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: Ypsilanti Community Utilities Authority	Six-Digit Muni Code: 817514						
Defined Benefit Pension System Name: Employees Retirement System (8106)							
Contact Name (Administrative Officer): Kevin Welch							
Title if not Administrative Officer: Human Resource Director	r						
Email: kwelch@ycua.org	Telephone:_734 544 7118						

2. GENERAL INFORMATION

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

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

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

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

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

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

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

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

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

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

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

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

3. DESCRIPTIONS OF PRIOR ACTIONS

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

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

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

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

Category of Prior Actions:

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

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

See attachment 7a for prior system design changes.

In addition, on page 12 of the December 31, 2017 attached actuarial supplemental valuation, it shows our funded ratio will be 61% by fiscal year 2021 (based on 7.75% return and no-5-year phase-in approach). See attachment 1a

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

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

See attachment 8a

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**.

Our Fiscal Year ending August 31, 2018 will show we are currently at a funded percentage of 59.758%. Total pension liability is \$53,912,136 (an increase from the prior year of just over \$1 million), the net position is \$32,216,841 (an increase of just over \$3 million) and the NPL is \$21,695,295 (for a decrease of about \$2 million).

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?).
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. N/A
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.
We will continue contributing an extra \$1,000,000 towards our Pension liability. We also will maintain the contributions at the "No Phase in" number for the foreseeable future. See attachment 10a
■ 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 .
See attachment 9a

5.	CONFIRMATION	OF FUNDING	
	ease check the appl		
to	the corrective action make, at a minimum, a or long-term budget fo	the annual required contri	for (insert local unit name) YCUA ibution payment for the defined benefit pension system according to
	Yes No If No, Explain The	current ADC/Governmental fu	und revenues is 4/7% as reported on PA 202 form 5572 2017 Pension Report.
7	DOCUMENTATION	ON ATTACHED TO T	THIS CORRECTIVE A CTION BY AN
Do cor stat bel	cumentation should b rective action plan th cus. Please check all d ow:	pe attached as a .pdf to thin at would be implemented ocuments that are include	s Corrective Action Plan. The documentation should detail the to adequately address the local unit of government's underfunded as part of this plan and attach in successive order as provided
tha exa	n one document in a	specific category that need nitting two supplemental va	s please use the naming convention shown below. If there is more ds to be submitted, include a, b, or c for each document. For aluations, you would name the first document "Attachment 2a" and
Na	ming Convention		Type of Document
X	Attachment – I		This Corrective Action Plan Form (Required)
\boxtimes	Attachment – Ia		Documentation from the governing body approving this Corrective Action Plan (Required)
\boxtimes	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)
	Attachment – 3a	Not Applicable	Documentation of additional payments in past years that is not reflected in your audited financial statements (e.g. enacted budget, system provided information).
	Attachment – 4a	Not Applicable	Documentation of commitment to additional payments in future years (e.g. resolution, ordinance)
	Attachment – 5a	Not Applicable	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
	Attachment –6a	See Below	Other documentation not categorized above

Please confirm that each of the four corrective action this document. Specific detail on corrective action pla <u>Development: Best Practices and Strategies</u> document	ASTRACTOR APPROVATION CONTRACTOR ASSESSMENT OF THE PROPERTY OF
Corrective Action Plan Criteria	Description
☑ Underfunded Status	Is there a description and adequate supporting documentation of how and when the retirement system will reach the 60% funded ratio? Or, if your local unit is a city, village, township, or county, how and when the ARC of all pension systems will be less than 10 percent of governmental fund revenues?
□ Reasonable Timeframe	Do the corrective actions address the underfunded status in a reasonable timeframe (see CAP criteria issued by the Board)?
■ Legal and Feasible	Does the corrective action plan follow all applicable laws? Are all required administrative certifications and governing body approvals included? Are the actions listed feasible?
★ Affordability	Do the corrective action(s) listed allow the local unit to make the annual required contribution payment for the pension system now and into the future without additional changes to this corrective action plan?
8. LOCAL UNIT OF GOVERNMENT'S ADM ACTION PLAN	INISTRATIVE OFFICER APPROVAL OF CORRECTIVE
I Jeffery Castro, as the govern Executive Director (Ex: City/Tov	nment's administrative officer (enter title) vnship Manager, Executive director, and Chief Executive Officer, blement the prospective actions contained in this Corrective
I confirm to the best of my knowledge that because occur:	of the changes listed above, one of the following statements will
The Employees Retirement System (8106) funded status of at least 60% by Fiscal Year 2021 listed in section 6.	(Insert Retirement Pension System Name) will achieve a as demonstrated by required supporting documentation
OR, if the local unit is a city, village, township,	or county:
The ARC for all of the defined benefit pension retunit name) will be less than 10% of the local unit Year as demonstrated by required s	tirement systems of (Insert local it of government's annual governmental fund revenues by Fiscal upporting documentation listed in section 6.
Signature 74 at	Date

7. CORRECTIVE ACTION PLAN CRITERIA

Attachment 1a

YCUA RESOLUTION NO. 18-8 APPROVING PUBLIC ACT 202 CORRECTIVE ACTION PLAN: YCUA DEFINED BENEFIT PENSION RETIREMENT SYSTEM

Minutes of a meeting of the Board of Commissioners of the Ypsilanti Community Utilities Authority, County of Washtenaw, Michigan, held in the Authority, on the 28th day of November 2018 at 4:00 o'clock p.m., prevailing Eastern Time.

(T) (T)		
prevail	ing Eastern Time.	,
PRESENT:	Commissioners	Brenda L. Stumbo, Michael Bodary, Jon R. Ichesco, Larry J. Doe,
A Part of the Control		and Keith P. Jason.
ABSENT:	Commissioners	None.
The fo	ollowing preamble and	resolution were offered by Commissioner Ichesco and supported by
Commissioner	Bodary.	
WHER	EAS, the Ypsilanti Con	mmunity Utilities Authority ("YCUA") is required to submit a Defined
Benefit Pensio	n Retirement Corrective	e Action Plan (form 5598) to the Michigan Department of Treasury, as
required by Pul	blic Act 202 of 2017, and	i
WHER	EAS, YCUA requests	authorization from the YCUA Board of Commissioners for YCUA's
Executive Dire	ector to sign the Plan and	l for YCUA's Human Resources Director to submit the completed Plan to
the Michigan S	tate Treasurer no later th	an January 1, 2019.
NOW,	THEREFORE, BE IT R	ESOLVED THAT the Public Act 202 Corrective Action Plan for YCUA's
Defined Benef	it Pension Retirement S	ystem and the request for YCUA's Director to sign the plan (form 5598)
and for YCUA	's Human Resources Di	rector to submit the completed plan and attachments to the Michigan State
Treasurer no la	ater than January 1, 201	9 are hereby approved by the Board of Commissioners of the Ypsilanti
Community Ut	ilities Authority.	
AYES:	Commissioners	Brenda L. Stumbo, Michael Bodary, Jon R. Ichesco, Larry J. Doe,
		and Keith P. Jason.
NAYS:	Commissioners	None.
RESOLUTION	V DECLARED ADOPTI	ED. M. Dolwer
		JON R. ICHESCO, Secretary - Treasurer

Attachment 1 a

I hereby certify that the attached is a true and complete copy of a resolution adopted by the Board of Commissioners of the Ypsilanti Community Utilities Authority, County of Washtenaw, State of Michigan, at a meeting held on the 28th day of November 2018 and that public notice of said meeting was given pursuant to and in full compliance with Act No. 267, Public Acts of Michigan, 1976 and that minutes of the meeting were kept and will be or have been made available as required by said Act.

ON R. ICHESCO, Secretary - Treasure



MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN

ANNUAL ACTUARIAL VALUATION REPORT DECEMBER 31, 2017 YPSILANTI CMNTY UTIL AUTH (8106)



Spring, 2018

Ypsilanti Cmnty Util Auth

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 Ypsilanti Cmnty Util Auth (8106) 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. Ypsilanti Cmnty Util Auth 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 September 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	16
Participant Summary Table 3	18
Reported Assets (Market Value) Table 4	19
Flow of Valuation Assets Table 5	20
Actuarial Accrued Liabilities and Valuation Assets Table 6	21
Actuarial Accrued Liabilities - Comparative Schedule Table 7	23
Division-Based Comparative Schedules Tables 8 and 9	24
Division-Based Layered Amortization Schedule Table 10	29
GASB 68 Information	34
Benefit Provision History	35
Plan Provisions, Actuarial Assumptions, and Actuarial Funding Method	38

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	59%	58%

^{*} 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								
	No Phase-in 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 12/3		/31/2016	
		Septembe	Septembe	Septembe	Sep	tember 1,	Sep	tember 1,	ember 1, September 1, Sep		September 1,	
Fiscal Year Beginning:	r 1, 2019	r 1, 2019	r 1, 2018	r 1, 2018		2019 2019 2018		2018		2018		
Division												
01 - AFSCME	-	-	-	-	\$	69,627	\$	73,123	\$	68,751	\$	73,995
11 - Mgmt	-	-	-	-		39,423		41,145	İ	39,442		42,025
12 - Tmstrs	-	-	-	-		49,888		51,912		48,054		51,090
13 - AFSCME ee's on/after 9	4.47%	4.47%	4.69%	4.69%		6,652		6,652	l	5,990		5,990
14 - Non-Union contract aft	7.32%	7.32%	7.58%	7.58%		1,795		1,795		1,629		1,629
Municipality Total					\$	167,385	\$	174,627	\$	163,866	\$	174,729

Employee contribution rates reflected in the valuations are shown below:

	Employee Cor	tribution Rate
Valuation Date:	12/31/2017	12/31/2016
Division	-	
01 - AFSCME	3.00%	3.00%
11 - Mgmt	3.00%	3.00%
12 - Tmstrs	4.00%	4.00%
13 - AFSCME ee's on/after 9	3.00%	3.00%
14 - Non-Union contract aft	3.00%	3.00%

The employer may contribute more than the minimum required contributions, as these additional contributions will earn investment income and may result in lower future contribution requirements. Employers making contributions in excess of the minimum requirements may elect to apply the excess contribution immediately to a particular division, or segregate the excess into one or more of what

MERS calls "Surplus" divisions. An election in the first case would immediately reduce any unfunded accrued liability and lower the amortization payments throughout the remaining amortization period. An election to set up Surplus divisions would not immediately lower future contributions, however the assets from the Surplus divisions could be transferred to an unfunded division in the future to reduce the unfunded liability in future years, or to be used to pay all or a portion of the minimum required contribution in a future year. For purposes of this report, the assets in any Surplus division have been included in the municipality's total assets, unfunded accrued liability and funded status, however, these assets are not used in calculating the minimum required contribution.

MERS strongly encourages employers to contribute more than the minimum contribution shown above.

Assuming that experience of the plan meets actuarial assumptions:

 To accelerate to a 100% funding ratio in 10 years, estimated monthly employer contributions for the fiscal year beginning in 2019 for the entire employer would be \$274,223, instead of \$174,627.

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.
 - 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.
 - 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 <u>Appendix</u>, or visit our <u>Defined Benefit resource page</u> 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 58% (instead of 59%); and
- Your total employer contribution requirement for the fiscal year starting September 1, 2019 would be \$2,124,576 (instead of \$2,095,524).

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 A	Annu	al Returns		Valuation ssumption	Higher Returns			
12/31/2017 Valuation Results		5.75%		6.75%		7.75%	8.75%			
Accrued Liability	\$	68,522,991	\$	61,344,395	\$	55,279,904	\$	50,119,797		
Valuation Assets ¹	\$	32,581,568	\$	32,581,568	\$	32,581,568	\$	32,581,568		
Unfunded Accrued Liability	\$	35,941,423	\$	28,762,827	\$	22,698,336	\$	17,538,229		
Funded Ratio		48%		53%		59%		65%		
Monthly Normal Cost	\$	75,687	\$	55,566	\$	40,239	\$	28,471		
Monthly Amortization Payment	\$	176,307	\$	154,465	\$	134,388	\$	111,239		
Total Employer Contribution ²	\$	251,994	\$	210,031	\$	174,627	\$	139,710		

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

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

Projection Scenarios

The next two pages show projections of the plan's funded ratio and computed employer contributions under the actuarial assumptions used in the valuation and alternate assumed long-term investment return assumption scenarios. All four projections take into account the past investment losses that will continue to affect the actuarial rate of return in the short term. Under the 7.75% scenarios in the table on the next page, two sets of projections are shown:

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

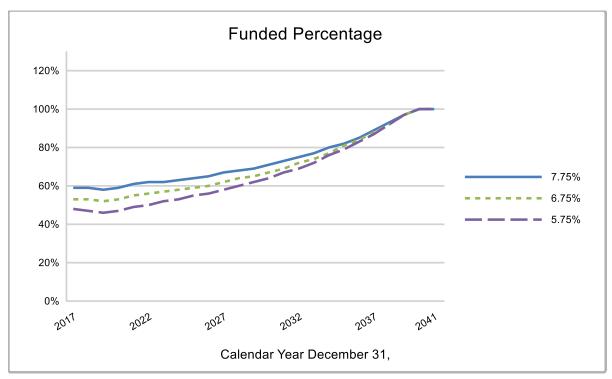
The 7.75% scenarios provide an estimate of computed employer contributions based on current actuarial assumptions, and a projected 7.75% market return. The other two scenarios may be useful if the municipality chooses to budget more conservatively, and make contributions in addition to the minimum requirements.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

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

Valuation	Fiscal Year						Co	mputed Annual		
Year Ending	Beginning	Actu	arial Accrued			Funded	Employer			
12/31	9/1		Liability	Valuation Assets ²		Percentage		Contribution		
7.75% ¹										
WITH 5-Y	EAR PHASE-	İN								
2017	2019	\$	55,279,904	\$	32,581,568	59%	\$	2,008,620		
2018	2020		56,700,000		33,300,000	59%		2,190,000		
2019	2021		58,100,000		33,800,000	58%		2,370,000		
2020	2022		59,400,000		35,200,000	59%		2,410,000		
2021	2023		60,600,000		36,600,000	61%		2,460,000		
2022	2024		61,700,000		37,800,000	61%		2,540,000		
	AR PHASE-IN	۱ ۴	FF 070 004	φ.	20 504 500	500/	Φ.	0.005.504		
2017	2019	\$	55,279,904	\$	32,581,568	59%	\$	2,095,524		
2018	2020		56,700,000		33,300,000	59%		2,230,000		
2019	2021		58,100,000		33,800,000	58%		2,360,000		
2020	2022		59,400,000		35,300,000	59%		2,400,000		
2021	2023		60,600,000		36,800,000	61%		2,450,000		
2022	2024		61,700,000		38,000,000	62%		2,530,000		
a ==a,1										
6.75% ¹										
1	AR PHASE-IN	۱ ۵	04 044 005	_	00 504 500	500/	•	0.500.070		
2017	2019	\$	61,344,395	\$	32,581,568	53%	\$	2,520,372		
2018	2020		62,900,000		33,000,000	53%		2,730,000		
2019	2021		64,300,000		33,300,000	52%		2,870,000		
2020	2022		65,600,000		34,900,000	53%		2,930,000		
2021	2023		66,900,000		36,500,000	55%		3,000,000		
2022	2024		68,000,000		37,800,000	56%		3,090,000		
5.75% ¹	 									
1 110012	AR PHASE-IN	۱ ۴	00 500 004	_	00 504 500	400/	Φ.	0.000.000		
2017	2019	\$	68,522,991	\$	32,581,568	48%	\$	3,023,928		
2018	2020		70,100,000		32,700,000	47%		3,280,000		
2019	2021		71,600,000		32,800,000	46%		3,430,000		
2020	2022		73,000,000		34,600,000	47%		3,510,000		
2021	2023		74,200,000		36,400,000	49%		3,590,000		
2022	2024		75,400,000		38,000,000	50%		3,710,000		

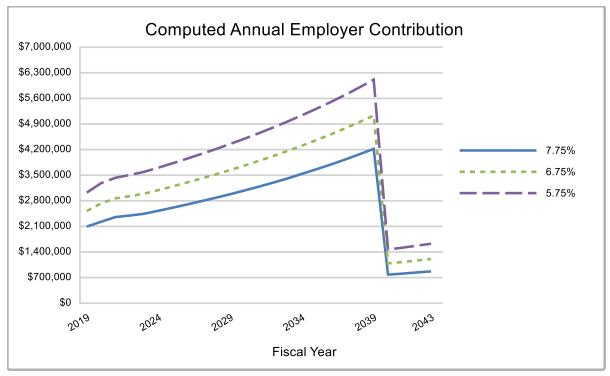
¹ Represents both the interest rate for discounting liabilities and the future investment return assumption on the Market Value of assets.

 $^{^{\}rm 2}$ Valuation Assets do not include assets from Surplus divisions, if any.



Notes:

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



Notes:

All projected contributions are shown with no phase-in.

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

Table 1

			Employer Contributions ¹			Computed			
Division	Total Normal Cost	Employee Contribut. Rate	Employer Normal Cost	Payment of the Unfunded Accrued Liability ⁴	Computed Employer Contribut. No Phase-In	Employer Contribut.	Blended ER Rate No Phase-In ⁵	Blended ER Rate With Phase-In ⁵	Employee Contribut. Conversion Factor ²
Percentage of Payroll									
01 - AFSCME	10.47%	3.00%	-	-	-	-	18.96%	18.13%	
11 - Mgmt	13.85%	3.00%	-	-	-	-	61.80%	59.32%	
12 - Tmstrs	11.00%	4.00%	-	-	-	-			
13 - AFSCME ee's on/aft	7.63%	3.00%	4.63%	-0.16%	4.47%	4.47%	18.96%	18.13%	0.85%
14 - Non-Union contract	10.51%	3.00%	7.51%	-0.19%	7.32%	7.32%	61.80%	59.32%	0.82%
Estimated Monthly Contribution ³									
01 - AFSCME			\$ 20,313	\$ 52,810	\$ 73,123	\$ 69,627			
11 - Mgmt			4,878	36,267	41,145	39,423			
12 - Tmstrs			6,312	45,600	51,912	49,888			
13 - AFSCME ee's on/aft			6,895	(243)	6,652	6,652			
14 - Non-Union contract			1,841	(46)	1,795	1,795			
Total Municipality			\$ 40,239	\$ 134,388	\$ 174,627	\$ 167,385			
Estimated Annual Contribution ³			\$ 482,868	\$ 1,612,656	\$ 2,095,524	\$ 2,008,620			

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 September 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

	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):	55/25	55/25
Early Retirement (Reduced):	50/25	50/25
, ,	55/15	55/15
Final Average Compensation:	3 years	3 years
Employee Contributions:	3%	3%
ct 88:	Yes (Adopted 5/22/2007)	Yes (Adopted 5/22/2007)

11 - Mgmt: Closed to new hires, linked to Division 14

	2017 Valuation	2016 Valuation
Benefit Multiplier:	2.00% Multiplier (no max)	2.00% Multiplier (no max)
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	55/25	55/25
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	3 years	3 years
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	3%	3%
Act 88:	Yes (Adopted 5/22/2007)	Yes (Adopted 5/22/2007)

12 - Tmstrs: Closed to new hires, linked to Division 15

	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):	55/25	55/25	
Early Retirement (Reduced):	50/25	50/25	
	55/15	55/15	
Final Average Compensation:	3 years	3 years	
Employee Contributions:	4%	4%	
Act 88:	Yes (Adopted 5/22/2007)	Yes (Adopted 5/22/2007)	

Table 2 (continued)

13 - AFSCME ee's on/after 9/1/2013: Open Division, linked to Division 01							
	2017 Valuation	2016 Valuation					
Benefit Multiplier:	1.50% Multiplier (no max)	1.50% Multiplier (no 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:	3 years	3 years					
Employee Contributions:	3%	3%					
Act 88:	Yes (Adopted 5/22/2007)	Yes (Adopted 5/22/2007)					

14 - Non-Union contract aft 1/1/14: Open Division, linked to Division 11						
	2017 Valuation	2016 Valuation				
Benefit Multiplier:	1.50% Multiplier (no max)	1.50% Multiplier (no max)				
Normal Retirement Age:	60	60				
Vesting:	6 years	6 years				
Early Retirement (Unreduced):	55/25	55/25				
Early Retirement (Reduced):	50/25	50/25				
	55/15	55/15				
Final Average Compensation:	3 years	3 years				
Employee Contributions:	3%	3%				
Act 88:	Yes (Adopted 5/22/2007)	Yes (Adopted 5/22/2007)				

Participant Summary

Table 3

	2017 Valuation 2016 Valuation			2017 Valuation				
Division	Number		Annual Payroll ¹	Number	Annual Payroll ¹	Average Age	Average Benefit Service ²	Average Eligibility Service ²
01 - AFSCME								
Active Employees	57	\$	3,398,839	63	\$ 3,726,579	48.0	17.1	17.5
Vested Former Employees	14		221,753	15	230,098	53.7	15.1	15.3
Retirees and Beneficiaries	76		1,683,428	73	1,585,144	66.6		
11 - Mgmt								
Active Employees	8	\$	676,554	8	\$ 667,692	52.5	20.4	21.1
Vested Former Employees	2		57,244	1	20,531	47.5	14.9	16.9
Retirees and Beneficiaries	15		689,661	15	675,670	70.2		
12 - Tmstrs								
Active Employees	16	\$	1,258,678	16	\$ 1,241,626	50.9	21.4	21.4
Vested Former Employees	0		0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	28		921,058	28	921,058	70.9		
13 - AFSCME ee's on/after								
Active Employees	25	\$	1,178,388	19	\$ 909,414	34.8	2.0	2.1
Vested Former Employees	0		0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0		0	0	0	0.0		
14 - Non-Union contract a								
Active Employees	1	\$	79,082	1	\$ 73,520	61.2	1.6	1.6
Vested Former Employees	0		0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0		0	0	0	0.0		
Total Municipality								
Active Employees	107	\$	6,591,541	107	\$ 6,618,831	45.8	14.3	14.6
Vested Former Employees	16		278,997	16	250,629	52.9	15.1	15.5
Retirees and Beneficiaries Total Participants	119 242		3,294,147	<u>116</u> 239	3,181,872	68.1		

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 $\underline{\text{Appendix}}$.

Reported Assets (Market Value)

Table 4

	2017 Va	luation	2016 Valuation			
	Employer and		Employer and			
Division	Retiree ¹	Employee ²	Retiree ¹	Employee ²		
01 - AFSCME	\$ 18,682,093	\$ 1,105,040	\$ 17,140,809	\$ 1,065,172		
11 - Mgmt	5,308,627	293,338	4,677,008	249,490		
12 - Tmstrs	6,032,915	498,278	5,406,109	446,929		
13 - AFSCME ee's on/after 9/1/2013	196,614	85,344	95,119	54,636		
14 - Non-Union contract aft 1/1/14	10,911	3,681	2,591	1,286		
Municipality Total	\$ 30,231,160	\$ 1,985,681	\$ 27,321,636	\$ 1,817,513		
Combined Assets	\$32,21	16,841	\$29,13	39,149		

¹ Reserve for Employer Contributions and Benefit Payments

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 <u>Appendix</u>.

² Reserve for Employee Contributions

Flow of Valuation Assets

Table 5

Year				Investment Income		Employee		Valuation
Ended	Employer C	ontributions	Employee	(Valuation	Benefit	Contribution Net		Asset
12/31	Required	Additional	Contributions	Assets)	Payments	Refunds	Transfers	Balance
2007	\$ 1,156,239		\$ 104,792	\$ 2,015,570	\$ (1,557,209)	\$ 0	\$ 0	\$ 26,567,938
2008	1,200,243		110,071	1,227,540	(1,641,635)	(8,141)	0	27,456,016
2009	1,149,177		139,352	1,218,951	(1,875,027)	(1,505)	4,467	28,091,431
2010	1,030,288		238,039	1,463,635	(2,007,098)	(390)	1,797	28,817,702
2011	1,080,801	\$ 0	229,871	1,442,820	(2,083,025)	0	0	29,488,169
2012	1,122,716	0	229,647	1,292,058	(2,290,529)	(3,472)	0	29,838,589
2013	1,170,214	0	224,811	1,714,132	(2,532,904)	(18,574)	0	30,396,268
2014	1,331,966	0	221,035	1,695,499	(2,772,550)	Ó	0	30,872,218
2015	1,443,195	471	214,851	1,475,938	(2,869,169)	(24,850)	0	31,112,654
2016	1,578,017	0	215,215	1,536,804	(3,056,262)	(797)	0	31,385,631
2017	1,743,105	595,580	213,872	1,875,063	(3,218,097)	(13,585)	(1)	32,581,568

Notes:

Transfers in and out are usually related to the transfer of participants between municipalities, and to 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	Acc	Actuarial crued Liability	Valu	uation Assets ¹	Percent Funded	(0	Unfunded Overfunded) Accrued Liabilities
01 - AFSCME							
Active Employees	\$	10,563,386	\$	1,654,126	15.7%	\$	8,909,260
Vested Former Employees		1,566,683		1,566,683	100.0%		0
Retirees And Beneficiaries	ĺ	16,776,325		16,776,325	100.0%		0
Pending Refunds	l	<u>14,009</u>		<u>14,009</u>	100.0%		<u>0</u>
Total	\$	28,920,403	\$	20,011,143	69.2%	\$	8,909,260
11 - Mgmt	İ						
Active Employees	\$	3,681,681	\$	232,119	6.3%	\$	3,449,562
Vested Former Employees	i	287,000		61,219	21.3%		225,781
Retirees And Beneficiaries	i	7,820,300		5,372,047	68.7%		2,448,253
Pending Refunds	i	<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	11,788,981	\$	5,665,385	48.1%	\$	6,123,596
12 - Tmstrs	1						
Active Employees	\$	5,537,025	\$	490,319	8.9%	\$	5,046,706
Vested Former Employees		0		0	0.0%		0
Retirees And Beneficiaries		8,758,752		6,106,855	69.7%		2,651,897
Pending Refunds	i	<u>7,959</u>		7,959	100.0%		<u>0</u>
Total	\$	14,303,736	\$	6,605,133	46.2%	\$	7,698,603
13 - AFSCME ee's on/after 9/1/2013							
Active Employees	\$	253,628	\$	281,399	110.9%	\$	(27,771)
Vested Former Employees		0		0	0.0%		Ó
Retirees And Beneficiaries	i	0		0	0.0%		0
Pending Refunds		<u>3,751</u>		<u>3,751</u>	100.0%		<u>0</u>
Total	\$	257,379	\$	285,150	110.8%	\$	(27,771)
14 - Non-Union contract aft 1/1/14		·		·			
Active Employees	\$	9,405	\$	14,757	156.9%	\$	(5,352)
Vested Former Employees		0		0	0.0%		Ó
Retirees And Beneficiaries	i	0		0	0.0%		0
Pending Refunds		<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	9,405	\$	14,757	156.9%	\$	(5,352)
Total Municipality	İ						
Active Employees	\$	20,045,125	\$	2,672,720	13.3%	\$	17,372,405
Vested Former Employees	ĺ	1,853,683		1,627,902	87.8%		225,781
Retirees and Beneficiaries		33,355,377		28,255,227	84.7%		5,100,150
Pending Refunds	ĺ	<u>25,719</u>		<u>25,719</u>	<u>100.0%</u>		<u>0</u>
Total	\$	55,279,904	\$	32,581,568	58.9%	\$	22,698,336

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.

Table 6 (continued)

Division	Aco	Actuarial	Valı	uation Assets ¹	Percent Funded	(0	Unfunded Overfunded) Accrued Liabilities
Linked Divisions 13, 01							
Active Employees	\$	10,817,014	\$	1,935,525	17.9%	\$	8,881,489
Vested Former Employees		1,566,683		1,566,683	100.0%		0
Retirees and Beneficiaries	İ	16,776,325		16,776,325	100.0%		0
Pending Refunds		<u>17,760</u>		<u>17,760</u>	100.0%		<u>0</u>
Total	\$	29,177,782	\$	20,296,293	69.6%	\$	8,881,489
Linked Divisions 14, 11							
Active Employees	\$	3,691,086	\$	246,876	6.7%	\$	3,444,210
Vested Former Employees	İ	287,000		61,219	21.3%		225,781
Retirees and Beneficiaries		7,820,300		5,372,047	68.7%		2,448,253
Pending Refunds		<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	11,798,386	\$	5,680,142	48.1%	\$	6,118,244

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	\$ 29,319,302	\$ 20,994,213	72%	\$ 8,325,089
2004	31,546,256	22,212,469	70%	9,333,787
2005	33,270,928	23,276,154	70%	9,994,774
2006	35,783,703	24,848,546	69%	10,935,157
2007	37,824,856	26,567,938	70%	11,256,918
2008	40,050,833	27,456,016	69%	12,594,817
2009	40,184,091	28,091,431	70%	12,092,660
2010	41,318,496	28,817,702	70%	12,500,794
2011	42,796,960	29,488,169	69%	13,308,791
2012	44,269,173	29,838,589	67%	14,430,584
2013	46,729,765	30,396,268	65%	16,333,497
2014	49,121,016	30,872,218	63%	18,248,798
2015	52,803,049	31,112,654	59%	21,690,395
2016	54,252,089	31,385,631	58%	22,866,458
2017	55,279,904	32,581,568	59%	22,698,336

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 - AFSCME

Table 8-01: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date	Actuarial	Actuarial		Unfunded (Overfunded) Accrued
December 31	Accrued Liability	Valuation Assets	Percent Funded	Liabilities
2007	\$ 19,198,055	\$ 15,075,440	79%	\$ 4,122,615
2008	20,424,762	15,709,368	77%	4,715,394
2009	20,448,116	16,397,765	80%	4,050,351
2010	20,996,606	17,154,624	82%	3,841,982
2011	22,679,320	18,008,977	79%	4,670,343
2012	23,530,659	18,399,661	78%	5,130,998
2012	24,678,641	18,856,715	76%	5,821,926
2014	26,029,659	19,343,591	74%	6,686,068
2015	28,114,993	19,612,057	70%	8,502,936
2016	28,489,958	19,609,571	69%	8,880,387
2017	28,920,403	20,011,143	69%	8,909,260

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

Table 9-01: Computed Employer Contributions - Comparative Schedule

	Active Employees		Computed	Employee
Valuation Date		Annual	Employer	Contribution
December 31	Number	Payroll	Contribution ¹	Rate ²
2007	100	\$ 5,224,851	11.67%	1.00%
2008	100	5,405,409	13.22%	1.00%
2009	92	5,065,471	11.09%	3.00%
2010	87	4,888,952	11.06%	3.00%
2011	87	4,938,173	12.67%	3.00%
2012	85	4,792,286	14.03%	3.00%
2013	77	4,413,084	\$ 56,182	3.00%
2014	74	4,445,947	\$ 62,270	3.00%
2015	67	3,966,920	\$ 73,055	3.00%
2016	63	3,726,579	\$ 73,995	3.00%
2017	57	3,398,839	\$ 73,123	3.00%

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

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.

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.

Division 11 - Mgmt

Table 8-11: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2007	\$ 5,600,508	\$ 3,810,769	68%	\$ 1,789,739
2008	5,973,200	3,948,243	66%	2,024,957
2009	6,367,808	4,139,876	65%	2,227,932
2010	7,005,647	4,376,792	62%	2,628,855
2011	7,760,037	4,669,169	60%	3,090,868
2012	8,625,919	4,679,913	54%	3,946,006
2013	9,464,321	4,998,482	53%	4,465,839
2014	9,888,265	5,025,849	51%	4,862,416
2015	10,663,466	5,046,896	47%	5,616,570
2016	11,613,649	5,306,306	46%	6,307,343
2017	11,788,981	5,665,385	48%	6,123,596

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

Table 9-11: Computed Employer Contributions - Comparative Schedule

	Active Employees		Computed	Employee
Valuation Date		Annual	Employer	Contribution
December 31	Number	Payroll	Contribution ¹	Rate ²
2007	11	\$ 824,864	20.74%	2.00%
2008	11	876,638	22.37%	2.00%
2009	12	943,485	22.12%	3.00%
2010	10	836,266	26.65%	3.00%
2011	11	939,244	27.92%	3.00%
2012	10	794,003	40.59%	3.00%
2013	9	712,310	49.08%	3.00%
2014	9	743,909	\$ 31,781	3.00%
2015	9	745,271	\$ 38,057	3.00%
2016	8	667,692	\$ 42,025	3.00%
2017	8	676,554	\$ 41,145	3.00%

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

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.

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.

Division 12 - Tmstrs

Table 8-12: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2007	\$ 13,026,293	\$ 7,681,729	59%	\$ 5,344,564
2008	13,652,871	7,798,405	57%	5,854,466
2009	13,368,167	7,553,790	57%	5,814,377
2010	13,316,243	7,286,286	55%	6,029,957
2011	12,357,603	6,810,023	55%	5,547,580
2012	12,112,595	6,759,015	56%	5,353,580
2013	12,584,457	6,538,363	52%	6,046,094
2014	13,170,756	6,472,061	49%	6,698,695
2015	13,934,849	6,372,481	46%	7,562,368
2016	13,974,265	6,304,278	45%	7,669,987
2017	14,303,736	6,605,133	46%	7,698,603

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

Table 9-12: Computed Employer Contributions - Comparative Schedule

	Active Employees		Computed	Employee
Valuation Date		Annual	Employer	Contribution
December 31	Number	Payroll	Contribution ¹	Rate ²
2007	25	\$ 1,745,820	22.18%	2.00%
2008	25	1,824,645	24.64%	2.00%
2009	21	1,560,852	26.85%	3.00%
2010	19	1,425,396	28.52%	4.00%
2011	18	1,356,955	27.44%	4.00%
2012	17	1,304,279	30.11%	4.00%
2013	16	1,209,646	37.34%	4.00%
2014	16	1,305,497	\$ 43,446	4.00%
2015	16	1,275,497	\$ 50,167	4.00%
2016	16	1,241,626	\$ 51,090	4.00%
2017	16	1,258,678	\$ 51,912	4.00%

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

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.

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.

Division 13 - AFSCME ee's on/after 9/1/2013

Table 8-13: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	\$ 2,346	\$ 2,708	115%	\$ (362)
2014	32,336	30,717	95%	1,619
2015	89,741	81,220	91%	8,521
2016	173,661	161,300	93%	12,361
2017	257,379	285,150	111%	(27,771)

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

Table 9-13: Computed Employer Contributions - Comparative Schedule

	Active Employees		Computed	Employee	
Valuation Date			Annual	Employer	Contribution
December 31	Number		Payroll	Contribution ¹	Rate ²
2013	5	\$	183,375	4.88%	3.00%
2014	10		411,929	4.64%	3.00%
2015	16		716,632	4.57%	3.00%
2016	19		909,414	4.69%	3.00%
2017	25		1,178,388	4.47%	3.00%

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

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.

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.

Division 14 - Non-Union contract aft 1/1/14

Table 8-14: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2016	556	4,176	751%	(3,620)
2017	9.405	14.757	157%	(5,352)

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

Table 9-14: Computed Employer Contributions - Comparative Schedule

	Active Employees		Computed	Employee
Valuation Date	Annual		Employer	Contribution
December 31	Number	Payroll	Contribution ¹	Rate ²
2016	1	73,520	7.58%	3.00%
2017	1	79,082	7.32%	3.00%

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

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.

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.

Division 01 - AFSCME

Table 10-01: Layered Amortization Schedule

				An	nounts for Fi	scal Year Begi	inn	ing 9/1/2019
Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²		utstanding AL Balance ³	Remaining Amortization Period ²	Α	Annual mortization Payment
Initial	12/31/2015 \$	8,502,936	23	\$	9,024,274	21	\$	634,248
(Gain)/Loss	12/31/2016	125,740	22		143,353	21		10,080
(Gain)/Loss	12/31/2017	(133,257)	21		(150,910)	21		(10,608)
Total				\$	9,016,717		\$	633,720

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 <u>Appendix</u> on MERS website).

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

Division 11 - Mgmt

Table 10-11: Layered Amortization Schedule

				An	nounts for Fi	scal Year Begi	inn	ing 9/1/2019
Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²		utstanding L Balance ³	Remaining Amortization Period ²	Α	Annual mortization Payment
Initial	12/31/2015 \$	5,616,570	23	\$	5,937,443	21	\$	417,300
(Gain)/Loss	12/31/2016	545,094	22		621,440	21		43,680
(Gain)/Loss	12/31/2017	(323,883)	21		(366,790)	21		(25,776)
Total				\$	6,192,093		\$	435,204

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 <u>Appendix</u> on MERS website).

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

Division 12 - Tmstrs

Table 10-12: Layered Amortization Schedule

				An	nounts for Fi	scal Year Begi	inni	ng 9/1/2019
Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²		utstanding L Balance ³	Remaining Amortization Period ²		Annual nortization Payment
Initial	12/31/2015 \$	7,562,368	23	\$	7,972,447	21	\$	560,316
(Gain)/Loss	12/31/2016	(78,026)	22		(88,956)	21		(6,252)
(Gain)/Loss	12/31/2017	(86,299)	21		(97,731)	21		(6,864)
Total				\$	7,785,760		\$	547,200

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 <u>Appendix</u> on MERS website).

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

Division 13 - AFSCME ee's on/after 9/1/2013

Table 10-13: Layered Amortization Schedule

				Am	ounts for Fi	scal Year Begi	inning 9/1/2019
Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²		utstanding L Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
(Gain)/Loss	12/31/2017	\$ (28,885) 15	\$	(32,711)	15	\$ (2,916)
Total				\$	(32,711)		\$ (2,916)

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 <u>Appendix</u> on MERS website).

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

Division 14 - Non-Union contract aft 1/1/14

Table 10-14: Layered Amortization Schedule

				Amo	ounts for Fi	scal Year Beg	inning 9/1	/2019
Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²		standing Balance ³	Remaining Amortization Period ²	Annu Amortiz Payme	ation
(Gain)/Loss	12/31/2017	\$ (5,532)	15	\$	(6,265)	15	\$	(552)
Total				\$	(6,265)		\$	(552)

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 <u>Appendix</u> on MERS website).

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

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: Inactive employees entitled to but not yet receiving benefits: Active employees:	119 16 <u>107</u>
	242
Covered employee payroll: (Needed for Required Supplementary Information)	\$ 6,591,541
Average expected remaining service lives of all employees (active and inactive):	4
Total Pension Liability as of 12/31/2016 measurement date:	\$ 52,883,046
Total Pension Liability as of 12/31/2017 measurement date:	\$ 53,912,136
Service Cost for the year ending on the 12/31/2017 measurement date:	\$ 645,678
Change in the Total Pension Liability due to:	
- Benefit changes ¹ :	\$ 0
- Differences between expected and actual experience ² :	\$ (512,109)
- Changes in assumptions ² :	\$ 0

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

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

1% Decrease Current Discount 1% Increase (7.00%) Rate (8.00%) (9.00%)

Change in Net Pension Liability as of 12/31/2017: \$5,820,701 - \$(4,960,952)

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.

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.

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 - AFSCME	
12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2013	Non Standard Compensation Definition
12/1/2011	Sick Eligibility - 396 hours
10/1/2009	Member Contribution Rate 3.00%
5/22/2007	Covered by Act 88
12/1/2003	Day of work defined as 80 Hours a Month for All employees.
1/1/2003	Sick Eligibility - 496 Hours
1/1/2002	Sick Eligibility - 576 Hours
9/1/2000	Member Contribution Rate 1.00%
1/1/2000	Benefit B-2
1/1/1998	Temporary Benefit F50 (With 20 Years of Service) (01/01/1998 - 07/02/1998)
1/1/1998	Benefit F50 (With 20 Years of Service)
11/1/1989	Benefit FAC-3 (3 Year Final Average Compensation)
11/1/1989	Benefit C-2/Base B-1
11/1/1989	Benefit F55 (With 25 Years of Service)
9/1/1981	Member Contribution Rate 0.00%
1/1/1975	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1975	10 Year Vesting
1/1/1975	Benefit C-1 (Old)
1/1/1975	Member Contribution Rate 3.00% Under \$4,200.00 - Then 5.00%
1/1/1975	Fiscal Month - September
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

l - Mgmt	
12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2013	Non Standard Compensation Definition
9/1/2009	Member Contribution Rate 3.00%
5/22/2007	Covered by Act 88
12/1/2005	6 Year Vesting
12/1/2005	Member Contribution Rate 2.00%
12/1/2003	Day of work defined as 80 Hours a Month for All employees.
4/1/2000	Member Contribution Rate 4.00%
10/1/1998	Sick Eligibility - 496 Hours
9/1/1993	Member Contribution Rate 5.00%
8/31/1993	Member Contribution Rate 0.00%
9/1/1992	Member Contribution Rate 3.30%
10/1/1989	Benefit FAC-3 (3 Year Final Average Compensation)
10/1/1989	Member Contribution Rate 0.00%
2/1/1989	Benefit B-2

11

11 ·	- Mg	ımt
-------------	------	-----

2/1/1989	Member Contribution Rate 3.00%
1/1/1987	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1987	10 Year Vesting
1/1/1987	Benefit C-2/Base B-1
1/1/1987	Benefit F55 (With 25 Years of Service)
1/1/1987	E2 2.5% COLA for future retirees (01/01/1987)
1/1/1975	Fiscal Month - September
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

12 - Tmstrs

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2010	Non Standard Compensation Definition
1/1/2010	Member Contribution Rate 4.00%
9/1/2009	Member Contribution Rate 3.00%
5/22/2007	Covered by Act 88
1/1/2006	Member Contribution Rate 2.00%
12/1/2003	Day of work defined as 80 Hours a Month for All employees.
4/1/2000	Member Contribution Rate 1.00%
12/1/1999	Sick Eligibility - 896 Hours
1/1/1998	Temporary Benefit F50 (With 20 Years of Service) (01/01/1998 - 07/02/1998)
1/1/1998	Benefit F50 (With 20 Years of Service)
1/22/1996	Member Contribution Rate 2.00%
9/1/1993	Member Contribution Rate 3.50%
9/1/1992	Member Contribution Rate 2.30%
1/1/1992	Benefit B-2
1/1/1991	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/1987	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1987	10 Year Vesting
1/1/1987	Benefit C-2/Base B-1
1/1/1987	Benefit F55 (With 25 Years of Service)
11/1/1978	Member Contribution Rate 0.00%
1/1/1975	Fiscal Month - September
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

13 - AFSCME ee's on/after 9/1/2013

12/1/2016	Service Credit Purchase Estimates - Yes
9/1/2013	Day of work defined as 80 Hours a Month for All employees.
9/1/2013	Benefit FAC-3 (3 Year Final Average Compensation)
9/1/2013	10 Year Vesting
9/1/2013	Benefit C-1 (New)
9/1/2013	Benefit F55 (With 25 Years of Service)
9/1/2013	Member Contribution Rate 3.00%
5/22/2007	Covered by Act 88

13 - AFSCME ee's on/after 9/1/2013

1/1/1975 Fiscal Month - September

Defined Benefit Normal Retirement Age - 60

Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

14 - Non-Union contract aft 1/1/14

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	Day of work defined as 80 Hours a Month for All employees.
1/1/2014	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2014	Non Standard Compensation Definition
1/1/2014	6 Year Vesting
1/1/2014	Benefit C-1 (New)
1/1/2014	Benefit F55 (With 25 Years of Service)
1/1/2014	Member Contribution Rate 3.00%
5/22/2007	Covered by Act 88
1/1/1975	Fiscal Month - September
	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 <u>Appendix</u>. Some actuarial assumptions are specific to this municipality and its divisions. These are listed below.

Increase in Final Average Compensation

Division	FAC Increase Assumption
01 - AFSCME	6.00%
11 - Mgmt	15.00%
12 - Tmstrs	15.00%
13 - AFSCME ee's on/after 9/	2.00%
14 - Non-Union contract aft	4.00%

Withdrawal Rate Scaling Factor

Division	Withdrawal Rate Scaling Factor
All Divisions	80%

Miscellaneous and Technical Assumptions

Loads - None.

Attachment 7 (a)

Ypsilanti Community Utilities Authority

System Design Changes:

The system's multiplier for all AFSCME union employees hired after 9/1/13 was reduced from 2.0% to 1.5%. As of 4/6/18, 28 of 86 employees in this group are affected by this design change. The system's multiplier for all non-union employees hired after 1/1/14 was reduced from 2.0% to 1.5%. As of 4/6/18, 2 of 9 employees in this group are affected by this design change. In total, 31.5% of the employees in both groups reflect a lower multiplier.

The system's Cost of Living Allowance (COLA) was eliminated for all non-union employees hired after 1/1/2014.

Paid Time Off (PTO) maximum possible accumulation included in the Final Average Compensation (FAC) calculation for Non-Union employees hired after 1/1/14 was reduced from 640 hours to 240 hours.

Paid Time Off (PTO) maximum possible accumulation included in the Final Average Compensation (FAC) calculation for Teamster employees hired after 9/1/13 was reduced from 640 hours to 480 hours.

Further, in 2013 the total hours of accumulated sick, vacation or PTO time included in the FAC at retirement was reduced from 100% to 75% or 50% or 0%, depending on the employee group and the original hire date. Accumulated sick leave paid out at retirement is no longer included in the FAC for AFSCME union employees hired after 9/1/2013.

Vacation time maximum possible accumulation included in the Final Average Compensation (FAC) calculation for AFSCME Union employees hired after 9/1/13 was reduced from 2.5 times the annual accumulation to 2 times the annual accumulation.

Ypsilanti Community Utilities Authority Michigan Department of Treasury

Additional Funding

We have made 3 payments beyond our annual required contribution. On 08/31/2017 we made an extra contribution of \$537,644.00. On 07/11/2018 we contributed \$500,000 extra. The third payment was for \$500,000 on 09/21/2018.

We have been contributing the MERS "No Phase in" number (higher ARC).

In addition, the YCUA Teamster's Union members increased their contribution to the pension system from 4% to 5% effective November 1, 2018.



MERS 1134 Municipal Way Lansing, MI 48917 www.mersofmich.com

Invoice	00085490-13		
Date	7/31/2018		
Customer	810601		
Due Date	8/20/2018		
Page	1/1		

Bill To:

Dwayne Harrigan Ypsilanti Community Utilties Authority 2777 State Rd. Ypsilanti, MI 48198

Billing Questions?

Email: servicecenter@mersofmich.com

Phone: 1.800.767.6377

Fax: 517.703.9711

Invoice Details	Division Number	Billing Period	Division Name	MERS Wages Reported Through Defined Benefit Reporting	Employer Contribution Percentage or Flat Amount	Employer	Contribution Amount Employee	Employer Voluntary
00085490-01	81060101	2018-07	AFSCME	\$300,000.00	1.00	\$0.00	\$0.00	\$300,000.00
00085490-02	81060101	2018-07	AFSCME	\$12,567.55	1.00	\$0.00	\$12,567.55	\$0.00
00085490-03	81060101	2018-07	AFSCME	\$73,055.00	1.00	\$73,055.00	\$0.00	\$0.00
00085490-04	81060113	2018-07	AFSCME ee's on/after 9/1/2013	\$6,199.41	1.00	\$0.00	\$6,199.41	\$0.00
00085490-05	81060113	2018-07	AFSCME ee's on/after 9/1/2013	\$124,629.75	4.57%	\$5,695.58	\$0.00	\$0.00
00085490-06	81060114	2018-07	Non-Union contract aft 1/1/14	\$647.44	1.00	\$0.00	\$647.44	\$0.00
00085490-07	81060114	2018-07	Non-Union contract aft 1/1/14	\$12,948.80	5.86%	\$758.80	\$0.00	\$0.00
00085490-08	81060112	2018-07	Tmstrs	\$100,000.00	1.00	\$0.00	\$0.00	\$100,000.00
00085490-09	81060112	2018-07	Tmstrs	\$4,917.77	1.00	\$0.00	\$4,917.77	\$0.00
00085490-10	81060112	2018-07	Tmstrs	\$50,167.00	1.00	\$50,167.00	\$0.00	\$0.00
00085490-11	81060111	2018-07	Mgmt	\$100,000.00	1.00	\$0.00	\$0.00	\$100,000.00
00085490-12	81060111	2018-07	Mgmt	\$2,676.12	1.00	\$0.00	\$2,676.12	\$0.00
00085490-13	81060111	2018-07	Mgmt	\$38,057.00	1.00	\$38,057.00	\$0.00	\$0.00
				Λ	Subtotal:	\$167,733.38	\$27,008.29	\$500,000.00

.

tal

\$694,741.67

220-\$27,008.29

Log onto ePayment to pay your invoice.

714-\$167,73338+500,000



MERS 1134 Municipal Way Lansing, MI 48917 www.mersofmich.com

00084309-13
6/30/2018
810601
7/20/2018
1 / 1

Bill To:

Dwayne Harrigan Ypsilanti Community Utilties Authority 2777 State Rd. Ypsilanti, MI 48198

Billing Questions?

Email: servicecenter@mersofmich.com

Phone: 1.800.767.6377

Fax: 517.703.9711

Invoice Details	Division Number	Billing Period	Division Name	MERS Wages Reported Through Defined Benefit Reporting	Employer Contribution Percentage or Flat Amount	Employer	Contribution Amount Employee	Employer Voluntary
00084309-01	81060112	2018-06	Tmstrs	\$100,000.00	1.00	\$0.00	\$0.00	\$100,000.00
00084309-02	81060112	2018-06	Tmstrs	\$3,770.50	1.00	\$0.00	\$3,770.50	\$0.00
00084309-03	81060112	2018-06	Tmstrs	\$50,167.00	1.00	\$50,167.00	\$0.00	\$0.00
00084309-04	81060114	2018-06	Non-Union contract aft 1/1/14	\$647.44	1.00	\$0.00	\$647.44	\$0.00
00084309-05	81060114	2018-06	Non-Union contract aft 1/1/14	\$12,948.80	5.86%	\$758.80	\$0.00	\$0.00
00084309-06	81060111	2018-06	Mgmt	\$100,000.00	1.00	\$0.00	\$0.00	\$100,000.00
00084309-07	81060111	2018-06	Mgmt	\$2,631.12	1.00	\$0.00	\$2,631.12	\$0.00
00084309-08	81060111	2018-06	Mgmt	\$38,057.00	1.00	\$38,057.00	\$0.00	\$0.00
00084309-09	81060113	2018-06	AFSCME ee's on/after 9/1/2013	\$5,751.50	1.00	\$0.00	\$5,751.50	\$0.00
00084309-10	81060113	2018-06	AFSCME ee's on/after 9/1/2013	\$113,667.57	4.57%	\$5,194.61	\$0.00	\$0.00
00084309-11	81060101	2018-06	AFSCME	\$300,000.00	1.00	\$0.00	\$0.00	\$300,000.00
00084309-12	81060101	2018-06	AFSCME	\$12,700.87	1.00	\$0.00	\$12,700.87	\$0.00
00084309-13	81060101	2018-06	AFSCME	\$73,055.00	1.00	\$73,055.00	\$0.00	\$0.00
Subtotal: \$167,232.41 \$25,501.43 \$500,000					\$500,000.00			
						Total		PC02 722 04

otal \$692,733.84

Log onto ePayment to pay your invoice.



MERS 1134 Municipal Way Lansing, MI 48917 www.mersofmich.com

Invoice	00072681-5
Date	8/31/2017
Customer	810601
Due Date	9/20/2017
Page	1/1

Bill To:

Dwayne Harrigan Ypsilanti Community Utilties Authority 2777 State Rd. Ypsilanti, MI 48198

Billing Questions?

Email: servicecenter@mersofmich.com

Phone: 1.800.767.6377

Fax: 517.703.9711

Invoice Details	Division Number	Billing Period	Division Name	MERS Wages Reported Through Defined Benefit Reporting	Employer Contribution Percentage or Flat Amount	Employer	Contribution Amount Employee	Employer Voluntary
00072681-01	81060114	2017-08	Non-Union contract aft 1/1/14	\$2,644.00	1.00	\$0.00	\$0.00	\$2,644.00
00072681-02	81060112	2017-08	Tmstrs	\$175,000.00	1.00	\$0.00	\$0.00	\$175,000.00
00072681-03	81060113	2017-08	AFSCME ee's on/after 9/1/2013	\$25,000.00	1.00	\$0.00	\$0.00	\$25,000.00
00072681-04	81060111	2017-08	Mgmt	\$235,000.00	1.00	\$0.00	\$0.00	\$235,000.00
00072681-05	81060101	2017-08	AFSCME	\$100,000.00	1.00	\$0.00	\$0.00	\$100,000.00
					Subtotal:	\$0.00	\$0.00	\$537,644.00
						Total		\$537,644.00

Log onto ePayment to pay your invoice.



Collective Bargaining Agreement Between Ypsilanti Community Utilities Authority and Teamsters Local 214

January 1, 2019, through December 31, 2022



Contract between Ypsilanti Community Utilities Authority and Teamsters Local 214 January 1, 2019 through December 31, 2022

ARTICLE 18 - EMPLOYEE PENSION PLAN

Section 1.

YCUA will provide Employees covered by this Agreement with Pension Plan B-2, FAC-3, F-55 (25 years of service) of the Michigan Employees' Retirement System (MERS), under Act No. 135, as amended. YCUA shall pay a full contribution for said plan except as provided in Section 2 below.

After January 1, 2014 (1/1/14), Employees transferred into the bargaining unit shall retain their current pension multiplier. New Employees hired externally after January 1, 2014 (1/1/14) will have a Pension Plan C-1, FAC-3, F-55 (25 years of service) of the Michigan Employees' Retirement System (MERS), under Act No. 135, as amended. YCUA shall pay a full contribution for said plan except as provided in Section 2 below.

Section 2.

Effective November 1, 2018 Employees covered by this Agreement will be required to contribute five percent (5%) of their compensation toward the cost of their pension program.

Section 3.

All payments of PTO time will be reported to MERS as wages and included in Final Average Compensation in accordance with ARTICLE 15 – PAID TIME OFF, Sections 6 and 7.

ARTICLE 19 - LIFE INSURANCE

Section 1.

YCUA shall pay the full cost of providing term life insurance to all Employees in the amount of \$50,000 death benefit. This insurance shall include coverage for accidental death and/or dismemberment.

1. YCUA Employees will be allowed to purchase an additional optional life insurance for themselves, their spouse and children. Contributions will be made weekly by payroll deduction on a post-tax basis. The Employee contribution will be determined by the Group Insurance Carrier and only that amount will be charged to the Employee.

Section 2.

After January 1, 1997, Employees who retire from YCUA employment shall be covered by a group term life insurance in the amount of \$10,000 death benefit only. All other Employees who retire prior to January 1, 1997, will receive the current \$5,000 death benefit only. Certificate/Policy of insurance will be provided upon request of YCUA's Human Resources department.

Section 3.

Attachment 8a YCUA RESOLUTION No. 18-7

Defined Benefit Plan Adoption Agreement



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

www.mersofmich.com

The Employer, a participating municipality or participating court within the state of Michigan, hereby agrees to adopt and administer the MERS Defined Benefit Plan provided by the Municipal Employees' Retirement System of Michigan, as authorized by 1996 PA 220, in accordance with the MERS Plan Document, as both may be amended, subject to the terms and conditions herein.

I. Employ	er Name	Ypsilanti Community Utilities Authority	Municipality #: 8106
If new to	MERS, ple	ase provide your municipality's fiscal year:	through
II. Effecti	ve Date		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Check	k one:		
A.		s the initial Adoption Agreement for this group, the effe, 20	ective date shall be the first day
		This municipality or division is new to MERS, so vesting effective date by each eligible participant shall be credit All prior service from date of hire Prior service proportional to assets transferred; Prior service and vesting service proportional to No prior service but grant vesting credit No prior service or vesting credit Link this new division to division number for proportions (Unless otherwise specified, the standard	ed as follows (choose one): all service used for vesting assets transferred urposes of determining
B.	12 &15), t	s an amendment of an existing Adoption Agreement (Ithe effective date shall be the first day of November 1 to mark changes to your plan throughout the remaind	, 20_18 Please note: You
	benefit are	s a temporary benefit that lasts 2-6 months, the effect from/01/ through// for Defined Bene- Last day of month te: You only need to mark changes to your plan throught.	efit division number
D.	number(s)	s to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from an existing Defined Beautonese to separate employees from the separate employees from) into a new division,
E.		s to merge division(s) into divis	sion(s),

Defined Benefit Plan Adoption Agreement

III.	Eligib	le Employees
	Plan.	those Employees eligible for MERS membership may participate in the MERS Defined Benefit A copy of ALL employee enrollment forms must be submitted to MERS. The following groups of byees are eligible to participate:
		(Name of Defined Benefit division – e.g. All Full Time Employees, or General after 7/01/13)
		Only retirees will be in this division.
	Thes	e employees are (check one or both):
		In a collective bargaining unit (attach cover page, retirement section, signature page)
		Subject to the same personnel policy
	To re	ceive one month of service credit (check one):
		An employee shall work 10 hour days.
		An employee shall work hours in a month.
	cri [.]	employees as classified under eligible employees, whether full or part time, who meet this teria must be reported to MERS. If you change your current day of work definition to be more strictive, the new definition only applies to employees hired after the effective date.
	To fur	ther define eligibility, check all that apply:
		Probationary Periods are allowed in one-month increments, no longer than 12 months. During this introductory period, the Employer will not report or provide service time for this period, including retroactively. Service will begin after the probationary period has been satisfied.
		The probationary period will be month(s).
		Temporary employees in a position normally requiring less than a total of 12 whole months of work in the position may be <i>excluded</i> from membership. These employees must be notified in writing by the participating municipality that they are excluded from membership within 10 business days of date of hire or execution of this Agreement.
		The temporary exclusion period will be month(s).
IV.	Provis	sions
	Valua	tion Date:, 20
		Review the valuation results
		It is recommended that your MERS representative presents and explains the valuation results to your municipality before adopting. Please choose one:
		☐ Our MERS representative presented and explained the valuation results to the
		on (Board, Finance Cmte, etc.) (mm/dd/yyyy) As an authorized representative of this municipality, I

(Title)

waive the right for a presentation of the results.

Defined Benefit Plan Adoption Agreement

acquisition of job-related certifications Lump sum payments attributable to the member's personal service rendered during the FAC period Other:	2.	This Adoption Agreement will be implemented in conjunction with a current actuarial valuation certified by a MERS actuary that sets contribution rates.							
Check here if multiplier will be effective for existing active members' future service only (Bridged Benefit as of effective date on page 1) Gridged Benefit as of effective date on page 1) If checked, select one below: Termination Final Average Compensation (calculated over the members entire wage history) Frozen Final Average Compensation (FAC is calculated twice, once for the timeframe that matches the original multiplier, and once for the new multiplier) Final Average Compensation (Min 3 yr, increments of 1 yr) years Vesting (5 -10 yrs, increments of 1 yr) years Required employee contribution (Max 10%, increments of 0.01%) 5 % Compensation, for retirement purposes, is defined as base wages and all of the following. Check applicable boxes to exclude these types from your MERS reported wages: Longevity pay	3.	contribution rates. Employers are responsible for payment of said contributions at the rate, in							
Bridged Benefit as of effective date on page 1)	4.								
Termination Final Average Compensation (calculated over the members entire wage history) Frozen Final Average Compensation (FAC is calculated twice, once for the timeframe that matches the original multiplier, and once for the new multiplier) Final Average Compensation (Min 3 yr, increments of 1 yr)									
wage history) Frozen Final Average Compensation (FAC is calculated twice, once for the timeframe that matches the original multiplier, and once for the new multiplier) 5. Final Average Compensation (Min 3 yr, increments of 1 yr) years 6. Vesting (5 -10 yrs, increments of 1 yr) years 7. Required employee contribution (Max 10%, increments of 0.01%) 5 % 8. Compensation, for retirement purposes, is defined as base wages and all of the following. Check applicable boxes to exclude these types from your MERS reported wages: Longevity pay Overtime pay Shift differentials Pay for periods of absence from work by reason of vacation, holiday, and sickness Workers' compensation weekly benefits (if reported and are higher than regular earnings) A member's pre-tax contributions to a plan established under Section 125 of the IRC Transcript fees paid to a court reporter A taxable car allowance Short term or long term disability payments Payments for achievement of established annual (or similar period) performance goals Payment for attainment of educational degrees from accredited colleges, universities, or for acquisition of job-related certifications Lump sum payments attributable to the member's personal service rendered during the FAC period Other:		If checked, select one below:							
timeframe that matches the original multiplier, and once for the new multiplier) 5. Final Average Compensation (Min 3 yr, increments of 1 yr) years 6. Vesting (5 -10 yrs, increments of 1 yr) years 7. Required employee contribution (Max 10%, increments of 0.01%) 5 % 8. Compensation, for retirement purposes, is defined as base wages and all of the following. Check applicable boxes to exclude these types from your MERS reported wages: Longevity pay Overtime pay Shift differentials Pay for periods of absence from work by reason of vacation, holiday, and sickness Workers' compensation weekly benefits (if reported and are higher than regular earnings) A member's pre-tax contributions to a plan established under Section 125 of the IRC Transcript fees paid to a court reporter A taxable car allowance Short term or long term disability payments Payments for achievement of established annual (or similar period) performance goals Payment for attainment of educational degrees from accredited colleges, universities, or for acquisition of job-related certifications Lump sum payments attributable to the member's personal service rendered during the FAC period Other:									
6. Vesting (5 -10 yrs, increments of 1 yr) years 7. Required employee contribution (Max 10%, increments of 0.01%) 5 % 8. Compensation, for retirement purposes, is defined as base wages and all of the following. Check applicable boxes to exclude these types from your MERS reported wages: Longevity pay Overtime pay Shift differentials Pay for periods of absence from work by reason of vacation, holiday, and sickness Workers' compensation weekly benefits (if reported and are higher than regular earnings) A member's pre-tax contributions to a plan established under Section 125 of the IRC Transcript fees paid to a court reporter A taxable car allowance Short term or long term disability payments Payments for achievement of established annual (or similar period) performance goals Payment for attainment of educational degrees from accredited colleges, universities, or for acquisition of job-related certifications Lump sum payments attributable to the member's personal service rendered during the FAC period Other:									
7. Required employee contribution (Max 10%, increments of 0.01%)	5.	Final Average Compensation (Min 3 yr, increments of 1 yr) years							
8. Compensation, for retirement purposes, is defined as base wages and all of the following. Check applicable boxes to exclude these types from your MERS reported wages: Longevity pay Overtime pay Shift differentials Pay for periods of absence from work by reason of vacation, holiday, and sickness Workers' compensation weekly benefits (if reported and are higher than regular earnings) A member's pre-tax contributions to a plan established under Section 125 of the IRC Transcript fees paid to a court reporter A taxable car allowance Short term or long term disability payments Payments for achievement of established annual (or similar period) performance goals Payment for attainment of educational degrees from accredited colleges, universities, or for acquisition of job-related certifications Lump sum payments attributable to the member's personal service rendered during the FAC period Other:	6.	Vesting (5 -10 yrs, increments of 1 yr) years							
8. Compensation, for retirement purposes, is defined as base wages and all of the following. Check applicable boxes to exclude these types from your MERS reported wages: Longevity pay Overtime pay Shift differentials Pay for periods of absence from work by reason of vacation, holiday, and sickness Workers' compensation weekly benefits (if reported and are higher than regular earnings) A member's pre-tax contributions to a plan established under Section 125 of the IRC Transcript fees paid to a court reporter A taxable car allowance Short term or long term disability payments Payments for achievement of established annual (or similar period) performance goals Payment for attainment of educational degrees from accredited colleges, universities, or for acquisition of job-related certifications Lump sum payments attributable to the member's personal service rendered during the FAC period Other:	7.	Required employee contribution (Max 10%, increments of 0.01%) %							
 Overtime pay Shift differentials Pay for periods of absence from work by reason of vacation, holiday, and sickness Workers' compensation weekly benefits (if reported and are higher than regular earnings) A member's pre-tax contributions to a plan established under Section 125 of the IRC Transcript fees paid to a court reporter A taxable car allowance Short term or long term disability payments Payments for achievement of established annual (or similar period) performance goals Payment for attainment of educational degrees from accredited colleges, universities, or for acquisition of job-related certifications Lump sum payments attributable to the member's personal service rendered during the FAC period Other: 		Compensation, for retirement purposes, is defined as base wages and all of the following.							
LI UIIIPI Z		 Overtime pay Shift differentials Pay for periods of absence from work by reason of vacation, holiday, and sickness Workers' compensation weekly benefits (if reported and are higher than regular earnings) A member's pre-tax contributions to a plan established under Section 125 of the IRC Transcript fees paid to a court reporter A taxable car allowance Short term or long term disability payments Payments for achievement of established annual (or similar period) performance goals Payment for attainment of educational degrees from accredited colleges, universities, or for acquisition of job-related certifications Lump sum payments attributable to the member's personal service rendered during the FAC period 							

Defined Benefit Plan Adoption Agreement

10. (Early Normal Retirement with unreduced benefits							
	☐ Age 55 with 15 years of service ☐ Age	e 50 with 30 years of service e 55 with 20 years of service e 55 with 30 years of service years of service						
10.	Other							
11.	participant's benefit Duty death or disability enhancement (add exceed 30 years of service) Deferred Retirement Option Program (DRO Annuity Withdrawal Program (AWP) Calculation of the actuarial equivalent of the done using:	he lump sum distribution made under AWP will s as determined by the Retirement Board, or						
	All current retirees as of effective date Retirees who retire between /01/ and/01/(one time increase only)	Future retirees who retire after effective date						
	Increase of% or \$ per month	Increase of% or \$ per month						
	Select one: Annual automatic increase One-time increase	☐ Annual automatic increase						
	Select one: Compounding Non-compounding	Select one: Compounding Non-compounding						
	Employees must be retired months (6-12 months, increments of 1 month)	Employees must be retired months (6-12 months, increments of 1 month)						

V. Appointing MERS as the Plan Administrator

The Employer hereby agrees to the provisions of this *MERS Defined Benefit Plan Adoption Agreement* and appoints MERS as the Plan Administrator pursuant to the terms and conditions of the Plan. The Employer also agrees that in the event any conflict between MERS Plan Document and the MERS Defined Benefit Plan, the provisions of the Plan Document control.

Defined Benefit Plan Adoption Agreement

VI. Modification Of The Terms Of The Adoption Agreement

If the Employer desires to amend any of its elections contained in this Adoption Agreement, including attachments, the Governing Body or Chief Judge, by resolution or official action accepted by MERS, must adopt a new Adoption Agreement. The amendment of the new Agreement is not effective until approved by MERS.

VII. Enforcement

- 1. The Employer acknowledges that the Michigan Constitution of 1963, Article 9, Section 24, provides that accrued financial benefits arising under a public Employer's retirement plan are a contractual obligation of the Employer that may not be diminished or impaired, and prohibits the use of the Employer's required current service funding to finance unfunded accrued liabilities.
- 2. The Employer agrees that, pursuant to the Michigan Constitution, its obligations to pay required contributions are contractual obligations to its employees and to MERS and may be enforced in a court of competent jurisdiction;
- 3. In accordance with the Constitution and this Agreement, if at any time the balance standing to the Employer's credit in the reserve for employer contributions and benefit payments is insufficient to pay all service benefits due and payable to the entity's retirees and beneficiaries, the Employer agrees and covenants to promptly remit to MERS the amount of such deficiency as determined by the Retirement Board within thirty (30) days notice of such deficiency.
- 4. The Employer acknowledges that wage and service reports are due monthly, and the employee contributions (if any) and Employer contributions are due and payable monthly, and must be submitted in accordance with the MERS Enforcement Procedure for Prompt Reporting and Payment, the terms of which are incorporated herein by reference.
- 5. Should the Employer fail to make its required contribution(s) when due, the retirement benefits due and payable by MERS on behalf of the entity to its retirees and beneficiaries may be suspended until the delinquent payment is received by MERS. MERS may implement any applicable interest charges and penalties pursuant to the MERS Enforcement Procedure for Prompt Reporting and Payment and Plan Document Section 79, and take any appropriate legal action, including but not limited to filing a lawsuit and reporting the entity to the Treasurer of the State of Michigan in accordance with MCL 141.1544(d), Section 44 of PA 436 of 2012, as may be amended.
- 6. The Employer acknowledges that changes to the Employer's MERS Defined Benefit Plan must be made in accordance with the MERS Plan Document and applicable law, and agrees that MERS will not administer any such changes unless the MERS Plan Document and applicable law permit same, and MERS is capable of administering same.

Defined Benefit Plan Adoption Agreement

VIII. Execution Authorized Designee of Gover			
The foregoing Adoption Agree the 28th day of November	ement is hereby approved by <u>*</u> , 20_ ¹⁸	(Name of Approving Employer)	_ on
	und & Stumb		
Title: Brenda L. Stumbo, YCUA E Witness signature: KEVIN M		1	
Received and Approved by the	e Municipal Employees' Retire	ement System of Michigan	
Dated:	, 20 Signature:	(Authorized MERS Signatory)	

Ypsilanti Community Utilities Authority

Michigan Department of Treasury

Other Considerations

As YCUA has done in the past years, the annual employer contribution will be based on the MERS no 5 year phase-in approach, which increases the funded percentage quicker than the MERS 5 year phase in approach. See page 12 of the December 31, 2017 attached actuarial supplemental valuation.

Further, YCUA's ADC/Governmental fund revenues (Line 10 on form 5572 -2017 Report) is 4.7%, which is less than the 10% allowed for primary units. YCUA feels it should be treated as if it is a primary unit due to its size and financial resources.

Public Act 202 of 2017 Pension Report

Enter Local Unit Name	Ypsilanti Community Utilities Authority	Instructions/Questions: For a list of detailed instructions of					
Enter Six-Digit Municode	817514	how to complete and submit this form, visit					
Unit Type	Authority	michigan.gov/LocalRetirementReporting. For questions, please					
Fiscal Year (four-digit year only, e.g. 2017)	2017	email LocalRetirementReporting@michigan.gov. Return this					
Contact Name (Chief Financial Officer)	Dwayne Harrigan	original Excel file. Do not submit a scanned image or PDF.					
Title if not CFO	Finance Director						
CFO (or designee) Email Address	dharrigan@ycua.org						
Contact Telephone Number	734 544 7169						
	Ypsilanti Community Utilities Authority						
Pension System Name (not division) 1	Employees Retirement System(8106)	If your pension system is separated by divisions, you would only					
Pension System Name (not division) 2		enter one system. For example, one could have different divisions					
Pension System Name (not division) 3		of the same system for union and non-union employees. However					
Pension System Name (not division) 4		these would be only one system and should be reported as such					
Pension System Name (not division) 5		on this form.					

		Statute					
ne Description	Source of Data	Reference	System 1	System 2	System 3	System 4	System 5
			Ypsilanti Community				
			Utilities Authority				
Provide the name of your retirement pension system	Most Recent Actuarial Valuation Report	Sec. 5(6)	Employees				
2 Enter retirement pension system's assets (system fiduciary net position ending)	Most Recent Audit Report	Sec. 5(4)(b)	29,139,150				
3 Enter retirement pension system's liabilities (total pension liability ending)	Most Recent Audit Report	Sec. 5(4)(b)	52,883,046				
Date (system year ending) of valuation of system's assets and liabilities (e.g. 12/31/2016)	Most Recent Audit Report	Sec. 5(6)	8/31/17				
5 Actuarially Determined Contribution (ADC)	Most Recent Audit Report	Sec. 5(4)(b)	1,993,992				
6 Governmental Fund Revenues	Most Recent Audit Report	Sec. 5(4)(b)	42,045,384				
7 Pension Trigger Summary							
8 Is this unit a primary unit (County, Township, City, Village)?	From Municode		NO	NO	NO	NO	NO
9 Funded ratio	Calculated	Sec. 5(4)(b)	55.1%				
O All systems combined ADC/Governmental fund revenues	Calculated	Sec. 5(4)(b)	4.7%	0.0%	0.0%	0.0%	0.0%
	Primary unit triggers: Less than 60% funded AND great						
	ADC/Governmental fund revenues. Non-Primary unit t	riggers: Less					
11 Does this system trigger "underfunded status" as defined by PA 202 of 2017?	than 60% funded	Sec. 5(4)(b)	YES	NO	NO	NO	NO

By emailing this report to the Michigan Department of Treasury, the local unit of government acknowledges that this report is complete and accurate in all known respects. Act 202 of 2017 also requires the local unit of government to electronically submit the report to its governing body.

Attachment 10 a

APPROVED 2018/2019 YCUA BUDGET

Payroll Taxes and Other Obligations - 591

[Actual	Budget	City	Township	Budget	City	Township	Sewer	Water
	2017	2018	2018	2018	2019	2019	2019	2019	2019
Flexible admin fees	(\$645)	\$1,080	\$232	\$848	\$1,800	\$387	\$1,413	\$1,247	\$553
Health ins	\$1,531,931	\$2,201,123	\$473,241	\$1,727,881	\$2,000,000	\$430,127	\$1,569,873	\$1,385,974	\$614,026
Life ins	\$17,681	\$20,144	\$4,331	\$15,813	\$23,040	\$4,955	\$18,085	\$15,966	\$7,074
Disability ins	\$41,457	\$46,983	\$10,101	\$36,881	\$43,974	\$9,457	\$34,517	\$30,473	\$13,500
Social sec	\$517,368	\$506,636	\$108,927	\$397,709	\$534,960	\$115,050	\$419,910	\$370,720	\$164,240
Pension	\$3,166,684	\$2,827,656	\$607,946	\$2,219,710	\$3,000,000	\$645,191	\$2,354,809	\$2,078,961	\$921,039
Uniforms	\$16,812	\$21,800	\$4,687	\$17,113	\$23,750	\$5,108	\$18,642	\$16,458	\$7,292
Work comp	\$51,391	\$66,771	\$14,356	\$52,415	\$73,276	\$15,759	\$57,517	\$50,779	\$22,497
Unemployment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Health trust fund (ARC)	\$2,753,063	\$1,034,412	\$222,399	\$812,013	\$1,013,983	\$218,071	\$795,912	\$702,677	\$311,306
Health Care Savings	\$31,900	\$42,000	\$9,030	\$32,970	\$54,000	\$11,613	\$42,387	\$37,421	\$16,579
EAP	\$2,815	\$2,864	\$616	\$2,249	\$2,864	\$616	\$2,248	\$1,985	\$879
Allocations	(\$8,130,456)	(\$6,771,469)	(\$1,455,866)	(\$5,315,603)	(\$6,771,647)	(\$1,456,335)	(\$5,315,312)	(\$4,692,664)	(\$2,078,983)
Total Department	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

21.50% 78.50% city/twp 21.50% 78.50% h20/ww 30.70% 69.30%

Attachment 10 a

APPROVED 2018/2019 YCUA BUDGET

Payroll Taxes and Other Obligations - 591

Ì	Actual	Budget	City	Township	Budget	City	Township	Sewer	Water
	2017	2018	2018	2018	2019	2019	2019	2019	2019
Flexible admin fees	(\$645)	\$1,080	\$232	\$848	\$1,800	\$387	\$1,413	\$1,247	\$553
Health ins	\$1,531,931	\$2,201,123	\$473,241	\$1,727,881	\$2,000,000	\$430,127	\$1,569,873	\$1,385,974	\$614,026
Life ins	\$17,681	\$20,144	\$4,331	\$15,813	\$23,040	\$4,955	\$18,085	\$15,966	\$7,074
Disability ins	\$41,457	\$46,983	\$10,101	\$36,881	\$43,974	\$9,457	\$34,517	\$30,473	\$13,500
Social sec	\$517,368	\$506,636	\$108,927	\$397,709	\$534,960	\$115,050	\$419,910	\$370,720	\$164,240
Pension	\$3,166,684	\$2,827,656	\$607,946	\$2,219,710	\$3,000,000	\$645,191	\$2,354,809	\$2,078,961	\$921,039
Uniforms	\$16,812	\$21,800	\$4,687	\$17,113	\$23,750	\$5,108	\$18,642	\$16,458	\$7,292
Work comp	\$51,391	\$66,771	\$14,356	\$52,415	\$73,276	\$15,759	\$57,517	\$50,779	\$22,497
Unemployment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Health trust fund (ARC)	\$2,753,063	\$1,034,412	\$222,399	\$812,013	\$1,013,983	\$218,071	\$795,912	\$702,677	\$311,306
Health Care Savings	\$31,900	\$42,000	\$9,030	\$32,970	\$54,000	\$11,613	\$42,387	\$37,421	\$16,579
EAP	\$2,815	\$2,864	\$616	\$2,249	\$2,864	\$616	\$2,248	\$1,985	\$879
Allocations	(\$8,130,456)	(\$6,771,469)	(\$1,455,866)	(\$5,315,603)	(\$6,771,647)	(\$1,456,335)	(\$5,315,312)	(\$4,692,664)	(\$2,078,983)
Total Department	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

21.50% 78.50% city/twp 21.50% 78.50% h20/ww 30.70% 69.30%

Public Act 202 of 2017 Pension Report

Enter Local Unit Name	Ypsilanti Community Utilities Authority	Instructions/Questions: For a list of detailed instructions on					
Enter Six-Digit Municode	817514	how to complete and submit this form, visit					
Unit Type	Authority	michigan.gov/LocalRetirementReporting. For questions, please					
Fiscal Year (four-digit year only, e.g. 2017)	2017	email LocalRetirementReporting@michigan.gov. Return this					
Contact Name (Chief Financial Officer)	Dwayne Harrigan	original Excel file. Do not submit a scanned image or PDF.					
Title if not CFO	Finance Director						
CFO (or designee) Email Address	dharrigan@ycua.org						
Contact Telephone Number	734 544 7169						
	Ypsilanti Community Utilities Authority						
Pension System Name (not division) 1	Employees Retirement System(8106)	If your pension system is separated by divisions, you would only					
Pension System Name (not division) 2		enter one system. For example, one could have different divisions					
Pension System Name (not division) 3		of the same system for union and non-union employees. However					
Pension System Name (not division) 4		these would be only one system and should be reported as such					
Pension System Name (not division) 5		on this form.					

		Statute					
ne Description	Source of Data	Reference	System 1	System 2	System 3	System 4	System 5
			Ypsilanti Community				
			Utilities Authority	3			
1 Provide the name of your retirement pension system	Most Recent Actuarial Valuation Report	Sec. 5(6)	Employees				
2 Enter retirement pension system's assets (system fiduciary net position ending)	Most Recent Audit Report	Sec. 5(4)(b)	29,139,150				
3 Enter retirement pension system's liabilities (total pension liability ending)	Most Recent Audit Report	Sec. 5(4)(b)	52,883,046				
4 Date (system year ending) of valuation of system's assets and liabilities (e.g. 12/31/2016)	Most Recent Audit Report	Sec. 5(6)	8/31/17				
5 Actuarially Determined Contribution (ADC)	Most Recent Audit Report	Sec. 5(4)(b)	1,993,992				
6 Governmental Fund Revenues	Most Recent Audit Report	Sec. 5(4)(b)	42,045,384				
7 Pension Trigger Summary							
8 Is this unit a primary unit (County, Township, City, Village)?	From Municode		NO	NO	NO	NO	NO
9 Funded ratio	Calculated	Sec. 5(4)(b)	55.1%				
O All systems combined ADC/Governmental fund revenues	Calculated	Sec. 5(4)(b)	4.7%	0.0%	0.0%	0.0%	0.0%
	Primary unit triggers: Less than 60% funded AND great	er than 10%					
	ADC/Governmental fund revenues. Non-Primary unit t	riggers: Less					
11 Does this system trigger "underfunded status" as defined by PA 202 of 2017?	than 60% funded	Sec. 5(4)(b)	YES	NO	NO	NO	NO

By emailing this report to the Michigan Department of Treasury, the local unit of government acknowledges that this report is complete and accurate in all known respects. Act 202 of 2017 also requires the local unit of government to electronically submit the report to its governing body.



Ypsilanti, MI 48198-9112

Minutes

YPSILANTI COMMUNITY UTILITIES AUTHORITY
BOARD OF COMMISSIONERS MEETING
Wednesday, August 22, 2018 – 4:00 p.m.
YCUA Administration Building
2777 State Road

Members Present: Brenda L. Stumbo, Michael Bodary, Jon R. Ichesco, and Larry J. Doe.

Members Absent: Keith P. Jason.

1. **CALL TO ORDER:** Ms. Stumbo called the meeting to order at 4:00 p.m.

2. MINUTES OF THE PREVIOUS MEETING: Motion by Doe to receive and file the minutes of the July 25, 2018 meeting as presented. Support by Bodary. In favor: All. Opposed: None. (Motion carried.)

3. NEW BUSINESS:

A. Request to Approve – Fiscal Year 2018 – 2019 Budget – Jeff Castro

Mr. Castro advised the Board that, if approved, this budget will take effect September 1, 2018. He indicated that the budget projects water and sewer sales in the Township and City Divisions to remain about the same as the 2017 - 2018 budget.

Mr. Castro explained that the budget also includes a recommended modification to the water and sewer rate structure. He pointed out that the proposed budget produces cash after operating expenses, non-operating items, and bond principal payments of about \$500,000 in the City Division and \$2 million in the Township Division, totaling \$2.5 million for the Authority. Mr. Castro also explained that this cash is available for capital projects for the fiscal year 2018 – 2019 and is needed to replace various components in the water distribution and sewage collection systems, wastewater treatment infrastructure, and to maintain bond covenant.

He further advised that, with the approval of this budget, the Board will also need to take action on the rate study rate modification, which is the

next item on the agenda. Mr. Castro stated that the Finance Committee met and recommends approval of the proposed budget.

Motion by Doe to approve the Fiscal Year 2018 - 2019 Budget. Support by Bodary.

Ms. Stumbo inquired as to the percentage that the Fund Balance represents. Mr. Harrigan responded that it is about 40% if restricted is included. He added that there is a \$20 million fund balance for a \$45 million budget.

Ms. Stumbo inquired as to the level of funding for OPEB and pension. Mr. Harrigan responded that the Authority is in the process of getting the OPEB re-evaluated. He indicated that it was at 80% and he is hoping it will be between 90 to 100% after re-evaluation. Mr. Harrigan indicated that the pension is just under 60% and he is hoping that will increase with the new audit. The topic was then discussed in detail.

In favor: All. Opposed: None. (Motion carried.)

B. Request to Approve and Recommend – Fiscal Year 2018 – 2019 Water and Sewer Rates – Jeff Castro

Motion by Doe to approve the Fiscal Year 2018 – 2019 Water and Sewer Rates. Support by Bodary.

Mr. Castro advised the Board that this is not a water rate upgrade but rather a rate study and is based on what needs to be done to maintain the Authority's fixed costs. He indicated that this rate study opens up everything including bonds, surcharge, and removal of the minimum usage. Mr. Castro explained that is definitely a fair rate and is the normal process at 75% of the communities. He pointed out that the minimum usage structure has been in place since the 1970s and it is time to move forward.

Vic Cooperwasser from Tetra Tech addressed the Board. The matter was then discussed at length.

In favor: All. Opposed: None. (Motion carried.)

C. Request to Approve – Purchase of Bypass Pump in the Amount of \$46,037 (O & M Expense Account No. 594-597) – Stacey L. Reynolds

Motion by Bodary to approve the Purchase of Bypass Pump in the Amount of \$46,037 (O & M Expense Account No. 594-597). Support by Doe

Mr. Reynolds advised the Board that the bypass pump is used in emergency situations when a pump station goes offline and also during

emergency main repairs when flow needs to be diverted. He indicated that nine bids were received ranging from \$29,000 to \$109,000 and only two met specifications.

In favor: All. Opposed: None. (Motion carried.)

D. Fund Balance Report – Dwayne Harrigan

Informational only; no motion from the Board required.

- E. Financial Report Authority Net Assets Dwayne Harrigan Informational only; no motion from the Board required.
- F. Usage Report Consumption Report Jeff Castro Informational only; no motion from the Board required.
- G. Attorney's Report Thomas E. Daniels

Mr. Daniels was not present to provide an Attorney's Report.

H. Human Resources Report – Kevin M. Welch

Mr. Welch was not present to provide a Human Resources Report.

I. Director's Report - Jeff Castro

Mr. Castro brought to the Board's attention to a document that is part of item 3.B. He indicated that it is a letter of understanding agreement between YCUA and Pittsfield Township that was drafted by Attorney Daniels.

Mr. Castro explained that, when the city and township merged in 1974 to form YCUA, a 30-year contract was signed with Pittsfield Township. He pointed out that there was verbiage included in their agreement that reflected the Ypsilanti Township ordinance's second-step rate based on consumption, which has not been a provision in more current ordinances for many years.

Mr. Castro also explained that Pittsfield Township has asked that this obsolete language be removed from their agreement going forward. He further advised that this only makes sense since YCUA has been charging its contract communities the same commodity rate as it does for Ypsilanti Township residents.

The topic was then discussed in more detail.

- 4. **OLD BUSINESS:** There was no Old Business for the month.
- 5. **OTHER BUSINESS:** There was no Other Business for the month.

BOARD MEETING MINUTES YPSILANTI COMMUNITY UTILITIES AUTHORITY August 22, 2018 Page 4

- 6. STATEMENTS AND CHECKS: Motion by Ichesco to pay the current month's bills in the amount of \$4,341,738.37. Support by Bodary. In favor: All. Opposed: None. (Motion carried.)
- **PUBLIC COMMENTS:** There were no Public Comments for the month. 7.

ADJOURNMENT: Motion by Doe to adjourn the meeting at 4:37 p.m. Support by 8. Respectfully submitted,

SEAL

JONR. ICHESCO, Secretary

JON R. ICHESCO, Secretary - Treasurer