

Fall 2012

Madison Heights, City of

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

Subject: Madison Heights, City of (6308) – 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.

Madison Heights, City of (6308) - Non-Union and Department Heads (01)
December 31, 2011 Actuarial Valuation Results

| | | | |
|------------------------------|------------|---|--------------|
| Division Status | Closed | Actuarial Accrued Liability | |
| Division Link Status | Not Linked | Active Members | \$ 3,491,413 |
| Benefit Provisions | | Retirees and Beneficiaries | 5,241,594 |
| Benefit Multiplier | | Vested Former Members | 269,854 |
| Benefit B-4 (80% max) | | Pending Refunds | 0 |
| | | Total | \$ 9,002,861 |
| Normal Retirement Age | 60 | Valuation Assets ¹ | \$ 5,618,427 |
| Vesting | 10 years | Unfunded Accrued Liability (UAL) | \$ 3,384,434 |
| Early Retirement (Unreduced) | 55/15 | Percent Funded | 62.4% |
| | - | Amortization Period | |
| | - | For Positive UAL | 24 years |
| Early Retirement (Reduced) | 50/25 | For Negative UAL | 10 years |
| | - | Employer Contribution | |
| Final Average Compensation | 3 years | For Fiscal Year Beginning | 7/1/2013 |
| COLA for Future Retirees | None | Percentage of Payroll | |
| COLA for Current Retirees | None | Normal Cost | - |
| Member Contributions | | Amortization of UAL | - |
| 2.50% | | Total Employer Contribution | - |
| RS50% Percentage | - | Estimated Monthly Contribution ² | |
| DC Plan for New Hires | 7/1/2010 | Normal Cost | \$ 8,281 |
| | | Amortization of UAL | 18,057 |
| | | Total Employer Contribution | \$ 26,338 |
| | | Annual GASB ARC | \$ 399,876 |
| Active Members | | Division-Specific Assumptions | |
| Number | 11 | Withdrawal Rate Scaling Factor | 80% |
| Annual Payroll | \$ 972,440 | FAC Increase Factor | 3% |
| Retirees and Beneficiaries | | | |
| Number | 21 | | |
| Annual Benefits | \$ 589,086 | | |
| Vested Former Members | | | |
| Number | 2 | | |
| Annual Deferred Benefits | \$ 46,752 | | |

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.

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>.

Madison Heights, City of (6308) - Gnrl Crth (10)
December 31, 2011 Actuarial Valuation Results

| | | | |
|------------------------------|----------------|---|--------------|
| Division Status | Closed | Actuarial Accrued Liability | |
| Division Link Status | Not Linked | Active Members | \$ 813,664 |
| Benefit Provisions | | Retirees and Beneficiaries | 1,116,257 |
| Benefit Multiplier | | Vested Former Members | 149,032 |
| Benefit B-2 | | Pending Refunds | 4,046 |
| | | Total | \$ 2,082,999 |
| Normal Retirement Age | 60 | Valuation Assets ¹ | \$ 1,767,933 |
| Vesting | 10 years | Unfunded Accrued Liability (UAL) | \$ 315,066 |
| Early Retirement (Unreduced) | 55/15 50/25 | Percent Funded | 84.9% |
| | - | Amortization Period | |
| Early Retirement (Reduced) | - | For Positive UAL | 18 years |
| | - | For Negative UAL | 10 years |
| Final Average Compensation | 5 years | Employer Contribution | |
| COLA for Future Retirees | None | For Fiscal Year Beginning | 7/1/2013 |
| COLA for Current Retirees | None | Percentage of Payroll | |
| Member Contributions | | Normal Cost | - |
| 5.54% | | Amortization of UAL | - |
| RS50% Percentage | - | Total Employer Contribution | - |
| DC Plan for New Hires | 10/1/2006 | Estimated Monthly Contribution ² | |
| | | Normal Cost | \$ 1,475 |
| | | Amortization of UAL | 2,020 |
| | | Total Employer Contribution | \$ 3,495 |
| | | Annual GASB ARC | \$ 45,216 |
| Active Members | | Division-Specific Assumptions | |
| Number | 6 | Withdrawal Rate Scaling Factor | 80% |
| Annual Payroll | \$ 305,279 | FAC Increase Factor | 3% |
| Retirees and Beneficiaries | | | |
| Number | 7 | | |
| Annual Benefits | \$ 132,948 | | |
| Vested Former Members | | | |
| Number | 1 | | |
| Annual Deferred Benefits | \$ 13,425 | | |

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.

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>.

Madison Heights, City of (6308) - Dept of Public Svcs TPOAM (11)
December 31, 2011 Actuarial Valuation Results

| | | | |
|------------------------------|--------------|---|---------------|
| Division Status | Closed | Actuarial Accrued Liability | |
| Division Link Status | Not Linked | Active Members | \$ 3,211,122 |
| Benefit Provisions | | Retirees and Beneficiaries | 7,228,234 |
| Benefit Multiplier | | Vested Former Members | 358,694 |
| Benefit B-3 (80% max) | | Pending Refunds | 129 |
| | | Total | \$ 10,798,179 |
| Normal Retirement Age | 60 | Valuation Assets ¹ | \$ 8,192,100 |
| Vesting | 10 years | Unfunded Accrued Liability (UAL) | \$ 2,606,079 |
| Early Retirement (Unreduced) | 55/15 | Percent Funded | 75.9% |
| | - | Amortization Period | |
| Early Retirement (Reduced) | 50/25 | For Positive UAL | 18 years |
| | - | For Negative UAL | 10 years |
| Final Average Compensation | 5 years | Employer Contribution | |
| COLA for Future Retirees | | For Fiscal Year Beginning | 7/1/2013 |
| None | | Percentage of Payroll | |
| COLA for Current Retirees | | Normal Cost | - |
| None | | Amortization of UAL | - |
| Member Contributions | | Total Employer Contribution | - |
| 4.84% | | Estimated Monthly Contribution ² | |
| RS50% Percentage | - | Normal Cost | \$ 5,467 |
| DC Plan for New Hires | 6/1/2010 | Amortization of UAL | 16,689 |
| | | Total Employer Contribution | \$ 22,156 |
| | | Annual GASB ARC | \$ 292,968 |
| Active Members | | Division-Specific Assumptions | |
| Number | 20 | Withdrawal Rate Scaling Factor | 80% |
| Annual Payroll | \$ 1,047,392 | FAC Increase Factor | 3% |
| Retirees and Beneficiaries | | | |
| Number | 40 | | |
| Annual Benefits | \$ 714,470 | | |
| Vested Former Members | | | |
| Number | 4 | | |
| Annual Deferred Benefits | \$ 44,500 | | |

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.

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>.

Madison Heights, City of (6308) - AFSCME (12)
December 31, 2011 Actuarial Valuation Results

| | | | |
|------------------------------|------------|---|--------------|
| Division Status | Closed | Actuarial Accrued Liability | |
| Division Link Status | Not Linked | Active Members | \$ 2,066,501 |
| Benefit Provisions | | Retirees and Beneficiaries | 3,807,173 |
| Benefit Multiplier | | Vested Former Members | 188,508 |
| Benefit B-3 (80% max) | | Pending Refunds | 15,074 |
| | | Total | \$ 6,077,256 |
| Normal Retirement Age | 60 | Valuation Assets ¹ | \$ 4,318,993 |
| Vesting | 10 years | Unfunded Accrued Liability (UAL) | \$ 1,758,263 |
| Early Retirement (Unreduced) | 55/15 | Percent Funded | 71.1% |
| | - | Amortization Period | |
| Early Retirement (Reduced) | 50/25 | For Positive UAL | 24 years |
| | - | For Negative UAL | 10 years |
| Final Average Compensation | 5 years | Employer Contribution | |
| COLA for Future Retirees | | For Fiscal Year Beginning | 7/1/2013 |
| None | | Percentage of Payroll | |
| COLA for Current Retirees | | Normal Cost | - |
| None | | Amortization of UAL | - |
| Member Contributions | | Total Employer Contribution | - |
| 4.94% | | Estimated Monthly Contribution ² | |
| RS50% Percentage | - | Normal Cost | \$ 2,963 |
| DC Plan for New Hires | 7/1/2010 | Amortization of UAL | 9,469 |
| | | Total Employer Contribution | \$ 12,432 |
| | | Annual GASB ARC | \$ 193,140 |
| Active Members | | Division-Specific Assumptions | |
| Number | 9 | Withdrawal Rate Scaling Factor | 80% |
| Annual Payroll | \$ 618,088 | FAC Increase Factor | 3% |
| Retirees and Beneficiaries | | | |
| Number | 17 | | |
| Annual Benefits | \$ 376,135 | | |
| Vested Former Members | | | |
| Number | 5 | | |
| Annual Deferred Benefits | \$ 43,346 | | |

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.

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>.

Madison Heights, City of (6308) - Cler Tmst (13)
December 31, 2011 Actuarial Valuation Results

| | | | |
|------------------------------|------------|---|--------------|
| Division Status | Closed | Actuarial Accrued Liability | |
| Division Link Status | Not Linked | Active Members | \$ 2,126,019 |
| Benefit Provisions | | Retirees and Beneficiaries | 4,376,455 |
| Benefit Multiplier | | Vested Former Members | 372,910 |
| Benefit B-2 | | Pending Refunds | 1,659 |
| | | Total | \$ 6,877,043 |
| Normal Retirement Age | 60 | Valuation Assets ¹ | \$ 5,634,859 |
| Vesting | 10 years | Unfunded Accrued Liability (UAL) | \$ 1,242,184 |
| Early Retirement (Unreduced) | 55/15 | Percent Funded | 81.9% |
| | - | Amortization Period | |
| | - | For Positive UAL | 24 years |
| Early Retirement (Reduced) | 50/25 | For Negative UAL | 10 years |
| | - | Employer Contribution | |
| Final Average Compensation | 5 years | For Fiscal Year Beginning | 7/1/2013 |
| COLA for Future Retirees | None | Percentage of Payroll | |
| COLA for Current Retirees | None | Normal Cost | - |
| Member Contributions | | Amortization of UAL | - |
| 2.50% | | Total Employer Contribution | - |
| RS50% Percentage | - | Estimated Monthly Contribution ² | |
| DC Plan for New Hires | 7/1/2010 | Normal Cost | \$ 5,633 |
| | | Amortization of UAL | 6,484 |
| | | Total Employer Contribution | \$ 12,117 |
| | | Annual GASB ARC | \$ 175,500 |
| Active Members | | Division-Specific Assumptions | |
| Number | 21 | Withdrawal Rate Scaling Factor | 80% |
| Annual Payroll | \$ 952,124 | FAC Increase Factor | 3% |
| Retirees and Beneficiaries | | | |
| Number | 34 | | |
| Annual Benefits | \$ 488,565 | | |
| Vested Former Members | | | |
| Number | 8 | | |
| Annual Deferred Benefits | \$ 64,897 | | |

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.

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>.

Madison Heights, City of (6308) - Disptchrs (14)
December 31, 2011 Actuarial Valuation Results

| | | | |
|------------------------------|------------|---|--------------|
| Division Status | Closed | Actuarial Accrued Liability | |
| Division Link Status | Not Linked | Active Members | \$ 390,651 |
| Benefit Provisions | | Retirees and Beneficiaries | 150,352 |
| Benefit Multiplier | | Vested Former Members | 118,646 |
| Benefit B-2 | | Pending Refunds | 0 |
| | | Total | \$ 659,649 |
| Normal Retirement Age | 60 | Valuation Assets ¹ | \$ 767,385 |
| Vesting | 10 years | Unfunded Accrued Liability (UAL) | \$ (107,736) |
| Early Retirement (Unreduced) | 55/15 | Percent Funded | 116.3% |
| | - | Amortization Period | |
| Early Retirement (Reduced) | 50/25 | For Positive UAL | 25 years |
| | - | For Negative UAL | 10 years |
| Final Average Compensation | 5 years | Employer Contribution | |
| COLA for Future Retirees | None | For Fiscal Year Beginning | 7/1/2013 |
| COLA for Current Retirees | None | Percentage of Payroll | |
| Member Contributions | | Normal Cost | - |
| 2.50% | | Amortization of UAL | - |
| RS50% Percentage | - | Total Employer Contribution | - |
| DC Plan for New Hires | 9/1/2010 | Estimated Monthly Contribution ² | |
| | | Normal Cost | \$ 1,810 |
| | | Amortization of UAL | (1,166) |
| | | Total Employer Contribution | \$ 644 |
| | | Annual GASB ARC | \$ 7,728 |
| Active Members | | Division-Specific Assumptions | |
| Number | 6 | Withdrawal Rate Scaling Factor | 80% |
| Annual Payroll | \$ 294,722 | FAC Increase Factor | 3% |
| Retirees and Beneficiaries | | | |
| Number | 1 | | |
| Annual Benefits | \$ 13,799 | | |
| Vested Former Members | | | |
| Number | 4 | | |
| Annual Deferred Benefits | \$ 37,073 | | |

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.

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>.