



CBIZ Retirement Plan Services

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July 6, 2020

Pamela Bratschi
Assistant City Administrator/Treasurer
City of Lathrup Village
27400 Southfield Road
Lathrup Village, MI 48076

RE: Actuarial Valuation of Other Post-Employment Benefits under GASB Statement No. 75 as of June 30, 2019

Dear Pamela:

Enclosed are the results of the Actuarial Valuation of Other Post-Employment Benefits (OPEBs) under GASB Statement No. 75 for City of Lathrup Village.

Overall, the Total OPEB Liability increased relative to the expectation from the prior valuation. Below is a summary of the primary drivers of the increase:

- Updated mortality assumption to the current MERS assumption per the February 2020 experience study

Furthermore, the roll-forward GASB 75 disclosure for year-ended June 30, 2020 is also included in the enclosed report. Adding to the increase in TOL mentioned above was a 70 basis-point decrease in the discount rate from 3.36% to 2.26%.

Please review the results thoroughly. If you have any further questions or concerns, feel free to reach out to me by phone at 216.525.4683, or by e-mail at AJJohnson@CBIZ.com.

Respectfully,

A handwritten signature in blue ink that reads "Alex J. Johnson".

Alex J. Johnson
Actuarial Consultant

Enclosure(s)



**Actuarial Valuation
of
Other Post Employment Benefits (OPEBs)
as of June 30, 2019
and
GASB Statement No. 75**

City of Lathrup Village

Report Prepared July 6, 2020

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City of Lathrup Village

Actuarial Valuation as of June 30, 2019

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City of Lathrup Village Actuarial Valuation as of June 30, 2019

Actuarial Certification

I, the undersigned, am a consulting actuary associated with the firm CBIZ Retirement Plan Services. I am a member of the American Academy of Actuaries and meet its qualification standards to provide statements of actuarial opinion for actuarial valuations of Other Postemployment Benefits (OPEBs). I have completed an actuarial valuation of the OPEB Plan for the City of Lathrup Village as of June 30, 2019. This report contains the results of the valuation.

To the best of my knowledge, the information supplied in this report is complete and accurate. In my opinion, the methods and assumptions used in the valuation comply with the Governmental Accounting Standards Board (GASB), particularly GASB Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pension". The assumptions are related reasonably to the past experience of the Plan, and they represent my best estimate of anticipated experience under the Plan. Nevertheless, the actual costs of the plan in the future will differ from the results of the valuation, as the emerging experience varies from the assumptions projected in the valuation.

I have relied on the City for the accuracy and completeness of the benefit plans, assets, claims and premium data, and the employee census. While I have not audited the data, I have reviewed it for reasonableness and consistency. A summary of my understanding of the plan features is provided in this report.

This report has been prepared for the use and benefit of the City in assessing the effect of GASB Statement No. 75 on accounting for OPEB plans. It should not be relied upon for other purposes, and it is not intended to benefit any other party. It may be shared in its entirety with all auditors and the general public.

Neither CBIZ nor any of the employees working on this engagement has any relationship with the City of Lathrup Village that may impair, or appear to impair, the independence and objectivity of our work.

This actuarial valuation was prepared in accordance with the applicable Statements of the Governmental Accounting Standards Board and the Actuarial Standards of Practice issued by the American Academy of Actuaries.

Frank T. Vedegys, FSA, EA, MAAA
Senior Consulting Actuary

July 6, 2020
Date



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Summary of Valuation Results

Valuation Date June 30, 2019

Participant Data

Active Employees	4
Retirees and Covered Spouses	21
Total	25

Present Value of Future Benefits (PVFB)

Active Employees	\$ 2,200,509
Retirees and Covered Spouses	4,148,316
Present Value of Future Benefits	\$ 6,348,825

Total OPEB Liability (TOL)

Active Employees	\$ 2,001,791
Retirees and Covered Spouses	4,148,316
Total OPEB Liability	\$ 6,150,107

Fiduciary Net Position (FNP)

	0
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Net OPEB Liability (NOL)

	0.00%
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Actuarial Determined Contribution (ADC) for Year Ending:

June 30, 2020	\$ 407,962
June 30, 2021	409,275



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Development of Fiduciary Net Position at Valuation Date

Statement of Changes in Fiduciary Net Position

	7/1/2018 - 6/30/2019		
	OPEB Trust	Pay-as-you-go	Total
Balance as of Beginning of Year	\$ 0	\$ 0	\$ 0
Employer Contributions	0	167,338	167,338
Participant Contributions	0	0	0
Implicit Subsidy	0	0	0
Investment Income, net of investment expenses	0	0	0
Total Additions	\$ 0	\$ 167,338	\$ 167,338
Net Benefit Payments, including implicit subsidy	0	(167,338)	(167,338)
Non-Investment Expenses	0	0	0
Total Deductions	\$ 0	\$ (167,338)	\$ (167,338)
Net Change	\$ 0	\$ 0	\$ 0
Balance as of End of Year	\$ 0	\$ 0	\$ 0
Money-Weighted Rate of Return	0.00%	0.00%	0.00%



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Development of Actuarially Determined Contribution (ADC)

Consistent with Public Act 202 of 2017, the Actuarially Determined Contribution ("ADC") must be calculated in the same manner as the Act's Annual Required Contribution ("ARC"), which is defined as the sum of the normal cost payment and the annual amortization payment for past service costs to fund the Unfunded Actuarial Accrued Liability.

The ADC calculated below is in compliance with Public Act 202 of 2017, which also requires an amortization period no greater than 30 years and a level-dollar amortization method for plans that are closed to new hires. All actuarial assumptions that may be used in the calculation of the ADC are disclosed below.

Year Ending:	<u>6/30/2021</u>	<u>6/30/2020</u>
<u>Normal Cost Component</u>		
Normal Cost	\$ 64,749	\$ 63,479
Expenses	0	0
Interest to End of Year	2,176	2,133
Total Normal Cost	\$ 66,925	\$ 65,612
<u>Amortization Component</u>		
Actuarial Accrued Liability		\$ 6,150,107
Actuarial Value of Assets		0
Unfunded Actuarial Accrued Liability		\$ 6,150,107
Amortization Factor		18.56799
Amortization Payment	\$ 331,221	\$ 331,221
Interest on Amortization Payment to End of Year	11,129	11,129
Total Amortization Payment	\$ 342,350	\$ 342,350
Actuarial Cost Method: Entry Age Normal as a Percentage of Payroll Discount Rate: 3.36% Wage Increase Rate: 2.00% Amortization Method: Level Dollar over a closed 28 years		
Actuarially Determined Contribution	\$ 409,275	\$ 407,962
Expected Covered Payroll	340,771	340,935
ADC as a % of Covered Payroll	120.10%	119.66%



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

10-Year Schedule of Funding Progress

Actuarial Valuation Date	Fiduciary Net Position (a)	Total OPEB Liability (b)	Net OPEB Liability (Asset) (b - a)	Funded Ratio (a / b)	Annual Covered Payroll (c)	Net OPEB Liability as a Percent of Payroll (b - a) / c
6/30/2010*	\$0	\$7,082,910	\$7,082,910	0.0%	\$0	0.0%
6/30/2011*	0	7,011,832	7,011,832	0.0%	0	0.0%
6/30/2012*	0	6,036,293	6,036,293	0.0%	1,135,812	531.5%
6/30/2013*	0	4,479,040	4,479,040	0.0%	1,102,601	406.2%
6/30/2014*	0	5,930,152	5,930,152	0.0%	840,997	705.1%
6/30/2015*	0	4,416,375	4,416,375	0.0%	877,424	503.3%
6/30/2016*	0	4,830,441	4,830,441	0.0%	723,381	667.8%
6/30/2017	0	5,896,193	5,896,193	0.0%	310,699	1897.7%
6/30/2019	0	6,150,107	6,150,107	0.0%	334,250	1840.0%



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

10-Year Schedule of Employer Contributions

Fiscal Year Ended	Actuarially Determined Contribution (a)	Historical Contribution (b)	Contribution Deficiency (Excess) (a) - (b)	Covered Payroll (c)	Contributions as a Percentage of
					Covered Payroll (b) / (c)
6/30/2012	\$457,917	\$188,565	\$269,352	\$1,135,812	16.60%
6/30/2013	318,021	191,083	126,938	1,102,601	17.33%
6/30/2014	422,732	183,783	238,949	840,997	21.85%
6/30/2015	259,097	165,208	93,889	877,424	18.83%
6/30/2016	288,836	138,020	150,816	723,381	19.08%
6/30/2017	288,836	143,679	145,157	723,381	19.86%
6/30/2018	181,840	177,091	4,749	316,913	55.88%
6/30/2019	200,426	167,338	33,088	311,227	53.77%
6/30/2020	407,962	147,716	260,246	<i>340,935</i>	43.33%
6/30/2021	409,275	<i>184,384</i>	224,891	<i>340,771</i>	54.11%

Beginning Fiscal Year Ending 2020, the ADC is calculated in accordance with the requirements of Public Act 202 of 2017, namely Numbered Letter 2018-3. For Fiscal Years Ending 2018 and 2019, the ADC is calculated based on the Employer's substantive 'pay-as-you-go' funding policy. Prior to Fiscal Year Ending 2018, the ADC is equal to the Annual Required Contribution (ARC) as calculated under GASB No. 45.

Italicized amounts are yet to be determined



City of Lathrup Village Actuarial Valuation as of June 30, 2019

Projected Retiree Benefit Payments

Exhibit A is a graph that shows the 30-year projection of expected benefit payments under the OPEB plan. These payments only reflect those participants who have already been hired or who are retired. Expected benefit payments are equal to the number of retirees each year times the per retiree cost to the employer. The first year's projected benefit payments total \$161,980. As the last participants retire and then reach the end of their benefit period, the benefit payments decline and eventually would reach zero. Exhibit B is a table showing the first 10 years of expected benefit payments.

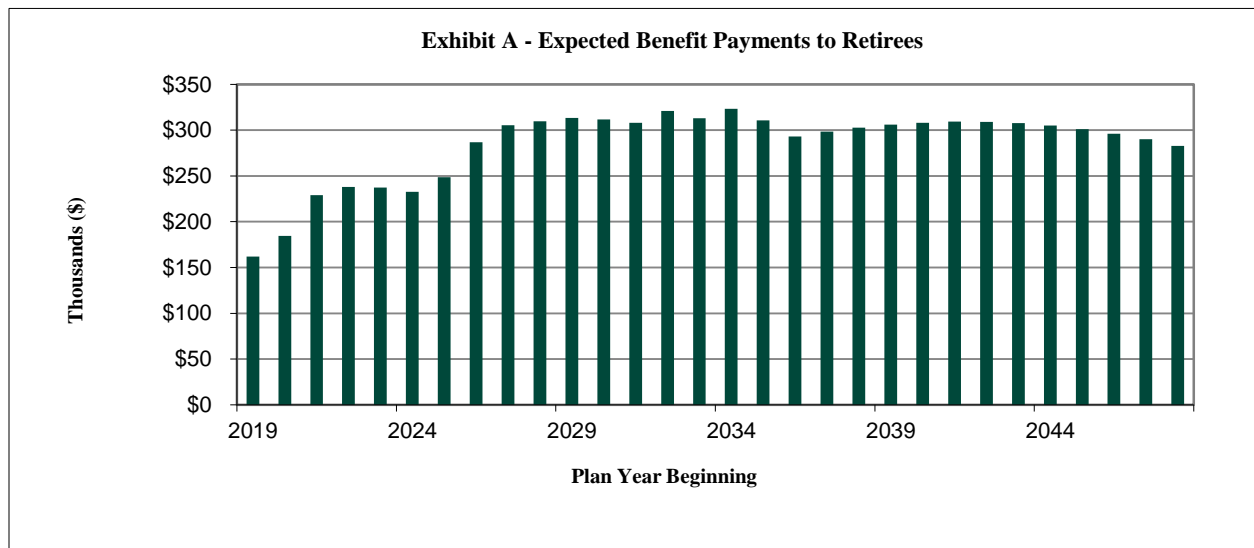


Exhibit B: First 10 Years of Expected Benefit Payments

Plan Year Beginning July 1,	Total Projected Benefits
2019	\$161,980
2020	184,384
2021	228,941
2022	238,131
2023	237,388
2024	232,705
2025	248,651
2026	286,831
2027	305,389
2028	309,673



City of Lathrup Village GASB Statement No. 75

OPEB Expense (Income)

	Measurement Period Ending	
	6/30/2021	6/30/2020
	<i>Estimate</i>	<i>Actual</i>
OPEB Expense (Income)		
1. Service Cost	\$ 80,712	\$ 64,528
2. Interest Cost	184,803	205,246
3. Non-Investment Administrative Expenses	0	0
4. Employee Contributions	0	0
5. Projected Earnings on Fiduciary Net Position	0	0
6. Recognition of Deferred Outflows/(Inflows) related to:		
Net difference between projected and actual earnings	0	0
Differences between expected and actual experience	0	123,103
Changes in assumptions	0	688,405
7. Ad Hoc Postemployment Benefit Changes	0	0
8. OPEB Expense (Income)	\$ 265,515	\$ 1,081,282

Development of Interest Cost on:	% of Period		
1. Beginning Total OPEB Liability	100%	\$ 186,182	\$ 206,644
2. Service Cost	50%	1,073	1,084
3. Benefit Payments	50%	(2,452)	(2,482)
4. Total Interest Cost on Total OPEB Liability		\$ 184,803	\$ 205,246

Development of Projected Earnings on:	% of Period		
1. Beginning Fiduciary Net Position	100%	\$ 0	\$ 0
2. Employer Contributions	50%	0	0
3. Employee Contributions	50%	0	0
4. Benefit Payments	50%	0	0
5. Non-Investment Administrative Expenses	50%	0	0
6. Total Projected Earnings on Fiduciary Net Position		\$ 0	\$ 0

Key Assumptions for OPEB Expense (Income)

Discount Rate	2.66%	3.36%
Salary Scale	2.00%	2.00%
Expected Return on Assets	N/A	N/A



City of Lathrup Village GASB Statement No. 75

Net OPEB Liability

	Measurement Period Ending	
	6/30/2021 <i>Estimate</i>	6/30/2020 <i>Actual</i>
Reconciliation of Total OPEB Liability		
1. Total OPEB Liability at End of Prior Year	\$ 6,999,337	\$ 6,065,771
2. Service Cost	80,712	64,528
3. Interest Cost	184,803	205,246
4. Net Benefits Paid by Employer	(184,384)	(147,716)
5. Ad Hoc Postemployment Benefit Changes	0	0
6. Differences between expected and actual experience	0	123,103
7. Changes in assumptions	0	688,405
8. Total OPEB Liability at End of Year	\$ 7,080,468	\$ 6,999,337
Reconciliation of Fiduciary Net Position		
1. Fiduciary Net Position at End of Prior Year	\$ 0	\$ 0
2. Projected Earnings on Fiduciary Net Position	0	0
3. Difference Between Projected and Actual Earnings	0	0
4. Employer Contributions	184,384	147,716
5. Net Benefits Paid by Employer	(184,384)	(147,716)
6. Non-Investment Administrative Expenses	0	0
7. Employee Contributions	0	0
8. Fiduciary Net Position at End of Year	\$ 0	\$ 0
Money-Weighted Rate of Return	0.00%	0.00%
Net OPEB Liability (Asset)		
1. Total OPEB Liability	\$ 7,080,468	\$ 6,999,337
2. Fiduciary Net Position	0	0
3. Net OPEB Liability (Asset)	\$ 7,080,468	\$ 6,999,337
Fiduciary Net Position as % of Total OPEB Liability	0.00%	0.00%
Net OPEB Liability: 1% increase in the discount rate	\$ 6,089,222	\$ 5,995,987
Net OPEB Liability: 1% decrease in the discount rate	8,346,401	8,284,554
Net OPEB Liability: 1% increase in healthcare trend	8,474,690	8,339,335
Net OPEB Liability: 1% decrease in healthcare trend	5,977,949	5,939,344
Key Assumptions for Net OPEB Liability		
Discount Rate	2.66%	2.66%
Salary Scale	2.00%	2.00%
Expected Return on Assets	N/A	N/A



City of Lathrup Village GASB Statement No. 75

Deferred Outflows (Inflows)

	Measurement Period Ending	
	6/30/2021 <i>Estimate</i>	6/30/2020 <i>Actual</i>
Deferred Inflows of Resources Related to OPEB		
1. Net difference between projected and actual earnings	\$ 0	\$ 0
2. Differences between expected and actual experience	0	0
3. Changes in assumptions	0	0
4. Total	\$ 0	\$ 0
Deferred Outflows of Resources Related to OPEB		
1. Net difference between projected and actual earnings	\$ 0	\$ 0
2. Differences between expected and actual experience	0	0
3. Changes in assumptions	0	0
4. Contributions subsequent to measurement date	0	0
5. Total	\$ 0	\$ 0

Schedule of Deferred Outflows (Inflows)

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

MPE 6/30/2021			MPE 6/30/2020		
2022	\$	-	2021	\$	-
2023		-	2022		-
2024		-	2023		-
2025		-	2024		-
2026		-	2025		-
2027+		-	2026+		-



City of Lathrup Village GASB Statement No. 75

Deferred Outflows (Inflows) (cont.)

Deferred Outflows/(Inflows) - Historical Amortization Schedules

Meas. Period Ending	Original Amount	Original Amortization Amount	Original Amortization Period	Outstanding Balance at 6/30/2021	Outstanding Balance at 6/30/2020
<u>Net difference between projected and actual earnings</u>					
2021	\$ 0	\$ 0	5.00	\$ 0	N/A
2020	0	0	5.00	0	0
<u>Differences between expected and actual experience</u>					
2021	\$ 0	\$ 0	1.00	\$ 0	N/A
2020	123,103	123,103	1.00	0	0
<u>Changes in assumptions</u>					
2021	\$ 0	\$ 0	1.00	\$ 0	N/A
2020	688,405	688,405	1.00	0	0



City of Lathrup Village Actuarial Valuation as of June 30, 2019

Public Act 530 of 2016 - Compliance Guide

Sec. 13(1)(d):

(i)	Name of system	City of Lathrup Village
(ii)	Names Investment fiduciaries	Not provided
(iii)	System's service providers	Blue Cross Blue Shield of Michigan
(iv)	System's assets and liabilities	See Summary of Valuation Results, page 2
(v)	System's funded ratio	See Summary of Valuation Results, page 2
(vi)	Investment performance, net of fees	Most recent year is provided on page 3. For historical performance, contact investment advisors.
(vii)	System admin & invest expenses	Non-investment expenses = 0%
(viii)	System's budget	For investment expenses, contact investment advisors
(ix)		Not applicable
	(A) Number of actives	See Participant Summary, page 15
	(B) Number of retirees/beneficiaries	See Participant Summary, page 15
	(C) Average annual retirement allowance	See Projected Retiree Benefit Payments, page 7 <i>Divide by number of retirees and spouses in Participant Summary</i>
	(D) Total annual retirement allowance	See Projected Retiree Benefit Payments, page 7
	(E) Valuation Payroll at Valuation Date	\$334,250
	(F) Normal Cost as a % of payroll	18.62%
	(G) ADC as a % of payroll	119.66%
	(H) Weighted average member contributions	Member premium cost sharing is described in the Plan Provisions beginning on page 16
	(I) Actuarial expected investment return	N/A
	(J) Actuarial long-term inflation rate	2.50%
	(K) Asset smoothing method	None
	(L) Amortization Method	Level Dollar
	(M) Actuarial Cost Method	Individual Entry Age Normal as a level percentage of payroll
	(N) Open or Closed membership	Closed
	(O) Healthcare inflation	See Actuarial Methods and Assumptions, beginning on page 18
(x)	Travel report	Not applicable

Sec. 20(h)(1):

(7)	If below 60% funded, actions taken to reduce the system's Unfunded Liability	- Plan participation has been closed for all future employees as of July 1, 2013
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City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Public Act 202 of 2017 - Form 5572 Compliance Guide

Line	Description	Valuation Information	
Fiscal Year End Date		6/30/2021	6/30/2020
Measurement Date		6/30/2021	6/30/2020
Valuation Date		6/30/2019	6/30/2019
	Descriptive Information	<i>Estimate</i>	<i>Actual</i>
1	Is this unit a primary unit (County, Twp, City, Village)?		Yes
2	Name of Retirement Health Care System	City of Lathrup Village	
3	Financial Information		
4	Actuarial Value of Assets (AVA)	\$0	\$0
5	Actuarial Accrued Liability (AAL)	\$7,080,468	\$6,999,337
6	Funded Ratio: (4)/(5)	0.00%	0.00%
7	Actuarially Determined Contribution (ADC)	\$409,275	\$407,962
7a	Is ADC calculated in compliance with Numbered Letter 2018-3	Yes	Yes
8	Governmental Fund Revenues	4,648,471*	4,648,471*
9	ADC as % of Governmental Revenues: (7)/(8)	8.80%	8.78%
10	Membership[^]		
11	Number of Active Members	4	4
12	Number of Inactive Members	12	12
13	Number of Retirees and Beneficiaries	21	21
14	Net Benefits Paid on Behalf of the Retirees and Beneficiaries	\$184,384	\$147,716
15	Investment Performance		
16	Actual Rate of Return - Prior 1-year period	0.00%	0.00%
17	Actual Rate of Return - Prior 5-year period	Contact Investment Advisors	
18	Actual Rate of Return - Prior 10-year period	Contact Investment Advisors	
19	Actuarial Assumptions		
20	Assumed Rate of Investment Return	0.00%	0.00%
21	Discount Rate	2.66%	2.66%
22	Amortization Method for Funding the Unfunded Accrued Liability	Level Dollar	Level Dollar
23	Amortization Period as of Valuation Date	28	28
24	Is Plan Closed to New Participants?	Yes	Yes
25	Immediate Health Care Trend Assumption	8.00% pre-65 6.25% post-65	8.25% pre-65 6.50% post-65
26	Ultimate Health Care Trend Assumption	4.50%	4.50%

* Revenues are as disclosed in the most recently available Comprehensive Annual Financial Report; amount must be updated to actual revenues upon completion of Form 5572

[^] Membership is based on participant data provided as of the valuation date. For interim-years, counts may need updated by the Employer upon completion of Form 5572.



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Public Act 202 of 2017 - Form 5572 Compliance Guide

Line	Description	Valuation Information	
	Fiscal Year End Date	6/30/2021	6/30/2020
	Measurement Date	6/30/2021	6/30/2020
	Valuation Date	6/30/2019	6/30/2019
27	Uniform Assumptions	<i>Estimate</i>	<i>Actual</i>
28	Actuarial Value of Assets (AVA) using Uniform Assumptions	\$0	\$0
29	Actuarial Accrued Liability (AAL) using Uniform Assumptions	\$6,214,370	\$6,112,464
30	Funded Ratio: (28)/(29)	0.00%	0.00%
31	Actuarially Determined Contribution (ADC) ¹	\$414,089	\$411,533
32	ADC as % of Governmental Revenues: (31)/(8)	8.91%	8.85%
36	Does Plan Trigger "Underfunded Status"	No	No

Primary Units: Yes, if Funded Ratio is less than 40% AND ARC is greater than 12% of Governmental Fund Revenues

Non-Primary Units: Yes, if Funded Ratio is less than 40%

¹Development of Actuarially Determined Contribution (ADC) using Uniform Assumptions

	6/30/2021	6/30/2020
<u>Normal Cost Component</u>		
Normal Cost	\$ 73,025	\$ 70,556
Administrative Expenses	0	0
Interest to End of Year	2,556	2,469
Total Normal Cost	\$ 75,581	\$ 73,025
<u>Amortization Component</u>		
Actuarial Accrued Liability	\$ 5,980,425	
Less Assets		0
Unfunded Actuarial Accrued Liability	\$ 5,980,425	
Amortization Factor		18.28536
Amortization Payment	\$ 327,061	\$ 327,061
Interest on Amortization Payment to End of Year	11,447	11,447
Total Amortization Payment	\$ 338,508	\$ 338,508
Total Annual Required Contribution (ARC) at End of Year	\$ 414,089	\$ 411,533

Discount Rate:	3.50%	3.50%
Wage Increase Rate:	3.50%	3.50%
Amortization Period (years):	27	28
Amortization Method:	Level Dollar	Level Dollar
Plan Type (Open vs. Closed):	Closed	Closed





City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Participant Summary

Participant Summary

Metric	Active Employees	Retirees and Spouses
Covered Participants	4	21
Average Age	53.5	65.9
Average Service	19.0	N/A
Percentage Male	75.0	47.6

Age and Service Chart

Attained Age	Years of Credited Service										Total
	<1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40+	
Under 25	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	0	0	0	0	0	0
45 to 49	0	0	0	0	0	1	0	0	0	0	1
50 to 54	0	0	0	0	1	1	0	0	0	0	2
55 to 59	0	0	0	1	0	0	0	0	0	0	1
60 to 64	0	0	0	0	0	0	0	0	0	0	0
65 to 70	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	1	2	0	0	0	0	4



City of Lathrup Village Actuarial Valuation as of June 30, 2019

Plan Provisions

Retiree Benefits and Eligibility

The Employer provides medical and pharmacy benefits for eligible retirees and their spouses. Benefits are provided through fully-insured plans administered by Blue Cross Blue Shield of Michigan.

Eligible employees include Administrative employees hired prior to July 1, 2013, and Police employees hired prior to July 1, 2008, who also meet the following eligibility:

Normal/Early Retirement

Age 60 with 10 years of service, or
Age 55 with 15 years of service, or
Age 50 with 25 years of service

Duty Disability or Duty Death (Police Only)

Any age and service combination

Length of Benefits

Administrative

Retiree : Life

Spouse : Life

Police hired prior to August 1, 2005

Retiree : Life

Spouse : Life

Police hired on or after August 1, 2005 but before July 1, 2008

Retiree : Life

Spouse : Life, but at their own expense

Payment In-Lieu

Retirees who opt-out of traditional healthcare coverage are eligible to receive an annual stipend of \$2,500 deposited into a Health Care Savings Plan account.

Retiree Contributions

Administrative

Retirees and spouses pay nothing toward the premium cost of coverage. Certain current retirees are required to contribute toward the cost of coverage as was indicated in the participant data provided by the Employer.



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Plan Provisions

**Retiree
Contributions
(cont.)**

Police

Duty-disability retirees and their eligible spouses pay nothing toward the premium cost of coverage.

Normal retirees and their eligible spouses as well as eligible surviving spouses of employees who die as a result of performing law enforcement duties, pay a portion of the premium based on years of service at retirement as shown below.

Service (years)	% Paid by Employer
< 10	No Coverage
10	40%
11	52%
12	64%
13	76%
14	88%
15+	100%

**Changes Since
Prior Valuation**

None



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Actuarial Methods and Assumptions

Actuarial Valuation Date	June 30, 2019	
Actuarial Cost Method	Individual Entry Age Normal as a level percentage of payroll	
Discount Rate	3.36%	at valuation date
	2.66%	for financial reporting for MPE June 30, 2020
	3.50%	uniform assumption for MPE June 30, 2020
Annual Wage Increases	2.00%	for financial reporting for MPE June 30, 2020
	3.50%	uniform assumption for MPE June 30, 2020
Price Inflation	2.50%	
Investment Rate of Return	N/A	
Actuarial Value of Assets	N/A	

**Annual Medical and
Pharmacy Trend**

Years after Valuation	Pre-65	Post-65
1	8.50%	7.00%
2	8.25	6.50
3	8.00	6.25
4	7.75	6.00
5	7.50	5.75
6	7.25	5.50
7	7.00	5.25
8	6.75	5.00
9	6.50	4.75
10	6.25	4.50
11	6.00	4.50
12	5.75	4.50
13	5.50	4.50
14	5.25	4.50
15	5.00	4.50
16	4.75	4.50
17+	4.50	4.50



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Actuarial Methods and Assumptions

Annual Per-Capita Claims Costs

Age	Police	Admin
	PPO \$250 MA PPO	BCN 10% BCN Adv.
40	\$ 5,872	\$ 4,377
45	6,634	4,946
50	8,205	6,118
55	10,245	7,638
60	12,469	9,296
64	13,783	10,276
65	6,238	4,221
70	7,058	4,776
75	7,793	5,273
80	8,395	5,680
85+	8,823	5,970

Starting per-capita costs were developed using the fully-insured premium equivalent rates provided by the insurer, in effect at the valuation date. For pre-Medicare ages, the rates are set by the insurer on an age-specific per-member basis. Thus, no additional adjustments were made to these rates. Sample rates are shown above. The Medicare Advantage premiums were disaggregated into age-specific starting costs using average ages and morbidity assumptions to reflect the relationship between costs and increasing age. Fixed costs and fees are included in these rates to the extent the insurer incorporated them into the base premium rates.

Medicare Advantage	\$ 6,507	MA PPO (Medicare Plus Blue Group PPO)
Premium Equivalent Rates	\$ 4,638	BCN Adv. (BCN Advantage HMO-POS)

Healthcare Reform

Per the *Setting Every Community Up for Retirement Enhancement Act* ("SECURE"), signed into law on December 20, 2019, the excise tax on high-cost healthcare plans ("Cadillac" tax) scheduled to take effect in 2022 has been repealed. As a result the liability for future excise taxes is reduced to zero. This will be reflected as a reduction to the Total OPEB Liability due to changes in assumptions.

Other aspects of the Affordable Care Act were included in the valuation only to the extent they have already been implemented in the plan.



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Actuarial Methods and Assumptions

Participation

Future Retirees: 100% of future retirees are assumed to elect coverage at retirement. It is assumed that no one will opt in or opt out of coverage once initial retirement election is made.

Current Retirees: Based on current coverage election. It is assumed that no one will opt in or opt out of coverage once initial retirement election is made.

Spousal Participation

Future Retirees: Actual marital status and spousal coverage election were used as provided in the participant data.

Current Retirees: Based on current coverage election.

Spouse Age

Male spouses are assumed to be 3 years older, and female spouses are assumed to be 3 years younger. Actual age is used for spouses of current retirees, if provided.

Mortality

Pre-Retirement:

Pub-2010 General Employees Mortality Table without adjustment

Healthy Retirees:

Pub-2010 General Retiree Mortality Table scaled by a factor of 106%

Disabled Retirees:

PubNS-2010 Disabled Retiree Mortality Table without adjustment

The mortality assumptions include a margin for future mortality improvements using Scale MP-2019 projected fully-generationally from the central year of data, 2010.

Ninety percent (90%) of active member deaths are assumed to be non-duty deaths, and 10% of the deaths are assumed to be duty related.

Retirement

Participants are assumed to retire at the later of age 56, or first year of retirement eligibility.



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Actuarial Methods and Assumptions

Disability

Participants are assumed to become disabled in accordance with annual rates varying by age. Sample rates are as follows:

Age	Rate
25	0.02%
30	0.02
35	0.05
40	0.08
45	0.21
50	0.29
55	0.38
60+	0.39

Eighty percent (80%) of the disabilities are assumed to be non-duty and 20% of the disabilities are assumed to be duty related.

Withdrawal

Participants are assumed to terminate employment for reasons other than death, disability or retirement in accordance with annual rates varying by service and employment type. Sample rates are as follows:

Service	Public Safety	General
0	13.90%	23.40%
1	11.60	19.50
2	9.40	15.80
3	7.40	12.50
4	6.10	10.30
5	4.90	8.30
10	3.20	5.40
15	2.40	4.00
20	1.80	3.10
25+	1.50	2.60



City of Lathrup Village Actuarial Valuation as of June 30, 2019

Actuarial Methods and Assumptions

Changes Since Prior Valuation

1. Per-capita claims costs and premiums were updated to reflect experience since the previous valuation.
2. Healthcare trend assumption was updated to the most recent *Uniform Assumption* released by the Michigan Department of Treasury for fiscal years ending 2020.
3. Load on the Total OPEB Liability to estimate the impact of "Cadillac Taxes" was removed due to the repeal of the tax in December 2019 via the SECURE Act.
4. Mortality and Withdrawal assumptions were updated to the current MERS of Michigan assumption per the experience study released in February 2020.



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Rationale for Key Assumptions

Investment Rate of Return

Not applicable

Discount Rate

The discount rate is the single rate that reflects (1) the long-term expected rate of return on OPEB plan investments that are expected to be used to finance the payment of benefits, to the extent that the OPEB plan's fiduciary net position is projected to be sufficient to make projected benefit payments and OPEB plan assets are expected to be invested using a strategy to achieve that return, and (2) a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another scale), to the extent that the conditions for use of the long-term expected rate of return are not met.

For purposes of calculating the discount rate, projected Employer contributions are equal to the expected net benefit payments per the Employer's substantive 'pay-as-you-go' funding policy.

Single Equivalent Interest Rate (SEIR)	Financial Reporting	Uniform Assumptions
Long-Term Expected Rate of Return	0.00%	0.00%
Municipal Bond Index Rate*	2.66%	3.50%
Administrative Expenses Paid from the Trust	0.00%	0.00%
Year in which Fiduciary Net Position is Depleted	2019	2019
Single Equivalent Interest Rate	2.66%	3.50%

* Source: S&P Municipal Bond 20 Year High Grade Rate Index

Annual Healthcare Trend

The uniform assumption is based on a survey of over 100 health insurers, managed care organizations, pharmacy benefit managers, and third-party administrators about forecasted health plan cost trends. Respondents included the five largest health insurance payers in the U.S., the five largest pharmacy benefits managers in the U.S., and the largest health insurance plan in the State of Michigan. The healthcare trend survey was published by Segal Consulting in Fall 2018.



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Rationale for Key Assumptions

Mortality, Withdrawal, and Disability

Because the Employer does not have enough data to conduct a fully credible experience analysis with respect to these assumptions, the current assumptions are based on those used in the most recent actuarial valuation of pension benefits through MERS. Said assumptions are based on an experience study conducted using actual MERS experience from 2014 - 2018.

Retirement

The current assumption has been selected based on observations of the past experience, discussions with the employer, and consideration of eligibility for other retirement income.

Participation

The assumed rate of participation for both the employee and spouse incorporated into these measurements is based on observations of the plan's past experience, the actuary's experience with plans of a similar size, plan design and retiree contribution level.



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Definitions

Actuarial Present Value of Projected Benefits	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Actuarial Valuation Date	The date as of which the service cost, total OPEB liability, and related actuarial present value of projected benefit payments is determined in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.
Actuarially Determined Contribution (ADC)	A target or recommended contribution to a defined benefit plan 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.
Closed Period	A specific number of years that is counted from one date and declines to zero with the passage of time. For example, if the recognition period initially is five years on a closed basis, four years remain after the first year, three years after the second year, and so forth.
Contributions	Additions to a OPEB plan's fiduciary net position for amounts from employers, nonemployer contributing entities (for example, state government contributions to a local government plan), or employees. Contributions can result from cash receipts by the OPEB plan or from recognition by the OPEB plan of a receivable from one of these sources.
Cost-of-Living Adjustments	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Covered Employee Payroll	The payroll of employees that are provided with OPEBs through the OPEB plan.
Deferred Outflows and Inflows of Resources Related to OPEBs	Deferred outflows of resources and deferred inflows of resources related to OPEBs arising from certain changes in the net OPEB liability.



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Definitions

Defined Benefit OPEB	OPEB for which the benefits that the employee will receive at or after separation from employment are defined by the benefit terms. The OPEB may be stated as (a) a specified dollar amount; (b) an amount that is calculated based on one or more factors such as age, years of service, and compensation; or (c) a type or level of coverage such as prescription drug coverage or a percentage of health insurance premiums.
Defined Contribution OPEB	OPEB having terms that (a) provide an individual account for each employee; (b) define the contributions that an employer or nonemployer contributing entity is required to make (or the credits that it is required to provide) to an active employee's account for periods in which that employee renders service; and (c) provide that the OPEB an employee will receive will depend only on the contributions (or credits) to the employee's account, actual earning on investments of those contributions (or credits), and the effects of forfeitures of contributions (or credits) made for other employees, as well as OPEB plan administrative costs, that are allocated to the employee's account.
Discount Rate	<p>The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following:</p> <ol style="list-style-type: none">1. The actuarial present value of benefit payments projected to be made in future periods in which (1) the amount of the OPEB plan's fiduciary net position is projected (under the requirements of Statement 75) to be greater than the benefit payments that are projected to be made in that period and (2) OPEB plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on OPEB plan investments.2. The actuarial present value of projected benefit payments not included in (a), calculated using a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale).



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Definitions

Entry Age Actuarial Cost Method	A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the <i>normal cost</i> . The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the <i>actuarial accrued liability</i> .
Healthcare Cost Trend Rates	The rates of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.
Money-Weighted Rate of Return	A method of calculating period-by-period returns on OPEB plan investments that adjusts for the changing amounts actually invested. For purposes of Statement 74, money-weighted rate of return is calculated as the internal rate of return on OPEB plan investments, net of OPEB plan investment expense.
Net OPEB Liability	The liability of employers and nonemployer contributing entities to employees for benefits provided through a defined benefit OPEB plan.
OPEB Expense	OPEB expense arising from certain changes in the net OPEB liability.
Other Postemployment 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.
Postemployment Healthcare Benefits	Medical, dental, vision, and other health-related benefits paid subsequent to the termination of employment.



City of Lathrup Village

Actuarial Valuation as of June 30, 2019

Definitions

Projected Benefit Payments	All benefits (including refunds of employee contributions) estimated to be payable through the OPEB plan (including amounts to be paid by employers or nonemployer contributing entities as the benefits come due) to current active and inactive employees as a result of their past service and their expected future service.
Real Rate of Return	The rate of return on an investment after adjustment to eliminate inflation.
Service Costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Termination Benefits	Inducements offered by employers to active employees to hasten the termination of services, or payments made in consequence of the early termination of services. Termination benefits include early-retirement incentives, severance benefits, and other termination-related benefits.
Total OPEB Liability	The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of Statement 75. The total OPEB liability is the liability of employers and nonemployer contributing entities to employees for benefits provided through a defined benefit OPEB plan that is not administered through a trust that meets the criteria of paragraph 4 of Statement 75.