



MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN
ANNUAL ACTUARIAL VALUATION REPORT DECEMBER 31, 2012
SPRINGFIELD, CITY OF (1303)

Spring, 2013

Springfield, City of

In care of:

Municipal Employees' Retirement System of Michigan
1134 Municipal Way
Lansing, Michigan 48917

This report presents the results of the Annual Actuarial Valuation, prepared as of December 31, 2012. The report includes the determination of liabilities and contribution rates resulting from the participation of Springfield, City of (1303) in the Municipal Employees' Retirement System of Michigan ("MERS"). MERS is an independent public nonprofit organization that has partnered with Michigan municipalities for more than 65 years, helping them provide safe, secure retirement plans for their employees. Springfield, City of is responsible for the employer contributions needed to provide MERS benefits for its employees and former employees under the Michigan Constitution and the MERS Plan Document.

The purpose of the December 31, 2012 annual actuarial valuation is to (i) measure funding progress, (ii) establish contribution requirements for the fiscal year beginning July 1, 2014, and (iii) provide actuarial information in connection with applicable Governmental Accounting Standards Board statements. This valuation report should not be relied upon for any other purpose.

The valuation uses financial data, plan provision data, and participant data as of December 31, 2012 furnished by MERS' administrative staff. The data was checked for internal and year to year consistency as well as general reasonableness, but was not otherwise audited. The MERS of Michigan Actuarial Services Department does not assume responsibility for the accuracy or completeness of the data used in this valuation.

The actuarial assumptions and methods are adopted by the Retirement Board. For this annual valuation, the Retirement Board adopted some revised actuarial assumptions. Please refer to the division-specific assumptions described in table(s) in this report, and to the Appendix on the MERS website at:

www.mersofmich.com/Portals/0/Assets/Resources/AAV-Appendix/MERS-2012AnnualActuarialValuation-Appendix.pdf.

The actuarial assumptions used for this valuation produce results that we believe are reasonable.

To the best of our knowledge, this report is complete and accurate, was prepared in conformity with generally recognized actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and is in compliance with Act No. 220 of the Public Acts of 1996, as amended, and the MERS Plan Document as revised. All of the undersigned are employees of MERS, members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The Retirement Board of the Municipal Employees' Retirement System of Michigan confirms that the System provides for payment of the required employer contribution as described in Section 20m of Act No. 314 of 1965 (MCL 38.1140m).

Please review the Comments on the Investment Markets.

This report was prepared at the request of the Retirement Board and may be provided only in its entirety by the municipality to other interested parties (MERS customarily provides the full report on request to related third parties such as the auditor for the municipality).

Please contact MERS at <http://www.mersofmich.com/MERS/About-MERS/Contact-Us> if you have any questions.

Sincerely,

Alan Sonnanstine, MAAA, ASA
Cathy Nagy, MAAA, FSA
Jim Koss, MAAA, ASA

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Executive Summary

Required Employer Contributions

The computed minimum required employer contributions to the retirement system for the fiscal years beginning July 1, 2014 (2012 Valuation) and July 1, 2013 (2011 Valuation) are as follows:

Division	Percentage of Payroll		Monthly \$ Based on Valuation Payroll	
	2012 Valuation	2011 Valuation	2012 Valuation	2011 Valuation
01 - AFSCME	13.68%	14.15%	\$ 2,352	\$ 2,494
02 - PubSafety	19.07%	12.83%	12,855	9,629
10 - Non Union	7.98%	7.44%	1,451	1,112
11 - Dept Hds	32.57%	29.26%	5,189	4,354
Municipality Total			\$ 21,847	\$ 17,589

The above employer contribution requirements are in addition to the member contributions, if any, shown in Table 2.

It is important to note that the contribution rates shown above are not expected to remain at present levels indefinitely. If future experience were to match the valuation assumptions exactly, the computed employer rates for divisions that are open to new hires would trend over time toward the long-term cost of system benefits, known as the Normal Cost (see Table 1). For underfunded divisions that are closed to new hires and are not linked to an open division, the computed employer dollar contribution would increase 5%-9% annually for 15 years under the Option B amortization policy (for divisions first reflected as closed in the 2012 valuation). Under the Option A amortization policy, the annual increases would be larger but would only continue for 10 years.

Contribution rates will change from one year to the next as a result of changes in benefit provisions, changes in the actuarial assumptions, and experience of the plan (investment experience and demographic experience).

The 2012 valuation reflects changes in actuarial assumptions and/or methods (see the [Appendix](#)). For benefit provision changes see Table 2.

2012 System Experience

Based on the smoothed Actuarial Value of Assets (Valuation Assets), the recognized rate of investment return for MERS overall was 5.4% (less than the 8% actuarial assumption). On average this will result in increases in computed employer contributions.

Demographic experience varied by division. This reflects what actually happened to participants (active members, retirees, and vested former members) compared to what was projected by the actuarial assumptions.

2012 Funded Position

The ratio of the Valuation Assets to the Actuarial Accrued Liability for Springfield, City of in aggregate is 75%; last year's ratio was 81%.

Comments on the Investment Markets

The dramatic price declines across the world financial markets in 2008 led to increased volatility unlike any experienced in decades. From 2009 to 2012, financial markets experienced price appreciation driven largely by government monetary policy and a rebound in economic activities; although at a slower pace than historic past recession recoveries. MERS' portfolio recovered with average annual investment returns of over 10%. While investors world-wide continue to focus on economic concerns and market volatility, equity markets have rebounded, particularly in the United States. The S&P has rebounded 109% from the March 9, 2009 bottom to December 31, 2012.

At this time, MERS maintains the 8% annual return assumption on investments in the belief that over the long term this is achievable. For example, MERS' 30 year return was 9.3% on December 31, 2012. MERS regularly monitors the investment return assumption to make sure it is reasonable compared to long term expectations.

The actuarial value of assets (funding value), used to determine both your funded status and your required employer contribution, is based on a 10-year smoothed value of assets. Only a portion (five-tenths, for 2008 - 2012) of the 2008 investment market losses was recognized in this actuarial valuation report. This reduces the volatility of the valuation results, which affects your required employer contribution and actuarial funded percentage.

As of December 31, 2012 the actuarial value of assets is 114% of market value (down from 121% in 2011). This means that meeting the actuarial assumption in the next few years will require average annual market returns that exceed the 8% investment return assumption.

If the December 31, 2012 valuation results were based on market value on that date instead of 10-year smoothed funding value: i) the funded percent of your entire municipality would be 66% (instead of 75%); and ii) your total employer contribution requirement for the fiscal year starting July 1, 2014 would be \$ 321,696 (instead of \$ 262,164). If the investment markets do not fully make up for the 2008 losses, employer contribution requirements may rise. MERS' investment strategy employs diversification using various asset categories (stocks, bonds, and to a smaller extent real estate, commodities and private equity) to capture as much of the upside return as possible while managing acceptable risk. If contribution increases do become necessary, MERS would attempt to implement them incrementally.

Remember that only five-tenths of the 2008 market losses are reflected in this actuarial valuation report. As was true for past market downturns, MERS expects the markets to continue to rebound. By the time the 2008 market losses would be fully recognized (over the following 5 years), future market gains are expected to partly or fully offset 2008 market losses. This smoothing method is a powerful tool for reducing the volatility of your required employer contributions. However, if the financial markets do not rebound, the result would be gradual increases in your employer contribution requirement over the next 5 years (as described above).

Employer Contribution Details For the Fiscal Year Beginning July 1, 2014

Table 1

Division	Amort. Period for Unfund. Liab. ^{4,5}	Employer Contributions ¹			Blended Employer Contribut. ⁷	GASB ARC ⁶	Member Contribut. Conversion Factor ²
		Normal Cost	Unfunded Accrued Liability	Total Required Employer Contribut.			
Percentage of Payroll							
01 - AFSCME	26	7.95%	5.73%	13.68%			
02 - PubSafety	26	7.33%	11.74%	19.07%			
10 - Non Union	26	6.34%	1.64%	7.98%			
11 - Dept Hds	26	11.90%	20.67%	32.57%			
Estimated Monthly Contribution³							
01 - AFSCME	26	\$ 1,367	\$ 985	\$ 2,352			0.85%
02 - PubSafety	26	4,941	7,914	12,855			0.84%
10 - Non Union	26	1,153	298	1,451			0.84%
11 - Dept Hds	26	1,896	3,293	5,189			0.89%
Total Municipality		\$ 9,357	\$ 12,490	\$ 21,847			
Estimated Annual Contribution³							
		\$ 112,284	\$ 149,880	\$ 262,164			

¹ The above Employer contribution requirements are in addition to the Member contributions, if any, shown in Table 2.

² If Member contributions are increased/decreased by 1.00% of pay, the Employer contribution requirement will decrease/increase by the Member Contribution Conversion Factor.

³ For divisions that are open to new hires, estimated contributions are based on valuation payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher). For divisions that will have no new hires, invoices will be based on the above dollar amounts which are based on projected fiscal year payroll. See description of Open Divisions and Closed Divisions in the [Appendix](#).

⁴ If projected assets exceed projected liabilities as of the beginning of the July 1, 2014 fiscal year, the negative unfunded accrued liability is amortized (spread) over 10 years. This amortization is used to reduce the employer contribution rate. Note that if the overfunding credit is larger than the normal cost, the full credit is shown above but the total contribution requirement is zero. This will cause the displayed normal cost and unfunded accrued liability contributions to not add across.

⁵ If the division is closed to new hires, with new hires not covered by MERS Defined Benefit Plan or Hybrid Plan provisions, the amortization period will decrease as follows: Under Amortization Option A, the period will decrease by 2 years each valuation year, until a minimum 5-year amortization is attained. Under Amortization Option B, the period will decrease by 2 years each valuation year, until reaching 15 years. Thereafter, the period will reduce by 1 year each valuation year, until a minimum 5-year amortization is attained. This will result in amortization payments that increase faster than the usual 4.5% each year. If the division is closed to new hires, with new hires (and transfers) covered by MERS Defined Benefit Plan or Hybrid Plan provisions, the standard open division amortization period will apply.

⁶ For reporting and disclosure purposes under Statement Nos. 25 and 27 of the Governmental Accounting Standards Board, the annual required contribution (ARC) for this division is based on a 30 year level dollar amortization.

⁷ For linked divisions, the employer will be invoiced the Total Required Employer Contribution rate shown above for each linked division (a contribution rate for the open division; a contribution dollar for the closed-but-linked division), unless the employer elects to contribute the Blended Employer Contribution rate shown above, by contacting MERS at 800-767-2308.

Please see the Comments on the Investment Markets.

Benefit Provisions

Table 2

01 - AFSCME: Open Division

	2012 Valuation	2011 Valuation
Benefit Multiplier:	2.25% Multiplier (80% max)	Benefit B-3 (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/25	55/25
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	5 years	5 years
Member Contributions:	2%	2%
Act 88:	Yes (Adopted 12/21/1970)	Yes (Adopted 12/21/1970)

02 - PubSafety: Open Division

	2012 Valuation	2011 Valuation
Benefit Multiplier:	3.00% Multiplier (80% max)	3.0% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	25 and Out	25 and Out
Early Retirement (Reduced):	55/15	55/15
Final Average Compensation:	5 years	5 years
Member Contributions:	7%	7%
Act 88:	Yes (Adopted 12/21/1970)	Yes (Adopted 12/21/1970)

10 - Non Union: Open Division

	2012 Valuation	2011 Valuation
Benefit Multiplier:	2.00% Multiplier (no max)	Benefit B-2
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	5 years	5 years
Member Contributions:	2%	2%
Act 88:	Yes (Adopted 12/21/1970)	Yes (Adopted 12/21/1970)

Table 2 (continued)**11 - Dept Hds: Open Division**

	2012 Valuation	2011 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	Benefit B-4 (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/25	55/25
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	3 years	3 years
Member Contributions:	2%	2%
RS50% Percentage:	50%	50%
Act 88:	Yes (Adopted 12/21/1970)	Yes (Adopted 12/21/1970)

Membership Summary

Table 3

Division	2012 Valuation		2011 Valuation		2012 Valuation		
	Number	Annual Payroll ¹	Number	Annual Payroll ¹	Average Age	Average Benefit Service ²	Average Eligibility Service ²
01 - AFSCME							
Active Members	5	\$ 206,347	5	\$ 211,465	45.4	9.6	9.6
Vested Former Members	1	4,874	1	4,874	50.0	11.2	11.2
Retirees and Beneficiaries	6	54,199	7	63,472	70.8		
02 - PubSafety							
Active Members	12	\$ 808,898	13	\$ 900,562	38.4	9.8	10.4
Vested Former Members	1	31,008	1	31,008	52.0	14.3	14.3
Retirees and Beneficiaries	20	457,511	19	380,538	65.8		
10 - Non Union							
Active Members	6	\$ 218,150	5	\$ 179,322	46.3	9.9	9.9
Vested Former Members	6	29,055	6	29,055	49.2	7.6	12.8
Retirees and Beneficiaries	3	30,455	3	30,455	74.7		
11 - Dept Hds							
Active Members	3	\$ 191,160	3	\$ 178,575	52.0	18.4	23.1
Vested Former Members	3	20,913	3	20,913	53.0	6.8	16.7
Retirees and Beneficiaries	4	96,130	4	96,130	72.5		
Total Municipality							
Active Members	26	\$ 1,424,555	26	\$ 1,469,924	43.1	10.8	11.6
Vested Former Members	11	85,850	11	85,850	50.6	8.3	13.9
Retirees and Beneficiaries	33	638,295	33	570,595	68.3		
Total Participants	70		70				

¹ Annual payroll for active members; annual deferred benefits payable for vested former members; annual benefits being paid for retirees and beneficiaries.

² Description can be found under Miscellaneous and Technical Assumptions in the [Appendix](#).

Reported Assets (Market Value)

Table 4

Division	2012 Valuation		2011 Valuation	
	Employer and Retiree ¹	Employee ²	Employer and Retiree ¹	Employee ²
01 - AFSCME	\$ 539,681	\$ 5,930	\$ 517,652	\$ 2,041
02 - PubSafety	3,898,679	611,430	3,603,020	732,461
10 - Non Union	540,511	5,932	503,168	1,865
11 - Dept Hds	900,138	5,627	856,996	1,801
Municipality Total	\$ 5,879,009	\$ 628,919	\$ 5,480,836	\$ 738,168
Combined Reserves	\$ 6,507,928		\$ 6,219,004	

¹ Reserve for Employer Contributions and Benefit Payments

² Reserve for Employee Contributions

The December 31, 2012 valuation assets are equal to 1.143563 times the reported market value of assets (compared to 1.205815 as of December 31, 2011). The derivation of valuation assets is described, and detailed calculations of valuation assets are shown, in the [Appendix](#).

Flow of Valuation Assets

Table 5

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Net Transfers	Valuation Asset Balance
	Employer	Member					
2002	\$ 12,836	\$ 0	\$ 45,424	\$ (131,403)	\$ 0	\$ 0	\$ 2,007,703
2003	3,299,473	463,421	1,126,394	(285,988)	0	0	6,611,003
2004	156,739	81,391	427,132	(430,908)	0	0	6,845,357
2005	164,291	76,873	432,265	(438,481)	(37)	0	7,080,268
2006	161,826	79,706	562,328	(493,390)	0	0	7,390,738
2007	162,665	74,892	598,968	(523,365)	0	0	7,703,898
2008	153,761	71,613	299,494	(554,808)	(86,993)	0	7,586,965
2009	155,708	65,072	255,025	(568,111)	(17,806)	0	7,476,853
2010	180,881	62,692	343,815	(597,569)	(1,761)	0	7,464,911
2011	187,977	68,746	349,607	(572,273)	0	0	7,498,968
2012	184,498	70,290	305,956	(608,275)	(9,211)	0	7,442,226

Note: Transfers in and out are usually related to the transfer of participants between municipalities, and to employer and member payments for service credit purchases (if any) that the governing body has approved.

Actuarial Accrued Liabilities and Valuation Assets As of December 31, 2012

Table 6

Division	Actuarial Accrued Liability	Valuation Assets ¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
01 - AFSCME				
Active Members	\$ 323,861	\$ 119,094	36.8%	\$ 204,767
Vested Former Members	22,613	22,613	100.0%	0
Retirees And Beneficiaries	482,234	482,234	100.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 828,708	\$ 623,941	75.3%	\$ 204,767
02 - PubSafety				
Active Members	\$ 1,965,886	\$ 527,831	26.8%	\$ 1,438,055
Vested Former Members	168,527	59,824	35.5%	108,703
Retirees And Beneficiaries	4,543,004	4,543,004	100.0%	0
Pending Refunds	<u>26,935</u>	<u>26,935</u>	100.0%	<u>0</u>
Total	\$ 6,704,352	\$ 5,157,594	76.9%	\$ 1,546,758
10 - Non Union				
Active Members	\$ 302,654	\$ 241,476	79.8%	\$ 61,178
Vested Former Members	153,212	153,212	100.0%	0
Retirees And Beneficiaries	230,204	230,204	100.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 686,070	\$ 624,892	91.1%	\$ 61,178
11 - Dept Hds				
Active Members	\$ 773,612	\$ 107,197	13.9%	\$ 666,415
Vested Former Members	83,785	83,785	100.0%	0
Retirees And Beneficiaries	844,817	844,817	100.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 1,702,214	\$ 1,035,799	60.9%	\$ 666,415
Total Municipality				
Active Members	\$ 3,366,013	\$ 995,598	29.6%	\$ 2,370,415
Vested Former Members	428,137	319,434	74.6%	108,703
Retirees and Beneficiaries	6,100,259	6,100,259	100.0%	0
Pending Refunds	<u>26,935</u>	<u>26,935</u>	100.0%	<u>0</u>
Total Participants	\$ 9,921,344	\$ 7,442,226	75.0%	\$ 2,479,118

¹ Includes both employer and member assets.

Please see the Comments on the Investment Markets.

See the MERS Fiscal Responsibility Policy on the MERS website at:

http://www.mersofmich.com/Portals/0/Assets/PageResources/MERS/PlanDocument/Pension/sec_43c.pdf.

Actuarial Accrued Liabilities - Comparative Schedule

Table 7

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities	UAL as Percent of Annual Payroll
1998	\$ 1,640,084	\$ 1,735,154	106%	\$ (95,069)	0%
1999	1,769,219	1,923,123	109%	(153,903)	0%
2000	1,925,319	2,041,646	106%	(116,326)	0%
2001	2,055,785	2,080,846	101%	(25,061)	0%
2002	2,098,078	2,007,703	96%	90,375	18%
2003	7,222,416	6,611,003	92%	611,413	38%
2004	7,584,567	6,845,357	90%	739,210	46%
2005	7,947,925	7,080,268	89%	867,657	53%
2006	8,346,103	7,390,738	89%	955,365	55%
2007	8,771,605	7,703,898	88%	1,067,707	67%
2008	8,793,691	7,586,965	86%	1,206,726	79%
2009	8,826,445	7,476,853	85%	1,349,592	92%
2010	8,981,040	7,464,911	83%	1,516,129	100%
2011	9,311,277	7,498,968	81%	1,812,309	123%
2012	9,921,344	7,442,226	75%	2,479,118	174%

Notes: Actuarial assumptions were revised for the 2000, 2004, 2008, 2009, 2010, 2011, and 2012 actuarial valuations.

GASB 25 and GASB 27 Information

The following information has been prepared to provide the information necessary to comply with GASB Statements Number 25 and 27. Statement 25 is effective for fiscal years beginning after June 15, 1996 and Statement 27 is effective for fiscal years beginning after June 15, 1997.

All entries and the annual employer contribution amount were based on the actuarial methods and assumptions used in the December 31, 2012 actuarial valuation. The entry age normal actuarial method was used to determine the disclosure entries.

GASB 25 Information (as of 12/31/2012)

Actuarial Accrued Liability		
Retirees and beneficiaries currently receiving benefits	\$	6,100,259
Terminated employees (vested former members) not yet receiving benefits		428,137
Non-Vested terminated employees (pending refunds of accumulated member contributions)		26,935
Current employees -		
Accumulated employee contributions including allocated investment income		545,320
Employer financed		<u>2,820,693</u>
Total Actuarial Accrued Liability	\$	9,921,344
Net Assets Available for Benefits at Actuarial Value	\$	<u>7,442,226</u>
(Market Value is 6,507,928)		
Unfunded (Overfunded) Actuarial Accrued Liability	\$	2,479,118

GASB 27 Information (as of 12/31/2012)

Fiscal Year Beginning		July 1, 2014
Annual Required Contribution (ARC)	\$	262,164 ¹

¹ Based on valuation payroll (based on projected fiscal year payroll for divisions that will have no new hires). For divisions that are open to new hires the actual required contribution will be based on current monthly payroll (during the fiscal year beginning July 1, 2014) times the computed employer contribution rate(s) shown in Table 1. The ARC shown here is the sum of the ARC's calculated separately for each division.

GASB 27 Information (Used in the 12/31/2012 Annual Actuarial Valuation)

Amortization Factors Used to Compute Employer Contribution Requirements Used for Funding Calculations and Most ARC Calculations (see below) (Payments Increase 4.5% per Year)

Amortization Factor Used - Underfunded or Overfunded Liabilities (5 years)	0.221706
Amortization Factor Used - Underfunded or Overfunded Liabilities (6 years)	0.187731
Amortization Factor Used - Underfunded or Overfunded Liabilities (7 years)	0.163488
Amortization Factor Used - Underfunded or Overfunded Liabilities (8 years)	0.145330
Amortization Factor Used - Underfunded or Overfunded Liabilities (9 years)	0.131227
Amortization Factor Used - Underfunded or Overfunded Liabilities (10 years)	0.119963
Amortization Factor Used - Underfunded or Overfunded Liabilities (11 years)	0.110763
Amortization Factor Used - Underfunded or Overfunded Liabilities (12 years)	0.103112
Amortization Factor Used - Underfunded or Overfunded Liabilities (13 years)	0.096652
Amortization Factor Used - Underfunded or Overfunded Liabilities (14 years)	0.091128
Amortization Factor Used - Underfunded or Overfunded Liabilities (15 years)	0.086353
Amortization Factor Used - Underfunded or Overfunded Liabilities (16 years)	0.082185
Amortization Factor Used - Underfunded or Overfunded Liabilities (17 years)	0.078519
Amortization Factor Used - Underfunded or Overfunded Liabilities (18 years)	0.075270
Amortization Factor Used - Underfunded or Overfunded Liabilities (19 years)	0.072372
Amortization Factor Used - Underfunded or Overfunded Liabilities (20 years)	0.069773
Amortization Factor Used - Underfunded or Overfunded Liabilities (21 years)	0.067430
Amortization Factor Used - Underfunded or Overfunded Liabilities (22 years)	0.065308
Amortization Factor Used - Underfunded or Overfunded Liabilities (23 years)	0.063378
Amortization Factor Used - Underfunded or Overfunded Liabilities (24 years)	0.061616
Amortization Factor Used - Underfunded or Overfunded Liabilities (25 years)	0.060002
Amortization Factor Used - Underfunded or Overfunded Liabilities (26 years)	0.058519

Amortization Factor Used to Compute the GASB Annual Required Contribution (ARC) For Divisions that are Closed to New Hires (and new hires are not covered by MERS DB or Hybrid provisions in a linked division) If Division is Less than 100% Funded, and Uses a Funding Period over 15 Years

Amortization Factor Used - Underfunded Liabilities (30 year level \$)	0.085453
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Assumptions: Continuous Payments; Interest at 8% Per Year

Benefit Provision History

The following benefit provision history is provided by MERS. Any corrections to this history or discrepancies between this information and information displayed elsewhere in the valuation report should be reported to MERS. All provisions are listed by date of adoption.

01 - AFSCME

7/1/2011	Member Contribution Rate 2.00%
1/1/2010	Benefit B-3 (80% max)
8/1/2009	Temporary 20 Years & Out (08/01/2009 - 09/30/2009)
1/1/2000	Benefit B-2
1/1/2000	Flexible E \$10.00 Monthly COLA Adopted (01/01/2000)
1/1/2000	E Cola Adoption Date 01-01-2000
1/1/2000	E Cola Increase Amount 10
1/1/2000	E Cola Increase Type Flat Amount
1/1/1997	Flexible E 2% COLA Adopted (01/01/1997)
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
1/1/1992	Flexible E 2% COLA Adopted (01/01/1992)
1/1/1991	Flexible E 2% COLA Adopted (01/01/1991)
1/1/1990	Benefit F55 (With 25 Years of Service)
1/1/1990	Flexible E 2% COLA Adopted (01/01/1990)
1/1/1989	Flexible E 2% COLA Adopted (01/01/1989)
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
7/1/1980	Member Contribution Rate 0.00%
7/1/1979	Benefit B-1
7/1/1979	Member Contribution Rate 5.00%
3/1/1976	Exclude Temporary Employees
12/21/1970	Covered by Act 88
3/1/1963	Benefit FAC-5 (5 Year Final Average Compensation)
3/1/1963	Benefit C (Old)
3/1/1963	Member Contribution Rate 3.00% Under \$4,200.00 - Then 5.00%
3/1/1963	Fiscal Month - July
3/1/1963	10 Year Vesting

02 - PubSafety

7/1/2009	Temporary 20 Years & Out (07/01/2009 - 08/31/2009)
7/1/2004	Member Contribution Rate 7.00%
7/1/2003	10 Year Vesting
7/1/2003	25 Years & Out
7/1/2003	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/2003	3.0% Multiplier (80% max)
7/1/2003	Day of work defined as 120 Hours a Month for all employees
7/1/2003	Member Contribution Rate 8.00%
12/21/1970	Covered by Act 88
3/1/1963	Fiscal Month - July

10 - Non Union

7/1/2011	Member Contribution Rate 2.00%
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Benefit Provision History

10 - Non Union

1/1/1997	Flexible E 2% COLA Adopted (01/01/1997)
1/1/1997	E Cola Adoption Date 01-01-1997
1/1/1997	E Cola Increase Amount 2
1/1/1997	E Cola Increase Type Percent
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
1/1/1992	Flexible E 2% COLA Adopted (01/01/1992)
1/1/1991	Flexible E 2% COLA Adopted (01/01/1991)
1/1/1990	Flexible E 2% COLA Adopted (01/01/1990)
1/1/1989	Flexible E 2% COLA Adopted (01/01/1989)
7/1/1988	Benefit B-2
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
7/1/1980	Member Contribution Rate 0.00%
7/1/1979	10 Year Vesting
7/1/1979	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/1979	Benefit B-1
7/1/1979	Member Contribution Rate 5.00%
3/1/1976	Exclude Temporary Employees
12/21/1970	Covered by Act 88
3/1/1963	Fiscal Month - July

11 - Dept Hds

7/1/2011	Member Contribution Rate 2.00%
3/1/2007	Temporary 30 Years & Out (03/01/2007 - 08/31/2007)
1/1/1997	Flexible E 2% COLA Adopted (01/01/1997)
1/1/1997	E Cola Adoption Date 01-01-1997
1/1/1997	E Cola Increase Amount 2
1/1/1997	E Cola Increase Type Percent
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
1/1/1992	Flexible E 2% COLA Adopted (01/01/1992)
11/1/1991	Benefit RS 50 (50% Post-Ret. Spouse Benefits)
1/1/1991	Flexible E 2% COLA Adopted (01/01/1991)
7/1/1990	Benefit B-4 (80% max)
7/1/1990	Benefit F55 (With 25 Years of Service)
5/1/1990	Benefit B-3 (80% max)
1/1/1990	Flexible E 2% COLA Adopted (01/01/1990)
1/1/1989	Flexible E 2% COLA Adopted (01/01/1989)
7/1/1988	Benefit FAC-3 (3 Year Final Average Compensation)
7/1/1988	Benefit B-2
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
7/1/1980	Member Contribution Rate 0.00%
7/1/1979	10 Year Vesting
7/1/1979	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/1979	Benefit B-1
7/1/1979	Member Contribution Rate 5.00%
3/1/1976	Exclude Temporary Employees

Benefit Provision History

SPRINGFIELD, CITY OF (1303)

11 - Dept Hds

12/21/1970	Covered by Act 88
3/1/1963	Fiscal Month - July

Plan Provisions, Actuarial Assumptions, and Actuarial Funding Method

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology can be found in the [Appendix](#). Some actuarial assumptions are specific to this municipality and its divisions. These are listed below.

Increase in Final Average Compensation

Division	FAC Increase Assumption
All Divisions	2.00%

Withdrawal Rate Scaling Factor

Division	Withdrawal Rate Scaling Factor
All Divisions	100%

Miscellaneous and Technical Assumptions

Loads – None.