

Fall 2012

Pittsfield Chtr Twp

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

Subject: Pittsfield Chtr Twp (8110) – December 31, 2011 Annual Actuarial Valuation Results Summary

This letter includes the determination of liabilities and contribution rates resulting from participation by the above-named municipality in the Municipal Employees' Retirement System of Michigan ("MERS").

Please note this letter is a summary of the final December 31, 2011 valuation results.

Our calculations were based on the following information:

- Demographic information, financial information and benefit provisions provided to us by MERS administrative staff for the December 31, 2011 annual valuation. Data was checked for internal consistency with the prior year, but was not otherwise audited by us.
- The actuarial assumptions and methods adopted by the Retirement Board for use in the December 31, 2011 annual valuation. Please refer to the division-specific assumptions described in table(s) in this letter, and to the Appendix on the MERS website at: <http://www.mersofmich.com/Appendix>.

The results of our calculations are shown in the table(s) beginning on page 3 of this letter. These are the final results of the December 31, 2011 annual actuarial valuation.

The undersigned actuaries are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. Please see the following page for additional disclosures required by the Actuarial Standards of Practice.

If you have questions, please contact your MERS representative.

Sincerely,

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

Additional Disclosures Required by Actuarial Standards of Practice

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This report should not be relied on for any purpose other than the purpose described in the primary communication. Determination of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

The signing actuaries are employees of MERS.

The calculation was based upon information furnished by the employer and MERS administrative staff, concerning Retirement System benefits and member information. The MERS of Michigan Actuarial Services Department is not responsible for the accuracy or completeness of the information provided to us for these calculations.

The developed findings included in this report consider data or other information through December 31, 2011.

Pittsfield Chtr Twp (8110) - AFSCME (01)
December 31, 2011 Actuarial Valuation Results

Division Status	Open	Actuarial Accrued Liability	
Division Link Status	Not Linked	Active Members	\$ 587,815
Benefit Provisions		Retirees and Beneficiaries	150,646
Benefit Multiplier		Vested Former Members	292,016
Benefit B-2		Pending Refunds	42,435
		Total	\$ 1,072,912
Normal Retirement Age	60	Valuation Assets ¹	\$ 1,139,443
Vesting	10 years	Unfunded Accrued Liability (UAL)	\$ (66,531)
Early Retirement (Unreduced)	-	Percent Funded	106.2%
	-	Amortization Period	
Early Retirement (Reduced)	50/25	For Positive UAL	27 years
	55/15	For Negative UAL	10 years
Final Average Compensation	3 years	Employer Contribution	
COLA for Future Retirees		For Fiscal Year Beginning	1/1/2013
None		Percentage of Payroll ³	
COLA for Current Retirees		Normal Cost	5.50%
None		Amortization of UAL	-0.99%
Member Contributions		Total Employer Contribution	4.51%
4%		Estimated Monthly Contribution ²	
RS50% Percentage	-	Normal Cost	\$ 2,763
D-2	-	Amortization of UAL	(497)
		Total Employer Contribution	\$ 2,266
		Annual GASB ARC	\$ 27,192
Active Members		Division-Specific Assumptions	
Number	17	Withdrawal Rate Scaling Factor	100%
Annual Payroll	\$ 602,922	FAC Increase Factor	0%
Retirees and Beneficiaries			
Number	4		
Annual Benefits	\$ 18,704		
Vested Former Members			
Number	6		
Annual Deferred Benefits	\$ 56,183		

¹ Valuation assets are equal to 1.205815 times the reported market value of assets.

² 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.

³ Based on the member contribution rate shown above. If member contributions are increased/decreased by 1.00% of pay, the Employer Contribution Rate will decrease/increase by 0.86%.

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology can be found in the Appendix on the MERS website at: <http://www.mersofmich.com/Appendix>.

Pittsfield Chtr Twp (8110) - Pol Ptrl (02)
December 31, 2011 Actuarial Valuation Results

Division Status	Open	Actuarial Accrued Liability	
Division Link Status	Not Linked	Active Members	\$ 3,824,197
Benefit Provisions		Retirees and Beneficiaries	823,884
Benefit Multiplier		Vested Former Members	235,034
Benefit B-3 (80% max)		Pending Refunds	1,903
		Total	\$ 4,885,018
Normal Retirement Age	60	Valuation Assets ¹	\$ 3,652,191
Vesting	10 years	Unfunded Accrued Liability (UAL)	\$ 1,232,827
Early Retirement (Unreduced)	50/25	Percent Funded	74.8%
	-	Amortization Period	
	-	For Positive UAL	27 years
Early Retirement (Reduced)	55/15	For Negative UAL	10 years
	-	Employer Contribution	
Final Average Compensation	3 years	For Fiscal Year Beginning	1/1/2013
COLA for Future Retirees		Percentage of Payroll ³	
2.50% (Non-Compound)		Normal Cost	7.62%
COLA for Current Retirees		Amortization of UAL	3.85%
None		Total Employer Contribution	11.47%
Member Contributions		Estimated Monthly Contribution ²	
6.17%		Normal Cost	\$ 11,811
RS50% Percentage	-	Amortization of UAL	5,968
D-2	-	Total Employer Contribution	\$ 17,779
		Annual GASB ARC	\$ 213,348
Active Members		Division-Specific Assumptions	
Number	30	Withdrawal Rate Scaling Factor	100%
Annual Payroll	\$ 1,860,017	FAC Increase Factor	0%
Retirees and Beneficiaries			
Number	3		
Annual Benefits	\$ 59,326		
Vested Former Members			
Number	4		
Annual Deferred Benefits	\$ 36,816		

¹ Valuation assets are equal to 1.205815 times the reported market value of assets.

² 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.

³ Based on the member contribution rate shown above. If member contributions are increased/decreased by 1.00% of pay, the Employer Contribution Rate will decrease/increase by 0.86%.

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology can be found in the Appendix on the MERS website at: <http://www.mersofmich.com/Appendix>.

Pittsfield Chtr Twp (8110) - Fire Fght (05)
December 31, 2011 Actuarial Valuation Results

Division Status	Open	Actuarial Accrued Liability	
Division Link Status	Not Linked	Active Members	\$ 2,043,309
Benefit Provisions		Retirees and Beneficiaries	297,012
Benefit Multiplier		Vested Former Members	606,914
Benefit B-3 (80% max)		Pending Refunds	2,126
		Total	\$ 2,949,361
Normal Retirement Age	60	Valuation Assets ¹	\$ 2,489,043
Vesting	10 years	Unfunded Accrued Liability (UAL)	\$ 460,318
Early Retirement (Unreduced)	55/15	Percent Funded	84.4%
	-	Amortization Period	
	-	For Positive UAL	27 years
Early Retirement (Reduced)	50/25	For Negative UAL	10 years
	-	Employer Contribution	
Final Average Compensation	3 years	For Fiscal Year Beginning	1/1/2013
COLA for Future Retirees	None	Percentage of Payroll ³	
COLA for Current Retirees	None	Normal Cost	6.26%
Member Contributions		Amortization of UAL	1.58%
5%		Total Employer Contribution	7.84%
RS50% Percentage	-	Estimated Monthly Contribution ²	
D-2	-	Normal Cost	\$ 8,237
		Amortization of UAL	2,079
		Total Employer Contribution	\$ 10,316
		Annual GASB ARC	\$ 123,792
Active Members		Division-Specific Assumptions	
Number	23	Withdrawal Rate Scaling Factor	100%
Annual Payroll	\$ 1,579,022	FAC Increase Factor	0%
Retirees and Beneficiaries			
Number	1		
Annual Benefits	\$ 25,042		
Vested Former Members			
Number	2		
Annual Deferred Benefits	\$ 75,726		

¹ Valuation assets are equal to 1.205815 times the reported market value of assets.

² 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.

³ Based on the member contribution rate shown above. If member contributions are increased/decreased by 1.00% of pay, the Employer Contribution Rate will decrease/increase by 0.89%.

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology can be found in the Appendix on the MERS website at: <http://www.mersofmich.com/Appendix>.

Pittsfield Chtr Twp (8110) - Elctd Ofc (10)
December 31, 2011 Actuarial Valuation Results

Division Status	Open	Actuarial Accrued Liability	
Division Link Status	Not Linked	Active Members	\$ 121,570
Benefit Provisions		Retirees and Beneficiaries	595,961
Benefit Multiplier		Vested Former Members	87,087
Benefit B-3 (80% max)		Pending Refunds	20,957
		Total	\$ 825,575
Normal Retirement Age	60	Valuation Assets ¹	\$ 394,931
Vesting	8 years	Unfunded Accrued Liability (UAL)	\$ 430,644
Early Retirement (Unreduced)	-	Percent Funded	47.8%
	-	Amortization Period	
Early Retirement (Reduced)	50/25	For Positive UAL	27 years
	55/15	For Negative UAL	10 years
Final Average Compensation	3 years	Employer Contribution	
COLA for Future Retirees		For Fiscal Year Beginning	1/1/2013
2.50% (Non-Compound)		Percentage of Payroll ³	
COLA for Current Retirees		Normal Cost	8.19%
None		Amortization of UAL	9.91%
Member Contributions		Total Employer Contribution	18.10%
6.93%		Estimated Monthly Contribution ²	
RS50% Percentage	-	Normal Cost	\$ 1,601
D-2	-	Amortization of UAL	1,937
		Total Employer Contribution	\$ 3,538
		Annual GASB ARC	\$ 42,456
Active Members		Division-Specific Assumptions	
Number	3	Withdrawal Rate Scaling Factor	100%
Annual Payroll	\$ 234,513	FAC Increase Factor	0%
Retirees and Beneficiaries			
Number	4		
Annual Benefits	\$ 65,914		
Vested Former Members			
Number	1		
Annual Deferred Benefits	\$ 14,444		

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² 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.

³ Based on the member contribution rate shown above. If member contributions are increased/decreased by 1.00% of pay, the Employer Contribution Rate will decrease/increase by 0.85%.

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology can be found in the Appendix on the MERS website at: <http://www.mersofmich.com/Appendix>.

Pittsfield Chtr Twp (8110) - Dspchr (11)
December 31, 2011 Actuarial Valuation Results

Division Status	Open	Actuarial Accrued Liability	
Division Link Status	Not Linked	Active Members	\$ 413,893
Benefit Provisions		Retirees and Beneficiaries	0
Benefit Multiplier		Vested Former Members	42,956
Benefit B-3 (80% max)		Pending Refunds	23,638
		Total	\$ 480,487
Normal Retirement Age	60	Valuation Assets ¹	\$ 541,624
Vesting	10 years	Unfunded Accrued Liability (UAL)	\$ (61,137)
Early Retirement (Unreduced)	-	Percent Funded	112.7%
	-	Amortization Period	
Early Retirement (Reduced)	50/25	For Positive UAL	27 years
	55/15	For Negative UAL	10 years
Final Average Compensation	3 years	Employer Contribution	
COLA for Future Retirees		For Fiscal Year Beginning	1/1/2013
None		Percentage of Payroll ³	
COLA for Current Retirees		Normal Cost	4.18%
None		Amortization of UAL	-1.64%
Member Contributions		Total Employer Contribution	2.54%
5%		Estimated Monthly Contribution ²	
RS50% Percentage	-	Normal Cost	\$ 1,376
D-2	-	Amortization of UAL	(540)
		Total Employer Contribution	\$ 836
		Annual GASB ARC	\$ 10,032
Active Members		Division-Specific Assumptions	
Number	9	Withdrawal Rate Scaling Factor	100%
Annual Payroll	\$ 395,048	FAC Increase Factor	0%
Retirees and Beneficiaries			
Number	0		
Annual Benefits	\$ 0		
Vested Former Members			
Number	4		
Annual Deferred Benefits	\$ 18,922		

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² 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.

³ Based on the member contribution rate shown above. If member contributions are increased/decreased by 1.00% of pay, the Employer Contribution Rate will decrease/increase by 0.88%.

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology can be found in the Appendix on the MERS website at: <http://www.mersofmich.com/Appendix>.

Pittsfield Chtr Twp (8110) - Adm/NonUnion (14)
December 31, 2011 Actuarial Valuation Results

Division Status	Open	Actuarial Accrued Liability	
Division Link Status	Not Linked	Active Members	\$ 3,337,352
Benefit Provisions		Retirees and Beneficiaries	237,431
Benefit Multiplier		Vested Former Members	564,707
Benefit B-3 (80% max)		Pending Refunds	100,661
		Total	\$ 4,240,151
Normal Retirement Age	60	Valuation Assets ¹	\$ 4,384,685
Vesting	10 years	Unfunded Accrued Liability (UAL)	\$ (144,534)
Early Retirement (Unreduced)	-	Percent Funded	103.4%
	-	Amortization Period	
Early Retirement (Reduced)	50/25	For Positive UAL	27 years
	55/15	For Negative UAL	10 years
Final Average Compensation	3 years	Employer Contribution	
COLA for Future Retirees	None	For Fiscal Year Beginning	1/1/2013
COLA for Current Retirees	None	Percentage of Payroll ³	
Member Contributions		Normal Cost	6.15%
5%		Amortization of UAL	-0.80%
RS50% Percentage	-	Total Employer Contribution	5.35%
D-2	-	Estimated Monthly Contribution ²	
		Normal Cost	\$ 9,955
		Amortization of UAL	(1,295)
		Total Employer Contribution	\$ 8,660
		Annual GASB ARC	\$ 103,920
Active Members		Division-Specific Assumptions	
Number	33	Withdrawal Rate Scaling Factor	100%
Annual Payroll	\$ 1,942,390	FAC Increase Factor	0%
Retirees and Beneficiaries			
Number	3		
Annual Benefits	\$ 27,695		
Vested Former Members			
Number	6		
Annual Deferred Benefits	\$ 98,649		

¹ Valuation assets are equal to 1.205815 times the reported market value of assets.

² 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.

³ Based on the member contribution rate shown above. If member contributions are increased/decreased by 1.00% of pay, the Employer Contribution Rate will decrease/increase by 0.83%.

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology can be found in the Appendix on the MERS website at: <http://www.mersofmich.com/Appendix>.

Pittsfield Chtr Twp (8110) - Utilities Dr (15)
December 31, 2011 Actuarial Valuation Results

Division Status	Closed	Actuarial Accrued Liability	
Division Link Status	Not Linked	Active Members	\$ 0
Benefit Provisions		Retirees and Beneficiaries	233,539
Benefit Multiplier		Vested Former Members	0
Benefit B-3 (80% max)		Pending Refunds	0
		Total	\$ 233,539
Normal Retirement Age	60	Valuation Assets ¹	\$ 192,594
Vesting	10 years	Unfunded Accrued Liability (UAL)	\$ 40,945
Early Retirement (Unreduced)	55/25	Percent Funded	82.5%
	-	Amortization Period	
	-	For Positive UAL	24 years
Early Retirement (Reduced)	50/25	For Negative UAL	10 years
	55/15	Employer Contribution	
Final Average Compensation	3 years	For Fiscal Year Beginning	1/1/2013
COLA for Future Retirees	None	Percentage of Payroll	
COLA for Current Retirees	None	Normal Cost	-
Member Contributions		Amortization of UAL	-
6%		Total Employer Contribution	-
RS50% Percentage	-	Estimated Monthly Contribution ²	
D-2	-	Normal Cost	\$ 0
		Amortization of UAL	227
		Total Employer Contribution	\$ 227
		Annual GASB ARC	\$ 3,780
Active Members		Division-Specific Assumptions	
Number	0	Withdrawal Rate Scaling Factor	0%
Annual Payroll	\$ 0	FAC Increase Factor	0%
Retirees and Beneficiaries			
Number	1		
Annual Benefits	\$ 19,167		
Vested Former Members			
Number	0		
Annual Deferred Benefits	\$ 0		

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² 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.

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology can be found in the Appendix on the MERS website at: <http://www.mersofmich.com/Appendix>.

Pittsfield Chtr Twp (8110) - Pol Cmnd (20)
December 31, 2011 Actuarial Valuation Results

Division Status	Open	Actuarial Accrued Liability	
Division Link Status	Not Linked	Active Members	\$ 2,470,496
Benefit Provisions		Retirees and Beneficiaries	4,326,996
Benefit Multiplier		Vested Former Members	159,941
Benefit B-4 (80% max)		Pending Refunds	0
		Total	\$ 6,957,433
Normal Retirement Age	60	Valuation Assets ¹	\$ 3,689,013
Vesting	10 years	Unfunded Accrued Liability (UAL)	\$ 3,268,420
Early Retirement (Unreduced)	50/25	Percent Funded	53.0%
	-	Amortization Period	
	-	For Positive UAL	27 years
Early Retirement (Reduced)	55/15	For Negative UAL	10 years
	-	Employer Contribution	
Final Average Compensation	3 years	For Fiscal Year Beginning	1/1/2013
COLA for Future Retirees		Percentage of Payroll ³	
2.50% (Non-Compound)		Normal Cost	7.04%
COLA for Current Retirees		Amortization of UAL	26.86%
None		Total Employer Contribution	33.90%
Member Contributions		Estimated Monthly Contribution ²	
9.06%		Normal Cost	\$ 3,793
RS50% Percentage	-	Amortization of UAL	14,471
D-2	-	Total Employer Contribution	\$ 18,264
		Annual GASB ARC	\$ 219,168
Active Members		Division-Specific Assumptions	
Number	8	Withdrawal Rate Scaling Factor	100%
Annual Payroll	\$ 646,496	FAC Increase Factor	0%
Retirees and Beneficiaries			
Number	8		
Annual Benefits	\$ 319,486		
Vested Former Members			
Number	1		
Annual Deferred Benefits	\$ 23,169		

¹ Valuation assets are equal to 1.205815 times the reported market value of assets.

² 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.

³ Based on the member contribution rate shown above. If member contributions are increased/decreased by 1.00% of pay, the Employer Contribution Rate will decrease/increase by 0.83%.

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology can be found in the Appendix on the MERS website at: <http://www.mersofmich.com/Appendix>.