

December 7, 2022

PERSONAL & CONFIDENTIAL

Linda Morrison  
City of Battle Creek  
10 North Division Street  
Battle Creek, MI 49014

RE: City of Battle Creek Retiree Health Care Plan

Dear Linda:

Transmitted via email, this is a **Revised** copy of your OPEB accounting report for the fiscal year ending June 30, 2022. This revision reflects the correct counts for active participants and revised calculations based on the corrected counts. This information is intended to assist you in complying with Governmental Accounting Standards Board Statement No. 74 (GASB 74) Financial Reporting for Postemployment Benefit Plans Other than Pension Plans, and Statement No. 75 (GASB 75) Accounting and Financial Reporting for Postemployment Benefits Other than Pensions.

The State of Michigan under Public Act (PA) 202 requires that Other Post-Employment Benefit (OPEB) Plans covering 100 or more members have a peer review or change of actuaries once every 8 years. In addition, the Act requires an actuarial study be performed once every 5 years. Watkins Ross satisfies those requirements by virtue of having three credentialed OPEB actuaries on staff providing peer review for each other and, when necessary, rotating certification of our OPEB actuarial valuations. Additionally, Watkins Ross completes full actuarial valuations for all our OPEB Plan clients once every two years including an analysis of the sources of actuarial gains and losses (actuarial experience study) and evaluates whether changes in assumptions are warranted (see Comments section of this report for more detail).

If you have any questions about this report, please call me at (616) 742-9218.

Sincerely,



Joey Shackelford ASA, MAAA  
Actuary

Enclosure

# City of Battle Creek Retiree Health Care Plan

## *Revised* Accounting Report

for the Period Ending June 30, 2022  
under GASB Statement 74 & 75



WATKINS ROSS | 200 OTTAWA AVE N.W. | SUITE 600 | GRAND RAPIDS, MI 49503 | 616.456.9696

Report presented by:



December 2022

**CONTENTS**

**INTRODUCTION AND CERTIFICATION .....1**

**COMMENTS .....2**

**PLAN DESCRIPTION .....3**

**ASSUMPTIONS AND METHODS .....4**

**RECONCILIATION AND RECOGNITION OF NET OPEB LIABILITY .....5**

    Changes in the Net OPEB Liability ..... 5

    Net OPEB Liability – Discount and Trend Rate Sensitivities ..... 5

    OPEB Expense ..... 6

    OPEB Plan Fiduciary Net Position ..... 6

    Deferred Inflows and Outflows of Resources Related to OPEB Plan ..... 6

    Reconciliation of Net OPEB Liability ..... 7

    Total OPEB Liability by Participant Status ..... 7

**SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION .....8**

    Description of Actuarially Determined Contributions ..... 8

    State of Michigan Public Acts 530 and 202 Information ..... 9

    Changes in Net OPEB Liability and Related Ratios ..... 10

    Assumptions and Methods for Calculation of Actuarially Determined Contribution ..... 12

    Assumptions used for PA 202 Reporting ..... 14

    Schedule of Difference between Actual and Expected Experience ..... 15

    Schedule of Changes in Assumptions ..... 15

    Schedule of Differences between Projected and Actual Earnings on OPEB Plan Investments ..... 15

    Total Deferred Outflow/(Inflow) of Resources ..... 15

**TRUSTEE AND FORM 5720 INFORMATION .....16**

**SUMMARY OF PLAN PROVISIONS .....17**

**SUMMARY OF PLAN PROVISIONS .....18**

**GLOSSARY .....19**

## INTRODUCTION AND CERTIFICATION

The schedules included in this report have been prepared in order to provide the information necessary to comply with Governmental Accounting Standards Board (GASB) Statement Nos. 74 and 75. This information may, at the discretion of management of the plan sponsor and its auditor, be used for the preparation of its financial statements. The calculations herein have been made based on our understanding of GASB 74 and 75 and may be inappropriate for other purposes.

The calculations summarized in this report involve actuarial calculations that require assumptions about future events. We believe that the assumptions used in the report are within the range of possible assumptions that are reasonable and appropriate for the purposes for which they have been used. However, other assumptions are also reasonable and appropriate, and their use would produce different results.


This report contains additional information and details related to plan provisions and recommended contribution calculations.

This report was prepared based on participant data and asset values as reported to us by the plan sponsor. Watkins Ross relied upon the data as submitted, and has no reason to believe that any information, which would have a material effect on the results of this valuation, was not considered in the preparation of the report.

The actuary certifying this report represents himself as meeting the Qualification Standards of the American Academy of Actuaries to render actuarial opinions contained in the report.


**Reviewed by:**

**Prepared & Certified by:**



---

Glen W. Bradley  
Senior Pension Analyst



---

Joseph Shackelford, ASA, MAAA  
Actuary

## COMMENTS

### **Purpose of Governmental Accounting Standards Board (GASB) Reporting**

The objective of GASB is to provide guidelines and requirements for accounting and financial reporting by state and local governments for postemployment benefits other than pensions (OPEB). This statement establishes standards for recognizing and measuring liabilities, deferred inflows and outflows of resources and methods and assumptions that are required to be used to project benefit payments and discount those payments to their actuarial present value.

### **State of Michigan Public Act 202**

Public Act 202 (PA 202) was drafted to address the underfunded status of pension and retiree healthcare plans of local governments in Michigan. Accordingly, PA 202 included transparency and funding requirements. In addition, in order that the plans' funded status be reported on a consistent basis, Uniform Assumptions were published. While all of the Uniform Assumptions have a sound and reasonable basis, some might not be appropriate for each plan and therefore may be different than what is used for funding. Additionally, some of the assumptions may differ from what is required for reporting under GASB.

### **PA 202 further requires that plans covering 100 or more Plan Members – active and inactive:**

- 1. At least every 5 years, the local unit of government (city, village, township, county, county road commission or other districts, authorities created by the state or 1 or more these entities) shall have an actuarial experience study conducted by the plan actuary for each retirement system of the local unit of government and**
- 2. At least every 8 years, the local unit of government shall do at least 1 of the following:**
  - a. Have a peer actuarial audit conducted by an actuary that is not the plan actuary**
  - b. Replace the plan actuary**

**Actuarial Experience Study** – A 5-year analysis will be prepared for the fiscal year ending June 30, 2023. Watkins Ross completes full actuarial valuations for all our OPEB Plan clients once every two years including an analysis of the sources of actuarial gains and losses (actuarial experience study) and evaluates whether changes in assumptions are warranted.

### **Actuarial gains and losses analysis:**

There was an actuarial gain (decrease in liability) of \$14,402,629, primarily due to Medicare premiums 26% lower than expected, as well as demographic changes. The combination of actuarial assumption changes, described in the "Assumptions and Methods for Calculation of Actuarially Determined Contribution" section of this report, generated a decrease in liability of \$14,205,569. In particular, updating the single equivalent discount rate from 2.30% to 5.36%, makes up 96% of the decrease due to assumption changes.

There were also two plan changes that went into effect since the last valuation. Effective April 1, 2022, participating Police retiree members are eligible for an increase in the subsidy offered, increasing it from \$8,000 up to \$10,000 per year prorated for service, causing a slight increase in liability. Additionally, effective January 1, 2021, the members covered under Fire Act 312 will no longer receive full payment of healthcare, but instead are provided a Stipend for Single, Two-person or Family coverage - The City is not committed to benefits beyond 2021. These two plan changes combined generated a net decrease in liability of \$17,240,898.

### **Peer Review and rotation of Certifying Actuary**

Current year Certifying Actuary: Joey Shackelford  
Peer reviewed/change in Actuary: 06/30/2022

## PLAN DESCRIPTION

### Summary of Significant Accounting Policies

For purposes of measuring the net Other Post-Employment Benefits (OPEB) liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expenses, information about the fiduciary net position of the City of Battle Creek Retiree Health Care Plan and additions to/deductions from the City's fiduciary net position have been determined on the same basis as they are reported by the City of Battle Creek. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

### Plan Description

**City of Battle Creek Retiree Health Care Plan** is a single employer plan established and administered by **City of Battle Creek** and can be amended at its discretion.

### Benefits Provided

A summary of the benefits provided is available in the Plan Provisions section of the report.

### Summary of Plan Participants

As of June 30, 2022, Retirement Plan membership consisted of the following:

	General	Police & Fire	Total
Active members	140	179	319
Inactive members	0	0	0
Retirees and beneficiaries	142	160	302
Total members	282	339	621

### Contributions

The City of Battle Creek Retiree Health Care Plan was established and is being funded under the authority of the City and under agreements with the unions representing various classes of employees. The plan sponsor's funding policy is that the police members contribute 1% of pay and the City contributes 3% of pay during active employment. Fire members contribute 3.75% of pay while fire retirees hired after May 14, 2007 no longer make contributions into the 149 trust. In addition, the plan sponsor will make projected trust contributions as reported while assets are drawn down to pay benefits. There are no long-term contracts for contributions to the plan.

## ASSUMPTIONS AND METHODS

The City of Battle Creek's OPEB liability was measured as of June 30, 2022.

### Actuarial Assumptions

The total OPEB liability was determined by an actuarial valuation as of June 30, 2022. The following actuarial assumptions were used in the measurement:

Inflation	2.50%
Salary increases	4.00% (for purpose of allocating liability)
Investment rate of return	7.00% (including inflation)
20-year Aa Municipal bond rate	4.09% (S&P Municipal Bond 20-Year High Grade Rate Index)
Mortality	2010 Public General Employees and Healthy Retirees, Headcount weighted
Improvement Scale	MP-2021

The long-term expected rate of return on retirement plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of retirement plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the retirement plan's target asset allocation are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	60.0%	4.50%
Global Fixed Income	20.0%	2.00%
Private Assets	20.0%	7.00%

The sum of each target allocation times its long-term expected real rate, plus inflation, is 7.00%.

### Discount Rate

The discount rate used to measure the total OPEB liability was **5.36%**. The projection of cash flows used to determine the discount rate included reported, projected contributions while assets are drawn down to pay retiree benefits. Based on these assumptions, the retirement plan's fiduciary net position was projected to be sufficient to make projected future benefit payments of current plan members through 2047 – the cross-over point. For projected benefits that are covered by projected assets, the long-term expected rate was used to discount the projected benefits. From the year that benefit payments were not projected to be covered by the projected assets (the "depletion date"), projected benefits were discounted at a discount rate reflecting a 20-year AA/Aa tax-exempt municipal bond yield. A single equivalent discount rate that yields the same present value of benefits is calculated. This discount rate is used to determine the Total OPEB Liability. As of June 30, 2021 the discount rate used to value OPEB liabilities was 2.30%.



## RECONCILIATION AND RECOGNITION OF NET OPEB LIABILITY

### Changes in the Net OPEB Liability

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
<b>Balance at June 30, 2021</b>	\$73,098,630	\$8,203,030	\$64,895,600
<b>Changes during the Year</b>			
Service Cost	1,763,720		1,763,720
Interest	1,703,634		1,703,634
Experience (Gains)/Losses	(14,402,629)		(14,402,629)
Change in plan terms	(17,240,898)		(17,240,898)
Change in actuarial assumptions	(14,205,569)		(14,205,569)
Contributions to OPEB trust		357,288	(357,288)
Contributions/benefit from general operating funds		1,248,235	(1,248,235)
Employee Contributions		437,388	(437,388)
Net Investment Income		(710,476)	710,476
Benefit Payments;			
Including Refunds of Employee Contributions	(1,582,598)	(1,582,598)	0
Administrative Expenses		(15,159)	15,159
Other Changes		0	0
<b>Total Changes</b>	<b>(43,964,340)</b>	<b>(265,322)</b>	<b>(43,699,018)</b>
<b>Balance at June 30, 2022</b>	<b>\$29,134,290</b>	<b>\$7,937,708</b>	<b>\$21,196,582</b>

### Net OPEB Liability – Discount and Trend Rate Sensitivities

The following presents the net OPEB liability (NOL) of the City, calculated using trend and discount rates 1% higher and lower than base assumptions:

Discount	1% Decrease	Current Rate	1% Increase
Total OPEB Liability	\$32,704,570	\$29,134,290	\$26,180,046
Plan Fiduciary Net Position	7,937,708	7,937,708	7,937,708
Net OPEB Liability	\$24,766,862	\$21,196,582	\$18,242,338
Trend	1% Decrease	Current Rate	1% Increase
Total OPEB Liability	\$28,447,337	\$29,134,290	\$29,794,456
Plan Fiduciary Net Position	7,937,708	7,937,708	7,937,708
Net OPEB Liability	\$20,509,629	\$21,196,582	\$21,856,748

## RECONCILIATION AND RECOGNITION OF NET OPEB LIABILITY

### OPEB Expense

Below are the components of the Total OPEB Expense:

	Fiscal Year Ending 06/30/2022
Service Cost	\$1,763,720
Interest on Total OPEB Liability	1,703,634
Experience (Gains)/Losses	(2,847,780)
Changes in Plan Terms	(17,240,898)
Changes in Assumptions	(3,517,276)
Employee Contributions	(437,388)
Projected Earnings on OPEB Plan Investments	(619,282)
Investment Earnings (Gains)/Losses	122,480
Administrative Expenses	15,159
Other Changes in Fiduciary Net Position	0
<b>Total OPEB Expense</b>	<b>\$(21,057,631)</b>

### OPEB Plan Fiduciary Net Position

The OPEB Plan Fiduciary Net Position as of June 30, 2022 is \$7,937,708.

### Deferred Inflows and Outflows of Resources Related to OPEB Plan

	Deferred Outflows Of Resources	Deferred Inflows Of Resources
Experience (Gains)/Losses	0	12,597,483
Changes of Assumptions	5,689,899	17,347,574
Investment Earnings (Gains)/Losses	446,527	0
<b>Total</b>	<b>\$6,136,426</b>	<b>\$29,945,057</b>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year Ended June 30,	Amount Recognized
2023	\$(6,251,884)
2024	(5,559,708)
2025	(3,521,595)
2026	(4,700,751)
2027	(3,774,693)
Thereafter	0

## RECONCILIATION AND RECOGNITION OF NET OPEB LIABILITY

### Reconciliation of Net OPEB Liability

	Net OPEB Liability
Net OPEB Liability June 30, 2021	\$64,895,600
Total OPEB expense	(21,057,631)
Contributions	(2,042,911)
Change in deferred outflows of resources	(1,649,962)
Change in deferred inflows of resources	(19,385,902)
<b>Net OPEB Liability June 30, 2022</b>	<b>\$20,759,194</b>

### Total OPEB Liability by Participant Status

	Total OPEB Liability
Active participants	\$9,454,617
Inactive participants	0
Retirees and beneficiaries	19,679,673
<b>Total OPEB Liability</b>	<b>\$29,134,290</b>

## SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

### Description of Actuarially Determined Contributions

Although not required as part of GASB reporting, we have included an Actuarially Determined Contribution in order to provide information for funding. This recommended contribution is designed to eventually fund your plan enough that you can pay retiree benefits directly from the trust instead of general operating funds. The amortization period is based on average future working years for active employees.

Actuarially Determined Contribution (ADC) <sup>1</sup>	Fiscal Year Ending June 30,	
	2023	2022
Discount rate	5.36%	2.30%
Amortization period	11 years	10 years
Amortization method	Level % of pay	Level % of pay
Normal cost	508,405	1,763,720
Amortization of Net OPEB Liability	2,054,560	6,154,325
Interest to end of year	137,375	182,115
Total ADC	\$2,700,340	\$8,100,160

PA 202 was issued by the State of Michigan and requires the calculation of other “contribution” amounts. These are

1. The Actuarially Determined Contribution (ADC) using Assumptions for financial reporting and
2. The minimum required amount to be deposited into an OPEB trust

The first of these contributions as shown above, \$8,100,160, is an amount required to be reported to the State of Michigan and may be used to determine whether a Corrective Action Plan (CAP) must be adopted if one hasn’t yet been implemented. *It is not a required contribution.*

The second of these numbers is the actual minimum amount the State of Michigan requires you to deposit into a trust and it is based on the normal cost (actuarially calculated) for those covered by your plan and hired after June 30, 2018. This amount is \$70,436 for 2022 and is projected to be \$86,904 for 2023. Accordingly, to the extent past contributions have been sufficient to cover the past service liability and normal cost for those hired after June 30, 2018, this contribution requirement has been met.

Minimum funding rules under PA 202 require that retiree healthcare benefits continue to be paid from general operating funds until plan funds are sufficient to pay benefits. That amount was \$1,248,235 for 2022.

---

<sup>1</sup> ADC for 2022 and 2023 is based on actuarial assumptions consistent with reporting as of June 30, 2021, and June 30, 2022, respectively.

## SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

### State of Michigan Public Acts 530 and 202 Information

<b>Financial information</b>	<b>2022</b>
Assets (Fiduciary net position)	7,937,708
Liabilities (Total OPEB Liability)	29,134,290
Funded ratio for the Plan Year	27.25%
Actuarially Determined Contribution	\$8,100,160
Is ADC calculated in compliance with No. Letter 2018-3?	Yes

<b>Membership</b>	<b>2022</b>
Number of active members	319
Number of inactive members	0
Number of retirees and beneficiaries	302
Premiums paid on behalf of the retirants	\$1,248,235

<b>Investment Performance</b>
This information is available from the Investment Manager

<b>Actuarial Assumptions</b>	<b>2022</b>
Actuarially assumed rate of investment return	7.00%
Discount rate	5.35%
Amortization method used for funding unfunded liability	Level % of Pay
Amortization period used for funding unfunded liability	10 years
Is each division closed to new employees	No
Healthcare inflation assumption next year	7.25%
Healthcare inflation assumption - long term	4.50%

<b>Uniform Assumptions</b>	<b>2022</b>
Actuarial value of assets using uniform assumptions	7,937,708
Actuarial accrued liability using uniform assumptions	36,405,576
Funded ratio using uniform assumptions	21.80%
Actuarially Determined Contribution (ADC) using uniform assumptions	\$9,164,067

## SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

### Changes in Net OPEB Liability and Related Ratios

Fiscal Year Ending	06/30/2022	06/30/2021	06/30/2020
<b>Total OPEB Liability</b>			
Service Cost	\$1,763,720	\$1,624,371	\$1,217,385
Interest	1,703,634	1,903,031	2,024,859
Changes of Benefit Terms	(17,240,898)	0	0
Difference between Expected and Actual Experience	(14,402,629)	(190,185)	(271,616)
Change of Assumptions	(14,205,569)	2,464,152	5,092,881
Benefit Payments (Including Refunds of Employee Contributions)	(1,582,598)	(1,572,949)	(1,875,778)
Net Change in Total OPEB Liability	(43,964,340)	4,228,420	6,187,731
Total OPEB Liability – Beginning	73,098,630	68,870,210	62,682,479
Total OPEB Liability – Ending (a)	\$29,134,290	\$73,098,630	\$68,870,210
<b>Plan Fiduciary Net Position</b>			
Contributions to OPEB trust	\$357,288	\$1,334,149	\$1,410,390
Contributions/benefit payments made from general operating funds	1,248,235	370,676	390,550
Net Investment Income	(710,476)	1,772,773	147,822
Benefit Payments (Including Refunds of Employee Contributions)	(1,582,598)	(1,572,949)	(1,875,778)
Administrative Expenses	(15,159)	(13,816)	(11,266)
Other	0	0	0
Net Change in Fiduciary Net Position	(265,322)	1,890,833	61,718
Plan Fiduciary Net Position – Beginning	8,203,030	6,312,198	6,250,480
Plan Fiduciary Net Position – Ending (b)	7,937,708	8,203,031	6,312,198
<b>Net OPEB Liability – Ending (a)-(b)</b>	\$21,196,582	\$64,895,599	\$62,558,012
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	27.25%	11.22%	9.17%
Covered Employee Payroll	\$25,809,821	\$25,614,713	\$25,494,729
Net OPEB Liability as Percentage of Payroll	82.1%	253.4%	245.4%
<b>Actuarially Determined Contribution</b>	\$8,100,160	\$7,295,382	\$5,676,569
Employer Contribution/benefit payments	(1,605,523)	(1,334,149)	(1,410,390)
Contribution Deficiency/(Excess)	\$6,494,637	\$5,961,233	\$4,266,179
ADC as a Percentage of Covered Payroll	31.4%	28.5%	22.3%
Employer Contribution as a Percentage of Covered Payroll	6.2%	5.2%	5.5%

## SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

### Changes in Net OPEB Liability and Related Ratios

Fiscal Year Ending	06/30/2019	06/30/2018	06/30/2017
<b>Total OPEB Liability</b>			
Service Cost	\$1,503,153	\$2,444,926	\$2,866,687
Interest	2,087,663	2,752,781	2,366,860
Changes of Benefit Terms	0	0	0
Difference between Expected and Actual Experience	0	(1,747,090)	0
Change of Assumptions	4,524,282	(21,345,849)	(8,351,874)
Benefit Payments (Including Refunds of Employee Contributions)	(1,904,580)	(2,178,985)	(1,600,811)
Net Change in Total OPEB Liability	6,210,518	(20,074,217)	(4,719,138)
Total OPEB Liability – Beginning	56,471,961	76,546,178	81,265,316
Total OPEB Liability – Ending (a)	\$62,682,479	\$56,471,961	\$76,546,178
<b>Plan Fiduciary Net Position</b>			
Contributions to OPEB trust	\$1,446,699	\$1,734,099	\$1,204,642
Contributions/benefit payments made from general operating funds	318,750	439,777	228,042
Net Investment Income	177,435	365,451	807,558
Benefit Payments (Including Refunds of Employee Contributions)	(1,920,528)	(2,178,985)	(1,600,811)
Administrative Expenses	(12,876)	(14,677)	(10,920)
Other	0	0	0
Net Change in Fiduciary Net Position	9,480	345,665	628,511
Plan Fiduciary Net Position – Beginning	6,241,000	5,895,335	5,266,824
Plan Fiduciary Net Position – Ending (b)	6,250,480	6,241,000	5,895,335
<b>Net OPEB Liability – Ending (a)-(b)</b>	\$56,431,999	\$50,230,961	\$70,650,843
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	9.97%	11.05%	7.70%
Covered Employee Payroll	\$29,984,686	\$28,970,711	30,761,954
Net OPEB Liability as Percentage of Payroll	188.2%	173.4%	229.7%
<b>Actuarially Determined Contribution</b>	\$2,819,532	\$2,723,435	\$3,823,865
Employer Contribution/benefit payments	(1,446,699)	(1,734,099)	(1,024,642)
Contribution Deficiency/(Excess)	\$1,372,833	\$989,336	2,619,223
ADC as a Percentage of Covered Payroll	9.4%	9.4%	12.4%
Employer Contribution as a Percentage of Covered Payroll	4.8%	6.0%	3.9%

## SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

### Assumptions and Methods for Calculation of Actuarially Determined Contribution

**Valuation date** June 30, 2022

**Measurement date** June 30, 2022

**Reporting date** June 30, 2022

#### Actuarial Methods

Cost method Entry Age Normal (level percentage of compensation)

Asset valuation method Market value

#### Actuarial Assumptions

**Discount Rate** – 2.30% 2022 contribution; 5.36% for 2022 liability and 2023 contribution

Rationale – Blended rate based on long term expected return and the 20-year Aa Municipal Bond rate

**20-year Aa Municipal Bond Rate** – 4.09% (S&P Municipal Bond 20-Year High Grade Rate Index)

Rationale – Current bond rate (based on information published by S&P, LLC as of June 30, 2022)

**Salary Scale** – 4.00% (for purpose of allocating liability)

Rationale – Per employer experience and expectations

**Return on Plan Assets** – 7.00%

Rationale – Provided by investment manager

**Mortality Rates** – Public General and Public Safety 2010 Employee and Healthy Retiree, Headcount weighted, MP-2021 improvement

Rationale – Current mortality rates for municipalities

**Termination Rates** – Sample rates below

Years of Service	General Employees	Years of Service	General Employees
0	13.72%	5	4.83%
1	11.41	10	3.22
2	9.31	15	2.38
3	7.35	20	1.82
4	6.02	25+	1.54

Age	Police	Fire
25	4.00%	3.50%
30	3.68	2.90
35	3.16	1.50
40	1.88	0.60
45-50	1.40	0.50
55+	0.40	0.50

Rationale – Based on past employer experience



## SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

**Retirement Rates** – See rates below

Age	City Managers	General Other
50-54	20%	
55-56	20	20%
57-60	21	21
61-63	22	22
64	23	23
65-66	25	25
67	26	26
68	28	28
69	30	30
70+	100	100

Age	Police	IAFF	OSP	Service	Police	Fire
50			20%	25	60%	30%
51			15	26	30	15
52-56			10	27	30	15
57			15	28	30	15
58			25	29	20	15
59			30	30	20	50
60-65	35%	20%	100	31	20	40
66	25	15	100	32	20	30
67	20	10	100	33	20	20
68-71	15	10	100	34	20	20
72	15	15	100	35+	100	100
73	25	25	100			
74	30	30	100			
75+	100	100	100			

Rationale – Continued from prior valuations and checked against experience for reasonableness

**Disability Rates** – See rates below

Age	General	Police & Fire	
		Male	Female
20-30	0.02%	0.06%	0.08%
35	0.05	0.06	0.08
40	0.08	0.15	0.27
45	0.20	0.20	0.30
50	0.29	0.37	0.43
55	0.38	0.67	0.57
60	0.39	1.06	0.76
65	0.39	1.24	0.92

Rationale – Common to public employer plan valuations

## SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

**Marital Assumption** – 70% of active employees will have a covered spouse at retirement with females 3 years younger than males; Actual spouse data used for retirees

Rationale – Consistent with experience

**Claims Costs** – See monthly rates below

Plan	Single	Double	Comp	Medicare
Simply Blue-PPO	\$ 662.34	\$1,589.63		
Community Blue PPO2	1,019.72	2,447.30		
BCBS Traditional Plan	0.00	0.00	\$0.00	
Community Blue PPO 401(h)	999.42	1,541.74		
Medicare Advantage Plan				\$329.92

Rationale – Premium rates in effect as of the valuation date

**Utilization** – 90% of eligible employees will elect coverage at retirement; Actual coverage used for non-active

Rationale – A conservative estimate given the reported number of opt-out members

**Implicit Subsidy** – None

Rationale – Premiums for police and union are set such that pre-65 costs for those groups are expected to be fully covered by the amount charged

### Medical Trend

Pre-65: 7.25% graded down by 0.25% per year to an ultimate rate of 4.5%

Post-65: 5.5% graded down by 0.25% per year to an ultimate rate of 4.5%

Stipend: none

Rationale – Based on State of Michigan trend survey

### Data Collection

Date and form of data - All personnel and asset data was prepared by the plan sponsor or a representative and was generally relied upon as being correct and complete without audit by Watkins Ross

### Assumption changes since prior valuation

- Discount rate changed from 2.30% to 5.36%
- Salary Scale updated from 3.50% to 4.00%
- Mortality Improvement Scale updated from MP-2019 to MP-2021

## Assumptions used for PA 202 Reporting

**Salary Scale** – 3.00%

**Mortality Improvement Scale** – MP-2020

**Discount Rate** – 3.60%

All other assumptions are the same as used for GASB

## SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

### Schedule of Difference between Actual and Expected Experience

Year	Difference between expected and actual Experience	Recognition period (years)	Amount Recognized in Year Ended June 30,							Deferred Outflow of Resources	Deferred Inflow of Resources
			2022	2023	2024	2025	2026	2027	2028+		
2018	(1,747,090)	6.78	(257,614)	(257,614)	(201,405)	-	-	-	-	-	(459,019)
2019	-	6.78	-	-	-	-	-	-	-	-	-
2020	(271,616)	5.89	(46,090)	(46,090)	(46,090)	(41,166)	-	-	-	-	(133,346)
2021	(190,185)	4.36	(43,620)	(43,620)	(43,620)	(15,705)	-	-	-	-	(102,945)
2022	(14,402,629)	5.76	(2,500,456)	(2,500,456)	(2,500,456)	(2,500,456)	(2,500,456)	(1,900,349)	-	-	(11,902,173)
Net recognized in OPEB expense			<u>\$ (2,847,780)</u>	<u>\$ (2,847,780)</u>	<u>\$ (2,791,571)</u>	<u>\$ (2,557,327)</u>	<u>\$ (2,500,456)</u>	<u>\$ (1,900,349)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (12,597,483)</u>

### Schedule of Changes in Assumptions

Year	Changes in Assumptions	Recognition period (years)	Amount Recognized in Year Ended June 30,							Deferred Outflow of Resources	Deferred Inflow of Resources
			2022	2023	2024	2025	2026	2027	2028+		
2018	(21,345,849)	6.78	(3,147,520)	(3,147,520)	(2,460,730)	-	-	-	-	-	(5,608,250)
2019	4,524,282	6.78	667,121	667,121	667,121	521,556	-	-	-	1,855,798	-
2020	5,092,881	5.89	864,196	864,196	864,196	771,901	-	-	-	2,500,293	-
2021	2,464,152	4.36	565,172	565,172	565,172	203,464	-	-	-	1,333,808	-
2022	(14,205,569)	5.76	(2,466,245)	(2,466,245)	(2,466,245)	(2,466,245)	(2,466,245)	(1,874,344)	-	-	(11,739,324)
Net recognized in OPEB expense			<u>\$ (3,517,276)</u>	<u>\$ (3,517,276)</u>	<u>\$ (2,830,486)</u>	<u>\$ (969,324)</u>	<u>\$ (2,466,245)</u>	<u>\$ (1,874,344)</u>	<u>\$ -</u>	<u>\$ 5,689,899</u>	<u>\$ (17,347,574)</u>

### Schedule of Differences between Projected and Actual Earnings on OPEB Plan Investments

Year	Difference between expected and actual earnings on OPEB assets	Recognition period (years)	Amount Recognized in Year Ended June 30,							Deferred Outflow of Resources	Deferred Inflow of Resources
			2022	2023	2024	2025	2026	2027	2028+		
2018	46,530	5.00	9,306	-	-	-	-	-	-	-	-
2019	254,118	5.00	50,824	50,822	-	-	-	-	-	50,822	-
2020	286,479	5.00	57,296	57,296	57,295	-	-	-	-	114,591	-
2021	(1,304,488)	5.00	(260,898)	(260,898)	(260,898)	(260,896)	-	-	-	-	(782,692)
2022	1,329,758	5.00	265,952	265,952	265,952	265,952	265,950	-	-	1,063,806	-
Net recognized in OPEB expense			<u>\$ 122,480</u>	<u>\$ 113,172</u>	<u>\$ 62,349</u>	<u>\$ 5,056</u>	<u>\$ 265,950</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 1,229,219</u>	<u>\$ (782,692)</u>

### Total Deferred Outflow/(Inflow) of Resources

	Amount Recognized in Year Ended June 30,					
	2023	2024	2025	2026	2027	2028+
Total Deferred Outflow/(Inflow) of Resources	(6,251,884)	(5,559,708)	(3,521,595)	(4,700,751)	(3,774,693)	-

## TRUSTEE AND FORM 5720 INFORMATION

### Projected benefit payments and contributions

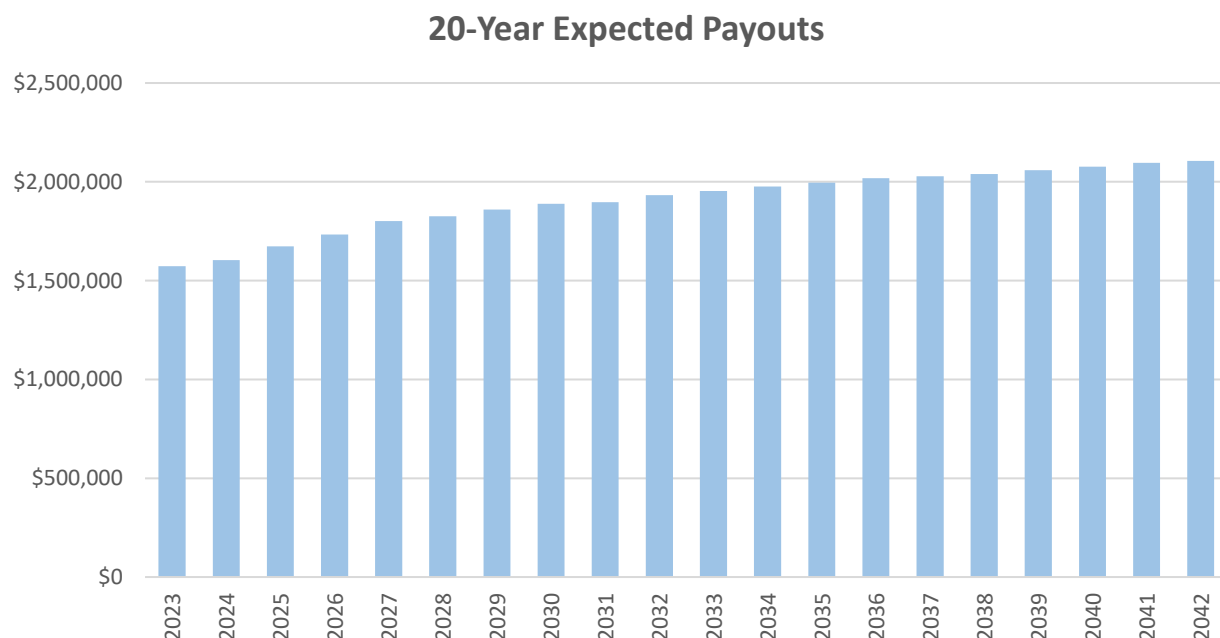
Form 5720 (the Form) – Corrective Action Plan Monitoring: Application for Certification of Compliance, Section 4 asks for supporting documentation that shows projected benefit payments and contributions as a percentage of projected governmental fund revenues over the next five years. A link to a spreadsheet is provided with the Form, and within the spreadsheet, there is a link to instructions on how to complete the spreadsheet.

To assist in completing that section of the Form, below is a table of benefit payments as shown for the current fiscal year and projected for the next four. In addition, if a Corrective Action Plan (CAP) has been adopted that includes scheduled contributions to an OPEB trust, those are shown for the same period as either reported to us or developed with assistance from Watkins Ross:

Fiscal Year	Total OPEB Benefit Payment Amount (All Systems)	Additional OPEB Contributions (All Systems)
2022	\$1,248,235	\$794,676
2023	1,573,089	371,579
2024	1,604,543	386,442
2025	1,673,739	401,900
2026	1,733,612	329,891

In addition to the benefit payments shown above, a graphic illustration of 20 years of projected benefit payments for the current group of covered lives is shown below. Plans open to new participants could see higher than expected payments if new members are hired and are eligible to retire during the projection period.

The chart below reflects expected cash flows to pay benefits for current plan participants.



## SUMMARY OF PLAN PROVISIONS

**Plan Name** City of Battle Creek Retiree Health Care Plan

### Eligibility Requirements

Fire OSP	Age 50 with 25 years of service or Age 60 with any amount of service
Police, Fire IAFF and non-rep Fire	Any age with 25 years of service or Age 60 with any amount of service
MERS City Managers	Age 50 with 25 years of service or Age 55 with 15 years of service or Age 60 with 10 years of service or
All other MERS members	Age 55 with 25 years of service or Age 60 with 10 years of service or
Disability Retirement Eligibility	
Duty disability retiree	Any age with any years of service; benefit commences immediately
Non-duty disability retiree	Any age with 5 years of service; benefit commences immediately

Hire date requirements applicable to General members

Collectively Bargained Group	Hired on or before
AFSCME	December 1, 2010
ATU	January 1, 2010
BCSA	June 21, 2011
SEIU	June 30, 2011

### Employer Benefits

Police and Fire members retired prior to January 1, 2007 (401(h))

- City pays for retiree health care premium up to a maximum total annual amount \$500,000 for the group

Police members retired on or after January 1, 2007

- Members receive a maximum \$200 per month (single or married) prorated for service
- Surviving spouse receives \$80 per month prorated for service
- Beginning in April 1, 2022, members are eligible for an additional dollar subsidy of up to \$10,000 per year

## SUMMARY OF PLAN PROVISIONS

### Employer Benefits (Continued)

Fire members hired after May 14, 2007

- Members contribute 3% pay and retirees contribute 3% of pension into 149 Trust
- Members receive a maximum \$200 per month prorated for service
- Surviving spouse receives \$80 per month prorated for service

Fire members hired prior to May 14, 2007 and retired after July 1, 2004

- Members contribute 3% pay into 149 Trust
- Members no longer receive full payment of healthcare for Act 312, City contributions are below, The City is not committed to benefits beyond 2021:

Coverage Type	Amount (Monthly)
Pre-65 Single Coverage	\$300
Pre-65 Two-Person Coverage	500
Pre-65 Family Coverage	700
Post-65 Single Coverage	200
Post-65 Two-Person Coverage	350
Combination of 1 Pre-65 & 1 Post-65	500

General members

- Members receive a maximum \$200 per month based on service

Years of service	Employee	Dependent	Total
15+	\$ 120	\$ 80	\$ 200
14	114	76	190
13	108	72	180
12	102	68	170
11	96	64	160
10	90	60	150

### Changes since prior valuation:

- Police members retired on or after January 1, 2007, Beginning in April 1, 2022 - members are eligible for an additional dollar subsidy of up to \$10,000 per year (previously it was an additional \$8,000 per year)
- Fire members hired prior to May 14, 2007 and retired after July 1, 2004 - Members no longer receive full payment of healthcare for Act 312, instead these Members receive a fixed stipend amount

## GLOSSARY

A number of special terms and concepts are used in connection with OPEB plans and the OPEB accounting report. The following list reviews a number of these terms and provides a brief discussion of their meaning.

**Actuarially Determined Contribution (ADC)** – A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

**Actuarial Cost Method** – This is a mathematical formula which is used to allocate the present value of projected benefits to past and future plan years.

**Amortization** – The difference between actual and expected investment returns, the difference between actual and expected experience, and the impact of any plan or assumption changes will be amortized and paid over future years.

**Depletion Date (Cross-over Point)** – The projected date (if any) where plan assets, including future contributions, are no longer sufficient to pay Projected Benefit Payments to current members.

**Long-term expected rate of return** – The rate of return based on the nature and mix of current and expected plan investments and over the time period from when an employee is hired to when all benefits to the employee have been paid.

**Market Value of Assets** – The market value of all assets in the fund including any accrued contribution for the previous plan year, which was not paid by the end of the year.

**Measurement Date** – The date the Total OPEB Liability, Fiduciary Net Position, and Net OPEB Liability are determined.

**Net OPEB Liability (NOL)** – The Total OPEB Liability less the Plan Fiduciary Net Position.

**Normal Cost** – For GASB 74/75 purposes, normal cost is the equivalent of service cost (see definition of service cost).

**Other Post-Employment Benefits (OPEB)** – Benefits (such as death benefits, life insurance, disability, and long-term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.

**OPEB Expense (OE)** – The change in the Net OPEB Liability (NOL) recognized in the current measurement period. Changes to the NOL not fully recognized in a given year's OPEB expense will be maintained as deferred inflows and deferred outflows. These will be recognized incrementally in the OPEB expense over time.

## GLOSSARY

**Plan assets** – Stocks, bonds and other investments that have been segregated and restricted (usually in a trust) to provide for post-retirement benefits. Assets not segregated in a trust, or otherwise effectively restricted so that they cannot be used by the employer for other purposes, are not plan assets, even though it may be intended that those assets be used to provide post-retirement benefits.

**Plan Fiduciary Net Position** – The market value of plan assets as of the measurement date.

**Present Value** – The present value of a future payment or a series of payments is the amount of each payment, discounted to recognize the time value of money, and further reduced for the probability that the payment might not be made because of death, disability or termination of employment.

**Projected Benefit Payments** – All benefits projected to be payable to current active and inactive participants as a result of their past service and their expected future service.

**Real Rate of Return** – The rate of return on an investment after the adjustment to eliminate inflation.

**Reporting Date** – The date that represents the fiscal year end for the plan or employer.

**Service Cost** – The value of portion of Total OPEB Liability earned during the current year computed in accordance with GAAP accounting rules.

**Single Equivalent Discount Rate** – The single rate that gives the same total present value as discounting the Projected Benefit Payments with the long-term expected rate of return until the Depletion Date and discounting any remaining Projected Benefit Payments with the yield on a 20-year AA/Aa tax-exempt municipal bond index.

**Total OPEB Liability (TOL)** – The actuarial present value of the accrued benefit determined under the Entry Age actuarial cost method calculated using the blended Single Equivalent Discount Rate.

**Valuation Date** – The date as of which an actuarial valuation is performed.