

Bay County Retiree Health Care Plan

Actuarial Valuation Report

For County Employers Other Than BABH

as of December 31, 2019



Table of Contents

<u>Section</u>	<u>Page Number</u>	
	--	Cover Letter
	1	Executive Summary
A		Valuation Results
	1	Results by Division
	2	Comments
B	1	Retiree Premium Rate Development
C	1	Summary of Benefits
D		Summary of Valuation Data
	1	Schedule of Active Members
	7	Schedule of Inactive Members
	8	Reported Financial Information
E		Actuarial Cost Methods and Actuarial Assumptions
	1	Actuarial Methods
	2	Actuarial Assumptions
	8	Miscellaneous and Technical Assumptions
Appendix	1	Glossary



May 27, 2021

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

**Re: Bay County Retiree Health Care Plan – Excluding BABH Actuarial Funding Valuation
as of December 31, 2019**

Dear Board Members:

The results of the December 31, 2019 Biennial Actuarial Funding Valuation of the Bay County Voluntary Employees' Beneficiary Association – Excluding BABH 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, each Employer, and those designated or approved by the Board. This report may be provided to parties other than the VEBA, 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 Plan's funding progress and to determine the Actuarially Determined Contribution for the fiscal years ending December 31, 2022 and December 31, 2023. 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. This report does not satisfy GASB Statement No. 75.

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, 2019. 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.

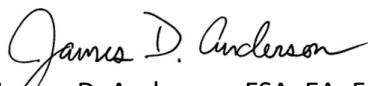
This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

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 Retiree Health Care Plan - Excluding 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

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



Shana M. Neeson, ASA, FCA, MAAA

JDA/SMN:rmn



EXECUTIVE SUMMARY

Executive Summary

Actuarially Determined Contribution

Please note that beginning with the fiscal year starting after June 15, 2016, GASB Statement No. 43 was replaced by GASB Statement No. 74. Also, beginning with the fiscal year starting after June 15, 2017, GASB Statement No. 45 was replaced by GASB Statement No. 75. It is our understanding that the County Employers other than BABH is only required to comply with GASB Statement No. 75, and as such requires a separate GASB Statement No. 75 report at the completion of each fiscal year.

We have calculated the Actuarially Determined Contribution for the fiscal years ending December 31, 2022 and December 31, 2023 under an interest rate assumption of 7.00%. Below is a summary of the results. The Actuarially Determined Contributions and estimated claims and premiums shown below include the impact of any implicit rate subsidy present in your pre-65 rates.

Fiscal Year Ending	Actuarially Determined Contribution	Estimated Claims and Premiums Paid for Retirees
December 31, 2022	\$ 7,596,516	\$ 6,053,265
December 31, 2023	7,534,478	6,460,606

For additional details please see the Section titled "Valuation Results."

Liabilities and Assets – as of December 31, 2019

1. Present Value of Future Benefit Payments	\$104,901,419
2. Actuarial Accrued Liability	95,692,093
3. Plan Assets	46,052,050
4. Unfunded Actuarial Accrued Liability (2) – (3)	49,640,043
5. Funded Ratio (3)/(2)	48.1%

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

VALUATION RESULTS

Bay County Retiree Health Care Plan – Excluding BABH Results by Division as of December 31, 2019

	General County	DWS	Library	Medical Care Facility	Sheriff's Deptment	Road Commission	Total
A. Present Value of Future Benefits							
i) Retirees and Beneficiaries	\$ 15,926,990	\$ 6,347,867	\$ 832,592	\$ 20,679,076	\$ 5,568,321	\$ 11,604,580	\$ 60,959,426
ii) Vested Terminated Members	0	0	0	0	0	0	0
iii) Active Members	<u>14,629,521</u>	<u>4,614,818</u>	<u>1,318,318</u>	<u>9,685,577</u>	<u>4,354,212</u>	<u>9,339,547</u>	<u>43,941,993</u>
Total Present Value of Future Benefits	30,556,511	10,962,685	2,150,910	30,364,653	9,922,533	20,944,127	104,901,419
B. Present Value of Future Normal Costs	2,507,738	1,839,030	423,593	1,215,362	916,830	2,306,773	9,209,326
C. Actuarial Accrued Liability (A.-B.)	28,048,773	9,123,655	1,727,317	29,149,291	9,005,703	18,637,354	95,692,093
D. Actuarial Value of Assets	15,783,240	6,934,610	2,540,482	13,665,535	5,021,662	2,106,521	46,052,050
E. Unfunded Actuarial Accrued Liability (C.-D.)	12,265,533	2,189,045	(813,165)	15,483,756	3,984,041	16,530,833	49,640,043
F. Funded Ratio (D./C.)	56.3%	76.0%	147.1%	46.9%	55.8%	11.3%	48.1%
G. Fiscal Year Ending December 31, 2022							
i) Employer Normal Cost	\$ 481,467	\$ 240,971	\$ 60,455	\$ 216,814	\$ 142,210	\$ 331,700	\$ 1,473,617
ii) Amortization of UAAL*	<u>1,281,205</u>	<u>178,090</u>	<u>(84,940)</u>	<u>1,703,376</u>	<u>416,156</u>	<u>2,604,527</u>	<u>6,098,414</u>
Actuarially Determined Contribution	\$ 1,762,672	\$ 419,061	\$ 0	\$ 1,920,190	\$ 558,366	\$ 2,936,227	\$ 7,596,516
H. Fiscal Year Ending December 31, 2023							
Actuarially Determined Contribution	\$ 1,720,420	\$ 432,680	\$ 0	\$ 1,903,381	\$ 549,944	\$ 2,928,053	\$ 7,534,478

* 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, 2022 and decreasing by one each year thereafter:

Employer	Method	Period
General County	Level Dollar	20 years
DWS	Level Percent of Payroll	20 years
Library	Level Dollar	20 years
Medical Care Facility	Level Dollar	18 years
Sheriff's Deptment	Level Dollar	20 years
Road Commission	Level Dollar	10 years

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



Comments

Comment A: Overall Plan experience was more favorable than expected. Factors contributing to the favorable experience include, but are not limited to:

- Favorable investment performance; and
- Overall, favorable claims and premium experience for all divisions.

Partially offsetting these factors was unfavorable experience due to:

- An assumption change: adjustment to the health care cost trend rates. The impact of the change in assumptions increased the liabilities by approximately \$4,228,000.

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 Determined Contribution. Lower returns will tend to increase the Actuarially Determined Contribution. We have calculated the liability and the resulting Actuarially Determined 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 amounts shown include amortization of the unfunded actuarial accrued liability over a closed 10-year period for Road Commission, a closed 18-year period for Medical Care Facility, and a closed 20-year period for all other groups for the fiscal year ending December 31, 2022 and decreasing by one each year thereafter. For this valuation, assets represent 48.1% of accrued liabilities; for the last valuation, the ratio was 28.4%. Given the funded status of the Library group, the Library should consider starting to pay benefits from the trust.

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

Comment F: This valuation covers the retiree health benefits provided by all units of the Bay County Voluntary Employees' Beneficiary Association, excluding 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.

Comments

Comment G: The GASB issued Statement Nos. 74 and 75 for OPEB valuations. 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 needs to comply with GASB Statement No. 75 for each measurement date ending December 31st. The basis for the December 31, 2021 GASB Statement No. 75 reporting information is expected to be this valuation (as of December 31, 2019), where roll-forward techniques will be applied.

Comment H: The Michigan State Treasurer has established uniform actuarial assumptions as required by Public Act 202 (PA 202) of 2017 for use with the annual Form 5572 (Retirement System Annual Report). The use of the uniform assumptions for reporting purposes is required for each future fiscal year ending December 31st. GRS plans to provide the necessary PA 202 uniform assumption information as part of the GASB Statement No. 75 reports.

Comment I: 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,
- A funded status measurement of 100% is not synonymous with no required future contributions. If the funded status were 100%, the Plan would still require future normal cost contributions (i.e., contributions to cover the cost of the active membership accruing an additional year of service credit); and
- The measurement is inappropriate for assessing the need for or the amount of future employer contributions.

SECTION B

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). Blue Cross Blue Shield and Benistar 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. The pre-65 rates include an adjustment for the HRA benefit that covers 80% of the in-network deductible. 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 0008 pre-65 and The Benistar plan post-65 with the Express Scripts Group Medicare Part D Program.



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 2017 through December 2019, paid through October 2020, 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, 2021 through December 31, 2021, 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. CMS' reimbursement is based on a very competitive bid process and has resulted in recent Medicare Advantage premiums trending at low rates of increase. Historically, a margin has been added to Medicare Advantage rates to recognize that increases in CMS reimbursements may lag behind the trends for healthcare costs. In developing the post 65 rates used in this valuation a transition to removing the load completely was begun. 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 2017 through December 2019, paid through September 30, 2020, 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, 2021 through December 31, 2021, 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. CMS' reimbursement is based on a very competitive bid process and has resulted in recent Medicare Advantage premiums trending at low rates of increase. Historically, a margin has been added to Medicare Advantage rates to recognize that increases in CMS reimbursements may lag behind the trends for healthcare costs. In developing the post 65 rates used in this valuation a transition to removing the load completely was begun. This adjustment will be revisited at the time of the next valuation.

For current active employees, the plans available upon retirement are BCBS groups 0010, 0046, and 0050 for pre-65 participants and group Option II: 601 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 2017 through December 2019, paid through August, 2020, 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, 2021 through December 31, 2021, 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. CMS' reimbursement is based on a very competitive bid process and has resulted in recent Medicare Advantage premiums trending at low rates of increase. Historically, a margin has been added to Medicare Advantage rates to recognize that increases in CMS reimbursements may lag behind the trends for healthcare costs. In developing the post 65 rates used in this valuation a transition to removing the load completely was begun. 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 rates 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 2017 through December 2019, paid through June 30, 2020, and paid prescription drug claims for the period of January 2017 through December 2019 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, 2021 through December 31, 2021, 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. CMS' reimbursement is based on a very competitive bid process and has resulted in recent Medicare Advantage premiums trending at low rates of increase. Historically, a margin has been added to Medicare Advantage rates to recognize that increases in CMS reimbursements may lag behind the trends for healthcare costs. In developing the post 65 rates used in this valuation a transition to removing the load completely was begun. 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 0011 for pre-65 participants and group Option 0 for post-65 participants. We have developed separate premium rates for future retirees to reflect the benefit differences.



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	\$ 440.01	\$ 607.28	\$ 520.71	\$ 718.65	\$ 322.81	\$ 445.52
50	572.95	705.82	678.02	835.26	420.33	517.81
55	753.94	823.19	892.20	974.15	553.11	603.91
60	973.75	958.81	1,152.33	1,134.65	714.37	703.41
64	1,184.11	1,117.48	1,401.26	1,322.41	868.69	819.81
65	352.05	332.06	344.25	324.70	371.49	350.39
70	383.51	371.11	375.01	362.88	404.68	391.59
75	411.90	401.92	402.77	393.02	434.64	424.11

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	\$ 499.51	\$ 689.39	\$ 440.01	\$ 607.28	\$ 550.78	\$ 760.14
50	650.42	801.25	572.95	705.82	717.17	883.49
55	855.88	934.49	753.94	823.19	943.72	1,030.40
60	1,105.41	1,088.45	973.75	958.81	1,218.86	1,200.16
64	1,344.21	1,268.57	1,184.11	1,117.48	1,482.17	1,398.77
65	315.14	297.24	352.05	332.06	326.72	308.16
70	343.30	332.20	383.51	371.11	355.91	344.40
75	368.71	359.78	411.90	401.92	382.26	373.00

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	\$ 440.01	\$ 607.28	\$ 526.62	\$ 726.81	\$ 322.81	\$ 445.52
50	572.95	705.82	685.72	844.74	420.33	517.81
55	753.94	823.19	902.33	985.21	553.11	603.91
60	973.75	958.81	1,165.41	1,147.53	714.37	703.41
64	1,184.11	1,117.48	1,417.17	1,337.42	868.69	819.81
65	352.22	332.22	416.56	392.90	371.49	350.39
70	383.70	371.29	453.78	439.10	404.68	391.59
75	412.10	402.12	487.37	475.57	434.64	424.11

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	\$ 499.51	\$ 689.39	\$ 440.01	\$ 607.28	\$ 550.78	\$ 760.14
50	650.42	801.25	572.95	705.82	717.17	883.49
55	855.88	934.49	753.94	823.19	943.72	1,030.40
60	1,105.41	1,088.45	973.75	958.81	1,218.86	1,200.16
64	1,344.21	1,268.57	1,184.11	1,117.48	1,482.17	1,398.77
65	315.14	297.24	352.22	332.22	371.78	350.66
70	343.30	332.20	383.70	371.29	405.00	391.90
75	368.71	359.78	412.10	402.12	434.98	424.44

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	\$38.72	\$77.44	\$37.01	\$74.02
DWS	38.72	77.44	37.01	74.02
Medical Care Facility	26.41	52.82	24.73	49.46



Retiree Premium Rate Development

Health Care Cost Trend Assumption

The health care cost trend rate is the rate of change in per capita health care claims over time as a result of factors such as medical inflation, utilization of health care services, plan design, and technological improvements. It is a crucial economic assumption that is required for measuring retiree health care benefit obligations.

Retiree health care valuations use a health care cost trend assumption (trend vector) that changes over the years. The trend vector used in this valuation begins with a near-term trend assumption and declines over a time to an ultimate trend rate. The near-term rates reflect the increases in the current cost of health care goods and services. The process of trending down to a lower ultimate trend relies on the theory that premiums will moderate over the long term, otherwise the healthcare sector would eventually consume the entire GDP. It is on this basis that we project premium rate increases will continue to exceed wage inflation for the next ten years, but by less each year until leveling off at an ultimate rate, assumed to be 3.50% in this valuation.

While experience is often the best starting point for future costs, GRS does not rely on a group's experience in setting the near-term trend assumptions since trends vary significantly from year to year and are not credible for most groups. Therefore, professional judgment, trends from GRS' book of business and industry benchmarks (e.g., trend reports from various Pharmacy Benefit Management (PBM) organizations and national healthcare benefit consulting firms) are used in conjunction with a group's historical experience to establish the trend assumptions.

The combined medical and prescription drug per capita costs are projected to increase as shown in the table below:

Year After Valuation	Medical and Drug Valuation Trend Rate
	All Groups
1	8.25%
2	7.50%
3	7.00%
4	6.50%
5	6.00%
6	5.50%
7	5.00%
8	4.50%
9	4.00%
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.



Retiree Premium Rate Development

Actuarial Disclosures

The premium rates used in this valuation were developed using proprietary Excel models which in James E. Pranschke's professional judgment provide the initial projected costs which are consistent with the purposes of the valuation. We perform tests to ensure that the models, in their entirety, reasonably represent that which is intended to be modeled.

Aging factors used in the premium development models were developed based on the information and data from a 2013 study commissioned by the Society of Actuaries entitled "Health Care Costs – From Birth to Death."

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 on pages B-6 and B-7 as well as the health care trend rates shown on page B-8.



James E. Pranschke, FSA, FCA, MAAA

SECTION C

SUMMARY OF BENEFITS

Bay County Retiree Health Care Plan – General County

Summary of the Benefit Provisions as of December 31, 2019

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)	
Normal/Early Retirement	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* yrs of svc Circuit Court G.E.L.C.: 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* yrs of svc Probate Court USWA: Age 55 with 8 yrs of svc ** Age 55 with 30 yrs of svc Age 60/62* 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* yrs of svc 25* yrs of svc regardless of age^	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* yrs of svc Age 60 with 8/10* 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	Medical Prescription drug N/A	BCBS EHIM Standard	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	
			*** TO BE ELIGIBLE FOR HEALTH, EMPLOYEE MUST HAVE BEEN ELIGIBLE FOR HEALTH AS AN ACTIVE EMPLOYEE - this is true for all categories on this matrix									
Deferred Vested Termination	Dispatchers: 8/10* yrs of svc Nurses: 8/10* yrs of svc Circuit Court G.E.L.C.: 8/10* 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
Non-Duty Disability	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 Standard	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	
Duty Disability	No age or svc requirement	No age or svc requirement	Immediately	Medical Prescription drug Life Insurance	Medical Prescription drug	BCBS EHIM Standard	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	
Non-Duty Death-in-Svc	10 or more yrs of credited svc	10 or more yrs of credited svc	Immediately		Medical Prescription drug	BCBS EHIM	self-insured self-insured	BCBS EHIM				See Schedule A See Schedule A
Duty Death-in-Svc	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 and no prescription drug). Employees hired after 1/1/2020 are not eligible for life insurance in retirement.



Bay County Retiree Health Care Plan – DWS

Summary of the Benefit Provisions as of December 31, 2019

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)
Normal/Early Retirement	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 [^] yrs of svc **	Age 55 with 8/10 [^] 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 [^] yrs of svc	Age 60 with 8/10 [^] 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
Deferred Vested Termination	8/10 [^] yrs of svc	n/a		Medical	Medical	N/A			N/A	N/A	N/A
				Prescription drug	Prescription drug	N/A			N/A	N/A	N/A
				Dental	Dental	N/A			N/A	N/A	N/A
				Vision	Vision	N/A			N/A	N/A	N/A
				Life Insurance		N/A			N/A	N/A	N/A
Non-Duty Disability	10 yrs of svc	8/10 [^] 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
Duty Disability	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
Non-Duty Death-in-Svc	10 yrs of svc	8/10 [^] yrs of svc	Immediately		Medical	BCBS	self-insured	BCBS			Hourly See Schedule B, Salary See Schedule C
					Prescription drug	BCBS	self-insured	BCBS			Hourly See Schedule B, Salary See Schedule C
					Dental						
					Vision						
Duty Death-in-Svc	No age or svc requirement	No age or svc requirement	Immediately		Medical	BCBS	self-insured	BCBS			Hourly See Schedule B, Salary See Schedule C
					Prescription drug	BCBS	self-insured	BCBS			Hourly See Schedule B, Salary See Schedule C

Medicare Reimbursement is not offered to any members.
[^] Members hired after 7/1/2008
^{**} 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, 2019

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)
Normal/Early Retirement	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 30 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
Deferred Vested Termination	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
Non-Duty Disability	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
Duty Disability	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
Non-Duty Death-in-Svc	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
Duty Death-in-Svc	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, 2019

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)
Normal/Early Retirement	30 yrs of svc regardless of age Age 55 with 8/10 ³ yrs of svc ** Age 55 with 25 ³ yrs of svc Age 60 with 8/10 ³ yrs of svc Age 62 with 10 ³ 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 N/A	BCBSM BCBSM BCBSM BCBSM The Hartford	self-insured self-insured self-insured self-insured Term	BCBSM BCBSM BCBSM BCBSM The Hartford	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
Deferred Vested Termination	8/10 ³ 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 N/A N/A N/A	N/A N/A N/A N/A N/A
Non-Duty Disability	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 N/A	BCBSM BCBSM BCBSM BCBSM The Hartford	self-insured self-insured self-insured self-insured Term	BCBSM BCBSM BCBSM BCBSM The Hartford	Medical, Prescription Drug, Dental, and Vision Same as described above N/A	Medical, Prescription Drug, Dental, and Vision Same as described above N/A	Medical, Prescription Drug, Dental, and Vision Same as described above N/A
Duty Disability	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 N/A	BCBSM BCBSM BCBSM BCBSM The Hartford	self-insured self-insured self-insured self-insured Term	BCBSM BCBSM BCBSM BCBSM The Hartford	Medical, Prescription Drug, Dental, and Vision Same as described above N/A	Medical, Prescription Drug, Dental, and Vision Same as described above N/A	Medical, Prescription Drug, Dental, and Vision Same as described above N/A
Non-Duty Death-in-Svc	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 self-insured	BCBSM BCBSM BCBSM BCBSM			Medical, Prescription Drug, Dental, and Vision Same as described above
Duty Death-in-Svc	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 self-insured	BCBSM 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
 - Members hired before 1/1/2018 (4/1/2019 for Div. 22) only
 ? Members hired on or after 1/1/2018 (4/1/2019 for Div. 22)

For pre-Medicare eligible retirees after 1/15/2010, coverage is equivalent to that provided to active employees, including co-pays, deductibles, etc. The retiree share of premiums are determined by the MCF based upon the retiree claims, trend, and future fixed fees. The premium share applicable to calendar year 2020 for retirees utilized the same employer cap, for all plan options, reflecting the retiree paying 100% of the difference between the illustrative rates and the cap.

Employees hired on or after 1/1/2010 are not eligible for health care in retirement. Employees hired on or after 1/1/2010 continue to be eligible for life insurance coverage upon retirement.

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, 2019

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)
Normal/Early Retirement	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 th yrs of svc ** 25 yrs of svc regardless of age Age 60 with 8/10* 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 th yrs of svc 25 yrs of svc regardless of age Age 60 with 8/10* 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
Deferred Vested Termination	Road Patrol: 8/10* yrs of svc Road Patrol Supervisory Unit: 8/10 th 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
Non-Duty Disability	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
Duty Disability	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
Non-Duty Death-in-Svc	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
Duty Death-in-Svc	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, 2019

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)
Normal/Early Retirement	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 Dearborn National Life	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
Deferred Vested Termination	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
Non-Duty Disability	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 Dearborn National Life	self-insured self-insured self-insured self-insured Whole Life	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
Duty Disability	No age or svc requirement	15 yrs of svc regardless of age	Immediately	Medical Prescription drug Dental Vision Life Insurance	Medical Prescription drug Dental Vision	BCBS BCBS BCBS BCBS Dearborn National Life	self-insured self-insured self-insured self-insured Whole Life	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
Non-Duty Death-in-Svc	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			See Below See Below Yes Yes
Duty Death-in-Svc	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			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. At Medicare eligibility, the retiree and/or spouse will be moved to Medicare Advantage or equivalent with no cost.



Bay County Retiree Health Care Plan – Excluding BABH Summary of the Benefit Provisions as of December 31, 2019

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, 2019

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, 2019

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, 2019

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 on or after 1/1/2020 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, 2019

Schedule H Medical Care Facility Life Insurance Benefits

Member Retired	Life Insurance Amount
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

Employees hired on or after 1/1/2010 continue to be eligible for life insurance coverage upon retirement.

Schedule I DWS Salaried Members Only Life Insurance Benefits

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

SECTION D

SUMMARY OF VALUATION DATA

Bay County Retiree Health Care Plan – General County Active Members as of December 31, 2019 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	4							4
25-29	13	3						16
30-34	18	10	2					30
35-39	12	10	2	7				31
40-44	16	14	5	4	2			41
45-49	12	7	6	11	10	1		47
50-54	4	7	5	12	10	7	3	48
55-59	5	8	6	12	17	4	8	60
60-64	4	8	4	9	2	4	6	37
65 & Over	2	3	3	3	3	2		16
Totals	90	70	33	58	44	18	17	330

* Excludes 68 part-time employees.

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

Age: 48.0 years
Service: 12.6 years

**Bay County Retiree Health Care Plan – DWS
Active Members as of December 31, 2019
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	1							1
20-24	1							1
25-29	4							4
30-34	3	1						4
35-39	3	5	1					9
40-44	7	3						10
45-49	2	2	1	1				6
50-54	5	1		1	1	2	1	11
55-59	5	1	1	2			1	10
60-64	3					1		4
65 & Over								
Totals	34	13	3	4	1	3	2	60

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

Age: 45.1 years
Service: 7.7 years

**Bay County Retiree Health Care Plan – Library
Active Members as of December 31, 2019
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
25-29	1							1
30-34	1	1						2
35-39	3	2						5
40-44	2	3	1		1			7
45-49			2					2
50-54	2	2		2	1			7
55-59	1	1	3		1	1		7
60-64			1	2	1			4
65 & Over			1	1	2			4
Totals	10	9	8	5	6	1		39

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

Age: 49.5 years
Service: 11.1 years

Bay County Retiree Health Care Plan – Medical Care Facility Active Members as of December 31, 2019 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	15							15
20-24	38	3						41
25-29	27	10						37
30-34	22	13	8					43
35-39	12	9	5	4				30
40-44	10	5	3	1	4	1		24
45-49	14	4	6	2	3	6		35
50-54	12	6	3	3	2		3	29
55-59	12	7	6	6	3	3	3	40
60-64	2	3	2	2	1		1	11
65 & Over	1	1						2
Totals	165	61	33	18	13	10	7	307

* Excludes 36 part-time employees.

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

Age: 38.8 years
Service: 7.3 years

Bay County Retiree Health Care Plan – Sheriff’s Department Active Members as of December 31, 2019 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		2	2					4
35-39		1	5					6
40-44		1	3	5	1			10
45-49				2	7			9
50-54				2	6	1		9
55-59				1			1	2
60-64								
65 & Over					1		3	4
Totals		4	10	10	15	1	4	44

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

Age: 46.7 years
Service: 19.2 years

**Bay County Retiree Health Care Plan – Road Commission
Active Members as of December 31, 2019
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	2							2
30-34	2	4						6
35-39	2	2		1				5
40-44	1	3		1				5
45-49	1	2	1		2	1		7
50-54	2	1		3	1	5		12
55-59	1			4	4	5		14
60-64			1	1	1	1		4
65 & Over	1							1
Totals	13	12	2	10	8	12		57

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

Age: 48.1 years
Service: 14.5 years

Bay County Retiree Health Care Plan – Excluding BABH Inactive Members as of December 31, 2019

Number of Retiree and Beneficiary Contracts[^]

	Opt-Out/ Ineligible*	One-Person Coverage	Two-Person Coverage**	Total
Male	88	72	122	282
Female	217	243	116	576
Total	305	315	238	858

[^] Coverage based on medical/prescription drug coverage.

* Of the 305 Opt-Out/Ineligible retired members, 53 receive life insurance coverage.

** 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			2
45-49	1				2		3
50-54	1	1		6	5	1	14
55-59	7	2	1	19	9	13	51
60-64	47	8	3	36	7	8	109
65-69	52	15	3	47	10	16	143
70-74	57	5	3	34	11	15	125
75-79	21	2	1	16	7	13	60
80-84	19	2	2	19	3	7	52
85-89	10		1	8	3	8	30
90-94	5	1	1	5	1	2	15
95 +			1			1	2
Totals	220	37	16	191	58	84	606

* There are 53 retired members that only receive life insurance coverage that are included in the covered counts.

There are no terminated members eligible for deferred Plan benefits.



Bay County Retiree Health Care Plan – Excluding BABH Reported Financial Information (Market Value)

	December 31, 2019
Additions	
Contributions	
Employer	\$ 2,054,896
Nonemployer contributing entities	0
Active Employees	0
Member	0
Total Contributions	\$ 2,054,896
Investment Income	
Total Investment Income	\$ 7,736,359
Less Investment Expense	(94,585)
Net Investment Income	\$ 7,641,774
Other Miscellaneous income	\$ 0
Total Additions	\$ 9,696,670
 Deductions	
Health Benefit Payments and Refunds	\$ 0
OPEB Plan Administrative Expense	59,788
Total Deductions	\$ 59,788
Net Increase in Net Position	\$ 9,636,882
 Net Position Restricted for OPEB	
Beginning of Year	\$ 36,415,168
End of Year	\$ 46,052,050

SECTION E

ACTUARIAL COST METHODS AND ACTUARIAL ASSUMPTIONS

Actuarial Methods for Bay County Retiree Health Care Plan – Excluding BABH as of December 31, 2019

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 Determined Contribution for the fiscal years shown:

	Fiscal Year Ending December 31,	
	2022	2023
General County (Level Dollar)	10.9606	10.6933
DWS (Level Percent of Pay)	14.0728	13.5819
Library (Level Dollar)	10.9606	10.6933
Medical Care Facility (Level Dollar)	10.4072	10.1011
Sheriff's Department (Level Dollar)	10.9606	10.6933
Road Commission (Level Dollar)	7.2666	6.7407

Actuarial Assumptions for Bay County Retiree Health Care Plan – Excluding BABH as of December 31, 2019

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 Retiree Health Care Plan – Excluding BABH as of December 31, 2019

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	35.05	40.31	33.58	36.59	24.75
55	30.00	35.19	28.79	31.67	21.57	25.33
60	25.16	30.20	24.23	26.94	18.50	21.74
65	20.65	25.33	19.94	22.43	15.59	18.28
70	16.55	20.60	15.98	18.14	12.81	14.89
75	12.79	16.08	12.36	14.17	10.16	11.71
80	9.41	11.81	9.18	10.64	7.75	8.95

[^] Based on retirements in 2019. Retirements in future years will reflect improvements in life expectancy.

Actuarial Assumptions for Bay County Retiree Health Care Plan – Excluding BABH as of December 31, 2019

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
34	100	64	100



Actuarial Assumptions for Bay County Retiree Health Care Plan – Excluding BABH as of December 31, 2019

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 Retiree Health Care Plan – Excluding BABH as of December 31, 2019

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	
	Sheriff's	All Other 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 Retiree Health Care Plan – Excluding BABH as of December 31, 2019 (Concluded)

The Medical Care Facility and Road Commission future retiree cost shares were developed based on the calendar year 2021 cost shares and the plan election of the current retiree population of each applicable group. The developed future retiree cost shares valued are as follows.:

Group	Future Retiree Cost Share			
	Pre-65		Post-65	
	One-Person	Two-Person	One-Person	Two-Person
Medical Care Facility	\$199.67	\$485.23	\$0.00	\$0.00
Road Commission	6.47	73.76	0.00	0.00

The Medical Care Facility current retiree cost share was developed based on the calendar year 2021 cost shares and the plan election of the retirees currently responsible for a portion of their retiree health care coverage. The developed cost shares valued are as follows:

Group	Current Retiree Cost Share			
	Pre-65		Post-65	
	One-Person	Two-Person	One-Person	Two-Person
Medical Care Facility	\$189.75	\$464.71	\$0.00	\$0.00

The Road Commission current retiree cost share was valued as reported, during the data collection process, for each individual current retiree.

All retiree cost shares are projected based on the valuation trend noted in Section B.

Miscellaneous and Technical Assumptions for Bay County Retiree Health Care Plan – Excluding BABH as of December 31, 2019

- 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	45.00%	45.00%	40.00%	40.00%	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	45.00%	45.00%	40.00%	40.00%	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

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 Determined Contribution. The Actuarially Determined Contribution is the normal cost plus the portion of the unfunded actuarial accrued liability to be amortized in the current period. The Actuarially Determined 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.