

Protecting Local Government Retirement and Benefits Act Corrective Action Plan: Defined Benefit Pension Retirement Systems

Issued under authority of Public Act 202 of 2017.

I. MUNICIPALITY INFORMATION

Local Unit Name: Otsego County Road Commission Six-Digit Muni Code: 690100

Defined Benefit Pension System Name: MERS

Contact Name (Administrative Officer): Rebecca Jerry

Title if not Administrative Officer: Finance Director

Email: jerryr@ocrc-mi.org

Telephone: (989) 732-5202

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 attached.

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 attached.

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 attached.

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 attached.

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.

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) Otsego Road Commission 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

Type of Document

- | | |
|---|---|
| <input checked="" type="checkbox"/> Attachment – 1 | This Corrective Action Plan Form (Required) |
| <input checked="" type="checkbox"/> Attachment – 1a | Documentation from the governing body approving this Corrective Action Plan (Required) |
| <input type="checkbox"/> Attachment – 2a | 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) |
| <input type="checkbox"/> Attachment – 3a | Documentation of additional payments in past years that is not reflected in your audited financial statements (e.g. enacted budget, system provided information). |
| <input type="checkbox"/> Attachment – 4a | Documentation of commitment to additional payments in future years (e.g. resolution, ordinance) |
| <input type="checkbox"/> Attachment – 5a | 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 |
| <input type="checkbox"/> Attachment –6a | 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
<input checked="" type="checkbox"/> 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?
<input checked="" type="checkbox"/> Reasonable Timeframe	Do the corrective actions address the underfunded status in a reasonable timeframe (<u>see CAP criteria issued by the Board</u>)?
<input checked="" type="checkbox"/> 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?
<input checked="" type="checkbox"/> 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 Jason Melancon, as the government's administrative officer (*enter title*) 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 (Insert Retirement Pension System Name) will achieve a funded status of at least 60% by Fiscal Year 2020 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 _____

Date December 20, 2018

Corrective Action Plan

3. Description of Prior Actions:

System Design Changes:

As reported in Otsego County Road Commission's 2017 MERS Annual Actuarial Valuation Report December 31, 2017, the Road Commission is 57% funded an increase of 1% from 2016. The Road Commission's unfunded balance is \$5,537,869.00.

Currently, the Road Commission has 3 divisions:

01 – General: This division receives a B-4 retirement plan.

10 – General after 10/16/2016: This division receives a B-2 retirement plan.

11 – Non-Union employees: This division receives a B-4 retirement plan.

As you can see, the Otsego County Road Commission closed the 01 – General division to new hires. In addition, in 2012, employees started to contribute towards their MERS retirement. New hires are strongly encouraged to invest funds towards a retirement account to help offset the amount of their retirement.

The Road Commission has researched many options in order to lower their unfunded liability. We will continue to discuss options with the employees during negotiations scheduled for this year.

The Otsego County Road Commission has focused on the funding to decrease their unfunded liability.

Additional Funding:

As previously discussed, the employees initially contributed 1%, of which has increased each subsequent year starting in 2012. Beginning January 1, 2018, the employees began contributing 4% of their gross income. This year, the Road Commission will be bargaining with the Union employees and retirement contributions will once again be discussed.

Administrative employees have already agreed to increase their employee contributions to 5% beginning January 1, 2019; 6% beginning January 1, 2020; and 7% beginning January 1, 2021.

In December of 2010, the Otsego County Road Commission began to pay \$10,000.00 per month in addition to the normal cost and has continued to do so to this date. At the board meeting scheduled on May 18, 2017, the Board Members approved and adopted a Defined Benefit Plan Surplus Division. At this meeting, the Board also approved a monthly amount of \$10,000.00 per

month, in addition to a one-time payment of \$100,000.00 be paid to the Surplus Division account.

In 2018, the Board of the Otsego County Road Commission decided to be more aggressive with its additional contributions. To date, the Road Commission's regular contributions totaled \$267,805.36. In addition to the \$10,000.00 per month (totaling \$60,000.00), \$204,707.32 in voluntary payments has been paid to the surplus account. (1/19/18 for \$100,000.00; 1/18/18 for \$28,661.24; 2/15/18 for \$7,500.00; 3/19/18 for \$47,491.02; 5/24/18 for \$21,055.06)

In an effort to get the Otsego County Road Commission to 60% funding, the Board is proposing the following (please note all additional payments will be remitted to the surplus account):

Prior to December 31, 2018, an amount of \$295,292.68 will be paid to the surplus account (said amount when added to the \$204,707.32 in already remitted additional payments would equal \$500,000.00. (Payment of \$295,292.68 was remitted on or around July 23, 2018) In addition, the Road Commission would then remit \$500,000.00 in 2019 and \$500,000.00 in 2020. These additional amounts should be sufficient to get the Road Commission to being 60% funded. The Road Commission would then re-evaluate its financial situation to see if said payment amounts could continue or if they would need to be adjusted. Please note that the Road Commission will continue to submit \$10,000.00 per month in addition to its annual required contribution.

The Otsego Road Commission Board is confident that if they continue to follow MERS projections, the Road Commission would be close to being fully funded by 2028 according to the Ballpark Projection Results issued by MERS on August 13, 2018. Of course, that is assuming all assumptions will be met. We understand the market changing on a continuous basis affects how our assets increase or decrease, but we will continue to closely monitor these assets with MERS.

4. Description of Prospective Actions

System Design Changes:

The Otsego County Road Commission will begin negotiating a successor collective bargaining agreement with its employees in 2019. During these negotiations the Road Commission will be considering proposals to increase the employee contribution and other benefit modifications, which will reduce the liability.

Administrative employees have already agreed to increase their employee contributions to 5% beginning January 1, 2019; 6% beginning January 1, 2020; and 7% beginning January 1, 2021.

Other Considerations:

The Otsego County Road Commission will continue to work with the employees in an effort to lower costs. In addition, Management and Board Members will continue to research new retirement plans for cost saving measures.

5. Confirmation of Funding

Do the corrective actions listed in this plan allow for the Otsego County Road Commission to make, at a minimum, the annual required contribution payment for the defined benefit pension system according to your long-term forecast?

The Otsego County Road Commission answers in the affirmative.

6. Documentation Attached to This Corrective Action Plan:

1. Form 5598 Protecting Local Government and Benefits Act Corrective Action Plan: Retirement Health Benefit Systems
2. Resolution Approving Corrective Action Plan
3. Approved Minutes dated May 18, 2017 approving MERS/Surplus Fund/\$10,000 additional payment per month/\$100,000.00 one time payment
4. Unapproved Minutes dated December 20, 2018 documenting Board approval of Resolution Approving Corrective Action Plan
5. Annual Actuarial Valuation Report December 31, 2017
6. MERS Ballpark Estimation using additional funding contributions per the Corrective Action Plan

For e-mail transmission purposes, the Otsego County Road Commission has not attached all documentation referenced in this Attachment to its Application for Waiver and Plan. Should any of the documentation referenced above be needed in the determination of the Otsego County Road Commission Application for Waiver and Plan approval, please contact Rebecca Jerry at jerryr@ocrc-mi.org.

OTSEGO COUNTY ROAD COMMISSION	GENERAL ADMINISTRATION				
TITLE: Resolution Adopting and Approving the Corrective Action Plan for Defined Benefit Pension Retirement Systems	RESOLUTION NUMBER: R18-14	SUPERCEDE	EFFECTIVE DATE: 12-20-18	SUPERCEDE	POLICY NUMBER:

**Resolution Adopting and Approving the Corrective Action Plan for
Defined Benefit Pension Retirement Systems**

WHEREAS the Board of County Road Commissioners for the County of Otsego acknowledges that its MERS retirement pension program is unfunded and that Public Act 202 of 2017 was signed into law addressing unfunded pension liabilities;

WHEREAS the Board of County Road Commissioners for the County of Otsego is committed to protect the security of retirement benefits for its retirees and current employees:

NOW THEREFORE BE IT RESOLVED, the Board of County Road Commissioners for the County of Otsego hereby adopts and approves the Corrective Action Plan as proposed in compliance with State of Michigan PA 202 of 2017.

BE IT FURTHER RESOLVED, the Board of County Road Commissioners for the County of Otsego believes these additional funds will be sufficient to bring the Otsego County Road Commission's pension plan to being 60% funded by 2020.


THEREFORE, a Motion was made by Commissioner Huff, and seconded by Commissioner Holewinski to approve and adopt R18-14 Resolution Adopting and Approving the Corrective Action Plan for Defined Benefit Pension Retirement Systems. Roll call vote: Huff, yes; Holewinski, yes; Matelski, absent. Two ayes, no nays. Motion carried.

THEREFORE, BE IT RESOLVED, the Otsego County Road Commission Board, hereby adopts Resolution No.: R18-14 Resolution Adopting and Approving the Corrective Action Plan for Defined Benefit Pension Retirement Systems on this 20th day of December, 2018, at its Regularly Scheduled Board Meeting duly held at the Road Commission office.

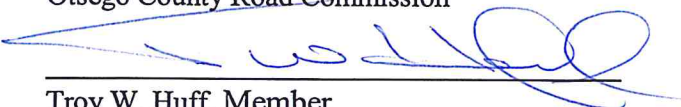
RESOLUTION DECLARED ADOPTED

ABSENT

David C. Matelski, Chairman
Otsego County Road Commission

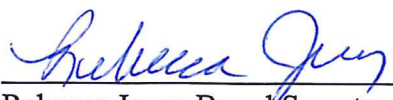


William T. Holewinski, Jr., Vice Chairman
Otsego County Road Commission



Troy W. Huff, Member
Otsego County Road Commission

I, Rebecca Jerry, Board Secretary, do hereby certify that the above is a true copy of R18-14 Resolution Adopting and Approving the Corrective Action Plan for Defined Benefit Pension Retirement Systems, of which was adopted at the December 20, 2018, regularly scheduled meeting of the Board of Road Commissioners for the County of Otsego.



Rebecca Jerry, Board Secretary

APPROVED

**MINUTES for the
REGULAR MEETING OF THE
OTSEGO COUNTY ROAD COMMISSION
HELD ON THURSDAY, MAY 18, 2017, AT 9:00 A.M.
AT THE OFFICE LOCATED AT 669 MCCOY ROAD, GAYLORD, MICHIGAN**

ITEM 1 - PLEDGE OF ALLEGIANCE

Meeting called to order by Chair Matelski at 9:00 a.m. Pledge of Allegiance.

ITEM 2 - ROLL CALL

Upon roll call, the following Commissioners responded:

Holewinski, Present

Huff, Present

Matelski, Present

In addition, the following staff members were present: Jason Melancon, Manager; Becky Jerry, Board Secretary.

ITEM 3 – ADDITIONS TO AGENDA

None.

ITEM 4 – APPROVAL OF AGENDA

**Motion by Huff, and seconded by Holewinski to approve the Agenda as presented. Three ayes, no nays.
Motion carried.**

ITEM 5 – CONSENT CALENDAR

The purpose of the Consent Calendar is to expedite business by grouping non-controversial items together without discussion. Any member of the Commission, staff, or the public may ask that any item on the Consent Calendar be removed and placed elsewhere on the Agenda for full discussion. Such requests will be automatically respected.

If an item is not removed from the Consent Calendar, the action noted in parentheses on the Agenda is approved by a single Commission action adopting the Consent Calendar. The Manager recommends the following items be adopted:

- A. *Minutes:* The Board approves the Regular Meeting Minutes dated April 20, 2017.
- B. *Payroll:* The Board approves Payroll #9 (\$63,777.59), and Payroll #10 (\$63,623.40), respectfully.
- C. *Accounts Payable:* The Board approves Accounts Payable C/4-4 (\$3,252.10) to be paid through the General (201) account, C/5-1 (\$4,431.98) to be paid through the General (201) account, C/5-2 (\$149,400.27) to be paid through the General (201) account, and the Accounts Payable Check Register dated 04/01/2017 to 04/30/2017.

Motion by Huff and seconded by Holewinski to approve items on the Consent Calendar. Three ayes, no nays. Motion carried.

ITEM 6 – COUNTY UPDATE

Ken Glasser, Commissioner for Otsego County Board, updated Road Commission Board on County matters.

ITEM 7- APPOINTMENTS

- A. Phil Wolf, auditor from Anderson, Tackman & Company, went over the 2016 Audit. **Motion by Huff, and seconded by Holewinski to accept and approve the 2016 Audit as presented. Three ayes, no nays. Motion carried.**

ITEM 10 – PUBLIC HEARING AT 9:15 a.m.

- A. Abandonment of Deer Lake Road.

Motion by Huff, and seconded by Holewinski to open the Public Hearing at 9:33 a.m. to hear any objections and to discuss the abandonment of a 50-foot wide easement between parcels 060-027-

APPROVED

200-068-08 and 061-165-000-001-00, section 27 of Elmira Township. Roll Call Vote: Huff, yes; Holewinski, yes; Matelski, yes. Three ayes, no nays. Motion carried.

Manager went over abandonment documents. Discussion.

No objections were heard.

Motion by Huff, and seconded by Holewinski, to close the Public Hearing at 9:42 a.m. and return to open session. Three ayes, no nays. Motion carried.

Motion by Holewinski, and seconded by Huff to approve R17-2 Resolution for Road Abandonment and R17-2 Resolution for Road Abandonment for recording at the Otsego County Register of Deeds. (Board Secretary mistakenly took Roll Call vote) Discussion. Motion by Holewinski, and seconded by Huff to reconsider approval of R17-2 Road Abandonment. Roll call vote: Holewinski, yes; Huff, yes; Matelski, yes. Three ayes, no nays. Motion carried.

Motion by Huff, and seconded by Holewinski to postpone matter of R17-2 Resolution for Road Abandonment until the June 15 Board meeting. Three ayes, no nays. Motion carried.

ITEM 8 – PUBLIC COMMENT

Matt Nowak, Charlton Township Supervisor, commented on millage funds and the change in the percentage of Township participation costs on projects.

ITEM 12 – FOREMEN’S UPDATES

- A. Foremen updated Board on shop and road issues.

ITEM 9 – UPCOMING MEETINGS

- A. Discussion on dates of upcoming Board meetings. **Motion by Holewinski, and seconded by Huff to change the meeting scheduled for July 20, 2017 to Monday, July 17, 2017. Three ayes, no nays. Motion carried.**
- B. MCRCSIP Annual Membership meeting. Holewinski to attend.

ITEM 11 – FINANCE REPORTS/BUDGETS

Discussed:

- 1. MERS quarterly report.

ITEM 13 – OLD BUSINESS/UNFINISHED BUSINESS

- A. Purchase of Service Time by Tom Deans. **Motion by Holewinski, and seconded by Huff, to approve MERS Resolution for purchase of 3 years 9 months Service Time by Tom Deans. Discussion. Roll Call Vote: Holewinski, yes; Huff, no; Matelski, no. One aye, two nays. Motion failed.**
- B. MERS/Surplus Fund. Discussion. **Motion by Huff, and seconded by Holewinski to approve and adopt the Defined Benefit Plan Surplus Division Adoption Addendum, to authorize Manager to sign said Addendum, and to direct Finance Director to pay \$10,000.00 per month into the Surplus Division in addition to a one-time payment of \$100,000.00. Three ayes, no nays. Motion carried. Also discussed starting a healthcare liability escrow fund.**
- C. Bid Tabulation for Hot Mix Asphalt Paving of Various Streets in Bagley Township. **Motion by Huff, and seconded by Holewinski to accept the bid from Reith-Riley Construction Co., Inc. for the hot mix asphalt paving of various streets in Bagley Township. Threes ayes, no nays. Motion carried.**
- D. Bid Tabulations for Asphalt Emulsions/Dust Control/Ice Control Sand. **Motion by Huff, and seconded by Holewinski to accept those bids for Asphalt Emulsions, Dust Control, and Ice Control Sand that the Manager recommends to be in the best interests of the Road Commission. Three ayes, no nays. Motion carried.**
- E. Bid Tabulation/Used 4x2 Crew Cab 24,500 GVW Dump Truck. **Motion by Huff, and seconded by Holewinski to approve the bid from Diesel Truck Sales, Inc. for a used 4x2 Crew Cab 24,500 GVW dump truck for the amount of \$28,625.00 upon approval and recommendation of Manager. Three ayes, no nays. Motion carried.**

APPROVED

ITEM 14 – NEW BUSINESS

- A. P17-5 Permit for Limited Communication Service Provider Facilities Access Within County Road Right-of-Way and Communication Service Provider Right-of-Way Permit: Special Terms and Conditions. **Motion by Huff, and seconded by Holewinski to approve P17-5 Permit for Limited Communication Service Provider Facilities Access Within County Road Right-of-Way and Communication Service Provider Right-of-Way Permit: Special Terms and Conditions. Three ayes, no nays. Motion carried.**
- B. P17-6 Ethical Standards and Standards of Conduct. **Motion by Holewinski, and seconded by Huff to approve the revised P17-6 Ethical Standards and Standards of Conduct Policy. Discussion. Three ayes, no nays. Motion carried.**
- C. P17-7 Travel Policy. **Motion by Huff, and seconded by Holewinski to approve the revised P17-7 Travel Policy. Three ayes, no nays. Motion carried.**
- D. Township Agreement for Improvements on Local Roads/Gunner Lane and Red Pine Drive. **Motion by Huff, and seconded by Holewinski to approve the Township Agreement for Improvements on Local Roads between the OCRC and Bagley Township for improvements on Gunner Lane and Red Pine Drive for the estimated amount of \$72,760.00. Three ayes, no nays. Motion carried.**
- E. Township Agreement for Improvements on Local Roads/Cheyenne Circle and Waneta Court. **Motion by Huff, and seconded by Holewinski to approve the Township Agreement for Improvements on Local Roads between the OCRC and Bagley Township for improvements on Cheyenne Circle and Waneta Court for the estimated amount of \$55,000.00. Three ayes, no nays. Motion carried.**
- F. Township Agreement for Improvements on Local Roads/Old Alba Road. **Motion by Huff, and seconded by Holewinski to approve the Township Agreement for Improvements on Local Roads between the OCRC and Hayes Township for improvements on Old Alba Road for the estimated amount of \$314,640.00. Three ayes, no nays. Motion carried.**

ITEM 15 – CORRESPONDENCE AND REPORTS

Manager went over Commissioners’ Report with the Board.

Also discussed:

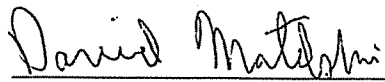
- Audit findings.
- Bradford Lake Dam.
- Resurfacing round-about to Fairview
- Liaison box.
- Equipment Committee.

ITEM 146– MISCELLANEOUS AND OTHER

None.

ITEM 17 – ADJOURNMENT

Motion by Huff, and seconded by Holewinski, to adjourn meeting at 11:03 a.m. Three ayes, no nays. Motion carried.



 David Matelski, Chairman



 Rebecca Jerry, Board Secretary

UNAPPROVED

**MINUTES for the
REGULAR MEETING OF THE
OTSEGO COUNTY ROAD COMMISSION
HELD ON THURSDAY, DECEMBER 20, 2018 AT 9:00 A.M.
AT THE OFFICE LOCATED AT 669 MCCOY ROAD, GAYLORD, MICHIGAN**

ITEM 1 - PLEDGE OF ALLEGIANCE

Meeting called to order by Vice Chair, Holewinski at 9:00 a.m. Pledge of Allegiance.

ITEM 2 - ROLL CALL

Upon roll call, the following Commissioners responded:

Holewinski, Present

Huff, Present

Matelski, Not Present

In addition, the following staff members were present: Jason Melancon, Manager; Becky Jerry, Board Secretary.

ITEM 3 – ADDITIONS TO AGENDA

Add to Consent Calendar: Payment of C/12-2 in the amount of \$17,052.19.

ITEM 4 – APPROVAL OF AGENDA

**Motion by Huff, and seconded by Holewinski to approve the Agenda with revisions. Two ayes, no nays.
Motion carried.**

ITEM 5 - CONFLICT OF INTEREST

Do Commissioners or any Commissioners feel other Commissioners may have a conflict on any matter addressed on this Agenda? (Missed)

ITEM 6 – CONSENT CALENDAR

The purpose of the Consent Calendar is to expedite business by grouping non-controversial items together without discussion. Any member of the Commission, staff, or the public may ask that any item on the Consent Calendar be removed and placed elsewhere on the Agenda for full discussion. Such requests will be automatically respected.

If an item is not removed from the Consent Calendar, the action noted in parentheses on the Agenda is approved by a single Commission action adopting the Consent Calendar. The Manager recommends the following items be adopted:

- A. *Minutes:* The Board approves the Regular Meeting Minutes dated November 14, 2018.
- B. *Payroll:* The Board approves Payroll #24 (\$62,971.23), Payroll #25 (\$71,097.06), and Payroll Adm. Vacation Payout (\$11,862.55) respectfully.
- C. *Accounts Payable:* The Board approves Accounts Payable C/11-3 (\$72,498.22) to be paid through the General (201) account, C/12-2 (\$17,052.19) to be paid through the General (201) account, C/12-3 (\$79,121.80) to be paid through the General (201) account, C/12-4 (\$95,178.20) to be paid through the General (201) account, and C/12-5 (\$775,571.74) to be paid through the General (201) account, and the Accounts Payable Check Register dated 11/01/2018 to 11/30/2018.

Motion by Huff, and seconded by Holewinski to approve items on the Consent Calendar. Two ayes, no nays. Motion carried.

ITEM 8 – PUBLIC COMMENT

Ann Smith, caregiver for private landowner on The Ford Road, requested and/or voiced concerns over placement of gate. Discussion. Manager and Board both agreed that it would hinder the public's access to the river and it would not be in the best interest of the public. Discussion of possible other options available.

UNAPPROVED

ITEM 7 – COUNTY UPDATE

Ken Glasser, Commissioner for Otsego County Board, updated Road Commission Board on County matters.

ITEM 9 – APPOINTMENTS

None.

ITEM 10 – UPCOMING MEETINGS

1. Board Meeting dates: Proposed Reorganizational Meeting Date, Monday, January 7, 2019 at 9:00 a.m. Reorganizational Meeting: **Motion by Huff, and seconded by Holewinski, to hold the Reorganizational Meeting on Monday, January 7, 2019 at 9:00 a.m. Two ayes, no nays. Motion carried.**

ITEM 11 – FINANCE REPORT/BUDGETS

1. 2018 2nd Amended General Appropriation Budget. **Motion by Huff, and seconded by Holewinski to approve the 2018 2nd Amended General Appropriation Budget. Two ayes, no nays. Motion carried.**
2. 2019 General Appropriation Budget. **Motion by Huff, and seconded by Holewinski to approve the 2019 Amended General Appropriation Budget. Two ayes, no nays. Motion carried.**
3. Road Project Escrow Account. **Motion by Huff, and seconded by Holewinski for the Road Commission to propose up to \$1,000,000.00 be set aside for 2019 road projects, to setup a Road Project Escrow Account, and for the transfer of \$500,000.00 into said account. Discussion. Two ayes, no nays. Motion carried.**
4. Balance of Vacation/Sick Escrow. Discussion. **Motion by Huff, and seconded by Holewinski to transfer balance of \$36,025.75 from the Vacation/Sick Escrow to the Equipment Escrow. Two ayes, no nays. Motion carried.**

ITEM 12 – OLD BUSINESS/UNFINISHED BUSINESS

1. Corrective Action Plan: Retirement Health Benefit Systems/Form 5597/R18-13 Resolution Adopting and Approving the Corrective Action Plan for Retirement Health Benefit Systems. **Motion by Huff, and seconded by Holewinski to approve the Corrective Action Plan: Retirement Health Benefit Systems and Form 5597. Two ayes, no nays. Motion carried.**

Motion by Huff, and seconded by Holewinski to adopt and approve R18-13 Resolution Adopting and Approving the Corrective Action Plan for Retirement Health Benefit Systems. Roll call vote: Huff, yes; Holewinski, yes. Two ayes, no nays. Motion carried.

2. Corrective Action Plan: Defined Benefit Pension Retirement Systems/Form 5598/R18-14 Resolution Adopting and Approving the Corrective Action Plan for Defined Benefit Pension Retirement Systems. **Motion by Huff, and seconded by Holewinski to approve the Corrective Action Plan: Defined Benefit Pension Retirement Systems and Form 5598. Two ayes, no nays. Motion carried.**

Motion by Huff, and seconded by Holewinski to adopt and approve R18-14 Resolution Adopting and Approving the Corrective Action Plan for Defined Benefit Pension Retirement Systems. Roll call vote: Huff, yes; Holewinski, yes. Two ayes, no nays. Motion carried.

ITEM 13 – NEW BUSINESS

None.

ITEM 14 – CORRESPONDENCE AND REPORTS

Manager discussed the following with the Board:

1. Obtaining road grader.
2. New employees.

ITEM 15 – MISCELLANEOUS AND OTHER

None.

UNAPPROVED

ITEM 16 – ADJOURNMENT

Motion by Huff, and seconded by Holewinski to adjourn meeting at 9:41 a.m. Two ayes, no nays. Motion carried.

William Holewinski, Vice Chair

Rebecca Jerry, Board Secretary

I, Rebecca Jerry, Board Secretary, do hereby certify that the above is a true copy of Unapproved Minutes for the Otsego County Road Commission's regularly scheduled meeting on December 20, 2018.



Rebecca Jerry, Board Secretary



MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN
ANNUAL ACTUARIAL VALUATION REPORT DECEMBER 31, 2017
OTSEGO CRC (6901)



Spring, 2018

Otsego CRC

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

This report presents the results of the Annual Actuarial Valuation, prepared as of December 31, 2017. The report includes the determination of liabilities and contribution rates resulting from the participation of Otsego CRC (6901) 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. Otsego CRC 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 January 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

TABLE OF CONTENTS

	Page
Executive Summary	5
Employer Contribution Details Table 1	14
Benefit Provisions Table 2	15
Participant Summary Table 3	16
Reported Assets (Market Value) Table 4	17
Flow of Valuation Assets Table 5	18
Actuarial Accrued Liabilities and Valuation Assets Table 6	19
Actuarial Accrued Liabilities - Comparative Schedule Table 7	20
Division-Based Comparative Schedules Tables 8 and 9	21
Division-Based Layered Amortization Schedule Table 10	25
GASB 68 Information	28
Benefit Provision History	30
Plan Provisions, Actuarial Assumptions, and Actuarial Funding Method	32

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	57%	56%

* 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:	January 1, 2019	January 1, 2019	January 1, 2018	January 1, 2018	January 1, 2019	January 1, 2019	January 1, 2018	January 1, 2018
Division								
01 - General	-	-	-	-	\$ 28,354	\$ 29,616	\$ 24,904	\$ 26,821
10 - General after 10/16/20	2.89%	2.92%	3.29%	3.34%	767	775	835	847
11 - Non-Union employees	33.65%	35.13%	32.90%	35.22%	14,348	14,980	13,465	14,413
Municipality Total					\$ 43,469	\$ 45,371	\$ 39,204	\$ 42,081

Employee contribution rates reflected in the valuations are shown below:

Valuation Date:	Employee Contribution Rate	
	12/31/2017	12/31/2016
Division		
01 - General	4.00%	3.50%
10 - General after 10/16/20	4.00%	3.50%
11 - Non-Union employees	4.00%	3.50%

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 \$70,908, instead of \$45,371.

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 56% (instead of 57%); and
- Your total employer contribution requirement for the fiscal year starting January 1, 2019 would be \$550,380 (instead of \$544,452).

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	\$ 15,806,934	\$ 14,164,121	\$ 12,772,377	\$ 11,585,097
Valuation Assets ¹	\$ 7,234,508	\$ 7,234,508	\$ 7,234,508	\$ 7,234,508
Unfunded Accrued Liability	\$ 8,572,426	\$ 6,929,613	\$ 5,537,869	\$ 4,350,589
Funded Ratio	46%	51%	57%	63%
Monthly Normal Cost	\$ 20,750	\$ 15,304	\$ 11,096	\$ 7,879
Monthly Amortization Payment	\$ 43,363	\$ 38,549	\$ 34,275	\$ 29,142
Total Employer Contribution²	\$ 64,113	\$ 53,853	\$ 45,371	\$ 37,021

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.

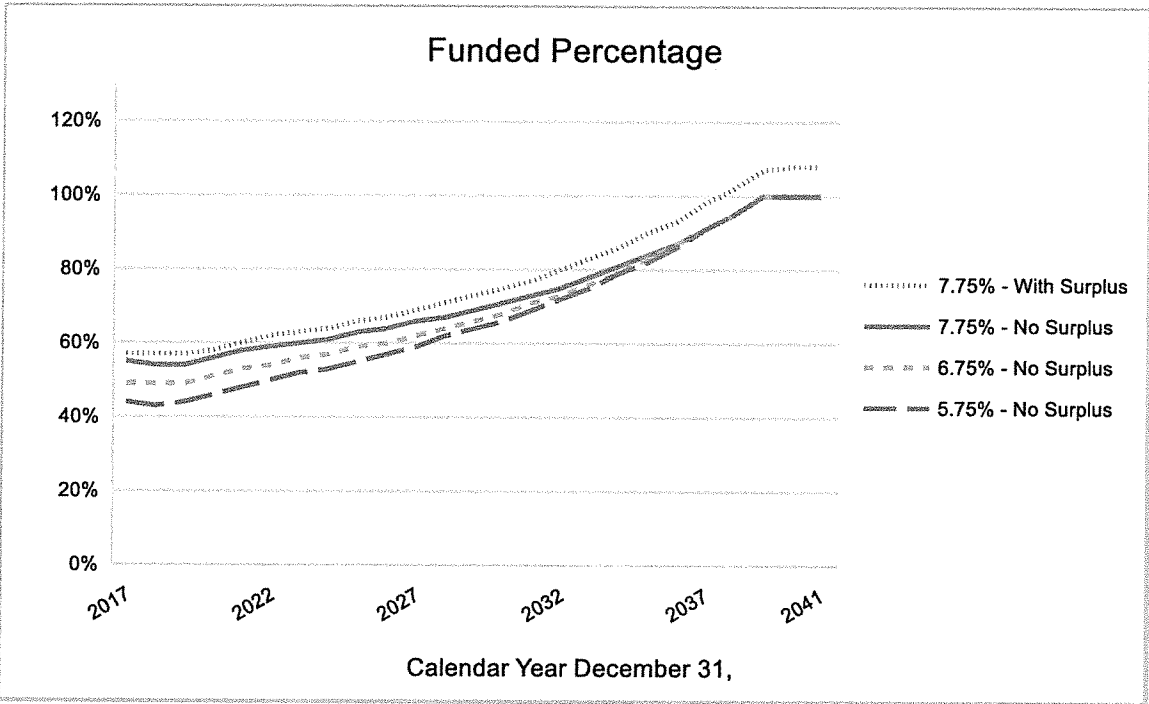
Your municipality includes one or more Surplus divisions. The assets in a Surplus division may be used to reduce future employer contributions or to accelerate the date by which the municipality becomes 100% funded. The timing and use of these Surplus assets is discretionary.

The Funded Percentage graph shows projections of funded status under the 7.75% investment return assumption, both including the Surplus assets (contributed as of the valuation date), and without the Surplus assets. The graph including the Surplus assets assumes these Surplus assets grow with interest and are not used to lower future employer contributions. We modeled the projections including the Surplus assets in this fashion because the use of these assets is discretionary by the employer and we do not know when and how the employer will use them. Once the employer uses these Surplus assets, any future employer contributions are expected to be lower than those shown in the projections.

Valuation Year Ending 12/31	Fiscal Year Beginning 1/1	Actuarial Accrued Liability	Valuation Assets ²	Funded Percentage	Computed Annual Employer Contribution
7.75%¹					
WITH 5-YEAR PHASE-IN					
2017	2019	\$ 12,772,377	\$ 6,966,812	55%	\$ 521,628
2018	2020	13,100,000	7,140,000	54%	563,000
2019	2021	13,500,000	7,300,000	54%	607,000
2020	2022	13,900,000	7,710,000	56%	620,000
2021	2023	14,200,000	8,170,000	57%	634,000
2022	2024	14,600,000	8,570,000	59%	655,000
NO 5-YEAR PHASE-IN					
2017	2019	\$ 12,772,377	\$ 6,966,812	55%	\$ 544,452
2018	2020	13,100,000	7,140,000	54%	573,000
2019	2021	13,500,000	7,320,000	54%	604,000
2020	2022	13,900,000	7,750,000	56%	617,000
2021	2023	14,200,000	8,200,000	58%	631,000
2022	2024	14,600,000	8,600,000	59%	652,000
6.75%¹					
NO 5-YEAR PHASE-IN					
2017	2019	\$ 14,164,121	\$ 6,966,812	49%	\$ 646,236
2018	2020	14,500,000	7,070,000	49%	688,000
2019	2021	14,900,000	7,280,000	49%	723,000
2020	2022	15,300,000	7,750,000	51%	741,000
2021	2023	15,700,000	8,260,000	53%	759,000
2022	2024	16,100,000	8,710,000	54%	785,000
5.75%¹					
NO 5-YEAR PHASE-IN					
2017	2019	\$ 15,806,934	\$ 6,966,812	44%	\$ 769,356
2018	2020	16,200,000	7,010,000	43%	819,000
2019	2021	16,600,000	7,270,000	44%	858,000
2020	2022	17,000,000	7,800,000	46%	881,000
2021	2023	17,400,000	8,370,000	48%	905,000
2022	2024	17,800,000	8,890,000	50%	935,000

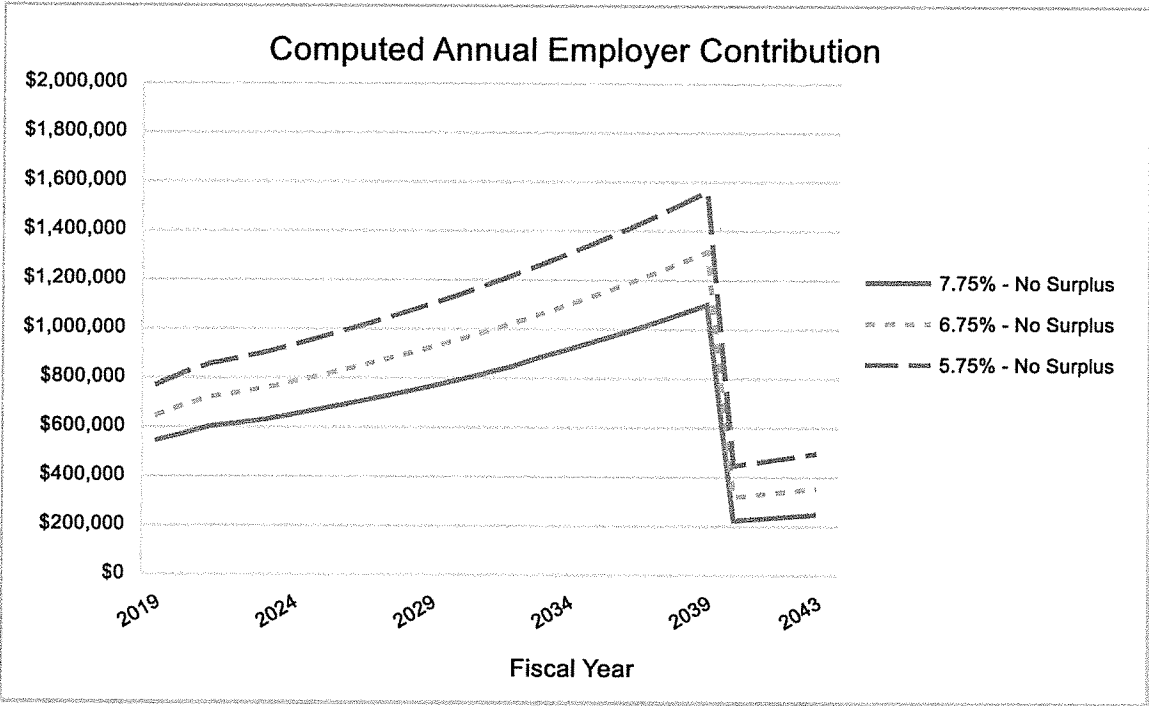
¹ Represents both the interest rate for discounting liabilities and the future investment return assumption on the Market Value of assets.

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



Notes:

All projected funded percentages are shown with no phase-in.
 Assumes assets from Surplus divisions will not be used to lower employer contributions during the projection period.



Notes:

All projected contributions are shown with no phase-in.
 Projected employer contributions do not reflect the use of any assets from the Surplus divisions.

Employer Contribution Details For the Fiscal Year Beginning January 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	11.37%	4.00%	-	-	-	-	28.39%	27.20%	
10 - General after 10/1	8.19%	4.00%	4.19%	-1.27%	2.92%	2.89%	28.39%	27.20%	0.86%
11 - Non-Union employee	13.50%	4.00%	9.50%	25.63%	35.13%	33.65%			0.85%
Estimated Monthly Contribution³									
01 - General			\$ 5,933	\$ 23,683	\$ 29,616	\$ 28,354			
10 - General after 10/1			1,112	(337)	775	767			
11 - Non-Union employee			4,051	10,929	14,980	14,348			
Total Municipality			\$ 11,096	\$ 34,275	\$ 45,371	\$ 43,469			
Estimated Annual Contribution³			\$ 133,152	\$ 411,300	\$ 544,452	\$ 521,628			

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 January 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, linked to Division 10

	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):	55/25	55/25
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	4%	3.50%
Act 88:	Yes (Adopted 11/23/1970)	Yes (Adopted 11/23/1970)

10 - General after 10/16/2012: Open Division, linked to Division 01

	2017 Valuation	2016 Valuation
Benefit Multiplier:	2.00% Multiplier (no max)	2.00% Multiplier (no max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	4%	3.50%
Act 88:	Yes (Adopted 11/23/1970)	Yes (Adopted 11/23/1970)

11 - Non-Union employees: Open Division

	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):	55/25	55/25
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	4%	3.50%
Act 88:	Yes (Adopted 11/23/1970)	Yes (Adopted 11/23/1970)

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	19	\$ 971,424	20	\$ 903,489	49.4	16.3	16.3
Vested Former Employees	4	53,487	3	25,010	50.7	14.4	14.4
Retirees and Beneficiaries	36	557,801	36	557,801	74.6		
10 - General after 10/16/							
Active Employees	5	\$ 221,976	5	\$ 216,756	32.6	2.4	2.4
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
11 - Non-Union employees							
Active Employees	8	\$ 475,366	8	\$ 456,246	51.1	12.3	14.5
Vested Former Employees	2	38,615	2	38,615	53.6	14.0	15.4
Retirees and Beneficiaries	13	234,384	13	234,384	69.9		
Total Municipality							
Active Employees	32	\$ 1,668,766	33	\$ 1,576,491	47.2	13.1	13.7
Vested Former Employees	6	92,102	5	63,625	51.7	14.3	14.7
Retirees and Beneficiaries	<u>49</u>	<u>792,185</u>	<u>49</u>	<u>792,185</u>	73.4		
Total Participants	87		87				

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	\$ 4,468,270	\$ 92,069	\$ 4,244,997	\$ 57,290
10 - General after 10/16/2012	86,802	13,307	67,117	7,754
11 - Non-Union employees	2,063,860	164,516	1,873,095	82,366
S1 - Surplus div unassoc.	264,699	0		
Municipality Total	\$ 6,883,631	\$ 269,892	\$ 6,185,209	\$ 147,410
Combined Assets	\$7,153,523		\$6,332,619	

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.

Assets in the Surplus division(s) are employer assets that have been reserved to be used by the employer at some point in the future to stabilize increases in contributions. These assets are not used in calculating the employer contribution for the fiscal year beginning January 1, 2019.

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	\$ 224,003		\$ 0	\$ 510,079	\$ (427,009)	\$ 0	\$ 0	\$ 6,588,882
2008	213,426		0	271,778	(480,497)	0	0	6,593,589
2009	248,246		0	237,106	(537,178)	0	0	6,541,763
2010	258,856		0	276,166	(657,354)	0	0	6,419,431
2011	314,852	\$ 70,000	0	288,406	(712,669)	0	0	6,380,020
2012	318,244	120,000	1,167	264,987	(715,449)	0	0	6,368,969
2013	297,129	123,077	15,965	357,620	(716,526)	0	0	6,446,234
2014	327,449	129,967	19,228	360,894	(716,135)	0	0	6,567,637
2015	377,216	121,576	20,794	326,468	(738,956)	0	56,340	6,731,075
2016	388,482	120,000	39,016	334,583	(792,324)	0	0	6,820,832
2017	419,002	248,661	57,569	418,292	(792,185)	(2,007)	64,344	7,234,508

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	\$ 3,224,343	\$ 88,080	2.7%	\$ 3,136,263
Vested Former Employees	326,196	3,989	1.2%	322,207
Retirees And Beneficiaries	5,057,637	4,519,898	89.4%	537,739
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 8,608,176	\$ 4,611,967	53.6%	\$ 3,996,209
10 - General after 10/16/2012				
Active Employees	\$ 58,856	\$ 101,242	172.0%	\$ (42,386)
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	\$ 58,856	\$ 101,242	172.0%	\$ (42,386)
11 - Non-Union employees				
Active Employees	\$ 1,366,590	\$ 161,508	11.8%	\$ 1,205,082
Vested Former Employees	274,227	2,764	1.0%	271,463
Retirees And Beneficiaries	2,464,285	2,089,088	84.8%	375,197
Pending Refunds	<u>243</u>	<u>243</u>	100.0%	<u>0</u>
Total	\$ 4,105,345	\$ 2,253,603	54.9%	\$ 1,851,742
S1 - Surplus div unassoc.				
Total	\$ 0	\$ 267,696		\$ (267,696)
Total Municipality				
Active Employees	\$ 4,649,789	\$ 350,830	7.5%	\$ 4,298,959
Vested Former Employees	600,423	6,753	1.1%	593,670
Retirees and Beneficiaries	7,521,922	6,608,986	87.9%	912,936
Pending Refunds	243	243	100.0%	0
Surplus Assets	<u>0</u>	<u>267,696</u>		<u>(267,696)</u>
Total	\$ 12,772,377	\$ 7,234,508	56.6%	\$ 5,537,869
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 10, 01				
Active Employees	\$ 3,283,199	\$ 189,322	5.8%	\$ 3,093,877
Vested Former Employees	326,196	3,989	1.2%	322,207
Retirees and Beneficiaries	5,057,637	4,519,898	89.4%	537,739
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 8,667,032	\$ 4,713,209	54.4%	\$ 3,953,823

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	\$ 6,783,459	\$ 5,493,694	81%	\$ 1,289,765
2004	7,209,588	5,706,795	79%	1,502,793
2005	7,422,771	5,931,141	80%	1,491,630
2006	7,649,844	6,281,809	82%	1,368,035
2007	8,539,999	6,588,882	77%	1,951,117
2008	8,917,923	6,593,589	74%	2,324,334
2009	9,253,348	6,541,763	71%	2,711,585
2010	9,550,340	6,419,431	67%	3,130,909
2011	10,032,901	6,380,020	64%	3,652,881
2012	10,240,166	6,368,969	62%	3,871,197
2013	10,612,828	6,446,234	61%	4,166,594
2014	10,689,921	6,567,637	61%	4,122,284
2015	11,530,201	6,731,075	58%	4,799,126
2016	12,227,243	6,820,832	56%	5,406,411
2017	12,772,377	7,234,508	57%	5,537,869

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	\$ 8,539,999	\$ 6,588,882	77%	\$ 1,951,117
2008	8,917,923	6,593,589	74%	2,324,334
2009	9,253,348	6,541,763	71%	2,711,585
2010	9,550,340	6,419,431	67%	3,130,909
2011	10,032,901	6,380,020	64%	3,652,881
2012	10,240,365	6,368,699	62%	3,871,666
2013	10,609,990	6,442,511	61%	4,167,479
2014	7,245,030	4,540,879	63%	2,704,151
2015	7,761,452	4,632,585	60%	3,128,867
2016	8,276,848	4,633,972	56%	3,642,876
2017	8,608,176	4,611,967	54%	3,996,209

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	38	\$ 1,402,311	17.03%	0.00%
2008	35	1,360,494	18.85%	0.00%
2009	34	1,365,098	20.59%	0.00%
2010	31	1,198,321	24.05%	0.00%
2011	31	1,285,741	25.61%	0.00%
2012	30	1,336,430	\$ 29,156	1.00%
2013	29	1,363,276	\$ 31,164	1.25%
2014	22	975,961	\$ 20,270	1.50%
2015	19	781,328	\$ 23,108	2.50%
2016	20	903,489	\$ 26,821	3.50%
2017	19	971,424	\$ 29,616	4.00%

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

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

Note: The contributions shown in Table 9 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 30 for past benefit provision changes.

Division 10 - General after 10/16/2012

Table 8-10: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2012	\$ (199)	\$ 270	0%	\$ (469)
2013	2,838	3,723	131%	(885)
2014	9,066	7,490	83%	1,576
2015	17,278	17,479	101%	(201)
2016	40,930	80,643	197%	(39,713)
2017	58,856	101,242	172%	(42,386)

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		
2012	1	\$ 33,158	6.32%	1.00%
2013	1	36,508	5.97%	1.25%
2014	2	70,930	5.94%	1.50%
2015	4	136,814	5.12%	2.50%
2016	5	216,756	3.34%	3.50%
2017	5	221,976	2.92%	4.00%

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

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

Note: The contributions shown in Table 9 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 30 for past benefit provision changes.

Division 11 - Non-Union employees

Table 8-11: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	\$ 3,435,825	\$ 2,019,268	59%	\$ 1,416,557
2015	3,751,471	2,081,011	56%	1,670,460
2016	3,909,465	2,106,217	54%	1,803,248
2017	4,105,345	2,253,603	55%	1,851,742

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

Table 9-11: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2014	7	\$ 362,782	32.73%	1.50%
2015	6	338,165	41.03%	2.50%
2016	8	456,246	35.22%	3.50%
2017	8	475,366	35.13%	4.00%

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

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

Note: The contributions shown in Table 9 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 30 for past benefit provision changes.

Division S1 - Surplus div unassoc.

Table 8-S1: Comparative Schedule

Valuation Date December 31	Valuation Assets
2017	\$ 267,696

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 1/1/2019		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Initial	12/31/2015	\$ 3,128,867	23	\$ 3,237,516	21	\$ 227,544
(Gain)/Loss	12/31/2016	464,505	22	503,859	21	35,412
Plan Amendments	12/31/2016	(10,089)	22	(10,941)	21	(768)
(Gain)/Loss	12/31/2017	294,593	21	317,424	21	22,308
Plan Amendments	12/31/2017	(3,999)	21	(4,309)	21	(300)
Total				\$ 4,043,549		\$ 284,196

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 - General after 10/16/2012

Table 10-10: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 1/1/2019		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Initial	12/31/2015	\$ (201)	10	\$ (1,331)	10	\$ (168)
(Gain)/Loss	12/31/2016	(36,595)	15	(38,849)	14	(3,636)
Plan Amendments	12/31/2016	(1,659)	10	(1,702)	9	(228)
(Gain)/Loss	12/31/2017	1,337	15	1,441	15	132
Plan Amendments	12/31/2017	(1,107)	10	(1,193)	10	(144)
Total				\$ (41,634)		\$ (4,044)

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 11 - Non-Union employees

Table 10-11: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 1/1/2019		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Initial	12/31/2015	\$ 1,670,460	23	\$ 1,742,704	21	\$ 122,484
(Gain)/Loss	12/31/2016	87,581	22	95,003	21	6,672
Plan Amendments	12/31/2016	(628)	22	(680)	21	(48)
(Gain)/Loss	12/31/2017	27,495	21	29,626	21	2,088
Plan Amendments	12/31/2017	(560)	21	(603)	21	(48)
Total				\$ 1,866,050		\$ 131,148

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:	49
Inactive employees entitled to but not yet receiving benefits:	6
Active employees:	<u>32</u>
	87

Covered employee payroll: (Needed for Required Supplementary Information)	\$	1,668,766
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Average expected remaining service lives of all employees (active and inactive):		3
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Total Pension Liability as of 12/31/2016 measurement date:	\$	11,925,335
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Total Pension Liability as of 12/31/2017 measurement date:	\$	12,457,966
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Service Cost for the year ending on the 12/31/2017 measurement date:	\$	180,150
--	----	---------

Change in the Total Pension Liability due to:

- Benefit changes ¹ :	\$	(5,788)
- Differences between expected and actual experience ² :	\$	222,997
- 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:	\$ 1,336,649	-	\$ (1,142,183)

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.

GASB 68 Information

This page is for those municipalities who need to “roll-forward” their total pension liability due to the timing of completion of the actuarial valuation in relation to their fiscal year-end.

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):	12/31/2018

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

Inactive employees or beneficiaries currently receiving benefits:	49
Inactive employees entitled to but not yet receiving benefits:	6
Active employees:	<u>32</u>
	87

Covered employee payroll: (Needed for Required Supplementary Information)	\$ 1,668,766
Average expected remaining service lives of all employees (active and inactive):	3

Total Pension Liability as of 12/31/2017 measurement date:	\$ 12,227,596
Total Pension Liability as of 12/31/2018 measurement date:	\$ 12,807,573
Service Cost for the year ending on the 12/31/2018 measurement date:	\$ 185,530
Change in the Total Pension Liability due to:	
- Benefit changes ¹ :	\$ (4,710)
- Differences between expected and actual experience ² :	\$ 255,051
- 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 12/31/2018:	\$ 1,355,596	-	\$ (1,159,871)

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

1/1/2018	Participant Contribution Rate 4%
1/1/2017	Participant Contribution Rate 3.5%
12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2016	Participant Contribution Rate 2.5%
6/1/2014	Member Contribution Rate 1.50%
7/1/2013	Member Contribution Rate 1.25%
12/1/2012	Member Contribution Rate 1.00%
2/1/2007	Benefit B-4 (80% max)
1/1/2004	Benefit F55 (With 25 Years of Service)
4/1/2002	Benefit B-3 (80% max)
1/1/2000	Benefit B-2
6/7/1999	Day of work defined as 8 Hours a Day for All employees.
4/1/1990	Benefit F55 (With 30 Years of Service)
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
1/1/1986	Benefit B-1
2/1/1981	Member Contribution Rate 0.00%
5/21/1975	Exclude Temporary Employees
2/1/1971	Benefit C-1 (Old)
11/23/1970	Covered by Act 88
7/1/1959	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/1959	10 Year Vesting
7/1/1959	Benefit C (Old)
7/1/1959	Member Contribution Rate 3.00% Under \$4,200.00 - Then 5.00%
7/1/1959	Fiscal Month - January
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

10 - General after 10/16/2012

1/1/2018	Participant Contribution Rate 4%
1/1/2017	Participant Contribution Rate 3.5%
12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2016	Participant Contribution Rate 2.5%
6/1/2014	Member Contribution Rate 1.50%
7/1/2013	Member Contribution Rate 1.25%
12/1/2012	Member Contribution Rate 1.00%
11/1/2012	Day of work defined as 8 Hours a Day for All employees.
11/1/2012	Benefit FAC-5 (5 Year Final Average Compensation)
11/1/2012	Non Standard Compensation Definition
11/1/2012	10 Year Vesting
11/1/2012	Benefit B-2

10 - General after 10/16/2012

11/1/2012	Member Contribution Rate 0.00%
11/23/1970	Covered by Act 88
7/1/1959	Fiscal Month - January
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

11 - Non-Union employees

1/1/2018	Participant Contribution Rate 4%
1/1/2017	Participant Contribution Rate 3.5%
12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2016	Participant Contribution Rate 2.5%
7/1/2014	Day of work defined as 8 Hours a Day for All employees.
7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/2014	Exclude Temporary Employees requiring less than 12 months
7/1/2014	10 Year Vesting
7/1/2014	Benefit B-4 (80% max)
7/1/2014	Benefit F55 (With 25 Years of Service)
7/1/2014	Member Contribution Rate 1.50%
11/23/1970	Covered by Act 88
7/1/1959	Fiscal Month - January
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

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	3.00%

Withdrawal Rate Scaling Factor

Division	Withdrawal Rate Scaling Factor
All Divisions	100%

Miscellaneous and Technical Assumptions

Loads – None.

August 13, 2018

Otsego CRC (6901)

Request Summary

Our understanding of the purpose for the employer's request is to estimate the impact on future funding of the plan with an additional annual contribution of \$620,000 to surplus in years 2018, 2019 and 2020 followed by \$120,000 annually to surplus until 100% funding is obtained.

Otsego CRC (6901) - Total of All Divisions							
Valuation Year Ending 12/31	Fiscal Year Beginning 1/1	Actuarial Accrued Liability	Valuation Assets (Including Surplus)	Funded Percentage	Computed Annual Employer Contribution	Additional Annual Employer Contribution	Total Annual Employer Contribution
7.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return							
Additional Contributions to Surplus Until 100% Funding (With Phase-in); Reflect an additional \$620,000 in 2018 (Not Displayed)							
2017	2019	\$ 12,772,377	\$ 7,234,508	57%	\$ 521,628	\$ 620,000	\$ 1,141,628
2018	2020	13,128,881	8,070,314	61%	563,064	620,000	1,183,064
2019	2021	13,489,297	8,943,989	66%	606,516	120,000	726,516
2020	2022	13,854,202	10,128,176	73%	619,536	120,000	739,536
2021	2023	14,229,504	10,895,045	77%	633,636	120,000	753,636
2022	2024	14,604,002	11,630,678	80%	654,660	120,000	774,660
2023	2025	14,946,393	12,374,261	83%	676,560	120,000	796,560
2024	2026	15,283,651	13,162,955	86%	699,060	120,000	819,060
2025	2027	15,587,019	13,972,625	90%	722,208	120,000	842,208
2026	2028	15,868,612	14,820,087	93%	746,544	-	746,544
2027	2029	16,137,551	15,719,823	97%	161,664	-	161,664
2028	2030	16,384,034	16,544,037	101%	164,940	-	164,940

Note: the employer normal cost was shown as the employer contribution in fiscal years 2029 and 2030 (after 100% funding was reached) for illustrative purposes. Future actual required contributions will depend on when and how surplus assets are ultimately utilized.

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 (other than the proposed change(s)), and demographic data underlying the December 31, 2017 Annual Actuarial Valuation. The results are based on the same actuarial assumptions and methods as in the December 31, 2017 Annual Actuarial Valuation.
- 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

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 for any currently active or prior employees.

Becky Jerry

From: LocalRetirementReporting <LocalRetirementReporting@michigan.gov>
Sent: Friday, December 21, 2018 12:09 PM
To: Becky Jerry
Subject: Automatic Reply: Local Retirement Reporting

Thank you for contacting the Michigan Department of Treasury regarding local retirement reporting and Public Act 202, the Protecting Local Government Retirement and Benefits Act. If you have attached your Retirement System Annual Report (Form 5572), Waiver Application(s) (Form 5583/Form 5584), Corrective Action Plan(s) (Form 5597/Form 5598), or other correspondence, this email serves as confirmation and acknowledgment that we have received your form(s). No additional confirmation will be sent to your local unit.

If you are simply submitting your form(s), we will contact you if any further information is required.

If you are contacting us with an inquiry, it will be forwarded to our team for review. Once our team has reviewed your inquiry, a response will be developed and emailed to you. Our goal is to respond within three business days.

If you have any questions regarding your status, please visit Michigan.gov/LocalRetirementReporting for our summary report, step-by-step instructions, and helpful FAQs, or email our office at LocalRetirementReporting@michigan.gov. If you would prefer to speak with a member of our team, please schedule a phone call appointment using the [Local Retirement Calendar](#). A team member will contact you via the phone number you provide at your scheduled time.

Sincerely,

Michigan Department of Treasury
Local Retirement Reporting Team