



CBIZ Retirement Plan Services

CBIZ Benefits Insurance Services, Inc.
6050 Oak Tree Boulevard, Suite 500
Cleveland, OH 44131
Ph: 216.447.9000 • F: 216.447.9007
<http://retirement.cbiz.com>

August 14, 2017

Ethan Moody
Finance Director and Treasurer
City of Springfield
601 Avenue A
Springfield, MI 49037

RE: Actuarial Valuation of Other Post-Employment Benefits under GASB Statements No. 74 and 75 as of June 30, 2017

Dear Ethan:

Enclosed are the results of the Actuarial Valuation of Other Post-Employment Benefits (OPEBs) under GASB Statements No. 74 and 75 for City of Springfield.

Overall, the plan liabilities saw a loss since the prior valuation. Below is a summary of the primary drivers of the loss:

- Updated plan premiums, which include age-specific per-member rates
- Updated healthcare trend
- Updated mortality, withdrawal, and disability assumptions to match MERS

As noted above and in the enclosed report, many of the demographic assumptions were updated to reflect those used in the participants' underlying pension valuation through MERS. Much of the loss driven by the items above were offset by the increase in discount rate.

The enclosed valuation report follows GASB No. 75 standards and includes the estimated year-end disclosures for fiscal years ending June 30, 2018 and June 30, 2019. Final disclosures are to be determined when actual experience is realized.

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)
and
GASB Statements No. 74 and 75
as of June 30, 2017
City of Springfield**

Report Revised August 14, 2017

The information provided herein is the confidential and proprietary work product of CBIZ and cannot be disclosed, copied or distributed to outside third parties without the prior written consent of CBIZ. This information can be expressly used only for the intended purpose and recipient.





City of Springfield

Actuarial Valuation as of June 30, 2017

Table of Contents

		Page
Section 1:	Actuarial Certification	1
Section 2:	Summary of Valuation Results	2
	Development of Fiduciary Net Position at Valuation Date	3
	10-year Schedule of Funding Progress	4
	10-year Schedule of Employer Contributions	5
	Projected Retiree Benefit Payments	6
	GASB Statements No. 74 and 75	7
Section 3:	Plan Provisions and Participant Summary	10
	Actuarial Methods and Assumptions	13
	Rationale for Key Assumptions	16
	PA 530 of 2016 - Compliance Guide	18
	Definitions	19



City of Springfield

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 Springfield 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 Springfield 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

August 14, 2017
Date





City of Springfield Actuarial Valuation as of June 30, 2017

Summary of Valuation Results

Department	City Manager	Finance and Admin	Public Safety	Public Services	Total
Participant Data					
Active Employees	0	3	1	5	9
Retirees and Covered Spouses	1	5	13	6	25
Total	<u>1</u>	<u>8</u>	<u>14</u>	<u>11</u>	<u>34</u>
Total OPEB Liability (TOL)					
Active Employees	\$ -	\$ 87,689	\$ 28,413	\$ 77,728	\$ 193,830
Retirees and Covered Spouses	781	73,800	523,927	195,486	793,994
Total OPEB Liability	<u>\$ 781</u>	<u>\$ 161,489</u>	<u>\$ 552,340</u>	<u>\$ 273,214</u>	<u>\$ 987,824</u>
Fiduciary Net Position (FNP)	<u>(309)</u>	<u>(63,877)</u>	<u>(218,478)</u>	<u>(108,070)</u>	<u>(390,735)</u>
Net OPEB Liability (NOL)	<u><u>\$ 472</u></u>	<u><u>\$ 97,612</u></u>	<u><u>\$ 333,862</u></u>	<u><u>\$ 165,144</u></u>	<u><u>\$ 597,090</u></u>
FNP as a Percentage of TOL	39.56%	39.56%	39.56%	39.56%	39.56%
Actuarial Determined Contribution (ADC) for Fiscal Year Ending:					
June 30, 2018	\$ 26	\$ 7,550	\$ 19,302	\$ 15,032	\$ 41,910
June 30, 2019	27	7,834	20,026	15,595	43,482

Discount Rate Sensitivity

- A 1 % increase in the discount rate would decrease the Net OPEB Liability by \$82,000.
- A 1 % decrease in the discount rate would increase the Net OPEB Liability by \$95,000.

Healthcare Trend Sensitivity

- A 1 % increase in the healthcare trend would increase the Net OPEB Liability by \$13,000
- A 1 % decrease in the healthcare trend would decrease the Net OPEB Liability by \$11,000



City of Springfield 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	\$ 370,113	\$ -	\$ 370,113
Employer Contributions	-	60,858	60,858
Participant Contributions	-	-	-
Implicit Subsidy	-	-	-
Investment Income, net of investment expenses	46,558	-	46,558
Total Additions	\$ 46,558	\$ 60,858	\$ 107,415
Benefit Payments, including implicit subsidy	(25,000) *	(60,858)	(85,858)
Non-Investment Expenses	(936)	-	(936)
Total Deductions	\$ (25,936)	\$ (60,858)	\$ (86,794)
Net Change	\$ 20,621	\$ -	\$ 20,621
Balance as of End of Year	\$ 390,735	\$ -	\$ 390,735
Money-Weighted Rate of Return	13.02%	0.00%	13.02%

* Amount was removed from trust to reimburse the City for pay-as-you-go benefit costs.



City of Springfield

Actuarial Valuation as of June 30, 2017

10-Year Schedule of Funding Progress

Required Supplementary Information

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	\$1,669,757	\$1,669,757	0.0%	\$1,501,991	111.2%
6/30/2013	208,387	1,531,885	1,323,498	13.6%	1,402,010	94.4%
6/30/2014	269,235	903,086	633,851	29.8%	653,869	96.9%
6/30/2017	390,735	987,824	597,090	39.6%	447,299	133.5%



City of Springfield Actuarial Valuation as of June 30, 2017

10-Year Schedule of Employer Contributions

Required Supplementary Information					Contributions as a Percentage of
Fiscal Year Ended June 30,	Actuarially Determined Contribution (a)	Actual Contribution (b)	Contribution Deficiency (Excess) (a) - (b)	Covered Payroll (c)	Covered Payroll (b) / (c)
2011	148,486	151,967	(3,481)	1,501,991	10.12%
2012	148,486	45,955	102,531	1,501,991	3.06%
2013	148,217	97,998	50,219	1,402,010	6.99%
2014	98,604	78,930	19,674	653,869	12.07%
2015	68,202	106,640	(38,438)	653,869	16.31%
2016	68,202	142,213	(74,011)	653,869	21.75%
2017	68,202	85,858	(17,656)	447,299	19.19%
2018	41,910	<i>41,910</i>	0	447,299	9.37%
2019	43,482	<i>43,482</i>	0	447,299	9.72%

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.



City of Springfield 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 \$88,863. 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.

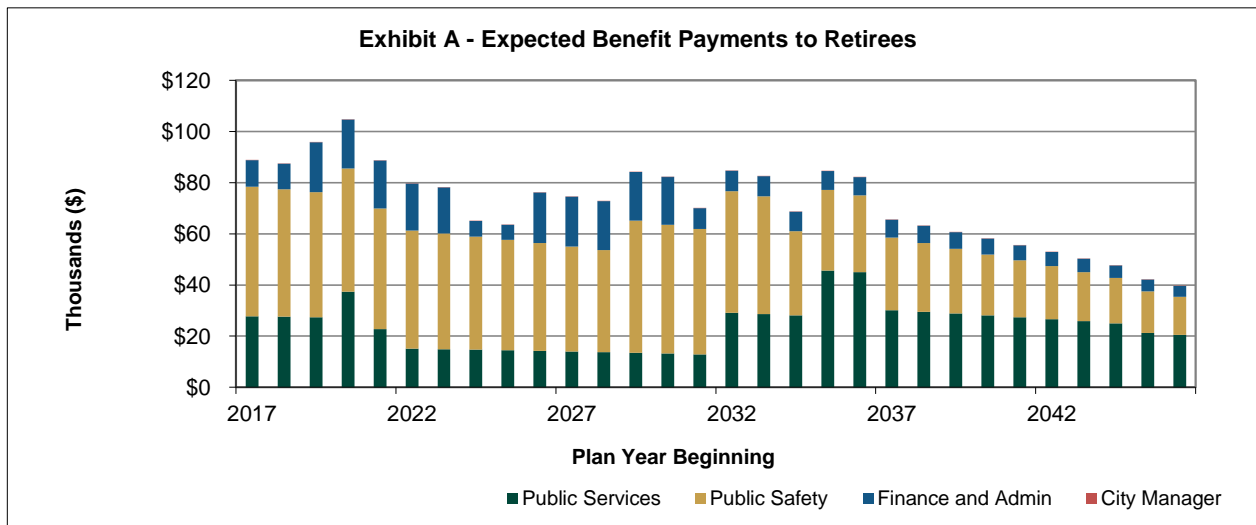


Exhibit B: First 10 Years of Expected Benefit Payments

Plan Year Beginning July 1,	City Manager	Finance and Admin	Public Safety	Public Services	Total
2017	\$85	\$10,385	\$50,590	\$27,804	\$88,863
2018	83	10,057	49,794	27,607	87,542
2019	82	19,539	48,958	27,394	95,972
2020	80	19,157	48,082	37,433	104,752
2021	78	18,778	47,171	22,756	88,783
2022	76	18,406	46,225	15,077	79,785
2023	74	18,046	45,246	14,901	78,266
2024	72	6,068	44,234	14,710	65,083
2025	69	5,843	43,189	14,502	63,604
2026	67	19,827	42,109	14,277	76,280



City of Springfield GASB Statement No. 75

OPEB Expense (Income)

	Fiscal Year Ending	
	6/30/2019	6/30/2018
OPEB Expense (Income)		
1. Service Cost	\$ 8,960	\$ 8,636
2. Interest Cost	60,135	61,321
3. Expected Return On Plan Assets	(22,389)	(23,846)
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)	<u>\$ 46,705</u>	<u>\$ 46,110</u>

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	2.00	\$ 0	N/A
2018	0	0	2.00	0	0
<u>Changes in assumptions</u>					
2019	\$ 0	\$ 0	2.00	\$ 0	N/A
2018	0	0	2.00	0	0



City of Springfield 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	\$ 968,918	\$ 987,824
2. Service Cost	8,960	8,636
3. Interest Cost	60,135	61,321
4. Net Benefits Paid by Employer	(87,542)	(88,863)
5. Differences between expected and actual experience	0	0
6. Changes in assumptions	0	0
7. Total OPEB Liability at End of Year	\$ 950,470	\$ 968,918
Reconciliation of Fiduciary Net Position		
1. Fiduciary Net Position at Beginning of Year	\$ 366,847	\$ 390,735
2. Projected Earnings on Fiduciary Net Position	22,389	23,846
3. Net Difference Between Projected and Actual Earnings	0	0
4. Employer Contributions	43,482	41,910
5. Total Benefits Paid	(87,542)	(88,863)
6. Expenses	(734)	(781)
7. Participant Contributions	0	0
8. Fiduciary Net Position at End of Year	\$ 344,442	\$ 366,847
Money-Weighted Rate of Return	6.50%	6.50%
Net OPEB Liability (Asset)		
1. Total OPEB Liability	\$ 950,470	\$ 968,918
2. Fiduciary Net Position	(344,442)	(366,847)
3. Net OPEB Liability (Asset)	\$ 606,028	\$ 602,071
Fiduciary Net Position as % of Total OPEB Liability	36.24%	37.86%
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 Springfield 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 Springfield

Actuarial Valuation as of June 30, 2017

Plan Provisions and Participant Summary

Retiree Benefits

The Employer allows eligible retirees to continue in the Employer's group medical, dental, and vision insurance plans. Benefits are provided through fully-insured plans administered by Blue Cross Blue Shield of Michigan.

At the time the retiree is eligible to enroll in Medicare, he/she shall enroll in Medicare, and the Employer will provide \$200 per month for employees, and \$250 per month for department heads, for the purchase of supplemental insurance in lieu of continuance on the Employer's group health insurance plan.

The Employer will carry a \$5,000 life insurance policy for eligible retirees.

At the time of retirement, any employee that is eligible to participate in the Employer's hospitalization plan, but chooses to decline participation, shall be paid a one-time deferral fee equal to \$25,000 for union members and \$10,000 for non-union employees. Such retiree shall have no future right to access the Employer's hospitalization plan.

Eligibility

Healthcare

Non-Union

The employee must have been hired prior to July 1, 2009 and must have completed a minimum of 20 years of full-time service.

Union

The employee must have been hired prior to June 15, 2015, and must have completed a minimum of 20 years of full-time service.

Life Insurance

The employee must retire under MERS, the Police and Fire Pension, or the ICMA Deferred Compensation Plan after December 1, 1978, and be hired by the Employer on or before January 5, 2004.



City of Springfield Actuarial Valuation as of June 30, 2017

Plan Provisions and Participant Summary

Cost Sharing

Non-Union

The Employer will contribute 80% of the cost of the single-person healthcare premium and 100% of the cost of single-person dental and vision premiums in effect at retirement. This dollar amount will be fixed until age 65. The retiree is responsible for the remaining premium, and any increases in the gross premium, thereafter. The retiree contributes nothing toward life insurance coverage.

Union

The Employer will contribute 100% of the cost of the single-person healthcare, dental, and vision premiums in effect at retirement. This dollar amount will be fixed until age 65. The retiree is responsible for the remaining premium, and any increases in the gross premium, thereafter. The retiree contributes nothing toward life insurance coverage.

Annual Premiums

Age	Medical	Dental	Vision	Total
45	\$5,751	\$335	\$48	\$6,134
46	5,967	341	49	6,358
47	6,210	347	51	6,608
48	6,486	354	54	6,894
49	6,759	360	56	7,175
50	7,066	367	59	7,491
51	7,369	374	61	7,804
52	7,702	381	64	8,147
53	8,039	388	67	8,494
54	8,403	395	70	8,868
55	8,767	402	73	9,243
56	9,161	410	77	9,647
57	9,559	418	80	10,057
58	9,983	426	84	10,492
59	10,197	434	86	10,717
60	10,622	442	89	11,154
61	10,990	450	92	11,533
62	11,235	459	94	11,789
63	11,540	468	97	12,105
64	11,729	477	99	12,304

Life Insurance - \$0.71 per \$1,000 of coverage.

Changes Since Prior Valuation

1. Premium equivalent rates were updated reflect current rates.



City of Springfield Actuarial Valuation as of June 30, 2017

Plan Provisions and Participant Summary

Participant Summary

Metric	City Manager	Finance and Admin	Public Safety	Public Services
Active - Count	0	3	1	5
Active - Average Age	0.0	58.4	48.2	41.2
Active - Average Svc	0.0	16.8	18.3	9.0
Active - % Male	0.0	0.0	0.0	100.0
Retiree - Count	1	5	13	6
Retiree - Average Age	70.7	75.3	66.8	70.9
Retiree - % Male	100.0	0.0	84.6	100.0

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	1	0	0	0	0	0	0	0	0	1
30 to 34	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	1	1	0	0	0	0	0	0	0	2
40 to 44	0	0	0	1	0	0	0	0	0	0	1
45 to 49	0	0	0	0	1	0	0	0	0	0	1
50 to 54	0	0	0	0	1	0	0	0	0	0	1
55 to 59	0	0	0	0	0	1	0	0	0	0	1
60 to 64	0	0	0	0	1	0	0	0	0	0	1
65 to 70	0	0	0	1	0	0	0	0	0	0	1
70+	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	1	2	3	1	0	0	0	0	9



City of Springfield

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	2.50%
Investment Rate of Return	6.50%
Actuarial Value of Assets	Market Value
Funding Policy	As the Employer does not have a formal funding policy, the actuarially determined contribution is a continuation of the Annual Required Contribution methodology used under GASB No. 45. The determined contributions as of the valuation date include the normal cost, plus a 26-year, closed, level-percentage-of-payroll amortization of the Net OPEB Liability.
Annual Per-Capita Claims Costs	Per-capita costs are equal to the premium equivalent rates listed earlier in this report. Blue Care Network charges age-specific, per-person premiums for healthcare coverage. As such, aging of costs was not required and there is no implicit subsidies included in this valuation.

Annual Healthcare Trend

Years after Valuation	Medical & Pharmacy	Dental	Vision
1	8.00%	4.00%	4.00%
2	7.50	4.00	4.00
3	7.00	4.00	4.00
4	6.50	4.00	4.00
5	6.00	4.00	4.00
6	5.50	4.00	4.00
7	5.00	4.00	4.00
8	4.50	4.00	4.00
9+	4.00	4.00	4.00

Healthcare costs are assumed to increase according to the above healthcare trend. Life insurance premiums are not assumed to increase in the future.





City of Springfield

Actuarial Valuation as of June 30, 2017

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

Not applicable

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

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 follows:

- 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.



City of Springfield

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. Rates are based on 100% of Withdrawal rates in the 12/31/2015 MERS pension valuation. Sample rates are as follows:

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

Retirement

Other than those denoted in the participant data, all active employees are assumed to retire at age 60, or 20 years of service, which ever occurs later.

Disability

Participants are assumed to become disabled in accordance with annual rates varying by age. Rates are based the Disability rates used in the 12/31/2015 MERS pension valuation. Sample rates are as follows:

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

Changes Since Prior Valuation

1. Discount rate was increased from 5% to 6.5% based on the expected return on assets and the discount rate methodology required under GASB No. 75.
2. Annual wage increase assumption was updated to reflect the assumption used in the most recent MERS pension valuation.
3. Healthcare trend was updated to the above schedule based on plan experience and industry norms. Dental and vision trend was set equal to the ultimate healthcare trend rate.
4. Mortality, withdrawal, and disability assumptions were updated to reflect those used in the most recent MERS pension valuation.
5. Individual assumed retirement ages for active employees were updated as provided by the client.



City of Springfield

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 Employer is determined based on the goals and objectives of the Plan and the risk tolerance of the Employer. 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 Employer'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	10.0%	10.0%	3.00%	0.3%
International Fixed Income	2.3%	7.0%	5.75%	0.4%
Domestic Equity	40.5%	38.0%	8.50%	3.2%
International Equity	12.3%	12.5%	8.75%	1.1%
Private Equity	4.6%	5.0%	9.75%	0.5%
Real Estate	10.3%	9.0%	7.00%	0.6%
Cash	10.4%	1.5%	2.00%	0.0%
Other	9.6%	17.0%	2.50%	0.4%
				6.5%



City of Springfield

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, Mortality

Because the Employer does not have enough data to conduct a fully credible experience analysis with respect to these assumptions, the current assumptions have been selected based on those used in the participant's 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 Springfield

Actuarial Valuation as of June 30, 2017

Public Act 530 of 2016 - Compliance Guide

Sec. 13(1)(d):

(i)	Name of system	City of Springfield
(ii)	Names Investment fiduciaries	Not provided
(iii)	System's service providers	Insurer - 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 = 0.20% 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	\$447,299
	(F) Normal Cost as a % of payroll	1.85%
	(G) ADC as a % of payroll	9.37%
	(H) Weighted average member contributions	Member premium cost sharing is described in the Plan Provisions beginning on page 10
	(I) Actuarial expected investment return	6.50%
	(J) Actuarial long-term inflation rate	2.50%
	(K) Asset smoothing method	None
	(L) Amortization Method	Closed Level % of Pay amortization over 26 years
	(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	<ul style="list-style-type: none"> - Participation has been closed to new hires - An irrevocable OPEB trust has been established - Employer contributions are fixed at retirement
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City of Springfield 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 Springfield

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 Springfield

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 Springfield

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.