



**Actuarial Valuation
of
Other Post Employment Benefits (OPEBs)
and
GASB Statements No. 74 and 75
as of June 30, 2017
City of Port Huron**

Report Prepared November 7, 2017

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City of Port Huron

Actuarial Valuation as of June 30, 2017

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City of Port Huron

Actuarial Valuation as of June 30, 2017

Actuarial Certification

We, the undersigned, are consulting actuaries associated with the firm CBIZ Retirement Plan Services. We are members 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). We have completed an actuarial valuation of the OPEB plan for the City of Port Huron as of June 30, 2017. This report contains the results of the valuation.

To the best of our knowledge, the information supplied in this report is complete and accurate. In our opinion, the methods and assumptions used in the valuation comply with the Governmental Accounting Standards Board (GASB), particularly GASB Statements No. 74 and 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 our 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.

We have relied on the City for the accuracy and completeness of the benefit plans, assets, claims and premium data, and the employee census. While we have not audited the data, we have reviewed it for reasonableness and consistency. A summary of our 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 Statements No. 74 and 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 Port Huron 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

November 7, 2017

Date





City of Port Huron Actuarial Valuation as of June 30, 2017

Summary of Valuation Results

Valuation Date 6/30/2017

Participant Data	City (Excluding McMorran Place)	McMorran Place	Total
Active Employees	133	0	133
Retirees and Covered Spouses	466	17	483
Total	599	17	616

Total OPEB Liability (TOL)

Active Employees	\$ 14,570,929	\$ -	\$ 14,570,929
Retirees and Covered Spouses	+ 48,719,093	+ 1,538,509	+ 50,257,602
Total OPEB Liability	\$ 63,290,022	\$ 1,538,509	\$ 64,828,531

Fiduciary Net Position (FNP)

- 16,678,220 - - 16,678,220

Net OPEB Liability (NOL)

\$ 46,611,802 \$ 1,538,509 \$ 48,150,311

FNP as a Percentage of TOL

26.35% 0.00% 25.73%

Actuarial Determined Contribution (ADC) for Fiscal Year Ending*:

June 30, 2018	\$ 3,716,514	\$ 117,012	\$ 3,833,526
June 30, 2019	3,712,494	121,032	3,833,526

Estimated OPEB Expense (Income) for Fiscal Year Ending:

June 30, 2018	\$ 3,372,006
June 30, 2019	3,353,549

Discount Rate Sensitivity

- A 1 % increase in the discount rate would decrease the Net OPEB Liability by \$6,947,000.
- A 1 % decrease in the discount rate would increase the Net OPEB Liability by \$8,434,000.

Healthcare Trend Sensitivity

- A 1 % increase in the healthcare trend would increase the Net OPEB Liability by \$8,548,000
- A 1 % decrease in the healthcare trend would decrease the Net OPEB Liability by \$7,052,000

* ADC for McMorran place is equal to the expected pay-as-you-go net benefits. The ADC for the City is based on the funding policy described in the *Actuarial Assumptions and Methods* section of this report.



City of Port Huron Actuarial Valuation as of June 30, 2017

Development of Fiduciary Net Position at Valuation Date

Statement of Changes in Fiduciary Net Position

	7/1/2016 - 6/30/2017		
	OPEB Trust	Pay-as-you-go	Total
Balance as of Beginning of Year	\$ 14,794,297	\$ -	\$ 14,794,297
Employer Contributions	1,736	3,125,166	3,126,902
Participant Contributions	-	59,142	59,142
Implicit Subsidy	-	-	-
Investment Income, net of investment expenses	1,920,945	-	1,920,945
Total Additions	\$ 1,922,681	\$ 3,184,308	\$ 5,106,989
Benefit Payments, including implicit subsidy	-	(3,184,308)	(3,184,308)
Non-Investment Expenses	(38,758)	-	(38,758)
Total Deductions	\$ (38,758)	\$ (3,184,308)	\$ (3,223,066)
Net Change	\$ 1,883,923	\$ -	\$ 1,883,923
Balance as of End of Year	\$ 16,678,220	\$ -	\$ 16,678,220
Money-Weighted Rate of Return	13.00%	0.00%	13.00%



City of Port Huron Actuarial Valuation as of June 30, 2017

10-Year Schedule of Funding Progress

City (Excluding McMorran Place)

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
12/31/2005	\$ -	\$ 55,051,000	\$ 55,051,000	0.0%	\$ 17,210,000	319.9%
12/31/2007	6,058,000	56,466,000	50,408,000	10.7%	15,990,000	315.2%
12/31/2009	5,788,760	55,796,090	50,007,330	10.4%	15,028,000	332.8%
6/30/2012	8,516,941	66,502,722	57,985,781	12.8%	13,840,815	418.9%
6/30/2013	10,451,516	58,161,918	47,710,402	18.0%	13,711,611	348.0%
6/30/2015	14,441,011	51,550,977	37,109,966	28.0%	13,913,491	266.7%
6/30/2017	16,678,220	63,290,022	46,611,802	26.4%	7,634,516	610.5%

McMorran Place

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
12/31/2009	\$ -	\$ 1,883,427	\$ 1,883,427	0.0%	\$ 353,058	533.5%
6/30/2012	-	1,865,135	1,865,135	0.0%	245,240	760.5%
6/30/2013	-	1,705,602	1,705,602	0.0%	252,193	676.3%
6/30/2015	-	1,166,122	1,166,122	0.0%	-	0.0%
6/30/2017	-	1,538,509	1,538,509	0.0%	-	0.0%



City of Port Huron Actuarial Valuation as of June 30, 2017

10-Year Schedule of Employer Contributions

Fiscal Year Ended June 30,	Actuarially Determined Contribution (a)	Actual Contribution (b)	Contribution Deficiency (Excess) (a) - (b)	Covered Payroll (c)	Contributions as a Percentage of Covered Payroll (b) / (c)
2010	\$ 3,396,937	\$ 3,396,937	\$ -	\$ 15,028,000	22.60%
2011	3,429,293	3,429,293	-	15,028,000	22.82%
2012	3,583,611	3,583,611	-	15,028,000	23.85%
2013	3,701,740	3,701,740	-	13,840,815	26.75%
2014	3,266,897	3,266,897	-	13,711,611	23.83%
2015	3,413,907	3,413,907	-	13,711,611	24.90%
2016	2,689,768	3,075,690	(385,922)	13,913,491	22.11%
2017	2,781,249	3,126,902	(345,653)	13,913,491	22.47%
2018	3,833,526	3,833,526	-	7,634,516	50.21%
2019	3,833,526	3,833,526	-	7,634,516	50.21%

Beginning Fiscal Year Ending 2018, the ADC is calculated in accordance with the Employer's funding policy, if one exists. Prior to Fiscal Year Ending 2018, the ADC is equal to the Annual Required Contribution (ARC) as calculated under GASB No. 45.

Covered payroll amounts reflect covered payroll as of the most recent actuarial valuation date



City of Port Huron Actuarial Valuation as of June 30, 2017

Projected Retiree Benefit Payments

Exhibit A is a graph that shows the 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 \$3,622,436. 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.

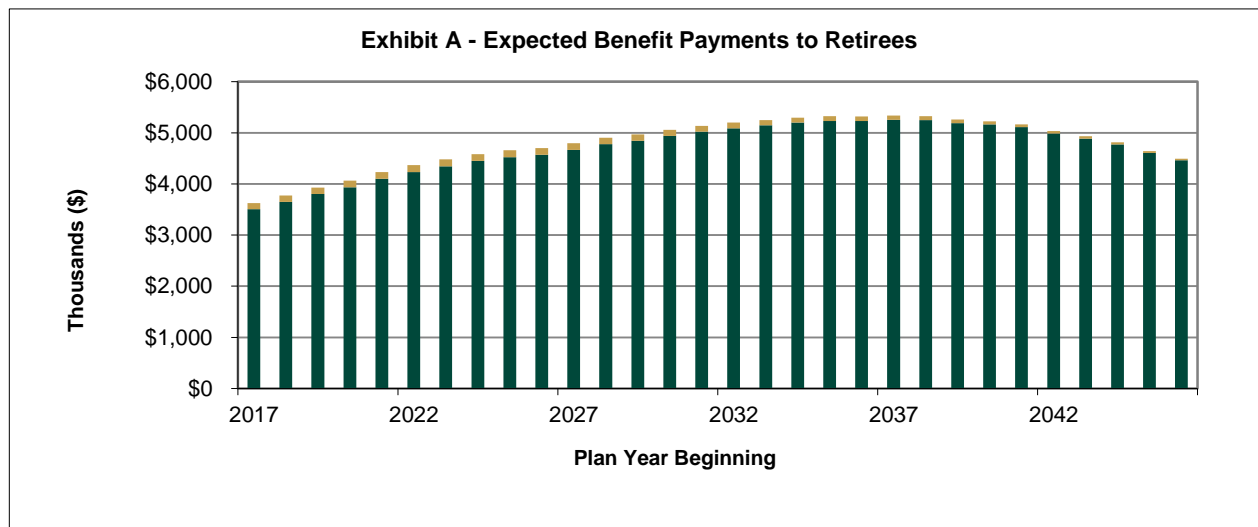


Exhibit B: First 10 Years of Expected Benefit Payments

Plan Year Beginning July 1,	Projected Benefits: City (excluding McMorran)	Projected Benefits: McMorran Place	Total Projected Benefits
2017	\$ 3,505,423	\$ 117,012	\$ 3,622,436
2018	3,651,416	121,032	3,772,448
2019	3,805,831	124,929	3,930,760
2020	3,936,643	128,507	4,065,149
2021	4,102,515	131,760	4,234,275
2022	4,231,867	134,528	4,366,395
2023	4,345,485	136,351	4,481,837
2024	4,449,010	132,840	4,581,849
2025	4,524,329	132,325	4,656,654
2026	4,570,981	131,255	4,702,236



City of Port Huron GASB Statement No. 74

Net OPEB Liability

	<u>Fiscal Year Ending</u> <u>6/30/2017</u>
Reconciliation of Total OPEB Liability	
1. Total OPEB Liability at Beginning of Year	\$ 63,568,688
2. Service Cost	354,612
3. Interest Cost	4,030,397
4. Net Benefits Paid by Employer	(3,125,166)
5. Differences between expected and actual experience	0
6. Changes in assumptions	0
7. Total OPEB Liability at End of Year	\$ 64,828,531
Reconciliation of Fiduciary Net Position	
1. Fiduciary Net Position at Beginning of Year	\$ 14,794,297
2. Projected Earnings on Fiduciary Net Position	1,920,945
3. Employer Contributions	3,126,902
4. Total Benefits Paid	(3,184,308)
5. Expenses	(38,758)
6. Participant Contributions	59,142
7. Fiduciary Net Position at End of Year	\$ 16,678,220
Money-Weighted Rate of Return	13.00%
Net OPEB Liability (Asset)	
1. Total OPEB Liability	\$ 64,828,531
2. Fiduciary Net Position	(16,678,220)
3. Net OPEB Liability (Asset)	\$ 48,150,311
Fiduciary Net Position as % of Total OPEB Liability	25.73%
Key Assumptions for Net OPEB Liability	
Discount Rate	6.50%
Salary Scale	3.75%
Expected Return on Assets	6.50%



City of Port Huron GASB Statement No. 75

OPEB Expense (Income)

	Fiscal Year Ending	
	6/30/2019	6/30/2018
OPEB Expense (Income)		
1. Service Cost	\$ 381,706	\$ 367,910
2. Interest Cost	4,145,954	4,096,125
3. Expected Return On Plan Assets	(1,174,111)	(1,092,029)
4. Recognition of Deferred Outflows/(Inflows) related to:		
Net difference between projected and actual earnings	0	0
Differences between expected and actual experience	0	0
Changes in assumptions	0	0
5. OPEB Expense (Income)	\$ 3,353,549	\$ 3,372,006

Key Assumptions for OPEB Expense (Income)

Discount Rate	6.50%	6.50%
Salary Scale	3.75%	3.75%
Expected Return on Assets	6.50%	6.50%

Deferred Outflows/(Inflows) - Amortization Schedules

Fiscal Year Established	Original Amount	Amortization Amount	Original Amortization Period	Outstanding Balance at End of Year	Outstanding Balance at End of Year
<u>Net difference between projected and actual earnings</u>					
2019	\$ 0	\$ 0	5.00	\$ 0	N/A
2018	0	0	5.00	0	0
<u>Differences between expected and actual experience</u>					
2019	\$ 0	\$ 0	1.58	\$ 0	N/A
2018	0	0	1.58	0	0
<u>Changes in assumptions</u>					
2019	\$ 0	\$ 0	1.58	\$ 0	N/A
2018	0	0	1.58	0	0



City of Port Huron GASB Statement No. 75

Net OPEB Liability

	Fiscal Year Ending	
	6/30/2019	6/30/2018
Reconciliation of Total OPEB Liability		
1. Total OPEB Liability at Beginning of Year	\$ 65,670,130	\$ 64,828,531
2. Service Cost	381,706	367,910
3. Interest Cost	4,145,954	4,096,125
4. Net Benefits Paid by Employer	(3,772,448)	(3,622,436)
5. Differences between expected and actual experience	0	0
6. Changes in assumptions	0	0
7. Total OPEB Liability at End of Year	\$ 66,425,342	\$ 65,670,130
Reconciliation of Fiduciary Net Position		
1. Fiduciary Net Position at Beginning of Year	\$ 18,014,695	\$ 16,678,220
2. Projected Earnings on Fiduciary Net Position	1,174,111	1,092,029
3. Net Difference Between Projected and Actual Earnings	0	0
4. Employer Contributions	3,833,526	3,833,526
5. Total Benefits Paid	(3,772,448)	(3,622,436)
6. Expenses	36,029	33,356
7. Participant Contributions	0	0
8. Fiduciary Net Position at End of Year	\$ 19,285,913	\$ 18,014,695
Money-Weighted Rate of Return	6.50%	6.50%
Net OPEB Liability (Asset)		
1. Total OPEB Liability	\$ 66,425,342	\$ 65,670,130
2. Fiduciary Net Position	(19,285,913)	(18,014,695)
3. Net OPEB Liability (Asset)	\$ 47,139,429	\$ 47,655,435
Fiduciary Net Position as % of Total OPEB Liability	29.03%	27.43%
Key Assumptions for Net OPEB Liability		
Discount Rate	6.50%	6.50%
Salary Scale	3.75%	3.75%
Expected Return on Assets	6.50%	6.50%



City of Port Huron GASB Statement No. 75

Deferred Outflows (Inflows)

	Fiscal Year Ending	
	6/30/2019	6/30/2018
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. 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:

FYE			
2019	\$	N/A	\$ -
2020		-	-
2021		-	-
2022		-	-
2023		-	-
2024(+)		-	-
2025+		-	N/A



City of Port Huron Actuarial Valuation as of June 30, 2017

Plan Provisions and Participant Summary

**Retiree Benefits
and Eligibility**

The Employer provides medical and pharmacy benefits for eligible retirees hired prior to July 1, 2008, and their spouses. Benefits are provided through self-insured plans administered by Blue Cross Blue Shield of Michigan.

Non-Represented Employees, DPW, Records Clerks & McMorran

Age 55 with 25 years of full-time service, or

Age 60 with 10 years of full-time service if hired prior to January 1, 1993

Age plus years of full-time service greater than or equal to 80 if hired on or after January 1, 1993

Police, Police Command, and Firefighters

Age 50 with 25 years of full-time service, or

Age 60 with 10 years of full-time service

Employees retiring under MERS Early Retirement provisions or who terminate prior to retirement are not eligible for the Retiree Health Care Plan. Duty Death in Service and Duty Disability Benefits are available for qualifying employees.

Length of Benefits

Retiree : Life

Spouse : Life

**Retiree
Contributions**

There is no cost to the retirees as the City pays 100% of retiree and qualifying spouse health care costs.

Opt-Out Option

Retirees may opt-out of the health care plan and receive a payment-in-lieu of Health Care Benefits, in the amount of \$3,000 per year. Retirees may opt back in to the Retiree Health Care Plan during open enrollment or upon a qualifying event.

**Changes Since
Prior Valuation**

1. Premium equivalent rates were updated reflect current rates.
2. Effective 7/1/2016, future retirees must elect Suffix 908. Previously required to enroll in Suffix 905.



City of Port Huron Actuarial Valuation as of June 30, 2017

Plan Provisions and Participant Summary

Annual Premium Equivalent Rates

BCBSM Division	BCBSM Suffix	Pre-65 (Regular)		Post-65 (Complementary)	
		1-Single	2-Person	1-Single	2-Person
0004	900	\$ 7,893	\$ 18,942	\$ 9,022	\$ 18,044
0007	903	6,321	15,171	7,912	15,823
0008	904	5,593	13,423	6,643	13,287
0009	905	5,302	12,724	6,244	12,488
0010	906	7,637	18,329	9,268	18,537
0011	907	5,708	13,700	7,266	14,532
0013	908	5,302	12,724	5,911	11,822

Participant Summary

Metric		City (Excluding McMorran	McMorran Place	Total
Active	Count	133	0	133
	Average Age	49.1	0.0	49.1
	Average Service	18.8	0.0	18.8
	Percentage Male	76.7	0.0	76.7
Inactive	Count	466	17	483
	Average Age	70.9	75.1	71.0
	Percentage Male	53.9	48.2	53.7

Age and Service Chart

Attained Age	Years of Credited Service										
	<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+	Total
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	4	0	0	0	0	0	0	4
35 to 39	0	0	0	10	8	0	0	0	0	0	18
40 to 44	0	0	0	10	10	3	0	0	0	0	23
45 to 49	0	0	0	3	7	9	7	0	0	0	26
50 to 54	0	0	0	3	10	8	5	2	0	0	28
55 to 59	0	0	0	4	10	5	4	1	0	0	24
60 to 64	0	0	0	0	4	0	2	0	1	0	7
65 to 70	0	0	1	1	1	0	0	0	0	0	3
70+	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	35	50	25	18	3	1	0	133



City of Port Huron

Actuarial Valuation as of June 30, 2017

Actuarial Methods and Assumptions

Actuarial Valuation Date	June 30, 2017
Actuarial Cost Method	Individual Entry Age Normal as a level percentage of payroll
Discount Rate	6.50%
Annual Wage Increases	3.75%
Price Inflation	3.00%
Investment Rate	6.50%
Actuarial Value of Assets	Market Value
Actuarially Determined Contribution	<p><u>McMorran Place</u>: Pay-as-you-go</p> <p><u>City (Excluding McMorran Place)</u>: The City has committed to contribute a 30-year, level-dollar contribution that is actuarially determined to allow the projected Fiduciary Net Position to always be sufficient to cover projected net benefits. This amount will be adjusted at each valuation date, as needed.</p>
Participation	<p><i>Future Retirees</i>: 90% of future retirees are assumed to elect traditional healthcare coverage at retirement; 10% are assumed to elect the opt-out stipend in lieu of traditional healthcare coverage. All participating future retirees will elect Suffix 908. It is assumed that no one will opt in or opt out of coverage once initial retirement election is made.</p> <p><i>Current Retirees</i>: 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.</p>
Spousal Participation	<p><i>Future Retirees</i>: 70% of participating retirees are assumed to be married and will cover their spouse.</p> <p><i>Current Retirees</i>: Based on current coverage election.</p>
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.



City of Port Huron

Actuarial Valuation as of June 30, 2017

Actuarial Methods and Assumptions

Mortality MERS mortality assumption used for the 12/31/2015 pension valuation

Healthy:

50% Male-50% Female blend of the following tables:

1. The RP-2014 Health Annuitant Mortality Tables, with rates multiplied by 105%
2. The RP-2014 Employee Mortality Tables
2. The RP-2014 Juvenile Mortality Tables

For ages 0-17 use the rates in Table 3, for ages 18-49 use the rates in Table 2, for ages 70 and older use the rates in Table 1, and for ages 50-69 blend Table 2 and Table 1 as

- a. Age 50, use 60% of Table 2 and 40% of Table 1
- b. Age 51, use 57% of Table 2 and 43% of Table 1
- c. Etc. ...
- d. Age 69, use 3% of Table 2 and 97% of Table 1

Disabled:

50% Male-50% Female blend of the RP-2014 Disabled Retiree Mortality Tables.

The mortality assumptions include a 10% margin for future mortality improvements, relative to the actual mortality experience seen in the 2000-2013 Experience Study.

Retirement

Participants are assumed to retire in accordance with annual rates varying by age. The following table illustrates the assumed number of such retirements per year:

Age	Rate
50-56	20%
57-60	21
61-63	22
64	23
65-66	25
67	26
68	28
69	30
70	100



City of Port Huron Actuarial Valuation as of June 30, 2017

Actuarial Methods and Assumptions

Withdrawal

Participants are assumed to terminate employment for reasons other than death, disability or retirement in accordance with annual rates varying by service. The following table illustrates the assumed number of such terminations per year:

Service	Rate
0	19.60%
1	16.30
2	13.30
3	10.50
4	8.60
5	6.90
10	4.60
15	3.40
20	2.60
25	2.20
30	2.20
35+	2.20

Disability

Participants are assumed to become disabled in accordance with annual rates varying by age. The following table illustrates the assumed number of such disablements per year:

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



City of Port Huron Actuarial Valuation as of June 30, 2017

Actuarial Methods and Assumptions

Annual Per-Capita Claims Costs

Age	Plan (Suffix)						
	900	903	904	905	906	907	908
40	\$ 4,123	\$ 3,371	\$ 2,903	\$ 2,728	\$ 4,130	\$ 2,943	\$ 2,728
45	5,016	4,102	3,532	3,319	5,025	3,580	3,319
50	6,103	4,991	4,297	4,038	6,113	4,356	4,038
55	7,425	6,072	5,228	4,913	7,438	5,300	4,913
60	9,034	7,387	6,361	5,977	9,049	6,448	5,977
64	10,568	8,642	7,442	6,992	10,586	7,543	6,992
65	\$ 4,969	\$ 4,344	\$ 3,664	\$ 3,450	\$ 5,071	\$ 3,998	\$ 3,261
70	5,760	5,036	4,248	4,000	5,879	4,635	3,780
75	6,517	5,698	4,806	4,526	6,651	5,244	4,277
80	7,196	6,291	5,307	4,997	7,344	5,790	4,722
85+	7,945	6,946	5,859	5,517	8,108	6,392	5,213

Starting per capita costs were developed using paid retiree claims and enrollment data from July 1, 2015 through June 30, 2017. Pre-Medicare and Medicare supplemental experience were analyzed separately. Non-Drug Medical and Pharmacy were analyzed separately, and projected to the current claims year based on the most recent Segal Survey. 80% credibility was placed on 2016-2017 costs while 20% was placed on 2015-2016 costs. The resulting costs were then blended 50/50 with expected costs to reduce volatility. Costs were then adjusted for differences in plan design and disaggregated into age-specific starting costs using average ages and assumptions on the relationship between costs and increasing age. Fixed costs and fees are not included in these costs.

Morbidity

Age	Rate
<65	4.0%
65-69	3.0
70-74	2.5
75-85	2.0
85+	0.0

Annual Per-Capita Fees

Administration	\$ 416	per member
Aggregate Stop Loss	60	
Specific Stop Loss	894	
PCORI	2	
Total	\$ 1,373	per member

Aggregate attachment point is 120% of expected claims.

Specific annual attachment point is \$100,000 per Coverage Unit

PCORI is only paid for plan years ending on or before September 30, 2019



City of Port Huron Actuarial Valuation as of June 30, 2017

Actuarial Methods and Assumptions

Annual Healthcare Trend

Years after Valuation	Medical & Pharmacy
1	8.00%
2	7.50
3	7.00
4	6.50
5	6.00
6	5.50
7	5.00
8+	4.50

Claims costs and premium equivalent rates are assumed to increase according to the above healthcare trend. Fixed costs and fees are assumed to increase with inflation.

Healthcare Reform

Excise taxes on Cadillac plan benefits, if any, were not included in this valuation due to significant uncertainties regarding the tax. Other legislative changes related to the Affordable Care Act were included in the valuation only to the extent they have already been implemented in the plan.

Changes Since Prior Valuation

1. Discount rate and investment rate of return decreased from 7.5% to 6.5%.
2. Wage Inflation, Mortality, Withdrawal, and Disability assumptions were updated in accordance with changes to MERS assumptions.
3. Healthcare trend was updated to the schedule above based on recent plan experience and industry norms.



City of Port Huron

Actuarial Valuation as of June 30, 2017

Rationale for Key Assumptions

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.

Single Equivalent Interest Rate (SEIR)

Long-Term Expected Rate of Return	6.50%
Municipal Bond Index Rate*	3.10%
Fiscal Year in which Fiduciary Net Position is Projected to be Depleted	N/A
Single Equivalent Interest Rate	6.50%

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

Expected Long-Term Rate of Return on Assets Selection

The investment policy of the Company is determined based on the goals and objectives of the Plan and the risk tolerance of the Company. As new information regarding the economic environment becomes available the investment policy may need to be revised. Asset allocations fluctuate due to market performance, however, the targeted OPEB asset allocation is as described below. The Company's objective in selecting the Expected Long-Term rate of return on Assets is to estimate the single rate of return that reflects the historical returns, future expectations for each asset class, and the asset mix of the plan assets.

Asset Classes	Actual Allocation (a)	Target Allocation (b)	Expected Return (c)	Arithmetic Mean (b) x (c)
Domestic Fixed Income	10.00%	10.00%	3.00%	0.30%
International Fixed Income	2.30%	7.00%	5.75%	0.40%
Domestic Equity	40.50%	38.00%	8.50%	3.20%
International Equity	12.30%	12.50%	8.75%	1.10%
Private Equity	4.60%	5.00%	9.75%	0.50%
Real Estate	10.30%	9.00%	7.00%	0.60%
Cash	10.40%	1.50%	2.00%	0.00%
Other	9.60%	17.00%	2.50%	0.40%
				6.50%



City of Port Huron

Actuarial Valuation as of June 30, 2017

Rationale for Key Assumptions

Annual Healthcare Trend

Trend rates are based on plan experience, historical trends, and industry norms. The immediate trend rates are assumed to decrease to an ultimate trend rate over a period of 5 to 10 years. Healthcare costs are currently approximately 17% of the Gross Domestic Product (GDP). The ultimate rate is decreased over time to maintain this relationship.

Withdrawal, Disability, and Retirement

Because the Employer does not have enough data to conduct a fully credible experience analysis with respect to these assumptions, they have been selected based on the assumptions used in the most recent actuarial valuation of the participants' corresponding pension plan through MERS.

Mortality

Because the Employer does not have enough data to conduct a fully credible experience analysis with respect to mortality, this assumption has been selected based on the assumption used in the most recent actuarial valuation of the participants' corresponding pension plan through MERS.

Participation

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

Spousal Participation and Age

Because the employer does not have enough data to conduct a fully credible experience analysis with respect to spousal information, the current assumption has been selected based on observations of the past experience, the actuary's experience with plans of a similar size and plan design.



City of Port Huron Actuarial Valuation as of June 30, 2017

Public Act 530 of 2016 - Compliance Guide

Sec. 13(1)(d):

(i)	Name of system	City of Port Huron
(ii)	Names Investment fiduciaries	Not provided
(iii)	System's service providers	Blue Cross Blue Shield of Michigan Brown & Brown of Central Michigan, Inc. MERS Retiree Healthcare Funding Vehicle
(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 = 0.20% For investment expenses, contact investment advisors
(viii)	System's budget	Not applicable
(ix)		
	(A) Number of actives	See Participant Summary, page 12
	(B) Number of retirees/beneficiaries	See Participant Summary, page 12
	(C) Average annual retirement allowance	See Projected Retiree Benefit Payments, page 6 <i>Divide by number of retirees and spouses in Participant Summary</i>
	(D) Total annual retirement allowance	See Projected Retiree Benefit Payments, page 6
	(E) Valuation Payroll at Valuation Date	\$7,634,516
	(F) Normal Cost as a % of payroll	4.52%
	(G) ADC as a % of payroll	50.21%
	(H) Weighted average member contributions	Member premium cost sharing is described in the Plan Provisions beginning on page 11
	(I) Actuarial expected investment return	6.50%
	(J) Actuarial long-term inflation rate	3.00%
	(K) Asset smoothing method	None
	(L) Amortization Method	Not applicable
	(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 13
(x)	Travel report	Not applicable

Sec. 20(h)(1):

(7)	If below 60% funded, actions taken to reduce the system's Unfunded Liability	- Plan is closed to new hires as of July 1, 2008 - An irrevocable trust has been established to offset plan liabilities and the Employer has consistently contributed the Actuarially Determined Contribution
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City of Port Huron Actuarial Valuation as of June 30, 2017

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 Port Huron

Actuarial Valuation as of June 30, 2017

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 Port Huron Actuarial Valuation as of June 30, 2017

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
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.
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.



City of Port Huron Actuarial Valuation as of June 30, 2017

Definitions

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-
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.