscal Year Ending December 31,	
	2018	2019
General County (Level Dollar)	11.8662	11.6623
DWS (Level Percent of Pay)	15.8704	15.4447
Library (Level Dollar)	11.8662	11.6623
Medical Care Facility (Level Dollar)	11.4440	11.2105
Sheriff's Department (Level Dollar)	11.8662	11.6623
Road Commission (Level Dollar)	9.0481	8.6469

## Actuarial Assumptions for Bay County Employers Excluding BABH as of December 31, 2017

The rationale for all assumptions except the investment return, which was investigated separately and changed by the Board in fall 2018, used in this valuation is included in the five-year experience study ending December 31, 2015, issued August 1, 2017. All assumptions are expectations of future experience, not market measures.

**Investment Return** (net of investment expenses): 7.00% a year, compounded annually.

**Rates of price inflation** are not specifically used for this valuation. However, a rate of price inflation of 2.50% would be consistent with other assumptions in this report. This assumption was first adopted for the December 31, 2016 pension actuarial valuation.

**Pay Projections.** These assumptions are used to project current pays to those upon which future contributions will be based. In addition to the Merit and Longevity rates shown in the table, members are also assumed to receive a base increase of 3.25%.

Years of Service	Annual Rate of Pay Increase for Merit & Longevity					
	General	DWS	Library	MCF	Sheriff's	Road Commission
1	3.00 %	3.00 %	3.00 %	0.50 %	5.25 %	5.25 %
2	2.25	2.25	2.25	0.50	4.50	3.00
3	1.50	1.50	1.50	0.50	4.50	3.00
4	1.50	1.50	1.50	0.50	3.75	3.00
5	0.75	0.75	0.75	0.50	3.00	0.75
6+	0.75	0.75	0.75	0.50	0.75	0.75

If the number of active members remains constant, the total active member payroll will increase by about the level of pay inflation (assumed to be 3.25% per year). This increasing payroll was recognized in amortizing unfunded actuarial accrued liabilities for the active employees of the DWS. The payroll growth assumptions were first adopted for the December 31, 2016 pension actuarial valuation.

# Actuarial Assumptions for Bay County Employers Excluding BABH as of December 31, 2017

**Mortality.** The mortality rates utilized are based upon the RP-2014 tables, as extended, and include a margin for future mortality improvements projected using a fully generational improvement scale. The mortality assumptions were first adopted for the December 31, 2016 pension actuarial valuation. The tables used were as follows:

- **Healthy Pre-Retirement:** The RP-2014 Employee Generational Mortality Tables, with blue-collar adjustments and extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale, resulting in a base year of 2006 with future mortality improvements assumed each year using scale MP-2016.
- **Healthy Post-Retirement:** The RP-2014 Healthy Annuitant Generational Mortality Tables, with blue-collar adjustments and extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale, resulting in a base year of 2006 with future mortality improvements assumed each year using scale MP-2016.
- **Disability Retirement:** The RP-2014 Disabled Mortality Table, extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale, resulting in a base year of 2006 with future mortality improvements assumed each year using scale MP-2016.

Sample Ages	Healthy Pre-Retirement Future Life Expectancy (Years)^		Healthy Post-Retirement Future Life Expectancy (Years)^		Disabled Retirement Future Life Expectancy (Years)^	
	Men	Women	Men	Women	Men	Women
	50	34.86	40.15	33.37	36.40	24.47
55	29.81	35.04	28.59	31.48	21.33	25.11
60	24.99	30.06	24.05	26.77	18.31	21.56
65	20.51	25.20	19.79	22.27	15.44	18.12
70	16.42	20.47	15.84	17.99	12.67	14.73
75	12.66	15.95	12.23	14.03	10.03	11.57
80	9.30	11.70	9.07	10.52	7.64	8.83

<sup>^</sup> Based on retirements in 2017. Retirements in future years will reflect improvements in life expectancy.

## Actuarial Assumptions for Bay County Employers Excluding BABH as of December 31, 2017

*The rates of retirement* used to measure the probability of eligible members retiring during the next year were as follows:

Retirement Ages	Percent of Active Members Retiring within Next Year					
	General	DWS	Library	MCF	Sheriff's	Road Commission
50				20 %		20 %
51				20		20
52				20		30
53				20		30
54				20		30
55	20 %	25 %	15 %	30		30
56	13	20	10	40		20
57	13	20	10	50		20
58	13	20	10	50		20
59	13	20	10	50		20
60	30	35	25	30	15 %	20
61	25	30	20	30	15	20
62	13	20	10	50	30	40
63	13	20	10	25	15	40
64	13	20	10	25	15	40
65	30	35	25	100	100	100
66	13	20	10			
67	13	20	10			
68	13	20	10			
69	13	20	10			
70	100	100	100			

The following table shows the rates used for the Road Patrol and Road Patrol Supervisory Unit, and Elected Officials and Department Heads: Elected Sheriff and Appointed Undersheriff 25 & Out provision and the Correctional Facility Officers 55 & 25 provision.

25 & Out		55 & 25	
Years of Service	Sheriff's Road Patrol, Road Patrol Supervisory Unit, and Elected Sheriff and Appointed Undersheriff	Age	Correctional Facility Officers
25	35 %	55	35 %
26	35	56	35
27	35	57	35
28	25	58	25
29	25	59	25
30	25	60	25
31	25	61	25
32	25	62	25
33	25	63	25

## Actuarial Assumptions for Bay County Employers Excluding BABH as of December 31, 2017

The following table shows the rates for the 55 & 8 and/or 55 & 10 Early Retirement provision:

Retirement Ages	55 & 8 and/or 55 & 10 Early Retirement*		
	General	DWS	All Other Groups
55	8 %	15 %	5 %
56	8	15	5
57	8	15	5
58	8	15	5
59	8	15	5
60	8	15	5
61	8		

\* These rates do not apply to Medical Care Facility, Sheriff's Department, and Road Commission.

The retirement assumptions were first adopted for the December 31, 2016 pension actuarial valuation.

## Actuarial Assumptions for Bay County Employers Excluding BABH as of December 31, 2017

**Rates of Disability.** These rates represent the probabilities of active members becoming disabled. This assumption was first adopted for the December 31, 2016 pension actuarial valuation.

Sample Ages	Percent Becoming Disabled within Next Year	
	All Other	
	Sheriff's	Groups
20	0.15 %	0.07 %
25	0.15	0.07
30	0.15	0.07
35	0.15	0.07
40	0.38	0.19
45	0.50	0.25
50	0.92	0.46
55	1.67	0.84
60	2.65	1.33

We assumed that 50% of disabilities are duty related and 50% are non-duty related for Sheriff's. For all other groups we assumed 85% of disabilities are non-duty related and 15% are duty related.

**Rates of Separation from Active Membership.** These rates do not apply to members eligible to retire and do not include separation on account of death or disability. This assumption measures the probabilities of members remaining in employment. This assumption was first adopted for the December 31, 2016 pension actuarial valuation.

Sample Ages	Years of Service	% of Active Members Separating within Next Year					
		General County	DWS	Library	Med. Care Facility	Sheriff's Department*	Road Commission*
ALL	0	15.00%	9.00%	8.25%	26.25%	N/A	N/A
	1	9.00	5.40	4.95	26.25	N/A	N/A
	2	9.00	5.40	4.95	15.75	N/A	N/A
	3	8.00	4.80	4.40	13.13	N/A	N/A
	4	8.00	4.80	4.40	9.19	N/A	N/A
20	5 & Over	7.50	4.50	4.13	7.88	4.50%	4.50%
25		7.50	4.50	4.13	7.88	4.50	4.50
30		7.00	4.20	3.85	5.25	3.75	3.90
35		7.00	4.20	3.85	5.25	2.25	2.30
40		4.00	2.40	2.20	3.94	1.50	0.90
45		3.00	1.80	1.65	2.63	1.50	0.50
50		2.00	1.20	1.10	2.10	1.25	0.50
55		2.00	1.20	1.10	2.10	0.75	0.50
60		2.00	1.20	1.10	2.10	0.75	0.50

\* These groups do not have service based rates of separation. All rates of separation are based on age.

## Actuarial Assumptions for Bay County Employers Excluding BABH as of December 31, 2017 (Concluded)

**Health care cost trend rates** are displayed in the following table:

Year After Valuation	Medical and Drug Valuation Trend Rate
	All Groups
1	9.00%
2	8.25%
3	7.50%
4	6.75%
5	6.25%
6	5.75%
7	5.25%
8	4.75%
9	4.25%
10	3.50%
11	3.50%
12+	3.50%

DWS, Medical Care Facility, and Road Commission dental and vision trends are 3.50% for all years after the valuation.

The Medical Care Facility and Road Commission retiree cost shares are projected based on the valuation trend noted above and calendar year 2018 cost shares as follows:

Group	Retiree Cost Share			
	Pre-65		Post-65	
	One-Person	Two-Person	One-Person	Two-Person
Medical Care Facility	\$55.44	\$150.96	\$0.00	\$0.00
Road Commission	84.65	346.61	0.00	0.00

# Miscellaneous and Technical Assumptions for Bay County Employers Excluding BABH as of December 31, 2017

- Administrative Expenses** No explicit assumption has been made for administrative expenses.
- Decrement Operation** Disability and death-in-service decrements do not operate during the first 5 years of service. Disability and withdrawal do not operate during retirement eligibility.
- Decrement Timing** Decrements of all types are assumed to occur mid-year.
- Eligibility Testing** Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
- Incidence of Contributions** Contributions are assumed to be received continuously throughout the year based upon the contributions shown in this report.
- Marriage Assumption** 100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses.
- Medicare Coverage** Assumed to be available for all covered employees on attainment of age 65. Disabled retirees were assumed to be eligible for Medicare coverage at age 65.
- Part-Time Employees** Part-time employees are not eligible for retiree health care benefits even if they are eligible for benefits from the Retirement System. Part-time employees were excluded from the valuation.
- Opt-In Assumption** Certain General and Sheriff retirees opted-out of the retiree health care program. These retirees may opt back into the program at a future date. We assumed that 10% of these retirees would opt back into the program.
- Health Care Coverage at Retirement** The table below shows the assumed portion of future retirees electing one-person or two-person/family coverage, or opting out of coverage entirely. For those that elect two-person coverage, the assumption regarding the percentage of retirees that would continue coverage to the spouse upon death of the retiree is also shown.

Group	One-Person		Two-Person/Family		Opt-Out		Continuation Percentage to Spouse	
	Males	Females	Males	Females	Males	Females	Males	Females
General County	40.00%	40.00%	45.00%	45.00%	15.00%	15.00%	80.00%	80.00%
DWS	25.00%	25.00%	75.00%	75.00%	0.00%	0.00%	100.00%	100.00%
Library	90.00%	90.00%	0.00%	0.00%	10.00%	10.00%	0.00%	0.00%
Medical Care Facility	30.00%	30.00%	65.00%	65.00%	5.00%	5.00%	100.00%	100.00%
Sheriff's Department	40.00%	40.00%	45.00%	45.00%	15.00%	15.00%	80.00%	80.00%
Road Commission	5.00%	5.00%	95.00%	95.00%	0.00%	0.00%	100.00%	100.00%

## APPENDIX

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## Glossary

**Accrued Service.** The service credited under the plan which was rendered before the date of the actuarial valuation.

**Actuarial Accrued Liability.** The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability."

**Actuarial Assumptions.** Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

**Actuarial Cost Method.** A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

**Actuarial Equivalent.** A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

**Actuarial Present Value.** The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Actuarially Computed Employer Contribution.** The Actuarially Computed Employer Contribution is the normal cost plus the portion of the unfunded actuarial accrued liability to be amortized in the current period. The Actuarially Computed Employer Contribution is an amount that is actuarially determined so that, if paid on an ongoing basis, it would be expected to provide sufficient resources to fund both the normal cost for each year and the amortized unfunded actuarial accrued liability.

**Amortization.** Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

**Governmental Accounting Standards Board (GASB).** GASB is the private, nonpartisan, nonprofit organization that works to create and improve the rules U.S. state and local governments follow when accounting for their finances and reporting them to the public.

**Implicit Rate Subsidy.** It is common practice for employers to allow retirees to continue in the employer's group health insurance plan (which also covers active employees), often charging the retiree some portion of the premium charged for active employees. Under the theory that retirees have higher utilization of services, the difference between the true cost of providing retiree coverage and what the retiree is being charged is known as the implicit rate subsidy.

## Glossary

**Medical Trend Rate (Health Care Inflation).** The increase in the cost of providing health care benefits over time. Trend includes such elements as pure price inflation, changes in utilization, advances in medical technology, and cost shifting.

**Normal Cost.** The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

**Other Postemployment Benefits (OPEB).** OPEB are postemployment benefits other than pensions. OPEB generally takes the form of health insurance, dental, vision, prescription drugs, life insurance or other health care benefits.

**Reserve Account.** An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

**Unfunded Actuarial Accrued Liability.** The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded actuarial accrued liability."

**Valuation Assets.** The value of current plan assets recognized for valuation purposes.

February 28, 2019

Ms. Katie Zanotti, Retirement Administrator/Accountant  
Bay County Retiree Health Care Plan  
Bay County Building  
515 Center Avenue  
Bay City, Michigan 48708

**Re: Bay County Retiree Health Care Plan**

Dear Ms. Zanotti:

Enclosed are 20 copies of the December 31, 2017 actuarial valuation of Bay County Retiree Health Care Plan – Excluding BABH.

Should you have any questions on the enclosed report, please feel free to call me.

Respectfully submitted,



James D. Anderson, FSA, EA, FCA, MAAA

JDA:rmn  
Enclosures

cc: Jerry Desloover, Rehmann, Robson  
Shana M. Neeson, GRS  
Stephanie Crawford, GRS