MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN
APPENDIX TO THE ANNUAL ACTUARIAL VALUATION REPORT DECEMBER 31, 2016

Summary of Plan Provisions, Actuarial Assumptions and Actuarial Funding Method as of December 31, 2016

## Introduction

An actuarial valuation is the mathematical process that estimates plan liabilities and employer contribution requirements for purposes of funding the individual employer plans within MERS. This process is repeated annually to update the liabilities and contribution requirements for changes in member census and plan features, and to reflect actual plan experience in the process. The valuation reflects the present provisions of the MERS Plan Document (as revised). The specific benefit provisions in effect for each municipality are listed in Table 2 in the municipality's actuarial report.

In addition to using current membership and financial data, an actuarial valuation requires the use of a series of assumptions regarding uncertain future events. The assumptions and methods used in the December 31, 2016 Actuarial Valuation are those adopted by the Retirement Board. The most recent study of plan experience covered the period from December 31, 2008 through December 31, 2013 and was completed in 2015. The December 31, 2016 Assumptions are based on the results of this experience study. Generally, an experience study is performed every 5 years.

There have been no changes in the funding method, adopted by the Retirement Board beginning with the December 31, 1993 valuations. The basic funding method is entry age normal and employer contribution amounts are developed as a level percentage of projected payroll for employee divisions that are open to new employees.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA).

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology follow this section.

## Summary of Plan Provisions — Defined Benefit Plan ${ }^{1}$

The benefits summarized in this section are intended only as general information regarding the Municipal Employees' Retirement System of Michigan. They are not a substitute for PA 220 of 1996, and the MERS Plan Document (as revised). If any conflict occurs between the information in this summary and PA 220 of 1996or the MERS Plan Document (as revised), the provisions of PA 220 and the MERS Plan Document govern.

## Eligibility for Retirement

MERS members are eligible to retire at:

- Age T, where T is between ages 60 and 70, with enough credited service to be vested (see below).
- Age T minus 5 , with 15 or more years of credited service.
- Age T minus 10 , with 25 or more years of credited service.

The retirement allowance is reduced for each complete month that the retirement date precedes T , up to a maximum reduction of $60 \%$. The monthly reduction factors for various ages $T$ are shown in the following table:

| Monthly Early Retirement Reduction Factor by Age T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |  |  |  |  |  |
| $0.50 \%$ | $0.65 \%$ | $0.66 \%$ | $0.67 \%$ | $0.68 \%$ | $0.69 \%$ | $0.70 \%$ | $0.71 \%$ | $0.72 \%$ | $0.73 \%$ | $0.74 \%$ |  |  |  |  |  |

The reduction may be partially or fully waived by adopting the early retirement provisions outlined below.

## Optional Retirement Programs (Unreduced Benefits)

- $F A(R)$, where $A$ is an age from 50 to 54 , and $R$ is between 25 and 30 years of credited service.
- $F A(R)$, where $A$ is an age from 55 to 65 , and $R$ is between 15 and 30 years of credited service.
- $F A(R)$, where $A$ is any age, and $R$ is $20,21,22,23,24,25,26,27,28,29$ or 30 years of credited service.
- S Points, where $S$ is between 70 and 90 , and $S$ is the sum of the member or former member's attained age and years of credited service.


## Mandatory Retirement

None.

## Deferred Retirement (Vesting)

Retirement can be deferred if membership is terminated before age $T$ other than by retirement or death, after becoming vested ( 10 years of credited service is required for vesting; adopting $5,6,7,8$ or 9 year vesting is optional). The retirement allowance begins when the application is filed with MERS and eligibility requirements for retirement are met. The deferred retirement allowance is computed in the same manner as a service retirement allowance, based on the benefit program in effect as of the date of termination of membership.

[^0]Rights to an allowance are forfeited if the member's accumulated contributions are refunded after termination of employment.

## Final Average Compensation (FAC)

MERS Plan benefits are based on a member's FAC, subject to the dollar compensation limits under Section 401(a)(17) of the Internal Revenue Code, as applicable. For this purpose, FAC means one-fifth of the aggregate amount of compensation paid to a member and earned during the period of 5 consecutive years of the member's credited service in which the aggregate compensation paid is highest. The employer may optionally adopt an FAC averaged over 3 or more years, instead of 5 years.

## Service Retirement Allowance

Credited service at time of termination of membership is multiplied by one of the following options:

- $1.00 \%$ of FAC to $2.50 \%$ of FAC, in increments of $0.05 \%$ of FAC, the "lifetime multiplier" as adopted by the employer, with a maximum benefit of $80 \%$ of FAC.
- Supplemental Multiplier (in addition to the above lifetime multiplier): $0.05 \%$ of FAC to $1.50 \%$ of FAC, in increments of $0.05 \%$ of FAC, as adopted by the employer and payable only until attainment of the age at which unreduced Social Security benefits are available (currently age 66 for normal retirement, gradually increasing to age 67). When this age is reached, the benefit reverts to the above lifetime multiplier. The combined lifetime and supplemental multipliers may not exceed $2.5 \%$, and the combined benefit may not exceed $80 \%$ of FAC.
- Bridged Benefit: For service prior to the Bridged Benefit date, one of the Benefit Program multiplier percentages of FAC (FAC may be frozen at the Bridged Benefit Date, or may be calculated at termination of membership). For service after the Bridged Benefit date, one of the Benefit Program multiplier percentages of FAC (at termination of membership). The combined benefit may not exceed the larger of:
(i) the above benefit based on service prior to the Bridged Benefit date; and
(ii) $80 \%$ of FAC at termination of employment.
- Frozen Benefit: For service prior to the Frozen Benefit Date, one of the Benefit Program Multiplier Percentages applies.

The following legacy benefit formula options were previously included in the MERS Plan Document:

- $1.0 \%$ of FAC (no $80 \%$ of FAC maximum).
- $1.3 \%$ of FAC (no $80 \%$ of FAC maximum).
- Sum of $1.0 \%$ times the first $\$ 4,200$ of FAC, plus $1.5 \%$ times the portion of FAC over $\$ 4,200$. No $80 \%$ of FAC maximum. May not be adopted after January 2, 1986.
- $1.5 \%$ of FAC (no $80 \%$ of FAC maximum).
- Sum of $1.2 \%$ times the first $\$ 4,200$ of FAC, plus $1.7 \%$ times the portion of FAC over $\$ 4,200$. No $80 \%$ of FAC maximum. May not be adopted after January 2, 1986.
- $1.7 \%$ of FAC (no $80 \%$ of FAC maximum).
- $2.0 \%$ of FAC, payable until attainment of the age at which unreduced Social Security benefits are available (currently age 66 for normal retirement, gradually increasing to age 67). When this age is reached, the benefit reverts to between $1.0 \%$ of FAC and $1.7 \%$ of FAC adopted by the employer. No $80 \%$ of FAC maximum. May not be adopted after January 2, 1986.
- $2.0 \%$ of FAC (no $80 \%$ of FAC maximum).


## Maximum Benefit Payable by MERS

The maximum benefit that may be paid by MERS is governed by Section 415 of the Internal Revenue Code. Benefits in excess of the maximum benefit will be paid by the MERS Excess Benefit Plan.

## Act 88 (Reciprocal Retirement Act, 1961 P.A. 88)

If the municipality has elected to come under the provision of Act 88 (see Table 2 in your municipality's actuarial report), service with former and future public employers in Michigan may be used to satisfy the service eligibility conditions of MERS. MERS maintains a statewide Act 88 adoption list:
https://employerportal.mersofmich.com/SharepointFormsService/Default.aspx?FormName=form 77.pdf

## Disability Retirement Allowance

Total and permanent disability while employed by a participating municipality and after meeting the vesting requirement of the benefit program. The service requirement is waived if the disability is the duty-related, as set forth in Section 31(4) of the MERS Plan Document.

The allowance is computed in the same manner as a service retirement allowance, except that the reduction for retirement before age 60 is not applied.

If disability is duty-related, the amount of the retirement allowance shall not be less than $25 \%$ of the member's FAC.
Adoption of optional Benefit Program D-2 provides a retirement allowance for a duty-related disability that is the greater of:
(i) $25 \%$ of the member's FAC; or
(ii) A benefit based on 10 years of credited service in addition to the member's actual period of service, provided the total years of service do not exceed the greater of 30 years or the member's actual period of service.

## Non-Duty Death Allowance

If a member or vested former member with the minimum years of service required to be vested dies before retirement, a monthly survivor allowance may be payable.

If the member is married, the spouse is the automatic beneficiary unless the spouse, in writing, waives the benefit in favor of another named beneficiary.

A contingent survivor beneficiary (named in an Option II Contingent Beneficiary Designation form filed with MERS) will receive a retirement allowance computed in the same manner as a service retirement allowance, based on service and FAC at death, but reduced to reflect an Option II ( $100 \%$ joint and survivor) election. The reduction for retirement before age 60 is not applied. Payment of a retirement allowance to the contingent survivor beneficiary of a deceased member commences immediately. Payment of a retirement allowance to the contingent survivor beneficiary of a deceased vested former member commences on the date the member would have first satisfied eligibility for retirement with an unreduced service retirement allowance.

If there is no named beneficiary and the member leaves a spouse, the spouse will receive an Option II survivor allowance. Payment of a retirement allowance to the surviving spouse of a deceased member commences immediately. Payment of a retirement allowance to the surviving spouse of a deceased vested former member commences on the date the member would have first satisfied eligibility for retirement for an unreduced service retirement allowance. The amount of a surviving spouse's retirement allowance shall be $85 \%$ of the deceased member's or deceased vested former member's accrued
retirement allowance computed in the same manner as a service retirement allowance, based on service and FAC at time of death.

The amount of a surviving spouse's benefit is always the larger of:
(i) the benefit computed as a contingent survivor beneficiary; and
(ii) the $85 \%$ of accrued retirement allowance benefit described above.

If there is no named beneficiary and no retirement allowance being paid to a surviving spouse, unmarried children under age 21 will be paid an equal share of $50 \%$ of the deceased member's or deceased vested former member's accrued retirement allowance. The reduction for retirement before age 60 is not applied.

If no retirement allowance becomes payable at death, the member's accumulated contributions, if any, are paid to the beneficiary or to the decedent's estate.

## Duty-Connected Death Allowance

A duty death allowance, computed in the same manner as a non-duty death allowance, may be payable to a spouse or child(ren) if death occurs as the natural and proximate result of performance of duty with a participating municipality, as described in Section 34 of the MERS Plan Document. In such a case, the vesting requirement is waived, and the minimum benefit is $25 \%$ of the deceased member's FAC.

Adoption of optional Benefit Program D-2 provides a retirement allowance for a duty-connected death that is the greater of:
(i) $25 \%$ of the member's FAC; or
(ii) A benefit based on 10 years of credited service in addition to the member's actual period of service, provided the total years of service do not exceed the greater of 30 years or the member's actual period of service.

## Member Contributions

Each member contributes a percent of annual compensation, as selected by the municipality, on the member's annual compensation up to the compensation limit under Section 401(a)(17) of the Internal Revenue Code, as applicable. Any percentage from $0 \%$ to $10 \%$ (in $0.1 \%$ increments) may be selected. A $3 \% / 5 \%$ contribution program was available prior to 1985 and may be continued (until any new benefit programs are adopted), but not adopted, after 1984. Under this program they contribute $3 \%$ of the first $\$ 4,200$ of annual compensation and $5 \%$ of portions of annual compensation over $\$ 4,200$. Interest is credited to accumulated member contributions each December 31 (and reflected in the Annual Member Statement provided to each member) at a rate determined by MERS, currently the one-year U.S. Treasury Bill rate determined as of each December 31. The interest rate credited for the 12-month period ending on the valuation date was $0.85 \%$.

If a member leaves the employ of the municipality or dies without a retirement allowance or other benefit payable on their account, the member's accumulated contributions plus interest (as described above) are refunded with spousal consent, to the member, if living, or to the member's surviving spouse, if any, or to a named beneficiary (after spousal consent, if applicable).

Note for MERS' Defined Contribution Plan: The Annual Actuarial Valuation addresses assets and liabilities for participation under the MERS Defined Benefit Plan and Hybrid Plan. The MERS Defined Contribution Plan, which first became available for adoption in late 1997, is not addressed in the valuation results as it is not a defined benefit plan.

## Post-Retirement Adjustments

Employers may adopt post-retirement cost-of-living adjustments (COLA):
One-Time COLA for present retirees and beneficiaries. The amount of the increase is equal to the number of years since the later of retirement or the date specified in the adopting resolution times either:
(i) a fixed percentage of the present benefit; or
(ii) a fixed dollar amount.

This COLA may be readopted from time to time.
Annual COLA - provides automatic annual benefit increases. The COLA may apply to either:
(i) retirees (and their beneficiaries) retired before the effective date of the COLA; or
(ii) retirees (and their beneficiaries) retired on or after the effective date of the COLA.

The amount of the annual increase may be either:
(i) a percentage of the original (base) retirement benefit (non-compounded COLA); or
(ii) a percentage of the present retirement benefit (compounded COLA); or
(iii) a fixed dollar amount.

Such increases are further limited to increases in the Consumer Price Index (CPI) if the COLA was adopted before January 1, 1999. For all adoptions or readoptions after that date, the increase is not limited by the CPI increase.

## Death-After-Retirement Surviving Spouse Benefit

A retiring member electing the Straight Life (highest) form of retirement payment is normally paid a lifetime retirement allowance, with payments terminating at death. The retiring member could provide benefits to a surviving spouse or another named beneficiary by electing Option II ( $100 \%$ continuation to beneficiary) or Option II-A ( $75 \%$ continuation to beneficiary) or Option III ( $50 \%$ continuation to beneficiary). A surviving spouse is automatically the beneficiary to an Option II, IIA or III allowance unless the spouse, in writing, relinquishes the benefit to the member electing a Straight Life allowance or to another named beneficiary. Electing these alternate forms of payment would lower the retiring member's retirement allowance.

If Benefit Program RS50\% is adopted, a member retiring on or after the effective date of Benefit RS50\% may elect the Straight Life form of retirement payment and still provide a $50 \%$ survivor benefit to their spouse. To be eligible for a surviving spouse benefit, the retiring member and spouse must have been married to each other both at the time of death and during the full one-year period just before retirement.

## Delayed Retirement Option Partial Lump Sum (DROP+)

Any member who is eligible to retire with full, immediate retirement benefits has the option to:
(i) Retire immediately and receive a monthly benefit payable immediately; or
(ii) Delay their retirement date and continue to work.

If the member is covered by DROP+ and they retire at least 12 months after first becoming eligible for unreduced benefits, at actual retirement the member has the option to receive a partial lump sum and a reduced monthly benefit:
(i) The member can elect a lump sum equal to $12,24,36,48$, or 60 times the their monthly accrued benefit (if they have delayed retirement at least that many months).
(ii) For each 12 months included in the lump sum, the member's lifetime benefit is reduced by the DROP+ percentage adopted by the employer. The employer can adopt any of the following DROP+ reduction percentages: $6 \%, 7 \%, 8 \%, 9 \%$ or $10 \%$.

DROP+ may not be adopted after June 30, 2013.
CBIZ Retirement Plan Services / Powerscourt Building, Suite 405, 17199 Laurel Park North, Livonia, MI 48152 / http://retirement.cbiz.com

## Annuity Withdrawal

An employer may adopt the Annuity Withdrawal Program (AWP). Under the AWP a retiring member may elect to receive a refund of their accumulated member contributions with interest in a lump sum at retirement. The member's monthly pension would then be reduced by the actuarial equivalent of the lump sum payment. The employer has two options for the interest discount rate used to compute the actuarial equivalent reduction:
(i) The current investment return assumption used in the annual actuarial valuations (currently 7.75\%); or
(ii) The most recent December 31 interest rate used for crediting interest on member contributions ( $0.85 \%$ as of December 31, 2016).

## Deferred Retirement Option Program (DROP)

If a participant is covered by the Benefit Program DROP and is eligible for retirement, they have the option to elect a specified DROP period in which they will cease to accrue any additional retirement benefits, but remain employed by the participating municipality or court. The participant must elect a DROP end date at least six months after the beginning date, but no more than sixty months after the beginning date, in one-month increments

Upon the participant's election of DROP and the receipt of an application to enroll in DROP, MERS will calculate the participant's service retirement and benefit payment as of the beginning date. The Retirement System also shall calculate any age differential between the participant and the participant's beneficiary as of the calendar year of the DROP exit date in accordance with Treas. Reg. § 1.401(a)(9)-6. Upon the beginning date of the DROP period, the participant shall be responsible to continue employee contributions, if any.

On the next available benefit payment date after processing is complete, and monthly thereafter, an amount equal to $100 \%$ of the monthly service retirement benefit payment the participant would have received if he or she had retired as of the DROP beginning date will be credited to a notional account for the benefit of the participant. Funds in the DROP account are credited with interest in the amount of $3 \%$ annually, or prorated in the event of a DROP period that is less than twelve months.

Upon the end date, the participant shall receive a lump-sum distribution of the participant's DROP account and on the first day of the calendar month following end date, the participant will begin receiving monthly service retirement benefit payments.

## Non-Standard Benefit Provisions

Some municipalities have collectively bargained benefit provisions that differ from the benefit provisions described in this section, and MERS has agreed to administer such provisions. Such benefit provisions, if any, are listed in Table 2 of a municipality's annual actuarial valuation report, or are reflected in the actuarial assumptions that are specific to a municipality and are listed on the last page of a municipality's annual actuarial valuation report.

## Frozen Benefit Provisions

If a division has a Frozen Defined Benefit plan as described on page 4 of this appendix, the provisions of the frozen defined benefit plan formula continue to apply for ancillary (non-retirement) benefits; alternatively, should the members of the Frozen Defined Benefit plan be enrolled in the Hybrid Plan, the terms of the defined benefit component of the Hybrid Plan shall apply.

## Summary of Plan Provisions - Hybrid Plan ${ }^{1}$

The benefits summarized in this section are intended only as general information regarding the Municipal Employees' Retirement System of Michigan. They are not a substitute for PA 220 of 1996, and the MERS Plan Document. If any conflict occurs between the information in this summary and PA 220, or the MERS Plan Document, the provisions of PA 220 and the MERS Plan Document govern.

## Hybrid Plan Part I — Defined Benefit Portion

## Eligibility for Retirement

Members are eligible to retire at an age between 60 and 70, as selected by the participating municipality, with 6 or more years of service.

## Optional Retirement Programs (Unreduced Benefits)

An age between 55 and 65 as selected by the participating municipality, with credited service of 25 years.

## Mandatory Retirement

None.

## Deferred Retirement (Vesting)

Retirement can be deferred if membership is terminated before the applicable retirement age other than by retirement or death, after becoming vested (6 years of credited service is required for vesting). The retirement allowance begins when the application is filed with MERS and eligibility requirements for retirement are met. The deferred retirement allowance is computed in the same manner as a service retirement allowance, based on the final average compensation and years of service at termination of membership.

## Final Average Compensation (FAC)

Benefits are based on a member's FAC, subject to the dollar compensation limits under Section 401(a)(17) of the Internal Revenue Code, as applicable. For this purpose, FAC means one-third of the aggregate amount of compensation paid to a member and earned during the period of 3 consecutive years of the member's credited service in which the aggregate compensation paid is highest.

## Act 88 (Reciprocal Retirement Act, 1961 P.A. 88)

If the municipality has elected to come under the provision of Act 88 (see Table 2 in your municipality's actuarial report), service with former and future public employers in Michigan may be used to satisfy the service eligibility conditions of MERS. MERS maintains a statewide Act 88 adoption list:
https://employerportal.mersofmich.com/SharepointFormsService/Default.aspx?FormName=form 77.pdf

[^1]
## Service Retirement Allowance

Credited service at time of termination of membership is multiplied by one of the following options:

Hybrid 1.0\% $\quad 1.0 \%$ of a member's FAC
Hybrid $1.25 \% \quad 1.25 \%$ of FAC
Hybrid $1.5 \% \quad 1.5 \%$ of FAC
Hybrid $1.75 \%^{1} \quad 1.75 \%$ of FAC
Hybrid $2.0 \%{ }^{1} \quad 2.0 \%$ of FAC
${ }^{1}$ Available to those without social security coverage.

## Maximum Benefit Payable by MERS

The maximum benefit that may be paid by MERS is governed by Section 415 of the Internal Revenue Code. Benefits in excess of the maximum benefit will be paid by the MERS Excess Benefit Plan.

## Disability Retirement Allowance

Benefits are the same as under the Defined Benefit Plan, except that optional Benefit Program D-2 does not apply.

## Non-Duty Death Allowance

Benefits are the same as under the Defined Benefit Plan.

## Duty-Related Death Allowance

Benefits are the same as under the Defined Benefit Plan, except that optional Benefit Program D-2 does not apply.

## Member Contributions

None, unless required to comply with a state statute that places restrictions on employer contributions to retirement plans. Each municipality's actuarial valuation reflects the member contribution provisions reported by MERS.

## Post-Retirement Adjustments

Not available.

## Death-After-Retirement Surviving Spouse Benefit

The same optional forms of payment are available as under the Defined Benefit Plan, except that the optional Benefit Program RS50\% does not apply.

## Delayed Retirement Option Partial Lump Sum (DROP+)

Not available.

## Annuity Withdrawal

Not available.

## Deferred Retirement Option Program (DROP)

Not available.

## Hybrid Plan Part II - Defined Contribution Portion

## Employer Contributions and Vesting

The employer contribution amount is any percentage of compensation allowed by federal law.

The vesting schedule for employer contributions is one of the following schedules, as adopted by the employer:
(i) Immediate vesting upon participation; or
(ii) 100\% vesting after stated years (participant is $100 \%$ vested after not to exceed maximum 5 years of service ("cliff" vesting)); or
(iii) Graded vesting percentages per year of service, not to exceed maximum 6 years of service for $100 \%$ vesting, nor be less than certain stated minimums.

## Member Contributions and Vesting

The member contribution amount is any amount allowed by federal law and subject to procedures established by the Retirement Board.

The vesting schedule for member contributions is $100 \%$ immediate vesting.

Note: The Annual Actuarial Valuation addresses assets and liabilities for participation under the MERS Defined Benefit Plan and the Defined Benefit portion of the Hybrid Plan. The Defined Contribution portion of the Hybrid Plan is not addressed in the valuation results.

## Municipal Employees' Retirement System of Michigan IRC Section 415(b)(1)(A) Benefit Dollar Limits - 2017

The limits are based on the retiree's age at retirement. The limit at ages 62-65 is indexed with inflation, in \$5,000 increments. The limits at earlier ages are then increased proportionately. The limit applies to the retiree's or beneficiary's employer-financed straight life benefit, except in the case of an Option II, IIA, or III election with the retiree's spouse as named beneficiary, in which case the limit applies to the employer-financed portion of the reduced joint and survivor benefit.

| Age at Retirement | General Employees | Police and Fire Members ${ }^{1}$ |
| :---: | :---: | :---: |
| 35 | 39,562 | 215,000 |
| 36 | 41,800 | 215,000 |
| 37 | 44,179 | 215,000 |
| 38 | 46,709 | 215,000 |
| 39 | 49,402 | 215,000 |
| 40 | 52,271 | 215,000 |
| 41 | 55,329 | 215,000 |
| 42 | 58,591 | 215,000 |
| 43 | 62,074 | 215,000 |
| 44 | 65,797 | 215,000 |
| 45 | 69,779 | 215,000 |
| 46 | 74,044 | 215,000 |
| 47 | 78,616 | 215,000 |
| 48 | 83,523 | 215,000 |
| 49 | 88,797 | 215,000 |
| 50 | 94,472 | 215,000 |
| 51 | 100,588 | 215,000 |
| 52 | 107,189 | 215,000 |
| 53 | 114,326 | 215,000 |
| 54 | 122,053 | 215,000 |
| 55 | 130,436 | 215,000 |
| 56 | 139,547 | 215,000 |
| 57 | 149,466 | 215,000 |
| 58 | 160,288 | 215,000 |
| 59 | 172,119 | 215,000 |
| 60 | 185,083 | 215,000 |
| 61 | 199,322 | 215,000 |
| 62 | 215,000 | 215,000 |
| 63 | 215,000 | 215,000 |
| 64 | 215,000 | 215,000 |
| $65 \&$ older | 215,000 | 215,000 |
|  |  | 2 |

${ }^{1}$ Requires that the member have at least 15 years of police, fire, and/or armed forces service as defined in IRC regulations. Otherwise use the limits for general members.

## IRC Section 401(a)(17) Compensation Limit - 2017

For 2017, the IRC Section $401(\mathrm{a})(17)$ limit is $\$ 270,000$. This limit is indexed with inflation in $\$ 5,000$ increments.

## Actuarial Assumptions

To calculate MERS contribution requirements, assumptions are made about future events that could affect the amount and timing of benefits to be paid and the assets to be accumulated. The economic and demographic assumptions include:

- An assumed rate of investment return that is used to discount liabilities and project what plan assets will earn.
- A mortality table projecting the number of members who will die before retirement and the duration of benefit payments after retirement.
- Assumed retirement rates projecting when members will retire and commence receiving retirement benefits.
- A set of withdrawal and disability rates to estimate the number of members who will leave the work force before retirement.
- Assumed rates of pay increase to project member compensation in future years.

The actuarial assumptions used in connection with this December 31, 2016 Actuarial Valuation are unchanged from those used in the December 31, 2015 Actuarial Valuation. The actuarial assumptions currently used are summarized below and on the following pages.

## Interest Rate

Funding plan benefits involves the accumulation of assets to pay benefits in the future. These assets are invested and the net rate of investment earnings is a significant factor in determining the contributions required to support the ultimate cost of benefits. For the 2016 actuarial valuation, the long-term investment yield is assumed to be $7.75 \%$ annually, net of administrative and investment expenses. This assumption was first used for the December 31, 2015 actuarial valuations.

Please note that, given that the actuarial value of assets is currently $8 \%$ higher than the market value, meeting the actuarial assumption in the next few years will require average annual market returns that exceed the $7.75 \%$ investment return assumption.

Please see the Comments on Asset Smoothing in your municipality's Annual Actuarial Valuation Report.

## Pay Increases

Because benefits are based on a member's final average compensation (FAC), it is necessary to make an assumption with respect to each member's estimated pay progression. The pay increase assumption used in the actuarial valuation projects annual pay increases of $3.75 \%$ in the long term plus a percentage based on an age-related scale to reflect merit, longevity and promotional pay increases.

The pay increase assumption for selected ages is shown below. The $3.75 \%$ long-term wage inflation assumption was first used for the December 31, 2015 actuarial valuations. The merit and longevity pay increase assumption was first used for the December 31, 2015 actuarial valuations.

| Age | Base <br> (Wage Inflation) | Merit and <br> Longevity | Total Percentage <br> Increase in Pay |
| :---: | :---: | :---: | :---: |
| 20 | $3.75 \%$ | $11.00 \%$ | $14.75 \%$ |
| 25 | 3.75 | 7.20 | 10.95 |
| 30 | 3.75 | 3.10 | 6.85 |
| 35 | 3.75 | 1.90 | 5.65 |
| 40 | 3.75 | 1.20 | 4.95 |
| 45 | 3.75 | 0.81 | 4.56 |
| 50 | 3.75 | 0.52 | 4.27 |
| 55 | 3.75 | 0.30 | 4.05 |
| 60 | 3.75 | 0.00 | 3.75 |

## Inflation

Although no explicit price inflation assumption is used in this valuation, the long-term annual rate of price inflation implicit in the $3.75 \%$ base wage inflation is $2.5 \%$.

## Payroll Growth

For divisions that are open to new hires, the number of active members is projected to remain constant, and the total payroll is projected to increase $3.75 \%$ annually. This assumption was first used for the December 31, 2015 actuarial valuations.

## Increase in Final Average Compensation (FAC)

The 2009-2013 and two previous experience studies determined that for some retirees of some municipalities, the actual FAC at retirement was larger than would be expected based on reported annual pays and FAC's for the years just before retirement. Some possible sources for the differences are:

- Lump sum payments for unused paid time off. Unused sick leave payouts have been excluded from FAC since the mid-1970s. However, since that time it has become popular to combine sick and vacation time into paid time off, which is included in the FAC. Consequently, the lump sums that are includible in FAC have grown over the years.
- Extra overtime pay during the final year of employment. Our studies only reflect any increase in overtime during the final year, not any increase that occurs during the full 3 or more year averaging period.

We analyzed the variation among municipalities. The amount of unexpected FAC increase varies quite a bit between municipalities. Some municipalities show no sign of FAC loading, while other municipalities show increases above the average increase. This is presumably the result of different personnel policies among municipalities.

The Retirement Board adopted new FAC assumptions that were first used for the December 31, 2015 annual actuarial valuations. These assumptions reflect an FAC load of $0 \%$ to $12 \%$ for each municipality, based on the municipality's experience in the 2009-2013 and earlier experience studies (it is anticipated that these assumptions will be updated after every 5 year experience study). The FAC increase assumption(s) for your municipality are shown in your annual actuarial valuation report. Note that for divisions that adopted Sick Leave in FAC (SLIF), the assumption is developed individually for each division, based on the specific SLIF provision and/or past experience.

## Withdrawal Rates

The withdrawal rates are used to estimate the number of employees at each age that are expected to terminate employment before qualifying for retirement benefits. The withdrawal rates do not apply to members eligible to retire, and do not include separation on account of death or disability. The assumed rates of withdrawal applied in the current valuation are based on years of service, and scaled up or down according to each division's experience.

Sample rates of withdrawal from active employment, before application of the scaling factor, are shown below. These rates were first used for the December 31, 2015 actuarial valuations.

The base withdrawal rates (see the table below) are multiplied by the scaling factor to obtain the assumed withdrawal rates. The scaling factor for each division is shown in your actuarial valuation report.

| Sample Years <br> of Service | \% of Active Members Withdrawing <br> Within the Next Year |
| :---: | :---: |
| 0 | $19.60 \%$ |
| 1 | 16.30 |
| 2 | 13.30 |
| 3 | 10.50 |
| 4 | 8.60 |
| 5 | 6.90 |
| 10 | 4.60 |
| 15 | 3.40 |
| 20 | 2.60 |
| 25 | 2.20 |
| 30 and over | 2.20 |

## Retirement Rates

A schedule of retirement rates is used to measure the probability of eligible members retiring during the next year. The retirement rates for Normal Retirement are determined by each member's replacement index at the time of retirement. The replacement index is defined as the approximate percentage of the member's pay (after reducing for their member contributions) that will be replaced by the member's benefit at retirement. The index is calculated as:

Replacement Index = $100 \times$ Accrued Benefit divided by [Pay less Member Contributions]
The assumed retirement percentage is $100 \%$ at the later of age 70 or a member's age on the valuation date.
Retirement rates for Early (reduced) Retirement are determined by the member's age at early retirement.
The Normal Retirement rates below were first used for the December 31, 2015 actuarial valuations. The Early Retirement rates were first used for the December 31, 2015 actuarial valuations.

Normal Retirement

| Sample <br> Replacement <br> Index | Percent of Eligible <br> Active Members <br> Retiring Within <br> the Next Year |
| :---: | :---: |
| 5 | $8.0 \%$ |
| 10 | 12.0 |
| 15 | 16.0 |
| 20 | 19.0 |
| 25 | 19.5 |
| 30 | 19.5 |
| 35 | 19.5 |
| 40 | 20.0 |
| 45 | 21.0 |
| 50 | 21.0 |
| 55 | 21.0 |
| 60 | 24.0 |
| 65 | 24.0 |
| 70 | 25.0 |
| 75 | 28.0 |
| 80 | 33.0 |
| 85 | 36.0 |
| 90 | 41.0 |
| 95 | 46.0 |
| $100+$ | 50.0 |

## Early Retirement - Reduced Benefit

| Age | Percent of Eligible <br> Active Members <br> Retiring Within <br> the Next Year |
| :---: | :---: |
| 50 | $2.0 \%$ |
| 51 | 2.0 |
| 52 | 3.3 |
| 53 | 3.8 |
| 54 | 5.6 |
| 55 | 4.3 |
| 56 | 4.2 |
| 57 | 4.1 |
| 58 | 5.0 |
| 59 | 6.2 |

## Disability Rates

Disability rates are used in the valuation to estimate the incidence of member disability in future years.
The assumed rates of disablement at various ages are shown below. These rates were first used for the December 31, 2015 actuarial valuations.

| Sample Ages | Percent Becoming Disabled <br> Within the Next Year |
| :---: | :---: |
| 20 | $0.02 \%$ |
| 25 | 0.02 |
| 30 | 0.02 |
| 35 | 0.05 |
| 40 | 0.08 |
| 45 | 0.20 |
| 50 | 0.29 |
| 55 | 0.38 |
| 60 | 0.39 |
| 65 | 0.39 |

Eighty percent ( $80 \%$ ) of the disabilities are assumed to be non-duty and $20 \%$ of the disabilities are assumed to be duty related. For those plans which have adopted disability provision D-2, $40 \%$ of the disabilities are assumed to be non-duty and $60 \%$ are assumed to be duty related.

## Mortality Table

In estimating the amount of the reserves required at the time of retirement to pay a member's benefit for the remainder of their lifetime, it is necessary to make an assumption with respect to the probability of surviving to retirement and the life expectancy after retirement.

The mortality table used to project the mortality experience of non-disabled plan members is a $50 \%$ Male - $50 \%$ Female blend of the following tables:

1. The RP-2014 Healthy Annuitant Mortality Tables, with rates multiplied by $105 \%$
2. The RP-2014 Employee Mortality Tables
3. The RP-2014 Juvenile Mortality Tables

For ages $0-17$ we use the rates in Table 3; for ages $18-49$ we use the rates in Table 2 ; for ages 70 and older we use the rates in Table 1; and for ages 50-69 we blend Table 2 and Table 1 as follows:
a. Age 50, use $60 \%$ of Table 2 and $40 \%$ of Table 1
b. Age 51, use $57 \%$ of Table 2 and $43 \%$ of Table 1
c. Etc. ...
d. Age 69, use 3\% of Table 2 and $97 \%$ of Table 1

The mortality table used to project the mortality experience of disabled plan members is a $50 \%$ Male - $50 \%$ Female blend of the RP-2014 Disabled Retiree Mortality Tables.

These mortality tables were first used for the December 31, 2015 actuarial valuations.

Ninety percent (90\%) of active member deaths are assumed to be non-duty deaths and $10 \%$ of the deaths are assumed to be duty related.

Possible future mortality improvements are reflected in the mortality assumption. The mortality assumptions include a $10 \%$ margin for future mortality improvements, relative to the actual mortality experience seen in the 2009-2013 Experience Study.

The life expectancies and mortality rates projected for non-disabled members are shown below for selected ages:

| Age | Expected Years <br> of Life Remaining | Mortality Rates |
| :---: | :---: | :---: |
| 20 | 63.06 | $0.03 \%$ |
| 25 | 58.15 | 0.03 |
| 30 | 53.24 | 0.03 |
| 35 | 48.33 | 0.04 |
| 40 | 43.43 | 0.05 |
| 45 | 38.56 | 0.08 |
| 50 | 33.74 | 0.23 |
| 55 | 29.18 | 0.37 |
| 60 | 24.79 | 0.58 |
| 65 | 20.59 | 0.94 |
| 70 | 16.66 | 1.56 |
| 75 | 13.07 | 2.51 |
| 80 | 9.85 | 4.18 |

The life expectancies and mortality rates projected for disabled members are shown below for selected ages:

| Age | Expected Years <br> of Life Remaining | Mortality Rates |
| :---: | :---: | :---: |
| 20 | 46.95 | $0.47 \%$ |
| 25 | 43.14 | 0.54 |
| 30 | 39.24 | 0.55 |
| 35 | 35.33 | 0.65 |
| 40 | 31.52 | 0.82 |
| 45 | 27.98 | 1.30 |
| 50 | 24.87 | 1.62 |
| 55 | 21.91 | 1.89 |
| 60 | 18.97 | 2.18 |
| 65 | 16.04 | 2.63 |
| 70 | 13.19 | 3.43 |
| 75 | 10.54 | 4.77 |
| 80 | 8.18 | 6.88 |

## Miscellaneous and Technical Assumptions

| Loads | - Vesting liabilities are increased by $2 \%$ to reflect the value of the potential survivor benefit payable in case of death during the benefit deferral period. |
| :---: | :---: |
| Marriage Assumptions | - Seventy percent ( $70 \%$ ) of males and $70 \%$ of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses. |
| Pay Increase Timing | - Beginning of valuation year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date. |
| Pay Adjustment | None. |
| Decrement Timing | Decrements of all types are assumed to occur mid-year. |
| Future Service | Members are assumed to earn 1.0 years of service in each future year. |
| Eligibility Testing | - Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur. |
| Benefit Service | - Exact fractional service is used to determine the amount of benefit payable. Benefit service is the service used in the benefit formula. |
| Eligibility Service | - The larger of reported Eligibility Service and reported Vesting Service was used as eligibility service in the valuation. Eligibility service is the service used to meet the conditions for retirement, and is generally equal to or larger than benefit service. |
| Decrement Relativity | - Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects. |
| Decrement Operation | - Disability and withdrawal do not operate during retirement eligibility. |
| Normal Form of Payment | - Future retiring members are assumed to elect the Straight Life form of payment (see page 7 regarding death-after-retirement benefits). |
| Incidence of Contributions | - Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits. |


| Maximum Compensation | - The dollar compensation limits under Section 401(a)(17) of the Internal Revenue Code are projected to increase $3.75 \%$ annually. No member or employer contributions are projected to be made on the portion of any member's annual compensation in excess of the IRC Section 401(a)(17) limit for the year. |
| :---: | :---: |
| Maximum Benefit | The dollar benefit limitations under Section 415 of the Internal Revenue Code are projected to increase $3.75 \%$ annually. Employee divisions 02, 20-29 (Police), 05 and 50-59 (Fire) are presumed eligible for the public safety benefit limits. No benefits in excess of the IRC 415 limits are projected to be paid out of the Qualified Benefit Plan. |
| Member Contribution Interest | - The interest rate credited on member contributions is the one-year Treasury Bill rate as of December 31, determined annually. The long-term rate assumed in the valuation is $3 \%$, which is consistent with the $2.5 \%$ price inflation assumption. |
| DROP+ Assumptions | Each eligible member is assumed to make the DROP + election with the most valuable combination of lump sum and reduced monthly benefit. <br> The retirement probabilities shown earlier are used for members who are not covered by Benefit Program DROP+. For those covered by Benefit Program DROP+, it is assumed that retirement will be delayed long enough to become eligible for at least 4 years' worth of DROP+ lump sum. |
| Data Adjustments | - The gender was not reported for a small number of active members. These active members were assumed to be male. |

## Actuarial Funding Method

The Retirement Board has adopted funding methodology for the Retirement System to achieve the following major objectives:

- Develop level required contribution rates as a percentage of payroll (for divisions that are open to new hires);
- Finance benefits earned by present employees on a current basis;
- Accumulate assets to enhance members' benefit security;
- Produce investment earnings on accumulated assets to help meet future benefit costs;
- Make it possible to estimate the long-term actuarial cost of proposed amendments to System provisions; and
- Assist in maintaining the Retirement System's long-term financial viability.

The basic funding objective is a level pattern of cost as a percentage of pay throughout each member's working lifetime. The funding method used in this actuarial valuation - the entry age normal cost method - was first used for the December 31,1993 actuarial valuations and is intended to:
(i) Meet this funding objective; and
(ii) Result in a relatively level long-term contribution requirement as a percentage of pay.

Under the entry age normal cost method, the total actuarially-determined contribution requirement is equal to the sum of the normal cost plus the payment required to fund the unfunded actuarial accrued liability over a period of years. Funding or amortizing the unfunded actuarial accrued liability includes a payment toward the liability (principal) plus a payment to reflect the time value of money (interest).

## Normal Cost

In general terms, the normal cost is the cost of benefit rights accruing on the basis of current service. Technically, the normal cost rate is the level percentage-of-pay contribution required each year, with respect to each member, to accumulate over their projected working lifetime the reserves needed to meet the cost of earned benefits. The normal cost represents the ultimate cost of the Retirement System, if the unfunded liability is paid up and the actual experience of the System conforms to the assumptions.

## Actuarial Accrued Liability

The total actuarial present value of future benefits is computed using the valuation's actuarial assumptions. Subtracting the present value of future normal costs results in the actuarial accrued liability.

The total actuarial accrued liability essentially represents the amount that would have been accumulated as of a given valuation date, if:
(i) Contributions sufficient to meet the normal costs of the Retirement System had been made each year in the past;
(ii) Benefit provisions had always been the same as current benefit provisions; and
(iii) Actual past experience had always conformed to current actuarial assumptions.

If assets equaled the total accrued liability, there would be no unfunded liability and future contribution requirements would consist solely of the calculated normal cost rates.

## Amortization of Unfunded Actuarial Accrued Liability

The unfunded accrued liability (UAL) as of December 31, 2016 (see Table 10 of your municipality's annual actuarial valuation report) is projected to the beginning of the fiscal year for which employer contributions are being calculated (fiscal year beginning in 2018). This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. This projection process will result in more stable computed contribution rates, and was first used for the December 31, 2004 actuarial valuations.

For valuation years through 2015, the projected total unfunded accrued liability was then amortized over the appropriate period for each division (see Table 1 of your municipality's annual actuarial valuation report) to determine the amortization payment. For divisions that will have no new hires this was the dollar amortization payment. For divisions that are open to new hires this payment was divided by the projected fiscal year payroll to determine the amortization payment as a percentage of active member payroll. The resulting amortization contributions were displayed in Table 1 for each division. For purposes of determining the amortization payment, payments are projected to increase $3.75 \%$ a year.

For the December 31, 2016 Annual Valuation, the remaining December 31, 2015 UAL is maintained separately (herein after called the "initial UAL") from newly emerging UAL and will be amortized over the remaining years. Newly emerging UAL is amortized separately as discussed below. Dollar and percentage contributions are determined as above for each piece (layer) of UAL.

The standard amortization period to fund the initial UAL for open divisions is 22 years for positive unfunded in the 2016 valuation. This period decreases by 1 each year until the initial UAL is paid off. Section 20 m of Act No. 314 of the Public Acts of 1965 as amended (MCL 38.1140m) requires that the amortization period not exceed 30 years.

The standard amortization period for negative initial UAL is 10 years, with the 10 year period reestablished with each annual actuarial valuation.

For divisions that closed to new hires prior to 2016, with new hires not covered by MERS Defined Benefit Plan or Hybrid Plan provisions (in a linked division), the amortization period was shortened in order to ensure adequate funding of the closed division. The employer had two amortization options. Under the Accelerated to 5 Year Option, the otherwise applicable MERS-wide standard amortization period for positive unfunded liabilities in effect in the valuation year in which the division is closed is decreased annually by 2 years until the period reaches 6 or 5 years. Each year thereafter the amortization period decreases one year each valuation year until the unfunded liability is paid off. Under the Accelerated to 15 Year Option, the amortization period is decreased annually by 2 years until the period reaches 16 or 15 years. Each year thereafter the amortization period decreases one year each valuation year until the unfunded liability is paid off. An employer that elected the Accelerated to 5 Year Option may later change to the Accelerated to 15 Year Option. Note that beginning in 2016 the Accelerated to 15 Option is the default amortization policy for closed divisions. Beginning in 2017, the default amortization policy for newly closing division is the same as for open divisions unless the actuary determines that a shorter period is necessary to ensure a reasonable level of benefit security is maintained. This is called the "Non-Accelerated Option".

Amortization periods that are shorter than the above standard periods may be elected by a municipality (but not shorter than 5 years for negative unfunded liabilities), and some municipalities have done so.

The minimum contribution requirement is equal to the excess of three years of projected annual retiree benefit payments over the projected market value of assets. For open divisions this minimum first applied beginning with the December 31, 2015 annual valuations.

Beginning in the December 31, 2016 annual actuarial valuation, new sources of UAL are amortized over separate closed amortization periods as shown in the table on the following page unless the remaining period on the initial liability is longer, in which case the longer period is used.

If in a valuation the total Unfunded Liability switches from positive to negative or negative to positive, all existing layers are eliminated and a new layer is established.

## Amortization Periods for New Sources of Unfunded Accrued Liability (UAL)

(First Applicable to the December 31, 2016 Annual Actuarial Valuation)

| Source of UAL |  | Amortization Period ${ }^{1}$ |  |
| :--- | :---: | :---: | :---: |
|  | Open Divisions | Closed Divisions |  |
| Remaining 12/31/2015 UAL | 22 years | Accelerated or |  |
| Non-Accelerated |  |  |  |
| UAL for new MERS employers | 25 years ${ }^{1}$ | 25 years ${ }^{1}$ |  |
| Future Active and Inactive Plan Amendments | 10 years ${ }^{2}$ | 5 years ${ }^{2}$ |  |
| Future Liability and Asset Gain or Loss | 15 years | 10 years |  |
| Future Assumption or Method Changes | 15 years | 10 years |  |
| Future Early Retirement Incentives | 5 years ${ }^{2}$ | 5 years ${ }^{2}$ |  |

${ }^{1}$ A shorter amortization period may be suggested for poorly funded divisions (subject to MERS
CEO and actuary discussion).
${ }^{2}$ Only applies to divisions that are over $100 \%$ funded before and after the benefit provision change.

## Open Divisions and Closed Divisions

Open divisions will include the future new hires within an employee classification (bargaining unit). Rehired members will also become members of the open division. Members transferred to the employee classification will also become members of the open division, unless the Alternate Transfer Provision is adopted by the municipality. In the latter case, each transferring member is given a choice of entering the open division or a closed division within the employee classification (if there are still active members in the closed division, and the closed division is of the same type - defined benefit, hybrid, or defined contribution - as the division from which the member transferred).

There may also be one or more divisions within the employee classification that no longer accept new hires. These are generally referred to as closed divisions, but in some situations are linked to the open division with the new hires (for actuarial valuation purposes - see Linked Divisions below). Note that a division is also treated like a closed division if the division has no active members reported as of the valuation date.

## Linked Divisions

If new hires, transfers and rehires in a division are covered by a new tier of benefits in the MERS Defined Benefit Plan (including the defined benefit portion of the MERS Hybrid Plan), there can be a sharing of employer assets between the defined benefit division with no new hires (with the old benefit structure) and the defined benefit or hybrid division covering
the new hires within the same employee classification. (Note that assets cannot be shared if the new tier of benefits is a defined contribution plan.) This allows multiple divisions to be "linked" and financed as if they were one division.

If a division with no new hires is "linked" to an open MERS Defined Benefit Plan or MERS Hybrid Plan division, this is indicated in Table 2 of your municipality's annual actuarial valuation report. Both of the linked divisions will use the standard open division funding policy.

## Asset Valuation Method

The actuarial value of assets is determined on the basis of a method that calculates expected investment income at the valuation rate of return and adds a portion of the difference between the expected investment income and actual investment income earned on a market value basis. For the December 31, 2016 valuation the difference in investment income between expected return and market return is recognized over a 5 -year period at the rate of $20 \%$ per year. This asset valuation method was first adopted for the December 31, 2016 valuation, and is applied as follows:

Actuarial Value equals:
(i) Actuarial value of assets from the previous actuarial valuation; plus
(ii) Aggregate employer and member contributions since the last valuation; minus
(iii) Benefit payments and refunds of member contributions since the last valuation; plus
(iv) Estimated investment income at the $7.75 \%$ valuation interest rate; plus
(v) Portion of gain (loss) recognized in the current valuation.

For the above purpose, gain (loss) is defined as the excess during the period of the investment return on the market value of assets over the expected investment income. The portion recognized in the valuation is $20 \%$ of the current year's gain (loss) plus $20 \%$ of the gain (loss) from each of the 4 preceding years. This is a change from the 2015 and prior valuations where a 10 year smoothing period was used. For purposes of transitioning from the 10 year to the 5 year method, the entirety of prior unrecognized gains and losses at December 31, 2016 is combined into a single item and will be recognized over the next four years.

During 2016, the approximate net investment return on average total assets at actuarial value (determined as the actuarial value of investment income divided by the average actuarial value of assets during the year) was $5.14 \%$. The corresponding amounts for 2015, 2014, 2013 and 2012 were $5.21 \%, 5.90 \%, 6.04 \%$, and $5.42 \%$, respectively.

For the December 31, 2016 valuation, the actuarial value of assets is equal to $107.71 \%$ of market value (compared to $113.54 \%, 105.99 \%, 106.18 \%$, and $114.36 \%$ in $2015,2014,2013$ and 2012 , respectively). This percentage is applied to each division's reported market value of assets to estimate the actuarial value of assets for the division. The tables on the following pages provide the details of the derivation of the actuarial value of assets for the retirement system in the aggregate.

Note that, given that the actuarial value of assets is currently $8 \%$ higher than the market value, meeting the actuarial assumption in the next few years will require average annual market returns that exceed the $7.75 \%$ investment return assumption.

Please see the Comments on Asset Smoothing in your municipality's annual actuarial valuation report.

## Municipal Employees' Retirement System of Michigan

Derivation of Actuarial Value of Assets

| Valuation Date December 31 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Beginning of Year Assets |  |  |  |  |  |
| a) Market Value | \$3,788,886,471 | \$3,647,820,869 | \$3,285,304,333 | \$4,071,997,180 | \$4,619,201,287 |
| b) Valuation Assets | 3,791,423,339 | 4,034,377,419 | 4,134,404,645 | 4,459,492,020 | 4,732,208,229 |
| 2. End of Year Market Value Assets | 3,647,820,869 | 3,285,304,333 | 4,071,997,180 | 4,619,201,287 | 4,906,288,690 |
| 3. Net Additions to Market Value |  |  |  |  |  |
| a) Net Contributions | 154,103,475 | 167,427,558 | 223,450,393 | 223,057,268 | 277,589,524 |
| b) Net Investment Income $=(3 \mathrm{~d})-(3 \mathrm{a})-(3 \mathrm{c})$ | $(93,269,286)$ | $(324,926,459)$ | $792,139,959$ | $577,562,751$ | $288,223,418$ |
| c) Benefit Payments | $(201,899,791)$ | $(205,017,635)$ | $(228,897,505)$ | $(253,415,912)$ | $(278,725,539)$ |
| Total Additions to Market Value $=(2)$ (1a) | $(141,065,602)$ | $(362,516,536)$ | 786,692,847 | 547,204,107 | 287,087,403 |
| 4. Average Valuation Assets $=(1 b)+.5 x[(3 a)+(3 c)]$ | 3,767,525,181 | 4,015,582,381 | 4,131,681,089 | 4,444,312,698 | 4,731,640,222 |
| 5. Expected Income at Valuation Rate $=8 \% \times(4)$ | 301,402,014 | 321,246,590 | 330,534,487 | 355,545,016 | 378,531,218 |
| 6. Gain (Loss) $=(3 \mathrm{~b})-(5)$ | $(394,671,300)$ | $(646,173,049)$ | 461,605,472 | 222,017,735 | $(90,307,800)$ |
| 7. Phased-In Recognition of Investment Return |  |  |  |  |  |
| a) Current Year: $0.2 \times(6)$ | $(78,934,260)$ | $(129,234,610)$ |  | 44,403,547 | $(18,061,560)$ |
| b) First Prior Year | $(79,670,266)$ | $(78,934,260)$ |  |  | 44,403,547 |
| c) Second Prior Year | 63,981,441 | $(79,670,266)$ |  |  |  |
| d) Third Prior Year | 40,228,410 | 63,981,441 |  |  |  |
| e) Fourth Prior Year | 43,743,057 | 40,228,408 |  |  |  |
| f) 1999-2003 Years Combined | N/A | N/A | 0 | $(96,873,710)$ | $(96,873,710)$ |
| g) Total Recognized Investment Gain (Loss) | $(10,651,618)$ | $(183,629,287)$ | 0 | $(52,470,163)$ | $(70,531,723)$ |
| 8. Change in Valuation Assets (3a) + (3c) + (5) + (7g) | 242,954,080 | 100,027,226 | 325,087,375 | 272,716,209 | 306,863,480 |
| 9. End of Year Assets |  |  |  |  |  |
| a) Market Value = (2) | 3,647,820,869 | 3,285,304,333 | 4,071,997,180 | 4,619,201,287 | 4,906,288,690 |
| b) Valuation Assets = $(1 b)+(8)$ | 4,034,377,419 | 4,134,404,645 | 4,459,492,020 | 4,732,208,229 | 5,039,071,709 |
| c) Difference Between Market \& Valuation Assets | $(386,556,550)$ | $(849,100,312)$ | $(387,494,840)$ | $(113,006,942)$ | $(132,783,019)$ |
| 10. Recognized Rate of Return $=[(5)+(7 \mathrm{~g})] /(4)$ | 7.72\% | 3.43\% | 8.00\% | 6.82\% | 6.51\% |
| 11. Market Rate of Return | (2.48\%) | (8.95\%) | 24.13\% | 14.24\% | 6.24\% |
| 12. Valuation Asset Adjustment Factor $=(9 b) /$ (9a) | 1.105969 | 1.258454 | 1.095161 | 1.024465 | 1.027064 |

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## Municipal Employees' Retirement System of Michigan

Derivation of Actuarial Value of Assets (Cont.)

| Valuation Date December 31 | 2006 | 2007 | 2008 | 2009 | 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Beginning of Year Assets <br> a) Market Value <br> b) Valuation Assets | \$4,906,288,690 $5,039,071,709$ | $\$ 5,590,042,317$ $5,512,924,466$ | \$6,071,046,914 $6,001,040,078$ | $\$ 4,512,260,955$ $6,278,731,673$ | $\begin{array}{r} \$ 5,276,645,338 \\ 6,604,608,397 \end{array}$ |
| 2. End of Year Market Value Assets | 5,590,042,317 | 6,071,046,914 | 4,512,260,955 | 5,276,645,338 | 5,971,593,444 |
| 3. Net Additions to Market Value |  |  |  |  |  |
| a) Net Contributions | 371,505,157 | 386,942,952 | 374,214,134 | 413,354,720 | 423,489,032 |
| b) Net Investment Income $=(3 d)-(3 a)-(3 c)$ | 622,409,716 | 442,377,206 | $(1,553,001,917)$ | 771,066,207 | 733,059,352 |
| c) Benefit Payments | $(310,161,246)$ | $(348,315,561)$ | $(379,998,176)$ | $(420,036,544)$ | $(461,600,278)$ |
| d) Total Additions to Market Value $=(2)$ (1a) | 683,753,627 | 481,004,597 | $(1,558,785,959)$ | 764,384,383 | 694,948,106 |
| 4. Average Valuation Assets $=(1 b)+.5 \times[(3 a)+(3 c)]$ | 5,069,743,665 | 5,532,238,162 | 5,998,148,057 | 6,275,390,761 | 6,585,552,774 |
| 5. Expected Income at Valuation Rate $=8 \% \times(4)$ | 405,579,493 | 442,579,053 | 479,851,845 | 502,031,261 | 526,844,222 |
| 6. Gain (Loss) $=(3 \mathrm{~b})-(5)$ | 216,830,223 | $(201,847)$ | $(2,032,853,762)$ | 269,034,946 | 206,215,130 |
| 7. Phased-In Recognition of Investment Return |  |  |  |  |  |
| a) Current Year: $0.1 \times(6)$ | $21,683,022$ | $(20,185)$ | $(203,285,376)$ | 26,903,495 | 20,621,513 |
| b) First Prior Year | $(14,753,669)$ | 21,683,022 | $(20,185)$ | $(203,285,376)$ | 26,903,495 |
| c) Second Prior Year |  | $(14,753,669)$ | 21,683,022 | (20,185) | $(203,285,376)$ |
| d) Third Prior Year |  |  | $(14,753,669)$ | 21,683,022 | $(20,185)$ |
| e) Fourth Prior Year |  |  |  | $(14,753,669)$ | 21,683,022 |
| f) Fifth Prior Year |  |  |  |  | $(14,753,669)$ |
| g) Sixth Prior Year |  |  |  |  |  |
| h) Seventh Prior Year |  |  |  |  |  |
| i) Eighth Prior Year |  |  |  |  |  |
| j) Ninth Prior Year |  |  |  |  |  |
| k) Total Recognized Investment Gain (Loss) | 6,929,353 | 6,909,168 | $(196,376,208)$ | $(169,472,713)$ | $(148,851,200)$ |
| 8. Change in Valuation Assets $(3 a)+(3 c)+(5)+$ (7k) | 473,852,757 | 488,115,612 | 277,691,595 | 325,876,724 | 339,881,776 |
| 9. End of Year Assets |  |  |  |  |  |
| a) Market Value $=(2)$ | 5,590,042,317 | 6,071,046,914 | 4,512,260,955 | 5,276,645,338 | 5,971,593,444 |
| b) Valuation Assets = $(1 \mathrm{~b})+(8)$ | 5,512,924,466 | 6,001,040,078 | 6,278,731,673 | 6,604,608,397 | 6,944,490,173 |
| c) Difference Between Market \& Valuation Assets | 77,117,851 | 70,006,836 | $(1,766,470,718)$ | $(1,327,963,059)$ | $(972,896,729)$ |
| 10. Recognized Rate of Return $=[(5)+(7 \mathrm{k})] /(4)$ | 8.14\% | 8.12\% | 4.73\% | 5.30\% | 5.74\% |
| 11. Market Rate of Return | 12.61\% | 7.89\% | (25.59\%) | 17.10\% | 13.94\% |
| 12. Valuation Asset Adjustment Factor $=(9 b) /(9 a)$ | 0.986204 | 0.988469 | 1.391482 | 1.251668 | 1.162921 |

## Municipal Employees' Retirement System of Michigan

Derivation of Actuarial Value of Assets (Cont.)

| Valuation Date December 31 | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Beginning of Year Assets <br> a) Market Value <br> b) Valuation Assets | $\$ 5,971,593,444$ $6,944,490,173$ | \$5,935,528,263 $7,157,148,344$ | \$6,858,525,416 $7,843,152,666$ | \$7,651,705,376 $8,124,887,439$ | $\begin{array}{r} \$ 8,063,083,723 \\ 8,546,363,754 \end{array}$ |
| 2. End of Year Market Value Assets | 5,935,528,263 | 6,858,525,416 | 7,651,705,376 | 8,063,083,723 | 7,886,133,448 |
| 3. Net Additions to Market Value |  |  |  |  |  |
| a) Net Contributions | 362,710,568 | 856,171,348 | 476,725,412 | 651,265,712 | 717,870,630 |
| b) Net Investment Income $=(3 d)-(3 a)-(3 c)$ | 108,045,293 | 633,022,713 | 979,236,854 | 467,398,803 | $(139,840,580)$ |
| c) Benefit Payments | $(506,821,042)$ | $(566,196,908)$ | $(662,782,306)$ | $(707,286,168)$ | $(754,980,325)$ |
| Market Value $=(2)$ (1a) | $(36,065,181)$ | 922,997,153 | 793,179,960 | 411,378,347 | $(176,950,275)$ |
| 4. Average Valuation Assets $=(1 b)+.5 x[(3 a)+(3 c)]$ | 6,872,434,936 | 7,302,135,564 | 7,750,124,219 | 8,096,877,211 | 8,527,808,907 |
| 5. Expected Income at Valuation Rate $=8 \% \times(4)$ | 549,794,795 | 584,170,845 | 620,009,938 | 647,750,177 | 682,224,713 |
| 6. Gain (Loss) $=(3 \mathrm{~b})-(5)$ | $(441,749,502)$ | 48,851,868 | 359,226,916 | $(180,351,374)$ | $(822,065,293)$ |
| 7. Phased-In Recognition of Investment Return |  |  |  |  |  |
| a) Current Year: $0.1 \times(6)$ | $(44,174,950)$ | 4,885,187 | 35,922,692 | $(18,035,137)$ | $(82,206,529)$ |
| b) First Prior Year | 20,621,513 | $(44,174,950)$ | 4,885,187 | 35,922,692 | $(18,035,137)$ |
| c) Second Prior Year | 26,903,495 | 20,621,513 | $(44,174,950)$ | 4,885,187 | 35,922,692 |
| d) Third Prior Year | $(203,285,376)$ | 26,903,495 | 20,621,513 | $(44,174,950)$ | 4,885,187 |
| e) Fourth Prior Year | $(20,185)$ | $(203,285,376)$ | 26,903,495 | 20,621,513 | $(44,174,950)$ |
| f) Fifth Prior Year | 21,683,022 | $(20,185)$ | $(203,285,376)$ | 26,903,495 | 20,621,513 |
| g) Sixth Prior Year | $(14,753,669)$ | 21,683,022 | $(20,185)$ | $(203,285,376)$ | 26,903,495 |
| h) Seventh Prior Year |  | $(14,753,669)$ | 21,683,022 | $(20,185)$ | $(203,285,376)$ |
| i) Eighth Prior Year |  |  | $(14,753,669)$ | $\begin{array}{r} 21,683,022 \end{array}$ | $(20,185)$ |
| j) Ninth Prior Year |  |  |  | $(14,753,667)$ | 21,683,025 |
| k) Total Recognized <br> Investment Gain (Loss) | $(193,026,150)$ | $(188,140,963)$ | $(152,218,271)$ | $(170,253,406)$ | $(237,706,265)$ |
| 8. Change in Valuation Assets (3a) + (3c) + (5) + (7k) | 212,658,171 | 686,004,322 | 281,734,773 | 421,476,315 | 407,408,753 |
| 9. End of Year Assets |  |  |  |  |  |
| a) Market Value = (2) | 5,935,528,263 | 6,858,525,416 | 7,651,705,376 | 8,063,083,723 | 7,886,133,448 |
| b) Valuation Assets = $(1 \mathrm{~b})+(8)$ | 7,157,148,344 | 7,843,152,666 | 8,124,887,439 | 8,546,363,754 | 8,953,772,507 |
| c) Difference Between Market \& Valuation Assets | $(1,221,620,081)$ | $(984,627,250)$ | $(473,182,063)$ | $(483,280,031)$ | $(1,067,639,059)$ |
| 10. Recognized Rate of Return $=[(5)+(7 \mathrm{k})] /(4)$ | 5.19\% | 5.42\% | 6.04\% | 5.90\% | 5.21\% |
| 11. Market Rate of Return | 1.83\% | 10.41\% | 14.47\% | 6.13\% | (1.74\%) |
| 12. Valuation Asset Adjustment <br> Factor $=(9 b) /(9 a)$ | 1.205815 | 1.143563 | 1.061840 | 1.059937 | 1.135382 |

## Municipal Employees' Retirement System of Michigan

Derivation of Actuarial Value of Assets (Cont.)

| Valuation Date December 31 | 2016 | 2017 | 2018 | 2019 | 2020 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Beginning of Year Assets <br> a) Market Value <br> b) Valuation Assets | $\begin{array}{r} \$ 7,886,133,448 \\ 8,953,772,507 \end{array}$ |  |  |  |  |
| 2. End of Year Market Value Assets | 8,490,200,180 |  |  |  |  |
| 3. Net Additions to Market Value <br> a) Net Contributions <br> 654,676,753 <br> b) Net Investment Income $=$ (3d) - (3a) - (3c) <br> c) Benefit Payments <br> $(917,084,153)$ |  |  |  |  |  |
| d) Total Additions to Market Value $=(2)-(1 a)$ | 604,066,732 |  |  |  |  |
| 4. Average Valuation Assets $=$ $(1 b)+.5 x[(3 a)+(3 c)]$ | 8,822,568,807 |  |  |  |  |
| 5. Expected Income at Valuation Rate=7.75\% x (4) | 683,749,083 |  |  |  |  |
| 6. Gain (Loss) $=(3 \mathrm{~b})-(5)$ | 182,725,049 |  |  |  |  |
| 7. Phased-In Recognition of Investment Return <br> a) Current Year: $0.2 \times(6)$ <br> b) First Prior Year <br> c) Second Prior Year <br> d) Third Prior Year <br> e) Fourth Prior Year <br> f) Total Recognized Investment Gain (Loss) |  |  |  |  |  |
|  | $36,545,010$ |  |  |  |  |
|  | $(266,909,765)$ | $36,545,010$ |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  | $(266,909,764)$ | 36,545,010 |
|  | $(230,364,755)$ | $(230,364,755)$ | $(230,364,755)$ | $(230,364,755)$ | 36,545,010 |
| 8. Change in Valuation Assets $(3 a)+(3 c)+(5)+(7 f)$ | 190,976,928 |  |  |  |  |
| 9. End of Year Assets |  |  |  |  |  |
| a) Market Value $=(2)$ | 8,490,200,180 |  |  |  |  |
| b) Valuation Assets $=(1 \mathrm{~b})$ $+(8)$ | 9,144,749,435 |  |  |  |  |
| c) Difference Between Market \& Valuation Assets | $(654,549,255)$ |  |  |  |  |
| 10. Recognized Rate of Return $=[(5)+(7 f)] /(4)$ | 5.14\% |  |  |  |  |
| 11. Market Rate of Return | 11.17\% |  |  |  |  |
| 12.Valuation Asset Adjustment Factor $=(9 b) /(9 a)$ | 1.077095 |  |  |  |  |

CBIZ Retirement Plan Services

September 14, 2017

The Retirement Board
Municipal Employees' Retirement System of Michigan
Lansing, Michigan
Ladies and Gentlemen:
This report presents a summary of the results of the $71^{\text {st }}$ Annual Actuarial Valuations, prepared as of December 31, 2016, for the Municipal Employees' Retirement System (MERS) 735 Defined Benefit Plan and Hybrid Plan municipalities. The report was prepared at the request of the Retirement Board and is intended for use by the Retirement System.

MERS is an independent, professional retirement services organization that has partnered with Michigan municipalities for over 70 years. Each municipality in MERS is responsible for the employer contributions needed to provide benefits for its employees and former employees under the Michigan Constitution, the MERS Plan Document, and MERS' enabling legislation (Public Act 427 of 1984, as amended). The pension plan is a taxqualified plan under section 401 (a) of the Internal Revenue Code (most recent letter of Favorable Determination issued October 18, 2016).

The purpose of each municipality's December 31, 2016 annual actuarial valuation is to measure funding progress, to determine the employer contribution rates for the fiscal year beginning in 2018, and to determine the actuarial information for the Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68.

The purpose of this summary report is to provide an overview of the results of the valuations of the individual municipalities. Note that the combined results for all municipalities are not indicative of the financial status of each municipality, since each entity stands on its own financially, with separately computed liabilities and contribution requirements. MERS is not funded on a combined basis. The information in this report should not be used to compare the results between various employers or to compare the results of an employer to the combined results. There are many factors that would make this type of a comparison of minimal value. This report also contains certain information that is required to be included in the MERS Comprehensive Annual Financial Report.

This report should not be relied on for any purpose other than the purpose described in this cover letter. This report should be provided by the Retirement System to other interested parties only in its entirety. CBIZ Retirement Plan Services is not responsible for the consequences of unauthorized use.

CBIZ Retirement Plan Services

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

All of the undersigned actuaries are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The valuations were based upon information 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 provided data.

Our actuarial valuation was based on the following:

- The benefit provisions of MERS, as described on pages 3-12 of Appendix D which is on the MERS website at: Appendix
- Demographic data on the participants covered, as described in Section II. Financial information regarding plan assets, as described in Section III.
- The actuarial assumptions and funding methods adopted by the Retirement Board. See pages $13-31$ of Appendix D on the MERS website at: Appendix

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board and in compliance with Act No. 427 of the Public Acts of 1984, as amended, and the MERS Plan Document as revised. The actuarial assumptions used for this valuation produce results that we believe are reasonable.

Respectfully Submitted,


Cathy Nagy, MAAA, FSA


Jim Koss, MAAA, ASA

Curtis Powell, MAAA, EA

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This publication contains a summary description of MERS benefits, policies or procedures. MERS has made every effort to ensure that the information provided is accurate and up to date. Where the publication conflicts with the relevant Plan Document, the Plan Document controls.

## I. Results of the Actuarial Valuation

Our actuarial valuation of the liabilities and contribution rates for each of the 735 Defined Benefit Plan and Hybrid Plan participating municipalities in the Municipal Employees' Retirement System as of December 31, 2016 is based on four major elements:

1. The present benefit provisions of MERS, as governed by Act 220 of the Public Acts of 1996 and the MERS Plan Document, as revised, and various collective bargaining agreements (see Appendix D which is on the MERS website at: Appendix).
2. The characteristics of active and inactive MERS members as of December 31, 2016 (see Section II).
3. The assets attributable to MERS members of each participating municipality. The total assets (at actuarial value) for all 735 municipalities included in the December 31, 2016 valuation was $\$ 9.14$ billion. The market value of assets was $\$ 8.48$ billion.
4. The actuarial assumptions and funding method (see Appendix D which is on the MERS website at: Appendix). The results in this report reflect the new assumptions and funding policy adopted by the Retirement Board in July 2015.

The employer contribution rate has been determined for each open municipality based on the entry age normal funding method. Under the entry age normal funding method, the total employer contribution is comprised of the normal cost plus the amortization payment required to fund the unfunded actuarial accrued liability over a period of years.

- Beginning with the December 31, 2016 annual valuation, liabilities attributable to different events may be amortized over different periods (ie. layering is in effect).
- Please see the Appendix on the MERS website for a full description of the amortization policy and the layering.
- The asset smoothing period was changed from 10 to 5 years.

The total normal cost is, for each active member, the level percentage of payroll contribution (from entry age to retirement) required to accumulate sufficient assets at the member's retirement to pay for his or her projected benefit. The employer normal cost is the total normal cost reduced by the member contribution rate. Closed municipalities (no longer actively participating in MERS) are covered by special funding requirements.

The actuarial accrued liability represents the difference between the present value of all future benefits and the present value of future normal costs. The unfunded actuarial accrued liability (i.e., the actuarial accrued liability less assets accumulated as of the valuation date) is projected to the beginning of the fiscal year commencing in 2018, and is then amortized as noted in the Appendix .

Each of these components of the employer contribution (i.e., normal cost and amortization payment) are shown separately for each municipality in Appendix C. For open divisions, we show estimated dollar contributions (based on projected payroll, but the actual required contribution for open divisions will be based on actual reported monthly pays during the fiscal year and will be different). For closed divisions, we show the dollar contributions that MERS will invoice, unless the division is linked to an open division and the employer has requested a blended contribution rate.

Within each municipality, an individual employer contribution is determined for each valuation group (division). The employer contribution requirement for each municipality is shown in Appendix C. The funded status of each municipality is shown in Appendix B.

## Municipality Funded Status

One measure of a municipality's funding progress is the ratio of its actuarial value of assets to actuarial accrued liabilities. The most recent MERS actuarial valuation is as of December 31, 2016. At that date 66 municipalities ( $9.2 \%$ of all Defined Benefit Plan and Hybrid Plan municipalities in MERS) were funded at $100 \%$ or higher. There were 401 municipalities in MERS that were funded at 70\% or higher ( $56 \%$ of all municipalities).

## Changes in Municipality Funding Percentages in 2016

Each municipality is responsible for funding its own benefit provisions, and funded percentages vary between municipalities, as shown in Table 1 and Chart 5. Factors that affect the change in a municipality's funded percentage during 2016 include:

- Funding Policy - The MERS funding policy results in a gradual change in the funded percentage towards $100 \%$ funding.
- Investment Experience - The 2016 valuations continue to phase-in the effect of the 2008 market losses, resulting in reduced funded percentages.
- Benefit Provision Changes - When a municipality's benefit provisions increase, the funded percentage usually decreases, and vice versa.
- Experience in Other Risk Areas (retirements, disabilities, withdrawals, pay increases, etc.) Any material difference between what actually happened to participants in 2016 versus what the actuarial assumptions projected would happen will increase or decrease the funded percentage.
- Contributions in Excess of Minimum Requirements - Contributing more than the annual minimum required contribution would increase the municipality's funded percentage compared to what it would have been without the extra contribution.

Note that the above list is not all inclusive. Further, each municipality's funded status could be affected by a combination of these factors.

## Comments on the Investment Markets

The actuarial value of assets, used to determine both municipalities' funded status and the required employer contributions, is based on a 5 -year smoothed value of assets. Only a portion of each year's investment market losses or gains were recognized in the 2016 actuarial valuation reports. This reduces the volatility of the valuation results, which affects the required employer contributions and actuarial funded percentage.

As of December 31, 2016 the actuarial value of assets is $108 \%$ of market value. This means that meeting the actuarial assumption in the next few years will require average annual market returns that exceed the $7.75 \%$ assumed long-term investment return assumption.

If the current $8 \%$ difference between the actuarial value and market values of assets is not made up by greater than assumed investment returns in the future, employer contribution requirements may rise.

Table 1

## Summary of the Valuation Results

|  | December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
| Number of Participating Municipalities | 720 | 717 | 713 |
| Number of Closed Municipalities ${ }^{1}$ | 15 | 15 | 15 |
| Total Defined Benefit and Hybrid Municipalities | 735 | 732 | 728 |
| Number of Valuation Divisions |  |  |  |
| Open to new hires | 1,279 | 1,324 | 1,303 |
| Closed to new hires | 1,389 | 1,306 | 1,188 |
| Closed municipalities | 19 | 19 | 19 |
| Total | 2,687 | 2,649 | 2,510 |
| Total Active Member Payroll (millions) | \$1,780 | \$1,787 | \$1,744 |
| Assets at Market Value (millions) | \$8,483 | \$7,835 | \$8,057 |
| Assets at Actuarial Value (millions) | 9,136 | 8,893 | 8,539 |
| Actuarial Rate of Return | 5.14\% | 5.21\% | 5.90\% |
| Actuarial Accrued Liability (millions) | \$13,680 | \$13,368 | \$12,096 |
| Average AAL Funded Percentage ${ }^{2}$ (based on actuarial value of assets) | 74\% | 74\% | 78\% |
| Number of Municipalities ${ }^{3}$ : |  |  |  |
| Under 60\% Funded | 153 | 155 | 115 |
| 60\%-80\% Funded | 324 | 334 | 307 |
| 80\%-100\% Funded | 177 | 174 | 203 |
| 100\%+ Funded | 66 | 54 | 88 |

${ }^{1}$ Closed municipalities have ceased participation in MERS, but MERS retains assets and liabilities for future benefit payments to their retirees and vested former members.
${ }^{2}$ Average over all municipalities (excluding the closed municipalities).
${ }^{3}$ Excludes the closed municipalities

## II. Membership Characteristics

## Active Members

The total number of defined benefit plan active members decreased from 35,274 on December 31, 2015 to 34,843 on December 31, 2016.

The basic demographic characteristics of the active members are shown below with comparative statistics for the past two years.

| Item | December 31, |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ |
| Number of defined benefit plan |  |  |  |
| active members | 34,843 | 35,274 | 35,302 |
| Average age | 45.9 | 46.1 | 46.2 |
| Average benefit service | 11.5 | 11.8 | 12.0 |
| Average vesting service | 12.2 | 12.4 | 12.6 |
| Average compensation | $\$ 51,084$ | $\$ 50,656$ | $\$ 49,397$ |
| Aggregate compensation (millions) | $\$ 1,779.9$ | $\$ 1,786.8$ | $\$ 1,743.8$ |

## Vested Former Members

A vested former member is a person who terminated employment after meeting their division's vesting schedule, with rights to a deferred benefit commencing at normal retirement age, or earlier if early (unreduced) retirement benefits have been adopted.

There were 8,252 former employees with deferred vested rights as of December 31, 2016. This compares to 8,340 such members as of the prior valuation.

| Item | December 31, |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ |
| Number of vested former members ${ }^{1}$ |  |  |  |
| Average age | 8,252 | 8,340 | 7,960 |
| Average annual deferred benefit | 50.0 | 50.4 | 50.4 |

${ }^{1}$ Excludes terminated employees who are not vested. However, any member contributions still on deposit for such persons are reflected as an accrued liability for pending refunds.

## Retirees and Beneficiaries

There were 38,774 retirees and beneficiaries receiving payments as of December 31, 2016. The table below presents age and benefit information as of the current valuation and for the past two years.

| Item | December 31, |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ |
| Number of pensioners | 38,774 | 37,467 | 35,754 |
| Average age | 69.2 | 69.1 | 69.0 |
| Average annual benefit | $\$ 21,216$ | $\$ 20,768$ | $\$ 20,224$ |

Table 2

## Participating Municipalities and Covered Persons Historical Comparison

| Valuation <br> Date <br> Dec. 31, | No. of <br> DB and Hybrid <br> Municipalities | Active Members |  |  |  |  | Annual <br> Deferred <br> Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Annual Payroll | Average Pay | Percent Increase |  |  |
| 1980 | 334 | 29,528 | \$ 399,413,360 | \$ 13,527 | 12.0 \% | 432 |  |
| 1981 | 332 | 29,289 | 430,542,086 | 14,700 | 8.7 | 439 |  |
| 1982 | 333 | 28,896 | 461,539,421 | 15,972 | 8.7 | 504 |  |
| 1983 | 336 | 29,095 | 483,436,531 | 16,616 | 4.0 | 524 |  |
| 1984 | 337 | 28,927 | 505,865,473 | 17,488 | 5.2 | 549 |  |
| 1985 | 342 | 29,659 | 544,238,433 | 18,350 | 4.9 | 641 |  |
| 1986 | 345 | 30,036 | 577,785,159 | 19,236 | 4.8 | 681 |  |
| 1987 | 349 | 29,802 | 598,014,814 | 20,066 | 4.3 | 846 |  |
| 1988 | 361 | 30,345 | 635,074,449 | 20,928 | 4.3 | 839 |  |
| 1989 | 370 | 31,313 | 674,297,441 | 21,534 | 2.9 | 955 |  |
| 1990 | 381 | 32,256 | 725,691,155 | 22,498 | 4.5 | 1,261 |  |
| 1991 | 401 | 33,118 | 782,914,985 | 23,640 | 5.1 | 1,605 |  |
| 1992 | 418 | 34,001 | 852,361,539 | 25,069 | 6.0 | 1,855 |  |
| 1993 | 438 | 34,139 | 869,313,319 | 25,464 | 1.6 | 1,941 |  |
| 1994 | 463 | 34,994 | 925,500,706 | 26,447 | 3.9 | 2,034 |  |
| 1995 | 490 | 35,611 | 972,975,649 | 27,322 | 3.3 | 2,322 |  |
| 1996 | 506 | 36,070 | 1,025,214,728 | 28,423 | 4.0 | 2,713 |  |
| 1997 | 529 | 36,547 | 1,068,597,733 | 29,239 | 3.0 | 3,752 |  |
| 1998 | 541 | 36,817 | 1,163,056,817 | 31,590 | 8.0 | 4,369 |  |
| 1999 | 552 | 36,472 | 1,179,274,854 | 32,334 | 2.4 | 4,794 |  |
| 2000 | 560 | 36,573 | 1,225,992,204 | 33,522 | 3.7 | 5,303 |  |
| 2001 | 561 | 36,583 | 1,271,563,960 | 34,758 | 3.7 | 5,799 | \$34,788,263 |
| 2002 | 575 | 37,043 | 1,327,360,448 | 35,833 | 3.1 | 5,510 | 35,150,225 |
| 2003 | 594 | 37,159 | 1,381,197,725 | 37,170 | 3.7 | 5,575 | 37,240,512 |
| 2004 | 615 | 36,766 | 1,437,211,517 | 39,091 | 5.2 | 5,804 | 40,567,372 |
| 2005 | 644 | 36,467 | 1,462,411,810 | 40,102 | 2.6 | 6,126 | 43,894,457 |
| 2006 | 668 | 36,846 | 1,545,886,480 | 41,955 | 4.6 | 6,235 | 46,110,745 |
| 2007 | 683 | 36,518 | 1,581,597,937 | 43,310 | 3.2 | 6,438 | 50,135,311 |
| 2008 | 692 | 36,092 | 1,624,855,145 | 45,020 | 3.9 | 6,662 | 54,141,539 |
| 2009 | 699 | 35,598 | 1,636,501,282 | 45,972 | 2.1 | 6,726 | 55,557,591 |
| 2010 | 715 | 35,816 | 1,683,983,258 | 47,018 | 2.3 | 6,961 | 60,836,793 |
| 2011 | 721 | 35,111 | 1,669,676,476 | 47,554 | 1.1 | 7,160 | 63,257,208 |
| 2012 | 726 | 34,187 | 1,640,390,877 | 47,983 | 0.9 | 7,262 | 66,638,525 |
| 2013 | 728 | 34,809 | 1,687,391,045 | 48,476 | 1.0 | 7,620 | 72,185,583 |
| 2014 | 728 | 35,302 | 1,743,799,124 | 49,397 | 1.9 | 7,690 | 77,919,750 |
| 2015 | 732 | 35,274 | 1,786,825,334 | 50,656 | 2.5 | 8,340 | 83,291,898 |
| 2016 | 735 | 34,843 | 1,779,919,980 | 51,084 | 0.8 | 8,252 | 85,220,062 |

Table 2 provides a historical comparison of the number of active and vested former members included in the actuarial valuations, along with the number of Defined Benefit Plan and Hybrid Plan municipalities.

Table 3
Benefits Being Paid to Retirees and Beneficiaries
Historical Comparison

| Valuation Date December 31, | Number of Retirees and Beneficiaries | Percent Increase in Retirees and Beneficiaries | Annual Retirement Allowances | Percent Increase in Retirement Allowances |
| :---: | :---: | :---: | :---: | :---: |
| 1980 | 6,423 | 6.9 \% | \$ 15,234,503 | 13.3 \% |
| 1981 | 6,861 | 6.8 | 17,446,778 | 14.5 |
| 1982 | 7,175 | 4.6 | 19,618,191 | 12.4 |
| 1983 | 7,554 | 5.3 | 21,674,209 | 10.5 |
| 1984 | 7,902 | 4.6 | 24,369,121 | 12.4 |
| 1985 | 8,343 | 5.6 | 27,747,190 | 13.9 |
| 1986 | 8,741 | 4.8 | 31,567,968 | 13.8 |
| 1987 | 9,104 | 4.2 | 35,740,364 | 13.2 |
| 1988 | 9,500 | 4.3 | 40,676,119 | 13.8 |
| 1989 | 9,863 | 3.8 | 45,635,598 | 12.2 |
| 1990 | 10,317 | 4.6 | 51,738,242 | 13.4 |
| 1991 | 11,061 | 7.2 | 61,807,210 | 19.5 |
| 1992 | 11,617 | 5.0 | 71,044,806 | 14.9 |
| 1993 | 12,040 | 3.6 | 80,964,212 | 14.0 |
| 1994 | 12,492 | 3.8 | 91,226,923 | 12.7 |
| 1995 | 13,032 | 4.3 | 102,010,673 | 11.8 |
| 1996 | 13,263 | 1.8 | 109,841,190 | 7.7 |
| 1997 | 14,236 | 7.3 | 123,112,928 | 12.1 |
| 1998 | 14,790 | 3.9 | 138,700,740 | 12.7 |
| 1999 | 15,325 | 3.6 | 152,771,711 | 10.1 |
| 2000 | 16,275 | 6.2 | 173,549,622 | 13.6 |
| 2001 | 16,905 | 3.9 | 191,785,646 | 10.5 |
| 2002 | 17,538 | 3.7 | 210,982,922 | 10.0 |
| 2003 | 18,443 | 5.2 | 236,588,632 | 12.1 |
| 2004 | 19,271 | 4.5 | 262,221,987 | 10.8 |
| 2005 | 20,155 | 4.6 | 288,061,637 | 9.9 |
| 2006 | 21,464 | 6.5 | 322,522,645 | 12.0 |
| 2007 | 22,600 | 5.3 | 353,541,830 | 9.6 |
| 2008 | 23,832 | 5.5 | 391,959,046 | 10.9 |
| 2009 | 24,930 | 4.6 | 423,577,691 | 8.1 |
| 2010 | 26,930 | 8.0 | 481,476,493 | 13.7 |
| 2011 | 28,202 | 4.7 | 520,998,787 | 8.2 |
| 2012 | 29,739 | 5.4 | 565,478,715 | 8.5 |
| 2013 | 32,460 | 9.1 | 628,103,333 | 11.1 |
| 2014 | 35,754 | 10.1 | 723,077,656 | 15.1 |
| 2015 | 37,467 | 4.8 | 778,114,296 | 7.6 |
| 2016 | 38,774 | 3.5 | 822,640,812 | 5.7 |

Table 3 shows a historical comparison of the number of retirees and beneficiaries and the annual benefits paid to retirees and beneficiaries, together with various ratios.

## Chart 1

## MERS Growth



Chart 1 presents a comparison of the growth in MERS Defined Benefit Plan and Hybrid Plan municipalities to the growth in plan participants (active members, vested former members and retirees).

## Chart 2

Active and Retired Participants


Chart 2 illustrates graphically the historical growth in the number of active members and retirees and beneficiaries.

Chart 3
Active Members Per Pension Recipient


Chart 4
Retiree Benefits as a Percent of Active Pay


Charts 3 and 4 illustrate how MERS has matured over the years. Over time the number of active members per retiree has declined from over 7 to just under 1 . This ratio is expected to temporarily dip further below 1, due to employee divisions that are closed to new hires, but then eventually stabilize around 1. The benefit payout as a percentage of active payroll has increased to over $46 \%$.

Table 4

## Number and Average Pay of Members in Active Service as of December 31, 2016 by Age and Years of Benefit Service

| Age | Total | Years of Benefit Service |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Total | 34,843 | 11,778 | 5,553 | 5,209 | 5,659 | 3,471 | 1,968 | 1,205 |
|  | \$51,084 | \$42,275 | \$51,378 | \$54,351 | \$56,294 | \$59,748 | \$59,519 | \$58,506 |
| Under 20 | 80 | 80 |  |  |  |  |  |  |
|  | \$21,788 | \$21,788 |  |  |  |  |  |  |
| 20-24 | 1,121 | 1,110 | 11 |  |  |  |  |  |
|  | \$34,055 | \$33,996 | \$39,989 |  |  |  |  |  |
| 25-29 | 2,598 | 2,247 | 341 | 10 |  |  |  |  |
|  | \$42,215 | \$41,806 | \$45,116 | \$35,208 |  |  |  |  |
| 30-34 | 3,327 | 1,919 | 990 | 400 | 18 |  |  |  |
|  | \$48,469 | \$43,822 | \$54,684 | \$55,303 | \$50,178 |  |  |  |
| 35-39 | 3,843 | 1,441 | 861 | 1,035 | 490 | 16 |  |  |
|  | \$52,762 | \$44,766 | \$54,058 | \$59,609 | \$59,200 | \$63,051 |  |  |
| 40-44 | 4,442 | 1,206 | 756 | 846 | 1,257 | 369 | 8 |  |
|  | \$55,001 | \$43,936 | \$54,258 | \$58,453 | \$61,314 | \$63,438 | \$47,126 |  |
| 45-49 | 5,510 | 1,199 | 760 | 816 | 1,275 | 1,094 | 357 | 9 |
|  | \$55,878 | \$44,522 | \$51,475 | \$54,867 | \$58,872 | \$65,684 | \$64,870 | \$59,459 |
| 50-54 | 5,450 | 1,087 | 666 | 740 | 1,062 | 872 | 731 | 292 |
|  | \$53,041 | \$42,344 | \$49,845 | \$53,582 | \$54,906 | \$57,937 | \$61,160 | \$57,052 |
| 55-59 | 4,895 | 883 | 618 | 741 | 924 | 706 | 546 | 477 |
|  | \$50,847 | \$44,033 | \$47,608 | \$48,302 | \$50,558 | \$55,248 | \$56,883 | \$58,750 |
| 60-64 | 2,679 | 453 | 370 | 444 | 514 | 324 | 258 | 316 |
|  | \$50,640 | \$42,722 | \$49,137 | \$49,748 | \$49,737 | \$52,449 | \$54,945 | \$61,106 |
| 65 \& Over | 898 | 153 | 180 | 177 | 119 | 90 | 68 | 111 |
|  | \$45,064 | \$34,432 | \$43,655 | \$40,630 | \$49,846 | \$50,997 | \$53,778 | \$53,800 |

Table 4 shows the distribution of active members by age and service and includes information on average compensation.

Table 5
Retirees and Beneficiaries
as of December 31, 2016
Tabulated by Attained Ages

| Age | Number |
| :---: | :---: |
| Under 50 | 637 |
| $50-54$ | 1,195 |
| $55-59$ | 3,466 |
| $60-64$ | 8,558 |
| $65-69$ | 8,933 |
| $70-74$ | 6,032 |
| $75-79$ | 4,073 |
| $80-84$ | 2,815 |
| $85-89$ | 1,837 |
| $90-94$ | 880 |
| $95-99$ | 241 |
| $100 \&$ Over | 26 |
| Certain Only |  |
| Total | 81 |

${ }^{1}$ These are beneficiaries of deceased retirees who had elected term certain and life options. The beneficiaries receive benefits until the end of the term certain period.

$$
\begin{gathered}
\text { Table } 6 \\
\text { Retirees and Beneficiaries } \\
\text { as of December 31, 2016 } \\
\text { Average Annual Pension by Year of Retirement }{ }^{2} \\
\begin{array}{||c|r|c||}
\hline \text { Year of } & \text { Number } & \text { Average Annual } \\
\text { Retirement } & \text { Pension } \\
\hline \text { Before } 1960 & 2 & \$ 835 \\
1960-1999 & 24 & 5,672 \\
1970-1979 & 337 & 7,715 \\
1980-1989 & 2,263 & 10,894 \\
190-199 & 6,773 & 17,858 \\
2000-2009 & 14,008 & 23,105 \\
2010-2016 & 15,367 & 22,818 \\
\text { Total } & 38,774 & 21,216 \\
\hline
\end{array}
\end{gathered}
$$

[^2]
# Allowances Being paid Retirees and Beneficiaries December 31, 2016 

## Table 7 <br> Tabulated by Type of Benefit Being Paid

| Type of Benefit | Number of <br> Retirees | Number as a <br> Percent <br> of Total | Total <br> Monthly <br> Benefits |
| :--- | ---: | ---: | ---: |
| Normal Retirement for age and service | 31,593 | $81.5 \%$ | $\$ 60,413,646$ |
| Non-Duty Disability ${ }^{1}$ | 1,183 | 3.1 | $1,568,663$ |
| Duty Disability $^{1}$ | 583 | 1.5 | $1,005,659$ |
| Beneficiaries $^{2}$ | 4,534 | 11.7 | $4,614,382$ |
| Non-Duty Death | 824 | 2.1 | 891,893 |
| Duty Death | $\boxed{57}$ | $\underline{0.1}$ | $\underline{59,157}$ |
| Totals | 38,774 | $100.0 \%$ | $\$ 68,553,400$ |

[^3]Table 8
Tabulated by Optional Form of Benefit Being Paid

| Type of Benefit | Number of <br> Retirees | Number as a <br> Percent <br> of Total | Total <br> Monthly <br> Benefits |
| :--- | ---: | ---: | ---: |
| Beneficiary draws 100\% of retiree's benefit | 11,886 | $30.7 \%$ | $\$ 21,958,263$ |
| Beneficiary draws 67\% of retiree's benefit | 4 | 0.0 | $\$ 13,968$ |
| Beneficiary draws 75\% of retiree's benefit | 2,480 | 6.4 | $6,024,859$ |
| Beneficiary draws 60\% of retiree's benefit | 414 | 1.1 | $1,482,241$ |
| Beneficiary draws 50\% of retiree's benefit | 5,636 | 14.5 | $11,664,382$ |
| Equated Option (changing at Social Security age) | 422 | 1.1 | 401,652 |
| 5 year certain and life | 306 | 0.8 | 478,773 |
| 10 year certain and life | 803 | 2.1 | $1,525,936$ |
| 15 year certain and life | 227 | 0.6 | 340,609 |
| 20 year certain and life | 476 | 1.2 | 697,693 |
| Straight life allowance | 16,120 | 41.5 | $23,965,024$ |
| Totals | 38,774 | $100.0 \%$ | $\$ 68,553,400$ |

Table 9
Valuation Divisions in 2016, 2015, and 2014 Valuations Tabulated by Benefit Formula (Excludes the Divisions of Closed Municipalities and Shadow Divisions - see Table 1)

| Benefit Formula | Number of Divisions with Benefit on December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
| 1.00\% Multiplier (80\% max) | 1 | 1 | 1 |
| 1.00\% Multiplier (no max) | 7 | 7 | 4 |
| 1.00\% Multiplier ( $30 \%$ max, except for purchased service) | 1 | 1 | 1 |
| 1.20\% Multiplier (no max) | 1 | 2 | 2 |
| 1.30\% Multiplier (no max) | 25 | 24 | 23 |
| Svc $\times$ ( $1.00 \%$ times FAC<\$4,200, plus 1.50\% times FAC>\$4,200) | 7 | 7 | 7 |
| 1.50\% Multiplier (80\% max) | 9 | 9 | 8 |
| 1.50\% Multiplier (no max) | 119 | 105 | 94 |
| Svc $\times$ (1.20\% times FAC<\$4,200, plus 1.70\% times FAC>\$4,200) | 14 | 14 | 15 |
| 1.70\% Multiplier for Svc < 25 yrs, 1.50\% for Svc > 25 yrs ( $80 \% \mathrm{max}$ ) | 0 | 0 | 0 |
| 1.70\% Multiplier (no max) | 80 | 80 | 79 |
| 1.75\% Multiplier (no max) | 1 | 1 | 0 |
| 1.80\% Multiplier (no max) | 0 | 1 | 1 |
| 2.00\% Multiplier for Svc < 25 yrs, 1.00\% for Svc > 25 yrs (55\% max) | 1 | 1 | 1 |
| 2.00\% Multiplier (75\% max) | 2 | 2 | 2 |
| 2.0\% multiplier (80\% max) | 4 | 3 | 2 |
| 2.00\% Multiplier (no max) | 372 | 373 | 371 |
| 2.20\% Multiplier for Svc < 25 yrs, 1.00\% for Svc > 25 yrs ( $80 \%$ max) | 1 | 1 | 1 |
| 2.20\% Multiplier for Svc < 15 yrs , 2.40\% for Svc 16-25 yrs, 1.00\% for Svc > 25 yrs ( $80 \% \mathrm{max}$ ) | 1 | 1 | 1 |
| 2.20\% Multiplier (no max) | 6 | 6 | 6 |
| 2.25\% Multiplier (70\% max) | 1 | 1 | 0 |
| 2.25\% Multiplier (75\% max) | 0 | 1 | 0 |
| 2.25\% Multiplier (80\% max) | 529 | 531 | 531 |
| 2.25\% Multiplier (no max) | 12 | 11 |  |
| 2.35\% Multiplier (80\% max) | 3 | 3 | 3 |
| 2.40\% Multiplier (80\% max) | 1 | 1 | 1 |
| 2.50\% Multiplier (70\% max) | 1 | 1 | 1 |
| 2.50\% Multiplier ( $75 \%$ max) | 6 | 6 | 6 |
| 2.50\% Multiplier for Svc < 25 yrs, 1.00\% for Svc > 25 yrs (80\% max) | 1 | 1 | 1 |
| 2.50\% Multiplier for Svc < 25 yrs, 1.00\% for Svc > 25 yrs (no max) | 5 | 5 | 5 |
| 2.50\% Multiplier (80\% max) | 888 | 904 | 909 |
| 2.50\% Multiplier (85\% max) | 2 | 0 | 0 |
| 2.50\% Multiplier (no max) | 8 | 9 | 9 |
| 2.57\% Multiplier for Svc < 25 yrs, 1.00\% for Svc > 25 yrs (no max) | 1 | 1 | 1 |
| 2.60\% Multiplier for Svc <20 yrs, 2.25\% for Svc > 20 yrs (no max) | 3 | 3 | 3 |
| 2.60\% Multiplier for Svc <25 yrs, 2.75\% for Svc > 25 yrs (74\% max) | 1 | 1 | 0 |
| 2.60\% Multiplier (65\% max) | 1 | 1 | 0 |
| 2.70\% Multiplier for Svc < 25 yrs , 2.50\% for Svc 25-30 yrs, 1.00\% for Svc > 30 yrs (no max) | 1 | 2 | 2 |
| 2.75\% Multiplier (80\% max) | 21 | 21 | 21 |
| 2.75\% Multiplier (85\% max) | 1 | 1 | 1 |
| 2.80\% Multiplier (75\% max) | 1 | 1 |  |

Table 9 shows the distribution of benefit provisions in effect for the 2016 and past two valuations. MERS is a multiple-employer plan, where each municipality decides its benefit structure.

Table 9 (Continued)

## Valuation Divisions in 2016, 2015, and 2014 Valuations Tabulated by Benefit Formula

 (Excludes the Divisions of Closed Municipalities and Shadow Divisions - see Table 1)| Benefit Formula | Number of Divisions with Benefit on December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
| 2.80\% Multiplier for Svc < 25 yrs, 1.00\% for Svc > 25 yrs (80\% max) | 4 | 4 | 4 |
| 2.80\% Multiplier for Svc < 25 yrs , 2.50\% for Svc $25-30 \mathrm{yrs}$, 1.00\% for Svc > 30 yrs (no max) | 6 | 8 | 8 |
| 2.80\% Multiplier (80\% max) | 17 | 17 | 17 |
| 2.80\% Multiplier ( $84 \%$ max) | 1 | 0 | 0 |
| 2.80\% Multiplier for Svc < $30 \mathrm{yrs}, 1.00 \%$ for Svc > 30 yrs (no max) | 2 | 2 | 2 |
| $2.80 \%$ Multiplier for Svc < $35 \mathrm{yrs}, 1.50 \%$ for Svc > 35 yrs ( $100 \%$ max) | 2 | 2 | 2 |
| 2.80\% Multiplier for first 12 yrs 9 months, 1.80\% Multiplier for next 8 yrs 5 months; 2.00\% multiplier for svc after 12/31/2012 (no max) | 1 | 0 | 0 |
| 3.00\% Multiplier (80\% max) | 20 | 21 | 21 |
| 3.00\% Multiplier (75\% max) | 5 | 5 | 5 |
| 3.20\% Multiplier (80\% max) | 9 | 9 | 9 |
| 2.00\% to Social Security Age (no max), 1.50\% after SS Age (no max) | 1 | 1 | 1 |
| 2.00\% to Social Security Age (no max), after SS Age Svc $\times$ ( $1.2 \%$ FAC $<\$ 4,200,1.7 \%$ FAC $>\$ 4200$ ) | 7 | 7 | 7 |
| 2.00\% to Social Security Age (no max), 1.70\% after SS Age (no max) | 35 | 35 | 34 |
| 2.50\% to Social Security Age (80\% max), 2.25\% after SS Age (80\% max) | 2 | 2 | 2 |
| 2.50\% to Age 65 (80\% max), 2.25\% after Age 65 (80\% max) | 1 | 1 | 1 |
| 2.80\% to Age 65 (80\% max), 2.50\% after Age 65 (80\% max) | 1 | 1 | 1 |
| Old Plan Benefits | 24 | 23 | 20 |
| Retire Before 25 Years: 1.70\% Multiplier (no max); Retire After 25 Years: 2.00\% Multiplier (no max) | 1 | 1 |  |
| Before SSAge: 2.8\% for first 25 years of service; 1.0\% for service over 25 years (75\% max). After SSAge: 2.38\% (75\% max) | 2 | 2 | 0 |
| Before SSAge: $2.8 \%$ for service before 12/31/12; $1.0 \%$ for service after 12/31/12 (Termination FAC). After SSAge: $2.38 \%$ for service before $12 / 31 / 12 ; 1.0 \%$ for service after 12/31/12 (Termination FAC) | 2 | 2 | 0 |
| Frozen Benefits | 9 | 3 | 0 |
| Prepayment of Employer Contributions for Divisions 02, 13, and 20 | 1 | 1 | 1 |
| Subtotal | 2292 | 2291 | 2259 |
| Bridged Benefit: 1.70\% Multiplier for Svc < 25 yrs, 1.50\% for Svc > 25 yrs (80\% max) Frozen FAC; to 1.00\% Multiplier (80\% max) | 3 | 3 |  |
| Bridged Benefit: 1.70\% Multiplier for Svc < 25 yrs, 1.50\% for Svc > 25 yrs ( $80 \%$ max) Frozen FAC; to 1.50\% Multiplier (80\% max) | 3 | 3 | 3 |
| Bridged Benefit: $2.00 \%$ Multiplier (no max) Frozen FAC; to 1.50\% Multiplier (no max) | 12 | 11 | 7 |
| Bridged Benefit: $2.00 \%$ Multiplier (no max) Frozen FAC; to 1.70\% Multiplier (no max) | 3 | 3 | 3 |
| Bridged Benefit: $2.20 \%$ Multiplier for Svc < 15 yrs , 2.40\% for Svc 16-25 yrs, 1.00\% for Svc > 25 yrs (80\% max) Frozen FAC; to 1.50\% Multiplier (80\% max) | 2 | 2 | 2 |
| Bridged Benefit: 2.25\% Multiplier (80\% max) Frozen FAC; to 1.30\% Multiplier (no max) | 2 | 1 | 1 |
| Bridged Benefit: $2.25 \%$ Multiplier (80\% max) Frozen FAC; to 1.50\% Multiplier (no max) | 2 | 1 | 0 |
| Bridged Benefit: $2.25 \%$ Multiplier (80\% max) Frozen FAC; to 1.70\% Multiplier (no max) | 4 | 4 | 4 |
| Bridged Benefit: $2.25 \%$ Multiplier (80\% max) Frozen FAC; to 1.80\% Multiplier (no max) | 1 | 0 | 0 |
| Bridged Benefit: $2.25 \%$ Multiplier (80\% max) Frozen FAC; to 2.00\% Multiplier (no max) | 6 | 5 | 4 |
| Bridged Benefit: 2.25\% Multiplier (80\% max) Frozen FAC; to 2.00\% Multiplier ( $80 \%$ max) | 1 | 1 |  |
| Bridged Benefit: 2.35\% Multiplier (80\% max) Frozen FAC; to 2.25\% Multiplier (80\% max) | 2 | 2 | 2 |
| Bridged Benefit: $2.50 \%$ Multiplier (80\% max) Frozen FAC; to 1.25\% Multiplier (no max) | 3 | 0 | 0 |
| Bridged Benefit: $2.50 \%$ Multiplier (80\% max) Frozen FAC; to 1.30\% Multiplier (no max) | 1 | 1 | 1 |
| Bridged Benefit: $2.50 \%$ Multiplier (80\% max) Frozen FAC; to 1.50\% Multiplier (no max) | 8 | 7 | 7 |
| Bridged Benefit: $2.50 \%$ Multiplier (80\% max) Frozen FAC; to 1.70\% Multiplier (no max) | 5 | 5 | 5 |
| Bridged Benefit: 2.50\% Multiplier (80\% max) Frozen FAC; to 1.75\% Multiplier ( $80 \% \mathrm{max}$ ) | 1 | 1 | 0 |
| Bridged Benefit: 2.50\% Multiplier (80\% max) Frozen FAC; to 1.90\% Multiplier (80\% max) | 1 | 1 | 1 |

Table 9 shows the distribution of benefit provisions in effect for the 2016 and past two valuations. MERS is a multiple-employer plan, where each municipality decides its benefit structure.

Table 9 (Concluded)
Valuation Divisions in 2016, 2015, and 2014 Valuations Tabulated by Benefit Formula (Excludes the Divisions of Closed Municipalities and Shadow Divisions - see Table 1)

| Benefit Formula | Number of Divisions with Benefit on December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
| Bridged Benefit: $2.50 \%$ Multiplier (80\% max) Frozen FAC; to 2.00\% Multiplier (no max) | 8 | 6 | 6 |
| Bridged Benefit: 2.50\% Multiplier (80\% max) Frozen FAC; to 2.00\% Multiplier ( $80 \%$ max) | 1 | 2 | 1 |
| Bridged Benefit: 2.50\% Multiplier (80\% max) Frozen FAC; to 2.25\% Multiplier (80\% max) | 21 | 13 | 9 |
| Bridged Benefit: $2.70 \%$ Multiplier svc <25 yrs, $2.50 \%$ svc $25-30$ yrs, $1.00 \%$ svc>30 yrs (no max) Frozen FAC; to 2.25\% Multiplier (80\% max) | 1 | 0 | 0 |
| Bridged Benefit: 2.80\% Multiplier (80\% max) Frozen FAC; to 2.50\% Multiplier (80\% max) | 5 | 5 | 4 |
| Bridged Benefit: 2.80\% Multiplier svc <25 yrs, 2.50\% svc 25-30 yrs, 1.00\% svc>30 yrs (no max) Frozen FAC; to 2.25\% Multiplier (80\% max) | 2 | 0 | 0 |
| Bridged Benefit: 3.00\% Multiplier (80\% max) Frozen FAC; to 1.50\% Multiplier (no max) | 1 | 0 | O |
| Bridged Benefit: 3.00\% Multiplier (80\% max) Frozen FAC; to 2.50\% Multiplier ( $80 \%$ max) | 3 | 3 |  |
| Bridged Benefit: 1.50\% Multiplier (no max) Frozen FAC; to 2.00\% Multiplier (no max) | 4 | 4 | 4 |
| Bridged Benefit: 1.70\% Multiplier (no max) Frozen FAC; to 1.30\% Multiplier (no max) | 1 | 0 | 0 |
| Bridged Benefit: 1.70\% Multiplier (no max) Frozen FAC; to 2.00\% Multiplier (no max) | 1 | 1 | 1 |
| Bridged Benefit: 1.00\% Multiplier (no max) Termination FAC; to 2.00\% Multiplier ( $60 \%$ overall max, except for pre-bridge purchased service) | 1 | $\square$ | 1 |
| Bridged Benefit: 1.60\% Multiplier (no max) Termination FAC; to 2.00\% Multiplier (no max) | 1 | - 1 | 1 |
| Bridged Benefit: 1.80\% Multiplier (no max) Termination FAC; to 2.00\% Multiplier (no max) | 1 | - 1 |  |
| Bridged Benefit: 2.00\% Multiplier (no max) Termination FAC; to 2.25\% Multiplier ( $80 \% \mathrm{max}$ ) | 1 | $\square$ | o |
| Bridged Benefit: 2.25\% Multiplier (80\% max) Termination FAC; to 1.50\% Multiplier (80\% max) | 3 | 3 | 3 |
| Bridged Benefit: 2.25\% Multiplier (80\% max) Termination FAC; to 2.00\% Multiplier (no max) | 2 | 0 | 0 |
| Bridged Benefit: 2.25\% Multiplier (80\% max) Termination FAC; to 2.50\% Multiplier ( $80 \% \mathrm{max}$ ) | 1 | 1 |  |
| Bridged Benefit: 2.50\% Multiplier (80\% max) Termination FAC; to 1.50\% Multiplier (no max) | 1 | 0 | 0 |
| Bridged Benefit: 2.50\% Multiplier (80\% max) Termination FAC; to 2.00\% Multiplier (no max) | 1 | $\square$ |  |
| Bridged Benefit: 2.50\% Multiplier (80\% max) Termination FAC; to 2.25\% Multiplier (80\% max) | 3 | 3 | 3 |
| Bridged Benefit: $\mathbf{2 . 5 0 \%}$ Multiplier (80\% max) Termination FAC; to 3.00\% Multiplier (no max) | 1 | $\square$ |  |
| Bridged Benefit: 2.80\% Multiplier (80\% max) Termination FAC; to 1.80\% Multiplier (no max) | 1 | - 1 | o |
| Bridged Benefit: 2.80\% Multiplier (80\% max) Termination FAC; to 2.00\% Multiplier (no max) | 1 | 1 | 0 |
| Bridged Benefit: 2.80\% Multiplier (80\% max) Termination FAC; to 2.50\% Multiplier (80\% max) | 1 | 0 |  |
| Bridged Benefit: 3.00\% Multiplier (80\% max) Termination FAC: to 2.50\% Multiplier (80\% max) | 2 | 2 | 2 |
| Bridged Benefit: 3.00\% Multiplier (80\% max) Termination FAC; to 2.80\% Multiplier (80\% max) | 3 | 3 | 3 |
| Bridged Benefit: Frozen Benefit for Svc before 1/1/2008; 2.50\% Multiplier for Svc after 1/1/2008 (no max) | 1 | - 1 |  |
| Bridged Benefit: Frozen Benefit for Svc before 4/1/2004; 2.50\% Multiplier for Svc after 4/1/2004 (80\% max) | 2 | 2 | 2 |
| Bridged Benefit: Frozen Benefit for Svc before 5/1/2012; 2.25\% Multiplier for Svc after 5/1/2012 (no max) | 5 | 5 | 5 |
| Bridged Benefit: Frozen Benefit for Svc before 5/1/2012; 1.50\% Multiplier for Svc after 5/1/2012 (no max) | 5 | 5 | 5 |
| Bridged Benefit: Frozen Benefit for Svc before 12/1/2015; 2.00\% Multiplier for Svc after 12/1/2015 (no max) | 3 | 0 | 0 |
| Bridged Benefit: Frozen Benefit for Svc before 12/1/2015; 2.50\% Multiplier for Svc after 12/1/2015 (no max) | 3 | 0 | 0 |
| Bridged Benefit: ( $1.20 \%$ for FAC $<\$ 4,200$, plus $1.70 \%$ for FAC $>\$ 4,200$ ) for service before $3 / 31 / 2015$; $2.50 \%$ Multiplier for service after $3 / 31 / 2015$ ( $80 \%$ Max); Termination FAC | 1 | 1 | o |
| Bridged Benefit Subtotal | 152 | 119 | 102 |
| Hybrid Plan - 1.00\% Multiplier | 49 | 47 | 41 |
| Hybrid Plan - 1.25\% Multiplier | 54 | 49 | 38 |
| Hybrid Plan - 1.50\% Multiplier | 65 | 54 | 48 |
| Hybrid Plan - 1.75\% Multiplier | 4 | 4 | 3 |
| Hybrid Plan - 2.00\% Multiplier | 1 | - 1 | 0 |
| Hybrid Plan Subtotal | 173 | 155 | 130 |
| Total Divisions | 2617 | 2565 | 2491 |

Table 9 shows the distribution of benefit provisions in effect for the 2016 and past two valuations. MERS is a multiple-employer plan, where each municipality decides its benefit structure.

## III. Actuarial Value of Assets

For actuarial valuation purposes, the actuarial value of assets is determined on the basis of a valuation method that assumes the fund earns the expected rate of return (7.75\% beginning with calendar year 2016), and includes an adjustment to reflect market value. This procedure was instituted for the December 31, 2005 valuation and further modified with the latest experience study, and is applied as follows:
(i) Preliminary value is determined by taking the sum of the actuarial value at the beginning of the year and the excess of income over expenses during the year, assuming that the fund earns the assumed rate during the year.
(ii) This value is written-up or written-down by recognizing $20 \%$ of the current year's difference between actual and expected return and $20 \%$ of that difference for the 4 prior years. Actual return for the year includes interest, dividends, realized and unrealized gains or losses, net of administrative and investment expenses.

The cumulative difference between the market value and valuation assets as of December 31, 2016 will be recognized over 4 years.

For the December 31, 2016 valuation, this procedure produced an actuarial asset value that is equal to $107.71 \%$ of market value (compared to $113.54 \%, 105.99 \%, 106.18 \%$, and 114.36 in 2015, 2014, 2013, and 2012, respectively).

On pages 28 - 31 of Appendix D (on the MERS website at: Appendix.) we have illustrated the development of the actuarial value of assets for the December 31, 2001 through December 31, 2016 actuarial valuations. The market value of assets reported to the actuary includes most accounts receivables.

## IV. Employer Contributions and Funded Status

## Table 10 <br> Computed Employer Contribution Rates <br> (Excludes Closed Divisions, Shadow Division, and Closed Municipalities - see Table 1)

| Benefit Formula | Contributory Groups |  |  | Non-Contributory Groups |  | Total Groups |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of Divisions | Member Contrib. Avg. \% | Employer Contrib. Avg. \% | No. of Divisions | Employer Contrib. Avg. \% | No. of Divisions | Employer Contrib. Avg. \% |
| 1.00\% Multiplier (no max) | 2 | 4.99\% | 0.12\% | 3 | 5.80\% | 5 | 0.33\% |
| 1.20\% Multiplier (no max) | 1 | 4.70\% | 1.13\% | -- | 0.00\% | 1 | 1.13\% |
| 1.30\% Multiplier (no max) | 11 | 4.75\% | 2.50\% | 10 | 7.30\% | 21 | 4.14\% |
| Sve $\times$ ( $1.00 \%$ times FAC $<\$ 4,200$, plus $1.50 \%$ times FAC $>\$ 4,200$ ) | 2 | 0.45\% | 7.28\% |  |  | 2 | 7.28\% |
| 1.50\% Multiplier (80\% max) | 7 | 4.93\% | 2.97\% | 1 | 7.83\% | 8 | 3.33\% |
| $1.50 \%$ Multiplier (no max) | 82 | 4.33\% | 3.93\% | 23 | 7.88\% | 105 | 4.55\% |
| Sve $\times$ ( $1.20 \%$ times FAC $<\$ 4,200$, plus $1.70 \%$ times FAC $>\$ 4,200$ ) | 2 | 3.00\% | 3.49\% | 3 | 4.24\% | 5 | 3.61\% |
| 1.70\% Multiplier (no max) | 35 | 4.14\% | 6.33\% | 18 | 7.66\% | 53 | 6.49\% |
| 1.75\% Multiplier (no max) | 1 | 3.00\% | 4.53\% |  |  | 1 | 4.53\% |
| 2.00\% Multiplier for Suc < 25 yrs, 1.00\% for Svc > 25 yrs (55\% max) | 1 | 6.00\% | 8.03\% |  |  | 1 | 8.03\% |
| 2.00\% Multiplier (75\% max) | 2 | 7.57\% | 2.79\% |  |  | 2 | 2.79\% |
| 2.00\% Multiplier (80\% max) | 2 | 4.82\% | 5.75\% |  |  | 2 | 5.75\% |
| 2.00\% Multiplier (no max) | 145 | 4.45\% | 10.84\% | 68 | 13.55\% | 213 | 11.82\% |
| 2.20\% Multiplier (no max) | 2 | 5.00\% | 41.73\% |  |  | 2 | 41.73\% |
| 2.25\% Multiplier (80\% max) | 167 | 5.10\% | 15.02\% | 59 | 17.04\% | 226 | 15.59\% |
| 2.25\% Multiplier (no max) | 4 | 5.08\% | 20.86\% | 1 | 19.38\% | 5 | 19.90\% |
| 2.35\% Multiplier (80\% max) | 1 | 4.00\% | 102.95\% |  |  | 1 | 102.95\% |
| 2.40\% Multiplier ( $80 \% \mathrm{max}$ ) | 1 | 2.00\% | 227.09\% |  |  | 1 | 227.09\% |
| 2.50\% Multiplier for Svc < 25 yrs , 1.00\% for Svc > 25 yrs ( $80 \% \mathrm{max}$ ) | 1 | 5.00\% | 27.57\% |  |  | 1 | 27.57\% |
| 2.50\% Multiplier for Sve < 25 yrs, 1.00\% for Sve > 25 yrs (no max) | 3 | 12.00\% | 47.34\% |  |  | 3 | 47.34\% |
| 2.50\% Multiplier (80\% max) | 230 | 6.51\% | 20.24\% | 73 | 34.54\% | 303 | 22.25\% |
| 2.50\% Multiplier (75\% max) | 1 | 7.00\% | 32.81\% |  |  | 1 | 32.81\% |
| 2.50\% Multiplier (85\% max) | 1 | 5.00\% | 7.35\% |  |  | 1 | 7.35\% |
| 2.50\% Multiplier (no max) | 4 | 3.53\% | 23.61\% | -- | 0.00\% | 4 | 23.61\% |
| 2.60\% Multiplier (65\% max) | 1 | 11.50\% | 359.02\% |  |  | 1 | 359.02\% |
| 2.60\% Multiplier for Sve < 25 yrs , 2.75\% for Svc > 25 yrs ( $74 \% \mathrm{max}$ ) | 1 | 11.50\% | 158.52\% |  |  | 1 | 158.52\% |
| 2.57\% Multiplier for Sve < 25 yrs , 1.00\% for Svc > 25 yrs (no max) | 1 | 12.00\% | 29.83\% |  |  | 1 | 29.83\% |
| 2.70\% Multiplier for Sve < 25 yrs, 2.50\% for Svc 25-30 yrs, 1.00\% for Svc > 30 yrs (no max) | 1 | 7.00\% | 24.37\% |  |  | 1 | 24.37\% |
| 2.75\% Multiplier ( $80 \% \mathrm{max}$ ) | 10 | 8.07\% | 29.26\% | 1 | 30.04\% | 11 | 29.28\% |
| 2.80\% Multiplier (80\% max) | 2 | 5.77\% | 27.02\% | 1 | 0.00\% | 3 | 23.75\% |
| 2.80\% Multiplier for Sve < 35 yrs, 1.50\% for Sve > 35 yrs ( $100 \%$ max) | 1 | 2.90\% | 4.67\% |  |  | 1 | 4.67\% |
| $3.00 \%$ Multiplier (80\% max) | 8 | 6.35\% | 39.97\% |  |  | 8 | 39.97\% |
| 3.00\% Multiplier (75\% max) | 1 | 10.35\% | 19.84\% |  |  | 1 | 19.84\% |
| $3.20 \%$ Multiplier (80\% max) | 4 | 14.36\% | 40.76\% |  |  | 4 | 40.76\% |
| $2.00 \%$ to Social Security Age (no max), 1.50\% after SS Age (no max) |  |  |  | 1 | 16.59\% | 1 | 16.59\% |

Table 10 provides a distribution of average employer and member contribution rates by type of benefit program. This information is shown on a divisional basis. MERS is a multiple-employer plan, where each municipality decides its benefit structure

## Table 10 (Concluded) Computed Employer Contribution Rates (Excludes Closed Divisions, Shadow Divisions, and Closed Municipalities - see Table 1)

| Benefit Formula | Contributory Groups |  |  | Non-Contributory Groups |  | Total Groups |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of Divisions | Member Contrib. Avg. \% | Employer Contrib. Avg. \% | No. of Divisions | Employer Contrib. Avg. \% | No. of Divisions | Employer Contrib. Avg. \% |
| $2.00 \%$ to Social Security Age (no max), after SS Age Sve x (1.2\% FAC $<\$ 4,200,1.7 \%$ FAC $>\$ 4200$ ) |  |  |  | 1 | 8.11\% | 1 | 8.11\% |
| $2.00 \%$ to Social Security Age (no max), 1.70\% after SS Age (no max) | 13 | 4.88\% | 11.40\% | 3 | 6.16\% | 16 | 10.97\% |
| 2.50\% to Social Security Age (80\% max), 2.25\% after SS Age (80\% max) | 2 | 0.95\% | 17.19\% |  |  | 2 | 17.19\% |
| Retire Before 25 Years: 1.70\% Multiplier (no max); Retire After 25 Years: $2.00 \%$ Multiplier (no max) | 1 | 5.14\% | 4.25\% |  |  | 1 | 4.25\% |
| Bridged Benefit: ( $1.20 \%$ for FAC < \$4,200, plus 1.70\% for FAC > \$4,200) for service before 3/31/2015; 2.50\% Multiplier for service after 3/31/2015 ( $80 \%$ Max); Termination FAC |  |  |  | 1 | 0.00\% | 1 | 0.00\% |
| Bridged Benefit: 1.70\% Multiplier (no max) Frozen FAC; to 2.00\% Multiplier (no max) |  |  |  | 1 | 0.00\% | 1 | 0.00\% |
| Bridged Benefit: 1.70\% Multiplier (no max) Frozen FAC; to 1.30\% Multiplier (no max) | 1 | 5.00\% | 1.30\% |  |  | 1 | 1.30\% |
| Bridged Benefit: $\mathbf{2 . 0 0 \%}$ Multiplier (no max) Frozen FAC; to 1.50\% Multiplier (no max) | 7 | 1.42\% | 3.19\% |  |  | 7 | 3.19\% |
| Bridged Benefit: 2.00\% Multiplier (no max) Frozen FAC; to 1.70\% Multiplier (no max) | 2 | 3.05\% | 9.83\% |  |  | 2 | 9.83\% |
| Bridged Benefit: $2.25 \%$ Multiplier (80\% max) Frozen FAC; to 1.30\% Multiplier (no max) | 1 | 5.00\% | 23.54\% |  |  | 1 | 23.54\% |
| Bridged Benefit: $2.25 \%$ Multiplier ( $80 \% \mathrm{max}$ ) Frozen FAC; to 1.50\% Multiplier (no max) |  |  |  | 1 | 0.00\% | 1 | 0.00\% |
| Bridged Benefit: $2.25 \%$ Multiplier ( $80 \% \mathrm{max}$ ) Frozen FAC; to 1.70\% Multiplier (no max) | 2 | 5.00\% | 17.61\% |  |  | 2 | 17.61\% |
| Bridged Benefit: $2.25 \%$ Multiplier ( $80 \% \mathrm{max}$ ) Frozen FAC; to 1.80\% Multiplier (no max) | 1 | 7.50\% | 17.57\% |  |  | 1 | 17.57\% |
| Bridged Benefit: $2.25 \%$ Multiplier (80\% max) Frozen FAC; to 2.00\% Multiplier (no max) |  |  |  | 1 | 21.14\% | 1 | 21.14\% |
| Bridged Benefit: $2.35 \%$ Multiplier ( $80 \% \mathrm{max}$ ) Frozen FAC; to $2.25 \%$ Multiplier ( $80 \% \mathrm{max}$ ) | 2 | 5.00\% | 71.74\% |  |  | 2 | 71.74\% |
| Bridged Benefit: $2.50 \%$ Multiplier ( $80 \% \mathrm{max}$ ) Frozen FAC; to 1.50\% Multiplier (no max) | 3 | 4.72\% | 21.05\% | 1 | 18.54\% | 4 | 20.28\% |
| Bridged Benefit: $2.50 \%$ Multiplier (80\% max) Frozen FAC; to 1.70\% Multiplier (no max) | 1 | 5.00\% | 9.08\% |  |  | 1 | 9.08\% |
| Bridged Benefit: $2.50 \%$ Multiplier ( $80 \% \mathrm{max}$ ) Frozen FAC; to 1.75\% Multiplier (no max) | 1 | 13.78\% | 15.00\% |  |  | 1 | 15.00\% |
| Bridged Benefit: $2.50 \%$ Multiplier (80\% max) Frozen FAC; to 1.90\% Multiplier ( $80 \% \mathrm{max}$ ) | 1 | 8.00\% | 107.14\% |  |  | 1 | 107.14\% |
| Bridged Benefit: $2.50 \%$ Multiplier ( $80 \% \mathrm{max}$ ) Frozen FAC; to 2.00\% Multiplier (no max) | 2 | 10.56\% | 10.68\% |  |  | 2 | 10.68\% |
| Bridged Benefit: $2.50 \%$ Multiplier (80\% max) Frozen FAC; to 2.25\% Multiplier (80\% max) | 6 | 6.00\% | 24.39\% |  |  | 6 | 24.39\% |
| Bridged Benefit: $2.80 \%$ Multiplier (80\% max) Frozen FAC; to 2.50\% Multiplier ( $80 \% \mathrm{max}$ ) | 1 | 11.00\% | 27.49\% |  |  | 1 | 27.49\% |
| Bridged Benefit: 3.00\% Multiplier (80\% max) Frozen FAC; to 2.50\% Multiplier (80\% max) | 3 | 7.45\% | 29.85\% |  |  | 3 | 29.85\% |
| Bridged Benefit: 1.50\% Multiplier (no max) Frozen FAC; to 2.00\% Multiplier (no max) | 4 | 5.00\% | 6.56\% |  |  | 4 | 6.56\% |
| Bridged Benefit: 1.00\% Multiplier (no max) Termination FAC; to $2.00 \%$ Multiplier ( $60 \%$ overall max, except for pre-bridge purchased service) | 1 | 8.50\% | 6.55\% |  |  | 1 | 6.55\% |
| Bridged Benefit: $2.00 \%$ Multiplier (no max) Termination FAC; to 2.25\% Multiplier (80\% max) | 1 | 6.00\% | 7.01\% |  |  | 1 | 7.01\% |
| Bridged Benefit: $2.25 \%$ Multiplier (80\% max) Termination FAC; to 2.00\% Multiplier (no max) | 2 | 6.00\% | 19.63\% |  |  | 2 | 19.63\% |
| Bridged Benefit: $2.50 \%$ Multiplier ( $80 \% \mathrm{max}$ ) Termination FAC; to 3.00\% Multiplier (no max) |  |  |  | 1 | 26.69\% | 1 | 26.69\% |
| Bridged Benefit: $2.50 \%$ Multiplier (80\% max) Termination FAC; to 1.50\% Multiplier (no max) | 1 | 8.26\% | 46.92\% |  |  | 1 | 46.92\% |
| Bridged Benefit: $2.50 \%$ Multiplier ( $80 \%$ max) Termination FAC; to 2.25\% Multiplier ( $80 \% \mathrm{max}$ ) | 2 | 3.35\% | 35.41\% |  |  | 2 | 35.41\% |
| Bridged Benefit: 3.00\% Multiplier (80\% max) Termination FAC; to 2.50\% Multiplier (80\% max) | 1 | 15.11\% | 24.18\% |  |  | 1 | 24.18\% |
| Hybrid Plan - 1.00\% Multiplier |  |  |  | 47 | 5.19\% | 47 | 5.19\% |
| Hybrid Plan - 1.25\% Multiplier |  |  |  | 53 | 5.73\% | 53 | 5.73\% |
| Hybrid Plan - 1.50\% Multiplier | 2 | 1.43\% | 10.00\% | 63 | 7.97\% | 65 | 8.04\% |
| Hybrid Plan - 1.75\% Multiplier |  |  |  | 4 | 6.94\% | 4 | 6.94\% |
| Hybrid Plan - 2.00\% Multiplier |  |  |  | 1 | 9.89\% | 1 | 9.89\% |
| Total | 802 | 5.67\% | 15.77\% | 440 | 14.07\% | 1242 | 15.31\% |

Table 10 provides a distribution of average employer and member contribution rates by type of benefit program. This information is shown on a divisional basis. MERS is a multiple-employer plan, where each municipality decides its benefit structure.

Table 11
Additional Benefit Programs
(Excludes the Divisions of Closed municipalities - see Table 1)

| Benefit Program | No. of Divisions | Benefit Program | No. of Divisions | Benefit Program | No. of Divisions | Benefit <br> Program | No. of Divisions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Normal Retirment |  | Early (Reduced) Retirement |  | Survivor Provisions |  | D-2 Provisions |  |
| 50 | 5 | 50/25 | 1771 | RS 50\% | 147 | D-2 (25\%) | 74 |
| 52 | 3 | 55/10 | 13 | RS 60\% | 20 | D-2 (55\%) | 1 |
| 55 | 44 | 55/15 | 2006 | RS 100\% | 1 | D-2 (67\%) | 18 |
| 58 | 6 | 0/25 | 1 | RS 75\% | 15 | D-2 (70\%) | 11 |
| 59 | 2 |  |  | Sub.75\% | 15 | D-2 (80\%) | 1 |
| 60 | 2532 |  |  |  |  | D-2 (50\% Dth; 67\% Dsb) | 1 |
| Old Plan Benefits | 24 | Vesting |  | COLA for Existing Retirees |  | D-2 (67\% Dth; 50\% Dsb) | 15 |
|  |  | 3 years | 1 | 0.5\% Non-Compound | 1 | D-2 No Svc Proj | 16 |
| Unreduced Retirement |  | 5 years | 31 | 2.5\% Non-Compound | 284 |  |  |
| 49/20 | 1 | 6 years | 598 | 2.0\% Non-Compound | 1 | Disability and Death Provisions |  |
| 50/20 | 3 | 7 years | 2 | 2.0\% Compound | 22 | DD 50\% FAC Min | 2 |
| 50/25 | 454 | 8 years | 213 | 3.0\% Compound | 5 | NDD/Dsb 25\% FAC Min | 6 |
| 50/28 | 1 | 10 years | 1,731 | 2.0\% Compound; CPI Limit | 1 | NDsb 55\% FAC Min | 1 |
| 50/30 | 6 | 15 years | 16 | CPI (Compound; 3\% Limit) to Age 65 | 2 | NDD15\% FAC Min | 15 |
| 52/10 | 2 | Old Plan Vesting | 24 | CPI (Compound; 4\% Limit for Some) | 1 | Non Dty Dsb Elg: 10 Years | 4 |
| 53/25 | 6 |  |  | \$300 Annual Flat | 1 | NDD/Dsb Elg: 1 year | 6 |
| 55/10 | 16 | FAC Period |  | 2\% Compound: Years 6-15 | 2 | Duty Dsb 65\% FAC Min (no svc |  |
| 55/15 | 342 | 2 years | 14 | Varies | 3 | projection); Non Dty Dsb Elg: |  |
| 55/20 | 246 | 3 years | 1,219 |  |  | 5 Years | 1 |
| 55/25 | 693 | 4 years | 3 | COLA for Future Retirees |  |  |  |
| 55/30 | 69 | 5 years | 1,349 | 0.5\% Non-Compound | 1 | Other Provisions |  |
| 57/25 | 2 | 3 of 5 years | 4 | 2.5\% Non-Compound | 680 | PRO | 1 |
| 58/8 | 1 | 5 of 10 years | 3 | 1.0\% Non-Compound | 8 | SLIF | 54 |
| 60/10 | 7 | Max \$ FAC | 3 | 2.0\% Non-Compound | 4 | AWD TBill | 30 |
|  |  | Old Plan Benefits | 24 | 1.0\% Compound | 1 | AWD (Valuation Interest Rate) | 5 |
| Unreduced Retirement |  |  |  | 2.0\% Compound | 22 | DROP+4\% | 2 |
| 6 \& out | 1 |  |  | \$300 Annual Flat | 1 | DROP:Traditional | 1 |
| 20 \& out |  |  |  | 2.5\% Non-Compound - commencing at age |  |  |  |
|  | 22 |  |  | 54 | 2 | Late Retirement | 1 |
| 21 \& out | 1 |  |  | 3.0\% Compound | 5 | Deferred GrowNRD | 4 |
| 22 \& out | 4 |  |  |  |  |  |  |
| 23 \& out | 5 |  |  |  |  |  |  |
| 25 \& out | 151 |  |  |  |  |  |  |
| 30 \& out | 12 |  |  |  |  |  |  |
| 65 Points | 2 |  |  |  |  |  |  |
| 80 Points | 1 |  |  |  |  |  |  |
| 85 Points | 6 |  |  |  |  |  |  |

Table 11 shows the distribution of Additional Benefit Programs in effect (by division) for the 2016 valuations. MERS is a multiple-employer plan, where each municipality decides its benefit structure.

## Chart 5

Distribution of Funded Percentage of Actuarial Accrued Liability Among the 720 Participating Municipalities as of December 31, 2016 and the 717 Participating Municipalities as of December 31, 2015


Chart 5 provides a distribution of the active municipalities by funded percentage of the entire municipality, comparing 2016 and 2015. 401 municipalities in MERS are funded at $70 \%$ or higher ( $56 \%$ of all municipalities). 66 municipalities ( $9.2 \%$ of all municipalities) are funded at $100 \%$ or more. The average funded percentage is $74 \%$ in 2016 and 74\% in 2015.

## Chart 6

Distribution of Municipality Divisions by Employer Contribution Rate


Chart 6 provides a distribution of divisions by employer contribution rate for divisions that are open to new hires, comparing 2016 and 2015. Note that:

- The average employer contribution rate is $15.31 \%$ in the 2016 valuations, compared to $15.77 \%$ in the 2015 valuations.
- Employer contribution rates vary between divisions as a result of differences in demographics, benefit provisions, and cost-sharing arrangements.
- The divisions with very high employer contribution rates are generally small divisions that have experienced a decline in the number of active employees (unfunded liabilities are then spread over a smaller payroll, leading to a higher contribution rate).


## Appendices

## Municipal Employees' Retirement System of Michigan

## December 31, 2016 Valuation Results by Municipality

MERS 12/31/2016 Valuation - Results By Municipality - Appendix A

| Municipality Name | Number | of Divisions | Fiscal Year Beginning | of <br> Actives | Active Salary | of <br> Retirees | Benefits in Force | Deferred Vesteds | Deferred Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21st Dist Ct | 8243 | 1 | 7/1/2018 | 9 | 370,154 | 7 | 174,504 | 0 | 0 |
| 23rd Jud Dist Ct | 8223 | 1 | 7/1/2018 | 9 | 419,817 | 8 | 192,805 | 3 | 20,218 |
| 26th Jud Cir Ct | 0403 | 1 | 1/1/2018 | 17 | 575,187 | 20 | 201,937 | 17 | 94,169 |
| 34th Dist Ct | 8235 | 1 | 7/1/2018 | 35 | 1,634,904 | 13 | 418,048 | 3 | 50,229 |
| 35th Dist Ct | 8234 | , | 1/1/2018 | 16 | 755,715 | 14 | 427,067 | o | 0 |
| 41 B Dist Ct | 5014 | 3 | 1/1/2018 | 35 | 1,599,640 | 29 | 391,860 | 6 | 117,088 |
| Addison Fire Dept | 4607 | 1 | 4/1/2018 | 1 | 88,646 | 0 | 0 | 1 | 15,481 |
| Adrian, City of | 4601 | 11 | 7/1/2018 | 120 | 6,079,410 | 149 | 4,077,417 | 19 | 231,833 |
| Aitkin Memorial Dist Lib | 7407 | 1 | 7/1/2018 | 0 | 0 | 0 | 0 | 1 | 22,644 |
| Albion, City of | 1301 | 6 | 1/1/2018 | 25 | 1,157,642 | 103 | 1,052,379 | 13 | 86,355 |
| Alcona Co | 0101 | 8 | 1/1/2018 | 45 | 1,739,655 | 59 | 760,055 | 10 | 55,425 |
| Alger Co | 0203 | 13 | 1/1/2018 | 34 | 1,574,727 | 34 | 655,458 | 4 | 23,041 |
| Alger CRC | 0201 | , | 1/1/2018 | 25 | 1,350,259 | 36 | 628,590 | 2 | 34,008 |
| Algonac, City of | 7707 | 4 | 7/1/2018 | 13 | 659,097 | 22 | 366,238 | 10 | 118,392 |
| Allegan Co | 0302 | 14 | 1/1/2018 | 66 | 4,102,688 | 280 | 4,410,786 | 55 | 457,007 |
| Allegan CRC | 0301 | 5 | 1/1/2018 | 49 | 2,413,337 | 74 | 1,764,178 | 5 | 72,873 |
| Allegan, City of | 0309 | 5 | 7/1/2018 | 9 | 629,218 | 7 | 185,151 | 5 | 83,599 |
| Alma, City of | 2901 | 6 | 7/1/2018 | 73 | 3,087,594 | 89 | 1,445,105 | 6 | 57,790 |
| Almont, VIg of | 4407 | 6 | 7/1/2018 | 13 | 726,286 | 7 | 155,072 | 2 | 3,593 |
| Alpena Co | 0401 | 8 | 1/1/2018 | 79 | 3,108,545 | 115 | 1,358,958 | 35 | 209,222 |
| Alpena CRC | 0402 | 1 | 1/1/2018 | 13 | 701,059 | 46 | 898,888 | 1 | 7,490 |
| Alpena HC | 0406 | 1 | 1/1/2018 | 6 | 341,577 | 1 | 26,578 | 1 | 11,706 |
| Alpena Sr Citizens Ctr | 0404 | 1 | 10/1/2018 | 0 | 0 | 7 | 75,668 | 0 | 0 |
| Alpha, Vlg of | 3614 | 1 | 4/1/2018 | 2 | 29,133 | o | 0 | 2 | 3,502 |
| Antrim Co | 0502 | 6 | 1/1/2018 | 321 | 13,827,586 | 189 | 1,884,709 | 68 | 550,795 |
| Antrim CRC | 0501 | 2 | 1/1/2018 | 34 | 1,489,486 | 41 | 812,892 | 2 | 76,699 |
| Arenac Co | 0603 | 7 | 1/1/2018 | 33 | 1,340,263 | 72 | 705,913 | 17 | 120,292 |
| Arenac CRC | 0604 | 3 | 1/1/2018 | 16 | 776,658 | 33 | 506,667 | 1 | 8,158 |
| Ash Twp | 5804 | 1 | 4/1/2018 | 5 | 201,333 | 4 | 58,800 | 1 | 1,438 |
| Au Gres, City of | 0602 | 2 | 4/1/2018 | 1 | 49,345 | 9 | 215,845 | o | 0 |
| Auburn, City of | 0905 | 2 | 7/1/2018 | 4 | 106,381 | 8 | 202,902 | 2 | 14,680 |
| Bad Axe Area Dist Lib | 3214 | 1 | 7/1/2018 | 1 | 47,172 | o | 0 | o | 0 |
| Bad Axe, City of | 3211 | 1 | 7/1/2018 | 19 | 997,605 | 18 | 468,708 | 1 | 14,941 |
| Bancroft, Vlg of | 7610 | 1 | 3/1/2018 | 0 | O | 1 | 7,884 | 1 | 6,352 |
| Bangor, City of | 8003 | 1 | 7/1/2018 | 7 | 297,441 | 18 | 158,512 | 18 | 41,028 |
| Baraga Co | 0702 | 2 | 1/1/2018 | 27 | 1,175,689 | 30 | 417,652 | 11 | 80,111 |
| Baraga Co Memorial Hosp | 0703 | 2 | 10/1/2018 | 53 | 2,572,331 | 129 | 1,295,155 | 33 | 275,972 |
| Baraga CRC | 0701 | 5 | 10/1/2018 | 18 | 814,763 | 36 | 580,124 | 3 | 38,887 |
| Baraga, Vlg of | 0704 | 3 | 3/1/2018 | 10 | 435,701 | 11 | 260,585 | 2 | 31,689 |
| Baroda Lake Twp Police Dept | 1109 | 1 | 4/1/2018 | 4 | 250,048 | 1 | 12,131 | 1 | 683 |
| Barry Co | 0802 | 15 | 1/1/2018 | 437 | 17,158,278 | 231 | 3,342,250 | 70 | 580,757 |
| Barry Co CMH Auth | 0804 | 2 | 10/1/2018 | 77 | 3,202,702 | 7 | 190,211 | 12 | 145,197 |
| Barry Eaton Dist Hith Dept | 2303 | 3 | 1/1/2018 | 60 | 2,660,328 | 91 | 1,252,684 | 41 | 316,032 |
| Barton Hills, Vlg of | 8107 | 1 | 4/1/2018 | 2 | 121,228 | 2 | 51,095 | o | 0 |
| Bates Twp | 3616 | 1 | 4/1/2018 | 0 | 0 | 1 | 27,441 | o | 0 |
| Bath Chtr Twp | 1909 | 1 | 1/1/2018 | 25 | 1,457,065 | 10 | 280,452 | 4 | 41,473 |
| Battle Creek, City of | 1302 | 13 | 7/1/2018 | 332 | 17,452,775 | 403 | 9,797,224 | 45 | 652,799 |
| Bay Area Trans Auth | 2810 | 2 | 10/1/2018 | 95 | 3,330,086 | 45 | 268,897 | 12 | 80,919 |
| Bay City HC | 0906 | 2 | 10/1/2018 | 9 | 486,663 | 19 | 448,516 | o | 0 |
| Bay City, City of | 0901 | 7 | 7/1/2018 | 44 | 2,349,701 | 289 | 6,017,021 | 13 | 167,004 |
| Bay Metro Trans Auth | 0907 | 3 | 10/1/2018 | 82 | 3,877,036 | 52 | 638,183 | 13 | 56,928 |
| Beecher Metro Dist Swg\&Wtr | 2501 | 2 | 7/1/2018 | 6 | 378,417 | 14 | 386,408 | 1 | 15,164 |
| Belding, City of | 3410 | 3 | 7/1/2018 | 7 | 339,780 | 6 | 158,743 | 1 | 2,056 |
| Belleville, City of | 8213 | 3 | 7/1/2018 | 11 | 583,098 | 18 | 485,253 | 12 | 58,525 |
| Benton Harbor, City of | 1120 | 4 | 7/1/2018 | 44 | 1,654,104 | 95 | 2,177,682 | 4 | 63,851 |
| Benzie Co | 1003 | 9 | 10/1/2018 | 83 | 3,493,504 | 73 | 954,882 | 36 | 262,837 |
| Benzie Co Comm on Aging | 1006 | 1 | 10/1/2018 | 8 | 297,875 | 6 | 64,464 | 5 | 29,016 |
| Benzie Co MCF (The Maples) | 1004 | 2 | 1/1/2018 | 96 | 3,277,592 | 56 | 510,954 | 24 | 122,650 |
| Benzie CRC | 1001 | 4 | 1/1/2018 | 29 | 1,113,805 | 42 | 606,248 | 10 | 103,520 |
| Benzie Shores Dist Lib | 1005 | 1 | 7/1/2018 | 1 | 78,360 | O | 0 | o | 0 |
| Benzie Trans Auth | 1007 | 1 | 10/1/2018 | 18 | 653,049 | 3 | 7,592 | 1 | 630 |
| Benzie/Leelanau Dist Hith Dept | 4504 | 1 | 10/1/2018 | 3 | 191,355 | 2 | 26,751 | o | 0 |
| Berkley, City of | 6304 | 4 | 7/1/2018 | 43 | 2,014,906 | 75 | 1,745,549 | 10 | 92,033 |
| Berrien Springs, Vlg of | 1102 | 1 | 7/1/2018 | 10 | 406,279 | 9 | 109,023 | 1 | 5,920 |
| Bessemer, City of | 2702 | 1 | 7/1/2018 | 11 | 542,638 | 12 | 132,792 | 1 | 2,549 |
| Beverly Hills, VIg of | 6321 | 4 | 7/1/2018 | 24 | 1,905,227 | 52 | 1,471,703 | 9 | 107,040 |
| Big Rapids HC | 5406 | 1 | 4/1/2018 | 2 | 166,956 | 5 | 117,058 | 2 | 17,513 |
| Big Rapids, City of | 5402 | 2 | 7/1/2018 | 14 | 786,272 | 51 | 1,064,327 | 5 | 24,598 |
| Bingham Farms, Vlg of | 6332 | 1 | 7/1/2018 | 2 | 186,680 | 0 | O | o | 0 |
| Birch Run, Vlg of | 7315 | 3 | 7/1/2018 | 13 | 603,167 | 2 | 19,780 | 5 | 21,850 |
| Bishop Intl Arpt Auth | 2507 | 1 | 1/1/2018 | 32 | 1,923,775 | 14 | 264,772 | 1 | 12,276 |
| Blackman Chtr Twp | 3806 | 1 | 1/1/2018 | 34 | 2,400,085 | 12 | 433,207 | 1 | 48,835 |
| Blissfield, VIg of | 4606 | 1 | 7/1/2018 | 21 | 1,084,562 | 10 | 201,741 | 9 | 54,377 |
| Bloomfield Hills, City of | 6302 | 8 | 7/1/2018 | 23 | 1,859,858 | 48 | 2,411,892 | 3 | 75,365 |
| Blue Water Area Trans Comm | 7709 | 2 | 10/1/2018 | 61 | 2,706,563 | 24 | 274,886 | 3 | 21,539 |
| Boyne City HC | 1508 | 1 | 10/1/2018 | 4 | 157,139 | 3 | 62,528 | 3 | 37,847 |
| Boyne City, City of | 1506 | 3 | 5/1/2018 | 14 | 809,970 | 35 | 542,655 | 5 | 35,755 |
| Branch Co | 1205 | 14 | 1/1/2018 | 554 | 26,374,742 | 108 | 1,756,235 | 62 | 461,141 |
| Branch-Hillsdale-St Joseph Com | 1202 | , | 1/1/2018 | 49 | 1,974,029 | 56 | 724,469 | 21 | 219,884 |
| Brandon Chtr Twp of | 6333 | 2 | 1/1/2018 | 26 | 1,291,632 | 16 | 346,798 | 4 | 34,049 |
| Breckenridge, Vlg of | 2906 | 2 | 3/1/2018 | 10 | 328,639 | 10 | 195,297 | 5 | 24,260 |
| Bridgeport Chtr Twp | 7307 | 6 | 1/1/2018 | 37 | 1,648,064 | 36 | 503,506 | 24 | 235,931 |
| Bridgman, City of | 1110 | 2 | 7/1/2018 | 17 | 834,219 | 6 | 62,159 | 6 | 46,810 |
| Brighton Area Fire Auth | 4715 | 1 | 7/1/2018 | 1 | 73,714 | 1 | 18,317 | o | 0 |
| Brighton, Chtr Twp of | 4711 | 4 | 4/1/2018 | 10 | 511,727 | 11 | 103,757 | 4 | 21,933 |
| Brighton, City of | 4704 | 6 | 7/1/2018 | 51 | 3,510,572 | 39 | 1,057,439 | 11 | 98,740 |
| Britton, Vlg of | 4604 |  | 3/1/2018 | 3 | 89,270 | 0 | 0 | 1 | 5,001 |
| Bronson, City of | 1204 | 2 | 7/1/2018 | 12 | 600,891 | 6 | 80,657 | 4 | 55,978 |
| Brooklyn, VIg of | 3801 | 1 | 3/1/2018 | 9 | 343,182 | 5 | 95,246 | 1 | 3,996 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix A

| Municipality Name | Number |  | Fiscal Year Beginning | Participant Information |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Number of Actives | Active Salary | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { Retirees } \end{gathered}$ | Annual Benefits in Force | Number <br> Deferred Vesteds | Annual Deferred Benefits |
| Brownstown, Chtr Twp of | 8247 | 3 | 1/1/2018 | 66 | 4,596,422 | 12 | 563,880 | 5 | 63,184 |
| Buchanan Dist Lib | 1108 | 1 | 7/1/2018 | 5 | 164,423 | 1 | 3,673 | 1 | 5,546 |
| Buchanan, City of | 1101 | 4 | 7/1/2018 | 26 | 1,429,260 | 33 | 410,393 | 6 | 56,256 |
| Buena Vista Chtr Twp | 7312 | 7 | 1/1/2018 | 32 | 1,485,027 | 26 | 742,855 | 16 | 146,896 |
| Burton, City of | 2508 | 5 | 7/1/2018 | 85 | 4,841,511 | 87 | 3,222,146 | 15 | 138,968 |
| Butman Twp CLD | 2604 | 1 | 7/1/2018 | 0 | 0 | 3 | 7,287 | 0 | 0 |
| Cadillac, City of | 8301 | 7 | 7/1/2018 | 61 | 2,746,059 | 67 | 830,508 | 8 | 128,688 |
| Cadillac/Wexford Trans Auth | 8305 | 2 | 10/1/2018 | 16 | 594,106 | 13 | 146,139 | 0 | 0 |
| Calhoun Co | 1311 | 8 | 1/1/2018 | 573 | 27,754,513 | 258 | 4,675,748 | 66 | 683,538 |
| Calhoun Co Conso Dispatch Auth | 1316 | 3 | 1/1/2018 | 13 | 776,599 | 6 | 199,172 | 4 | 53,338 |
| Canton Pub Lib | 8232 | 1 | 1/1/2018 | 16 | 942,185 | 9 | 262,956 | 3 | 36,385 |
| Canton, Chtr Twp of | 8233 | 15 | 1/1/2018 | 348 | 24,978,861 | 139 | 7,221,757 | 19 | 182,542 |
| Capac, Vlg of | 7705 | 3 | 7/1/2018 | 3 | 141,891 | 18 | 214,779 | 5 | 13,132 |
| Capital Area Dist Lib | 3317 | 3 | 1/1/2018 | 66 | 3,401,919 | 18 | 212,532 | 8 | 54,108 |
| Capital Region Arprt Auth | 3305 | 9 | 7/1/2018 | 37 | 2,305,022 | 39 | 1,051,210 | 18 | 220,930 |
| Carleton, VIg of | 5805 | 1 | 3/1/2018 | 7 | 307,063 | 5 | 64,398 | 0 | 0 |
| Carrollton Twp | 7320 | 2 | 4/1/2018 | 19 | 755,561 | 8 | 134,570 | 2 | 21,135 |
| Cascade Chtr Twp | 4110 | 1 | 1/1/2018 | 41 | 2,474,196 | 20 | 361,706 | 6 | 76,258 |
| Caseville, City of | 3207 | 1 | 3/1/2018 | 13 | 532,671 | 7 | 106,850 | 0 | 0 |
| Caspian, City of | 3608 | 1 | 7/1/2018 | 2 | 104,258 | 8 | 111,710 | 2 | 7,953 |
| Cass Co | 1402 | 8 | 10/1/2018 | 151 | 7,500,912 | 94 | 1,411,427 | 17 | 121,599 |
| Cass Co MCF | 1403 | 2 | 10/1/2018 | 81 | 3,421,293 | 45 | 358,101 | 6 | 57,237 |
| Cass Dist Lib | 1404 | 1 | 1/1/2018 | 12 | 396,081 | 5 | 31,879 | 5 | 16,907 |
| Cedar Springs, City of | 4105 | 3 | 7/1/2018 | 9 | 409,485 | 13 | 204,326 | 11 | 101,312 |
| Center Line, City of | 5001 | 6 | 7/1/2018 | 13 | 591,642 | 44 | 704,678 | 5 | 42,389 |
| Central Lake, Vlg of | 0504 | 1 | 3/1/2018 | 5 | 189,337 | 0 | 0 | 1 | 2,407 |
| Central Mich Dist Hlth Dept | 3705 | 5 | 10/1/2018 | 39 | 1,810,677 | 96 | 1,376,039 | 43 | 332,831 |
| Charlevoix Co | 1503 | 6 | 1/1/2018 | 313 | 12,063,168 | 196 | 2,542,183 | 53 | 442,545 |
| Charlevoix CRC | 1501 | 3 | 1/1/2018 | 35 | 1,468,326 | 43 | 527,821 | 8 | 68,899 |
| Charlevoix, City of | 1505 | 3 | 4/1/2018 | 44 | 2,444,252 | 43 | 919,208 | 3 | 42,146 |
| Charlotte Dist Lib | 2309 | 2 | 1/1/2018 | 5 | 181,227 | 4 | 60,753 | 1 | 2,057 |
| Charlotte, City of | 2301 | 8 | 7/1/2018 | 47 | 2,580,947 | 61 | 1,373,703 | 14 | 203,336 |
| Cheboygan Co | 1603 | 6 | 1/1/2018 | 123 | 5,057,284 | 104 | 1,517,392 | 13 | 129,612 |
| Cheboygan CRC | 1601 | 3 | 1/1/2018 | 33 | 1,358,613 | 63 | 1,324,405 | 6 | 93,272 |
| Cheboygan, City of | 1602 | 6 | 7/1/2018 | 27 | 1,298,224 | 33 | 599,386 | 3 | 25,780 |
| Chelsea Area Fire Auth | 8118 | 1 | 3/1/2018 | 6 | 358,318 | 1 | 14,820 | 4 | 20,822 |
| Chelsea, City of | 8103 | 3 | 7/1/2018 | 3 | 275,249 | 37 | 1,022,515 | 7 | 106,401 |
| Chesaning, Vlg of | 7313 | 5 | 3/1/2018 | 8 | 346,736 | 14 | 247,187 | 5 | 24,351 |
| Chesterfield Twp | 5009 | 3 | 1/1/2018 | 150 | 8,624,344 | 62 | 1,537,377 | 13 | 149,904 |
| Chesterfield Twp Lib | 5010 | 1 | 1/1/2018 | 4 | 181,097 | 3 | 72,780 | 2 | 41,516 |
| Chikaming Twp | 1112 | 2 | 4/1/2018 | 15 | 648,388 | 7 | 132,495 | 1 | 19,005 |
| Chippewa Co | 1703 | 15 | 1/1/2018 | 162 | 7,575,339 | 173 | 2,629,844 | 29 | 232,212 |
| Chippewa CRC | 1704 | 2 | 1/1/2018 | 66 | 3,244,097 | 86 | 1,278,009 | 4 | 49,987 |
| Chippewa River Dist Lib | 3707 | 2 | 1/1/2018 | 14 | 706,014 | 6 | 146,018 | 5 | 65,008 |
| Chocolay, Chtr Twp of | 5218 | 1 | 1/1/2018 | 13 | 590,397 | 3 | 23,244 | 2 | 53,584 |
| Clare Co | 1802 | 4 | 1/1/2018 | 141 | 5,510,723 | 85 | 1,175,437 | 32 | 311,089 |
| Clare Co Trans Auth | 1806 | 1 | 10/1/2018 | 3 | 153,925 | 1 | 8,895 | 1 | 1,368 |
| Clare CRC | 1801 | 4 | 7/1/2018 | 34 | 1,650,120 | 41 | 812,353 | 4 | 36,837 |
| Clare, City of | 1804 | 2 | 7/1/2018 | 28 | 1,284,529 | 25 | 533,749 | 7 | 84,211 |
| Clawson, City of | 6305 | 3 | 7/1/2018 | 13 | 918,970 | 61 | 1,896,896 | 3 | 47,943 |
| Clay Twp | 7706 | 8 | 7/1/2018 | 34 | 1,797,413 | 27 | 491,262 | 4 | 82,272 |
| Clearwater Twp | 4005 | 1 | 4/1/2018 | 1 | 33,625 | 1 | 12,217 | 0 | 0 |
| Clinton Co | 1903 | 6 | 1/1/2018 | 126 | 6,900,749 | 156 | 2,613,607 | 40 | 464,326 |
| Clinton CRC | 1901 | 6 | 1/1/2018 | 43 | 2,222,086 | 56 | 1,353,228 | 4 | 44,238 |
| Clinton Twp | 5002 | 18 | 4/1/2018 | 152 | 8,937,780 | 191 | 4,850,449 | 16 | 281,183 |
| Clinton, VIg of | 4602 | 4 | 4/1/2018 | 15 | 898,796 | 17 | 290,013 | 1 | 13,342 |
| Clinton-Eaton-Ingham CMH | 3308 | 7 | 10/1/2018 | 796 | 37,049,477 | 428 | 8,972,214 | 146 | 1,428,079 |
| Clio, City of | 2523 | 1 | 7/1/2018 | 16 | 655,923 | 6 | 92,338 | 4 | 30,607 |
| CMH for Central Mich | 3708 | 1 | 10/1/2018 | 340 | 17,663,923 | 223 | 3,964,248 | 94 | 786,730 |
| Coldwater Brd of Pub Util | 1203 | 2 | 7/1/2018 | 14 | 938,878 | 32 | 785,803 | 8 | 95,223 |
| Coldwater, City of | 1201 | 5 | 7/1/2018 | 15 | 980,640 | 61 | 1,213,271 | 6 | 55,586 |
| Coleman, City of | 5603 | 2 | 7/1/2018 | 7 | 365,220 | 8 | 165,918 | 0 | 0 |
| Coloma Chtr Twp | 1107 | 2 | 4/1/2018 | 14 | 698,681 | 3 | 114,222 | 2 | 30,508 |
| Coloma, City of | 1118 | 1 | 4/1/2018 | 6 | 259,389 | 0 | 0 | 0 | 0 |
| Columbiaville, Vlg of | 4406 | 1 | 3/1/2018 | 4 | 193,334 | 3 | 14,288 | 0 | 0 |
| Constantine, Vlg of | 7806 | 1 | 4/1/2018 | 1 | 57,388 | 0 | 0 | 1 | 4,841 |
| Coopersville Area Dist Lib | 7011 | 2 | 7/1/2018 | 1 | 48,000 | 2 | 24,055 | 2 | 9,222 |
| Coopersville, City of | 7005 | 1 | 7/1/2018 | 15 | 735,794 | 14 | 162,601 | 6 | 67,092 |
| Corunna City of | 7604 | 6 | 7/1/2018 | 12 | 641,801 | 17 | 380,048 | 4 | 25,759 |
| Corwith Twp | 6904 | 1 | 4/1/2018 | 9 | 86,114 | 0 | 0 | 0 | 0 |
| Covert Twp | 8010 | 1 | 7/1/2018 | 14 | 715,476 | 2 | 59,790 | 2 | 18,200 |
| Crawford Co | 2001 | 7 | 10/1/2018 | 48 | 2,196,349 | 80 | 1,094,772 | 22 | 139,549 |
| Crawford Co Trans Auth | 2004 | 1 | 10/1/2018 | 23 | 756,564 | 14 | 299,061 | 4 | 60,695 |
| Crawford CRC | 2002 | 3 | 1/1/2018 | 28 | 1,411,941 | 31 | 574,210 | 0 | 0 |
| Croswell, City of | 7401 | 3 | 7/1/2018 | 26 | 1,467,886 | 25 | 609,421 | 5 | 48,626 |
| Crystal Falls Cmnty Hosp CLD | 3618 | 2 | 1/1/2018 | 0 | 0 | 78 | 333,158 | 37 | 57,242 |
| Crystal Falls, City of | 3603 | 4 | 1/1/2018 | 15 | 856,374 | 25 | 600,032 | 9 | 77,061 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix A

| Municipality Name | Number | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { Divisions } \\ \hline \end{gathered}$ | Fiscal Year Beginning |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Number of Actives | Active Salary | Number of Retirees | Annual Benefits in Force | Number Deferred Vesteds | Annual Deferred Benefits |
| Ctrl Dispatch of Muskegon Co | 6109 | 3 | 10/1/2018 | 30 | 1,573,426 | 21 | 356,469 | 5 | 69,567 |
| Ctrl Wayne Co Sanitation Auth | 8214 | 2 | 7/1/2018 | 0 | 0 | 19 | 272,224 | 2 | 17,232 |
| Davison Richfield Sr CCA | 2525 | 1 | 7/1/2018 | 1 | 46,738 | 1 | 28,339 | 0 | 0 |
| Davison Twp | 2519 | 2 | 7/1/2018 | 41 | 2,419,588 | 10 | 386,812 | 3 | 43,499 |
| Davison, City of | 2516 | 5 | 7/1/2018 | 18 | 956,848 | 17 | 674,170 | 3 | 26,751 |
| Dearborn, City of | 8251 | 2 | 7/1/2018 | 155 | 10,645,058 | 0 | 0 | 1 | 1,824 |
| Deerfield, Vlg of | 4603 | 1 | 3/1/2018 | 5 | 203,642 | 4 | 106,883 | 2 | 55,044 |
| Delta Area Transit Auth | 2107 | 1 | 10/1/2018 | 1 | 53,154 | 0 | 0 | 0 | 0 |
| Delta Chtr Twp | 2306 | 1 | 1/1/2018 | 38 | 2,475,005 | 15 | 665,451 | 6 | 101,104 |
| Delta Co | 2102 | 8 | 10/1/2018 | 47 | 2,123,797 | 114 | 2,257,378 | 18 | 225,339 |
| Delta CRC | 2105 | 5 | 1/1/2018 | 35 | 1,451,488 | 42 | 801,629 | 2 | 18,599 |
| Delta-Menominee Dist Hlth Dept | 2103 | 2 | 1/1/2018 | 39 | 1,480,531 | 33 | 465,768 | 28 | 170,846 |
| Detour, VIg of | 1706 | 1 | 4/1/2018 | 7 | 138,541 | 5 | 29,217 | 1 | 7,641 |
| Detroit HC | 8241 | 5 | 7/1/2018 | 120 | 6,304,406 | 30 | 390,868 | 43 | 498,866 |
| DeWitt Chtr Twp | 1910 | 2 | 1/1/2018 | 14 | 946,726 | 6 | 226,830 | 6 | 73,942 |
| DeWitt, City of | 1908 | 6 | 7/1/2018 | 16 | 896,506 | 18 | 333,456 | 13 | 89,705 |
| Dexter Area Fire Dept | 8219 | 1 | 1/1/2018 | 8 | 580,692 | 2 | 45,764 | 1 | 16,517 |
| Dexter Twp | 8111 | 1 | 4/1/2018 | 11 | 263,011 | 8 | 48,383 | 2 | 7,674 |
| Dexter, City of | 8217 | 1 | 7/1/2018 | 8 | 531,865 | 10 | 194,864 | 2 | 18,578 |
| Dickinson Co | 2206 | 8 | 1/1/2018 | 81 | 3,645,568 | 90 | 1,913,529 | 17 | 205,296 |
| Dickinson CRC | 2203 | 2 | 1/1/2018 | 19 | 975,698 | 46 | 786,006 | 8 | 73,861 |
| Dickinson-Iron Dist Hith Dept | 3605 | 4 | 1/1/2018 | 19 | 918,777 | 50 | 586,758 | 13 | 150,947 |
| Dimondale, Vlg of | 2304 | 1 | 3/1/2018 | 3 | 146,809 | 5 | 42,574 | 1 | 15,341 |
| Dist Hlth Dept \# 2 | 6501 | 2 | 1/1/2018 | 10 | 458,123 | 37 | 564,388 | 10 | 99,586 |
| Dist Hlth Dept \# 4 | 7103 | 2 | 1/1/2018 | 41 | 1,607,080 | 59 | 1,288,525 | 12 | 90,388 |
| Dist Hith Dept \#10 | 5104 | 3 | 10/1/2018 | 111 | 5,123,779 | 121 | 2,223,835 | 17 | 97,909 |
| Douglas, City of Vlg of | 0303 | 3 | 3/1/2018 | 17 | 883,260 | 15 | 146,574 | 8 | 45,444 |
| Dowagiac Dist Lib | 1406 | 2 | 10/1/2018 | 3 | 104,072 | 1 | 2,862 | 0 | 0 |
| Dowagiac HC | 1405 | 2 | 10/1/2018 | 4 | 168,998 | 1 | 3,308 | 2 | 4,712 |
| Dowagiac, City of | 1401 | 6 | 10/1/2018 | 46 | 2,461,520 | 59 | 1,137,320 | 11 | 111,407 |
| Drummond Island Twp | 1708 | 1 | 4/1/2018 | 2 | 92,779 | 0 | 0 | 1 | 2,220 |
| Dryden, Vlg of | 4405 | 1 | 4/1/2018 | 1 | 37,263 | 3 | 35,295 | 1 | 18,604 |
| Dundee, Vlg of | 5803 | 1 | 3/1/2018 | 10 | 513,728 | 13 | 296,295 | 3 | 74,513 |
| Durand, City of | 7603 | 3 | 7/1/2018 | 21 | 913,272 | 20 | 379,414 | 5 | 56,270 |
| E UP Reg Planning \& Dev Comm | 1709 | 1 | 10/1/2018 | 6 | 256,452 | 0 | 0 | 0 | 0 |
| E UP Trans Auth | 1705 | 3 | 10/1/2018 | 20 | 1,034,301 | 30 | 775,781 | 3 | 23,182 |
| East China Chtr Twp | 7701 | 1 | 4/1/2018 | 16 | 887,979 | 17 | 579,943 | 1 | 16,525 |
| East Grand Rapids, City of | 4101 | 5 | 7/1/2018 | 6 | 437,527 | 46 | 1,641,239 | 6 | 46,961 |
| East Jordan, City of | 1504 | 4 | 7/1/2018 | 16 | 724,325 | 22 | 311,122 | 4 | 33,278 |
| East Lansing, City of | 3301 | 21 | 7/1/2018 | 268 | 15,609,738 | 373 | 12,708,765 | 76 | 764,185 |
| Eastpointe HC | 5011 | 1 | 7/1/2018 | 6 | 358,359 | 2 | 20,559 | 0 | 0 |
| Eastpointe, City of | 5019 | 12 | 1/1/2018 | 104 | 7,006,112 | 210 | 6,312,056 | 13 | 260,901 |
| Eaton Co | 2302 | 10 | 10/1/2018 | 365 | 18,444,571 | 285 | 8,188,818 | 66 | 856,720 |
| Eaton Co Hlth \& Rehab Svcs | 2305 | 4 | 1/1/2018 | 220 | 9,299,528 | 49 | 410,519 | 11 | 74,509 |
| Eaton Rapids, City of | 2307 | 8 | 1/1/2018 | 34 | 1,970,006 | 32 | 949,217 | 14 | 142,533 |
| Eau Claire, Vlg of | 1104 | 1 | 3/1/2018 | 1 | 47,472 | 3 | 45,404 | 0 | 0 |
| Ecorse, City of | 8206 | 8 | 7/1/2018 | 24 | 1,612,357 | 136 | 3,780,388 | 14 | 184,166 |
| Elk Rapids, Vlg of | 0506 | 1 | 3/1/2018 | 21 | 985,018 | 4 | 102,774 | 2 | 15,440 |
| Elkton, Vlg of | 3206 | 2 | 3/1/2018 | 2 | 81,369 | 5 | 45,157 | 2 | 5,459 |
| Elsie, Vlg of CLD | 1906 | 1 | 4/1/2018 | 0 | 0 | 3 | 12,278 | 0 | 0 |
| Emmet CRC | 2401 | 2 | 1/1/2018 | 10 | 597,089 | 39 | 924,192 | 2 | 8,527 |
| Emmett, Chtr Twp | 1310 | 2 | 4/1/2018 | 25 | 1,325,728 | 12 | 189,242 | 10 | 114,353 |
| Erie, Twp of | 5812 | 1 | 7/1/2018 | 3 | 133,148 | 0 | 0 | 0 | 0 |
| Escanaba, City of | 2101 | 6 | 7/1/2018 | 42 | 2,074,943 | 118 | 2,398,054 | 11 | 105,128 |
| Essexville, City of | 0903 | 6 | 7/1/2018 | 18 | 877,950 | 21 | 497,674 | 6 | 70,072 |
| Evart Local Dev Finance Auth | 6706 | 1 | 7/1/2018 | 1 | 26,297 | 2 | 37,044 | 0 | 0 |
| Evart, City of | 6705 | 2 | 7/1/2018 | 10 | 464,691 | 8 | 117,538 | 8 | 61,494 |
| Farmington Cmnty Lib | 6319 | 2 | 7/1/2018 | 8 | 442,696 | 29 | 605,653 | 3 | 13,650 |
| Farmington, City of | 6343 | 6 | 7/1/2018 | 43 | 2,737,705 | 59 | 1,698,394 | 8 | 79,358 |
| Farwell, Vlg of | 1805 | 1 | 3/1/2018 | 6 | 210,782 | 2 | 38,274 | 1 | 13,832 |
| Fenton, City of | 2505 | 11 | 7/1/2018 | 46 | 2,907,101 | 42 | 942,970 | 4 | 70,893 |
| Ferndale HC | 6345 | 1 | 1/1/2018 | 5 | 253,179 | 1 | 17,269 | 1 | 49,481 |
| Ferrysburg, City of | 7106 | 1 | 7/1/2018 | 7 | 361,584 | 11 | 113,657 | 1 | 3,689 |
| Flat Rock, City of | 8212 | 11 | 7/1/2018 | 55 | 3,210,773 | 56 | 1,649,079 | 6 | 122,233 |
| Flint Pub Lib | 2518 | 1 | 7/1/2018 | 18 | 722,376 | 2 | 17,086 | 9 | 56,890 |
| Flint, Chtr Twp of | 2512 | 5 | 1/1/2018 | 57 | 3,357,102 | 43 | 1,726,032 | 6 | 91,078 |
| Flint, City of | 2530 | 19 | 7/1/2018 | 414 | 21,427,792 | 1,800 | 50,685,389 | 121 | 2,022,712 |
| Flushing, Chtr Twp of | 2515 | 3 | 4/1/2018 | 10 | 536,137 | 13 | 325,509 | 4 | 16,131 |
| Flushing, City of | 2502 | 5 | 7/1/2018 | 17 | 1,098,575 | 41 | 1,181,795 | 4 | 58,654 |
| Forsyth Twp | 5212 | 6 | 4/1/2018 | 19 | 873,384 | 16 | 454,194 | 9 | 78,409 |
| Fowler, Vlg of | 1904 | 1 | 1/1/2018 | 3 | 146,368 | 1 | 9,627 | 1 | 4,786 |
| Fowlerville Dist Lib | 4710 | 1 | 7/1/2018 | 6 | 246,430 | 0 | 0 | 0 | 0 |
| Fowlerville, Vlg of | 4705 | 1 | 2/1/2018 | 2 | 107,612 | 14 | 244,842 | 3 | 21,256 |
| Frankenmuth Wickson Dist Lib | 7323 | 1 | 7/1/2018 | 1 | 59,666 | 0 | 0 | 0 | 0 |
| Frankenmuth, City of | 7306 | 4 | 7/1/2018 | 26 | 1,752,318 | 22 | 856,863 | 2 | 18,633 |
| Frankfort, City of | 1002 | 4 | 7/1/2018 | 13 | 669,633 | 18 | 226,112 | 4 | 27,624 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix A

| Municipality Name | Number | Number of Divisions | Fiscal Year Beginning | Participant Information |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { Actives } \end{gathered}$ | Active <br> Salary | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { Retirees } \end{aligned}$ | Annual <br> Benefits in Force | Number Deferred Vesteds | Annual Deferred Benefits |
| Franklin, Vlg of | 6323 | 3 | 7/1/2018 | 11 | 627,738 | 11 | 411,799 | 1 | 2,186 |
| Fraser, City of | 5003 | 7 | 7/1/2018 | 66 | 5,053,190 | 105 | 3,549,653 | 19 | 209,802 |
| Fremont Area Dist Lib | 6209 | 1 | 7/1/2018 | 6 | 248,785 | 4 | 59,496 | 3 | 15,153 |
| Fremont, City of | 6203 | 4 | 7/1/2018 | 26 | 1,527,970 | 28 | 700,405 | 6 | 75,125 |
| Gaastra, City of | 3617 | 1 | 7/1/2018 | 2 | 92,917 | 1 | 17,159 | 0 | 0 |
| Garden City, City of | 8255 | 8 | 7/1/2018 | 95 | 5,927,900 | 170 | 5,189,625 | 5 | 66,802 |
| Gaylord, City of | 6903 | 6 | 7/1/2018 | 28 | 1,463,837 | 30 | 851,206 | 2 | 12,518 |
| Genesee Chtr Twp | 2510 | 1 | 1/1/2018 | 32 | 1,561,294 | 44 | 1,011,018 | 8 | 119,328 |
| Genoa Twp | 4713 | 2 | 4/1/2018 | 2 | 229,122 | 0 | 0 | 0 | 0 |
| Gerald R Ford Intl Airport Aut | 4116 | 2 | 1/1/2018 | 91 | 5,635,428 | 3 | 95,995 | 3 | 62,560 |
| Gladstone, City of | 2106 | 4 | 4/1/2018 | 12 | 751,993 | 39 | 861,337 | 3 | 14,608 |
| Gladwin City HC | 2608 | 1 | 7/1/2018 | 17 | 592,818 | 14 | 289,545 | 4 | 34,121 |
| Gladwin Co | 2602 | 9 | 1/1/2018 | 91 | 3,710,408 | 81 | 1,117,975 | 26 | 182,685 |
| Gladwin Co Dist Lib | 2607 | 1 | 1/1/2018 | 6 | 163,493 | 5 | 49,799 | 0 | 0 |
| Gladwin CRC | 2601 | 3 | 1/1/2018 | 30 | 1,308,816 | 35 | 1,025,672 | 4 | 56,796 |
| Gladwin, City of | 2605 | 2 | 7/1/2018 | 8 | 441,403 | 1 | 19,359 | 0 | 0 |
| Gogebic-Iron WWTR Auth | 2703 | 1 | 7/1/2018 | 7 | 420,717 | 5 | 103,012 | 0 | 0 |
| Grand Beach, VIg of | 1117 | 1 | 11/1/2018 | 8 | 435,284 | 0 | 0 | 0 | 0 |
| Grand Blanc Chtr Twp | 2511 | 2 | 1/1/2018 | 45 | 3,000,886 | 21 | 857,228 | 2 | 29,598 |
| Grand Blanc, City of | 2513 | 4 | 6/1/2018 | 28 | 1,873,519 | 19 | 838,297 | 2 | 29,340 |
| Grand Haven, City of | 7010 | 7 | 7/1/2018 | 201 | 12,103,488 | 193 | 5,463,621 | 46 | 496,263 |
| Grand Ledge Area Dist. Library | 2316 | 1 | 7/1/2018 | 1 | 71,740 | 0 | 0 | 0 | 0 |
| Grand Ledge Area ESA | 2310 | 1 | 7/1/2018 | 9 | 495,102 | 4 | 47,775 | 5 | 26,675 |
| Grand Ledge, City of | 2312 | 2 | 7/1/2018 | 11 | 513,565 | 5 | 185,899 | 4 | 61,512 |
| Grand Rapids HC | 4108 | 1 | 7/1/2018 | 1 | 102,201 | 6 | 165,394 | 0 | 0 |
| Grand Traverse Co | 2803 | 14 | 1/1/2018 | 64 | 3,516,849 | 295 | 7,027,411 | 43 | 414,238 |
| Grand Traverse CRC | 2802 | 2 | 1/1/2018 | 2 | 88,257 | 56 | 929,870 | 3 | 36,828 |
| Grand Traverse Pavilions | 2809 | 5 | 1/1/2018 | 379 | 14,936,116 | 171 | 1,428,282 | 117 | 616,348 |
| Grandville, City of | 4102 | 6 | 7/1/2018 | 12 | 845,600 | 63 | 1,545,113 | 8 | 86,777 |
| Gratiot Co | 2905 | 4 | 10/1/2018 | 42 | 2,171,090 | 98 | 1,549,715 | 15 | 155,680 |
| Gratiot CRC | 2903 | 2 | 1/1/2018 | 33 | 1,631,452 | 55 | 1,136,982 | 1 | 9,585 |
| Grayling, City of | 2003 | 5 | 7/1/2018 | 6 | 318,700 | 20 | 307,381 | 4 | 42,942 |
| Green Oak Chtr Twp | 4708 | 3 | 4/1/2018 | 37 | 2,044,488 | 10 | 266,253 | 1 | 20,010 |
| Greenville, City of | 5906 | 1 | 7/1/2018 | 15 | 992,157 | 12 | 361,867 | 3 | 45,667 |
| Grosse lle Twp | 8207 | 8 | 4/1/2018 | 47 | 3,116,401 | 44 | 1,507,001 | 8 | 154,107 |
| Grosse Pointe Park, City of | 8201 | 8 | 7/1/2018 | 68 | 4,810,060 | 89 | 2,796,578 | 7 | 118,766 |
| Grosse Pointe-Clinton Ref CLD | 5004 | 2 | 7/1/2018 | 0 | 0 | 16 | 216,796 | 0 | 0 |
| Groveland Twp | 6335 | 3 | 4/1/2018 | 10 | 442,332 | 5 | 48,491 | 2 | 22,313 |
| Hackley Pub Lib | 6114 | 1 | 7/1/2018 | 7 | 252,972 | 0 | 0 | 0 | 0 |
| Hamburg Twp | 4709 | 1 | 7/1/2018 | 15 | 1,147,139 | 7 | 218,914 | 5 | 102,391 |
| Hamtramck HC | 8250 | 2 | 1/1/2018 | 11 | 788,129 | 2 | 27,691 | 2 | 29,736 |
| Hamtramck, City of | 8205 | 18 | 7/1/2018 | 87 | 4,462,514 | 227 | 7,896,505 | 23 | 291,308 |
| Hancock, City of | 3107 | 1 | 7/1/2018 | 12 | 618,951 | 6 | 197,946 | 0 | 0 |
| Harbor Beach, City of | 3201 | 5 | 4/1/2018 | 20 | 1,044,819 | 21 | 426,377 | 2 | 16,382 |
| Harbor Springs Area Swg Auth | 2406 | 1 | 1/1/2018 | 7 | 378,562 | 2 | 24,077 | 0 | 0 |
| Harbor Springs, City of | 2405 | 1 | 1/1/2018 | 26 | 1,635,818 | 9 | 242,095 | 0 | 0 |
| Harper Woods, City of | 8260 | 11 | 1/1/2018 | 57 | 3,315,282 | 115 | 4,045,945 | 2 | 79,705 |
| Harrison Dist Lib | 1807 | 1 | 1/1/2018 | 2 | 53,785 | 1 | 13,164 | 0 | 0 |
| Harrison, City of | 1803 | 1 | 1/1/2018 | 10 | 460,385 | 10 | 158,736 | 2 | 27,027 |
| Hartland Deerfield Fire Auth | 4716 | , | 4/1/2018 | 4 | 242,794 | 0 | 0 | 0 | 0 |
| Hastings, City of | 0801 | 11 | 7/1/2018 | 57 | 2,186,822 | 72 | 1,175,130 | 15 | 124,131 |
| Hazel Park, City of | 6336 | 21 | 7/1/2018 | 99 | 5,724,514 | 163 | 4,748,866 | 14 | 174,428 |
| Helen Newberry Joy Hosp | 4805 | 1 | 1/1/2018 | 22 | 1,274,919 | 86 | 1,224,925 | 10 | 107,421 |
| Henika Dist Lib | 0310 | 1 | 1/1/2018 | 1 | 38,389 | 1 | 23,411 | 0 | 0 |
| Herrick Dist Lib | 7012 | 2 | 7/1/2018 | 36 | 1,606,338 | 51 | 623,208 | 6 | 30,363 |
| Hesperia, Vlg of | 6214 | 1 | 4/1/2018 | 0 | 0 | 0 | 0 | 1 | 6,596 |
| Hiawatha Bhvrl Hlth | 1707 | 6 | 10/1/2018 | 18 | 818,921 | 77 | 1,097,188 | 33 | 254,178 |
| Hillsdale Co | 3005 | 2 | 1/1/2018 | 34 | 1,753,157 | 19 | 404,151 | 4 | 37,484 |
| Hillsdale CRC | 3004 | 2 | 1/1/2018 | 40 | 1,844,203 | 38 | 672,031 | 2 | 7,620 |
| Hillsdale HC | 3007 | 1 | 7/1/2018 | 4 | 107,624 | 1 | 8,454 | 0 | 0 |
| Hillsdale, City of | 3001 | 8 | 7/1/2018 | 66 | 3,440,133 | 73 | 1,480,492 | 14 | 216,922 |
| Hth Source of Saginaw | 7311 | 8 | 1/1/2018 | 118 | 5,879,573 | 282 | 2,893,784 | 102 | 704,204 |
| Holland Area Cmnty Pool Auth | 7014 | 2 | 7/1/2018 | 9 | 474,127 | 4 | 21,589 | 2 | 11,700 |
| Holland Cmnty Hosp CLD | 7006 | 1 | 7/1/2018 | 0 | 0 | 53 | 201,611 | 2 | 6,387 |
| Holland, City of | 7001 | 7 | 7/1/2018 | 183 | 12,389,202 | 330 | 8,403,230 | 63 | 827,896 |
| Holly, Vlg of | 6317 | 5 | 7/1/2018 | 22 | 1,233,542 | 34 | 928,337 | 8 | 72,800 |
| Homer, VIg of | 1304 | 1 | 1/1/2018 | 9 | 350,728 | 10 | 89,396 | 15 | 51,594 |
| Houghton Co | 3102 | 10 | 1/1/2018 | 90 | 4,099,332 | 100 | 1,666,906 | 10 | 143,781 |
| Houghton CRC | 3103 | 1 | 1/1/2018 | 7 | 442,625 | 8 | 256,327 | 0 | 0 |
| Houghton Lake Pub Lib | 7203 | 1 | 7/1/2018 | 7 | 260,625 | 2 | 34,732 | 0 | 0 |
| Houghton, City of | 3109 | 1 | 7/1/2018 | 23 | 1,290,717 | 3 | 94,265 | 4 | 72,169 |


| Municipality Name | Number | Number of Divisions | Fiscal Year Beginning | Participant Information |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Number of Actives | Active <br> Salary | Number of Retirees | Annual Benefits in Force | Number Deferred Vesteds | Annual Deferred Benefits |
| Howard City, Vlg of | 5902 | 2 | 3/1/2018 | 2 | 90,658 | 4 | 48,740 | 4 | 28,380 |
| Howard Twp | 1106 | 1 | 4/1/2018 | 2 | 58,967 | 1 | 4,674 | 1 | 2,885 |
| Howell Area Fire Auth | 4714 | 2 | 7/1/2018 | 6 | 350,421 | 2 | 70,239 | 0 | 0 |
| Howell, City of | 4702 | 8 | 7/1/2018 | 51 | 3,208,559 | 59 | 1,266,426 | 19 | 250,304 |
| Howell-Carnegie Dist Lib | 4707 | 1 | 7/1/2018 | 11 | 526,589 | 2 | 18,616 | 1 | 6,583 |
| Hudsonville, City of | 7004 | 4 | 7/1/2018 | 1 | 84,458 | 11 | 137,562 | 9 | 96,329 |
| Huntington Woods, City of | 6303 | 5 | 7/1/2018 | 26 | 1,966,631 | 50 | 1,729,012 | 3 | 32,454 |
| Hurley Med Ctr | 2521 | 13 | 7/1/2018 | 1,980 | 113,422,810 | 1,913 | 39,718,776 | 278 | 4,463,560 |
| Huron Behavioral Health | 3215 | 1 | 10/1/2018 | 57 | 3,011,086 | 38 | 664,195 | 22 | 301,625 |
| Huron Chtr Twp | 8224 | 4 | 1/1/2018 | 44 | 2,600,841 | 23 | 900,137 | 16 | 265,391 |
| Huron Co | 3204 | 4 | 1/1/2018 | 325 | 12,662,036 | 264 | 4,721,892 | 36 | 315,768 |
| Huron CRC | 3202 | 3 | 1/1/2018 | 60 | 2,934,503 | 59 | 1,610,693 | 3 | 56,063 |
| Imlay City, City of | 4404 | 6 | 7/1/2018 | 18 | 1,052,141 | 29 | 535,920 | 5 | 32,015 |
| Independence Twp | 6328 | 1 | 1/1/2018 | 32 | 2,223,895 | 13 | 514,168 | 2 | 49,064 |
| Indianfields Twp CLD | 7905 | 1 | 4/1/2018 | 0 | 0 | 11 | 27,401 | 7 | 7,408 |
| Ingham Co | 3303 | 63 | 1/1/2018 | 1,285 | 70,321,127 | 1,305 | 26,305,656 | 264 | 2,884,246 |
| Interurban Trans Auth | 0308 | 1 | 10/1/2018 | 6 | 251,395 | 3 | 85,257 | 0 | 0 |
| Ionia Cmnty Lib | 3412 | 1 | 7/1/2018 | 6 | 218,638 | 3 | 42,452 | 1 | 14,357 |
| lonia Co | 3408 | 6 | 1/1/2018 | 65 | 3,048,334 | 18 | 317,778 | 15 | 155,477 |
| Ionia CRC | 3404 | 1 | 1/1/2018 | 35 | 1,897,922 | 45 | 1,045,590 | 4 | 49,091 |
| lonia HC | 3406 | 1 | 10/1/2018 | 4 | 160,211 | 3 | 82,505 | 0 | 0 |
| Ionia, City of | 3403 | 9 | 7/1/2018 | 45 | 2,819,237 | 49 | 1,197,569 | 10 | 115,498 |
| losco Co | 3501 | 9 | 1/1/2018 | 142 | 4,912,262 | 147 | 1,566,001 | 46 | 267,715 |
| losco CRC | 3502 | 2 | 1/1/2018 | 23 | 1,131,695 | 34 | 695,199 | 2 | 33,741 |
| Iron Co | 3606 | 10 | 1/1/2018 | 301 | 11,232,526 | 172 | 1,703,364 | 43 | 270,623 |
| Iron Co HC | 3611 | 1 | 10/1/2018 | 3 | 234,142 | 4 | 9,959 | 3 | 6,740 |
| Iron CRC | 3602 | 4 | 1/1/2018 | 17 | 894,469 | 47 | 956,134 | 2 | 28,186 |
| Iron Mountain, City of | 2201 | 4 | 7/1/2018 | 21 | 1,025,734 | 43 | 999,914 | 5 | 21,380 |
| Iron Mountain-Kingsford Swg | 2205 | 1 | 7/1/2018 | 5 | 266,641 | 2 | 32,208 | 1 | 8,881 |
| Iron River, City of | 3601 | 3 | 7/1/2018 | 13 | 590,086 | 39 | 654,656 | 5 | 80,214 |
| Ironwood, City of | 2706 | 10 | 7/1/2018 | 40 | 1,960,073 | 84 | 1,453,289 | 4 | 47,448 |
| Isabella Co | 3703 | 9 | 10/1/2018 | 118 | 5,666,069 | 201 | 2,972,284 | 70 | 681,706 |
| Isabella Co Trans Comm | 3709 | 1 | 10/1/2018 | 13 | 570,326 | 6 | 149,913 | 0 | 0 |
| Isabella CRC | 3702 | 3 | 10/1/2018 | 35 | 1,665,980 | 38 | 701,783 | 10 | 117,172 |
| Ishpeming Area Joint Wwtr Trtm | 5207 | 2 | 1/1/2018 | 6 | 328,469 | 3 | 61,883 | 1 | 6,750 |
| Ishpeming Twp | 5216 | 1 | 4/1/2018 | 10 | 245,173 | 9 | 105,893 | 2 | 11,696 |
| Ishpeming, City of | 5204 | 3 | 1/1/2018 | 27 | 1,296,057 | 39 | 984,198 | 4 | 45,215 |
| Ithaca, City of | 2904 | 3 | 7/1/2018 | 4 | 189,274 | 18 | 368,621 | 5 | 32,807 |
| Jackson Dist Lib | 3802 | 2 | 1/1/2018 | 35 | 1,628,733 | 32 | 347,156 | 8 | 79,840 |
| Jackson Trans Auth | 3805 | 2 | 10/1/2018 | 47 | 1,955,948 | 17 | 276,513 | 4 | 64,798 |
| Jordan Valley Dist Lib | 1507 | 1 | 7/1/2018 | 1 | 69,179 | 0 | 0 | 1 | 7,158 |
| Jordan Valley EMS Auth | 1509 | 2 | 4/1/2018 | 5 | 214,509 | 1 | 8,758 | 0 | 0 |
| Kalamazoo Lake Swr \& Wtr Auth | 0306 | 2 | 3/1/2018 | 7 | 353,418 | 8 | 114,359 | 5 | 49,463 |
| Kalamazoo Pub Lib | 3903 | 2 | 7/1/2018 | 62 | 3,196,686 | 14 | 231,329 | 11 | 86,541 |
| Kalamazoo, Chtr Twp of | 3907 | 1 | 1/1/2018 | 35 | 2,223,101 | 11 | 486,612 | 0 | 0 |
| Kalkaska Co | 4003 | 6 | 1/1/2018 | 93 | 3,270,085 | 80 | 1,217,278 | 29 | 216,350 |
| Kalkaska CRC | 4002 | 4 | 1/1/2018 | 26 | 1,066,885 | 41 | 730,448 | 15 | 219,955 |
| Kalkaska Pub Trans Auth | 4004 | 1 | 10/1/2018 | 11 | 288,981 | 12 | 141,170 | 1 | 4,158 |
| Kalkaska, Vlg of | 4001 | 6 | 3/1/2018 | 11 | 480,154 | 16 | 368,311 | 4 | 24,621 |
| Keego Harbor, City of | 6322 | 4 | 7/1/2018 | 6 | 328,135 | 16 | 281,529 | 4 | 52,106 |
| Kent CRC | 4111 | 1 | 10/1/2018 | 0 | 0 | 5 | 34,357 | 0 | 0 |
| Keweenaw Co | 4202 | 3 | 1/1/2018 | 13 | 573,022 | 12 | 163,301 | 5 | 51,604 |
| Keweenaw CRC | 4201 | 1 | 1/1/2018 | 15 | 731,766 | 24 | 537,618 | 1 | 10,560 |
| Kinde, Vlg of | 3209 | 1 | 2/1/2018 | 1 | 41,941 | 1 | 16,930 | 0 | 0 |
| Kingsford, City of | 2202 | 5 | 7/1/2018 | 16 | 750,273 | 23 | 498,038 | 2 | 14,444 |
| L.M.A.S. Dist Hith Dept | 4803 | 2 | 10/1/2018 | 34 | 1,354,265 | 111 | 582,432 | 106 | 393,034 |
| Lac Vieux Desert Band | 8402 | 1 | 1/1/2018 | 7 | 406,805 | 2 | 19,797 | 3 | 15,135 |
| Laingsburg, City of | 7608 | 1 | 7/1/2018 | 4 | 154,609 | 2 | 24,465 | 1 | 8,022 |
| Lake Co | 4301 | 5 | 1/1/2018 | 112 | 4,929,575 | 68 | 723,823 | 32 | 175,197 |
| Lake CRC | 4302 | 2 | 1/1/2018 | 27 | 1,255,078 | 42 | 778,420 | 3 | 31,662 |
| Lake Linden, Vlg of | 3105 | 2 | 3/1/2018 | 6 | 266,655 | 8 | 100,147 | 4 | 13,999 |
| Lake Odessa, Vlg of | 3402 | 1 | 3/1/2018 | 2 | 157,782 | 1 | 1,209 | 0 | 0 |
| Lake Orion, Vlg of | 6318 | 4 | 7/1/2018 | 5 | 277,342 | 13 | 286,658 | 4 | 19,643 |
| Lakeland Lib Coop | 4106 | 2 | 10/1/2018 | 7 | 324,929 | 4 | 52,113 | 2 | 12,124 |
| Lakeshore Coordinating Council | 7007 | 1 | 10/1/2018 | 0 | 0 | 10 | 96,301 | 10 | 42,014 |
| Lakeview Cemetery | 2407 | 1 | 1/1/2018 | 2 | 73,452 | 0 | 0 | 0 | 0 |
| L'Anse, Vlg of | 0705 | 1 | 7/1/2018 | 19 | 937,901 | 19 | 431,388 | 1 | 1,586 |
| Lansing Chtr Twp | 3320 | 4 | 1/1/2018 | 45 | 2,501,656 | 11 | 362,747 | 5 | 15,543 |
| Lansing HC | 3311 | 3 | 7/1/2018 | 27 | 1,333,333 | 35 | 661,153 | 14 | 149,980 |
| Lapeer Co | 4403 | 10 | 1/1/2018 | 694 | 27,580,728 | 362 | 5,412,989 | 140 | 1,274,275 |
| Lapeer CRC | 4402 | 9 | 1/1/2018 | 51 | 2,505,754 | 60 | 1,145,751 | 5 | 38,118 |
| Lapeer Dist Lib | 4410 | 1 | 1/1/2018 | 21 | 700,982 | 20 | 329,016 | 4 | 44,350 |
| Lapeer, City of | 4401 | 6 | 7/1/2018 | 69 | 4,238,874 | 63 | 1,288,126 | 20 | 121,755 |
| Lathrup VIg, City of | 6311 | 5 | 7/1/2018 | 6 | 647,096 | 20 | 612,152 | 1 | 5,790 |
| Laurium, Vlg of | 3104 | 2 | 3/1/2018 | 12 | 435,843 | 10 | 91,606 | 2 | 6,348 |
| Lawrence, Vlg of | 8004 | 2 | 3/1/2018 | 0 | 0 | 6 | 13,086 | 3 | 1,663 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix A

| Municipality Name | Number | Number of Divisions | Fiscal Year Beginning |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{array}{c}\text { Number } \\ \text { of } \\ \text { Actives }\end{array}$ | Active Salary | Number <br> of <br> Retirees | Annual Benefits in Force | Number <br> Deferred Vesteds | Annual <br> Deferred <br> Benefits |
| Leelanau Co | 4501 | 5 | 1/1/2018 | 112 | 5,317,268 | 84 | 1,388,321 | 20 | 212,081 |
| Leelanau CRC | 4503 | 1 | 1/1/2018 | 23 | 1,015,420 | 23 | 345,117 | 11 | 122,259 |
| Leoni Twp | 3804 | 2 | 7/1/2018 | 13 | 526,628 | 25 | 402,147 | 23 | 286,646 |
| Leslie Twp | 3319 | 1 | 7/1/2018 | 4 | 107,918 | 1 | 5,537 | 0 | 0 |
| Leslie, City of | 3313 | 4 | 7/1/2018 | 10 | 429,779 | 6 | 121,692 | 4 | 27,029 |
| Lexington, Vlg of | 7708 | 2 | 7/1/2018 | 5 | 211,878 | 9 | 171,324 | 2 | 34,138 |
| Lima Twp | 8112 | 1 | 4/1/2018 | 6 | 98,382 | 3 | 28,609 | 1 | 1,556 |
| Lincoln Park, City of | 8244 | 3 | 7/1/2018 | 45 | 1,954,573 | 152 | 3,542,160 | 11 | 240,749 |
| Litchfield, City of | 3006 | 1 | 7/1/2018 | 8 | 373,582 | 6 | 110,270 | 1 | 12,331 |
| Livingston Co | 4703 | 13 | 1/1/2018 | 488 | 26,787,770 | 368 | 6,831,507 | 123 | 1,162,783 |
| Livingston Co CMH Auth | 4712 | 1 | 10/1/2018 | 99 | 5,188,751 | 58 | 1,006,364 | 41 | 421,438 |
| Livingston CRC | 4701 | 4 | 1/1/2018 | 67 | 3,827,861 | 55 | 1,209,229 | 5 | 74,270 |
| Looking Glass Rgnl Fire CLD | 2311 | 1 | 1/1/2018 | 0 | 0 | 1 | 8,061 | 2 | 8,055 |
| Loutit Dist Lib | 7013 | 1 | 7/1/2018 | 16 | 615,938 | 5 | 59,823 | 1 | 6,700 |
| Lowell, City of | 4104 | 4 | 7/1/2018 | 33 | 2,050,553 | 35 | 897,269 | 7 | 139,543 |
| Luce Co | 4804 | 6 | 1/1/2018 | 25 | 828,033 | 37 | 411,581 | 14 | 70,782 |
| Luce Co Amb Svs | 4806 | 1 | 1/1/2018 | 5 | 183,071 | 0 | 0 | 1 | 7,260 |
| Luce CRC | 4801 | 5 | 1/1/2018 | 15 | 667,852 | 33 | 760,748 | 2 | 33,368 |
| Ludington, City of | 5302 | 2 | 1/1/2018 | 50 | 2,153,157 | 65 | 1,283,674 | 5 | 53,176 |
| Luna Pier, City of | 5802 | 3 | 7/1/2018 | 6 | 284,867 | 13 | 339,712 | 2 | 16,914 |
| Lyons, Vlg of | 3411 | 1 | 3/1/2018 | 0 | 0 | 2 | 18,824 | 0 | 0 |
| Mackinac Co | 4901 | 4 | 1/1/2018 | 24 | 1,051,743 | 56 | 903,216 | 20 | 251,760 |
| Mackinac Co HC | 4905 | 1 | 7/1/2018 | 0 | 0 | 2 | 29,985 | 0 | 0 |
| Mackinac CRC | 4903 | 2 | 1/1/2018 | 9 | 403,355 | 34 | 630,857 | 0 | 0 |
| Mackinac Straits Hosp\&Hlth Ctr | 4902 | 2 | 7/1/2018 | 235 | 12,669,890 | 94 | 1,148,920 | 46 | 385,710 |
| Mackinaw City, Vlg of | 1606 | 1 | 3/1/2018 | 5 | 278,747 | 1 | 26,111 | 1 | 15,066 |
| Madison Heights, City of | 6308 | 6 | 7/1/2018 | 49 | 2,969,921 | 127 | 2,679,725 | 23 | 246,890 |
| Madison, Chtr Twp of | 4605 | 1 | 1/1/2018 | 11 | 612,601 | 6 | 50,159 | 2 | 37,989 |
| Manistee Co | 5101 | 16 | 10/1/2018 | 255 | 9,991,850 | 200 | 2,836,555 | 73 | 566,677 |
| Manistee CRC | 5103 | 5 | 10/1/2018 | 28 | 1,167,875 | 42 | 838,467 | 4 | 82,648 |
| Manistee HC | 5107 | 1 | 1/1/2018 | 8 | 293,102 | 4 | 29,267 | 2 | 13,387 |
| Manistee, City of | 5105 | 8 | 7/1/2018 | 53 | 2,836,757 | 51 | 1,097,764 | 4 | 63,152 |
| Manistique, City of | 7504 | 4 | 7/1/2018 | 24 | 1,330,108 | 32 | 819,385 | 3 | 32,006 |
| Manlius Twp | 0311 | 1 | 4/1/2018 | 5 | 64,826 | 2 | 31,690 | 1 | 2,075 |
| Manton, City of | 8304 | 2 | 12/1/2018 | 6 | 230,145 | 10 | 158,860 | 2 | 18,380 |
| Marenisco Twp | 2704 | 2 | 4/1/2018 | 4 | 164,226 | 1 | 19,601 | 0 | 0 |
| Marine City, City of CLD | 7704 | 2 | 7/1/2018 | 0 | 0 | 2 | 2,705 | 0 | 0 |
| Marion, Vlg of | 6704 | 2 | 3/1/2018 | 5 | 171,601 | 6 | 27,573 | 1 | 607 |
| Marlette, City of | 7405 | 1 | 7/1/2018 | 11 | 469,383 | 3 | 95,171 | 2 | 15,658 |
| Marquette Brd of Light \& Power | 5209 | 6 | 10/1/2018 | 37 | 3,140,861 | 108 | 3,081,518 | 1 | 19,591 |
| Marquette Chtr Twp | 5215 | 2 | 1/1/2018 | 19 | 1,083,225 | 2 | 32,629 | 3 | 27,281 |
| Marquette Co | 5202 | 15 | 1/1/2018 | 288 | 10,462,359 | 333 | 6,773,418 | 49 | 448,653 |
| Marquette Co Solid Waste Mgmt | 5213 | 4 | 7/1/2018 | 18 | 1,072,006 | 6 | 96,159 | 2 | 61,876 |
| Marquette Co Trans Auth | 5206 | 2 | 10/1/2018 | 24 | 941,203 | 22 | 227,756 | 1 | 6,903 |
| Marquette CRC | 5211 | 7 | 1/1/2018 | 53 | 2,728,682 | 68 | 1,656,744 | 20 | 185,859 |
| Marquette, City of | 5201 | 12 | 10/1/2018 | 119 | 6,086,963 | 138 | 3,440,452 | 18 | 261,136 |
| Marshall Area Firefighters Amb | 1313 | 1 | 7/1/2018 | 14 | 746,241 | 0 | 0 | 1 | 5,584 |
| Marshall Dist Lib | 1309 | 1 | 7/1/2018 | 0 | 0 | 1 | 30,313 | 0 | 0 |
| Marshall, City of | 1306 | 5 | 7/1/2018 | 57 | 3,544,724 | 86 | 2,206,903 | 15 | 169,394 |
| Mason Co | 5301 | 6 | 1/1/2018 | 120 | 5,613,079 | 192 | 3,026,557 | 43 | 419,620 |
| Mason Co Dist Lib | 5303 | 1 | 1/1/2018 | 11 | 296,404 | 11 | 139,931 | 1 | 7,966 |
| Mason CRC | 5305 | 2 | 1/1/2018 | 34 | 1,536,826 | 22 | 378,065 | 4 | 39,409 |
| Mason, City of | 3304 | 7 | 7/1/2018 | 42 | 2,123,390 | 35 | 1,070,439 | 9 | 91,850 |
| Mason-Oceana Cty Enh 911 Cen | 6403 | 2 | 1/1/2018 | 13 | 556,880 | 4 | 60,339 | 3 | 64,713 |
| MBS Intl Arpt | 0902 | 5 | 1/1/2018 | 25 | 1,174,637 | 23 | 696,770 | 4 | 61,313 |
| Meceola Central Dispatch | 5405 | 1 | 1/1/2018 | 19 | 786,358 | 9 | 108,414 | 2 | 4,110 |
| Mecosta Co | 5403 | 8 | 1/1/2018 | 39 | 1,966,035 | 121 | 2,019,212 | 38 | 352,639 |
| Mecosta Co General Hosp CLD | 5404 | 2 | 1/1/2018 | 0 | 0 | 111 | 632,293 | 68 | 230,031 |
| Mecosta CRC | 5401 | 3 | 1/1/2018 | 43 | 1,680,540 | 55 | 693,575 | 6 | 56,517 |
| Melvindale HC | 8220 | 2 | 1/1/2018 | 8 | 313,661 | 4 | 80,401 | 5 | 56,980 |
| Melvindale, City of | 8215 | 6 | 1/1/2018 | 18 | 1,295,717 | 93 | 3,097,163 | 5 | 157,535 |
| Menominee Co | 5502 | 10 | 10/1/2018 | 72 | 3,580,388 | 98 | 1,165,315 | 12 | 153,590 |
| Menominee CRC | 5503 | 3 | 1/1/2018 | 7 | 376,534 | 12 | 266,772 | 1 | 30,001 |
| Menominee, City of | 5501 | 3 | 9/1/2018 | 34 | 1,486,204 | 46 | 487,580 | 14 | 157,982 |
| Meridian Chtr Twp | 3315 | 6 | 1/1/2018 | 107 | 6,197,969 | 84 | 3,092,974 | 28 | 315,794 |
| MERS | 2308 | 1 | 1/1/2018 | 126 | 10,080,837 | 34 | 634,809 | 37 | 697,649 |
| Metamora Twp | 4409 | 1 | 4/1/2018 | 5 | 226,280 | 2 | 28,827 | 3 | 47,612 |
| Mich Muni Risk Mgmt Auth | 8237 | 1 | 7/1/2018 | 1 | 246,061 | 0 | 0 | 0 | 0 |
| Mich S Central Power Agcy | 3002 | 3 | 7/1/2018 | 8 | 714,270 | 30 | 732,844 | 23 | 601,689 |
| Middleville, Vlg of | 0803 | 6 | 1/1/2018 | 8 | 398,578 | 9 | 91,432 | 3 | 12,528 |
| Midland Co Central Disp Auth | 5604 | 2 | 1/1/2018 | 18 | 990,672 | 6 | 101,979 | 1 | 24,522 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix A

| Municipality Name | Number | Number of Divisions | Fiscal Year Beginning |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Number of <br> Actives | Active <br> Salary | $\begin{array}{c}\text { Number } \\ \text { of } \\ \text { Retirees }\end{array}$ | Annual Benefits in Force | Number Deferred Vesteds | Annual Deferred Benefits |
| Midland CRC | 5602 | 4 | 1/1/2018 | 35 | 1,876,853 | 63 | 1,435,018 | 1 | 12,350 |
| Midland, City of | 5601 | 7 | 7/1/2018 | 101 | 6,861,725 | 326 | 9,987,353 | 22 | 376,417 |
| Mid-Mich Dist Hlth Dept | 5901 | 4 | 10/1/2018 | 76 | 3,273,595 | 47 | 467,992 | 38 | 264,318 |
| Mid-Mich Lib League | 8306 | 1 | 10/1/2018 | 2 | 98,324 | 2 | 28,411 | 3 | 32,890 |
| Mid-Peninsula Lib Coop CLD | 3609 | 1 | 10/1/2018 | 0 | 0 | 3 | 21,901 | 0 | 0 |
| Milan Lib | 5806 | 1 | 7/1/2018 | 2 | 80,884 | 2 | 31,059 | 0 | 0 |
| Milan, City of | 5801 | 8 | 7/1/2018 | 9 | 642,227 | 41 | 920,385 | 9 | 121,135 |
| Milford, Vlg of | 6313 | 7 | 7/1/2018 | 22 | 1,658,117 | 25 | 706,286 | 9 | 106,886 |
| Millington, VIg of | 7904 | 2 | 3/1/2018 | 6 | 233,002 | 7 | 114,917 | 0 | 0 |
| Missaukee Co | 5702 | 3 | 10/1/2018 | 30 | 1,603,743 | 16 | 314,752 | 9 | 91,729 |
| MOA Solid Waste Mgmt Auth | 6002 | 1 | 1/1/2018 | 4 | 150,751 | 2 | 44,309 | 1 | 12,755 |
| Monroe HC | 5808 | 1 | 10/1/2018 | 10 | 464,711 | 4 | 113,647 | 2 | 16,160 |
| Montague, City of | 6112 | 4 | 7/1/2018 | 15 | 1,029,215 | 14 | 298,656 | 2 | 22,577 |
| Montcalm CRC | 5905 | 4 | 10/1/2018 | 49 | 2,279,121 | 49 | 1,124,168 | 4 | 40,961 |
| Montmorency Co | 6001 | 5 | 1/1/2018 | 50 | 1,861,935 | 71 | 747,604 | 14 | 82,325 |
| Montrose, City of | 2509 | 2 | 7/1/2018 | 4 | 159,165 | 7 | 73,332 | 8 | 36,592 |
| Mt. Morris Chtr Twp | 2503 | 7 | 4/1/2018 | 47 | 2,482,357 | 56 | 1,872,040 | 8 | 51,934 |
| Mt. Pleasant, City of | 3701 | 4 | 1/1/2018 | 90 | 4,237,697 | 86 | 1,691,742 | 18 | 181,318 |
| Muir, Vlg of | 3405 | 1 | 7/1/2018 | 2 | 68,540 | 2 | 21,715 | 0 | 0 |
| Mundy, Chtr Twp of | 2517 | 2 | 1/1/2018 | 28 | 1,515,120 | 14 | 394,416 | 6 | 74,843 |
| Munising, City of | 0202 | 3 | 7/1/2018 | 22 | 961,548 | 26 | 466,233 | 7 | 59,805 |
| Muskegon Area Dist Lib | 6117 | 2 | 1/1/2018 | 16 | 808,164 | 5 | 62,419 | 0 | 0 |
| Muskegon Chtr Twp | 6108 | 4 | 1/1/2018 | 40 | 2,368,116 | 40 | 999,236 | 3 | 18,256 |
| Muskegon Co | 6103 | 20 | 10/1/2018 | 531 | 27,677,080 | 1,041 | 17,968,469 | 199 | 2,468,705 |
| Muskegon CRC | 6101 | 6 | 1/1/2018 | 70 | 3,398,543 | 94 | 1,750,702 | 18 | 139,758 |
| Muskegon HC | 6113 | 1 | 10/1/2018 | 6 | 250,986 | 1 | 36,449 | 0 | 0 |
| Muskegon Heights HC | 6115 | 1 | 4/1/2018 | 8 | 371,123 | 4 | 46,953 | 1 | 897 |
| Muskegon Heights, City of | 6102 | 7 | 7/1/2018 | 55 | 2,711,422 | 99 | 2,457,196 | 17 | 180,128 |
| Muskegon, City of | 6116 | 9 | 7/1/2018 | 134 | 8,460,078 | 306 | 6,600,917 | 30 | 516,740 |
| N Houghton Co Wtr\&Swg Auth | 3106 | 2 | 1/1/2018 | 3 | 144,800 | 1 | 24,933 | 1 | 4,337 |
| N Muskegon, City of | 6104 | 3 | 12/1/2018 | 10 | 581,807 | 18 | 366,120 | 4 | 28,780 |
| Nashville, Vlg of | 0807 | 1 | 3/1/2018 | 6 | 220,540 | 0 | 0 | 0 | 0 |
| Negaunee Twp | 5217 | 1 | 4/1/2018 | 6 | 233,041 | 2 | 28,861 | 1 | 732 |
| Negaunee, City of | 5203 | 2 | 1/1/2018 | 24 | 1,161,865 | 42 | 846,763 | 6 | 83,200 |
| Network180 | 4109 | 1 | 10/1/2018 | 74 | 5,135,112 | 38 | 1,163,718 | 38 | 537,611 |
| New Baltimore, City of | 5016 | 8 | 7/1/2018 | 57 | 3,042,786 | 40 | 721,378 | 6 | 77,069 |
| New Buffalo, City of | 1113 | 1 | 7/1/2018 | 21 | 1,081,327 | 6 | 96,175 | 8 | 35,677 |
| Newaygo CMH | 6207 | 1 | 10/1/2018 | 1 | 49,130 | 4 | 257,607 | 2 | 17,402 |
| Newaygo Co | 6201 | 8 | 10/1/2018 | 23 | 1,089,831 | 114 | 2,020,240 | 18 | 227,226 |
| Newaygo CRC | 6212 | 6 | 10/1/2018 | 43 | 2,021,952 | 43 | 560,930 | 4 | 27,823 |
| Newaygo MCF | 6204 | 4 | 1/1/2018 | 81 | 3,455,208 | 83 | 797,698 | 26 | 173,258 |
| Newaygo Soil \& Wtr Cnsrun Dist | 6205 | 1 | 9/1/2018 | 3 | 100,856 | 2 | 11,643 | 0 | 0 |
| Newberry, VIg of | 4802 | 7 | 1/1/2018 | 17 | 647,812 | 27 | 313,023 | 5 | 27,470 |
| Niles Dist Lib | 1105 | 1 | 10/1/2018 | 10 | 344,032 | 7 | 56,805 | 1 | 8,631 |
| Northern Lakes CMH Auth | 2808 | 3 | 1/1/2018 | 19 | 991,949 | 111 | 2,000,447 | 13 | 191,750 |
| Northfield Twp | 8117 | 1 | 7/1/2018 | 10 | 565,824 | 0 | 0 | 3 | 35,653 |
| Northpointe Bhvrl Hlth Sys | 2207 | 4 | 10/1/2018 | 58 | 2,891,510 | 45 | 634,855 | 36 | 281,442 |
| Northville Chtr Twp | 8230 | 5 | 1/1/2018 | 92 | 7,534,853 | 35 | 1,667,257 | 5 | 69,314 |
| Northville Dist Lib | 8229 | 1 | 12/1/2018 | 14 | 753,732 | 11 | 155,973 | 2 | 20,082 |
| Northville, City of | 8208 | 8 | 7/1/2018 | 9 | 706,615 | 63 | 1,528,966 | 10 | 131,788 |
| Norton Shores, City of | 6106 | 11 | 7/1/2018 | 94 | 6,267,719 | 107 | 2,732,421 | 12 | 189,303 |
| Norway, City of | 2204 | 4 | 7/1/2018 | 21 | 1,293,766 | 43 | 1,204,384 | 1 | 28,985 |
| Nottawaseppi Huron Band | 8403 | 1 | 1/1/2018 | 14 | 744,473 | 1 | 3,743 | 1 | 1,993 |
| Novi, City of | 6320 | 10 | 7/1/2018 | 146 | 10,614,530 | 179 | 5,562,689 | 55 | 919,971 |
| NW Mich Cmnty Hith Agcy | 1502 | 1 | 1/1/2018 | 7 | 436,499 | 35 | 431,981 | 6 | 32,899 |
| NW Rgnl Arpt Comm | 2805 | 2 | 1/1/2018 | 24 | 1,211,465 | 14 | 364,044 | 3 | 27,146 |
| Oceana Co | 6402 | 6 | 1/1/2018 | 165 | 7,784,760 | 163 | 2,054,457 | 28 | 302,112 |
| Oceola Twp | 4717 | 1 | 7/1/2018 | 12 | 453,034 | 3 | 26,252 | 1 | 3,709 |
| Ogemaw Co | 6502 | 4 | 1/1/2018 | 53 | 2,179,119 | 101 | 1,575,620 | 15 | 100,258 |
| Ogemaw Co EMS Auth | 6508 | 2 | 10/1/2018 | 21 | 980,183 | 8 | 113,168 | 1 | 37,745 |
| Ogemaw CRC | 6503 | 3 | 1/1/2018 | 30 | 1,287,385 | 30 | 551,287 | 2 | 54,508 |
| Olive Twp | 7009 | 1 | 4/1/2018 | 2 | 48,772 | 4 | 26,072 | 0 | 0 |
| Onaway, City of | 7105 | 2 | 4/1/2018 | 4 | 151,703 | 2 | 19,523 | 3 | 3,185 |
| Ontonagon Co | 6602 | 6 | 1/1/2018 | 45 | 1,619,688 | 45 | 523,907 | 11 | 79,405 |
| Ontonagon Co Economic Dev Cor | 6605 | 1 | 1/1/2018 | 0 | 0 | 1 | 10,371 | 0 | 0 |
| Ontonagon CRC | 6604 | 1 | 1/1/2018 | 39 | 2,047,690 | 58 | 1,525,346 | 0 | 0 |
| Ontonagon, Vlg of | 6603 | 2 | 4/1/2018 | 9 | 371,370 | 119 | 1,233,771 | 40 | 292,681 |
| Orchard Lake, City of | 6312 | 4 | 7/1/2018 | 4 | 315,333 | 12 | 403,371 | 1 | 8,110 |
| Oronoko Chtr Twp | 1114 | 2 | 1/1/2018 | 10 | 580,201 | 6 | 130,477 | 4 | 21,337 |
| Osceola Co | 6701 | 6 | 1/1/2018 | 112 | 4,649,144 | 71 | 683,914 | 57 | 430,387 |
| Osceola CRC | 6703 | 2 | 1/1/2018 | 23 | 944,278 | 41 | 597,500 | 0 | 0 |


| Municipality Name | Number |  | Fiscal Year Beginning | Participant Information |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Number of Actives | Active <br> Salary | Number of Retirees | Annual Benefits in Force | Number Deferred Vesteds | Annual Deferred Benefits |
| Oscoda Chtr Twp | 3503 | 2 | 1/1/2018 | 9 | 495,390 | 12 | 270,686 | 7 | 40,750 |
| Oscoda Co | 6801 | 6 | 1/1/2018 | 68 | 2,383,546 | 55 | 609,662 | 14 | 73,759 |
| Oscoda Wurtsmith Arpt Auth I | 6802 | 1 | 10/1/2018 | 4 | 183,921 | 2 | 15,202 | 0 | 0 |
| Otisville, Vlg of | 2506 | 2 | 7/1/2018 | 3 | 154,779 | 4 | 64,051 | 1 | 1,545 |
| Otsego Co | 6902 | 18 | 1/1/2018 | 110 | 4,435,813 | 101 | 1,242,118 | 43 | 376,723 |
| Otsego CRC | 6901 | 3 | 1/1/2018 | 33 | 1,576,491 | 49 | 792,185 | 5 | 63,625 |
| Ottawa Co | 7003 | 16 | 10/1/2018 | 574 | 34,396,609 | 562 | 12,513,805 | 188 | 2,355,359 |
| Ottawa Co Central Disp Auth | 7008 | 2 | 1/1/2018 | 6 | 329,831 | 10 | 118,418 | 1 | 8,197 |
| Ottawa CRC | 7002 | 3 | 10/1/2018 | 95 | 5,699,998 | 139 | 3,872,964 | 14 | 168,666 |
| Otter Lake, Vlg of | 4408 | 1 | 3/1/2018 | 1 | 39,715 | 0 | 0 | 0 | 0 |
| Owosso, City of | 7607 | 2 | 7/1/2018 | 6 | 409,210 | 14 | 396,219 | 1 | 15,138 |
| Oxford Fire Department | 6327 | 2 | 1/1/2018 | 15 | 1,128,865 | 14 | 288,400 | 3 | 39,562 |
| Oxford, Vlg of | 6326 | 2 | 7/1/2018 | 12 | 584,748 | 5 | 150,391 | 4 | 34,448 |
| Parchment, City of | 3901 | 1 | 1/1/2018 | 5 | 234,654 | 16 | 260,906 | 1 | 6,407 |
| Pathways(Spr.Bhvl.Mntl.Hlth) | 5214 | 7 | 10/1/2018 | 28 | 1,358,187 | 251 | 4,345,269 | 68 | 544,533 |
| Paw Paw Lk Reg Jnt Swg Disp Bd | 1103 | 1 | 4/1/2018 | 4 | 245,194 | 1 | 45,168 | 0 | 0 |
| Paw Paw, Vlg of | 8002 | 4 | 3/1/2018 | 31 | 1,656,800 | 22 | 515,033 | 5 | 36,842 |
| Pellston, Vlg of | 2404 | 1 | 1/1/2018 | 3 | 89,287 | 0 | 0 | 0 | 0 |
| Pennfield Chtr Twp | 1312 | 1 | 4/1/2018 | 16 | 720,570 | 7 | 111,699 | 1 | 12,089 |
| Pentwater, Vlg of | 6401 | 1 | 4/1/2018 | 10 | 485,569 | 13 | 124,705 | 3 | 26,689 |
| Perrinton, Vlg of | 2909 | 1 | 3/1/2018 | 1 | 44,282 | 0 | 0 | 1 | 5,874 |
| Petersburg, City of | 5807 | 1 | 7/1/2018 | 7 | 219,842 | 0 | 0 | 2 | 23,134 |
| Petoskey, City of | 2402 | 5 | 1/1/2018 | 69 | 4,247,006 | 76 | 1,476,087 | 11 | 156,866 |
| Pewamo, Vlg of | 3407 | 1 | 4/1/2018 | 2 | 96,351 | 0 | 0 | 0 | 0 |
| Pigeon, Vlg of | 3203 | 2 | 3/1/2018 | 4 | 217,266 | 5 | 84,377 | 3 | 24,404 |
| Pinckney, Vlg of | 4706 | 2 | 3/1/2018 | 13 | 541,924 | 4 | 135,304 | 6 | 12,717 |
| Pinconning, City of | 0904 | 4 | 7/1/2018 | 6 | 231,284 | 17 | 182,035 | 1 | 16,780 |
| Pittsfield Chtr Twp | 8110 | 15 | 1/1/2018 | 134 | 8,424,988 | 47 | 1,014,005 | 26 | 325,126 |
| Pleasant Ridge, City of | 6301 | 6 | 7/1/2018 | 10 | 618,585 | 14 | 362,400 | 9 | 43,187 |
| Plymouth Dist Lib | 8221 | 1 | 1/1/2018 | 14 | 913,279 | 10 | 267,663 | 1 | 3,365 |
| Plymouth, Chtr Twp of | 8238 | 5 | 1/1/2018 | 48 | 3,970,486 | 27 | 1,373,965 | 6 | 159,449 |
| Plymouth, City of | 8202 | 6 | 7/1/2018 | 0 | 0 | 57 | 1,537,814 | 6 | 23,815 |
| Pokagon Band of Potawatomi | 8401 | 1 | 1/1/2018 | 235 | 12,760,886 | 25 | 298,153 | 25 | 208,674 |
| Port Austin Area Swr\&Wtr Auth | 3210 | 1 | 3/1/2018 | 0 | 0 | 1 | 5,599 | 1 | 4,934 |
| Port Austin, Vlg of | 3208 | 1 | 3/1/2018 | 5 | 160,819 | 5 | 50,712 | 2 | 1,646 |
| Port Huron Chtr Twp | 7711 | 1 | 1/1/2018 | 18 | 950,260 | 11 | 194,081 | 2 | 33,981 |
| Port Huron HC | 7712 | 4 | 7/1/2018 | 23 | 973,734 | 23 | 567,419 | 2 | 18,352 |
| Port Huron, City of | 7702 | 11 | 7/1/2018 | 229 | 13,768,369 | 372 | 10,970,740 | 41 | 423,667 |
| Port Sanilac, VIg of | 7403 | 2 | 7/1/2018 | 4 | 141,519 | 4 | 72,970 | 1 | 7,368 |
| Port Sheldon Twp | 7018 | 1 | 4/1/2018 | 7 | 186,373 | 1 | 13,170 | 0 | 0 |
| Portland, City of | 3401 | 6 | 7/1/2018 | 30 | 1,964,499 | 38 | 747,018 | 11 | 149,997 |
| Potterville, City of | 2313 | 1 | 7/1/2018 | 9 | 415,015 | 2 | 61,851 | 3 | 5,149 |
| Presque Isle Co | 7104 | 6 | 7/1/2018 | 70 | 2,294,761 | 60 | 760,311 | 14 | 101,955 |
| Presque Isle CRC | 7101 | 3 | 1/1/2018 | 27 | 1,095,758 | 46 | 757,619 | 0 | 0 |
| PRIDE Youth Programs CLD | 6210 | 1 | 10/1/2018 | 0 | 0 | 2 | 45,930 | 0 | 0 |
| Ravenna, Vlg of | 6111 | 1 | 1/1/2018 | 2 | 114,477 | 1 | 21,801 | 1 | 5,749 |
| Reading, City of | 3003 | 1 | 7/1/2018 | 5 | 189,455 | 4 | 16,693 | 4 | 5,885 |
| Redford Twp Dist Lib | 8228 | 1 | 4/1/2018 | 9 | 472,358 | 6 | 119,139 | 3 | 15,539 |
| Redford, Chtr Twp of | 8209 | 8 | 4/1/2018 | 96 | 4,204,172 | 175 | 3,793,137 | 32 | 344,516 |
| Reed City, City of | 6702 | 3 | 7/1/2018 | 19 | 868,742 | 26 | 357,500 | 8 | 40,564 |
| Richfield Twp (Genesee Co) | 2514 | 2 | 7/1/2018 | 14 | 698,278 | 7 | 238,994 | 6 | 69,398 |
| Richfield Twp (Roscommon Co) | 7202 | 2 | 4/1/2018 | 11 | 368,349 | 10 | 129,699 | 7 | 85,671 |
| Richland Twp | 7310 | 3 | 4/1/2018 | 12 | 384,321 | 9 | 304,740 | 3 | 3,865 |
| Richmond, City of | 5012 | 1 | 7/1/2018 | 10 | 506,169 | 2 | 58,819 | 0 | 0 |
| Rochester, City of | 6307 | 5 | 7/1/2018 | 44 | 3,079,953 | 52 | 1,334,358 | 3 | 76,881 |
| Rockford, City of | 4103 | 5 | 7/1/2018 | 27 | 1,584,261 | 27 | 458,936 | 13 | 170,579 |
| Rockwood, City of | 5810 | 3 | 7/1/2018 | 13 | 687,313 | 6 | 102,404 | 4 | 19,041 |
| Rogers City, City of | 7102 | 3 | 7/1/2018 | 21 | 1,016,544 | 28 | 774,225 | 7 | 57,192 |
| Romeo Dist Lib | 5006 | 2 | 7/1/2018 | 3 | 172,466 | 20 | 237,825 | 7 | 82,693 |
| Romeo, Vlg of | 5005 | 5 | 7/1/2018 | 23 | 1,205,787 | 19 | 387,571 | 4 | 14,605 |
| Romulus, City of | 8225 | 7 | 7/1/2018 | 57 | 3,853,356 | 62 | 3,328,922 | 7 | 224,756 |
| Roosevelt Park, City of | 6107 | 2 | 12/1/2018 | 6 | 407,997 | 20 | 349,090 | 8 | 76,748 |
| Roscommon Co | 7201 | 6 | 1/1/2018 | 81 | 3,803,411 | 104 | 1,534,467 | 26 | 261,054 |
| Roscommon Co Trans Auth | 7205 | 1 | 10/1/2018 | 24 | 751,357 | 13 | 167,508 | 0 | 0 |
| Rose City, City of | 6504 | 1 | 7/1/2018 | 4 | 138,159 | 4 | 45,393 | 2 | 6,228 |
| Rose Twp | 6506 | 1 | 4/1/2018 | 5 | 44,025 | 3 | 7,581 | 0 | 0 |
| Royal Oak, Chtr Twp of | 6306 | 5 | 1/1/2018 | 2 | 46,629 | 15 | 210,379 | 1 | 469 |
| Saginaw Chtr Twp | 7314 | 2 | 4/1/2018 | 36 | 2,320,068 | 29 | 1,226,913 | 7 | 77,883 |
| Saginaw Co | 7303 | 21 | 10/1/2018 | 47 | 2,579,083 | 569 | 12,192,785 | 49 | 376,229 |
| Saginaw Co 911 Com Ctr | 7316 | 4 | 10/1/2018 | 4 | 289,036 | 31 | 937,414 | 2 | 36,334 |
| Saginaw Co CMH | 7318 | 5 | 10/1/2018 | 11 | 562,045 | 93 | 1,386,019 | 21 | 150,665 |
| Saginaw CRC | 7304 | 7 | 1/1/2018 | 65 | 3,527,334 | 104 | 2,113,271 | 7 | 99,806 |
| Saginaw HC | 7321 | 3 | 7/1/2018 | 7 | 288,986 | 10 | 256,816 | 4 | 87,036 |
| Saginaw Trans Sys Auth | 7319 | 1 | 10/1/2018 | 16 | 633,017 | 12 | 132,344 | 9 | 63,794 |
| Saginaw, City of | 7301 | 13 | 7/1/2018 | 198 | 11,109,314 | 857 | 28,770,204 | 19 | 384,903 |
| Saginaw, Pub Lib of | 7317 | 1 | 7/1/2018 | 10 | 584,291 | 5 | 50,488 | 8 | 69,114 |


| Municipality Name | Number | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { Divisions } \end{gathered}$ | Fiscal Year Beginning | Participant Information |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Number of Actives | Active Salary | $\begin{array}{c}\text { Number } \\ \text { of } \\ \text { Retirees }\end{array}$ | Annual Benefits in Force | Number Deferred Vesteds | Annual Deferred Benefits |
| Saginaw-Midland Muni Wtr Corp | 7305 | 2 | 7/1/2018 | 7 | 504,338 | 14 | 304,711 | 1 | 7,353 |
| Saline, City of | 8105 | 5 | 7/1/2018 | 40 | 2,797,436 | 72 | 1,672,093 | 10 | 79,733 |
| Sandusky Dist Lib | 7404 | 1 | 1/1/2018 | 1 | 49,920 | 1 | 4,656 | 0 | 0 |
| Sandusky, City of | 7402 | 3 | 3/1/2018 | 17 | 747,887 | 13 | 268,483 | 5 | 67,234 |
| Sanilac CRC | 7410 | 1 | 1/1/2018 | 48 | 2,363,970 | 15 | 366,455 | 0 | 0 |
| Saranac HC | 3413 | 1 | 4/1/2018 | 4 | 165,886 | 2 | 36,063 | 0 | 0 |
| Saugatuck Twp | 0305 | 2 | 7/1/2018 | 4 | 207,416 | 5 | 68,246 | 1 | 12,982 |
| Saugatuck Twp Fire Dist | 0313 | 1 | 7/1/2018 | 4 | 198,475 | 1 | 31,803 | 0 | 0 |
| Saugatuck, City of | 0307 | 2 | 7/1/2018 | 8 | 415,545 | 11 | 151,834 | 2 | 6,987 |
| Sault Ste. Marie HC | 4906 | 1 | 4/1/2018 | 9 | 373,794 | 4 | 116,562 | 1 | 3,195 |
| Sault Ste. Marie, City of | 1701 | 8 | 7/1/2018 | 78 | 3,725,549 | 89 | 1,966,355 | 11 | 120,755 |
| SCCMUA | 1905 | 2 | 1/1/2018 | 11 | 603,638 | 9 | 167,141 | 7 | 88,559 |
| Schoolcraft Co | 7503 | 16 | 10/1/2018 | 149 | 4,751,759 | 116 | 1,984,779 | 43 | 275,880 |
| Schoolcraft Co Trans Auth | 7506 | 2 | 10/1/2018 | 14 | 425,406 | 0 | 0 | 0 | 0 |
| Schoolcraft CRC | 7501 | 2 | 10/1/2018 | 18 | 957,342 | 41 | 1,072,371 | 4 | 71,433 |
| Schoolcraft Memorial Hosp | 7505 | 5 | 1/1/2018 | 29 | 1,497,357 | 74 | 1,245,123 | 21 | 330,424 |
| Scio Twp | 8116 | 2 | 4/1/2018 | 22 | 1,458,427 | 4 | 37,766 | 0 | 0 |
| Scottville, City of | 5308 | 1 | 7/1/2018 | 7 | 269,990 | 1 | 17,558 | 1 | 4,542 |
| SE Oakland Co Rsrc Rec Auth | 6310 | 3 | 7/1/2018 | 18 | 1,017,901 | 25 | 383,298 | 5 | 60,681 |
| SE Oakland Co Wtr Auth | 6309 | 4 | 7/1/2018 | 16 | 973,140 | 23 | 650,565 | 1 | 548 |
| Sebewaing, Vlg of | 3205 | 6 | 4/1/2018 | 18 | 1,011,141 | 23 | 609,115 | 4 | 64,682 |
| SEMCOG | 8210 | 1 | 7/1/2018 | 60 | 4,178,310 | 60 | 1,678,160 | 26 | 292,593 |
| Shepherd, VIg of | 3704 | 2 | 3/1/2018 | 6 | 280,009 | 2 | 13,069 | 0 | 0 |
| Shiawassee Co | 7602 | 24 | 1/1/2018 | 416 | 15,925,192 | 383 | 7,481,643 | 135 | 1,311,017 |
| Shiawassee Co CMH | 7609 | 3 | 10/1/2018 | 120 | 5,445,724 | 60 | 659,203 | 61 | 437,754 |
| Shiawassee Council on Aging | 7605 | 1 | 1/1/2018 | 5 | 150,960 | 9 | 78,304 | 0 | 0 |
| Shiawassee CRC | 7601 | 5 | 1/1/2018 | 35 | 1,671,608 | 53 | 1,393,858 | 8 | 247,224 |
| Shiawassee Dist Lib | 7606 | 1 | 12/1/2018 | 7 | 372,530 | 2 | 48,641 | 1 | 9,313 |
| Sims Whitney Util Auth | 0606 | 1 | 7/1/2018 | 2 | 104,733 | 2 | 9,236 | 0 | 0 |
| SMART | 8216 | 9 | 7/1/2018 | 755 | 36,992,486 | 845 | 14,889,888 | 171 | 1,734,291 |
| South Haven Area ESA | 8005 | 3 | 1/1/2018 | 14 | 976,614 | 6 | 242,827 | 0 | 0 |
| South Haven, City of | 8001 | 6 | 7/1/2018 | 83 | 4,957,515 | 81 | 1,588,507 | 15 | 172,807 |
| South Lyon, City of | 6315 | 5 | 7/1/2018 | 43 | 2,725,500 | 26 | 573,433 | 9 | 134,105 |
| Southgate, City of | 8262 | 1 | 7/1/2018 | 44 | 2,350,053 | 82 | 2,097,084 | 5 | 75,819 |
| Sparta, VIg of | 4107 | 5 | 1/1/2018 | 16 | 908,707 | 11 | 203,447 | 3 | 31,270 |
| Spring Lake Dist Lib | 7016 | 1 | 1/1/2018 | 9 | 420,050 | 1 | 12,077 | 0 | 0 |
| Spring Lake, Vlg of | 7015 | 3 | 7/1/2018 | 7 | 313,969 | 6 | 207,126 | 10 | 206,500 |
| Springfield, City of | 1303 | 3 | 7/1/2018 | 15 | 684,780 | 40 | 815,592 | 18 | 306,135 |
| St Charles, Vlg of | 7308 | 3 | 4/1/2018 | 8 | 393,435 | 11 | 255,066 | 3 | 13,735 |
| St Clair HC | 7715 | 1 | 1/1/2018 | 1 | 36,917 | 4 | 74,629 | 0 | 0 |
| St Clair Shores HC | 5007 | 1 | 1/1/2018 | 7 | 379,065 | 9 | 157,059 | 2 | 50,191 |
| St Clair, City of | 7703 | 8 | 10/1/2018 | 24 | 1,427,041 | 47 | 1,348,937 | 6 | 71,428 |
| St Ignace, City of | 4904 | 6 | 1/1/2018 | 26 | 1,135,338 | 29 | 608,611 | 6 | 41,003 |
| St Johns, City of | 1902 | 3 | 7/1/2018 | 15 | 865,538 | 55 | 1,356,280 | 5 | 45,518 |
| St Joseph Co | 7803 | 5 | 1/1/2018 | 185 | 8,588,069 | 127 | 2,197,508 | 53 | 522,554 |
| St Louis HC | 2908 | 1 | 7/1/2018 | 3 | 140,573 | 1 | 21,858 | 0 | 0 |
| St Louis, City of | 2902 | 4 | 7/1/2018 | 5 | 325,067 | 30 | 602,531 | 5 | 26,605 |
| Stambaugh Twp | 3615 | 1 | 4/1/2018 | 1 | 44,718 | 1 | 5,302 | 0 | 0 |
| Standish, City of | 0601 | 1 | 7/1/2018 | 1 | 29,932 | 13 | 233,134 | 1 | 10,081 |
| Stanton, City of CLD | 5903 | 1 | 3/1/2018 | 0 | 0 | 2 | 5,670 | 0 | 0 |
| Stephenson, City of | 5504 | 1 | 7/1/2018 | 4 | 177,186 | 1 | 9,822 | 0 | 0 |
| Sterling, VIg of | 0605 | 1 | 4/1/2018 |  | 42,133 | 1 | 4,976 | 0 | 0 |
| Stockbridge, VIg of | 3316 | 1 | 3/1/2018 | 5 | 263,047 | 3 | 33,525 | 1 | 1,757 |
| Sturgis HC | 7805 | 1 | 10/1/2018 | 3 | 104,205 | 0 | 0 | 1 | 4,161 |
| Summit Twp | 3803 | 3 | 4/1/2018 | 34 | 1,982,880 | 26 | 623,936 | 3 | 62,486 |
| Sumpter Twp | 8226 | 3 | 4/1/2018 | 26 | 1,703,358 | 11 | 289,220 | 1 | 11,633 |
| Superior Chtr Twp | 8109 | 2 | 1/1/2018 | 24 | 1,583,227 | 12 | 387,218 | 0 | 0 |
| Superior Dist Lib | 1702 | 1 | 7/1/2018 | 9 | 284,862 | 7 | 63,065 | 0 | 0 |
| Superiorland Lib Coop | 5208 | 1 | 10/1/2018 | 1 | 71,615 | 3 | 78,460 | 1 | 4,390 |
| Suttons Bay Bingham Fire Auth | 4506 | 1 | 4/1/2018 | 9 | 551,634 | 0 | 0 | 1 | 12,356 |
| SW Mich Comm Amb Svcs | 1119 | 1 | 7/1/2018 | 13 | 775,112 | 3 | 99,860 | 1 | 14,938 |
| SW Shiawassee ESA | 7611 | 1 | 1/1/2018 | 12 | 572,528 | 1 | 6,080 | 2 | 17,097 |
| Swan Creek Twp | 7309 | 1 | 4/1/2018 | 7 | 121,208 | 8 | 70,591 | 0 | 0 |
| Swartz Creek, City of | 2504 | 3 | 7/1/2018 | 8 | 511,896 | 19 | 610,793 | 1 | 9,681 |
| Sylvan Lake, City of | 6314 | 2 | 7/1/2018 | 5 | 339,184 | 10 | 151,581 | 1 | 7,728 |
| Tawas Police Auth | 3504 | 1 | 7/1/2018 | 3 | 144,421 | 4 | 73,734 | 3 | 41,686 |
| Taylor HC | 8231 | 1 | 4/1/2018 | 5 | 264,658 | 2 | 26,854 | 0 | 0 |
| The Lib Network | 8218 | 3 | 10/1/2018 | 30 | 1,186,143 | 29 | 382,454 | 9 | 82,658 |
| Three Rivers, City of | 7801 | 10 | 7/1/2018 | 64 | 3,179,822 | 50 | 971,816 | 21 | 282,031 |
| Tittabawassee, Twp of | 7322 | 1 | 4/1/2018 | 14 | 816,119 | 4 | 106,155 | 1 | 24,644 |
| Traverse Area Dist Lib | 2807 | 1 | 1/1/2018 | 37 | 1,733,192 | 31 | 431,735 | 2 | 5,538 |
| Traverse City Light \& Power | 2811 | 3 | 7/1/2018 | 36 | 2,728,607 | 57 | 1,903,775 | 4 | 49,864 |
| Traverse City, City of | 2801 | 5 | 7/1/2018 | 98 | 5,927,328 | 128 | 2,636,168 | 22 | 230,844 |
| Trenton, City of | 8203 | 2 | 7/1/2018 | 18 | 1,139,210 | 125 | 3,392,438 | 1 | 7,652 |
| Tri-County Aging Consortium | 3307 | 2 | 10/1/2018 | 102 | 3,638,975 | 50 | 365,689 | 22 | 173,915 |
| Trio Council on Aging Inc CLD | 6507 | 1 | 10/1/2018 | 0 | 0 | 3 | 22,440 | 1 | 3,287 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix A

| Municipality Name | Number | Number <br> of <br> Divisions | Fiscal Year Beginning | Participant Information |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Number of Actives | Active <br> Salary | $\begin{array}{c}\text { Number } \\ \text { of } \\ \text { Retirees }\end{array}$ | Annual Benefits in Force | Number <br> Deferred Vesteds | Annual Deferred Benefits |
| Tuscarora Twp | 1604 | 1 | 7/1/2018 | 8 | 465,158 | 4 | 84,124 | 1 | 18,941 |
| Tuscola Co | 7902 | 17 | 1/1/2018 | 138 | 6,087,878 | 132 | 2,006,012 | 25 | 257,698 |
| Tuscola Co CMH | 7907 | 1 | 10/1/2018 | 121 | 5,227,721 | 58 | 656,334 | 17 | 96,582 |
| Tuscola Co Hlth Dpt | 7901 | 2 | 1/1/2018 | 27 | 1,199,952 | 33 | 594,952 | 0 | 0 |
| Tuscola Co MCF | 7906 | 1 | 1/1/2018 | 331 | 11,057,929 | 90 | 728,597 | 30 | 143,257 |
| Tuscola CRC | 7908 | 3 | 1/1/2018 | 24 | 1,051,454 | 22 | 397,931 | 3 | 19,817 |
| Twin City Pub Safety Auth CLD | 3610 | 1 | 7/1/2018 | 0 | 0 | 2 | 6,414 | 1 | 2,929 |
| Ubly, Vlg of | 3212 | 1 | 3/1/2018 | 3 | 128,813 | 1 | 32,545 | 2 | 25,154 |
| Utica, City of | 5008 | 4 | 7/1/2018 | 17 | 999,759 | 12 | 283,307 | 0 | 0 |
| Van Buren Co | 8006 | 10 | 10/1/2018 | 247 | 11,422,725 | 89 | 1,616,410 | 18 | 283,522 |
| Van Buren Dist Lib | 8007 | 1 | 1/1/2018 | 15 | 615,447 | 5 | 90,386 | 2 | 10,038 |
| Van Buren Twp | 8236 | 2 | 1/1/2018 | 48 | 3,566,357 | 10 | 513,482 | 7 | 198,654 |
| Vassar, City of | 7903 | 3 | 7/1/2018 | 6 | 336,374 | 30 | 530,536 | 7 | 63,215 |
| Vevay Twp | 3318 | 1 | 4/1/2018 | 4 | 136,514 | 5 | 54,797 | 1 | 1,283 |
| Vicksburg Dist Lib | 3904 | 1 | 3/1/2018 | 1 | 52,242 | 2 | 9,444 | 1 | 716 |
| Vicksburg, VIg of | 3902 | 2 | 7/1/2018 | 13 | 631,719 | 11 | 168,046 | 9 | 73,274 |
| Vienna, Chtr Twp of | 2522 | 1 | 1/1/2018 | 6 | 241,510 | 7 | 124,823 | 0 | 0 |
| W Iron Co Swr Auth | 3612 | 2 | 7/1/2018 | 3 | 148,350 | 4 | 86,709 | 0 | 0 |
| W Mich CMH Sys | 5304 | 1 | 10/1/2018 | 3 | 208,377 | 19 | 296,705 | 5 | 80,649 |
| W Mich Shoreline Rgnl Dev Comm | 6110 | 1 | 10/1/2018 | 10 | 550,547 | 7 | 241,935 | 4 | 13,560 |
| W UP Dist Hlth Dept | 3101 | 2 | 1/1/2018 | 23 | 969,215 | 95 | 1,002,074 | 43 | 313,005 |
| Wakefield, City of | 2701 | 1 | 7/1/2018 | 13 | 610,688 | 20 | 381,825 | 2 | 16,865 |
| Walker, City of | 4112 | 4 | 7/1/2018 | 31 | 2,056,503 | 50 | 1,248,620 | 3 | 63,672 |
| Walled Lake, City of | 6324 | 6 | 7/1/2018 | 21 | 1,420,690 | 32 | 878,910 | 12 | 218,047 |
| Washtenaw Co | 8113 | 4 | 1/1/2018 | 318 | 22,640,190 | 67 | 2,395,456 | 28 | 440,713 |
| Washtenaw CRC | 8102 | 6 | 10/1/2018 | 126 | 7,327,466 | 133 | 3,623,342 | 15 | 230,477 |
| Wayland, City of | 0304 | 2 | 7/1/2018 | 18 | 868,041 | 22 | 438,936 | 9 | 54,063 |
| Wayne HC | 8252 | 1 | 1/1/2018 | 3 | 126,341 | 2 | 54,960 | 0 | 0 |
| Wayne, City of | 8242 | 22 | 7/1/2018 | 60 | 4,101,050 | 202 | 7,534,969 | 24 | 471,492 |
| Webberville, Vlg of | 3314 | 1 | 4/1/2018 | 4 | 193,421 | 3 | 28,816 | 3 | 11,565 |
| West Branch Dist Lib | 6509 | 1 | 7/1/2018 | 3 | 107,455 | 1 | 19,370 | 0 | 0 |
| West Branch, City of | 6505 | 5 | 7/1/2018 | 16 | 661,594 | 21 | 343,474 | 1 | 14,760 |
| Westland,City of | 8211 | 14 | 7/1/2018 | 116 | 6,889,905 | 298 | 8,845,394 | 41 | 511,228 |
| Westphalia, Vlg of | 1907 | 1 | 3/1/2018 | 2 | 135,142 | 2 | 14,536 | 0 | 0 |
| Wexford Co | 8302 | 10 | 1/1/2018 | 109 | 4,597,331 | 104 | 1,703,460 | 30 | 346,223 |
| Wexford CRC | 8303 | 4 | 1/1/2018 | 26 | 1,294,335 | 44 | 697,198 | 13 | 143,220 |
| White Cloud Cmnty Lib | 6208 | 2 | 7/1/2018 | 4 | 131,448 | 1 | 11,946 | 0 | 0 |
| White Cloud, City of | 6206 | 1 | 7/1/2018 | 6 | 234,073 | 7 | 52,324 | 3 | 13,510 |
| White Cloud/Sherman Util | 6211 | 1 | 7/1/2018 | 3 | 120,734 | 1 | 8,750 | 0 | 0 |
| White Lake Chtr Twp | 6325 | 8 | 1/1/2018 | 83 | 5,020,601 | 41 | 1,369,829 | 7 | 118,615 |
| White Pigeon, Vlg of | 7804 | 1 | 4/1/2018 | 2 | 96,262 | 1 | 6,532 | 2 | 13,357 |
| White Pine District Library | 5904 | 1 | 7/1/2018 | 2 | 39,225 | 4 | 22,864 | 0 | 0 |
| Whitehall, City of | 6105 | 6 | 7/1/2018 | 21 | 1,267,316 | 23 | 365,918 | 1 | 12,620 |
| Willard Pub Lib | 1308 | 2 | 7/1/2018 | 34 | 1,777,552 | 3 | 51,329 | 2 | 16,609 |
| Williamston, City of | 3310 | 5 | 7/1/2018 | 17 | 897,292 | 20 | 286,023 | 3 | 32,367 |
| Wixom, City of | 6316 | 6 | 7/1/2018 | 28 | 2,061,173 | 54 | 1,753,903 | 13 | 142,716 |
| Wolverine Lake, Vlg of | 6329 | 3 | 7/1/2018 | 8 | 497,622 | 9 | 179,696 | 3 | 47,329 |
| WUPPDR | 3108 | 1 | 10/1/2018 | 6 | 186,057 | 4 | 122,225 | 1 | 15,851 |
| Ypsilanti Cmnty Util Auth | 8106 | 6 | 9/1/2018 | 107 | 6,618,831 | 116 | 3,181,872 | 16 | 250,629 |
| Ypsilanti HC | 8115 | 1 | 7/1/2018 | 2 | 144,938 | 4 | 71,418 | 2 | 19,509 |
| Ypsilanti, City of | 8101 | 7 | 7/1/2018 | 43 | 2,263,584 | 51 | 801,227 | 19 | 148,392 |
| Ypsilanti, Twp of | 8104 | 2 | 1/1/2018 | 66 | 3,482,631 | 58 | 1,123,804 | 12 | 149,920 |
| Totals - Active Groups | 720 | 2,668 |  | 34,843 | 1,779,919,980 | 38,474 | 821,000,566 | 8,124 | 84,862,709 |
| Totals - Closed Groups | 15 | 19 |  | 0 | 0 | 300 | 1,640,246 | 128 | 357,353 |
| Totals - MERS | 735 | 2,687 |  | 34,843 | 1,779,919,980 | 38,774 | 822,640,812 | 8,252 | 85,220,062 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix B
Actuarial Accrued Liability

| Municipality Name | Number |  | Vested Former Liability |  | Pending Refund Liability | Total Liability | Actuarial Value of Assets | Percent <br> Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Active <br> Liability |  | Retired Liability |  |  |  |  |
| 21st Dist Ct | 8243 | 318,678 | 0 | 2,514,553 | 0 | 2,833,231 | 1,844,676 | 65.1\% |
| 23rd Jud Dist Ct | 8223 | 1,768,960 | 186,148 | 1,985,301 | 506 | 3,940,915 | 3,009,197 | 76.4\% |
| 26th Jud Cir Ct | 0403 | 1,330,112 | 607,318 | 1,883,247 | 0 | 3,820,677 | 3,465,794 | 90.7\% |
| 34th Dist Ct | 8235 | 4,660,252 | 229,229 | 4,553,053 | 1,187 | 9,443,721 | 5,722,862 | 60.6\% |
| 35th Dist Ct | 8234 | 467,744 | 0 | 4,481,291 | 14,684 | 4,963,719 | 2,914,481 | 58.7\% |
| 41 B Dist Ct | 5014 | 4,974,430 | 723,370 | 3,785,233 | 17,237 | 9,500,270 | 7,312,727 | 77.0\% |
| Addison Fire Dept | 4607 | 275,032 | 53,805 | 0 | 0 | 328,837 | 300,946 | 91.5\% |
| Adrian, City of | 4601 | 19,007,227 | 1,526,111 | 41,818,614 | 212,536 | 62,564,488 | 42,197,466 | 67.4\% |
| Aitkin Memorial Dist Lib | 7407 | 0 | 82,805 | 0 | 0 | 82,805 | 144,045 | 174.0\% |
| Albion, City of | 1301 | 4,302,199 | 591,261 | 9,181,361 | 2,268 | 14,077,089 | 13,943,511 | 99.1\% |
| Alcona Co | 0101 | 6,525,873 | 328,192 | 7,832,723 | 1,470 | 14,688,258 | 9,817,944 | 66.8\% |
| Alger Co | 0203 | 5,092,875 | 97,190 | 7,857,624 | 3,197 | 13,050,886 | 9,238,934 | 70.8\% |
| Alger CRC | 0201 | 3,650,588 | 178,435 | 5,862,042 | 6,237 | 9,697,302 | 6,425,000 | 66.3\% |
| Algonac, City of | 7707 | 1,435,485 | 651,400 | 4,154,297 | 2,250 | 6,243,432 | 4,931,918 | 79.0\% |
| Allegan Co | 0302 | 17,869,081 | 3,154,427 | 47,030,105 | 97,752 | 68,151,365 | 60,954,708 | 89.4\% |
| Allegan CRC | 0301 | 5,654,312 | 629,615 | 17,470,026 | 15,115 | 23,769,068 | 14,058,523 | 59.1\% |
| Allegan, City of | 0309 | 2,415,485 | 917,243 | 2,369,763 | 0 | 5,702,491 | 4,079,235 | 71.5\% |
| Alma, City of | 2901 | 8,861,127 | 323,002 | 13,724,033 | 85,576 | 22,993,738 | 18,161,515 | 79.0\% |
| Almont, VIg of | 4407 | 1,218,990 | 19,448 | 1,581,576 | 712 | 2,820,726 | 2,078,666 | 73.7\% |
| Alpena Co | 0401 | 7,252,651 | 1,207,353 | 13,372,634 | 21,454 | 21,854,092 | 14,023,717 | 64.2\% |
| Alpena CRC | 0402 | 2,815,292 | 51,144 | 9,729,563 | 0 | 12,595,999 | 8,775,551 | 69.7\% |
| Alpena HC | 0406 | 1,898,895 | 132,409 | 247,982 | 76 | 2,279,362 | 2,302,666 | 101.0\% |
| Alpena Sr Citizens Ctr | 0404 | 0 | 0 | 753,380 | 0 | 753,380 | 61,278 | 8.1\% |
| Alpha, VIg of | 3614 | 15,300 | 32,214 | 0 | 0 | 47,514 | 65,954 | 138.8\% |
| Antrim Co | 0502 | 24,257,982 | 3,797,985 | 16,989,807 | 84,648 | 45,130,422 | 33,511,638 | 74.3\% |
| Antrim CRC | 0501 | 5,418,828 | 631,150 | 7,792,101 | 0 | 13,842,079 | 6,894,356 | 49.8\% |
| Arenac Co | 0603 | 5,148,243 | 842,127 | 6,800,317 | 9,832 | 12,800,519 | 9,005,788 | 70.4\% |
| Arenac CRC | 0604 | 1,744,558 | 21,548 | 4,839,645 | 1,225 | 6,606,976 | 2,286,603 | 34.6\% |
| Ash Twp | 5804 | 385,644 | 5,528 | 472,649 | 0 | 863,821 | 451,947 | 52.3\% |
| Au Gres, City of | 0602 | 217,400 | 0 | 2,086,486 | 0 | 2,303,886 | 1,654,257 | 71.8\% |
| Auburn, City of | 0905 | 8,513 | 105,105 | 1,949,383 | 0 | 2,063,001 | 1,115,795 | 54.1\% |
| Bad Axe Area Dist Lib | 3214 | 139,366 | 0 | 0 | 0 | 139,366 | 116,680 | 83.7\% |
| Bad Axe, City of | 3211 | 3,296,885 | 44,018 | 4,736,665 | 1,503 | 8,079,071 | 4,705,051 | 58.2\% |
| Bancroft, Vlg of | 7610 | 0 | 23,914 | 70,756 | 0 | 94,670 | 30,079 | 31.8\% |
| Bangor, City of | 8003 | 27,987 | 146,015 | 1,541,047 | 1,138 | 1,716,187 | 2,184,980 | 127.3\% |
| Baraga Co | 0702 | 2,934,584 | 504,580 | 3,803,949 | 0 | 7,243,113 | 4,937,843 | 68.2\% |
| Baraga Co Memorial Hosp | 0703 | 7,054,093 | 1,791,816 | 12,512,352 | 2,041 | 21,360,302 | 14,374,190 | 67.3\% |
| Baraga CRC | 0701 | 2,159,026 | 287,592 | 5,146,109 | 0 | 7,592,727 | 3,783,418 | 49.8\% |
| Baraga, Vlg of | 0704 | 558,900 | 227,457 | 3,010,893 | 0 | 3,797,250 | 1,627,294 | 42.9\% |
| Baroda Lake Twp Police De\| | 1109 | 277,936 | 3,317 | 121,017 | 0 | 402,270 | 326,343 | 81.1\% |
| Barry Co | 0802 | 34,363,182 | 3,962,930 | 33,751,150 | 170,418 | 72,247,680 | 56,772,089 | 78.6\% |
| Barry Co CMH Auth | 0804 | 6,048,496 | 658,264 | 2,223,910 | 61,116 | 8,991,786 | 7,604,682 | 84.6\% |
| Barry Eaton Dist Hlth Dept | 2303 | 6,793,761 | 2,036,259 | 12,065,567 | 95,374 | 20,990,961 | 15,490,494 | 73.8\% |
| Barton Hills, Vlg of | 8107 | 537,202 | 0 | 397,185 | 0 | 934,387 | 707,140 | 75.7\% |
| Bates Twp | 3616 | 0 | 0 | 299,265 | 0 | 299,265 | 140,240 | 46.9\% |
| Bath Chtr Twp | 1909 | 3,918,177 | 192,869 | 3,496,481 | 66,554 | 7,674,081 | 6,003,215 | 78.2\% |
| Battle Creek, City of | 1302 | 44,533,955 | 3,891,390 | 96,012,187 | 167,594 | 144,605,126 | 87,519,819 | 60.5\% |
| Bay Area Trans Auth | 2810 | 2,756,677 | 488,497 | 2,700,690 | 100,205 | 6,046,069 | 6,132,447 | 101.4\% |
| Bay City HC | 0906 | 3,071,758 | 0 | 5,174,335 | 0 | 8,246,093 | 8,467,558 | 102.7\% |
| Bay City, City of | 0901 | 13,515,952 | 1,206,873 | 59,941,380 | 12,331 | 74,676,536 | 53,030,404 | 71.0\% |
| Bay Metro Trans Auth | 0907 | 11,121,199 | 407,023 | 6,257,684 | 0 | 17,785,906 | 10,272,463 | 57.8\% |
| Beecher Metro Dist Swg\&W | 2501 | 1,824,914 | 143,084 | 4,686,243 | 0 | 6,654,241 | 4,675,719 | 70.3\% |
| Belding, City of | 3410 | 647,638 | 7,827 | 1,755,890 | 9,654 | 2,421,009 | 1,264,278 | 52.2\% |
| Belleville, City of | 8213 | 2,069,240 | 385,688 | 6,087,224 | 1,272 | 8,543,424 | 4,512,926 | 52.8\% |
| Benton Harbor, City of | 1120 | 2,568,233 | 255,277 | 24,127,461 | 67,768 | 27,018,739 | 10,682,583 | 39.5\% |
| Benzie Co | 1003 | 7,190,020 | 1,467,958 | 9,364,785 | 30,344 | 18,053,107 | 12,118,595 | 67.1\% |
| Benzie Co Comm on Aging | 1006 | 166,469 | 276,153 | 737,137 | 0 | 1,179,759 | 766,947 | 65.0\% |
| Benzie Co MCF (The Maples | 1004 | 2,906,775 | 904,703 | 4,915,042 | 83,065 | 8,809,585 | 7,161,292 | 81.3\% |
| Benzie CRC | 1001 | 1,302,555 | 660,062 | 5,722,901 | 846 | 7,686,364 | 2,968,338 | 38.6\% |
| Benzie Shores Dist Lib | 1005 | 282,350 | 0 | 0 | 0 | 282,350 | 305,147 | 108.1\% |
| Benzie Trans Auth | 1007 | 645,128 | 7,607 | 84,727 | 17,936 | 755,398 | 867,547 | 114.8\% |
| Benzie/Leelanau Dist Hith D | 4504 | 739,500 | 0 | 270,330 | 0 | 1,009,830 | 769,951 | 76.2\% |
| Berkley, City of | 6304 | 4,040,076 | 523,671 | 16,743,758 | 76,574 | 21,384,079 | 12,294,873 | 57.5\% |
| Berrien Springs, Vlg of | 1102 | 564,719 | 38,006 | 1,007,331 | 0 | 1,610,056 | 1,568,831 | 97.4\% |
| Bessemer, City of | 2702 | 1,464,214 | 13,307 | 1,096,422 | 2,923 | 2,576,866 | 1,736,085 | 67.4\% |
| Beverly Hills, Vlg of | 6321 | 9,188,090 | 576,129 | 15,431,148 | 178 | 25,195,545 | 22,423,053 | 89.0\% |
| Big Rapids HC | 5406 | 988,864 | 125,951 | 1,116,317 | 0 | 2,231,132 | 1,787,338 | 80.1\% |
| Big Rapids, City of | 5402 | 4,297,687 | 194,693 | 10,813,818 | 0 | 15,306,198 | 9,795,252 | 64.0\% |
| Bingham Farms, Vlg of | 6332 | 338,942 | 0 | 0 | 0 | 338,942 | 293,934 | 86.7\% |
| Birch Run, VIg of | 7315 | 1,390,195 | 72,954 | 157,405 | 4,414 | 1,624,968 | 1,460,051 | 89.9\% |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix B

|  | Actuarial Accrued Liability |  |  |  |  | Actuarial Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Active Liability | Vested Former Liability | Retired Liability | Pending Refund Liability | Total Liability |  |  |
| 2507 | 7,106,497 | 137,495 | 3,191,223 | 20,972 | 10,456,187 | 8,181,831 | 78.2\% |
| 3806 | 7,102,992 | 226,117 | 4,772,750 | 2,795 | 12,104,654 | 7,058,193 | 58.3\% |
| 4606 | 1,882,202 | 277,226 | 2,060,981 | 0 | 4,220,409 | 3,719,486 | 88.1\% |
| 6302 | 7,628,399 | 512,663 | 28,537,896 | 18,271 | 36,697,229 | 31,777,545 | 86.6\% |
| 7709 | 7,310,986 | 107,143 | 2,778,557 | 0 | 10,196,686 | 7,646,442 | 75.0\% |
| 1508 | 169,269 | 310,618 | 671,226 | 1,466 | 1,152,579 | 706,346 | 61.3\% |
| 1506 | 3,350,966 | 194,551 | 5,541,818 | 13,703 | 9,101,038 | 7,006,519 | 77.0\% |
| 1205 | 34,689,667 | 2,859,728 | 18,239,864 | 158,196 | 55,947,455 | 42,269,950 | 75.6\% |
| 1202 | 5,424,975 | 1,665,798 | 7,564,076 | 48,700 | 14,703,549 | 12,827,184 | 87.2\% |
| 6333 | 3,185,019 | 234,868 | 3,520,236 | 419 | 6,940,542 | 5,491,304 | 79.1\% |
| 2906 | 297,113 | 112,694 | 1,990,154 | 23,540 | 2,423,501 | 983,488 | 40.6\% |
| 7307 | 3,461,515 | 1,286,207 | 4,374,691 | 11,592 | 9,134,005 | 5,908,870 | 64.7\% |
| 1110 | 939,207 | 308,600 | 639,613 | 1,859 | 1,889,279 | 1,398,383 | 74.0\% |
| 4715 | 241,520 | 0 | 226,566 | 0 | 468,086 | 464,915 | 99.3\% |
| 4711 | 858,203 | 122,345 | 996,103 | 21,358 | 1,998,009 | 1,863,034 | 93.2\% |
| 4704 | 9,594,018 | 494,057 | 12,729,967 | 1,362 | 22,819,404 | 14,347,180 | 62.9\% |
| 4604 | 276,077 | 15,960 | 0 | 620 | 292,657 | 475,176 | 162.4\% |
| 1204 | 1,007,742 | 401,139 | 847,757 | 39,577 | 2,296,215 | 1,399,354 | 60.9\% |
| 3801 | 248,598 | 8,842 | 906,140 | 13,620 | 1,177,200 | 810,347 | 68.8\% |
| 8247 | 20,144,690 | 473,522 | 7,666,916 | 50,576 | 28,335,704 | 21,056,049 | 74.3\% |
| 1108 | 211,394 | 49,648 | 33,765 | 0 | 294,807 | 325,983 | 110.6\% |
| 1101 | 3,369,454 | 313,219 | 3,760,367 | 38,629 | 7,481,669 | 7,906,506 | 105.7\% |
| 7312 | 3,651,731 | 662,859 | 7,966,406 | 60,897 | 12,341,893 | 8,570,420 | 69.4\% |
| 2508 | 12,574,303 | 710,362 | 40,828,179 | 39,966 | 54,152,810 | 23,456,958 | 43.3\% |
| 2604 | 0 | 0 | 80,904 | 0 | 80,904 | 111,650 | 138.0\% |
| 8301 | 6,506,247 | 759,018 | 7,747,844 | 0 | 15,013,109 | 12,257,453 | 81.6\% |
| 8305 | 778,708 | 0 | 1,602,864 | 0 | 2,381,572 | 1,737,194 | 72.9\% |
| 1311 | 51,340,756 | 3,660,595 | 46,217,480 | 618,171 | 101,837,002 | 63,847,014 | 62.7\% |
| 1316 | 3,341,583 | 236,490 | 2,230,187 | 2,741 | 5,811,001 | 5,997,693 | 103.2\% |
| 8232 | 1,868,142 | 210,362 | 2,412,165 | 0 | 4,490,669 | 4,496,778 | 100.1\% |
| 8233 | 43,291,898 | 906,813 | 80,486,962 | 128,558 | 124,814,231 | 81,949,051 | 65.7\% |
| 7705 | 170,748 | 89,919 | 2,383,785 | 3,250 | 2,647,702 | 674,156 | 25.5\% |
| 3317 | 6,920,176 | 283,783 | 2,157,604 | 110,338 | 9,471,901 | 8,332,048 | 88.0\% |
| 3305 | 5,679,184 | 1,324,116 | 10,486,360 | 5,446 | 17,495,106 | 13,425,019 | 76.7\% |
| 5805 | 690,279 | 0 | 687,323 | 0 | 1,377,602 | 1,001,843 | 72.7\% |
| 7320 | 2,732,669 | 118,669 | 1,342,139 | 1,830 | 4,195,307 | 3,192,232 | 76.1\% |
| 4110 | 5,251,943 | 500,337 | 4,415,657 | 6,788 | 10,174,725 | 8,113,762 | 79.7\% |
| 3207 | 1,459,194 | 0 | 1,350,174 | 858 | 2,810,226 | 2,134,538 | 76.0\% |
| 3608 | 181,776 | 53,504 | 1,092,445 | 0 | 1,327,725 | 654,128 | 49.3\% |
| 1402 | 16,461,182 | 672,309 | 14,081,910 | 119,804 | 31,335,205 | 22,836,064 | 72.9\% |
| 1403 | 1,975,817 | 460,355 | 3,374,230 | 186,380 | 5,996,782 | 5,730,084 | 95.6\% |
| 1404 | 690,834 | 128,532 | 167,101 | 11,486 | 997,953 | 930,132 | 93.2\% |
| 4105 | 1,046,455 | 408,118 | 1,925,281 | 14,626 | 3,394,480 | 2,802,412 | 82.6\% |
| 5001 | 1,358,863 | 207,175 | 6,777,129 | 43,419 | 8,386,586 | 4,168,953 | 49.7\% |
| 0504 | 203,779 | 3,901 | 0 | 0 | 207,680 | 201,593 | 97.1\% |
| 3705 | 6,965,115 | 1,844,532 | 13,158,955 | 60,403 | 22,029,005 | 14,992,710 | 68.1\% |
| 1503 | 25,618,874 | 2,828,236 | 24,874,348 | 18,532 | 53,339,990 | 40,374,904 | 75.7\% |
| 1501 | 3,367,948 | 501,346 | 4,509,637 | 0 | 8,378,931 | 5,776,896 | 68.9\% |
| 1505 | 4,220,424 | 164,366 | 9,266,660 | 4,694 | 13,656,144 | 8,901,979 | 65.2\% |
| 2309 | 392,631 | 4,531 | 389,245 | 0 | 786,407 | 410,815 | 52.2\% |
| 2301 | 6,559,049 | 1,773,680 | 13,935,817 | 30,578 | 22,299,124 | 13,187,412 | 59.1\% |
| 1603 | 12,792,523 | 889,506 | 14,949,872 | 112,857 | 28,744,758 | 21,001,279 | 73.1\% |
| 1601 | 5,199,253 | 683,791 | 15,024,038 | 1,701 | 20,908,783 | 9,556,287 | 45.7\% |
| 1602 | 4,411,134 | 69,424 | 6,197,175 | 7,306 | 10,685,039 | 6,857,101 | 64.2\% |
| 8118 | 475,362 | 53,343 | 215,960 | 10,107 | 754,772 | 770,862 | 102.1\% |
| 8103 | 1,471,345 | 555,487 | 10,992,536 | 0 | 13,019,368 | 9,621,448 | 73.9\% |
| 7313 | 510,876 | 116,641 | 2,756,801 | 0 | 3,384,318 | 655,341 | 19.4\% |
| 5009 | 20,688,367 | 665,872 | 16,982,795 | 42,620 | 38,379,654 | 29,029,561 | 75.6\% |
| 5010 | 260,757 | 232,334 | 744,780 | 12,101 | 1,249,972 | 1,522,350 | 121.8\% |
| 1112 | 889,932 | 190,113 | 1,334,380 | 28,624 | 2,443,049 | 1,695,204 | 69.4\% |
| 1703 | 18,485,851 | 1,737,020 | 26,451,118 | 123,051 | 46,797,040 | 32,491,180 | 69.4\% |
| 1704 | 6,918,036 | 281,398 | 12,522,278 | 0 | 19,721,712 | 10,165,078 | 51.5\% |
| 3707 | 1,378,058 | 243,881 | 1,396,074 | 22,872 | 3,040,885 | 2,654,767 | 87.3\% |
| 5218 | 873,717 | 476,101 | 223,898 | 21,694 | 1,595,410 | 1,625,806 | 101.9\% |
| 1802 | 10,444,106 | 1,915,423 | 10,855,389 | 108,187 | 23,323,105 | 16,710,717 | 71.6\% |
| 1806 | 168,704 | 9,718 | 89,270 | 0 | 267,692 | 187,641 | 70.1\% |
| 1801 | 3,802,704 | 309,344 | 7,927,335 | 14,846 | 12,054,229 | 8,189,112 | 67.9\% |
| 1804 | 2,598,315 | 426,508 | 5,821,173 | 24,207 | 8,870,203 | 5,529,353 | 62.3\% |
| 6305 | 5,381,268 | 236,292 | 19,324,141 | 7,009 | 24,948,710 | 10,745,043 | 43.1\% |
| 7706 | 4,276,630 | 375,978 | 5,087,876 | 47,492 | 9,787,976 | 6,309,444 | 64.5\% |
| 4005 | 19,768 | 0 | 109,508 | 0 | 129,276 | 103,544 | 80.1\% |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix B

| Municipality Name | Number | Actuarial Accrued Liability |  |  |  |  | Actuarial Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Active Liability | Vested <br> Former <br> Liability | Retired Liability | Pending Refund Liability | Total Liability |  |  |
| Clinton Co | 1903 | 27,308,493 | 3,920,860 | 26,354,643 | 4,172 | 57,588,168 | 54,774,737 | 95.1\% |
| Clinton CRC | 1901 | 7,478,321 | 187,235 | 14,495,851 | 21,827 | 22,183,234 | 13,836,070 | 62.4\% |
| Clinton Twp | 5002 | 24,954,736 | 1,625,274 | 47,739,444 | 150,506 | 74,469,960 | 45,738,069 | 61.4\% |
| Clinton, VIg of | 4602 | 2,676,319 | 110,012 | 2,848,794 | 0 | 5,635,125 | 5,513,496 | 97.8\% |
| Clinton-Eaton-Ingham CMH | 3308 | 77,619,341 | 9,372,371 | 90,177,751 | 858,810 | 178,028,273 | 133,489,920 | 75.0\% |
| Clio, City of | 2523 | 649,352 | 200,670 | 932,437 | 4,566 | 1,787,025 | 1,383,294 | 77.4\% |
| CMH for Central Mich | 3708 | 32,080,743 | 4,581,378 | 39,476,011 | 24,604 | 76,162,736 | 62,804,872 | 82.5\% |
| Coldwater Brd of Pub Util | 1203 | 4,188,960 | 754,109 | 7,557,802 | 0 | 12,500,871 | 7,465,258 | 59.7\% |
| Coldwater, City of | 1201 | 5,422,581 | 333,645 | 10,849,004 | 15,681 | 16,620,911 | 12,638,973 | 76.0\% |
| Coleman, City of | 5603 | 1,060,567 | 0 | 1,793,324 | 0 | 2,853,891 | 1,897,631 | 66.5\% |
| Coloma Chtr Twp | 1107 | 968,592 | 175,344 | 1,243,510 | 10,284 | 2,397,730 | 1,528,803 | 63.8\% |
| Coloma, City of | 1118 | 953,057 | 0 | 0 | 0 | 953,057 | 832,834 | 87.4\% |
| Columbiaville, VIg of | 4406 | 408,735 | 0 | 104,873 | 0 | 513,608 | 392,680 | 76.5\% |
| Constantine, VIg of | 7806 | 51,588 | 10,452 | 0 | 11,542 | 73,582 | 100,677 | 136.8\% |
| Coopersville Area Dist Lib | 7011 | 155,850 | 79,991 | 263,022 | 3,166 | 502,029 | 244,421 | 48.7\% |
| Coopersville, City of | 7005 | 927,457 | 354,185 | 1,616,070 | 258 | 2,897,970 | 2,304,672 | 79.5\% |
| Corunna City of | 7604 | 1,669,987 | 217,472 | 4,077,894 | 0 | 5,965,353 | 3,779,188 | 63.4\% |
| Corwith Twp | 6904 | 129,602 | 0 | 0 | 0 | 129,602 | 126,549 | 97.6\% |
| Covert Twp | 8010 | 915,202 | 65,766 | 728,613 | 18,237 | 1,727,818 | 1,286,216 | 74.4\% |
| Crawford Co | 2001 | 9,084,319 | 767,521 | 10,925,745 | 2,824 | 20,780,409 | 21,721,634 | 104.5\% |
| Crawford Co Trans Auth | 2004 | 1,904,315 | 465,174 | 3,419,705 | 1,180 | 5,790,374 | 4,331,899 | 74.8\% |
| Crawford CRC | 2002 | 3,549,828 | 0 | 5,984,510 | 0 | 9,534,338 | 3,623,729 | 38.0\% |
| Croswell, City of | 7401 | 3,985,511 | 229,971 | 6,307,074 | 271 | 10,522,827 | 5,756,038 | 54.7\% |
| Crystal Falls Cmnty Hosp C | 3618 | 0 | 571,699 | 3,089,261 | 0 | 3,660,960 | 3,722,824 | 101.7\% |
| Crystal Falls, City of | 3603 | 2,248,864 | 784,870 | 6,422,747 | 0 | 9,456,481 | 5,603,195 | 59.3\% |
| Ctrl Dispatch of Muskegon C | 6109 | 2,689,859 | 279,500 | 3,404,925 | 89,609 | 6,463,893 | 5,544,446 | 85.8\% |
| Ctrl Wayne Co Sanitation Al | 8214 | 0 | 117,713 | 2,201,159 | 0 | 2,318,872 | 1,856,264 | 80.1\% |
| Davison Richfield Sr CCA | 2525 | 62,745 | 0 | 243,248 | 0 | 305,993 | 170,790 | 55.8\% |
| Davison Twp | 2519 | 9,779,078 | 214,373 | 4,688,026 | 17,619 | 14,699,096 | 10,966,229 | 74.6\% |
| Davison, City of | 2516 | 3,074,562 | 106,272 | 9,345,631 | 2,802 | 12,529,267 | 6,532,528 | 52.1\% |
| Dearborn, City of | 8251 | 10,801,116 | 3,643 | 0 | 58,726 | 10,863,485 | 11,616,659 | 106.9\% |
| Deerfield, Vlg of | 4603 | 184,876 | 392,911 | 1,019,820 | 0 | 1,597,607 | 1,128,817 | 70.7\% |
| Delta Area Transit Auth | 2107 | 45,978 | 0 | 0 | 0 | 45,978 | 40,232 | 87.5\% |
| Delta Chtr Twp | 2306 | 4,981,494 | 907,726 | 8,634,901 | 54,919 | 14,579,040 | 11,779,374 | 80.8\% |
| Delta Co | 2102 | 10,834,285 | 1,650,845 | 25,998,714 | 959 | 38,484,803 | 27,455,588 | 71.3\% |
| Delta CRC | 2105 | 3,678,419 | 152,597 | 8,557,182 | 0 | 12,388,198 | 6,727,821 | 54.3\% |
| Delta-Menominee Dist Hlth [ | 2103 | 3,694,621 | 1,091,357 | 5,563,316 | 13,530 | 10,362,824 | 9,509,636 | 91.8\% |
| Detour, VIg of | 1706 | 179,958 | 61,676 | 253,341 | 0 | 494,975 | 197,215 | 39.8\% |
| Detroit HC | 8241 | 10,898,616 | 2,292,841 | 3,715,905 | 50,356 | 16,957,718 | 17,073,383 | 100.7\% |
| DeWitt Chtr Twp | 1910 | 2,422,034 | 399,607 | 2,966,978 | 16,103 | 5,804,722 | 4,213,937 | 72.6\% |
| DeWitt, City of | 1908 | 1,516,075 | 392,201 | 3,361,279 | 1,320 | 5,270,875 | 2,670,946 | 50.7\% |
| Dexter Area Fire Dept | 8219 | 1,036,418 | 167,662 | 425,764 | 0 | 1,629,844 | 942,158 | 57.8\% |
| Dexter Twp | 8111 | 372,203 | 74,472 | 420,689 | 20,211 | 887,575 | 713,985 | 80.4\% |
| Dexter, City of | 8217 | 1,776,376 | 50,604 | 2,144,298 | 3,132 | 3,974,410 | 3,253,800 | 81.9\% |
| Dickinson Co | 2206 | 11,362,568 | 1,506,574 | 22,184,021 | 154,643 | 35,207,806 | 21,010,032 | 59.7\% |
| Dickinson CRC | 2203 | 2,578,324 | 450,479 | 7,701,330 | 0 | 10,730,133 | 5,213,552 | 48.6\% |
| Dickinson-Iron Dist Hlth Dep | 3605 | 3,083,653 | 1,173,489 | 5,421,085 | 9,280 | 9,687,507 | 6,259,443 | 64.6\% |
| Dimondale, Vlg of | 2304 | 548,497 | 32,475 | 344,395 | 0 | 925,367 | 747,921 | 80.8\% |
| Dist Hth Dept \# 2 | 6501 | 1,687,419 | 810,494 | 5,270,335 | 20,740 | 7,788,988 | 5,871,613 | 75.4\% |
| Dist Hlth Dept \# 4 | 7103 | 4,341,290 | 838,492 | 15,133,434 | 9,382 | 20,322,598 | 12,848,701 | 63.2\% |
| Dist Hlth Dept \#10 | 5104 | 4,796,195 | 761,065 | 23,704,557 | 3,177 | 29,264,994 | 17,811,995 | 60.9\% |
| Douglas, City of Vig of | 0303 | 1,997,544 | 250,568 | 1,398,201 | 0 | 3,646,313 | 3,053,936 | 83.8\% |
| Dowagiac Dist Lib | 1406 | 71,309 | 0 | 28,219 | 0 | 99,528 | 102,093 | 102.6\% |
| Dowagiac HC | 1405 | 163,283 | 22,059 | 31,849 | 0 | 217,191 | 259,017 | 119.3\% |
| Dowagiac, City of | 1401 | 7,786,807 | 849,224 | 12,177,983 | 12,512 | 20,826,526 | 10,638,526 | 51.1\% |
| Drummond Island Twp | 1708 | 184,822 | 28,380 | 0 | 0 | 213,202 | 178,300 | 83.6\% |
| Dryden, Vlg of | 4405 | 30,942 | 108,429 | 285,766 | 0 | 425,137 | 293,238 | 69.0\% |
| Dundee, Vlg of | 5803 | 779,615 | 393,864 | 2,875,622 | 34,906 | 4,084,007 | 2,522,566 | 61.8\% |
| Durand, City of | 7603 | 1,706,444 | 421,444 | 4,151,513 | 0 | 6,279,401 | 4,209,153 | 67.0\% |
| E UP Reg Planning \& Dev C | 1709 | 235,858 | 0 | 0 | 0 | 235,858 | 328,628 | 139.3\% |
| E UP Trans Auth | 1705 | 2,247,618 | 130,630 | 9,331,410 | 0 | 11,709,658 | 5,419,223 | 46.3\% |
| East China Chtr Twp | 7701 | 1,927,961 | 29,676 | 6,821,768 | 4,820 | 8,784,225 | 5,520,538 | 62.8\% |
| East Grand Rapids, City of | 4101 | 2,956,183 | 287,501 | 15,492,624 | 2,956 | 18,739,264 | 9,409,075 | 50.2\% |
| East Jordan, City of | 1504 | 1,679,337 | 278,177 | 3,081,482 | 11,533 | 5,050,529 | 3,470,689 | 68.7\% |
| East Lansing, City of | 3301 | 44,383,776 | 3,865,705 | 138,830,064 | 36,054 | 187,115,599 | 99,444,497 | 53.1\% |
| Eastpointe HC | 5011 | 930,148 | 0 | 188,610 | 5,201 | 1,123,959 | 912,981 | 81.2\% |
| Eastpointe, City of | 5019 | 22,063,758 | 1,051,112 | 62,668,139 | 0 | 85,783,009 | 43,292,464 | 50.5\% |
| Eaton Co | 2302 | 56,025,638 | 5,462,085 | 95,256,517 | 339,915 | 157,084,155 | 90,981,886 | 57.9\% |
| Eaton Co HIth \& Rehab Svc: | 2305 | 7,148,852 | 482,767 | 3,618,368 | 382,848 | 11,632,835 | 10,329,828 | 88.8\% |
| Eaton Rapids, City of | 2307 | 4,016,972 | 716,017 | 10,165,740 | 11,316 | 14,910,045 | 9,196,375 | 61.7\% |
| Eau Claire, Vlg of | 1104 | 119,485 | 0 | 424,492 | 1,864 | 545,841 | 197,048 | 36.1\% |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix B Actuarial Accrued Liability

| Municipality Name | Number | Active Liability | Vested <br> Former <br> Liability | Retired Liability | Pending Refund Liability | Total Liability | Actuarial Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ecorse, City of | 8206 | 4,755,408 | 1,170,124 | 36,612,877 | 3,303 | 42,541,712 | 17,079,288 | 40.1\% |
| Elk Rapids, Vlg of | 0506 | 1,048,437 | 150,619 | 1,219,207 | 33,219 | 2,451,482 | 1,860,436 | 75.9\% |
| Elkton, VIg of | 3206 | 239,590 | 45,520 | 326,036 | 0 | 611,146 | 566,498 | 92.7\% |
| Elsie, VIg of CLD | 1906 | 0 | 0 | 132,579 | 1,192 | 133,771 | 194,647 | 145.5\% |
| Emmet CRC | 2401 | 4,073,754 | 94,955 | 10,175,689 | 0 | 14,344,398 | 9,663,415 | 67.4\% |
| Emmett, Chtr Twp | 1310 | 2,922,756 | 454,390 | 1,982,358 | 2,115 | 5,361,619 | 4,171,449 | 77.8\% |
| Erie, Twp of | 5812 | 79,604 | 0 | 0 | 16,593 | 96,197 | 107,767 | 112.0\% |
| Escanaba, City of | 2101 | 10,687,404 | 412,910 | 25,583,044 | 0 | 36,683,358 | 21,194,811 | 57.8\% |
| Essexville, City of | 0903 | 1,805,707 | 348,748 | 4,811,754 | 16,336 | 6,982,545 | 4,846,615 | 69.4\% |
| Evart Local Dev Finance Aut | 6706 | 78,078 | 0 | 447,349 | 0 | 525,427 | 255,129 | 48.6\% |
| Evart, City of | 6705 | 591,945 | 311,305 | 1,227,294 | 1,941 | 2,132,485 | 1,670,820 | 78.4\% |
| Farmington Cmnty Lib | 6319 | 2,757,992 | 88,741 | 6,191,574 | 1,510 | 9,039,817 | 9,113,088 | 100.8\% |
| Farmington, City of | 6343 | 7,701,556 | 328,882 | 17,477,846 | 292 | 25,508,576 | 20,816,465 | 81.6\% |
| Farwell, VIg of | 1805 | 41,398 | 105,342 | 390,148 | 13,935 | 550,823 | 385,739 | 70.0\% |
| Fenton, City of | 2505 | 6,271,691 | 307,181 | 10,648,039 | 12,642 | 17,239,553 | 10,866,488 | 63.0\% |
| Ferndale HC | 6345 | 418,905 | 349,320 | 168,636 | 3,117 | 939,978 | 609,596 | 64.9\% |
| Ferrysburg, City of | 7106 | 1,011,705 | 36,369 | 1,119,988 | 0 | 2,168,062 | 1,596,458 | 73.6\% |
| Flat Rock, City of | 8212 | 8,252,938 | 556,679 | 16,682,900 | 82,809 | 25,575,326 | 12,420,010 | 48.6\% |
| Flint Pub Lib | 2518 | 1,067,548 | 253,389 | 187,987 | 0 | 1,508,924 | 1,736,559 | 115.1\% |
| Flint, Chtr Twp of | 2512 | 9,019,663 | 567,750 | 22,431,473 | 95,659 | 32,114,545 | 20,426,074 | 63.6\% |
| Flint, City of | 2530 | 55,188,790 | 12,697,692 | 492,303,947 | 318,343 | 560,508,772 | 218,757,448 | 39.0\% |
| Flushing, Chtr Twp of | 2515 | 2,478,661 | 73,185 | 3,209,793 | 0 | 5,761,639 | 3,729,028 | 64.7\% |
| Flushing, City of | 2502 | 5,753,585 | 562,509 | 14,044,939 | 17,705 | 20,378,738 | 10,228,614 | 50.2\% |
| Forsyth Twp | 5212 | 1,681,542 | 501,634 | 4,897,741 | 0 | 7,080,917 | 3,898,795 | 55.1\% |
| Fowler, VIg of | 1904 | 273,932 | 30,996 | 106,725 | 0 | 411,653 | 311,875 | 75.8\% |
| Fowlerville Dist Lib | 4710 | 508,457 | 0 | 0 | 1,160 | 509,617 | 466,980 | 91.6\% |
| Fowlerville, Vlg of | 4705 | 684,591 | 122,197 | 3,023,022 | 23,190 | 3,853,000 | 3,206,115 | 83.2\% |
| Frankenmuth Wickson Dist I | 7323 | 186,008 | 0 | 0 | 0 | 186,008 | 144,269 | 77.6\% |
| Frankenmuth, City of | 7306 | 5,372,547 | 210,470 | 9,527,162 | 1,170 | 15,111,349 | 10,833,553 | 71.7\% |
| Frankfort, City of | 1002 | 1,257,714 | 102,501 | 2,231,523 | 551 | 3,592,289 | 1,876,577 | 52.2\% |
| Franklin, Vlg of | 6323 | 1,863,578 | 5,919 | 5,678,590 | 26,355 | 7,574,442 | 4,289,709 | 56.6\% |
| Fraser, City of | 5003 | 21,689,901 | 1,348,952 | 36,203,131 | 15,695 | 59,257,679 | 30,957,111 | 52.2\% |
| Fremont Area Dist Lib | 6209 | 617,250 | 134,277 | 482,312 | 0 | 1,233,839 | 874,291 | 70.9\% |
| Fremont, City of | 6203 | 4,839,586 | 773,461 | 7,251,119 | 0 | 12,864,166 | 7,671,654 | 59.6\% |
| Gaastra, City of | 3617 | 163,490 | 0 | 155,466 | 0 | 318,956 | 198,314 | 62.2\% |
| Garden City, City of | 8255 | 25,352,533 | 449,138 | 64,320,661 | 38,560 | 90,160,892 | 59,450,705 | 65.9\% |
| Gaylord, City of | 6903 | 5,010,793 | 71,400 | 9,158,241 | 744 | 14,241,178 | 8,566,538 | 60.2\% |
| Genesee Chtr Twp | 2510 | 5,140,390 | 711,087 | 12,306,185 | 1,891 | 18,159,553 | 9,046,941 | 49.8\% |
| Genoa Twp | 4713 | 395,736 | 0 | 0 | 0 | 395,736 | 319,336 | 80.7\% |
| Gerald R Ford Intl Airport Aut | 4116 | 12,388,665 | 522,383 | 1,161,721 | 414 | 14,073,183 | 22,127,436 | 157.2\% |
| Gladstone, City of | 2106 | 5,007,718 | 95,475 | 8,391,688 | 0 | 13,494,881 | 6,479,445 | 48.0\% |
| Gladwin City HC | 2608 | 758,767 | 196,535 | 2,927,298 | 10,734 | 3,893,334 | 2,949,448 | 75.8\% |
| Gladwin Co | 2602 | 9,316,395 | 1,280,659 | 12,381,507 | 104,461 | 23,083,022 | 15,896,315 | 68.9\% |
| Gladwin Co Dist Lib | 2607 | 483,023 | 0 | 566,510 | 2,484 | 1,052,017 | 933,970 | 88.8\% |
| Gladwin CRC | 2601 | 5,525,495 | 504,323 | 10,356,544 | 13,424 | 16,399,786 | 8,939,829 | 54.5\% |
| Gladwin, City of | 2605 | 1,425,482 | 0 | 217,408 | 0 | 1,642,890 | 1,442,786 | 87.8\% |
| Gogebic-Iron WWTR Auth | 2703 | 2,085,421 | 0 | 1,047,123 | 0 | 3,132,544 | 2,216,023 | 70.7\% |
| Grand Beach, Vlg of | 1117 | 353,322 | 0 | 0 | 0 | 353,322 | 353,202 | 100.0\% |
| Grand Blanc Chtr Twp | 2511 | 10,068,645 | 118,579 | 11,517,009 | 11,943 | 21,716,176 | 13,645,312 | 62.8\% |
| Grand Blanc, City of | 2513 | 5,107,521 | 117,012 | 9,302,786 | 7,208 | 14,534,527 | 14,690,100 | 101.1\% |
| Grand Haven, City of | 7010 | 39,523,637 | 3,384,111 | 61,058,164 | 106,400 | 104,072,312 | 78,819,696 | 75.7\% |
| Grand Ledge Area Dist. Libr: | 2316 | 20,129 | 0 | 0 | 0 | 20,129 | 19,165 | 95.2\% |
| Grand Ledge Area ESA | 2310 | 1,026,181 | 71,940 | 519,873 | 0 | 1,617,994 | 1,449,105 | 89.6\% |
| Grand Ledge, City of | 2312 | 769,174 | 482,341 | 2,061,489 | 0 | 3,313,004 | 2,001,608 | 60.4\% |
| Grand Rapids HC | 4108 | 622,745 | 0 | 1,713,363 | 0 | 2,336,108 | 1,571,231 | 67.3\% |
| Grand Traverse Co | 2803 | 16,120,066 | 2,936,628 | 78,316,137 | 1,535 | 97,374,366 | 43,552,384 | 44.7\% |
| Grand Traverse CRC | 2802 | 393,608 | 223,447 | 8,790,945 | 0 | 9,408,000 | 7,098,480 | 75.5\% |
| Grand Traverse Pavilions | 2809 | 19,504,057 | 3,673,104 | 14,065,163 | 267,608 | 37,509,932 | 29,113,160 | 77.6\% |
| Grandville, City of | 4102 | 4,280,045 | 773,173 | 15,072,085 | 0 | 20,125,303 | 11,745,834 | 58.4\% |
| Gratiot Co | 2905 | 12,273,523 | 1,217,832 | 16,511,968 | 0 | 30,003,323 | 24,090,008 | 80.3\% |
| Gratiot CRC | 2903 | 5,623,918 | 33,454 | 12,512,781 | 0 | 18,170,153 | 11,011,367 | 60.6\% |
| Grayling, City of | 2003 | 769,373 | 174,332 | 3,153,574 | 0 | 4,097,279 | 2,452,470 | 59.9\% |
| Green Oak Chtr Twp | 4708 | 4,992,213 | 160,174 | 3,135,984 | 1,764 | 8,290,135 | 5,187,655 | 62.6\% |
| Greenville, City of | 5906 | 2,315,808 | 164,949 | 3,907,554 | 47,217 | 6,435,528 | 4,751,534 | 73.8\% |
| Grosse lle Twp | 8207 | 14,882,056 | 1,603,251 | 17,297,931 | 0 | 33,783,238 | 20,571,003 | 60.9\% |
| Grosse Pointe Park, City of | 8201 | 17,249,310 | 595,957 | 28,138,891 | 72,415 | 46,056,573 | 25,906,096 | 56.2\% |
| Grosse Pointe-Clinton Ref C | 5004 | 0 | 0 | 2,138,617 | 40,846 | 2,179,463 | 2,596,207 | 119.1\% |
| Groveland Twp | 6335 | 1,217,425 | 156,919 | 419,655 | 0 | 1,793,999 | 1,898,415 | 105.8\% |
| Hackley Pub Lib | 6114 | 323,369 | 0 | 0 | 0 | 323,369 | 240,310 | 74.3\% |
| Hamburg Twp | 4709 | 2,008,181 | 316,567 | 2,626,681 | 8,819 | 4,960,248 | 3,429,544 | 69.1\% |
| Hamtramck HC | 8250 | 2,205,425 | 391,110 | 348,430 | 12,381 | 2,957,346 | 2,060,683 | 69.7\% |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix B Actuarial Accrued Liability

| Municipality Name | Number | Actuarial Accrued Liability |  |  |  |  | Actuarial Value of Assets | Percent <br> Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Active <br> Liability | Vested <br> Former <br> Liability | Retired <br> Liability | Pending Refund Liability | Total <br> Liability |  |  |
| Hamtramck, City of | 8205 | 9,568,661 | 2,090,306 | 86,272,083 | 500,935 | 98,431,985 | 45,859,762 | 46.6\% |
| Hancock, City of | 3107 | 1,497,941 | 0 | 2,623,802 | 9,246 | 4,130,989 | 2,689,593 | 65.1\% |
| Harbor Beach, City of | 3201 | 3,407,694 | 82,635 | 4,699,061 | 8,040 | 8,197,430 | 6,003,379 | 73.2\% |
| Harbor Springs Area Swg Al | 2406 | 777,033 | 0 | 259,606 | 0 | 1,036,639 | 910,556 | 87.8\% |
| Harbor Springs, City of | 2405 | 3,598,321 | 0 | 2,581,671 | 30,498 | 6,210,490 | 3,967,504 | 63.9\% |
| Harper Woods, City of | 8260 | 9,124,600 | 530,859 | 41,584,537 | 58,926 | 51,298,922 | 24,273,442 | 47.3\% |
| Harrison Dist Lib | 1807 | 126,274 | 0 | 131,756 | 0 | 258,030 | 169,627 | 65.7\% |
| Harrison, City of | 1803 | 1,560,329 | 97,600 | 1,777,793 | 0 | 3,435,722 | 2,420,482 | 70.5\% |
| Hartland Deerfield Fire Auth | 4716 | 750,435 | 0 | 0 | 0 | 750,435 | 687,978 | 91.7\% |
| Hastings, City of | 0801 | 4,640,171 | 650,208 | 11,049,052 | 3,782 | 16,343,213 | 8,597,562 | 52.6\% |
| Hazel Park, City of | 6336 | 19,326,357 | 995,626 | 47,870,932 | 102,970 | 68,295,885 | 34,775,276 | 50.9\% |
| Helen Newberry Joy Hosp | 4805 | 5,950,313 | 553,290 | 11,362,511 | 47,621 | 17,913,735 | 12,235,045 | 68.3\% |
| Henika Dist Lib | 0310 | 115,582 | 0 | 316,372 | 0 | 431,954 | 464,563 | 107.5\% |
| Herrick Dist Lib | 7012 | 2,990,503 | 152,433 | 5,476,243 | 41 | 8,619,220 | 6,809,032 | 79.0\% |
| Hesperia, Vlg of | 6214 | 0 | 33,530 | 0 | 1,467 | 34,997 | 67,781 | 193.7\% |
| Hiawatha Bhvrl Hlth | 1707 | 4,349,779 | 2,084,556 | 12,626,737 | 41,595 | 19,102,667 | 14,645,604 | 76.7\% |
| Hillsdale Co | 3005 | 3,648,505 | 173,134 | 4,342,499 | 276 | 8,164,414 | 4,929,478 | 60.4\% |
| Hillsdale CRC | 3004 | 4,597,270 | 62,100 | 6,789,299 | 4,856 | 11,453,525 | 7,078,238 | 61.8\% |
| Hillsdale HC | 3007 | 100,561 | 0 | 97,654 | 0 | 198,215 | 222,632 | 112.3\% |
| Hillsdale, City of | 3001 | 7,873,154 | 1,458,415 | 14,181,827 | 85,946 | 23,599,342 | 19,682,035 | 83.4\% |
| Hlth Source of Saginaw | 7311 | 15,014,767 | 4,087,719 | 26,145,963 | 10,397 | 45,258,846 | 34,224,249 | 75.6\% |
| Holland Area Cmnty Pool Au | 7014 | 601,151 | 96,155 | 301,580 | 64,943 | 1,063,829 | 1,076,890 | 101.2\% |
| Holland Cmnty Hosp CLD | 7006 | 0 | 57,594 | 1,440,343 | 0 | 1,497,937 | 1,751,133 | 116.9\% |
| Holland, City of | 7001 | 48,061,840 | 4,899,769 | 81,494,578 | 7,507 | 134,463,694 | 112,356,798 | 83.6\% |
| Holly, Vlg of | 6317 | 3,028,271 | 383,789 | 10,877,025 | 3,425 | 14,292,510 | 7,387,659 | 51.7\% |
| Homer, Vlg of | 1304 | 561,108 | 235,290 | 867,319 | 0 | 1,663,717 | 1,397,741 | 84.0\% |
| Houghton Co | 3102 | 11,418,721 | 973,621 | 16,229,294 | 41,269 | 28,662,905 | 18,077,231 | 63.1\% |
| Houghton CRC | 3103 | 2,104,481 | 0 | 2,354,305 | 0 | 4,458,786 | 2,905,504 | 65.2\% |
| Houghton Lake Pub Lib | 7203 | 431,160 | 0 | 350,878 | 0 | 782,038 | 782,959 | 100.1\% |
| Houghton, City of | 3109 | 2,750,892 | 570,357 | 1,125,819 | 0 | 4,447,068 | 3,792,019 | 85.3\% |
| Howard City, Vlg of | 5902 | 299,988 | 162,254 | 391,679 | 0 | 853,921 | 687,404 | 80.5\% |
| Howard Twp | 1106 | 89,276 | 13,095 | 47,225 | 0 | 149,596 | 120,335 | 80.4\% |
| Howell Area Fire Auth | 4714 | 597,819 | 0 | 795,007 | 0 | 1,392,826 | 1,350,774 | 97.0\% |
| Howell, City of | 4702 | 10,481,169 | 1,588,208 | 12,875,937 | 60,269 | 25,005,583 | 14,716,116 | 58.9\% |
| Howell-Carnegie Dist Lib | 4707 | 1,382,829 | 10,416 | 146,958 | 0 | 1,540,203 | 1,473,050 | 95.6\% |
| Hudsonville, City of | 7004 | 371,485 | 549,888 | 1,399,947 | 1,522 | 2,322,842 | 1,634,585 | 70.4\% |
| Huntington Woods, City of | 6303 | 7,706,354 | 97,190 | 16,859,802 | 19,084 | 24,682,430 | 14,791,894 | 59.9\% |
| Hurley Med Ctr | 2521 | 181,865,458 | 29,864,330 | 379,115,446 | 1,830,163 | 592,675,397 | 435,096,080 | 73.4\% |
| Huron Behavioral Health | 3215 | 7,563,045 | 2,501,105 | 7,819,170 | 232,788 | 18,116,108 | 16,565,652 | 91.4\% |
| Huron Chtr Twp | 8224 | 10,199,317 | 1,088,981 | 11,161,955 | 17,882 | 22,468,135 | 15,444,796 | 68.7\% |
| Huron Co | 3204 | 31,408,382 | 2,591,467 | 51,390,768 | 396,802 | 85,787,419 | 60,086,676 | 70.0\% |
| Huron CRC | 3202 | 11,450,747 | 341,538 | 15,745,046 | 9,743 | 27,547,074 | 19,172,351 | 69.6\% |
| Imlay City, City of | 4404 | 2,159,323 | 228,970 | 5,763,495 | 17 | 8,151,805 | 5,282,557 | 64.8\% |
| Independence Twp | 6328 | 6,793,388 | 106,868 | 5,745,302 | 5,520 | 12,651,078 | 8,881,081 | 70.2\% |
| Indianfields Twp CLD | 7905 | 0 | 56,583 | 225,812 | 0 | 282,395 | 311,435 | 110.3\% |
| Ingham Co | 3303 | 170,123,345 | 16,647,654 | 270,055,780 | 1,620,305 | 458,447,084 | 303,682,816 | 66.2\% |
| Interurban Trans Auth | 0308 | 504,228 | 0 | 895,054 | 0 | 1,399,282 | 1,215,705 | 86.9\% |
| lonia Cmnty Lib | 3412 | 163,777 | 61,595 | 449,585 | 0 | 674,957 | 454,569 | 67.3\% |
| Ionia Co | 3408 | 6,024,651 | 675,759 | 3,384,398 | 53,846 | 10,138,654 | 8,433,732 | 83.2\% |
| Ionia CRC | 3404 | 5,858,637 | 399,270 | 11,737,662 | 0 | 17,995,569 | 7,133,855 | 39.6\% |
| Ionia HC | 3406 | 384,617 | 0 | 875,781 | 0 | 1,260,398 | 947,173 | 75.1\% |
| Ionia, City of | 3403 | 8,565,524 | 718,283 | 12,922,672 | 8,031 | 22,214,510 | 10,694,856 | 48.1\% |
| losco Co | 3501 | 11,523,037 | 1,706,537 | 14,687,381 | 29,236 | 27,946,191 | 21,194,161 | 75.8\% |
| losco CRC | 3502 | 4,254,190 | 225,551 | 7,117,240 | 0 | 11,596,981 | 8,463,270 | 73.0\% |
| Iron Co | 3606 | 22,108,659 | 1,764,830 | 16,826,297 | 242,147 | 40,941,933 | 31,085,231 | 75.9\% |
| Iron Co HC | 3611 | 923,649 | 26,063 | 82,978 | 0 | 1,032,690 | 672,578 | 65.1\% |
| Iron CRC | 3602 | 2,669,213 | 268,406 | 9,845,187 | 0 | 12,782,806 | 5,216,044 | 40.8\% |
| Iron Mountain, City of | 2201 | 2,282,086 | 197,755 | 10,265,069 | 16,670 | 12,761,580 | 5,121,367 | 40.1\% |
| Iron Mountain-Kingsford Swc | 2205 | 1,032,401 | 32,406 | 335,438 | 476 | 1,400,721 | 907,132 | 64.8\% |
| Iron River, City of | 3601 | 1,816,532 | 535,206 | 7,681,447 | 0 | 10,033,185 | 5,935,106 | 59.2\% |
| Ironwood, City of | 2706 | 5,716,852 | 253,992 | 14,123,120 | 18,382 | 20,112,346 | 10,169,476 | 50.6\% |
| Isabella Co | 3703 | 27,008,323 | 4,265,149 | 29,309,750 | 52,378 | 60,635,600 | 47,219,756 | 77.9\% |
| Isabella Co Trans Comm | 3709 | 1,094,770 | 0 | 1,540,370 | 2,846 | 2,637,986 | 2,211,972 | 83.9\% |
| Isabella CRC | 3702 | 5,013,805 | 909,249 | 7,613,758 | 20,263 | 13,557,075 | 9,490,422 | 70.0\% |
| Ishpeming Area Joint Wwtr 7 | 5207 | 1,029,400 | 65,122 | 634,667 | 0 | 1,729,189 | 1,646,682 | 95.2\% |
| Ishpeming Twp | 5216 | 569,131 | 74,928 | 1,143,029 | 1,395 | 1,788,483 | 1,623,420 | 90.8\% |
| Ishpeming, City of | 5204 | 3,966,873 | 323,071 | 11,973,105 | 73,032 | 16,336,081 | 8,450,672 | 51.7\% |
| Ithaca, City of | 2904 | 683,638 | 189,545 | 3,806,278 | 0 | 4,679,461 | 2,714,096 | 58.0\% |
| Jackson Dist Lib | 3802 | 3,633,146 | 718,561 | 3,544,987 | 24,516 | 7,921,210 | 6,958,486 | 87.8\% |
| Jackson Trans Auth | 3805 | 4,897,058 | 532,042 | 2,813,780 | 1,734 | 8,244,614 | 6,536,149 | 79.3\% |
| Jordan Valley Dist Lib | 1507 | 202,718 | 70,447 | 0 | 0 | 273,165 | 249,867 | 91.5\% |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix B Actuarial Accrued Liability

| Municipality Name | Number | Active Liability | Vested Former Liability | Retired <br> Liability | Pending Refund Liability | Total Liability | Actuarial Value of Assets | Percent <br> Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jordan Valley EMS Auth | 1509 | 291,522 | 0 | 88,126 | 6,194 | 385,842 | 261,719 | 67.8\% |
| Kalamazoo Lake Swr \& Wtr | 0306 | 334,796 | 161,170 | 978,518 | 0 | 1,474,484 | 1,001,696 | 67.9\% |
| Kalamazoo Pub Lib | 3903 | 4,569,368 | 420,958 | 2,991,262 | 0 | 7,981,588 | 6,833,653 | 85.6\% |
| Kalamazoo, Chtr Twp of | 3907 | 7,726,216 | 0 | 5,833,656 | 0 | 13,559,872 | 10,727,109 | 79.1\% |
| Kalkaska Co | 4003 | 6,277,643 | 1,204,314 | 13,577,578 | 51,576 | 21,111,111 | 15,384,477 | 72.9\% |
| Kalkaska CRC | 4002 | 950,412 | 1,781,297 | 7,183,295 | 2,724 | 9,917,728 | 4,106,623 | 41.4\% |
| Kalkaska Pub Trans Auth | 4004 | 632,882 | 44,340 | 1,481,000 | 9,262 | 2,167,484 | 1,946,715 | 89.8\% |
| Kalkaska, Vlg of | 4001 | 1,048,628 | 129,033 | 4,493,975 | 4,136 | 5,675,772 | 2,836,705 | 50.0\% |
| Keego Harbor, City of | 6322 | 746,885 | 564,897 | 3,200,112 | 6,956 | 4,518,850 | 2,328,122 | 51.5\% |
| Kent CRC | 4111 | 0 | 0 | 174,353 | 0 | 174,353 | 62,110 | 35.6\% |
| Keweenaw Co | 4202 | 1,620,940 | 300,654 | 1,618,394 | 8,804 | 3,548,792 | 2,619,174 | 73.8\% |
| Keweenaw CRC | 4201 | 1,641,690 | 22,158 | 5,222,752 | 0 | 6,886,600 | 3,317,697 | 48.2\% |
| Kinde, Vlg of | 3209 | 63,773 | 0 | 184,100 | 0 | 247,873 | 261,700 | 105.6\% |
| Kingsford, City of | 2202 | 2,470,701 | 117,632 | 6,029,504 | 16,514 | 8,634,351 | 5,700,494 | 66.0\% |
| L.M.A.S. Dist Hith Dept | 4803 | 1,843,959 | 2,474,365 | 5,397,790 | 710 | 9,716,824 | 7,962,357 | 81.9\% |
| Lac Vieux Desert Band | 8402 | 292,102 | 64,969 | 225,666 | 0 | 582,737 | 535,659 | 91.9\% |
| Laingsburg, City of | 7608 | 293,812 | 18,324 | 252,708 | 6,017 | 570,861 | 532,126 | 93.2\% |
| Lake Co | 4301 | 10,192,354 | 1,078,483 | 7,139,764 | 18,935 | 18,429,536 | 13,714,440 | 74.4\% |
| Lake CRC | 4302 | 2,772,637 | 153,237 | 7,760,649 | 0 | 10,686,523 | 5,532,115 | 51.8\% |
| Lake Linden, Vlg of | 3105 | 250,157 | 58,356 | 1,039,994 | 0 | 1,348,507 | 714,016 | 52.9\% |
| Lake Odessa, Vlg of | 3402 | 327,781 | 0 | 5,849 | 0 | 333,630 | 360,456 | 108.0\% |
| Lake Orion, Vlg of | 6318 | 1,107,123 | 143,061 | 2,692,849 | 26,088 | 3,969,121 | 2,787,949 | 70.2\% |
| Lakeland Lib Coop | 4106 | 682,746 | 24,586 | 493,527 | 6,140 | 1,206,999 | 1,077,088 | 89.2\% |
| Lakeshore Coordinating Col | 7007 | 0 | 109,747 | 884,971 | 0 | 994,718 | 1,110,933 | 111.7\% |
| Lakeview Cemetery | 2407 | 109,623 | 0 | 0 | 0 | 109,623 | 101,691 | 92.8\% |
| L'Anse, Vlg of | 0705 | 2,283,119 | 5,495 | 4,531,289 | 0 | 6,819,903 | 3,323,753 | 48.7\% |
| Lansing Chtr Twp | 3320 | 5,340,764 | 20,767 | 3,786,164 | 2,172 | 9,149,867 | 7,979,948 | 87.2\% |
| Lansing HC | 3311 | 1,616,573 | 833,110 | 6,640,524 | 13,810 | 9,104,017 | 8,103,857 | 89.0\% |
| Lapeer Co | 4403 | 56,847,602 | 7,762,751 | 52,580,358 | 185,506 | 117,376,217 | 97,895,537 | 83.4\% |
| Lapeer CRC | 4402 | 6,162,328 | 199,651 | 11,730,301 | 44,650 | 18,136,930 | 10,709,092 | 59.0\% |
| Lapeer Dist Lib | 4410 | 1,035,039 | 230,552 | 3,507,477 | 40,716 | 4,813,784 | 3,198,803 | 66.5\% |
| Lapeer, City of | 4401 | 14,053,297 | 670,892 | 12,813,992 | 0 | 27,538,181 | 19,094,144 | 69.3\% |
| Lathrup VIg, City of | 6311 | 1,955,526 | 35,283 | 6,359,989 | 137,469 | 8,488,267 | 6,848,191 | 80.7\% |
| Laurium, Vlg of | 3104 | 1,688,867 | 59,759 | 799,025 | 0 | 2,547,651 | 1,478,342 | 58.0\% |
| Lawrence, Vlg of | 8004 | 0 | 7,458 | 110,345 | 0 | 117,803 | 114,637 | 97.3\% |
| Leelanau Co | 4501 | 12,605,370 | 1,457,830 | 13,891,931 | 20,728 | 27,975,859 | 23,480,278 | 83.9\% |
| Leelanau CRC | 4503 | 3,103,718 | 1,008,897 | 3,328,242 | 14,927 | 7,455,784 | 5,685,208 | 76.3\% |
| Leoni Twp | 3804 | 860,443 | 1,643,557 | 3,747,929 | 27,393 | 6,279,322 | 4,388,559 | 69.9\% |
| Leslie Twp | 3319 | 401,974 | 0 | 58,773 | 0 | 460,747 | 395,132 | 85.8\% |
| Leslie, City of | 3313 | 583,852 | 143,955 | 1,235,092 | 874 | 1,963,773 | 1,407,992 | 71.7\% |
| Lexington, Vlg of | 7708 | 651,530 | 259,016 | 1,818,064 | 12,072 | 2,740,682 | 1,765,230 | 64.4\% |
| Lima Twp | 8112 | 205,743 | 15,588 | 193,239 | 0 | 414,570 | 480,156 | 115.8\% |
| Lincoln Park, City of | 8244 | 3,665,530 | 1,284,733 | 37,006,735 | 0 | 41,956,998 | 7,990,061 | 19.0\% |
| Litchfield, City of | 3006 | 642,480 | 48,044 | 1,218,333 | 7,065 | 1,915,922 | 1,290,214 | 67.3\% |
| Livingston Co | 4703 | 59,780,851 | 7,442,703 | 75,342,875 | 54,620 | 142,621,049 | 101,624,833 | 71.3\% |
| Livingston Co CMH Auth | 4712 | 10,253,097 | 2,408,018 | 9,850,334 | 0 | 22,511,449 | 19,651,707 | 87.3\% |
| Livingston CRC | 4701 | 11,202,130 | 517,110 | 11,732,349 | 0 | 23,451,589 | 18,369,753 | 78.3\% |
| Looking Glass Rgnl Fire CL[ | 2311 | 0 | 56,484 | 83,406 | 0 | 139,890 | 174,154 | 124.5\% |
| Loutit Dist Lib | 7013 | 1,877,562 | 72,984 | 550,711 | 8,497 | 2,509,754 | 2,103,540 | 83.8\% |
| Lowell, City of | 4104 | 4,947,617 | 741,450 | 8,847,738 | 52,258 | 14,589,063 | 9,420,051 | 64.6\% |
| Luce Co | 4804 | 2,628,909 | 538,479 | 4,786,055 | 2,565 | 7,956,008 | 4,602,387 | 57.8\% |
| Luce Co Amb Svs | 4806 | 300,244 | 47,625 | 0 | 0 | 347,869 | 353,830 | 101.7\% |
| Luce CRC | 4801 | 1,949,833 | 353,818 | 8,520,594 | 0 | 10,824,245 | 4,214,835 | 38.9\% |
| Ludington, City of | 5302 | 6,043,306 | 294,134 | 13,402,230 | 0 | 19,739,670 | 13,492,971 | 68.4\% |
| Luna Pier, City of | 5802 | 720,292 | 54,032 | 4,091,961 | 22,619 | 4,888,904 | 2,425,511 | 49.6\% |
| Lyons, Vlg of | 3411 | 0 | 0 | 195,790 | 0 | 195,790 | 194,668 | 99.4\% |
| Mackinac Co | 4901 | 5,470,813 | 2,326,505 | 10,280,809 | 0 | 18,078,127 | 12,732,277 | 70.4\% |
| Mackinac Co HC | 4905 | 0 | 0 | 433,885 | 0 | 433,885 | 383,961 | 88.5\% |
| Mackinac CRC | 4903 | 1,708,133 | 0 | 7,465,320 | 0 | 9,173,453 | 4,447,369 | 48.5\% |
| Mackinac Straits Hosp\&Hlth | 4902 | 12,837,539 | 3,214,247 | 12,508,570 | 137,672 | 28,698,028 | 21,463,236 | 74.8\% |
| Mackinaw City, Vlg of | 1606 | 783,403 | 36,580 | 332,577 | 1,032 | 1,153,592 | 985,731 | 85.4\% |
| Madison Heights, City of | 6308 | 11,977,699 | 1,623,817 | 26,879,336 | 22,951 | 40,503,803 | 42,487,975 | 104.9\% |
| Madison, Chtr Twp of | 4605 | 943,467 | 260,651 | 392,959 | 728 | 1,597,805 | 1,218,045 | 76.2\% |
| Manistee Co | 5101 | 21,070,683 | 3,561,149 | 27,920,966 | 95,369 | 52,648,167 | 36,953,823 | 70.2\% |
| Manistee CRC | 5103 | 4,196,209 | 514,704 | 8,056,887 | 0 | 12,767,800 | 8,314,298 | 65.1\% |
| Manistee HC | 5107 | 186,736 | 72,075 | 281,509 | 5,567 | 545,887 | 541,087 | 99.1\% |
| Manistee, City of | 5105 | 8,769,558 | 356,837 | 10,295,412 | 15,569 | 19,437,376 | 16,164,788 | 83.2\% |
| Manistique, City of | 7504 | 4,809,311 | 235,545 | 9,875,995 | 0 | 14,920,851 | 7,102,561 | 47.6\% |
| Manlius Twp | 0311 | 232,115 | 10,973 | 344,014 | 1,336 | 588,438 | 526,322 | 89.4\% |
| Manton, City of | 8304 | 352,160 | 89,346 | 1,542,090 | 0 | 1,983,596 | 740,884 | 37.4\% |
| Marenisco Twp | 2704 | 278,214 | 0 | 188,050 | 0 | 466,264 | 358,441 | 76.9\% |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix B
Actuarial Accrued Liability

| Municipality Name | Number | Actuarial Accrued Liability |  |  |  |  | Actuarial Value of Assets | Percent <br> Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Active <br> Liability | Vested <br> Former <br> Liability | Retired Liability | Pending <br> Refund <br> Liability | Total Liability |  |  |
| Marine City, City of CLD | 7704 | 0 | 0 | 13,573 | 0 | 13,573 | 35,675 | 262.8\% |
| Marion, Vlg of | 6704 | 436,343 | 1,889 | 234,249 | 0 | 672,481 | 495,222 | 73.6\% |
| Marlette, City of | 7405 | 926,428 | 52,724 | 1,055,768 | 0 | 2,034,920 | 1,434,930 | 70.5\% |
| Marquette Brd of Light \& Pov | 5209 | 8,710,721 | 62,417 | 33,547,274 | 24,937 | 42,345,349 | 25,409,847 | 60.0\% |
| Marquette Chtr Twp | 5215 | 2,539,260 | 237,141 | 289,421 | 3,295 | 3,069,117 | 2,288,854 | 74.6\% |
| Marquette Co | 5202 | 24,127,453 | 3,570,567 | 79,268,057 | 265,310 | 107,231,387 | 74,492,848 | 69.5\% |
| Marquette Co Solid Waste N | 5213 | 1,134,857 | 586,562 | 1,010,941 | 8,671 | 2,741,031 | 2,758,183 | 100.6\% |
| Marquette Co Trans Auth | 5206 | 1,159,778 | 12,915 | 2,360,158 | 17,591 | 3,550,442 | 3,292,864 | 92.7\% |
| Marquette CRC | 5211 | 9,486,613 | 1,491,428 | 17,773,843 | 16,942 | 28,768,826 | 13,387,503 | 46.5\% |
| Marquette, City of | 5201 | 22,672,478 | 2,254,576 | 40,179,117 | 45,217 | 65,151,388 | 39,693,337 | 60.9\% |
| Marshall Area Firefighters Ar | 1313 | 857,332 | 16,414 | 0 | 6,547 | 880,293 | 929,999 | 105.6\% |
| Marshall Dist Lib | 1309 | 0 | 0 | 167,404 | 0 | 167,404 | 102,686 | 61.3\% |
| Marshall, City of | 1306 | 11,523,328 | 1,173,367 | 22,486,160 | 37,277 | 35,220,132 | 22,875,111 | 64.9\% |
| Mason Co | 5301 | 21,941,049 | 3,641,815 | 32,405,469 | 0 | 57,988,333 | 42,319,182 | 73.0\% |
| Mason Co Dist Lib | 5303 | 816,947 | 99,375 | 1,484,055 | 0 | 2,400,377 | 1,881,359 | 78.4\% |
| Mason CRC | 5305 | 3,709,391 | 316,635 | 3,933,673 | 4,223 | 7,963,922 | 5,219,948 | 65.5\% |
| Mason, City of | 3304 | 6,108,362 | 676,195 | 12,347,823 | 153,623 | 19,286,003 | 12,671,404 | 65.7\% |
| Mason-Oceana Cty Enh 911 | 6403 | 1,437,207 | 386,030 | 635,757 | 2,060 | 2,461,054 | 2,197,568 | 89.3\% |
| MBS Intl Arpt | 0902 | 3,414,136 | 322,119 | 7,661,856 | 0 | 11,398,111 | 6,683,222 | 58.6\% |
| Meceola Central Dispatch | 5405 | 1,965,166 | 25,979 | 1,135,607 | 0 | 3,126,752 | 2,611,499 | 83.5\% |
| Mecosta Co | 5403 | 11,501,848 | 2,894,716 | 21,655,299 | 14,997 | 36,066,860 | 35,443,125 | 98.3\% |
| Mecosta Co General Hosp C | 5404 | 0 | 1,959,920 | 5,381,243 | 0 | 7,341,163 | 8,793,528 | 119.8\% |
| Mecosta CRC | 5401 | 3,667,232 | 350,811 | 6,404,435 | 16,983 | 10,439,461 | 8,436,800 | 80.8\% |
| Melvindale HC | 8220 | 68,195 | 431,117 | 845,591 | 2,990 | 1,347,893 | 1,041,281 | 77.3\% |
| Melvindale, City of | 8215 | 7,562,647 | 1,150,338 | 33,272,915 | 1,733 | 41,987,633 | 17,339,243 | 41.3\% |
| Menominee Co | 5502 | 12,502,623 | 1,294,627 | 12,114,257 | 13,768 | 25,925,275 | 18,512,474 | 71.4\% |
| Menominee CRC | 5503 | 2,259,818 | 247,434 | 2,690,995 | 0 | 5,198,247 | 3,185,651 | 61.3\% |
| Menominee, City of | 5501 | 5,183,381 | 1,263,522 | 4,140,157 | 0 | 10,587,060 | 8,300,117 | 78.4\% |
| Meridian Chtr Twp | 3315 | 22,905,102 | 1,649,337 | 39,503,628 | 102,436 | 64,160,503 | 37,221,865 | 58.0\% |
| MERS | 2308 | 15,990,387 | 4,929,326 | 6,999,933 | 117,919 | 28,037,565 | 29,499,016 | 105.2\% |
| Metamora Twp | 4409 | 428,321 | 365,518 | 320,108 | 0 | 1,113,947 | 1,063,594 | 95.5\% |
| Mich Muni Risk Mgmt Auth | 8237 | 1,192,526 | 0 | 0 | 0 | 1,192,526 | 1,292,179 | 108.4\% |
| Mich S Central Power Agcy | 3002 | 2,433,345 | 3,588,184 | 7,756,394 | 0 | 13,777,923 | 13,621,701 | 98.9\% |
| Middleville, VIg of | 0803 | 851,602 | 73,418 | 1,029,711 | 0 | 1,954,731 | 1,591,367 | 81.4\% |
| Midland Co Central Disp Aut | 5604 | 2,667,405 | 98,221 | 1,112,922 | 14,746 | 3,893,294 | 2,866,085 | 73.6\% |
| Midland CRC | 5602 | 4,732,774 | 126,654 | 13,670,528 | 9,941 | 18,539,897 | 12,676,529 | 68.4\% |
| Midland, City of | 5601 | 29,605,999 | 2,779,776 | 112,320,476 | 98,210 | 144,804,461 | 83,248,979 | 57.5\% |
| Mid-Mich Dist Hlth Dept | 5901 | 5,540,349 | 1,423,263 | 4,325,299 | 62,712 | 11,351,623 | 9,075,061 | 79.9\% |
| Mid-Mich Lib League | 8306 | 160,464 | 305,778 | 300,736 | 0 | 766,978 | 721,984 | 94.1\% |
| Mid-Peninsula Lib Coop CL[ | 3609 | 0 | 0 | 212,967 | 2,069 | 215,036 | 76,988 | 35.8\% |
| Milan Lib | 5806 | 147,691 | 0 | 264,194 | 0 | 411,885 | 247,665 | 60.1\% |
| Milan, City of | 5801 | 1,883,145 | 855,473 | 10,364,202 | 0 | 13,102,820 | 6,427,776 | 49.1\% |
| Milford, VIg of | 6313 | 6,279,893 | 540,733 | 7,481,562 | 29,258 | 14,331,446 | 11,273,670 | 78.7\% |
| Millington, VIg of | 7904 | 194,957 | 0 | 1,310,909 | 0 | 1,505,866 | 1,503,340 | 99.8\% |
| Missaukee Co | 5702 | 3,091,073 | 432,796 | 3,228,910 | 6,548 | 6,759,327 | 4,918,107 | 72.8\% |
| MOA Solid Waste Mgmt Autl | 6002 | 199,029 | 106,248 | 595,079 | 0 | 900,356 | 858,156 | 95.3\% |
| Monroe HC | 5808 | 962,549 | 155,557 | 1,222,436 | 0 | 2,340,542 | 1,276,003 | 54.5\% |
| Montague, City of | 6112 | 2,778,643 | 177,654 | 3,209,393 | 0 | 6,165,690 | 4,233,400 | 68.7\% |
| Montcalm CRC | 5905 | 5,566,401 | 326,142 | 12,452,325 | 65 | 18,344,933 | 9,885,490 | 53.9\% |
| Montmorency Co | 6001 | 3,535,512 | 581,933 | 8,033,222 | 11,344 | 12,162,011 | 6,677,982 | 54.9\% |
| Montrose, City of | 2509 | 108,988 | 230,680 | 743,394 | 0 | 1,083,062 | 544,256 | 50.3\% |
| Mt. Morris Chtr Twp | 2503 | 12,853,514 | 380,436 | 22,849,176 | 8,042 | 36,091,168 | 19,764,157 | 54.8\% |
| Mt. Pleasant, City of | 3701 | 13,439,021 | 1,065,574 | 16,575,001 | 60,610 | 31,140,206 | 21,140,530 | 67.9\% |
| Muir, Vlg of | 3405 | 123,400 | 0 | 233,060 | 0 | 356,460 | 280,716 | 78.8\% |
| Mundy, Chtr Twp of | 2517 | 3,801,879 | 315,231 | 4,236,097 | 11,276 | 8,364,483 | 6,673,702 | 79.8\% |
| Munising, City of | 0202 | 3,246,110 | 602,089 | 5,102,599 | 0 | 8,950,798 | 5,810,398 | 64.9\% |
| Muskegon Area Dist Lib | 6117 | 1,803,393 | 0 | 605,604 | 8,705 | 2,417,702 | 2,107,448 | 87.2\% |
| Muskegon Chtr Twp | 6108 | 11,564,400 | 180,891 | 10,998,030 | 9,398 | 22,752,719 | 15,997,441 | 70.3\% |
| Muskegon Co | 6103 | 85,247,386 | 15,539,455 | 175,385,479 | 888,729 | 277,061,049 | 181,973,117 | 65.7\% |
| Muskegon CRC | 6101 | 7,506,322 | 785,073 | 15,952,612 | 0 | 24,244,007 | 17,599,633 | 72.6\% |
| Muskegon HC | 6113 | 550,145 | 0 | 383,087 | 0 | 933,232 | 657,219 | 70.4\% |
| Muskegon Heights HC | 6115 | 848,566 | 4,757 | 515,569 | 1,274 | 1,370,166 | 888,365 | 64.8\% |
| Muskegon Heights, City of | 6102 | 8,174,506 | 1,462,277 | 25,751,801 | 210,899 | 35,599,483 | 22,760,693 | 63.9\% |
| Muskegon, City of | 6116 | 44,218,848 | 3,471,104 | 63,297,841 | 93,685 | 111,081,478 | 90,926,163 | 81.9\% |
| N Houghton Co Wtr\&Swg At | 3106 | 336,131 | 29,890 | 298,106 | 0 | 664,127 | 502,171 | 75.6\% |
| N Muskegon, City of | 6104 | 2,180,442 | 191,482 | 4,291,739 | 0 | 6,663,663 | 5,196,978 | 78.0\% |
| Nashville, VIg of | 0807 | 348,328 | 0 | 0 | 70,195 | 418,523 | 462,970 | 110.6\% |
| Negaunee Twp | 5217 | 305,739 | 1,999 | 323,755 | 888 | 632,381 | 608,983 | 96.3\% |
| Negaunee, City of | 5203 | 4,430,454 | 485,227 | 8,250,504 | 0 | 13,166,185 | 7,288,340 | 55.4\% |
| Network180 | 4109 | 17,290,495 | 3,854,663 | 13,527,263 | 158,464 | 34,830,885 | 33,251,819 | 95.5\% |
| New Baltimore, City of | 5016 | 8,632,003 | 332,369 | 7,636,947 | 35,072 | 16,636,391 | 14,103,737 | 84.8\% |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix B Actuarial Accrued Liability

| Municipality Name | Number | Active <br> Liability | Vested Former Liability | Retired <br> Liability | Pending Refund Liability | Total Liability | Actuarial Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New Buffalo, City of | 1113 | 1,374,156 | 177,956 | 1,021,185 | 57,406 | 2,630,703 | 2,115,751 | 80.4\% |
| Newaygo CMH | 6207 | 274,008 | 156,466 | 2,818,685 | 0 | 3,249,159 | 3,766,137 | 115.9\% |
| Newaygo Co | 6201 | 5,728,954 | 1,329,253 | 19,441,850 | 0 | 26,500,057 | 21,625,167 | 81.6\% |
| Newaygo CRC | 6212 | 5,154,524 | 224,880 | 5,337,072 | 0 | 10,716,476 | 8,615,638 | 80.4\% |
| Newaygo MCF | 6204 | 4,735,967 | 1,123,909 | 7,316,267 | 414,286 | 13,590,429 | 13,683,423 | 100.7\% |
| Newaygo Soil \& Wtr Cnsrvn | 6205 | 58,407 | 0 | 124,406 | 4,941 | 187,754 | 185,021 | 98.5\% |
| Newberry, Vlg of | 4802 | 1,362,515 | 239,159 | 3,073,828 | 0 | 4,675,502 | 3,035,237 | 64.9\% |
| Niles Dist Lib | 1105 | 533,184 | 25,150 | 511,846 | 15,971 | 1,086,151 | 932,974 | 85.9\% |
| Northern Lakes CMH Auth | 2808 | 4,103,893 | 1,589,049 | 20,227,427 | 0 | 25,920,369 | 21,480,158 | 82.9\% |
| Northfield Twp | 8117 | 1,800,116 | 199,721 | 0 | 0 | 1,999,837 | 1,835,538 | 91.8\% |
| Northpointe Bhvrl Hith Sys | 2207 | 5,264,132 | 1,750,218 | 6,237,970 | 37,660 | 13,289,980 | 11,827,902 | 89.0\% |
| Northville Chtr Twp | 8230 | 23,888,675 | 403,444 | 22,170,088 | 3,164 | 46,465,371 | 32,999,978 | 71.0\% |
| Northville Dist Lib | 8229 | 1,763,195 | 90,047 | 1,402,110 | 0 | 3,255,352 | 2,627,017 | 80.7\% |
| Northville, City of | 8208 | 4,058,208 | 876,109 | 15,410,212 | 10,312 | 20,354,841 | 12,366,755 | 60.8\% |
| Norton Shores, City of | 6106 | 17,684,550 | 1,195,495 | 27,651,913 | 22,156 | 46,554,114 | 22,881,306 | 49.1\% |
| Norway, City of | 2204 | 6,857,113 | 324,589 | 13,151,956 | 5,849 | 20,339,507 | 9,001,159 | 44.3\% |
| Nottawaseppi Huron Band | 8403 | 303,155 | 2,890 | 48,413 | 1,139 | 355,597 | 341,316 | 96.0\% |
| Novi, City of | 6320 | 36,815,878 | 5,568,950 | 57,152,928 | 182,016 | 99,719,772 | 64,009,436 | 64.2\% |
| NW Mich Cmnty Hlth Agcy | 1502 | 2,175,798 | 306,134 | 4,172,178 | 0 | 6,654,110 | 5,076,132 | 76.3\% |
| NW Rgnl Arpt Comm | 2805 | 2,525,116 | 218,425 | 3,906,960 | 0 | 6,650,501 | 5,995,744 | 90.2\% |
| Oceana Co | 6402 | 19,823,693 | 1,980,969 | 19,583,757 | 103,174 | 41,491,593 | 31,446,844 | 75.8\% |
| Oceola Twp | 4717 | 1,061,664 | 39,469 | 209,844 | 1,116 | 1,312,093 | 1,221,835 | 93.1\% |
| Ogemaw Co | 6502 | 10,763,810 | 890,144 | 17,713,146 | 61,688 | 29,428,788 | 22,046,527 | 74.9\% |
| Ogemaw Co EMS Auth | 6508 | 1,792,800 | 320,007 | 1,321,536 | 14,861 | 3,449,204 | 3,139,091 | 91.0\% |
| Ogemaw CRC | 6503 | 4,362,981 | 616,787 | 5,013,780 | 0 | 9,993,548 | 5,956,876 | 59.6\% |
| Olive Twp | 7009 | 188,038 | 0 | 233,413 | 0 | 421,451 | 291,429 | 69.1\% |
| Onaway, City of | 7105 | 599,455 | 11,845 | 226,430 | 0 | 837,730 | 771,761 | 92.1\% |
| Ontonagon Co | 6602 | 4,745,060 | 641,918 | 5,037,656 | 0 | 10,424,634 | 7,271,081 | 69.7\% |
| Ontonagon Co Economic Dt | 6605 | 0 | 0 | 100,749 | 0 | 100,749 | 50,716 | 50.3\% |
| Ontonagon CRC | 6604 | 6,532,837 | 0 | 17,991,888 | 0 | 24,524,725 | 10,758,413 | 43.9\% |
| Ontonagon, Vlg of | 6603 | 964,072 | 1,991,775 | 11,391,308 | 144,895 | 14,492,050 | 8,614,198 | 59.4\% |
| Orchard Lake, City of | 6312 | 1,508,377 | 57,945 | 4,401,216 | 197 | 5,967,735 | 4,283,042 | 71.8\% |
| Oronoko Chtr Twp | 1114 | 686,733 | 128,699 | 1,463,421 | 12,659 | 2,291,512 | 1,575,223 | 68.7\% |
| Osceola Co | 6701 | 10,401,172 | 2,685,384 | 6,463,458 | 32,003 | 19,582,017 | 16,333,661 | 83.4\% |
| Osceola CRC | 6703 | 2,455,971 | 0 | 5,724,147 | 0 | 8,180,118 | 4,568,562 | 55.8\% |
| Oscoda Chtr Twp | 3503 | 615,852 | 207,074 | 3,366,037 | 9,265 | 4,198,228 | 2,703,704 | 64.4\% |
| Oscoda Co | 6801 | 4,302,603 | 407,285 | 6,170,652 | 23,101 | 10,903,641 | 7,436,713 | 68.2\% |
| Oscoda Wurtsmith Arpt Autr | 6802 | 273,871 | 0 | 146,993 | 0 | 420,864 | 334,422 | 79.5\% |
| Otisville, VIg of | 2506 | 426,065 | 2,852 | 808,545 | 0 | 1,237,462 | 896,125 | 72.4\% |
| Otsego Co | 6902 | 8,800,650 | 2,212,540 | 11,524,251 | 8,868 | 22,546,309 | 14,637,015 | 64.9\% |
| Otsego CRC | 6901 | 4,177,831 | 382,718 | 7,666,455 | 239 | 12,227,243 | 6,820,832 | 55.8\% |
| Ottawa Co | 7003 | 126,577,144 | 15,801,133 | 138,259,026 | 814,087 | 281,451,390 | 230,443,173 | 81.9\% |
| Ottawa Co Central Disp Autl | 7008 | 1,163,967 | 58,718 | 1,175,405 | 9,058 | 2,407,148 | 2,080,755 | 86.4\% |
| Ottawa CRC | 7002 | 17,983,788 | 938,405 | 37,402,568 | 19,330 | 56,344,091 | 33,005,995 | 58.6\% |
| Otter Lake, Vlg of | 4408 | 151,104 | 0 | 0 | 0 | 151,104 | 128,711 | 85.2\% |
| Owosso, City of | 7607 | 761,538 | 42,379 | 4,143,037 | 0 | 4,946,954 | 3,353,276 | 67.8\% |
| Oxford Fire Department | 6327 | 2,171,592 | 214,370 | 3,050,634 | 0 | 5,436,596 | 3,246,112 | 59.7\% |
| Oxford, Vlg of | 6326 | 1,735,301 | 140,365 | 1,518,949 | 510 | 3,395,125 | 2,140,306 | 63.0\% |
| Parchment, City of | 3901 | 768,471 | 52,550 | 2,704,885 | 0 | 3,525,906 | 2,174,760 | 61.7\% |
| Pathways(Spr.Bhvl.Mntl.Hlth | 5214 | 5,558,124 | 4,238,550 | 44,939,722 | 41,661 | 54,778,057 | 26,758,452 | 48.8\% |
| Paw Paw Lk Reg Jnt Swg D | 1103 | 1,483,079 | 0 | 530,589 | 0 | 2,013,668 | 1,558,153 | 77.4\% |
| Paw Paw, Vlg of | 8002 | 4,684,881 | 156,741 | 4,912,275 | 51,501 | 9,805,398 | 7,222,278 | 73.7\% |
| Pellston, Vlg of | 2404 | 509,366 | 0 | 0 | 0 | 509,366 | 425,936 | 83.6\% |
| Pennfield Chtr Twp | 1312 | 1,660,867 | 43,290 | 1,187,094 | 0 | 2,891,251 | 2,032,320 | 70.3\% |
| Pentwater, Vlg of | 6401 | 597,457 | 166,738 | 1,340,079 | 4,810 | 2,109,084 | 1,586,163 | 75.2\% |
| Perrinton, VIg of | 2909 | 67,034 | 31,121 | 0 | 3,226 | 101,381 | 100,074 | 98.7\% |
| Petersburg, City of | 5807 | 403,902 | 107,026 | 0 | 0 | 510,928 | 560,656 | 109.7\% |
| Petoskey, City of | 2402 | 11,031,147 | 915,585 | 14,700,510 | 720 | 26,647,962 | 20,640,074 | 77.5\% |
| Pewamo, Vlg of | 3407 | 352,588 | 0 | 0 | 0 | 352,588 | 266,480 | 75.6\% |
| Pigeon, Vlg of | 3203 | 352,678 | 188,993 | 766,360 | 0 | 1,308,031 | 805,954 | 61.6\% |
| Pinckney, Vlg of | 4706 | 1,210,040 | 58,452 | 1,677,525 | 10,042 | 2,956,059 | 2,591,382 | 87.7\% |
| Pinconning, City of | 0904 | 399,828 | 163,698 | 1,802,045 | 4,713 | 2,370,284 | 1,383,307 | 58.4\% |
| Pittsfield Chtr Twp | 8110 | 20,664,883 | 2,267,421 | 12,212,717 | 230,775 | 35,375,796 | 25,223,934 | 71.3\% |
| Pleasant Ridge, City of | 6301 | 1,856,312 | 422,980 | 3,812,492 | 2,263 | 6,094,047 | 3,229,910 | 53.0\% |
| Plymouth Dist Lib | 8221 | 1,695,469 | 12,902 | 2,919,670 | 0 | 4,628,041 | 3,615,611 | 78.1\% |
| Plymouth, Chtr Twp of | 8238 | 14,444,665 | 594,910 | 15,600,398 | 54,151 | 30,694,124 | 21,905,575 | 71.4\% |
| Plymouth, City of | 8202 | 0 | 134,660 | 16,363,679 | 0 | 16,498,339 | 9,140,563 | 55.4\% |
| Pokagon Band of Potawaton | 8401 | 15,390,035 | 1,351,010 | 3,489,705 | 294,176 | 20,524,926 | 20,816,161 | 101.4\% |
| Port Austin Area Swr\&Wtr A | 3210 | 0 | 33,790 | 50,181 | 7,288 | 91,259 | 169,061 | 185.3\% |
| Port Austin, Vlg of | 3208 | 200,198 | 12,277 | 478,079 | 3,418 | 693,972 | 538,138 | 77.5\% |
| Port Huron Chtr Twp | 7711 | 1,786,613 | 120,643 | 1,822,847 | 0 | 3,730,103 | 2,568,548 | 68.9\% |


|  |  | Actuarial Accrued Liability |  |  |  |  | Actuarial <br> Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Municipality Name | Number | Active Liability | Vested Former Liability | Retired Liability | Pending Refund Liability | Total Liability |  |  |
| Port Huron HC | 7712 | 2,229,326 | 146,700 | 6,437,862 | 2,949 | 8,816,837 | 5,634,112 | 63.9\% |
| Port Huron, City of | 7702 | 46,526,565 | 2,588,355 | 108,373,207 | 59,155 | 157,547,282 | 88,397,936 | 56.1\% |
| Port Sanilac, VIg of | 7403 | 436,237 | 51,296 | 867,900 | 4,435 | 1,359,868 | 837,468 | 61.6\% |
| Port Sheldon Twp | 7018 | 755,336 | 0 | 143,553 | 0 | 898,889 | 970,910 | 108.0\% |
| Portland, City of | 3401 | 6,241,989 | 760,055 | 7,041,746 | 645 | 14,044,435 | 8,884,809 | 63.3\% |
| Potterville, City of | 2313 | 255,509 | 30,931 | 685,865 | 1,101 | 973,406 | 713,412 | 73.3\% |
| Presque Isle Co | 7104 | 5,538,890 | 466,769 | 7,278,550 | 38,618 | 13,322,827 | 9,088,043 | 68.2\% |
| Presque Isle CRC | 7101 | 3,043,303 | 0 | 6,951,415 | 209 | 9,994,927 | 5,166,331 | 51.7\% |
| PRIDE Youth Programs CLI | 6210 | 0 | 0 | 535,012 | 0 | 535,012 | 378,279 | 70.7\% |
| Ravenna, Vlg of | 6111 | 348,010 | 38,896 | 220,220 | 0 | 607,126 | 574,647 | 94.7\% |
| Reading, City of | 3003 | 213,239 | 48,346 | 180,000 | 0 | 441,585 | 380,751 | 86.2\% |
| Redford Twp Dist Lib | 8228 | 1,703,499 | 67,516 | 1,127,825 | 0 | 2,898,840 | 2,541,621 | 87.7\% |
| Redford, Chtr Twp of | 8209 | 11,915,615 | 2,253,395 | 37,869,854 | 30,175 | 52,069,039 | 30,605,469 | 58.8\% |
| Reed City, City of | 6702 | 2,651,347 | 272,884 | 4,033,047 | 822 | 6,958,100 | 4,458,698 | 64.1\% |
| Richfield Twp (Genesee Co) | 2514 | 1,395,834 | 443,274 | 3,234,344 | 3,477 | 5,076,929 | 2,917,420 | 57.5\% |
| Richfield Twp (Roscommon | 7202 | 652,159 | 932,911 | 1,423,553 | 18,771 | 3,027,394 | 1,965,377 | 64.9\% |
| Richland Twp | 7310 | 1,025,770 | 14,524 | 3,964,850 | 1,929 | 5,007,073 | 2,909,967 | 58.1\% |
| Richmond, City of | 5012 | 2,108,140 | 0 | 645,319 | 0 | 2,753,459 | 1,997,834 | 72.6\% |
| Rochester, City of | 6307 | 8,721,636 | 341,503 | 13,200,335 | 60,734 | 22,324,208 | 14,932,151 | 66.9\% |
| Rockford, City of | 4103 | 3,040,310 | 1,013,754 | 4,977,797 | 0 | 9,031,861 | 5,931,774 | 65.7\% |
| Rockwood, City of | 5810 | 1,297,305 | 161,436 | 1,164,350 | 0 | 2,623,091 | 2,440,153 | 93.0\% |
| Rogers City, City of | 7102 | 2,454,409 | 308,522 | 8,496,163 | 7,248 | 11,266,342 | 5,563,815 | 49.4\% |
| Romeo Dist Lib | 5006 | 611,066 | 513,888 | 2,295,714 | 4,868 | 3,425,536 | 2,927,620 | 85.5\% |
| Romeo, Vlg of | 5005 | 3,809,590 | 69,929 | 4,387,232 | 0 | 8,266,751 | 5,271,928 | 63.8\% |
| Romulus, City of | 8225 | 11,125,697 | 984,682 | 40,023,929 | 111,877 | 52,246,185 | 21,473,793 | 41.1\% |
| Roosevelt Park, City of | 6107 | 1,632,412 | 313,883 | 3,802,286 | 0 | 5,748,581 | 3,376,527 | 58.7\% |
| Roscommon Co | 7201 | 10,821,453 | 1,299,118 | 15,512,239 | 24,793 | 27,657,603 | 20,443,921 | 73.9\% |
| Roscommon Co Trans Auth | 7205 | 1,354,202 | 0 | 1,680,324 | 0 | 3,034,526 | 2,434,477 | 80.2\% |
| Rose City, City of | 6504 | 198,462 | 14,648 | 457,486 | 1,954 | 672,550 | 583,676 | 86.8\% |
| Rose Twp | 6506 | 78,372 | 0 | 76,307 | 0 | 154,679 | 374,219 | 241.9\% |
| Royal Oak, Chtr Twp of | 6306 | 149,045 | 1,089 | 2,176,882 | 39,773 | 2,366,789 | 4,069,829 | 172.0\% |
| Saginaw Chtr Twp | 7314 | 4,443,857 | 344,679 | 15,112,014 | 56,727 | 19,957,277 | 13,174,974 | 66.0\% |
| Saginaw Co | 7303 | 17,436,757 | 2,712,819 | 128,518,234 | 8,843 | 148,676,653 | 128,382,162 | 86.3\% |
| Saginaw Co 911 Com Ctr | 7316 | 1,975,062 | 252,856 | 11,082,413 | 0 | 13,310,331 | 9,054,956 | 68.0\% |
| Saginaw Co CMH | 7318 | 3,236,087 | 1,276,266 | 13,517,156 | 661 | 18,030,170 | 11,989,691 | 66.5\% |
| Saginaw CRC | 7304 | 11,731,077 | 491,208 | 21,364,883 | 4,472 | 33,591,640 | 23,840,041 | 71.0\% |
| Saginaw HC | 7321 | 817,590 | 649,737 | 2,799,815 | 21,274 | 4,288,416 | 2,248,264 | 52.4\% |
| Saginaw Trans Sys Auth | 7319 | 630,191 | 433,006 | 1,430,444 | 0 | 2,493,641 | 2,490,668 | 99.9\% |
| Saginaw, City of | 7301 | 43,727,342 | 2,786,034 | 295,167,591 | 100,743 | 341,781,710 | 186,187,752 | 54.5\% |
| Saginaw, Pub Lib of | 7317 | 662,941 | 420,669 | 606,592 | 25,002 | 1,715,204 | 2,668,790 | 155.6\% |
| Saginaw-Midland Muni Wtr C | 7305 | 2,095,063 | 41,600 | 2,723,674 | 0 | 4,860,337 | 3,345,168 | 68.8\% |
| Saline, City of | 8105 | 9,743,415 | 432,193 | 16,930,385 | 0 | 27,105,993 | 17,656,793 | 65.1\% |
| Sandusky Dist Lib | 7404 | 208,221 | 0 | 45,907 | 0 | 254,128 | 243,428 | 95.8\% |
| Sandusky, City of | 7402 | 1,428,995 | 392,917 | 2,906,037 | 9,521 | 4,737,470 | 2,678,112 | 56.5\% |
| Sanilac CRC | 7410 | 4,644,965 | 0 | 3,881,157 | 149 | 8,526,271 | 7,072,575 | 83.0\% |
| Saranac HC | 3413 | 535,312 | 0 | 299,981 | 0 | 835,293 | 493,081 | 59.0\% |
| Saugatuck Twp | 0305 | 320,446 | 124,207 | 540,845 | 0 | 985,498 | 319,994 | 32.5\% |
| Saugatuck Twp Fire Dist | 0313 | 169,217 | 0 | 277,158 | 0 | 446,375 | 361,239 | 80.9\% |
| Saugatuck, City of | 0307 | 338,333 | 66,098 | 1,485,110 | 0 | 1,889,541 | 1,623,809 | 85.9\% |
| Sault Ste. Marie HC | 4906 | 827,459 | 29,060 | 1,223,268 | 15,010 | 2,094,797 | 2,049,313 | 97.8\% |
| Sault Ste. Marie, City of | 1701 | 10,702,981 | 739,909 | 19,060,783 | 43,415 | 30,547,088 | 21,386,892 | 70.0\% |
| SCCMUA | 1905 | 1,790,259 | 520,197 | 1,818,339 | 25,923 | 4,154,718 | 3,608,273 | 86.8\% |
| Schoolcraft Co | 7503 | 9,760,662 | 2,386,091 | 22,171,721 | 165,670 | 34,484,144 | 22,354,261 | 64.8\% |
| Schoolcraft Co Trans Auth | 7506 | 934,920 | 0 | 0 | 510 | 935,430 | 727,125 | 77.7\% |
| Schoolcraft CRC | 7501 | 3,181,873 | 525,372 | 11,567,155 | 0 | 15,274,400 | 7,240,579 | 47.4\% |
| Schoolcraft Memorial Hosp | 7505 | 7,475,263 | 2,601,268 | 13,067,979 | 15,067 | 23,159,577 | 18,819,990 | 81.3\% |
| Scio Twp | 8116 | 2,789,692 | 0 | 383,595 | 15,197 | 3,188,484 | 2,597,441 | 81.5\% |
| Scottville, City of | 5308 | 525,458 | 18,938 | 177,290 | 0 | 721,686 | 626,548 | 86.8\% |
| SE Oakland Co Rsrc Rec A | 6310 | 2,138,712 | 277,982 | 3,358,548 | 0 | 5,775,242 | 3,674,810 | 63.6\% |
| SE Oakland Co Wtr Auth | 6309 | 4,438,151 | 1,172 | 5,329,716 | 0 | 9,769,039 | 8,120,572 | 83.1\% |
| Sebewaing, Vlg of | 3205 | 1,831,768 | 327,726 | 5,681,971 | 14,100 | 7,855,565 | 7,191,603 | 91.5\% |
| SEMCOG | 8210 | 13,613,873 | 1,824,505 | 16,008,993 | 0 | 31,447,371 | 27,337,184 | 86.9\% |
| Shepherd, Vlg of | 3704 | 479,062 | 0 | 134,076 | 10,116 | 623,254 | 625,969 | 100.4\% |
| Shiawassee Co | 7602 | 27,436,267 | 8,243,208 | 79,636,762 | 50,406 | 115,366,643 | 79,303,633 | 68.7\% |
| Shiawassee Co CMH | 7609 | 6,892,937 | 2,663,893 | 5,696,982 | 0 | 15,253,812 | 12,891,724 | 84.5\% |
| Shiawassee Council on Agir | 7605 | 105,741 | 0 | 718,978 | 0 | 824,719 | 541,471 | 65.7\% |
| Shiawassee CRC | 7601 | 4,865,981 | 1,782,030 | 14,294,784 | 449 | 20,943,244 | 15,890,851 | 75.9\% |
| Shiawassee Dist Lib | 7606 | 1,500,887 | 38,528 | 402,953 | 10,635 | 1,953,003 | 1,955,680 | 100.1\% |
| Sims Whitney Util Auth | 0606 | 254,037 | 0 | 89,389 | 0 | 343,426 | 273,632 | 79.7\% |
| SMART | 8216 | 87,123,020 | 11,695,407 | 150,114,881 | 224,200 | 249,157,508 | 181,133,704 | 72.7\% |
| South Haven Area ESA | 8005 | 4,560,519 | 0 | 3,046,748 | 0 | 7,607,267 | 4,906,716 | 64.5\% |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix B Actuarial Accrued Liability

| Municipality Name | Number | Active <br> Liability | Vested Former Liability | Retired <br> Liability | Pending Refund Liability | Total Liability | Actuarial Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| South Haven, City of | 8001 | 11,113,042 | 1,049,823 | 16,993,834 | 68,974 | 29,225,673 | 23,916,774 | 81.8\% |
| South Lyon, City of | 6315 | 9,032,087 | 857,272 | 5,686,596 | 14,710 | 15,590,665 | 10,787,327 | 69.2\% |
| Southgate, City of | 8262 | 8,406,740 | 302,572 | 21,186,411 | 0 | 29,895,723 | 20,162,453 | 67.4\% |
| Sparta, VIg of | 4107 | 2,976,601 | 128,496 | 2,018,244 | 7,258 | 5,130,599 | 3,351,941 | 65.3\% |
| Spring Lake Dist Lib | 7016 | 1,750,467 | 0 | 143,993 | 1,659 | 1,896,119 | 1,961,413 | 103.4\% |
| Spring Lake, Vlg of | 7015 | 606,028 | 940,362 | 2,374,716 | 2,889 | 3,923,995 | 3,230,046 | 82.3\% |
| Springfield, City of | 1303 | 974,327 | 1,310,765 | 8,060,351 | 30,240 | 10,375,683 | 6,940,505 | 66.9\% |
| St Charles, Vlg of | 7308 | 1,203,812 | 64,973 | 3,110,161 | 0 | 4,378,946 | 2,544,413 | 58.1\% |
| St Clair HC | 7715 | 10,743 | 0 | 790,486 | 0 | 801,229 | 364,984 | 45.6\% |
| St Clair Shores HC | 5007 | 689,605 | 408,765 | 1,407,525 | 4,559 | 2,510,454 | 1,469,458 | 58.5\% |
| St Clair, City of | 7703 | 4,700,198 | 612,537 | 17,233,097 | 0 | 22,545,832 | 12,968,260 | 57.5\% |
| St lgnace, City of | 4904 | 4,671,919 | 398,179 | 6,909,125 | 569 | 11,979,792 | 7,390,244 | 61.7\% |
| St Johns, City of | 1902 | 3,827,162 | 221,336 | 13,949,922 | 95 | 17,998,515 | 8,648,336 | 48.1\% |
| St Joseph Co | 7803 | 17,265,190 | 3,528,339 | 23,853,198 | 41,160 | 44,687,887 | 41,940,693 | 93.9\% |
| St Louis HC | 2908 | 786,238 | 0 | 252,095 | 0 | 1,038,333 | 924,356 | 89.0\% |
| St Louis, City of | 2902 | 1,772,464 | 151,159 | 5,940,681 | 499 | 7,864,803 | 6,129,234 | 77.9\% |
| Stambaugh Twp | 3615 | 117,897 | 0 | 43,447 | 0 | 161,344 | 97,738 | 60.6\% |
| Standish, City of | 0601 | 126,833 | 68,482 | 2,541,646 | 0 | 2,736,961 | 1,753,414 | 64.1\% |
| Stanton, City of CLD | 5903 | 0 | 0 | 55,048 | 0 | 55,048 | 100,551 | 182.7\% |
| Stephenson, City of | 5504 | 601,920 | 0 | 56,970 | 0 | 658,890 | 389,324 | 59.1\% |
| Sterling, VIg of | 0605 | 173,136 | 0 | 40,633 | 0 | 213,769 | 328,282 | 153.6\% |
| Stockbridge, Vlg of | 3316 | 699,813 | 19,465 | 341,950 | 13,937 | 1,075,165 | 669,435 | 62.3\% |
| Sturgis HC | 7805 | 106,964 | 25,165 | 0 | 0 | 132,129 | 138,506 | 104.8\% |
| Summit Twp | 3803 | 6,972,523 | 700,016 | 7,169,582 | 0 | 14,842,121 | 8,945,812 | 60.3\% |
| Sumpter Twp | 8226 | 5,651,316 | 56,296 | 3,091,710 | 23,590 | 8,822,912 | 6,556,765 | 74.3\% |
| Superior Chtr Twp | 8109 | 3,250,197 | 0 | 4,179,774 | 7,374 | 7,437,345 | 5,247,390 | 70.6\% |
| Superior Dist Lib | 1702 | 307,472 | 0 | 523,651 | 5,252 | 836,375 | 1,316,864 | 157.4\% |
| Superiorland Lib Coop | 5208 | 13,028 | 18,438 | 964,139 | 0 | 995,605 | 755,882 | 75.9\% |
| Suttons Bay Bingham Fire A | 4506 | 1,109,833 | 33,628 | 0 | 0 | 1,143,461 | 731,871 | 64.0\% |
| SW Mich Comm Amb Svcs | 1119 | 1,824,478 | 93,709 | 1,083,173 | 39,367 | 3,040,727 | 2,454,952 | 80.7\% |
| SW Shiawassee ESA | 7611 | 883,049 | 39,432 | 62,066 | 3,232 | 987,779 | 1,005,997 | 101.8\% |
| Swan Creek Twp | 7309 | 103,948 | 0 | 697,861 | 444 | 802,253 | 656,483 | 81.8\% |
| Swartz Creek, City of | 2504 | 1,684,597 | 84,998 | 7,009,704 | 2,257 | 8,781,556 | 8,062,895 | 91.8\% |
| Sylvan Lake, City of | 6314 | 1,631,057 | 20,853 | 1,300,830 | 18,918 | 2,971,658 | 2,015,543 | 67.8\% |
| Tawas Police Auth | 3504 | 129,666 | 221,295 | 830,021 | 7,745 | 1,188,727 | 678,180 | 57.1\% |
| Taylor HC | 8231 | 400,240 | 0 | 283,317 | 0 | 683,557 | 649,567 | 95.0\% |
| The Lib Network | 8218 | 3,858,135 | 613,925 | 3,350,977 | 57,646 | 7,880,683 | 5,953,334 | 75.5\% |
| Three Rivers, City of | 7801 | 7,162,272 | 1,671,298 | 9,552,616 | 42,580 | 18,428,766 | 13,091,226 | 71.0\% |
| Tittabawassee, Twp of | 7322 | 2,087,891 | 113,718 | 1,178,890 | 2,353 | 3,382,852 | 3,293,595 | 97.4\% |
| Traverse Area Dist Lib | 2807 | 3,432,086 | 23,286 | 3,771,835 | 11,497 | 7,238,704 | 5,785,135 | 79.9\% |
| Traverse City Light \& Power | 2811 | 7,746,195 | 185,670 | 22,303,340 | 0 | 30,235,205 | 17,770,404 | 58.8\% |
| Traverse City, City of | 2801 | 10,807,228 | 1,140,981 | 27,057,592 | 0 | 39,005,801 | 24,800,735 | 63.6\% |
| Trenton, City of | 8203 | 8,020,400 | 54,290 | 38,666,685 | 1,508 | 46,742,883 | 26,830,376 | 57.4\% |
| Tri-County Aging Consortiun | 3307 | 4,697,142 | 1,131,840 | 3,298,975 | 0 | 9,127,957 | 8,578,103 | 94.0\% |
| Trio Council on Aging Inc CL | 6507 | 0 | 23,129 | 266,979 | 0 | 290,108 | 298,009 | 102.7\% |
| Tuscarora Twp | 1604 | 1,168,493 | 102,123 | 1,084,231 | 4,033 | 2,358,880 | 1,636,588 | 69.4\% |
| Tuscola Co | 7902 | 14,416,025 | 1,447,282 | 18,915,467 | 172,788 | 34,951,562 | 34,607,082 | 99.0\% |
| Tuscola Co CMH | 7907 | 8,868,037 | 549,706 | 6,779,120 | 272,084 | 16,468,947 | 15,191,655 | 92.2\% |
| Tuscola Co Hlth Dpt | 7901 | 4,073,538 | 0 | 7,112,003 | 20,285 | 11,205,826 | 8,366,697 | 74.7\% |
| Tuscola Co MCF | 7906 | 8,777,715 | 843,075 | 6,575,133 | 346,471 | 16,542,394 | 15,514,197 | 93.8\% |
| Tuscola CRC | 7908 | 2,102,870 | 159,421 | 4,024,308 | 0 | 6,286,599 | 4,209,128 | 67.0\% |
| Twin City Pub Safety Auth C | 3610 | 0 | 19,719 | 72,919 | 0 | 92,638 | 110,108 | 118.9\% |
| Ubly, Vlg of | 3212 | 424,516 | 87,352 | 405,246 | 3,378 | 920,492 | 685,813 | 74.5\% |
| Utica, City of | 5008 | 2,774,900 | 0 | 2,867,032 | 21,736 | 5,663,668 | 3,621,473 | 63.9\% |
| Van Buren Co | 8006 | 18,911,096 | 1,550,755 | 16,185,675 | 281,371 | 36,928,897 | 25,259,981 | 68.4\% |
| Van Buren Dist Lib | 8007 | 1,069,905 | 62,690 | 912,652 | 16,591 | 2,061,838 | 1,714,778 | 83.2\% |
| Van Buren Twp | 8236 | 10,454,192 | 1,575,049 | 6,420,407 | 12,627 | 18,462,275 | 14,075,256 | 76.2\% |
| Vassar, City of | 7903 | 1,049,722 | 432,060 | 5,934,852 | 16,395 | 7,433,029 | 4,731,424 | 63.7\% |
| Vevay Twp | 3318 | 120,538 | 11,524 | 498,633 | 16,097 | 646,792 | 359,744 | 55.6\% |
| Vicksburg Dist Lib | 3904 | 28,807 | 1,011 | 104,188 | 0 | 134,006 | 79,514 | 59.3\% |
| Vicksburg, Vlg of | 3902 | 863,561 | 330,907 | 1,739,424 | 0 | 2,933,892 | 1,996,477 | 68.0\% |
| Vienna, Chtr Twp of | 2522 | 535,984 | 0 | 1,339,804 | 0 | 1,875,788 | 1,201,282 | 64.0\% |
| W Iron Co Swr Auth | 3612 | 231,017 | 0 | 952,234 | 0 | 1,183,251 | 597,786 | 50.5\% |
| W Mich CMH Sys | 5304 | 1,583,272 | 933,531 | 2,814,002 | 23,165 | 5,353,970 | 4,587,201 | 85.7\% |
| W Mich Shoreline Rgnl Dev | 6110 | 1,073,448 | 116,537 | 2,778,719 | 0 | 3,968,704 | 4,581,834 | 115.4\% |
| W UP Dist Hlth Dept | 3101 | 2,616,621 | 2,184,500 | 9,943,346 | 158 | 14,744,625 | 9,453,693 | 64.1\% |
| Wakefield, City of | 2701 | 1,121,088 | 71,678 | 3,680,193 | 18,281 | 4,891,240 | 2,581,487 | 52.8\% |
| Walker, City of | 4112 | 10,918,723 | 398,233 | 11,943,896 | 0 | 23,260,852 | 13,920,494 | 59.8\% |
| Walled Lake, City of | 6324 | 3,728,328 | 1,045,630 | 9,717,728 | 55,453 | 14,547,139 | 4,484,174 | 30.8\% |
| Washtenaw Co | 8113 | 79,064,142 | 1,969,361 | 27,441,584 | 439,116 | 108,914,203 | 83,021,523 | 76.2\% |



| Municipality Name | Number | Amortization Period(s) for Initial UAL ${ }^{1}$ | Normal Cost | Amortization Payment ${ }^{2}$ | Total Employer Contribution |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 21st Dist Ct | 8243 | 22 | 42,372 | 69,528 | 111,900 |
| 23rd Jud Dist Ct | 8223 | 22 | 24,264 | 66,312 | 90,576 |
| 26th Jud Cir Ct | 0403 | 22 | 50,028 | 24,756 | 74,784 |
| 34th Dist Ct | 8235 | 22 | 182,508 | 259,560 | 442,068 |
| 35th Dist Ct | 8234 | 22 | $(19,680)$ | 141,672 | 121,992 |
| 41 B Dist Ct | 5014 | 22 | 128,616 | 151,476 | 280,092 |
| Addison Fire Dept | 4607 | 22 | 10,188 | 1,944 | 12,132 |
| Adrian, City of | 4601 | 22, 3 | 494,376 | 1,489,728 | 1,984,104 |
| Aitkin Memorial Dist Lib | 7407 | 18 | 0 | 0 | 0 |
| Albion, City of | 1301 | 22, 14, 4, 3 | 113,124 | 59,268 | 172,392 |
| Alcona Co | 0101 | 22, 7 | 208,632 | 437,700 | 646,332 |
| Alger Co | 0203 | 22, 12, 3 | 187,512 | 264,288 | 451,800 |
| Alger CRC | 0201 | 22 | 105,516 | 224,880 | 330,396 |
| Algonac, City of | 7707 | 22 | 48,984 | 92,544 | 141,528 |
| Allegan Co | 0302 | 17, 4, 3 | 328,512 | 1,066,620 | 1,395,132 |
| Allegan CRC | 0301 | 22 | 149,604 | 669,264 | 818,868 |
| Allegan, City of | 0309 | 22, 4 | 89,376 | 114,492 | 203,868 |
| Alma, City of | 2901 | 22, 7, 3 | 177,072 | 507,300 | 684,372 |
| Almont, VIg of | 4407 | 22 | 41,364 | 51,300 | 92,664 |
| Alpena Co | 0401 | 22, 8 | 253,668 | 546,300 | 799,968 |
| Alpena CRC | 0402 | 15 | 72,900 | 336,204 | 409,104 |
| Alpena HC | 0406 | 22 | 41,220 | $(2,448)$ | 38,772 |
| Alpena Sr Citizens Ctr | 0404 | 8 | 0 | 95,616 | 95,616 |
| Alpha, Vlg of | 3614 | 22 | 1,560 | $(2,100)$ | 0 |
| Antrim Co | 0502 | 22, 20 | 899,904 | 872,388 | 1,772,292 |
| Antrim CRC | 0501 | 22 | 182,016 | 478,944 | 660,960 |
| Arenac Co | 0603 | 18, 6, 3 | 121,728 | 637,164 | 758,892 |
| Arenac CRC | 0604 | 22 | 19,080 | 289,452 | 308,532 |
| Ash Twp | 5804 | 22 | 21,792 | 28,476 | 50,268 |
| Au Gres, City of | 0602 | 8 | 5,880 | 90,984 | 96,864 |
| Auburn, City of | 0905 | 20 | 192 | 70,872 | 71,064 |
| Bad Axe Area Dist Lib | 3214 | 22 | 4,452 | 1,572 | 6,024 |
| Bad Axe, City of | 3211 | 22 | 51,528 | 235,008 | 286,536 |
| Bancroft, Vlg of | 7610 | 20 | 0 | 4,620 | 4,620 |
| Bangor, City of | 8003 | 22 | 23,124 | $(63,648)$ | 0 |
| Baraga Co | 0702 | 22 | 131,628 | 158,940 | 290,568 |
| Baraga Co Memorial Hosp | 0703 | 8, 3 | 140,904 | 1,425,300 | 1,566,204 |
| Baraga CRC | 0701 | 22 | 50,892 | 267,888 | 318,780 |
| Baraga, Vlg of | 0704 | 22 | 56,052 | 148,308 | 204,360 |
| Baroda Lake Twp Police Dept | 1109 | 22 | 22,356 | 5,160 | 27,516 |
| Barry Co | 0802 | 22, 5, 3 | 1,335,528 | 1,052,736 | 2,388,264 |
| Barry Co CMH Auth | 0804 | 10 | 322,164 | 176,820 | 498,984 |
| Barry Eaton Dist Hlth Dept | 2303 | 22 | 100,020 | 378,024 | 478,044 |
| Barton Hills, Vlg of | 8107 | 16 | 5,796 | 19,740 | 25,536 |
| Bates Twp | 3616 | 16 | 0 | 13,560 | 13,560 |
| Bath Chtr Twp | 1909 | 22 | 42,036 | 114,732 | 156,768 |
| Battle Creek, City of | 1302 | 22, 18, 14 | 1,629,360 | 4,001,052 | 5,661,396 |
| Bay Area Trans Auth | 2810 | 22 | 315,552 | $(4,512)$ | 311,040 |
| Bay City HC | 0906 | 3 | 48,528 | 6,420 | 54,948 |
| Bay City, City of | 0901 | 22, 18, 3 | 164,016 | 5,619,924 | 5,783,940 |
| Bay Metro Trans Auth | 0907 | 22 | 401,604 | 531,960 | 933,564 |
| Beecher Metro Dist Swg\&Wtr | 2501 | 17, 5 | 46,560 | 286,488 | 333,048 |
| Belding, City of | 3410 | 22 | 18,696 | 81,108 | 99,804 |
| Belleville, City of | 8213 | 22 | 65,184 | 282,504 | 347,688 |
| Benton Harbor, City of | 1120 | 20 | 49,392 | 1,272,360 | 1,321,752 |
| Benzie Co | 1003 | 22 | 221,976 | 411,132 | 633,108 |
| Benzie Co Comm on Aging | 1006 | 22 | 40,512 | 29,160 | 69,672 |
| Benzie Co MCF (The Maples) | 1004 | 22 | 197,172 | 112,560 | 309,732 |
| Benzie CRC | 1001 | 22 | 76,116 | 324,516 | 400,632 |
| Benzie Shores Dist Lib | 1005 | 22 | 4,248 | $(2,352)$ | 1,896 |
| Benzie Trans Auth | 1007 | 22 | 45,528 | $(11,544)$ | 33,984 |
| Benzie/Leelanau Dist Hith Dept | 4504 | 7 | 20,484 | 37,272 | 57,756 |
| Berkley, City of | 6304 | 22 | 199,560 | 571,572 | 806,808 |
| Berrien Springs, Vlg of | 1102 | 22 | 27,840 | 3,228 | 31,068 |
| Bessemer, City of | 2702 | 22 | 54,096 | 57,204 | 111,300 |
| Beverly Hills, VIg of | 6321 | 19, 17 | 265,776 | 225,624 | 491,400 |
| Big Rapids HC | 5406 | 8 | 13,212 | 62,724 | 75,936 |
| Big Rapids, City of | 5402 | 12, 8 | 44,160 | 581,340 | 625,500 |
| Bingham Farms, Vlg of | 6332 | 22 | 12,156 | 3,168 | 15,324 |
| Birch Run, VIg of | 7315 | 22 | 19,680 | 10,440 | 30,120 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix C

| Municipality Name | Number | Amortization Period(s) for Initial UAL ${ }^{1}$ | Normal Cost | Amortization Payment ${ }^{2}$ | Total Employer Contribution |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bishop Intl Arpt Auth | 2507 | 22 | 212,664 | 157,008 | 369,672 |
| Blackman Chtr Twp | 3806 | 22 | $(24,288)$ | 347,232 | 322,944 |
| Blissfield, Vlg of | 4606 | 22 | 116,076 | 35,136 | 151,212 |
| Bloomfield Hills, City of | 6302 | 18, 6, 4 | 238,092 | 483,180 | 721,272 |
| Blue Water Area Trans Comm | 7709 | 22 | 333,720 | 178,392 | 512,112 |
| Boyne City HC | 1508 | 22 | 17,268 | 31,428 | 48,696 |
| Boyne City, City of | 1506 | 22, 6 | 51,828 | 381,528 | 433,356 |
| Branch Co | 1205 | 22, 20, 19 | 438,864 | 975,996 | 1,414,860 |
| Branch-Hillsdale-St Joseph Com | 1202 | 19 | 162,720 | 141,840 | 304,560 |
| Brandon Chtr Twp of | 6333 | 22 | 103,056 | 99,828 | 203,196 |
| Breckenridge,Vlg of | 2906 | 22 | 10,176 | 97,776 | 107,952 |
| Bridgeport Chtr Twp | 7307 | 22 | 156,072 | 215,904 | 371,976 |
| Bridgman, City of | 1110 | 22 | 44,724 | 33,936 | 78,660 |
| Brighton Area Fire Auth | 4715 | 16 | 8,460 | 288 | 8,748 |
| Brighton, Chtr Twp of | 4711 | 22 | 28,728 | 9,504 | 38,232 |
| Brighton, City of | 4704 | 22 | 260,052 | 590,148 | 850,200 |
| Britton, Vlg of | 4604 | 22 | 1,404 | $(23,724)$ | 0 |
| Bronson, City of | 1204 | 22 | $(15,024)$ | 62,340 | 47,316 |
| Brooklyn, Vlg of | 3801 | 22 | 23,868 | 25,356 | 49,224 |
| Brownstown, Chtr Twp of | 8247 | 22 | 470,028 | 500,004 | 970,032 |
| Buchanan Dist Lib | 1108 | 22 | 6,972 | $(3,360)$ | 3,612 |
| Buchanan, City of | 1101 | 22, 3 | 88,248 | 97,380 | 185,628 |
| Buena Vista Chtr Twp | 7312 | 22, 3 | 164,616 | 260,184 | 424,800 |
| Burton, City of | 2508 | 22 | 230,808 | 2,132,580 | 2,363,388 |
| Butman Twp CLD | 2604 |  | 0 | 4,788 | 4,788 |
| Cadillac, City of | 8301 | 22, 20 | 259,584 | 184,488 | 449,940 |
| Cadillac/Wexford Trans Auth | 8305 | 22 | 71,208 | 45,612 | 116,820 |
| Calhoun Co | 1311 | 22, 20, 17 | 879,156 | 2,621,784 | 3,500,940 |
| Calhoun Co Conso Dispatch Auth | 1316 | 15 | 56,352 | $(21,912)$ | 34,440 |
| Canton Pub Lib | 8232 | 22 | 52,740 | $(1,548)$ | 51,192 |
| Canton, Chtr Twp of | 8233 | 22, 18, 17 | 1,939,896 | 3,076,728 | 5,016,624 |
| Capac, VIg of | 7705 | 22, 19 | 13,644 | 159,588 | 173,232 |
| Capital Area Dist Lib | 3317 | 22 | 267,864 | 78,636 | 346,500 |
| Capital Region Arprt Auth | 3305 | 22, 20 | 255,144 | 286,932 | 542,076 |
| Carleton, Vlg of | 5805 | 22 | 15,804 | 26,196 | 42,000 |
| Carrollton Twp | 7320 | 22 | 79,680 | 69,552 | 149,232 |
| Cascade Chtr Twp | 4110 | 22 | 194,688 | 140,352 | 335,040 |
| Caseville, City of | 3207 | 22 | 41,940 | 47,496 | 89,436 |
| Caspian, City of | 3608 | 19 | 10,632 | 51,636 | 62,268 |
| Cass Co | 1402 | 22 | 463,956 | 599,796 | 1,063,752 |
| Cass Co MCF | 1403 | 22 | 121,008 | 23,028 | 144,036 |
| Cass Dist Lib | 1404 | 22 | 22,728 | 4,692 | 27,420 |
| Cedar Springs, City of | 4105 | 22, 18 | 25,668 | 45,060 | 70,728 |
| Center Line, City of | 5001 | 22 | 24,648 | 293,388 | 319,152 |
| Central Lake, Vlg of | 0504 | 22 | 18,504 | 456 | 18,960 |
| Central Mich Dist Hlth Dept | 3705 | 7 | 120,072 | 1,076,436 | 1,196,508 |
| Charlevoix Co | 1503 | 22, 19 | 1,100,484 | 823,308 | 1,923,792 |
| Charlevoix CRC | 1501 | 22 | 157,524 | 179,796 | 337,320 |
| Charlevoix, City of | 1505 | 22 | 136,836 | 330,252 | 467,088 |
| Charlotte Dist Lib | 2309 | 22 | 20,784 | 35,784 | 56,568 |
| Charlotte, City of | 2301 | 22 | 168,948 | 626,268 | 795,216 |
| Cheboygan Co | 1603 | 22 | 500,220 | 533,916 | 1,034,136 |
| Cheboygan CRC | 1601 | 22, 19 | 168,108 | 792,000 | 960,108 |
| Cheboygan, City of | 1602 | 22 | 92,160 | 266,664 | 358,824 |
| Chelsea Area Fire Auth | 8118 | 22 | 29,064 | $(1,860)$ | 27,204 |
| Chelsea, City of | 8103 | 3 | 22,116 | 893,664 | 915,780 |
| Chesaning, Vlg of | 7313 | 22, 20, 4 | 6,648 | 223,860 | 230,592 |
| Chesterfield Twp | 5009 | 22 | 674,016 | 642,540 | 1,316,556 |
| Chesterfield Twp Lib | 5010 | 22 | 17,076 | $(31,020)$ | 0 |
| Chikaming Twp | 1112 | 22 | 27,444 | 51,324 | 78,768 |
| Chippewa Co | 1703 | 22, 20 | 622,620 | 975,564 | 1,598,484 |
| Chippewa CRC | 1704 | 22 | 304,704 | 658,164 | 962,868 |
| Chippewa River Dist Lib | 3707 | 22 | 58,572 | 26,568 | 85,140 |
| Chocolay, Chtr Twp of | 5218 | 5 | 29,232 | $(3,408)$ | 25,824 |
| Clare Co | 1802 | 20 | 353,736 | 479,580 | 833,316 |
| Clare Co Trans Auth | 1806 | 22 | 15,804 | 6,264 | 22,068 |
| Clare CRC | 1801 | 22 | 117,696 | 270,432 | 388,128 |
| Clare, City of | 1804 | 22 | 95,100 | 233,004 | 328,104 |
| Clawson, City of | 6305 | 11, 8 | 84,960 | 1,725,984 | 1,810,944 |
| Clay Twp | 7706 | 22 | 125,592 | 242,748 | 368,844 |
| Clearwater Twp | 4005 | 22 | 5,148 | 1,836 | 6,984 |
| Clinton Co | 1903 | 19, 18, 12, 10, 8 | 672,924 | 292,476 | 965,400 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix C

|  |  | Amortization |  |  | Total |
| :--- | :---: | :---: | ---: | ---: | ---: |
|  |  | Period(s) for | Normal | Amortization | Employer |
| Municipality Name | Number | Initial UAL |  | Cost | Payment |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix C

| Municipality Name | Number | Amortization Period(s) for Initial UAL ${ }^{1}$ | Normal <br> Cost | Amortization Payment ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Elkton, Vlg of | 3206 | 3 | 1,836 | 42,456 | 44,292 |
| Elsie, Vlg of CLD | 1906 |  | 0 | 8,964 | 8,964 |
| Emmet CRC | 2401 | 8 | 59,400 | 650,280 | 709,680 |
| Emmett, Chtr Twp | 1310 | 22 | 18,132 | 81,912 | 100,044 |
| Erie, Twp of | 5812 | 22 | 8,952 | $(1,536)$ | 7,416 |
| Escanaba, City of | 2101 | 22, 13, 12, 11 | 188,760 | 1,589,592 | 1,778,352 |
| Essexville, City of | 0903 | 22, 17, 15, 3 | 68,700 | 208,776 | 277,476 |
| Evart Local Dev Finance Auth | 6706 | 22 | 3,864 | 18,948 | 22,812 |
| Evart, City of | 6705 | 22 | 34,344 | 31,560 | 65,904 |
| Farmington Cmnty Lib | 6319 | 3 | 22,332 | 2,508 | 24,840 |
| Farmington, City of | 6343 | 20, 12, 10 | 363,180 | 370,260 | 733,440 |
| Farwell, Vlg of | 1805 | 22 | 12,120 | 11,292 | 23,412 |
| Fenton, City of | 2505 | 22, 7, 3 | 275,256 | 473,244 | 748,500 |
| Ferndale HC | 6345 | 22 | 8,316 | 22,704 | 31,020 |
| Ferrysburg, City of | 7106 | 18 | 20,424 | 45,228 | 65,652 |
| Flat Rock, City of | 8212 | 22 | 159,672 | 930,072 | 1,105,728 |
| Flint Pub Lib | 2518 | 22 | 62,820 | $(22,644)$ | 40,176 |
| Flint, Chtr Twp of | 2512 | 22 | 193,692 | 803,988 | 997,680 |
| Flint, City of | 2530 | 27 | 969,144 | 21,371,004 | 22,340,148 |
| Flushing, Chtr Twp of | 2515 | 22 | 38,364 | 135,516 | 173,880 |
| Flushing, City of | 2502 | 22, 10 | 115,056 | 823,404 | 938,460 |
| Forsyth Twp | 5212 | 22, 10 | 89,292 | 222,048 | 311,340 |
| Fowler, Vlg of | 1904 | 22 | 13,236 | 6,912 | 20,148 |
| Fowlerville Dist Lib | 4710 | 22 | 16,164 | 3,036 | 19,200 |
| Fowlerville, VIg of | 4705 | 20 | 8,808 | 47,712 | 56,520 |
| Frankenmuth Wickson Dist Lib | 7323 | 18 | 5,364 | 3,060 | 8,424 |
| Frankenmuth, City of | 7306 | 22 | 106,944 | 298,860 | 405,804 |
| Frankfort, City of | 1002 | 22 | 40,404 | 119,724 | 160,128 |
| Franklin, Vlg of | 6323 | 22 | 50,460 | 214,728 | 283,512 |
| Fraser, City of | 5003 | 22, 3 | 678,060 | 2,005,080 | 2,683,140 |
| Fremont Area Dist Lib | 6209 | 22 | 31,128 | 25,464 | 56,592 |
| Fremont, City of | 6203 | 22 | 168,804 | 355,668 | 524,472 |
| Gaastra, City of | 3617 | 22 | 6,564 | 8,496 | 15,060 |
| Garden City, City of | 8255 | 22, 20, 11 | 541,536 | 2,213,040 | 2,754,576 |
| Gaylord, City of | 6903 | 22 | 165,108 | 396,576 | 561,684 |
| Genesee Chtr Twp | 2510 | 22 | 226,884 | 627,336 | 854,220 |
| Genoa Twp | 4713 | 22 | 22,308 | 5,400 | 27,708 |
| Gerald R Ford Intl Airport Aut | 4116 | 23 | 533,724 | $(386,868)$ | 146,856 |
| Gladstone, City of | 2106 | 12, 8 | 59,892 | 879,912 | 939,804 |
| Gladwin City HC | 2608 | 22 | 37,764 | 67,620 | 105,384 |
| Gladwin Co | 2602 | 22 | 289,836 | 495,684 | 785,520 |
| Gladwin Co Dist Lib | 2607 | 22 | 17,040 | 7,260 | 24,300 |
| Gladwin CRC | 2601 | 22 | 108,468 | 512,604 | 621,072 |
| Gladwin, City of | 2605 | 22 | 57,636 | 11,736 | 69,372 |
| Gogebic-Iron WWTR Auth | 2703 | 22 | 39,444 | 64,104 | 103,548 |
| Grand Beach, Vlg of | 1117 | 22 | 30,492 | 204 | 30,696 |
| Grand Blanc Chtr Twp | 2511 | 22, 4 | 213,192 | 779,364 | 992,556 |
| Grand Blanc, City of | 2513 | 20 | 116,616 | 1,524 | 118,140 |
| Grand Haven, City of | 7010 | 22, 5, 4 | 680,568 | 1,805,916 | 2,486,484 |
| Grand Ledge Area Dist. Library | 2316 | 22 | 5,052 | 72 | 5,124 |
| Grand Ledge Area ESA | 2310 | 22 | 52,824 | 12,360 | 65,184 |
| Grand Ledge, City of | 2312 | 22 | 23,580 | 91,212 | 114,792 |
| Grand Rapids HC | 4108 | 3 | 8,856 | 194,268 | 203,124 |
| Grand Traverse Co | 2803 | 19, 11 | 372,612 | 5,733,552 | 6,106,164 |
| Grand Traverse CRC | 2802 | 3 | 8,688 | 801,492 | 810,180 |
| Grand Traverse Pavilions | 2809 | 22 | 785,544 | 574,584 | 1,360,128 |
| Grandville, City of | 4102 | 8 | 63,420 | 1,147,428 | 1,210,848 |
| Gratiot Co | 2905 | 3 | 197,232 | 1,563,468 | 1,760,700 |
| Gratiot CRC | 2903 | 22 | 187,284 | 493,008 | 680,292 |
| Grayling, City of | 2003 | 17, 15, 6 | 32,688 | 255,312 | 288,000 |
| Green Oak Chtr Twp | 4708 | 22 | 97,296 | 214,656 | 311,952 |
| Greenville, City of | 5906 | 22 | $(51,576)$ | 116,832 | 65,256 |
| Grosse lle Twp | 8207 | 22 | 426,036 | 919,200 | 1,345,236 |
| Grosse Pointe Park, City of | 8201 | 22 | 339,168 | 1,403,796 | 1,742,964 |
| Grosse Pointe-Clinton Ref CLD | 5004 |  | 0 | 92,496 | 92,496 |
| Groveland Twp | 6335 | 22 | 38,724 | $(14,160)$ | 24,828 |
| Hackley Pub Lib | 6114 | 22 | 24,276 | 5,904 | 30,180 |
| Hamburg Twp | 4709 | 22 | 79,884 | 107,028 | 186,912 |
| Hamtramck HC | 8250 | 22 | 119,964 | 61,668 | 181,632 |
| Hamtramck, City of | 8205 | 22, 14, 8 | 81,180 | 4,584,660 | 4,666,848 |
| Hancock, City of | 3107 | 22 | 53,688 | 102,072 | 155,760 |
| Harbor Beach, City of | 3201 | 22, 16, 10 | 61,596 | 163,188 | 224,784 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix C

| Municipality Name | Number | Amortization Period(s) for Initial UAL ${ }^{1}$ | Normal Cost | Amortization Payment ${ }^{2}$ | Total Employer Contribution |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Harbor Springs Area Swg Auth | 2406 | 22 | 24,084 | 8,532 | 32,616 |
| Harbor Springs, City of | 2405 | 22 | 72,012 | 155,268 | 227,280 |
| Harper Woods, City of | 8260 | 23, 21 | 234,828 | 2,032,716 | 2,267,544 |
| Harrison Dist Lib | 1807 | 22 | 5,580 | 6,084 | 11,664 |
| Harrison, City of | 1803 | 22 | 44,352 | 70,032 | 114,384 |
| Hartland Deerfield Fire Auth | 4716 | 18 | 32,244 | 4,884 | 37,128 |
| Hastings, City of | 0801 | 22, 15 | 155,580 | 537,504 | 694,476 |
| Hazel Park, City of | 6336 | 22 | 407,976 | 2,344,092 | 2,752,068 |
| Helen Newberry Joy Hosp | 4805 | 8 | 75,732 | 776,100 | 851,832 |
| Henika Dist Lib | 0310 | 22 | 4,896 | $(3,192)$ | 1,704 |
| Herrick Dist Lib | 7012 | 22 | 136,812 | 128,628 | 265,440 |
| Hesperia, Vlg of | 6214 | 19 | 0 | 0 | 0 |
| Hiawatha Bhvrl Hlth | 1707 | 15, 11, 9, 8 | 67,200 | 574,644 | 641,844 |
| Hillssale Co | 3005 | 22 | $(58,692)$ | 228,516 | 169,824 |
| Hillsdale CRC | 3004 | 22 | 79,164 | 301,260 | 380,424 |
| Hillsdale HC | 3007 | 22 | 13,356 | $(2,844)$ | 10,512 |
| Hillsdale, City of | 3001 | 22, 19, 3 | 238,548 | 220,908 | 575,280 |
| Hlth Source of Saginaw | 7311 | 15, 14, 12, 10, 3 | 400,296 | 1,179,168 | 1,579,464 |
| Holland Area Cmnty Pool Auth | 7014 | 19, 18 | 33,060 | $(1,992)$ | 31,068 |
| Holland Cmnty Hosp CLD | 7006 |  | 0 | 46,968 | 46,968 |
| Holland, City of | 7001 | 22, 10, 8, 4 | 871,980 | 1,854,132 | 2,726,112 |
| Holly, Vlg of | 6317 | 22 | 171,384 | 458,040 | 659,520 |
| Homer, Vlg of | 1304 | 22 | 35,340 | 18,480 | 53,820 |
| Houghton Co | 3102 | 22, 20 | 339,660 | 756,408 | 1,096,068 |
| Houghton CRC | 3103 | 22 | 68,988 | 107,124 | 176,112 |
| Houghton Lake Pub Lib | 7203 | 22 | 29,952 | 336 | 30,288 |
| Houghton, City of | 3109 | 10 | 143,940 | 69,144 | 213,084 |
| Howard City, VIg of | 5902 | 6 | 7,200 | 34,440 | 41,640 |
| Howard Twp | 1106 | 22 | 5,688 | 2,088 | 7,776 |
| Howell Area Fire Auth | 4714 | 22, 14 | 43,500 | 3,144 | 46,644 |
| Howell, City of | 4702 | 22 | 278,724 | 713,616 | 992,340 |
| Howell-Carnegie Dist Lib | 4707 | 22 | 42,264 | 4,560 | 46,824 |
| Hudsonville, City of | 7004 | 12, 7, 3 | 6,624 | 158,004 | 164,628 |
| Huntington Woods, City of | 6303 | 22, 7, 3 | 145,128 | 1,230,744 | 1,375,872 |
| Hurley Med Ctr | 2521 | 22, 17, 11, 9 | 1,317,036 | 11,739,732 | 13,056,768 |
| Huron Behavioral Health | 3215 | 22 | 312,240 | 113,352 | 425,592 |
| Huron Chtr Twp | 8224 | 22 | 165,672 | 458,232 | 661,512 |
| Huron Co | 3204 | 22 | 1,271,304 | 1,767,492 | 3,038,796 |
| Huron CRC | 3202 | 22 | 222,168 | 573,900 | 796,068 |
| Imlay City, City of | 4404 | 22 | 91,800 | 200,508 | 292,308 |
| Independence Twp | 6328 | 22 | 28,248 | 258,996 | 287,244 |
| Indianfields Twp CLD | 7905 |  | 0 | $(6,156)$ | 0 |
| Ingham Co | 3303 | 22, 20, 19, 18, 15, 3 | 4,846,404 | 10,515,468 | 15,384,192 |
| Interurban Trans Auth | 0308 | 22 | 21,948 | 13,980 | 35,928 |
| Ionia Cmnty Lib | 3412 | 22 | 21,336 | 15,564 | 36,900 |
| lonia Co | 3408 | 22 | 190,848 | 116,772 | 307,620 |
| lonia CRC | 3404 | 22 | 108,072 | 749,460 | 857,532 |
| Ionia HC | 3406 | 22 | 14,196 | 21,888 | 36,084 |
| lonia, City of | 3403 | 22, 3 | 325,128 | 806,688 | 1,131,816 |
| losco Co | 3501 | 22, 18, 13, 12, 9, 8 | 370,068 | 716,124 | 1,086,192 |
| losco CRC | 3502 | 15 | 35,748 | 277,476 | 313,224 |
| Iron Co | 3606 | 22, 19, 8, 6 | 716,868 | 928,392 | 1,645,260 |
| Iron Co HC | 3611 | 22 | 16,584 | 26,028 | 42,612 |
| Iron CRC | 3602 | 22 | 108,600 | 511,836 | 620,436 |
| Iron Mountain, City of | 2201 | 22, 20 | 65,868 | 614,712 | 680,580 |
| Iron Mountain-Kingsford Swg | 2205 | 22 | 14,712 | 34,296 | 49,008 |
| Iron River, City of | 3601 | 22 | 64,812 | 284,964 | 349,776 |
| Ironwood, City of | 2706 | 22 | 171,252 | 682,272 | 853,524 |
| Isabella Co | 3703 | 18, 4, 3 | 400,356 | 2,355,936 | 2,756,292 |
| Isabella Co Trans Comm | 3709 | 22 | 20,136 | 29,940 | 50,076 |
| Isabella CRC | 3702 | 22 | 79,764 | 283,872 | 373,308 |
| Ishpeming Area Joint Wwtr Trtm | 5207 | 22 | 24,084 | 4,728 | 28,812 |
| Ishpeming Twp | 5216 | 22 | 18,300 | 10,224 | 28,524 |
| Ishpeming, City of | 5204 | 22 | 135,828 | 544,488 | 680,316 |
| Ithaca, City of | 2904 | 12, 11 | 15,840 | 217,632 | 233,472 |
| Jackson Dist Lib | 3802 | 22 | 112,572 | 67,008 | 179,580 |
| Jackson Trans Auth | 3805 | 22 | 113,964 | 121,392 | 235,356 |
| Jordan Valley Dist Lib | 1507 | 22 | 3,768 | 1,800 | 5,568 |
| Jordan Valley EMS Auth | 1509 | 22 | 18,324 | 8,340 | 26,664 |
| Kalamazoo Lake Swr \& Wtr Auth | 0306 | 22 | 30,060 | 32,880 | 62,940 |
| Kalamazoo Pub Lib | 3903 | 22 | 307,884 | 81,852 | 389,736 |
| Kalamazoo, Chtr Twp of | 3907 | 22 | 223,740 | 195,048 | 418,788 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix C

| Municipality Name | Number | Amortization Period(s) for Initial UAL ${ }^{1}$ | Normal Cost | Amortization Payment ${ }^{2}$ | Total Employer Contribution |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Kalkaska Co | 4003 | 22 | 328,056 | 392,688 | 720,744 |
| Kalkaska CRC | 4002 | 22 | 75,768 | 400,680 | 476,448 |
| Kalkaska Pub Trans Auth | 4004 | 20 | 38,412 | 17,340 | 55,752 |
| Kalkaska, Vlg of | 4001 | 22 | 45,048 | 197,004 | 242,052 |
| Keego Harbor, City of | 6322 | 22 | 17,652 | 153,552 | 173,328 |
| Kent CRC | 4111 | 3 | 0 | 37,800 | 37,800 |
| Keweenaw Co | 4202 | 22 | 44,148 | 64,320 | 108,468 |
| Keweenaw CRC | 4201 | 22 | 86,964 | 246,204 | 333,168 |
| Kinde, VIg of | 3209 | 22 | 1,500 | $(2,028)$ | 0 |
| Kingsford, City of | 2202 | 22, 18 | 50,760 | 206,832 | 257,592 |
| L.M.A.S. Dist Hlth Dept | 4803 | 22 | 94,992 | 121,104 | 216,096 |
| Lac Vieux Desert Band | 8402 | 22 | 20,400 | 3180 | 23,580 |
| Laingsburg, City of | 7608 | 22 | 9,732 | 3,888 | 13,620 |
| Lake Co | 4301 | 22 | 520,164 | 322,476 | 842,640 |
| Lake CRC | 4302 | 22 | 106,992 | 355,524 | 462,516 |
| Lake Linden, VIg of | 3105 | 22, 17 | 25,188 | 45,708 | 70,896 |
| Lake Odessa, Vlg of | 3402 | 22 | 18,540 | $(2,988)$ | 15,552 |
| Lake Orion, Vlg of | 6318 | 12, 7 | 14,004 | 112,068 | 126,072 |
| Lakeland Lib Coop | 4106 | 22 | 18,684 | 9,540 | 28,224 |
| Lakeshore Coordinating Council | 7007 |  | 0 | 23,892 | 23,892 |
| Lakeview Cemetery | 2407 | 22 | 6,384 | 564 | 6,948 |
| L'Anse, Vlg of | 0705 | 22 | 112,008 | 244,320 | 356,328 |
| Lansing Chtr Twp | 3320 | 22 | 175,056 | 80,760 | 255,816 |
| Lansing HC | 3311 | 22 | 34,800 | 77,064 | 111,864 |
| Lapeer Co | 4403 | 22 | 2,348,256 | 1,333,584 | 3,681,840 |
| Lapeer CRC | 4402 | 22, 3 | 127,596 | 586,632 | 714,228 |
| Lapeer Dist Lib | 4410 | 22 | 23,244 | 109,356 | 132,600 |
| Lapeer, City of | 4401 | 22 | 498,420 | 591,228 | 1,089,648 |
| Lathrup VIg, City of | 6311 | 17 | 44,244 | 172,896 | 217,140 |
| Laurium, Vlg of | 3104 | 22 | 19,344 | 73,308 | 92,652 |
| Lawrence, VIg of | 8004 | 7, 4 | 0 | 7,260 | 7,260 |
| Leelanau Co | 4501 | 22 | 548,964 | 303,576 | 852,540 |
| Leelanau CRC | 4503 | 18 | 47,640 | 136,092 | 183,732 |
| Leoni Twp | 3804 | 22, 12 | 32,748 | 164,220 | 196,968 |
| Leslie Twp | 3319 | 22 | 7,356 | 4,476 | 11,832 |
| Leslie, City of | 3313 | 22 | 28,572 | 38,976 | 67,548 |
| Lexington, Vlg of | 7708 | 20, 11 | 14,748 | 74,520 | 89,268 |
| Lima Twp | 8112 | 22 | 12,864 | $(7,620)$ | 5,244 |
| Lincoln Park, City of | 8244 | 22, 15 | 137,028 | 2,442,552 | 2,579,580 |
| Litchfield, City of | 3006 | 22 | 24,780 | 43,548 | 68,328 |
| Livingston Co | 4703 | 22, 7, 4 | 1,909,656 | 2,900,268 | 4,809,924 |
| Livingston Co CMH Auth | 4712 | 20 | 348,468 | 214,356 | 562,824 |
| Livingston CRC | 4701 | 22 | 353,028 | 348,336 | 701,364 |
| Looking Glass Rgnl Fire CLD | 2311 |  | 0 | 5,472 | 5,472 |
| Loutit Dist Lib | 7013 | 22 | 57,612 | 28,392 | 86,004 |
| Lowell, City of | 4104 | 22 | 155,664 | 365,208 | 520,872 |
| Luce Co | 4804 | 22 | 100,140 | 229,812 | 329,952 |
| Luce Co Amb Svs | 4806 | 20 | 25,776 | (792) | 24,984 |
| Luce CRC | 4801 | 22 | 80,256 | 456,252 | 536,508 |
| Ludington, City of | 5302 | 22 | 239,364 | 425,208 | 664,572 |
| Luna Pier, City of | 5802 | 22, 17 | 11,868 | 201,024 | 212,892 |
| Lyons, Vlg of | 3411 | 22 | 0 | 408 | 408 |
| Mackinac Co | 4901 | 22, 6 | 129,708 | 765,900 | 895,608 |
| Mackinac Co HC | 4905 | 14 | 0 | 4,440 | 4,440 |
| Mackinac CRC | 4903 | 22, 7 | 58,668 | 513,228 | 571,896 |
| Mackinac Straits Hosp\&Hlth Ctr | 4902 | 22, 3 | 896,136 | 512,772 | 1,408,908 |
| Mackinaw City, Vlg of | 1606 | 22 | 18,624 | 11,568 | 30,192 |
| Madison Heights, City of | 6308 | 15, 12 | 216,468 | 0 | 216,468 |
| Madison, Chtr Twp of | 4605 | 22 | 24,600 | 25,932 | 50,532 |
| Manistee Co | 5101 | 22, 17 | 661,716 | 1,171,476 | 1,833,192 |
| Manistee CRC | 5103 | 22, 4 | 125,820 | 437,892 | 563,712 |
| Manistee HC | 5107 | 22 | 5,748 | 576 | 6,324 |
| Manistee, City of | 5105 | 22 | 228,132 | 233,028 | 461,160 |
| Manistique, City of | 7504 | 22, 18 | 222,324 | 546,852 | 769,176 |
| Manlius Twp | 0311 | 22 | 3,276 | 4,440 | 7,716 |
| Manton, City of | 8304 | 22 | 14,292 | 87,420 | 101,712 |
| Marenisco Twp | 2704 | 22 | 17,148 | 7,608 | 24,756 |
| Marine City, City of CLD | 7704 |  | 0 | 17,460 | 17,460 |
| Marion, Vlg of | 6704 | 22, 15 | 5,868 | 13,152 | 19,020 |
| Marlette, City of | 7405 | 22 | 47,400 | 40,836 | 88,236 |
| Marquette Brd of Light \& Power | 5209 | 22, 3 | 170,460 | 1,227,912 | 1,398,372 |
| Marquette Chtr Twp | 5215 | 22 | 88,092 | 53,700 | 141,792 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix C

| Municipality Name | Number | Amortization Period(s) for Initial UAL ${ }^{1}$ | Normal Cost | Amortization Payment ${ }^{2}$ | Total Employer Contribution |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Marquette Co | 5202 | 22, 20, 17, 11, 9, 8 | 747,996 | 3,517,020 | 4,265,016 |
| Marquette Co Solid Waste Mgmt | 5213 | 22, 19 | 70,872 | $(5,220)$ | 65,652 |
| Marquette Co Trans Auth | 5206 | 22 | 64,608 | 16,152 | 80,760 |
| Marquette CRC | 5211 | 22, 4 | 179,052 | 1,116,132 | 1,295,184 |
| Marquette, City of | 5201 | 22, 19, 8 | 655,500 | 2,138,724 | 2,794,224 |
| Marshall Area Firefighters Amb | 1313 | 20 | 29,412 | $(6,756)$ | 22,656 |
| Marshall Dist Lib | 1309 | 6 | 0 | 13,908 | 13,908 |
| Marshall, City of | 1306 | 22, 17, 14 | 194,280 | 977,868 | 1,172,148 |
| Mason Co | 5301 | 22, 7 | 874,308 | 1,382,568 | 2,256,876 |
| Mason Co Dist Lib | 5303 | 22 | 40,776 | 36,060 | 76,836 |
| Mason CRC | 5305 | 22 | 157,212 | 189,132 | 346,344 |
| Mason, City of | 3304 | 22 | 121,068 | 467,148 | 588,216 |
| Mason-Oceana Cty Enh 911 Cen | 6403 | 22, 6 | 53,952 | 24,408 | 78,360 |
| MBS Intl Arpt | 0902 | 22 | 148,272 | 318,276 | 466,548 |
| Meceola Central Dispatch | 5405 | 22 | 57,900 | 35,184 | 93,084 |
| Mecosta Co | 5403 | 4, 3 | 191,784 | 280,308 | 472,092 |
| Mecosta Co General Hosp CLD | 5404 |  | 0 | 450,576 | 450,576 |
| Mecosta CRC | 5401 | 22 | 88,896 | 135,420 | 224,316 |
| Melvindale HC | 8220 | 22 | 21,732 | 21,168 | 42,900 |
| Melvindale, City of | 8215 | 22, 12, 11 | 114,300 | 2,294,988 | 2,409,288 |
| Menominee Co | 5502 | 20, 19, 18, 12, 3 | 350,388 | 571,008 | 921,396 |
| Menominee CRC | 5503 | 19, 12 | 37,728 | 170,496 | 208,224 |
| Menominee, City of | 5501 | 22 | 174,816 | 163,812 | 338,628 |
| Meridian Chtr Twp | 3315 | 22 | 668,016 | 1,840,704 | 2,508,720 |
| MERS | 2308 | 22 | 1,131,768 | $(154,308)$ | 977,460 |
| Metamora Twp | 4409 | 22 | 25,620 | 2,976 | 28,596 |
| Mich Muni Risk Mgmt Auth | 8237 | 22 | 33,048 | $(9,420)$ | 23,628 |
| Mich S Central Power Agcy | 3002 | 22, 18 | 55,452 | 40,200 | 95,652 |
| Middleville, VIg of | 0803 | 22, 3 | 23,976 | 25,272 | 49,248 |
| Midland Co Central Disp Auth | 5604 | 22, 8 | 72,408 | 71,688 | 144,096 |
| Midland CRC | 5602 | 22, 17, 12 | 106,308 | 450,600 | 556,908 |
| Midland, City of | 5601 | 22, 11 | 846,000 | 5,148,096 | 5,994,096 |
| Mid-Mich Dist Hlth Dept | 5901 | 22 | 223,428 | 162,000 | 385,428 |
| Mid-Mich Lib League | 8306 | 22 | 14,628 | 3,684 | 18,312 |
| Mid-Peninsula Lib Coop CLD | 3609 |  | 0 | 5,760 | 5,760 |
| Milan Lib | 5806 | 22 | 8,760 | 11,544 | 20,304 |
| Milan, City of | 5801 | 22, 9, 8 | 70,896 | 774,840 | 845,736 |
| Milford, VIg of | 6313 | 22, 16, 3 | 138,468 | 399,168 | 537,636 |
| Millington, Vlg of | 7904 | 22 | 8,520 | (204) | 8,316 |
| Missaukee Co | 5702 | 22 | 160,860 | 129,072 | 289,932 |
| MOA Solid Waste Mgmt Auth | 6002 | 22 | 20,004 | 2,964 | 22,968 |
| Monroe HC | 5808 | 22 | 63,720 | 74,688 | 138,408 |
| Montague, City of | 6112 | 22 | 86,472 | 136,284 | 222,756 |
| Montcalm CRC | 5905 | 22 | 167,592 | 589,668 | 757,260 |
| Montmorency Co | 6001 | 22, 10 | 204,156 | 364,116 | 568,272 |
| Montrose, City of | 2509 | 22, 3 | 4,560 | 57,048 | 61,608 |
| Mt. Morris Chtr Twp | 2503 | 22 | 296,808 | 1,132,416 | 1,429,224 |
| Mt. Pleasant, City of | 3701 | 22, 16 | 423,324 | 690,384 | 1,113,708 |
| Muir, VIg of | 3405 | 22 | 3,396 | 4,260 | 7,656 |
| Mundy, Chtr Twp of | 2517 | 22 | 99,108 | 116,340 | 215,448 |
| Munising, City of | 0202 | 22 | 134,208 | 219,684 | 353,892 |
| Muskegon Area Dist Lib | 6117 | 22 | 85,008 | 20,040 | 105,048 |
| Muskegon Chtr Twp | 6108 | 18, 17, 16 | 152,088 | 550,404 | 702,492 |
| Muskegon Co | 6103 | 18, 16, 12, 10, 8 | 1,760,340 | 8,120,448 | 9,880,788 |
| Muskegon CRC | 6101 | 22, 19, 16 | 348,384 | 460,884 | 809,268 |
| Muskegon HC | 6113 | 22 | 25,332 | 19,632 | 44,964 |
| Muskegon Heights HC | 6115 | 22 | 33,996 | 32,892 | 66,888 |
| Muskegon Heights, City of | 6102 | 22, 6 | 232,452 | 959,784 | 1,192,236 |
| Muskegon, City of | 6116 | 12, 7 | 664,716 | 3,029,544 | 3,694,260 |
| N Houghton Co Wtr\&Swg Auth | 3106 | 22 | 10,956 | 11,076 | 22,032 |
| N Muskegon, City of | 6104 | 18, 17 | 44,076 | 120,564 | 164,640 |
| Nashville, Vlg of | 0807 | 22 | 14,256 | $(4,788)$ | 9,468 |
| Negaunee Twp | 5217 | 22 | 2,052 | 1,368 | 3,420 |
| Negaunee, City of | 5203 | 22 | 151,188 | 405,288 | 556,476 |
| Network180 | 4109 | 16 | 380,760 | 116,352 | 497,112 |
| New Baltimore, City of | 5016 | 15 | 179,592 | 230,328 | 409,920 |
| New Buffalo, City of | 1113 | 22 | 41,976 | 35,376 | 77,352 |
| Newaygo CMH | 6207 | 4 | 3,312 | $(3,312)$ | 0 |
| Newaygo Co | 6201 | 8, 6, 4, 3 | 64,236 | 1,168,752 | 1,232,988 |
| Newaygo CRC | 6212 | 22, 11 | 168,012 | 144,720 | 312,732 |
| Newaygo MCF | 6204 | 19, 18 | 161,952 | $(20,400)$ | 141,552 |
| Newaygo Soil \& Wtr Cnsrvn Dist | 6205 | 22 | 4,032 | 216 | 4,248 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix C

| Municipality Name | Number | Amortization Period(s) for Initial UAL ${ }^{1}$ | Normal Cost | Amortization Payment ${ }^{2}$ | Total Employer Contribution |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Newberry, Vlg of | 4802 | 22 | 55,572 | 112,236 | 167,808 |
| Niles Dist Lib | 1105 | 22 | 17,784 | 10,944 | 28,728 |
| Northern Lakes CMH Auth | 2808 | 4 | 0 | 906,720 | 906,720 |
| Northfield Twp | 8117 | 22 | 51,000 | 11,064 | 62,064 |
| Northpointe Bhvrl Hlth Sys | 2207 | 22, 16, 3 | 260,424 | 134,184 | 394,608 |
| Northville Chtr Twp | 8230 | 22 | 1,013,388 | 926,256 | 1,939,644 |
| Northville Dist Lib | 8229 | 22 | 113,880 | 44,436 | 158,316 |
| Northville, City of | 8208 | 12, 11, 9, 8 | 73,236 | 948,228 | 1,021,464 |
| Norton Shores, City of | 6106 | 22 | 671,292 | 1,642,752 | 2,314,044 |
| Norway, City of | 2204 | 22, 17 | 117,852 | 825,348 | 943,200 |
| Nottawaseppi Huron Band | 8403 | 22 | 54,492 | 1032 | 55,524 |
| Novi, City of | 6320 | 22, 16, 15, 14, 12, 11 | 799,536 | 3,156,504 | 3,956,040 |
| NW Mich Cmnty Hith Agcy | 1502 | 3 | 30,492 | 429,792 | 460,284 |
| NW Rgnl Arpt Comm | 2805 | 22, 15 | 128,052 | 56,232 | 184,284 |
| Oceana Co | 6402 | 16, 15, 14 | 463,848 | 881,160 | 1,345,008 |
| Oceola Twp | 4717 | 22 | 29,556 | 6,492 | 36,048 |
| Ogemaw Co | 6502 | 22, 10, 8 | 209,964 | 884,436 | 1,094,400 |
| Ogemaw Co EMS Auth | 6508 | 22 | 123,588 | 18,804 | 147,192 |
| Ogemaw CRC | 6503 | 22 | 91,992 | 276,264 | 368,256 |
| Olive Twp | 7009 | 22 | 2,100 | 9,024 | 11,124 |
| Onaway, City of | 7105 | 22 | 18,540 | 1,248 | 19,788 |
| Ontonagon Co | 6602 | 22 | 152,640 | 212,796 | 366,540 |
| Ontonagon Co Economic Dev Co | 6605 | 7 | 0 | 7,716 | 7,716 |
| Ontonagon CRC | 6604 | 22 | 290,508 | 946,032 | 1,236,540 |
| Ontonagon, Vlg of | 6603 | 22 | 39,924 | 411,156 | 451,080 |
| Orchard Lake, City of | 6312 | 20, 15, 3 | 26,076 | 377,016 | 403,092 |
| Oronoko Chtr Twp | 1114 | 22 | 29,916 | 49,272 | 79,188 |
| Osceola Co | 6701 | 22 | 399,900 | 223,680 | 623,580 |
| Osceola CRC | 6703 | 22 | 78,360 | 249,024 | 327,384 |
| Oscoda Chtr Twp | 3503 | 22, 12 | 46,236 | 105,996 | 152,232 |
| Oscoda Co | 6801 | 22 | 238,440 | 311,856 | 645,672 |
| Oscoda Wurtsmith Arpt Auth I | 6802 | 22 | 11,892 | 6,120 | 18,012 |
| Otisville, Vlg of | 2506 | 22, 7 | 15,768 | 23,172 | 38,940 |
| Otsego Co | 6902 | 22 | 369,684 | 540,648 | 910,692 |
| Otsego CRC | 6901 | 22 | 131,724 | 373,248 | 504,972 |
| Ottawa Co | 7003 | 22, 18, 17, 16 | 3,091,020 | 4,420,836 | 7,511,856 |
| Ottawa Co Central Disp Auth | 7008 | 6, 3 | 18,900 | 94,692 | 113,592 |
| Ottawa CRC | 7002 | 22 | 410,436 | 1,639,908 | 2,050,344 |
| Otter Lake, Vlg of | 4408 | 22 | 2,016 | 1,548 | 3,564 |
| Owosso, City of | 7607 | 22, 4 | 18,264 | 126,804 | 145,068 |
| Oxford Fire Department | 6327 | 22 | 90,948 | 151,212 | 242,160 |
| Oxford, Vlg of | 6326 | 22 | 64,968 | 87,516 | 152,484 |
| Parchment, City of | 3901 | 22 | 11,592 | 93,336 | 104,928 |
| Pathways(Spr.Bhvl.Mntl.Hlth) | 5214 | 15, 11, 8 | 60,516 | 3,254,904 | 3,315,420 |
| Paw Paw Lk Reg Jnt Swg Disp B | 1103 | 22 | 21,336 | 31,236 | 52,572 |
| Paw Paw, VIg of | 8002 | 22 | 117,384 | 197,604 | 314,988 |
| Pellston, VIg of | 2404 | 22 | 3,732 | 5,652 | 9,384 |
| Pennfield Chtr Twp | 1312 | 22 | 63,336 | 59,988 | 123,324 |
| Pentwater, Vlg of | 6401 | 22 | 41,892 | 36,528 | 78,420 |
| Perrinton, Vlg of | 2909 | 22 | 4,704 | 156 | 4,860 |
| Petersburg, City of | 5807 | 22 | 15,888 | $(5,136)$ | 10,752 |
| Petoskey, City of | 2402 | 22, 20 | 376,872 | 414,576 | 791,448 |
| Pewamo, Vlg of | 3407 | 22 | 6,480 | 5,976 | 12,456 |
| Pigeon, Vlg of | 3203 | 22 | 12,012 | 35,196 | 47,208 |
| Pinckney, Vlg of | 4706 | 22, 3 | 66,096 | 42,516 | 108,612 |
| Pinconning, City of | 0904 | 22 | 11,220 | 69,948 | 81,168 |
| Pittsfield Chtr Twp | 8110 | 22, 14 | 647,940 | 696,504 | 1,344,444 |
| Pleasant Ridge, City of | 6301 | 22, 17, 8 | 71,880 | 211,848 | 283,728 |
| Plymouth Dist Lib | 8221 | 22 | 113,148 | 70,536 | 183,684 |
| Plymouth, Chtr Twp of | 8238 | 20, 18, 11, 9 | 215,820 | 798,168 | 1,013,988 |
| Plymouth, City of | 8202 | 8, 3 | 0 | 1,727,088 | 1,727,088 |
| Pokagon Band of Potawatomi | 8401 | 22 | 1,521,936 | 0 | 1,521,936 |
| Port Austin Area Swr\&Wtr Auth | 3210 | 4 | 0 | 0 | 0 |
| Port Austin, Vlg of | 3208 | 22 | 5,508 | 10,824 | 16,332 |
| Port Huron Chtr Twp | 7711 | 22 | 74,364 | 79,956 | 154,320 |
| Port Huron HC | 7712 | 22 | 109,812 | 220,524 | 330,336 |
| Port Huron, City of | 7702 | 22, 18, 10 | 956,076 | 4,797,768 | 5,753,844 |
| Port Sanilac, Vlg of | 7403 | 22 | 12,768 | 36,684 | 49,452 |
| Port Sheldon Twp | 7018 | 22 | 22,392 | $(7,800)$ | 14,592 |
| Portland, City of | 3401 | 20 | 182,952 | 381,336 | 564,288 |
| Potterville, City of | 2313 | 22 | 34,272 | 18,384 | 52,656 |
| Presque Isle Co | 7104 | 22, 6 | 183,600 | 296,880 | 480,480 |


| MERS 12/31/2016 Valuation - Results By Municipality - Appendix C |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Municipality Name | Number | Amortization Period(s) for Initial UAL ${ }^{1}$ | Normal Cost | Amortization Payment ${ }^{2}$ | Total Employer Contribution |
| Presque Isle CRC | 7101 | 22 | 76,644 | 333,036 | 409,680 |
| PRIDE Youth Programs CLD | 6210 |  | 0 | 4,800 | 4,800 |
| Ravenna, Vlg of | 6111 | 19 | 4,272 | 2,448 | 6,720 |
| Reading, City of | 3003 | 22 | 10,140 | 4,428 | 14,568 |
| Redford Twp Dist Lib | 8228 | 20 | 51,720 | 24,384 | 76,104 |
| Redford, Chtr Twp of | 8209 | 22 | 498,636 | 1,485,696 | 1,984,332 |
| Reed City, City of | 6702 | 22 | 114,840 | 174,960 | 289,800 |
| Richfield Twp (Genesee Co) | 2514 | 22 | $(17,688)$ | 149,280 | 131,592 |
| Richfield Twp (Roscommon Co) | 7202 | 22 | 32,952 | 72,996 | 105,948 |
| Richland Twp | 7310 | 22 | 36,192 | 146,124 | 182,316 |
| Richmond, City of | 5012 | 22 | 3,384 | 52,104 | 55,488 |
| Rochester, City of | 6307 | 17 | 218,244 | 606,864 | 825,108 |
| Rockford, City of | 4103 | 22 | 152,604 | 219,120 | 371,724 |
| Rockwood, City of | 5810 | 22 | 61,920 | 7,452 | 78,348 |
| Rogers City, City of | 7102 | 22 | 46,164 | 395,448 | 441,612 |
| Romeo Dist Lib | 5006 | 4 | 12,996 | 106,548 | 119,544 |
| Romeo, Vlg of | 5005 | 22 | 130,716 | 207,888 | 338,604 |
| Romulus, City of | 8225 | 22, 17, 16 | 314,844 | 2,228,376 | 2,543,220 |
| Roosevelt Park, City of | 6107 | 22, 17 | 56,028 | 198,504 | 254,532 |
| Roscommon Co | 7201 | 22, 14 | 325,512 | 588,828 | 914,340 |
| Roscommon Co Trans Auth | 7205 | 22 | 90,636 | 42,504 | 133,140 |
| Rose City, City of | 6504 | 22 | 13,020 | 5,808 | 18,828 |
| Rose Twp | 6506 | 22 | 6,000 | $(29,292)$ | 0 |
| Royal Oak, Chtr Twp of | 6306 | 22, 10, 6, 5 | 5,688 | $(40,272)$ | 0 |
| Saginaw Chtr Twp | 7314 | 22 | $(86,460)$ | 464,628 | 424,632 |
| Saginaw Co | 7303 | 11, 9, 8 | 186,456 | 2,826,504 | 3,012,960 |
| Saginaw Co 911 Com Ctr | 7316 | 4 | 30,732 | 902,028 | 932,760 |
| Saginaw Co CMH | 7318 | 22, 19, 7, 4 | 64,752 | 458,088 | 522,840 |
| Saginaw CRC | 7304 | 22, 18 | 243,552 | 680,724 | 924,276 |
| Saginaw HC | 7321 | 22 | 21,840 | 142,212 | 164,052 |
| Saginaw Trans Sys Auth | 7319 | 22 | 76,776 | 1,008 | 77,784 |
| Saginaw, City of | 7301 | 22, 14, 8 | 1,362,972 | 12,466,908 | 13,829,880 |
| Saginaw, Pub Lib of | 7317 | 22 | 30,888 | $(120,036)$ | 0 |
| Saginaw-Midland Muni Wtr Corp | 7305 | 16, 3 | 29,100 | 262,644 | 291,744 |
| Saline, City of | 8105 | 22, 12 | 271,452 | 863,280 | 1,134,732 |
| Sandusky Dist Lib | 7404 | 22 | 2,832 | 696 | 3,528 |
| Sandusky, City of | 7402 | 22 | 56,016 | 143,292 | 199,308 |
| Sanilac CRC | 7410 | 22 | 102,036 | 101,472 | 203,508 |
| Saranac HC | 3413 | 22 | 6,540 | 23,664 | 30,204 |
| Saugatuck Twp | 0305 | 22 | 20,892 | 46,512 | 67,404 |
| Saugatuck Twp Fire Dist | 0313 | 22 | 21,984 | 6,012 | 27,996 |
| Saugatuck, City of | 0307 | 22 | 38,760 | 18,588 | 57,348 |
| Sault Ste. Marie HC | 4906 | 22 | 27,696 | 2,472 | 30,168 |
| Sault Ste. Marie, City of | 1701 | 22 | 181,860 | 640,152 | 822,012 |
| SCCMUA | 1905 | 22, 18 | 35,556 | 41,532 | 77,088 |
| Schoolcraft Co | 7503 | 22, 20, 10 | 396,540 | 849,372 | 1,245,912 |
| Schoolcraft Co Trans Auth | 7506 | 22 | 47,628 | 15,684 | 63,312 |
| Schoolcraft CRC | 7501 | 22 | 124,284 | 559,320 | 683,604 |
| Schoolcraft Memorial Hosp | 7505 | 5, 4, 3 | 76,560 | 1,008,336 | 1,084,896 |
| Scio Twp | 8116 | 20 | 80,196 | 43,884 | 124,080 |
| Scottville, City of | 5308 | 22 | 20,664 | 6,732 | 27,396 |
| SE Oakland Co Rsrc Rec Auth | 6310 | 22 | 68,400 | 146,880 | 215,280 |
| SE Oakland Co Wtr Auth | 6309 | 22 | 63,852 | 110,832 | 176,052 |
| Sebewaing, Vlg of | 3205 | 22 | 58,188 | 67,320 | 125,508 |
| SEMCOG | 8210 | 22 | 484,764 | 295,056 | 779,820 |
| Shepherd, Vlg of | 3704 | 22, 16 | 14,472 | 936 | 15,408 |
| Shiawassee Co | 7602 | 22, 3 | 1,241,400 | 3,524,568 | 4,768,224 |
| Shiawassee Co CMH | 7609 | 22 | 519,540 | 163,068 | 682,608 |
| Shiawassee Council on Aging | 7605 | 22 | 2,988 | 19,428 | 22,416 |
| Shiawassee CRC | 7601 | 22 | 85,176 | 336,324 | 421,500 |
| Shiawassee Dist Lib | 7606 | 22 | 15,012 | 600 | 15,612 |
| Sims Whitney Util Auth | 0606 | 22 | 10,152 | 4,800 | 14,952 |
| SMART | 8216 | 22 | 2,514,900 | 4,684,080 | 7,198,980 |
| South Haven Area ESA | 8005 | 22, 8 | 53,292 | 219,288 | 272,580 |
| South Haven, City of | 8001 | 22, 17, 3 | 390,072 | 421,512 | 811,584 |
| South Lyon, City of | 6315 | 22 | 297,876 | 335,640 | 633,516 |
| Southgate, City of | 8262 | 21 | 67,008 | 697,560 | 764,568 |
| Sparta, Vlg of | 4107 | 22 | 63,156 | 121,584 | 184,740 |
| Spring Lake Dist Lib | 7016 | 22 | 50,952 | $(6,504)$ | 44,448 |
| Spring Lake, Vlg of | 7015 | 22, 18 | 11,532 | 46,620 | 65,016 |
| Springfield, City of | 1303 | 22, 17 | 50,616 | 264,468 | 315,084 |
| St Charles, Vlg of | 7308 | 22 | 56,292 | 127,500 | 183,792 |

MERS 12/31/2016 Valuation - Results By Municipality - Appendix C

| Municipality Name | Number | Amortization Period(s) for Initial UAL ${ }^{1}$ | Normal Cost | Amortization Payment ${ }^{2}$ | Total Employer Contribution |
| :---: | :---: | :---: | :---: | :---: | :---: |
| St Clair HC | 7715 | 22 | 4,572 | 30,372 | 34,944 |
| St Clair Shores HC | 5007 | 22 | 27,540 | 71,640 | 99,180 |
| St Clair, City of | 7703 | 22, 7, 3 | 134,172 | 709,260 | 843,432 |
| St Ignace, City of | 4904 | 22 | 130,752 | 316,044 | 446,796 |
| St Johns, City of | 1902 | 22, 19, 11 | 98,028 | 947,376 | 1,045,404 |
| St Joseph Co | 7803 | 22 | 546,696 | 186,852 | 733,548 |
| St Louis HC | 2908 | 16 | 11,964 | 10,068 | 22,032 |
| St Louis, City of | 2902 | 17, 4, 3 | 17,544 | 411,948 | 429,492 |
| Stambaugh Twp | 3615 | 22 | 1,824 | 4,416 | 6,240 |
| Standish, City of | 0601 | 3 | 2,964 | 252,120 | 255,084 |
| Stanton, City of CLD | 5903 |  | 0 | 6,228 | 6,228 |
| Stephenson, City of | 5504 | 22 | 18,108 | 18,744 | 36,852 |
| Sterling, VIg of | 0605 | 22 | 5,532 | $(14,364)$ | 0 |
| Stockbridge, Vlg of | 3316 | 22 | 20,148 | 28,176 | 48,324 |
| Sturgis HC | 7805 | 22 | 10,800 | (552) | 10,248 |
| Summit Twp | 3803 | 22 | 247,920 | 397,620 | 645,540 |
| Sumpter Twp | 8226 | 22, 6 | 110,016 | 179,508 | 289,524 |
| Superior Chtr Twp | 8109 | 22 | 110,184 | 150,852 | 261,036 |
| Superior Dist Lib | 1702 | 22 | 17,868 | $(61,308)$ | 0 |
| Superiorland Lib Coop | 5208 | 22 | 10,536 | 13,296 | 23,832 |
| Suttons Bay Bingham Fire Auth | 4506 | 22 | 37,464 | 28,488 | 65,952 |
| SW Mich Comm Amb Svcs | 1119 | 22 | 10,116 | 40,692 | 50,808 |
| SW Shiawassee ESA | 7611 | 22 | 54,600 | $(2,064)$ | 52,536 |
| Swan Creek Twp | 7309 | 22 | 7,956 | 10,224 | 18,180 |
| Swartz Creek, City of | 2504 | 22, 4 | 43,020 | 42,792 | 85,812 |
| Sylvan Lake, City of | 6314 | 22, 17 | 20,412 | 68,724 | 89,136 |
| Tawas Police Auth | 3504 | 20 | 96 | 37,692 | 37,788 |
| Taylor HC | 8231 | 18 | 15,768 | 2,724 | 18,492 |
| The Lib Network | 8218 | 22, 5 | 79,752 | 194,520 | 274,272 |
| Three Rivers, City of | 7801 | 22 | 229,368 | 368,748 | 598,116 |
| Tittabawassee, Twp of | 7322 | 22 | 61,092 | 6,348 | 67,440 |
| Traverse Area Dist Lib | 2807 | 20 | 1,920 | 97,452 | 99,372 |
| Traverse City Light \& Power | 2811 | 22 | 340,020 | 862,896 | 1,202,916 |
| Traverse City, City of | 2801 | 22 | 519,912 | 993,492 | 1,513,404 |
| Trenton, City of | 8203 | 7 | 72,144 | 3,059,652 | 3,131,796 |
| Tri-County Aging Consortium | 3307 | 22 | 364,200 | 39,444 | 403,644 |
| Trio Council on Aging Inc CLD | 6507 |  | 0 | 3,636 | 3,636 |
| Tuscarora Twp | 1604 | 22 | 57,900 | 47,076 | 104,976 |
| Tuscola Co | 7902 | 19, 10, 3 | 342,348 | 76,344 | 418,692 |
| Tuscola Co CMH | 7907 | 22 | 273,072 | 93,564 | 366,636 |
| Tuscola Co Hith Dpt | 7901 | 22 | 93,948 | 197,136 | 291,084 |
| Tuscola Co MCF | 7906 | 22 | 257,100 | 69,252 | 326,352 |
| Tuscola CRC | 7908 | 22, 19 | 53,184 | 155,592 | 208,776 |
| Twin City Pub Safety Auth CLD | 3610 |  | 0 | 3,096 | 3,096 |
| Ubly, Vlg of | 3212 | 22 | 5,208 | 15,984 | 21,192 |
| Utica, City of | 5008 | 22 | 58,824 | 141,948 | 200,772 |
| Van Buren Co | 8006 | 22 | 532,596 | 819,840 | 1,352,436 |
| Van Buren Dist Lib | 8007 | 22 | 41,736 | 23,904 | 65,640 |
| Van Buren Twp | 8236 | 22 | 219,876 | 301,836 | 521,712 |
| Vassar, City of | 7903 | 17 | 27,096 | 223,572 | 250,668 |
| Vevay Twp | 3318 | 22 | 3,780 | 19,908 | 23,688 |
| Vicksburg Dist Lib | 3904 | 22 | 6,312 | 3,792 | 10,104 |
| Vicksburg, Vlg of | 3902 | 22 | 64,536 | 66,324 | 130,860 |
| Vienna, Chtr Twp of | 2522 | 22 | 11,304 | 46,512 | 57,816 |
| W Iron Co Swr Auth | 3612 | 22 | 16,956 | 41,100 | 58,056 |
| W Mich CMH Sys | 5304 | 8 | 13,536 | 107,520 | 121,056 |
| W Mich Shoreline Rgnl Dev Comr | 6110 | 22 | 53,196 | $(82,308)$ | 0 |
| W UP Dist Hlth Dept | 3101 | 22, 6 | 52,512 | 626,112 | 678,624 |
| Wakefield, City of | 2701 | 22 | 34,752 | 162,144 | 196,896 |
| Walker, City of | 4112 | 6 | 195,816 | 1,632,108 | 1,827,924 |
| Walled Lake, City of | 6324 | 22 | 87,492 | 677,892 | 765,384 |
| Washtenaw Co | 8113 | 22, 12 | 2,136,624 | 1,782,756 | 3,919,380 |
| Washtenaw CRC | 8102 | 22 | 310,680 | 1,982,640 | 2,344,212 |
| Wayland, City of | 0304 | 22 | 148,848 | 156,072 | 304,920 |
| Wayne HC | 8252 | 22 | 18,072 | 15,072 | 33,144 |
| Wayne, City of | 8242 | 22, 20, 7 | 553,728 | 4,581,012 | 5,141,184 |
| Webberville, VIg of | 3314 | 22 | 5,700 | 0 | 5,700 |
| West Branch Dist Lib | 6509 | 22 | 7,704 | 4,932 | 12,636 |
| West Branch, City of | 6505 | 22 | 35,952 | 130,764 | 166,716 |
| Westland, City of | 8211 | 22, 19, 18 | 870,012 | 5,637,372 | 6,547,224 |
| Westphalia, Vlg of | 1907 | 22 | 9,708 | 9,288 | 18,996 |
| Wexford Co | 8302 | 22, 20 | 336,048 | 673,596 | 1,009,644 |


| MERS 12/31/2016 Valuation - Results By Municipality - Appendix C |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Amortization |  | Amortization <br> Payment ${ }^{2}$ | Total Employer Contribution |
|  |  |  |  |  |  |
| Municipality Name | Number | Initial UAL ${ }^{1}$ | Cost |  |  |
| Wexford CRC | 8303 | 22 | 121,428 | 255,084 | 377,220 |
| White Cloud Cmnty Lib | 6208 | 22 | 12,552 | 4,212 | 16,764 |
| White Cloud, City of | 6206 | 22 | 29,652 | 28,212 | 57,864 |
| White Cloud/Sherman Util | 6211 | 22 | 13,152 | 6,000 | 19,152 |
| White Lake Chtr Twp | 6325 | 22 | 349,308 | 552,144 | 901,452 |
| White Pigeon, Vlg of | 7804 | 22 | 5,160 | 2,004 | 7,164 |
| White Pine District Library | 5904 | 22 | 1,164 | 8,808 | 9,972 |
| Whitehall, City of | 6105 | 22 | 97,356 | 114,792 | 212,148 |
| Willard Pub Lib | 1308 | 22 | 107,736 | 22,224 | 129,960 |
| Williamston, City of | 3310 | 22, 14 | 64,272 | 132,564 | 196,836 |
| Wixom, City of | 6316 | 18, 17, 7, 3 | 226,836 | 1,461,168 | 1,688,004 |
| Wolverine Lake, Vlg of | 6329 | 22, 11 | $(6,384)$ | 101,940 | 95,556 |
| WUPPDR | 3108 | 22 | 17,832 | 11,892 | 29,724 |
| Ypsilanti Cmnty Util Auth | 8106 | 22 | 496,236 | 1,600,512 | 2,096,748 |
| Ypsilanti HC | 8115 | 22 | 11,028 | 6,576 | 17,604 |
| Ypsilanti, City of | 8101 | 22, 20, 14 | 176,676 | $(119,028)$ | 57,708 |
| Ypsilanti, Twp of | 8104 | 22 | 182,304 | 415,884 | 598,188 |
| Totals - Active Groups |  |  | 131,231,664 | 368,437,452 | 500,570,928 |
| Totals - Closed Groups |  |  | 0 | 753,684 | 759,840 |
| Totals - MERS |  |  | 131,231,664 | 369,191,136 | 501,330,768 |
| ${ }^{1}$ The initial UAL is defined as the UAL as of 12/31/2015 or the date of the first annual valuation, if later. Please see the Appendix on the MERS website for a description of the amortization policy. |  |  |  |  |  |
| ${ }^{2}$ For overfunded divisions liabilities, and acts as a do not always add up ac | yed amortiz st the norm the total | payment is bas t. The entire cre ution cannot be | 0-year amortiza own, even if it ex zero. | of the assets in ds the normal cos | ess of accrued Thus the numbers |


[^0]:    ${ }^{1}$ Please see the description of the Hybrid Plan beginning on page 9.

[^1]:    ${ }^{1}$ Please see the description of the Defined Benefit Plan beginning on page 3.

[^2]:    ${ }^{2}$ As new divisions with existing retirees and beneficiaries join MERS, the year of retirement is set equal to the year the division joins MERS. This skews the number of retirees and beneficiaries as well as the average annual pension in years when this occurs.

[^3]:    ${ }^{1}$ At age 60, these benefit types are converted to normal retirement for age and service.
    ${ }^{2}$ Includes EDRO alternate payees.

