



## 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<sup>1</sup>

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)**

- FA(R), where A is an age from 50 to 54, and R is between 25 and 30 years of credited service.
- FA(R), where A is an age from 55 to 65, and R is between 15 and 30 years of credited service.
- FA(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.

<sup>&</sup>lt;sup>1</sup> Please see the description of the Hybrid Plan beginning on page 9.

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.

#### **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<sup>1</sup>

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

<sup>&</sup>lt;sup>1</sup> Please see the description of the Defined Benefit Plan beginning on page 3.

#### Service Retirement Allowance

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

Hybrid 1.0% 1.0% of a member's FAC

Hybrid 1.25% of FAC

Hybrid 1.5% 1.5% of FAC

Hybrid 1.75% 1 1.75% of FAC

Hybrid 2.0% 1 2.0% of FAC

## **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.

<sup>&</sup>lt;sup>1</sup> Available to those without social security coverage.

### **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 <sup>1</sup>
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

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(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 (Wage Inflation)	Merit and Longevity	Total Percentage 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 of Service	% of Active Members Withdrawing 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 x 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 Replacement Index	Percent of Eligible Active Members Retiring Within 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 Active Members Retiring Within 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 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 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 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.

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 20m 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 decreases one year each valuation year 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)

	Amortization Period <sup>1</sup>		
Source of UAL	Open Divisions	Closed Divisions	
Remaining 12/31/2015 UAL	22 years	Accelerated or Non-Accelerated Option	
UAL for new MERS employers	25 years 1	25 years <sup>1</sup>	
Future Active and Inactive Plan Amendments	10 years <sup>2</sup>	5 years <sup>2</sup>	
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 <sup>2</sup>	5 years <sup>2</sup>	

<sup>&</sup>lt;sup>1</sup> A shorter amortization period may be suggested for poorly funded divisions (subject to MERS CEO and actuary discussion).

## **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

<sup>&</sup>lt;sup>2</sup> Only applies to divisions that are over 100% funded before and after the benefit provision change.

the new hires within the same employee classification. (Note that assets cannot be shared if the new tier of benefits defined contribution plan.) This allows multiple divisions to be "linked" and financed as if they were one division.	is a
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

٧a	aluation Date December 31	2001	2002	2003	2004	2005
1.	Beginning of Year Assets a) Market Value b) Valuation Assets	\$3,788,886,471 3,791,423,339	\$3,647,820,869 4,034,377,419	\$3,285,304,333 4,134,404,645	\$4,071,997,180 4,459,492,020	\$4,619,201,287 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 $= (3d) - (3a) - (3c)$	(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)
	<ul><li>d) Total Additions to Market Value = (2) - (1a)</li></ul>	(141,065,602)	(362,516,536)	786,692,847	547,204,107	287,087,403
4.	Average Valuation Assets = (1b) + .5x[(3a)+(3c)]	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% x (4)	301,402,014	321,246,590	330,534,487	355,545,016	378,531,218
6.	Gain (Loss) = (3b) - (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 x (6) b) First Prior Year c) Second Prior Year d) Third Prior Year e) Fourth Prior Year	(78,934,260) (79,670,266) 63,981,441 40,228,410 43,743,057	(129,234,610) (78,934,260) (79,670,266) 63,981,441 40,228,408		44,403,547	(18,061,560) 44,403,547
	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) b) Valuation Assets = (1b) + (8) c) Difference Between Market & Valuation Assets	3,647,820,869 4,034,377,419 (386,556,550)	3,285,304,333 4,134,404,645 (849,100,312)	4,071,997,180 4,459,492,020 (387,494,840)	4,619,201,287 4,732,208,229 (113,006,942)	4,906,288,690 5,039,071,709 (132,783,019)
10	Recognized Rate of Return = [(5) + (7g)] / (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 = (9b) / (9a)	1.105969	1.258454	1.095161	1.024465	1.027064

# **Municipal Employees' Retirement System of Michigan** Derivation of Actuarial Value of Assets (*Cont.*)

Va	aluation Date December 31	2006	2007	2008	2009	2010
1.	Beginning of Year Assets a) Market Value 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	\$5,276,645,338 6,604,608,397
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	622,409,716	442,377,206	(1,553,001,917)	771,066,207	733,059,352
	= (3d) - (3a) - (3c) 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 = (1b) + .5x[(3a)+(3c)]	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% x (4)	405,579,493	442,579,053	479,851,845	502,031,261	526,844,222
6.	Gain (Loss) = (3b) - (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 x (6) b) First Prior Year c) Second Prior Year d) Third Prior Year e) Fourth Prior Year f) Fifth Prior Year g) Sixth Prior Year h) Seventh Prior Year i) Eighth Prior Year j) Ninth Prior Year	21,683,022 (14,753,669)	(20,185) 21,683,022 (14,753,669)	(203,285,376) (20,185) 21,683,022 (14,753,669)	26,903,495 (203,285,376) (20,185) 21,683,022 (14,753,669)	20,621,513 26,903,495 (203,285,376) (20,185) 21,683,022 (14,753,669)
	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 (3a) + (3c) + (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 = (1b) + (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) + (7k)] / (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 = (9b )/ (9a)	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 a) Market Value 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	\$8,063,083,723 8,546,363,754
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	108,045,293	633,022,713	979,236,854	467,398,803	(139,840,580)
	= (3d) - (3a) - (3c)				(707,286,168)	,
	c) Benefit Payments d) Total Additions to Market Value = (2) - (1a)	(36,065,181)	922,997,153	793,179,960	411,378,347	(754,980,325)
4.	Average Valuation Assets = $(1b) + .5x[(3a)+(3c)]$	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% x (4)	549,794,795	584,170,845	620,009,938	647,750,177	682,224,713
6.	Gain (Loss) = (3b) - (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 x (6) b) First Prior Year c) Second Prior Year d) Third Prior Year e) Fourth Prior Year f) Fifth Prior Year g) Sixth Prior Year h) Seventh Prior Year i) Eighth Prior Year j) Ninth Prior Year	(44,174,950) 20,621,513 26,903,495 (203,285,376) (20,185) 21,683,022 (14,753,669)	4,885,187 (44,174,950) 20,621,513 26,903,495 (203,285,376) (20,185) 21,683,022 (14,753,669)	35,922,692 4,885,187 (44,174,950) 20,621,513 26,903,495 (203,285,376) (20,185) 21,683,022 (14,753,669)	(18,035,137) 35,922,692 4,885,187 (44,174,950) 20,621,513 26,903,495 (203,285,376) (20,185) 21,683,022 (14,753,667)	(82,206,529) (18,035,137) 35,922,692 4,885,187 (44,174,950) 20,621,513 26,903,495 (203,285,376) (20,185) 21,683,025
	k) Total Recognized 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) b) Valuation Assets =	5,935,528,263	6,858,525,416	7,651,705,376	8,063,083,723	7,886,133,448
	(1b) + (8) c) Difference Between Market & Valuation	7,157,148,344 (1,221,620,081)	7,843,152,666 (984,627,250)	8,124,887,439 (473,182,063)	8,546,363,754 (483,280,031)	8,953,772,507 (1,067,639,059)
	Assets					
10.	Recognized Rate of Return = [(5) + (7k)] / (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 Factor = (9b ) / (9a)	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
Beginning of Year Assets     a) Market Value     b) Valuation Assets	\$7,886,133,448 8,953,772,507				
End of Year Market Value     Assets	8,490,200,180				
3. Net Additions to Market Value a) Net Contributions b) Net Investment Income = (3d) - (3a) - (3c) c) Benefit Payments d) Total Additions to Market Value = (2) - (1a)	654,676,753 866,474,132 (917,084,153) 604,066,732				
4. Average Valuation Assets = (1b) + .5x[(3a)+(3c)]	8,822,568,807				
5. Expected Income at Valuation Rate=7.75% x (4)	683,749,083				
6. Gain (Loss) = (3b) - (5)	182,725,049				
7. Phased-In Recognition of Investment Return a) Current Year: 0.2 x (6) b) First Prior Year c) Second Prior Year d) Third Prior Year e) Fourth Prior Year	36,545,010 (266,909,765)	36,545,010 (266,909,765)	36,545,010 (266,909,765)	36,545,010 (266,909,764)	36,545,010
f) Total Recognized Investment Gain (Loss)	(230,364,755)	(230,364,755)	(230,364,755)	(230,364,755)	36,545,010
8. Change in Valuation Assets (3a) + (3c) + (5) + (7f)	190,976,928				
9. End of Year Assets a) Market Value = (2) b) Valuation Assets = (1b) + (8) c) Difference Between Market & Valuation Assets	8,490,200,180 9,144,749,435 (654,549,255)				
10. Recognized Rate of Return = [(5) + (7f)] / (4)	5.14%				
11. Market Rate of Return	11.17%				
12.Valuation Asset Adjustment Factor = (9b) / (9a)	1.077095				



MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN SUMMARY REPORT OF THE 71<sup>ST</sup> ANNUAL ACTUARIAL VALUATIONS AS OF DECEMBER 31, 2016 FOR THE 735 DEFINED BENEFIT PLAN AND HYBRID PLAN MUNICIPALITIES



#### **CBIZ Retirement Plan Services**

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

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<sup>st</sup> 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 tax-qualified 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.

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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; 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: <a href="Appendix">Appendix</a>
- 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: <u>Appendix</u>

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 Wagy, 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: <a href="Appendix">Appendix</a>). 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 <u>Appendix</u> 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 <a href="Appendix">Appendix</a>.

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	
720	717	713	
<u>15</u>	<u> 15</u>	<u> 15</u>	
735	732	728	
1,279	1,324	1,303	
1,389	1,306	1,188	
<u> </u>	<u> </u>	<u> 19</u>	
2,687	2,649	2,510	
\$1,780	\$1,787	\$1,744	
\$8,483	\$7,835	\$8,057	
9,136	8,893	8,539	
5.14%	5.21%	5.90%	
\$13,680	\$13,368	\$12,096	
74%	74%	78%	
153	155	115	
324	334	307	
		203	
66	54	88	
	720 15 735 1,279 1,389 19 2,687 \$1,780 \$8,483 9,136 5.14% \$13,680 74%	2016         2015           720         717           15         15           735         732           1,279         1,324           1,389         1,306           19         19           2,687         2,649           \$1,780         \$1,787           \$8,483         \$7,835           9,136         8,893           5.14%         5.21%           \$13,680         \$13,368           74%         74%           153         35           324         334           177         174	

<sup>&</sup>lt;sup>1</sup> Closed municipalities have ceased participation in MERS, but MERS retains assets and liabilities for future benefit payments to their retirees and vested former members.

<sup>&</sup>lt;sup>2</sup> Average over all municipalities (excluding the closed municipalities).

<sup>&</sup>lt;sup>3</sup> 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.

	December 31,			
ltem	2016	2015	2014	
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.

	December 31,			
Item	2016 2015 2014			
Number of vested former members <sup>1</sup>	8,252	8,340	7,960	
Average age	50.0	50.4	50.4	
Average annual deferred benefit	10,327	\$9,987	\$9,789	

<sup>&</sup>lt;sup>1</sup> 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.

	December 31,				
ltem	2016 2015 2014				
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	No. of		Active Me	embers		Persons on	Annual
Date	DB and Hybrid		Annual	Average	Percent	Deferred	Deferred
Dec. 31,	Municipalities	Number	Payroll	Pay	Increase	Status	Benefits
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

	Number of	Percent Increase in	Annual	Percent Increase in
Valuation Date	Retirees and	Retirees and	Retirement	Retirement
December 31,	Beneficiaries	Beneficiaries	Allowances	Allowances
December 31,	Deficicianes	Deficiciaries	Allowalices	Allowalices
1000	6.400	6.0.0/	Ф 4E 004 E00	42.2.0/
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
1990	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
2002	18,443	5.2	236,588,632	12.1
2004	19,271	4.5	262,221,987	10.8
2004	19,271	4.5	202,221,907	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
2012	32,460	9.1	628,103,333	11.1
2014	35,754	10.1	723,077,656	15.1
2017	33,734	10.1	120,011,000	10.1
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

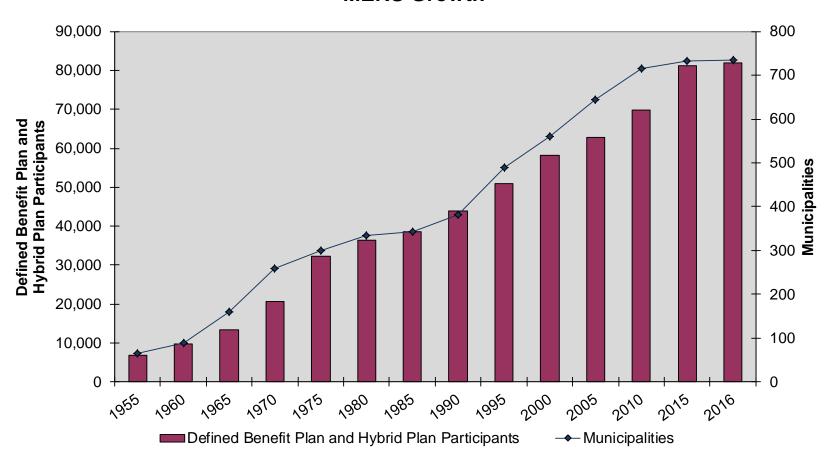


Chart 1 presents a comparison of the growth in MERS Defined Benefit Plan and Hybrid Plan municipalities to the growth in plan participants (active members, vested former members and retirees).

Chart 2
Active and Retired Participants

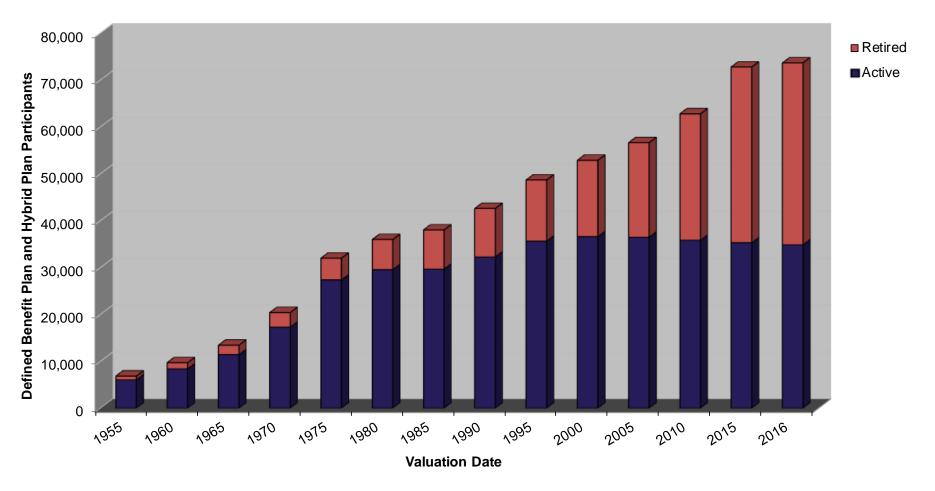


Chart 2 illustrates graphically the historical growth in the number of active members and retirees and beneficiaries.

Chart 3
Active Members Per Pension Recipient

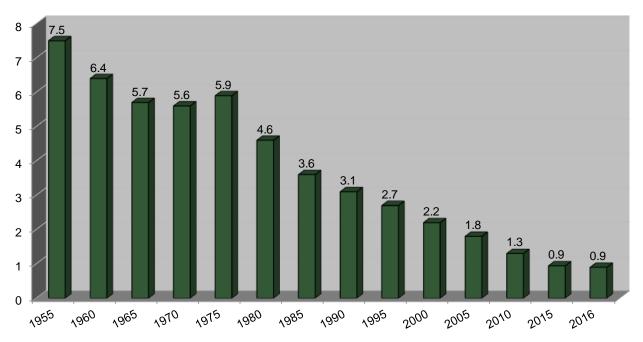
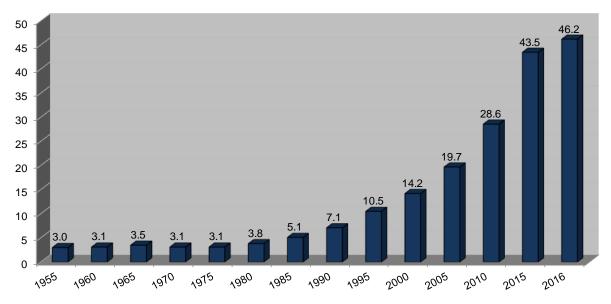


Chart 4
Retiree Benefits as a Percent of Active Pay



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

				Years	of Benefit S	Service		
Age	Total	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
Lindar 00	00	00						
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 <sup>1</sup>	81
Total	38,774

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.

Table 6
Retirees and Beneficiaries
as of December 31, 2016
Average Annual Pension by Year of Retirement<sup>2</sup>

Year of Retirement	Number	Average Annual Pension
Before 1960	2	\$ 835
1960 - 1969	24	5,672
1970 - 1979	337	7,715
1980 - 1989	2,263	10,894
1990 - 1999	6,773	17,858
2000 - 2009	14,008	23,105
2010 - 2016	15,367	22,818
Total	38,774	21,216

<sup>&</sup>lt;sup>2</sup> 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.

### Allowances Being paid Retirees and Beneficiaries **December 31, 2016**

Table 7 **Tabulated by Type of Benefit Being Paid** 

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

<sup>&</sup>lt;sup>1</sup> At age 60, these benefit types are converted to normal retirement for age and service. <sup>2</sup> Includes EDRO alternate payees.

Table 8 **Tabulated by Optional Form of Benefit Being Paid** 

		Number as a	Total
	Number of	Percent	Monthly
Type of Benefit	Retirees	of Total	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)

	Number of	Divisions with	Benefit on
		December 31,	
Benefit Formula	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 x (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 x (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% 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% 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	9
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	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)

		Divisions with	Benefit on
Benefit Formula	2016	December 31, 2015	2014
2.80% Multiplier for Svc < 25 yrs, 1.00% for Svc > 25 yrs (80% max)	2016	2015	2014
2.80% Multiplier for Svc < 25 yrs, 2.50% for Svc 25-30 yrs, 0.00% for Svc > 30 yrs (no max)	6	8	4
2.00% intuitiplier for 5xx < 25 yrs, 2.50% for 5xx 25-50 yrs, 1.50% for 5xx > 30 yrs (no max)  2.80% Multiplier (80% max)	17	17	17
2.80% Multiplier (84% max)	17	0	0
2.80% Multiplier for Svc < 30 yrs, 1.00% for Svc > 30 yrs (no max)	2	3	3
2.00% Multiplier for Svc < 35 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
2.00% Multiplier (80% max)	20	21	21
3.00% Multiplier (75% max)	5	5	5
3.20% Multiplier (80% max)	9	9	0
3.20% indusprier (60% indax) indax) (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 x(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 66 (80% max)	1	1	
2.30% 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	23	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	
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			- U
service 3fter 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	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	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% 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)

	Number of	Number of Divisions with Be December 31,  2016 2015  8 6 1 2 21 13 1 0 5 5 2 0 1 0 3 3 3 4 4 4 1 0 0			
		December 31,			
Benefit Formula	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	0		
Bridged Benefit: 3.00% Multiplier (80% max) Frozen FAC; to 2.50% Multiplier (80% max)	3	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	1	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	1		
Bridged Benefit: 2.00% Multiplier (no max) Termination FAC; to 2.25% Multiplier (80% max)	1	1	0		
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% max)	1	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	1	1		
Bridged Benefit: 2.50% Multiplier (80% max) Termination FAC; to 2.25% Multiplier (80% max)	3	3	3		
Bridged Benefit: 2.50% Multiplier (80% max) Termination FAC; to 3.00% Multiplier (no max)	1	1	1		
Bridged Benefit: 2.80% Multiplier (80% max) Termination FAC; to 1.80% Multiplier (no max)	1	1	0		
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	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	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);	3	J	J		
Termination FAC	1	1	0		
Bridged Benefit Subtotal	152	119	102		
Bridged Benefit Guldottal Hybrid Plan - 1.00% Multiplier	49	47	41		
riyotia Fiant - 1.00 % Multiplier Hybrid Plan - 1.25% Multiplier	54	49	38		
riyotia Fiant - 1.25 % Multiplier Hybrid Plan - 1.50% Multiplier	65	54	48		
nyona Pian - 1.50% Multiplier Hybrid Plan - 1.75% Multiplier	65	54	48		
nyona Pian - 1.75% multiplier Hybrid Plan - 2.00% Multiplier	4	4	0		
nyona Pian - 2.00% munipiler Hybrid Plan Subtotal	173	155	130		
	2617	2565	2491		
Total Divisions	2617	∠565	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 Computed Employer Contribution Rates (Excludes Closed Divisions, Shadow Division, and Closed Municipalities – see Table 1)

	Co	ontributory G	iroups	Non-Contrib	utory Groups	Total	l Groups
		Member	Employer		Employer		Employer
	No. of	Contrib.	Contrib.	No. of	Contrib.	No. of	Contrib.
Benefit Formula	Divisions	Avg. %	Avg. %	Divisions	Avg. %	Divisions	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%
Svc x (1.00% times FAC-\$4,200, plus 1.50% times FAC-\$4,200)	2	0.45%	7.28%		1.0070	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%
Svc x (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 Svc < 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% max)	1	2.00%	227.09%			1	227.09%
2.50% Multiplier for Svc < 25 yrs, 1.00% for Svc > 25 yrs (80% max)	1	5.00%	27.57%			1	27.57%
2.50% Multiplier for Svc < 25 yrs, 1.00% for Svc > 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 Svc < 25 yrs, 2.75% for Svc > 25 yrs (74% max)	1	11.50%	158.52%			1	158.52%
2.57% Multiplier for Svc < 25 yrs, 1.00% for Svc > 25 yrs (no max)	1	12.00%	29.83%			1	29.83%
2.70% Multiplier for Svc < 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% 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 Svc < 35 yrs, 1.50% for Svc > 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)

		ntributory G	roune	Non-Contrib	utory Groups	Total	l Groups
		Member	Employer	NOII-COILLID	Employer	Total	Employer
	No. of	Contrib.	Contrib.	No. of	Contrib.	No. of	Contrib.
Benefit Formula	Divisions	Avg. %	Avg. %	Divisions	Avg. %	Divisions	Avg. %
2.00% to Social Security Age (no max), after SS Age Svc 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%						1	ĺ
Max); Termination FAC				1	0.00%		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: 2.00% 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% max) Frozen FAC; to 1.50% Multiplier (no max)				1	0.00%	1	0.00%
Bridged Benefit: 2.25% Multiplier (80% max) Frozen FAC; to 1.70% Multiplier (no max)	2	5.00%	17.61%			2	17.61%
Bridged Benefit: 2.25% Multiplier (80% 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% max) Frozen FAC; to 2.25% Multiplier (80% max)	2	5.00%	71.74%			2	71.74%
Bridged Benefit: 2.50% Multiplier (80% 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% 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% max)	1	8.00%	107.14%			1	107.14%
Bridged Benefit: 2.50% Multiplier (80% 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% 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% 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% 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		1911170		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% Multiolier	_		. 2. 3070	4	6.94%	4	6.94%
Hybrid Plan - 2.00% Multiplier				1	9.89%	1	9.89%
Total Control of the	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	No. of	Benefit	No. of	Benefit	No. of	Benefit	No. of
Program	Divisions	Program	Divisions	Program	Divisions	Program	Divisions
				-3			
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

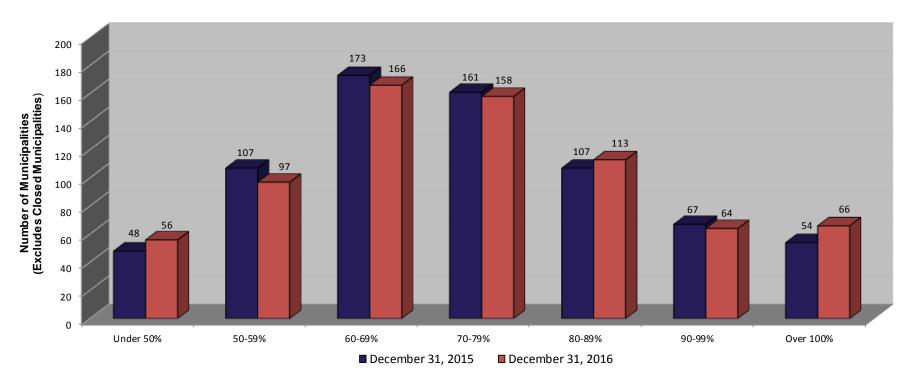


Chart 5 provides a distribution of the active municipalities by funded percentage of the entire municipality, comparing 2016 and 2015. 401 municipalities in MERS are funded at 70% or higher (56% of all municipalities). 66 municipalities (9.2% of all municipalities) are funded at 100% or more. The average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

Chart 6
Distribution of Municipality Divisions by Employer Contribution Rate

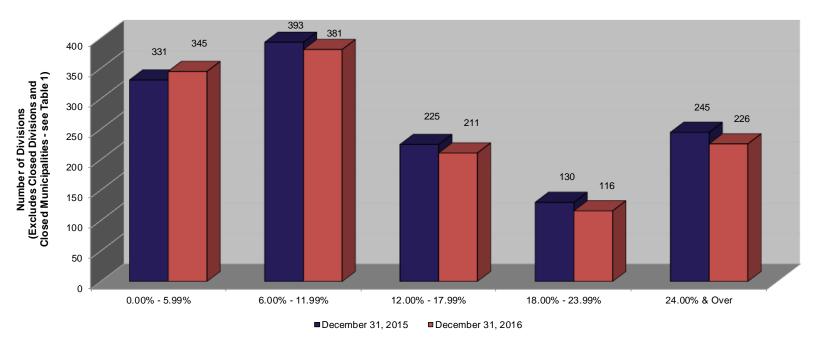


Chart 6 provides a distribution of divisions by employer contribution rate for divisions that are open to new hires, comparing 2016 and 2015. Note that:

- 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

						Participant	Information		
		Number	Fiscal	Number		Number	Annual	Number	Annual
Municipality Name	Number	of Divisions	Year Beginning	of Actives	Active Salary	of Retirees	Benefits in Force	Deferred Vesteds	Deferred Benefits
21st Dist Ct	8243	1	7/1/2018	Actives 9	370,154	7	174,504	vesteus 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 41 B Dist Ct	8234 5014	1 3	1/1/2018 1/1/2018	16 35	755,715 1,599,640	14 29	427,067 391,860	0 6	0 117,088
Addison Fire Dept	4607	1	4/1/2018	1	88,646	0	391,860	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	О	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 Alger CRC	0203 0201	13 1	1/1/2018 1/1/2018	34 25	1,574,727 1,350,259	34 36	655,458 628,590	4 2	23,041 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, Vlg of Alpena Co	4407 0401	6 8	7/1/2018 1/1/2018	13 79	726,286 3,108,545	7 115	155,072 1,358,958	2 35	3,593 209,222
Alpena CRC	0401	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	0	0	2	3,502
Antrim Co	0502	6	1/1/2018	321	13,827,586	189	1,884,709	68	550,795
Antrim CRC Arenac Co	0501 0603	2 7	1/1/2018	34 33	1,489,486	41 72	812,892 705,913	2 17	76,699 120,292
Arenac Co Arenac CRC	0603	3	1/1/2018 1/1/2018	33 16	1,340,263 776,658	33	506,667	17	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	Ó	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	0	0	0	0
Bad Axe, City of	3211	1	7/1/2018	19	997,605	18	468,708	1	14,941
Bancroft, Vlg of Bangor, City of	7610 8003	1 1	3/1/2018 7/1/2018	0 7	0 297,441	1 18	7,884 158,512	1 18	6,352 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 Barry Eaton Dist Hlth Dept	0804 2303	2	10/1/2018 1/1/2018	77 60	3,202,702 2,660,328	7 91	190,211 1,252,684	12 41	145,197 316,032
Barton Hills, Vlg of	8107	1	4/1/2018	2	121,228	2	51,095	0	0
Bates Twp	3616	1	4/1/2018	0	0	1	27,441	0	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 2	10/1/2018	95 9	3,330,086	45 19	268,897	12 0	80,919 0
Bay City HC Bay City, City of	0906 0901	7	10/1/2018 7/1/2018	44	486,663 2,349,701	289	448,516 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 Benzie Co	1120 1003	4 9	7/1/2018 10/1/2018	44 83	1,654,104	95 73	2,177,682	4	63,851
Benzie Co Comm on Aging	1003	1	10/1/2018	8	3,493,504 297,875	6	954,882 64,464	36 5	262,837 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	0	0	0	0
Benzie Trans Auth	1007	1	10/1/2018	18	653,049	3	7,592	1	630
Benzie/Leelanau Dist Hlth Dept Berkley, City of	4504 6304	1 4	10/1/2018 7/1/2018	3 43	191,355 2,014,906	2 75	26,751 1,745,549	0 10	0 92,033
Berrien Springs, Vlg of	1102	1	7/1/2018	10	406.279	, s 9	109.023	10	5.920
Bessemer, City of	2702	1	7/1/2018	11	542,638	12	132,792	1	2,549
Beverly Hills, Vlg 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 Birch Run, Vlg of	6332	1 3	7/1/2018 7/1/2018	2	186,680 603,167	0 2	0 19,780	0 5	0
Bishop Intl Arpt Auth	7315 2507	1	1/1/2018	13 32	1,923,775	14	264,772	1	21,850 12,276
Blackman Chtr Twp	3806	1	1/1/2018	34	2,400,085	12	433,207	1	48,835
Blissfield, Vlg 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 City of	1508 1506	1 3	10/1/2018 5/1/2018	4 14	157,139 809,970	3 35	62,528 542,655	3 5	37,847 35,755
Boyne City, City of Branch Co	1205	3 14	5/1/2018 1/1/2018	14 554	26,374,742	108	1,756,235	62	35,755 461,141
Branch-Hillsdale-St Joseph Com	1203	1	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 4715	2	7/1/2018	17	834,219	6	62,159	6	46,810 0
Brighton Area Fire Auth Brighton, Chtr Twp of	4715 4711	1 4	7/1/2018 4/1/2018	1 10	73,714 511,727	1 11	18,317 103,757	0 4	0 21,933
Brighton, City of	4711	6	7/1/2018	51	3,510,572	39	1,057,439	11	98,740
Britton, Vlg of	4604	1	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, Vlg of	3801	1	3/1/2018	9	343,182	5	95,246	1	3,996

							Information		
		Number	Fiscal	Number		Number	Annual	Number	Annual
Na I also allies Na	Manual an	of	Year	of	Active	of	Benefits	Deferred	Deferred
Municipality Name	Number 0247	<u>Divisions</u>	Beginning 4/4/2040	Actives	Salary	Retirees	in Force	<u>Vesteds</u>	Benefits C2.404
Brownstown, Chtr Twp of	8247	3	1/1/2018	66	4,596,422	12	563,880	5	63,184
Buchanan Dist Lib Buchanan, City of	1108 1101	1 4	7/1/2018 7/1/2018	5 26	164,423 1,429,260	1 33	3,673 410,393	1 6	5,546 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	32 85	4,841,511	26 87	3,222,146	15	138,968
Butman Twp CLD	2604	1	7/1/2018	0	4,041,511	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, Vlg 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 2	10/1/2018	340	17,663,923	223	3,964,248	94	786,730
Coldwater Brd of Pub Util	1203		7/1/2018	14	938,878 980,640	32	785,803	8	95,223
Coldwater, City of	1201 5603	5 2	7/1/2018	15		61	1,213,271	6	55,586
Coleman, City of Coloma Chtr Twp	1107	2	7/1/2018 4/1/2018	7 14	365,220 698,681	8	165,918 114,222	0 2	0 30,508
Coloma, City of	1118	1	4/1/2018	6	259,389	0	0	0	30,300
Columbiaville, Vlq of	4406	1	3/1/2018	4	193,334	3	14,288	0	0
Constantine, Vig of	7806	1	3/1/2018 4/1/2018	1	57,388	0	14,288	1	4,841
Coopersville Area Dist Lib	7011	2	7/1/2018	1	48,000	2	24,055	2	9,222
Coopersville, City of	7011	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	360,046	0	25,759
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	2001	1	10/1/2018	23	756,564	14	299,061	4	60,695
Crawford CRC	2004	3	1/1/2018	28	1,411,941	31	574,210	0	00,093
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	0 000,100	78	333,158	37	57,242
Crystal Falls, City of	3603	4	1/1/2018	15	856,374	25	600,032	9	77,061
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		Number	Fiscal	Number		Number	Annual	Number	Annual
		of	Year	of	Active	of	Benefits	Deferred	Deferred
Municipality Name	Number	<b>Divisions</b>	<b>Beginning</b>	Actives	<u>Salary</u>	Retirees	in Force	Vesteds	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, Vlg 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 Hlth 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 Hlth 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
Participant Information

							Information		
		Number	Fiscal	Number		Number	Annual	Number	Annual
BB		of	Year	of	Active	of	Benefits	Deferred	Deferred
Municipality Name	Number	<u>Divisions</u>	Beginning 7/4/0040	Actives	Salary	Retirees	in Force	<u>Vesteds</u>	Benefits 0.400
Franklin, Vlg of	6323 5003	3 7	7/1/2018 7/1/2018	11 66	627,738 5,053,190	11 105	411,799 3,549,653	1 19	2,186 209,802
Fraser, City of 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	75,125
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, Vlg 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 4	7/1/2018	12	845,600	63	1,545,113	8	86,777
Gratiot Co Gratiot CRC	2905	2	10/1/2018	42	2,171,090	98 55	1,549,715 1,136,982	15 1	155,680
Grayling, City of	2903 2003	5	1/1/2018 7/1/2018	33 6	1,631,452 318,700	20	307,381	4	9,585 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	1	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
Hith 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 Holland, City of	7006 7001	1 7	7/1/2018 7/1/2018	0 183	12 380 202	53 330	201,611	2	6,387 827 806
	7001 6317	<i>7</i> 5		183 22	12,389,202 1,233,542	330 34	8,403,230 928,337	63 8	827,896 72,800
Holly, VIg of Homer, VIg of	6317 1304	5 1	7/1/2018 1/1/2018	9	350,728	34 10	89,396	8 15	72,800 51,594
Houghton Co	3102	10	1/1/2018	90	4,099,332	100	1,666,906	10	143,781
Houghton CRC	3102	10	1/1/2018	7	442,625	8	256,327	0	143,761
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
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### MERS 12/31/2016 Valuation – Results By Municipality – Appendix A

						Btl-lt	I. f		
		Number	Fiscal	Number		Number Number	Information Annual	Number	Annual
		of	Year	of	Active	of	Benefits	Deferred	Deferred
Municipality Name	Number	<u>Divisions</u>	Beginning	Actives	Salary	Retirees	in Force	<u>Vesteds</u>	<u>Benefits</u>
Howard City, Vlg of Howard Twp	5902 1106	2	3/1/2018 4/1/2018	2	90,658 58,967	4 1	48,740 4,674	4 1	28,380 2,885
Howell Area Fire Auth	4714	2	7/1/2018	6	350,421	2	70,239	0	2,883
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 Hurley Med Ctr	6303 2521	5 13	7/1/2018 7/1/2018	26 1,980	1,966,631 113,422,810	50 1,913	1,729,012 39,718,776	3 278	32,454 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 Independence Twp	4404 6328	6 1	7/1/2018 1/1/2018	18 32	1,052,141 2,223,895	29 13	535,920 514,168	5 2	32,015 49,064
Indianfields Twp CLD	7905	1	4/1/2018	0	2,223,093	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
Ionia Co Ionia CRC	3408	6	1/1/2018	65	3,048,334	18	317,778	15	155,477
Ionia CRC Ionia HC	3404 3406	1	1/1/2018 10/1/2018	35 4	1,897,922 160,211	45 3	1,045,590 82,505	4 0	49,091 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 Iron Mountain, City of	3602 2201	4 4	1/1/2018 7/1/2018	17 21	894,469 1,025,734	47 43	956,134 999,914	2 5	28,186
Iron Mountain, City of Iron Mountain-Kingsford Swg	2201	1	7/1/2018	5	266,641	2	32,208	1	21,380 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 5207	3 2	10/1/2018 1/1/2018	35 6	1,665,980	38 3	701,783	10 1	117,172
Ishpeming Area Joint Wwtr Trtm Ishpeming Twp	5207	1	4/1/2018	10	328,469 245,173	9	61,883 105,893	2	6,750 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 Jordan Valley EMS Auth	1507 1509	1 2	7/1/2018 4/1/2018	1 5	69,179 214,509	0 1	0 8,758	1 0	7,158 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 4004	4 1	1/1/2018	26 11	1,066,885	41 12	730,448	15 1	219,955
Kalkaska Pub Trans Auth Kalkaska, Vlg of	4004	6	10/1/2018 3/1/2018	11	288,981 480,154	16	141,170 368,311	4	4,158 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 Kingsford, City of	3209 2202	1 5	2/1/2018 7/1/2018	1 16	41,941 750,273	1 23	16,930 498,038	0 2	0 14,444
L.M.A.S. Dist Hlth 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 Lake Odessa, Vlg of	3105 3402	2	3/1/2018 3/1/2018	6 2	266,655 157,782	8 1	100,147 1,209	4 0	13,999 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, Vig of	0705	1	7/1/2018	19	937,901	19	431,388	1	1,586
Lansing Chtr Twp Lansing HC	3320 3311	4	1/1/2018 7/1/2018	45 27	2,501,656 1,333,333	11 35	362,747 661,153	5 14	15,543 149,980
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 Vlg, City of	6311	5	7/1/2018	6	647,096	20	612,152	1	5,790
Laurium, Vlg of Lawrence, Vlg of	3104 8004	2 2	3/1/2018 3/1/2018	12 0	435,843 0	10 6	91,606 13,086	2	6,348 1,663
, vig oi	3004	2	5, 1,2010	J	0	J	13,000	3	1,000

						Participant	Information		
		Number	Fiscal	Number		Number	Annual	Number	Annual
		of	Year	of	Active	of	Benefits	Deferred	Deferred
Municipality Name Leelanau Co	Number 4501	Divisions 5	Beginning 1/1/2018	Actives 112	<u>Salary</u> 5,317,268	Retirees 84	in Force 1,388,321	Vesteds 20	Benefits 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

**Participant Information** 

Number Number Number Number Annual Fiscal Annual of Year of Active of **Benefits** Deferred Deferred **Municipality Name** Number **Divisions** Beginning Actives <u>Salary</u> Retirees in Force Vesteds **Benefits** 1,876,853 Midland CRC 5602 1/1/2018 35 63 1.435.018 12.350 5601 6,861,725 376,417 Midland, City of 7 7/1/2018 101 326 9.987.353 22 Mid-Mich Dist HIth Dept 5901 4 10/1/2018 76 3.273.595 47 467 992 38 264 318 Mid-Mich Lib League 8306 10/1/2018 2 98,324 2 28,411 3 32,890 Mid-Peninsula Lib Coop CLD 10/1/2018 0 3 21,901 0 3609 0 5806 7/1/2018 80,884 2 31,059 0 Milan Lib 2 0 1 9 Milan, City of 5801 8 7/1/2018 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 2 3/1/2018 6 233,002 114,917 0 Millington, Vlg of 7904 7 0 Missaukee Co 5702 3 10/1/2018 30 1,603,743 16 314,752 9 91,729 MOA Solid Waste Mamt Auth 6002 1/1/2018 150.751 2 44.309 12.755 4 1 1 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 6001 5 1/1/2018 50 71 747,604 14 82,325 1,861,935 Montmorency Co 2509 2 7/1/2018 73 332 36 592 Montrose, City of 4 159 165 7 8 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 7/1/2018 2 68,540 2 21,715 0 1 0 Mundy, Chtr Twp of 2517 2 1/1/2018 28 6 74.843 1.515.120 14 394.416 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 6103 20 10/1/2018 531 27.677.080 1.041 17.968.469 199 2.468.705 Muskegon Co 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 4/1/2018 46,953 Muskegon Heights HC 6115 8 371,123 4 1 897 6102 7 7/1/2018 55 99 2,457,196 17 Muskegon Heights, City of 2,711,422 180,128 6116 9 7/1/2018 134 8.460.078 306 6.600.917 30 516.740 Muskegon, City of N Houghton Co Wtr&Swg Auth 3106 2 1/1/2018 3 144.800 1 24.933 1 4.337 6104 3 12/1/2018 10 581,807 18 28,780 N Muskegon, City of 366,120 4 Nashville, Vlg of 0807 1 3/1/2018 6 220.540 0 0 0 5217 4/1/2018 6 233,041 2 28.861 732 Negaunee Twp 1 1 Negaunee, City of 5203 2 1/1/2018 24 1,161,865 42 846.763 6 83.200 4109 10/1/2018 74 5,135,112 38 1,163,718 38 537,611 Network180 7/1/2018 57 3,042,786 40 721,378 6 77,069 New Baltimore, City of 5016 8 7/1/2018 New Buffalo, City of 1113 21 1,081,327 6 96,175 8 35,677 1 10/1/2018 49 130 257 607 2 17 402 Newaygo CMH 6207 1 1 4 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 6204 4 1/1/2018 81 3,455,208 83 797,698 26 173,258 Newaygo MCF Newaygo Soil & Wtr Cnsrvn Dist 6205 9/1/2018 100.856 11.643 0 1 3 2 0 Newberry, Vlg of 4802 7 1/1/2018 17 647.812 27 313.023 5 27.470 1105 10/1/2018 10 344.032 7 56,805 1 8,631 Niles Dist Lib 1 Northern Lakes CMH Auth 2808 3 1/1/2018 19 991,949 111 2,000,447 13 191,750 8117 7/1/2018 10 565.824 3 35.653 Northfield Twp 1 0 0 Northpointe Bhyrl 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 12/1/2018 2 Northville Dist Lib 8229 1 14 753.732 11 155.973 20.082 Northville, City of 8208 8 7/1/2018 9 706,615 1,528,966 10 131,788 63 6106 11 7/1/2018 94 6.267.719 107 2.732.421 12 189.303 Norton Shores, City of Norway, City of 2204 4 7/1/2018 21 1.293.766 43 1.204.384 1 28.985 1/1/2018 744,473 3,743 Nottawaseppi Huron Band 8403 14 1,993 6320 10 7/1/2018 146 10,614,530 179 5.562.689 55 919.971 Novi, City of NW Mich Cmnty Hlth Agey 1502 1/1/2018 436,499 35 431.981 6 32.899 7 1 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 Two 4717 1 7/1/2018 12 453.034 3 26.252 1 3.709 6502 4 1/1/2018 53 101 1,575,620 15 100,258 Ogemaw Co 2,179,119 Ogemaw Co EMS Auth 2 10/1/2018 6508 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 6 45 6602 1/1/2018 1.619.688 45 523.907 11 79.405 Ontonagon Co Ontonagon Co Economic Dev Cor 6605 1 1/1/2018 0 Λ 1 10.371 0 0 Ontonagon CRC 6604 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 4 403,371 Orchard Lake, City of 6312 7/1/2018 315,333 12 8,110 4 1 2 Oronoko Chtr Twp 1114 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

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1/1/2018

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Osceola CRC

						Participant	Information		
		Number	Fiscal	Number		Number	Annual	Number	Annual
		of	Year	of	Active	of	Benefits	Deferred	Deferred
Municipality Name	Number	Divisions 2	Beginning 1/1/2018	<u>Actives</u>	<u>Salary</u> 495,390	Retirees	in Force	<u>Vesteds</u>	Benefits 40.750
Oscoda Chtr Twp Oscoda Co	3503 6801	6	1/1/2018	9 68	2,383,546	12 55	270,686 609,662	7 14	40,750 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 Oxford Fire Department	7607 6327	2	7/1/2018	6	409,210	14	396,219	1	15,138
Oxford, Vig of	6326	2	1/1/2018 7/1/2018	15 12	1,128,865 584,748	14 5	288,400 150,391	4	39,562 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 Petoskey, City of	5807 2402	1 5	7/1/2018 1/1/2018	7 69	219,842 4,247,006	0 76	0 1,476,087	2 11	23,134 156,866
Pewamo, Vlg of	3407	1	4/1/2018	2	96,351	0	1,476,067	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 8401	6	7/1/2018	0 235	10.700.000	57 25	1,537,814	6	23,815
Pokagon Band of Potawatomi Port Austin Area Swr&Wtr Auth	3210	1 1	1/1/2018 3/1/2018	235	12,760,886 0	25 1	298,153 5,599	25 1	208,674 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, Vlg 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 CDC	7104 7101	6 3	7/1/2018	70	2,294,761	60	760,311	14	101,955
Presque Isle CRC PRIDE Youth Programs CLD	6210	3 1	1/1/2018 10/1/2018	27 0	1,095,758 0	46 2	757,619 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 Rochester, City of	5012 6307	1 5	7/1/2018 7/1/2018	10 44	506,169 3,079,953	2 52	58,819 1,334,358	0 3	0 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 Rose Twp	6504	1 1	7/1/2018	4 5	138,159	4	45,393	2	6,228 0
Royal Oak, Chtr Twp of	6506 6306	5	4/1/2018 1/1/2018	2	44,025 46,629	15	7,581 210,379	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

		Number	Fiscal	Number		Number	Annual	Number	Annual
M i a in a lite e Name	Missaalaan	of Divisions	Year Beginning	of Actives	Active Salary	of Retirees	Benefits	Deferred	Deferred
Municipality Name Saginaw-Midland Muni Wtr Corp	Number 7305	Divisions 2	7/1/2018	Actives 7	504.338	Retirees 14	in Force 304,711	Vesteds 1	Benefits 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 Saugatuck, City of	0313 0307	1 2	7/1/2018 7/1/2018	4 8	198,475 415,545	1 11	31,803 151,834	0 2	0 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 5	10/1/2018	18	957,342	41 74	1,072,371	4	71,433
Schoolcraft Memorial Hosp Scio Twp	7505 8116	2	1/1/2018 4/1/2018	29 22	1,497,357 1,458,427	4	1,245,123 37,766	21 0	330,424 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, Vlg of	3704	2	3/1/2018	6	280,009	2	13,069	0	0
Shiawassee Co Shiawassee Co CMH	7602 7609	24 3	1/1/2018 10/1/2018	416 120	15,925,192 5,445,724	383 60	7,481,643 659,203	135 61	1,311,017 437,754
Shiawassee Council on Aging	7605	1	1/1/2018	5	150,960	9	78,304	0	437,734
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 Southgate, City of	6315 8262	5 1	7/1/2018 7/1/2018	43 44	2,725,500 2,350,053	26 82	573,433 2,097,084	9 5	134,105 75,819
Sparta, Vlg 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 St Clair, City of	5007 7703	1 8	1/1/2018 10/1/2018	7 24	379,065 1,427,041	9 47	157,059 1,348,937	2 6	50,191 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 1	7/1/2018	1 0	29,932 0	13 2	233,134	1	10,081 0
Stanton, City of CLD Stephenson, City of	5903 5504	1	3/1/2018 7/1/2018	4	177,186	1	5,670 9,822	0	0
Sterling, Vlg of	0605	1	4/1/2018	1	42,133	1	4,976	0	0
Stockbridge, Vlg 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 Superiorland Lib Coop	1702 5208	1 1	7/1/2018 10/1/2018	9 1	284,862 71,615	7	63,065 78,460	0 1	0 4,390
Suttons Bay Bingham Fire Auth	4506	1	4/1/2018	9	551,634	0	70,400	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 The Lib Network	8231 8218	1	4/1/2018 10/1/2018	5 30	264,658 1,186,143	2 29	26,854 382,454	0 9	0 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 Trio Council on Aging Inc CLD	3307 6507	2 1	10/1/2018 10/1/2018	102 0	3,638,975 0	50 3	365,689 22,440	22 1	173,915 3,287
The Council on Aging inc CLD	0307	ı	10/1/2018	U	U	3	22,440	'	3,207

							information		
		Number	Fiscal	Number		Number	Annual	Number	Annual
		of	Year	of	Active	of	Benefits	Deferred	Deferred
Municipality Name	Number	<b>Divisions</b>	<u>Beginning</u>	Actives	<u>Salary</u>	Retirees	in Force	<u>Vesteds</u>	<b>Benefits</b>
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, Vlg 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		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	230	14,536	0	0
Westphalia, vig of 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
	6208	2	7/1/2018	4	131,448	1		0	143,220
White Cloud Cmnty Lib White Cloud, City of	6206	1	7/1/2018	6	234,073	7	11,946	3	13,510
White Cloud/Sherman Util	6211	1	7/1/2018	3		1	52,324	0	13,510
	6325	8		83	120,734	41	8,750 1,369,829	7	
White Disease May of			1/1/2018	2	5,020,601			2	118,615
White Pigeon, VIg of	7804	1	4/1/2018	2	96,262	1	6,532		13,357
White Pine District Library	5904	1	7/1/2018		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
Tatala Astina Carana	700	0.000		04.040	4 770 040 000	00.47.1	004 000 500	0.404	04.000.700
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	15 735	19		34,843	1 770 010 090	300	1,640,246	128	357,353
Totals - MERS	135	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

		Vested Pending					Actuarial		
		Active	Former	Retired	Refund	Total	Value of	Percent	
Municipality Name	Mumbar								
Municipality Name	Number	<u>Liability</u>	Liability	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	Assets	Funded	
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	0302	5,654,312	629,615	17,470,026	15,115	23,769,068	14,058,523	59.1%	
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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, Vlg 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, Vlg 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 .,0 .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%	
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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	0701				0			42.9%	
0 . 0		558,900	227,457	3,010,893	0	3,797,250	1,627,294		
Baroda Lake Twp Police Del	1109	277,936	3,317	121,017		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%	
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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 Hlth D	4504	739,500	0	270,330	0	1,009,830	769,951	76.2%	
Berkley, City of	6304	4,040,076		16,743,758					
			523,671		76,574	21,384,079	12,294,873	57.5% 07.4%	
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, Vlg of	7315	1,390,195	72,954	157,405	4,414	1,624,968	1,460,051	89.9%	
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Actuarial Accrued Liability

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			Vested	5	Pending		Actuarial	
		Active	Former	Retired	Refund	Total	Value of	Percent
Municipality Name	Number	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	Assets	Funded
Bishop Intl Arpt Auth	2507	7,106,497	137,495	3,191,223	20,972	10,456,187	8,181,831	78.2%
Blackman Chtr Twp	3806	7,102,992	226,117	4,772,750	2,795	12,104,654	7,058,193	58.3%
Blissfield, Vlg of	4606	1,882,202	277,226	2,060,981	0	4,220,409	3,719,486	88.1%
Bloomfield Hills, City of	6302	7,628,399	512,663	28,537,896	18,271	36,697,229	31,777,545	86.6%
Blue Water Area Trans Com	7709	7,310,986	107,143	2,778,557	0	10,196,686	7,646,442	75.0%
Boyne City HC	1508	169,269	310,618	671,226	1,466	1,152,579	706,346	61.3%
Boyne City, City of	1506	3,350,966	194,551	5,541,818	13,703	9,101,038	7,006,519	77.0%
Branch Co	1205	34,689,667	2,859,728	18,239,864	158,196	55,947,455	42,269,950	75.6%
Branch-Hillsdale-St Joseph (	1202	5,424,975	1,665,798	7,564,076	48,700	14,703,549	12,827,184	87.2%
Brandon Chtr Twp of	6333	3,185,019	234,868	3,520,236	419	6,940,542	5,491,304	79.1%
Breckenridge, Vlg of	2906	297,113	112,694	1,990,154	23,540	2,423,501	983,488	40.6%
Bridgeport Chtr Twp	7307	3,461,515	1,286,207	4,374,691	11,592	9,134,005	5,908,870	64.7%
Bridgman, City of	1110	939,207	308,600	639,613	1,859	1,889,279	1,398,383	74.0%
Brighton Area Fire Auth	4715	241,520	0	226,566	0	468,086	464,915	99.3%
Brighton, Chtr Twp of	4711	858,203	122,345	996,103	21,358	1,998,009	1,863,034	93.2%
Brighton, City of	4704	9,594,018	494,057	12,729,967	1,362	22,819,404	14,347,180	62.9%
Britton, Vlg of	4604	276,077	15,960	0	620	292,657	475,176	162.4%
Bronson, City of	1204	1,007,742	401,139	847,757	39,577	2,296,215	1,399,354	60.9%
Brooklyn, Vlg of	3801	248,598	8,842	906,140	13,620	1,177,200	810,347	68.8%
Brownstown, Chtr Twp of	8247	20,144,690	473,522	7,666,916	50,576	28,335,704	21,056,049	74.3%
Buchanan Dist Lib	1108	211,394	49,648	33,765	0	294,807	325,983	110.6%
Buchanan, City of	1101	3,369,454	313,219	3,760,367	38,629	7,481,669	7,906,506	105.7%
Buena Vista Chtr Twp	7312	3,651,731	662,859	7,966,406	60,897	12,341,893	8,570,420	69.4%
Burton, City of	2508	12,574,303	710,362	40,828,179	39,966	54,152,810	23,456,958	43.3%
Butman Twp CLD	2604	0	0	80,904	0	80,904	111,650	138.0%
Cadillac, City of	8301	6,506,247	759,018	7,747,844	0	15,013,109	12,257,453	81.6%
Cadillac/Wexford Trans Auth	8305	778,708	0	1,602,864	0	2,381,572	1,737,194	72.9%
Calhoun Co	1311	51,340,756	3,660,595	46,217,480	618,171	101,837,002	63,847,014	62.7%
Calhoun Co Conso Dispatch	1316	3,341,583	236,490	2,230,187	2,741	5,811,001	5,997,693	103.2%
Canton Pub Lib	8232	1,868,142	210,362	2,412,165	0	4,490,669	4,496,778	100.1%
Canton, Chtr Twp of	8233	43,291,898	906,813	80,486,962	128,558	124,814,231	81,949,051	65.7%
Capac, Vlg of	7705	170,748	89,919	2,383,785	3,250	2,647,702	674,156	25.5%
Capital Area Dist Lib	3317	6,920,176	283,783	2,157,604	110,338	9,471,901	8,332,048	88.0%
Capital Region Arprt Auth	3305	5,679,184	1,324,116	10,486,360	5,446	17,495,106	13,425,019	76.7%
Carleton, Vig of	5805	690,279	1,324,110	687,323	0,440	1,377,602	1,001,843	70.7%
Carrollton Twp	7320		118,669		1,830			76.1%
Cascade Chtr Twp	4110	2,732,669 5,251,943	500,337	1,342,139 4,415,657	6,788	4,195,307 10,174,725	3,192,232 8,113,762	79.7%
· ·	3207		000,337		858			
Caseville, City of		1,459,194		1,350,174		2,810,226	2,134,538	76.0%
Caspian, City of	3608	181,776	53,504	1,092,445	0	1,327,725	654,128	49.3%
Cass Co	1402	16,461,182	672,309	14,081,910	119,804	31,335,205	22,836,064	72.9%
Cass Co MCF	1403	1,975,817	460,355	3,374,230	186,380	5,996,782	5,730,084	95.6%
Cass Dist Lib	1404	690,834	128,532	167,101	11,486	997,953	930,132	93.2%
Cedar Springs, City of	4105	1,046,455	408,118	1,925,281	14,626	3,394,480	2,802,412	82.6%
Center Line, City of	5001	1,358,863	207,175	6,777,129	43,419	8,386,586	4,168,953	49.7%
Central Lake, Vlg of	0504	203,779	3,901	0	0	207,680	201,593	97.1%
Central Mich Dist HIth Dept	3705	6,965,115	1,844,532	13,158,955	60,403	22,029,005	14,992,710	68.1%
Charlevoix Co	1503	25,618,874	2,828,236	24,874,348	18,532	53,339,990	40,374,904	75.7%
Charlevoix CRC	1501	3,367,948	501,346	4,509,637	0	8,378,931	5,776,896	68.9%
Charlevoix, City of	1505	4,220,424	164,366	9,266,660	4,694	13,656,144	8,901,979	65.2%
Charlotte Dist Lib	2309	392,631	4,531	389,245	0	786,407	410,815	52.2%
Charlotte, City of	2301	6,559,049	1,773,680	13,935,817	30,578	22,299,124	13,187,412	59.1%
Cheboygan Co	1603	12,792,523	889,506	14,949,872	112,857	28,744,758	21,001,279	73.1%
Cheboygan CRC	1601	5,199,253	683,791	15,024,038	1,701	20,908,783	9,556,287	45.7%
Cheboygan, City of	1602	4,411,134	69,424	6,197,175	7,306	10,685,039	6,857,101	64.2%
Chelsea Area Fire Auth	8118	475,362	53,343	215,960	10,107	754,772	770,862	102.1%
Chelsea, City of	8103	1,471,345	555,487	10,992,536	0	13,019,368	9,621,448	73.9%
Chesaning, Vlg of	7313	510,876	116,641	2,756,801	0	3,384,318	655,341	19.4%
Chesterfield Twp	5009	20,688,367	665,872	16,982,795	42,620	38,379,654	29,029,561	75.6%
Chesterfield Twp Lib	5010	260,757	232,334	744,780	12,101	1,249,972	1,522,350	121.8%
Chikaming Twp	1112	889,932	190,113	1,334,380	28,624	2,443,049	1,695,204	69.4%
Chippewa Co	1703	18,485,851	1,737,020	26,451,118	123,051	46,797,040	32,491,180	69.4%
Chippewa CRC	1704	6,918,036	281,398	12,522,278	0	19,721,712	10,165,078	51.5%
Chippewa River Dist Lib	3707	1,378,058	243,881	1,396,074	22,872	3,040,885	2,654,767	87.3%
Chocolay, Chtr Twp of	5218	873,717	476,101	223,898	21,694	1,595,410	1,625,806	101.9%
Clare Co	1802	10,444,106	1,915,423	10,855,389	108,187	23,323,105	16,710,717	71.6%
Clare Co Trans Auth	1806	168,704	9,718	89,270	0	267,692	187,641	70.1%
Clare CRC	1801	3,802,704	309,344	7,927,335	14,846	12,054,229	8,189,112	67.9%
Clare, City of	1804	2,598,315	426,508	5,821,173	24,207	8,870,203	5,529,353	62.3%
Clawson, City of	6305	5,381,268	236,292	19,324,141	7,009	24,948,710	10,745,043	43.1%
Clay Twp	7706	4,276,630	375,978	5,087,876	47,492	9,787,976	6,309,444	64.5%
Clearwater Twp	4005	19,768	0	109,508	0	129,276	103,544	80.1%
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			Vested	5 0 1	Pending		Actuarial	-	
		Active	Former	Retired	Refund	Total	Value of	Percent	
Municipality Name	Number	<u>Liability</u>	<u>Liability</u>	Liability	<u>Liability</u>	Liability	Assets	Funded	
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, Vlg 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, Vlg of	4406	408,735	0	104,873	0	513,608	392,680	76.5%	
Constantine, Vlg 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	2004	3,549,828	405,174	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 Cl	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 Au	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, Vlg 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%	
•	2206		1,506,574		154,643		21,010,032	59.7%	
Dickinson Co	2206	11,362,568		22,184,021		35,207,806			
Dickinson CRC		2,578,324	450,479	7,701,330	0	10,730,133	5,213,552	48.6%	
Dickinson-Iron Dist HIth 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 Hlth 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 Vlg 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		99,444,497	53.1%	
0, ,			3,003,703			187,115,599	99,444,497		
Eastpointe HC	5011	930,148		188,610	5,201	1,123,959		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 Hlth & 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%	

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M i aim alite . Name	Ni	Active	Former	Retired	Refund	Total	Value of	Percent
Municipality Name	Number	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	Assets	Funded
Ecorse, City of	8206	4,755,408	1,170,124	36,612,877	3,303	42,541,712	17,079,288	40.1% 75.9%
Elk Rapids, Vlg of Elkton, Vlg of	0506 3206	1,048,437 239,590	150,619 45,520	1,219,207 326,036	33,219 0	2,451,482 611,146	1,860,436 566,498	92.7%
Elsie, Vlg of CLD	1906	239,390	45,520	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, Vlg 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, Vlg 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	7323	186,008	0	0 507 460	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 6323	1,257,714	102,501	2,231,523	551	3,592,289	1,876,577	52.2% 56.6%
Franklin, Vlg of	5003	1,863,578	5,919	5,678,590	26,355 15,695	7,574,442	4,289,709	52.2%
Fraser, City of Fremont Area Dist Lib	6209	21,689,901 617,250	1,348,952 134,277	36,203,131 482,312	0	59,257,679 1,233,839	30,957,111 874,291	52.2% 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 Au	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. Libra	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%
Grading City of	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	1 764	4,097,279	2,452,470	59.9%
Green Oak Chtr Twp Greenville, City of	4708 5906	4,992,213 2,315,808	160,174	3,135,984	1,764 47.217	8,290,135 6,435,528	5,187,655	62.6% 73.8%
	5906 8207		164,949 1 603 251	3,907,554	47,217	6,435,528	4,751,534	73.8%
Grosse lle Twp		14,882,056	1,603,251	17,297,931	0 72.415	33,783,238	20,571,003	60.9% 56.2%
Grosse Pointe Park, City of Grosse Pointe-Clinton Ref C	8201 5004	17,249,310 0	595,957 0	28,138,891 2,138,617	72,415 40,846	46,056,573 2,179,463	25,906,096 2,596,207	56.2% 119.1%
Groveland Twp	6335	1,217,425	156,919	419,655	40,646	1,793,999	1,898,415	105.8%
Hackley Pub Lib	6114	323,369	0	419,033	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%
	3_30	_,200,420	551,115	3 10, 100	,001	_,507,5-10	_,000,000	55.1 /5

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			Vested		Pending		Actuarial	
		Active	Former	Retired	Refund	Total	Value of	Percent
Municipality Name	Number	Liability	Liability	Liability	Liability	Liability	Assets	Funded
Hamtramck, City of	8205	9,568,661	2,090,306	86,272,083	500,935	98,431,985	45,859,762	46.6%
	3107							
Hancock, City of		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 Au	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, 0,2 .0	1,467	34,997	67,781	193.7%
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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%
•	7014							
Holland Area Cmnty Pool Au		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%
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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	00,200	1,540,203	1,473,050	95.6%
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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%
Ionia 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		26,063	82,978	0		672,578	65.1%
		923,649				1,032,690		
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 Swς	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	4,203,149	1,540,370			2,211,972	
					2,846	2,637,986		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 1	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%
	1507							
Jordan Valley Dist Lib	1307	202,718	70,447	0	0	273,165	249,867	91.5%

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			Vested		Pending		Actuarial	
		Active	Former	Retired	Refund	Total	Value of	Percent
Municipality Name	Number	Liability	Liability	Liability	Liability	Liability	Assets	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%
			,		0			
Kalamazoo, Chtr Twp of	3907	7,726,216	0	5,833,656		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		300,654		8,804		2,619,174	73.8%
		1,620,940	,	1,618,394		3,548,792		
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 Hlth 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%
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Lakeshore Coordinating Cou	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%
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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 Vlg, 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 CLI	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		741,450	8,847,738	52,258	14,589,063	9,420,051	64.6%
		4,947,617						
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%
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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%

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		Active	Vested	Datirod	Pending	Total	Actuarial	Doroont
BB of the Pt. Manne	N		Former	Retired	Refund		Value of	Percent
Municipality Name	Number	<u>Liability</u>	Liability	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	Assets	<u>Funded</u>
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		386,030	635,757	2,060		2,197,568	89.3%
•	0902	1,437,207		,	2,000	2,461,054		
MBS Intl Arpt		3,414,136	322,119	7,661,856		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, Vlg 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		98,210	144,804,461	83,248,979	57.5%
				112,320,476				
Mid-Mich Dist HIth 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 CLE	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, Vlg of	6313	6,279,893	540,733	7,481,562	29,258	14,331,446	11,273,670	78.7%
Millington, Vlg 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	002,009	605,604	8,705	2,417,702	2,107,448	87.2%
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Muskegon Chtr Twp	6108	11,564,400 85,247,386	180,891	10,998,030	9,398	22,752,719	15,997,441	70.3%
Muskegon Co	6103		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 Au	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, Vlg 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%
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			Vested		Pending		Actuarial	_
No. of the although and	M	Active	Former	Retired	Refund	Total	Value of	Percent
Municipality Name New Buffalo, City of	Number 1112	Liability	Liability	Liability	<u>Liability</u> 57,406	Liability	Assets	Funded 80.4%
Newaygo CMH	1113 6207	1,374,156 274,008	177,956 156,466	1,021,185 2,818,685	0	2,630,703 3,249,159	2,115,751 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 Hlth 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% 93.1%
Oceola Twp	4717	1,061,664	39,469	209,844	1,116	1,312,093	1,221,835	
Ogemaw Co FMS Auth	6502	10,763,810	890,144	17,713,146	61,688 14,861	29,428,788	22,046,527	74.9% 91.0%
Ogemaw Co EMS Auth Ogemaw CRC	6508 6503	1,792,800 4,362,981	320,007 616,787	1,321,536 5,013,780	14,001	3,449,204 9,993,548	3,139,091	59.6%
Olive Twp	7009	188,038	010,767	233,413	0	9,993,546 421,451	5,956,876 291,429	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 De	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 Auth	6802	273,871	0	146,993	0	420,864	334,422	79.5%
Otisville, Vlg 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 7607	151,104 761,538	0 42,379	0 4,143,037	0	151,104 4,946,954	128,711 3,353,276	85.2% 67.8%
Owosso, City of Oxford Fire Department	6327		42,379 214,370	3,050,634	0		3,246,112	59.7%
Oxford, Vlg of	6326	2,171,592 1,735,301	140,365	1,518,949	510	5,436,596 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, Vlg 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	15 200 025	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 Port Austin, Vlg of	3210 3208	0 200,198	33,790 12,277	50,181 478,079	7,288 3,418	91,259 693,972	169,061 538,138	185.3% 77.5%
Port Austin, vig of Port Huron Chtr Twp	3208 7711	1,786,613	12,277 120,643	1,822,847	3,418	3,730,103	2,568,548	68.9%
. Sittimon Silli Twp		1,700,013	120,040	1,022,047	U	0,700,100	2,000,040	55.576

	MERS 12/31/2016 Valuation – Results By Municipality – Appendix B  Actuarial Accrued Liability							
	•		Vested	Accided Liabil	Pending		Actuarial	
		Active	Former	Retired	Refund	Total	Value of	Percent
Municipality Name	Number	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	Assets	<u>Funded</u>
Port Huron HC Port Huron, City of	7712 7702	2,229,326 46,526,565	146,700 2,588,355	6,437,862 108,373,207	2,949 59,155	8,816,837 157,547,282	5,634,112 88,397,936	63.9% 56.1%
Port Sanilac, Vlg 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 Reading, City of	6111 3003	348,010 213,239	38,896 48,346	220,220 180,000	0	607,126 441,585	574,647 380,751	94.7% 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 Rockwood, City of	4103 5810	3,040,310	1,013,754 161,436	4,977,797	0	9,031,861	5,931,774	65.7% 93.0%
Rockwood, City of Rogers City, City of	7102	1,297,305 2,454,409	308,522	1,164,350 8,496,163	7,248	2,623,091 11,266,342	2,440,153 5,563,815	93.0% 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 Saginaw Co	7314 7303	4,443,857 17,436,757	344,679 2,712,819	15,112,014 128,518,234	56,727 8,843	19,957,277 148,676,653	13,174,974 128,382,162	66.0% 86.3%
Saginaw Co 911 Com Ctr	7303	1,975,062	252,856	11,082,413	0,043	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 7402	208,221	202.047	45,907	0 534	254,128	243,428	95.8%
Sandusky, City of Sanilac CRC	7402 7410	1,428,995 4,644,965	392,917 0	2,906,037 3,881,157	9,521 149	4,737,470 8,526,271	2,678,112 7,072,575	56.5% 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 Schoolcraft CRC	7506 7501	934,920	0 525 272	11 567 155	510 0	935,430 15,274,400	727,125 7,240,579	77.7%
Schoolcraft Memorial Hosp	7501 7505	3,181,873 7,475,263	525,372 2,601,268	11,567,155 13,067,979	15,067	23,159,577	18,819,990	47.4% 81.3%
Scio Twp	8116	2,789,692	2,001,200	383,595	15,007	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 7601	105,741	1 792 020	718,978	0	824,719	541,471	65.7%
Shiawassee CRC Shiawassee Dist Lib	7601 7606	4,865,981 1,500,887	1,782,030 38,528	14,294,784	449 10,635	20,943,244	15,890,851 1,955,680	75.9% 100.1%
Sims Whitney Util Auth	7606 0606	1,500,887 254,037	38,528 0	402,953 89,389	10,635	1,953,003 343,426	273,632	100.1% 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%
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				Accrued Liabil	•		A - 4 1 - 1	
			Vested		Pending		Actuarial	_
		Active	Former	Retired	Refund	Total	Value of	Percent
Municipality Name	Number	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	<u>Liability</u>	<u>Assets</u>	<u>Funded</u>
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, Vlg 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 Ignace, 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%
	7803							
St Joseph Co		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, Vlg 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%
	7901	4,073,538	0			, ,		74.7%
Tuscola Co Hlth Dpt				7,112,003	20,285	11,205,826	8,366,697	
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 HIth Dept	3101	2,616,621	2,184,500	9,943,346	158	14,744,625	9,453,693	64.1%
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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 55.453	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%

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	_		Vested	al Accrued Liabil	Pending		Actuarial	
		Active	Former	Retired	Refund	Total	Value of	Percent
Municipality Name	Number	Liability	Liability	Liability	Liability	Liability	Assets	Funded
Washtenaw CRC	8102	21,826,349	1,286,290	42,131,801	134,105	65,378,545	36,768,404	56.2%
Wayland, City of	0304	2,243,446	274,784	5,329,447	0	7,847,677	5,642,887	71.9%
Wayne HC	8252	167,323	0	668,637	0	835,960	618,555	74.0%
Wayne, City of	8242	17,806,651	4,271,222	92,639,923	103,561	114,821,357	68,709,355	59.8%
Webberville, Vlg of	3314	195,715	42,230	258,180	333	496,458	496,236	100.0%
West Branch Dist Lib	6509	301,633	0	196,544	0	498,177	428,315	86.0%
West Branch, City of	6505	1,338,610	162,995	4,249,618	13,358	5,764,581	3,908,892	67.8%
Westland, City of	8211	31,227,634	3,517,952	101,097,486	34,007	135,877,079	58,038,689	42.7%
Westphalia, Vlg of	1907	484,318	0	118,773	0	603,091	468,540	77.7%
Wexford Co	8302	10,724,109	1,971,196	16,566,796	69,823	29,331,924	19,566,163	66.7%
Wexford CRC	8303	6,427,460	965,000	7,027,914	14,215	14,434,589	10,643,445	73.7%
White Cloud Cmnty Lib	6208	373,066	0	106,074	0	479,140	419,109	87.5%
White Cloud, City of	6206	420,721	108,519	489,031	0	1,018,271	611,727	60.1%
White Cloud/Sherman Util	6211	273,722	0	106,276	0	379,998	291,741	76.8%
White Lake Chtr Twp	6325	14,877,777	750,181	14,924,070	154,446	30,706,474	22,700,058	73.9%
White Pigeon, Vlg of	7804	70,930	117,131	71,353	628	260,042	232,746	89.5%
White Pine District Library	5904	76,637	0	181,788	0	258,425	132,361	51.2%
Whitehall, City of	6105	2,214,048	59,334	3,887,102	0	6,160,484	4,525,715	73.5%
Willard Pub Lib	1308	2,973,076	106,220	612,761	8,396	3,700,453	3,355,914	90.7%
Williamston, City of	3310	1,880,373	249,746	2,804,947	15,925	4,950,991	3,359,568	67.9%
Wixom, City of	6316	12,199,461	1,079,419	21,464,007	16,219	34,759,106	19,735,804	56.8%
Wolverine Lake, Vlg of	6329	1,154,688	354,358	1,765,564	21,372	3,295,982	1,920,090	58.3%
WUPPDR	3108	88,304	48,148	1,277,099	0	1,413,551	1,262,253	89.3%
Ypsilanti Cmnty Util Auth	8106	19,836,513	1,747,423	32,642,831	25,322	54,252,089	31,385,631	57.9%
Ypsilanti HC	8115	46,239	117,682	722,726	16,367	903,014	811,966	89.9%
Ypsilanti, City of	8101	6,073,540	650,969	7,710,643	125,512	14,560,664	19,289,792	132.5%
Ypsilanti, Twp of	8104	10,281,373	932,712	10,657,038	90,840	21,961,963	15,896,585	72.4%
Totals - Active Groups	720	4,553,563,602	543,973,009	8,540,386,772	24,394,583	13,662,317,966	9,115,953,878	
Totals - Closed Groups	15	0	2,854,875	14,613,634	44,107	17,512,616	19,766,121	
Totals - MERS	735	4,553,563,602	546,827,884	8,555,000,406	24,438,690	13,679,830,582	9,135,719,999	

		Amortization			Total
		Period(s) for	Normal	Amortization	Employer
Municipality Name	Number	Initial UAL <sup>1</sup>	Cost	Payment <sup>2</sup>	Contribution
		22			
21st Dist Ct	8243		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	01,020	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	0703	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	22, 5, 5 10	322,164	176,820	
-	2303	22	,		498,984
Barry Eaton Dist Hlth Dept			100,020	378,024	478,044
Barton Hills, Vlg of	8107	16 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 Hlth 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, Vlg 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, Vlg of	7315	22	19,680	10,440	30,120

		Amortization	,		Total
		Period(s) for	Normal	Amortization	
		• • • • • • • • • • • • • • • • • • • •			Employer
Municipality Name	<u>Number</u>	Initial UAL <sup>1</sup>	<u>Cost</u>	Payment <sup>2</sup>	<u>Contribution</u>
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	
		22	,	,	850,200
Britton, VIg of	4604	22	1,404	(23,724)	0
Bronson, City of	1204		(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, Vlg 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
		22		,	
Cass Co MCF	1402		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, VIg 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
		11, 8			
Clawson, City of	6305 7706		84,960 125,592	1,725,984	1,810,944
Clay Twp		22 22	125,592 5 148	242,748	368,844 6 984
Clearwater Twp	4005		5,148 672 924	1,836	6,984 965 400
Clinton Co	1903	19, 18, 12, 10, 8	672,924	292,476	965,400

		Amortization			Total
		Period(s) for	Normal	Amortization	Employer
Municipality Name	Number	Initial UAL <sup>1</sup>	Cost	Payment <sup>2</sup>	Contribution
Clinton CRC	1901	22, 20	186,360	574,356	760,716
Clinton Twp	5002	22, 20	664,776	1,968,684	2,634,036
Clinton, Vlg of	4602	22 22, 20, 3	55,044	9,096	64,140
Clinton-Eaton-Ingham CMH Clio, City of	3308 2523	22, 20, 3 22	3,003,600 57,900	3,186,552 28,368	6,190,152 86,268
CMH for Central Mich	3708	22	2,077,980	967,344	3,045,324
Coldwater Brd of Pub Util	1203	12, 9	79,872	577,632	657,504
Coldwater, City of	1201	17, 8	50,940	548,712	599,652
Coleman, City of	5603	22	22,776	66,432	89,208
Coloma Chtr Twp	1107	22	24,720	58,332	83,052
Coloma, City of	1118	22	8,712	8,196	16,908
Columbiaville, Vlg of	4406	22	5,064	8,340	13,404
Constantine, Vlg of	7806	22	5,112	(2,712)	2,400
Coopersville Area Dist Lib Coopersville, City of	7011 7005	22, 18 22	1,500 50,268	18,792 40,800	20,292 91,068
Corunna City of	7604	22, 6	65,124	189,288	254,412
Corwith Twp	6904	22	396	216	612
Covert Twp	8010	22	40,008	30,564	70,572
Crawford Co	2001	17, 10, 8, 7	165,972	13,212	179,184
Crawford Co Trans Auth	2004	22	65,508	103,572	169,080
Crawford CRC	2002	22, 16	120,816	407,208	528,024
Croswell, City of	7401	22	126,936	333,252	460,188
Crystal Falls Cmnty Hosp CLD	3618		0	85,704	85,704
Crystal Falls, City of	3603	15, 14	67,248	339,036	406,284
Ctrl Dispatch of Muskegon Co	6109	22	90,180	65,664	155,844
Ctrl Wayne Co Sanitation Auth	8214	3	0	155,304	155,304
Davison Richfield Sr CCA	2525	22 22	2,964	9,420	12,384
Davison Twp Davison,City of	2519 2516	22, 16	129,636 127,920	257,340 422,064	386,976 549,984
Dearborn, City of	8251	22, 10	1,310,928	(77,952)	1,232,976
Deerfield, Vlg of	4603	22	18,456	32,436	50,892
Delta Area Transit Auth	2107	22	10,308	432	10,740
Delta Chtr Twp	2306	22	94,572	192,576	287,148
Delta Co	2102	19, 16, 14, 13, 12, 8	302,184	1,111,668	1,413,852
Delta CRC	2105	22	123,264	390,048	513,312
Delta-Menominee Dist Hlth Dept	2103	22	180,852	59,016	239,868
Detour, Vlg of	1706	22	14,844	20,220	35,064
Detroit HC	8241	22, 20, 16	434,556	48,168	482,724
DeWitt Chtr Twp	1910	22	67,368	109,572	176,940
DeWitt, City of	1908	22	59,748	180,888	240,636
Dexter Area Fire Dept Dexter Twp	8219 8111	22 22	36,132 5,856	47,688 12,144	83,820 18,000
Dexter, City of	8217	15	24,744	60,336	85,080
Dickinson Co	2206	22, 19	347,220	984,432	1,331,652
Dickinson CRC	2203	17, 12	92,568	449,472	542,040
Dickinson-Iron Dist Hlth Dept	3605	22, 7, 3	84,048	436,920	520,968
Dimondale,Vlg of	2304	22	10,380	12,288	22,668
Dist Hlth Dept # 2	6501	3	28,368	517,056	545,424
Dist Hlth Dept # 4	7103	22	83,652	514,668	598,320
Dist Hlth Dept #10	5104	22, 19	375,768	805,608	1,181,376
Douglas, City of Vlg of	0303	22	99,780	40,296	140,076
Dowagiac Dist Lib	1406	22	7,836	(144)	7,692
Dowagiac HC	1405	22 22	16,800 159,312	(4,488)	12,312
Dowagiac, City of Drummond Island Twp	1401 1708	22	12,756	706,164 2,424	865,476 15,180
Dryden, Vlg of	4405	22	3,504	9,264	12,768
Dundee, Vlg of	5803	22	11,016	108,192	119,208
Durand, City of	7603	22	82,944	147,108	230,052
E UP Reg Planning & Dev Comm	1709	22	16,824	(10,260)	6,564
E UP Trans Auth	1705	22	134,052	443,400	577,452
East China Chtr Twp	7701	22	85,284	227,520	312,804
East Grand Rapids, City of	4101	8	35,316	1,332,024	1,367,340
East Jordan, City of	1504	22	60,660	110,340	171,000
East Lansing, City of	3301	22, 8, 7, 3	1,868,496	6,362,796	8,231,292
Eastpointe HC	5011	22	22,752	14,568	37,320
Eastpointe, City of	5019	23, 21	607,896	3,005,448	3,613,344
Eaton Co Hith & Rehab Sycs	2302	22, 17	1,302,612	4,729,488	6,032,100 525,684
Eaton Co Hlth & Rehab Svcs Eaton Rapids, City of	2305 2307	22 22	436,092 142,596	89,592 393,600	525,684 536,196
Eau Claire, Vlg of	1104	22	142,596	24,132	24,132
Ecorse, City of	8206	22, 17, 6, 5, 3	126,600	2,300,676	2,427,276
Elk Rapids, Vlg of	0506	22	65,724	41,016	106,740
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		Amortization	,		Total
		Period(s) for	Normal	Amortization	Employer
Municipality Name	Number	Initial UAL <sup>1</sup>	Cost	Payment <sup>2</sup>	Contribution
Elkton, Vlg of	3206	3	1,836	42,456	44,292
Elsie, Vlg of CLD	1906	ŭ	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 3	34,344	31,560	65,904
Farmington Cmnty Lib Farmington, City of	6319 6343	20, 12, 10	22,332 363,180	2,508 370,260	24,840 733,440
Farmington, City of Farwell, Vig of	1805	20, 12, 10	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 Fowler, Vlg of	5212 1904	22, 10 22	89,292 13,236	222,048 6,912	311,340 20,148
Fowlerville Dist Lib	4710	22	16,164	3,036	19,200
Fowlerville, Vlg 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 Gaylord, City of	8255 6903	22, 20, 11 22	541,536 165,108	2,213,040 396,576	2,754,576 561,684
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 Grand Beach, Vlg of	2703	22 22	39,444	64,104	103,548
Grand Beach, Vig of Grand Blanc Chtr Twp	1117 2511	22, 4	30,492 213,192	204 779,364	30,696 992,556
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 Gratiot Co	4102 2905	8 3	63,420 197,232	1,147,428 1,563,468	1,210,848 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 8250	22 22	79,884 119,964	107,028	186,912 181,632
Hamtramck HC Hamtramck, City of	8250 8205	22, 14, 8	119,964 81,180	61,668 4,584,660	181,632 4,666,848
Hancock, City of	3107	22, 14, 0	53,688	102,072	155,760
Harbor Beach, City of	3201	22, 16, 10	61,596	163,188	224,784
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		Amortization			Total
		Period(s) for	Normal	Amortization	Employer
Municipality Name	Number	Initial UAL <sup>1</sup>	Cost	Payment <sup>2</sup>	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 Hastings, City of	4716 0801	18 22, 15	32,244 155,580	4,884 537,504	37,128 694,476
Hazel Park, City of	6336	22, 13	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
Hillsdale Co	3005	22	(58,692)	228,516	169,824
Hillsdale CRC	3004	22	79,164	301,260	380,424
Hillsdale HC	3007 3001	22 22, 19, 3	13,356 238,548	(2,844)	10,512
Hillsdale, City of Hlth Source of Saginaw	7311	15, 14, 12, 10, 3	400,296	220,908 1,179,168	575,280 1,579,464
Holland Area Cmnty Pool Auth	7014	19, 18	33,060	(1,992)	31,068
Holland Cmnty Hosp CLD	7006	10, 10	00,000	46,968	46,968
Holland, City of	7001	22, 10, 8, 4	871,980	1,854,132	2,726,112
Holly, Vig 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 Turn	5902 1106	6 22	7,200 5,688	34,440 2,088	41,640 7,776
Howard Twp 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 Huron CRC	3204	22 22	1,271,304	1,767,492	3,038,796
Imlay City, City of	3202 4404	22	222,168 91,800	573,900 200,508	796,068 292,308
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
Ionia CRC	3404	22	108,072	749,460	857,532
lonia HC lonia, City of	3406 3403	22 22, 3	14,196 325,128	21,888 806,688	36,084 1,131,816
losco Co	3501	22, 3	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 22	64,812 171,252	284,964	349,776 853,524
Ironwood, City of Isabella Co	2706 3703	18, 4, 3	400,356	682,272 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 1507	22 22	113,964	121,392	235,356
Jordan Valley Dist Lib Jordan Valley EMS Auth	1507 1509	22 22	3,768 18,324	1,800 8,340	5,568 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

		Amortization			Total
		Period(s) for	Normal	Amortization	Employer
Municipality Name	Number	Initial UAL <sup>1</sup>	Cost	Payment <sup>2</sup>	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 Keweenaw Co	4111 4202	3 22	0 44,148	37,800	37,800
Keweenaw CRC	4202	22	86,964	64,320 246,204	108,468 333,168
Kinde, Vlg 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, Vlg of	3105	22, 17	25,188	45,708	70,896
Lake Odessa, VIg of	3402	22	18,540	(2,988)	15,552
Lake Orion, Vlg of Lakeland Lib Coop	6318 4106	12, 7 22	14,004 18,684	112,068 9,540	126,072 28,224
Lakeshore Coordinating Council	7007	22	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 8004	22 7, 4	19,344 0	73,308 7,260	92,652 7,260
Lawrence, Vlg of 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, VIg 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 Livingston Co CMH Auth	4703 4712	22, 7, 4 20	1,909,656 348,468	2,900,268 214,356	4,809,924 562,824
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 5802	22 22, 17	239,364 11,868	425,208	664,572
Luna Pier, City of Lyons, Vlg of	3411	22, 17	0	201,024 408	212,892 408
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 Manistee CRC	5101 5103	22, 17 22, 4	661,716 125,820	1,171,476 437,892	1,833,192 563,712
Manistee HC	5103	22, 4	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
Marquette Rrd of Light & Power	7405 5209	22	47,400 170,460	40,836	88,236 1 308 372
Marquette Brd of Light & Power Marquette Chtr Twp	5209 5215	22, 3 22	170,460 88,092	1,227,912 53,700	1,398,372 141,792
	32.13		55,052	55,750	171,102

MERS	12/31/2016 \	/aluation - Results By	/ Municipality – /	Appendix C	Total
		Amortization Period(s) for	Normal	Amortization	Total Employer
Municipality Name	Number	Initial UAL <sup>1</sup>	Cost	Payment <sup>2</sup>	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 Marshall, City of	1309 1306	6 22, 17, 14	0 194,280	13,908 977,868	13,908 1,172,148
Mason Co	5301	22, 77, 14	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 Conorol Hoon CLD	5403 5404	4, 3	191,784 0	280,308	472,092
Mecosta Co General Hosp CLD Mecosta CRC	5404 5401	22	88,896	450,576 135,420	450,576 224,316
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 Middleville, Vlg of	3002 0803	22, 18 22, 3	55,452 23,976	40,200 25,272	95,652 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 Millington, VIg of	6313 7904	22, 16, 3 22	138,468 8,520	399,168 (204)	537,636 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 Muir, Vlg of	3701 3405	22, 16 22	423,324 3,396	690,384 4,260	1,113,708 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 Muskegon Heights HC	6113 6115	22 22	25,332 33,996	19,632 32,892	44,964 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 5016	16 15	380,760	116,352	497,112
New Baltimore, City of New Buffalo, City of	5016 1113	15 22	179,592 41,976	230,328 35,376	409,920 77,352
Newaygo CMH	6207	4	3,312	(3,312)	77,352 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 1	12/31/2016	Valuation - Results By	Municipality –	Appendix C	T-4-1
		Amortization Period(s) for	Normal	Amortization	Total Employer
Municipality Name	Number	Initial UAL <sup>1</sup>	Cost	Payment <sup>2</sup>	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 Northville Chtr Twp	2207 8230	22, 16, 3 22	260,424 1,013,388	134,184 926,256	394,608 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 Novi, City of	8403 6320	22 22, 16, 15, 14, 12, 11	54,492 799,536	1032 3,156,504	55,524 3,956,040
NW Mich Cmnty Hlth 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 Ogemaw CRC	6508 6503	22 22	123,588 91,992	18,804 276,264	147,192 368,256
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 VIg of	6604	22 22	290,508	946,032	1,236,540
Ontonagon, Vlg of Orchard Lake, City of	6603 6312	20, 15, 3	39,924 26,076	411,156 377,016	451,080 403,092
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 Oscoda Wurtsmith Arpt Auth I	6801 6802	22 22	238,440 11,892	311,856 6,120	645,672 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 Ottawa CRC	7008 7002	6, 3 22	18,900 410,436	94,692 1,639,908	113,592 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 Pathways(Spr.Bhvl.Mntl.Hlth)	3901 5214	22 15, 11, 8	11,592 60,516	93,336 3,254,904	104,928 3,315,420
Paw Paw Lk Reg Jnt Swg Disp B	1103	22	21,336	31,236	52,572
Paw Paw, Vlg 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, VIg of Petersburg, City of	2909 5807	22 22	4,704 15,888	156 (5,136)	4,860 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, VIg of	3203	22	12,012	35,196	47,208
Pinckney, Vlg of	4706	22, 3	66,096	42,516	108,612
Pinconning, City of Pittsfield Chtr Twp	0904 8110	22 22, 14	11,220 647,940	69,948 696,504	81,168 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 Port Austin Area Swr&Wtr Auth	8401 3210	22 4	1,521,936 0	0	1,521,936 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 Sapiles, Vig. of	7702	22, 18, 10	956,076	4,797,768	5,753,844
Port Sanilac, Vlg of Port Sheldon Twp	7403 7018	22 22	12,768 22,392	36,684 (7,800)	49,452 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 V	aluation - Results E Amortization	sy Municipality – A	Appendix C	Total
		Period(s) for	Normal	Amortization	Employer
Municipality Name	<u>Number</u>	Initial UAL <sup>1</sup>	Cost	Payment <sup>2</sup>	<b>Contribution</b>
Presque Isle CRC	7101	22	76,644	333,036	409,680
PRIDE Youth Programs CLD Ravenna, Vlg of	6210 6111	19	0 4,272	4,800 2,448	4,800 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 Richfield Twp (Genesee Co)	6702 2514	22 22	114,840	174,960 149,280	289,800
Richfield Twp (Roscommon Co)	7202	22	(17,688) 32,952	72,996	131,592 105,948
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 Rockwood, City of	4103 5810	22 22	152,604 61,920	219,120 7,452	371,724 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 Roscommon Co	6107 7201	22, 17 22, 14	56,028 325,512	198,504 588,828	254,532 914,340
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 Saginaw Co	7314 7303	22 11, 9, 8	(86,460) 186,456	464,628 2,826,504	424,632 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 Saginaw Trans Sys Auth	7321 7319	22 22	21,840 76,776	142,212 1,008	164,052 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 Sandusky, City of	7404 7402	22 22	2,832 56,016	696 143,292	3,528 199,308
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 22	21,984	6,012	27,996
Saugatuck, City of Sault Ste. Marie HC	0307 4906	22	38,760 27,696	18,588 2,472	57,348 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 Schoolcraft CRC	7506 7501	22 22	47,628 124,284	15,684 559,320	63,312 683,604
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 SE Oakland Co Wtr Auth	6310 6309	22 22	68,400 63,852	146,880 110,832	215,280 176,052
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 Shiawassee Council on Aging	7609 7605	22 22	519,540 2,988	163,068 19,428	682,608 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 South Haven, City of	8005 8001	22, 8 22, 17, 3	53,292 390,072	219,288 421,512	272,580 811,584
South Lyon, City of	6315	22, 17, 3	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 Vig of	7016 7015	22	50,952	(6,504)	44,448 65.016
Spring Lake, Vlg of Springfield, City of	7015 1303	22, 18 22, 17	11,532 50,616	46,620 264,468	65,016 315,084
St Charles, Vlg of	7308	22	56,292	127,500	183,792

		Amortization	,		Total
		Period(s) for	Normal	Amortization	Employer
Municipality Name	Number	Initial UAL <sup>1</sup>	Cost	Payment <sup>2</sup>	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 St Joseph Co	1902 7803	22, 19, 11 22	98,028 546,696	947,376 186,852	1,045,404 733,548
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, Vlg of	0605	22	5,532	(14,364)	0
Stockbridge, Vlg of Sturgis HC	3316 7805	22 22	20,148 10,800	28,176 (552)	48,324 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 SW Shiawassee ESA	1119	22 22	10,116	40,692	50,808
Swan Creek Twp	7611 7309	22	54,600 7,956	(2,064) 10,224	52,536 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 Traverse City Light & Power	2807 2811	20 22	1,920 340,020	97,452 862,896	99,372 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 Hlth Dpt Tuscola Co MCF	7901 7906	22 22	93,948 257,100	197,136 69,252	291,084 326,352
Tuscola CRC	7908	22, 19	53,184	155,592	208,776
Twin City Pub Safety Auth CLD	3610	22, .0	0	3,096	3,096
Ubly, VIg 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 Vassar, City of	8236 7903	22 17	219,876 27,096	301,836	521,712
Vassar, City of Vevay Twp	3318	22	3,780	223,572 19,908	250,668 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 Hith Dept	3101	22, 6	52,512	626,112 162,144	678,624
Wakefield, City of Walker, City of	2701 4112	22 6	34,752 195,816	1,632,108	196,896 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, Vlg of	3314	22	5,700 7,704	4 022	5,700
West Branch Dist Lib West Branch, City of	6509 6505	22 22	7,704 35,952	4,932 130,764	12,636 166,716
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

		Amortization			Total
		Period(s) for	Normal	Amortization	Employer
Municipality Name	Number	Initial UAL1	Cost	Payment <sup>2</sup>	Contribution
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	720		131,231,664	368,437,452	500,570,928
Totals - Closed Groups	15		0	753,684	759,840
Totals - MERS	735		131,231,664	369,191,136	501,330,768

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> For overfunded divisions the displayed amortization payment is based on a 10-year amortization of the assets in excess of accrued liabilities, and acts as a credit against the normal cost. The entire credit is shown, even if it exceeds the normal cost. Thus the numbers do not always add up across, since the total contribution cannot be less than zero.