Municipal Employees' Retirement System of Michigan

Annual Actuarial Valuation Report
December 31, 2024 - Keego Harbor, City of (6322)

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Spring 2025

Keego Harbor, City of

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

This report presents the results of the Annual Actuarial Valuation, prepared for Keego Harbor, City of (6322) 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. Keego Harbor, City of 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 July 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

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 Keego Harbor, City of 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*	58%	58%

* 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:	July 1, 2026	July 1, 2025	July 1, 2026	July 1, 2025
Division				
01 - General	-	-	$ 18,162	$ 16,937
02 - Plc/Fire	-	-	10,737	10,313
11 - General after 5/1/2012	-	-	0	0
Total Municipality - Estimated Monthly Contribution			**$ 28,899**	**$ 27,250**
Total Municipality - Estimated Annual Contribution			**$ 346,788**	**$ 327,000**

Employee contribution rates:

	Employee Contribution Rate	
Valuation Date:	12/31/2024	12/31/2023
Division		
01 - General	10.00%	10.00%
02 - Plc/Fire	5.00%	5.00%
11 - General after 5/1/2012	10.00%	10.00%

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 $34,566, instead of $28,899.

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 55% (instead of 58%); and
- Your total employer contribution requirement for the fiscal year starting July 1, 2026 would be $363,804 (instead of $346,788).

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	$ 7,259,663	$ 6,556,320	$ 5,958,597
Valuation Assets[1]	$ 3,464,511	$ 3,464,511	$ 3,464,511
Unfunded Accrued Liability	$ 3,795,152	$ 3,091,809	$ 2,494,086
Funded Ratio	48%	53%	58%
Monthly Normal Cost	$ 3,065	$ 2,272	$ 1,664
Monthly Amortization Payment	$ 33,609	$ 30,186	$ 26,960
Total Employer Contribution[2]	$ 36,925	$ 32,720	$ 28,899

[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.

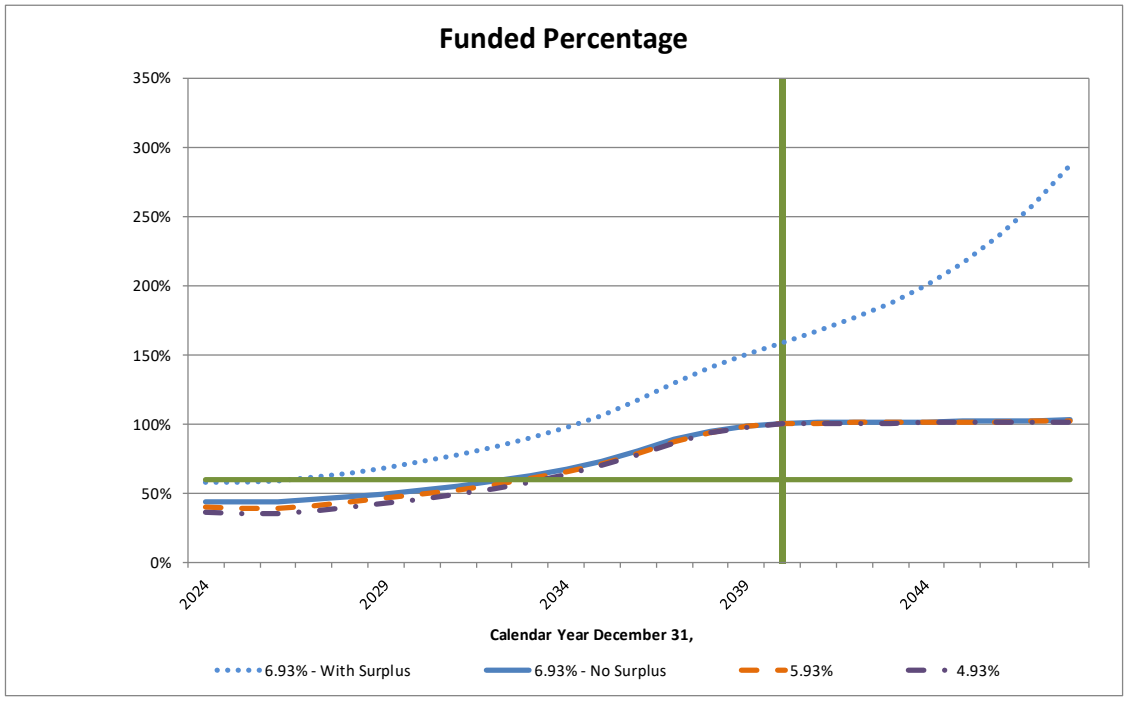
Your municipality includes one or more Surplus divisions. Extra contributions in a Surplus division may be used to reduce future employer contributions or to accelerate the date by which the municipality becomes 100% funded. The timing and use of these Surplus assets within the plan is discretionary. 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.

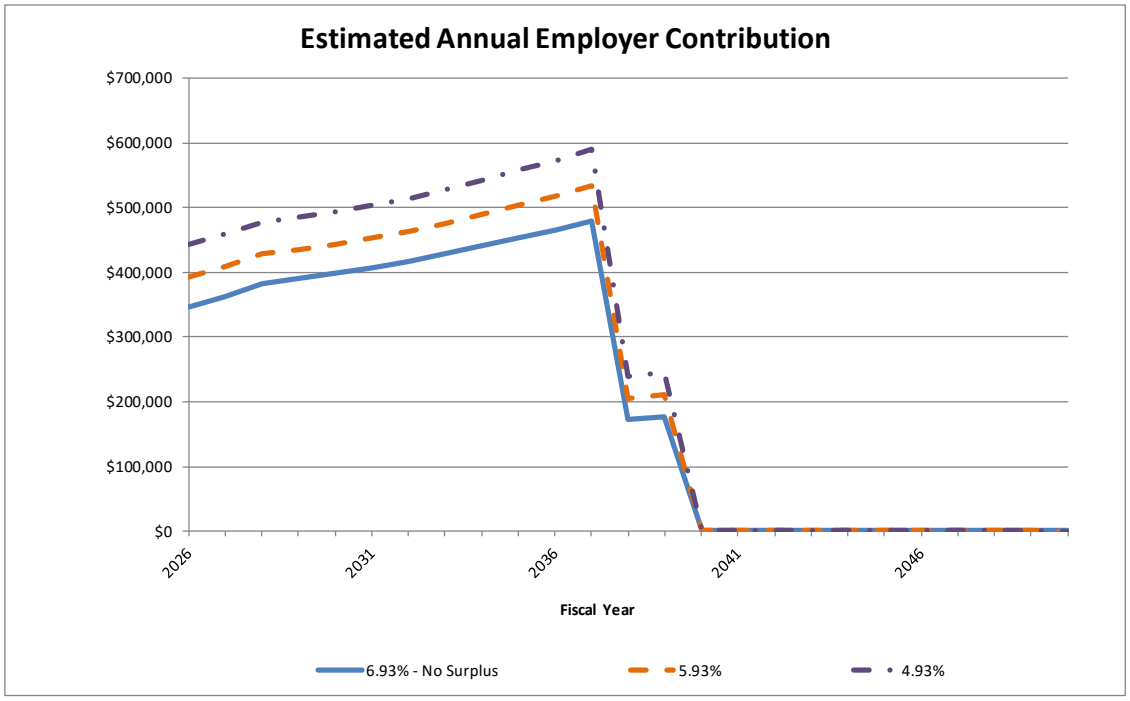
Valuation Year Ending 12/31	Fiscal Year Beginning 7/1	Actuarial Accrued Liability	Valuation Assets[2]	Funded Percentage	Estimated Annual Employer Contribution
6.93%[1]					
2024	2026	$ 5,958,597	$ 2,622,473	44%	$ 346,788
2025	2027	$ 5,940,000	$ 2,590,000	44%	$ 363,000
2026	2028	$ 5,950,000	$ 2,600,000	44%	$ 382,000
2027	2029	$ 5,930,000	$ 2,690,000	45%	$ 390,000
2028	2030	$ 5,900,000	$ 2,800,000	48%	$ 398,000
2029	2031	$ 5,840,000	$ 2,910,000	50%	$ 407,000
5.93%[1]					
2024	2026	$ 6,556,320	$ 2,622,473	40%	$ 392,640
2025	2027	$ 6,530,000	$ 2,560,000	39%	$ 409,000
2026	2028	$ 6,520,000	$ 2,570,000	39%	$ 428,000
2027	2029	$ 6,490,000	$ 2,690,000	41%	$ 435,000
2028	2030	$ 6,430,000	$ 2,820,000	44%	$ 443,000
2029	2031	$ 6,350,000	$ 2,950,000	46%	$ 453,000
4.93%[1]					
2024	2026	$ 7,259,663	$ 2,622,473	36%	$ 443,100
2025	2027	$ 7,210,000	$ 2,540,000	35%	$ 460,000
2026	2028	$ 7,190,000	$ 2,550,000	35%	$ 478,000
2027	2029	$ 7,130,000	$ 2,690,000	38%	$ 485,000
2028	2030	$ 7,050,000	$ 2,840,000	40%	$ 493,000
2029	2031	$ 6,950,000	$ 3,000,000	43%	$ 503,000

[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 July 1, 2026

Division	Total Normal Cost	Employee Contribution Rate	Employer Contributions[1]			Blended ER Rate[5]	Employee Contribution Conversion Factor[2]
			Employer Normal Cost[6]	Payment of the Unfunded Accrued Liability[4]	Computed Employer Contribution		
Percentage of Payroll							
01 - General	0.00%	10.00%	-	-	-		
02 - Plc/Fire	18.37%	5.00%	-	-	-		
11 - General after 5/1/2012	0.00%	10.00%	-	-	-		
Estimated Monthly Contribution[3]							
01 - General			$ 0	$ 18,162	$ 18,162		
02 - Plc/Fire			1,664	9,073	10,737		
11 - General after 5/1/2012			0	(275)	0		
Total Municipality			**$ 1,664**	**$ 26,960**	**$ 28,899**		
Estimated Annual Contribution[3]			**$ 19,968**	**$ 323,520**	**$ 346,788**		

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

01 - General: Closed to new hires

	2024 Valuation	2023 Valuation
Benefit Multiplier:	Bridged Benefit: 2.50% Multiplier (80% max)-Frozen FAC; 1.30% Multiplier (no max)	Bridged Benefit: 2.50% Multiplier (80% max)-Frozen FAC; 1.30% Multiplier (no max)
Bridged Benefit Date:	4/30/2012	4/30/2012
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:	5 years	5 years
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	10.00%	10.00%
DC Plan for New Hires:	7/1/2018	7/1/2018
Act 88:	No	No

02 - Plc/Fire: Closed to new hires

	2024 Valuation	2023 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% 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:	5 years	5 years
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
COLA for Current Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	5.00%	5.00%
DC Plan for New Hires:	7/1/2018	7/1/2018
Act 88:	No	No

11 - General after 5/1/2012: Closed to new hires

	2024 Valuation	2023 Valuation
Benefit Multiplier:	1.30% Multiplier (no max)	1.30% Multiplier (no max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	10.00%	10.00%
DC Plan for New Hires:	7/1/2018	7/1/2018
Act 88:	No	No

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]
01 - General							
Active Employees	0	$ 0	0	$ 0	0.0	0.0	0.0
Vested Former Employees	2	9,977	1	7,205	57.4	5.9	6.8
Retirees and Beneficiaries	15	269,337	15	264,892	73.5		
Pending Refunds	0		0				
02 - Plc/Fire							
Active Employees	2	$ 176,116	2	$ 179,469	56.9	21.4	21.4
Vested Former Employees	1	2,624	0	0	51.1	2.8	2.8
Retirees and Beneficiaries	5	136,235	5	133,497	76.6		
Pending Refunds	0		1				
11 - General after 5/1/2012							
Active Employees	0	$ 0	0	$ 0	0.0	0.0	0.0
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
Pending Refunds	2		2				
Total Municipality							
Active Employees	**2**	**$ 176,116**	**2**	**$ 179,469**	**56.9**	**21.4**	**21.4**
Vested Former Employees	**3**	**12,601**	**1**	**7,205**	**55.3**	**4.9**	**5.5**
Retirees and Beneficiaries	**20**	**405,572**	**20**	**398,389**	**74.3**		
Pending Refunds	**2**		**3**				
Total Participants	**27**		**26**				

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]
01 - General	$ 936,294	$ 18,169	$ 946,804	$ 17,444
02 - Plc/Fire	1,189,191	260,706	1,128,289	242,486
11 - General after 5/1/2012	14,477	42,731	12,296	41,025
SG - Surplus Grant Funds	790,374	0	736,662	0
Municipality Total[3]	**$ 2,930,335**	**$ 321,607**	**$ 2,824,051**	**$ 300,955**
Combined Assets[3]	**$3,251,942**		**$3,125,006**	

[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 July 1, 2026.

Table 5: Flow of Valuation Assets

Year Ended 12/31	Employer Contributions		Employee Contributions	Investment Income (Valuation Assets)	Benefit Payments	Employee Contribution Refunds	Net Transfers	Valuation Asset Balance
	Required	Additional						
2014	$ 92,778	$ 0	$ 24,559	$ 126,599	$ (234,277)	$ 0	$ 0	$ 2,322,488
2015	106,170	0	26,993	110,735	(242,830)	0	20,231	2,343,787
2016	109,770	0	32,476	111,592	(269,503)	0	0	2,328,122
2017	123,900	0	24,559	132,303	(286,984)	0	0	2,321,900
2018	149,388	0	29,764	81,278	(319,189)	0	0	2,263,141
2019	175,044	0	21,279	96,308	(327,438)	(25,626)	0	2,202,708
2020	198,318	0	22,007	171,928	(341,786)	0	0	2,253,175
2021	223,146	0	23,236	378,202	(358,014)	0	114,087	2,633,832
2022	255,696	7,265	20,210	82,122	(384,024)	0	0	2,615,101
2023	278,184	712,017	14,381	236,921	(391,206)	(29,282)	0	3,436,116
2024	291,576	0	9,013	127,065	(398,389)	(870)	0	3,464,511

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					Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
	Active Employees	Vested Former Employees	Retirees and Beneficiaries	Pending Refunds	Total			
01 - General	$ 0	$ 128,553	$ 3,050,679	$ 0	$ 3,179,232	$ 1,016,853	32.0%	$ 2,162,379
02 - Plc/Fire	1,166,086	17,442	1,553,106	0	2,736,634	1,544,672	56.4%	1,191,962
11 - General after 5/1/2012	0	0	0	42,731	42,731	60,948	142.6%	(18,217)
SG - Surplus Grant Funds	0	0	0	0	0	842,038		(842,038)
Total	**$ 1,166,086**	**$ 145,995**	**$ 4,603,785**	**$ 42,731**	**$ 5,958,597**	**$ 3,464,511**	**58.1%**	**$ 2,494,086**

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	$ 3,615,608	$ 2,413,574	67%	$ 1,202,034
2011	3,736,066	2,376,209	64%	1,359,857
2012	3,806,963	2,330,331	61%	1,476,632
2013	3,908,738	2,312,829	59%	1,595,909
2014	3,831,708	2,322,488	61%	1,509,220
2015	4,330,942	2,343,787	54%	1,987,155
2016	4,518,850	2,328,122	52%	2,190,728
2017	4,751,835	2,321,900	49%	2,429,935
2018	4,772,746	2,263,141	47%	2,509,605
2019	4,882,846	2,202,708	45%	2,680,138
2020	5,142,142	2,253,175	44%	2,888,967
2021	5,718,144	2,633,832	46%	3,084,312
2022	5,720,079	2,615,101	46%	3,104,978
2023	5,883,277	3,436,116	58%	2,447,161
2024	5,958,597	3,464,511	58%	2,494,086

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 01 - General

Table 8-01: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	$ 2,781,508	$ 1,392,779	50%	$ 1,388,729
2015	2,944,488	1,348,025	46%	1,596,463
2016	2,990,487	1,305,705	44%	1,684,782
2017	2,997,509	1,268,042	42%	1,729,467
2018	3,020,206	1,177,327	39%	1,842,879
2019	3,038,649	1,096,568	36%	1,942,081
2020	3,120,709	1,054,330	34%	2,066,379
2021	3,208,745	1,125,579	35%	2,083,166
2022	3,193,255	1,077,291	34%	2,115,964
2023	3,193,294	1,060,243	33%	2,133,051
2024	3,179,232	1,016,853	32%	2,162,379

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 9-01: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution[1]	Employee Contribution Rate[2]
	Number	Annual Payroll		
2014	2	$ 92,667	$ 7,325	10.00%
2015	2	95,305	$ 9,096	10.00%
2016	2	96,403	$ 9,770	10.00%
2017	1	59,231	$ 10,248	10.00%
2018	1	76,942	$ 11,679	10.00%
2019	0	0	$ 13,489	10.00%
2020	0	0	$ 14,841	10.00%
2021	0	0	$ 15,051	10.00%
2022	0	0	$ 16,043	10.00%
2023	0	0	$ 16,937	10.00%
2024	0	0	$ 18,162	10.00%

[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 8-02: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	$ 1,042,854	$ 920,843	88%	$ 122,011
2015	1,372,504	978,839	71%	393,665
2016	1,509,584	999,677	66%	509,907
2017	1,729,765	1,024,567	59%	705,198
2018	1,715,681	1,042,422	61%	673,259
2019	1,822,387	1,077,723	59%	744,664
2020	1,986,374	1,155,230	58%	831,144
2021	2,456,669	1,443,860	59%	1,012,809
2022	2,458,693	1,457,029	59%	1,001,664
2023	2,648,958	1,507,243	57%	1,141,715
2024	2,736,634	1,544,672	56%	1,191,962

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 9-02: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution[1]	Employee Contribution Rate[2]
	Number	Annual Payroll		
2014	3	$ 181,222	$ 1,707	5.00%
2015	3	191,255	$ 4,074	5.00%
2016	3	188,572	$ 4,674	5.00%
2017	3	247,755	$ 6,422	5.00%
2018	3	207,717	$ 5,868	5.00%
2019	3	211,665	$ 6,543	5.00%
2020	3	217,875	$ 7,743	5.00%
2021	2	160,973	$ 8,729	5.00%
2022	2	159,854	$ 8,773	5.00%
2023	2	179,469	$ 10,313	5.00%
2024	2	176,116	$ 10,737	5.00%

[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 8-11: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	$ 7,346	$ 8,866	121%	$ (1,520)
2015	13,950	16,923	121%	(2,973)
2016	18,779	22,740	121%	(3,961)
2017	24,561	29,291	119%	(4,730)
2018	36,859	43,392	118%	(6,533)
2019	21,810	28,417	130%	(6,607)
2020	35,059	43,615	124%	(8,556)
2021	52,730	64,393	122%	(11,663)
2022	68,131	80,781	119%	(12,650)
2023	41,025	58,629	143%	(17,604)
2024	42,731	60,948	143%	(18,217)

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 9-11: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution[1]	Employee Contribution Rate[2]
	Number	Annual Payroll		
2014	2	$ 69,950	0.00%	10.00%
2015	2	70,412	0.00%	10.00%
2016	1	43,160	0.00%	10.00%
2017	1	47,965	0.00%	10.00%
2018	3	130,573	$ 0	10.00%
2019	2	99,378	$ 0	10.00%
2020	2	112,359	$ 0	10.00%
2021	2	125,052	$ 0	10.00%
2022	1	70,830	$ 0	10.00%
2023	0	0	$ 0	10.00%
2024	0	0	$ 0	10.00%

[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-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	810,001		(810,001)
2024	0	842,038		(842,038)

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 01 - General

Table 10-01: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance[1]	Original Amortization Period[2]	Amounts for Fiscal Year Beginning 7/1/2026		
				Outstanding UAL Balance[3]	Remaining Amortization Period[2]	Annual Amortization Payment
Initial	12/31/2015	$ 1,596,463	23	$ 1,505,361	12	$ 158,028
(Gain)/Loss	12/31/2016	51,985	22	52,559	12	5,520
(Gain)/Loss	12/31/2017	16,546	21	16,610	12	1,740
(Gain)/Loss	12/31/2018	95,899	19	95,854	12	10,068
(Gain)/Loss	12/31/2019	(22,499)	17	(22,380)	12	(2,352)
Assumption	12/31/2019	103,689	17	93,422	12	9,804
Experience	12/31/2020	118,025	16	118,897	12	12,480
Experience	12/31/2021	11,825	15	12,051	12	1,260
Experience	12/31/2022	62,694	14	65,324	12	6,864
Experience	12/31/2023	52,595	13	56,254	12	5,904
Experience	12/31/2024	74,358	12	82,220	12	8,628
Total				**$ 2,076,172**		**$ 217,944**

[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.

Table 10-02: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance[1]	Original Amortization Period[2]	Amounts for Fiscal Year Beginning 7/1/2026		
				Outstanding UAL Balance[3]	Remaining Amortization Period[2]	Annual Amortization Payment
Initial	12/31/2015	$ 393,665	23	$ 414,303	14	$ 38,592
(Gain)/Loss	12/31/2016	90,961	22	96,143	14	8,952
(Gain)/Loss	12/31/2017	171,109	21	179,618	14	16,728
(Gain)/Loss	12/31/2018	(53,090)	20	(55,485)	14	(5,172)
(Gain)/Loss	12/31/2019	4,747	19	4,926	14	456
Assumption	12/31/2019	60,312	19	58,800	14	5,472
Experience	12/31/2020	84,087	18	87,771	14	8,172
Experience	12/31/2021	172,085	17	180,412	14	16,800
Experience	12/31/2022	(17,604)	16	(18,711)	14	(1,740)
Experience	12/31/2023	146,312	15	158,199	14	14,736
Experience	12/31/2024	57,123	14	63,163	14	5,880
Total				**$ 1,169,139**		**$ 108,876**

[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 10-11: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance[1]	Original Amortization Period[2]	Amounts for Fiscal Year Beginning 7/1/2026		
				Outstanding UAL Balance[3]	Remaining Amortization Period[2]	Annual Amortization Payment
Initial	12/31/2015	$ (2,973)	10	$ (4,353)	6	$ (828)
(Gain)/Loss	12/31/2016	791	15	608	7	96
(Gain)/Loss	12/31/2017	771	15	649	8	96
(Gain)/Loss	12/31/2018	(1,035)	10	(624)	4	(168)
(Gain)/Loss	12/31/2019	(1,749)	10	(1,234)	5	(276)
Assumption	12/31/2019	296	10	239	5	48
Experience	12/31/2020	(2,348)	10	(1,907)	6	(360)
Experience	12/31/2021	(3,600)	10	(3,205)	7	(528)
Experience	12/31/2022	(1,809)	10	(1,765)	8	(264)
Experience	12/31/2023	(5,964)	10	(6,220)	9	(828)
Experience	12/31/2024	(2,108)	10	(2,331)	10	(288)
Total				**$ (20,143)**		**$ (3,300)**

[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:		20
Inactive employees entitled to but not yet receiving benefits (including refunds):		5
Active employees:		2
		27
Total Pension Liability as of 12/31/2023 measurement date:	$	5,745,783
Total Pension Liability as of 12/31/2024 measurement date:	$	5,823,282
Service Cost for the year ending on the 12/31/2024 measurement date:	$	31,155
Change in the Total Pension Liability due to:		
- Benefit changes[1]:	$	0
- Differences between expected and actual experience[2]:	$	51,154
- Changes in assumptions[2]:	$	(4,884)
Average expected remaining service lives of all employees (active and inactive):		0

[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):	$	176,116

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:	$ 574,551	$ 0	$ (492,632)

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.

01 - General

9/1/2023	Pension Grant Recipient
12/1/2020	Non-Accelerated Amortization
7/1/2018	Accelerated to 15-year Amortization
7/1/2018	DC Adoption Date 07-01-2018
12/1/2016	Service Credit Purchase Estimates - Yes
5/1/2012	1.30% Multiplier
5/1/2012	Member Contribution Rate 10.00%
4/30/2012	Frozen FAC
7/1/2009	Member Contribution Rate 6.00%
1/1/2008	E 2% COLA Adopted (01/01/2008)
7/1/2004	Member Contribution Rate 3.00%
1/1/2004	E2 2.5% COLA for future retirees (07/01/2003)
1/1/2004	Flexible E 2% COLA Adopted (01/01/2004)
7/1/2003	2.50% Multiplier (Capped at 80% of FAC)
7/1/2003	Benefit F55 (With 25 Years of Service)
7/1/2003	Member Contribution Rate 2.00%
12/16/1999	Day of work defined as 160 Hours a Month for All employees.
7/1/1996	2.00% Multiplier
7/1/1990	Member Contribution Rate 0.00%
1/1/1990	8 Year Vesting
7/1/1983	2.00% Multiplier until SS Age, then 1.70% Multiplier
1/1/1973	1.00% Multiplier on FAC < $4,200 and 1.50% Multiplier on FAC > $4,200
1/1/1973	10 Year Vesting
1/1/1973	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1973	Fiscal Month - July
1/1/1973	Member Contribution Rate 3.00% Under $4,200.00 - Then 5.00%
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
	Normal Retirement Age (DB) - 60

02 - Plc/Fire

9/1/2023	Pension Grant Recipient
1/1/2021	Gross Wages
1/1/2021	Public Safety Employees - Yes
1/1/2021	Service Credit Qualification - 160 hours
1/1/2021	Sick Eligibility - No Max
7/1/2018	DC Adoption Date 07-01-2018
7/1/2018	Non-Accelerated Amortization
12/1/2016	Service Credit Purchase Estimates - Yes
11/1/2009	Member Contribution Rate 5.00%
7/1/2004	Member Contribution Rate 3.00%
1/1/2004	E2 2.5% COLA for future retirees (07/01/2003)
1/1/2004	Flexible E 2% COLA Adopted (01/01/2004)

02 - Plc/Fire

7/1/2003	2.50% Multiplier (Capped at 80% of FAC)
7/1/2003	Benefit F55 (With 25 Years of Service)
7/1/2003	Member Contribution Rate 2.00%
12/16/1999	Day of work defined as 160 Hours a Month for All employees.
1/1/1998	E1 2.5% COLA for past retirees (08/01/1997)
7/1/1996	2.00% Multiplier
1/1/1995	E1 2.5% COLA for past retirees (01/01/1995)
1/1/1993	E1 2.5% COLA for past retirees (01/01/1993)
7/1/1990	Member Contribution Rate 0.00%
1/1/1990	8 Year Vesting
7/1/1983	2.00% Multiplier until SS Age, then 1.70% Multiplier
1/1/1973	1.00% Multiplier on FAC < $4,200 and 1.50% Multiplier on FAC > $4,200
1/1/1973	10 Year Vesting
1/1/1973	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1973	Fiscal Month - July
1/1/1973	Member Contribution Rate 3.00% Under $4,200.00 - Then 5.00%
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
	Normal Retirement Age (DB) - 60

11 - General after 5/1/2012

9/1/2023	Pension Grant Recipient
1/1/2021	Gross Wages
1/1/2021	Public Safety Employees - Yes
1/1/2021	Service Credit Qualification - 160 hours
1/1/2021	Sick Eligibility - No Max
7/1/2018	DC Adoption Date 07-01-2018
12/1/2016	Service Credit Purchase Estimates - Yes
5/1/2012	1.30% Multiplier
5/1/2012	10 Year Vesting
5/1/2012	Benefit FAC-5 (5 Year Final Average Compensation)
5/1/2012	Day of work defined as 160 Hours a Month for All employees.
5/1/2012	Member Contribution Rate 10.00%
1/1/1973	Fiscal Month - July
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
	Normal Retirement Age (DB) - 60

SG - Surplus Grant Funds

1/1/1973	Fiscal Month - July

Plan Provisions, Actuarial Assumptions, and Actuarial Funding Method

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

Increase in Final Average Compensation

Division	Increase Assumption
All Divisions	2.00%

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	5.0	11.5	0.4	6.5	-6.1%
2019	7.0	15.7	0.3	6.2	-7.6%
2020	7.0	15.6	0.3	6.8	-5.6%
2021	9.2	20.0	0.2	7.4	0.1%
2022	9.8	24.8	0.2	5.9	-3.8%
2023	17.4	32.8	0.1	7.4	25.9%
2024	18.5	33.8	0.1	8.1	-3.2%

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	2
12	Indicate number of inactive members (excluding pending refunds)	3
13	Indicate number of retirees and beneficiaries	20
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]	14
22	Is each division within the system closed to new employees?[4]	Yes
23	**Uniform Assumptions**	
24	Enter retirement pension system's actuarial value of assets using uniform assumptions	$3,361,442
25	Enter retirement pension system's actuarial accrued liabilities using uniform assumptions[5]	$5,958,597
27	Actuarially Determined Contribution (ADC) using uniform assumptions, Fiscal Year Ending June 30, 2025	$388,320

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%.