

Macomb County Retiree Health Care Plan

Actuarial Valuation
as of December 31, 2019



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February 2, 2022

Mr. Steven Smigiel, Finance Director
Macomb County Retiree Health Care Plan
120 North Main Street, 2nd Floor
Mt. Clemens, MI 48043

Dear Mr. Smigiel:

Submitted in this report are the results of an actuarial valuation of the assets and liabilities associated with the employer financed retiree health plan benefits provided by Macomb County. The date of the valuation was December 31, 2019. The actuarially determined contributions have been calculated for the County's fiscal year beginning January 1, 2021.

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

The purpose of the valuation is to measure the liabilities of the Retiree Health Care Plan and determine the fiscal year 2021 employer contribution. This report should not be relied upon for any other purpose. The valuation was based upon information furnished by the County, concerning retiree health benefits, financial transactions, plan provisions, active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency with data provided for the last valuation, but did not audit the data. As a result, we are unable to assume responsibility for the accuracy or completeness of the information provided by the County.

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.

Mr. Steven Smigiel

February 2, 2022

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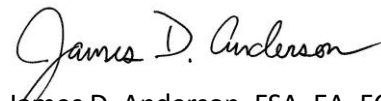
This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that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

This report was prepared by actuaries with substantial experience in valuing public employee retirement systems. 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. Louise M. Gates and James D. Anderson are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

Respectfully submitted,
Gabriel, Roeder, Smith & Company



Louise M. Gates, ASA, FCA, MAAA



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

LMG/JDA:sc

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SECTION A

VALUATION RESULTS

County Contributions to Provide Benefits for the Fiscal Year Beginning January 1, 2021

Contributions for	All Groups Combined
A. Normal Cost of Benefits	\$ 5,238,929
B. Unfunded Accrued Liability (UAL)	187,277,430
C. UAL Payment	15,191,633
D. Employer Contribution (A+C)	20,430,562

The Actuarially Determined Contribution (ADC) shown above was developed for the General division, Sheriff's department and Martha T. Berry combined. Given the closure of the Plan to County employees hired on or after January 1, 2016, the UAL was financed over 23 years using a level dollar amortization method.

The table below shows fiscal year 2021 employer contributions for each employment group.

Employment Group	Contribution Dollars
General	\$ 14,937,580
Sheriff	4,542,003
Martha T. Berry	950,979
Total	20,430,562

Determination of the Unfunded Accrued Liability as of December 31, 2019

A. Accrued Liability	
1. For retirees and beneficiaries	\$ 290,909,726
2. For current DROP members	48,165,183
3. For vested terminated members	35,349,788
4. For present active members	115,094,708
5. Total	489,519,405
B. Valuation Assets	\$ 302,241,975
C. Unfunded Accrued Liability (UAL): (A.5) – (B)	\$ 187,277,430
D. Funded Percent: (B) / (A.5)	61.7%

The table above shows the development of the Plan's unfunded actuarial accrued liabilities for the three employment groups combined as of December 31, 2019.

As of December 31, 2019, for Martha T. Berry (MTB) the accrued liability was \$26,005,306, the MVA was \$15,589,741 and the funded percent was 59.9%.

Development of Valuation Assets as of December 31, 2019

Year Ended December 31:	2019	2020	2021	2022	2023
A. Valuation Assets Beginning of Year	\$ 262,829,336				
B. Market Value End of Year	338,910,804				
C. Market Value Beginning of Year	262,829,336				
D. Non-Investment Net Cash Flow	10,798,847				
E. Investment Income					
E1. Market Total: B - C - D	65,282,621				
E2. Amount for Immediate Recognition	19,446,585				
E3. Amount for Phased-In Recognition: E1-E2	45,836,036				
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.2 x E4	9,167,207				
F2. First Prior Year	0	\$ 9,167,207			
F3. Second Prior Year	0	0	\$ 9,167,207		
F4. Third Prior Year	0	0	0	\$ 9,167,207	
F5. Fourth Prior Year	0	0	0	0	\$ 9,167,208
F6. Total Phased-In Recognition	9,167,207	9,167,207	9,167,207	9,167,207	9,167,208
G. Preliminary Valuation Assets End of Year: A + D + E2 + F6	302,241,975				
H. Corridor					
Lower Limit: 80% x (B)	271,128,643				
Upper Limit: 120% x (B)	406,692,965				
Adjustment to (G) to fit Limits	0				
I. Valuation Assets End of Year	302,241,975				
J. Difference between Market & Valuation Assets: B - I	36,668,829				
K. Valuation Asset Recognized Rate of Return	10.67%				
L. Market Value Recognized Rate of Return	24.34%				

Comments

Comment A: There are three general reasons why contributions change from one valuation to the next. The first is a change in the benefits or eligibility conditions of the Plan. The second is a change in the valuation assumptions or methods. The third is the difference during the year between the Plan's actual experience and what the assumptions predicted. No benefit changes were reported to GRS in connection with this valuation of the Plan. This valuation of the Plan reflects new actuarial assumptions and methods adopted by the Board based upon a 2021 study of Plan experience. In addition, updates were made to the medical and prescription drug trend rates, the asset valuation method and a liability load for health care claims volatility. Additional information about the assumptions is included in Section D of this report.

Plan experience during calendar year 2019 was favorable. The medical and prescription drug claims experience during calendar year 2019 was more favorable than anticipated by actuarial assumptions. In addition, investment returns during the year were higher than long term expectations. Additional information related to Plan assets is shown on pages A-3 and C-1.

Comment B: The Plan's funding percent was 61.7% as of December 31, 2019 based on valuation assets. Using the market value of assets as of December 31, 2019, the funding percent was 69.2% and 56.2% on the same basis as of December 31, 2018. The increase in the Plan's funding percent during the past year is due primarily to the favorable Plan experience.

Comment C: Future trends in health care costs defy accurate prediction by anyone. To the extent that future costs increase more or less than projected in this valuation, the computed liabilities and actuarially computed employer contribution will be higher or lower than shown in this report.

Comment D: Effective with this valuation of the Plan, valuation assets were developed using an asset smoothing method. The actuarial value of assets recognizes assumed investment return fully each year while phasing in the difference between actual and assumed returns over a closed 5-year period. Additional information about this method is shown on page A-3.

SECTION B

RETIREE PREMIUM RATE DEVELOPMENT

Retiree Premium Rate Development

Rate Development

Premium rates for Macomb County were developed separately for the self-insured and the fully-insured portions and then combined to create one set of premium rates.

The self-insured initial premium rates were developed only for pre-65 retirees, as the post-65 retirees are covered through a fully-insured Medicare Advantage program for both medical and prescription drugs. The pre-65 rates were calculated by using incurred claims experience and exposure data for the period of January 2018 to December 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 County. Since the prescription drug claims and the medical claims exhibit different trends and claim payment patterns, we analyzed these claims separately as well.

The fully-insured initial premium rates were developed for the two classes of retirees (pre-65 and post-65). Since HAP claim and exposure data was not available for a segment of pre-65 retirees, fully insured equivalent rates were used. The January 1, 2021 fully-insured rates provided by the County were utilized to determine the appropriate premium rates. The pre-65 fully-insured premiums for current retirees in the HAP group are assumed to be unblended rates based on the experience of pre-65 retired members; therefore, the fully-insured premium rate is used as the basis of the initial per capita cost without adjustments, since the rate reflects the demographics of the pre-65 retiree group.

For the post-65 retirees, the fully-insured Medicare Advantage premium rate is used as the basis of the initial per capita cost since the rate reflects the demographics of the post-65 retiree group. 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. Previously, a margin has been added to Medicare Advantage rates to recognize that increases in CMS reimbursements may lag behind the trends for healthcare costs. For the near term, we believe this margin is no longer necessary and we will monitor the Medicare Advantage environment and revisit the need for an additional margin at the time of the next valuation.

For the current active employees who retire after November 1, 2013, retiree coverage floats with active coverage. We have developed separate premium rates for future retirees in order to reflect the benefit differences. For a variety of reasons, the future rates increased more than the current rates including a portion of the future exposure expected to come from the self-insured plans, and rate increases for those benefit plans.

Age graded and sex distinct premiums are utilized in this valuation. The premiums developed by the preceding process 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.



Retiree Premium Rate Development

The tables below show the combined self-insured and fully-insured medical and prescription drug one-person monthly premiums at select ages. The premium (or per capita costs) rates shown below reflect the use of age grading.

Current Retiree Rates		
Retirements prior to 11/1/2013 and All POAM and POLC Retirees		
Premiums For Retirees Not Eligible For Medicare		
Age	Males	Females
50	\$500.97	\$617.15
55	659.22	719.77
60	851.42	838.36

Future Retiree Rates		
Retirements after 11/1/2013		
Premiums For Retirees Not Eligible For Medicare		
Age	Males	Females
50	\$430.72	\$530.61
55	566.78	618.84
60	732.03	720.80

Premiums For Retirees Eligible For Medicare		
Age	Males	Females
70	\$362.28	\$350.57
75	389.10	379.68
80	408.48	401.34

Premiums For Retirees Eligible For Medicare		
Age	Males	Females
70	\$362.28	\$350.57
75	389.10	379.68
80	408.48	401.34

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 rates used for this valuation were \$37.76 per person. The monthly vision rates used for this valuation were \$3.61 per person.

Health Care 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.

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.



Retiree Premium Rate Development

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 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 premium levels will moderate over the long-term, otherwise the healthcare sector would eventually consume the entire GDP. It is on this basis that projected premium rate increases continue to exceed wage inflation for the next twelve years, but by less each year until leveling off at an ultimate rate, assumed to be 3.50% in this valuation. See below for the trend vector used in this valuation.

Year Beginning January 1,	Future Health Cost Increases		
	Pre-65 Medical /Rx	Post-65 Medical /Rx	Dental/Vision
2021	7.50 %	6.25 %	3.50 %
2022	7.25	6.00	3.50
2023	6.75	5.75	3.50
2024	6.50	5.50	3.50
2025	6.00	5.25	3.50
2026	5.75	5.00	3.50
2027	5.25	4.75	3.50
2028	5.00	4.50	3.50
2029	4.50	4.25	3.50
2030	4.25	4.00	3.50
2031	3.75	3.75	3.50
2032 & after	3.50	3.50	3.50

Actuarial Disclosures

The premium rates used in this valuation were developed using proprietary Excel models which, in James E. Pranschke’s professional judgment, provide initial projected costs which are consistent with the purposes of the valuation. We performed 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 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 above.



James E. Pranschke, FSA, FCA, MAAA

SECTION C

VALUATION DATA

Summary of Reported Financial Information Year Ended December 31, 2019

Market Value on December 31, 2018	\$ 262,829,336
Revenues:	
a. Employer Contributions	30,278,004
b. Net Investment Earnings	65,305,621
c. Member Contributions	0
d. Other	0
e. Total	<u>95,583,625</u>
Disbursements:	
a. Health Care Premiums	19,479,157
b. Administrative Expenses	23,000
c. Total	<u>19,502,157</u>
Market Value on December 31, 2019	<u><u>\$ 338,910,804</u></u>
Market Value Rate of Return	24.34%

The assets shown above are those held in the Retiree Health Care Plan trust. Assets attributable to bond proceeds (held in a separate account) were not included in this valuation of the Plan.

Summary of Retiree Health Plan Members by Employment Group as of December 31, 2019

Active Members

General County Employees	
Number	963
Average Age	48.7 years
Average Service	12.3 years
Sheriff Department	
Number	334
Average Age	41.9 years
Average Service	14.2 years
Martha T. Berry MCF	
Number	29
Average Age	47.4 years
Average Service	16.0 years
Total	
Number	1,326
Average Age	47.0 years
Average Service	12.9 years

DROP Members

General County Employees	
Number	195
Average Age	59.2 years
Sheriff Department	
Number	42
Average Age	54.4 years
Martha T. Berry MCF	
Number	5
Average Age	54.1 years
Total	
Number	242
Average Age	58.2 years

Summary of Retiree Health Plan Members as of December 31, 2019

Retirees and Beneficiaries (Current Benefit Recipients)

General County & Sheriff Department	
Recipient Age	Number of Contracts
Under 35	0
35 - 39	1
40 - 44	6
45 - 49	8
50 - 54	73
55 - 59	176
60 - 64	375
65 - 69	433
70 - 74	385
75 - 79	291
80 - 84	150
85 - 89	93
90 & Over	76
Totals	2,067

The table above includes 166 retirees who receive a \$2,000 annual payment in lieu of County paid retiree health benefits.

Martha T. Berry MCF	
Recipient Age	Number of Contracts
50 - 54	5
55 - 59	17
60 - 64	28
65 - 69	32
70 - 74	26
75 - 79	26
80 - 84	23
85 - 89	9
90 & Over	9
Totals	175

The table above includes 5 retirees who receive a \$2,000 annual payment in lieu of County paid retiree health benefits.



Summary of Retiree Health Plan Members as of December 31, 2019

Vested Terminated Employees (Future Benefit Recipients)

General County & Sheriff Department	
Age	Number of Contracts
30-34	1
35-39	15
40-44	30
45-49	61
50-54	47
55-59	59
60	2
61	3
62	1
63	3
66	2
68	1
Totals	225

Martha T. Berry MCF	
Age	Number of Contracts
45-49	2
50-54	3
55-59	4
60	1
62	2
Totals	12

SECTION D

VALUATION METHODS AND ACTUARIAL ASSUMPTIONS

Actuarial Methods and Assumptions Used for the Valuation

The individual entry age actuarial cost method of valuation was used in determining liabilities and normal cost. Differences in the past between assumed experience and actual experience (“actuarial gains and losses”) become part of actuarial accrued liabilities.

Unfunded actuarial accrued liabilities are amortized to produce payments (principal & interest) which are level dollar amounts.

The **asset valuation method** recognizes assumed investment income fully each year. Differences between actual and assumed investment income are phased in over a closed five-year period. During periods when investment performance exceeds the assumed rate, valuation assets will tend to be less than the market value of assets and vice versa. Valuation assets are not permitted to deviate from the market value by more than 20%. Assets were allocated among the three employment divisions based on noninvestment activity during the year (contributions and other information for each group) such that the rate of investment return for each group is equal to the investment return for the entire Plan.

The **amortization method** used to develop employer contributions is a level dollar closed period amortization method over 23 years.

Actuarial Assumptions Used for the Valuation

The assumed **rate of investment return** used in the valuation was 7.00% per year, net of investment and administrative expenses, compounded annually

The **salary increase assumption** used in this actuarial valuation projects annual salary increases of 3.50% plus a percentage based on an age-related scale to reflect merit, longevity, and promotional salary increases.

Years of Service	Annual Rate of Pay Increase						
	Base (Economic)	Merit and Longevity			Total		
		General County	Sheriff's Department	Martha T. Berry MCF	General County	Sheriff's Department	Martha T. Berry MCF
1	3.50%	3.00%	7.00%	3.00%	6.50%	10.50%	6.50%
2	3.50	3.00	7.00	3.00	6.50	10.50	6.50
3	3.50	3.00	7.00	3.00	6.50	10.50	6.50
4	3.50	3.00	4.00	3.00	6.50	7.50	6.50
5	3.50	3.00	4.00	3.00	6.50	7.50	6.50
6	3.50	3.00	4.00	3.00	6.50	7.50	6.50
7	3.50	1.00	4.00	1.00	4.50	7.50	4.50
8	3.50	1.00	1.00	1.00	4.50	4.50	4.50
9	3.50	1.00	1.00	1.00	4.50	4.50	4.50
10	3.50	1.00	1.00	1.00	4.50	4.50	4.50
11+	3.50	1.00	1.00	1.00	4.50	4.50	4.50

Actuarial Assumptions Used for the Valuation

The **mortality table** assumption is used to measure the probabilities of employees dying before retirement and the probabilities of each health insurance premium being paid after retirement and was first used for the December 31, 2019 valuation.

General and MTB

- **Healthy Pre-Retirement:** The Pub-2010 Amount-Weighted, General, Employee, Male and Female tables, with future mortality improvements projected to 2030 using scale MP-2019.
- **Healthy Post-Retirement:** The Pub-2010 Amount-Weighted, General, Healthy Retiree, Male and Female tables, with future mortality improvements projected to 2030 using scale MP-2019.
- **Disability Retirement:** The Pub-2010 Amount-Weighted, General, Disabled Retiree, Male and Female tables, with future mortality improvements projected to 2030 using scale MP-2019.

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	37.89	40.02	34.01	36.86	24.80	27.31
55	33.15	35.18	29.48	32.24	21.65	24.21
60	28.51	30.41	25.09	27.71	18.83	21.35
65	23.99	25.71	20.89	23.28	16.19	18.40
70	19.53	21.07	16.84	18.96	13.56	15.24
75	15.13	16.51	13.04	14.86	10.90	12.10
80	10.78	12.04	9.64	11.15	8.41	9.28

Sheriffs

- **Healthy Pre-Retirement:** The Pub-2010 Headcount-Weighted, Safety, Employee, Male and Female tables, with future mortality improvements projected to 2030 using scale MP-2019.
- **Healthy Post-Retirement:** The Pub-2010 Headcount-Weighted, Safety, Healthy Retiree, Male and Female tables, with future mortality improvements projected to 2030 using scale MP-2019.
- **Disability Retirement:** The Pub-2010 Headcount-Weighted, Safety, Disabled Retiree, Male and Female tables, with future mortality improvements projected to 2030 using scale MP-2019.

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	36.46	39.18	32.97	35.43	31.27	32.83
55	31.68	34.38	28.37	30.76	26.91	28.36
60	26.99	29.63	23.90	26.29	22.76	24.23
65	22.41	24.93	19.71	22.04	18.88	20.33
70	17.97	20.27	15.72	17.95	15.21	16.50
75	13.70	15.75	12.01	14.11	11.76	12.89
80	9.66	11.47	8.76	10.68	8.71	9.84

The sample values shown are for individuals attaining the indicated age in calendar year 2019.

Actuarial Assumptions Used for the Valuation

Retirement rates are used to measure the probability of eligible members retiring during the next year. The retirement rates in use for each group are shown below. These assumptions were first used for the December 31, 2019 valuation.

Retirement Ages	General County	Sheriff's Department	Martha T. Berry MCF	Retirement Service	Sheriff's Department
50	25 %		25 %	25	60 %
51	25		25	26	50
52	25		25	27	50
53	25		25	28	50
54	25		25	29	50
55	25		25	30	50
56	25		25	31	40
57	25		25	32	30
58	25		25	33	30
59	25		25	34	30
60	30	50 %	30	35 & Up	100
61	30	50	30		
62	30	50	30		
63	30	50	30		
64	30	50	30		
65	30	100	30		
66	30		30		
67	30		30		
68	30		30		
69	30		30		
70 & Up	100		100		

Actuarial Assumptions Used for the Valuation

For all General County and Martha T. Berry MCF members hired on or after January 1, 2002 the following retirement probabilities will apply. These assumptions were first used for the December 31, 2019 valuation.

Retirement Ages	General County	Martha T. Berry MCF
55	25 %	25 %
56	25	25
57	25	25
58	25	25
59	25	25
60	30	30
61	30	30
62	30	30
63	30	30
64	30	30
65	30	30
66	30	30
67	30	30
68	30	30
69	30	30
70 & Up	100	100

Actuarial Assumptions Used for the Valuation

Disability rates are used in the valuation to estimate the incidence of disability in future years. The assumed rates of disablement at various ages are shown below:

Sample Ages	% of Active Members Becoming Disabled within Next Year
25	0.09 %
30	0.11
35	0.15
40	0.22
45	0.36
50	0.61
55	1.01
60	1.66

Actuarial Assumptions Used for the Valuation

The **withdrawal rates** are used to estimate the number of employees at each age (or years of service) that are expected to terminate employment before qualifying for retirement benefits. The withdrawal rates do not apply to members eligible to retire, and do not include separation on account of death or disability.

Sample rates of withdrawal from active employment are shown below:

Sample Ages	Years of Service	% of Active Members Separating within Next Year		
		General County	Sheriff's Department	Martha T. Berry MCF
ALL	0	18.00 %	6.00 %	20.00 %
	1	14.00	6.00	15.00
	2	12.00	5.00	13.33
	3	9.00	5.00	10.00
	4	9.00	5.00	10.00
25	5 & Over	6.38	1.84	7.25
30		5.83	1.27	6.63
35		4.73	1.15	5.38
40		3.63	0.86	4.13
45		2.53	0.58	2.88
50		1.98	0.29	2.25
55		1.93	0.29	2.19
60	1.65	0.29	1.88	

Actuarial Assumptions Used for the Valuation

Medicare coverage was assumed to be available for all covered employees on attainment of age 65.

Opt-Out Assumption: Based on information provided by the County, 10% of General members and 5% of Sheriffs and MTB members who retire from County employment are assumed to elect waiver payments (currently \$2,000 per year) in lieu of traditional health care coverage. Of those electing health care coverage, 60% of General members, 70% of Sheriffs, and 50% of MTB members were assumed to elect two-person health care coverage at retirement.

Spousal Coverage: 100% of both males and females are assumed to have spouse coverage continue after the member's death.

Deferred Retirement Option Plan (DROP) Participation: General County employees who participate in the DROP are assumed to stay in the Plan for 5 years. All other Plan member employees are assumed to stay in the DROP for 4 years before retiring. Additionally, for current employees who may become eligible to enter the DROP, it was assumed that 65% of General members and Sheriffs would elect to enter the DROP while 35% would retire directly from County employment. For MTB members, 50% were assumed to elect to enter the DROP while 50% would retire directly from County employment.

DROP Beneficiary Data: Beneficiary data provided for DROP members in the 2019 valuation data was used as provided. For any beneficiaries in the 2019 valuation data who were not provided with beneficiary information, the 2018 valuation data was used if available.

Other: Plan liabilities were loaded by 25% to account for the fluctuation in medical and prescription drug claims volatility.

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.

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.

Annual Required Contribution (ARC) or Actuarially Determined Contribution (ADC). The ARC is the normal cost plus the portion of the unfunded actuarial accrued liability to be amortized in the current period. The ARC is an amount that is actuarially determined in accordance with the requirements 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 liability.

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.

Medical Trend Rate (Health Inflation). The increase in the plan's cost over time. Trend includes all elements that may influence a plan's cost, assuming that enrollments and the plan benefits do not change. 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.



Glossary

Other Postemployment Employee Benefits (OPEB). OPEB are postemployment benefits other than pensions. OPEB generally takes the form of health insurance and dental, vision, prescription drugs 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 accrued liability.”

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

SECTION E

SUMMARY OF BENEFIT PROVISIONS

Summary of Benefits as of December 31, 2019

Regular Retirement

All Groups Coverage begins the first of the month following retirement date. Please refer to pages E-3 through E-7 for details.

Deferred Retirement

All Groups Coverage begins the first of the month the age requirement is met and retirement is applied for. Please refer to pages E-3 through E-7 for details.

Disability Retirement

All Groups Coverage begins when Retirement System disability pension begins, if the service requirements for healthcare eligibility are met. Please refer to pages E-3 through E-7 for details.

Death-in-Service

All Groups Coverage for surviving spouse is based on hire date, receipt of Retirement System survivor pension, and satisfaction of the service requirements by the employee. Please refer to pages E-3 through E-7 for details.

Death After Retirement

All Groups Spouse may be covered based on hire date and receipt of retiree's pension due to optional pension election. Assumes the service requirements are met. Please refer to pages E-3 through E-7 for details.

Retiree Premium Payments

All Groups General County employees hired on or after January 1, 2012 and certain Sheriff's department employees hired on or after June 1, 2013 will have a monthly premium payment in retirement equal to payments made by employees. Currently, \$0 for a single contract and \$100 per month for a two-person contract. Martha T Berry employees currently have no premium payments.



Summary of Benefits as of December 31, 2019

Retiree Contribution

All Groups

Retirees pay for 25% of their dental and vision coverage. Dental and vision coverage for spouse or other coverages may be offered but retiree must pay 100% of the cost. Employees hired after January 1, 2012 will not be eligible for County paid post-retirement benefits for a spouse. Retirees in this category will have the option of paying for 100% of the spouse's health coverage under the County group health plan. There shall be no contribution by the Employer for this option.

Limitations

All Groups

Coverages supplement Medicare once retiree and/or spouse are eligible for Medicare. Medicare eligible retirees must apply for both Part A & B.

Bonus Payment

All Groups

A retiree may waive County paid medical and prescription drug benefits and receive a \$2,000 annual payment. Waiver does not affect dental and optical benefits.

Other

All Groups

Retiree health plan (medical and prescription drug) coverage options available to individuals who retire or "DROP" on or after November 1, 2013 will be the same health plan options available to current employees.

The retiree health plan is closed to new County employees hired on or after January 1, 2016. New County employees will receive retiree health benefits from a defined contribution type retiree health plan and will not become members of this plan.



**MACOMB COUNTY RETIREE HEALTH CARE PLAN
GENERAL COUNTY EMPLOYEES HIRED BEFORE 2006⁺**

Employee Group (Group Number)	Spouse Coverage		County Paid Coverage for Retiree/Spouse								Employer Paid Portion of Retiree Medical Benefits
	While Retiree is Alive	After Retiree's Death	Eligibility for Benefits	Retiree Deferred Retirement #	Spouse Deferred Retirement #	DROP Eligible @	Disability Retirement (Retiree Coverage)		Disability Retirement (Spouse Coverage)		
							(Duty)	(Non Duty)	(Duty)	(Non Duty)	
0,2,3,6,8,9,10,11,12,13,15,16,18,19 21,24,25,27,28,30,43,44,88	Yes	Yes* ^	Age 60 w/8 years Rule of 70 (min age 50)	Yes	Yes*	Yes	Yes	Yes	Yes*	Yes*	100%

**MACOMB COUNTY RETIREE HEALTH CARE PLAN
GENERAL COUNTY EMPLOYEES HIRED AFTER 2006 BUT BEFORE 2012**

Employee Group (Group Number)	Spouse Coverage		County Paid Coverage for Retiree/Spouse								Employer Paid Portion of Retiree Medical Benefits
	While Retiree is Alive	After Retiree's Death	Eligibility for Benefits	Retiree Deferred Retirement #	Spouse Deferred Retirement #	DROP Eligible @	Disability Retirement (Retiree Coverage)		Disability Retirement (Spouse Coverage)		
							(Duty)	(Non Duty)	(Duty)	(Non Duty)	
0,2,3,6,8,9,10,11,12,13,15,16,18,19 21,24,25,27,28,30,43,44,88	Yes	Yes* ^	Age 60 w/ 15 years Age 55 w/25 yrs	Yes	Yes*	No	Yes	Yes	Yes*	Yes*	100%

at time of retirement with receipt of monthly pension benefit

* as long as spouse is receiving survivors benefit

+ Includes people hired before 2002 or vested by various dates in 2009, also includes people hired after 2001 and vested by 12/31/2012

^ Includes duty death

@ must be vested on 12/31/2012 to be eligible for DROP



**MACOMB COUNTY RETIREE HEALTH CARE PLAN
GENERAL COUNTY EMPLOYEES HIRED ON OR AFTER JANUARY 1, 2012**

Employee Group (Group Number)	Spouse Coverage		County Paid Coverage for Retiree/Spouse								Employer Paid Portion of Retiree Medical Benefits
	While Retiree is Alive	After Retiree's Death	Eligibility for Benefits	Retiree Deferred Retirement #	Spouse Deferred Retirement #	Duty Death (Spouse Coverage)	Disability Retirement (Retiree Coverage)		Disability Retirement (Spouse Coverage)		
							(Duty)	(Non Duty)	(Duty)	(Non Duty)	
General Non Union (00)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
UAW Local 889 Animal Shelter (02)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
AFSCME Local 411 (03)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
Macomb County Environmental Health Association (06)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
Teamsters Local 214 Court Reporters (08)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
International Union of Operating Engineers (Boiler Operators) (09)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
TPOAM Circuit Court Officers (10)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
MNA Unit Health Department (11)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
UAW Local 412 Unit 49 Information Technology (12)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
UAW Local 889 Specialized Offices (13)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
Building Trades Association (15)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
UAW Local 412 Unit 46 Assistant Prosecutors (16)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
Teamsters Local 214 FOC Circuit Court (18)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
UAW Local 412 General (19)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
POAM JJC (21)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
UAW Local 889 MCCSA (24)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
UAW Local 412 Unit 75 Supervisors (25)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
TPOAM Juvenile Court & Justice Center Employees (28)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
UAW Local 412 Unit 95 (30)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
UAW Local 889 Probate Court/Corporation Counsel (43)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
UAW Local 412 Unit 98 MCCSA Professionals (44)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
AFSCME Council 25 (District Court Employees) (22) @	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
TPOAM Macomb County Senior Service Employees Association (27)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
AFSCME Local 6091 (Head Start Teachers) (29)@	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%
General County Part Time employees (88)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%

* Coverage is available for an eligible spouse at the retiree's expense, no County paid benefit is available.

At time of retirement @ Now included in Group 03



**MACOMB COUNTY RETIREE HEALTH CARE PLAN
SHERIFF'S DEPARTMENT EMPLOYEES HIRED BEFORE JUNE 1, 2013[@]**

Employee Group (Group Number)	Spouse Coverage		County Paid Coverage for Retiree/Spouse								Employer Paid Portion of Retiree Medical Benefits
	While Retiree is Alive	After Retiree's Death	Eligibility for Benefits	Retiree Deferred Retirement #	Spouse Deferred Retirement	DROP Eligible	Disability Retirement (Retiree Coverage) (Duty) (Non Duty)		Disability Retirement (Spouse Coverage) (Duty) (Non Duty)		
POAM (01)	Yes	Yes* ^	25 years Age 60 w/8yrs	Yes	Yes*	Yes	Yes	Yes	Yes*	Yes*	100%
POAM Deputies (07)	Yes	Yes* ^	Age 60 w/8yrs 25 & out	Yes	Yes*	Yes	Yes	Yes	Yes*	Yes*	100%
POAM Dispatchers (07)	Yes	Yes* ^	Age 60 w/8yrs 25 & out	Yes	Yes*	Yes	Yes	Yes	Yes*	Yes*	100%
POLC Captains (20)	Yes	Yes* ^	25 years Age 60 w/8yrs	Yes	Yes*	Yes	Yes	Yes	Yes*	Yes*	100%+
Corrections Deputies (26)	Yes	Yes* ^	Age 60 w/8yrs 25 & out	Yes	Yes*	Yes	Yes	Yes	Yes*	Yes*	100%+

**MACOMB COUNTY RETIREE HEALTH CARE PLAN
SHERIFF'S DEPARTMENT EMPLOYEES HIRED ON OR AFTER JUNE 1, 2013[&]**

Employee Group (Group Number)	Spouse Coverage		County Paid Coverage for Retiree/Spouse								Employer Paid Portion of Retiree Medical Benefits
	While Retiree is Alive	After Retiree's Death	Eligibility for Benefits	Retiree Deferred Retirement #	Spouse Deferred Retirement #	DROP Eligible	Disability Retirement (Retiree Coverage) (Duty) (Non Duty)		Disability Retirement (Spouse Coverage) (Duty) (Non Duty)		
POAM Command (01)	No	No^	25 years 60/15	Yes	No	No	Yes	Yes	No	No	100%
POAM Deputies (07)	No	No^	25 years 60/15	Yes	Yes	No	Yes	Yes	No	No	100%
POAM Dispatchers (07)	No	No^	25 years 60/15	Yes	Yes	No	Yes	Yes	No	No	100%
POLC Captains (20)	No	No^	25 years 60/15	Yes	Yes	No	Yes	Yes	No	No	100%+
Corrections Deputies (26)	No	No^	25 years 60/15	Yes	Yes	No	Yes	Yes	No	No	100%+

* as long as spouse is receiving survivors benefit

at time of retirement with receipt of monthly pension benefit

@ hired before October 1, 2008

^ Includes duty death

+ Employer paid portion of retiree health benefits for retiree will be equal to benefit provided to current employees except for divisions 01 and 07 (retiree pays for part of benefit)

& Hired on/after 10/1/2008

Note: retiree health coverage available to the retiree will be equal to the coverage available to current employees for those retiring or DROPPing after 11/1/2013



**MACOMB COUNTY RETIREE HEALTH CARE PLAN
MTB EMPLOYEES HIRED BEFORE JANUARY 1, 2012**

Employee Group (Group Number)	Spouse Coverage		County Paid Coverage for Retiree/Spouse								Employer Paid Portion of Retiree Medical Benefits
	While Retiree is Alive	After Retiree's Death	Eligibility for Benefits	Retiree Deferred Retirement #	Spouse Deferred Retirement #	Duty Death (Spouse Coverage)	Disability Retirement (Retiree Coverage)		Disability Retirement (Spouse Coverage)		
							(Duty)	(Non Duty)	(Duty)	(Non Duty)	
MNA - RNs (04)	Yes	Yes*	Age 60 w/8yrs Age 55 w/25 yrs	Yes	Yes	Yes	Yes	Yes	Yes*	Yes*	100%
Service Employees International Union - LPNs (05)	Yes	Yes*	Age 60 w/8yrs Age 55 w/25 yrs	Yes	Yes	Yes	Yes	Yes	Yes*	Yes*	100%
AFSCME 411 (14) Hired before 1/1/2002	Yes	Yes*	Age 60 w/8yrs Rule of 70 min age (50)	Yes	Yes	Yes	Yes	Yes	Yes*	Yes*	100%
AFSCME 411 (14) Hired on /after 1/1/2002 & before 1/1/2012	Yes	Yes*	Age 60 w/8yrs Age 55 w/25 yrs	Yes	Yes	Yes	Yes	Yes	Yes*	Yes*	100%
MTB UAW Supervisors (42) Hired before 1/1/2002	Yes	Yes*	Age 60 w/8yrs Rule of 70 min age (50)	Yes	Yes	Yes	Yes	Yes	Yes*	Yes*	100
MTB UAW Supervisors (42) Hired on /after 1/1/2002 & before 1/1/2012	Yes	Yes	Age 60 w/8yrs Age 55 w/25 yrs	Yes	Yes	Yes	Yes	Yes	Yes*	Yes*	100%
MTB Non Union Employees (40) Hired before 1/1/2002 or vested before 2/26/2009	Yes	Yes*	Age 60 w/8yrs Rule of 70 min age (50)	Yes	Yes	Yes	Yes	Yes	Yes*	Yes*	100%
MTB Non Union Employees (40) Hired on /after 1/1/2002 & before 1/1/2012	Yes	Yes*	Age 60 w/ 15 years Age 55 w/25 yrs	Yes	Yes	Yes	Yes	Yes	Yes*	Yes*	100%

* As long as spouse is receiving survivors benefit.

At time of retirement.

For individuals noted above (except Div. 40) hired after 2005, age 60 with 15 years of service is needed for benefit eligibility.

Division 4,5,14 and 42 employees hired after 1/1/2010 are not eligible for employer funded retiree health benefits.



**MACOMB COUNTY RETIREE HEALTH CARE PLAN
MTB EMPLOYEES HIRED ON OR AFTER JANUARY 1, 2012**

Employee Group (Group Number)	Spouse Coverage		County Paid Coverage for Retiree/Spouse								Employer Paid Portion of Retiree Medical Benefits	
	While Retiree is Alive	After Retiree's Death	Eligibility for Benefits	Retiree Deferred Retirement #	Spouse Deferred Retirement #	Duty Death (Spouse Coverage)	Disability Retirement (Retiree Coverage) (Duty) (Non Duty)		Disability Retirement (Spouse Coverage) (Duty) (Non Duty)			
MNA - RNs (04)	No	No	NA	No	No	No	No	No	No	No	No	NA
Service Employees International Union - LPNs (05)	No	No	NA	No	No	No	No	No	No	No	No	NA
AFSCME 411 (14)	No	No	NA	No	No	No	No	No	No	No	No	NA
MTB Non Union Employees (40)	No*	No*	Age 60 w/15yrs Age 55 w/25 yrs	Yes	No*	No*	Yes	Yes	No*	No*	100%	
MTB UAW Supervisors (42)	No	No	NA	No	No	No	No	No	No	No	NA	

* Coverage is available for an eligible spouse at the retiree's expense, no County paid benefit is available.
Employee is vested after completing 15 years of service, spouse at the time of retirement is covered.

