CITY OF MARYSVILLE RETIREE HEALTH CARE FUND OTHER POSTEMPLOYMENT BENEFITS PROGRAM

ACTUARIAL VALUATION AS OF JUNE 30, 2021

CONTRIBUTIONS APPLICABLE TO THE PLAN/FISCAL YEAR ENDING JUNE 30, 2022





December 8, 2021

Mr. Michael Booth City of Marysville 1111 Delaware Ave. Marysville, Michigan 48040-0389

Dear Mr. Booth:

We are pleased to present to the City this annual actuarial valuation of City of Marysville's Other Postemployment Benefits (OPEB) Program. This valuation was performed to determine the current funded status of the Plan.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects all applicable federal laws and regulations. In our opinion, the assumptions used in this valuation, as adopted by the City of Marysville, represent reasonable expectations of anticipated plan experience.

In conducting the valuation, we have relied on personnel and plan design information supplied by City personnel, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. Because of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such 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); and changes in plan provisions or applicable law. Due to the limited scope of this report, we did not provide an analysis of these potential differences.

The undersigned are familiar with the immediate and long-term aspects of OPEB valuations and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Marysville, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Directors. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 248-399-8760.

Respectfully submitted,

Foster & Foster, Inc.

By:

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Sandia Mi Rodwan

By:

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SUMMARY OF RESULTS

The annual actuarial valuation of the City of Marysville's Other Postemployment Benefits Program as of June 30, 2021 has been performed, and the results are presented in this Report. For purposes of this valuation, retiree medical, dental, vision, and life insurance benefits were taken into consideration.

The following table shows the results of the June 30, 2021 valuation of the Plan and the Actuarially Determined Contribution for the plan/fiscal year ending June 30, 2022:

Valuation Date: Contribution Applicable to Year Ending:		ne 30, 2021 ne 30, 2022
Actuarially Determined Contribution As a Percent of Covered Payroll	\$	1,021,168 33.75%
Actuarial Accrued Liability (AAL) Actives	\$	9,877,831
Inactives Total	\$	16,090,384 25,968,215
Normal Cost	\$	262,805
Funded Status as of the Valuation Date Actuarial Accrued Liability (AAL) Actuarial Value of Assets (AVA) Unfunded Actuarial Accrued Liability (UAAL)	\$ 	25,968,215 15,898,920 10,069,295
Funded Ratio	ψ	61.2%
Covered Payroll Ratio of UAAL to Covered Payroll	\$	3,025,454 332.8%
Number of Covered Participants Actives Inactives		39 71
Total		110



The following table shows the Actuarial Accrued Liability as of June 30, 2021 by group:

Actuarial Accrued Liability by Group	General	Police & Fire	Total
Actives	\$ 4,760,720	\$ 5,117,111	\$ 9,877,831
Retirees and Beneficiaries	10,558,781	5,531,603	16,090,384
Total	\$ 15,319,501	\$ 10,648,714	\$ 25,968,215

Changes since the Prior Valuation

The following changes have been made since the prior valuation:

- The census data reflects changes in status for the twenty-four (24) month period since June 30, 2019.
- Data was collected as of June 30, 2021 and valued as of June 30, 2021.
- Health care premiums were updated to those in effect for the 2021 fiscal year.
- The mortality rates were updated to the Pub-2010 tables, with fully generational mortality improvements using Scale MP-2019.
- The initial non-Medicare trend rate was decreased from 8.25% to 7.50%. The initial Medicare medical trend rate was decreased from 6.50% to 5.75%. The medical trend decreases by 0.25% each year to the ultimate rate of 4.50%.
- The assumed long-term rate of return on assets and the discount rate used to value the liabilities was decreased from 7.50% to 7.00%.



This actuarial valuation involves estimates of the value of reported amounts and assumptions about the probability of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to constant revision as actual experience is compared with past expectations and new estimates are made about the future.

Calculations are based upon the types of benefits provided under the terms of the substantive plan at the time of the valuation and on the pattern of sharing of costs between the employer and plan members to that point. Calculations reflect a long-term perspective, so methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.



DEVELOPMENT OF ACTUARIALLY DETERMINED CONTRIBUTION

Valuation Date		6/30/2021
Unfunded Actuarial Accrued Liability		
Actuarial Accrued Liability	\$	25,968,215
Actuarial Value of Assets		15,898,920
Unfunded Actuarial Accrued Liability (UAAL)	\$	10,069,295
Amortization Amount		
Amortization Period		30
Amortization Method		Open
Discount Rate		7.00%
Payroll Growth Rate		0.00%
Total Amortization Amount	\$	758,363
Development of Actuarially Determined Contributi	on (ADC)	
Covered Employee Payroll	\$	3,025,454
Normal Cost	\$	262,805
As of Percent of Covered Employee Payroll		8.69%
UAAL Amortization Component	\$	758,363
As of Percent of Covered Employee Payroll		25.07%
Total Actuarially Determined Contribution	\$	1,021,168
As of Percent of Covered Employee Payroll		33.75%



INSURANCE PREMIUMS

The annual insurance premiums used in the valuation, effective for fiscal year 2021, are shown in the table below. These amounts, adjusted annually with assumed medical inflation, are the assumed benefit for retirees.

Monthly Retiree Health Care Premium					
Rates		2021		2020	
Pre-65					
Single Coverage	\$	557.76	\$	505.06	
Employee plus Spouse	\$	1,323.14	\$	1,196.54	
Post-65					
Single Coverage	\$	670.80	\$	634.44	
Employee plus Spouse	\$	1,341.60	\$	1,268.88	



PARTICIPANT DATA

The following 39 active members were included in the valuation as of June 30, 2021:

Active Members June 30, 2021										
Attained				Service						
Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total		Payroll
20-24									\$	_
25-29									\$	-
30-34		1						1	\$	53,375
35-39		1						1	\$	-
40-44			2	4				6	\$	485,951
45-49			2	2	8			12	\$	892,560
50.54		1		-	7			1.4	Φ	1 110 204
50-54		1		5	7	1	1	14	\$	1,118,294
55-59				2	3	1		6	\$	475,275
60-64									\$	-
65+									\$	-
Total	0	2	4	13	18	1	1	39	\$	3,025,454

Group Averages:

Age: 49.7 years Service: 19.4 years Annual Pay: \$77,576



PARTICIPANT DATA

		6/30/2021
Number of Active Participants Eligible for Retiree Health Benefits Not Yet Eligible for Retiree Health benefits Total		2 37 39
Average Current Age Average Age at Employment Average Past Service		49.7 30.2 19.4
Covered Employee Payroll at Valuation Date Average Salary	\$ \$	3,025,454 77,576
Number of Inactives Retirees, Beneficiaries, and Disabled Members		71
Average Current Ages Retirees, Beneficiaries, and Disabled Members		72.9



ACTUARIAL ASSUMPTIONS AND FUNDING METHODS

Valuation Date June 30, 2021.

Interest Rate 7.00%

Mortality Rates Pub-2010 Mortality Tables, for General and Public

Safety employees, as applicable, with fully

generational improvements using Scale MP-2019

Salary Increases 4.00%

Medical Inflation Non-Medicare: Initial rate of 7.50%, decreasing

0.25% per year to a 4.50% long-term rate.

Medicare: Initial rate of 5.75%, decreasing 0.25%

per year to a 4.50% long-term rate.

<u>Retirement Rates</u> Employees are assumed to retire at earliest age

participant becomes eligible for normal retirement.

Disability Rates

Age	Male	Female
25	0.02%	0.01%
30	0.05%	0.04%
35	0.08%	0.07%
40	0.11%	0.10%
45	0.19%	0.17%
50	0.27%	0.23%
55	0.47%	0.35%
60	0.67%	0.46%



<u>Termination Rates</u> General Employees:

Years of Service	Rates
<1	20.0%
1	15.0%
2	10.0%
3	8.0%
4	7.0%
Age, with 5+	
Years of Service	Rates
20-29	6.00%
30-34	5.50%
35-39	4.40%
40-44	1.85%
45+	1.25%

Police & Fire Employees:

Age	Male	Female
25	10.88%	17.38%
30	6.89%	9.89%
35	4.84%	7.34%
40	2.79%	4.79%
45	1.61%	3.11%
50	0.44%	1.44%
55	0%	0%
60	0%	0%

Marital Status

90% assumed married.

Actuarial Cost Method

Entry Age Normal (Level Percentage of Pay).



SUMMARY OF PLAN PROVISIONS

Eligibility for Post-Retirement Health Insurance Benefits

Administrative employees hired prior to December 1, 2005 who retire directly from the City are eligible for retiree health for themselves, their spouse and eligible dependents. Employees hired prior to December 1, 2005 who terminate employment with 10 or more years of continuous service and defer retirement until normal retirement age are eligible at normal retirement for benefits for themselves only.

Union employees hired before July 1, 2013 are eligible for retiree health benefits for themselves, their spouse and eligible dependents.

Retirement System eligibility conditions are as follows:

General: Age 60 with 5 or more years of service or age 55 and 25 years of service.

526M: If hired before 7/1/84, attainment of age 60 and 5 years of service. If hired after 7/1/84, age 62 and 5 years of service; or age 55 and 25 years of service regardless of date of hire.

Police/Fire: Age 55 with 5 or more years of service.

Administrative employees hired after December 1, 2005 and who retire directly, not deferred, after 20 years of continuous employment are eligible for retiree health benefits. All employees hired on or after July 1, 2013 are not eligible for City-financed retiree health benefits.

Health Insurance Benefits

Retiree health benefits are the equivalent of their health care benefits on the last day of employment with the City.

Life Insurance Benefit

The City pays the premium for a life insurance policy in the amount of \$5,000 for retirees.

Note: This is a brief summary only for purposes of the valuation. Benefit provisions are governed by the plan documents and collective bargaining agreements.



GLOSSARY OF ACTUARIAL TERMS

<u>Actuarial Present Value</u> is the amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

- 1. adjusted for the probable financial effect of certain intervening events
- 2. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
- 3. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

<u>Actuarial Cost Method</u> is a procedure for determining the Present Value of plan benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Liability.

<u>Total Annual Payroll</u> is the annual rate of pay for the fiscal year prior to the valuation date of all covered members.

<u>Present Value of Benefits</u> is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Normal (Current Year's) Cost is the portion of the Actuarial Present Value of plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

<u>Actuarial Accrued Liability</u> is the portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of plan benefits and expenses which is not provided for by future Normal Costs.

<u>Unfunded Actuarial Accrued Liability (UAAL)</u> is a liability which arises when a plan is initially established or improved and such establishment or improvement is applicable to all years of past service. Under the Entry Age Normal Actuarial Cost Method, there is also a new UAAL created each year equal to the actuarial gain or loss for that year.

Actuarially Determined Contribution (ADC) represents the level of employer contribution effort that would be required on a sustained, ongoing basis to:

- 1. fund the Normal Cost (cost associated with new services received) each year and
- 2. amortize the total unfunded actuarial liabilities (or funding excess) attributed to past services over a period of time (as determined by the plan sponsor, but typically no more than thirty years).

The ADC is a basis for the allocation of the employer's projected cost of providing Other Post-Employment Benefits (OPEB) over periods that approximate the periods in which the employer receives services from the covered employees. Accordingly, the ADC may be used as the foundation on which the measurement of the employer's annual funding can be based.

