Municipal Employees' Retirement System of Michigan

Annual Actuarial Valuation Report
December 31, 2024 - Washtenaw CRC (8102)

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Spring 2025

Washtenaw CRC

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 for Washtenaw CRC (8102) as of December 31, 2024. The report includes the determination of liabilities and contribution rates resulting from the participation in the Municipal Employees' Retirement System of Michigan ("MERS"). This report contains the minimum actuarially determined contribution requirement, in alignment with the MERS Plan Document, Actuarial Policy, the Michigan Constitution, and governing statutes. Washtenaw CRC is responsible for the employer contributions needed to provide MERS benefits for its employees and former employees.

The purposes of this valuation are to:

- Measure funding progress as of December 31, 2024,
- Establish contribution requirements for the fiscal year beginning October 1, 2026,
- Provide information regarding the identification and assessment of risk,
- Provide actuarial information in connection with applicable Governmental Accounting Standards Board (GASB) statements, and
- Provide information to assist the local unit of government with State reporting requirements.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The findings in this report are based on data and other information through December 31, 2024. The valuation was based upon information furnished by MERS concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by MERS.

The Municipal Employees' Retirement Act, PA 427 of 1984 and the MERS' Plan Document Article VI Sec. 71 (1)(d), provides the MERS Board with the authority to set actuarial assumptions and methods after consultation with the actuary. As the fiduciary of the plan, the MERS Retirement Board sets certain assumptions for funding and GASB purposes. These assumptions are reviewed regularly through a comprehensive study, most recently in the Spring of 2025. The MERS Retirement Board adopted a Dedicated

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Gains Policy at the February 17, 2022 Board meeting. The Dedicated Gains Policy automatically reduces the assumed rate of investment return in conjunction with recognizing excess investment gains to mitigate the impact on employer contributions the first year. The policy was effective with the December 31, 2021 annual actuarial valuation.

The Michigan Department of Treasury provides required assumptions to be used for purposes of Public Act 202, of 2017, reporting. These assumptions are for reporting purposes only and do not impact required contributions. Please refer to the State Reporting page found at the end of this report for information for this filing.

For a full list of all the assumptions used, please refer to the division-specific assumptions described in table(s) in this report, and to the Appendix on the MERS website at:
https://www.mersofmich.com/Portals/0/Assets/Resources/AAV-Appendix/MERS-2024AnnualActuarialValuation-Appendix.pdf

The actuarial assumptions used for this valuation, including the assumed rate of investment return, are reasonable for purposes of the measurement. The combined effect of the assumptions is expected to have no significant bias (i.e., not significantly optimistic or pessimistic).

In December 2021, the Actuarial Standards Board (ASB) adopted a revision to the Actuarial Standard of Practice (ASOP) No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*. The revised ASOP No. 4 requires the calculation and disclosure of a liability referred to by the ASOP as the "Low-Default-Risk Obligation Measure" (LDROM). The LDROM calculation is provided in aggregate, along with aggregate employer results, in a separate report titled "Summary Report of the 79th Annual Actuarial Valuations," and will be available on the MERS website during the fall of 2025.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of Washtenaw CRC as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and with applicable statutes.

Rebecca L. Stouffer, Mark Buis, Kurt Dosson, and Shana M. Neeson are members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor. GRS maintains independent consulting agreements with certain local units of government for services unrelated to the actuarial consulting services provided in this report.

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).

This information is purely actuarial in nature. It is not intended to serve as a substitute for legal, accounting, or investment advice.

This report was prepared at the request of the MERS 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 associated third parties such as the auditor for the municipality). GRS is not responsible for the consequences of any unauthorized use. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

If you have reason to believe that the plan provisions are incorrectly described, that important plan provisions relevant to this valuation are not described, that conditions have changed since the calculations were made, that the information provided in this report is inaccurate or is in anyway incomplete, or if you need further information in order to make an informed decision on the subject matter in this report, please contact your Regional Manager at 1.800.767.MERS (6377).

Sincerely,
Gabriel, Roeder, Smith & Company

Rebecca L. Stouffer, ASA, FCA, MAAA

Mark Buis, FSA, FCA, EA, MAAA

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Executive Summary

Funded Ratio

The funded ratio of a plan is the percentage of the dollar value of the actuarial accrued liability that is covered by the actuarial value of assets. While the funded ratio may be a useful plan measurement, understanding a plan's funding trend may be more important than a particular point in time. Refer to Table 7 to find a history of this information.

	12/31/2024	12/31/2023
Funded Ratio*	63%	63%

* Reflects assets from Surplus divisions, if any.

Throughout this report are references to valuation results generated prior to the 2018 valuation date. Results prior to 2018 were received directly from the prior actuary or extracted from the previous valuation system by MERS' technology service provider.

Required Employer Contributions

Your required employer contributions are shown in the following table. Employee contributions, if any, are in addition to the employer contributions.

Effective with the December 31, 2021 valuation, the MERS Retirement Board adopted a Dedicated Gains Policy which allows for recognition of asset gains in excess of a set threshold in combination with lowering the assumed rate of investment return. Following the completion of an Experience Study and effective with the 2024 valuations, the MERS Retirement Board adopted updated demographic and economic assumptions. **The combined impact of the implementation of updated assumptions and application of the Dedicated Gains Policy is shown in the contribution requirements below.**

	Percentage of Payroll		Monthly $ Based on Projected Payroll	
Valuation Date:	12/31/2024	12/31/2023	12/31/2024	12/31/2023
Fiscal Year Beginning:	October 1, 2026	October 1, 2025	October 1, 2026	October 1, 2025
Division				
10 - Teamsters Local	-	-	$ 100,179	$ 93,483
13 - Non-Union	-	-	232,017	214,294
14 - Non-Union after 1/1/2012	5.55%	4.44%	14,660	11,141
15 - TPOAM after 1/1/12	4.84%	4.08%	16,249	12,702
Total Municipality - Estimated Monthly Contribution			**$ 363,105**	**$ 331,620**
Total Municipality - Estimated Annual Contribution			**$ 4,357,260**	**$ 3,979,440**

Employee contribution rates:

	Employee Contribution Rate	
Valuation Date:	12/31/2024	12/31/2023
Division		
10 - Teamsters Local	7.00%	7.00%
13 - Non-Union	7.00%	7.00%
14 - Non-Union after 1/1/2012	4.00%	5.00%
15 - TPOAM after 1/1/12	4.00%	5.00%

The employer may contribute more than the minimum required contributions, as these additional contributions will earn investment income and may result in lower future contribution requirements. Employers making contributions in excess of the minimum requirements may elect to apply the excess contribution immediately to a particular division, or segregate the excess into one or more "Surplus" divisions. An election in the first case would immediately reduce any unfunded accrued liability and lower the amortization payments throughout the remaining amortization period. Additional contribution into one or more Surplus divisions would not immediately lower future contributions, however the assets from the Surplus division(s) could be transferred to an unfunded division in the future to reduce the unfunded liability in future years, or to be used to pay all or a portion of the minimum required contribution in a future year. For purposes of this report, the assets in any Surplus division have been included in the municipality's total assets, unfunded accrued liability, and funded status; however, these assets are not used in calculating the minimum required contribution.

MERS strongly encourages employers to contribute more than the minimum contribution shown above. With the implemented dedicated gains policy, market gains and losses will continue to be smoothed over five years; however, excess returns are used to lower the investment assumption. Thus, there will be fewer gains to smooth in down markets. Having additional funds in Surplus divisions will assist plans with navigating potential short-term market volatility.

Assuming that experience of the plan meets actuarial assumptions:

- To accelerate to a 100% funding ratio in 10 years, estimated monthly employer contributions for the fiscal year beginning in 2026 for the entire employer would be $461,999, instead of $363,105.

The required employer contribution rates, or dollars if the division is closed, determined in this report are reasonable under Actuarial Standard of Practice (ASOP) No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions, based on:

- The use of reasonable actuarial assumptions and cost methods;
- The use of reasonable amortization and asset valuation methods; and
- Application of the MERS funding policy which will accumulate sufficient assets to make benefit payments when due, assuming all assumptions will be realized, and the required employer contributions are made when due.

How and Why Do These Numbers Change?

In a defined benefit plan, contributions vary from one annual actuarial valuation to the next as a result of the following:

- Changes in benefit provisions (see Table 2);
- Changes in actuarial assumptions and methods (see the Appendix); and
- Experience of the plan (investment experience and demographic experience); this is the difference between actual experience of the plan and the actuarial assumptions.

These impacts are reflected in various tables in the report. For more information, please contact your Regional Manager.

Comments on Investment Rate of Return Assumption

A defined benefit plan is funded by employer contributions, participant contributions, and investment earnings. Investment earnings have historically provided a significant portion of the funding. The larger the share of benefits being provided from investment returns, the smaller the required contributions, and vice versa. Determining the contributions required to prefund the promised retirement benefits requires an assumption of what investment earnings are expected to add to the fund over a long period of time. This is called the **Investment Return Assumption**.

The MERS Investment Return Assumption is **6.93%** per year. This, along with all other actuarial assumptions, is reviewed at least every five years in an Experience Study that compares the assumptions used against actual experience and recommends adjustments if necessary. If your municipality would like to explore contributions at lower assumed investment return assumptions, please review the “What If” projection scenarios later in this report.

Assumption and Method Changes in 2024

Effective February 17, 2022, the MERS Retirement Board adopted a dedicated gains policy that automatically lowers the assumed rate of investment return by using excess asset gains to mitigate large increases in required contributions to the Plan. Full details of this dedicated gains policy are available in the Actuarial Policy found on the MERS website. Some goals of the dedicated gains policy are to:

- Provide a systematic approach to lower the assumed rate of investment return between experience studies; and
- Use excess gains to cover both the increase in normal cost and any increase in UAL payment the first contribution year after application (i.e., minimize the first-year impact (i.e., increase) in employer contributions).

The dedicated gains policy was implemented with the December 31, 2021 annual actuarial valuation and was reflected in the computed employer contribution amounts beginning in fiscal year 2023.

Investment performance measured for the one-year period ending December 31, 2024 resulted in no change to the assumed rate of investment return of 6.93%.

On February 12, 2025, the MERS Retirement Board adopted the results of an Experience Study covering the period, January 1, 2019 through December 31, 2023. The study examined recent experience and trends, with consideration for the COVID-19 pandemic. The study resulted in incremental assumption updates, with limited impact on employer contributions and funded status, for most employers when results are measured on the new assumption basis. The results of this study are reflected in the December 31, 2024 annual actuarial valuations.

MI Local Retirement Grant

Michigan lawmakers adopted Public Act 119 of 2023, which provided relief to local units of government with the most significant burden from qualified pension and retirement health benefit systems on their annual budget and revenues. As authorized under Public Act 119 of 2023, Section 990, the state pension and OPEB grants were awarded to eligible local governments in September 2024.

A smaller number of municipalities qualified for the ***MI Local Retirement Grant*** than the ***Protecting MI Pension Grant Program*** of the previous year. Pension funds received by municipalities were deposited into the MERS trust during September 2024 and are reflected in this valuation.

Comments on Asset Smoothing

To avoid dramatic spikes and dips in annual contribution requirements due to short-term fluctuations in asset markets, MERS applies a technique called **asset smoothing**. This spreads out each year's investment gains or losses over the prior year and the following four years. After initial application of asset smoothing, remaining excess market gains are used to buy down the assumed rate of investment return and increase the level of valuation assets, to the extent allowed by the dedicated gains policy. This smoothing method is used to determine your actuarial value of assets (valuation assets), which is then used to determine both your funded ratio and your required contributions. **The (smoothed) actuarial rate of return for 2024 was 3.79%, while the actual market rate of return was 7.28%.** The actuarial rate of return is below the assumed rate of return, which will put upward pressure on the employer contribution requirements determined in this valuation. To see historical details of the market rate of return compared to the smoothed actuarial rate of return, refer to this report's Appendix or view the "How Smoothing Works" video on the Defined Benefit resource page of the MERS website.

As of December 31, 2024, the actuarial value of assets is 107% of market value due to asset smoothing. This means that there are deferred investment losses, which will put upward pressure on contributions in the short term.

If the December 31, 2024 valuation results were based on market value instead of actuarial value:

- The funded percent of your entire municipality would be 59% (instead of 63%); and
- Your total employer contribution requirement for the fiscal year starting October 1, 2026 would be $4,667,820 (instead of $4,357,260).

Alternate Scenarios to Estimate the Potential Volatility of Results ("What If Scenarios")

The calculations in this report are based on assumptions about long-term economic and demographic behavior. These assumptions will never materialize in a given year, except by coincidence. Therefore, the results will vary from one year to the next. The volatility of the results depends upon the characteristics of the plan. For example:

- Open divisions that have substantial assets compared to their active employee payroll will have more volatile employer contribution rates due to investment return fluctuations.
- Open divisions that have substantial accrued liability compared to their active employee payroll will have more volatile employer contribution rates due to demographic experience fluctuations.
- Small divisions will have more volatile contribution patterns than larger divisions because statistical fluctuations are relatively larger among small populations.
- Shorter amortization periods result in more volatile contribution patterns.

Many assumptions are important in determining the required employer contributions. In the following table, we show the impact of varying the Investment Return assumption. Lower investment returns would generally result in higher required employer contributions, and vice versa. The three economic scenarios below provide a quantitative risk assessment for the impact of investment returns on the plan's projected financial condition for funding purposes.

The relative impact of the economic scenarios below will vary from year to year, as the participant demographics change. The impact of each scenario should be analyzed for a given year, not from year to year. The results in the table are based on the December 31, 2024 valuation and are for the municipality in total, not by division.

It is important to note that calculations in this report are mathematical estimates based upon assumptions regarding future events, which may or may not materialize. Actuarial calculations can and do vary from one valuation to the next, sometimes significantly depending on the group's size. Projections are not predictions. Future valuations will be based on actual future experience.

12/31/2024 Valuation Results	Lower Future Annual Returns	Lower Future Annual Returns	Valuation Assumptions
Investment Return Assumption	**4.93%**	**5.93%**	**6.93%**
Accrued Liability	$ 118,486,451	$ 104,591,841	$ 93,114,389
Valuation Assets[1]	$ 58,750,258	$ 58,750,258	$ 58,750,258
Unfunded Accrued Liability	$ 59,736,193	$ 45,841,583	$ 34,364,131
Funded Ratio	50%	56%	63%
Monthly Normal Cost	$ 97,957	$ 67,075	$ 44,429
Monthly Amortization Payment	$ 450,493	$ 382,513	$ 318,676
Total Employer Contribution[2]	$ 548,450	$ 449,588	$ 363,105

[1] The Valuation Assets include assets from Surplus divisions, if any.

[2] If assets exceed accrued liabilities for a division, the division may have an overfunding credit to reduce the division's employer contribution requirement. If the overfunding credit is larger than the normal cost, the division's full credit is included in the municipality's amortization payment above but the division's total contribution requirement is zero. This can cause the displayed normal cost and amortization payment to not add up to the displayed total employer contribution.

Projection Scenarios

The next two pages show projections of the plan's funded ratio and computed employer contributions under the actuarial assumptions used in the valuation and alternate economic assumption scenarios. All three projections account for the past investment experience that will continue to affect the actuarial rate of return in the short term.

The 6.93% scenario provides an estimate of computed employer contributions based on current actuarial assumptions, and a projected 6.93% market return. The other two scenarios may be useful if the municipality chooses to budget more conservatively and make contributions in addition to the minimum requirements. The 5.93% and 4.93% projection scenarios provide an indication of the potential required employer contribution if these assumptions were met over the long term.

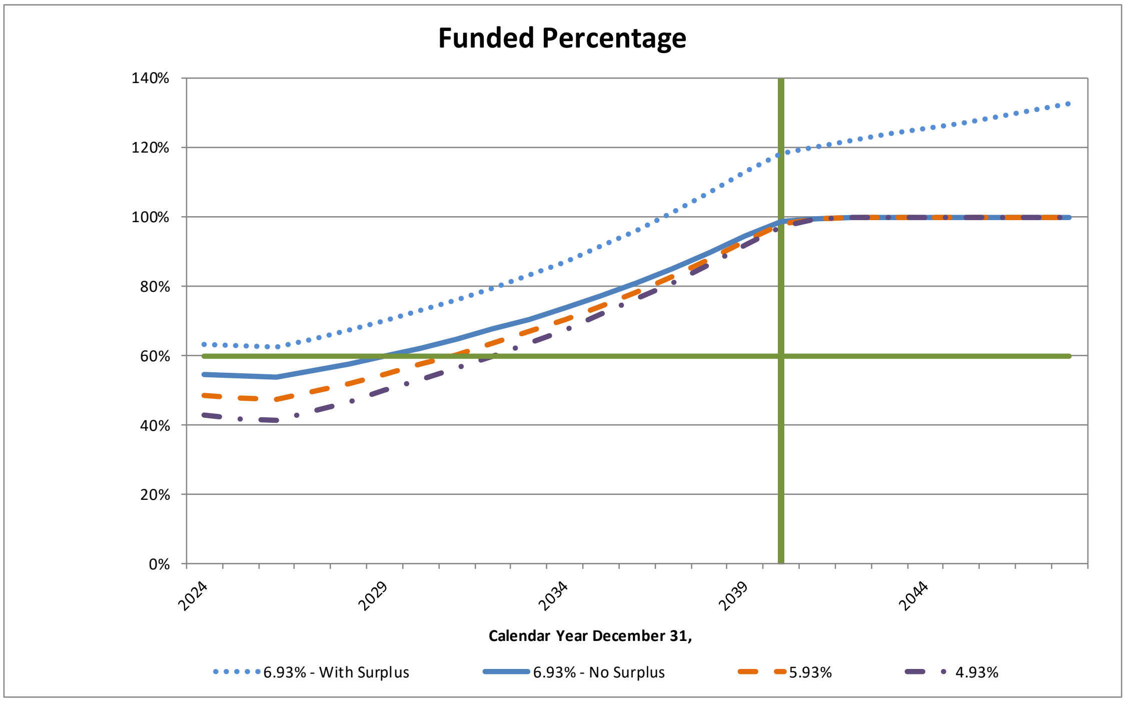
Your municipality includes one or more Surplus divisions. Extra contributions in a Surplus division may be used to reduce future employer contributions or to accelerate the date by which the municipality becomes 100% funded. The timing and use of these Surplus assets within the plan is discretionary. Certain employers have special funding arrangements that may differ from the Actuarial Policy.

The Funded Percentage graph shows projections of funded status under the 6.93% investment return assumption, both including the Surplus assets (contributed as of the valuation date), and without the Surplus assets. The graph including the Surplus assets assumes these Surplus assets grow with interest and are not used to lower future employer contributions. We modeled the projections including the Surplus assets in this fashion because the use of these assets within the plan is discretionary by the employer and we do not know when and how the employer will use them. Once the employer uses these Surplus assets, any future employer contributions are expected to be lower than those shown in the projections.

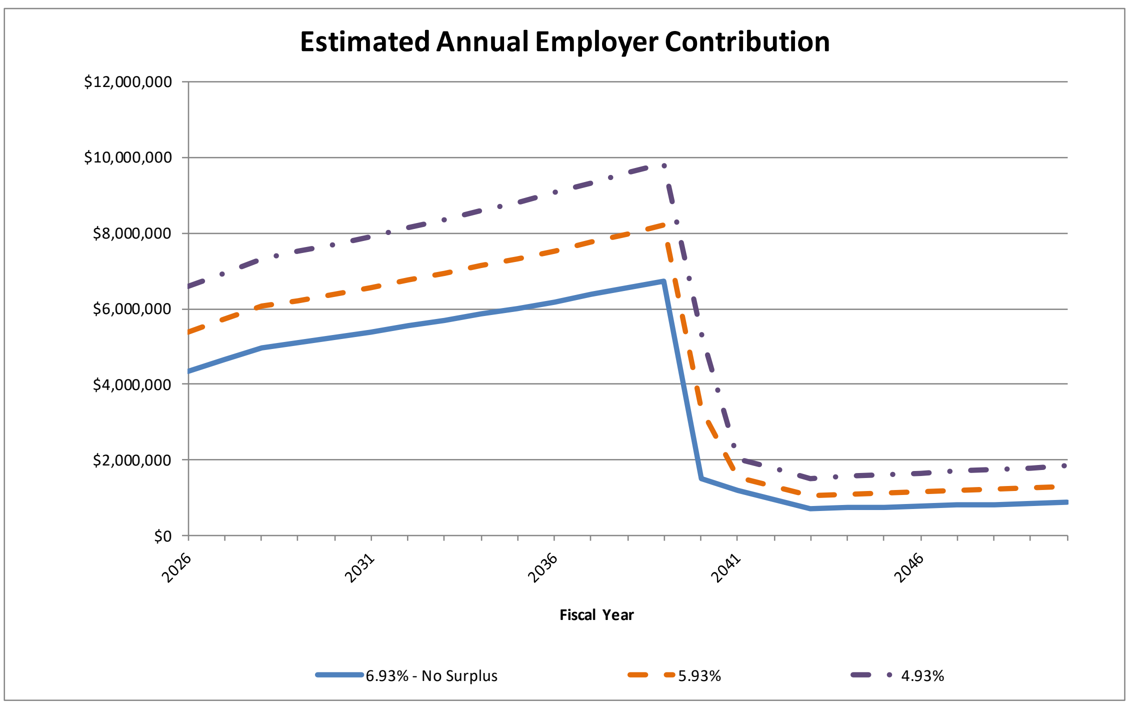
Valuation Year Ending 12/31	Fiscal Year Beginning 10/1	Actuarial Accrued Liability	Valuation Assets[2]	Funded Percentage	Estimated Annual Employer Contribution
6.93%[1]					
2024	2026	$ 93,114,389	$ 50,915,024	55%	$ 4,357,260
2025	2027	$ 94,600,000	$ 51,200,000	54%	$ 4,650,000
2026	2028	$ 96,400,000	$ 51,800,000	54%	$ 4,960,000
2027	2029	$ 98,200,000	$ 54,500,000	56%	$ 5,100,000
2028	2030	$ 99,900,000	$ 57,500,000	58%	$ 5,240,000
2029	2031	$ 101,400,000	$ 60,700,000	60%	$ 5,390,000
5.93%[1]					
2024	2026	$ 104,591,841	$ 50,915,024	49%	$ 5,395,056
2025	2027	$ 106,200,000	$ 50,700,000	48%	$ 5,720,000
2026	2028	$ 108,000,000	$ 51,200,000	47%	$ 6,060,000
2027	2029	$ 109,800,000	$ 54,400,000	50%	$ 6,220,000
2028	2030	$ 111,600,000	$ 58,000,000	52%	$ 6,390,000
2029	2031	$ 113,200,000	$ 61,800,000	55%	$ 6,570,000
4.93%[1]					
2024	2026	$ 118,486,451	$ 50,915,024	43%	$ 6,581,400
2025	2027	$ 120,100,000	$ 50,300,000	42%	$ 6,950,000
2026	2028	$ 122,000,000	$ 50,500,000	41%	$ 7,320,000
2027	2029	$ 123,900,000	$ 54,500,000	44%	$ 7,510,000
2028	2030	$ 125,600,000	$ 58,800,000	47%	$ 7,710,000
2029	2031	$ 127,200,000	$ 63,400,000	50%	$ 7,920,000

[1] Represents both the interest rate for discounting liabilities and the future investment return assumption on the Market Value of assets.

[2] Valuation Assets do not include assets from Surplus divisions, if any.



Notes:
Assumes assets from the Surplus division(s) will grow at the denoted investment return assumption and will not be used to lower employer contributions of non-surplus divisions during the projection period. Also assumes no additional contributions in future years to the surplus division(s). The green indicator lines have been added at 60% funded and 16 years following the valuation date for PA 202 purposes.



Notes:
Projected employer contributions do not reflect the use of any assets from the Surplus division(s).

Table 1: Employer Contribution Details for the Fiscal Year Beginning October 1, 2026

Division	Total Normal Cost	Employee Contribution Rate	Employer Contributions[1]: Employer Normal Cost[6]	Employer Contributions[1]: Payment of the Unfunded Accrued Liability[4]	Employer Contributions[1]: Computed Employer Contribution	Blended ER Rate[5]	Employee Contribution Conversion Factor[2]
Percentage of Payroll							
10 - Teamsters Local	14.35%	7.00%	-	-	-	27.72%	
13 - Non-Union	14.39%	7.00%	-	-	-	57.39%	
14 - Non-Union after 1/1/2012	8.50%	4.00%	4.50%	1.05%	5.55%	57.39%	0.88%
15 - TPOAM after 1/1/12	8.20%	4.00%	4.20%	0.64%	4.84%	27.72%	0.85%
Estimated Monthly Contribution[3]							
10 - Teamsters Local			$ 6,217	$ 93,962	$ 100,179		
13 - Non-Union			12,230	219,787	232,017		
14 - Non-Union after 1/1/2012			11,895	2,765	14,660		
15 - TPOAM after 1/1/12			14,087	2,162	16,249		
Total Municipality			**$ 44,429**	**$ 318,676**	**$ 363,105**		
Estimated Annual Contribution[3]			**$ 533,148**	**$ 3,824,112**	**$ 4,357,260**		

1 The above employer contribution requirements are in addition to the employee contributions, if any.

2 If employee contributions are increased/decreased by 1.00% of pay, the employer contribution requirement will decrease/increase by the Employee Contribution Conversion Factor. The conversion factor is usually under 1% because employee contributions may be refunded at termination of employment and not used to fund retirement pensions. Employer contributions will all be used to fund pensions.

3 For divisions that are open to new hires, estimated contributions are based on projected fiscal year payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts. For divisions that will have no new hires (i.e., closed divisions), 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 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 not to add across.

5 For linked divisions, the employer will be invoiced the Computed 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-MERS (6377).

6 For divisions with a negative employer normal cost, employee contributions cover the normal cost and a portion of the payment of any unfunded accrued liability.

Please see the Comments on Asset Smoothing in the Executive Summary of this report.

Table 2: Benefit Provisions

10 - Teamsters Local: Closed to new hires, linked to Division 15

	2024 Valuation	2023 Valuation
Benefit Multiplier:	2.25% Multiplier (80% max)	2.25% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	8 years	8 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
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	7.00%	7.00%
Act 88:	Yes (Adopted 7/19/1966)	Yes (Adopted 7/19/1966)

13 - Non-Union: Closed to new hires, linked to Division 14

	2024 Valuation	2023 Valuation
Benefit Multiplier:	2.25% Multiplier (80% max)	2.25% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	8 years	8 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
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	7.00%	7.00%
Act 88:	Yes (Adopted 7/19/1966)	Yes (Adopted 7/19/1966)

14 - Non-Union after 1/1/2012: Open Division, linked to Division 13

	2024 Valuation	2023 Valuation
Benefit Multiplier:	1.50% Multiplier (no max)	1.50% Multiplier (no max)
Normal Retirement Age:	60	60
Vesting:	8 years	8 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	3 years	3 years
Employee Contributions:	4.00%	5.00%
Act 88:	Yes (Adopted 7/19/1966)	Yes (Adopted 7/19/1966)

15 - TPOAM after 1/1/12: Open Division, linked to Division 10

	2024 Valuation	2023 Valuation
Benefit Multiplier:	1.50% Multiplier (no max)	1.50% Multiplier (no max)
Normal Retirement Age:	60	60
Vesting:	8 years	8 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	3 years	3 years
Employee Contributions:	4.00%	5.00%
Act 88:	Yes (Adopted 7/19/1966)	Yes (Adopted 7/19/1966)

Table 3: Participant Summary

Division	2024 Valuation Number	2024 Valuation Annual Payroll[1]	2023 Valuation Number	2023 Valuation Annual Payroll[1]	2024 Valuation Average Age	2024 Valuation Average Benefit Service[2]	2024 Valuation Average Eligibility Service[2]
10 - Teamsters Local							
Active Employees	16	$ 1,101,397	19	$ 1,251,608	50.3	20.3	20.3
Vested Former Employees	11	209,189	11	209,189	53.1	14.4	15.2
Retirees and Beneficiaries	69	2,001,950	66	1,879,575	71.1		
Pending Refunds	4		5				
13 - Non-Union							
Active Employees	19	$ 2,081,483	22	$ 2,221,120	49.6	20.5	20.9
Vested Former Employees	8	235,311	7	175,183	56.6	16.2	19.0
Retirees and Beneficiaries	75	3,294,722	75	3,112,284	72.9		
Pending Refunds	3		5				
14 - Non-Union after 1/1/2012							
Active Employees	34	$ 2,673,298	31	$ 2,449,881	40.5	5.8	6.4
Vested Former Employees	3	31,243	1	1,317	39.4	7.8	8.6
Retirees and Beneficiaries	1	6,032	1	6,032	64.5		
Pending Refunds	6		6				
15 - TPOAM after 1/1/12							
Active Employees	58	$ 3,544,631	54	$ 3,237,695	41.4	5.0	5.0
Vested Former Employees	1	10,827	0	0	54.6	9.8	9.8
Retirees and Beneficiaries	1	8,919	0	0	62.5		
Pending Refunds	22		21				
Total Municipality							
Active Employees	**127**	**$ 9,400,809**	**126**	**$ 9,160,304**	**43.5**	**9.5**	**9.7**
Vested Former Employees	**23**	**486,570**	**19**	**385,689**	**52.6**	**14.0**	**15.4**
Retirees and Beneficiaries	**146**	**5,311,623**	**142**	**4,997,891**	**71.9**		
Pending Refunds	**35**		**37**				
Total Participants	**331**		**324**				

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

[2] Descriptions can be found under Miscellaneous and Technical Assumptions in the Appendix.

Table 4: Reported Assets (Market Value)

Division	2024 Valuation		2023 Valuation	
	Employer and Retiree[1]	Employee[2]	Employer and Retiree[1]	Employee[2]
10 - Teamsters Local	$ 17,218,896	$ 1,865,644	$ 16,458,587	$ 2,129,169
13 - Non-Union	21,418,393	2,982,827	20,385,895	3,062,324
14 - Non-Union after 1/1/2012	686,748	1,348,931	507,595	1,181,541
15 - TPOAM after 1/1/12	783,340	1,486,287	501,367	1,347,621
S1 - Surplus Unassociated	2,256,042	0	1,640,790	0
SG - Surplus Grant Funds	5,098,450	0	4,751,975	0
Municipality Total[3]	**$ 47,461,869**	**$ 7,683,689**	**$ 44,246,210**	**$ 7,720,655**
Combined Assets[3]	**$55,145,558**		**$51,966,864**	

[1] Reserve for Employer Contributions and Benefit Payments.

[2] Reserve for Employee Contributions.

[3] Totals may not add due to rounding.

The December 31, 2024 valuation assets (actuarial value of assets) are equal to 1.065367 times the reported market value of assets (compared to 1.099555 as of December 31, 2023). Refer to the Appendix for a description of the valuation asset derivation and a detailed calculation of valuation assets.

Assets in the Surplus division(s) are employer assets that have been reserved separately and may be used within the plan at the employer's discretion at some point in the future. These assets are not used in calculating the employer contribution for the fiscal year beginning October 1, 2026.

Table 5: Flow of Valuation Assets

Year Ended 12/31	Employer Contributions Required	Employer Contributions Additional	Employee Contributions	Investment Income (Valuation Assets)	Benefit Payments	Employee Contribution Refunds	Net Transfers	Valuation Asset Balance
2014	$ 1,524,120	$ 165,000	$ 601,645	$ 1,960,971	$ (3,322,657)	$ (25,266)	$ 0	$ 35,603,234
2015	1,584,072	0	583,963	1,704,025	(3,486,376)	(95,558)	0	35,893,360
2016	1,776,276	327,000	638,816	1,829,620	(3,543,010)	(153,658)	0	36,768,404
2017	2,024,505	317,000	658,389	2,200,301	(3,623,563)	(81,185)	0	38,263,851
2018	2,088,295	400,000	675,786	1,432,438	(3,811,336)	(85,623)	0	38,963,411
2019	2,185,181	450,000	653,782	1,819,860	(4,167,095)	(50,363)	0	39,854,776
2020	2,409,049	500,000	661,415	3,120,977	(4,385,364)	(46,017)	0	42,114,836
2021	2,859,157	500,000	700,199	7,108,060	(4,571,759)	(56,640)	0	48,653,853
2022	3,180,815	500,000	666,192	1,731,418	(4,739,504)	(135,008)	0	49,857,766
2023	3,357,483	4,978,890	583,341	3,312,301	(4,830,274)	(119,083)	0	57,140,424
2024	3,506,162	500,494	552,929	2,172,886	(5,071,955)	(50,682)	0	58,750,258

Notes:

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

The investment income column reflects the recognized investment income based on Valuation Assets. It does not reflect the market value investment return in any given year.

The Valuation Asset balance includes assets from Surplus divisions, if any.

Years where historical information is not available will be displayed with zero values.

Table 6: Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2024

Division	Actuarial Accrued Liability: Active Employees	Vested Former Employees	Retirees and Beneficiaries	Pending Refunds	Total	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
10 - Teamsters Local	$ 6,410,629	$ 2,015,764	$ 24,360,198	$ 16,600	$ 32,803,191	$ 20,332,039	62.0%	$ 12,471,152
13 - Non-Union	12,442,068	2,590,752	40,055,636	25,742	55,114,198	25,996,254	47.2%	29,117,944
14 - Non-Union after 1/1/2012	2,160,735	176,771	75,518	98,817	2,511,841	2,168,745	86.3%	343,096
15 - TPOAM after 1/1/12	2,359,327	89,467	111,658	124,707	2,685,159	2,417,986	90.1%	267,173
S1 - Surplus Unassociated	0	0	0	0	0	2,403,513		(2,403,513)
SG - Surplus Grant Funds	0	0	0	0	0	5,431,721		(5,431,721)
Total	**$ 23,372,759**	**$ 4,872,754**	**$ 64,603,010**	**$ 265,866**	**$ 93,114,389**	**$ 58,750,258**	**63.1%**	**$ 34,364,131**

The following results show the combined accrued liabilities and assets for each set of linked divisions. These results are already shown in the table on the prior page(s).

Table 6 (continued)

Division	Actuarial Accrued Liability: Active Employees	Actuarial Accrued Liability: Vested Former Employees	Actuarial Accrued Liability: Retirees and Beneficiaries	Actuarial Accrued Liability: Pending Refunds	Actuarial Accrued Liability: Total	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
Linked Divisions 14, 13	$ 14,602,803	$ 2,767,523	$ 40,131,154	$ 124,559	$ 57,626,039	$ 28,164,999	48.9%	$ 29,461,040
Linked Divisions 15, 10	8,769,956	2,105,231	24,471,856	141,307	35,488,350	22,750,025	64.1%	12,738,325

Please see the Comments on Asset Smoothing in the Executive Summary of this report.

The December 31, 2024 valuation assets (actuarial value of assets) are equal to 1.065367 times the reported market value of assets. Refer to the Appendix for a description of the valuation asset derivation and a detailed calculation of valuation assets.

Table 7: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2010	$ 48,576,366	$ 33,152,973	68%	$ 15,423,393
2011	53,061,415	33,954,359	64%	19,107,056
2012	53,797,210	33,985,012	63%	19,812,198
2013	56,410,071	34,699,421	62%	21,710,650
2014	60,498,904	35,603,234	59%	24,895,670
2015	64,206,935	35,893,360	56%	28,313,575
2016	65,378,545	36,768,404	56%	28,610,141
2017	67,291,266	38,263,851	57%	29,027,415
2018	70,696,618	38,963,411	55%	31,733,207
2019	75,026,683	39,854,776	53%	35,171,907
2020	79,306,628	42,114,836	53%	37,191,792
2021	84,830,152	48,653,853	57%	36,176,299
2022	87,338,632	49,857,766	57%	37,480,866
2023	90,248,546	57,140,424	63%	33,108,122
2024	93,114,389	58,750,258	63%	34,364,131

Notes: Actuarial assumptions were revised for the 2010, 2011, 2012, 2015, 2019, 2020, 2021, 2023, and 2024 actuarial valuations.

The Valuation Assets include assets from Surplus divisions, if any.

Years where historical information is not available will be displayed with zero values.

Throughout this report are references to valuation results generated prior to the 2018 valuation date. Results prior to 2018 were received directly from the prior actuary or extracted from the previous valuation system by MERS's technology service provider.

Tables 8 and 9: Division-Based Comparative Schedules

Division 10 - Teamsters Local

Table 8-10: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	$ 25,030,931	$ 16,586,286	66%	$ 8,444,645
2015	25,572,135	16,478,699	64%	9,093,436
2016	25,042,005	16,577,719	66%	8,464,286
2017	25,734,395	17,220,968	67%	8,513,427
2018	27,162,882	17,382,234	64%	9,780,648
2019	28,373,318	17,429,009	61%	10,944,309
2020	29,439,670	18,123,069	62%	11,316,601
2021	31,139,146	20,530,145	66%	10,609,001
2022	32,014,453	20,246,640	63%	11,767,813
2023	32,363,833	20,438,259	63%	11,925,574
2024	32,803,191	20,332,039	62%	12,471,152

Notes: Actuarial assumptions were revised for the 2015, 2019, 2020, 2021, 2023, and 2024 actuarial valuations.
The percent funded does not reflect valuation assets from Surplus divisions, if any.

Table 9-10: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution[1]	Employee Contribution Rate[2]
	Number	Annual Payroll		
2014	55	$ 3,257,319	$ 64,551	8.00%
2015	47	2,594,229	$ 68,056	8.00%
2016	42	2,299,179	$ 61,878	8.00%
2017	41	2,231,210	$ 62,885	8.00%
2018	34	1,896,555	$ 72,213	8.00%
2019	26	1,622,662	$ 81,116	8.00%
2020	24	1,433,223	$ 81,764	8.00%
2021	23	1,418,014	$ 77,090	8.00%
2022	21	1,341,370	$ 89,972	7.00%
2023	19	1,251,608	$ 93,483	7.00%
2024	16	1,101,397	$ 100,179	7.00%

[1] For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

[2] For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 reflect the full employer contribution requirement.

See the Benefit Provision History, later in this report, for past benefit provision changes.

Years where historical information is not available will be displayed with zero values.

Table 8-13: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	$ 11,797,278	$ 6,093,518	52%	$ 5,703,760
2015	13,609,135	7,027,884	52%	6,581,251
2016	15,040,686	8,091,978	54%	6,948,708
2017	16,178,837	8,992,228	56%	7,186,609
2018	42,410,832	20,313,327	48%	22,097,505
2019	45,097,638	20,794,376	46%	24,303,262
2020	47,861,905	21,892,140	46%	25,969,765
2021	50,943,900	25,258,774	50%	25,685,126
2022	51,962,613	25,131,796	48%	26,830,817
2023	53,636,021	25,782,607	48%	27,853,414
2024	55,114,198	25,996,254	47%	29,117,944

Notes: Actuarial assumptions were revised for the 2015, 2019, 2020, 2021, 2023, and 2024 actuarial valuations.
The percent funded does not reflect valuation assets from Surplus divisions, if any.

Table 9-13: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution[1]	Employee Contribution Rate[2]
	Number	Annual Payroll		
2014	26	$ 2,103,603	$ 42,516	8.00%
2015	28	2,195,846	$ 50,973	8.00%
2016	28	2,253,743	$ 53,726	8.00%
2017	28	2,332,056	$ 55,690	8.00%
2018	31	2,465,289	$ 160,536	8.00%
2019	29	2,479,977	$ 176,306	8.00%
2020	27	2,431,725	$ 183,123	8.00%
2021	25	2,432,452	$ 182,107	8.00%
2022	23	2,318,627	$ 199,374	7.00%
2023	22	2,221,120	$ 214,294	7.00%
2024	19	2,081,483	$ 232,017	7.00%

[1] For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

[2] For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 reflect the full employer contribution requirement.

See the Benefit Provision History, later in this report, for past benefit provision changes.

Years where historical information is not available will be displayed with zero values.

Division 14 - Non-Union after 1/1/2012

Table 8-14: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	$ 17,289	$ 24,397	141%	$ (7,108)
2015	50,120	67,450	135%	(17,330)
2016	97,541	127,330	131%	(29,789)
2017	138,758	175,442	126%	(36,684)
2018	371,420	517,670	139%	(146,250)
2019	572,372	694,075	121%	(121,703)
2020	840,598	932,598	111%	(92,000)
2021	1,151,868	1,244,183	108%	(92,315)
2022	1,508,896	1,477,761	98%	31,135
2023	2,069,317	1,857,298	90%	212,019
2024	2,511,841	2,168,745	86%	343,096

Notes: Actuarial assumptions were revised for the 2015, 2019, 2020, 2021, 2023, and 2024 actuarial valuations.

The percent funded does not reflect valuation assets from Surplus divisions, if any.

Table 9-14: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution[1]	Employee Contribution Rate[2]
	Number	Annual Payroll		
2014	4	$ 222,983	0.00%	10.00%
2015	8	443,855	0.00%	10.00%
2016	9	532,847	0.00%	10.00%
2017	7	457,713	0.00%	10.00%
2018	19	1,100,410	0.00%	8.00%
2019	23	1,483,028	0.22%	8.00%
2020	24	1,598,556	0.61%	8.00%
2021	27	1,854,753	1.02%	8.00%
2022	29	2,095,907	2.93%	6.00%
2023	31	2,449,881	4.44%	5.00%
2024	34	2,673,298	5.55%	4.00%

[1] For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

[2] For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 reflect the full employer contribution requirement.

See the Benefit Provision History, later in this report, for past benefit provision changes.

Years where historical information is not available will be displayed with zero values.

Division 15 - TPOAM after 1/1/12

Table 8-15: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	$ 93,162	$ 99,133	106%	$ (5,971)
2015	203,203	214,096	105%	(10,893)
2016	360,156	393,337	109%	(33,181)
2017	552,544	600,842	109%	(48,298)
2018	751,484	750,180	100%	1,304
2019	983,355	937,316	95%	46,039
2020	1,164,455	1,167,029	100%	(2,574)
2021	1,595,238	1,620,751	102%	(25,513)
2022	1,852,670	1,821,573	98%	31,097
2023	2,179,375	2,033,064	93%	146,311
2024	2,685,159	2,417,986	90%	267,173

Notes: Actuarial assumptions were revised for the 2015, 2019, 2020, 2021, 2023, and 2024 actuarial valuations.

The percent funded does not reflect valuation assets from Surplus divisions, if any.

Table 9-15: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution[1]	Employee Contribution Rate[2]
	Number	Annual Payroll		
2014	18	$ 666,880	0.00%	10.00%
2015	29	1,142,670	0.00%	10.00%
2016	33	1,510,432	0.00%	10.00%
2017	36	1,674,066	0.00%	10.00%
2018	38	1,821,605	0.80%	8.00%
2019	47	2,299,257	0.75%	8.00%
2020	49	2,463,985	0.79%	8.00%
2021	51	2,799,781	1.45%	8.00%
2022	55	2,929,074	2.89%	6.00%
2023	54	3,237,695	4.08%	5.00%
2024	58	3,544,631	4.84%	4.00%

[1] For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

[2] For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 reflect the full employer contribution requirement.

See the Benefit Provision History, later in this report, for past benefit provision changes.

Years where historical information is not available will be displayed with zero values.

Table 8-S1: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	$ 0	$ 0		$ 0
2015	0	0		0
2016	0	0		0
2017	0	0		0
2018	0	0		0
2019	0	0		0
2020	0	0		0
2021	0	0		0
2022	0	1,179,996		(1,179,996)
2023	0	1,804,139		(1,804,139)
2024	0	2,403,513		(2,403,513)

Notes: Actuarial assumptions were revised for the 2015, 2019, 2020, 2021, 2023, and 2024 actuarial valuations.

Years where historical information is not available will be displayed with zero values.

Division SG - Surplus Grant Funds

Table 8-SG: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	$ 0	$ 0		$ 0
2015	0	0		0
2016	0	0		0
2017	0	0		0
2018	0	0		0
2019	0	0		0
2020	0	0		0
2021	0	0		0
2022	0	0		0
2023	0	5,225,057		(5,225,057)
2024	0	5,431,721		(5,431,721)

Notes: Actuarial assumptions were revised for the 2015, 2019, 2020, 2021, 2023, and 2024 actuarial valuations.

Years where historical information is not available will be displayed with zero values.

Table 10: Division-Based Layered Amortization Schedule

Division 10 - Teamsters Local

Table 10-10: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance[1]	Original Amortization Period[2]	Amounts for Fiscal Year Beginning 10/1/2026: Outstanding UAL Balance[3]	Remaining Amortization Period[2]	Annual Amortization Payment
Initial	12/31/2015	$ 9,093,436	23	$ 8,985,501	14	$ 836,856
(Gain)/Loss	12/31/2016	(888,429)	22	(956,619)	14	(89,100)
(Gain)/Loss	12/31/2017	26,994	21	28,869	14	2,688
(Gain)/Loss	12/31/2018	1,240,632	20	1,320,946	14	123,024
(Gain)/Loss	12/31/2019	52,363	19	55,280	14	5,148
Assumption	12/31/2019	961,336	19	949,655	14	88,440
Experience	12/31/2020	224,781	18	238,814	14	22,248
Experience	12/31/2021	(812,366)	17	(866,248)	14	(80,676)
Experience	12/31/2022	1,316,353	16	1,423,434	14	132,576
Experience	12/31/2023	240,174	15	264,071	14	24,600
Experience	12/31/2024	620,956	15	698,208	15	61,740
Total				**$ 12,141,911**		**$ 1,127,544**

[1] For each type of UAL (layer), this is the original balance as of the date the layer was established.

[2] According to the MERS amortization policy, each type of UAL (layer) is amortized over a specific period (see Appendix on MERS website).

[3] This is the remaining balance as of the valuation date, projected to the beginning of the fiscal year shown above.

The unfunded accrued liability (UAL) as of December 31, 2024 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2024 valuation to take into account the expected future contributions that are based on past valuations. Each type of UAL (layer) is amortized over the appropriate period. Please see the Appendix on the MERS website for a detailed description of the amortization policy.

Note: The original balance and original amortization periods prior to 12/31/2018 were received from the prior actuary.

Table 10-13: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance[1]	Original Amortization Period[2]	Amounts for Fiscal Year Beginning 10/1/2026: Outstanding UAL Balance[3]	Remaining Amortization Period[2]	Annual Amortization Payment
Initial	12/31/2015	$ 6,581,251	23	$ 6,576,432	14	$ 612,492
(Gain)/Loss	12/31/2016	175,148	22	188,583	14	17,568
(Gain)/Loss	12/31/2017	86,596	21	92,604	14	8,628
(Gain)/Loss	12/31/2018	2,719,353	20	2,895,432	14	269,664
Merger	12/31/2018			12,898,029	14	1,201,248
(Gain)/Loss	12/31/2019	(501,424)	19	(529,307)	14	(49,296)
Assumption	12/31/2019	1,504,938	19	1,436,655	14	133,800
Experience	12/31/2020	726,813	18	772,173	14	71,916
Experience	12/31/2021	(461,692)	17	(492,304)	14	(45,852)
Experience	12/31/2022	1,394,977	16	1,508,459	14	140,484
Experience	12/31/2023	1,252,438	15	1,377,066	14	128,256
Experience	12/31/2024	1,494,007	15	1,679,875	15	148,536
Total				**$ 28,403,697**		**$ 2,637,444**

[1] For each type of UAL (layer), this is the original balance as of the date the layer was established.

[2] According to the MERS amortization policy, each type of UAL (layer) is amortized over a specific period (see Appendix on MERS website).

[3] This is the remaining balance as of the valuation date, projected to the beginning of the fiscal year shown above.

The unfunded accrued liability (UAL) as of December 31, 2024 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2024 valuation to take into account the expected future contributions that are based on past valuations. Each type of UAL (layer) is amortized over the appropriate period. Please see the Appendix on the MERS website for a detailed description of the amortization policy.

Note: The original balance and original amortization periods prior to 12/31/2018 were received from the prior actuary.

Table 10-14: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance[1]	Original Amortization Period[2]	Amounts for Fiscal Year Beginning 10/1/2026: Outstanding UAL Balance[3]	Remaining Amortization Period[2]	Annual Amortization Payment
Experience	12/31/2022	$ 47,841	15	$ 51,244	13	$ 5,052
Experience	12/31/2023	168,392	15	185,149	14	17,244
Experience	12/31/2024	109,448	15	123,064	15	10,884
Total				**$ 359,457**		**$ 33,180**

[1] For each type of UAL (layer), this is the original balance as of the date the layer was established.

[2] According to the MERS amortization policy, each type of UAL (layer) is amortized over a specific period (see Appendix on MERS website).

[3] This is the remaining balance as of the valuation date, projected to the beginning of the fiscal year shown above.

The unfunded accrued liability (UAL) as of December 31, 2024 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2024 valuation to take into account the expected future contributions that are based on past valuations. Each type of UAL (layer) is amortized over the appropriate period. Please see the Appendix on the MERS website for a detailed description of the amortization policy.

Note: The original balance and original amortization periods prior to 12/31/2018 were received from the prior actuary.

Table 10-15: Layered Amortization Schedule

				Amounts for Fiscal Year Beginning 10/1/2026		
Type of UAL	Date Established	Original Balance[1]	Original Amortization Period[2]	Outstanding UAL Balance[3]	Remaining Amortization Period[2]	Annual Amortization Payment
Experience	12/31/2022	$ 31,097	15	$ 33,313	13	$ 3,288
Experience	12/31/2023	113,000	15	124,246	14	11,568
Experience	12/31/2024	111,508	15	125,381	15	11,088
Total				**$ 282,940**		**$ 25,944**

[1] For each type of UAL (layer), this is the original balance as of the date the layer was established.

[2] According to the MERS amortization policy, each type of UAL (layer) is amortized over a specific period (see Appendix on MERS website).

[3] This is the remaining balance as of the valuation date, projected to the beginning of the fiscal year shown above.

The unfunded accrued liability (UAL) as of December 31, 2024 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2024 valuation to take into account the expected future contributions that are based on past valuations. Each type of UAL (layer) is amortized over the appropriate period. Please see the Appendix on the MERS website for a detailed description of the amortization policy.

Note: The original balance and original amortization periods prior to 12/31/2018 were received from the prior actuary.

GASB Statement No. 68 Information

The following information has been prepared to provide some of the information necessary to complete GASB Statement No. 68 disclosures. GASB Statement No. 68 is effective for fiscal years beginning after June 15, 2014. Additional resources, including an Implementation Guide, are available at http://www.mersofmich.com/.

Actuarial Valuation Date:		12/31/2024
Measurement Date of the Total Pension Liability (TPL):		12/31/2024
At 12/31/2024, the following employees were covered by the benefit terms:		
Inactive employees or beneficiaries currently receiving benefits:		146
Inactive employees entitled to but not yet receiving benefits (including refunds):		58
Active employees:		127
		331
Total Pension Liability as of 12/31/2023 measurement date:	$	87,739,078
Total Pension Liability as of 12/31/2024 measurement date:	$	90,561,852
Service Cost for the year ending on the 12/31/2024 measurement date:	$	951,973
Change in the Total Pension Liability due to:		
- Benefit changes[1]:	$	86,736
- Differences between expected and actual experience[2]:	$	1,048,026
- Changes in assumptions[2]:	$	(291,263)
Average expected remaining service lives of all employees (active and inactive):		4

[1] A change in liability due to benefit changes is immediately recognized when calculating pension expense for the year.

[2] Changes in liability due to differences between actual and expected experience, and changes in assumptions, are recognized in pension expense over the average remaining service lives of all employees.

Covered employee payroll (Needed for Required Supplementary Information):	$	9,400,809

Note: Covered employee payroll may differ from the GASB Statement No. 68 definition.

Sensitivity of the Net Pension Liability to changes in the discount rate:

	1% Decrease (6.18%)	Current Discount Rate (7.18%)	1% Increase (8.18%)
Change in Net Pension Liability as of 12/31/2024:	$ 10,956,252	$ 0	$ (9,144,981)

Note: The current discount rate shown for GASB Statement No. 68 purposes is higher than the MERS assumed rate of return. This is because for GASB Statement No. 68 purposes, the discount rate must be gross of administrative expenses, whereas for funding purposes it is net of administrative expenses.

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.

10 - Teamsters Local

9/1/2023	Pension Grant Recipient
10/1/2022	Participant Contribution Rate 7%
1/1/2021	Custom Wages
1/1/2021	Long Term Disability - Service Granted
1/1/2021	Public Safety Employees - Yes
1/1/2021	Service Credit Qualification - 80 hours
1/1/2021	Short Term Disability - Service Granted
1/1/2021	Workers Compensation - Service Granted
12/1/2016	Service Credit Purchase Estimates - No
9/1/2012	Member Contribution Rate 8.00%
1/1/2003	E2 2.5% COLA for future retirees (07/01/2002)
11/1/2002	Member Contribution Rate 5.00%
6/1/1999	2.25% Multiplier (Capped at 80% of FAC)
1/1/1999	8 Year Vesting
7/1/1996	2.00% Multiplier
7/1/1996	Member Contribution Rate 5.30%
1/1/1991	Flexible E 2% COLA Adopted (01/01/1991)
8/1/1987	10 Year Vesting
8/1/1987	2.00% Multiplier until SS Age, then 1.70% Multiplier
8/1/1987	Benefit F55 (With 25 Years of Service)
8/1/1987	Benefit FAC-3 (3 Year Final Average Compensation)
8/1/1987	Member Contribution Rate 3.00% Under $4,200.00 - Then 5.00%
5/6/1975	Exclude Temporary Employees
7/19/1966	Covered by Act 88
7/1/1947	Fiscal Month - October
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
	Normal Retirement Age (DB) - 60

13 - Non-Union

9/1/2023	Pension Grant Recipient
7/1/2022	Participant Contribution Rate 7%
1/1/2021	Custom Wages
1/1/2021	Long Term Disability - Service Granted
1/1/2021	Public Safety Employees - Yes
1/1/2021	Service Credit Qualification - 80 hours
1/1/2021	Short Term Disability - Service Granted
1/1/2021	Workers Compensation - Service Granted
12/1/2016	Service Credit Purchase Estimates - No
1/1/2012	2.25% Multiplier (Capped at 80% of FAC)
1/1/2012	8 Year Vesting
1/1/2012	Benefit F55 (With 25 Years of Service)
1/1/2012	Benefit FAC-3 (3 Year Final Average Compensation)

13 - Non-Union

1/1/2012	Day of work defined as 8 Hours a Day for All employees.
1/1/2012	E2 2.5% COLA for future retirees (01/01/2012)
1/1/2012	Exclude Temporary Employees requiring less than 6 months
1/1/2012	Member Contribution Rate 8.00%
7/19/1966	Covered by Act 88
7/1/1947	Fiscal Month - October
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
	Normal Retirement Age (DB) - 60

14 - Non-Union after 1/1/2012

7/1/2024	Participant Contribution Rate 4%
9/1/2023	Pension Grant Recipient
7/1/2023	Participant Contribution Rate 5%
7/1/2022	Participant Contribution Rate 6%
1/1/2021	Custom Wages
1/1/2021	Long Term Disability - Service Granted
1/1/2021	Public Safety Employees - Yes
1/1/2021	Service Credit Qualification - 80 hours
1/1/2021	Short Term Disability - Service Granted
1/1/2021	Workers Compensation - Service Granted
7/1/2018	Participant Contribution Rate 8%
12/1/2016	Service Credit Purchase Estimates - No
5/1/2012	1.50% Multiplier
5/1/2012	8 Year Vesting
5/1/2012	Benefit FAC-3 (3 Year Final Average Compensation)
5/1/2012	Day of work defined as 8 Hours a Day for All employees.
5/1/2012	Exclude Temporary Employees requiring less than 6 months
5/1/2012	Member Contribution Rate 10.00%
7/19/1966	Covered by Act 88
7/1/1947	Fiscal Month - October
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
	Normal Retirement Age (DB) - 60

15 - TPOAM after 1/1/12

10/1/2024	Participant Contribution Rate 4.00%
10/1/2023	Participant Contribution Rate 5%
9/1/2023	Pension Grant Recipient
10/1/2022	Participant Contribution Rate 6%
1/1/2021	Custom Wages
1/1/2021	Long Term Disability - Service Granted
1/1/2021	Public Safety Employees - Yes
1/1/2021	Service Credit Qualification - 80 hours
1/1/2021	Short Term Disability - Service Granted
1/1/2021	Workers Compensation - Service Granted
1/1/2019	Participant Contribution Rate 8%
12/1/2016	Service Credit Purchase Estimates - No
9/1/2012	1.50% Multiplier
9/1/2012	8 Year Vesting
9/1/2012	Benefit FAC-3 (3 Year Final Average Compensation)

15 - TPOAM after 1/1/12

9/1/2012	Day of work defined as 8 Hours a Day for All employees.
9/1/2012	Exclude Temporary Employees
9/1/2012	Member Contribution Rate 10.00%
7/19/1966	Covered by Act 88
7/1/1947	Fiscal Month - October
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
	Normal Retirement Age (DB) - 60

S1 - Surplus Unassociated

7/1/1947	Fiscal Month - October

SG - Surplus Grant Funds

7/1/1947	Fiscal Month - October

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	Increase Assumption
All Divisions	6.00%

Miscellaneous and Technical Assumptions

Loads – None.

Amortization Policy for Closed Not Linked Divisions: The default funding policy for closed not linked divisions, including open divisions with zero active members, is to follow a non-accelerated amortization, where each closed period decreases by one year each year until the period is exhausted.

Risk Commentary

Determination of the accrued liability, the employer contribution, and the funded ratio requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability, the actuarially determined contribution and the funded ratio that result from the differences between actual experience and the actuarial assumptions.

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 due to changing conditions; 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. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

- **Investment Risk** – actual investment returns may differ from the expected returns;
- **Asset/Liability Mismatch** – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
- **Salary and Payroll Risk** – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
- **Longevity Risk** – members may live longer or shorter than expected and receive pensions for a period of time other than assumed; and
- **Other Demographic Risks –** members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

  The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

Plan Maturity Measures

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	Ratio of:				
December 31,	**Market Value of Assets to Total Payroll**	**Actuarial Accrued Liability to Payroll**	**Actives to Retirees and Beneficiaries**	**Market Value of Assets to Benefit Payments**	**Net Cash Flow to Market Value of Assets (BOY)**
2018	4.9	9.7	0.9	9.1	-1.9%
2019	5.0	9.5	0.9	9.3	-2.6%
2020	5.5	10.0	0.9	9.8	-2.2%
2021	5.7	10.0	0.9	10.5	-1.3%
2022	5.0	10.1	0.9	8.8	-1.1%
2023	5.7	9.9	0.9	10.5	9.2%
2024	5.9	9.9	0.9	10.8	-1.1%

Ratio of Market Value of Assets to Total Payroll

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

Ratio of Actuarial Accrued Liability to Payroll

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

Ratio of Actives to Retirees and Beneficiaries

A young plan with many active members and few retirees will have a high ratio of actives to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

Ratio of Market Value of Assets to Benefit Payments

The MERS' Actuarial Policy requires a total minimum contribution equal to the excess (if any) of three times the expected annual benefit payments over the projected market value of assets as of the participating municipality or court's Fiscal Year for which the contribution applies. The ratio of market value of assets to benefit payments as of the valuation date provides an indication of whether the division is at risk for triggering the minimum contribution rule in the near term. If the division triggers this minimum contribution rule, the required employer contributions could increase dramatically relative to previous valuations.

Ratio of Net Cash Flow to Market Value of Assets

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

State Reporting

The following information has been prepared to provide some of the information necessary to complete the Public Act 202 pension reporting requirements for the State of Michigan's Local Government Retirement System Annual Report (Form No. 5572). Additional resources are available at www.mersofmich.com and on the State website.

Form 5572 Line Reference	Description	Result
10	**Membership as of December 31, 2024**	
11	Indicate number of active members	127
12	Indicate number of inactive members (excluding pending refunds)	23
13	Indicate number of retirees and beneficiaries	146
14	**Investment Performance for Calendar Year Ending December 31, 2024**[1]	
15	Enter actual rate of return - prior 1-year period	7.72%
16	Enter actual rate of return - prior 5-year period	6.91%
17	Enter actual rate of return - prior 10-year period	6.62%
18	**Actuarial Assumptions**	
19	Actuarial assumed rate of investment return[2]	6.93%
20	Amortization method utilized for funding the system's unfunded actuarial accrued liability, if any	Level Percent
21	Amortization period utilized for funding the system's unfunded actuarial accrued liability, if any[3]	15
22	Is each division within the system closed to new employees?[4]	No
23	**Uniform Assumptions**	
24	Enter retirement pension system's actuarial value of assets using uniform assumptions	$57,002,419
25	Enter retirement pension system's actuarial accrued liabilities using uniform assumptions[5]	$93,114,389
27	Actuarially Determined Contribution (ADC) using uniform assumptions, Fiscal Year Ending September 30, 2025	$4,511,808

1 The Municipal Employees' Retirement System's investment performance has been provided to GRS from MERS Investment Staff and is included here for reporting purposes. The investment performance figures reported are net of investment expenses on a rolling calendar year basis for the previous 1-, 5-, and 10-year periods as required under PA 530.

2 Net of administrative and investment expenses.

3 Populated with the longest amortization period remaining in the amortization schedule, across all divisions in the plan. This is when each division and the plan in total is expected to reach 100% funded if all assumptions are met.

4 If all divisions within the employer are closed, "yes." If at least one division is open (including shadow divisions), "no."

5 Line 25 actuarial accrued liability is determined under PA 202 uniform assumptions which may differ from the valuation assumptions. In accordance with the March 4, 2025 memo on the selection of Uniform Assumptions, "[f]or retirement systems that utilize an investment rate of return that is less than 7.00% for funding purposes, the local government should use the lower investment rate of return for the uniform assumption as well." In particular, the assumed rate of return for PA 202 purposes is 6.93%.