

Protecting Local Government Retirement and Benefits Act

Corrective Action Plan:

Defined Benefit Pension Retirement Systems

Issued under authority of Public Act 202 of 2017.

1. MUNICIPALITY INFORMATION

Local Unit Name: CITY OF FLUSHING Six-Digit Muni Code: 252050

Defined Benefit Pension System Name: MERS - CITY OF FLUSHING PENSION PLAN

Contact Name (Administrative Officer): Brad Barrett

Title if not Administrative Officer: City Manager

Email: bbarrett@flushingcity.com Telephone: 810-659-3130

2. GENERAL INFORMATION

Corrective Action Plan: An underfunded local unit of government shall develop and submit for approval a corrective action plan for the local unit of government. The local unit of government shall determine the components of the corrective action plan. This Corrective Action Plan shall be submitted by any local unit of government with at least one defined benefit pension retirement system that has been determined to have an underfunded status. Underfunded status for a defined benefit pension system is defined as being less than 60% funded according to the most recent audited financial statements, and, if the local unit of government is a city, village, township, or county, the annually required contribution (ARC) for all of the defined benefit pension retirement systems of the local unit of government is greater than 10% of the local unit of government's annual governmental fund revenues, based on the most recent fiscal year.

Due Date: The local unit of government has **180 days from the date of notification** to submit a corrective action plan to the Municipal Stability Board (the Board). The Board may extend the 180-day deadline by up to an additional 45 days if the local unit of government submits a reasonable draft of a corrective action plan and requests an extension.

Filing: Per Sec. 10(1) of PA 202 of 2017 (the Act), this Corrective Action Plan must be approved by the local government's administrative officer and its governing body. ***You must provide proof of your governing body approving this Corrective Action Plan and attach the documentation as a separate PDF document.*** Per Sec. 10(4) of the Act, failure to provide documentation that demonstrates approval from your governing body will result in a determination of noncompliance by the Board.

The submitted plan must demonstrate through distinct supporting documentation how and when the local unit will reach the 60% funded ratio. Or, if the local unit is a city, village, township, or county, the submitted plan may demonstrate how and when the ARC for all of the defined benefit pension systems will be less than 10% of annual governmental fund revenues, as defined by the Act. Supporting documentation for the funding ratio and/or ARC must include an actuarial projection, an actuarial valuation, or an internally developed analysis. The local unit must project governmental fund revenues using a reasonable forecast based on historical trends and projected rates of inflation.

The completed plan must be submitted via email to Treasury at LocalRetirementReporting@michigan.gov for review by the Board. **If you have multiple underfunded retirement systems, you are required to complete separate plans and send a separate email for each underfunded system.** Please attach each plan as a separate PDF document in addition to all applicable supporting documentation.

The subject line of the email(s) should be in the following format: **Corrective Action Plan-2017, Local Unit Name, Retirement System Name** (e.g. Corrective Action Plan-2017, City of Lansing, Employees' Retirement System)

Pension Plan). Treasury will send an automatic reply acknowledging receipt of the email. Your individual email settings must allow for receipt of Treasury's automatic reply. This will be the only notification confirming receipt of the application(s).

Municipal Stability Board: The Municipal Stability Board (the Board) shall review and vote on the approval of a corrective action plan submitted by a local unit of government. If a corrective action plan is approved, the Board will monitor the corrective action plan for the following two years, and the Board will report on the local unit of government's compliance with the Act not less than every two years.

Review Process: Following receipt of the email by Treasury, the Board will accept the corrective action plan submission at the next scheduled meeting of the Board. The Board shall then approve or reject the corrective action plan within 45 days from the date of the meeting.

Considerations for Approval: A successful corrective action plan will demonstrate the actions for correcting underfunded status as set forth in Sec. 10(7) of the Act (listed below), as well as any additional solutions to address the underfunded status. Please also include steps already taken to address your underfunded status as well as the date prospective actions will be taken. A local unit of government may also include in its corrective action plan, a review of the local unit of government's budget and finances to determine any alternative methods available to address its underfunded status. A corrective action plan under this section may include the development and implementation of corrective options for the local unit of government to address its underfunded status. The corrective options as described in Sec. 10(7) may include, but are not limited to, any of the following:

- (i) Closing the current defined benefit plan.
- (ii) Implementing a multiplier limit.
- (iii) Reducing or eliminating new accrued benefits.
- (iv) Implementing final average compensation standards.

Implementation: The local unit of government has up to 180 days after the approval of a corrective action plan to begin to implement the corrective action plan to address its underfunded status. The Board shall monitor each underfunded local unit of government's compliance with this act and any corrective action plan. The Board shall adopt a schedule, not less than every 2 years, to certify that the underfunded local unit of government is in substantial compliance with the Act. If the Board determines that an underfunded local unit of government is not in substantial compliance under this subsection, the Board shall within 15 days provide notification and report to the local unit of government detailing the reasons for the determination of noncompliance with the corrective action plan. The local unit of government has 60 days from the date of the notification to address the determination of noncompliance.

3. DESCRIPTIONS OF PRIOR ACTIONS

Prior actions are separated into three categories below: System Design Changes, Additional Funding, and Other Considerations. Please provide a brief description of the prior actions implemented by the local government to address the retirement system's underfunded status within the appropriate category section. Within each category are sample statements that you may choose to use to indicate the changes to your system that will positively affect your funded status. For retirement systems that have multiple divisions, departments, or plans within the same retirement system, please indicate how these changes impact the retirement **system** as a whole.

- **Please Note:** If applicable, prior actions listed within your waiver application(s) may also be included in your corrective action plan.

Please indicate where in the attached supporting documentation these changes are described and the impact of those changes (i.e. what has the local unit of government done to improve its underfunded status, and where can we find the proof of these changes in the supporting documentation?).

Note: Please provide the name of the system impacted, the date you made the change, the relevant page number(s) within the supporting documentation, and the resulting change to the system's funded ratio.

Category of Prior Actions:

- ☒ **System Design Changes** - System design changes may include the following: Lower tier of benefits for new hires, final average compensation limitations, freeze future benefit accruals for active employees in the defined benefit system, defined contribution system for new hires, hybrid system for new hires, bridged multiplier for active employees, etc.

Sample Statement: *The system's multiplier for current employees was lowered from 2.5X to 2X for the **General Employees' Retirement System** on **January 1, 2017**. On page **8** of the attached actuarial supplemental valuation, it shows our funded ratio will be **60%** by fiscal year **2020**.*

See Attachment

- ☒ **Additional Funding** – Additional funding may include the following: Voluntary contributions above the actuarially determined contribution, bonding, millage increases, restricted funds, etc.

Sample Statement: *The local unit provided a lump sum payment of **\$1 million** to the **General Employees' Retirement System** on **January 1, 2017**. This lump sum payment was in addition to the actuarially determined contribution (ADC) of the system. The additional contribution will increase the retirement system's funded ratio to **61% by 2025**. Please see page **10** of the attached enacted budget, which highlights this contribution of **\$1 million**.*

See Attachment

- ☒ **Other Considerations** – Other considerations may include the following: outdated Form 5572 information, actuarial assumption changes, amortization policy changes, etc.

Sample Statement: *The information provided on the Form 5572 from the audit used actuarial data from **2015**. Attached is an updated actuarial valuation for **2017** that shows our funded ratio has improved to **62%** as indicated on page **13**.*

See Attachment

4. DESCRIPTION OF PROSPECTIVE ACTIONS

The corrective action plan allows you to submit a plan of prospective actions which are separated into three categories below: System Design Changes, Additional Funding, and Other Considerations. Please provide a brief description of the additional actions the local government is planning to implement to address the retirement system's underfunded status within the appropriate category section. Within each category are sample statements that you may choose to use to indicate the changes to your system that will positively affect your funded status. For retirement systems that have multiple divisions, departments, or plans within the same retirement system, please indicate how these changes impact the retirement **system** as a whole.

Please indicate where in the attached supporting documentation these changes are described and the impact of those changes (i.e. what will the local unit of government do to improve its underfunded status, and where can we find the proof of these changes in the supporting documentation?).

Category of Prospective Actions:

- ☒ **System Design Changes** - System design changes may include the following: Lower tier of benefits for new hires, final average compensation limitations, freeze future benefit accruals for active employees in the defined benefit system, defined contribution system for new hires, hybrid system for new hires, bridged multiplier for active employees, etc.

Sample Statement: Beginning with **summer 2018** contract negotiations, the local unit will seek to lower the system's multiplier for current employees from 2.5X to 2X for the **General Employees' Retirement System**. On page **8** of the attached actuarial supplemental valuation, it shows our funded ratio would be **60%** funded by **fiscal year 2020** if these changes were adopted and implemented by **fiscal year 2019**.

See Attachment

- ☒ **Additional Funding** – Additional funding may include the following: voluntary contributions above the actuarially determined contribution, bonding, millage increases, restricted funds, etc.

Sample Statement: Beginning in **fiscal year 2019**, the local unit will provide a lump sum payment of **\$1 million** to the **General Employees' Retirement System**. This lump sum payment will be in addition to the actuarially determined contribution (ADC) of the system. The additional contribution will increase the retirement system's funded ratio to **61% by 2025**. Please see page **10** of the attached enacted budget, which highlights this contribution of **\$1 million**. Please see page **12** of the attached supplemental actuarial valuation showing the projected change to the system's funded ratio with this additional contribution.

See Attachment

- ☐ **Other Considerations** – Other considerations may include the following: outdated Form 5572 information, actuarial assumption changes, amortization policy changes, etc.

Sample Statement: Beginning in **fiscal year 2019**, the local unit will begin amortizing the unfunded portion of the pension liability using a **level-dollar amortization method over a closed period of 10 years**. This will allow the retirement system to reach a funded status of **62% by 2022** as shown in the attached actuarial analysis on page **13**.

5. CONFIRMATION OF FUNDING

Please check the applicable answer:

Do the corrective actions listed in this plan allow for (insert local unit name) CITY OF FLUSHING to make, at a minimum, the annual required contribution payment for the defined benefit pension system according to your long-term budget forecast?

☒ Yes

☐ No

If No, Explain

6. DOCUMENTATION ATTACHED TO THIS CORRECTIVE ACTION PLAN

Documentation should be attached as a .pdf to this Corrective Action Plan. The documentation should detail the corrective action plan that would be implemented to adequately address the local unit of government's underfunded status. Please check all documents that are included as part of this plan and attach in successive order as provided below:

Naming convention: when attaching documents please use the naming convention shown below. If there is more than one document in a specific category that needs to be submitted, include a, b, or c for each document. For example, if you are submitting two supplemental valuations, you would name the first document "Attachment 2a" and the second document "Attachment 2b".

Naming Convention

☒ Attachment – 1

☒ Attachment – 1a

☒ Attachment – 2a

☒ Attachment – 3a

☐ Attachment – 4a

☐ Attachment – 5a

☒ Attachment –6a

Type of Document

This Corrective Action Plan Form (Required)

Documentation from the governing body approving this Corrective Action Plan (Required)

An actuarial projection, an actuarial valuation, or an internally developed analysis, which illustrates how and when the local unit will reach the 60% funded ratio. Or, if the local unit is a city, village, township, or county, ARC will be less than 10% of governmental fund revenues, as defined by the Act. (Required)

Documentation of additional payments in past years that is not reflected in your audited financial statements (e.g. enacted budget, system provided information).

Documentation of commitment to additional payments in future years (e.g. resolution, ordinance)

A separate corrective action plan that the local unit has approved to address its underfunded status, which includes documentation of prior actions, prospective actions, and the positive impact on the system's funded ratio

Other documentation not categorized above

7. CORRECTIVE ACTION PLAN CRITERIA

Please confirm that each of the four corrective action plan criteria listed below have been satisfied when submitting this document. Specific detail on corrective action plan criteria can be found in the [Corrective Action Plan Development: Best Practices and Strategies](#) document.

Corrective Action Plan Criteria

Description

- | | |
|--|---|
| ☒ Underfunded Status | Is there a description and adequate supporting documentation of how and when the retirement system will reach the 60% funded ratio? Or, if your local unit is a city, village, township, or county, how and when the ARC of all pension systems will be less than 10 percent of governmental fund revenues? |
| ☒ Reasonable Timeframe | Do the corrective actions address the underfunded status in a reasonable timeframe (see CAP criteria issued by the Board)? |
| ☒ Legal and Feasible | Does the corrective action plan follow all applicable laws? Are all required administrative certifications and governing body approvals included? Are the actions listed feasible? |
| ☒ Affordability | Do the corrective action(s) listed allow the local unit to make the annual required contribution payment for the pension system now and into the future without additional changes to this corrective action plan? |

8. LOCAL UNIT OF GOVERNMENT'S ADMINISTRATIVE OFFICER APPROVAL OF CORRECTIVE ACTION PLAN

I BRAD BARRETT, as the government's administrative officer (*enter title*) CITY MANAGER (Ex: City/Township Manager, Executive director, and Chief Executive Officer, etc.) approve this Corrective Action Plan and will implement the prospective actions contained in this Corrective Action Plan.

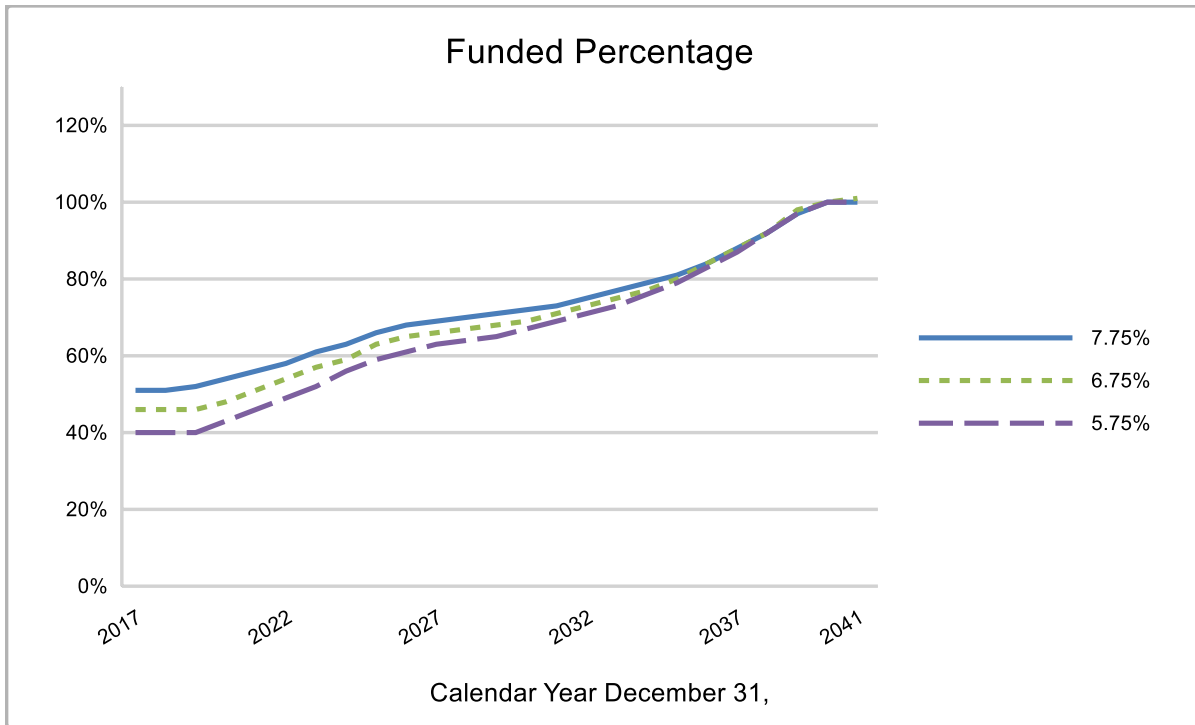
I confirm to the best of my knowledge that because of the changes listed above, one of the following statements will occur:

- ☒ The MERS - CITY OF FLUSHING (**Insert Retirement Pension System Name**) will achieve a funded status of at least 60% by Fiscal Year 2028 as demonstrated by required supporting documentation listed in section 6.

OR, if the local unit is a city, village, township, or county:

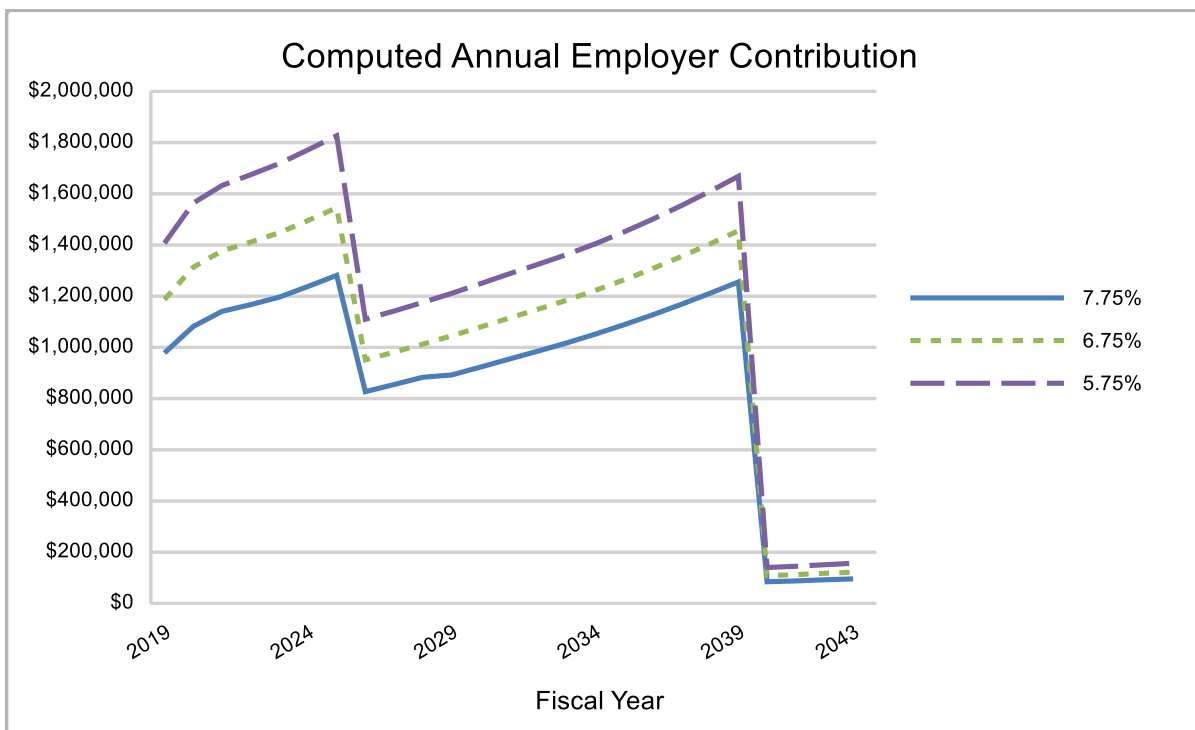
- ☐ The ARC for all of the defined benefit pension retirement systems of _____ (**Insert local unit name**) will be less than 10% of the local unit of government's annual governmental fund revenues by Fiscal Year _____ as demonstrated by required supporting documentation listed in section 6.

Signature BRAD BARRETT Date November 15, 2018



Notes:

All projected funded percentages are shown with no phase-in.



Notes:

All projected contributions are shown with no phase-in.

Flow of Valuation Assets

Table 5

Year Ended 12/31	Employer Contributions		Employee Contributions	Investment Income (Valuation Assets)	Benefit Payments	Employee Contribution Refunds	Net Transfers	Valuation Asset Balance
	Required	Additional						
2007	\$ 460,775		\$ 0	\$ 642,881	\$ (548,394)	\$ 0	\$ 0	\$ 8,488,720
2008	479,562		0	389,167	(587,129)	0	0	8,770,320
2009	503,069		0	404,998	(637,632)	0	(15,249)	9,025,506
2010	499,730		0	473,360	(717,571)	(9,070)	0	9,271,955
2011	497,998	\$ 0	0	449,016	(811,912)	0	0	9,407,057
2012	466,970	0	0	385,733	(913,378)	0	0	9,346,382
2013	529,299	0	0	511,771	(1,074,487)	0	0	9,312,965
2014	607,201	119,273	0	518,959	(1,081,328)	0	0	9,477,070
2015	663,669	124,048	23,484	460,981	(1,096,055)	0	0	9,653,197
2016	701,470	403,365	46,030	530,167	(1,105,615)	0	0	10,228,614
2017	752,490	216,014	60,808	621,242	(1,203,412)	0	0	10,675,756

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.

Additional employer contributions, if any, are shown separately starting in 2011. Prior to 2011, additional contributions are combined with the required employer contributions.

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 Assets include assets from Surplus divisions, if any.

CITY OF FLUSHING
Correction Action Plan: PENSION SYSTEM

Description of Prior Actions

SYSTEM DESIGN CHANGES

1. Employee Contribution Rates

- | | |
|---------------------------------|-------------------|
| a. Division 1 – General | 8% (July 2018) |
| b. Division 2 – Police | 8% (June 2017) |
| c. Division 10 – Administration | 8% (January 2017) |

2. Access

- | | |
|---------------------------------|--|
| a. Division 1 – General | Closed / New hires in a Define Contribution Plan (July 2017) |
| b. Division 2 – Police | Closed / New hires in a Hybrid Plan (November 2011) |
| c. Division 10 – Administration | Closed / New hires in Define Contribution Plan (June 2008) |

3. Alternative Amortization

Division 10 – Administration amortization was extended from 8 years to 19 years. (September 2018)

MERS Alternative Amortization Study states the total projected funded ratio with implementation will reach 60% 2027/2028.

4. ARC Payment Calculation

Annual city administration requests MERS to calculate its ARC payment with the following assumptions:

- a. No Employee Contributions
- b. No Phase In

5. The City of Flushing has a monthly flat payment to MERS calculated each year for Divisions 1 (General), 2 (Police) and 10 (Administration). The employer's payment associated with the Hybrid plan (HA – Police) is calculated on a percentage of payroll.

CITY OF FLUSHING
Correction Action Plan: PENSION SYSTEM

6. The City of Flushing adopted Defined Benefit Plan Surplus Divisions for Divisions 1 (General), 2 (Police) and 10 (Administration) in June 2018.

ADDITIONAL FUNDING

1. Each year voluntary contributions have been made to MERS (Table 5):

- a. Year 2014: \$119,273
- b. Year 2015: \$124,048
- c. Year 2016: \$403,365
- d. Year 2017: \$216,014

Each year administration requests MERS to calculate a new ARC payment without employee contributions and the “phase in.” The difference between the new ARC payment and calculated ARC payment is considered additional payments by MERS.

OTHER CONSIDERATIONS

The City of Flushing has always paid the annual required contribution calculated by MERS.

Description of Prospective Actions

SYSTEM DESIGN CHANGES

The City of Flushing requested MERS to provide the impact on the following changes to the defined benefit retirement plan:

1. Freezing the COLA as of January 1, 2019

MERS calculated impact is an overall funding ratio increase of .4%

2. Changing the FAC from 3 years to 5 years

MERS calculated impact is an overall funding ratio increase of .5%

3. Calculating the FAC with base wages only

MERS calculated impact for Division 1 is a funding ratio increase of 1.2%.

MERS calculated impact for Division 10 is a funding ratio increase of .5%.

MERS calculated impact for Division 2 & HA is a funding ratio increase of 1%.

All prospective actions above have to be negotiated with the collective bargaining group prior to implementation.

ADDITIONAL FUNDING

Administration explores the idea of lump sum contribution each year through the budgeting process.

OTHER CONSIDERATION

No other considerations

ATTACHMENT 6A

Amortization Extension Agreement

This Amortization Extension Agreement ("Agreement") is entered into between the Municipal Employees' Retirement System of Michigan ("MERS") and City of Flushing ("Employer") (together, "Parties") to memorialize the agreement and representations of the parties concerning an extension of the period of Employer's amortization schedule.

Accordingly, the Parties agree as follows:

1. **UAL Defined:** This extension study was prepared based on the Employer's most recent Annual Actuarial Valuation dated 12/31/2017. As used in this Agreement, the term UAL shall mean the Initial 12/31/2015 Unfunded Accrued Liability (valuation date the layered amortization policy commenced) outstanding as of the Employer's most recent Annual Valuation.
2. **Purpose:** In the exercise of its one-time opportunity to do so as provided by MERS, Employer has requested that MERS grant it an extension of the period in which its UAL is amortized to assist with the employer's need to address significant financial stress. This extension shall not apply to gains/losses emerged since 12/31/15 nor future gain/loss or other sources of UAL, which will continue to follow the standard amortization policy adopted by the Board
3. **MERS' Analysis:** In response to Employer's request and in accordance with MERS' procedures, MERS has discussed its conclusions with Employer, and Employer is in agreement with MERS' conclusions (report attached).
4. **Representations and Understandings of Employer:**
 - a. The information Employer provided to MERS in the course of and for purposes of MERS' analysis was complete and accurate to the best of Employer's ability.
 - b. Notwithstanding anything herein to the contrary, the Employer understands that MERS reserves the right to change the amortization policy in the future, including that included in this Agreement, if it is deemed necessary for the financial security of the benefits provided by the Employer.
 - c. Employer understands that MERS has advised that compliance with the existing amortization schedule is preferred, and that extending amortization as requested is not in full conformity with MERS' goals of earliest full funding and intergenerational equity.
 - d. Employer has made and will continue to make payment of its retirement costs, including UAL toward full funding, a priority in its annual and long-term budgeting and planning processes.
 - e. Employer understands that extending the amortization period for its current UAL has the effect of deferring current costs to the future, with the result that in the later years of the amortization, the Employer's UAL will be higher and the Employer's total required contributions will be higher than they would otherwise have been.
 - f. Employer understands, with respect to its request and otherwise, that future required contributions depend on the actual investment and demographic experience, and not on the assumptions used to develop the projected contributions considered in this Agreement.
5. **Conclusion and Decision of MERS:** Based on the foregoing analysis and representations of Employer, MERS approves Employer's request with the following terms and conditions, with which Employer agrees:

- a. MERS shall extend Employer's amortization period with respect to its UAL as followed:
- Division #10 – Administration: Amortization of UAL to be extended from 8 to 19 years with required contributions revised effective with the applicable fiscal year of the annual valuation used for the extension study or the date this signed agreement is received by MERS, whichever is latest.
- b. The Employer understands that if changes are made to the provisions used in the projection analysis, MERS may require that an updated analysis be prepared to ensure the continued sustainability of the plan as described in Section 4(b) of this Agreement.
- c. This Agreement has been authorized by formal action of Employer's governing body.
- d. Representatives of MERS presented and explained the actuarial analysis that forms the basis of this Agreement and the full impact of Employer's request to Employer on (insert date), and responded to all of Employer's questions to Employer's satisfaction.

Adopted by the Employer's governing body and MERS on this 12th day of SEPTEMBER, 2018.

FOR EMPLOYER

Brad Barrett
Signature

BRAD BARRETT, CITY MANAGER (approved by Flushing City Council on September 10, 2018)
Printed name Title

(check one):

- ☒ Authorized designee of the governing body of the Employer
- ☐ Chief Judge of the Court

Date: September 11, 2018

FOR MERS

Chris DeRose
Signature

Chris DeRose
Printed name

CEO
Title

Date: 10/9/15



CBIZ Retirement Plan Services
CBIZ Benefits & Insurance Services, Inc.
17199 Laurel Park North, Ste. 405
Livonia, MI 48152
<http://retirement.cbiz.com>

Municipal Employees' Retirement System of Michigan

Alternate Amortization Study Flushing, City of (2502)



CBIZ Retirement Plan Services
CBIZ Benefits & Insurance Services, Inc.
17199 Laurel Park North, Ste. 405
Livonia, MI 48152
<http://retirement.cbiz.com>

July 26, 2018

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

The purpose of this report is to determine whether it is reasonable to extend the period over which the remaining Initial Unfunded Accrued Liability as of December 31, 2017 (the "UAL") is amortized, for participants covered by the MERS Defined Benefit plan sponsored by Flushing, City of (2502). The City is requesting the following analysis:

- **Baseline** – this is the current amortization policy that was used in the December 31, 2017 annual valuation.
- **Option 1** – the amortization period for the Initial UAL remaining as of December 31, 2017 is extended to the maximum allowable, up to 25 years for closed divisions 01, 02, and 10. This amortization period declines by one each year until the UAL is fully paid.

Under **Option 1**, the maximum approved amortization period is 19 years for division 10. No amortization extension is approved for divisions 01 and 02.

Our analysis was prepared in the context of the MERS Defined benefit plan only. Any additional analysis regarding the financial condition of the employer is outside the scope of this project and is not our area of expertise.

This report should not be relied upon for any other purpose. Reliance on information contained in this report by anyone for anything other than the intended purpose could be misleading.

The information in this report is purely actuarial in nature. It is not intended to serve as a substitute for legal, accounting, and investment advice.

This report was prepared at the request of MERS and the municipality and may be provided only in its entirety by the municipality to other interested parties. CBIZ Retirement Plan Services is not responsible for the consequences of any unauthorized use.

The results of this analysis and the conclusions drawn, are based on the unique participant data, benefit provisions, and funded status of the city's plan. Because each MERS municipality is unique in these respects it is inappropriate to apply the conclusions in this report to another municipality.



Background on Funding Policy

Sponsors of Defined Benefit plans in Michigan are required by law to prefund the pension benefits provided to covered members. Prefunding in the MERS plan is accomplished by requiring an annual contribution made up of two components:

- The Normal Cost, covering the cost of the benefits earned by active members during the year, and
- An amortization payment, covering the annual payment necessary to pay off the UAL over a period of years.

The UAL is the difference, on the valuation date, between the liability attributable to benefits that have already been earned (the Accrued Liability) and the assets in the fund. This difference can be positive (Accrued Liability exceeds the assets), or negative (assets exceed the Accrued Liability).

UAL can develop for a number of reasons, including actual experience being different than assumed, benefit increases that apply to service already earned, and changes in assumptions (this list is not all-inclusive). A detailed discussion of the causes of the UAL for City of Flushing is beyond the scope of this assignment, and has not been prepared.

A funding policy is a mechanism for developing contributions that, when combined with investment earnings, will accumulate enough assets to pay the benefits promised. Funding policy is set by the MERS Retirement Board based on recommendation by the actuaries. While the ultimate goal of a funding policy is to develop a contribution pattern sufficient to ensure all promised benefits are paid, specifics of the policy (including the length of the amortization period) were designed to balance the Board's stated goals of contribution adequacy, inter-period equity and transparency, and a desire for contribution stability.

The goal of adequacy is to produce contributions that are expected to be sufficient to pay for benefits under a broad range of possible future outcomes. Inter-period equity encompasses both the idea that the cost of the benefits earned by workers should be paid by the generation of taxpayers that received the services provided by those workers, and the concept that the cost of benefits remain consistent between generations of taxpayers.

It is also important to remember that retirement plans, by their nature, are exposed to certain risks. While risks cannot be eliminated entirely, they can be mitigated through various strategies. Below are a few examples of risk (this is not an all-inclusive list) that retirement plans are exposed to:

- Economic – investment return, wage inflation, etc.
- Demographic – longevity, disability, retirement, etc.
- Plan Sponsor and Employees – contribution volatility, ability to make required contributions, etc.



The assumptions and methods adopted by the MERS Retirement Board based on the last Experience Study, including the funding policy, are designed to mitigate some of these risks. An Experience Study is completed every five years to review the assumptions and methods. The next Experience Study will be completed in 2020.

Request for Extension of the Amortization Period

The City of Flushing has requested an amortization extension study for the remaining Initial UAL as of December 31, 2017. The amortization extension request is described earlier in this letter under Option 1.

Extending the amortization period does not alter the promised benefits, and so does not change the ultimate cost of providing those benefits. It does lower contribution levels in the short term, by extending the period of time over which the contributions are required to be made. Therefore, extending the amortization period is a deferral of contributions to future years.

Extending the amortization period does not improve the funding goal of adequacy, and runs counter to the goal of intergenerational equity. Lengthening the amortization period means missed opportunities for investment earnings, puts a greater burden on future taxpayers, and reduces the financial security for members covered under the plan.

Analysis

We have prepared projections of the current funding policy and the policy amended by the requested extension, using the following:

- The same benefits that were used in preparing the December 31, 2017 annual actuarial valuation report.
- Current valuation assumptions (except where otherwise noted), and an assumed annual return on the market value of assets of 7.75%. The results of these projections are shown on pages 7 through 11 of this report.
- The calculations reflect the full impact of the new assumptions.

In addition, we also analyzed the following statistics for each division in order to reach our conclusion:

- Ratio of retiree AAL to total AAL as of December 31, 2017
- Average age of retirees and average age of actives as of December 31, 2017
- Net cash-flow of the plan during the projection period.



The relevant results of our analysis include the following:

- Under Option 1 the remaining Initial UAL as of December 31, 2017 is fully paid off over a longer period than under the Baseline, as expected.
- The average age of the retired members covered by the plan is 68 years. Extending the amortization period to 25 years will result in UAL payments being required after many of the current retirees passed away.
- Divisions 01 and 02 are 46% and 51% percent funded respectively. In addition, the retiree liabilities are 58% funded for division 01, and 78% funded for division 02. These divisions already use a 21 year amortization period which is longer than the average life expectancy of the current retirees.
- Division 10 is 57% funded and retiree liabilities are 69% funded. This division is currently using an 8 year amortization period. The average life expectancy of the current retirees in this division is 19 years.

Conclusion

The actuaries recommended, and the MERS Retirement Board adopted, the current funding policy as a result of the 2015 Experience Study. Extending the amortization period runs counter to current best practices in the Public Plan community and is an exception to the current MERS funding policy.

Based on the results of our analysis we are able to approve extending the amortization period for division 10 only to 19 years. We do not recommend an amortization extension for divisions 01 and 02 for the reasons listed above.

In addition, the City requested that we prepare our calculations using an alternate interest rate assumption of 7.25%. The purpose of these calculations is to show the estimated funded ratio as of 12/31/2017 and the magnitude of the first year contribution under this alternate assumption. The table below shows the result of our calculations:

Division	Funded Ratio – 7.75%	Employer Contribution FY 7/1/2019 – 7.75% - no extension	Employer Contribution FY 7/1/2019 – 7.75% - with extension	Funded Ratio – 7.25%	Employer Contribution FY 7/1/2019 – 7.25% - no extension	Employer Contribution FY 7/1/2019 – 7.25% - with extension
01	46%	300,000	300,000	44%	322,000	322,000
02	51%	324,000	324,000	48%	351,000	351,000
10	57%	350,000	185,000	54%	410,000	209,000



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As expected, under the 7.25% assumption, the funded ratio is lower and the employer contributions are higher than under the 7.75% assumption.

Ultimately, whether the plan accumulates enough assets to pay the benefits promised will depend, among other things, upon the plan sponsor's and the members' ability to make the contributions. If the plan sponsor makes at least the required minimum contributions the plan is expected to pay the benefits promised if future experience is in line with the actuarial assumptions used.

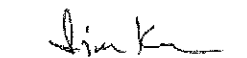
MERS staff and the actuaries will monitor the funding progress of all divisions. While not currently anticipated, the actuaries may recommend changes to the amortization policy in the future if it is deemed necessary for the financial security of the benefits promised under this plan.

The undersigned are members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

If you need further information to make an informed decision, please contact MERS at (800) 767-6377 for assistance.

Sincerely,

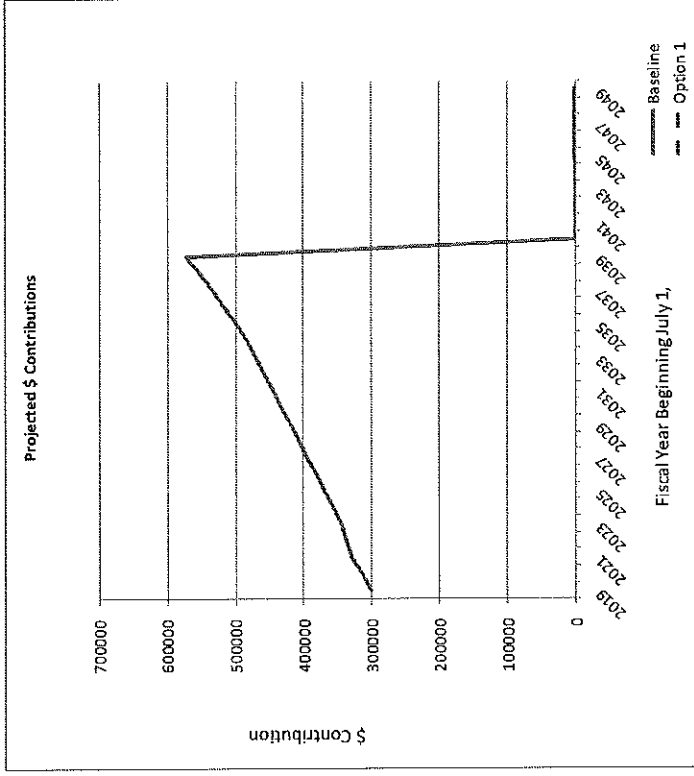
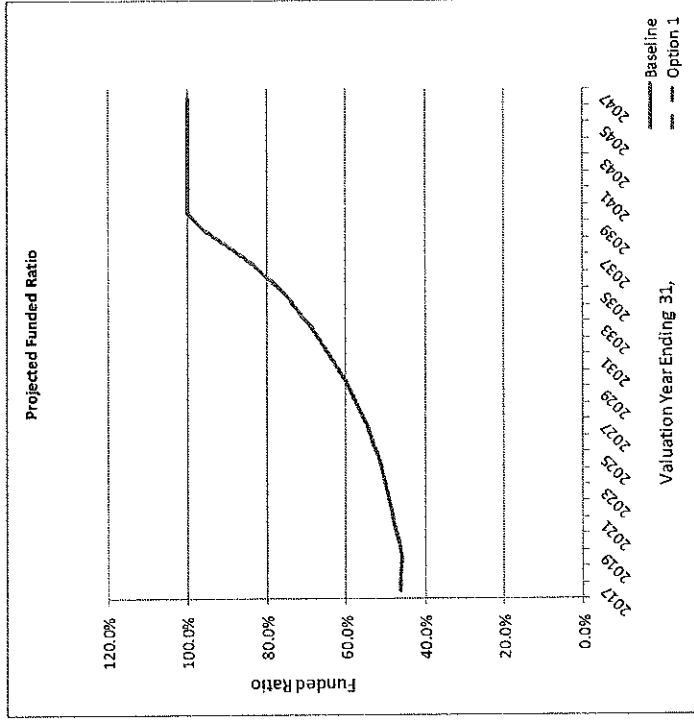

Cathy Nagy, FSA, MAAA
Actuary


W. James Koss, ASA, MAAA
Actuary



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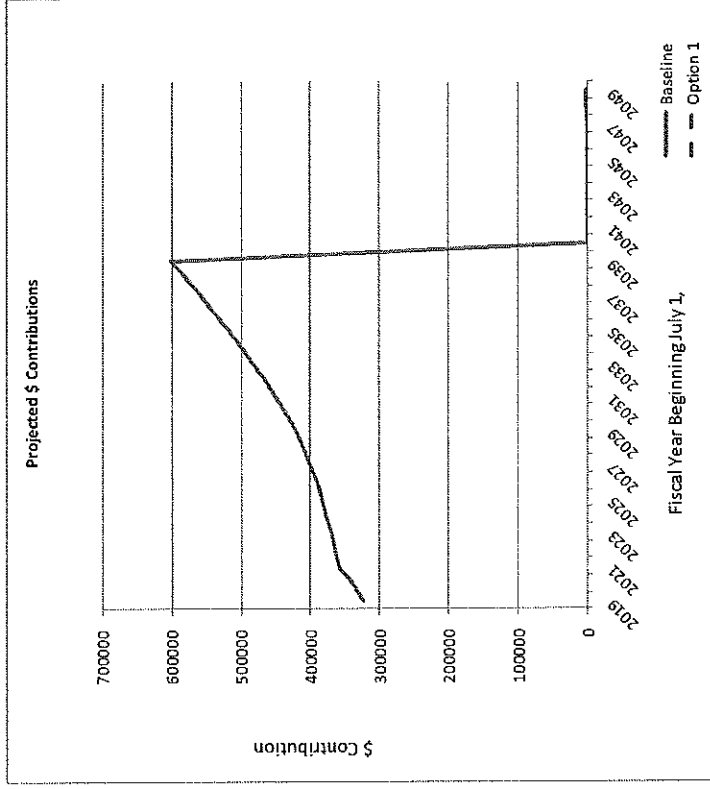
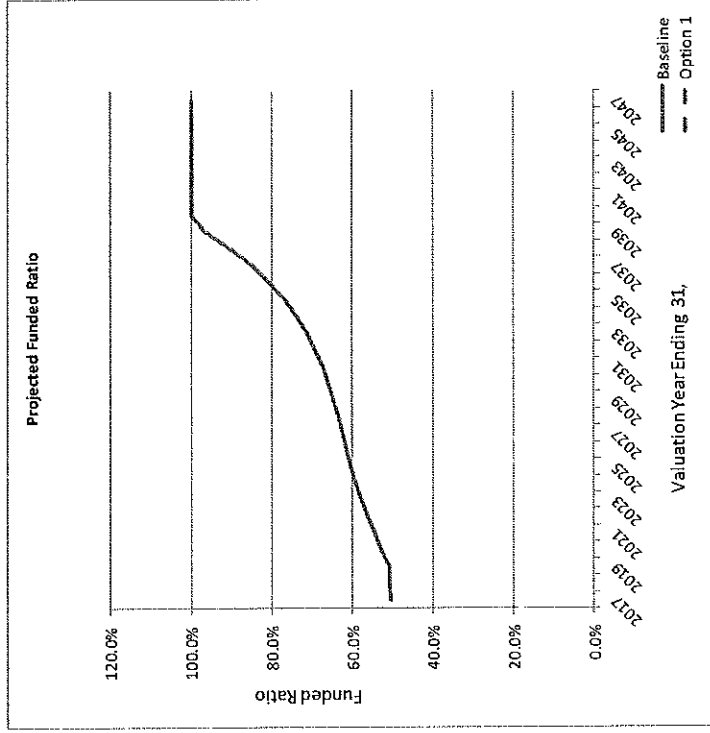
**Municipal Employees' Retirement System of Michigan
Flushing, City of (2502) - Div 01**





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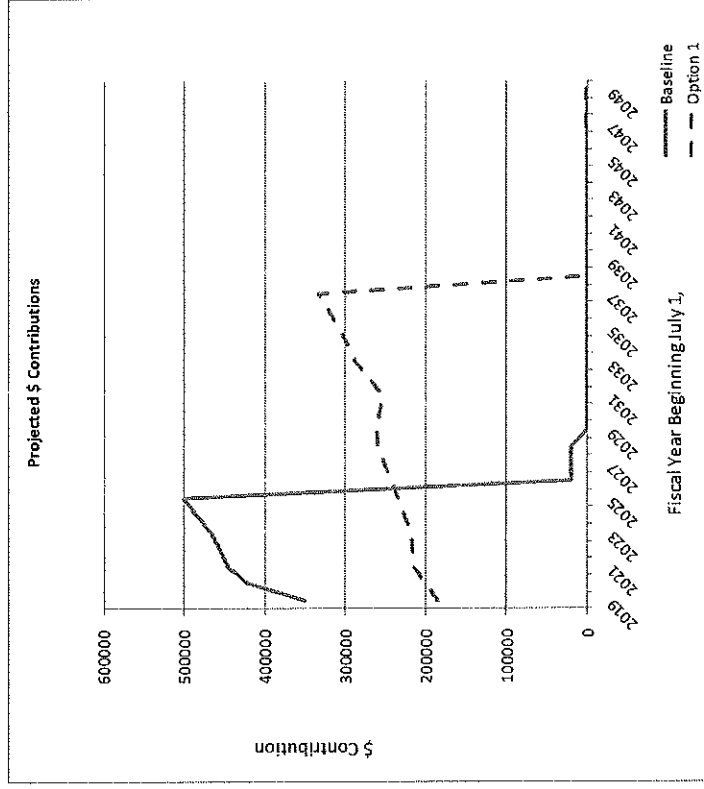
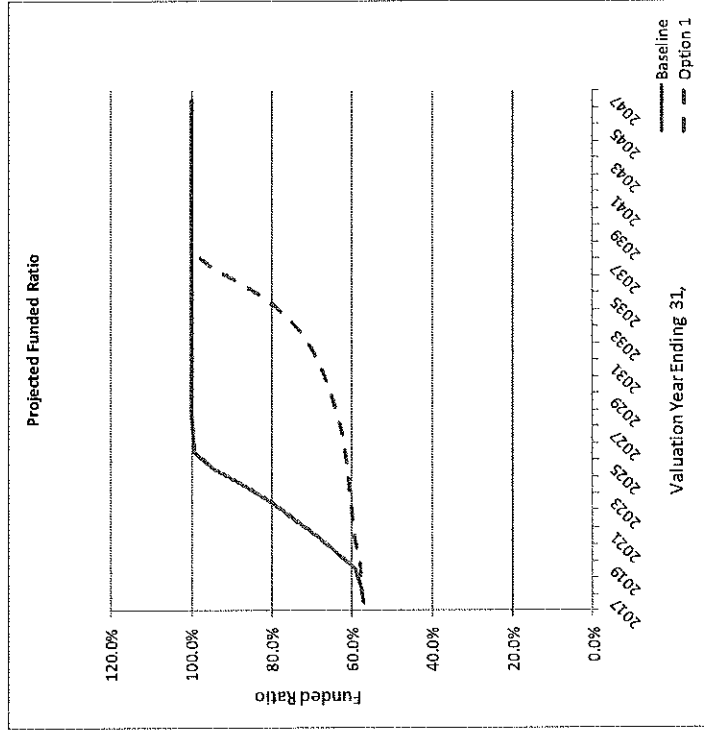
**Municipal Employees' Retirement System of Michigan
 Flushing, City of (2502) - Div 02**





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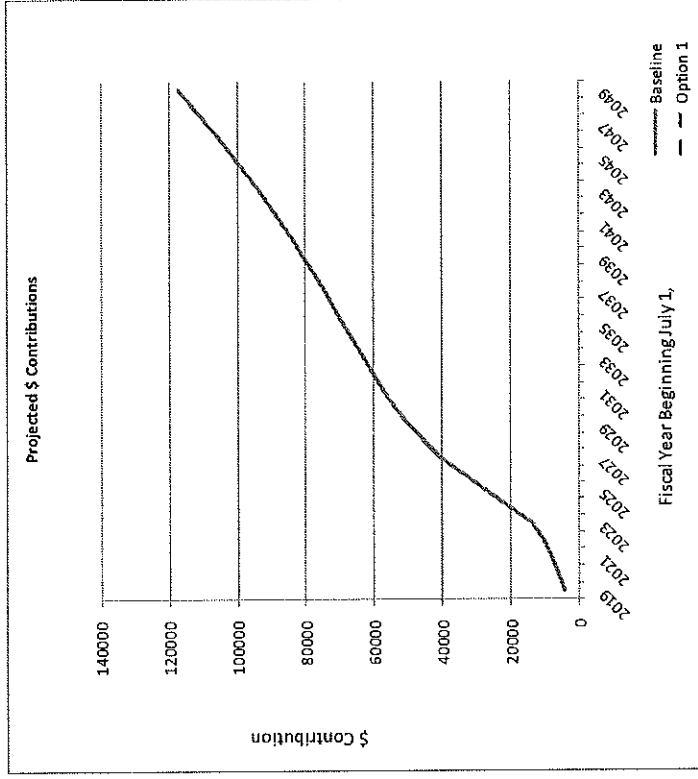
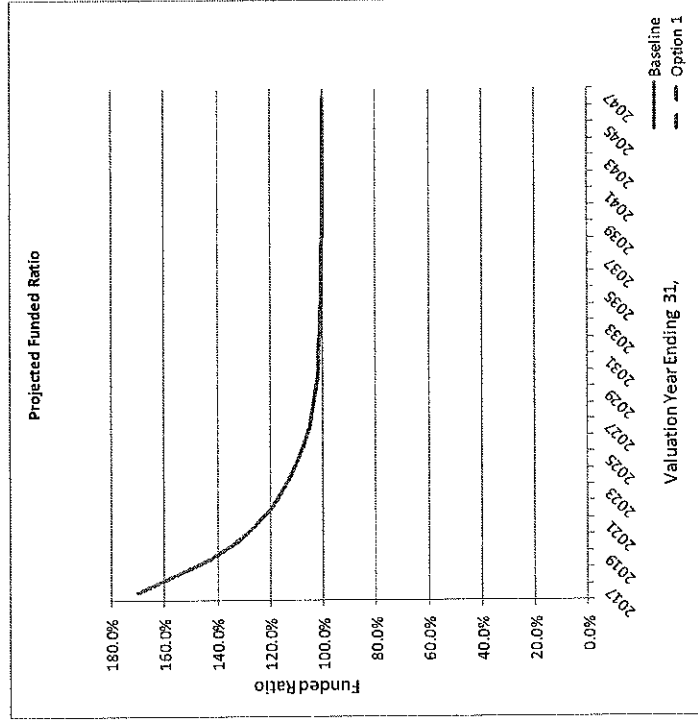
**Municipal Employees' Retirement System of Michigan
Flushing, City of (2502) - Div 10**





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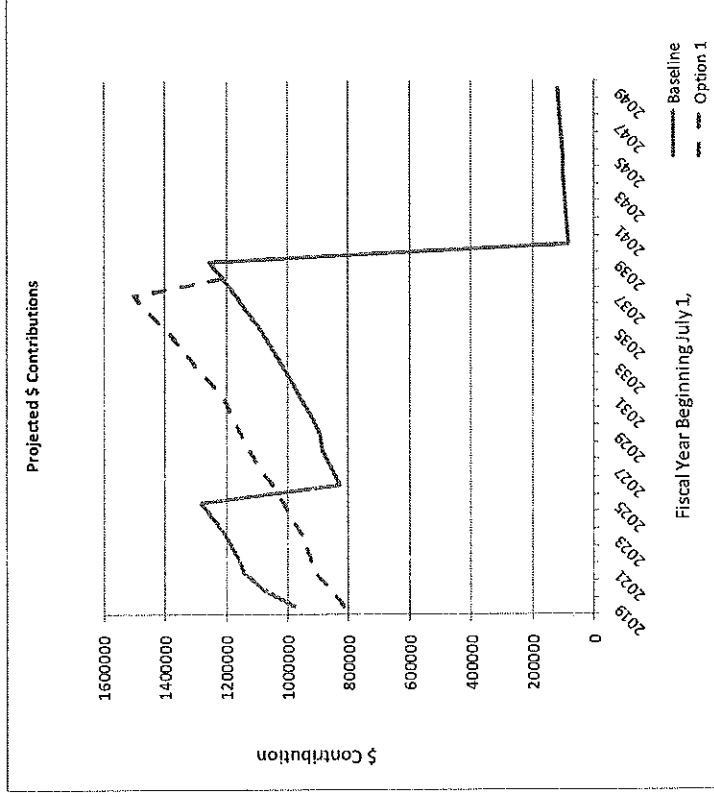
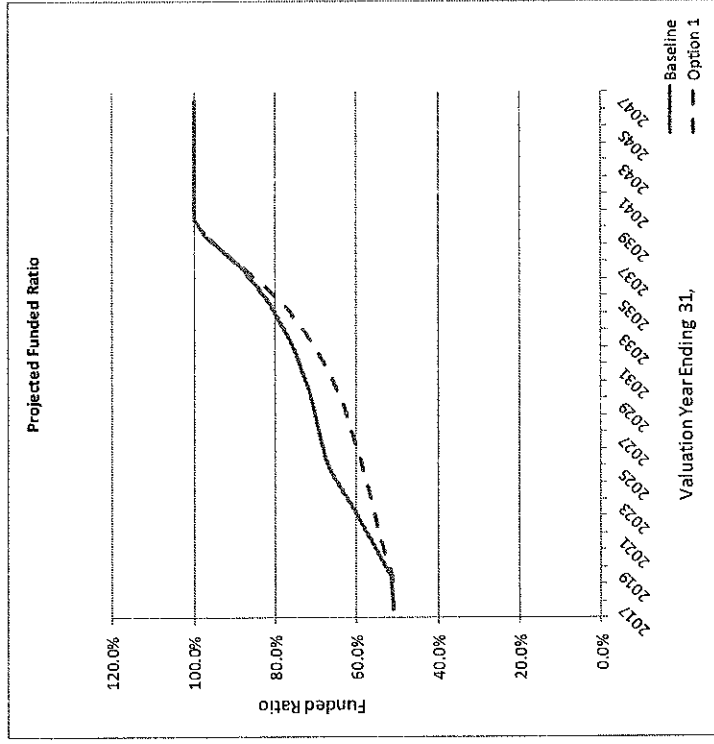
Municipal Employees' Retirement System of Michigan
 Flushing, City of (2502) - Div HA





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**Municipal Employees' Retirement System of Michigan
Flushing, City of (2502) - Total**





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Important Comments

1. The results are based on information provided by the municipality and MERS. The actuary is unaware of any additional information that would impact these results.
2. The calculations in this report were prepared based on December 31, 2017, demographic and financial information unless noted elsewhere in the report.
3. The valuation date is December 31, 2017.
4. Please note, the assumptions and methods used in these calculations are consistent with those used in the December 31, 2017, Annual Actuarial Valuation (except where noted otherwise) and are summarized in an Appendix. This Appendix is located on the MERS website at www.mersofmich.com.
5. The following information, assumptions and funding methods were used in the projections:
 - a. Demographic, financial information and benefit provisions provided by MERS for the December 31, 2017 annual valuation.
 - b. The assumptions and methods used in the December 31, 2017 annual valuation, except where noted otherwise.
 - c. All demographic assumptions will be met during the projection period.
 - d. There will be no benefit changes during the projection period.
6. If the user of this report is not sure how to interpret certain results in the report or how to read the report, they should contact MERS at (800) 767-6377 before relying on the results of this report.



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Additional Disclosures Required by Actuarial Standards of Practice

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

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

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

The developed findings included in this report consider data or other information through December 31, 2017, except where otherwise noted.

City of Flushing (2502) - Divisions 01, 10

- Modified Baseline: Changed Member Rate of Division 01 from 6.00% to 8.00%
- Option 1: Changed the Compensation Definition to Base Wages

Estimated Impact on Liabilities and Required Employer Contribution*

Division 01	Current Benefits	Proposed Benefits	Difference
Actuarial Accrued Liability	\$7,112,254	\$6,930,249	(\$182,005)
Funded Ratio [^]	46.2%	47.4%	1.2%
Employer Contribution (\$)	\$295,116	\$275,892	(\$19,224)

Division 10	Current Benefits	Proposed Benefits	Difference
Actuarial Accrued Liability	\$5,789,019	\$5,738,572	(\$50,447)
Funded Ratio [^]	57.0%	57.5%	0.5%
Employer Contribution (\$)	\$349,848	\$342,216	(\$7,632)

*For the fiscal year beginning in 2019; the phase-in of the 12/31/2015 assumptions change was not reflected in the above results for purposes of displaying an estimated truer impact.

[^]Based on actuarial value of assets (divide by 1.011321 for a market value basis)

Important Comments

- Actuarial calculations are mathematical estimates of future events that may or may not materialize. Actuarial calculations can and do vary from one valuation year to the next, and the actual impact of the proposed plan change(s) will change over time as the assumptions about future events are replaced by actual experience.
- The impacts of disparate scenarios should not be summed together to determine their combined impact due to interdependencies.
- The results are based on the same financial, plan provisions (except where otherwise noted), and demographic data underlying the December 31, 2017 Annual Actuarial Valuation except valuation payrolls ending 12/31/2017 were replaced with the base wages provided by the employer in the proposed scenario.
- The results are based on the same actuarial assumptions and methods as in the December 31, 2017 Annual Actuarial Valuation except a 0% FAC load was used in the proposed scenario. For a detailed description of the actuarial assumptions and funding methods used in the annual valuation please refer to its [Appendix](#) on the MERS website.

Ballpark Estimate Disclosure

This document is not an actuarial report nor are the contribution amounts or rates certified by an actuary. The contribution amounts and rates in this document are estimates (not actual contribution amounts or rates) and are for illustrative purposes only. Neither the employer, nor any other party receiving or reviewing this document may rely on these calculations as indicative of future contribution amounts or rates. By requesting and accepting this document, the employer agrees that MERS shall have no liability arising out of the provision of these amounts and rates, and agrees to indemnify MERS for any liability arising from same due to the provision of this letter or any information therein to any other party or individual. Pursuant to MCL 38.1140h and Section 46 of the MERS Plan Document, there must be a supplemental actuarial analysis conducted before any proposed benefit change is implemented.

July 16, 2018

City of Flushing (2502) – Divisions 02 and HA**Request Summary**

Our understanding of the purpose for the employer's request is to estimate the impact excluding vacation payouts from includable compensation based on a 7.25% Investment Return Assumption. The scenarios in this document are as follows (the proposed scenario indicate the change(s) from the modified baseline):

- Modified Baseline - 7.25% Investment Return Assumption; no other changes to the plan as of the valuation date
- Proposed - Excluded Vacation Payouts From Reported Compensation; 0% FAC Load

Conclusions

The results are for illustrative purposes only; the actual impact of the proposed change on annual required contributions will depend on the actual investment return assumption and actual reported payroll. If the employer has elected blended rate billing, changing to a flat dollar basis on Division 02 until the lower payroll is reflected in annual actuarial valuations would mitigate the risk of under-contributing toward unfunded liability under a % of pay basis.

Important Comments

- Actuarial calculations are mathematical estimates of future events that may or may not materialize. Actuarial calculations can and do vary from one valuation year to the next, and the actual impact of the proposed plan change(s) will change over time as the assumptions about future events are replaced by actual experience.
- The results are based on the same financial, plan provisions, and demographic data underlying the December 31, 2017 Annual Actuarial Valuation except for the change(s) indicated. Employer contributions through the start of the applicable fiscal year were not adjusted or recalculated as a result of the proposed change(s).
- The results are based on the same actuarial assumptions and methods as in the December 31, 2017 Annual Actuarial Valuation except a 7.25% Investment Return Assumption was used in the modified baseline and a 0% FAC Load in the proposed scenario to remove the impact of any assumed FAC loading that may have been due to vacation payouts.
- For a detailed description of the actuarial assumptions and funding methods used in the annual valuation please refer to its Appendix on the MERS website. In addition, the MERS Retirement Board adopted the Actuarial Policy effective May 1, 2018.

Ballpark Estimate Disclosure Statement

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City of Flushing (2502) - Divisions 02 & HA (Link-Set)
Estimated Projected Employer Contributions and Funded Ratios

Valuation Year Ending 12/31	Fiscal Year Beginning in Year	Modified Baseline - 7.25% Rate of Return				Proposed - Excluded Vacation Payouts From Reported Compensation			
		Actual Accrued Liability	Valuation Assets	Funded %	Required Annual Employer Contribution	Actual Accrued Liability	Valuation Assets	Funded %	Required Annual Employer Contribution
2017	2019	8,529,210	4,089,053	48%	\$362,208	8,145,146	4,089,053	50%	\$324,840
2018	2020	8,797,604	4,229,344	48%	\$382,188	8,373,555	4,225,348	50%	\$342,684
2019	2021	9,085,988	4,376,688	48%	\$402,768	8,619,122	4,349,895	50%	\$362,124
2020	2022	9,376,063	4,700,702	50%	\$413,148	8,864,263	4,629,815	52%	\$371,064
2021	2023	9,672,006	5,045,188	52%	\$423,552	9,113,380	4,926,123	54%	\$380,268
2022	2024	9,976,406	5,372,273	54%	\$437,220	9,368,598	5,202,075	56%	\$392,916
2023	2025	10,285,359	5,714,633	56%	\$451,008	9,626,510	5,490,092	57%	\$405,912
2024	2026	10,562,017	6,039,090	57%	\$465,576	9,856,852	5,763,331	58%	\$419,448
2025	2027	10,779,385	6,322,289	59%	\$481,116	10,037,797	6,003,443	60%	\$433,776
2026	2028	10,940,543	6,568,876	60%	\$497,735	10,171,710	6,214,292	61%	\$448,956
2027	2029	11,047,227	6,782,673	61%	\$514,812	10,258,707	6,397,832	62%	\$464,976
2028	2030	11,109,224	6,975,533	63%	\$533,364	10,305,674	6,562,837	64%	\$481,812
2029	2031	11,134,885	7,157,866	64%	\$552,936	10,319,532	6,718,316	65%	\$499,524
2030	2032	11,130,170	7,338,109	66%	\$573,348	10,305,156	6,871,406	67%	\$517,944
2031	2033	11,099,470	7,523,632	68%	\$594,768	10,265,865	7,027,904	68%	\$537,300
2032	2034	11,050,674	7,725,254	70%	\$617,112	10,208,511	7,197,302	71%	\$557,472
2033	2035	10,991,713	7,954,107	72%	\$640,140	10,140,588	7,389,984	73%	\$578,340
2034	2036	10,921,581	8,212,691	75%	\$664,068	10,061,129	7,608,175	75%	\$599,952
2035	2037	10,843,014	8,507,367	78%	\$689,136	9,972,752	7,857,810	79%	\$622,584
2036	2038	10,761,156	8,847,177	82%	\$715,056	9,880,444	8,147,414	82%	\$645,996
2037	2039	10,678,114	9,238,654	87%	\$741,948	9,786,310	8,483,059	87%	\$670,284
2038	2040	10,594,654	9,687,291	91%	\$95,136	9,691,357	8,870,036	92%	\$84,240
2039	2041	10,510,731	10,198,030	97%	\$98,844	9,595,751	9,313,027	97%	\$87,552
2040	2042	10,432,415	10,432,788	100%	\$103,164	9,505,147	9,505,905	100%	\$91,428

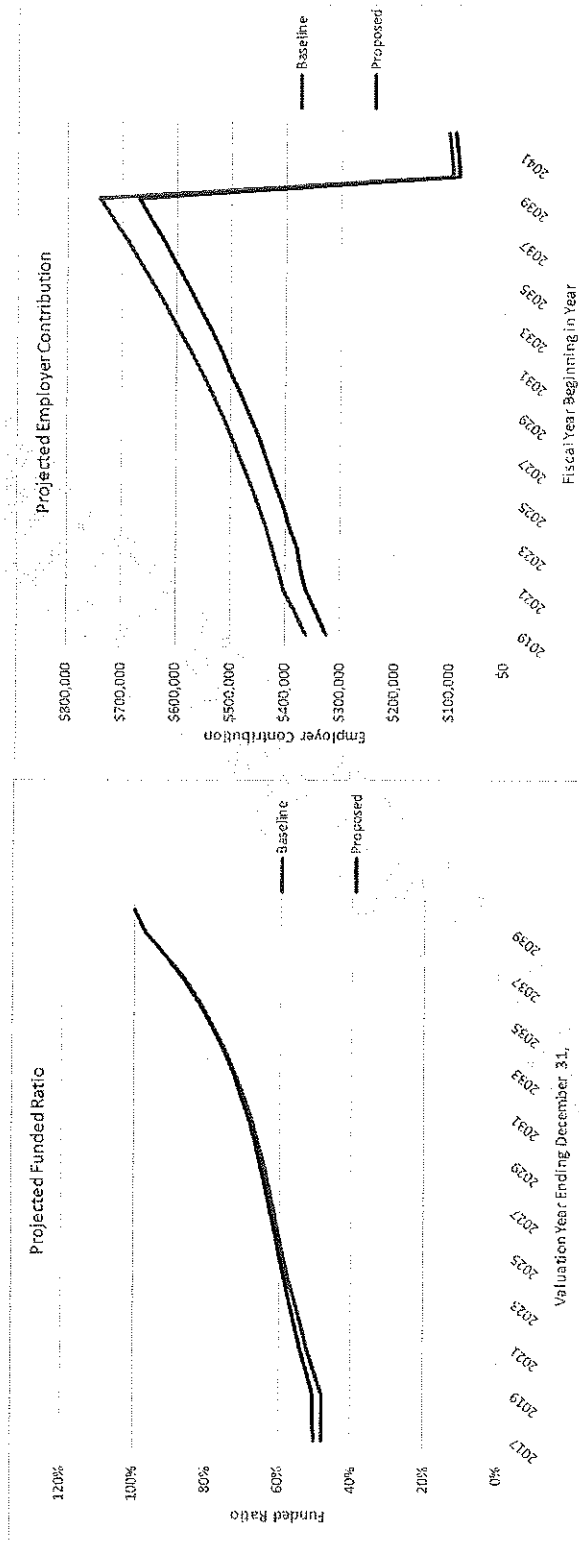
Notes: The phase-in was excluded for ballpark and comparison purposes.

The assumed future annual investment return is 7.25%.

Ballpark Estimate Disclosure Statement

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**City of Flushing (2502) - Divisions 02 & HA (Link-Set)
Estimated Projected Employer Contributions and Funded Ratios**



Modified Baseline - 7.25% Rate of Return
Proposed - Excluded Vacation Payouts From Reported Compensation

Ballpark Estimate Disclosure Statement

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ATTACHMENT 6D



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Municipal Employees' Retirement System of Michigan

**City of Flushing (2502)
Divisions 01, 02, and 10
Retirement Plan Options**



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Livonia, MI 48152
<http://retirement.cbiz.com>

July 26, 2018

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

The purpose of this report is to show the financial implications to the employer of different retirement plan design options for City of Flushing (2502) – Divisions 01, 02 and 10. The report consists of separate sections that correspond to the different plan options under consideration. In addition, there is an executive summary at the beginning of the report that summarizes all the options under consideration and shows the results for each option in graphical form, if multiple options are requested. Each section contains the following additional detail:

- An executive summary that describes the plan provisions and provides a brief explanation of the results.
- An exhibit showing the short-term impact of the proposed benefit change – that is, the impact on next year's contribution (this exhibit is only shown for supplemental valuations and supplemental valuations with bridge benefits).

This report should not be relied upon for any other purpose. Reliance on information contained in this report by anyone for anything other than the intended purpose could be misleading.

The information in this report is purely actuarial in nature. It is not intended to serve as a substitute for legal, accounting, and investment advice.

This report was prepared at the request of MERS and the municipality and may be provided only in its entirety by the municipality to other interested parties. CBIZ Retirement Plan Services is not responsible for the consequences of any unauthorized use.

Please see the Comments on Asset Smoothing in the annual valuation report.

Please refer to the following sections of this report for additional information:

- Risk Characteristics of Defined Benefit Plans
- Important Comments
- Miscellaneous and Technical Assumptions

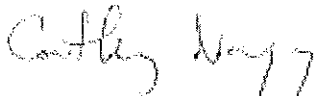


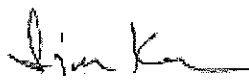
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The undersigned are members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

If you need further information to make an informed decision, please contact MERS at (800) 767-6377 for assistance.

Sincerely,


Cathy Nagy, FSA, MAAA
Actuary


W. James Koss, ASA, MAAA
Actuary



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CBIZ Benefits & Insurance Services, Inc.
17199 Laurel Park North, Ste. 405
Livonia, MI 48152
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**Options 1 and 2
Supplemental Valuation Results
Bridged Benefits**



Executive Summary

The purpose of this report is to show the impact on the liabilities and contributions of the proposed benefit changes for City of Flushing (2502) – Divisions 01, 02 and 10. The following proposed benefit changes have been considered:

Option	Proposed Change in Benefit
Option 1	Frozen COLA as of January 1, 2019
Option 2	Replace FAC-3 with FAC-5

Please note the following regarding these calculations:

- The exhibits following this page show the short term impact of the proposed benefit change (i.e. the change in the Actuarial Accrued Liability [AAL] as of December 31, 2017 and the change in the employer contribution for the fiscal year beginning July 1, 2019).
- The option would change both the AAL and the Normal Cost. The change in AAL will be recognized over 21 years for divisions 01 and 02, and 8 years for division 10. The employer Normal Cost is the cost to provide benefits accrued each year. In the long run, the employer is expected to pay the Normal Cost, if all the actuarial assumptions are met in the future.
- Under **Options 1 and 2** there is an immediate impact on both the unfunded accrued liability (UAL) and the Normal Cost.
- Because the proposed benefit change results in a reduction in actuarial accrued liability, under the MERS funding policy, the impact of the change is recognized over a period of time (i.e. the change in the AAL is amortized over a fixed period).

We have recently completed an amortization extension study for the City, where an increase in the amortization period of the Initial Unfunded Accrued Liability base from 8 to 19 years was approved for division 10. The City has requested that we provide the results of the impact of the proposed benefit changes as if this amortization extension was adopted. This impact is shown on the table on the following page.

The City has also requested to see the results of the proposed change in benefits under a 7.25% alternate interest rate assumption. While MERS is not currently considering such a change, it is possible that the assumed investment rate of return assumption will be lowered in the next few years. Your MERS plan has historically changed multiple assumptions at the same time rather than a single assumption in isolation, based on the recommendations of an Experience Study. Also, the impact of the assumption changes based on the last Experience Study was phased in over 5 years. These considerations make it difficult to estimate an exact dollar impact to your contribution. We estimate, however, that the long term impact of changing to a 7.25% rate of investment return assumption only (and not changing any other assumptions) is approximately a 10% increase in annual employer contributions. The actual impact of the change in assumptions depends on many factors, including the impact of any other assumptions changes, the phase-in (if any) of the assumptions change impact, and the assets and demographics of the affected divisions at the time of the assumption change.



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Note that under **Option 2** the exchange of the benefit provision from FAC3 to FAC5 may result in a diminishment of benefits for current active members, which is prohibited by the Michigan Constitution. In that case, the prior benefit provision may have to be honored. The "Proposed Benefits" column in the exhibits on the following pages assume that all current and future active members will receive the new benefit provision described in the "Proposed Benefits" column. If the prior benefit provision will be honored for any current active members, then the supplemental valuation does not accurately reflect the impact of the proposed changes and the valuation may need to be reissued.



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Comparison of Current and Proposed Benefits Under Current and Extended Amortization Period

	<u>Division 1</u>	<u>Division 2</u>	<u>Division 10</u>	<u>Sum of Divisions 1, 2, and 10</u>
Current Benefits				
- Funded Ratio	46.2%	50.5%	57.0%	50.8%
- Contribution, no Extension	300,252	323,928	349,848	974,028
- Contribution, with Extension	300,252	323,928	184,584	808,764
Proposed Benefits - Option 1				
- Funded Ratio	46.6%	51.1%	57.1%	51.2%
- Contribution, no Extension	287,220	302,868	346,992	937,080
- Contribution, with Extension	287,220	302,868	181,728	771,816
Proposed Benefits - Option 2				
- Funded Ratio	46.5%	51.3%	57.2%	51.3%
- Contribution, no Extension	293,640	310,740	345,684	950,064
- Contribution, with Extension	293,640	310,740	180,420	784,800

Notes: 1) Division HA was not included as there were no benefit changes proposed for this division.

2) "Contribution, with Extension" assumes a 19 year period was adopted for the Initial UAL of division 10.



Option 1
 Flushing, City of (2502) - General (Division 01)
 Employer Computed Contributions - Based on 12/31/2017 Actuarial Valuation

	Current Benefits	Proposed Benefits	Difference
1. Benefits			
a) Benefit Formula	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)	
b) Normal Retirement Age	60	60	
c) Vesting Provision	V-10	V-10	
d) F50 Retirement Condition	50/25	50/25	
e) F55 Retirement Condition	-	-	
f) F(N) Retirement Condition	-	-	
g) Rule of X	-	-	
h) FAC Period	FAC - 3	FAC - 3	
i) RS50 Percent	-	-	
j) DROP+	-	-	
k) D-2	-	-	
l) Benefit E	-	-	
m) Benefit E1	-	-	
n) Benefit E2	2.5% (Non-Compound)	Bridged COLA**	Bridged COLA**
o) Load for Sick Leave in FAC	-	-	
p) Member Contribution Rate	6.00%	6.00%	
2. Member Counts			
a) Active	5	5	0
b) Retired	20	20	0
c) Vested Former Members	1	1	0
d) Total	26	26	0
3. Annual Payroll	\$ 317,067	\$ 317,067	\$ -
4. Actuarial Value of Assets	\$ 3,286,624	\$ 3,286,624	\$ -
5. Actuarial Accrued Liability			
a) Active	\$ 1,395,652	\$ 1,332,061	\$ (63,591)
b) Retired	5,645,372	5,645,372	0
c) Vested Former Members	77,214	77,214	0
d) Pending Refunds	0	0	0
e) Total	\$ 7,118,238	\$ 7,054,647	\$ (63,591)
6. Unfunded Accrued Liability (UAL) (5e - 4)	\$ 3,831,614	\$ 3,768,023	\$ (63,591)
7. Division Percent Funded (4 / 5e)	46.2 %	46.6 %	0.4 %
8. Annual Employer Cost			
a) Employer Normal Cost	\$ 29,220	\$ 21,180	\$ (8,040)
b) Amortization of UAL*	271,032	266,040	(4,992)
c) Total Employer Contribution \$ (8a + 8b)	\$ 300,252	\$ 287,220	\$ (13,032)

* Please see the Appendix on the MERS website for a description of the amortization policy.

** Bridged COLA: Frozen COLA based on benefits accrued as of January 1, 2019.

^ Please note the new assumptions will be phased in over a 5 year period. The results shown do not reflect any phase-in of the new assumptions.

This report may be provided to other interested parties only in its entirety and only with the prior permission of MERS and the municipality.



Option 1
 Flushing, City of (2502) - Police (Division 02)
 Employer Computed Contributions - Based on 12/31/2017 Actuarial Valuation

	Current Benefits	Proposed Benefits	Difference
1. Benefits			
a) Benefit Formula	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)	
b) Normal Retirement Age	60	60	
c) Vesting Provision	V-10	V-10	
d) F50 Retirement Condition	-	-	
e) F55 Retirement Condition	50/25	50/25	
f) F(N) Retirement Condition	-	-	
g) Rule of X	-	-	
h) FAC Period	FAC - 3	FAC - 3	
i) RS50 Percent	-	-	
j) DROP+	-	-	
k) D-2	-	-	
l) Benefit E	-	-	
m) Benefit E1	-	-	
n) Benefit E2	2.5% (Non-Compound)	Bridged COLA**	Bridged COLA**
o) Load for Sick Leave in FAC	-	-	
p) Member Contribution Rate	8.00%	8.00%	
2. Member Counts			
a) Active	7	7	0
b) Retired	11	11	0
c) Vested Former Members	2	2	0
d) Total	20	20	0
3. Annual Payroll	\$ 488,855	\$ 488,855	\$ -
4. Actuarial Value of Assets	\$ 4,045,696	\$ 4,045,696	\$ -
5. Actuarial Accrued Liability			
a) Active	\$ 2,864,564	\$ 2,764,389	\$ (100,175)
b) Retired	5,020,120	5,020,120	0
c) Vested Former Members	115,320	115,320	0
d) Pending Refunds	18,016	18,016	0
e) Total	\$ 8,018,020	\$ 7,917,845	\$ (100,175)
6. Unfunded Accrued Liability (UAL) (5e - 4)	\$ 3,972,324	\$ 3,872,149	\$ (100,175)
7. Division Percent Funded (4 / 5e)	50.5 %	51.1 %	0.6 %
8. Annual Employer Cost			
a) Employer Normal Cost	\$ 40,596	\$ 27,408	\$ (13,188)
b) Amortization of UAL*	283,332	275,460	(7,872)
c) Total Employer Contribution \$ (8a + 8b)	\$ 323,928	\$ 302,868	\$ (21,060)

* Please see the Appendix on the MERS website for a description of the amortization policy.

** Bridged COLA: Frozen COLA based on benefits accrued as of January 1, 2019.

^ Please note the new assumptions will be phased in over a 5 year period. The results shown do not reflect any phase-in of the new assumptions.

This report may be provided to other interested parties only in its entirety and only with the prior permission of MERS and the municipality.



Option 1
 Flushing, City of (2502) - Administration (Division 10)
 Employer Computed Contributions - Based on 12/31/2017 Actuarial Valuation

	Current Benefits	Proposed Benefits	Difference
1. Benefits			
a) Benefit Formula	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)	
b) Normal Retirement Age	60	60	
c) Vesting Provision	V-10	V-10	
d) F50 Retirement Condition	-	-	
e) F55 Retirement Condition	50/25	50/25	
f) F(N) Retirement Condition	-	-	
g) Rule of X	-	-	
h) FAC Period	FAC - 3	FAC - 3	
i) RS50 Percent	-	-	
j) DROP+	-	-	
k) D-2	-	-	
l) Benefit E	-	-	
m) Benefit E1	-	-	
n) Benefit E2	2.5% (Non-Compound)	Bridged COLA**	Bridged COLA**
o) Load for Sick Leave in FAC	-	-	
p) Member Contribution Rate	8.00%	8.00%	
2. Member Counts			
a) Active	1	1	0
b) Retired	11	11	0
c) Vested Former Members	2	2	0
d) Total	14	14	0
3. Annual Payroll	\$ 74,030	\$ 74,030	\$ -
4. Actuarial Value of Assets	\$ 3,300,079	\$ 3,300,079	\$ -
5. Actuarial Accrued Liability			
a) Active	\$ 530,618	\$ 525,815	\$ (4,803)
b) Retired	4,784,456	4,784,456	0
c) Vested Former Members	473,945	473,945	0
d) Pending Refunds	0	0	0
e) Total	\$ 5,789,019	\$ 5,784,216	\$ (4,803)
6. Unfunded Accrued Liability (UAL) (5e - 4)	\$ 2,488,940	\$ 2,484,137	\$ (4,803)
7. Division Percent Funded (4 / 5e)	57.0 %	57.1 %	0.1 %
8. Annual Employer Cost			
a) Employer Normal Cost	\$ 6,468	\$ 4,404	\$ (2,064)
b) Amortization of UAL*	343,380	342,588	(792)
c) Total Employer Contribution \$ (8a + 8b)	\$ 349,848	\$ 346,992	\$ (2,856)

* Please see the Appendix on the MERS website for a description of the amortization policy.

** Bridged COLA: Frozen COLA based on benefits accrued as of January 1, 2019.

^ Please note the new assumptions will be phased in over a 5 year period. The results shown do not reflect any phase-in of the new assumptions.

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Option 2
 Flushing, City of (2502) - General (Division 01)
 Employer Computed Contributions - Based on 12/31/2017 Actuarial Valuation

	Current Benefits	Proposed Benefits	Difference
1. Benefits			
a) Benefit Formula	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)	
b) Normal Retirement Age	60	60	
c) Vesting Provision	V-10	V-10	
d) F50 Retirement Condition	50/25	50/25	
e) F55 Retirement Condition	-	-	
f) F(N) Retirement Condition	-	-	
g) Rule of X	-	-	
h) FAC Period	FAC - 3	FAC - 5	FAC - 5
i) RS50 Percent	-	-	
j) DROP+	-	-	
k) D-2	-	-	
l) Benefit E	-	-	
m) Benefit E1	-	-	
n) Benefit E2	2.5% (Non-Compound)	2.5% (Non-Compound)	
o) Load for Sick Leave in FAC	-	-	
p) Member Contribution Rate	6.00%	6.00%	
2. Member Counts			
a) Active	5	5	0
b) Retired	20	20	0
c) Vested Former Members	1	1	0
d) Total	26	26	0
3. Annual Payroll	\$ 317,067	\$ 317,067	\$ -
4. Actuarial Value of Assets	\$ 3,286,624	\$ 3,286,624	\$ -
5. Actuarial Accrued Liability			
a) Active	\$ 1,395,652	\$ 1,337,837	\$ (57,815)
b) Retired	5,645,372	5,645,372	0
c) Vested Former Members	77,214	77,214	0
d) Pending Refunds	0	0	0
e) Total	\$ 7,118,238	\$ 7,060,423	\$ (57,815)
6. Unfunded Accrued Liability (UAL) (5e - 4)	\$ 3,831,614	\$ 3,773,799	\$ (57,815)
7. Division Percent Funded (4 / 5e)	46.2 %	46.5 %	0.3 %
8. Annual Employer Cost			
a) Employer Normal Cost	\$ 29,220	\$ 27,144	\$ (2,076)
b) Amortization of UAL*	271,032	266,496	(4,536)
c) Total Employer Contribution \$ (8a + 8b)	\$ 300,252	\$ 293,640	\$ (6,612)

* Please see the Appendix on the MERS website for a description of the amortization policy.

^ Please note the new assumptions will be phased in over a 5 year period. The results shown do not reflect any phase-in of the new assumptions.

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Option 2
 Flushing, City of (2502) - Police (Division 02)
 Employer Computed Contributions - Based on 12/31/2017 Actuarial Valuation

	Current Benefits	Proposed Benefits	Difference
1. Benefits			
a) Benefit Formula	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)	
b) Normal Retirement Age	60	60	
c) Vesting Provision	V-10	V-10	
d) F50 Retirement Condition	-	-	
e) F55 Retirement Condition	50/25	50/25	
f) F(N) Retirement Condition	-	-	
g) Rule of X	-	-	
h) FAC Period	FAC - 3	FAC - 5	FAC - 5
i) RS50 Percent	-	-	
j) DROP+	-	-	
k) D-2	-	-	
l) Benefit E	-	-	
m) Benefit E1	-	-	
n) Benefit E2	2.5% (Non-Compound)	2.5% (Non-Compound)	
o) Load for Sick Leave in FAC	-	-	
p) Member Contribution Rate	8.00%	8.00%	
2. Member Counts			
a) Active	7	7	0
b) Retired	11	11	0
c) Vested Former Members	2	2	0
d) Total	20	20	0
3. Annual Payroll	\$ 488,855	\$ 488,855	\$ -
4. Actuarial Value of Assets	\$ 4,045,696	\$ 4,045,696	\$ -
5. Actuarial Accrued Liability			
a) Active	\$ 2,864,564	\$ 2,739,210	\$ (125,354)
b) Retired	5,020,120	5,020,120	0
c) Vested Former Members	115,320	115,320	0
d) Pending Refunds	18,016	18,016	0
e) Total	\$ 8,018,020	\$ 7,892,666	\$ (125,354)
6. Unfunded Accrued Liability (UAL) (5e - 4)	\$ 3,972,324	\$ 3,846,970	\$ (125,354)
7. Division Percent Funded (4 / 5e)	50.5 %	51.3 %	0.8 %
8. Annual Employer Cost			
a) Employer Normal Cost	\$ 40,596	\$ 37,260	\$ (3,336)
b) Amortization of UAL*	283,332	273,480	(9,852)
c) Total Employer Contribution \$ (8a + 8b)	\$ 323,928	\$ 310,740	\$ (13,188)

* Please see the Appendix on the MERS website for a description of the amortization policy.

^ Please note the new assumptions will be phased in over a 5 year period. The results shown do not reflect any phase-in of the new assumptions.

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Option 2
 Flushing, City of (2502) - Administration (Division 10)
 Employer Computed Contributions - Based on 12/31/2017 Actuarial Valuation

	Current Benefits	Proposed Benefits	Difference
1. Benefits			
a) Benefit Formula	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)	
b) Normal Retirement Age	60	60	
c) Vesting Provision	V-10	V-10	
d) F50 Retirement Condition	-	-	
e) F55 Retirement Condition	50/25	50/25	
f) F(N) Retirement Condition	-	-	
g) Rule of X	-	-	
h) FAC Period	FAC - 3	FAC - 5	FAC - 5
i) RS50 Percent	-	-	
j) DROP+	-	-	
k) D-2	-	-	
l) Benefit E	-	-	
m) Benefit E1	-	-	
n) Benefit E2	2.5% (Non-Compound)	2.5% (Non-Compound)	
o) Load for Sick Leave in FAC	-	-	
p) Member Contribution Rate	8.00%	8.00%	
2. Member Counts			
a) Active	1	1	0
b) Retired	11	11	0
c) Vested Former Members	2	2	0
d) Total	14	14	0
3. Annual Payroll	\$ 74,030	\$ 74,030	\$ -
4. Actuarial Value of Assets	\$ 3,300,079	\$ 3,300,079	\$ -
5. Actuarial Accrued Liability			
a) Active	\$ 530,618	\$ 508,383	\$ (22,235)
b) Retired	4,784,456	4,784,456	0
c) Vested Former Members	473,945	473,945	0
d) Pending Refunds	0	0	0
e) Total	\$ 5,789,019	\$ 5,766,784	\$ (22,235)
6. Unfunded Accrued Liability (UAL) (5e - 4)	\$ 2,488,940	\$ 2,466,705	\$ (22,235)
7. Division Percent Funded (4 / 5e)	57.0 %	57.2 %	0.2 %
8. Annual Employer Cost			
a) Employer Normal Cost	\$ 6,468	\$ 5,976	\$ (492)
b) Amortization of UAL*	343,380	339,708	(3,672)
c) Total Employer Contribution \$ (8a + 8b)	\$ 349,848	\$ 345,684	\$ (4,164)

* Please see the Appendix on the MERS website for a description of the amortization policy.

^ Please note the new assumptions will be phased in over a 5 year period. The results shown do not reflect any phase-in of the new assumptions.

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CBIZ Retirement Plan Services
CBIZ Benefits & Insurance Services, Inc.
17199 Laurel Park North, Ste. 405
Livonia, MI 48152
<http://retirement.cbiz.com>

Risk Characteristics of Defined Benefit Plans

It is important to understand that retirement plans, by their nature, are exposed to certain risks. While risks cannot be eliminated entirely, they can be mitigated through various strategies. Below are a few examples of risk (this is not an all-inclusive list):

- Economic - investment return, wage inflation, etc.
- Demographic - longevity, disability, retirement, etc.
- Plan Sponsor and Employees - contribution volatility, attract/retain employees, etc.

The MERS Retirement Board adopts certain assumptions and methods to mitigate the economic and demographic risks, and the contribution volatility risks. For example, the investment risk is the largest economic risk and is mitigated by having a balanced portfolio and a clearly defined investment strategy. Demographic risks vary based on the age of the workforce and are mitigated by preparing special studies called experience studies on a regular basis to determine if the assumptions used are reasonable compared to the experience. Risk may be mitigated through a plan design that provides benefits that are sustainable in the long run. An Experience Study is completed every five years to review the assumptions and methods. The next Experience Study will be completed in 2020.



Important Comments

1. The results are based on information provided by the municipality and MERS. The actuary is unaware of any additional information that would impact these results.
2. This report describes the financial effect of the proposed benefit plan. No statement contained within is a recommendation in favor of or in opposition to the proposed benefit plan.
3. The reader of this report should keep in mind that actuarial calculations are mathematical estimates based on current data and assumptions of future events (which may or may not materialize). As a result, actuarial calculations can and do vary from one valuation year to the next, sometimes significantly if the group valued is very small (less than 30 lives). The cost impact of a benefit change may fluctuate over time, as the demographics of the group changes.
4. The calculations in this report were prepared based on December 31, 2017, demographic and financial information unless noted elsewhere in the report.
5. The valuation date is December 31, 2017.
6. Please note, the assumptions and methods used in these calculations are consistent with those used in the December 31, 2017 Annual Actuarial Valuation (except where noted otherwise) and are summarized in an Appendix. This Appendix is located on the MERS website at www.mersofmich.com.
7. In the event that more than one plan change is being considered, the user of this report should remember that the results of separate actuarial valuations cannot be added together. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other and with the assumptions used.
8. Retirement benefits and employer contributions are based on a percentage of members' reported pay for open divisions. If actual reported payroll differs substantially from payroll used in this report, the dollar contribution should be adjusted proportionately.
9. The results do not show the potential impact on other post-employment benefits (such as retiree health care insurance) or ancillary benefits (such as life insurance).
10. If the user of this report is not sure how to interpret certain results in the report or how to read the report, they should contact MERS at (800) 767-6377 before relying on the results of this report.



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11. Additional disclosures required by Actuarial Standard of Practice:

- All actuarial calculations have been prepared in conformity with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.
- The valuation was based upon information furnished by the municipality and MERS staff. We checked for internal and year to year consistency, but did not otherwise audit the data. CBIZ Retirement Plan Services is not responsible for the accuracy or completeness of the information provided for the preparation of these calculations.



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Livonia, MI 48152
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Miscellaneous and Technical Assumptions

1. The results in this report are based on the assumptions used in the December 31, 2017 annual valuation.
2. FAC Load – 4.00%
3. Withdrawal Scaling Factor – 100%

ATTACHMENT 6F

Defined Benefit Plan Surplus Division Adoption Addendum



1134 Municipal Way Lansing, MI 48917 | 800.767.MERS (6377) | Fax 517.703.9711

www.mersonline.org

The Municipal Employees' Retirement System of Michigan ("MERS")

and City of Flushing _____, # 2502
(Municipality name) (Municipality number)

entered into an Adoption Agreement effective June 2018; and
(Month, Year)

Employer may elect to remit Contributions to its reserve account with MERS in excess of the annual required Employer Contributions as determined by MERS' actuary, or in excess of the amount currently due from Employer, without such amounts being immediately attributable to the reserve of its employee divisions ("Surplus Contributions"). MERS has advised Employer that in order to accomplish this, MERS must establish a Surplus Division to account such Surplus Contributions.

To establish the Surplus Division(s) and memorialize the terms and conditions agreed to by MERS and Employer concerning their establishment, Employer and MERS hereby enter into this Surplus Contribution Addendum to Employer's Adoption Agreement ("Addendum"), to be effective as of the date set out above.

- I. MERS Establishment of Surplus Division:** Commencing on the effective date of this Addendum, MERS shall establish the following Surplus Division(s) for Employer:

Associated Surplus Divisions:

- a) Surplus Division S1, to be associated with 01 - Division.
- b) Surplus Division S2, to be associated with 02 - Police.
- c) Surplus Division S3, to be associated with 10 - Administration.

Unassociated Surplus Divisions:

- d) Surplus Division _____, to be unassociated with any Employee Division.
- e) Surplus Division _____, to be unassociated with any Employee Division.
- f) Surplus Division _____, to be unassociated with any Employee Division.

- II. Employer Remittance of Surplus Contributions:** At Employer's sole and exclusive discretion (which shall include Employer's obligations under terms agreed to by Employer in the course of collective bargaining, if any), Employer may remit contributions to MERS that Employer expressly designates as Surplus Contributions, specifying the appropriate Surplus Division to which they are to be credited. It is understood by Employer that, once remitted to MERS, Surplus Contributions are not and shall never be refundable to Employer, nor used for any purpose other than the funding of its obligations for MERS benefits accrued by employees of Employer.

Defined Benefit Plan Surplus Division Adoption Addendum

III MERS' Crediting of Surplus Contributions: Upon receipt from Employer of Employer Contributions designated as Surplus Contributions, MERS shall credit such amounts to the Surplus Division designated by Employer.

IV Treatment of Surplus Contributions for Actuarial Purposes: Surplus Contributions reflected in one or more Surplus Division established by MERS as directed by Employer shall be treated as follows for actuarial purposes:

- a) They shall not be included in the determination of the annual Employer Contributions requirement for any Employee Division, and
- b) They shall be included in the determination of the Employer's overall funded status.

V Employer Use of Surplus Contributions: At any time, upon 30 days' advance written notice to MERS, Employer may direct MERS to use the Surplus Contributions currently reflected in one or more established Surplus Division(s) be used by Employer as follows:

- a) Employer may transfer Surplus Contributions reflected in an Unassociated Surplus Division to one or more Employee Division(s).
- b) Employer may transfer Surplus Contributions reflected in an Assigned Surplus Division to such Employee Division.
- c) Employer may redesignate any Surplus Division (whether Associated or Unassociated) to either an Associated Surplus Division or to an Unassociated Surplus Division, as applicable.

Employer is solely responsible for any decision(s) it makes under Section V, and Employer agrees that by entering into this Addendum, it shall indemnify and hold MERS harmless from any claim, challenge, or litigation arising from its actions under Section V, including costs and attorneys' fees.

Once Surplus Contributions are transferred to an Employee Division, they may not thereafter be recharacterized as Surplus Contributions or transferred back to a Surplus Division.

VI Recharacterization of Contributions: By written notice to MERS, Employer may make a one-time election to transfer Employer Contributions it remitted prior to the effective date of this Addendum that were in excess of the amount then due from Employer from an Employer Division to one or more Surplus Division(s) established by this Addendum, and recharacterize those amounts as Surplus Contributions. Employer may make the election described herein only once.

VII Rights of MERS: At any time following the occurrence of any or all of the following, MERS reserves the right to transfer some or all of the Surplus Contributions reflected in an Employer's Reserves to one or more Employee Division(s) of such Employer:

- a) Employer has defaulted on some or all of its contribution obligations to MERS.
- b) Employer has filed for or is otherwise subject to bankruptcy protection or receivership.
- c) An emergency manager or similar oversight authority has been appointed to conduct Employer's financial affairs.

Defined Benefit Plan Surplus Division Adoption Addendum

VIII Continuation of Adoption Agreement: Except for the terms and conditions of this Addendum, all other terms and conditions of the Adoption Agreement, as it may be or may have been amended from time to time, shall continue unchanged.

IN WITNESS WHEREOF, this Addendum is entered into by MERS and Employer by signature of the authorized parties below:

Employer Approving Authority

Signature: Brad Barrett on 6/12/18
(Name of approving representative) (Date)

Employer Printed Name: Brad Barrett

Employer Title: City Manager

Approved @ June 2018 CC mtg

MERS Approving Authority

Signature: Heather Rowland on June 12, 2018
(Date)

MERS Printed Name: Heather Rowland

MERS Title: Benefit Plan Coordinator



MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN
ANNUAL ACTUARIAL VALUATION REPORT DECEMBER 31, 2017
FLUSHING, CITY OF (2502)



Spring, 2018

Flushing, City of

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

This report presents the results of the Annual Actuarial Valuation, prepared as of December 31, 2017. The report includes the determination of liabilities and contribution rates resulting from the participation of Flushing, City of (2502) in the Municipal Employees' Retirement System of Michigan ("MERS"). MERS is an independent, professional retirement services company that was created to administer retirement plans for Michigan municipalities on a not-for-profit basis. This report contains the minimum actuarially determined contribution requirement, in alignment with the MERS Plan Documents, funding policy and Michigan Constitution. Flushing, City of is responsible for the employer contributions needed to provide MERS benefits for its employees and former employees under the Michigan Constitution and the MERS Plan Document.

The purpose of the December 31, 2017 annual actuarial valuation is to:

- Measure funding progress
- Establish contribution requirements for the fiscal year beginning July 1, 2019
- Provide actuarial information in connection with applicable Governmental Accounting Standards Board (GASB) statements

This valuation report should not be relied upon for any other purpose. Reliance on information contained in this report by anyone for anything other than the intended purpose could be misleading.

The valuation uses financial data, plan provision data, and participant data as of December 31, 2017 furnished by MERS. In accordance with Actuarial Standards of Practice No. 23, the data was checked for internal and year to year consistency as well as general reasonableness, but was not otherwise audited. CBIZ Retirement Plan Services does not assume responsibility for the accuracy or completeness of the data used in this valuation.

The actuarial assumptions and methods are adopted by the MERS Retirement Board, and are reviewed every five years in an Experience Study. The most recent study was completed in 2015. Please refer to the division-specific assumptions described in table(s) in this report, and to the Appendix on the MERS website at:

www.mersofmich.com/Portals/0/Assets/Resources/AAV-Appendix/MERS-2017AnnualActuarialValuation-Appendix.pdf.



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

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

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 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). CBIZ Retirement Plan Services is not responsible for the consequences of any unauthorized use.

You should notify MERS if you disagree with anything contained in the report or are aware of any information that would affect the results of the report that have not been communicated to us. 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,

Cathy Nagy, MAAA, FSA
Jim Koss, MAAA, ASA
Curtis Powell, MAAA, EA

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Executive Summary

Funded Ratio and Required Employer Contributions

The MERS Defined Benefit Plan is an agent multiple-employer plan, meaning that assets are pooled for investment purposes but separate accounts are maintained for each individual employer. Each municipality is responsible for their own plan liabilities; MERS does not borrow from one municipality's account to pay for another.

The funded ratio of a plan is the percentage of the dollar value of the accrued benefits that is covered by the actuarial value of assets.

Your Funded Ratio:

	12/31/2017 *	12/31/2016
Funded Ratio	51%	50%

* Reflects assets from Surplus divisions, if any.

Michigan Law requires that pension plans be pre-funded, meaning money is set aside now to pay for future benefits. Pension plans are usually funded by employer and employee contributions, and investment income.

How quickly a plan attains the 100% funding goal depends on many factors such as:

- The current funded ratio
- The future experience of the plan
- The amortization period

It is more important to look at the trend in the funded ratio over a period of time than at a particular point in time.

Your Required Employer Contributions:

Your computed employer contributions are shown in the following table. Employee contributions, if any, are in addition to the computed employer contributions. Changes to the assumptions and methods based on the 2015 Experience Study were first reflected in the December 31, 2015 valuations. The impact of these changes is being phased-in over a 5 year period. The phase-in allows the employer to spread the impact of the new assumptions over 5 fiscal years. This valuation reflects the third year of the phase-in.

Your minimum required contribution is the amount in the "Phase-in" columns. By default, MERS will invoice you the phased-in contribution amount, but strongly encourages you to contribute more than the minimum required contribution. If for 2018 your municipality is making employer contributions based on rates without the phase-in applied, contact MERS to ensure the No Phase-in rate is used again for 2019 and not the defaulted phase-in rates.

	Percentage of Payroll				Monthly \$ Based on Projected Payroll			
	Phase-in	No Phase-in	Phase-in	No Phase-in	Phase-in	No Phase-in	Phase-in	No Phase-in
Valuation Date:	12/31/2017	12/31/2017	12/31/2016	12/31/2016	12/31/2017	12/31/2017	12/31/2016	12/31/2016
Fiscal Year Beginning:	July 1, 2019	July 1, 2019	July 1, 2018	July 1, 2018	July 1, 2019	July 1, 2019	July 1, 2018	July 1, 2018
Division								
01 - General	-	-	-	-	\$ 23,725	\$ 25,021	\$ 25,050	\$ 26,994
02 - Police	-	-	-	-	25,562	26,994	23,433	25,581
10 - Administration	-	-	-	-	27,730	29,154	22,979	25,115
HA - Police hired after 11/	4.43%	4.46%	4.90%	4.93%	349	351	512	515
Municipality Total					\$ 77,366	\$ 81,520	\$ 71,974	\$ 78,205

Employee contribution rates reflected in the valuations are shown below:

Valuation Date:	Employee Contribution Rate	
	12/31/2017	12/31/2016
Division		
01 - General	6.00%	2.00%
02 - Police	8.00%	7.00%
10 - Administration	8.00%	8.00%
HA - Police hired after 11/	0.00%	0.00%

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 of what MERS calls "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. An

election to set up Surplus divisions would not immediately lower future contributions, however the assets from the Surplus divisions 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.

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 2019 for the entire employer would be \$110,917, instead of \$81,520.

If you are interested in making additional contributions, please contact MERS and they can assist you with evaluating your options.

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](#))
- Experience of the plan (investment experience and demographic experience); this is the difference between actual experience of the plan and the actuarial assumptions. For example:
 - o Lower actual investment returns would result in higher required employer contributions, and vice-versa.
 - o Smaller than assumed pay increases would lower required employer contributions.
 - o Reductions in the number of active employees would lower required contribution dollars, but would usually increase the contribution rate expressed as a percentage of (the now lower) payroll.
 - o Retirements at earlier ages than assumed would usually increase required employer contributions.
 - o More non-vested terminations of employment than assumed would decrease required contributions.
 - o More disabilities or survivor (death) benefits than assumed would increase required contributions.
 - o Longer lifetimes after retirement than assumed would increase required employer contributions.

Actuarial valuations do not affect the ultimate cost of the plan; the benefit payments (current and future) determine the cost of the plan. Actuarial valuations only affect the timing of the contributions into the plan. Because assumptions are for the long term, plan experience will not match the actuarial

assumptions in any given year (except by coincidence). Each annual actuarial valuation will adjust the required employer contributions up or down based on the prior year's actual experience.

Comments on Investment Return Assumption and Asset Smoothing

A defined benefit plan is funded by employer contributions, participant contributions, and investment earnings. Investment earnings have historically provided **more than half** 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 **7.75%** per year. This, along with all of our other actuarial assumptions, is reviewed 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 investment return assumptions, please review the budget projection scenarios later in this report.

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. 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 2017 was 6.08%, while the actual market rate of return was 13.07%**. 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 visit our [Defined Benefit resource page](#) on the MERS website.

As of December 31, 2017 the actuarial value of assets is 101% of market value due to asset smoothing. This means that meeting the actuarial assumption in the next few years will require average annual market returns that exceed the 7.75% investment return assumption, or contribution requirements will continue to increase.

If the December 31, 2017 valuation results were based on market value instead of the actuarial value:

- The funded percent of your entire municipality would be 50% (instead of 51%); and
- Your total employer contribution requirement for the fiscal year starting July 1, 2019 would be \$989,796 (instead of \$978,240).

Risk Characteristics of Defined Benefit Plans

It is important to understand that Defined Benefit retirement plans, the plan sponsor, and the plan participants are exposed to certain risks. While risks cannot be eliminated entirely, they can be managed through various strategies. Below are a few examples of risk (this is not an all-inclusive list):

- Economic - investment return, wage inflation, etc.
- Demographic - longevity, disability, retirement, etc.
- Plan Sponsor and Employees - contribution volatility, attract/retain employees, etc.

The MERS Retirement Board adopts certain assumptions and methods to manage the economic and demographic risks, and the contribution volatility risks. For example, the investment risk is the largest economic risk and is managed by having a balanced portfolio and a clearly defined investment strategy. Demographic risks are managed by preparing special studies called experience studies on a regular basis to determine if the assumptions used are reasonable compared to the experience. An Experience Study is completed every five years to review the assumptions and methods. The next Experience Study will be completed in 2020.

Risk can also be managed through a plan design that provides benefits that are sustainable in the long run.

The Actuarial Standards Board has issued Actuarial Standards of Practice (ASOP) No. 51. This standard will be effective for any actuarial work with a measurement date on or after November 1, 2018. This means, the December 31, 2018 and later annual actuarial valuation reports for MERS will have to comply with this standard. This standard will require the actuary to identify risks that, in the actuary's professional judgment may significantly impact the plan's future financial condition. The actuary will have to assess the potential effects of the identified risks on the plan's future financial condition. The assessment may or may not be based on numerical calculations. However, the assessment should reflect the specifics of the plan (i.e. funded status, plan demographics, funding policy, etc.). If the actuary concludes that numerical calculations are necessary to assess the risk, the actuary can use various methods to quantify the risk such as scenario tests, sensitivity tests, stress tests, etc.

Some of these risk assessment measures have already been incorporated in the MERS annual valuation reports. For example, the projections of funded percentage and employer contributions shown on the following pages could be used to gauge the risk associated with long term investment rates of return different than the assumed 7.75% annual rate. A history of the municipality's funded percentage as shown in Table 7, could indicate the trend in funded status over time.

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.

The analysis in this section is intended to review the potential volatility of the actuarial valuation results. 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.

Many assumptions are important in determining the required employer contributions. In the table below, we show the impact of varying the Investment Return Assumption. Lower investment returns would result in higher required employer contributions, and vice-versa.

The relative impact of each investment return scenario 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, 2017 valuation, and are for the municipality in total, not by division. These results do not reflect a 5-year phase in of the impact of the new actuarial assumptions.

	Assumed Future Annual Smoothed Investment Return Assumption			
	Lower Future Annual Returns		Valuation Assumption	Higher Returns
	5.75%	6.75%	7.75%	8.75%
12/31/2017 Valuation Results				
Accrued Liability	\$ 26,433,143	\$ 23,436,207	\$ 20,950,747	\$ 18,869,607
Valuation Assets ¹	\$ 10,675,756	\$ 10,675,756	\$ 10,675,756	\$ 10,675,756
Unfunded Accrued Liability	\$ 15,757,387	\$ 12,760,451	\$ 10,274,991	\$ 8,193,851
Funded Ratio	40%	46%	51%	57%
Monthly Normal Cost	\$ 15,214	\$ 10,390	\$ 6,875	\$ 4,303
Monthly Amortization Payment	\$ 102,031	\$ 88,510	\$ 74,645	\$ 64,653
Total Employer Contribution²	\$ 117,245	\$ 98,900	\$ 81,520	\$ 68,956

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

² If assets exceed accrued liabilities for a division, the division's amortization payment is negative and is used 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 assumed long-term investment return assumption scenarios. All four projections take into account the past investment losses that will continue to affect the actuarial rate of return in the short term. Under the 7.75% scenarios in the table on the next page, two sets of projections are shown:

- Based on the phase-in over 5 fiscal years (beginning in 2017) of the increased contribution requirements associated with the new actuarial assumptions. This projects your minimum required contribution.
- Based on no phase-in of the increased contribution requirements.

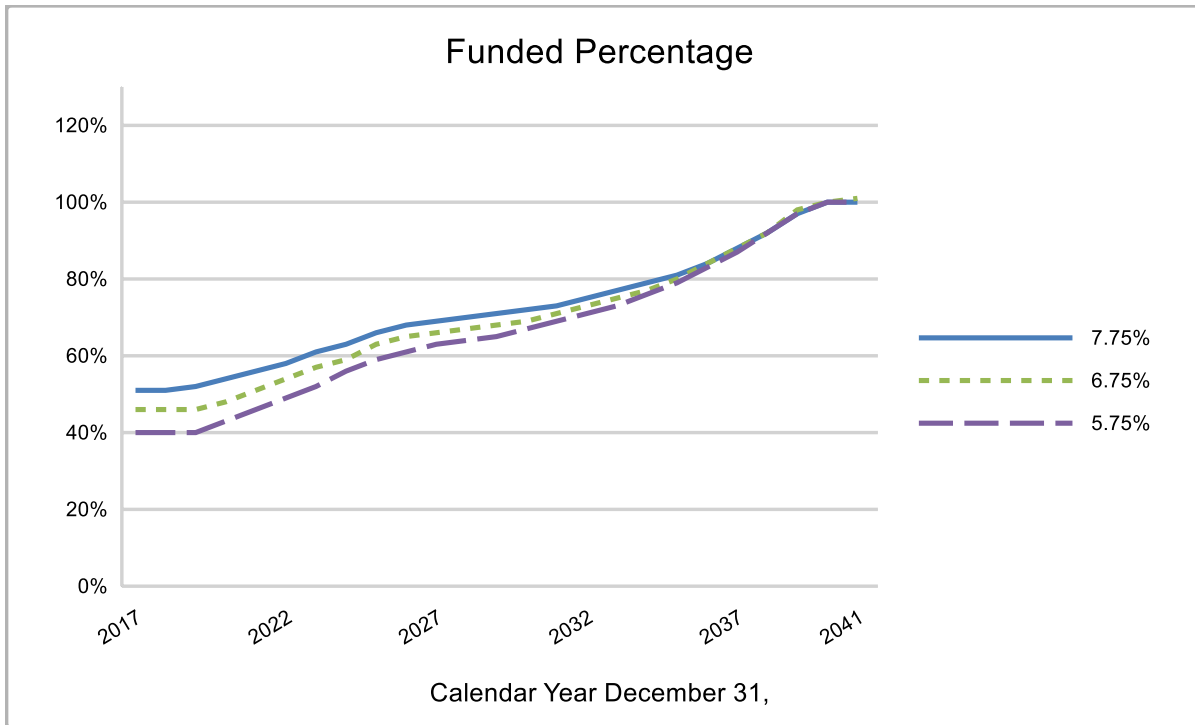
The 7.75% scenarios provide an estimate of computed employer contributions based on current actuarial assumptions, and a projected 7.75% market return. The other two scenarios may be useful if the municipality chooses to budget more conservatively, and make contributions in addition to the minimum requirements. The 6.75% and 5.75% projections provide an indication of the potential required employer contribution if MERS were to realize annual investment returns of 6.75% and 5.75% over the long-term.

The projections are shown both in tabular and graphical form in total for the employer. The tables show projections for six years. The graphs show projections for twenty five years.

Valuation Year Ending 12/31	Fiscal Year Beginning 7/1	Actuarial Accrued Liability	Valuation Assets ²	Funded Percentage	Computed Annual Employer Contribution
7.75%¹					
WITH 5-YEAR PHASE-IN					
2017	2019	\$ 20,950,747	\$ 10,675,756	51%	\$ 928,392
2018	2020	21,300,000	10,900,000	51%	1,060,000
2019	2021	21,800,000	11,200,000	51%	1,150,000
2020	2022	22,100,000	11,800,000	53%	1,170,000
2021	2023	22,500,000	12,600,000	56%	1,200,000
2022	2024	22,900,000	13,300,000	58%	1,250,000
NO 5-YEAR PHASE-IN					
2017	2019	\$ 20,950,747	\$ 10,675,756	51%	\$ 978,240
2018	2020	21,300,000	10,900,000	51%	1,080,000
2019	2021	21,800,000	11,200,000	52%	1,140,000
2020	2022	22,100,000	11,900,000	54%	1,170,000
2021	2023	22,500,000	12,700,000	56%	1,200,000
2022	2024	22,900,000	13,400,000	58%	1,240,000
6.75%¹					
NO 5-YEAR PHASE-IN					
2017	2019	\$ 23,436,207	\$ 10,675,756	46%	\$ 1,186,800
2018	2020	23,800,000	10,800,000	46%	1,310,000
2019	2021	24,200,000	11,100,000	46%	1,380,000
2020	2022	24,600,000	11,900,000	48%	1,410,000
2021	2023	25,000,000	12,800,000	51%	1,450,000
2022	2024	25,400,000	13,600,000	54%	1,500,000
5.75%¹					
NO 5-YEAR PHASE-IN					
2017	2019	\$ 26,433,143	\$ 10,675,756	40%	\$ 1,406,940
2018	2020	26,800,000	10,700,000	40%	1,560,000
2019	2021	27,300,000	11,000,000	40%	1,630,000
2020	2022	27,600,000	11,900,000	43%	1,670,000
2021	2023	28,000,000	12,900,000	46%	1,720,000
2022	2024	28,400,000	13,900,000	49%	1,770,000

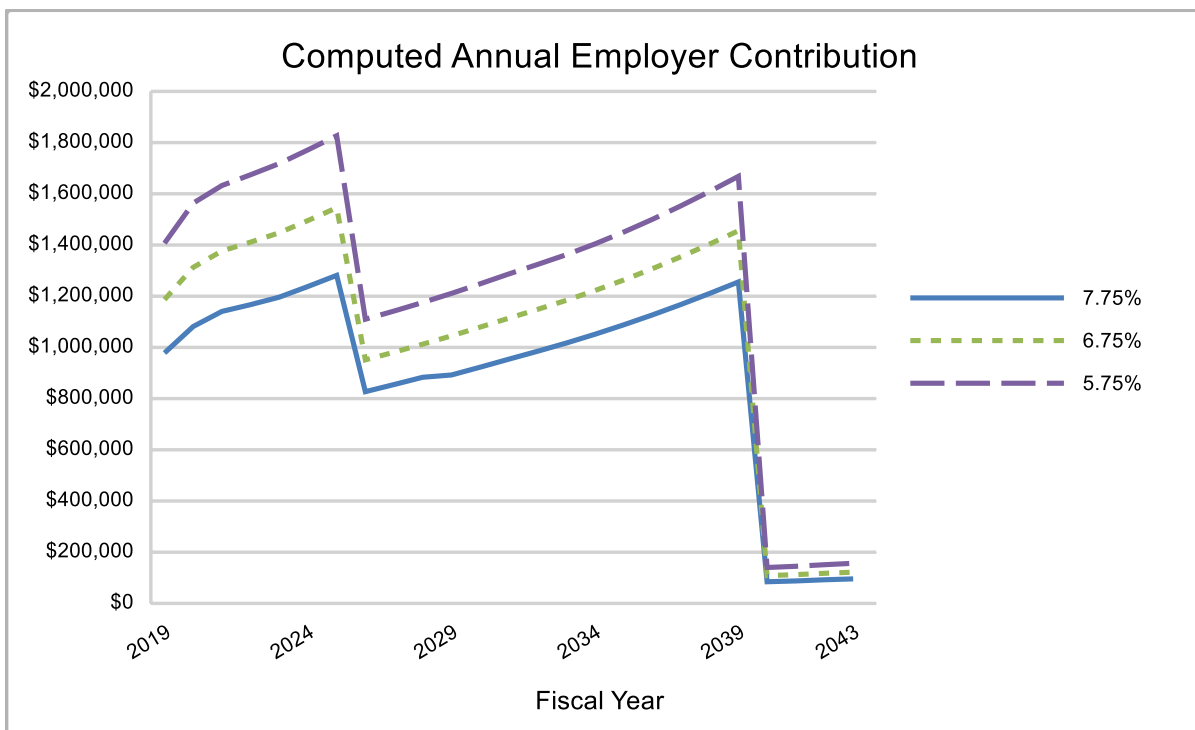
¹ Represents both the interest rate for discounting liabilities and the future investment return assumption on the Market Value of assets.

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



Notes:

All projected funded percentages are shown with no phase-in.



Notes:

All projected contributions are shown with no phase-in.

Employer Contribution Details For the Fiscal Year Beginning July 1, 2019

Table 1

Division	Total Normal Cost	Employee Contribut. Rate	Employer Contributions ¹			Computed Employer Contribut. With Phase-In	Blended ER Rate No Phase-In ⁵	Blended ER Rate With Phase-In ⁵	Employee Contribut. Conversion Factor ²
			Employer Normal Cost	Payment of the Unfunded Accrued Liability ⁴	Computed Employer Contribut. No Phase-In				
Percentage of Payroll									
01 - General	15.59%	6.00%	-	-	-	-			
02 - Police	16.16%	8.00%	-	-	-	-	55.43%	52.52%	
10 - Administration	16.80%	8.00%	-	-	-	-			
HA - Police hired after	6.58%	0.00%	6.58%	-2.12%	4.46%	4.43%	55.43%	52.52%	0.94%
Estimated Monthly Contribution ³									
01 - General			\$ 2,435	\$ 22,586	\$ 25,021	\$ 23,725			
02 - Police			3,383	23,611	26,994	25,562			
10 - Administration			539	28,615	29,154	27,730			
HA - Police hired after			518	(167)	351	349			
Total Municipality			\$ 6,875	\$ 74,645	\$ 81,520	\$ 77,366			
Estimated Annual Contribution ³			\$ 82,500	\$ 895,740	\$ 978,240	\$ 928,392			

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 If projected assets exceed projected liabilities as of the beginning of the July 1, 2019 fiscal year, the negative unfunded accrued liability is treated as overfunding credit and is used to reduce the contribution. This amortization is used to reduce the employer contribution rate. Note that if the overfunding credit is larger than the normal cost, the full credit is shown above but the total contribution requirement is zero. This will cause the displayed normal cost and unfunded accrued liability contributions to not add across.

⁵ For linked divisions, the employer will be invoiced the Computed Employer Contribution with Phase-in 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).

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

Benefit Provisions

Table 2

01 - General: Closed to new hires

	2017 Valuation	2016 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	50/25	50/25
Early Retirement (Reduced):	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:	6%	2%
DC Plan for New Hires:	7/1/2017	
Act 88:	No	No

02 - Police: Closed to new hires, linked to Division HA

	2017 Valuation	2016 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	50/25	50/25
Early Retirement (Reduced):	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:	8%	7%
Act 88:	No	No

10 - Administration: Closed to new hires

	2017 Valuation	2016 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	50/25	50/25
Early Retirement (Reduced):	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:	8%	8%
DC Plan for New Hires:	6/1/2008	6/1/2008
Act 88:	No	No

Table 2 (continued)**HA - Police hired after 11/1/2011: Open Division, linked to Division 02**

	2017 Valuation	2016 Valuation
Benefit Multiplier:	Hybrid Plan - 1.50% Multiplier	Hybrid Plan - 1.50% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	No	No

Participant Summary

Table 3

Division	2017 Valuation		2016 Valuation		2017 Valuation		
	Number	Annual Payroll ¹	Number	Annual Payroll ¹	Average Age	Average Benefit Service ²	Average Eligibility Service ²
01 - General							
Active Employees	5	\$ 317,067	7	\$ 424,706	42.2	16.0	16.0
Vested Former Employees	1	27,944	0	0	39.6	17.8	17.8
Retirees and Beneficiaries	20	479,185	20	438,478	69.9		
02 - Police							
Active Employees	7	\$ 488,855	8	\$ 549,920	45.2	19.7	19.8
Vested Former Employees	2	10,498	2	10,498	52.1	6.2	15.9
Retirees and Beneficiaries	11	415,715	10	356,316	67.3		
10 - Administration							
Active Employees	1	\$ 74,030	1	\$ 73,009	47.3	22.3	22.3
Vested Former Employees	2	48,309	2	48,156	54.4	15.6	27.7
Retirees and Beneficiaries	11	400,168	11	387,001	66.9		
HA - Police hired after 1							
Active Employees	1	\$ 50,963	1	\$ 50,940	39.3	5.0	5.0
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
Total Municipality							
Active Employees	14	\$ 930,915	17	\$ 1,098,575	43.9	17.5	17.6
Vested Former Employees	5	86,751	4	58,654	50.5	12.3	21.0
Retirees and Beneficiaries	42	1,295,068	41	1,181,795	68.4		
Total Participants	61		62				

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

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

Reported Assets (Market Value)

Table 4

Division	2017 Valuation		2016 Valuation	
	Employer and Retiree ¹	Employee ²	Employer and Retiree ¹	Employee ²
01 - General	\$ 3,228,641	\$ 21,192	\$ 2,948,396	\$ 12,474
02 - Police	3,875,474	124,933	3,414,277	118,452
10 - Administration	3,240,126	23,011	2,948,348	18,939
HA - Police hired after 11/1/2011	42,872	0	35,597	0
Municipality Total	\$ 10,387,113	\$ 169,136	\$ 9,346,618	\$ 149,865
Combined Assets	\$10,556,249		\$9,496,483	

¹ Reserve for Employer Contributions and Benefit Payments

² Reserve for Employee Contributions

The December 31, 2017 valuation assets (actuarial value of assets) are equal to 1.011321 times the reported market value of assets (compared to 1.077095 as of December 31, 2016). The derivation of valuation assets is described, and detailed calculations of valuation assets are shown, in the [Appendix](#).

Flow of Valuation Assets

Table 5

Year Ended 12/31	Employer Contributions		Employee Contributions	Investment Income (Valuation Assets)	Benefit Payments	Employee Contribution Refunds	Net Transfers	Valuation Asset Balance
	Required	Additional						
2007	\$ 460,775		\$ 0	\$ 642,881	\$ (548,394)	\$ 0	\$ 0	\$ 8,488,720
2008	479,562		0	389,167	(587,129)	0	0	8,770,320
2009	503,069		0	404,998	(637,632)	0	(15,249)	9,025,506
2010	499,730		0	473,360	(717,571)	(9,070)	0	9,271,955
2011	497,998	\$ 0	0	449,016	(811,912)	0	0	9,407,057
2012	466,970	0	0	385,733	(913,378)	0	0	9,346,382
2013	529,299	0	0	511,771	(1,074,487)	0	0	9,312,965
2014	607,201	119,273	0	518,959	(1,081,328)	0	0	9,477,070
2015	663,669	124,048	23,484	460,981	(1,096,055)	0	0	9,653,197
2016	701,470	403,365	46,030	530,167	(1,105,615)	0	0	10,228,614
2017	752,490	216,014	60,808	621,242	(1,203,412)	0	0	10,675,756

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.

Additional employer contributions, if any, are shown separately starting in 2011. Prior to 2011, additional contributions are combined with the required employer contributions.

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 Assets include assets from Surplus divisions, if any.

Actuarial Accrued Liabilities and Valuation Assets As of December 31, 2017

Table 6

Division	Actuarial Accrued Liability	Valuation Assets ¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
01 - General				
Active Employees	\$ 1,395,652	\$ 18,498	1.3%	\$ 1,377,154
Vested Former Employees	77,214	1,964	2.5%	75,250
Retirees And Beneficiaries	5,645,372	3,266,162	57.9%	2,379,210
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 7,118,238	\$ 3,286,624	46.2%	\$ 3,831,614
02 - Police				
Active Employees	\$ 2,864,564	\$ 80,540	2.8%	\$ 2,784,024
Vested Former Employees	115,320	26,377	22.9%	88,943
Retirees And Beneficiaries	5,020,120	3,920,763	78.1%	1,099,357
Pending Refunds	<u>18,016</u>	<u>18,016</u>	100.0%	<u>0</u>
Total	\$ 8,018,020	\$ 4,045,696	50.5%	\$ 3,972,324
10 - Administration				
Active Employees	\$ 530,618	\$ 8,623	1.6%	\$ 521,995
Vested Former Employees	473,945	14,388	3.0%	459,557
Retirees And Beneficiaries	4,784,456	3,277,068	68.5%	1,507,388
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 5,789,019	\$ 3,300,079	57.0%	\$ 2,488,940
HA - Police hired after 11/1/2011				
Active Employees	\$ 25,470	\$ 43,357	170.2%	\$ (17,887)
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 25,470	\$ 43,357	170.2%	\$ (17,887)
Total Municipality				
Active Employees	\$ 4,816,304	\$ 151,018	3.1%	\$ 4,665,286
Vested Former Employees	666,479	42,729	6.4%	623,750
Retirees and Beneficiaries	15,449,948	10,463,993	67.7%	4,985,955
Pending Refunds	<u>18,016</u>	<u>18,016</u>	<u>100.0%</u>	<u>0</u>
Total	\$ 20,950,747	\$ 10,675,756	51.0%	\$ 10,274,991
The following results show the combined accrued liabilities and assets for each set of linked divisions. These results are already included in the table above.				
Linked Divisions HA, 02				
Active Employees	\$ 2,890,034	\$ 123,897	4.3%	\$ 2,766,137
Vested Former Employees	115,320	26,377	22.9%	88,943
Retirees and Beneficiaries	5,020,120	3,920,763	78.1%	1,099,357
Pending Refunds	<u>18,016</u>	<u>18,016</u>	100.0%	<u>0</u>
Total	\$ 8,043,490	\$ 4,089,053	50.8%	\$ 3,954,437

¹ Includes both employer and employee assets.

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

Actuarial Accrued Liabilities - Comparative Schedule

Table 7

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2003	\$ 10,351,778	\$ 6,667,308	64%	\$ 3,684,470
2004	11,269,966	7,050,477	63%	4,219,489
2005	11,973,071	7,411,291	62%	4,561,780
2006	12,540,565	7,933,458	63%	4,607,107
2007	13,135,534	8,488,720	65%	4,646,814
2008	13,918,475	8,770,320	63%	5,148,155
2009	14,303,529	9,025,506	63%	5,278,023
2010	15,268,272	9,271,955	61%	5,996,317
2011	15,982,786	9,407,057	59%	6,575,729
2012	16,686,095	9,346,382	56%	7,339,713
2013	17,752,477	9,312,965	53%	8,439,512
2014	18,297,449	9,477,070	52%	8,820,379
2015	19,930,868	9,653,197	48%	10,277,671
2016	20,378,738	10,228,614	50%	10,150,124
2017	20,950,747	10,675,756	51%	10,274,991

Notes: Actuarial assumptions were revised for the 2004, 2008, 2009, 2010, 2011, 2012 and 2015 actuarial valuations.
The Valuation Assets include assets from Surplus divisions, if any.

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
2007	\$ 5,541,790	\$ 3,464,635	63%	\$ 2,077,155
2008	5,733,927	3,425,363	60%	2,308,564
2009	5,763,277	3,365,362	58%	2,397,915
2010	5,821,910	3,341,180	57%	2,480,730
2011	6,023,445	3,373,985	56%	2,649,460
2012	6,362,789	3,287,036	52%	3,075,753
2013	6,814,558	3,164,510	46%	3,650,048
2014	6,962,224	3,179,576	46%	3,782,648
2015	7,069,613	3,057,938	43%	4,011,675
2016	7,122,859	3,189,138	45%	3,933,721
2017	7,118,238	3,286,624	46%	3,831,614

Notes: Actuarial assumptions were revised for the 2008, 2009, 2010, 2011, 2012 and 2015 actuarial valuations.

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		
2007	12	\$ 581,087	30.74%	0.00%
2008	12	609,945	33.19%	0.00%
2009	12	621,049	33.75%	0.00%
2010	12	650,058	33.53%	0.00%
2011	11	604,313	37.70%	0.00%
2012	9	492,235	52.05%	0.00%
2013	9	514,906	56.87%	0.00%
2014	8	502,605	58.75%	0.00%
2015	7	421,358	\$ 27,122	2.00%
2016	7	424,706	\$ 26,994	2.00%
2017	5	317,067	\$ 25,021	6.00%

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 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 6.

See the Benefit Provision History on page 32 for past benefit provision changes.

Division 02 - Police

Table 8-02: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2007	\$ 4,254,164	\$ 2,690,800	63%	\$ 1,563,364
2008	4,583,712	2,825,952	62%	1,757,760
2009	4,937,303	3,019,222	61%	1,918,081
2010	5,551,826	3,147,094	57%	2,404,732
2011	5,929,924	3,176,565	54%	2,753,359
2012	6,150,611	3,158,791	51%	2,991,820
2013	6,390,716	3,222,882	50%	3,167,834
2014	6,706,147	3,377,623	50%	3,328,524
2015	7,426,152	3,542,834	48%	3,883,318
2016	7,559,861	3,805,085	50%	3,754,776
2017	8,018,020	4,045,696	51%	3,972,324

Notes: Actuarial assumptions were revised for the 2008, 2009, 2010, 2011, 2012 and 2015 actuarial valuations.

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		
2007	12	\$ 676,397	23.59%	0.00%
2008	12	699,585	26.48%	0.00%
2009	12	795,692	26.09%	0.00%
2010	9	579,845	36.19%	0.00%
2011	8	514,818	43.32%	0.00%
2012	8	538,553	\$ 21,346	0.00%
2013	8	535,745	\$ 22,426	0.00%
2014	8	550,823	\$ 23,975	0.00%
2015	8	565,845	\$ 27,397	4.00%
2016	8	549,920	\$ 25,581	7.00%
2017	7	488,855	\$ 26,994	8.00%

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 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 6.

See the Benefit Provision History on page 32 for past benefit provision changes.

Division 10 - Administration

Table 8-10: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2007	\$ 3,339,580	\$ 2,333,285	70%	\$ 1,006,295
2008	3,600,836	2,519,005	70%	1,081,831
2009	3,602,949	2,640,922	73%	962,027
2010	3,894,536	2,783,681	71%	1,110,855
2011	4,029,417	2,856,507	71%	1,172,910
2012	4,172,695	2,899,295	70%	1,273,400
2013	4,544,416	2,905,382	64%	1,639,034
2014	4,621,116	2,887,784	63%	1,733,332
2015	5,421,700	3,017,996	56%	2,403,704
2016	5,676,577	3,196,050	56%	2,480,527
2017	5,789,019	3,300,079	57%	2,488,940

Notes: Actuarial assumptions were revised for the 2008, 2009, 2010, 2011, 2012 and 2015 actuarial valuations.

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		
2007	10	\$ 530,962	24.13%	0.00%
2008	10	569,643	\$ 11,004	0.00%
2009	7	415,151	\$ 9,265	0.00%
2010	5	354,184	\$ 9,834	0.00%
2011	4	309,664	\$ 9,486	0.00%
2012	4	324,730	\$ 11,390	0.00%
2013	2	157,701	\$ 13,276	0.00%
2014	2	160,555	\$ 15,039	0.00%
2015	3	237,857	\$ 24,727	0.00%
2016	1	73,009	\$ 25,115	8.00%
2017	1	74,030	\$ 29,154	8.00%

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 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 6.

See the Benefit Provision History on page 32 for past benefit provision changes.

Division HA - Police hired after 11/1/2011

Table 8-HA: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2012	\$ 0	\$ 1,260	0%	\$ (1,260)
2013	2,787	20,191	725%	(17,404)
2014	7,962	32,087	403%	(24,125)
2015	13,403	34,429	257%	(21,026)
2016	19,441	38,341	197%	(18,900)
2017	25,470	43,357	170%	(17,887)

Notes: Actuarial assumptions were revised for the 2008, 2009, 2010, 2011, 2012 and 2015 actuarial valuations.

Table 9-HA: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2012	0	\$ 0	0.00%	0.00%
2013	1	41,573	2.26%	0.00%
2014	1	50,297	1.35%	0.00%
2015	1	49,523	4.76%	0.00%
2016	1	50,940	4.93%	0.00%
2017	1	50,963	4.46%	0.00%

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 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 6.

See the Benefit Provision History on page 32 for past benefit provision changes.

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 7/1/2019		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Initial	12/31/2015	\$ 4,011,675	23	\$ 4,172,452	21	\$ 293,244
(Gain)/Loss	12/31/2016	(140,098)	22	(157,739)	21	(11,088)
(Gain)/Loss	12/31/2017	(133,353)	21	(149,152)	21	(10,488)
Plan Amendments	12/31/2017	(8,044)	21	(8,997)	21	(636)
Total				\$ 3,856,564		\$ 271,032

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, 2017 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2017 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.

Division 02 - Police

Table 10-02: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 7/1/2019		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Initial	12/31/2015	\$ 3,883,318	23	\$ 4,064,122	21	\$ 285,636
(Gain)/Loss	12/31/2016	(216,782)	22	(244,087)	21	(17,160)
Plan Amendments	12/31/2016	1,514	22	1,700	21	120
(Gain)/Loss	12/31/2017	188,727	21	211,086	21	14,832
Plan Amendments	12/31/2017	(1,183)	21	(1,323)	21	(96)
Total				\$ 4,031,498		\$ 283,332

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, 2017 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2017 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.

Division 10 - Administration

Table 10-10: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 7/1/2019		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Initial	12/31/2015	\$ 2,403,704	12	\$ 2,283,125	8	\$ 336,840
(Gain)/Loss	12/31/2016	5,797	10	6,164	9	828
Plan Amendments	12/31/2016	164	10	172	8	24
(Gain)/Loss	12/31/2017	41,576	10	46,502	10	5,688
Total				\$ 2,335,963		\$ 343,380

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, 2017 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2017 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.

Division HA - Police hired after 11/1/2011

Table 10-HA: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 7/1/2019		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Initial	12/31/2015	\$ (21,026)	10	\$ (15,715)	10	\$ (1,920)
(Gain)/Loss	12/31/2016	(365)	15	(402)	14	(36)
(Gain)/Loss	12/31/2017	(525)	15	(587)	15	(48)
Total				\$ (16,704)		\$ (2,004)

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, 2017 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2017 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.

GASB 68 Information

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

Actuarial Valuation Date:	12/31/2017
Measurement Date of Total Pension Liability (TPL):	12/31/2017

At 12/31/2017, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits:	42
Inactive employees entitled to but not yet receiving benefits:	5
Active employees:	<u>14</u>
	61

Covered employee payroll: (Needed for Required Supplementary Information)	\$	930,915
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Average expected remaining service lives of all employees (active and inactive):		2
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Total Pension Liability as of 12/31/2016 measurement date:	\$	19,830,798
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Total Pension Liability as of 12/31/2017 measurement date:	\$	20,396,026
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Service Cost for the year ending on the 12/31/2017 measurement date:	\$	132,491
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Change in the Total Pension Liability due to:

- Benefit changes ¹ :	\$	(10,154)
- Differences between expected and actual experience ² :	\$	102,675
- Changes in assumptions ² :	\$	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.

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

	1% Decrease (7.00%)	Current Discount Rate (8.00%)	1% Increase (9.00%)
Change in Net Pension Liability as of 12/31/2017:	\$ 2,375,691	-	\$ (1,993,275)

Note: The current discount rate shown for GASB 68 purposes is higher than the MERS assumed rate of return. This is because for GASB 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

10/1/2017	Participant Contribution Rate 6%
7/1/2017	DC Adoption Date 07-01-2017
12/1/2016	Service Credit Purchase Estimates - Yes
7/1/2015	Participant Contribution Rate 2%
4/1/2002	Benefit FAC-3 (3 Year Final Average Compensation)
4/1/2002	Benefit F50 (With 25 Years of Service)
1/1/2000	E2 2.5% COLA for future retirees (09/28/1998)
10/1/1996	Temporary Benefit F50 (With 30 Years of Service) (10/01/1996 - 01/03/1997)
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
7/1/1991	Benefit B-4 (80% max)
7/1/1991	Benefit F55 (With 25 Years of Service)
1/1/1991	Flexible E 2% COLA Adopted (01/01/1991)
7/1/1989	Member Contribution Rate 0.00%
1/1/1987	Flexible E 2% COLA Adopted (01/01/1987)
12/1/1983	Benefit C-2/Base B-1
3/11/1975	Exclude Temporary Employees
7/1/1968	Member Contribution Rate 3.00% Under \$4,200.00 - Then 5.00%
1/1/1966	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1966	10 Year Vesting
1/1/1966	Benefit C (Old)
1/1/1966	Fiscal Month - July
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

02 - Police

6/1/2017	Participant Contribution Rate 8%
12/1/2016	Service Credit Purchase Estimates - Yes
8/1/2016	Participant Contribution Rate 7%
7/1/2015	Participant Contribution Rate 4%
1/1/2015	Participant Contribution Rate 3%
6/1/1996	Benefit F50 (With 25 Years of Service)
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
1/1/1994	E2 2.5% COLA for future retirees (07/01/1993)
7/1/1993	Benefit B-4 (80% max)
7/1/1992	Benefit FAC-3 (3 Year Final Average Compensation)
9/1/1991	Temporary Rule of 75 (Age + Service) Retirement (09/01/1991 - 11/03/1991)
9/1/1991	Temporary Benefit FAC-3 (3 Year Final Average Compensation) (09/01/1991 - 11/03/1991)
9/1/1991	Temporary Benefit B-4 (80% max) (09/01/1991 - 11/03/1991)
7/1/1991	Benefit B-3 (80% max)
1/1/1991	Flexible E 2% COLA Adopted (01/01/1991)

02 - Police

7/1/1989	Member Contribution Rate 0.00%
1/1/1987	Flexible E 2% COLA Adopted (01/01/1987)
7/1/1984	Benefit F55 (With 25 Years of Service)
12/1/1983	Benefit C-2/Base B-1
3/11/1975	Exclude Temporary Employees
7/1/1968	Member Contribution Rate 3.00% Under \$4,200.00 - Then 5.00%
1/1/1966	Fiscal Month - July
1/1/1966	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1966	10 Year Vesting
1/1/1966	Benefit C (Old)
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
	Defined Benefit Normal Retirement Age - 60

10 - Administration

1/1/2017	Participant Contribution Rate 8%
12/1/2016	Service Credit Purchase Estimates - Yes
6/1/2016	Participant Contribution Rate 6%
6/1/2008	DC Adoption Date 06-01-2008
1/1/2001	E2 2.5% COLA for future retirees (07/01/1996)
1/1/2000	E2 2% COLA for future retirees (07/01/1996)
1/1/1999	E2 2.3% COLA for future retirees (07/01/1996)
7/1/1997	Benefit F50 (With 25 Years of Service)
1/1/1997	E2 2.5% COLA for future retirees (07/01/1996)
7/1/1996	Benefit FAC-3 (3 Year Final Average Compensation)
4/1/1996	Benefit B-4 (80% max)
4/1/1996	Benefit F55 (With 25 Years of Service)
4/1/1996	Member Contribution Rate 0.00%
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
1/1/1991	Flexible E 2% COLA Adopted (01/01/1991)
1/1/1987	Flexible E 2% COLA Adopted (01/01/1987)
12/1/1983	Benefit FAC-5 (5 Year Final Average Compensation)
12/1/1983	10 Year Vesting
12/1/1983	Benefit C-2/Base B-1
3/11/1975	Exclude Temporary Employees
1/1/1966	Fiscal Month - July
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

HA - Police hired after 11/1/2011

11/1/2011	Benefit FAC-3 (3 Year Final Average Compensation)
11/1/2011	6 Year Vesting
11/1/2011	1.5% Multiplier
1/1/1966	Fiscal Month - July
	Defined Benefit Normal Retirement Age - 60
	No Early Reduced Conditions

Plan Provisions, Actuarial Assumptions, and Actuarial Funding Method

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

Increase in Final Average Compensation

Division	FAC Increase Assumption
All Divisions	4.00%

Withdrawal Rate Scaling Factor

Division	Withdrawal Rate Scaling Factor
All Divisions	100%

Miscellaneous and Technical Assumptions

Loads – None.

Amortization Policy for Closed Divisions

Closed Division	Amortization Option
01 - General	Non-Accelerated Amortization
10 - Administration	Accelerated to 5-Year Amortization

Please see the [Appendix](#) on the MERS website for a detailed description of the amortization options available for closed divisions within an open municipality.