# Municipal Employees' Retirement System of Michigan 

The Report of the
Sixty-Fifth Annual Actuarial Valuation
as of December 31, 2010
and 50-Year Actuarial Projection
Covering Participating Municipalities in the
Municipal Employees' Retirement System of Michigan

Submitted to<br>The Retirement Board<br>Municipal Employees' Retirement System of Michigan

September 16, 2011

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The Retirement Board
Municipal Employees' Retirement System of Michigan
Lansing, Michigan
Ladies and Gentlemen:
This report presents the results of the $65^{\text {th }}$ Annual Actuarial Valuation, prepared as of December 31, 2010, for 715 participating municipalities in the Municipal Employees' Retirement System. This total includes 15 municipalities that have ceased active membership in MERS, but for whom MERS retains assets and liabilities for future benefit payments. This report does not include the 40 participating MERS municipalities that have adopted MERS defined contribution benefits only.

Also presented in this report are the results of the 50-year projections of MERS' assets, liabilities and cash flow. The projections include the defined benefit plan and the defined benefit portion of the hybrid plan.

MERS is an agent multiple-employer public employee pension plan and is a tax-qualified plan under section 401(a) of the Internal Revenue Code (most recent letter of Favorable Determination issued June 15, 2005). MERS is an independent public corporation established by the Legislature pursuant to Public Act 220 of 1996, and is an instrumentality of the participating municipalities and courts. Each municipality or court is responsible for the employer contributions needed to provide MERS benefits for its employees and former employees under the Michigan Constitution and the MERS Plan Document.

Our actuarial valuation was based on the following:

1. The benefit provisions of MERS, as described in Section VII.
2. Demographic data on the participants covered, as described in Section II.
3. Financial information regarding plan assets, as shown in Section III.
4. The actuarial assumptions and funding methods adopted by the Retirement Board. See Section VIII for details.

The valuation was based upon information furnished by the MERS administrative staff concerning Retirement System benefits, financial transactions, plan provisions, and individual active members, vested former members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but we did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the MERS administrative staff.

This report was prepared at the request of the Retirement Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board.

The purpose of the actuarial valuation is to measure the System's funding progress, to determine the employer contribution rates for the fiscal years beginning in 2012, and to determine the actuarial information for the Governmental Accounting Standards Board (GASB) Statement Nos. 25 and 27.

The Retirement Board
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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; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose described in this cover letter.
The signing actuaries are independent of the plan sponsor.
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.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of MERS as of the valuation date. 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. The Retirement Board of the Municipal Employees' Retirement System of Michigan confirms that the System provides for payment of the required employer contribution as described in Section 20m of Act No. 314 of 1965 (MCL 38.1140m).

Respectfully submitted,


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## I. Results of the Actuarial Valuation

Our actuarial valuation of the liabilities and contribution rates for each of the 715 defined benefit plan participating municipalities in the Municipal Employees' Retirement System as of December 31, 2010 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 (see Section VII).
2. The characteristics of active and inactive MERS members as of December 31, 2010 (see Section II).
3. The assets attributable to MERS members of each participating municipality. The total assets (at actuarial value) for all 715 municipalities included in the December 31, 2010 valuation was $\$ 6.95$ billion (see Section III).
4. The actuarial assumptions and funding method, which include an investment yield rate of $8 \%$ and the entry age normal actuarial cost method (see Section VIII).

The employer contribution rate has been determined for each municipality based on the entry age normal funding method. Under the entry age normal cost funding method, the total employer contribution is comprised of the normal cost plus the level annual percentage of payroll payment required to amortize the unfunded actuarial accrued liability over a period of 28 years. The 28 -year period will decline by one year in each of the following eight annual valuations. For closed divisions (new hires are not covered by MERS defined benefit plan or hybrid provisions in a linked division) of active municipalities, the amortization period for positive unfunded liabilities is decreased annually by 2 years until the period reaches 5 years. Negative unfunded accrued liabilities are amortized over 10 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 2012, and is then amortized as noted above.

Each of these components of the employer contribution (i.e., normal cost and amortization payment) are shown separately for each municipality in the Appendix. For open divisions, we show estimated dollar contributions (based on valuation 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.

Within each municipality an individual employer contribution is determined for each valuation group (division). The funded status of each municipality is shown in the Appendix. Chart 6 on page 22 shows a distribution of the employer contribution rate for open valuation divisions included in the December 31, 2010 valuation.

There is no single all-encompassing test for measuring a Retirement System's funding progress and current funded status. However, some common indicators of the progress that a Retirement System
has achieved in funding their obligations include observing the changes over time in the following items:

1. The ratio of valuation assets to actuarial accrued liabilities.
2. The pattern of the unfunded actuarial accrued liability as a percentage of active payroll.
3. The ratio of valuation assets to the termination liability (computed as if all active employees terminated employment on the valuation date).
4. The ratio of valuation assets to the actuarial present value of accrued benefits.

The tables and charts that are included in this report provide illustrations of the above funding measures on a current basis and on a historical basis.

## Comments

Based on the funding schedules in place in the 2009 valuation, the MERS overall funded percentage was projected to increase from $75.5 \%$ in 2009 to $76.1 \%$ in 2010. Based on actual events the funded percentage decreased to $74.5 \%$ in 2010 . Within this experience (a $-1.6 \%$ change from the projected $76.1 \%$ to the actual $74.5 \%$ ), $-1.6 \%$ was attributable to investment experience (based on the smoothed actuarial value of assets), $-0.3 \%$ was attributable to benefit provision changes and new municipalities, $+0.4 \%$ was due to changes in actuarial assumptions, and $-0.1 \%$ was due to experience in other risk areas, (retirements, disabilities, withdrawals, pay increases, etc.).

## Comments on the Investment Markets

The dramatic price declines across the world financial markets in 2008 led to increased volatility unlike any experienced in decades. The following two years, 2009 and 2010, have been more stable and MERS' portfolio recovered with investment returns of over $17 \%$ and $14 \%$, respectively. While economic worries continue to haunt investors world-wide, equity markets have rebounded, particularly in the United States. MERS maintains the 8\% annual return assumption on investments in the belief that over the long term this is achievable.

The actuarial value of assets (funding value), used to determine both MERS' funded status and the required employer contributions, is based on a 10 -year smoothed value of assets. Only a portion (three-tenths, for 2008, 2009, and 2010) of the 2008 investment market losses were recognized in the 2010 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, 2010 the actuarial value of assets is $116 \%$ of market value (down from $125 \%$ in 2009). This means that meeting the actuarial assumption in the next few years will require average annual market returns that exceed the 8\% investment return assumption.

If the investment markets do not fully make-up for the 2008 losses, employer contribution requirements may rise. MERS' investment strategy employs diversification using various asset categories (stocks, bonds, and to a smaller extent real estate and private equity) to capture as much of the upside return as possible while managing acceptable risk. If contribution increases do become necessary, MERS would work to impose them incrementally.

Remember that only three-tenths of the 2008 market losses are reflected in the 2010 actuarial valuation reports. As was true for past market downturns, MERS expects the markets to continue to rebound. By the time the 2008 market losses would be fully recognized (over the following 7 years), future market gains are expected to partly or fully offset 2008 market losses. This smoothing method is a powerful tool for reducing the volatility of the required employer contributions. However, if the financial markets do not rebound, the result would be gradual increases in employer contribution requirements over the next 7 years.

## TABLE 1

## Summary of the Valuation Results

|  | December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2010 | 2009 | 2008 |
| Number of Participating Municipalities | 715 | 699 | 692 |
| Number of Valuation Divisions |  |  |  |
| Open to new hires | 1,508 | 1,531 | 1,509 |
| Closed to new hires | 610 | 542 | 542 |
| Closed municipalities | 19 | 20 | 20 |
| Total | 2,137 | 2,093 | 2,071 |
| Total Payroll (millions) | \$1,684 | \$1,637 | \$1,625 |
| Assets at Market Value (millions) | \$5,975 | \$5,151 | \$4,493 |
| Assets at Actuarial Value (millions) | 6,945 | 6,443 | 6,246 |
| Actuarial Rate of Return | 5.74\% | 5.30\% | 4.73\% |
| Actuarial Accrued Liability (millions - Entry Age Normal) | \$9,317 | \$8,535 | \$8,322 |
| Percent of AAL Funded (based on actuarial value of assets) | 74.5\%* | 75.5\%@ | 75.0\%^ |
| Termination Liability (millions) | \$8,564 | \$7,749 | \$7,268 |
| Percent of Liability Funded (based on actuarial value of assets) | 81.1\% | 83.1\% | 85.9\% |
| Employer Normal Cost (millions) | \$136 | \$134 | \$133 |
| Amortization Payment (millions)\# | 149 | 129 | 125 |
| Total Regular Annual Contribution (millions) | \$285 | \$263 | \$258 |

* The December 31, 2010 funded percentage would have been $74.8 \%$ if not for benefit provision changes and new municipalities first reflected in the 2010 valuation.
@ The December 31, 2009 funded percentage would have been $75.6 \%$ if not for benefit provision changes and new municipalities first reflected in the 2009 valuation.
$\wedge \quad$ The December 31, 2008 funded percentage would have been $75.9 \%$ if not for benefit provision changes and new municipalities first reflected in the 2008 valuation.
\# The amortization payment excludes 16 closed municipalities in 2008. The 2009 amortization payment includes $\$ 0.5$ million for 16 closed municipalities. The 2010 amortization payment includes $\$ 0.5$ million for 15 closed municipalities.


## II. Membership Characteristics

## Active Members

The total number of defined benefit plan active members increased from 35,598 on December 31, 2009 to 35,816 on December 31, 2010.

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

| Item | December 31, |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 0 8}$ |
| Number of defined benefit plan |  |  |  |
| active members | 35,816 | 35,598 | 36,092 |
| Average age | 46.0 | 45.9 | 45.6 |
| Average benefit service | 12.0 | 11.8 | 11.6 |
| Average vesting service | 12.4 | 12.2 | 12.0 |
| Average compensation | $\$ 47,018$ | $\$ 45,972$ | $\$ 45,020$ |
| Aggregate compensation (millions) | $\$ 1,684.0$ | $\$ 1,636.5$ | $\$ 1,624.9$ |

## Vested Former Members

A vested former member is a person who terminated employment after 10 or more years of service (6 or 8 years with Benefit V-6 or V-8), with rights to a deferred benefit commencing at age 60 (or earlier if "F" benefits have been adopted).

There were 6,961 former employees with deferred vested rights as of December 31, 2010. This compares to 6,726 such members as of the prior valuation.

| Item | December 31, |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 0 8}$ |
| Number of vested former members ${ }^{\#}$ |  |  |  |
| Average age | 6,961 | 6,726 | 6,662 |
| Average annual deferred benefit | 50.0 | 49.8 | 49.5 |

[^0]
## Retirees and Beneficiaries

There were 26,930 retirees and beneficiaries receiving payments as of December 31, 2010. The table below presents age and benefit information as of the current valuation and for the past two years.

| Item | December 31, |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 0 8}$ |
| Number of pensioners | 26,930 | 24,930 | 23,832 |
| Average age | 68.9 | 69.0 | 69.0 |
| Average annual benefit | $\$ 17,879$ | $\$ 16,991$ | $\$ 16,447$ |

## Defined Contribution Plan Participants and Total MERS Participants

Although defined contribution plan participants are not included in the annual actuarial valuation of the MERS defined benefit plan, the trend in defined contribution participation is of interest. As of December 31, 2010, 40 participating municipalities have adopted defined contribution benefits only. Numerous municipality defined benefit divisions have established defined contribution plan benefits for future new employees. Existing defined benefit plan active members of many of those divisions were offered the choice of plans. The table below shows recent trends in defined contribution plan participation and overall MERS participants.

| Item | December 31, |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 0 8}$ |
| Number of participants |  |  |  |
|  |  |  |  |
|  | 78,343 | 75,605 | 74,400 |
| \% of total | 69,707 | 67,254 | 66,586 |
| Defined contribution plan only | $89.0 \%$ | $89.0 \%$ | $89.5 \%$ |
| \% of total | 8,636 | 8,351 | 7,814 |
|  | $11.0 \%$ | $11.0 \%$ | $10.5 \%$ |

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 participating municipalities.

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

Table 4 presents a historical development of retirees and beneficiaries added or removed from the rolls.

Chart 1 presents a comparison of the growth in participating employers to the growth in plan participants (active members, vested former members and retirees).

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

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 well below 2. The benefit payout as a percentage of active member payroll has increased to over $28 \%$.

Table 5 shows the distribution of active members by age and service and includes information on average compensation.

Table 6 shows the retirees and beneficiaries by attained age, while Table 6A shows the Average Annual Pension by decade of Retirement.

Tables 7 and 8 present distributions of retirees and beneficiaries on the rolls by the types of benefit being paid and option selected.

Finally, Table 9 shows the distribution of benefit provisions in effect for the 2010 and past two valuations.

TABLE 2
Participating Municipalities and Covered Persons Historical Comparison

| Valuation <br> Date <br> Dec. 31, | No. of Participating Municipalities | Active Members |  |  |  | $\begin{array}{\|c\|} \hline \text { Persons on } \\ \text { Deferred } \\ \text { Status } \\ \hline \hline \end{array}$ | Annual <br> Deferred <br> Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Annual <br> Payroll | Average Pay | Percent Increase |  |  |
| 1976 | 312 | 26,951 | \$ 263,792,787 | \$ 9,788 | 9.9 \% | 306 |  |
| 1977 | 320 | 28,772 | 292,097,384 | 10,152 | 3.7 | 321 |  |
| 1978 | 324 | 28,066 | 314,343,079 | 11,200 | 10.3 | 366 |  |
| 1979 | 332 | 29,148 | 352,208,832 | 12,083 | 7.9 | 363 |  |
| 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 |

TABLE 3

## Benefits Being Paid to Retirees and Beneficiaries Historical Comparison

| Valuation Date December 31, | Number of Retirees and Beneficiaries | Percent Increase in Retirees and Beneficiaries | Annual Retirement Allowances | Percent Increase in Retirement Allowances |
| :---: | :---: | :---: | :---: | :---: |
| 1976 | 4,963 | 7.5 \% | \$ 8,753,807 | 16.1 \% |
| 1977 | 5,316 | 7.1 | 10,753,677 | 22.8 |
| 1978 | 5,648 | 6.2 | 12,012,571 | 11.7 |
| 1979 | 6,010 | 6.4 | 13,450,368 | 12.0 |
| 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 |
| 1991 | 11,061 | 7.2 | 61,807,210 | 19.5 |
| 1992 | 11,617 | 5 | 71,044,806 | 14.9 |
| 1993 | 12,040 | 3.6 | 80,964,212 | 14.0 |
| 1994 | 12,492 | 3.8 | 91,226,923 | 12.7 |
| 1995 | 13,032 | 4.3 | 102,010,673 | 11.8 |
| 1996 | 13,263 | 1.8 | 109,841,190 | 7.7 |
| 1997 | 14,236 | 7.3 | 123,112,928 | 12.1 |
| 1998 | 14,790 | 3.9 | 138,700,740 | 12.7 |
| 1999 | 15,325 | 3.6 | 152,771,711 | 10.1 |
| 2000 | 16,275 | 6.2 | 173,549,622 | 13.6 |
| 2001 | 16,905 | 3.9 | 191,785,646 | 10.5 |
| 2002 | 17,538 | 3.7 | 210,982,922 | 10.0 |
| 2003 | 18,443 | 5.2 | 236,588,632 | 12.1 |
| 2004 | 19,271 | 4.5 | 262,221,987 | 10.8 |
| 2005 | 20,155 | 4.6 | 288,061,637 | 9.9 |
| 2006 | 21,464 | 6.5 | 322,522,645 | 12.0 |
| 2007 | 22,600 | 5.3 | 353,541,830 | 9.6 |
| 2008 | 23,832 | 5.5 | 391,959,046 | 10.9 |
| 2009 | 24,930 | 4.6 | 423,577,691 | 8.1 |
| 2010 | 26,930 | 8.0 | 481,476,493 | 13.7 |

TABLE 4
Retirees and Beneficiaries Added and Removed
Historical Comparison

| Year Ended December 31, | Adde d |  | Removed |  | End of Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Annual Allowances | No. | Annual Allowances | No. | Annual Allowances |
| 1976 | 573 | \$ 1,527,655 | 225 | \$ 312,147 | 4,963 | \$ 8,753,807 |
| 1977 | 562 | 2,328,316 | 209 | 328,446 | 5,316 | 10,753,677 |
| 1978 | 545 | 1,691,557 | 213 | 432,663 | 5,648 | 12,012,571 |
| 1979 | 642 | 1,985,592 | 280 | 547,795 | 6,010 | 13,450,368 |
| 1980 | 666 | 2,377,702 | 253 | 593,567 | 6,423 | 15,234,503 |
| 1981 | 753 | 2,835,979 | 315 | 623,704 | 6,861 | 17,446,778 |
| 1982 | 630 | 2,852,317 | 316 | 680,904 | 7,175 | 19,618,191 |
| 1983 | 665 | 2,802,889 | 286 | 746,871 | 7,554 | 21,674,209 |
| 1984 | 665 | 3,468,634 | 317 | 773,722 | 7,902 | 24,369,121 |
| 1985 | 781 | 4,297,247 | 340 | 919,178 | 8,343 | 27,747,190 |
| 1986 | 737 | 4,840,442 | 339 | 1,019,664 | 8,741 | 31,567,968 |
| 1987 | 762 | 5,419,205 | 399 | 1,246,809 | 9,104 | 35,740,364 |
| 1988 | 783 | 6,097,248 | 387 | 1,161,493 | 9,500 | 40,676,119 |
| 1989 | 832 | 6,560,106 | 469 | 1,600,627 | 9,863 | 45,635,598 |
| 1990 | 865 | 7,777,389 | 411 | 1,674,745 | 10,317 | 51,738,242 |
| 1991 | 1189 | 11,803,085 | 445 | 1,734,117 | 11,061 | 61,807,210 |
| 1992 | 1,181 | 11,771,336 | 625 | 2,533,740 | 11,617 | 71,044,806 |
| 1993 | 1,024 | 12,219,419 | 601 | 2,300,023 | 12,040 | 80,964,212 |
| 1994 | 946 | 12,978,853 | 494 | 2,716,142 | 12,492 | 91,226,923 |
| 1995 | 1154 | 13,799,665 | 614 | 3,015,915 | 13,032 | 102,010,673 |
| 1996 | 824 | 10,582,845 | 593 | 2,752,328 | 13,263 | 109,841,190 |
| 1997 | 1504 | 16,305,680 | 531 | 3,033,941 | 14,236 | 123,112,929 |
| 1998 | 1,122 | 19,230,034 | 568 | 3,642,223 | 14,790 | 138,700,740 |
| 1999 | 1,312 | 19,663,240 | 777 | 5,592,269 | 15,325 | 152,771,711 |
| 2000 | 1,319 | 23,588,044 | 369 | 2,810,133 | 16,275 | 173,549,622 |
| 2001 | 1,238 | 22,971,336 | 608 | 4,735,312 | 16,905 | 191,785,646 |
| 2002 | 1,275 | 25,079,342 | 642 | 5,882,066 | 17,538 | 210,982,922 |
| 2003 | 1,577 | 31,229,077 | 672 | 5,623,367 | 18,443 | 236,588,632 |
| 2004 | 1,553 | 32,303,049 | 725 | 6,669,694 | 19,271 | 262,221,987 |
| 2005 | 1,666 | 32,839,907 | 782 | 7,000,257 | 20,155 | 288,061,637 |
| 2006 | 2,071 | 38,752,141 | 762 | 4,291,133 | 21,464 | 322,522,645 |
| 2007 | 2,030 | 36,947,384 | 894 | 5,928,199 | 22,600 | 353,541,830 |
| 2008 | 2,015 | 43,573,642 | 783 | 5,156,426 | 23,832 | 391,959,046 |
| 2009 | 1,871 | 36,164,024 | 773 | 4,545,379 | 24,930 | 423,577,691 |
| 2010 | 2,809 | 67,149,443 | 809 | 9,250,641 | 26,930 | 481,476,493 |

## Chart 1

## MERS GROWTH



## CHART 2

## Active and Retired Participants



## Chart 3

## Active Members Per Pension Recipient



Benefits as Percent of Pay


TABLE 5
Number and Average Pay of Members in Active Service as of December 31, 2010 by Age and Years of Benefit Service

| Age | Total | Years of Benefit Service |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Total | 35,816 | 9,099 | 7,602 | 7,410 | 4,622 | 3,865 | 1,808 | 1,410 |
|  | \$47,017 | \$39,218 | \$45,809 | \$48,228 | \$51,244 | \$54,273 | \$54,651 | \$53,973 |
| Under 20 | 80 | 80 |  |  |  |  |  |  |
|  | \$17,420 | \$17,420 |  |  |  |  |  |  |
| 20-24 | 846 | 828 | 18 |  |  |  |  |  |
|  | \$28,413 | \$28,371 | \$30,337 |  |  |  |  |  |
| 25-29 | 2,238 | 1,676 | 538 | 24 |  |  |  |  |
|  | \$40,917 | \$39,911 | \$43,901 | \$44,322 |  |  |  |  |
| 30-34 | 3,262 | 1,360 | 1,354 | 538 | 10 |  |  |  |
|  | \$46,530 | \$41,549 | \$50,462 | \$49,292 | \$42,825 |  |  |  |
| 35-39 | 4,194 | 1,126 | 1,171 | 1,481 | 404 | 12 |  |  |
|  | \$49,408 | \$41,563 | \$49,724 | \$53,572 | \$55,119 | \$48,571 |  |  |
| 40-44 | 5,167 | 1,098 | 1,119 | 1,403 | 1,086 | 445 | 16 |  |
|  | \$49,682 | \$41,888 | \$46,514 | \$50,785 | \$56,531 | \$56,483 | \$55,402 |  |
| 45-49 | 5,749 | 992 | 1,035 | 1,229 | 970 | 1,099 | 392 | 32 |
|  | \$49,299 | \$40,589 | \$45,897 | \$47,160 | \$52,402 | \$58,435 | \$53,931 | \$46,949 |
| 50-54 | 6,280 | 946 | 1,010 | 1,181 | 964 | 1,045 | 657 | 477 |
|  | \$47,435 | \$38,825 | \$41,723 | \$44,754 | \$48,495 | \$53,849 | \$57,853 | \$52,704 |
| 55-59 | 5,002 | 603 | 771 | 966 | 758 | 839 | 482 | 583 |
|  | \$47,446 | \$41,300 | \$42,772 | \$44,468 | \$46,288 | \$50,789 | \$54,630 | \$55,675 |
| 60-64 | 2,308 | 292 | 435 | 436 | 348 | 342 | 209 | 246 |
|  | \$46,246 | \$39,863 | \$41,476 | \$44,709 | \$48,110 | \$50,742 | \$48,407 | \$54,260 |
| 65 \& Over | 690 | 98 | 151 | 152 | 82 | 83 | 52 | 72 |
|  | \$37,532 | \$22,799 | \$31,838 | \$39,043 | \$40,913 | \$43,234 | \$44,694 | \$50,739 |

## TABLE 6

## RETIREES AND BENEFICIARIES AS OF DECEMBER 31, 2010 Tabulated by Attained Ages

| Age | Number |
| :---: | ---: |
| Total | 26,930 |
| Under 50 | 509 |
| $50-54$ | 1,065 |
| $55-59$ | 3,362 |
| $60-64$ | 6,015 |
| $65-69$ | 4,861 |
| $70-74$ | 3,684 |
| $75-79$ | 2,937 |
| $80-84$ | 2,253 |
| $85-89$ | 1,451 |
| $90-94$ | 591 |
| $95-99$ | 131 |
| $100 \&$ Over | 13 |
| Certain Only\# | 58 |

\# These are beneficiaries of deceased retirees who had elected years certain and life options. The beneficiaries receive benefits until the end of the term certain period.

TABLE 6A
RETIREES AND BENEFICIARIES
AS OF DECEMBER 31, 2010
Average Annual Pension by Year of Retirement

| Year of Retirement | Number\# | Average Annual Pension\# |
| :---: | ---: | :---: |
| Before 1960 | 4 | $\$ 4,948$ |
| $1960-1969$ | 46 | 9,468 |
| $1970-1979$ | 588 | 5,356 |
| $1980-1989$ | 3,033 | 8,107 |
| $1990-1999$ | 6,937 | 14,997 |
| $2000-2009$ | 13,874 | 21,198 |
| $2010-2019$ | 2,448 | 22,526 |
| Total | 26,930 | 17,879 |

\# 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.

TABLE 7

## Allowances Being Paid Retirees and Beneficiaries DECEMBER 31, 2010 Tabulated by Type of Benefit Being Paid

| Monthly Benefits | All Retired Members | Type of Benefit |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 |
| \$ 0-199 | 1,639 | 1,077 | 28 | 22 | 433 | 79 | 0 |
| 200-399 | 3,088 | 2,109 | 96 | 62 | 672 | 140 | 9 |
| 400-599 | 2,939 | 2,026 | 143 | 50 | 595 | 111 | 14 |
| 600-799 | 2,469 | 1,796 | 121 | 46 | 402 | 97 | 7 |
| 800-999 | 2,165 | 1,671 | 124 | 44 | 243 | 74 | 9 |
| 1000-1199 | 1,762 | 1,357 | 99 | 35 | 206 | 62 | 3 |
| 1200-1399 | 1,575 | 1,236 | 99 | 32 | 164 | 39 | 5 |
| 1400-1599 | 1,427 | 1,194 | 55 | 20 | 131 | 26 | 1 |
| 1600-1799 | 1,281 | 1,100 | 45 | 21 | 91 | 23 | 1 |
| 1800-1999 | 1,140 | 989 | 28 | 13 | 90 | 17 | 3 |
| 2000 \& Over | 7,445 | 7,060 | 83 | 41 | 187 | 68 | 6 |
| Totals | 26,930 | 21,615 | 921 | 386 | 3,214 | 736 | 58 |
| Total Monthly Benefits | \$40,123,041 | \$35,512,635 | \$962,167 | \$400,480 | \$2,532,088 | \$657,105 | \$58,566 |

## Type of Benefit

1. Normal Retirement for age and service
2. Non-Duty Disability*
3. Duty Disability*
4. Beneficiaries
5. Non-Duty Death
6. Duty Death

* At age 60, these benefit types are converted to Type 1, normal retirement for age and service.

TABLE 8

## Allowances Being Paid Retirees and Beneficiaries DECEMBER 31, 2010 <br> Tabulated by Optional Form of Benefit Being Paid

| Monthly <br> Benefits | All <br> Retired <br> Members | $\mathbf{1}$ |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

## Option Selected

1. Beneficiary draws $100 \%$ of retiree's benefit
2. Beneficiary draws $75 \%$ of retiree's benefit
3. Beneficiary draws $60 \%$ of retiree's benefit
4. Beneficiary draws $50 \%$ of retiree's benefit
5. Equated option (changing at Social Security age)
6. 5 year certain and life
7. 10 year certain and life
8. 15 year certain and life
9. 20 year certain and life
10. Straight life allowance

TABLE 9
VALUATION DIVISIONS IN 2010, 2009, AND 2008 VALUATIONS
TABULATED BY BENEFIT PLAN (EXCLUDES 15 CLOSEd MUNICIPALITIES WITH 19 DIVISIONS IN 2010, 16 CLOSED MUNICIPALITIES WITH 20 DIVISIONS IN 2009, and 16 CLOSED MUNICIPALITIES WITH 20 DIVISIONS IN 2008)

| Benefits | Number of Divisions with Benefit on December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2010 | 2009 | 2008 |
| Benefit A (1.00\%) | 2 | 2 | 2 |
| Benefit B-1 (1.70\%) | 76 | 68 | 68 |
| Benefit B-2 (2.00\%) | 322 | 327 | 332 |
| Benefit B-3 (2.25\%) | 509 | 504 | 504 |
| Benefit B-3 (2.25\%) - no maximum | 6 | 1 | 0 |
| Benefit B-4 (2.50\%) - $75 \%$ maximum | 4 | 4 | 3 |
| Benefit B-4 (2.50\%) | 904 | 895 | 884 |
| Benefit B-4 (2.50\%) - no maximum | 7 | 3 | 2 |
| Benefit C New (1.30\%) | 15 | 13 | 11 |
| Benefit C Old (1.00\% under \$4,200, 1.50\% over) | 6 | 6 | 6 |
| Benefit C-1 New (1.50\%) | 41 | 41 | 40 |
| Benefit C-1 Old (1.20\% under \$4,200, 1.70\% over) | 17 | 18 | 19 |
| Benefit C-2 (2.00\% to social security age) |  |  |  |
| (Base B-1) | 35 | 36 | 36 |
| (Base C-1 New) | 1 | 1 | 1 |
| (Base C-1 Old) | 8 | 8 | 9 |
| Non Standard Benefit C-2 |  |  |  |
| B-4 (Base B-3) | 2 | 2 | 2 |
| B-4 to 65 (Base B-3) | 1 | 1 | 1 |
| 2.8\% (Base B-4) | 1 | 1 | 1 |
| 1.70\% (25 years) $+1.50 \%$ (over 25 ) - 80\% maximum | 3 | 0 | 0 |
| 2.20\% - no maximum | 6 | 6 | 4 |
| 2.25\% (25 years) + $1.00 \%$ (over 25) 80\% Max | 1 | 0 | 0 |
| 2.25\% (25 years) + 2.00\% (over 25) 80\% Max | 0 | 1 | 1 |
| 2.20\% (15 years) + 2.40\% (15-25) + 1.00\% (over 25) - 80\% maximum | 3 | 0 | 0 |
| 2.35\% to maximum of 80\% | 4 | 4 | 4 |
| 2.50 (25 years) + 1.00\% (over 25) | 5 | 0 | 0 |
| 2.50 ( 25 years) + $1.00 \%$ (over 25) 80\%Max | 1 | 1 | 1 |
| 2.57 (25 years) $+1.00 \%$ (over 25) | 1 | 0 | 0 |
| 2.7\% (25 years) $+2.5 \%(25-30)+1.0 \%$ (over 30) | 2 | 10 | 7 |
| 2.7\% (25 years)+2.5\% (25-30)+1.0\%(over 30) 80\% Max | 0 | 0 | 2 |
| 2.75\% to maximum of $75 \%$ | 0 | 0 | 1 |
| 2.75\% to maximum of $80 \%$ | 21 | 22 | 22 |
| 2.75\% to maximum of $85 \%$ | 1 | 1 | 1 |
| 2.80\% to maximum of $75 \%$ | 1 | 1 | 1 |
| 2.80\% to maximum of 80\% | 20 | 19 | 19 |
| 2.80\% (25 years) + 1.00\% (over 25) 80\% Max | 4 | 4 | 4 |
| 2.80\% (30 years) + 1.00\% (over 30) no maximum | 2 | 2 | 2 |
| 2.80\% (35 years) + 1.50\% (over 35) 100\% Max | 2 | 2 | 0 |
| 2.80\% (25 years) $+2.5 \%(25-30)+1.0 \%$ (over 30) | 8 | 0 | 0 |
| 3.00\% to maximum of $75 \%$ | 3 | 3 | 2 |
| 3.00\% to maximum of 80\% | 29 | 28 | 27 |
| 3.20\% to maximum of $80 \%$ | 9 | 9 | 9 |
| Hybrid 1.0\% | 6 | 5 | 4 |
| Hybrid 1.25\% | 8 | 6 | 4 |
| Hybrid 1.5\% | 3 | 2 | 1 |
| Bridged Benefit B-4 to B-1 (Frozen FAC) | 1 | 1 | 0 |
| Bridged Benefit B-2 to B-1 (Frozen FAC) | 1 | 1 | 0 |
| Old Plan Benefits | 16 | 14 | 14 |
| Total Divisions | 2,118 | 2,073 | 2,051 |

## 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 (8\%), and includes an adjustment to reflect market value. This procedure was instituted for the December 31, 2005 valuation, 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 (8\%) during the year.
(ii) This value is written-up or written-down by recognizing $10 \%$ of the current year's difference between actual and expected return and $10 \%$ of that difference for the 9 prior years. Actual return for the year includes net interest, dividends, realized and unrealized gains or losses.

The cumulative difference between the market value and valuation assets as of December 31, 2005 is recognized over 9 years.

For the December 31, 2010 valuation, this procedure produced an actuarial asset value that is equal to $116.29 \%$ of market value (compared to $125.17 \%$, $139.15 \%, 98.85 \%$, and $98.62 \%$ in $2009,2008,2007$, and 2006, respectively).

In Table 37 on pages 100-102, we have illustrated the development of the actuarial value of assets for the December 31, 2001 through December 31, 2010 actuarial valuations. The market value of assets reported to the actuary includes most accounts receivables.

## IV. Employer Contributions and Funded Status

In the tables and charts that follow, we have illustrated the employer contribution requirements and funded status of the participating municipalities within MERS. This information is aggregated by division or municipality, as indicated in each table or chart.

- Table 10 provides a distribution of average employer contribution rates by type of benefit program. This information is shown on a divisional basis.
- Chart 5 provides a distribution of the active municipalities by funded percentage of the entire municipality.
- Chart 6 provides a distribution of divisions by employer contribution rate.
- Tables 11-A, 11-B, 11-C, and 11-D provide a historical comparison of the funded status of MERS.
- Table 12 provides the funded status of the termination liability for all MERS municipalities in the aggregate.
- Table 13 provides additional historical funding information.

TABLE 10
COMPUTED EMPLOYER CONTRIBUTION RATES
(EXCLUDES 610 Closed DIVISIONS AND 19 DIVISIONS OF 15 CLOSED MUNICIPALITIES)

| Benefit <br> Program | Contributory Groups |  |  | Non-Contributory Groups |  | Total Groups |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of Divisions | Member Contrib. Avg. \% | Employer <br> Contrib. <br> Avg. \% | No. of Divisions | Employer <br> Contrib. <br> Avg. \% | No. of Divisions | Employer <br> Contrib. <br> Avg. \% |
| Benefit B-1 (1.70\%) | 32 | 3.05\% | 5.05\% | 25 | 7.78\% | 57 | 6.20\% |
| Benefit B-2 (2.00\%) | 133 | 3.70 | 9.18 | 110 | 10.51 | 243 | 9.84 |
| Benefit B-3 (2.25\%) - No Max | 1 | 4.77 | 7.57 | 3 | 10.09 | 4 | 9.62 |
| Benefit B-3 (2.25\%) | 226 | 4.57 | 10.33 | 124 | 14.49 | 350 | 11.74 |
| Benefit B-4 (2.50\%) - No Max | 6 | 4.34 | 13.80 | -- | -- | 6 | 13.80 |
| Benefit B-4 (2.50\%) - 75\% Max | 2 | 7.57 | 3.83 | -- | -- | 2 | 3.83 |
| Benefit B-4 (2.50\%) | 466 | 5.11 | 15.78 | 175 | 23.24 | 641 | 17.14 |
| Benefit C New (1.30\%) | 7 | 2.82 | 4.46 | 7 | 6.19 | 14 | 5.09 |
| Benefit C Old (1.00\% < \$4,200, 1.50\%>) | 2 | 0.47 | 5.28 | 1 | 5.67 | 3 | 5.41 |
| Benefit C-1 New (1.50\%) | 25 | 3.66 | 2.98 | 13 | 7.31 | 38 | 3.66 |
| Benefit C-1 Old (1.20\% < \$4,200, 1.70\%>) | 5 | 2.34 | 5.36 | 5 | 5.17 | 10 | 5.28 |
| Benefit C-2 (2.00\% to social security age) (B-1 Base) | 18 | 4.68 | 7.44 | 9 | 8.47 | 27 |  |
| (B-1 Base) |  |  |  |  |  |  |  |
| (C-1 New Base) | 1 | 4.70 | 10.61 | -- | -- | 1 | 10.61 |
| (C-1 Old Base) | 2 | 4.01 | 3.35 | 3 | 8.00 | 5 | 3.90 |
| Non Standard C-2 |  |  |  |  |  |  |  |
| B-4 (B-3 Base) | 2 | 0.94 | 14.10 | -- | -- | 2 | 14.10 |
| 1.7\%(25 years)+1.5\% (over 25)-80\% Max | -- | -- | -- | 3 | 13.16 | 3 | 13.16 |
| 2.20\% - No Max | 3 | 5.00 | 19.53 | -- | -- | 3 | 19.53 |
| 2.2\%(15 years)+2.4\%(15-25)+1.0\%(over 25)-80\% Max | 2 | 6.91 | 9.82 | -- | -- | 2 | 9.82 |
| 2.35\% - 80\% Max | -- | -- | -- | 4 | 39.43 | 4 | 39.43 |
| 2.50\%<25yr, 1\%>25yr-80\% Max | 1 | 5.00 | 13.24 | -- | -- | 1 | 13.24 |
| 2.50\%<25yr, 1\%>25yr - No Max | -- | -- | -- | 5 | 28.31 | 5 | 28.31 |
| 2.57\%<25yr, 1\%>25yr - No Max | -- | -- | -- | 1 | 18.58 | 1 | 18.58 |
| 2.70\%<25yr, 2.5(25-30yr), 1\%>30yr | 1 | 7.00 | 15.02 | -- | -- | 1 | 15.02 |
| 2.75\% - 80\% Max | 11 | 7.19 | 19.22 | 2 | 23.21 | 13 | 19.63 |
| 2.80\% - 80\% Max | 17 | 6.80 | 15.62 | -- | -- | 17 | 15.62 |
| 2.8\% (1\%>25y) - 80\% Max | -- | -- | -- | 2 | 64.31 | 2 | 64.31 |
| 2.8\% (1\%>30y) - No Max | 1 | 5.00 | 11.88 | -- | -- | 1 | 11.88 |
| 2.8\% (1.5\%>35y) - 100\% Max | 2 | 2.01 | 10.33 | -- | -- | 2 | 10.33 |
| 3.00\% - 75\% Max | 1 | 10.35 | 35.47 | -- | -- | 1 | 35.47 |
| 3.00\% - 80\% Max | 23 | 6.32 | 22.12 | 1 | 54.76 | 24 | 22.40 |
| 3.20\% - 80\% Max | 7 | 13.46 | 21.36 | -- | -- | 7 | 21.36 |
| Hybrid - 1.0\% | -- | -- | -- | 6 | 4.39 | 6 | 4.39 |
| Hybrid - 1.25\% | -- | -- | -- | 8 | 6.82 | 8 | 6.82 |
| Hybrid - 1.5\% | -- | -- | -- | 3 | 7.97 | 3 | 7.97 |
| Bridged Benefit B-2 to B-1 (Frozen FAC) | 1 | 5.50 | 0.00 | -- | -- | 1 | 0.00 |
| Total | 998 | 5.01 | 13.07 | 510 | 15.26 | 1,508 | 13.70 |

## Additional Benefit Programs (EXCLUDES 19 DIVISIONS OF 15 CLOSED MUNICIPALITIES)

| $\begin{array}{\|c\|} \hline \text { Benefit } \\ \text { Program } \\ \hline \end{array}$ | No. of Divisions | Benefit <br> Program | No. of Divisions | Benefit <br> Program | No. of Divisions | Benefit <br> Program | No. of Divisions | $\begin{array}{\|c\|} \hline \text { Benefit } \\ \text { Program } \end{array}$ | No. of Divisions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 \& out | 1 | ER 55/10 | 8 |  |  | RS 50\% | 139 |  |  |
| 20 \& out | 17 | ER None | 3 | F50 | 412 | RS 60\% | 17 | SLIF | 43 |
| 21 \& out | 1 | E-1 | 289 | F50/20 | 2 | RS 100\% | 2 | AWD | 25 |
| 22 \& out | 3 | E-1(2\%) | 2 | F53 | 6 | Sub.75\% | 15 | AWD 8\% | 7 |
| 25 \& out | 129 | E-1 (2\% Comp) | 1 | F55 | 1,177 | V-5 | 15 | DROP+ | 1 |
| 30 \& out | 10 | $\mathrm{E}-1$ (3\% Comp) | 5 |  |  | V-6 | 414 |  |  |
| 65 Points | 2 | E-1 (CPI, 2\%) | 1 | D-2 | 66 | V-7 | 2 | FAC-2 | 9 |
|  |  |  |  | D-2 (70\% Min) | 10 | V-8 | 183 | FAC-3 | 905 |
| NR 50 | 5 | E-2 | 638 | D-2(67\%Dth/50\%DSB) | 15 | V-10 | 1,478 | FAC-4 | 2 |
| NR 55 | 24 | E-2 (1\%) | 8 | D-2(25\%NDty/67\%Dty) | 6 | V-10/V-1 | 6 | FAC-5 | 1,186 |
| NR 58 | 3 | $\\| \begin{aligned} & \mathrm{E}-2 \text { (2\% ) } \\ & \mathrm{E}-2 \text { (2\% Comp) } \end{aligned}$ | 1 22 | NDD15\% | 15 | $\|\mid V-15 / V-10$ <br> Old Plan | 4 16 | Old Plan | 16 |

Note: Some benefit programs in the two tables above are modifications of MERS standard benefits (see Section 43B of the MERS plan document). Others are benefit provisions that were in effect prior to MERS participation, and are not subject to change or available for adoption as a MERS benefit.

## CHART 5

Distribution of Funded Percentage of Actuarial Accrued Liability
Among the 700 Participating Municipalities as of December 31, 2010


## Chart 6

Distribution of Municipality Divisions by Employer Contribution Rate


TABLE 11-A

## ACCRUED LIABILITIES AND FUNDED PERCENTAGES Historical Comparison

| Valuation <br> Date <br> Dec. 31, | Non-Retired Members Accrued Liabilities | Annual <br> Allowances <br> Being Paid | Retiree \& Beneficiary Liabilities | Aggregate <br> Accrued <br> Liabilities | Aggregate <br> Valuation Assets | Ratio of Valuation Assets to Accrued Liabilities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1976 | \$ 211,840,776 | \$ 8,753,807 | \$ 90,361,506 | \$ 302,202,282 | \$ 209,071,263 | 69.2\% |
| 1977 | 244,970,343 | 10,753,677 | 103,736,444 | 348,706,787 | 243,536,698 | 69.8 |
| 1978 | 276,353,722 | 12,012,571 | 115,949,168 | 392,302,890 | 280,893,767 | 71.6 |
| 1979 | 315,733,909 | 13,450,368 | 130,607,800 | 446,341,709 | 327,542,457 | 73.4 |
| 1980 | 362,838,351 | 15,234,503 | 148,945,789 | 511,784,140 | 387,265,070 | 75.7 |
| 1981 | 363,323,286 | 17,446,778 | 149,976,466 | 513,299,752 | 473,256,032 | 92.2 |
| 1982 | 414,051,335 | 19,618,191 | 168,634,555 | 582,685,890 | 556,991,697 | 95.6 |
| 1983 | 446,269,077 | 21,674,209 | 186,670,065 | 632,939,142 | 662,916,808 | 104.7 |
| 1984 | 461,576,458 | 24,369,121 | 210,461,164 | 672,037,622 | 753,645,676 | 112.1 |
| 1985 | 515,821,524 | 27,747,190 | 241,109,150 | 756,930,674 | 852,594,742 | 112.6 |
| 1986 | 561,682,159 | 31,567,968 | 274,975,217 | 836,657,376 | 975,239,340 | 116.6 |
| 1987 | 562,053,213 | 35,740,364 | 312,365,574 | 874,418,787 | 1,101,948,565 | 126.0 |
| 1988 | 607,495,332 | 40,676,119 | 356,617,104 | 964,112,436 | 1,178,554,489 | 122.3 |
| 1989 | 680,170,204 | 45,635,598 | 402,345,765 | 1,082,515,969 | 1,299,895,892 | 120.1 |
| 1990 | 775,542,300 | 51,738,242 | 457,239,911 | 1,232,782,211 | 1,397,164,304 | 113.3 |
| 1991 | 878,855,313 | 61,807,210 | 562,788,136 | 1,441,643,449 | 1,550,887,208 | 107.6 |
| 1992 | 996,091,502 | 71,044,806 | 648,167,481 | 1,644,258,983 | 1,720,222,990 | 104.6 |
| 1993 | 1,442,124,270* | 80,964,212 | 704,868,169 | 2,146,992,632 | 1,863,307,761 | 86.8* |
| 1994 | 1,624,832,681 | 91,226,923 | 844,417,739 | 2,469,250,420 | 1,986,586,888 | 80.5 |
| 1995 | 1,775,482,400 | 102,010,673 | 968,431,013 | 2,743,913,413 | 2,166,888,155 | 79.0 |
| 1996 | 1,940,753,420 | 109,841,190 | 1,035,006,491 | 2,975,759,911 | 2,386,832,847 | 80.2 |
| 1997 | 2,110,440,654 | 124,469,481 | 1,174,726,785 | 3,285,167,459 | 2,692,666,308 | 82.0 |
| 1998 | 2,275,823,309 | 138,700,740 | 1,316,174,131 | 3,591,997,440 | 3,030,361,014 | 84.4 |
| 1999 | 2,372,394,581 | 152,771,711 | 1,463,153,486 | 3,835,548,067 | 3,464,935,295 | 90.3 |
| 2000 | 2,652,393,426 | 173,549,622 | 1,744,617,407 | 4,397,010,833 | 3,787,192,159 | 86.1 |
| 2001 | 2,839,295,057 | 191,785,646 | 1,944,557,814 | 4,783,852,871 | 4,034,376,766 | 84.3 |
| 2002 | 3,022,035,098 | 210,982,922 | 2,159,117,550 | 5,181,152,648 | 4,132,989,295 | 79.8 |
| 2003 | 3,232,507,773 | 236,588,632 | 2,435,240,158 | 5,667,747,931 | 4,459,492,556 | 78.7 |
| 2004 | 3,468,273,493 | 262,221,987 | 2,696,552,909 | 6,164,826,402 | 4,731,421,917 | 76.7 |
| 2005 | 3,642,919,909 | 288,061,637 | 2,966,188,567 | 6,609,108,476 | 5,026,080,689 | 76.0 |
| 2006 | 3,873,227,261 | 322,522,645 | 3,314,517,721 | 7,187,744,982 | 5,493,761,771 | 76.4 |
| 2007 | 4,096,299,479 | 353,541,830 | 3,627,633,023 | 7,723,932,502 | 5,973,015,584 | 77.3 |
| 2008 | 4,292,664,633 | 391,959,046 | 4,029,217,401 | 8,321,882,034 | 6,245,536,242 | 75.0 |
| 2009 | 4,192,727,414 | 423,577,691 | 4,341,972,611 | 8,534,700,025 | 6,443,101,939 | 75.5 |
| 2010 | 4,366,511,986 | 481,476,493 | 4,950,709,526 | 9,317,221,512 | 6,945,422,936 | 74.5 |

* Change in actuarial funding method from Attained Age Normal Cost to Entry Age Normal Cost.


## TABLE 11-B

Reserve for Employee Contributions Aggregate Accrued Liabilities and Aggregate Valuation Assets Historical Comparison

| Valuation Date <br> December 31, | Aggregate <br> Accrued <br> Liabilities | Aggregate <br> Valuation <br> Assets | Ratio of <br> Valuation Assets <br> Accrued Liabilities |
| :---: | ---: | ---: | :--- |
| 1976 | $\$ 57,510,496$ | $\$ 57,510,496$ | $100.0 \%$ |
| 1977 | $63,787,655$ | $63,787,655$ | 100.0 |
| 1978 | $70,679,181$ | $70,679,181$ | 100.0 |
| 1979 | $78,583,584$ | $78,583,584$ | 100.0 |
| 1980 | $87,322,139$ | $87,322,139$ | 100.0 |
| 1981 | $99,974,213$ | $99,974,213$ | 100.0 |
| 1982 | $110,972,544$ | $110,972,544$ | 100.0 |
| 1983 | $123,119,737$ | $123,119,737$ | 100.0 |
| 1984 | $134,610,254$ | $134,610,254$ | 100.0 |
| 1985 | $146,719,594$ | $146,719,594$ | 100.0 |
| 1986 | $158,270,468$ | $158,270,468$ | 100.0 |
| 1987 | $166,483,204$ | $166,483,204$ | 100.0 |
| 1988 | $175,671,692$ | $175,671,692$ | 100.0 |
| 1989 | $184,507,092$ | $184,507,092$ | 100.0 |
| 1990 | $193,558,998$ | $193,558,998$ | 100.0 |
| 1991 | $202,674,346$ | $202,674,346$ | 100.0 |
| 1992 | $214,772,461$ | $214,772,461$ | 100.0 |
| 1993 | $221,196,735$ | $221,196,735$ | 100.0 |
| 1994 | $238,971,125$ | $238,971,125$ | 100.0 |
| 1995 | $250,640,757$ | $250,640,757$ | 100.0 |
| 1996 | $265,314,637$ | $265,314,637$ | 100.0 |
| 1997 | $277,465,847$ | $277,465,847$ | 100.0 |
| 1998 | $291,925,302$ | $291,925,302$ | 100.0 |
| 1999 | $305,474,698$ | $305,474,698$ | 100.0 |
| 2000 | $318,387,711$ | $318,387,711$ | 100.0 |
| 2001 | $336,500,799$ | $336,500,799$ | 100.0 |
| 2002 | $359,218,473$ | $359,218,473$ | 100.0 |
| 2003 | $396,680,584$ | $396,680,584$ | 100.0 |
| 2004 | $422,536,663$ | $422,536,663$ | 100.0 |
| 2005 | $463,025,882$ | $463,025,882$ | 100.0 |
| 2006 | $518,036,804$ | $518,036,804$ | 100.0 |
| 2007 | $565,861,130$ | $565,861,130$ | 100.0 |
| 2008 | $591,919,166$ | $591,919,166$ | 100.0 |
| 2009 | $604,275,554$ | $604,275,554$ | 100.0 |
| 2010 | $652,068,591$ | $652,068,591$ | 100.0 |
|  |  |  |  |
|  |  |  |  |

## Table 11-C

## Actuarial Accrued Liabilities for Retired Benefit Payments Historical Comparison

| Valuation Date <br> December 31, | Annual <br> Retirement <br> Allowances | Aggregate <br> Accrued <br> Liabilities | Aggregate <br> Valuation <br> Assets | Ratio of <br> Valuation Assets to <br> Accrued Liabilities |
| :---: | ---: | ---: | ---: | :---: |
| 1976 | $\$ 8,753,807$ | $\$ 90,361,506$ | $\$ 93,578,119$ | $103.6 \%$ |
| 1977 | $10,753,677$ | $103,736,444$ | $106,505,499$ | 102.7 |
| 1978 | $12,012,571$ | $115,949,168$ | $117,165,585$ | 101.0 |
| 1979 | $13,450,368$ | $130,607,800$ | $130,953,142$ | 100.3 |
| 1980 | $15,234,503$ | $148,945,789$ | $149,933,072$ | 100.7 |
| 1981 | $17,446,778$ | $149,976,466$ | $161,990,110$ | 108.0 |
| 1982 | $19,618,191$ | $168,634,555$ | $181,975,448$ | 107.9 |
| 1983 | $21,674,209$ | $186,670,065$ | $202,412,938$ | 108.4 |
| 1984 | $24,369,121$ | $210,461,164$ | $210,461,164$ | 100.0 |
| 1985 | $27,747,190$ | $241,109,150$ | $241,109,150$ | 100.0 |
| 1986 | $31,567,968$ | $274,975,217$ | $274,975,217$ | 100.0 |
| 1987 | $35,740,364$ | $312,365,574$ | $312,365,574$ | 100.0 |
| 1988 | $40,676,119$ | $356,617,104$ | $356,617,104$ | 100.0 |
| 1989 | $45,635,598$ | $402,345,765$ | $402,345,765$ | 100.0 |
| 1990 | $51,738,242$ | $457,239,911$ | $457,239,911$ | 100.0 |
| 1991 | $61,807,210$ | $562,788,136$ | $562,788,136$ | 100.0 |
| 1992 | $71,044,806$ | $648,167,481$ | $648,167,481$ | 100.0 |
| 1993 | $80,964,212$ | $704,868,169$ | $704,868,169$ | 100.0 |
| 1994 | $91,226,923$ | $844,417,739$ | $844,417,739$ | 100.0 |
| 1995 | $102,010,673$ | $968,431,013$ | $968,431,013$ | 100.0 |
| 1996 | $109,841,190$ | $1,035,006,491$ | $1,035,006,491$ | 100.0 |
| 1997 | $124,469,481$ | $1,174,726,785$ | $1,121,695,199$ | 95.5 |
| 1998 | $138,700,740$ | $1,316,174,131$ | $1,255,316,779$ | 95.4 |
| 1999 | $152,771,711$ | $1,463,153,486$ | $1,399,439,687$ | 95.6 |
| 2000 | $173,549,622$ | $1,744,617,407$ | $1,661,933,518$ | 95.3 |
| 2001 | $191,785,646$ | $1,944,557,814$ | $1,838,700,512$ | 94.6 |
| 2002 | $210,982,922$ | $2,159,117,550$ | $2,012,124,629$ | 93.2 |
| 2003 | $236,588,632$ | $2,435,240,158$ | $2,244,136,154$ | 92.2 |
| 2004 | $262,221,987$ | $2,696,552,909$ | $2,464,191,571$ | 91.4 |
| 2005 | $288,061,637$ | $2,966,188,567$ | $2,708,811,119$ | 91.3 |
| 2006 | $322,522,645$ | $3,314,517,721$ | $3,027,004,180$ | 91.3 |
| 2007 | $353,541,830$ | $3,627,633,023$ | $3,346,099,089$ | 92.2 |
| 2008 | $391,959,046$ | $4,029,217,401$ | $3,676,000,849$ | 91.2 |
| 2009 | $423,577,691$ | $4,341,972,611$ | $3,914,504,693$ | 90.2 |
| 2010 | $481,476,493$ | $4,950,709,526$ | $4,399,725,563$ | 88.9 |
|  |  |  |  |  |
|  |  |  | 10 |  |

TABLE 11-D

## Reserve for Employer Contributions Historical Comparison

| Valuation Date December 31, | Aggregate <br> Accrued <br> Liabilities <br> (Excluding <br> Retirees) | Aggregate <br> Valuation <br> Assets | Ratio of <br> Valuation <br> Assets to Accrued <br> Liabilities | Unfunded Accrued Liabilities |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Aggregate Dollars | As Percent of Active Payroll |
| 1976 | \$ 154,330,280 | \$ 57,982,648 | 37.6\% | \$ 96,347,632 | 36.5\% |
| 1977 | 181,182,688 | 73,243,544 | 40.4 | 107,939,144 | 37.0 |
| 1978 | 205,674,541 | 93,049,001 | 45.2 | 112,625,540 | 35.8 |
| 1979 | 237,150,325 | 118,005,731 | 49.8 | 119,144,594 | 33.8 |
| 1980 | 275,516,212 | 150,009,859 | 54.4 | 125,506,353 | 31.4 |
| 1981 | 263,349,073 | 211,291,709 | 80.2 | 52,057,364 | 12.1 |
| 1982 | 303,078,791 | 264,043,705 | 87.1 | 39,035,086 | 8.5 |
| 1983 | 323,149,340 | 337,384,133 | 104.4 | - | - |
| 1984 | 326,966,204 | 408,574,258 | 125.0 | - | - |
| 1985 | 369,101,930 | 464,765,998 | 125.9 | - | - |
| 1986 | 403,411,691 | 541,993,655 | 134.4 | - | - |
| 1987 | 395,570,009 | 623,099,787 | 157.5 | - | - |
| 1988 | 431,823,640 | 647,265,693 | 149.9 | - | - |
| 1989 | 495,663,112 | 713,043,035 | 143.9 | - | - |
| 1990 | 581,983,302 | 746,365,395 | 128.2 | - | - |
| 1991 | 676,180,967 | 785,424,726 | 116.2 | - | - |
| 1992 | 781,319,041 | 857,283,048 | 109.7 | - | - |
| 1993 | 1,220,927,535* | 937,242,857 | 76.8* | 283,684,871 | 32.6 |
| 1994 | 1,385,861,556 | 903,198,024 | 65.2 | 482,663,536 | 52.2 |
| 1995 | 1,524,841,643 | 947,816,385 | 62.2 | 577,025,258 | 59.3 |
| 1996 | 1,675,438,783 | 1,086,511,719 | 64.8 | 588,927,064 | 57.4 |
| 1997 | 1,832,974,807 | 1,293,505,262 | 70.6 | 539,469,545 | 50.0 |
| 1998 | 1,983,898,007 | 1,483,118,933 | 74.2 | 500,779,074 | 43.1 |
| 1999 | 2,066,919,883 | 1,760,020,910 | 85.2 | 306,898,973 | 26.0 |
| 2000 | 2,334,005,715 | 1,806,870,930 | 77.4 | 527,134,785 | 43.0 |
| 2001 | 2,502,794,258 | 1,859,175,455 | 74.3 | 643,618,803 | 50.6 |
| 2002 | 2,662,816,625 | 1,761,646,193 | 66.2 | 901,170,432 | 67.9 |
| 2003 | 2,835,827,189 | 1,818,675,818 | 64.1 | 1,017,151,371 | 73.6 |
| 2004 | 3,045,736,830 | 1,844,693,683 | 60.6 | 1,201,043,147 | 83.6 |
| 2005 | 3,179,894,027 | 1,854,243,688 | 58.3 | 1,325,650,339 | 90.6 |
| 2006 | 3,355,190,457 | 1,948,720,787 | 58.1 | 1,406,469,670 | 91.0 |
| 2007 | 3,530,438,349 | 2,061,055,365 | 58.4 | 1,469,382,984 | 92.9 |
| 2008 | 3,700,745,467 | 1,977,616,227 | 53.4 | 1,723,129,240 | 106.0 |
| 2009 | 3,588,451,860 | 1,924,321,692 | 53.6 | 1,664,130,168 | 101.7 |
| 2010 | 3,714,443,395 | 1,893,628,782 | 51.0 | 1,820,814,613 | 108.1 |

* Change in actuarial funding method from Attained Age Normal Cost to Entry Age Normal Cost.

TAbLE 12

## Termination Liability as of December 31, 2010

| Type of Member | Termination <br> Liability |
| :--- | :---: |
| Active Members | $\$ 3,231,864,165$ |
| Vested Former Members | $365,831,999$ |
| Retired Members and Beneficiaries | $4,950,709,526$ |
| Pending Refunds | $15,686,866$ <br> Total <br> Total Valuation Assets <br> Funded Percent$\$ 8,564,092,556$ |

## Comment

The Termination Liability represents the present value of benefits payable in the event that all active members terminate employment on December 31, 2010, based upon the valuation interest and mortality assumptions. For a non-vested active member, the Termination Liability represents the present value of the non-vested accrued benefit (deferred to age 60). Pending refunds represent expected refunds of accumulated member contributions to persons who have terminated membership before becoming eligible for pension benefits.

Table 13

## Funding Progress Achievement Tests - Historical Comparison (\$ MILLIONS)

| Valuation <br> Date <br> Dec. 31, | Valuation <br> Assets | Termination Test |  | Continuation Tests |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Actuarial <br> Accrued <br> Liability | Funded <br> Ratio | Unfunded <br> Actuarial <br> Liability | Member <br> Payroll | Ratio of Unfunded <br> Accrued Actuarial <br> Liability to Payroll |
|  |  | Termination Liability | Funded <br> Ratio |  |  |  |  |  |
| 1975 | \$ 177.8 |  |  | \$ 260.3 | 68.3\% | \$ 82.5 | \$ 243.8 | 33.8\% |
| 1980 | 387.3 | \$ 419.0 | 92.4\% | 511.8 | 75.7 | 124.5 | 399.4 | 31.2 |
| 1985 | 852.6 | 609.7 | 139.8 | 756.9 | 112.6 | - | 544.2 | - |
| 1990 | 1,397.2 | 997.4 | 140.1 | 1,232.8 | 113.3 | - | 725.7 | - |
| 1995 | 2,166.9 | 1,817.1 | 119.2 | 2,743.9 | 79.0 | 577.0 | 973.0 | 59.3 |
| 1996 | 2,386.8 | 1,980.0 | 120.5 | 2,975.8 | 80.2 | 589.0 | 1,025.2 | 57.5 |
| 1997 | 2,692.7 | 2,248.9 | 119.7 | 3,285.2 | 82.0 | 592.5 | 1,068.6 | 55.4 |
| 1998 | 3,030.4 | 2,505.3 | 121.0 | 3,592.0 | 84.4 | 561.6 | 1,163.1 | 48.3 |
| 1999 | 3,464.9 | 2,728.6 | 127.0 | 3,835.5 | 90.3 | 370.6 | 1,179.3 | 31.4 |
| 2000 | 3,787.2 | 3,167.8 | 119.6 | 4,397.0 | 86.1 | 609.8 | 1,226.0 | 49.7 |
| 2001 | 4,034.4 | 3,813.5 | 105.8 | 4,783.9 | 84.3 | 749.5 | 1,271.6 | 58.9 |
| 2002 | 4,133.0 | 4,193.7 | 98.6 | 5,181.2 | 79.8 | 1,048.2 | 1,327.4 | 79.0 |
| 2003 | 4,459.5 | 4,652.5 | 95.9 | 5,667.7 | 78.7 | 1,208.2 | 1,381.2 | 87.5 |
| 2004 | 4,731.4 | 5,155.8 | 91.8 | 6,164.8 | 76.7 | 1,433.4 | 1,437.2 | 99.7 |
| 2005 | 5,026.1 | 5,605.7 | 89.7 | 6,609.1 | 76.0 | 1,583.0 | 1,462.4 | 108.2 |
| 2006 | 5,493.8 | 6,244.3 | 88.0 | 7,187.7 | 76.4 | 1,693.9 | 1,545.9 | 109.6 |
| 2007 | 5,973.0 | 6,730.3 | 88.7 | 7,723.9 | 77.3 | 1,750.9 | 1,581.6 | 110.7 |
| 2008 | 6,245.5 | 7,268.2 | 85.9 | 8,321.9 | 75.0 | 2,076.4 | 1,624.9 | 127.8 |
| 2009 | 6,443.1 | 7,748.8 | 83.1 | 8,534.7 | 75.5 | 2,091.6 | 1,636.5 | 127.8 |
| 2010 | 6,945.4 | 8,564.1 | 81.1 | 9,317.2 | 74.5 | 2,371.8 | 1,684.0 | 140.8 |

## V. GASB No. 25 AND GASB No. 27 Information

The following information has been prepared to provide the information necessary to comply with GASB Statements No. 25 and No. 27. Statement No. 25 is effective for fiscal years beginning after June 15, 1996 and Statement No. 27 is effective for fiscal years beginning after June 15, 1997.

All entries are based on the actuarial methods and assumptions that were used in the December 31, 2010 actuarial valuation to determine the annual employer contribution amounts. The entry age normal actuarial method was used to determine the disclosure entries.

## GASB No. 25 Information (as of 12/31/2010)

## Actuarial Accrued Liability

Retirees and beneficiaries currently receiving benefits
\$4,950,709,526
Terminated employees (vested former members) not yet receiving benefits 365,831,999
Non-vested terminated employees
(pending refunds of accumulated member contributions) 15,686,866
Current employees
Total Actuarial Accrued Liability
3,984,993,121
\$9,317,221,512

Net Assets Available for Benefits at Actuarial Value
(Market Value is $\$ 5,974,859,019$ )
6,945,422,936
Unfunded (Overfunded) Actuarial Accrued Liability
\$2,371,798,576

## GASB No. 27 Information (as of 12/31/2010)

Municipality Fiscal Years Beginning in 2012
Annual Required Contribution (ARC)
\$ 288,177,192*

[^1]
## VI. 50-Year Actuarial Projections

Regular actuarial valuations measure the retirement system's present financial position and contribution adequacy by calculating and financing the liabilities created by the benefit program. This process involves discounting to present values the future benefit payments on behalf of present active and retired members and their survivors. However, valuations do not produce information regarding future changes in the makeup of the covered group or the amounts of benefits to be paid or investment return to be received. This is done by actuarial projections.

Whereas valuations provide a snapshot of the retirement system as of a given date, projections provide a moving picture. Projected active, inactive vested and retired groups are developed from year-to-year by the application of assumptions regarding pre-retirement withdrawal from service, retirements, deaths, disabilities, and the addition of new members. Projected information regarding the retired life group leads to assumed future benefit payout. Combining future benefit payments with expected contributions and investment earnings produces the net cash flow of the system each year, and thus end of year asset levels.

Projection results are a useful educational tool for demonstrating changing relationships among key elements affecting system financial activity over a long period of time. For example: how benefits and system assets will grow in future decades. Projections are not predictions of specific future events and do not provide numeric precision in absolute terms. For instance, cash flow projected to occur 10 years in the future will not be exact (except by coincidence). However, projections can increase the understanding of the emerging and changing relationships between future benefit payout and future investment income.

This report presents the results of a 50-Year open group actuarial projection of MERS' experience based on regular actuarial assumptions and December 31, 2010 census data. Each division (general, police, fire, etc.) of each municipality and court is separately projected, based on the benefit provisions and actuarial assumptions applicable to that division. Closed divisions (new hires are not covered by MERS defined benefit or hybrid provisions in a linked division) are included in the projection, but with no new hires replacing members as they leave the active member group. The results have been summarized over the 2,137 defined benefit divisions (includes 19 divisions of 15 closed municipalities) and are presented in this report.

In order to illustrate the impact of changes in investment return, two alternative investment return scenarios have been included in the report.

## Summary Observations

The actuarial projections of MERS are based on regular valuation assumptions and lead to some general observations:

1) The ratio of active members to retirees will decline gradually over the next 50 years from the present level of 1.3 to a low point of around 0.8 , and will settle at around 1.0 (see page 42). Expressed simply, the retiree population is expected to increase around $21 \%$. At the same time, the active member population declines about $13 \%$ due to divisions that are closed to new hires (new hires are covered by the MERS defined contribution plan). The decline in the active/retiree ratio may be postponed if the active member population grows larger than projected, either due to new employers joining MERS or an increase in the existing employers' work forces with defined benefit coverage.
2) Due to the closed divisions, some of the projected quantities rise to higher levels, before settling down to their long term expected levels.
3) The growth of the trust fund is expected to continue indefinitely, because of the projected $4.5 \%$ inflation. In real terms ( 2011 dollars), assets in 2060 will be slightly lower than the present (2011) level under the base projection (see page 44). However, assets will peak at a $7 \%$ higher level around 2018, due to the closed divisions, before declining back down to just below the present level (closed division employer contributions increase for 11-12 years after closure and then start to decline).
4) Investment return is now and is expected to continue to be the largest source of revenue (by far) for the retirement system under the base projection (see page 44 or 48). Ultimately, the investment return is projected to be about 2.9 times as large as the employer and member contributions, under the base projection.
5) MERS' annual benefit payout is already larger than the annual employer and member contributions (see page 44). MERS relies in part on investment return to pay benefits. This is the normal and expected situation in a prefunded retirement system. The system has been reaping the rewards of actuarial advance funding. Liquidity needs will increase gradually until eventually leveling off at about $3 \%-3.5 \%$ of assets under the base projection (see page 46). The $3.5 \%$ annual real investment return (return in excess of inflation) will be used to pay benefits, while the $4.5 \%$ inflation portion of investment return will be needed to maintain the value of the portfolio.
6) Benefit payout relative to active member payroll will temporarily increase with time, due mostly to the retirees from divisions that are closed to new hires. In the long run, benefit payout will level out at close to $25 \%$ of payroll, which is less than the level in 2010. Meanwhile, employer and member contributions will decline to under $12 \%$ of payroll under the base projection (see page 48).
7) The current funded ratio, $75 \%$, gradually increases towards $100 \%$ over the projection period under the base projection (see page 51). Since most amortization periods for divisions with unfunded liabilities never decrease below 20 years, the unfunded accrued liability for those divisions slowly gets smaller and smaller in real dollars, but never quite drops to zero. This smooth progression, of course, is based on a constant $8 \%$ projected investment income based on the actuarial value of assets.
8) Based on current actuarial assumptions, the active member population "turns over" more rapidly than most readers would expect. By 2019 over half of the active members are persons who have not even been hired yet as of December 31, 2010 (see page 35). This is a common result.
9) In the base projection, investment return on valuation assets is projected to be a constant $8 \%$ annually. Remember that at the beginning of the projection (December 31, 2010), valuation assets were higher than market value by over $16 \%$. Consequently, in order to achieve an $8 \%$ return on valuation assets, the return on market value must average more than $8 \%$ annually. The base projection assumes that the 2008 investment losses are fully made up, so that the 10 -year smoothed assets reflect $8 \%$ return every year.

To show the impact of lower returns we included two more pessimistic projections.
Alternative 1 projections were based on $7 \%$ annual market returns beginning January 1, 2011. Alternative 2 projections were based on $6 \%$ annual market returns beginning January 1, 2011. The alternative projections are more pessimistic than the base projections, because the 2008 market losses are never made up and the ongoing rate of return is less than $8 \%$.

Under the alternative projections, the annual valuation calculations of liabilities and required contributions are still based on the $8 \%$ investment return assumption. The cash flow and asset values, however, are based on the lower assumed investment returns.

The population projections for Alternative 1 and Alternative 2 are identical to the population projections for the base scenario. The results of Alternatives 1 and 2 are compared with the base projection on pages 68 to 71 .
10) Both alternatives result in substantially larger contribution requirements (see pages 68-69) and much lower funded percentages (see pages 70-71) than the base projection.
11) Under Alternative 1, the funded ratio will decline from the current $75 \%$ to $68 \%$ and slowly rise to $78 \%$ by the end of the projection period (see page 70). The contribution requirements will increase substantially from current levels for the first 9 years, as the 2008 losses are fully reflected in the actuarial valuations. Thereafter, the contribution requirements will decrease, ultimately to just below 2011 levels, but about $6 \%$ of pay higher than the base projections (see page 68).

Under Alternative 2, the funded ratio will decline from $75 \%$ down to $62 \%$ and then rise slightly to $63 \%$ by the end of the projection period (see page 70). The contribution requirement for Alternative 2 will increase substantially from current levels for the first 10 years, as the 2008 losses are fully reflected in the actuarial valuations. Thereafter, the contribution requirements will decrease, ending up at a level about $2 \%-3 \%$ of payroll higher than the 2011 levels (see page 68). This compares to the expected $7 \%-8 \%$ reduction in contribution requirements under the base projection.

By the end of the projection the required contribution rate (employer and member combined) is $11.70 \%$ under the base projection, $17.71 \%$ under Alternative 1, and $21.75 \%$ under Alternative 2. This demonstrates that the projected funded ratio and required contribution are highly sensitive to seemingly modest changes in the projected rate of investment return, and how important it is to make up the 2008 market losses.
12) If the average actual market rate of return is below $8 \%$ for an extended period, it is likely that the actuary would recommend that the Retirement Board adopt a lower investment return assumption for the annual actuarial valuations. This would result in an immediate (at that time) decrease in the computed funded ratio and increase in the required contributions. Thereafter, the funded ratio would start climbing back toward $100 \%$, and the required contribution rate would gradually decline to the normal cost rate (based on the new assumption).

## POPULATION PROJECTION

The first phase of the projection study is to forecast the development of the active and retired groups in coming decades. The following pages present the results of the MERS population projection from 2011 through 2060 based on a continuation of present demographic patterns.

## Characteristics of Future Members

The assumed characteristics of future members have a powerful effect on the results of 50-year projections, since future members are the major portion of the active member group for most of the 50 years (see page 35).

The characteristics assumed for these projections are those of current members at the time they were hired.

| Characteristics of Future Members at Time of Employment |  |
| :---: | :---: |
| Age | Percent |
|  |  |
| Below 25 | $17.5 \%$ |
| $25-29$ | 22.8 |
| $30-34$ | 17.3 |
| $35-39$ | 14.4 |
| $40-44$ | 11.3 |
| $45-49$ | 8.2 |
| $50-54$ | 4.9 |
| $55 \&$ Up | 3.6 |
| Total | $100.0 \%$ |
|  |  |
|  |  |
| Average Pay | $\$ 47,018$ |

TABLE 14
MERS Active Member Population 2011-2060

| Year Ending <br> December 31, | Active Members |  |  | Year Ending <br> December 31, | Active Members |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Present | Future | Total |  | Present | Future | Total |
| 2011 | 32,265 | 3,101 | 35,366 | 2036 | 1,374 | 29,903 | 31,277 |
| 2012 | 29,311 | 5,659 | 34,970 | 2037 | 1,127 | 30,133 | 31,260 |
| 2013 | 26,722 | 7,880 | 34,602 | 2038 | 918 | 30,329 | 31,247 |
| 2014 | 24,386 | 9,872 | 34,258 | 2039 | 741 | 30,496 | 31,237 |
| 2015 | 22,238 | 11,697 | 33,935 | 2040 | 593 | 30,635 | 31,228 |
| 2016 | 20,250 | 13,389 | 33,639 | 2041 | 473 | 30,748 | 31,222 |
| 2017 | 18,395 | 14,972 | 33,367 | 2042 | 376 | 30,841 | 31,216 |
| 2018 | 16,675 | 16,441 | 33,115 | 2043 | 297 | 30,916 | 31,212 |
| 2019 | 15,057 | 17,830 | 32,887 | 2044 | 232 | 30,977 | 31,209 |
| 2020 | 13,546 | 19,130 | 32,677 | 2045 | 179 | 31,028 | 31,206 |
| 2021 | 12,151 | 20,332 | 32,483 | 2046 | 136 | 31,068 | 31,204 |
| 2022 | 10,868 | 21,440 | 32,308 | 2047 | 102 | 31,100 | 31,202 |
| 2023 | 9,691 | 22,461 | 32,152 | 2048 | 75 | 31,126 | 31,201 |
| 2024 | 8,611 | 23,401 | 32,013 | 2049 | 54 | 31,146 | 31,200 |
| 2025 | 7,626 | 24,264 | 31,890 | 2050 | 38 | 31,161 | 31,199 |
| 2026 | 6,717 | 25,066 | 31,783 | 2051 | 26 | 31,172 | 31,198 |
| 2027 | 5,892 | 25,798 | 31,690 | 2052 | 18 | 31,180 | 31,198 |
| 2028 | 5,149 | 26,462 | 31,611 | 2053 | 12 | 31,186 | 31,198 |
| 2029 | 4,475 | 27,066 | 31,541 | 2054 | 8 | 31,190 | 31,197 |
| 2030 | 3,866 | 27,615 | 31,481 | 2055 | 5 | 31,193 | 31,197 |
| 2031 | 3,319 | 28,111 | 31,429 | 2056 | 3 | 31,194 | 31,197 |
| 2032 | 2,829 | 28,558 | 31,387 | 2057 | 2 | 31,196 | 31,197 |
| 2033 | 2,392 | 28,959 | 31,351 | 2058 | 1 | 31,196 | 31,197 |
| 2034 | 2,004 | 29,318 | 31,322 | 2059 | 0 | 31,197 | 31,197 |
| 2035 | 1,666 | 29,632 | 31,298 | 2060 | 0 | 31,197 | 31,197 |

Within 9 years it is expected that over half of the active member population will consist of people entering the system after the valuation date (December 31, 2010).

TABLE 15

## MERS Present Active Members

Group Averages 2011-2060

| Year Ending December 31, | Present <br> Active <br> Members | Group Averages |  | Year Ending <br> December 31, | Present <br> Active <br> Members | Group Averages |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Age | Service |  |  | Age | Service |
| 2011 | 32,265 | 46.7 | 13.0 | 2036 | 1,374 | 56.4 | 30.6 |
| 2012 | 29,311 | 47.3 | 13.8 | 2037 | 1,127 | 56.8 | 31.4 |
| 2013 | 26,722 | 47.9 | 14.6 | 2038 | 918 | 57.2 | 32.2 |
| 2014 | 24,386 | 48.5 | 15.3 | 2039 | 741 | 57.6 | 32.9 |
| 2015 | 22,238 | 49.0 | 16.1 | 2040 | 593 | 58.1 | 33.7 |
| 2016 | 20,250 | 49.4 | 16.8 | 2041 | 473 | 58.5 | 34.5 |
| 2017 | 18,395 | 49.8 | 17.5 | 2042 | 376 | 59.0 | 35.3 |
| 2018 | 16,675 | 50.2 | 18.2 | 2043 | 297 | 59.5 | 36.1 |
| 2019 | 15,057 | 50.6 | 18.9 | 2044 | 232 | 60.0 | 36.9 |
| 2020 | 13,546 | 50.9 | 19.6 | 2045 | 179 | 60.5 | 37.8 |
| 2021 | 12,151 | 51.3 | 20.3 | 2046 | 136 | 61.1 | 38.6 |
| 2022 | 10,868 | 51.6 | 21.0 | 2047 | 102 | 61.7 | 39.5 |
| 2023 | 9,691 | 51.9 | 21.7 | 2048 | 75 | 62.3 | 40.3 |
| 2024 | 8,611 | 52.2 | 22.3 | 2049 | 54 | 62.9 | 41.2 |
| 2025 | 7,626 | 52.6 | 23.0 | 2050 | 38 | 63.6 | 42.1 |
| 2026 | 6,717 | 52.9 | 23.7 | 2051 | 26 | 64.3 | 42.9 |
| 2027 | 5,892 | 53.2 | 24.3 | 2052 | 18 | 65.0 | 43.8 |
| 2028 | 5,149 | 53.5 | 25.0 | 2053 | 12 | 65.7 | 44.7 |
| 2029 | 4,475 | 53.8 | 25.7 | 2054 | 8 | 66.4 | 45.6 |
| 2030 | 3,866 | 54.2 | 26.3 | 2055 | 5 | 67.0 | 46.5 |
| 2031 | 3,319 | 54.5 | 27.0 | 2056 | 3 | 67.5 | 47.4 |
| 2032 | 2,829 | 54.8 | 27.7 | 2057 | 2 | 68.0 | 48.1 |
| 2033 | 2,392 | 55.2 | 28.4 | 2058 | 1 | 68.5 | 49.0 |
| 2034 | 2,004 | 55.6 | 29.1 | 2059 | 0 | 68.9 | 49.7 |
| 2035 | 1,666 | 56.0 | 29.9 | 2060 | 0 | 69.5 | 50.4 |

Approximately $90 \%$ of the current active population will no longer be active after 21 years. None of the current active members will still be active members in 2060.

TAbLE 16
MERS Future Active Members
Group Averages 2011-2060

| Year Ending December 31, | Future <br> Active <br> Members | Group Averages |  | Year Ending December 31, | Future <br> Active <br> Members | Group Averages |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Age | Service |  |  | Age | Service |
| 2011 | 3,101 | 34.3 | 0.2 | 2036 | 29,903 | 41.3 | 8.5 |
| 2012 | 5,659 | 34.7 | 0.5 | 2037 | 30,133 | 41.5 | 8.7 |
| 2013 | 7,880 | 35.0 | 0.9 | 2038 | 30,329 | 41.6 | 8.9 |
| 2014 | 9,872 | 35.4 | 1.3 | 2039 | 30,496 | 41.7 | 9.1 |
| 2015 | 11,697 | 35.7 | 1.6 | 2040 | 30,635 | 41.8 | 9.3 |
| 2016 | 13,389 | 36.0 | 2.0 | 2041 | 30,748 | 41.9 | 9.4 |
| 2017 | 14,972 | 36.4 | 2.4 | 2042 | 30,841 | 42.0 | 9.5 |
| 2018 | 16,441 | 36.7 | 2.7 | 2043 | 30,916 | 42.1 | 9.6 |
| 2019 | 17,830 | 37.1 | 3.1 | 2044 | 30,977 | 42.1 | 9.7 |
| 2020 | 19,130 | 37.4 | 3.5 | 2045 | 31,028 | 42.1 | 9.7 |
| 2021 | 20,332 | 37.7 | 3.8 | 2046 | 31,068 | 42.2 | 9.8 |
| 2022 | 21,440 | 38.0 | 4.2 | 2047 | 31,100 | 42.2 | 9.8 |
| 2023 | 22,461 | 38.3 | 4.5 | 2048 | 31,126 | 42.2 | 9.8 |
| 2024 | 23,401 | 38.6 | 4.9 | 2049 | 31,146 | 42.2 | 9.8 |
| 2025 | 24,264 | 38.8 | 5.2 | 2050 | 31,161 | 42.2 | 9.8 |
| 2026 | 25,066 | 39.1 | 5.5 | 2051 | 31,172 | 42.2 | 9.8 |
| 2027 | 25,798 | 39.3 | 5.9 | 2052 | 31,180 | 42.2 | 9.8 |
| 2028 | 26,462 | 39.6 | 6.2 | 2053 | 31,186 | 42.1 | 9.8 |
| 2029 | 27,066 | 39.8 | 6.5 | 2054 | 31,190 | 42.1 | 9.7 |
| 2030 | 27,615 | 40.1 | 6.8 | 2055 | 31,193 | 42.1 | 9.7 |
| 2031 | 28,111 | 40.3 | 7.1 | 2056 | 31,194 | 42.1 | 9.7 |
| 2032 | 28,558 | 40.5 | 7.4 | 2057 | 31,196 | 42.1 | 9.7 |
| 2033 | 28,959 | 40.7 | 7.7 | 2058 | 31,196 | 42.1 | 9.7 |
| 2034 | 29,318 | 40.9 | 8.0 | 2059 | 31,197 | 42.1 | 9.7 |
| 2035 | 29,632 | 41.1 | 8.3 | 2060 | 31,197 | 42.1 | 9.7 |

## TABLE 17

## MERS Total Active Members <br> Group Averages 2011-2060

| Year Ending December 31, | Total <br> Active <br> Members | Group Averages |  |  |  | Year Ending December 31, | Total <br> Active <br> Members | Group Averages |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Pay |  |  |  | Age | Service | Pay |  |
|  |  | Age | Service | Inflated | 2011 Dollars |  |  |  |  | Inflated | 2011 Dollars |
| 2011 | 35,366 | 45.6 | 11.8 | \$ 48,164 | \$ 48,164 | 2036 | 31,277 | 42.0 | 9.5 | \$144,080 | \$ 47,940 |
| 2012 | 34,970 | 45.3 | 11.7 | 48,848 | 46,744 | 2037 | 31,260 | 42.0 | 9.5 | 150,868 | 48,037 |
| 2013 | 34,602 | 45.0 | 11.5 | 49,749 | 45,557 | 2038 | 31,247 | 42.1 | 9.6 | 157,941 | 48,123 |
| 2014 | 34,258 | 44.7 | 11.3 | 50,872 | 44,579 | 2039 | 31,237 | 42.1 | 9.7 | 165,308 | 48,199 |
| 2015 | 33,935 | 44.4 | 11.1 | 53,384 | 44,766 | 2040 | 31,228 | 42.1 | 9.7 | 172,977 | 48,263 |
| 2016 | 33,639 | 44.1 | 10.9 | 56,027 | 44,959 | 2041 | 31,222 | 42.2 | 9.8 | 180,965 | 48,318 |
| 2017 | 33,367 | 43.8 | 10.7 | 58,786 | 45,142 | 2042 | 31,216 | 42.2 | 9.8 | 189,278 | 48,361 |
| 2018 | 33,115 | 43.5 | 10.5 | 61,684 | 45,327 | 2043 | 31,212 | 42.2 | 9.8 | 197,931 | 48,394 |
| 2019 | 32,887 | 43.3 | 10.4 | 64,727 | 45,515 | 2044 | 31,209 | 42.2 | 9.9 | 206,939 | 48,418 |
| 2020 | 32,677 | 43.0 | 10.2 | 67,916 | 45,701 | 2045 | 31,206 | 42.2 | 9.9 | 216,318 | 48,433 |
| 2021 | 32,483 | 42.8 | 10.0 | 71,258 | 45,885 | 2046 | 31,204 | 42.2 | 9.9 | 226,086 | 48,440 |
| 2022 | 32,308 | 42.6 | 9.8 | 74,743 | 46,057 | 2047 | 31,202 | 42.2 | 9.9 | 236,266 | 48,441 |
| 2023 | 32,152 | 42.4 | 9.7 | 78,391 | 46,224 | 2048 | 31,201 | 42.2 | 9.9 | 246,877 | 48,437 |
| 2024 | 32,013 | 42.2 | 9.6 | 82,200 | 46,383 | 2049 | 31,200 | 42.2 | 9.9 | 257,944 | 48,429 |
| 2025 | 31,890 | 42.1 | 9.5 | 86,188 | 46,539 | 2050 | 31,199 | 42.2 | 9.8 | 269,492 | 48,418 |
| 2026 | 31,783 | 42.0 | 9.4 | 90,365 | 46,693 | 2051 | 31,198 | 42.2 | 9.8 | 281,547 | 48,406 |
| 2027 | 31,690 | 41.9 | 9.3 | 94,726 | 46,839 | 2052 | 31,198 | 42.2 | 9.8 | 294,136 | 48,393 |
| 2028 | 31,611 | 41.8 | 9.3 | 99,287 | 46,980 | 2053 | 31,198 | 42.1 | 9.8 | 307,287 | 48,379 |
| 2029 | 31,541 | 41.8 | 9.2 | 104,058 | 47,118 | 2054 | 31,197 | 42.1 | 9.8 | 321,028 | 48,366 |
| 2030 | 31,481 | 41.8 | 9.2 | 109,042 | 47,248 | 2055 | 31,197 | 42.1 | 9.7 | 335,389 | 48,354 |
| 2031 | 31,429 | 41.8 | 9.2 | 114,253 | 47,374 | 2056 | 31,197 | 42.1 | 9.7 | 350,400 | 48,343 |
| 2032 | 31,387 | 41.8 | 9.3 | 119,697 | 47,494 | 2057 | 31,197 | 42.1 | 9.7 | 366,093 | 48,333 |
| 2033 | 31,351 | 41.8 | 9.3 | 125,385 | 47,609 | 2058 | 31,197 | 42.1 | 9.7 | 382,501 | 48,324 |
| 2034 | 31,322 | 41.9 | 9.3 | 131,335 | 47,721 | 2059 | 31,197 | 42.1 | 9.7 | 399,657 | 48,318 |
| 2035 | 31,298 | 41.9 | 9.4 | 137,566 | 47,832 | 2060 | 31,197 | 42.1 | 9.7 | 417,596 | 48,312 |

Average pay in year 2011 dollars provides a constant measure of purchasing power. In 2060, a participant earning a pay of $\$ 417,596$ will be in the same relative financial position as the average participant today (based on $4.5 \%$ annual wage inflation).

## CHART 7 <br> Active Population - Present and Future



TAbLE 18
MERS RETIREE POPULATION 2011-2060

| Year Ending December 31, | Retired Members |  |  | Year Ending December 31, | Retired Members |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Present | Future | Total |  | Present | Future | Total |
| 2011 | 26,349 | 1,981 | 28,330 | 2036 | 8,086 | 32,373 | 40,459 |
| 2012 | 25,734 | 3,767 | 29,501 | 2037 | 7,385 | 32,704 | 40,089 |
| 2013 | 25,105 | 5,521 | 30,626 | 2038 | 6,708 | 32,979 | 39,686 |
| 2014 | 24,450 | 7,309 | 31,759 | 2039 | 6,058 | 33,185 | 39,243 |
| 2015 | 23,785 | 9,027 | 32,812 | 2040 | 5,440 | 33,340 | 38,780 |
| 2016 | 23,106 | 10,765 | 33,871 | 2041 | 4,857 | 33,426 | 38,283 |
| 2017 | 22,413 | 12,444 | 34,856 | 2042 | 4,310 | 33,466 | 37,776 |
| 2018 | 21,707 | 14,110 | 35,818 | 2043 | 3,802 | 33,480 | 37,282 |
| 2019 | 20,990 | 15,703 | 36,693 | 2044 | 3,335 | 33,452 | 36,788 |
| 2020 | 20,264 | 17,242 | 37,505 | 2045 | 2,910 | 33,397 | 36,307 |
| 2021 | 19,525 | 18,727 | 38,252 | 2046 | 2,525 | 33,317 | 35,842 |
| 2022 | 18,781 | 20,124 | 38,905 | 2047 | 2,182 | 33,227 | 35,408 |
| 2023 | 18,029 | 21,495 | 39,524 | 2048 | 1,878 | 33,124 | 35,002 |
| 2024 | 17,268 | 22,766 | 40,034 | 2049 | 1,611 | 33,027 | 34,637 |
| 2025 | 16,500 | 23,940 | 40,440 | 2050 | 1,379 | 32,926 | 34,304 |
| 2026 | 15,729 | 25,102 | 40,831 | 2051 | 1,178 | 32,827 | 34,006 |
| 2027 | 14,954 | 26,171 | 41,125 | 2052 | 1,007 | 32,731 | 33,738 |
| 2028 | 14,176 | 27,129 | 41,305 | 2053 | 861 | 32,640 | 33,501 |
| 2029 | 13,394 | 28,062 | 41,457 | 2054 | 738 | 32,555 | 33,293 |
| 2030 | 12,613 | 28,927 | 41,540 | 2055 | 635 | 32,477 | 33,112 |
| 2031 | 11,836 | 29,737 | 41,573 | 2056 | 548 | 32,406 | 32,955 |
| 2032 | 11,065 | 30,430 | 41,494 | 2057 | 476 | 32,344 | 32,820 |
| 2033 | 10,301 | 31,040 | 41,341 | 2058 | 415 | 32,289 | 32,704 |
| 2034 | 9,548 | 31,565 | 41,113 | 2059 | 364 | 32,242 | 32,607 |
| 2035 | 8,808 | 32,007 | 40,815 | 2060 | 321 | 32,203 | 32,524 |

The present retiree group changes more gradually than the active member group. Just over half of the present retiree group is expected to be still drawing benefits after 18 years.

## CHART 8

MERS Retiree Population - Present and Future


TABLE 19
Ratio of Active Members to Retirees 2011-2060

| Year Ending <br> December 31, | Active <br> Members | Retired <br> Members | Actives per <br> Retiree | Year Ending <br> December 31, | Active <br> Members | Retired <br> Members | Actives per <br> Retiree |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | 35,366 | 28,330 | 1.25 | 2036 | 31,277 | 40,459 | 0.77 |
| 2012 | 34,970 | 29,501 | 1.19 | 2037 | 31,260 | 40,089 | 0.78 |
| 2013 | 34,602 | 30,626 | 1.13 | 2038 | 31,247 | 39,686 | 0.79 |
| 2014 | 34,258 | 31,759 | 1.08 | 2039 | 31,237 | 39,243 | 0.80 |
| 2015 | 33,935 | 32,812 | 1.03 | 2040 | 31,228 | 38,780 | 0.81 |
| 2016 | 33,639 | 33,871 | 0.99 | 2041 | 31,222 | 38,283 | 0.82 |
| 2017 | 33,367 | 34,856 | 0.96 | 2042 | 31,216 | 37,776 | 0.83 |
| 2018 | 33,115 | 35,818 | 0.92 | 2043 | 31,212 | 37,282 | 0.84 |
| 2019 | 32,887 | 36,693 | 0.90 | 2044 | 31,209 | 36,788 | 0.85 |
| 2020 | 32,677 | 37,505 | 0.87 | 2045 | 31,206 | 36,307 | 0.86 |
| 2021 | 32,483 | 38,252 | 0.85 | 2046 | 31,204 | 35,842 | 0.87 |
| 2022 | 32,308 | 38,905 | 0.83 | 2047 | 31,202 | 35,408 | 0.88 |
| 2023 | 32,152 | 39,524 | 0.81 | 2048 | 31,201 | 35,002 | 0.89 |
| 2024 | 32,013 | 40,034 | 0.80 | 2049 | 31,200 | 34,637 | 0.90 |
| 2025 | 31,890 | 40,440 | 0.79 | 2050 | 31,199 | 34,304 | 0.91 |
| 2026 | 31,783 | 40,831 | 0.78 | 2051 | 31,198 | 34,006 | 0.92 |
| 2027 | 31,690 | 41,125 | 0.77 | 2052 | 31,198 | 33,738 | 0.92 |
| 2028 | 31,611 | 41,305 | 0.77 | 2053 | 31,198 | 33,501 | 0.93 |
| 2029 | 31,541 | 41,457 | 0.76 | 2054 | 31,197 | 33,293 | 0.94 |
| 2030 | 31,481 | 41,540 | 0.76 | 2055 | 31,197 | 33,112 | 0.94 |
| 2031 | 31,429 | 41,573 | 0.76 | 2056 | 31,197 | 32,955 | 0.95 |
| 2032 | 31,387 | 41,494 | 0.76 | 2057 | 31,197 | 32,820 | 0.95 |
| 2033 | 31,351 | 41,341 | 0.76 | 2058 | 31,197 | 32,704 | 0.95 |
| 2034 | 31,322 | 41,113 | 0.76 | 2059 | 31,197 | 32,607 | 0.96 |
| 2035 | 31,298 | 40,815 | 0.77 | 2060 | 31,197 | 32,524 | 0.96 |

The ratio of active members to retirees $(A / R)$ is expected to decline steadily until it reaches a level of about 1.0. This is a reasonable result, given the mixture of retirement conditions in MERS. Note that the ratio dips temporarily to 0.76 as a result of the closed division members moving out of active employment into retirement.

## CHART 9

Ratio of Active Members to Retirees


## CASH FLOW PROJECTIONS

As the retirement system matures, how will the relationship between contributions, benefit payments and investment return be affected? This section explores the expected emerging patterns over the next half century.

TABLE 20
BASE PROJECTION (8\% MARKET RETURN AND MAKEUP FOR 2008)
50-YEAR FUND PROJECTION
BASED ON VALUATION ASSUMPTIONS (\$ IN MILLIONS)

| Year Ending December 31, | Assets Beginning of Year | Contributions |  |  |  | Benefit <br> Payments | Investment Income | Assets End of Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Employer | UAAL | Member |  |  |  |  |  |
|  |  | Normal Cost | Payment | Contribution | Total |  |  | Inflated | 2011 Dollars |
| 2011 | \$ 6,945 | \$143 | \$130 | \$57 | \$ 331 | \$ 528* | \$ 548 | \$ 7,296 | \$7,296 |
| 2012 | 7,296 | 142 | 144 | 58 | 344 | 546 | 576 | 7,669 | 7,339 |
| 2013 | 7,669 | 142 | 158 | 58 | 358 | 584 | 605 | 8,048 | 7,370 |
| 2014 | 8,048 | 143 | 170 | 59 | 372 | 622 | 634 | 8,433 | 7,389 |
| 2015 | 8,433 | 148 | 188 | 61 | 397 | 659 | 664 | 8,835 | 7,409 |
| 2016 | 8,835 | 153 | 204 | 64 | 421 | 696 | 696 | 9,256 | 7,428 |
| 2017 | 9,256 | 158 | 211 | 67 | 436 | 732 | 729 | 9,689 | 7,440 |
| 2018 | 9,689 | 164 | 213 | 70 | 447 | 769 | 762 | 10,129 | 7,443 |
| 2019 | 10,129 | 170 | 215 | 73 | 458 | 806 | 796 | 10,577 | 7,438 |
| 2020 | 10,577 | 177 | 214 | 76 | 467 | 844 | 831 | 11,031 | 7,423 |
| 2021 | 11,031 | 183 | 207 | 79 | 469 | 882 | 866 | 11,485 | 7,396 |
| 2022 | 11,485 | 191 | 198 | 83 | 471 | 920 | 901 | 11,937 | 7,356 |
| 2023 | 11,937 | 198 | 190 | 86 | 475 | 959 | 936 | 12,389 | 7,305 |
| 2024 | 12,389 | 206 | 183 | 90 | 479 | 997 | 970 | 12,842 | 7,246 |
| 2025 | 12,842 | 215 | 176 | 94 | 485 | 1,034 | 1,005 | 13,298 | 7,181 |
| 2026 | 13,298 | 224 | 170 | 98 | 493 | 1,071 | 1,041 | 13,761 | 7,110 |
| 2027 | 13,761 | 234 | 166 | 103 | 502 | 1,108 | 1,077 | 14,231 | 7,037 |
| 2028 | 14,231 | 244 | 161 | 107 | 513 | 1,144 | 1,113 | 14,713 | 6,962 |
| 2029 | 14,713 | 255 | 158 | 112 | 525 | 1,178 | 1,151 | 15,210 | 6,887 |
| 2030 | 15,210 | 266 | 154 | 117 | 538 | 1,212 | 1,190 | 15,725 | 6,814 |
| 2031 | 15,725 | 278 | 151 | 123 | 552 | 1,246 | 1,230 | 16,262 | 6,743 |
| 2032 | 16,262 | 290 | 149 | 128 | 568 | 1,278 | 1,273 | 16,824 | 6,676 |
| 2033 | 16,824 | 303 | 147 | 134 | 584 | 1,308 | 1,317 | 17,417 | 6,613 |
| 2034 | 17,417 | 317 | 144 | 141 | 602 | 1,338 | 1,364 | 18,046 | 6,557 |
| 2035 | 18,046 | 332 | 142 | 147 | 622 | 1,366 | 1,414 | 18,716 | 6,508 |
| 2036 | 18,716 | 347 | 141 | 154 | 642 | 1,392 | 1,467 | 19,433 | 6,466 |
| 2037 | 19,433 | 363 | 139 | 161 | 663 | 1,420 | 1,524 | 20,201 | 6,432 |
| 2038 | 20,201 | 380 | 137 | 169 | 686 | 1,449 | 1,586 | 21,023 | 6,406 |
| 2039 | 21,023 | 397 | 135 | 177 | 709 | 1,479 | 1,651 | 21,904 | 6,387 |
| 2040 | 21,904 | 415 | 134 | 185 | 734 | 1,512 | 1,721 | 22,848 | 6,375 |
| 2041 | 22,848 | 434 | 132 | 193 | 760 | 1,547 | 1,796 | 23,857 | 6,370 |
| 2042 | 23,857 | 454 | 131 | 202 | 786 | 1,585 | 1,877 | 24,935 | 6,371 |
| 2043 | 24,935 | 474 | 129 | 211 | 815 | 1,628 | 1,962 | 26,084 | 6,378 |
| 2044 | 26,084 | 496 | 127 | 221 | 844 | 1,675 | 2,053 | 27,306 | 6,389 |
| 2045 | 27,306 | 518 | 125 | 231 | 874 | 1,727 | 2,150 | 28,604 | 6,404 |
| 2046 | 28,604 | 541 | 124 | 241 | 906 | 1,785 | 2,253 | 29,978 | 6,423 |
| 2047 | 29,978 | 566 | 122 | 252 | 939 | 1,848 | 2,362 | 31,431 | 6,444 |
| 2048 | 31,431 | 591 | 120 | 263 | 974 | 1,918 | 2,477 | 32,964 | 6,468 |
| 2049 | 32,964 | 617 | 117 | 275 | 1,010 | 1,993 | 2,598 | 34,578 | 6,492 |
| 2050 | 34,578 | 645 | 115 | 287 | 1,047 | 2,075 | 2,725 | 36,275 | 6,517 |
| 2051 | 36,275 | 674 | 112 | 300 | 1,086 | 2,163 | 2,859 | 38,057 | 6,543 |
| 2052 | 38,057 | 704 | 110 | 314 | 1,127 | 2,258 | 2,999 | 39,926 | 6,569 |
| 2053 | 39,926 | 735 | 107 | 328 | 1,170 | 2,358 | 3,147 | 41,884 | 6,594 |
| 2054 | 41,884 | 768 | 104 | 342 | 1,214 | 2,465 | 3,301 | 43,934 | 6,619 |
| 2055 | 43,934 | 802 | 100 | 358 | 1,260 | 2,577 | 3,462 | 46,080 | 6,643 |
| 2056 | 46,080 | 838 | 97 | 374 | 1,309 | 2,696 | 3,631 | 48,323 | 6,667 |
| 2057 | 48,323 | 876 | 93 | 390 | 1,359 | 2,821 | 3,807 | 50,669 | 6,689 |
| 2058 | 50,669 | 915 | 89 | 408 | 1,412 | 2,952 | 3,992 | 53,121 | 6,711 |
| 2059 | 53,121 | 956 | 84 | 426 | 1,467 | 3,089 | 4,185 | 55,684 | 6,732 |
| 2060 | 55,684 | 999 | 80 | 445 | 1,524 | 3,232 | 4,386 | 58,362 | 6,752 |

[^2]
## Chart 10

BASE PROJECTION (8\% MARKET RETURN AND MAKEUP FOR 2008) Projected Trust Fund Assets


TAble 21
Base Projection (8\% MARKET Return and Makeup for 2008)
Projected Non-Investment Cash Flow 2011-2060 (\$ IN Millions)

| Year Ending December 31, | External Cash Flow |  | Net External Cash Flow |  | Year Ending December 31, | External Cash Flow |  | Net External Cash Flow |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inflow | Outflow | Dollars | \% of Assets |  | Inflow | Outflow | Dollars | \% of Assets |
| 2011 | \$331 | \$528 | \$(197) | -2.83\% | 2036 | \$642 | \$1,392 | \$(750) | -4.01\% |
| 2012 | 344 | 546 | (203) | -2.78\% | 2037 | 663 | 1,420 | (757) | -3.89\% |
| 2013 | 358 | 584 | (226) | -2.94\% | 2038 | 686 | 1,449 | (763) | -3.78\% |
| 2014 | 372 | 622 | (249) | -3.10\% | 2039 | 709 | 1,479 | (770) | -3.66\% |
| 2015 | 397 | 659 | (262) | -3.10\% | 2040 | 734 | 1,512 | (778) | -3.55\% |
| 2016 | 421 | 696 | (275) | -3.11\% | 2041 | 760 | 1,547 | (787) | -3.45\% |
| 2017 | 436 | 732 | (296) | -3.20\% | 2042 | 786 | 1,585 | (799) | -3.35\% |
| 2018 | 447 | 769 | (322) | -3.33\% | 2043 | 815 | 1,628 | (813) | -3.26\% |
| 2019 | 458 | 806 | (348) | -3.44\% | 2044 | 844 | 1,675 | (831) | -3.19\% |
| 2020 | 467 | 844 | (377) | -3.56\% | 2045 | 874 | 1,727 | (853) | -3.12\% |
| 2021 | 469 | 882 | (412) | -3.74\% | 2046 | 906 | 1,785 | (879) | -3.07\% |
| 2022 | 471 | 920 | (449) | -3.91\% | 2047 | 939 | 1,848 | (909) | -3.03\% |
| 2023 | 475 | 959 | (484) | -4.05\% | 2048 | 974 | 1,918 | (944) | -3.00\% |
| 2024 | 479 | 997 | (518) | -4.18\% | 2049 | 1,010 | 1,993 | (984) | -2.98\% |
| 2025 | 485 | 1,034 | (549) | -4.28\% | 2050 | 1,047 | 2,075 | $(1,028)$ | -2.97\% |
| 2026 | 493 | 1,071 | (579) | -4.35\% | 2051 | 1,086 | 2,163 | $(1,077)$ | -2.97\% |
| 2027 | 502 | 1,108 | (606) | -4.41\% | 2052 | 1,127 | 2,258 | $(1,131)$ | -2.97\% |
| 2028 | 513 | 1,144 | (631) | -4.44\% | 2053 | 1,170 | 2,358 | $(1,188)$ | -2.98\% |
| 2029 | 525 | 1,178 | (654) | -4.44\% | 2054 | 1,214 | 2,465 | $(1,251)$ | -2.99\% |
| 2030 | 538 | 1,212 | (675) | -4.43\% | 2055 | 1,260 | 2,577 | $(1,317)$ | -3.00\% |
| 2031 | 552 | 1,246 | (694) | -4.41\% | 2056 | 1,309 | 2,696 | $(1,387)$ | -3.01\% |
| 2032 | 568 | 1,278 | (710) | -4.37\% | 2057 | 1,359 | 2,821 | $(1,462)$ | -3.02\% |
| 2033 | 584 | 1,308 | (724) | -4.30\% | 2058 | 1,412 | 2,952 | $(1,540)$ | -3.04\% |
| 2034 | 602 | 1,338 | (735) | -4.22\% | 2059 | 1,467 | 3,089 | $(1,622)$ | -3.05\% |
| 2035 | 622 | 1,366 | (744) | -4.12\% | 2060 | 1,524 | 3,232 | $(1,708)$ | -3.07\% |

The net external cash flow is currently in a negative position (i.e., benefits paid are more than contributions received). It is expected to become more negative over the next 50 years. Investment return is needed to pay benefits (a natural result from level contribution financing). Long range, the $3.5 \%$ annual real investment return (return in excess of inflation) will be needed to pay benefits. The remainder of investment return (the inflation portion-$4.5 \%$ in this projection) is needed to preserve the purchasing power of the assets.

Chart 11
BASE PROJECTION (8\% MARKET RETURN AND MAKEUP FOR 2008)
Projected Net Change in Assets
Amounts of INFLATED DOLLARS


The results shown in the above chart do not show changes of constant value, because amounts of change are inflated dollar amounts.
The Net Change in Assets, the blue bars, indicates perpetual additions to trust fund assets. While this is true (and necessary) in inflated dollars, it is not true in terms of constant value. Constant value changes are shown by the chart on page 45.

TABLE 22

## Base Projection (8\% MARKET RETURN AND MAKEUP FOR 2008)

CASH Flows as \%'s OF Payroll 2011-2060

| Year Ending <br> December 31, | External Cash Flow <br> Contributions <br> Received | Benefits <br> Paid | Investment <br> Return | Year Ending <br> December 31, | Contribution <br> Received | Benefits <br> Paid | Investment <br> Return |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $19.41 \%$ | $30.97 \%$ | $32.16 \%$ | 2036 | $14.24 \%$ | $30.90 \%$ | $32.56 \%$ |
|  | $20.12 \%$ | $31.98 \%$ | $33.70 \%$ | 2037 | $14.06 \%$ | $30.11 \%$ | $32.32 \%$ |
| 2013 | $20.80 \%$ | $33.92 \%$ | $35.12 \%$ | 2038 | $13.89 \%$ | $29.35 \%$ | $32.13 \%$ |
| 2014 | $21.36 \%$ | $35.68 \%$ | $36.37 \%$ | 2039 | $13.73 \%$ | $28.64 \%$ | $31.97 \%$ |
| 2015 | $21.91 \%$ | $36.36 \%$ | $36.66 \%$ | 2040 | $13.58 \%$ | $27.98 \%$ | $31.86 \%$ |
| 2016 | $22.34 \%$ | $36.91 \%$ | $36.92 \%$ | 2041 | $13.44 \%$ | $27.38 \%$ | $31.79 \%$ |
| 2017 | $22.24 \%$ | $37.33 \%$ | $37.15 \%$ | 2042 | $13.31 \%$ | $26.83 \%$ | $31.76 \%$ |
| 2018 | $21.87 \%$ | $37.64 \%$ | $37.31 \%$ | 2043 | $13.18 \%$ | $26.35 \%$ | $31.76 \%$ |
| 2019 | $21.50 \%$ | $37.86 \%$ | $37.41 \%$ | 2044 | $13.06 \%$ | $25.93 \%$ | $31.80 \%$ |
| 2020 | $21.03 \%$ | $38.01 \%$ | $37.45 \%$ | 2045 | $12.95 \%$ | $25.59 \%$ | $31.86 \%$ |
| 2021 | $20.27 \%$ | $38.09 \%$ | $37.41 \%$ | 2046 | $12.84 \%$ | $25.30 \%$ | $31.94 \%$ |
| 2022 | $19.52 \%$ | $38.09 \%$ | $37.31 \%$ | 2047 | $12.74 \%$ | $25.07 \%$ | $32.04 \%$ |
| 2023 | $18.83 \%$ | $38.03 \%$ | $37.12 \%$ | 2048 | $12.64 \%$ | $24.89 \%$ | $32.15 \%$ |
| 2024 | $18.20 \%$ | $37.87 \%$ | $36.88 \%$ | 2049 | $12.55 \%$ | $24.77 \%$ | $32.28 \%$ |
| 2025 | $17.65 \%$ | $37.62 \%$ | $36.58 \%$ | 2050 | $12.45 \%$ | $24.68 \%$ | $32.41 \%$ |
| 2026 | $17.16 \%$ | $37.30 \%$ | $36.24 \%$ | 2051 | $12.37 \%$ | $24.63 \%$ | $32.55 \%$ |
| 2027 | $16.72 \%$ | $36.92 \%$ | $35.86 \%$ | 2052 | $12.28 \%$ | $24.60 \%$ | $32.69 \%$ |
| 2028 | $16.33 \%$ | $36.44 \%$ | $35.47 \%$ | 2053 | $12.20 \%$ | $24.60 \%$ | $32.82 \%$ |
| 2029 | $15.98 \%$ | $35.90 \%$ | $35.07 \%$ | 2054 | $12.12 \%$ | $24.61 \%$ | $32.96 \%$ |
| 2030 | $15.66 \%$ | $35.31 \%$ | $34.66 \%$ | 2055 | $12.04 \%$ | $24.63 \%$ | $33.09 \%$ |
| 2031 | $15.37 \%$ | $34.69 \%$ | $34.26 \%$ | 2056 | $11.97 \%$ | $24.66 \%$ | $33.21 \%$ |
| 2032 | $15.11 \%$ | $34.01 \%$ | $33.87 \%$ | 2057 | $11.90 \%$ | $24.70 \%$ | $33.34 \%$ |
| 2033 | $14.87 \%$ | $33.28 \%$ | $33.50 \%$ | 2058 | $11.83 \%$ | $24.74 \%$ | $33.45 \%$ |
| 2034 | $14.64 \%$ | $32.52 \%$ | $33.16 \%$ | 2059 | $11.77 \%$ | $24.77 \%$ | $33.56 \%$ |
| 2035 | $14.44 \%$ | $31.72 \%$ | $32.84 \%$ | 2060 | $11.70 \%$ | $24.81 \%$ | $33.67 \%$ |

Investment return has already become the largest source of revenue for the retirement system - - a natural result of level contribution financing.

## Chart 12

BASE PROJECTION ((8\% MARKET RETURN AND MAKEUP FOR 2008) Projected Pattern of Contribution Income and Benefit Payout


Table 23
Base Projection (8\% Market Return and Makeup for 2008) MERS Projected Financial Growth Rates 2011-2060

| Year Ending <br> December 31, | Annual Growth in: |  |  | Contributions | Benefits | Assets | Year Ending |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Annual Growth in: |  |  |  |
|  | $3.94 \%$ | $3.56 \%$ | $5.11 \%$ | 2037 | $3.33 \%$ | $1.98 \%$ | $3.95 \%$ |
| 2013 | $4.18 \%$ | $6.89 \%$ | $4.94 \%$ | 2038 | $3.38 \%$ | $2.03 \%$ | $4.07 \%$ |
| 2014 | $3.97 \%$ | $6.48 \%$ | $4.78 \%$ | 2039 | $3.43 \%$ | $2.10 \%$ | $4.19 \%$ |
| 2015 | $6.60 \%$ | $5.95 \%$ | $4.77 \%$ | 2040 | $3.47 \%$ | $2.20 \%$ | $4.31 \%$ |
| 2016 | $6.06 \%$ | $5.61 \%$ | $4.77 \%$ | 2041 | $3.51 \%$ | $2.32 \%$ | $4.42 \%$ |
| 2017 | $3.64 \%$ | $5.24 \%$ | $4.68 \%$ | 2042 | $3.54 \%$ | $2.48 \%$ | $4.52 \%$ |
| 2018 | $2.40 \%$ | $5.02 \%$ | $4.54 \%$ | 2043 | $3.57 \%$ | $2.68 \%$ | $4.61 \%$ |
| 2019 | $2.45 \%$ | $4.80 \%$ | $4.43 \%$ | 2044 | $3.59 \%$ | $2.90 \%$ | $4.69 \%$ |
| 2020 | $1.97 \%$ | $4.68 \%$ | $4.30 \%$ | 2045 | $3.62 \%$ | $3.13 \%$ | $4.75 \%$ |
| 2021 | $0.55 \%$ | $4.52 \%$ | $4.11 \%$ | 2046 | $3.64 \%$ | $3.34 \%$ | $4.81 \%$ |
| 2022 | $0.43 \%$ | $4.33 \%$ | $3.94 \%$ | 2047 | $3.65 \%$ | $3.55 \%$ | $4.85 \%$ |
| 2023 | $0.69 \%$ | $4.22 \%$ | $3.78 \%$ | 2048 | $3.67 \%$ | $3.76 \%$ | $4.88 \%$ |
| 2024 | $0.93 \%$ | $3.96 \%$ | $3.66 \%$ | 2049 | $3.70 \%$ | $3.94 \%$ | $4.90 \%$ |
| 2025 | $1.26 \%$ | $3.76 \%$ | $3.55 \%$ | 2050 | $3.71 \%$ | $4.11 \%$ | $4.91 \%$ |
| 2026 | $1.59 \%$ | $3.60 \%$ | $3.48 \%$ | 2051 | $3.73 \%$ | $4.25 \%$ | $4.91 \%$ |
| 2027 | $1.88 \%$ | $3.44 \%$ | $3.42 \%$ | 2052 | $3.75 \%$ | $4.36 \%$ | $4.91 \%$ |
| 2028 | $2.11 \%$ | $3.21 \%$ | $3.39 \%$ | 2053 | $3.78 \%$ | $4.45 \%$ | $4.90 \%$ |
| 2029 | $2.33 \%$ | $3.03 \%$ | $3.38 \%$ | 2054 | $3.80 \%$ | $4.52 \%$ | $4.89 \%$ |
| 2030 | $2.51 \%$ | $2.87 \%$ | $3.39 \%$ | 2055 | $3.82 \%$ | $4.57 \%$ | $4.88 \%$ |
| 2031 | $2.67 \%$ | $2.76 \%$ | $3.41 \%$ | 2056 | $3.84 \%$ | $4.61 \%$ | $4.87 \%$ |
| 2032 | $2.82 \%$ | $2.56 \%$ | $3.46 \%$ | 2057 | $3.87 \%$ | $4.63 \%$ | $4.85 \%$ |
| 2033 | $2.95 \%$ | $2.41 \%$ | $3.52 \%$ | 2058 | $3.88 \%$ | $4.64 \%$ | $4.84 \%$ |
| 2034 | $3.07 \%$ | $2.25 \%$ | $3.61 \%$ | 2059 | $3.89 \%$ | $4.64 \%$ | $4.82 \%$ |
| 2035 | $3.18 \%$ | $2.07 \%$ | $3.71 \%$ | 2060 | $3.91 \%$ | $4.64 \%$ | $4.81 \%$ |
| 2036 | $3.27 \%$ | $1.96 \%$ | $3.83 \%$ | 2061 | $3.94 \%$ | $4.63 \%$ | $4.80 \%$ |

This schedule demonstrates that financial growth rates eventually stabilize close to the underlying assumed rate of wage inflation ( $4.5 \%$ for MERS). Note that the 2012 growth rate in benefits is low due to the one-time payment of pending refunds that was included in the 2011 benefit payout.

TABLE 24
BASE PROJECTION (8\% MARKET RETURN AND MAKEUP FOR 2008) MERS PRojected Funded Ratios 2011-2060 (\$ IN MiLlions)

| Year Ending <br> December 31, | Valuation <br> Assets | Accrued <br> Liabilities | Funded <br> Ratio | Year Ending <br> December 31, | Valuation <br> Assets | Accrued <br> Liabilities | Funded <br> Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | $\$ 7,296$ | $\$ 9,713$ | $75.1 \%$ | 2036 | $\$ 19,433$ | $\$ 21,203$ | $91.7 \%$ |
| 2012 | 7,669 | 10,120 | $75.8 \%$ | 2037 | 20,201 | 21,942 | $92.1 \%$ |
| 2013 | 8,048 | 10,520 | $76.5 \%$ | 2038 | 21,023 | 22,734 | $92.5 \%$ |
| 2014 | 8,433 | 10,914 | $77.3 \%$ | 2039 | 21,904 | 23,583 | $92.9 \%$ |
| 2015 | 8,835 | 11,308 | $78.1 \%$ | 2040 | 22,848 | 24,492 | $93.3 \%$ |
| 2016 | 9,256 | 11,702 | $79.1 \%$ | 2041 | 23,857 | 25,464 | $93.7 \%$ |
| 2017 | 9,689 | 12,098 | $80.1 \%$ | 2042 | 24,935 | 26,502 | $94.1 \%$ |
| 2018 | 10,129 | 12,496 | $81.1 \%$ | 2043 | 26,084 | 27,609 | $94.5 \%$ |
| 2019 | 10,577 | 12,895 | $82.0 \%$ | 2044 | 27,306 | 28,786 | $94.9 \%$ |
| 2020 | 11,031 | 13,297 | $83.0 \%$ | 2045 | 28,604 | 30,034 | $95.2 \%$ |
| 2021 | 11,485 | 13,701 | $83.8 \%$ | 2046 | 29,978 | 31,355 | $95.6 \%$ |
| 2022 | 11,937 | 14,109 | $84.6 \%$ | 2047 | 31,431 | 32,750 | $96.0 \%$ |
| 2023 | 12,389 | 14,520 | $85.3 \%$ | 2048 | 32,964 | 34,221 | $96.3 \%$ |
| 2024 | 12,842 | 14,937 | $86.0 \%$ | 2049 | 34,578 | 35,769 | $96.7 \%$ |
| 2025 | 13,298 | 15,360 | $86.6 \%$ | 2050 | 36,275 | 37,394 | $97.0 \%$ |
| 2026 | 13,761 | 15,791 | $87.1 \%$ | 2051 | 38,057 | 39,099 | $97.3 \%$ |
| 2027 | 14,231 | 16,233 | $87.7 \%$ | 2052 | 39,926 | 40,885 | $97.7 \%$ |
| 2028 | 14,713 | 16,688 | $88.2 \%$ | 2053 | 41,884 | 42,755 | $98.0 \%$ |
| 2029 | 15,210 | 17,159 | $88.6 \%$ | 2054 | 43,934 | 44,710 | $98.3 \%$ |
| 2030 | 15,725 | 17,650 | $89.1 \%$ | 2055 | 46,080 | 46,753 | $98.6 \%$ |
| 2031 | 16,262 | 18,161 | $89.5 \%$ | 2056 | 48,323 | 48,888 | $98.8 \%$ |
| 2032 | 16,824 | 18,699 | $90.0 \%$ | 2057 | 50,669 | 51,117 | $99.1 \%$ |
| 2033 | 17,417 | 19,267 | $90.4 \%$ | 2058 | 53,121 | 53,444 | $99.4 \%$ |
| 2034 | 18,046 | 19,870 | $90.8 \%$ | 2059 | 55,684 | 55,874 | $99.7 \%$ |
| 2035 | 18,716 | 20,514 | $91.2 \%$ | 2060 | 58,362 | 58,411 | $99.9 \%$ |

TABLE 25
Alternative 1 Projection (7\% MARKET RETURN) 50-Year Fund Projection (\$ IN Millions)

| Year Ending December 31, | Assets <br> Beginning <br> of Year | Contributions |  |  |  | Benefit <br> Payments | Investment Income | Assets End of Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Employer | UAAL | Member |  |  |  |  |  |
|  |  | Normal Cost | Payment | Contribution | Total |  |  | Inflated | 2011 Dollars |
| 2011 | \$ 6,945 | \$143 | \$130 | \$ 57 | \$ 331 | \$ 528* | \$ 383 | \$ 7,132 | \$ 7,132 |
| 2012 | 7,132 | 142 | 144 | 58 | 344 | 546 | 387 | 7,316 | 7,001 |
| 2013 | 7,316 | 142 | 166 | 58 | 366 | 584 | 389 | 7,488 | 6,857 |
| 2014 | 7,488 | 143 | 192 | 59 | 394 | 622 | 391 | 7,651 | 6,704 |
| 2015 | 7,651 | 148 | 227 | 61 | 436 | 659 | 407 | 7,835 | 6,570 |
| 2016 | 7,835 | 153 | 264 | 64 | 481 | 696 | 386 | 8,007 | 6,425 |
| 2017 | 8,007 | 158 | 292 | 67 | 517 | 732 | 395 | 8,187 | 6,287 |
| 2018 | 8,187 | 164 | 317 | 70 | 550 | 769 | 590 | 8,558 | 6,289 |
| 2019 | 8,558 | 170 | 344 | 73 | 587 | 806 | 583 | 8,922 | 6,274 |
| 2020 | 8,922 | 177 | 356 | 76 | 609 | 844 | 581 | 9,269 | 6,237 |
| 2021 | 9,269 | 183 | 353 | 79 | 616 | 882 | 612 | 9,615 | 6,191 |
| 2022 | 9,615 | 191 | 351 | 83 | 625 | 920 | 634 | 9,954 | 6,134 |
| 2023 | 9,954 | 198 | 351 | 86 | 635 | 959 | 666 | 10,297 | 6,072 |
| 2024 | 10,297 | 206 | 350 | 90 | 647 | 997 | 688 | 10,635 | 6,001 |
| 2025 | 10,635 | 215 | 351 | 94 | 660 | 1,034 | 710 | 10,971 | 5,924 |
| 2026 | 10,971 | 224 | 352 | 98 | 674 | 1,071 | 743 | 11,318 | 5,848 |
| 2027 | 11,318 | 234 | 355 | 103 | 691 | 1,108 | 767 | 11,667 | 5,769 |
| 2028 | 11,667 | 244 | 358 | 107 | 709 | 1,144 | 790 | 12,022 | 5,689 |
| 2029 | 12,022 | 255 | 361 | 112 | 728 | 1,178 | 814 | 12,386 | 5,608 |
| 2030 | 12,386 | 266 | 366 | 117 | 749 | 1,212 | 839 | 12,762 | 5,530 |
| 2031 | 12,762 | 278 | 372 | 123 | 772 | 1,246 | 864 | 13,153 | 5,454 |
| 2032 | 13,153 | 290 | 378 | 128 | 796 | 1,278 | 891 | 13,563 | 5,381 |
| 2033 | 13,563 | 303 | 385 | 134 | 822 | 1,308 | 919 | 13,996 | 5,314 |
| 2034 | 13,996 | 317 | 392 | 141 | 850 | 1,338 | 949 | 14,457 | 5,253 |
| 2035 | 14,457 | 332 | 400 | 147 | 879 | 1,366 | 981 | 14,952 | 5,199 |
| 2036 | 14,952 | 347 | 409 | 154 | 910 | 1,392 | 1,015 | 15,485 | 5,152 |
| 2037 | 15,485 | 363 | 418 | 161 | 943 | 1,420 | 1,052 | 16,060 | 5,113 |
| 2038 | 16,060 | 380 | 428 | 169 | 977 | 1,449 | 1,092 | 16,679 | 5,082 |
| 2039 | 16,679 | 397 | 438 | 177 | 1,012 | 1,479 | 1,135 | 17,347 | 5,058 |
| 2040 | 17,347 | 415 | 449 | 185 | 1,049 | 1,512 | 1,181 | 18,066 | 5,041 |
| 2041 | 18,066 | 434 | 461 | 193 | 1,088 | 1,547 | 1,231 | 18,838 | 5,030 |
| 2042 | 18,838 | 454 | 473 | 202 | 1,129 | 1,585 | 1,284 | 19,666 | 5,025 |
| 2043 | 19,666 | 474 | 486 | 211 | 1,172 | 1,628 | 1,341 | 20,552 | 5,025 |
| 2044 | 20,552 | 496 | 500 | 221 | 1,216 | 1,675 | 1,402 | 21,495 | 5,029 |
| 2045 | 21,495 | 518 | 514 | 231 | 1,263 | 1,727 | 1,467 | 22,499 | 5,037 |
| 2046 | 22,499 | 541 | 530 | 241 | 1,312 | 1,785 | 1,536 | 23,562 | 5,048 |
| 2047 | 23,562 | 566 | 546 | 252 | 1,364 | 1,848 | 1,609 | 24,687 | 5,061 |
| 2048 | 24,687 | 591 | 563 | 263 | 1,417 | 1,918 | 1,686 | 25,873 | 5,076 |
| 2049 | 25,873 | 617 | 582 | 275 | 1,474 | 1,993 | 1,767 | 27,121 | 5,092 |
| 2050 | 27,121 | 645 | 601 | 287 | 1,533 | 2,075 | 1,853 | 28,431 | 5,108 |
| 2051 | 28,431 | 674 | 621 | 300 | 1,595 | 2,163 | 1,942 | 29,805 | 5,124 |
| 2052 | 29,805 | 704 | 643 | 314 | 1,660 | 2,258 | 2,036 | 31,244 | 5,140 |
| 2053 | 31,244 | 735 | 665 | 328 | 1,728 | 2,358 | 2,134 | 32,748 | 5,156 |
| 2054 | 32,748 | 768 | 689 | 342 | 1,800 | 2,465 | 2,237 | 34,320 | 5,171 |
| 2055 | 34,320 | 802 | 715 | 358 | 1,875 | 2,577 | 2,344 | 35,961 | 5,185 |
| 2056 | 35,961 | 838 | 741 | 374 | 1,953 | 2,696 | 2,456 | 37,674 | 5,198 |
| 2057 | 37,674 | 876 | 769 | 390 | 2,035 | 2,821 | 2,572 | 39,461 | 5,210 |
| 2058 | 39,461 | 915 | 799 | 408 | 2,122 | 2,952 | 2,694 | 41,325 | 5,221 |
| 2059 | 41,325 | 956 | 829 | 426 | 2,212 | 3,089 | 2,821 | 43,270 | 5,231 |
| 2060 | 43,270 | 999 | 862 | 445 | 2,307 | 3,232 | 2,954 | 45,298 | 5,241 |

* First year benefit payments include $\$ 15.7$ million of pending refunds of accumulated member contributions to terminated employees.


## Chart 13

Alternative 1 Projection (7\% MARKET RETURN)
Projected Trust Fund Assets


TABLE 26
Alternative 1 Projection (7\% MARKET Return)
Projected Non-Investment Cash Flow
2011-2060 (\$ IN Millions)

| Year Ending December 31, | External Cash Flow |  | Net External Cash Flow |  | Year Ending December 31, | External Cash Flow |  | Net External Cash Flow |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inflow | Outflow | Dollars | \% of Assets |  | Inflow | Outflow | Dollars | \% of Assets |
| 2011 | \$331 | \$528 | \$(197) | -2.83\% | 2036 | \$ 910 | \$1,392 | \$(482) | -3.22\% |
| 2012 | 344 | 546 | (203) | -2.84\% | 2037 | 943 | 1,420 | (477) | -3.08\% |
| 2013 | 366 | 584 | (218) | -2.98\% | 2038 | 977 | 1,449 | (472) | -2.94\% |
| 2014 | 394 | 622 | (228) | -3.04\% | 2039 | 1,012 | 1,479 | (467) | -2.80\% |
| 2015 | 436 | 659 | (223) | -2.91\% | 2040 | 1,049 | 1,512 | (462) | -2.67\% |
| 2016 | 481 | 696 | (215) | -2.74\% | 2041 | 1,088 | 1,547 | (458) | -2.54\% |
| 2017 | 517 | 732 | (215) | -2.69\% | 2042 | 1,129 | 1,585 | (456) | -2.42\% |
| 2018 | 550 | 769 | (219) | -2.67\% | 2043 | 1,172 | 1,628 | (456) | -2.32\% |
| 2019 | 587 | 806 | (219) | -2.56\% | 2044 | 1,216 | 1,675 | (458) | -2.23\% |
| 2020 | 609 | 844 | (235) | -2.63\% | 2045 | 1,263 | 1,727 | (464) | -2.16\% |
| 2021 | 616 | 882 | (266) | -2.87\% | 2046 | 1,312 | 1,785 | (473) | -2.10\% |
| 2022 | 625 | 920 | (295) | -3.07\% | 2047 | 1,364 | 1,848 | (485) | -2.06\% |
| 2023 | 635 | 959 | (323) | -3.25\% | 2048 | 1,417 | 1,918 | (500) | -2.03\% |
| 2024 | 647 | 997 | (350) | -3.40\% | 2049 | 1,474 | 1,993 | (519) | -2.01\% |
| 2025 | 660 | 1,034 | (374) | -3.52\% | 2050 | 1,533 | 2,075 | (542) | -2.00\% |
| 2026 | 674 | 1,071 | (397) | -3.62\% | 2051 | 1,595 | 2,163 | (568) | -2.00\% |
| 2027 | 691 | 1,108 | (417) | -3.69\% | 2052 | 1,660 | 2,258 | (597) | -2.00\% |
| 2028 | 709 | 1,144 | (435) | -3.73\% | 2053 | 1,728 | 2,358 | (630) | -2.02\% |
| 2029 | 728 | 1,178 | (450) | -3.74\% | 2054 | 1,800 | 2,465 | (665) | -2.03\% |
| 2030 | 749 | 1,212 | (463) | -3.74\% | 2055 | 1,875 | 2,577 | (703) | -2.05\% |
| 2031 | 772 | 1,246 | (473) | -3.71\% | 2056 | 1,953 | 2,696 | (743) | -2.07\% |
| 2032 | 796 | 1,278 | (481) | -3.66\% | 2057 | 2,035 | 2,821 | (785) | -2.08\% |
| 2033 | 822 | 1,308 | (486) | -3.58\% | 2058 | 2,122 | 2,952 | (830) | -2.10\% |
| 2034 | 850 | 1,338 | (488) | -3.48\% | 2059 | 2,212 | 3,089 | (877) | -2.12\% |
| 2035 | 879 | 1,366 | (486) | -3.36\% | 2060 | 2,307 | 3,232 | (926) | -2.14\% |

The net external cash flow is currently in a negative position (i.e., benefits paid are more than contributions received). It is expected to become more negative over the next 50 years. Investment return is needed to pay benefits (a natural result from level contribution financing). Long range, the $2.5 \%$ annual real investment return (return in excess of inflation under Alternative 1) will be needed to pay benefits. The remainder of investment return (the inflation portion--4.5\% in this projection) is needed to preserve the purchasing power of the assets.

## Chart 14 <br> Alternative 1 Projection (7\% MARKET RETURN) Projected Net Change in Assets Amounts of INFLATED DOLLARS



The results shown in the above chart do not show changes of constant value, because amounts of change are inflated dollar amounts.
The Net Change in Assets, the blue bars, indicates perpetual additions to trust fund assets. While this is true (and necessary) in inflated dollars, it is not true in terms of constant value. Constant value changes are shown by the chart on page 53.

TABLE 27
Alternative 1 Projection (7\% MARKET RETURN)
CASH Flows as \%'s OF PayRoll 2011-2060

| Year Ending December 31, | External Cash Flow |  | Investment Return | Year Ending December 31, | External Cash Flow |  | Investment Return |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Contributions Received | Benefits Paid |  |  | Contributions Received | Benefits Paid |  |
| 2011 | 19.41\% | 30.97\% | 22.51\% | 2036 | 20.20\% | 30.90\% | 22.52\% |
| 2012 | 20.12\% | 31.98\% | 22.64\% | 2037 | 19.99\% | 30.11\% | 22.31\% |
| 2013 | 21.27\% | 33.92\% | 22.61\% | 2038 | 19.79\% | 29.35\% | 22.12\% |
| 2014 | 22.62\% | 35.68\% | 22.42\% | 2039 | 19.60\% | 28.64\% | 21.98\% |
| 2015 | 24.07\% | 36.36\% | 22.47\% | 2040 | 19.43\% | 27.98\% | 21.86\% |
| 2016 | 25.52\% | 36.91\% | 20.50\% | 2041 | 19.26\% | 27.38\% | 21.78\% |
| 2017 | 26.36\% | 37.33\% | 20.14\% | 2042 | 19.11\% | 26.83\% | 21.73\% |
| 2018 | 26.94\% | 37.64\% | 28.87\% | 2043 | 18.97\% | 26.35\% | 21.71\% |
| 2019 | 27.58\% | 37.86\% | 27.39\% | 2044 | 18.83\% | 25.93\% | 21.71\% |
| 2020 | 27.43\% | 38.01\% | 26.19\% | 2045 | 18.71\% | 25.59\% | 21.73\% |
| 2021 | 26.60\% | 38.09\% | 26.44\% | 2046 | 18.60\% | 25.30\% | 21.77\% |
| 2022 | 25.87\% | 38.09\% | 26.27\% | 2047 | 18.50\% | 25.07\% | 21.83\% |
| 2023 | 25.21\% | 38.03\% | 26.42\% | 2048 | 18.40\% | 24.89\% | 21.89\% |
| 2024 | 24.58\% | 37.87\% | 26.16\% | 2049 | 18.31\% | 24.77\% | 21.96\% |
| 2025 | 24.00\% | 37.62\% | 25.85\% | 2050 | 18.23\% | 24.68\% | 22.03\% |
| 2026 | 23.48\% | 37.30\% | 25.88\% | 2051 | 18.16\% | 24.63\% | 22.11\% |
| 2027 | 23.02\% | 36.92\% | 25.53\% | 2052 | 18.09\% | 24.60\% | 22.19\% |
| 2028 | 22.59\% | 36.44\% | 25.17\% | 2053 | 18.03\% | 24.60\% | 22.26\% |
| 2029 | 22.19\% | 35.90\% | 24.80\% | 2054 | 17.97\% | 24.61\% | 22.33\% |
| 2030 | 21.83\% | 35.31\% | 24.43\% | 2055 | 17.92\% | 24.63\% | 22.40\% |
| 2031 | 21.50\% | 34.69\% | 24.07\% | 2056 | 17.87\% | 24.66\% | 22.46\% |
| 2032 | 21.20\% | 34.01\% | 23.71\% | 2057 | 17.82\% | 24.70\% | 22.52\% |
| 2033 | 20.92\% | 33.28\% | 23.38\% | 2058 | 17.78\% | 24.74\% | 22.58\% |
| 2034 | 20.67\% | 32.52\% | 23.07\% | 2059 | 17.74\% | 24.77\% | 22.63\% |
| 2035 | 20.43\% | 31.72\% | 22.78\% | 2060 | 17.71\% | 24.81\% | 22.67\% |

Investment return will eventually again become the largest source of revenue for the retirement system. However, compared to the Base Projection, under the Alternative 1 Projection more of the benefit payout comes from contributions, and less from investment return.

## Chart 15

Alternative 1 Projection (7\% market Return) Projected Pattern of Contribution Income and Benefit Payout


TABLE 28
Alternative 1 Projection (7\% MARKET Return) MERS PROJECTED FinANCIAL GROWTH RATES 2011-2060

| Year Ending December 31, | Annual Growth in: |  |  | Year Ending December 31, | Annual Growth in: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Contributions | Benefits | Assets |  | Contributions | Benefits | Assets |
| 2012 | 3.94\% | 3.56\% | 2.58\% | 2037 | 3.56\% | 1.98\% | 3.71\% |
| 2013 | 6.51\% | 6.89\% | 2.34\% | 2038 | 3.59\% | 2.03\% | 3.86\% |
| 2014 | 7.67\% | 6.48\% | 2.18\% | 2039 | 3.63\% | 2.10\% | 4.00\% |
| 2015 | 10.64\% | 5.95\% | 2.41\% | 2040 | 3.68\% | 2.20\% | 4.14\% |
| 2016 | 10.28\% | 5.61\% | 2.19\% | 2041 | 3.71\% | 2.32\% | 4.27\% |
| 2017 | 7.49\% | 5.24\% | 2.25\% | 2042 | 3.74\% | 2.48\% | 4.40\% |
| 2018 | 6.45\% | 5.02\% | 4.53\% | 2043 | 3.78\% | 2.68\% | 4.50\% |
| 2019 | 6.68\% | 4.80\% | 4.26\% | 2044 | 3.82\% | 2.90\% | 4.59\% |
| 2020 | 3.68\% | 4.68\% | 3.88\% | 2045 | 3.85\% | 3.13\% | 4.67\% |
| 2021 | 1.15\% | 4.52\% | 3.74\% | 2046 | 3.88\% | 3.34\% | 4.73\% |
| 2022 | 1.45\% | 4.33\% | 3.53\% | 2047 | 3.92\% | 3.55\% | 4.77\% |
| 2023 | 1.72\% | 4.22\% | 3.44\% | 2048 | 3.95\% | 3.76\% | 4.80\% |
| 2024 | 1.80\% | 3.96\% | 3.29\% | 2049 | 3.98\% | 3.94\% | 4.82\% |
| 2025 | 1.98\% | 3.76\% | 3.16\% | 2050 | 4.01\% | 4.11\% | 4.83\% |
| 2026 | 2.23\% | 3.60\% | 3.16\% | 2051 | 4.05\% | 4.25\% | 4.83\% |
| 2027 | 2.49\% | 3.44\% | 3.09\% | 2052 | 4.08\% | 4.36\% | 4.83\% |
| 2028 | 2.59\% | 3.21\% | 3.04\% | 2053 | 4.10\% | 4.45\% | 4.81\% |
| 2029 | 2.73\% | 3.03\% | 3.03\% | 2054 | 4.14\% | 4.52\% | 4.80\% |
| 2030 | 2.90\% | 2.87\% | 3.03\% | 2055 | 4.16\% | 4.57\% | 4.78\% |
| 2031 | 3.03\% | 2.76\% | 3.06\% | 2056 | 4.19\% | 4.61\% | 4.76\% |
| 2032 | 3.15\% | 2.56\% | 3.12\% | 2057 | 4.21\% | 4.63\% | 4.74\% |
| 2033 | 3.26\% | 2.41\% | 3.19\% | 2058 | 4.23\% | 4.64\% | 4.72\% |
| 2034 | 3.36\% | 2.25\% | 3.30\% | 2059 | 4.26\% | 4.64\% | 4.70\% |
| 2035 | 3.45\% | 2.07\% | 3.42\% | 2060 | 4.28\% | 4.64\% | 4.69\% |
| 2036 | 3.52\% | 1.96\% | 3.57\% | 2061 | 4.30\% | 4.63\% | 4.67\% |

This schedule demonstrates that financial growth rates eventually stabilize close to the underlying assumed rate of wage inflation ( $4.5 \%$ for MERS). Note that the 2012 growth rate in benefits is low due to the one-time payment of pending refunds that was included in the 2011 benefit payout.

TABLE 29
Alternative 1 Projection (7\% MARKET RETURN) MERS PROJECTED Funded Ratios 2011-2060 (\$ IN Millions)

| Year Ending <br> December 31, | Valuation <br> Assets | Accrued <br> Liabilities | Funded <br> Ratio | Year Ending <br> December 31, | Valuation <br> Assets | Accrued <br> Liabilities | Funded <br> Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | $\$ 7,132$ | $\$ 9,713$ | $73.4 \%$ | 2036 | $\$ 15,485$ | $\$ 21,203$ | $73.0 \%$ |
| 2012 | 7,316 | 10,120 | $72.3 \%$ | 2037 | 16,060 | 21,942 | $73.2 \%$ |
| 2013 | 7,488 | 10,520 | $71.2 \%$ | 2038 | 16,679 | 22,734 | $73.4 \%$ |
| 2014 | 7,651 | 10,914 | $70.1 \%$ | 2039 | 17,347 | 23,583 | $73.6 \%$ |
| 2015 | 7,835 | 11,308 | $69.3 \%$ | 2040 | 18,066 | 24,492 | $73.8 \%$ |
| 2016 | 8,007 | 11,702 | $68.4 \%$ | 2041 | 18,838 | 25,464 | $74.0 \%$ |
| 2017 | 8,187 | 12,098 | $67.7 \%$ | 2042 | 19,666 | 26,502 | $74.2 \%$ |
| 2018 | 8,558 | 12,496 | $68.5 \%$ | 2043 | 20,552 | 27,609 | $74.4 \%$ |
| 2019 | 8,922 | 12,895 | $69.2 \%$ | 2044 | 21,495 | 28,786 | $74.7 \%$ |
| 2020 | 9,269 | 13,297 | $69.7 \%$ | 2045 | 22,499 | 30,034 | $74.9 \%$ |
| 2021 | 9,615 | 13,701 | $70.2 \%$ | 2046 | 23,562 | 31,355 | $75.1 \%$ |
| 2022 | 9,954 | 14,109 | $70.6 \%$ | 2047 | 24,687 | 32,750 | $75.4 \%$ |
| 2023 | 10,297 | 14,520 | $70.9 \%$ | 2048 | 25,873 | 34,221 | $75.6 \%$ |
| 2024 | 10,635 | 14,937 | $71.2 \%$ | 2049 | 27,121 | 35,769 | $75.8 \%$ |
| 2025 | 10,971 | 15,360 | $71.4 \%$ | 2050 | 28,431 | 37,394 | $76.0 \%$ |
| 2026 | 11,318 | 15,791 | $71.7 \%$ | 2051 | 29,805 | 39,099 | $76.2 \%$ |
| 2027 | 11,667 | 16,233 | $71.9 \%$ | 2052 | 31,244 | 40,885 | $76.4 \%$ |
| 2028 | 12,022 | 16,688 | $72.0 \%$ | 2053 | 32,748 | 42,755 | $76.6 \%$ |
| 2029 | 12,386 | 17,159 | $72.2 \%$ | 2054 | 34,320 | 44,710 | $76.8 \%$ |
| 2030 | 12,762 | 17,650 | $72.3 \%$ | 2055 | 35,961 | 46,753 | $76.9 \%$ |
| 2031 | 13,153 | 18,161 | $72.4 \%$ | 2056 | 37,674 | 48,888 | $77.1 \%$ |
| 2032 | 13,563 | 18,699 | $72.5 \%$ | 2057 | 39,461 | 51,117 | $77.2 \%$ |
| 2033 | 13,996 | 19,267 | $72.6 \%$ | 2058 | 41,325 | 53,444 | $77.3 \%$ |
| 2034 | 14,457 | 19,870 | $72.8 \%$ | 2059 | 43,270 | 55,874 | $77.4 \%$ |
| 2035 | 14,952 | 20,514 | $72.9 \%$ | 2060 | 45,298 | 58,411 | $77.5 \%$ |

TABLE 30
Alternative 2 Projection (6\% Market Return) 50-Year Fund Projection (\$ IN Millions)

| Year Ending December 31, | Assets Beginning of Year | Contributions |  |  |  | Benefit <br> Payments | Investment Income | Assets End of Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Employer Normal Cost | UAAL <br> Payment | Member Contribution | Total |  |  |  |  |
|  |  |  |  |  |  |  |  | Inflated | 2011 Dollars |
| 2011 | \$ 6,945 | \$ 143 | \$ 130 | \$ 57 | \$ 331 | \$ 528* | \$ 383 | \$ 7,132 | \$7,132 |
| 2012 | 7,132 | 142 | 144 | 58 | 344 | 546 | 373 | 7,302 | 6,988 |
| 2013 | 7,302 | 142 | 166 | 58 | 366 | 584 | 367 | 7,451 | 6,823 |
| 2014 | 7,451 | 143 | 193 | 59 | 395 | 622 | 360 | 7,584 | 6,646 |
| 2015 | 7,584 | 148 | 229 | 61 | 439 | 659 | 366 | 7,730 | 6,482 |
| 2016 | 7,730 | 153 | 269 | 64 | 486 | 696 | 336 | 7,856 | 6,304 |
| 2017 | 7,856 | 158 | 300 | 67 | 525 | 732 | 333 | 7,982 | 6,129 |
| 2018 | 7,982 | 164 | 329 | 70 | 563 | 769 | 520 | 8,296 | 6,096 |
| 2019 | 8,296 | 170 | 362 | 73 | 605 | 806 | 492 | 8,586 | 6,038 |
| 2020 | 8,586 | 177 | 379 | 76 | 632 | 844 | 475 | 8,850 | 5,955 |
| 2021 | 8,850 | 183 | 383 | 79 | 645 | 882 | 498 | 9,111 | 5,867 |
| 2022 | 9,111 | 191 | 388 | 83 | 662 | 920 | 512 | 9,364 | 5,770 |
| 2023 | 9,364 | 198 | 395 | 86 | 680 | 959 | 526 | 9,611 | 5,668 |
| 2024 | 9,611 | 206 | 402 | 90 | 698 | 997 | 539 | 9,853 | 5,560 |
| 2025 | 9,853 | 215 | 410 | 94 | 719 | 1,034 | 553 | 10,090 | 5,448 |
| 2026 | 10,090 | 224 | 419 | 98 | 742 | 1,071 | 566 | 10,326 | 5,336 |
| 2027 | 10,326 | 234 | 430 | 103 | 766 | 1,108 | 579 | 10,563 | 5,223 |
| 2028 | 10,563 | 244 | 441 | 107 | 793 | 1,144 | 592 | 10,804 | 5,112 |
| 2029 | 10,804 | 255 | 454 | 112 | 821 | 1,178 | 606 | 11,052 | 5,004 |
| 2030 | 11,052 | 266 | 467 | 117 | 850 | 1,212 | 620 | 11,310 | 4,901 |
| 2031 | 11,310 | 278 | 481 | 123 | 882 | 1,246 | 634 | 11,580 | 4,802 |
| 2032 | 11,580 | 290 | 496 | 128 | 915 | 1,278 | 650 | 11,867 | 4,709 |
| 2033 | 11,867 | 303 | 511 | 134 | 949 | 1,308 | 666 | 12,174 | 4,622 |
| 2034 | 12,174 | 317 | 527 | 141 | 985 | 1,338 | 684 | 12,505 | 4,544 |
| 2035 | 12,505 | 332 | 544 | 147 | 1,023 | 1,366 | 703 | 12,866 | 4,474 |
| 2036 | 12,866 | 347 | 562 | 154 | 1,063 | 1,392 | 724 | 13,261 | 4,412 |
| 2037 | 13,261 | 363 | 580 | 161 | 1,104 | 1,420 | 747 | 13,692 | 4,360 |
| 2038 | 13,692 | 380 | 599 | 169 | 1,147 | 1,449 | 772 | 14,162 | 4,315 |
| 2039 | 14,162 | 397 | 619 | 177 | 1,192 | 1,479 | 799 | 14,675 | 4,279 |
| 2040 | 14,675 | 415 | 639 | 185 | 1,239 | 1,512 | 829 | 15,231 | 4,250 |
| 2041 | 15,231 | 434 | 661 | 193 | 1,288 | 1,547 | 861 | 15,833 | 4,227 |
| 2042 | 15,833 | 454 | 684 | 202 | 1,340 | 1,585 | 895 | 16,483 | 4,211 |
| 2043 | 16,483 | 474 | 708 | 211 | 1,393 | 1,628 | 933 | 17,181 | 4,201 |
| 2044 | 17,181 | 496 | 733 | 221 | 1,449 | 1,675 | 973 | 17,929 | 4,195 |
| 2045 | 17,929 | 518 | 759 | 231 | 1,508 | 1,727 | 1,016 | 18,726 | 4,193 |
| 2046 | 18,726 | 541 | 787 | 241 | 1,570 | 1,785 | 1,061 | 19,572 | 4,193 |
| 2047 | 19,572 | 566 | 817 | 252 | 1,635 | 1,848 | 1,110 | 20,468 | 4,197 |
| 2048 | 20,468 | 591 | 848 | 263 | 1,703 | 1,918 | 1,161 | 21,414 | 4,201 |
| 2049 | 21,414 | 617 | 882 | 275 | 1,774 | 1,993 | 1,214 | 22,409 | 4,207 |
| 2050 | 22,409 | 645 | 916 | 287 | 1,849 | 2,075 | 1,271 | 23,453 | 4,214 |
| 2051 | 23,453 | 674 | 953 | 300 | 1,927 | 2,163 | 1,330 | 24,547 | 4,220 |
| 2052 | 24,547 | 704 | 992 | 314 | 2,010 | 2,258 | 1,392 | 25,691 | 4,227 |
| 2053 | 25,691 | 735 | 1,033 | 328 | 2,096 | 2,358 | 1,457 | 26,886 | 4,233 |
| 2054 | 26,886 | 768 | 1,077 | 342 | 2,187 | 2,465 | 1,525 | 28,133 | 4,239 |
| 2055 | 28,133 | 802 | 1,122 | 358 | 2,282 | 2,577 | 1,595 | 29,433 | 4,243 |
| 2056 | 29,433 | 838 | 1,170 | 374 | 2,382 | 2,696 | 1,669 | 30,788 | 4,248 |
| 2057 | 30,788 | 876 | 1,221 | 390 | 2,487 | 2,821 | 1,745 | 32,200 | 4,251 |
| 2058 | 32,200 | 915 | 1,274 | 408 | 2,597 | 2,952 | 1,825 | 33,671 | 4,254 |
| 2059 | 33,671 | 956 | 1,330 | 426 | 2,713 | 3,089 | 1,909 | 35,203 | 4,256 |
| 2060 | 35,203 | 999 | 1,389 | 445 | 2,834 | 3,232 | 1,995 | 36,800 | 4,257 |

* First year benefit payments include $\$ 15.7$ million of pending refunds of accumulated member contributions to terminated employees.


## Chart 16

Alternative 2 Projection (6\% MARKEt Return)
Projected Trust Fund Assets


## TABLE 31

Alternative 2 Projection (6\% Market Return) Projected Non-Investment Cash Flow 2011-2060 (\$ IN Millions)

| Year Ending <br> December 31, | External Cash Flow |  | Net External Cash Flow |  | Year Ending December 31, | External Cash Flow |  | Net External Cash Flow |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inflow | Outflow | Dollars | \% of Assets |  | Inflow | Outflow | Dollars | \% of Assets |
| 2011 | \$ 331 | \$ 528 | \$ (197) | -2.83\% | 2036 | \$ 1,063 | \$1,392 | \$(329) | -2.56\% |
| 2012 | 344 | 546 | (203) | -2.84\% | 2037 | 1,104 | 1,420 | (316) | -2.38\% |
| 2013 | 366 | 584 | (218) | -2.98\% | 2038 | 1,147 | 1,449 | (301) | -2.20\% |
| 2014 | 395 | 622 | (227) | -3.04\% | 2039 | 1,192 | 1,479 | (287) | -2.03\% |
| 2015 | 439 | 659 | (220) | -2.90\% | 2040 | 1,239 | 1,512 | (272) | -1.86\% |
| 2016 | 486 | 696 | (210) | -2.71\% | 2041 | 1,288 | 1,547 | (259) | -1.70\% |
| 2017 | 525 | 732 | (207) | -2.63\% | 2042 | 1,340 | 1,585 | (246) | -1.55\% |
| 2018 | 563 | 769 | (206) | -2.58\% | 2043 | 1,393 | 1,628 | (234) | -1.42\% |
| 2019 | 605 | 806 | (201) | -2.43\% | 2044 | 1,449 | 1,675 | (225) | -1.31\% |
| 2020 | 632 | 844 | (212) | -2.47\% | 2045 | 1,508 | 1,727 | (219) | -1.22\% |
| 2021 | 645 | 882 | (236) | -2.67\% | 2046 | 1,570 | 1,785 | (215) | -1.15\% |
| 2022 | 662 | 920 | (258) | -2.84\% | 2047 | 1,635 | 1,848 | (213) | -1.09\% |
| 2023 | 680 | 959 | (279) | -2.98\% | 2048 | 1,703 | 1,918 | (215) | -1.05\% |
| 2024 | 698 | 997 | (298) | -3.10\% | 2049 | 1,774 | 1,993 | (219) | -1.02\% |
| 2025 | 719 | 1,034 | (315) | -3.20\% | 2050 | 1,849 | 2,075 | (226) | -1.01\% |
| 2026 | 742 | 1,071 | (330) | -3.27\% | 2051 | 1,927 | 2,163 | (236) | -1.01\% |
| 2027 | 766 | 1,108 | (342) | -3.31\% | 2052 | 2,010 | 2,258 | (248) | -1.01\% |
| 2028 | 793 | 1,144 | (351) | -3.32\% | 2053 | 2,096 | 2,358 | (262) | -1.02\% |
| 2029 | 821 | 1,178 | (358) | -3.31\% | 2054 | 2,187 | 2,465 | (278) | -1.03\% |
| 2030 | 850 | 1,212 | (362) | -3.27\% | 2055 | 2,282 | 2,577 | (295) | -1.05\% |
| 2031 | 882 | 1,246 | (364) | -3.22\% | 2056 | 2,382 | 2,696 | (314) | -1.07\% |
| 2032 | 915 | 1,278 | (363) | -3.13\% | 2057 | 2,487 | 2,821 | (334) | -1.08\% |
| 2033 | 949 | 1,308 | (359) | -3.03\% | 2058 | 2,597 | 2,952 | (354) | -1.10\% |
| 2034 | 985 | 1,338 | (353) | -2.90\% | 2059 | 2,713 | 3,089 | (376) | -1.12\% |
| 2035 | 1,023 | 1,366 | (342) | -2.74\% | 2060 | 2,834 | 3,232 | (399) | -1.13\% |

The net external cash flow is currently in a negative position (i.e., benefits paid are more than contributions received). It is expected to become more negative over the next 50 years. Investment return is needed to pay benefits (a natural result from level contribution financing). Long range, the $1.5 \%$ annual real investment return (return in excess of inflation under Alternative 2) will be needed to pay benefits. The remainder of investment return (the inflation portion--4.5\% in this projection) is needed to preserve the purchasing power of the assets.

## Chart 17

Alternative 2 Projection (6\% Market Return)
Projected Net Change in Assets
Amounts of INFLATED DOLLARS


The results shown in the above chart do not show changes of constant value, because amounts of change are inflated dollar amounts.
The Net Change in Assets, the blue bars, indicates perpetual additions to trust fund assets. While this is true (and necessary) in inflated dollars, it is not true in terms of constant value. Constant value changes are shown by the chart on page 61.

TABLE 32
Alternative 2 Projection (6\% Market Return)
CASH FLOWS AS \%’s OF PAYROLL 2011-2060

| Year Ending December 31, | External Cash Flow |  | Investment Return | Year Ending December 31, | External Cash Flow |  | Investment Return |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Contributions Received | Benefits Paid |  |  | Contributions Received | Benefits Paid |  |
| 2011 | 19.41\% | 30.97\% | 22.51\% | 2036 | 23.59\% | 30.90\% | 16.07\% |
| 2012 | 20.12\% | 31.98\% | 21.81\% | 2037 | 23.41\% | 30.11\% | 15.84\% |
| 2013 | 21.27\% | 33.92\% | 21.31\% | 2038 | 23.25\% | 29.35\% | 15.64\% |
| 2014 | 22.66\% | 35.68\% | 20.63\% | 2039 | 23.09\% | 28.64\% | 15.48\% |
| 2015 | 24.21\% | 36.36\% | 20.22\% | 2040 | 22.94\% | 27.98\% | 15.34\% |
| 2016 | 25.78\% | 36.91\% | 17.80\% | 2041 | 22.80\% | 27.38\% | 15.24\% |
| 2017 | 26.78\% | 37.33\% | 16.99\% | 2042 | 22.67\% | 26.83\% | 15.16\% |
| 2018 | 27.55\% | 37.64\% | 25.46\% | 2043 | 22.55\% | 26.35\% | 15.10\% |
| 2019 | 28.40\% | 37.86\% | 23.10\% | 2044 | 22.44\% | 25.93\% | 15.06\% |
| 2020 | 28.47\% | 38.01\% | 21.40\% | 2045 | 22.34\% | 25.59\% | 15.05\% |
| 2021 | 27.88\% | 38.09\% | 21.50\% | 2046 | 22.25\% | 25.30\% | 15.04\% |
| 2022 | 27.39\% | 38.09\% | 21.20\% | 2047 | 22.17\% | 25.07\% | 15.05\% |
| 2023 | 26.97\% | 38.03\% | 20.86\% | 2048 | 22.10\% | 24.89\% | 15.07\% |
| 2024 | 26.54\% | 37.87\% | 20.50\% | 2049 | 22.04\% | 24.77\% | 15.09\% |
| 2025 | 26.15\% | 37.62\% | 20.11\% | 2050 | 21.99\% | 24.68\% | 15.11\% |
| 2026 | 25.82\% | 37.30\% | 19.70\% | 2051 | 21.94\% | 24.63\% | 15.14\% |
| 2027 | 25.53\% | 36.92\% | 19.28\% | 2052 | 21.90\% | 24.60\% | 15.17\% |
| 2028 | 25.26\% | 36.44\% | 18.86\% | 2053 | 21.87\% | 24.60\% | 15.20\% |
| 2029 | 25.01\% | 35.90\% | 18.45\% | 2054 | 21.84\% | 24.61\% | 15.22\% |
| 2030 | 24.78\% | 35.31\% | 18.05\% | 2055 | 21.81\% | 24.63\% | 15.25\% |
| 2031 | 24.56\% | 34.69\% | 17.66\% | 2056 | 21.79\% | 24.66\% | 15.27\% |
| 2032 | 24.35\% | 34.01\% | 17.29\% | 2057 | 21.78\% | 24.70\% | 15.28\% |
| 2033 | 24.14\% | 33.28\% | 16.95\% | 2058 | 21.77\% | 24.74\% | 15.30\% |
| 2034 | 23.95\% | 32.52\% | 16.62\% | 2059 | 21.76\% | 24.77\% | 15.31\% |
| 2035 | 23.77\% | 31.72\% | 16.33\% | 2060 | 21.75\% | 24.81\% | 15.32\% |

Compared to the Base Projection, under the Alternative 2 Projection much more of the benefit payout comes from contributions, and less from investment return. Moreover, investment income is no longer the largest source of revenue.

## CHART 18 <br> Alternative 2 Projection (6\% MARKEt REturn) Projected Pattern of Contribution Income and Benefit Payout



TABLE 33
Alternative 2 Projection (6\% Market Return) MERS Projected Financial Growth Rates 2011-2060

| Year Ending December 31, | Annual Growth in: |  |  | Year Ending December 31, | Annual Growth in: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Contributions | Benefits | Assets |  | Contributions | Benefits | Assets |
| 2012 | 3.94\% | 3.56\% | 2.38\% | 2037 | 3.89\% | 1.98\% | 3.25\% |
| 2013 | 6.51\% | 6.89\% | 2.04\% | 2038 | 3.90\% | 2.03\% | 3.44\% |
| 2014 | 7.87\% | 6.48\% | 1.78\% | 2039 | 3.92\% | 2.10\% | 3.62\% |
| 2015 | 11.04\% | 5.95\% | 1.93\% | 2040 | 3.94\% | 2.20\% | 3.79\% |
| 2016 | 10.80\% | 5.61\% | 1.63\% | 2041 | 3.96\% | 2.32\% | 3.95\% |
| 2017 | 8.10\% | 5.24\% | 1.61\% | 2042 | 3.98\% | 2.48\% | 4.10\% |
| 2018 | 7.13\% | 5.02\% | 3.93\% | 2043 | 4.00\% | 2.68\% | 4.24\% |
| 2019 | 7.44\% | 4.80\% | 3.50\% | 2044 | 4.03\% | 2.90\% | 4.35\% |
| 2020 | 4.51\% | 4.68\% | 3.07\% | 2045 | 4.06\% | 3.13\% | 4.44\% |
| 2021 | 2.12\% | 4.52\% | 2.95\% | 2046 | 4.09\% | 3.34\% | 4.52\% |
| 2022 | 2.52\% | 4.33\% | 2.78\% | 2047 | 4.12\% | 3.55\% | 4.58\% |
| 2023 | 2.75\% | 4.22\% | 2.64\% | 2048 | 4.15\% | 3.76\% | 4.62\% |
| 2024 | 2.73\% | 3.96\% | 2.51\% | 2049 | 4.19\% | 3.94\% | 4.65\% |
| 2025 | 2.95\% | 3.76\% | 2.41\% | 2050 | 4.22\% | 4.11\% | 4.66\% |
| 2026 | 3.16\% | 3.60\% | 2.34\% | 2051 | 4.25\% | 4.25\% | 4.66\% |
| 2027 | 3.33\% | 3.44\% | 2.29\% | 2052 | 4.28\% | 4.36\% | 4.66\% |
| 2028 | 3.45\% | 3.21\% | 2.28\% | 2053 | 4.31\% | 4.45\% | 4.65\% |
| 2029 | 3.55\% | 3.03\% | 2.30\% | 2054 | 4.33\% | 4.52\% | 4.64\% |
| 2030 | 3.62\% | 2.87\% | 2.33\% | 2055 | 4.36\% | 4.57\% | 4.62\% |
| 2031 | 3.68\% | 2.76\% | 2.39\% | 2056 | 4.38\% | 4.61\% | 4.60\% |
| 2032 | 3.73\% | 2.56\% | 2.48\% | 2057 | 4.41\% | 4.63\% | 4.59\% |
| 2033 | 3.76\% | 2.41\% | 2.59\% | 2058 | 4.43\% | 4.64\% | 4.57\% |
| 2034 | 3.81\% | 2.25\% | 2.72\% | 2059 | 4.44\% | 4.64\% | 4.55\% |
| 2035 | 3.86\% | 2.07\% | 2.88\% | 2060 | 4.45\% | 4.64\% | 4.54\% |
| 2036 | 3.89\% | 1.96\% | 3.07\% | 2061 | 4.46\% | 4.63\% | 4.52\% |

This schedule demonstrates that financial growth rates eventually stabilize close to the underlying assumed rate of wage inflation ( $4.5 \%$ for MERS). Note that the 2012 growth rate in benefits is low due to the one-time payment of pending refunds that was included in the 2011 benefit payout.

TABLE 34
Alternative 2 Projection (6\% Market Return) MERS PROJECTED Funded Ratios 2011-2060 (\$ in Millions)

| Year Ending <br> December 31, | Valuation <br> Assets | Accued <br> Liabilities | Funded <br> Ratio | Year Ending <br> December 31, | Valuation <br> Assets | Accrued <br> Liabilities | Funded <br> Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | $\$ 7,132$ | $\$ 9,713$ | $73.4 \%$ | 2036 | $\$ 13,261$ | $\$ 21,203$ | $62.5 \%$ |
| 2012 | 7,302 | 10,120 | $72.2 \%$ | 2037 | 13,692 | 21,942 | $62.4 \%$ |
| 2013 | 7,451 | 10,520 | $70.8 \%$ | 2038 | 14,162 | 22,734 | $62.3 \%$ |
| 2014 | 7,584 | 10,914 | $69.5 \%$ | 2039 | 14,675 | 23,583 | $62.2 \%$ |
| 2015 | 7,730 | 11,308 | $68.4 \%$ | 2040 | 15,231 | 24,492 | $62.2 \%$ |
| 2016 | 7,856 | 11,702 | $67.1 \%$ | 2041 | 15,833 | 25,464 | $62.2 \%$ |
| 2017 | 7,982 | 12,098 | $66.0 \%$ | 2042 | 16,483 | 26,502 | $62.2 \%$ |
| 2018 | 8,296 | 12,496 | $66.4 \%$ | 2043 | 17,181 | 27,609 | $62.2 \%$ |
| 2019 | 8,586 | 12,895 | $66.6 \%$ | 2044 | 17,929 | 28,786 | $62.3 \%$ |
| 2020 | 8,850 | 13,297 | $66.6 \%$ | 2045 | 18,726 | 30,034 | $62.3 \%$ |
| 2021 | 9,111 | 13,701 | $66.5 \%$ | 2046 | 19,572 | 31,355 | $62.4 \%$ |
| 2022 | 9,364 | 14,109 | $66.4 \%$ | 2047 | 20,468 | 32,750 | $62.5 \%$ |
| 2023 | 9,611 | 14,520 | $66.2 \%$ | 2048 | 21,414 | 34,221 | $62.6 \%$ |
| 2024 | 9,853 | 14,937 | $66.0 \%$ | 2049 | 22,409 | 35,769 | $62.6 \%$ |
| 2025 | 10,090 | 15,360 | $65.7 \%$ | 2050 | 23,453 | 37,394 | $62.7 \%$ |
| 2026 | 10,326 | 15,791 | $65.4 \%$ | 2051 | 24,547 | 39,099 | $62.8 \%$ |
| 2027 | 10,563 | 16,233 | $65.1 \%$ | 2052 | 25,691 | 40,885 | $62.8 \%$ |
| 2028 | 10,804 | 16,688 | $64.7 \%$ | 2053 | 26,886 | 42,755 | $62.9 \%$ |
| 2029 | 11,052 | 17,159 | $64.4 \%$ | 2054 | 28,133 | 44,710 | $62.9 \%$ |
| 2030 | 11,310 | 17,650 | $64.1 \%$ | 2055 | 29,433 | 46,753 | $63.0 \%$ |
| 2031 | 11,580 | 18,161 | $63.8 \%$ | 2056 | 30,788 | 48,888 | $63.0 \%$ |
| 2032 | 11,867 | 18,699 | $63.5 \%$ | 2057 | 32,200 | 51,117 | $63.0 \%$ |
| 2033 | 12,174 | 19,267 | $63.2 \%$ | 2058 | 33,671 | 53,444 | $63.0 \%$ |
| 2034 | 12,505 | 19,870 | $62.9 \%$ | 2059 | 35,203 | 55,874 | $63.0 \%$ |
| 2035 | 12,866 | 20,514 | $62.7 \%$ | 2060 | 36,800 | 58,411 | $63.0 \%$ |

Table 35
Comparison of Base and Alternative Projections Projected Pattern of Contribution Income and Benefit Payout (Percents of Payroll)

| Year | Benefits | Base (8\% Market Return) Contributions | Alternative 1 (7\% Market Return) Contributions | Alternative 2 (6\% Market Return) Contributions | Total Normal Cost* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | 30.97\% | 19.41\% | 19.41\% | 19.41\% | 11.78\% |
| 2012 | 31.98\% | 20.12\% | 20.12\% | 20.12\% | 11.71\% |
| 2013 | 33.92\% | 20.80\% | 21.27\% | 21.27\% | 11.64\% |
| 2014 | 35.68\% | 21.36\% | 22.62\% | 22.66\% | 11.61\% |
| 2015 | 36.36\% | 21.91\% | 24.07\% | 24.21\% | 11.56\% |
| 2016 | 36.91\% | 22.34\% | 25.52\% | 25.78\% | 11.52\% |
| 2017 | 37.33\% | 22.24\% | 26.36\% | 26.78\% | 11.48\% |
| 2018 | 37.64\% | 21.87\% | 26.94\% | 27.55\% | 11.44\% |
| 2019 | 37.86\% | 21.50\% | 27.58\% | 28.40\% | 11.40\% |
| 2020 | 38.01\% | 21.03\% | 27.43\% | 28.47\% | 11.37\% |
| 2021 | 38.09\% | 20.27\% | 26.60\% | 27.88\% | 11.34\% |
| 2022 | 38.09\% | 19.52\% | 25.87\% | 27.39\% | 11.31\% |
| 2023 | 38.03\% | 18.83\% | 25.21\% | 26.97\% | 11.29\% |
| 2024 | 37.87\% | 18.20\% | 24.58\% | 26.54\% | 11.26\% |
| 2025 | 37.62\% | 17.65\% | 24.00\% | 26.15\% | 11.24\% |
| 2026 | 37.30\% | 17.16\% | 23.48\% | 25.82\% | 11.22\% |
| 2027 | 36.92\% | 16.72\% | 23.02\% | 25.53\% | 11.21\% |
| 2028 | 36.44\% | 16.33\% | 22.59\% | 25.26\% | 11.19\% |
| 2029 | 35.90\% | 15.98\% | 22.19\% | 25.01\% | 11.18\% |
| 2030 | 35.31\% | 15.66\% | 21.83\% | 24.78\% | 11.17\% |
| 2031 | 34.69\% | 15.37\% | 21.50\% | 24.56\% | 11.16\% |
| 2032 | 34.01\% | 15.11\% | 21.20\% | 24.35\% | 11.15\% |
| 2033 | 33.28\% | 14.87\% | 20.92\% | 24.14\% | 11.14\% |
| 2034 | 32.52\% | 14.64\% | 20.67\% | 23.95\% | 11.13\% |
| 2035 | 31.72\% | 14.44\% | 20.43\% | 23.77\% | 11.13\% |
| 2036 | 30.90\% | 14.24\% | 20.20\% | 23.59\% | 11.12\% |
| 2037 | 30.11\% | 14.06\% | 19.99\% | 23.41\% | 11.12\% |
| 2038 | 29.35\% | 13.89\% | 19.79\% | 23.25\% | 11.11\% |
| 2039 | 28.64\% | 13.73\% | 19.60\% | 23.09\% | 11.11\% |
| 2040 | 27.98\% | 13.58\% | 19.43\% | 22.94\% | 11.11\% |
| 2041 | 27.38\% | 13.44\% | 19.26\% | 22.80\% | 11.10\% |
| 2042 | 26.83\% | 13.31\% | 19.11\% | 22.67\% | 11.10\% |
| 2043 | 26.35\% | 13.18\% | 18.97\% | 22.55\% | 11.10\% |
| 2044 | 25.93\% | 13.06\% | 18.83\% | 22.44\% | 11.10\% |
| 2045 | 25.59\% | 12.95\% | 18.71\% | 22.34\% | 11.09\% |
| 2046 | 25.30\% | 12.84\% | 18.60\% | 22.25\% | 11.09\% |
| 2047 | 25.07\% | 12.74\% | 18.50\% | 22.17\% | 11.09\% |
| 2048 | 24.89\% | 12.64\% | 18.40\% | 22.10\% | 11.09\% |
| 2049 | 24.77\% | 12.55\% | 18.31\% | 22.04\% | 11.09\% |
| 2050 | 24.68\% | 12.45\% | 18.23\% | 21.99\% | 11.09\% |
| 2051 | 24.63\% | 12.37\% | 18.16\% | 21.94\% | 11.09\% |
| 2052 | 24.60\% | 12.28\% | 18.09\% | 21.90\% | 11.09\% |
| 2053 | 24.60\% | 12.20\% | 18.03\% | 21.87\% | 11.09\% |
| 2054 | 24.61\% | 12.12\% | 17.97\% | 21.84\% | 11.09\% |
| 2055 | 24.63\% | 12.04\% | 17.92\% | 21.81\% | 11.09\% |
| 2056 | 24.66\% | 11.97\% | 17.87\% | 21.79\% | 11.09\% |
| 2057 | 24.70\% | 11.90\% | 17.82\% | 21.78\% | 11.09\% |
| 2058 | 24.74\% | 11.83\% | 17.78\% | 21.77\% | 11.09\% |
| 2059 | 24.77\% | 11.77\% | 17.74\% | 21.76\% | 11.09\% |
| 2060 | 24.81\% | 11.70\% | 17.71\% | 21.75\% | 11.09\% |

* Total normal cost equals the employer normal cost plus member contributions. As the plan approaches $100 \%$ funding under the Base Projection, the total contributions approach the total normal cost.


## Chart 19

COMPARISON OF BASE AND Alternative Projections Projected Pattern of Contribution Income and Benefit Payout


Total normal cost equals the employer normal cost plus member contributions. As the plan approaches $100 \%$ funding under the Base Projection, the total contributions approach the total normal cost.

## TABLE 36 <br> Comparison of Base and Alternative Projections MERS FUNDED RATIOS

|  | Base <br> Year | Alternative 1 1 <br> Projection | Altemative 2 <br> Projection | Year | Base <br> Projection | Alternative 1 <br> Projection | Alternative 2 <br> Projection |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | $75.1 \%$ | $73.4 \%$ | $73.4 \%$ | 2036 | $91.7 \%$ | $73.0 \%$ | $62.5 \%$ |
| 2012 | $75.8 \%$ | $72.3 \%$ | $72.2 \%$ | 2037 | $92.1 \%$ | $73.2 \%$ | $62.4 \%$ |
| 2013 | $76.5 \%$ | $71.2 \%$ | $70.8 \%$ | 2038 | $92.5 \%$ | $73.4 \%$ | $62.3 \%$ |
| 2014 | $77.3 \%$ | $70.1 \%$ | $69.5 \%$ | 2039 | $92.9 \%$ | $73.6 \%$ | $62.2 \%$ |
| 2015 | $78.1 \%$ | $69.3 \%$ | $68.4 \%$ | 2040 | $93.3 \%$ | $73.8 \%$ | $62.2 \%$ |
| 2016 | $79.1 \%$ | $68.4 \%$ | $67.1 \%$ | 2041 | $93.7 \%$ | $74.0 \%$ | $62.2 \%$ |
| 2017 | $80.1 \%$ | $67.7 \%$ | $66.0 \%$ | 2042 | $94.1 \%$ | $74.2 \%$ | $62.2 \%$ |
| 2018 | $81.1 \%$ | $68.5 \%$ | $66.4 \%$ | 2043 | $94.5 \%$ | $74.4 \%$ | $62.2 \%$ |
| 2019 | $82.0 \%$ | $69.2 \%$ | $66.6 \%$ | 2044 | $94.9 \%$ | $74.7 \%$ | $62.3 \%$ |
| 2020 | $83.0 \%$ | $69.7 \%$ | $66.6 \%$ | 2045 | $95.2 \%$ | $74.9 \%$ | $62.3 \%$ |
| 2021 | $83.8 \%$ | $70.2 \%$ | $66.5 \%$ | 2046 | $95.6 \%$ | $75.1 \%$ | $62.4 \%$ |
| 2022 | $84.6 \%$ | $70.6 \%$ | $66.4 \%$ | 2047 | $96.0 \%$ | $75.4 \%$ | $62.5 \%$ |
| 2023 | $85.3 \%$ | $70.9 \%$ | $66.2 \%$ | 2048 | $96.3 \%$ | $75.6 \%$ | $62.6 \%$ |
| 2024 | $86.0 \%$ | $71.2 \%$ | $66.0 \%$ | 2049 | $96.7 \%$ | $75.8 \%$ | $62.6 \%$ |
| 2025 | $86.6 \%$ | $71.4 \%$ | $65.7 \%$ | 2050 | $97.0 \%$ | $76.0 \%$ | $62.7 \%$ |
| 2026 | $87.1 \%$ | $71.7 \%$ | $65.4 \%$ | 2051 | $97.3 \%$ | $76.2 \%$ | $62.8 \%$ |
| 2027 | $87.7 \%$ | $71.9 \%$ | $65.1 \%$ | 2052 | $97.7 \%$ | $76.4 \%$ | $62.8 \%$ |
| 2028 | $88.2 \%$ | $72.0 \%$ | $64.7 \%$ | 2053 | $98.0 \%$ | $76.6 \%$ | $62.9 \%$ |
| 2029 | $88.6 \%$ | $72.2 \%$ | $64.4 \%$ | 2054 | $98.3 \%$ | $76.8 \%$ | $62.9 \%$ |
| 2030 | $89.1 \%$ | $72.3 \%$ | $64.1 \%$ | 2055 | $98.6 \%$ | $76.9 \%$ | $63.0 \%$ |
| 2031 | $89.5 \%$ | $72.4 \%$ | $63.8 \%$ | 2056 | $98.8 \%$ | $77.1 \%$ | $63.0 \%$ |
| 2032 | $90.0 \%$ | $72.5 \%$ | $63.5 \%$ | 2057 | $99.1 \%$ | $77.2 \%$ | $63.0 \%$ |
| 2033 | $90.4 \%$ | $72.6 \%$ | $63.2 \%$ | 2058 | $99.4 \%$ | $77.3 \%$ | $63.0 \%$ |
| 2034 | $90.8 \%$ | $72.8 \%$ | $62.9 \%$ | 2059 | $99.7 \%$ | $77.4 \%$ | $63.0 \%$ |
| 2035 | $91.2 \%$ | $72.9 \%$ | $62.7 \%$ | 2060 | $99.9 \%$ | $77.5 \%$ | $63.0 \%$ |

Base Projection:
Alternative 1:
Alternative 2:

8\% Market Return and Makeup for 2008
7\% Market Return (no makeup)
6\% Market Return (no makeup)

## Chart 20

## Comparison of Base and Alternative Projections MERS FUNDED RATIOS



Base Projection:
Alternative 1:
Alternative 2:

8\% Market Return and Makeup for 2008
7\% Market Return (no makeup)
6\% Market Return (no makeup)

## SUMMARY OF Projection Methods and Assumptions

For Present Retirees, Beneficiaries and Vested Former Members: People are assumed to live and die in accordance with the valuation assumptions described in Section VIII of this report.

For Present Active Employees: The projection deals with certain specific events in a member's lifetime: retirement, quitting, dying, becoming disabled and receiving pay increases. For each future year and each event, the probability that the event occurs is determined and the financial effect (adjusted for the probability of occurrence of the event) is included in the projection. The assumptions used are described in Section VIII of this report.

For Future Active Employees: Future active employees are assumed to have characteristics (age, sex, pay rate) that are similar to the characteristics of current employees at the time they were hired. Specifics are shown on page 34 .

The number of active members per division is assumed to continue at the present number, except that closed divisions are projected to have no new entrants.

The investment return rate used in making the valuations each year was $8 \%$ per year, compounded annually (net after administrative expenses). The long term investment return rate used in the asset projections was $8 \%$ per year (based on actuarial value) in the Base Projection, $7 \%$ per year (based on market value) in the Alternative 1 Projection, and $6 \%$ per year (based on market value) in the Alternative 2 Projection. The long term real rate of return is the portion of total investment return which is more than the inflation rate. Considering wage inflation recognition of $4.5 \%$, the $8 \%$ investment return rate translates to an assumed long term real rate of return of $3.5 \%$, the $7 \%$ investment return rate translates to an assumed long term real rate of return of $2.5 \%$, and the $6 \%$ investment return rate translates to an assumed long term real rate of return of $1.5 \%$.

Two alternative sets of rates of investment return were studied, in order to gauge the impact of variations in return. The rates of return (based on smoothed valuation assets) are shown below:

|  | Rate of Return on Valuation Assets |  |  |
| :---: | :---: | :---: | :---: |
| Year | Base <br> Projection (8\%) | Alternative 1 <br> Projection (7\%) | Alternative 2 <br> Projection (6\%) |
| 2011 | $8.0 \%$ | $5.6 \%$ | 5.6 \% |
| 2012 | 8.0 | 5.5 | 5.3 |
| 2013 | 8.0 | 5.4 | 5.1 |
| 2014 | 8.0 | 5.3 | 4.9 |
| 2015 | 8.0 | 5.4 | 4.9 |
| 2016 | 8.0 | 5.0 | 4.4 |
| 2017 | 8.0 | 5.0 | 4.3 |
| 2018 | 8.0 | 7.3 | 6.6 |
| 2019 | 8.0 | 6.9 | 6.0 |
| 2020 | 8.0 | 6.6 | 5.6 |
| 2021 | 8.0 | 6.7 | 5.7 |
| 2022 | 8.0 | 6.7 | 5.7 |
| 2023 | 8.0 | 6.8 | 5.7 |
| 2024 | 8.0 | 6.8 | 5.7 |
| 2025 | 8.0 | 6.8 | 5.7 |
| 2026 | 8.0 | 6.9 | 5.7 |
| 2027 | 8.0 | 6.9 | 5.7 |
| 2028 | 8.0 | 6.9 | 5.7 |
| 2029 | 8.0 | 6.9 | 5.7 |
| 2030 | 8.0 | 6.9 | 5.7 |
| 2031 | 8.0 | 6.9 | 5.7 |
| $2032 \&$ Later | 8.0 | 6.9 | 5.7 |

These are the projected rates of return based on the smoothed valuation assets, not the market value of assets. Remember that as of December 31, 2010 the valuation assets were equal to $116.29 \%$ of the market value of assets.

The base projection assumes that the market loss experienced during calendar year 2008 is made up during the first 7 years, resulting in a constant $8 \%$ return on valuation assets in all years.

The Alternative 1 projection assumes that market value return will be $7 \%$ annually in 2011 and later years. The Alternative 2 projection assumes that market value return will be 6\% annually in 2011 and later years. In both alternatives, it is assumed that the 2008 market loss (remaining in the 2010 valuation) is never made up. In both alternatives, the asset smoothing method results in a long range rate of return, based on valuation assets, that is lower than the assumed market value return. This happens because there are always built up losses compared to the $8 \%$ valuation assumption.

## VII. Summary of Plan Provisions - Defined Benefit Plan *

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 Act No. 427 of the Public Acts of 1984, as amended, and the MERS Plan Document, as revised. If any conflict occurs between the information in this summary and Act No. 427 of the Public Acts of 1984, as amended, or the MERS Plan Document, as revised, the provisions of Act No. 427 and the MERS Plan Document govern.

## Eligibility for Retirement (Plan Section 10)

Age 60 with 10 or more years of credited service (reduced to 8 or 6 years if either Benefit V-8 or $\mathrm{V}-6$, respectively, is adopted).
Age 55 with 15 or more years of credited service (reduced benefit unless Benefit F55 is adopted). Age 50 with 25 or more years of credited service (reduced benefit unless Benefit F50 is adopted).

The retirement allowance is reduced $1 / 2$ of $1 \%$ for each complete month that the retirement date precedes the age at which full normal retirement benefits are available. The reduction may be partially or fully waived by adopting Benefit F55 and/or Benefit F50 and/or Benefit F(N).

## Optional Retirement Programs (Unreduced Benefits) (Plan Section 10)

Benefit F50 - Age 50 with a required period of credited service of either 25 or 30 years.
Benefit F55 - Age 55 with a required period of credited service of $15,20,25$ or 30 years.
Benefit $\mathrm{F}(\mathrm{N})$ - Any age with a required period of credited service of either 20, 21, 22, 23, $24,25,26,27,28,29$ or 30 years.

## Mandatory Retirement

None.

## Deferred Retirement (Plan Section 12)

Termination of membership before age 60 other than by retirement or death, after 10 years of credited service (8 or 6 years if Benefit V-8 or V-6 is adopted). Retirement allowance begins upon application filed with MERS and satisfaction of the eligibility requirements for retirement. 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.

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

* Please see page 81 for a description of the Hybrid Plan.


## Service Retirement Allowance (Plan Sections 13-19)

Credited service at time of termination of membership is multiplied by:

| Benefit A | -$1.0 \%$ of a member's final average compensation (FAC). Benefit A <br> may not be adopted after January $2,1986$. |
| :--- | :--- |
| Benefit C New - | $1.3 \%$ of FAC. |
| Benefit C Old | -Sum of $1.0 \%$ times the first $\$ 4,200$ of FAC, plus $1.5 \%$ times the <br> portion of FAC over $\$ 4,200$. Benefit C Old may not be adopted after <br> January $2,1986$. |
| Benefit C-1 New - | $1.5 \%$ of FAC. |
| Benefit C-1 Old - | Sum of $1.2 \%$ times the first $\$ 4,200$ of FAC, plus $1.7 \%$ times the <br> portion of FAC over $\$ 4,200$. Benefit C-1 Old may not be adopted after |
| January $2,1986$. |  |

## Maximum Benefit Payable by MERS (Plan Section 55)

The maximum benefit that may be paid by MERS is governed by Section 415 of the Internal Revenue Code (see page 84). Benefits in excess of the maximum benefit will be paid by the MERS Excess Benefit Plan under Plan Section 55A.

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

If the municipality has elected to come under the provision of Act 88 , 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:
www.mersofmich.com/images/stories/Forms/Member/form_77.pdf

## Final Average Compensation (Plan Sections 2A(6) and 2A(11))

MERS plan benefits are based on a member's final average compensation (FAC), subject to the dollar compensation limits under Section 401(a)(17) of the Internal Revenue Code (see page 84). For this purpose, final average compensation means one-fifth of the aggregate amount of compensation (as defined in the MERS Plan Document, Section 2A(6)) paid to a member during the period of 5 consecutive years of the member's credited service in which the aggregate compensation paid is highest, known as FAC-5. Adoption of Benefit FAC-3 results in final average compensation being averaged over 3 years, instead of 5 years.

## Disability Retirement Allowance (Plan Section 24)

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 natural and proximate result of duty-connected causes.

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 due to duty-connected causes, the amount of the retirement allowance shall not be less than $25 \%$ of the member's final average compensation.

Adoption of optional Benefit Program D-2 will provide a retirement allowance for a duty-connected disability that is the greater of:
(i) $25 \%$ of the member's final average compensation; 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 (Plan Sections 26 and 28)

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, declines a benefit in favor of another named beneficiary.

A contingent survivor beneficiary (named in the Membership Application With Formal Beneficiary Designations form filed with MERS) will receive a retirement allowance computed in the same manner as a service retirement allowance, based on service and final average compensation 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 final average compensation 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 (Plan Section 27)

A duty death allowance, computed in the same manner as a non-duty death allowance, may be payable to a spouse or children if death occurs as the natural and proximate result of performance of duty with a participating municipality. The vesting requirement is waived, and the minimum benefit is $25 \%$ of the deceased member's final average compensation.

Adoption of optional Benefit Program D-2 will provide a retirement allowance for a duty-connected death that is the greater of:
(i) $25 \%$ of the member's final average compensation; 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 (Plan Sections 32 and 35)

Each member may contribute a percent of annual compensation, if 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 (see page 84). 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 the member contributes $3 \%$ 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 $0.28 \%$.

If a member leaves the employ of the municipality, or dies, without a retirement allowance or other benefit payable on his/her 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 Program (Plan Section 19A): The Annual Actuarial Valuation addresses assets and liabilities for participation under MERS' Defined Benefit Programs. MERS' Defined Contribution Program (Benefit Program DC), which first became available for adoption in late 1997, is not addressed in the valuation results as it is not a defined benefit program.

## Post-Retirement Adjustments (Plan Sections 20-22)

Benefit E - provides a one-time benefit increase to present retirants and beneficiaries. The amount of the increase is equal to a fixed percentage of the present benefit, or a fixed dollar amount times the number of years since the later of retirement or the date specified in the resolution. Benefit E may be readopted from time to time.

Benefit E-1 - provides automatic $2.5 \%$ annual non-compounded benefit increases to persons (and their beneficiaries) retired before the effective date of Benefit E-1. Such increases are further limited to increases in the Consumer Price Index (CPI) if Benefit E-1 was adopted before January 1, 1999. For all adoptions or readoptions after that date, the increase is an automatic $2.5 \%$ non-compounded increase without any CPI limitation.

Benefit E-2 - provides automatic $2.5 \%$ annual non-compounded benefit increases to persons (and their beneficiaries) retired on or after the effective date of Benefit E-2. Such increases are further limited to increases in the Consumer Price Index (CPI) if Benefit E-2 was adopted before January 1, 1999. For all adoptions or readoptions after that date, the increase is an automatic $2.5 \%$ non-compounded increase without any CPI limitation.

## Death-After-Retirement Surviving Spouse Benefit (Plan Sections 23 and 23A)

A retiring member electing form of payment SL (straight life retirement allowance) 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 (see below) 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 form of payment SL and still provide a $50 \%$ survivor benefit to the member's 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.

## DROP+ Delayed Retirement Option Partial Lump Sum (Plan Section 10(6))

Any member (covered or not covered by Benefit Program DROP+) 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 his or her retirement date and continue to work.

If the member is covered by Benefit Program DROP+ and the member retires 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 member's monthly accrued benefit (if the member has 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: $4 \%, 5 \%, 6 \%, 7 \%$, or $8 \%$.

## Summary of Plan Provisions - Hybrid Plan*

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 Act No. 427 of the Public Acts of 1984, as amended, and the MERS Plan Document, as revised. If any conflict occurs between the information in this summary and Act No. 427 of the Public Acts of 1984, as amended, or the MERS Plan Document, as revised, the provisions of Act No. 427 and the MERS Plan Document govern.

## Part I - Defined Benefit Portion of Hybrid Plan

## Eligibility for Retirement (Plan Section 19B)

Age 60 and 6 or more years of service.

## Optional Retirement Programs (Unreduced Benefits) (Plan Section 10)

None

## Mandatory Retirement

None

## Deferred Retirement (Plan Sections 12 and 19B)

Termination of membership before age 60 other than death, after 6 years of credited service. Retirement allowances begin upon application filed with MERS, at age 60 or later. 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.

## Service Retirement Allowance (Plan Section 19B)

Credited service at time of termination is multiplied by:
Hybrid $1.0 \% \quad 1.0 \%$ of a member's final average compensation (FAC)
Hybrid $1.25 \% \quad 1.25 \%$ of FAC
Hybrid 1.5\%
$1.5 \%$ of FAC

* Please see page 74 for a description of the Defined Benefit Plan.


## Maximum Benefit Payable by MERS (Plan Section 55)

The maximum benefit that may be paid by MERS is governed by Section 415 of the Internal Revenue Code (see page 84). Benefits in excess of the maximum benefit will be paid by the MERS Excess Benefit Plan under Plan Section 55A.

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

If the municipality has elected to come under the provision of Act 88 , 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:
www.mersofmich.com/images/stories/Forms/Member/form_77.pdf

## Final Average Compensation (Plan Sections 2A(6), 2A(11) and 19(B))

Computed under defined benefit plan Benefit Program FAC-3.

## Disability Retirement Allowance (Plan Section 24)

Benefits are the same as under the defined benefit plan, except that optional Benefit Program D-2 does not apply.

Non-Duty Death Allowance (Plan Sections 26 and 28)
Benefits are the same as under the defined benefit plan.

## Duty-Connected Death Allowance (Plan Section 27)

Benefits are the same as under the defined benefit plan, except that optional Benefit Program D-2 does not apply.

Member Contributions (Plan Section 19B)
None

## Post-Retirement Adjustments (Plan Sections 20-22)

None

## Death-After-Retirement Surviving Spouse Benefit (Plan Sections 23 and 23A)

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

## DROP+ Delayed Retirement Option Partial Lump Sum (Plan Section 10(6))

None

## Part II - Defined Contribution Portion of Hybrid Plan

## Employer Contributions (Plan Section 19B)

Contribution Amount - Any percentage of compensation allowed by federal law.
Vesting Schedule - One of the following vesting schedules for employer contributions can be adopted by the employer:

1. Immediate vesting upon participation, or
2. $100 \%$ vesting after stated years (participant is $100 \%$ vested after not to exceed maximum 5 years of service ("cliff" vesting)), or
3. 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 (Plan Section 19B)

Contribution Amount - Any amount allowed by federal law and subject to procedures established by the Retirement Board.

Vesting Schedule - 100\% immediate vesting

## Municipal Employees' Retirement System of Michigan <br> IRC Section 415(b)(1)(A) Benefit Dollar Limits - 2011

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 \# |
| :---: | :---: | :---: |
| 35 | \$ 35,498 | \$ 195,000 |
| 36 | 37,513 | 195,000 |
| 37 | 39,655 | 195,000 |
| 38 | 41,934 | 195,000 |
| 39 | 44,361 | 195,000 |
| 40 | 46,947 | 195,000 |
| 41 | 49,705 | 195,000 |
| 42 | 52,648 | 195,000 |
| 43 | 55,793 | 195,000 |
| 44 | 59,154 | 195,000 |
| 45 | 62,753 | 195,000 |
| 46 | 66,608 | 195,000 |
| 47 | 70,744 | 195,000 |
| 48 | 75,185 | 195,000 |
| 49 | 79,961 | 195,000 |
| 50 | 85,103 | 195,000 |
| 51 | 90,649 | 195,000 |
| 52 | 96,639 | 195,000 |
| 53 | 103,118 | 195,000 |
| 54 | 110,140 | 195,000 |
| 55 | 117,764 | 195,000 |
| 56 | 126,057 | 195,000 |
| 57 | 135,094 | 195,000 |
| 58 | 144,963 | 195,000 |
| 59 | 155,763 | 195,000 |
| 60 | 167,610 | 195,000 |
| 61 | 180,638 | 195,000 |
| 62 | 195,000 | 195,000 |
| 63 | 195,000 | 195,000 |
| 64 | 195,000 | 195,000 |
| 65 \& older | 195,000 | 195,000 |

\# Requires that the member have at least 15 years of police, fire, and/or armed forces service as defined in the final regulations issues on April 5, 2007. Otherwise, use the limits for general members.
IRC Section 401(a)(17) Compensation Limit - 2011
For 2011 the IRC Section 401(a)(17) limit is $\$ 245,000$. This limit is indexed with inflation in $\$ 5,000$ increments.

## VIII. Actuarial Assumptions and Funding Method

An actuarial valuation is the mathematical process that estimates plan liabilities and employer contribution requirements for purposes of financing the retirement system. 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 Municipal Employees' Retirement Act of 1984 (Act 427 of 1984), as last amended by 2004 Public Act 490, as embodied in the MERS Plan Document (as revised). The specific benefit provisions in effect for each municipality are listed in Table 1 in the results section of the municipality's individual valuation report.

In addition to utilizing 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, 2010 actuarial valuation are those adopted by the Retirement Board. The actuarial assumptions were last revised as of December 31, 2010 to reflect the results of the study of plan experience covering the period from December 31, 2003 through December 31, 2008.

There have been no changes in the funding method which was adopted by the Retirement Board commencing 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 payroll.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA). Gabriel, Roeder, Smith \& Company is an independent firm of consultants and actuaries.

## Assumption and Method Changes for the

## December 31, 2010 Actuarial Valuation

The December 31, 2010 actuarial valuation reflects the following changes in the actuarial assumptions:

- Temporary lower wage inflation assumption (see page 87).
- New assumption related to increases in final average compensation for some municipalities (see page 88)
- The standard amortization period for positive unfunded accrued liabilities is maintained at 28 years.

The effects of these changes are shown in the individual municipality valuation reports, in the note below Table 16 for each division.

## 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 the December 31, 2010 actuarial valuations are unchanged from the December 31, 2009 valuation assumptions with the exceptions noted on page 85. The actuarial assumptions currently utilized 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 2010 actuarial valuation, the net long-term investment yield is assumed to be $8 \%$. This assumption was first used for the December 31, 1981 actuarial valuation.

The reader should note that, given that the actuarial value of assets is currently $16 \%$ higher than the market value, meeting the actuarial assumption in the next few years will require average annual market returns that exceed the $8 \%$ investment return assumption.

## Please see the Comments on the Investment Markets on page 2.

## Pay Increases

Because benefits are based on a member's final average compensation, 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 $4.5 \%$ ( $1 \%$ for calendar years 2011 2014) plus a percentage based on an age-related scale to reflect merit, longevity and promotional pay increases.

The pay increase assumption for sample ages is shown below. The $4.5 \%$ long-term wage inflation assumption was first used for the December 31, 1997 actuarial valuation. The merit and longevity pay increase assumption was first used for the December 31, 2004 actuarial valuation.

| Age | Base <br> (Wage Inflation)\# | Merit and <br> Longevity | Total Percentage <br> Increase in Pay |
| :---: | :---: | :---: | :---: |
| 20 | $4.50 \%$ | $8.40 \%$ | $12.90 \%$ |
| 25 | 4.50 | 5.33 | 9.83 |
| 30 | 4.50 | 3.26 | 7.76 |
| 35 | 4.50 | 2.05 | 6.55 |
| 40 | 4.50 | 1.30 | 5.80 |
| 45 | 4.50 | 0.81 | 5.31 |
| 50 | 4.50 | 0.52 | 5.02 |
| 55 | 4.50 | 0.30 | 4.80 |
| 60 | 4.50 | 0.00 | 4.50 |

\# For calendar years 2011, 2012, 2013 and 2014, the wage inflation assumption is 1\%, instead of $4.5 \%$. The $1 \%$ assumption was first used for the December 31, 2010 actuarial valuations.

## Inflation

Although no specific price inflation assumption is needed for this valuation, the $4.5 \%$ long-term wage inflation assumption would be consistent with a price inflation of $3 \%$ to $4 \%$.

## 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 $4.5 \%$ annually in the long term ( $1 \%$ annually for calendar years 2011-2014). This assumption was first used for the December 31, 1997 actuarial valuation.

## Increase in Final Average Compensation

The 1999-2003 and 2004-2008 experience studies determined that for some retirees of some municipalities, the actual final average compensation (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 to 5 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 to be first used for the December 31, 2010 annual actuarial valuations. These assumptions reflect an FAC load of $0 \%$ to $4 \%$ (increase in active member accrued liabilities and normal costs) for each municipality, based on the municipality's experience. The FAC increase assumption(s) for each division is reported in each municipality's annual actuarial report.

## 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. The scaling factor for each division is reported in each municipality's annual actuarial report.

The base withdrawal rates (see the table below) are multiplied by the scaling factor to obtain the assumed withdrawal rates.

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, 2008 actuarial valuations.

| Sample Years <br> of Service | \% of Active Members Withdrawing <br> Within the Next Year |
| :---: | :---: |
| 0 | $20.00 \%$ |
| 1 | 17.00 |
| 2 | 14.00 |
| 3 | 11.00 |
| 4 | 9.00 |
| 5 | 6.50 |
| 10 | 5.00 |
| 15 | 3.70 |
| 20 | 3.00 |
| 25 | 2.70 |
| 30 | 2.60 |
| 34 and over | 2.40 |

## 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 MERS member contributions) that will be replaced by the member's benefit at retirement. The index is calculated as:

Replacement Index $=100 \mathrm{x}$ Accrued Benefit divided by [Pay less Member Contributions]
Retirement rates for Early (reduced) Retirement are determined by the member's age at early retirement.

The revised Normal Retirement rates below were first used for the December 31, 2009 actuarial valuations. The Early Retirement rates were first used for the December 31, 2004 actuarial valuations.

NORMAL RETIREMENT

| Sample <br> Replacement <br> Index | Percent of Eligible <br> Active Members <br> Retiring Within <br> Next Year |
| :---: | :---: |
| 5 | $5 \%$ |
| 10 | 11 |
| 15 | 16 |
| 20 | 19 |
| 25 | 20 |
| 30 | 20 |
| 35 | 20 |
| 40 | 20 |
| 45 | 20 |
| 50 | 20 |
| 55 | 21 |
| 60 | 22 |
| 65 | 24 |
| 70 | 24 |
| 75 | 28 |
| 80 | 32 |
| 85 | 38 |
| 90 | 45 |
| 95 | 48 |
| $100+$ | 50 |

Early Retirement - Reduced Benefit

| Retirement Ages | Percent of Eligible <br> Active Members <br> Retiring Within <br> Next Year |
| :---: | :---: |
| 50 | $2 \%$ |
| 51 | 2 |
| 52 | 3 |
| 53 | 5 |
| 54 | 8 |
| 55 | 4 |
| 56 | 4 |
| 57 | 4 |
| 58 | 6 |
| 59 | 8 |

## 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 sample ages are shown below. These rates were first used for the December 31, 2004 actuarial valuation.

| Sample Ages | Percent Becoming Disabled <br> Within Next Year |
| :---: | :---: |
| 20 | $0.02 \%$ |
| 25 | 0.02 |
| 30 | 0.02 |
| 35 | 0.06 |
| 40 | 0.06 |
| 45 | 0.11 |
| 50 | 0.24 |
| 55 | 0.41 |
| 60 | 0.41 |
| 65 | 0.41 |

$85 \%$ of the disabilities are assumed to be non-duty and $15 \%$ of the disabilities are assumed to be duty related. For those plans which have adopted disability provision D-2, $70 \%$ of the disabilities are assumed to be non-duty and $30 \%$ 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 his or her 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 plan members is a $50 \%$ Male - $50 \%$ Female blend of the 1994 Group Annuity Mortality Table. For disabled retirees, the regular mortality table is used with a 10 -year set forward in ages to reflect the higher expected mortality rates of disabled members. These mortality tables were first used for the December 31, 2004 actuarial valuations.
$90 \%$ of active member deaths are assumed to be non-duty deaths and $10 \%$ of the deaths are assumed to be duty related.

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

| Age | Expected Years <br> of Life Remaining | Mortality Rates |
| :---: | :---: | :---: |
| 20 | 61.55 | $0.04 \%$ |
| 25 | 56.68 | 0.05 |
| 30 | 51.82 | 0.06 |
| 35 | 46.97 | 0.07 |
| 40 | 42.13 | 0.09 |
| 45 | 37.34 | 0.13 |
| 50 | 32.60 | 0.20 |
| 55 | 27.98 | 0.34 |
| 60 | 23.53 | 0.62 |
| 65 | 19.40 | 1.16 |
| 70 | 15.66 | 1.87 |
| 75 | 12.24 | 2.99 |
| 80 | 9.25 | 5.07 |

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

| Age | Expected Years <br> of Life Remaining | Mortality Rates |
| :---: | :---: | :---: |
| 20 | 51.82 | $0.06 \%$ |
| 25 | 46.97 | 0.07 |
| 30 | 42.13 | 0.09 |
| 35 | 37.34 | 0.13 |
| 40 | 32.60 | 0.20 |
| 45 | 27.98 | 0.34 |
| 50 | 23.53 | 0.62 |
| 55 | 19.40 | 1.16 |
| 60 | 15.66 | 1.87 |
| 65 | 12.24 | 2.99 |
| 70 | 9.25 | 5.07 |
| 75 | 6.81 | 8.25 |
| 80 | 4.85 | 13.46 |

Loads

Marriage Assumptions

Pay Increase Timing

Pay Adjustment
Decrement Timing
Future Service
Eligibility Testing

Benefit Service

Eligibility Service

Decrement Relativity

Decrement Operation
Normal Form of Payment

Incidence of Contributions

Maximum Compensation

- For divisions with the Annuity Withdrawal provision (this provision is not available as a standard MERS benefit), if the Treasury Bill rate of interest is used, the normal retirement and early retirement liabilities and normal costs are increased by $3 \%$.
- $70 \%$ 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.
- 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.
- None.
- Decrements of all types are assumed to occur mid-year.
- Members are assumed to earn 1.0 years of service in each future year.
- 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.
- Exact fractional service is used to determine the amount of benefit payable. Benefit service is the service used in the benefit formula.
- 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 rates are used directly from the experience study, without adjustment for multiple decrement table effects.
- Disability and withdrawal do not operate during retirement eligibility.
- Future retiring members are assumed to elect:

| Form of Payment |  | Percentage |
| :---: | :---: | :---: |
| SL | $40 \%$ |  |
| II | 30 |  |
| IIA | 10 |  |
| III | 15 |  |
| IV | 5 |  |

- 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.
- The dollar compensation limits under Section 401(a)(17) of the Internal Revenue Code are projected to increase $4.5 \%$ 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.

Miscellaneous and Technical Assumptions (continued)

Maximum Benefit - The dollar benefit limitations under Section 415 of the Internal Revenue Code are projected to increase $4.5 \%$ 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 section 415 limits are projected to be paid, except as provided under the Qualified Excess Benefit Arrangement, Plan Section 55A.

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 $4 \%$, which is consistent with the $3 \%$ to $4 \%$ 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 on page are used for members who are not covered by Benefit Program DROP+. For members 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.


## 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 - is intended to i) meet this objective, and ii) result in a relatively level long-term contribution requirement as a percentage of pay. This actuarial method was first used for the December 31, 1993 actuarial valuation.

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 his or her 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 December 31, 2010, if contributions sufficient to meet the normal costs of the Retirement System had been made each year in the past, benefit provisions had always been the same as current benefit provisions, and 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 actuarial accrued liability is projected to the beginning of the fiscal year for which employer contributions are being calculated (see page 97 for a description of the projection). The projected unfunded accrued liability is then amortized by level percent of payroll contributions over a period of years. Active member payroll is assumed to increase $4.5 \%$ a year for the purpose of determining the level percent contributions.

The standard amortization period to fund the unfunded liability is 28 years for positive unfunded liabilities in the 2010 valuation. This period will be reduced by one year in each of the next eight annual valuations, reaching 20 years in the 2018 valuation. Beginning with the 2019 valuation the 20 year period will be reestablished with each annual valuation. 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 unfunded liabilities is 10 years, with the 10 year period reestablished with each annual actuarial valuation.

For divisions that are closed to new hires, and the new hires are not covered by MERS defined benefit or hybrid provisions (in a linked division), 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 5 years. At that point, the amortization period will remain at 5 years.

Shorter amortization periods may be elected by a municipality (but not shorter than 5 years for negative unfunded liabilities).

Table 16 in the results section of each municipality's individual valuation report indicates the current length of the amortization period for each division. Note that when the 10 year amortization is used for negative unfunded liabilities, Table 16 reports the amortization in two parts: i) a long term credit based on the long term amortization period (usually the standard amortization period described above), plus ii) an overfunding credit resulting from using a 10 year amortization.

In calculating the annual required contribution (ARC) for reporting and disclosure purposes under Statement Nos. 25 and 27 of the Governmental Accounting Standards Board, the following amortization methods are used:

- A level percentage of payroll amortization is used, based on the amortization periods described in the previous paragraph and based on the assumption that payroll increases 4.5\% per year.
- For divisions that are less than $100 \%$ funded and are closed to new hires (and new hires are not covered by MERS defined benefit or hybrid provisions in a linked division), a 30-year level dollar amortization is used if it results in a higher amortization payment.


## Projection of Unfunded Accrued Liability

The unfunded accrued liability as of December 31, 2010 is projected to the beginning of the fiscal year for which employer contributions are being calculated (each municipality's fiscal year beginning in 2012). This allows the 2010 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. The projected unfunded accrued liability is amortized over the appropriate period (see page 96) to determine the amortization payment. For divisions that will have no new hires this is the dollar amortization payment. For divisions that are open to new hires this payment is divided by the projected fiscal year payroll to determine the amortization payment as a percentage of active member payroll. The resulting amortization contributions are displayed for each division in Table 16 of each municipality's individual valuation report.

The details of the projection are displayed in Table 24 of each municipality's valuation report.

## Termination Liability

The termination liability represents the value of the benefits that have been earned as of the valuation date based on final average compensation and benefit service as of the valuation date. All active members are assumed to terminate employment on the valuation date. Vested and non-vested active members are assumed to retire at the first age when the member would be eligible for unreduced deferred retirement benefits, assuming no continued employment after the valuation date (non-vested benefits are assumed to commence at age 60).

## 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. The difference in investment income between expected return and market return is recognized over a 10-year period at the rate of $10 \%$ per year. This asset valuation method was first adopted for the December 31, 2005 valuation, and is applied as follows:

Actuarial Value equals:
(a) Actuarial value of assets from the previous actuarial valuation, plus
(b) Aggregate employer and member contributions since the last valuation, minus
(c) Benefit payments and refunds of member contributions since the last valuation, plus
(d) Estimated investment income at the $8 \%$ valuation interest rate, plus
(e) 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 $10 \%$ of the current year's gain (loss) plus $10 \%$ of the gain (loss) from each of the 9 preceding years. The cumulative difference between the market value and valuation assets as of December 31, 2005 is recognized over 9 years.

During 2010, 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 $5.74 \%$. The corresponding amounts for 2009, 2008, 2007, and 2006 were $5.30 \%, 4.73 \%, 8.12 \%$, and $8.14 \%$, respectively.

For the December 31, 2010 valuation, the actuarial value of assets is equal to $116.29 \%$ of market value (compared to $125.17 \%, 139.15 \%, 98.85 \%$, and $98.62 \%$ in $2009,2008,2007$, and 2006, respectively). This percentage is applied to each division's reported market value of assets to estimate the actuarial value of assets for the division. Table 37 on pages 100-102 provides the details of the derivation of the actuarial value of assets for the retirement system in the aggregate.

The reader should note that, given that the actuarial value of assets is currently $16 \%$ higher than the market value, meeting the actuarial assumption in the next few years will require average annual market returns that exceed the $8 \%$ investment return assumption.

## Please see the Comments on the Investment Markets on page 2.

Note that the asset values in Table 37 differ slightly from the asset values reported elsewhere in the report, because the assets in Table 37 include some employer divisions that were not included in the respective annual valuations. Also note that for closed municipalities the market value of assets is used, instead of the smoothed market value described above.

Table 37

## Municipal Employees' Retirement System of Michigan Derivation of Actuarial Value of Assets

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

[^3]Table 37 (cont.)

## Municipal Employees' Retirement System of Michigan

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

[^4]Table 37 (cont.)

## Municipal Employees' Retirement System of Michigan

 Derivation of Actuarial Value of Assets| Valuation Date December 31: | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Beginning of Year Assets <br> a) Market Value <br> b) Valuation Assets <br> 2. End of Year Market Value Assets <br> 3. Net Additions to Market Value <br> a) Net Contributions <br> b) Net Investment Income = (3d) - (3a) - (3c) <br> c) Benefit Payments <br> d) Total Additions to Market Value = (2) - (1a) <br> 4. Average Valuation Assets $=$ <br> $(1 b)+.5 x[(3 a)+(3 c)]$ <br> 5. Expected Income at Valuation Rate $=8 \% \mathrm{x}$ (4) <br> 6. Gain $($ Loss $)=(3 b)-(5)$ <br> 7. Phased-In Recognition of Investment Return <br> a) Current Year: $0.1 \times(6)$ <br> b) First Prior Year <br> c) Second Prior Year <br> d) Third Prior Year <br> e) Fourth Prior Year <br> f) Fifth Prior Year <br> g) Sixth Prior Year <br> h) Seventh Prior Year <br> i) Eighth Prior Year <br> j) Ninth Prior Year <br> k) Total Recognized Investment Gain (Loss) <br> 8. Change in Valuation Assets $(3 \mathrm{a})+(3 \mathrm{c})+(5)+(7 \mathrm{k})$ <br> 9. End of Year Assets <br> a) Market Value = (2) <br> b) Valuation Assets $=(1 b)+(8) \#$ <br> c) Difference Between Market \& Valuation Assets <br> 10. Recognized Rate of Return $=[(5)+(7 \mathrm{k})] /(4)$ <br> 11. Market Rate of Return <br> 12. Valuation Asset Adjustment Factor $=(9 b) /(9 a)$ | $\begin{array}{r} 20,621,513 \\ 26,903,495 \\ (203,285,376) \\ (20,185) \\ 21,683,022 \\ (14,753,669) \\ \\ \hline(148,851,200) \end{array}$ | $\begin{gathered} 20,621,513 \\ 26,903,495 \\ (203,285,376) \\ (20,185) \\ 21,683,022 \\ (14,753,669) \\ \\ \hline(148,851,200) \end{gathered}$ | $20,621,513$ <br> $26,903,495$ <br> $(203,285,376)$ <br> $(20,185)$ <br> $21,683,022$ <br> $(14,753,669)$ <br> $(148,851,200)$ | $20,621,513$ $26,903,495$ $(203,285,376)$ $(20,185)$ $21,683,022$ $(14,753,667)$ $(148,851,198)$ | $20,621,513$ $26,903,495$ $(203,285,376)$ $(20,185)$ $21,683,025$ $(134,097,528)$ |

[^5]
# Appendix <br> Municipal Employees' Retirement System of Michigan 

## December 31, 2010 Valuation Results

by Municipality

MERS 12/31/2010 Valuation - Results by Municipality
Participant Information

| Municipality Name | Number | Number of Divisions | Fiscal Year Beginning | Number of Actives | Active Salary | Number of Retirees | Annual Benefits <br> In Force | Number Deferred Vesteds | Annual Deferred Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21st Dist Ct | 8243 | 1 | July 1 | 7 | 312,919 | 1 | 16,140 | 0 | 0 |
| 23rd Jud Dist Ct | 8223 | 1 | July 1 | 12 | 540,148 | 6 | 114,752 | 3 | 20,218 |
| 26th Jud Cir Ct | 0403 | 1 | January 1 | 23 | 716,096 | 9 | 58,402 | 21 | 122,708 |
| 34th Dist Ct | 8235 | 1 | July 1 | 35 | 1,573,730 | 4 | 139,983 | 1 | 8,800 |
| 35th Dist Ct | 8234 | 1 | January 1 | 12 | 586,203 | 8 | 237,344 | 0 | 0 |
| 41 B Dist Ct | 5014 | 2 | January 1 | 32 | 1,368,995 | 22 | 289,052 | 11 | 200,509 |
| Addison Fire Dept | 4607 | 1 | April 1 | 2 | 151,404 | 0 | 0 | 0 | 0 |
| Adrian, City of | 4601 | 7 | July 1 | 147 | 7,310,870 | 123 | 2,894,663 | 19 | 200,843 |
| Aitkin Memorial Dist | 7407 | 1 | July 1 | 1 | 48,000 | 0 | 0 | 0 | 0 |
| Albion, City of | 1301 | 6 | January 1 | 39 | 1,595,100 | 101 | 845,247 | 22 | 123,397 |
| Alcona Co | 0101 | 8 | January 1 | 55 | 1,826,326 | 47 | 474,684 | 9 | 38,178 |
| Alger Co | 0203 | 8 | January 1 | 32 | 1,304,033 | 27 | 451,878 | 5 | 12,021 |
| Alger CRC | 0201 | 1 | January 1 | 27 | 1,212,042 | 35 | 552,977 | 3 | 30,137 |
| Algonac, City of | 7707 | 2 | July 1 | 21 | 1,089,773 | 10 | 142,950 | 6 | 50,749 |
| Allegan, City of | 0309 | 4 | July 1 | 9 | 622,922 | 7 | 141,641 | 4 | 28,326 |
| Allegan Co | 0302 | 14 | January 1 | 112 | 6,059,933 | 231 | 2,800,458 | 81 | 588,483 |
| Allegan CRC | 0301 | 3 | January 1 | 50 | 2,364,198 | 63 | 1,224,904 | 2 | 17,251 |
| Alma, City of | 2901 | 6 | July 1 | 79 | 3,029,810 | 78 | 1,108,993 | 7 | 63,958 |
| Almont, Vlg of | 4407 | 3 | July 1 | 14 | 756,251 | 3 | 46,369 | 2 | 3,663 |
| Alpena Co | 0401 | 6 | January 1 | 85 | 3,176,947 | 78 | 833,190 | 29 | 235,842 |
| Alpena CRC | 0402 | 2 | January 1 | 27 | 1,143,479 | 38 | 567,975 | 2 | 10,211 |
| Alpena Rgnl Med Ctr | 0405 | 5 | July 1 | 392 | 22,932,039 | 354 | 6,600,147 | 78 | 1,082,029 |
| Alpena Sr Citizens C | 0404 | 1 | October 1 | 0 | 0 | 7 | 67,036 | 0 | 0 |
| Alpha, Vlg of | 3614 | 1 | April 1 | 2 | 43,801 | 0 | 0 | 2 | 3,637 |
| Antrim Co | 0502 | 5 | January 1 | 305 | 11,407,938 | 147 | 1,224,369 | 59 | 334,587 |
| Antrim CRC | 0501 | 2 | January 1 | 37 | 1,479,712 | 39 | 752,752 | 0 | 0 |
| Arenac Co | 0603 | 7 | January 1 | 57 | 1,973,973 | 48 | 448,451 | 21 | 135,080 |
| Arenac CRC | 0604 | 3 | January 1 | 22 | 833,008 | 27 | 397,509 | 2 | 15,082 |
| Ash Twp | 5804 | 1 | April 1 | 4 | 127,287 | 4 | 52,191 | 1 | 1,438 |
| Auburn, City of | 0905 | 1 | July 1 | 6 | 274,884 | 6 | 141,176 | 0 | 0 |
| Au Gres, City of | 0602 | 2 | April 1 | 4 | 259,525 | 6 | 88,235 | 0 | 0 |
| Bad Axe, City of | 3211 | 1 | July 1 | 21 | 989,862 | 14 | 321,077 | 0 | 0 |
| Bad Axe Area Dist Li | 3214 | 1 | July 1 | 1 | 43,173 | 0 | 0 | 0 | 0 |
| Bancroft, Vlg of | 7610 | 1 | March 1 | 1 | 43,018 | 1 | 7,884 | 0 | 0 |
| Bangor, City of | 8003 | 1 | July 1 | 14 | 547,404 | 12 | 68,522 | 10 | 25,813 |
| Baraga, Vlg of | 0704 | 3 | March 1 | 8 | 305,789 | 10 | 197,872 | 2 | 7,360 |
| Baraga Co | 0702 | 2 | January 1 | 31 | 1,174,594 | 20 | 263,669 | 9 | 52,891 |
| Baraga Co Memorial H | 0703 | 2 | October 1 | 103 | 4,556,456 | 85 | 630,457 | 38 | 223,845 |
| Baraga CRC | 0701 | 3 | October 1 | 27 | 1,016,346 | 33 | 452,920 | 0 | 0 |
| Baroda Twp | 1109 | 1 | April 1 | 5 | 248,034 | 0 | 0 | 0 | 0 |
| Barry Co | 0802 | 14 | January 1 | 405 | 14,818,563 | 182 | 2,111,024 | 45 | 342,876 |
| Barry Co CMH Auth | 0804 | 2 | April 1 | 56 | 2,098,693 | 0 | 0 | 9 | 91,676 |
| Barry Eaton Dist Hlt | 2303 | 3 | January 1 | 76 | 3,392,244 | 54 | 681,969 | 42 | 291,304 |
| Barton Hills, Vlg of | 8107 | 1 | April 1 | 3 | 140,942 | 1 | 18,906 | 0 | 0 |
| Bates Twp | 3616 | 1 | April 1 | 1 | 39,794 | 1 | 12,632 | 0 | 0 |
| Bath Charter Twp | 1909 | 1 | January 1 | 22 | 1,245,513 | 4 | 97,085 | 3 | 39,615 |
| Battle Creek, City o | 1302 | 10 | July 1 | 332 | 16,067,939 | 320 | 7,172,073 | 54 | 817,523 |
| Bay Area Trans Auth | 2810 | 2 | October 1 | 74 | 2,447,915 | 10 | 46,900 | 7 | 28,367 |
| Bay City, City of | 0901 | 6 | July 1 | 83 | 4,126,308 | 277 | 4,968,599 | 18 | 245,164 |
| Bay City HC | 0906 | 2 | October 1 | 15 | 744,470 | 16 | 290,809 | 0 | 0 |
| Bayliss Pub Lib | 1702 | 1 | July 1 | 6 | 161,510 | 5 | 53,171 | 1 | 5,472 |
| Bay Metro Trans Auth | 0907 | 3 | October 1 | 95 | 3,503,023 | 31 | 275,525 | 12 | 76,892 |
| Beecher Metro Dist S | 2501 | 2 | July 1 | 8 | 472,953 | 15 | 364,637 | 1 | 15,165 |
| Belding, City of | 3410 | 1 | July 1 | 7 | 355,425 | 3 | 60,579 | 1 | 2,056 |
| Belleville, City of | 8213 | 3 | July 1 | 16 | 851,494 | 16 | 303,678 | 10 | 50,012 |
| Benzie/Leelanau Dist | 4504 | 1 | October 1 | 4 | 201,355 | 1 | 7,698 | 0 | 0 |
| Benzie Co | 1003 | 6 | October 1 | 78 | 3,125,738 | 42 | 473,594 | 41 | 357,397 |
| Benzie Co Comm on Ag | 1006 | 1 | October 1 | 9 | 274,943 | 4 | 34,979 | 1 | 6,116 |
| Benzie Co MCF (The M | 1004 | 2 | January 1 | 106 | 3,500,877 | 38 | 279,847 | 23 | 120,445 |
| Benzie CRC | 1001 | 3 | January 1 | 28 | 983,622 | 31 | 442,184 | 3 | 18,814 |
| Benzie Shores Dist L | 1005 | 1 | July 1 | 1 | 68,529 | 0 | 0 | 0 | 0 |
| Benzie Trans Auth | 1007 | 1 | October 1 | 20 | 642,044 | 0 | 0 | 0 | 0 |
| Berkley, City of | 6304 | 4 | July 1 | 49 | 2,194,904 | 65 | 1,367,335 | 10 | 102,704 |
| Berrien Springs, Vlg | 1102 | 1 | July 1 | 12 | 470,581 | 7 | 41,328 | 3 | 20,976 |
| Bessemer, City of | 2702 | 1 | July 1 | 12 | 453,522 | 15 | 170,551 | 1 | 8,451 |
| Beverly Hills, Vlg o | 6321 | 2 | July 1 | 13 | 727,853 | 12 | 200,823 | 10 | 63,524 |
| Big Rapids, City of | 5402 | 2 | July 1 | 26 | 1,255,926 | 50 | 765,194 | 7 | 35,987 |
| Big Rapids HC | 5406 | 1 | April 1 | 4 | 242,523 | 3 | 48,148 | 2 | 17,513 |
| Bingham Farms, Vlg o | 6332 | 1 | July 1 | 2 | 161,404 | 0 | 0 | 0 | 0 |
| Birch Run, Vlg of | 7315 | 3 | July 1 | 14 | 619,681 | 2 | 10,075 | 3 | 6,778 |
| Bishop Intl Arpt Aut | 2507 | 1 | January 1 | 32 | 1,822,484 | 7 | 108,602 | 2 | 21,443 |
| Blackman Chtr Twp | 3806 | 1 | January 1 | 33 | 1,945,164 | 7 | 232,197 | 1 | 18,714 |
| Blissfield, Vlg of | 4606 | 1 | July 1 | 21 | 928,218 | 4 | 42,620 | 3 | 17,948 |
| Bloomfield Hills, Ci | 6302 | 7 | July 1 | 32 | 2,244,043 | 40 | 1,744,043 | 3 | 64,478 |
| Blue Water Area Tran | 7709 | 2 | October 1 | 53 | 2,076,764 | 8 | 73,506 | 5 | 37,365 |
| Boyne City, City of | 1506 | 4 | May 1 | 29 | 1,318,808 | 32 | 424,935 | 7 | 44,918 |

MERS 12/31/2010 Valuation - Results by Municipality
Participant Information

| Municipality Name | Number | Number of Divisions | Fiscal Year Beginning | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { Actives } \end{gathered}$ | Active Salary | Number of Retirees | Annual Benefits In Force | Number Deferred Vesteds | Annual Deferred Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Branch Co | 1205 | 3 | January 1 | 36 | 1,682,726 | 2 | 7,046 | 0 | 0 |
| Brandon Chtr Twp of | 6333 | 2 | January 1 | 28 | 1,303,727 | 10 | 211,711 | 2 | 12,582 |
| Breckenridge, Vlg of | 2906 | 2 | March 1 | 4 | 135,033 | 11 | 204,356 | 3 | 19,753 |
| Bridgeport Chtr Twp | 7307 | 4 | January 1 | 28 | 1,283,781 | 26 | 388,277 | 24 | 207,641 |
| Bridgman, City of | 1110 | 1 | July 1 | 15 | 690,291 | 1 | 15,747 | 1 | 7,844 |
| Brighton, Chtr Twp o | 4711 | 2 | April 1 | 9 | 414,460 | 6 | 61,802 | 5 | 34,202 |
| Brighton, City of | 4704 | 5 | July 1 | 52 | 3,389,919 | 25 | 519,282 | 8 | 53,166 |
| Brighton Area Fire A | 4715 | 1 | July 1 | 1 | 65,596 | 1 | 16,162 | 0 | 0 |
| Britton, Vlg of | 4604 | 1 | March 1 | 3 | 105,319 | 0 | 0 | 0 | 0 |
| Brnch-Hillsdale-St J | 1202 | 1 | January 1 | 60 | 2,289,722 | 45 | 463,078 | 19 | 159,233 |
| Bronson, City of | 1204 | 2 | July 1 | 16 | 699,567 | 2 | 25,313 | 1 | 8,360 |
| Brooklyn, Vlg of | 3801 | 1 | March 1 | 5 | 244,026 | 4 | 78,423 | 0 | 0 |
| Brownstown, Chtr Twp | 8247 | 3 | January 1 | 64 | 4,076,278 | 3 | 150,879 | 1 | 15,976 |
| Buchanan, City of | 1101 | 4 | July 1 | 28 | 1,270,014 | 35 | 387,131 | 4 | 48,720 |
| Buchanan Dist Lib | 1108 | 1 | July 1 | 4 | 126,537 | 1 | 3,673 | 1 | 2,873 |
| Buena Vista Chtr Twp | 7312 | 4 | January 1 | 39 | 1,866,393 | 16 | 397,903 | 7 | 72,657 |
| Burton, City of | 2508 | 5 | July 1 | 84 | 3,958,517 | 72 | 2,415,756 | 12 | 107,236 |
| Butman Township | 2604 | 1 | July 1 | 0 | 0 | 0 | 0 | 4 | 15,287 |
| Cadillac, City of | 8301 | 7 | July 1 | 60 | 2,494,489 | 63 | 704,863 | 13 | 155,524 |
| Cadillac/Wexford Tra | 8305 | 3 | October 1 | 20 | 592,494 | 5 | 36,873 | 1 | 6,689 |
| Calhoun Co | 1311 | 2 | January 1 | 157 | 8,181,844 | 46 | 1,248,113 | 3 | 37,633 |
| Calhoun CRC | 1307 | 4 | January 1 | 64 | 2,709,992 | 43 | 816,832 | 18 | 211,464 |
| Canton, Chtr Twp of | 8233 | 8 | January 1 | 249 | 18,671,391 | 70 | 3,768,192 | 2 | 42,798 |
| Canton Pub Lib | 8232 | 1 | January 1 | 16 | 809,026 | 5 | 172,896 | 1 | 14,220 |
| Capac, Vlg of | 7705 | 3 | July 1 | 7 | 260,366 | 11 | 109,081 | 5 | 27,466 |
| Capital Area Dist Li | 3317 | 4 | January 1 | 77 | 3,458,666 | 7 | 66,588 | 2 | 7,068 |
| Capital Region Arprt | 3305 | 5 | July 1 | 35 | 2,035,246 | 38 | 963,837 | 15 | 169,815 |
| Carleton, Vlg of | 5805 | 1 | March 1 | 7 | 267,707 | 2 | 15,243 | 1 | 2,354 |
| Carrollton Twp | 7320 | 2 | April 1 | 22 | 795,840 | 2 | 41,904 | 2 | 18,374 |
| Cascade Chtr Twp | 4110 | 1 | January 1 | 37 | 1,984,632 | 11 | 170,350 | 4 | 73,790 |
| Caseville, Vlg of | 3207 | 1 | March 1 | 13 | 524,595 | 2 | 13,848 | 0 | 0 |
| Caspian, City of | 3608 | 1 | July 1 | 4 | 158,198 | 7 | 65,027 | 2 | 7,953 |
| Cass Co | 1402 | 8 | January 1 | 149 | 6,608,541 | 68 | 857,919 | 19 | 154,060 |
| Cass Co MCF | 1403 | 2 | January 1 | 74 | 2,758,017 | 28 | 164,213 | 8 | 64,326 |
| Cass Dist Lib | 1404 | 1 | January 1 | 13 | 389,959 | 5 | 31,879 | 4 | 12,875 |
| Cedar Springs, City | 4105 | 2 | July 1 | 16 | 813,861 | 11 | 150,139 | 3 | 17,095 |
| Center Line, City of | 5001 | 4 | July 1 | 17 | 720,085 | 46 | 740,976 | 2 | 22,749 |
| Central Lake, Vlg of | 0504 | 1 | March 1 | 4 | 139,959 | 0 | 0 | 0 | 0 |
| Central Mich Dist Hl | 3705 | 5 | October 1 | 80 | 3,414,246 | 64 | 817,887 | 39 | 234,207 |
| Charlevoix, City of | 1505 | 3 | April 1 | 46 | 2,322,846 | 32 | 515,048 | 4 | 83,877 |
| Charlevoix Co | 1503 | 6 | January 1 | 370 | 12,660,938 | 150 | 1,671,078 | 41 | 336,704 |
| Charlevoix CRC | 1501 | 2 | January 1 | 30 | 1,090,747 | 38 | 435,512 | 7 | 42,951 |
| Charlotte, City of | 2301 | 5 | July 1 | 49 | 2,726,067 | 42 | 842,493 | 17 | 131,294 |
| Charlotte Dist Lib | 2309 | 2 | January 1 | 5 | 160,092 | 3 | 45,480 | 0 | 0 |
| Cheboygan, City of | 1602 | 3 | July 1 | 28 | 1,166,555 | 33 | 568,074 | 2 | 6,409 |
| Cheboygan Co | 1603 | 3 | January 1 | 136 | 4,976,490 | 71 | 808,864 | 13 | 169,581 |
| Cheboygan CRC | 1601 | 2 | January 1 | 48 | 1,688,622 | 54 | 986,250 | 3 | 26,160 |
| Chelsea, City of | 8103 | 3 | July 1 | 15 | 973,864 | 27 | 643,628 | 7 | 70,462 |
| Chelsea Area Fire Au | 8118 | 1 | March 1 | 11 | 559,177 | 0 | 0 | 0 | 0 |
| Chesaning, Vlg of | 7313 | 3 | March 1 | 9 | 338,346 | 11 | 176,845 | 5 | 15,175 |
| Chesterfield Twp | 5009 | 3 | January 1 | 149 | 8,818,977 | 23 | 432,415 | 9 | 95,889 |
| Chesterfield Twp Lib | 5010 | 1 | January 1 | 7 | 342,526 | 1 | 9,772 | 0 | 0 |
| Chikaming Twp | 1112 | 2 | April 1 | 13 | 581,721 | 1 | 24,920 | 1 | 4,855 |
| Chippewa Co | 1703 | 11 | January 1 | 187 | 8,304,324 | 125 | 1,524,057 | 30 | 215,260 |
| Chippewa CRC | 1704 | 2 | January 1 | 60 | 2,483,706 | 76 | 991,916 | 4 | 44,250 |
| Chippewa River Dist | 3707 | 2 | January 1 | 17 | 756,946 | 3 | 57,784 | 1 | 6,601 |
| Chocolay, Chtr Twp o | 5218 | 1 | January 1 | 14 | 593,220 | 0 | 0 | 0 | 0 |
| Clare, City of | 1804 | 2 | July 1 | 28 | 1,168,257 | 22 | 404,097 | 6 | 66,926 |
| Clare Co | 1802 | 4 | January 1 | 134 | 4,960,637 | 68 | 911,124 | 20 | 128,048 |
| Clare Co Trans Auth | 1806 | 1 | October 1 | 2 | 78,113 | 1 | 8,895 | 0 | 0 |
| Clare CRC | 1801 | 2 | July 1 | 31 | 1,191,639 | 46 | 668,951 | 1 | 2,359 |
| Clawson, City of | 6305 | 3 | July 1 | 21 | 1,381,367 | 57 | 1,595,797 | 4 | 50,420 |
| Clay Twp | 7706 | 6 | July 1 | 31 | 1,677,833 | 19 | 269,605 | 5 | 95,774 |
| Clearwater Twp | 4005 | 1 | April 1 | 1 | 33,817 | 0 | 0 | 0 | 0 |
| Clinton, Vlg of | 4602 | 2 | April 1 | 14 | 720,502 | 10 | 100,012 | 5 | 44,945 |
| Clinton Co | 1903 | 6 | January 1 | 181 | 8,450,542 | 115 | 1,596,138 | 35 | 212,866 |
| Clinton CRC | 1901 | 4 | January 1 | 45 | 2,260,723 | 48 | 893,637 | 4 | 57,755 |
| Clinton-Eaton-Ingham | 3308 | 6 | October 1 | 701 | 30,821,617 | 256 | 4,572,868 | 146 | 1,206,851 |
| Clinton Twp | 5002 | 9 | April 1 | 175 | 9,997,259 | 140 | 3,040,563 | 9 | 86,560 |
| Clio, City of | 2523 | 1 | July 1 | 10 | 387,451 | 2 | 33,455 | 3 | 23,961 |
| CMH of Central Mich | 3708 | 1 | October 1 | 315 | 14,770,130 | 116 | 1,701,839 | 96 | 811,060 |
| Coldwater, City of | 1201 | 7 | July 1 | 25 | 1,376,770 | 59 | 978,880 | 9 | 89,211 |
| Coldwater Brd of Pub | 1203 | 2 | July 1 | 19 | 1,016,738 | 38 | 696,297 | 8 | 117,273 |
| Coleman, City of | 5603 | 1 | July 1 | 7 | 328,802 | 6 | 89,380 | 0 | 0 |
| Coloma, City of | 1118 | 1 | April 1 | 6 | 210,565 | 0 | 0 | 0 | 0 |
| Coloma Chtr Twp | 1107 | 2 | April 1 | 13 | 634,686 | 3 | 114,222 | 0 | 0 |

MERS 12/31/2010 Valuation - Results by Municipality

| Municipality Name | Number | Number of Divisions | Fiscal Year Beginning | Number of Actives | Active Salary | Number of Retirees | Annual Benefits In Force | Number Deferred Vesteds | Annual Deferred Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Columbiaville, Vlg o | 4406 | 1 | March 1 | 4 | 171,929 | 3 | 14,288 | 0 | 0 |
| Coopersville, City o | 7005 | 1 | July 1 | 13 | 492,804 | 8 | 90,216 | 4 | 18,559 |
| Coopersville Area Di | 7011 | 2 | July 1 | 4 | 125,798 | 1 | 11,373 | 1 | 6,721 |
| Corunna City of | 7604 | 5 | July 1 | 12 | 559,681 | 11 | 250,843 | 5 | 58,241 |
| Corwith Twp | 6904 | 1 | April 1 | 7 | 66,810 | 0 | 0 | 0 | 0 |
| Covert Twp | 8010 | 1 | July 1 | 13 | 639,160 | 0 | 0 | 1 | 5,307 |
| Crawford Co | 2001 | 7 | October 1 | 72 | 2,770,002 | 66 | 818,772 | 16 | 120,646 |
| Crawford Co Trans Au | 2004 | 1 | January 1 | 22 | 680,889 | 10 | 187,396 | 1 | 16,291 |
| Crawford CRC | 2002 | 3 | January 1 | 29 | 1,183,283 | 24 | 445,299 | 0 | 0 |
| Croswell, City of | 7401 | 2 | July 1 | 25 | 1,311,356 | 21 | 427,743 | 3 | 41,234 |
| Crystal Falls, City | 3603 | 3 | January 1 | 12 | 597,256 | 26 | 484,042 | 8 | 108,247 |
| Crystal Falls Comm H | 3618 | 2 | January 1 | 0 | 0 | 60 | 259,487 | 65 | 146,024 |
| Ctrl Dispatch of Mus | 6109 | 3 | October 1 | 27 | 1,274,042 | 17 | 211,067 | 3 | 16,289 |
| Ctrl Wayne Co Sanita | 8214 | 2 | July 1 | 0 | 0 | 26 | 345,335 | 4 | 38,530 |
| Davison, City of | 2516 | 4 | January 1 | 15 | 867,076 | 11 | 350,988 | 3 | 26,679 |
| Davison Richfield Sr | 2525 | 1 | July 1 | 0 | 0 | 1 | 27,957 | 0 | 0 |
| Davison Twp | 2519 | 2 | July 1 | 40 | 2,179,869 | 5 | 201,396 | 2 | 23,252 |
| Dearborn, City of | 8251 | 2 | July 1 | 59 | 3,622,893 | 0 | 0 | 0 | 0 |
| Deerfield, Vlg of | 4603 | 1 | March 1 | 5 | 255,693 | 2 | 42,641 | 0 | 0 |
| Delta Chtr Twp | 2306 | 1 | January 1 | 30 | 1,761,465 | 14 | 571,380 | 2 | 34,815 |
| Delta Co | 2102 | 8 | October 1 | 93 | 3,845,932 | 85 | 1,251,343 | 12 | 121,428 |
| Delta CRC | 2105 | 3 | January 1 | 35 | 1,372,914 | 24 | 394,444 | 6 | 58,576 |
| Delta-Menominee Dist | 2103 | 2 | January 1 | 40 | 1,376,423 | 16 | 126,942 | 34 | 308,411 |
| Detour, Vlg of | 1706 | 1 | April 1 | 8 | 150,710 | 5 | 37,528 | 1 | 359 |
| Detroit HC | 8241 | 3 | July 1 | 126 | 6,241,154 | 12 | 165,704 | 21 | 202,190 |
| DeWitt, City of | 1908 | 3 | July 1 | 15 | 772,859 | 14 | 266,075 | 9 | 44,396 |
| DeWitt Chtr Twp | 1910 | 2 | January 1 | 14 | 871,684 | 1 | 14,042 | 4 | 35,937 |
| Dexter, Vlg of | 8217 | 1 | July 1 | 14 | 781,444 | 7 | 127,686 | 0 | 0 |
| Dexter Area Fire Dep | 8219 | 1 | January 1 | 6 | 327,014 | 1 | 32,272 | 0 | 0 |
| Dexter Twp | 8111 | 1 | April 1 | 11 | 229,540 | 3 | 28,117 | 1 | 907 |
| Dickinson Co | 2206 | 7 | January 1 | 89 | 3,528,128 | 69 | 1,186,737 | 17 | 173,167 |
| Dickinson CRC | 2203 | 2 | January 1 | 33 | 1,390,036 | 40 | 543,304 | 7 | 53,160 |
| Dickinson-Iron Dist | 3605 | 4 | January 1 | 26 | 971,350 | 35 | 406,454 | 18 | 134,971 |
| Dimondale, Vlg of | 2304 | 1 | March 1 | 4 | 174,915 | 3 | 29,620 | 1 | 14,135 |
| Dist Hlth Dept \#10 | 5104 | 2 | January 1 | 34 | 1,696,565 | 87 | 1,317,704 | 19 | 120,633 |
| Dist Hlth Dept \# 2 | 6501 | 2 | January 1 | 24 | 1,041,103 | 23 | 300,890 | 14 | 144,854 |
| Dist Hlth Dept \# 4 | 7103 | 1 | January 1 | 34 | 1,429,814 | 31 | 611,776 | 13 | 109,411 |
| Douglas, City of Vlg | 0303 | 3 | March 1 | 17 | 781,445 | 11 | 108,127 | 7 | 32,819 |
| Dowagiac, City of | 1401 | 6 | October 1 | 49 | 2,409,626 | 47 | 868,717 | 14 | 120,975 |
| Dowagiac Dist Lib | 1406 | 1 | October 1 | 1 | 24,000 | 0 | 0 | 1 | 2,854 |
| Dowagiac HC | 1405 | 2 | October 1 | 5 | 172,071 | 0 | 0 | 2 | 5,176 |
| Drummond Island Twp | 1708 | 1 | April 1 | 2 | 75,817 | 0 | 0 | 1 | 2,220 |
| Dryden, Vlg of | 4405 | 1 | April 1 | 2 | 65,668 | 2 | 28,746 | 1 | 7,757 |
| Dundee, Vlg of | 5803 | 1 | March 1 | 9 | 467,830 | 14 | 297,009 | 0 | 0 |
| Durand, City of | 7603 | 2 | July 1 | 20 | 915,911 | 14 | 206,330 | 4 | 42,721 |
| East China Chtr Twp | 7701 | 1 | April 1 | 16 | 903,878 | 10 | 289,884 | 1 | 19,525 |
| East Grand Rapids,Ci | 4101 | 5 | July 1 | 9 | 581,999 | 45 | 1,466,948 | 8 | 70,721 |
| East Jordan, City of | 1504 | 4 | July 1 | 22 | 904,180 | 16 | 150,261 | 5 | 46,565 |
| East Lansing, City o | 3301 | 17 | July 1 | 213 | 12,551,771 | 313 | 9,190,395 | 52 | 589,458 |
| Eastpointe HC | 5011 | 1 | July 1 | 6 | 298,436 | 0 | 0 | 0 | 0 |
| Eaton Co | 2302 | 10 | October 1 | 367 | 17,004,840 | 204 | 5,081,492 | 55 | 577,384 |
| Eaton Co MCF | 2305 | 4 | January 1 | 194 | 6,333,430 | 39 | 257,767 | 5 | 68,718 |
| Eaton Rapids, City o | 2307 | 5 | January 1 | 43 | 2,287,110 | 13 | 359,754 | 8 | 81,113 |
| Eau Claire, Vlg of | 1104 | 1 | March 1 | 2 | 72,239 | 3 | 31,987 | 0 | 0 |
| Ecorse, City of | 8206 | 7 | July 1 | 50 | 3,170,366 | 145 | 3,424,831 | 7 | 21,805 |
| Elderly Housing Corp | 8222 | 2 | January 1 | 10 | 330,706 | 16 | 200,577 | 4 | 28,492 |
| Elkton, Vlg of | 3206 | 2 | March 1 | 3 | 112,120 | 5 | 40,005 | 2 | 5,459 |
| Elsie, Village of | 1906 | 1 | April 1 | 0 | 0 | 1 | 1,533 | 2 | 12,173 |
| Emmett, Chtr Twp | 1310 | 2 | April 1 | 28 | 1,405,300 | 7 | 124,346 | 3 | 25,753 |
| Emmett CRC | 2401 | 2 | January 1 | 14 | 699,756 | 44 | 826,625 | 4 | 28,909 |
| Erie, Township of | 5812 | 1 | July 1 | 2 | 74,269 | 0 | 0 | 0 | 0 |
| Escanaba, City of | 2101 | 6 | July 1 | 73 | 3,287,962 | 112 | 1,701,813 | 12 | 107,505 |
| Essexville, City of | 0903 | 6 | July 1 | 18 | 833,327 | 20 | 366,612 | 4 | 40,710 |
| E UP Reg Planning \& | 1709 | 1 | October 1 | 3 | 119,059 | 0 | 0 | 0 | 0 |
| E UP Trans Auth | 1705 | 2 | October 1 | 22 | 974,853 | 18 | 400,944 | 2 | 10,942 |
| Evart, City of | 6705 | 1 | July 1 | 13 | 540,032 | 5 | 60,816 | 5 | 41,169 |
| Evart Local Dev Fina | 6706 | 1 | July 1 | 1 | 33,315 | 2 | 32,818 | 0 | 0 |
| Farmington, City of | 6343 | 6 | July 1 | 54 | 3,239,192 | 46 | 1,197,853 | 3 | 49,602 |
| Farmington Cmnty Lib | 6319 | 2 | July 1 | 17 | 851,661 | 22 | 342,013 | 2 | 11,458 |
| Farwell, Vlg of | 1805 | 1 | March 1 | 4 | 147,421 | 0 | 0 | 0 | 0 |
| Fenton, City of | 2505 | 8 | July 1 | 43 | 2,648,146 | 33 | 604,984 | 4 | 35,611 |
| Ferndale HC | 6345 | 1 | January 1 | 6 | 362,583 | 0 | 0 | 0 | 0 |
| Ferrysburg, City of | 7106 | 1 | July 1 | 8 | 373,586 | 8 | 45,094 | 2 | 5,042 |
| Flat Rock, City of | 8212 | 6 | July 1 | 55 | 3,141,984 | 43 | 1,119,474 | 5 | 74,535 |
| Flint, Chtr Twp of | 2512 | 4 | January 1 | 58 | 3,195,422 | 21 | 827,674 | 5 | 56,064 |
| Flint Pub Lib | 2518 | 1 | July 1 | 26 | 1,104,573 | 0 | 0 | 0 | 0 |

MERS 12/31/2010 Valuation - Results by Municipality

| Municipality Name | Number | Number of Divisions | Fiscal <br> Year Beginning | Number of Actives | Active Salary | Number of Retirees | Annual Benefits In Force | Number <br> Deferred Vesteds | Annual Deferred Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Flushing, Chtr Twp o | 2515 | 3 | April 1 | 10 | 524,823 | 13 | 339,556 | 3 | 15,729 |
| Flushing, City of | 2502 | 3 | July 1 | 26 | 1,584,087 | 35 | 771,444 | 5 | 78,015 |
| Forsyth Twp | 5212 | 4 | April 1 | 16 | 662,376 | 12 | 302,369 | 7 | 76,174 |
| Fowler, Vlg of | 1904 | 1 | January 1 | 3 | 130,522 | 2 | 22,114 | 1 | 4,786 |
| Fowlerville, Vlg of | 4705 | 1 | February 1 | 7 | 350,116 | 10 | 118,297 | 4 | 28,985 |
| Fowlerville Dist Lib | 4710 | 1 | July 1 | 4 | 142,408 | 0 | 0 | 0 | 0 |
| Frankenmuth, City of | 7306 | 3 | July 1 | 28 | 1,676,286 | 19 | 552,537 | 2 | 21,033 |
| Frankfort, City of | 1002 | 2 | July 1 | 13 | 604,910 | 16 | 164,435 | 1 | 1,128 |
| Franklin, Vlg of | 6323 | 3 | July 1 | 11 | 731,505 | 6 | 167,669 | 1 | 711 |
| Fraser, City of | 5003 | 1 | July 1 | 0 | 0 | 5 | 17,222 | 0 | 0 |
| Fremont, City of | 6203 | 2 | July 1 | 27 | 1,451,346 | 22 | 483,000 | 5 | 59,667 |
| Fremont Area Dist Li | 6209 | 1 | July 1 | 9 | 292,234 | 4 | 50,079 | 2 | 9,623 |
| Gaastra, City of | 3617 | 1 | July 1 | 2 | 74,578 | 0 | 0 | 0 | 0 |
| Garden City, City of | 8255 | 7 | July 1 | 101 | 6,035,482 | 169 | 4,353,551 | 2 | 41,527 |
| Gaylord, City of | 6903 | 3 | July 1 | 33 | 1,581,382 | 15 | 354,530 | 3 | 20,386 |
| Genesee Chtr Twp | 2510 | 1 | January 1 | 38 | 1,955,904 | 40 | 851,409 | 5 | 71,725 |
| Genoa Twp | 4713 | 2 | April 1 | 2 | 180,430 | 0 | 0 | 0 | 0 |
| Gladstone, City of | 2106 | 3 | April 1 | 14 | 831,473 | 37 | 797,365 | 5 | 29,857 |
| Gladwin, City of | 2605 | 2 | July 1 | 7 | 352,282 | 1 | 19,359 | 0 | 0 |
| Gladwin City HC | 2608 | 1 | July 1 | 16 | 534,636 | 7 | 139,254 | 3 | 21,739 |
| Gladwin Co | 2602 | 8 | January 1 | 95 | 3,596,473 | 55 | 649,047 | 27 | 176,718 |
| Gladwin Co Dist Lib | 2607 | 1 | January 1 | 6 | 170,975 | 4 | 39,392 | 1 | 4,412 |
| Gladwin CRC | 2601 | 2 | January 1 | 34 | 1,399,475 | 36 | 840,484 | 1 | 32,415 |
| Gogebic-Iron Wastewa | 2703 | 1 | July 1 | 7 | 345,707 | 4 | 83,236 | 0 | 0 |
| Grand Beach, Vlg of | 1117 | 1 | November 1 | 8 | 361,720 | 0 | 0 | 0 | 0 |
| Grand Blanc, City of | 2513 | 4 | June 1 | 31 | 1,995,518 | 6 | 254,877 | 2 | 47,630 |
| Grand Blanc Chtr Twp | 2511 | 3 | January 1 | 44 | 2,673,831 | 19 | 636,040 | 1 | 898 |
| Grand Haven, City of | 7010 | 7 | July 1 | 198 | 10,511,320 | 141 | 3,368,878 | 32 | 310,863 |
| Grand Ledge, City of | 2312 | 1 | July 1 | 11 | 547,229 | 2 | 79,655 | 0 | 0 |
| Grand Ledge Area ESA | 2310 | 1 | July 1 | 9 | 505,383 | 0 | 0 | 5 | 20,888 |
| Grand Rapids H C | 4108 | 1 | July 1 | 4 | 270,278 | 3 | 46,854 | 0 | 0 |
| Grand Traverse Co | 2803 | 14 | January 1 | 122 | 5,928,845 | 224 | 4,959,976 | 59 | 526,548 |
| Grand Traverse CRC | 2802 | 2 | January 1 | 11 | 467,908 | 51 | 750,655 | 4 | 36,072 |
| Grand Traverse Pavil | 2809 | 4 | January 1 | 362 | 12,125,296 | 98 | 630,088 | 74 | 349,785 |
| Grandville, City of | 4102 | 6 | July 1 | 21 | 1,288,311 | 52 | 1,139,582 | 13 | 156,499 |
| Gratiot Co | 2905 | 5 | January 1 | 64 | 2,706,095 | 89 | 1,054,887 | 18 | 140,245 |
| Gratiot CRC | 2903 | 2 | January 1 | 35 | 1,507,782 | 54 | 933,515 | 0 | 0 |
| Grayling, City of | 2003 | 5 | July 1 | 9 | 404,594 | 16 | 273,244 | 4 | 15,986 |
| Green Oak Chtr Twp | 4708 | 1 | April 1 | 13 | 763,635 | 3 | 87,757 | 0 | 0 |
| Greenville, City of | 5906 | 1 | July 1 | 15 | 978,664 | 10 | 204,557 | 2 | 24,090 |
| Grosse Ile Twp | 8207 | 5 | April 1 | 51 | 3,113,176 | 35 | 1,244,171 | 12 | 118,875 |
| Grosse Pointe Park, | 8201 | 4 | July 1 | 74 | 5,103,036 | 76 | 1,865,616 | 6 | 71,825 |
| Grosse Pte-Clntn Rfs | 5004 | 2 | July 1 | 0 | 0 | 17 | 208,178 | 1 | 18,293 |
| Groveland Twp | 6335 | 3 | April 1 | 11 | 422,871 | 3 | 41,077 | 3 | 29,325 |
| Hackley Pub Lib | 6114 | 1 | July 1 | 6 | 150,231 | 0 | 0 | 0 | 0 |
| Hamburg Twp | 4709 | 1 | July 1 | 13 | 815,768 | 4 | 74,723 | 4 | 74,740 |
| Hamtramck, City of | 8205 | 11 | July 1 | 109 | 6,859,618 | 258 | 7,435,702 | 23 | 208,846 |
| Hamtramck Housing Co | 8250 | 2 | January 1 | 18 | 927,055 | 0 | 0 | 0 | 0 |
| Hancock, City of | 3107 | 1 | July 1 | 13 | 626,872 | 1 | 16,784 | 0 | 0 |
| Harbor Beach, City o | 3201 | 5 | July 1 | 20 | 935,145 | 17 | 262,871 | 5 | 57,500 |
| Harbor Springs, City | 2405 | 1 | January 1 | 24 | 1,249,110 | 6 | 163,636 | 0 | 0 |
| Harbor Springs Area | 2406 | 1 | January 1 | 7 | 359,368 | 0 | 0 | 0 | 0 |
| Harrison, City of | 1803 | 1 | January 1 | 11 | 422,012 | 8 | 95,348 | 1 | 11,992 |
| Hartland Deerfield T | 4716 | 1 | April 1 | 4 | 228,034 | 0 | 0 | 0 | 0 |
| Hastings, City of | 0801 | 9 | July 1 | 64 | 2,197,500 | 64 | 950,411 | 10 | 58,874 |
| Hazel Park, City of | 6336 | 15 | July 1 | 96 | 5,952,467 | 149 | 3,661,993 | 11 | 136,439 |
| Helen Newberry Joy H | 4805 | 1 | January 1 | 31 | 1,421,714 | 81 | 1,130,969 | 14 | 96,720 |
| Henika Dist Lib | 0310 | 1 | January 1 | 2 | 88,921 | 0 | 0 | 0 | 0 |
| Herrick Dist Lib | 7012 | 2 | July 1 | 53 | 2,031,343 | 24 | 240,499 | 5 | 36,400 |
| Hiawatha Bhvrl Hlth | 1707 | 6 | October 1 | 48 | 1,804,855 | 43 | 488,823 | 34 | 259,723 |
| Hillsdale, City of | 3001 | 9 | July 1 | 71 | 3,632,843 | 50 | 783,865 | 14 | 140,435 |
| Hillsdale Co | 3005 | 2 | January 1 | 39 | 1,911,857 | 10 | 165,162 | 3 | 28,108 |
| Hillsdale CRC | 3004 | 2 | January 1 | 46 | 1,733,507 | 27 | 337,209 | 2 | 7,620 |
| Hlth Source of Sagin | 7311 | 8 | January 1 | 247 | 10,123,889 | 217 | 1,850,932 | 83 | 609,742 |
| Holland, City of | 7001 | 9 | July 1 | 259 | 15,525,358 | 300 | 6,569,680 | 49 | 530,010 |
| Holland Area Cmnty P | 7014 | 1 | July 1 | 16 | 612,216 | 2 | 8,154 | 0 | 0 |
| Holland Hospital | 7006 | 1 | July 1 | 0 | 0 | 65 | 253,421 | 12 | 43,143 |
| Holly, Vlg of | 6317 | 2 | July 1 | 19 | 954,753 | 27 | 745,744 | 4 | 54,356 |
| Homer, Vlg of | 1304 | 2 | January 1 | 10 | 382,284 | 6 | 42,996 | 13 | 50,123 |
| Houghton, City of | 3109 | 1 | July 1 | 17 | 765,879 | 1 | 18,068 | 0 | 0 |
| Houghton Co | 3102 | 6 | January 1 | 96 | 4,022,538 | 79 | 1,118,915 | 12 | 96,921 |
| Houghton CRC | 3103 | 1 | January 1 | 8 | 395,764 | 10 | 285,946 | 0 | 0 |
| Houghton Lake Pub Li | 7203 | 1 | July 1 | 6 | 219,783 | 0 | 0 | 1 | 5,123 |
| Howard City, Vlg of | 5902 | 2 | March 1 | 5 | 181,016 | 5 | 47,024 | 2 | 3,447 |
| Howard Twp | 1106 | 1 | April 1 | 3 | 73,332 | 0 | 0 | 0 | 0 |
| Howell, City of | 4702 | 4 | July 1 | 56 | 3,339,441 | 44 | 1,015,358 | 22 | 247,216 |

MERS 12/31/2010 Valuation - Results by Municipality
Participant Information

| Municipality Name | Number | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { Divisions } \\ & \hline \end{aligned}$ | Fiscal Year Beginning | Number of Actives | Active Salary | Number of Retirees | Annual Benefits In Force | Number Deferred Vesteds | Annual Deferred Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Howell Area Fire Aut | 4714 | 2 | July 1 | 5 | 283,767 | 1 | 25,708 | 0 | 0 |
| Howell-Carnegie Dist | 4707 | 1 | July 1 | 11 | 473,923 | 3 | 25,281 | 1 | 3,357 |
| Hudsonville, City of | 7004 | 4 | July 1 | 2 | 104,603 | 8 | 129,498 | 11 | 122,145 |
| Huntington Woods, Ci | 6303 | 6 | July 1 | 27 | 2,031,439 | 46 | 1,538,255 | 3 | 35,452 |
| Hurley Med Ctr | 2521 | 8 | July 1 | 1,098 | 79,276,424 | 419 | 11,309,270 | 123 | 2,158,927 |
| Huron Chtr Twp | 8224 | 3 | January 1 | 51 | 3,032,504 | 14 | 509,360 | 2 | 2,119 |
| Huron Co | 3204 | 5 | January 1 | 377 | 13,674,564 | 231 | 3,228,781 | 55 | 562,967 |
| Huron CRC | 3202 | 3 | January 1 | 63 | 2,839,041 | 67 | 1,513,146 | 1 | 19,604 |
| Imlay City, City of | 4404 | 3 | July 1 | 22 | 1,204,254 | 13 | 231,728 | 9 | 47,939 |
| Independence Twp | 6328 | 1 | January 1 | 32 | 2,280,741 | 3 | 110,786 | 0 | 0 |
| Indianfields Twp | 7905 | 1 | April 1 | 2 | 26,316 | 7 | 24,727 | 4 | 12,942 |
| Ingham Co | 3303 | 27 | January 1 | 1,276 | 62,274,692 | 862 | 15,187,614 | 255 | 2,375,652 |
| Ingham CRC | 3302 | 4 | January 1 | 73 | 3,572,716 | 113 | 2,212,490 | 17 | 209,572 |
| Interurban Trans Aut | 0308 | 1 | October 1 | 6 | 246,030 | 0 | 0 | 0 | 0 |
| Ionia, City of | 3403 | 5 | July 1 | 43 | 2,346,300 | 35 | 694,052 | 14 | 154,379 |
| Ionia Cmnty Lib | 3412 | 2 | July 1 | 5 | 160,578 | 1 | 6,991 | 1 | 14,357 |
| Ionia Co | 3408 | 6 | January 1 | 61 | 2,762,452 | 8 | 123,147 | 9 | 63,499 |
| Ionia CRC | 3404 | 1 | January 1 | 37 | 1,700,070 | 39 | 766,637 | 1 | 7,396 |
| Ionia HC | 3406 | 1 | October 1 | 4 | 174,305 | 1 | 28,870 | 0 | 0 |
| Iosco Co | 3501 | 9 | January 1 | 215 | 6,340,092 | 124 | 1,068,869 | 32 | 183,719 |
| Iosco CRC | 3502 | 2 | January 1 | 33 | 1,375,968 | 26 | 401,058 | 3 | 36,669 |
| Iron Co | 3606 | 10 | January 1 | 331 | 10,278,470 | 136 | 961,532 | 31 | 153,774 |
| Iron Co HC | 3611 | 1 | October 1 | 4 | 206,912 | 2 | 5,619 | 3 | 5,274 |
| Iron CRC | 3602 | 3 | January 1 | 19 | 899,881 | 49 | 746,439 | 1 | 14,616 |
| Iron Mountain, City | 2201 | 3 | July 1 | 25 | 1,161,044 | 48 | 826,561 | 6 | 23,334 |
| Iron Mountain-Kingsf | 2205 | 1 | July 1 | 5 | 229,503 | 2 | 32,209 | 1 | 8,881 |
| Iron River, City of | 3601 | 3 | July 1 | 21 | 926,993 | 35 | 318,381 | 2 | 3,344 |
| Ironwood, City of | 2706 | 5 | July 1 | 48 | 2,213,574 | 88 | 1,228,966 | 3 | 46,532 |
| Isabella Co | 3703 | 9 | October 1 | 200 | 8,170,643 | 149 | 1,800,295 | 68 | 551,874 |
| Isabella Co Trans Co | 3709 | 1 | October 1 | 11 | 486,354 | 2 | 41,200 | 0 | 0 |
| Isabella CRC | 3702 | 2 | October 1 | 36 | 1,512,612 | 40 | 578,974 | 7 | 77,917 |
| Ishpeming, City of | 5204 | 3 | January 1 | 31 | 1,221,199 | 36 | 707,216 | 5 | 42,538 |
| Ishpeming Area Joint | 5207 | 1 | January 1 | 6 | 297,448 | 1 | 5,007 | 1 | 6,750 |
| Ishpeming Twp | 5216 | 1 | April 1 | 11 | 295,922 | 3 | 23,550 | 0 | 0 |
| Ithaca, City of | 2904 | 3 | July 1 | 9 | 378,223 | 15 | 254,892 | 4 | 21,857 |
| Jackson Dist Lib | 3802 | 1 | January 1 | 31 | 1,370,870 | 25 | 226,967 | 10 | 68,828 |
| Jackson Trans Auth | 3805 | 2 | October 1 | 52 | 2,034,888 | 3 | 68,310 | 2 | 26,230 |
| Jordan Valley Dist L | 1507 | 1 | July 1 | 2 | 83,942 | 1 | 2,569 | 0 | 0 |
| Kalamazoo, Chtr Twp | 3907 | 1 | January 1 | 34 | 2,072,158 | 2 | 101,935 |  | 31,174 |
| Kalamazoo Lake Swr \& | 0306 | 1 | March 1 | 8 | 344,661 | 3 | 41,228 | 3 | 12,108 |
| Kalamazoo Pub Lib | 3903 | 2 | July 1 | 60 | 2,695,219 | 4 | 26,990 | 4 | 20,463 |
| Kalkaska, Village of | 4001 | 3 | March 1 | 8 | 335,147 | 11 | 247,862 | 2 | 1,911 |
| Kalkaska Co | 4003 | 7 | January 1 | 116 | 3,738,523 | 52 | 666,351 | 17 | 96,300 |
| Kalkaska CRC | 4002 | 2 | January 1 | 27 | 992,354 | 38 | 604,385 | 4 | 42,587 |
| Kalkaska Pub Trans A | 4004 | 1 | October 1 | 14 | 251,191 | 8 | 89,134 | 3 | 21,179 |
| Keego Harbor, City o | 6322 | 2 | July 1 | 6 | 299,767 | 15 | 227,593 | 5 | 60,783 |
| Kent CRC | 4111 | 1 | October 1 | 0 | 0 | 16 | 79,331 | 0 | 0 |
| Keweenaw Co | 4202 | 3 | January 1 | 18 | 616,903 | 8 | 60,550 | 4 | 27,989 |
| Keweenaw CRC | 4201 | 1 | January 1 | 16 | 707,331 | 21 | 444,190 | 0 | 0 |
| Kinde, Vlg of | 3209 | 1 | February 1 | 1 | 37,035 | 1 | 14,977 | 0 | 0 |
| Kingsford, City of | 2202 | 3 | July 1 | 18 | 790,969 | 18 | 265,767 | 1 | 725 |
| L.M.A.S. Dist Hlth D | 4803 | 2 | October 1 | 27 | 949,896 | 71 | 417,506 | 119 | 484,530 |
| L'Anse, Vlg of | 0705 | 1 | July 1 | 19 | 808,200 | 12 | 260,021 | 3 | 14,736 |
| Lac Vieux Desert Ban | 8402 | 1 | January 1 | 9 | 368,062 | 0 | 0 | 0 | 0 |
| Laingsburg, City of | 7608 | 1 | July 1 | 7 | 231,814 | 0 | 0 | 0 | 0 |
| Lake Co | 4301 | 5 | January 1 | 124 | 4,364,572 | 41 | 360,932 | 26 | 91,939 |
| Lake CRC | 4302 | 1 | January 1 | 31 | 1,116,075 | 37 | 576,170 | 1 | 9,529 |
| Lakeland Lib Coop | 4106 | 1 | October 1 | 6 | 262,222 | 2 | 36,328 | 4 | 35,152 |
| Lake Linden, Vlg of | 3105 | 2 | March 1 | 5 | 167,998 | 4 | 48,164 | 4 | 11,342 |
| Lake Odessa, Village | 3402 | 1 | March 1 | 1 | 74,524 | 2 | 2,577 | 0 | 0 |
| Lake Orion, Vlg of | 6318 | 4 | July 1 | 14 | 667,434 | 12 | 260,045 | 2 | 6,170 |
| Lakeshore Coordinati | 7007 | 1 | October 1 | 11 | 380,368 | 2 | 34,323 | 1 | 3,138 |
| Lansing Chtr Twp | 3320 | 4 | January 1 | 38 | 1,970,775 | 4 | 105,799 | 0 | 0 |
| Lansing HC | 3311 | 1 | July 1 | 37 | 1,694,511 | 28 | 554,038 | 13 | 130,283 |
| Lapeer, City of | 4401 | 5 | July 1 | 82 | 4,541,250 | 46 | 788,156 | 17 | 93,796 |
| Lapeer Co | 4403 | 10 | January 1 | 680 | 24,357,397 | 264 | 3,116,937 | 106 | 781,829 |
| Lapeer CRC | 4402 | 5 | January 1 | 55 | 2,643,075 | 45 | 654,705 | 3 | 25,356 |
| Lapeer Dist Lib | 4410 | 1 | January 1 | 25 | 932,415 | 15 | 195,697 | 1 | 849 |
| Lathrup Vlg, City of | 6311 | 5 | July 1 | 17 | 1,073,339 | 15 | 386,693 | 0 | 0 |
| Laurium, Vlg of | 3104 | 2 | March 1 | 12 | 381,869 | 11 | 82,211 | 2 | 6,349 |
| Lawrence, Vlg of | 8004 | 2 | March 1 | 0 | 0 | 2 | 7,069 | 6 | 8,780 |
| Leelanau Co | 4501 | 4 | January 1 | 108 | 4,829,607 | 47 | 695,588 | 18 | 223,615 |
| Leelanau CRC | 4503 | 1 | January 1 | 33 | 1,248,859 | 19 | 227,215 | 4 | 38,825 |
| Leoni Twp | 3804 | 2 | July 1 | 19 | 727,354 | 21 | 361,643 | 20 | 282,580 |
| Leslie, City of | 3313 | 3 | July 1 | 10 | 401,293 | 3 | 64,601 | 2 | 8,000 |
| Leslie Twp | 3319 | 1 | July 1 | 3 | 88,095 | 0 | 0 | 0 | 0 |

MERS 12/31/2010 Valuation - Results by Municipality
Participant Information

| Municipality Name | Number | Number of Divisions | Fiscal Year Beginning | Number of Actives | Active Salary | Number of Retirees | Annual Benefits <br> In Force | Number Deferred Vesteds | Annual Deferred Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lexington, Vlg of | 7708 | 2 | July 1 | 13 | 493,991 | 3 | 45,407 | 2 | 11,329 |
| Lima Twp | 8112 | 1 | April 1 | 6 | 88,458 | 3 | 3,995 | 0 | 0 |
| Litchfield, City of | 3006 | 1 | July 1 | 8 | 298,821 | 4 | 81,829 | 1 | 7,919 |
| Livingston Co | 4703 | 9 | January 1 | 433 | 22,529,367 | 272 | 4,281,878 | 101 | 908,486 |
| Livingston Co CMH Au | 4712 | 1 | October 1 | 119 | 5,593,772 | 24 | 291,947 | 31 | 297,936 |
| Livingston CRC | 4701 | 2 | January 1 | 66 | 3,583,159 | 43 | 644,343 | 7 | 106,452 |
| Looking Glass Rgnl F | 2311 | 1 | January 1 | 4 | 171,644 | 0 | 0 | 1 | 710 |
| Loutit Dist Lib | 7013 | 1 | July 1 | 18 | 676,176 | 3 | 35,980 | 0 | 0 |
| Lowell, City of | 4104 | 3 | July 1 | 37 | 1,937,068 | 25 | 563,750 | 10 | 163,411 |
| Luce Co | 4804 | 2 | January 1 | 28 | 884,186 | 25 | 235,220 | 17 | 82,552 |
| Luce CRC | 4801 | 4 | January 1 | 18 | 684,094 | 29 | 509,917 | 2 | 27,448 |
| Ludington, City of | 5302 | 1 | January 1 | 49 | 1,977,617 | 62 | 974,387 | 4 | 46,813 |
| Ludington-Mason Dist | 5303 | 1 | January 1 | 12 | 296,535 | 5 | 36,779 | 1 | 7,967 |
| Luna Pier, City of | 5802 | 2 | July 1 | 11 | 504,371 | 12 | 276,841 | 0 | 0 |
| Lyons, Vlg of | 3411 | 1 | March 1 | 2 | 67,758 | 0 | 0 | 0 | 0 |
| Mackinac Co | 4901 | 4 | January 1 | 39 | 1,595,025 | 46 | 486,261 | 17 | 95,741 |
| Mackinac Co HC | 4905 | 1 | July 1 | 0 | 0 | 1 | 21,560 | 1 | 5,856 |
| Mackinac CRC | 4903 | 2 | January 1 | 15 | 593,573 | 35 | 489,990 | 2 | 9,827 |
| Mackinac Straits Hos | 4902 | 2 | July 1 | 206 | 9,111,272 | 59 | 444,215 | 25 | 199,768 |
| Mackinaw City, Vlg o | 1606 | 1 | March 1 | 5 | 260,064 | 1 | 22,778 | 0 | 0 |
| Madison, Chtr Twp of | 4605 | 1 | January 1 | 10 | 470,511 | 4 | 34,628 | 1 | 9,810 |
| Madison Heights, Cit | 6308 | 6 | July 1 | 78 | 4,342,054 | 117 | 2,220,435 | 23 | 241,336 |
| Manistee, City of | 5105 | 5 | July 1 | 49 | 2,381,687 | 43 | 812,804 | 2 | 17,116 |
| Manistee Co | 5101 | 10 | January 1 | 296 | 10,828,369 | 154 | 1,654,170 | 47 | 281,772 |
| Manistee CRC | 5103 | 3 | January 1 | 34 | 1,327,444 | 34 | 600,927 | 5 | 73,559 |
| Manistee HC | 5107 | 1 | January 1 | 8 | 353,453 | 2 | 9,579 | 0 | 0 |
| Manistique, City of | 7504 | 3 | July 1 | 25 | 1,275,376 | 27 | 538,906 | 1 | 963 |
| Manlius Twp | 0311 | 1 | April 1 | 6 | 104,206 | 0 | 0 | 2 | 3,569 |
| Manton, City of | 8304 | 2 | December 1 | 7 | 258,737 | 6 | 91,079 | 2 | 10,368 |
| Marenisco Twp | 2704 | 1 | April 1 | 4 | 140,538 | 0 | 0 | 0 | 0 |
| Marine City, City of | 7704 | 2 | July 1 | 0 | 0 | 3 | 4,313 | 0 | 0 |
| Marion, Vlg of | 6704 | 2 | March 1 | 6 | 184,370 | 5 | 21,370 | 1 | 607 |
| Marlette, City of | 7405 | 1 | July 1 | 7 | 272,359 | 1 | 36,184 | 3 | 55,377 |
| Marquette, City of | 5201 | 12 | July 1 | 128 | 5,750,938 | 115 | 2,270,980 | 15 | 162,039 |
| Marquette Brd of Lig | 5209 | 5 | July 1 | 44 | 3,185,217 | 103 | 2,339,270 | 1 | 24,173 |
| Marquette Chtr Twp | 5215 | 2 | January 1 | 13 | 657,908 | 2 | 32,629 | 3 | 27,281 |
| Marquette Co | 5202 | 13 | January 1 | 314 | 10,345,397 | 246 | 4,262,813 | 59 | 439,730 |
| Marquette Co Arpt | 5210 | 1 | January 1 | 5 | 211,187 | 7 | 112,362 | 1 | 5,143 |
| Marquette Co Solid W | 5213 | 4 | July 1 | 10 | 590,605 | 3 | 40,220 | 3 | 23,723 |
| Marquette Co Trans A | 5206 | 2 | October 1 | 24 | 841,128 | 12 | 116,875 | 1 | 20,227 |
| Marquette CRC | 5211 | 5 | January 1 | 48 | 2,171,382 | 64 | 1,415,184 | 14 | 118,624 |
| Marshall, City of | 1306 | 5 | July 1 | 83 | 4,121,120 | 81 | 1,803,398 | 13 | 176,061 |
| Marshall Area Firefi | 1313 | 1 | July 1 | 14 | 661,960 | 0 | 0 | 0 | 0 |
| Marshall Dist Lib | 1309 | 1 | July 1 | 0 | 0 | 1 | 26,815 | 0 | 0 |
| Mason, City of | 3304 | 4 | July 1 | 43 | 2,113,365 | 29 | 769,168 | 5 | 32,625 |
| Mason Co | 5301 | 7 | January 1 | 151 | 5,927,211 | 161 | 1,946,165 | 43 | 340,369 |
| Mason CRC | 5305 | 2 | January 1 | 34 | 1,415,788 | 11 | 165,064 | 2 | 34,136 |
| Mason-Oceana Cty Enh | 6403 | 2 | January 1 | 17 | 614,244 | 1 | 8,085 | 1 | 12,376 |
| Mastodon Township | 3613 | 1 | April 1 | 0 | 0 | 1 | 5,013 | 0 | 0 |
| MBS Intl Arpt | 0902 | 4 | January 1 | 26 | 1,181,414 | 18 | 476,145 | 2 | 24,842 |
| Meceola Central Disp | 5405 | 1 | July 1 | 15 | 630,087 | 6 | 49,888 | 1 | 3,182 |
| Mecosta Co | 5403 | 8 | January 1 | 60 | 2,678,450 | 106 | 1,384,602 | 45 | 329,381 |
| Mecosta County Gener | 5404 | 2 | January 1 | 0 | 0 | 90 | 588,219 | 103 | 401,007 |
| Mecosta CRC | 5401 | 3 | January 1 | 40 | 1,481,572 | 47 | 580,696 | 6 | 48,704 |
| Melvindale, City of | 8215 | 6 | January 1 | 45 | 2,944,146 | 70 | 2,046,976 | 3 | 65,994 |
| Melvindale HC | 8220 | 1 | January 1 | 6 | 250,483 | 1 | 14,685 | 4 | 43,909 |
| Menominee, City of | 5501 | 3 | September 1 | 34 | 1,203,514 | 46 | 441,419 | 18 | 190,727 |
| Menominee Co | 5502 | 7 | October 1 | 79 | 3,344,885 | 85 | 843,685 | 13 | 97,286 |
| Menominee CRC | 5503 | 3 | January 1 | 9 | 448,322 | 13 | 229,666 | 0 | 0 |
| Meridian Chtr Twp | 3315 | 6 | January 1 | 112 | 6,469,114 | 50 | 1,865,028 | 19 | 156,709 |
| MERS | 2308 | 1 | January 1 | 131 | 9,113,922 | 13 | 139,804 | 9 | 116,856 |
| Metamora Twp | 4409 | 1 | April 1 | 6 | 302,726 | 0 | 0 | 1 | 12,711 |
| Mich. Grand River Wa | 3306 | 1 | January 1 | 0 | 0 | 1 | 2,897 | 0 | 0 |
| Mich Muni Risk Mgmt | 8237 | 1 | July 1 | 1 | 211,980 | 0 | 0 | 0 | 0 |
| Mich S Central Power | 3002 | 3 | July 1 | 48 | 2,996,714 | 16 | 299,574 | 11 | 110,414 |
| Middleville, Vlg of | 0803 | 5 | January 1 | 4 | 185,271 | 8 | 69,411 | 3 | 8,561 |
| Midland, City of | 5601 | 6 | July 1 | 184 | 10,363,303 | 281 | 7,212,112 | 20 | 386,815 |
| Midland Co Central D | 5604 | 2 | January 1 | 19 | 884,813 | 4 | 59,743 | 0 | 0 |
| Midland CRC | 5602 | 3 | January 1 | 31 | 1,544,159 | 54 | 1,044,721 | 2 | 26,191 |
| Mid-Mich Dist Hlth D | 5901 | 5 | October 1 | 76 | 2,957,858 | 42 | 347,810 | 22 | 164,589 |
| Mid-Mich Lib League | 8306 | 1 | October 1 | 2 | 99,821 | 1 | 16,247 | 3 | 32,889 |
| Mid Peninsula Lbry C | 3609 | 1 | October 1 | 0 | 0 | 5 | 31,503 | 0 | 0 |
| Milan, City of | 5801 | 6 | July 1 | 10 | 651,610 | 36 | 744,535 | 8 | 121,719 |
| Milan Lib | 5806 | 1 | July 1 | 3 | 124,589 | 1 | 16,271 | 0 | 0 |
| Milford, Vlg of | 6313 | 6 | July 1 | 26 | 1,664,614 | 22 | 528,381 | 7 | 90,619 |
| Millington, Vlg of | 7904 | 2 | March 1 | 4 | 189,657 | 4 | 42,935 | 2 | 39,583 |

MERS 12/31/2010 Valuation - Results by Municipality
Participant Information

| Municipality Name | Number | Number of Divisions | Fiscal <br> Year Beginning | $\begin{gathered} \text { Number } \\ \text { of } \\ \underline{\text { Actives }} \end{gathered}$ | Active Salary | Number of Retirees | Annual <br> Benefits <br> In Force | Number Deferred Vesteds | Annual Deferred Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Missaukee Co | 5702 | 2 | January 1 | 29 | 1,276,875 | 7 | 102,627 | 5 | 57,937 |
| MOA Solid Waste Mgmt | 6002 | 1 | January 1 | 5 | 166,537 | 1 | 18,616 | 1 | 12,755 |
| Monroe HC | 5808 | 1 | October 1 | 7 | 281,423 | 3 | 95,102 | 0 | 0 |
| Montague, City of | 6112 | 2 | July 1 | 15 | 838,748 | 6 | 135,351 | 2 | 22,577 |
| Montcalm CRC | 5905 | 2 | October 1 | 47 | 1,882,239 | 39 | 866,767 | 5 | 40,860 |
| Montmorency Co | 6001 | 3 | January 1 | 43 | 1,479,758 | 59 | 477,486 | 15 | 91,673 |
| Montrose, City of | 2509 | 2 | July 1 | 7 | 267,426 | 5 | 64,931 | 2 | 9,755 |
| Mt. Morris Chtr Twp | 2503 | 4 | April 1 | 46 | 2,556,216 | 46 | 1,358,277 | 10 | 111,501 |
| Mt. Pleasant, City o | 3701 | 3 | January 1 | 92 | 4,011,819 | 75 | 1,411,397 | 16 | 126,009 |
| Muir, Vlg of | 3405 | 1 | July 1 | 3 | 116,644 | 2 | 19,571 | 0 | 0 |
| Mundy,Chtr Twp of | 2517 | 2 | January 1 | 29 | 1,459,594 | 7 | 213,048 | 1 | 14,292 |
| Munising, City of | 0202 | 4 | July 1 | 23 | 930,838 | 25 | 356,908 | 5 | 36,334 |
| Muskegon, City of | 6116 | 9 | July 1 | 205 | 11,533,186 | 298 | 5,259,346 | 36 | 542,289 |
| Muskegon Area Dist L | 6117 | 1 | January 1 | 15 | 615,627 | 2 | 26,245 | 0 | 0 |
| Muskegon Chtr Twp | 6108 | 4 | April 1 | 52 | 2,671,357 | 30 | 514,974 | 4 | 34,593 |
| Muskegon Co | 6103 | 15 | October 1 | 968 | 43,243,016 | 765 | 11,569,067 | 175 | 1,672,507 |
| Muskegon CRC | 6101 | 6 | January 1 | 77 | 3,442,664 | 88 | 1,562,242 | 10 | 76,816 |
| Muskegon HC | 6113 | 1 | October 1 | 6 | 263,465 | 0 | 0 | 0 | 0 |
| Muskegon Heights, Ci | 6102 | 8 | July 1 | 60 | 2,650,723 | 102 | 2,153,711 | 16 | 144,467 |
| Muskegon Heights HC | 6115 | 1 | April 1 | 7 | 283,763 | 5 | 70,464 | 1 | 10,699 |
| Negaunee, City of | 5203 | 2 | January 1 | 29 | 1,301,945 | 36 | 583,288 | 3 | 50,514 |
| Negaunee Twp | 5217 | 1 | April 1 | 6 | 206,837 | 1 | 7,847 | 0 | 0 |
| Network180 | 4109 | 1 | October 1 | 121 | 6,961,422 | 14 | 474,131 | 19 | 255,971 |
| Newaygo CMH | 6207 | 1 | October 1 | 3 | 257,495 | 3 | 89,019 | 1 | 12,801 |
| Newaygo Co | 6201 | 7 | January 1 | 58 | 2,542,210 | 91 | 1,299,303 | 15 | 86,894 |
| Newaygo CRC | 6212 | 5 | October 1 | 39 | 1,536,633 | 42 | 491,013 | 4 | 29,024 |
| Newaygo MCF | 6204 | 4 | January 1 | 170 | 4,952,589 | 85 | 651,880 | 22 | 152,246 |
| Newaygo Soil \& Wtr C | 6205 | 1 | September 1 | 3 | 91,500 | 0 | 0 | 1 | 6,010 |
| New Baltimore, City | 5016 | 7 | June 1 | 53 | 2,864,341 | 24 | 328,393 | 1 | 10,692 |
| Newberry, Vlg of | 4802 | 5 | January 1 | 16 | 564,470 | 19 | 219,678 | 7 | 45,783 |
| New Buffalo, City of | 1113 | 1 | July 1 | 23 | 1,017,719 | 2 | 39,510 | 1 | 16,225 |
| Niles Dist Lib | 1105 | 1 | October 1 | 14 | 449,933 | 1 | 6,086 | 0 | 0 |
| N Muskegon, City of | 6104 | 3 | December 1 | 16 | 787,298 | 15 | 293,548 | 4 | 16,365 |
| No. Mich. Comm. Mntl | 2403 | 1 | January 1 | 0 | 0 | 1 | 5,300 | 0 | 0 |
| Northern Lakes CMH A | 2808 | 3 | January 1 | 43 | 1,924,158 | 77 | 1,296,255 | 19 | 179,937 |
| Northfield Twp | 8117 | 1 | July 1 | 10 | 541,276 | 0 | 0 | 2 | 17,490 |
| North Houghton Co Wt | 3106 | 1 | January 1 | 4 | 143,505 | 0 | 0 | 1 | 4,337 |
| Northpointe Bhvrl Hl | 2207 | 4 | October 1 | 65 | 3,057,224 | 22 | 286,245 | 30 | 191,161 |
| Northville, City of | 8208 | 6 | July 1 | 21 | 1,430,837 | 55 | 1,174,980 | 9 | 102,875 |
| Northville Chtr Twp | 8230 | 4 | January 1 | 99 | 7,021,949 | 8 | 368,262 | 2 | 33,373 |
| Northville Dist Lib | 8229 | 1 | December 1 | 13 | 690,855 | 5 | 44,333 | 3 | 17,035 |
| Norton Shores, City | 6106 | 6 | July 1 | 86 | 4,973,591 | 85 | 2,074,043 | 7 | 87,059 |
| Norway, City of | 2204 | 4 | July 1 | 28 | 1,599,698 | 41 | 933,782 | 0 | 0 |
| Novi, City of | 6320 | 9 | July 1 | 208 | 13,817,418 | 102 | 3,003,376 | 44 | 580,539 |
| NW Mich Cmnty Hlth A | 1502 | 1 | January 1 | 14 | 730,209 | 28 | 262,284 | 11 | 86,005 |
| NW Rgnl Arpt Comm | 2805 | 2 | January 1 | 19 | 986,877 | 9 | 124,357 | 2 | 28,498 |
| Oceana Co | 6402 | 6 | January 1 | 300 | 11,044,771 | 120 | 1,279,464 | 27 | 197,688 |
| Oceola Twp | 4717 | 1 | July 1 | 12 | 311,620 | 0 | 0 | 1 | 3,686 |
| Ogemaw Co | 6502 | 4 | January 1 | 81 | 2,863,529 | 84 | 1,046,774 | 15 | 103,354 |
| Ogemaw Co EMS Auth | 6508 | 2 | October 1 | 19 | 810,870 | 1 | 9,465 | 1 | 8,279 |
| Ogemaw CRC | 6503 | 2 | January 1 | 32 | 1,263,746 | 34 | 453,666 | 2 | 12,911 |
| Olive Twp | 7009 | 1 | April 1 | 3 | 69,250 | 3 | 19,401 | 0 | 0 |
| Onaway, City of | 7105 | 2 | April 1 | 5 | 205,752 | 2 | 25,670 | 3 | 5,581 |
| Ontonagon, Vlg of | 6603 | 4 | April 1 | 10 | 397,597 | 114 | 1,114,662 | 60 | 455,601 |
| Ontonagon Co | 6602 | 3 | January 1 | 49 | 1,528,771 | 32 | 329,818 | 14 | 55,167 |
| Ontonagon Co Economi | 6605 | 1 | January 1 | 0 | 0 | 1 | 10,371 | 0 | 0 |
| Ontonagon CRC | 6604 | 1 | January 1 | 42 | 1,815,613 | 50 | 955,396 | 0 | 0 |
| Orchard Lake, City o | 6312 | 4 | July 1 | 10 | 720,265 | 8 | 102,532 | 2 | 18,594 |
| Oronoko Chtr Twp | 1114 | 1 | January 1 | 10 | 533,717 | 5 | 100,024 | 3 | 14,874 |
| Osceola Co | 6701 | 6 | January 1 | 112 | 4,247,086 | 55 | 462,272 | 39 | 261,309 |
| Osceola CRC | 6703 | 2 | January 1 | 22 | 824,680 | 37 | 479,470 | 2 | 23,198 |
| Oscoda Chtr Twp | 3503 | 2 | January 1 | 10 | 479,982 | 8 | 178,001 | 3 | 30,630 |
| Oscoda Co | 6801 | 5 | January 1 | 56 | 1,663,390 | 45 | 518,869 | 16 | 95,426 |
| Oscoda Wurtsmith Arp | 6802 | 1 | October 1 | 4 | 163,808 | 1 | 6,911 | 0 | 0 |
| Otisville, Vlg of | 2506 | 2 | July 1 | 5 | 163,445 | 2 | 30,507 | 1 | 8,199 |
| Otsego Co | 6902 | 11 | January 1 | 121 | 4,385,025 | 69 | 812,999 | 43 | 339,555 |
| Otsego CRC | 6901 | 1 | January 1 | 31 | 1,198,321 | 50 | 685,517 | 3 | 25,010 |
| Ottawa Co | 7003 | 15 | January 1 | 875 | 43,300,146 | 389 | 6,727,343 | 141 | 1,429,223 |
| Ottawa Co Central Di | 7008 | 2 | January 1 | 8 | 397,578 | 7 | 70,423 | 3 | 21,295 |
| Ottawa CRC | 7002 | 3 | October 1 | 122 | 6,005,448 | 118 | 2,671,817 | 8 | 64,341 |
| Otter Lake, Vlg of | 4408 | 1 | March 1 | 1 | 32,870 | 0 | 0 | 0 | 0 |
| Owosso, City of | 7607 | 2 | July 1 | 6 | 338,561 | 12 | 306,849 | 0 | 0 |
| Oxford, Township of | 6327 | 1 | January 1 | 14 | 851,839 | 12 | 269,145 | 4 | 43,872 |
| Oxford, Vlg of | 6326 | 1 | July 1 | 13 | 592,631 | 6 | 170,991 | 3 | 22,982 |
| Parchment, City of | 3901 | 1 | January 1 | 11 | 509,365 | 9 | 120,066 | 1 | 6,407 |
| Pathways(Spr.Bhvl.Mn | 5214 | 7 | October 1 | 66 | 3,229,889 | 205 | 3,493,833 | 82 | 587,545 |

MERS 12/31/2010 Valuation - Results by Municipality
Participant Information

| Municipality Name | Number | Number of Divisions | Fiscal Year Beginning | Number of Actives | Active Salary | Number of Retirees | Annual Benefits In Force | Number Deferred Vesteds | Annual Deferred Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Paw Paw, Vlg of | 8002 | 4 | March 1 | 27 | 1,311,022 | 18 | 385,906 | 5 | 45,903 |
| Paw Paw Lk Reg Jnt S | 1103 | 1 | April 1 | 4 | 205,867 | 3 | 53,331 | 1 | 796 |
| Pellston, Vlg of | 2404 | 1 | January 1 | 3 | 78,344 | 0 | 0 | 0 | 0 |
| Pennfield Chtr Twp | 1312 | 1 | April 1 | 14 | 621,729 | 5 | 74,151 | 0 | 0 |
| Pentwater, Vlg of | 6401 | 1 | April 1 | 7 | 265,713 | 9 | 70,139 | 5 | 26,825 |
| Perrinton, Vlg of | 2909 | 1 | March 1 | 1 | 38,408 | 0 | 0 | 1 | 5,875 |
| Petersburg, City of | 5807 | 1 | July 1 | 6 | 229,326 | 0 | 0 | 0 | 0 |
| Petoskey, City of | 2402 | 4 | January 1 | 69 | 3,973,031 | 62 | 898,165 | 11 | 154,460 |
| Pewamo, Vlg of | 3407 | 1 | April 1 | 2 | 85,307 | 0 | 0 | 0 | 0 |
| Pigeon, Vlg of | 3203 | 2 | March 1 | 5 | 203,876 | 4 | 67,835 | 2 | 2,311 |
| Pinckney, Village of | 4706 | 2 | March 1 | 11 | 428,987 | 3 | 55,603 | 3 | 4,876 |
| Pinconning, City of | 0904 | 3 | July 1 | 10 | 339,105 | 15 | 132,298 | 0 | 0 |
| Pittsfield Chtr Twp | 8110 | 8 | January 1 | 123 | 7,153,303 | 22 | 465,640 | 24 | 331,102 |
| Pleasant Ridge, City | 6301 | 4 | July 1 | 9 | 578,975 | 13 | 253,778 | 10 | 45,019 |
| Plymouth, Chtr Twp o | 8238 | 3 | January 1 | 58 | 4,236,759 | 14 | 750,807 | 1 | 43,327 |
| Plymouth, City of | 8202 | 6 | July 1 | 3 | 245,093 | 59 | 1,336,198 | 9 | 64,876 |
| Plymouth Dist Lib | 8221 | 1 | January 1 | 13 | 754,981 | 6 | 128,387 | 1 | 3,365 |
| Pokagon Band of Pota | MI01 | 1 | October 1 | 144 | 6,470,067 | 2 | 29,835 | 0 | 0 |
| Port Austin, Vlg of | 3208 | 1 | March 1 | 5 | 149,766 | 4 | 33,198 | 2 | 1,589 |
| Port Austin Area Swr | 3210 | 1 | March 1 | 0 | 0 | 1 | 5,599 | 1 | 4,934 |
| Port Huron, City of | 7702 | 9 | July 1 | 252 | 14,255,504 | 354 | 9,122,854 | 30 | 357,815 |
| Port Huron Chtr Twp | 7711 | 1 | January 1 | 18 | 821,251 | 4 | 80,038 | 2 | 39,080 |
| Port Huron HC | 7712 | 2 | July 1 | 24 | 1,088,909 | 16 | 266,392 | 3 | 47,211 |
| Portland, City of | 3401 | 3 | July 1 | 35 | 1,935,712 | 31 | 585,773 | 8 | 64,787 |
| Port Sanilac, Vlg of | 7403 | 2 | July 1 | 5 | 178,166 | 1 | 15,549 | 2 | 10,436 |
| Port Sheldon Twp | 7018 | 1 | April 1 | 7 | 162,021 | 0 | 0 | 0 | 0 |
| Potterville, City of | 2313 | 1 | July 1 | 9 | 389,022 | 0 | 0 | 1 | 1,452 |
| Presque Isle Co | 7104 | 5 | January 1 | 69 | 2,265,177 | 46 | 436,291 | 11 | 53,722 |
| Presque Isle CRC | 7101 | 2 | January 1 | 27 | 926,719 | 43 | 602,573 | 0 | 0 |
| PRIDE Youth Programs | 6210 | 1 | October 1 | 1 | 64,998 | 1 | 10,551 | 0 | 0 |
| Ravenna, Vlg of | 6111 | 1 | January 1 | 4 | 189,494 | 0 | 0 | 1 | 5,749 |
| Reading, City of | 3003 | 1 | July 1 | 4 | 138,164 | 2 | 5,005 | 4 | 6,022 |
| Redford, Chtr Twp of | 8209 | 2 | April 1 | 93 | 4,268,956 | 150 | 3,105,016 | 35 | 397,819 |
| Redford Twp Dist Lib | 8228 | 1 | April 1 | 12 | 514,310 | 4 | 84,187 | 1 | 3,659 |
| Reed City, City of | 6702 | 2 | July 1 | 18 | 763,058 | 21 | 234,846 | 12 | 55,760 |
| Richfield Twp (Genes | 2514 | 2 | July 1 | 13 | 635,170 | 3 | 118,709 | 2 | 19,228 |
| Richfield Twp (Rosco | 7202 | 2 | April 1 | 13 | 455,425 | 9 | 123,180 | 6 | 37,565 |
| Richland Twp | 7310 | 2 | April 1 | 13 | 455,061 | 3 | 58,249 | 1 | 265 |
| Richmond, City of | 5012 | 1 | July 1 | 11 | 557,738 | 1 | 25,586 | 0 | 0 |
| Rochester, City of | 6307 | 5 | July 1 | 54 | 3,348,219 | 46 | 1,142,363 | 2 | 8,140 |
| Rockford, City of | 4103 | 3 | July 1 | 32 | 1,667,839 | 13 | 138,538 | 13 | 181,675 |
| Rockwood, City of | 5810 | 2 | July 1 | 13 | 720,067 | 5 | 96,479 | 2 | 14,279 |
| Rogers City, City of | 7102 | 3 | July 1 | 25 | 1,024,384 | 28 | 660,141 | 5 | 35,200 |
| Romeo, Vlg of | 5005 | 5 | July 1 | 24 | 1,165,346 | 17 | 288,536 | 6 | 22,986 |
| Romeo Dist Lib | 5006 | 2 | July 1 | 11 | 471,316 | 12 | 135,108 | 5 | 57,177 |
| Romulus, City of | 8225 | 5 | July 1 | 61 | 4,854,341 | 43 | 2,128,925 | 3 | 44,500 |
| Roosevelt Park, City | 6107 | 4 | December 1 | 12 | 629,711 | 12 | 242,758 | 9 | 62,250 |
| Roscommon Co | 7201 | 4 | January 1 | 131 | 5,118,308 | 59 | 720,270 | 28 | 202,407 |
| Roscommon Co Trans A | 7205 | 1 | October 1 | 20 | 621,686 | 5 | 48,066 | 1 | 6,483 |
| Rose City, City of | 6504 | 1 | July 1 | 4 | 142,426 | 2 | 18,150 | 2 | 6,777 |
| Rose Twp | 6506 | 1 | April 1 | 5 | 43,150 | 2 | 2,320 | 0 | 0 |
| Royal Oak, Chtr Twp | 6306 | 5 | January 1 | 8 | 185,242 | 14 | 209,310 | 2 | 11,813 |
| Saginaw, City of | 7301 | 5 | July 1 | 131 | 6,502,488 | 434 | 10,630,194 | 24 | 409,056 |
| Saginaw, Pub Lib of | 7317 | 1 | July 1 | 21 | 1,001,734 | 2 | 9,177 | 0 | 0 |
| Saginaw Chtr Twp | 7314 | 1 | April 1 | 36 | 2,112,499 | 17 | 716,374 | 5 | 46,877 |
| Saginaw Co | 7303 | 21 | October 1 | 123 | 6,477,736 | 538 | 9,581,626 | 71 | 484,007 |
| Saginaw Co 911 Com C | 7316 | 4 | October 1 | 17 | 1,081,432 | 18 | 431,578 | 3 | 18,935 |
| Saginaw Co CMH | 7318 | 5 | October 1 | 26 | 1,071,866 | 76 | 1,014,344 | 33 | 259,288 |
| Saginaw CRC | 7304 | 4 | January 1 | 70 | 3,418,831 | 95 | 1,794,627 | 6 | 75,851 |
| Saginaw HC | 7321 | 2 | July 1 | 7 | 356,905 | 8 | 183,429 | 4 | 68,443 |
| Saginaw-Midland Muni | 7305 | 2 | July 1 | 10 | 590,031 | 17 | 238,823 | 0 | 0 |
| Saginaw Trans Sys Au | 7319 | 1 | October 1 | 22 | 956,052 | 1 | 2,590 | 5 | 54,056 |
| Saline, City of | 8105 | 4 | July 1 | 60 | 3,716,481 | 47 | 977,564 | 12 | 83,020 |
| Sandusky, City of | 7402 | 3 | March 1 | 20 | 798,545 | 9 | 150,764 | 3 | 33,875 |
| Sandusky Dist Lib | 7404 | 1 | January 1 | 1 | 43,452 | 0 | 0 | 1 | 4,656 |
| Sanilac CRC | 7410 | 1 | January 1 | 47 | 2,076,577 | 0 | 0 | 0 | 0 |
| Saranac HC | 3413 | 1 | April 1 | 5 | 166,399 | 2 | 36,063 | 0 | 0 |
| Saugatuck, City of | 0307 | 2 | July 1 | 8 | 380,376 | 7 | 40,853 | 3 | 20,617 |
| Saugatuck Twp | 0305 | 1 | July 1 | 5 | 194,181 | 4 | 52,414 | 1 | 2,400 |
| Saugatuck Twp Fire D | 0313 | 1 | July 1 | 2 | 77,692 | 1 | 31,803 | 0 | 0 |
| Sault Ste. Marie, Ci | 1701 | 4 | July 1 | 85 | 3,976,589 | 80 | 1,464,555 | 5 | 55,780 |
| Sault Ste. Marie HC | 4906 | 1 | April 1 | 9 | 334,864 | 4 | 81,870 | 1 | 3,195 |
| SCCMUA | 1905 | 2 | January 1 | 15 | 748,370 | 4 | 56,612 | 6 | 86,167 |
| Schoolcraft Co | 7503 | 9 | October 1 | 188 | 5,583,451 | 85 | 1,216,930 | 25 | 185,790 |
| Schoolcraft CRC | 7501 | 1 | January 1 | 23 | 1,145,011 | 37 | 827,178 | 1 | 10,755 |
| Schoolcraft Memorial | 7505 | 5 | January 1 | 52 | 2,385,931 | 59 | 844,642 | 22 | 260,552 |

MERS 12/31/2010 Valuation - Results by Municipality
Participant Information

| Municipality Name | Number | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { Divisions } \end{gathered}$ | Fiscal Year Beginning | Number of Actives | Active Salary | Number of Retirees | Annual Benefits <br> In Force | Number Deferred Vesteds | Annual Deferred Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Scio Twp | 8116 | 2 | April 1 | 18 | 1,034,441 | 1 | 7,043 | 0 | 0 |
| Scottville, City of | 5308 | 1 | July 1 | 8 | 284,681 | 0 | 0 | 0 | 0 |
| Sebewaing, Vlg of | 3205 | 4 | April 1 | 17 | 788,306 | 18 | 407,000 | 3 | 40,400 |
| SEMCOG | 8210 | 1 | July 1 | 61 | 4,010,328 | 50 | 1,291,707 | 30 | 302,508 |
| SE Oakland Co Rsrc R | 6310 | 2 | July 1 | 19 | 832,002 | 25 | 401,844 | 7 | 72,434 |
| SE Oakland Co Wtr Au | 6309 | 2 | July 1 | 21 | 1,260,194 | 20 | 427,939 | 2 | 4,270 |
| Shepherd, Vlg of | 3704 | 2 | March 1 | 6 | 236,292 | 2 | 13,070 | 0 | 0 |
| Shiawassee Co | 7602 | 19 | January 1 | 452 | 15,391,811 | 297 | 4,771,564 | 99 | 777,311 |
| Shiawassee Co CMH | 7609 | 3 | October 1 | 93 | 3,923,318 | 39 | 427,622 | 55 | 266,221 |
| Shiawassee Council o | 7605 | 1 | January 1 | 7 | 179,573 | 4 | 16,863 | 1 | 21,061 |
| Shiawassee CRC | 7601 | 4 | January 1 | 42 | 1,988,518 | 50 | 1,105,425 | 2 | 14,744 |
| Shiawassee Dist Lib | 7606 | 1 | December 1 | 7 | 336,482 | 2 | 73,862 | 1 | 9,313 |
| Sims Whitney Util Au | 0606 | 1 | July 1 | 2 | 67,892 | 0 | 0 | 1 | 1,050 |
| SMART | 8216 | 8 | July 1 | 856 | 39,146,755 | 606 | 9,808,443 | 204 | 1,818,493 |
| South Haven, City of | 8001 | 6 | July 1 | 82 | 4,272,061 | 78 | 1,212,180 | 9 | 84,326 |
| South Haven Area ESA | 8005 | 2 | January 1 | 13 | 773,733 | 5 | 182,658 | 0 | 0 |
| South Lyon, City of | 6315 | 5 | July 1 | 45 | 2,713,288 | 20 | 286,472 | 4 | 27,918 |
| Sparta, Vlg of | 4107 | 5 | January 1 | 17 | 975,006 | 7 | 153,064 | 2 | 7,838 |
| Springfield, City of | 1303 | 4 | July 1 | 28 | 1,510,929 | 33 | 575,635 | 8 | 72,236 |
| Spring Lake, Vlg of | 7015 | 2 | July 1 | 17 | 893,990 | 3 | 110,026 | 0 | 0 |
| Spring Lake Dist Lib | 7016 | 1 | January 1 | 9 | 327,184 | 1 | 10,535 | 0 | 0 |
| St. Charles, Vlg of | 7308 | 2 | April 1 | 10 | 439,113 | 8 | 158,569 | 3 | 18,604 |
| St. Clair, City of | 7703 | 5 | October 1 | 34 | 2,030,810 | 35 | 709,484 | 6 | 63,147 |
| St. Clair HC | 7715 | 1 | January 1 | 2 | 92,209 | 2 | 30,797 | 0 | 0 |
| St. Ignace, City of | 4904 | 3 | January 1 | 32 | 1,295,138 | 17 | 325,888 | 6 | 37,330 |
| St. Johns, City of | 1902 | 2 | July 1 | 25 | 1,303,664 | 38 | 975,213 | 7 | 77,487 |
| St. Louis, City of | 2902 | 4 | July 1 | 11 | 620,970 | 30 | 510,480 | 6 | 34,796 |
| Stambaugh Twp | 3615 | 1 | April 1 | 1 | 37,619 | 1 | 5,302 | 0 | 0 |
| Standish, City of | 0601 | 1 | July 1 | 4 | 164,759 | 10 | 139,325 | 2 | 20,642 |
| Stanton, City of | 5903 | 1 | March 1 | 0 | 0 | 2 | 5,670 | 0 | 0 |
| St Clair Shores HC | 5007 | 1 | January 1 | 9 | 450,810 | 6 | 115,417 | 1 | 11,556 |
| Stephenson, City of | 5504 | 1 | July 1 | 4 | 152,188 | 1 | 9,822 | 0 | 0 |
| Sterling, Vlg of | 0605 | 1 | April 1 | 1 | 33,406 | 1 | 4,976 | 0 | 0 |
| St Joseph Co | 7803 | 3 | January 1 | 174 | 7,212,426 | 84 | 1,078,231 | 40 | 355,792 |
| St Louis HC | 2908 | 1 | July 1 | 4 | 158,131 | 0 | 0 | 0 | 0 |
| Stockbridge, Vlg of | 3316 | 1 | July 1 | 7 | 344,126 | 2 | 29,400 | 2 | 3,281 |
| Sturgis HC | 7805 | 1 | October 1 | 4 | 131,588 | 0 | 0 | 0 | 0 |
| Summit Twp | 3803 | 3 | April 1 | 30 | 1,391,249 | 22 | 519,616 | 4 | 31,552 |
| Sumpter Twp | 8226 | 3 | April 1 | 24 | 1,408,553 | 5 | 135,175 | 2 | 42,393 |
| Superior Chtr Twp | 8109 | 2 | January 1 | 24 | 1,531,569 | 4 | 104,928 | 0 | 0 |
| Superiorland Lib Coo | 5208 | 1 | October 1 | 1 | 33,501 | 2 | 49,417 | 1 | 4,390 |
| Swan Creek Twp | 7309 | 1 | April 1 | 7 | 151,343 | 5 | 22,868 | 0 | 0 |
| Swartz Creek, City o | 2504 | 3 | July 1 | 10 | 572,087 | 18 | 559,715 | 0 | 0 |
| SW Shiawassee ESA | 7611 | 1 | January 1 | 13 | 601,582 | 0 | 0 | 0 | 0 |
| Sylvan Lake, City of | 6314 | 2 | July 1 | 8 | 494,819 | 7 | 97,884 | 1 | 2,842 |
| Tawas Police Auth | 3504 | 1 | July 1 | 5 | 218,458 | 3 | 46,985 | 1 | 7,572 |
| Taylor HC | 8231 | 1 | April 1 | 6 | 277,282 | 0 | 0 | 0 | 0 |
| The Lib Network | 8218 | 3 | October 1 | 32 | 1,124,399 | 26 | 332,592 | 9 | 90,474 |
| Three Rivers, City o | 7801 | 5 | July 1 | 60 | 2,970,636 | 37 | 723,163 | 15 | 195,898 |
| Tittabawassee, Twp o | 7322 | 1 | April 1 | 16 | 841,195 | 0 | 0 | 0 | 0 |
| Traverse Area Dist L | 2807 | 1 | January 1 | 42 | 1,694,188 | 19 | 255,965 | 2 | 15,593 |
| Traverse City, City | 2801 | 6 | July 1 | 141 | 8,152,207 | 151 | 3,107,808 | 28 | 236,247 |
| Trenton, City of | 8203 | 2 | July 1 | 39 | 2,190,662 | 121 | 2,795,801 | 1 | 7,652 |
| Tri-County Aging Con | 3307 | 2 | October 1 | 81 | 2,275,216 | 41 | 288,567 | 18 | 98,809 |
| Trio Council on Agin | 6507 | 1 | October 1 | 0 | 0 | 2 | 15,861 | 2 | 7,439 |
| Tuscarora Twp | 1604 | 1 | July 1 | 8 | 405,837 | 3 | 37,973 | 0 | 0 |
| Tuscola Co | 7902 | 12 | January 1 | 156 | 6,506,213 | 108 | 1,349,283 | 16 | 136,905 |
| Tuscola Co CMH | 7907 | 1 | October 1 | 134 | 4,998,411 | 37 | 365,280 | 15 | 101,702 |
| Tuscola Co Hlth Dpt | 7901 | 1 | January 1 | 28 | 1,205,813 | 22 | 326,620 | 2 | 9,008 |
| Tuscola Co MCF | 7906 | 1 | January 1 | 298 | 8,218,895 | 73 | 501,471 | 20 | 95,501 |
| Tuscola CRC | 7908 | 2 | January 1 | 23 | 1,065,900 | 12 | 191,071 | 1 | 6,765 |
| Twin Cities Pub Sfty | 3610 | 1 | July 1 | 0 | 0 | 2 | 6,415 | 1 | 2,929 |
| Ubly, Vlg of | 3212 | 1 | March 1 | 4 | 167,541 | 1 | 28,716 | 0 | 0 |
| Utica, City of | 5008 | 3 | July 1 | 18 | 974,580 | 7 | 186,750 | 2 | 43,341 |
| Van Buren Co | 8006 | 10 | October 1 | 209 | 9,206,636 | 35 | 642,633 | 6 | 57,155 |
| Van Buren Dist Lib | 8007 | 1 | January 1 | 14 | 535,840 | 2 | 26,843 | 1 | 5,521 |
| Van Buren Twp | 8236 | 2 | January 1 | 51 | 3,488,114 | 2 | 65,623 | 2 | 41,471 |
| Vassar, City of | 7903 | 4 | July 1 | 18 | 903,337 | 16 | 261,687 | 8 | 33,154 |
| Vevay Twp | 3318 | 1 | April 1 | 5 | 84,555 | 2 | 39,705 | 0 | 0 |
| Vicksburg, Vlg of | 3902 | 2 | July 1 | 15 | 764,983 | 10 | 121,423 | 4 | 25,870 |
| Vicksburg Dist Lib | 3904 | 1 | March 1 | 2 | 80,939 | 1 | 3,391 | 0 | 0 |
| Vienna, Chtr Twp of | 2522 | 1 | January 1 | 10 | 388,778 | 1 | 13,567 | 1 | 12,613 |
| Wakefield, City of | 2701 | 1 | July 1 | 16 | 698,856 | 27 | 317,649 | 0 | 0 |
| Walker, City of | 4112 | 3 | July 1 | 39 | 2,305,844 | 44 | 977,669 | 6 | 88,169 |
| Walled Lake, City of | 6324 | 5 | July 1 | 31 | 2,078,294 | 21 | 565,688 | 9 | 115,226 |
| Washtenaw Co | 8113 | 4 | January 1 | 291 | 18,976,106 | 21 | 451,177 | 23 | 363,033 |

MERS 12/31/2010 Valuation - Results by Municipality

|  |  |  |  | Participant Information |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Municipality Name | Number | Number of Divisions | Fiscal Year Beginning | Number of Actives | Active Salary | Number of Retirees | Annual Benefits In Force | Number <br> Deferred Vesteds | Annual <br> Deferred <br> Benefits |
| Washtenaw CRC | 8102 | 2 | October 1 | 130 | 7,190,527 | 108 | 2,337,803 | 9 | 94,965 |
| Wayland, City of | 0304 | 2 | July 1 | 17 | 828,933 | 11 | 139,144 | 7 | 52,625 |
| Wayne, City of | 8242 | 18 | July 1 | 84 | 5,814,240 | 182 | 5,762,573 | 19 | 357,897 |
| Wayne HC | 8252 | 1 | January 1 | 3 | 142,172 | 0 | 0 | 0 | 0 |
| Webberville, Vlg of | 3314 | 1 | April 1 | 3 | 110,476 | 1 | 15,128 | 3 | 18,589 |
| West Branch, City of | 6505 | 3 | July 1 | 19 | 748,064 | 11 | 154,933 | 2 | 30,332 |
| West Branch Dist Lib | 6509 | 1 | July 1 | 3 | 97,562 | 0 | 0 | 0 | 0 |
| Westland, City of | 8211 | 9 | July 1 | 144 | 7,969,308 | 247 | 6,679,864 | 34 | 464,864 |
| Westphalia, Vlg of | 1907 | 1 | March 1 | 2 | 113,529 | 2 | 14,356 | 0 | 0 |
| Wexford Co | 8302 | 11 | January 1 | 126 | 5,362,949 | 80 | 1,160,491 | 18 | 172,812 |
| Wexford CRC | 8303 | 2 | January 1 | 35 | 1,467,599 | 48 | 635,228 | 7 | 107,120 |
| White Cloud, City of | 6206 | 1 | July 1 | 6 | 194,490 | 5 | 44,650 | 3 | 13,524 |
| White Cloud/Sherman | 6211 | 1 | July 1 | 3 | 131,615 | 0 | 0 | 0 | 0 |
| White Cloud Cmnty Li | 6208 | 1 | July 1 | 5 | 130,898 | 1 | 11,946 | 0 | 0 |
| Whitehall, City of | 6105 | 5 | July 1 | 23 | 1,282,025 | 17 | 238,000 | 2 | 13,287 |
| White Lake Chtr Twp | 6325 | 5 | January 1 | 85 | 5,204,989 | 25 | 698,992 | 4 | 80,659 |
| White Pigeon, Vlg of | 7804 | 1 | April 1 | 4 | 178,631 | 0 | 0 | 0 | 0 |
| White Pine Lib | 5904 | 2 | July 1 | 3 | 66,547 | 3 | 12,126 | 0 | 0 |
| Willard Pub Lib | 1308 | 2 | July 1 | 28 | 1,411,642 | 1 | 7,021 | 2 | 14,291 |
| Williamston, City of | 3310 | 4 | July 1 | 16 | 765,918 | 15 | 232,477 | 6 | 76,375 |
| W Iron Co Swr Auth | 3612 | 1 | July 1 | 4 | 169,905 | 3 | 59,819 | 0 | 0 |
| Wixom, City of | 6316 | 6 | July 1 | 57 | 3,509,348 | 27 | 821,484 | 12 | 75,779 |
| W Mich CMH Sys | 5304 | 1 | October 1 | 7 | 371,609 | 19 | 270,134 | 4 | 28,079 |
| W Mich Shoreline Rgn | 6110 | 1 | October 1 | 11 | 568,131 | 2 | 50,056 | 6 | 21,408 |
| Wolverine Lake, Vlg | 6329 | 3 | July 1 | 8 | 516,699 | 8 | 165,556 | 2 | 16,002 |
| W UP Dist Hlth Dept | 3101 | 2 | January 1 | 37 | 1,673,204 | 68 | 535,163 | 61 | 419,848 |
| WUPPDR | 3108 | 1 | October 1 | 9 | 354,713 | 1 | 27,279 | 0 | 0 |
| Ypsilanti, City of | 8101 | 4 | July 1 | 43 | 2,089,039 | 51 | 738,828 | 16 | 116,527 |
| Ypsilanti, Twp of | 8104 | 1 | January 1 | 66 | 3,425,467 | 53 | 962,393 | 6 | 45,072 |
| Ypsilanti Cmnty Util | 8106 | 3 | September 1 | 116 | 7,150,614 | 82 | 2,024,890 | 18 | 268,157 |
| Ypsilanti HC | 8115 | 1 | July 1 | 7 | 356,381 | 1 | 16,891 | 1 | 10,040 |
| Totals - Active Groups | 700 | 2,118 |  | 35,816 | 1,683,983,258 | 26,675 | 480,071,461 | 6,771 | 60,190,498 |
| Totals - Closed Groups | 15 | 19 |  | 0 | 0 | 255 | 1,405,032 | 190 | 646,295 |
| Totals - MERS | 715 | 2,137 |  | 35,816 | 1,683,983,258 | 26,930 | 481,476,493 | 6,961 | 60,836,793 |


| Municipality Name | Number | Employer Liability | Employee Liability | Retired <br> Liability | Total <br> $\underline{\text { Liability }}$ | Value of Assets | Percent <br> Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21st Dist Ct | 8243 | 1,098,911 | 217,493 | 210,529 | 1,526,933 | 1,348,700 | 88.3\% |
| 23rd Jud Dist Ct | 8223 | 1,186,780 | 455,657 | 1,174,181 | 2,816,618 | 2,637,607 | 93.6\% |
| 26th Jud Cir Ct | 0403 | 2,235,341 | 26,635 | 441,768 | 2,703,744 | 3,085,261 | 114.1\% |
| 34th Dist Ct | 8235 | 2,746,258 | 1,400,943 | 1,600,110 | 5,747,311 | 3,988,219 | 69.4\% |
| 35th Dist Ct | 8234 | 1,069,902 | 817,078 | 2,205,518 | 4,092,498 | 3,029,721 | 74.0\% |
| 41 B Dist Ct | 5014 | 2,950,849 | 913,958 | 2,847,914 | 6,712,721 | 5,971,609 | 89.0\% |
| Addison Fire Dept | 4607 | 192,518 | 0 | 0 | 192,518 | 141,311 | 73.4\% |
| Adrian, City of | 4601 | 17,538,694 | 5,170,034 | 28,297,619 | 51,006,347 | 41,256,425 | 80.9\% |
| Aitkin Memorial Dist | 7407 | 104,780 | 2,050 | 0 | 106,830 | 77,844 | 72.9\% |
| Albion, City of | 1301 | 4,958,179 | 146,932 | 7,026,307 | 12,131,418 | 15,272,482 | 125.9\% |
| Alcona Co | 0101 | 5,796,497 | 216,523 | 4,582,033 | 10,595,053 | 7,812,407 | 73.7\% |
| Alger Co | 0203 | 4,609,625 | 89,573 | 5,276,699 | 9,975,897 | 6,881,848 | 69.0\% |
| Alger CRC | 0201 | 2,383,829 | 868,602 | 5,066,494 | 8,318,925 | 6,551,143 | 78.7\% |
| Algonac, City of | 7707 | 2,056,653 | 856,106 | 1,705,733 | 4,618,492 | 4,349,467 | 94.2\% |
| Allegan, City of | 0309 | 2,280,673 | 4,742 | 1,736,856 | 4,022,271 | 2,884,473 | 71.7\% |
| Allegan Co | 0302 | 21,016,044 | 3,199,028 | 28,530,795 | 52,745,867 | 40,573,210 | 76.9\% |
| Allegan CRC | 0301 | 6,520,770 | 1,933,931 | 11,396,283 | 19,850,984 | 15,035,282 | 75.7\% |
| Alma, City of | 2901 | 5,661,779 | 2,407,764 | 10,431,265 | 18,500,808 | 17,268,264 | 93.3\% |
| Almont, Vlg of | 4407 | 1,287,132 | 307,871 | 482,079 | 2,077,082 | 1,613,220 | 77.7\% |
| Alpena Co | 0401 | 8,375,634 | 339,175 | 8,164,477 | 16,879,286 | 12,316,727 | 73.0\% |
| Alpena CRC | 0402 | 4,197,077 | 111,219 | 5,759,348 | 10,067,644 | 8,435,726 | 83.8\% |
| Alpena Rgnl Med Ctr | 0405 | 70,146,632 | 3,128,462 | 62,167,492 | 135,442,586 | 114,287,052 | 84.4\% |
| Alpena Sr Citizens C | 0404 | 0 | 0 | 739,368 | 739,368 | 206,927 | 28.0\% |
| Alpha, Vlg of | 3614 | 41,111 | 0 | 0 | 41,111 | 44,120 | 107.3\% |
| Antrim Co | 0502 | 17,737,147 | 990,087 | 10,996,293 | 29,723,527 | 25,204,532 | 84.8\% |
| Antrim CRC | 0501 | 4,446,564 | 56,512 | 7,127,959 | 11,631,035 | 6,379,544 | 54.8\% |
| Arenac Co | 0603 | 4,883,582 | 426,380 | 4,104,651 | 9,414,613 | 7,157,393 | 76.0\% |
| Arenac CRC | 0604 | 2,093,953 | 67,284 | 3,775,348 | 5,936,585 | 2,733,788 | 46.0\% |
| Ash Twp | 5804 | 50,612 | 27,422 | 488,036 | 566,070 | 284,749 | 50.3\% |
| Auburn, City of | 0905 | 422,943 | 127,399 | 1,295,646 | 1,845,988 | 1,399,532 | 75.8\% |
| Au Gres, City of | 0602 | 1,137,048 | 0 | 905,443 | 2,042,491 | 1,484,900 | 72.7\% |
| Bad Axe, City of | 3211 | 2,143,626 | 476,086 | 3,377,102 | 5,996,814 | 3,603,693 | 60.1\% |
| Bad Axe Area Dist Li | 3214 | 36,860 | 15,715 | 0 | 52,575 | 44,390 | 84.4\% |
| Bancroft, Vlg of | 7610 | 11,767 | 0 | 76,618 | 88,385 | 34,712 | 39.3\% |
| Bangor, City of | 8003 | 758,854 | 141,591 | 556,657 | 1,457,102 | 2,211,149 | 151.7\% |
| Baraga, Vlg of | 0704 | 579,406 | 0 | 2,306,662 | 2,886,068 | 1,666,029 | 57.7\% |
| Baraga Co | 0702 | 2,969,507 | 2,950 | 2,458,107 | 5,430,564 | 4,109,662 | 75.7\% |
| Baraga Co Memorial H | 0703 | 10,453,623 | 193,541 | 5,755,675 | 16,402,839 | 11,698,137 | 71.3\% |
| Baraga CRC | 0701 | 2,536,408 | 802 | 4,013,357 | 6,550,567 | 4,181,549 | 63.8\% |
| Baroda Twp | 1109 | 133,060 | 42,162 | 0 | 175,222 | 164,050 | 93.6\% |
| Barry Co | 0802 | 27,869,618 | 2,079,811 | 19,296,795 | 49,246,224 | 36,553,096 | 74.2\% |
| Barry Co CMH Auth | 0804 | 4,061,656 | 290,898 | 0 | 4,352,554 | 3,823,827 | 87.9\% |
| Barry Eaton Dist Hlt | 2303 | 7,724,181 | 1,215,648 | 6,190,660 | 15,130,489 | 11,935,277 | 78.9\% |
| Barton Hills, Vlg of | 8107 | 534,754 | 0 | 125,059 | 659,813 | 576,959 | 87.4\% |
| Bates Twp | 3616 | 223,322 | 0 | 112,127 | 335,449 | 157,922 | 47.1\% |
| Bath Charter Twp | 1909 | 2,547,919 | 861,346 | 1,110,266 | 4,519,531 | 3,639,181 | 80.5\% |
| Battle Creek, City o | 1302 | 45,521,896 | 5,679,657 | 70,766,231 | 121,967,784 | 88,247,674 | 72.4\% |
| Bay Area Trans Auth | 2810 | 887,710 | 1,234,940 | 480,695 | 2,603,345 | 2,912,564 | 111.9\% |
| Bay City, City of | 0901 | 14,782,176 | 2,044,758 | 48,809,511 | 65,636,445 | 45,270,314 | 69.0\% |
| Bay City HC | 0906 | 3,097,288 | 234,036 | 2,832,284 | 6,163,608 | 5,869,316 | 95.2\% |
| Bayliss Pub Lib | 1702 | 139,623 | 73,366 | 474,868 | 687,857 | 1,228,981 | 178.7\% |
| Bay Metro Trans Auth | 0907 | 7,331,212 | 339,592 | 2,585,284 | 10,256,088 | 6,497,544 | 63.4\% |
| Beecher Metro Dist S | 2501 | 1,446,250 | 127,248 | 4,440,140 | 6,013,638 | 4,572,389 | 76.0\% |
| Belding, City of | 3410 | 594,164 | 263,884 | 660,560 | 1,518,608 | 963,764 | 63.5\% |
| Belleville, City of | 8213 | 2,828,938 | 175,605 | 3,700,222 | 6,704,765 | 3,993,656 | 59.6\% |
| Benzie/Leelanau Dist | 4504 | 455,085 | 0 | 65,432 | 520,517 | 510,328 | 98.0\% |
| Benzie Co | 1003 | 7,521,026 | 369,300 | 4,257,717 | 12,148,043 | 9,023,218 | 74.3\% |
| Benzie Co Comm on Ag | 1006 | 401,491 | 0 | 406,532 | 808,023 | 590,568 | 73.1\% |
| Benzie Co MCF (The M | 1004 | 3,169,640 | 484,044 | 2,718,641 | 6,372,325 | 5,948,944 | 93.4\% |
| Benzie CRC | 1001 | 2,193,852 | 166,842 | 4,280,125 | 6,640,819 | 3,067,334 | 46.2\% |


| Municipality Name | Number | Employer Liability | Employee Liability | Retired Liability | Total Liability | Actuarial Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzie Shores Dist L | 1005 | 160,895 | 21,071 | 0 | 181,966 | 177,886 | 97.8\% |
| Benzie Trans Auth | 1007 | 105,246 | 118,859 | 0 | 224,105 | 304,033 | 135.7\% |
| Berkley, City of | 6304 | 4,887,701 | 1,180,036 | 12,973,163 | 19,040,900 | 14,601,510 | 76.7\% |
| Berrien Springs, Vlg | 1102 | 851,684 | 42,315 | 340,234 | 1,234,233 | 1,560,507 | 126.4\% |
| Bessemer, City of | 2702 | 730,913 | 227,794 | 1,305,888 | 2,264,595 | 1,725,010 | 76.2\% |
| Beverly Hills, Vlg o | 6321 | 1,417,636 | 32,095 | 1,959,363 | 3,409,094 | 2,746,799 | 80.6\% |
| Big Rapids, City of | 5402 | 5,776,102 | 396,022 | 7,400,313 | 13,572,437 | 8,610,397 | 63.4\% |
| Big Rapids HC | 5406 | 1,021,205 | 34,267 | 417,145 | 1,472,617 | 1,076,792 | 73.1\% |
| Bingham Farms, Vlg o | 6332 | 172,011 | 0 | 0 | 172,011 | 147,299 | 85.6\% |
| Birch Run, Vlg of | 7315 | 497,122 | 299,166 | 68,178 | 864,466 | 785,130 | 90.8\% |
| Bishop Intl Arpt Aut | 2507 | 3,350,884 | 941,635 | 1,306,387 | 5,598,906 | 4,967,694 | 88.7\% |
| Blackman Chtr Twp | 3806 | 2,805,654 | 1,567,004 | 2,435,864 | 6,808,522 | 4,132,047 | 60.7\% |
| Blissfield, Vlg of | 4606 | 2,017,640 | 339,223 | 403,303 | 2,760,166 | 2,926,191 | 106.0\% |
| Bloomfield Hills, Ci | 6302 | 5,463,605 | 1,192,259 | 20,981,086 | 27,636,950 | 15,693,243 | 56.8\% |
| Blue Water Area Tran | 7709 | 4,188,619 | 43,797 | 693,432 | 4,925,848 | 3,899,043 | 79.2\% |
| Boyne City, City of | 1506 | 3,286,490 | 1,066,995 | 4,300,190 | 8,653,675 | 7,037,213 | 81.3\% |
| Branch Co | 1205 | 1,307,656 | 324,624 | 75,416 | 1,707,696 | 1,668,578 | 97.7\% |
| Brandon Chtr Twp of | 6333 | 1,605,192 | 1,286,392 | 2,104,296 | 4,995,880 | 4,389,854 | 87.9\% |
| Breckenridge, Vlg of | 2906 | 253,732 | 82,196 | 2,114,951 | 2,450,879 | 1,320,957 | 53.9\% |
| Bridgeport Chtr Twp | 7307 | 3,242,941 | 342,992 | 3,370,669 | 6,956,602 | 5,064,055 | 72.8\% |
| Bridgman, City of | 1110 | 720,680 | 345,430 | 163,674 | 1,229,784 | 818,767 | 66.6\% |
| Brighton, Chtr Twp o | 4711 | 587,550 | 222,769 | 658,772 | 1,469,091 | 1,618,096 | 110.1\% |
| Brighton, City of | 4704 | 7,804,575 | 227,402 | 6,196,130 | 14,228,107 | 10,003,808 | 70.3\% |
| Brighton Area Fire A | 4715 | 123,078 | 0 | 215,352 | 338,430 | 360,080 | 106.4\% |
| Britton, Vlg of | 4604 | 85,250 | 86,824 | 0 | 172,074 | 311,388 | 181.0\% |
| Brnch-Hillsdale-St J | 1202 | 4,799,980 | 1,139,151 | 4,758,460 | 10,697,591 | 11,006,427 | 102.9\% |
| Bronson, City of | 1204 | 718,554 | 447,104 | 288,672 | 1,454,330 | 886,237 | 60.9\% |
| Brooklyn, Vlg of | 3801 | 258,672 | 102,913 | 757,369 | 1,118,954 | 802,336 | 71.7\% |
| Brownstown, Chtr Twp | 8247 | 8,356,541 | 4,634,287 | 2,096,634 | 15,087,462 | 11,467,354 | 76.0\% |
| Buchanan, City of | 1101 | 1,728,084 | 807,030 | 3,541,557 | 6,076,671 | 7,166,602 | 117.9\% |
| Buchanan Dist Lib | 1108 | 65,734 | 47,254 | 36,040 | 149,028 | 170,567 | 114.5\% |
| Buena Vista Chtr Twp | 7312 | 4,408,481 | 939,416 | 4,244,237 | 9,592,134 | 7,439,583 | 77.6\% |
| Burton, City of | 2508 | 7,531,586 | 1,849,948 | 32,058,275 | 41,439,809 | 18,678,791 | 45.1\% |
| Butman Township | 2604 | 133,752 | 0 | 0 | 133,752 | 139,204 | 104.1\% |
| Cadillac, City of | 8301 | 5,457,563 | 90,095 | 6,348,454 | 11,896,112 | 11,570,167 | 97.3\% |
| Cadillac/Wexford Tra | 8305 | 968,750 | 10,448 | 362,406 | 1,341,604 | 1,226,859 | 91.4\% |
| Calhoun Co | 1311 | 7,576,751 | 8,928,750 | 12,803,100 | 29,308,601 | 15,388,120 | 52.5\% |
| Calhoun CRC | 1307 | 6,029,864 | 172,679 | 8,046,075 | 14,248,618 | 8,302,992 | 58.3\% |
| Canton, Chtr Twp of | 8233 | 28,050,493 | 20,569,213 | 40,944,910 | 89,564,616 | 63,798,032 | 71.2\% |
| Canton Pub Lib | 8232 | 824,797 | 768,275 | 1,684,962 | 3,278,034 | 3,258,270 | 99.4\% |
| Capac, Vlg of | 7705 | 908,708 | 6,534 | 1,222,651 | 2,137,893 | 878,187 | 41.1\% |
| Capital Area Dist Li | 3317 | 2,324,605 | 1,441,483 | 680,941 | 4,447,029 | 4,661,960 | 104.8\% |
| Capital Region Arprt | 3305 | 4,251,901 | 301,643 | 9,745,075 | 14,298,619 | 10,668,427 | 74.6\% |
| Carleton, Vlg of | 5805 | 540,730 | 194,216 | 173,724 | 908,670 | 727,064 | 80.0\% |
| Carrollton Twp | 7320 | 1,669,270 | 611,805 | 400,605 | 2,681,680 | 2,092,759 | 78.0\% |
| Cascade Chtr Twp | 4110 | 2,309,800 | 1,626,842 | 1,976,404 | 5,913,046 | 4,668,584 | 79.0\% |
| Caseville, Vlg of | 3207 | 1,065,797 | 343,068 | 125,668 | 1,534,533 | 1,324,341 | 86.3\% |
| Caspian, City of | 3608 | 444,504 | 0 | 590,844 | 1,035,348 | 658,180 | 63.6\% |
| Cass Co | 1402 | 7,926,465 | 3,664,596 | 8,254,952 | 19,846,013 | 16,610,546 | 83.7\% |
| Cass Co MCF | 1403 | 1,558,296 | 1,132,425 | 1,412,950 | 4,103,671 | 5,061,384 | 123.3\% |
| Cass Dist Lib | 1404 | 320,665 | 110,320 | 204,474 | 635,459 | 738,713 | 116.2\% |
| Cedar Springs, City | 4105 | 873,467 | 389,167 | 1,493,117 | 2,755,751 | 2,445,321 | 88.7\% |
| Center Line, City of | 5001 | 723,880 | 365,811 | 7,105,851 | 8,195,542 | 5,284,044 | 64.5\% |
| Central Lake, Vlg of | 0504 | 55,451 | 0 | 0 | 55,451 | 73,384 | 132.3\% |
| Central Mich Dist Hl | 3705 | 8,817,927 | 1,318,744 | 7,362,358 | 17,499,029 | 12,673,241 | 72.4\% |
| Charlevoix, City of | 1505 | 5,907,197 | 895,930 | 5,011,967 | 11,815,094 | 8,225,348 | 69.6\% |
| Charlevoix Co | 1503 | 19,500,880 | 382,164 | 16,201,695 | 36,084,739 | 26,464,711 | 73.3\% |
| Charlevoix CRC | 1501 | 2,714,196 | 112,864 | 3,792,996 | 6,620,056 | 4,911,755 | 74.2\% |
| Charlotte, City of | 2301 | 8,293,313 | 1,210,312 | 8,193,668 | 17,697,293 | 12,722,907 | 71.9\% |
| Charlotte Dist Lib | 2309 | 239,050 | 18,343 | 324,935 | 582,328 | 344,696 | 59.2\% |


| Municipality Name | Number | Employer Liability | Employee Liability | Retired Liability | Total Liability | Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cheboygan, City of | 1602 | 2,840,656 | 873,989 | 5,787,686 | 9,502,331 | 6,614,937 | 69.6\% |
| Cheboygan Co | 1603 | 9,760,857 | 2,021,171 | 7,646,847 | 19,428,875 | 15,496,805 | 79.8\% |
| Cheboygan CRC | 1601 | 4,726,681 | 661,590 | 11,202,341 | 16,590,612 | 9,795,044 | 59.0\% |
| Chelsea, City of | 8103 | 3,631,369 | 0 | 6,726,305 | 10,357,674 | 6,899,433 | 66.6\% |
| Chelsea Area Fire Au | 8118 | 120,502 | 60,020 | 0 | 180,522 | 207,767 | 115.1\% |
| Chesaning, Vlg of | 7313 | 795,767 | 5,535 | 1,936,908 | 2,738,210 | 605,860 | 22.1\% |
| Chesterfield Twp | 5009 | 10,291,816 | 7,090,877 | 4,530,435 | 21,913,128 | 16,445,891 | 75.1\% |
| Chesterfield Twp Lib | 5010 | 465,729 | 253,211 | 91,440 | 810,380 | 983,264 | 121.3\% |
| Chikaming Twp | 1112 | 720,082 | 562,783 | 276,542 | 1,559,407 | 1,191,982 | 76.4\% |
| Chippewa Co | 1703 | 18,167,045 | 2,081,566 | 14,544,760 | 34,793,371 | 27,576,324 | 79.3\% |
| Chippewa CRC | 1704 | 6,035,352 | 58,854 | 9,396,118 | 15,490,324 | 10,499,225 | 67.8\% |
| Chippewa River Dist | 3707 | 1,089,576 | 377,726 | 610,194 | 2,077,496 | 2,230,090 | 107.3\% |
| Chocolay, Chtr Twp o | 5218 | 226,350 | 593,415 | 0 | 819,765 | 828,807 | 101.1\% |
| Clare, City of | 1804 | 2,153,027 | 536,460 | 4,470,472 | 7,159,959 | 4,979,097 | 69.5\% |
| Clare Co | 1802 | 5,588,839 | 2,291,361 | 8,378,778 | 16,258,978 | 13,797,052 | 84.9\% |
| Clare Co Trans Auth | 1806 | 11,357 | 38,974 | 93,603 | 143,934 | 107,588 | 74.7\% |
| Clare CRC | 1801 | 2,182,453 | 794,791 | 6,440,452 | 9,417,696 | 7,633,299 | 81.1\% |
| Clawson, City of | 6305 | 5,761,480 | 258,296 | 16,521,999 | 22,541,775 | 11,127,090 | 49.4\% |
| Clay Twp | 7706 | 3,257,233 | 1,103,961 | 2,648,030 | 7,009,224 | 4,794,210 | 68.4\% |
| Clearwater Twp | 4005 | 67,642 | 0 | 0 | 67,642 | 86,682 | 128.1\% |
| Clinton, Vlg of | 4602 | 2,385,589 | 284,649 | 931,392 | 3,601,630 | 4,343,588 | 120.6\% |
| Clinton Co | 1903 | 23,841,990 | 1,238,793 | 15,617,499 | 40,698,282 | 32,003,087 | 78.6\% |
| Clinton CRC | 1901 | 6,710,272 | 1,217,975 | 8,788,366 | 16,716,613 | 12,131,735 | 72.6\% |
| Clinton-Eaton-Ingham | 3308 | 64,479,447 | 11,692,740 | 46,075,596 | 122,247,783 | 93,777,936 | 76.7\% |
| Clinton Twp | 5002 | 23,568,676 | 6,691,587 | 29,148,473 | 59,408,736 | 43,871,158 | 73.8\% |
| Clio, City of | 2523 | 396,500 | 156,650 | 325,737 | 878,887 | 756,339 | 86.1\% |
| CMH of Central Mich | 3708 | 28,541,302 | 1,473,074 | 16,952,593 | 46,966,969 | 46,269,658 | 98.5\% |
| Coldwater, City of | 1201 | 4,939,782 | 1,581,884 | 8,474,127 | 14,995,793 | 13,162,268 | 87.8\% |
| Coldwater Brd of Pub | 1203 | 4,043,776 | 407,405 | 6,212,684 | 10,663,865 | 7,289,470 | 68.4\% |
| Coleman, City of | 5603 | 860,138 | 225,055 | 883,140 | 1,968,333 | 1,302,282 | 66.2\% |
| Coloma, City of | 1118 | 190,933 | 324,121 | 0 | 515,054 | 443,567 | 86.1\% |
| Coloma Chtr Twp | 1107 | 323,026 | 266,994 | 1,285,051 | 1,875,071 | 1,224,953 | 65.3\% |
| Columbiaville, Vlg o | 4406 | 112,475 | 98,545 | 128,625 | 339,645 | 282,789 | 83.3\% |
| Coopersville, City o | 7005 | 781,583 | 308,079 | 902,474 | 1,992,136 | 1,895,305 | 95.1\% |
| Coopersville Area Di | 7011 | 117,701 | 28,749 | 121,740 | 268,190 | 228,785 | 85.3\% |
| Corunna City of | 7604 | 1,656,884 | 26,889 | 2,822,239 | 4,506,012 | 2,940,369 | 65.3\% |
| Corwith Twp | 6904 | $(1,862)$ | 41,019 | 0 | 39,157 | 52,409 | 133.8\% |
| Covert Twp | 8010 | 561,740 | 330,512 | 0 | 892,252 | 603,185 | 67.6\% |
| Crawford Co | 2001 | 6,706,120 | 711,971 | 8,166,898 | 15,584,989 | 11,108,402 | 71.3\% |
| Crawford Co Trans Au | 2004 | 1,456,625 | 305,047 | 2,096,076 | 3,857,748 | 3,547,246 | 92.0\% |
| Crawford CRC | 2002 | 1,893,359 | 347,705 | 4,778,015 | 7,019,079 | 3,218,339 | 45.9\% |
| Croswell, City of | 7401 | 3,865,761 | 189,790 | 4,114,791 | 8,170,342 | 4,947,321 | 60.6\% |
| Crystal Falls, City | 3603 | 2,509,014 | 5,334 | 5,442,430 | 7,956,778 | 5,689,534 | 71.5\% |
| Crystal Falls Comm H | 3618 | 1,259,926 | 20,384 | 2,239,813 | 3,520,123 | 3,541,204 | 100.6\% |
| Ctrl Dispatch of Mus | 6109 | 1,979,737 | 733,356 | 1,955,086 | 4,668,179 | 4,217,827 | 90.4\% |
| Ctrl Wayne Co Sanita | 8214 | 194,449 | 17,396 | 2,882,829 | 3,094,674 | 2,774,810 | 89.7\% |
| Davison, City of | 2516 | 3,025,042 | 589,863 | 4,948,750 | 8,563,655 | 5,341,539 | 62.4\% |
| Davison Richfield Sr | 2525 | 0 | 0 | 259,919 | 259,919 | 162,685 | 62.6\% |
| Davison Twp | 2519 | 3,740,739 | 2,230,941 | 2,419,824 | 8,391,504 | 6,233,396 | 74.3\% |
| Dearborn, City of | 8251 | 826,743 | 663,859 | 0 | 1,490,602 | 2,265,031 | 152.0\% |
| Deerfield, Vlg of | 4603 | 775,743 | 54,608 | 375,259 | 1,205,610 | 1,092,500 | 90.6\% |
| Delta Chtr Twp | 2306 | 2,360,572 | 1,290,152 | 7,415,069 | 11,065,793 | 7,762,220 | 70.1\% |
| Delta Co | 2102 | 14,107,381 | 240,900 | 14,071,265 | 28,419,546 | 24,160,170 | 85.0\% |
| Delta CRC | 2105 | 5,021,447 | 0 | 4,024,182 | 9,045,629 | 4,658,791 | 51.5\% |
| Delta-Menominee Dist | 2103 | 4,548,233 | 380,588 | 1,401,683 | 6,330,504 | 7,726,485 | 122.1\% |
| Detour, Vlg of | 1706 | 86,225 | 0 | 348,148 | 434,373 | 213,246 | 49.1\% |
| Detroit HC | 8241 | 7,355,429 | 37,172 | 1,620,980 | 9,013,581 | 9,509,562 | 105.5\% |
| DeWitt, City of | 1908 | 1,137,031 | 96,842 | 2,701,158 | 3,935,031 | 2,272,643 | 57.8\% |
| DeWitt Chtr Twp | 1910 | 2,320,864 | 693,542 | 157,481 | 3,171,887 | 2,691,395 | 84.9\% |
| Dexter, Vlg of | 8217 | 1,597,105 | 410,805 | 1,362,224 | 3,370,134 | 2,635,286 | 78.2\% |


| Municipality Name | Number | Employer Liability | Employee Liability | Retired <br> Liability | Total Liability | Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dexter Area Fire Dep | 8219 | 207,860 | 38,917 | 309,190 | 555,967 | 433,067 | 77.9\% |
| Dexter Twp | 8111 | 141,217 | 208,492 | 237,087 | 586,796 | 534,206 | 91.0\% |
| Dickinson Co | 2206 | 8,679,891 | 1,599,557 | 13,840,916 | 24,120,364 | 17,817,068 | 73.9\% |
| Dickinson CRC | 2203 | 3,425,961 | 48,321 | 5,135,203 | 8,609,485 | 5,835,842 | 67.8\% |
| Dickinson-Iron Dist | 3605 | 3,196,406 | 229,013 | 3,723,857 | 7,149,276 | 5,512,166 | 77.1\% |
| Dimondale, Vlg of | 2304 | 485,633 | 9,547 | 247,346 | 742,526 | 618,420 | 83.3\% |
| Dist Hlth Dept \#10 | 5104 | 9,458,360 | 201,882 | 13,527,718 | 23,187,960 | 15,134,985 | 65.3\% |
| Dist Hlth Dept \# 2 | 6501 | 3,329,158 | 291,244 | 2,562,407 | 6,182,809 | 5,110,018 | 82.6\% |
| Dist Hlth Dept \# 4 | 7103 | 6,098,140 | 1,494,273 | 7,117,442 | 14,709,855 | 11,914,784 | 81.0\% |
| Douglas, City of Vlg | 0303 | 1,119,817 | 18,328 | 1,078,342 | 2,216,487 | 1,691,096 | 76.3\% |
| Dowagiac, City of | 1401 | 5,139,688 | 2,116,720 | 9,280,088 | 16,536,496 | 9,107,259 | 55.1\% |
| Dowagiac Dist Lib | 1406 | 30,401 | 21,129 | 0 | 51,530 | 48,283 | 93.7\% |
| Dowagiac HC | 1405 | 107,992 | 2,464 | 0 | 110,456 | 158,798 | 143.8\% |
| Drummond Island Twp | 1708 | 84,064 | 634 | 0 | 84,698 | 82,379 | 97.3\% |
| Dryden, Vlg of | 4405 | 105,294 | 33,979 | 233,595 | 372,868 | 340,442 | 91.3\% |
| Dundee, Vlg of | 5803 | 385,995 | 255,855 | 3,113,722 | 3,755,572 | 2,829,725 | 75.3\% |
| Durand, City of | 7603 | 2,358,044 | 103,719 | 1,933,912 | 4,395,675 | 3,606,527 | 82.0\% |
| East China Chtr Twp | 7701 | 2,635,171 | 625,551 | 3,162,322 | 6,423,044 | 4,965,401 | 77.3\% |
| East Grand Rapids, Ci | 4101 | 2,822,223 | 502,360 | 14,580,792 | 17,905,375 | 11,286,065 | 63.0\% |
| East Jordan, City of | 1504 | 2,013,456 | 378,473 | 1,381,076 | 3,773,005 | 3,273,848 | 86.8\% |
| East Lansing, City o | 3301 | 51,162,296 | 2,519,209 | 97,556,368 | 151,237,873 | 99,154,337 | 65.6\% |
| Eastpointe HC | 5011 | 309,221 | 210,413 | 0 | 519,634 | 497,634 | 95.8\% |
| Eaton Co | 2302 | 33,245,525 | 18,603,852 | 59,829,372 | 111,678,749 | 72,180,067 | 64.6\% |
| Eaton Co MCF | 2305 | 3,132,595 | 1,147,735 | 2,130,607 | 6,410,937 | 6,274,531 | 97.9\% |
| Eaton Rapids, City o | 2307 | 6,240,834 | 943,790 | 3,802,441 | 10,987,065 | 7,840,158 | 71.4\% |
| Eau Claire, Vlg of | 1104 | 71,287 | 53,262 | 294,065 | 418,614 | 220,622 | 52.7\% |
| Ecorse, City of | 8206 | 8,948,821 | 58,050 | 33,708,491 | 42,715,362 | 21,982,172 | 51.5\% |
| Elderly Housing Corp | 8222 | 401,674 | 154,237 | 1,823,381 | 2,379,292 | 1,783,246 | 74.9\% |
| Elkton, Vlg of | 3206 | 166,027 | 127,537 | 259,283 | 552,847 | 501,281 | 90.7\% |
| Elsie, Village of | 1906 | 55,958 | 40,937 | 13,464 | 110,359 | 170,414 | 154.4\% |
| Emmett, Chtr Twp | 1310 | 1,143,746 | 836,932 | 1,321,331 | 3,302,009 | 2,681,445 | 81.2\% |
| Emmett CRC | 2401 | 3,027,861 | 130,015 | 9,376,159 | 12,534,035 | 8,099,319 | 64.6\% |
| Erie, Township of | 5812 | 568 | 2,265 | 0 | 2,833 | 5,819 | 205.4\% |
| Escanaba, City of | 2101 | 13,284,045 | 198,192 | 17,173,156 | 30,655,393 | 20,106,664 | 65.6\% |
| Essexville, City of | 0903 | 2,196,319 | 596,901 | 3,345,829 | 6,139,049 | 5,118,960 | 83.4\% |
| E UP Reg Planning \& | 1709 | 13,999 | 44,532 | 0 | 58,531 | 97,434 | 166.5\% |
| E UP Trans Auth | 1705 | 3,473,837 | 0 | 4,755,362 | 8,229,199 | 5,197,307 | 63.2\% |
| Evart, City of | 6705 | 880,564 | 25,376 | 610,140 | 1,516,080 | 1,395,358 | 92.0\% |
| Evart Local Dev Fina | 6706 | 29,755 | 0 | 426,857 | 456,612 | 322,418 | 70.6\% |
| Farmington, City of | 6343 | 7,201,712 | 581,738 | 12,284,370 | 20,067,820 | 19,901,055 | 99.2\% |
| Farmington Cmnty Lib | 6319 | 3,052,800 | 532,121 | 3,586,985 | 7,171,906 | 6,868,462 | 95.8\% |
| Farwell, Vlg of | 1805 | 223,859 | 121,760 | 0 | 345,619 | 278,492 | 80.6\% |
| Fenton, City of | 2505 | 5,908,504 | 258,743 | 6,378,868 | 12,546,115 | 9,395,038 | 74.9\% |
| Ferndale HC | 6345 | 398,129 | 164,464 | 0 | 562,593 | 275,624 | 49.0\% |
| Ferrysburg, City of | 7106 | 847,387 | 251,810 | 382,521 | 1,481,718 | 1,118,857 | 75.5\% |
| Flat Rock, City of | 8212 | 6,607,231 | 2,447,970 | 10,424,211 | 19,479,412 | 11,751,533 | 60.3\% |
| Flint, Chtr Twp of | 2512 | 7,776,107 | 3,387,969 | 11,384,775 | 22,548,851 | 17,316,160 | 76.8\% |
| Flint Pub Lib | 2518 | 903,330 | 0 | 0 | 903,330 | 1,042,074 | 115.4\% |
| Flushing, Chtr Twp o | 2515 | 1,533,317 | 307,036 | 3,747,838 | 5,588,191 | 3,277,147 | 58.6\% |
| Flushing, City of | 2502 | 6,163,430 | 115,593 | 8,989,249 | 15,268,272 | 9,271,955 | 60.7\% |
| Forsyth Twp | 5212 | 1,742,347 | 475,957 | 3,352,926 | 5,571,230 | 3,079,928 | 55.3\% |
| Fowler, Vlg of | 1904 | 115,878 | 0 | 186,345 | 302,223 | 232,674 | 77.0\% |
| Fowlerville, Vlg of | 4705 | 1,143,282 | 330,222 | 1,381,695 | 2,855,199 | 3,034,319 | 106.3\% |
| Fowlerville Dist Lib | 4710 | 179,844 | 50,486 | 0 | 230,330 | 226,621 | 98.4\% |
| Frankenmuth, City of | 7306 | 4,981,206 | 940,241 | 6,165,307 | 12,086,754 | 9,523,092 | 78.8\% |
| Frankfort, City of | 1002 | 912,823 | 141,197 | 1,640,925 | 2,694,945 | 1,700,246 | 63.1\% |
| Franklin, Vlg of | 6323 | 2,705,904 | 248,515 | 2,163,775 | 5,118,194 | 3,437,920 | 67.2\% |
| Fraser, City of | 5003 | 0 | 0 | 147,573 | 147,573 | 256,848 | 174.0\% |
| Fremont, City of | 6203 | 3,955,427 | 2,526 | 5,136,480 | 9,094,433 | 6,166,902 | 67.8\% |
| Fremont Area Dist Li | 6209 | 408,599 | 7,908 | 506,613 | 923,120 | 739,383 | 80.1\% |


| Municipality Name | Number | Employer Liability | Employee Liability | Retired <br> $\underline{\text { Liability }}$ | Total <br> Liability | Value of Assets | Percent <br> Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gaastra, City of | 3617 | 164,392 | 0 | 0 | 164,392 | 145,604 | 88.6\% |
| Garden City, City of | 8255 | 13,881,020 | 3,628,809 | 54,006,178 | 71,516,007 | 56,048,316 | 78.4\% |
| Gaylord, City of | 6903 | 5,523,186 | 332,566 | 3,612,169 | 9,467,921 | 6,971,310 | 73.6\% |
| Genesee Chtr Twp | 2510 | 4,179,074 | 652,585 | 10,476,703 | 15,308,362 | 8,376,269 | 54.7\% |
| Genoa Twp | 4713 | 119,557 | 1,861 | 0 | 121,418 | 124,684 | 102.7\% |
| Gladstone, City of | 2106 | 3,150,509 | 12,105 | 8,002,248 | 11,164,862 | 5,952,408 | 53.3\% |
| Gladwin, City of | 2605 | 462,773 | 121,933 | 223,634 | 808,340 | 793,931 | 98.2\% |
| Gladwin City HC | 2608 | 1,048,250 | 292,230 | 1,405,096 | 2,745,576 | 1,800,323 | 65.6\% |
| Gladwin Co | 2602 | 6,434,323 | 1,572,573 | 7,311,887 | 15,318,783 | 12,344,322 | 80.6\% |
| Gladwin Co Dist Lib | 2607 | 354,283 | 77,488 | 481,650 | 913,421 | 775,129 | 84.9\% |
| Gladwin CRC | 2601 | 2,558,475 | 921,755 | 8,973,409 | 12,453,639 | 8,666,124 | 69.6\% |
| Gogebic-Iron Wastewa | 2703 | 906,571 | 261,981 | 934,086 | 2,102,638 | 1,660,683 | 79.0\% |
| Grand Beach, Vlg of | 1117 | 20,378 | 27,832 | 0 | 48,210 | 68,463 | 142.0\% |
| Grand Blanc, City of | 2513 | 5,019,854 | 2,015,858 | 2,789,257 | 9,824,969 | 7,366,783 | 75.0\% |
| Grand Blanc Chtr Twp | 2511 | 5,086,454 | 1,393,249 | 8,568,505 | 15,048,208 | 8,753,631 | 58.2\% |
| Grand Haven, City of | 7010 | 30,722,123 | 4,641,940 | 35,689,964 | 71,054,027 | 69,335,021 | 97.6\% |
| Grand Ledge, City of | 2312 | 754,840 | 674,689 | 888,994 | 2,318,523 | 1,477,226 | 63.7\% |
| Grand Ledge Area ESA | 2310 | 722,509 | 123,299 | 0 | 845,808 | 764,004 | 90.3\% |
| Grand Rapids H C | 4108 | 1,001,396 | 109,453 | 430,917 | 1,541,766 | 1,162,772 | 75.4\% |
| Grand Traverse Co | 2803 | 25,065,224 | 312,733 | 55,018,636 | 80,396,593 | 40,647,280 | 50.6\% |
| Grand Traverse CRC | 2802 | 2,477,047 | 32,503 | 7,103,382 | 9,612,932 | 6,953,860 | 72.3\% |
| Grand Traverse Pavil | 2809 | 12,668,204 | 1,804,150 | 5,915,156 | 20,387,510 | 17,086,794 | 83.8\% |
| Grandville, City of | 4102 | 5,671,545 | 400,684 | 10,977,860 | 17,050,089 | 11,785,439 | 69.1\% |
| Gratiot Co | 2905 | 11,877,066 | 254,373 | 10,964,508 | 23,095,947 | 17,282,772 | 74.8\% |
| Gratiot CRC | 2903 | 3,928,663 | 668,197 | 10,014,158 | 14,611,018 | 10,681,620 | 73.1\% |
| Grayling, City of | 2003 | 768,305 | 16,784 | 2,902,444 | 3,687,533 | 2,677,849 | 72.6\% |
| Green Oak Chtr Twp | 4708 | 1,716,546 | 316,907 | 996,595 | 3,030,048 | 1,841,034 | 60.8\% |
| Greenville, City of | 5906 | 2,362,581 | 686,155 | 2,006,736 | 5,055,472 | 3,945,408 | 78.0\% |
| Grosse Ile Twp | 8207 | 10,089,995 | 276,130 | 13,970,332 | 24,336,457 | 17,351,355 | 71.3\% |
| Grosse Pointe Park, | 8201 | 13,332,680 | 4,163,584 | 17,656,961 | 35,153,225 | 25,093,872 | 71.4\% |
| Grosse Pte-Clntn Rfs | 5004 | 88,221 | 112,695 | 2,126,450 | 2,327,366 | 2,563,738 | 110.2\% |
| Groveland Twp | 6335 | 527,692 | 356,160 | 378,057 | 1,261,909 | 1,177,281 | 93.3\% |
| Hackley Pub Lib | 6114 | 80,158 | 0 | 0 | 80,158 | 82,553 | 103.0\% |
| Hamburg Twp | 4709 | 1,647,154 | 275,225 | 797,067 | 2,719,446 | 1,811,497 | 66.6\% |
| Hamtramck, City of | 8205 | 15,198,862 | 4,462,408 | 76,365,209 | 96,026,479 | 57,054,195 | 59.4\% |
| Hamtramck Housing Co | 8250 | 649,289 | 181,563 | 0 | 830,852 | 943,354 | 113.5\% |
| Hancock, City of | 3107 | 1,423,980 | 571,464 | 185,890 | 2,181,334 | 1,636,274 | 75.0\% |
| Harbor Beach, City o | 3201 | 1,942,435 | 884,077 | 2,819,152 | 5,645,664 | 5,387,399 | 95.4\% |
| Harbor Springs, City | 2405 | 1,188,021 | 856,151 | 1,781,368 | 3,825,540 | 2,557,271 | 66.8\% |
| Harbor Springs Area | 2406 | 259,025 | 313,123 | 0 | 572,148 | 526,285 | 92.0\% |
| Harrison, City of | 1803 | 1,380,791 | 245,375 | 949,024 | 2,575,190 | 2,078,100 | 80.7\% |
| Hartland Deerfield T | 4716 | 280,000 | 0 | 0 | 280,000 | 274,091 | 97.9\% |
| Hastings, City of | 0801 | 5,523,962 | 251,148 | 8,902,183 | 14,677,293 | 9,169,295 | 62.5\% |
| Hazel Park, City of | 6336 | 15,616,839 | 7,590,199 | 34,699,611 | 57,906,649 | 42,751,408 | 73.8\% |
| Helen Newberry Joy H | 4805 | 3,949,506 | 672,626 | 11,034,950 | 15,657,082 | 11,405,975 | 72.8\% |
| Henika Dist Lib | 0310 | 280,011 | 616 | 0 | 280,627 | 387,075 | 137.9\% |
| Herrick Dist Lib | 7012 | 4,325,939 | 40,815 | 1,951,968 | 6,318,722 | 5,224,788 | 82.7\% |
| Hiawatha Bhvrl Hlth | 1707 | 7,372,141 | 612,018 | 5,658,062 | 13,642,221 | 12,527,721 | 91.8\% |
| Hillsdale, City of | 3001 | 8,619,477 | 2,574,697 | 6,697,950 | 17,892,124 | 18,431,442 | 103.0\% |
| Hillsdale Co | 3005 | 2,341,200 | 1,384,394 | 1,688,566 | 5,414,160 | 3,237,600 | 59.8\% |
| Hillsdale CRC | 3004 | 3,388,445 | 1,273,216 | 3,310,435 | 7,972,096 | 5,714,830 | 71.7\% |
| Hlth Source of Sagin | 7311 | 19,289,253 | 759,606 | 15,820,579 | 35,869,438 | 32,380,332 | 90.3\% |
| Holland, City of | 7001 | 45,930,583 | 2,631,918 | 61,526,679 | 110,089,180 | 80,894,618 | 73.5\% |
| Holland Area Cmnty P | 7014 | 262,353 | 134,477 | 117,220 | 514,050 | 550,320 | 107.1\% |
| Holland Hospital | 7006 | 314,007 | 7,795 | 1,754,300 | 2,076,102 | 2,167,913 | 104.4\% |
| Holly, Vlg of | 6317 | 2,355,233 | 72,464 | 9,408,714 | 11,836,411 | 7,532,241 | 63.6\% |
| Homer, Vlg of | 1304 | 737,539 | 35,373 | 363,713 | 1,136,625 | 1,222,599 | 107.6\% |
| Houghton, City of | 3109 | 280,295 | 1,548,006 | 174,675 | 2,002,976 | 2,329,368 | 116.3\% |
| Houghton Co | 3102 | 10,309,933 | 1,118,656 | 10,307,495 | 21,736,084 | 14,426,950 | 66.4\% |
| Houghton CRC | 3103 | 1,192,094 | 0 | 2,683,721 | 3,875,815 | 2,824,797 | 72.9\% |


| Municipality Name | Number | Employer Liability | Employee $\underline{\text { Liability }}$ | Retired <br> Liability | Total <br> Liability | Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Houghton Lake Pub Li | 7203 | 396,016 | 0 | 0 | 396,016 | 455,809 | 115.1\% |
| Howard City, Vlg of | 5902 | 314,175 | 0 | 424,178 | 738,353 | 591,187 | 80.1\% |
| Howard Twp | 1106 | 62,622 | 0 | 0 | 62,622 | 68,246 | 109.0\% |
| Howell, City of | 4702 | 7,135,201 | 1,586,175 | 10,347,073 | 19,068,449 | 12,271,346 | 64.4\% |
| Howell Area Fire Aut | 4714 | 410,237 | 43,583 | 278,513 | 732,333 | 588,524 | 80.4\% |
| Howell-Carnegie Dist | 4707 | 808,397 | 2,907 | 185,465 | 996,769 | 958,559 | 96.2\% |
| Hudsonville, City of | 7004 | 666,995 | 71,052 | 1,308,240 | 2,046,287 | 1,330,867 | 65.0\% |
| Huntington Woods, Ci | 6303 | 5,010,302 | 1,284,882 | 15,143,853 | 21,439,037 | 11,752,110 | 54.8\% |
| Hurley Med Ctr | 2521 | 122,666,254 | 23,183,952 | 116,458,435 | 262,308,641 | 168,796,785 | 64.4\% |
| Huron Chtr Twp | 8224 | 6,697,126 | 2,222,199 | 6,497,951 | 15,417,276 | 10,500,487 | 68.1\% |
| Huron Co | 3204 | 28,993,710 | 8,676,541 | 34,683,570 | 72,353,821 | 62,955,031 | 87.0\% |
| Huron CRC | 3202 | 5,310,469 | 1,891,491 | 15,419,383 | 22,621,343 | 17,587,046 | 77.7\% |
| Imlay City, City of | 4404 | 3,173,432 | 1,400 | 2,358,080 | 5,532,912 | 4,281,212 | 77.4\% |
| Independence Twp | 6328 | 5,247,692 | 857,066 | 1,155,677 | 7,260,435 | 5,800,075 | 79.9\% |
| Indianfields Twp | 7905 | 107,159 | 0 | 175,145 | 282,304 | 33,568 | 11.9\% |
| Ingham Co | 3303 | 109,981,394 | 40,956,348 | 153,196,741 | 304,134,483 | 227,832,071 | 74.9\% |
| Ingham CRC | 3302 | 10,633,384 | 314,793 | 21,880,973 | 32,829,150 | 23,041,690 | 70.2\% |
| Interurban Trans Aut | 0308 | 846,763 | 12,653 | 0 | 859,416 | 980,601 | 114.1\% |
| Ionia, City of | 3403 | 7,302,311 | 325,984 | 7,204,794 | 14,833,089 | 7,838,963 | 52.8\% |
| Ionia Cmnty Lib | 3412 | 353,266 | 0 | 65,838 | 419,104 | 351,981 | 84.0\% |
| Ionia Co | 3408 | 3,554,338 | 1,023,182 | 1,346,385 | 5,923,905 | 5,011,598 | 84.6\% |
| Ionia CRC | 3404 | 3,983,535 | 647,080 | 8,833,019 | 13,463,634 | 4,988,708 | 37.1\% |
| Ionia HC | 3406 | 637,146 | 56,877 | 272,998 | 967,021 | 794,005 | 82.1\% |
| Iosco Co | 3501 | 11,458,491 | 400,405 | 9,652,110 | 21,511,006 | 16,210,721 | 75.4\% |
| Iosco CRC | 3502 | 3,014,895 | 1,187,655 | 3,887,456 | 8,090,006 | 6,480,513 | 80.1\% |
| Iron Co | 3606 | 14,043,233 | 2,311,671 | 8,871,848 | 25,226,752 | 21,754,906 | 86.2\% |
| Iron Co HC | 3611 | 433,789 | 0 | 41,764 | 475,553 | 401,789 | 84.5\% |
| Iron CRC | 3602 | 3,684,931 | 0 | 7,325,366 | 11,010,297 | 5,290,643 | 48.1\% |
| Iron Mountain, City | 2201 | 2,546,294 | 667,881 | 8,092,000 | 11,306,175 | 6,244,120 | 55.2\% |
| Iron Mountain-Kingsf | 2205 | 350,178 | 161,654 | 344,813 | 856,645 | 594,248 | 69.4\% |
| Iron River, City of | 3601 | 3,889,353 | 186,808 | 3,307,101 | 7,383,262 | 5,788,788 | 78.4\% |
| Ironwood, City of | 2706 | 4,390,758 | 1,529,215 | 11,679,925 | 17,599,898 | 10,625,468 | 60.4\% |
| Isabella Co | 3703 | 26,587,911 | 1,257,892 | 16,985,173 | 44,830,976 | 34,699,232 | 77.4\% |
| Isabella Co Trans Co | 3709 | 813,735 | 365,505 | 423,549 | 1,602,789 | 1,685,919 | 105.2\% |
| Isabella CRC | 3702 | 3,075,650 | 1,234,797 | 5,988,611 | 10,299,058 | 8,330,650 | 80.9\% |
| Ishpeming, City of | 5204 | 2,990,418 | 965,001 | 8,186,418 | 12,141,837 | 7,994,750 | 65.8\% |
| Ishpeming Area Joint | 5207 | 733,525 | 138,864 | 33,722 | 906,111 | 826,113 | 91.2\% |
| Ishpeming Twp | 5216 | 451,260 | 358,980 | 251,570 | 1,061,810 | 919,534 | 86.6\% |
| Ithaca, City of | 2904 | 848,432 | 353,776 | 2,686,568 | 3,888,776 | 2,984,564 | 76.7\% |
| Jackson Dist Lib | 3802 | 2,236,171 | 735,567 | 2,318,240 | 5,289,978 | 5,924,844 | 112.0\% |
| Jackson Trans Auth | 3805 | 3,207,964 | 870,632 | 641,904 | 4,720,500 | 4,263,970 | 90.3\% |
| Jordan Valley Dist L | 1507 | 133,705 | 0 | 18,884 | 152,589 | 170,768 | 111.9\% |
| Kalamazoo, Chtr Twp | 3907 | 2,656,139 | 5,024,981 | 1,238,230 | 8,919,350 | 7,865,857 | 88.2\% |
| Kalamazoo Lake Swr \& | 0306 | 773,730 | 5,574 | 359,641 | 1,138,945 | 958,959 | 84.2\% |
| Kalamazoo Pub Lib | 3903 | 3,434,524 | 57,081 | 314,568 | 3,806,173 | 3,397,515 | 89.3\% |
| Kalkaska, Village of | 4001 | 1,222,080 | 155,236 | 3,041,160 | 4,418,476 | 2,868,125 | 64.9\% |
| Kalkaska Co | 4003 | 7,637,420 | 479,063 | 7,409,714 | 15,526,197 | 13,389,467 | 86.2\% |
| Kalkaska CRC | 4002 | 2,466,217 | 741 | 6,273,504 | 8,740,462 | 4,621,053 | 52.9\% |
| Kalkaska Pub Trans A | 4004 | 604,633 | 74,565 | 971,410 | 1,650,608 | 1,661,238 | 100.6\% |
| Keego Harbor, City o | 6322 | 1,004,601 | 104,977 | 2,506,030 | 3,615,608 | 2,413,574 | 66.8\% |
| Kent CRC | 4111 | 0 | 0 | 400,508 | 400,508 | 184,123 | 46.0\% |
| Keweenaw Co | 4202 | 1,361,455 | 172,452 | 547,233 | 2,081,140 | 1,645,886 | 79.1\% |
| Keweenaw CRC | 4201 | 1,602,034 | 1,437 | 4,438,463 | 6,041,934 | 4,030,527 | 66.7\% |
| Kinde, Vlg of | 3209 | 10,443 | 10,516 | 179,570 | 200,529 | 80,843 | 40.3\% |
| Kingsford, City of | 2202 | 2,603,488 | 599,920 | 3,022,999 | 6,226,407 | 5,201,705 | 83.5\% |
| L.M.A.S. Dist Hlth D | 4803 | 3,644,315 | 3,008 | 3,945,015 | 7,592,338 | 7,931,154 | 104.5\% |
| L'Anse, Vlg of | 0705 | 1,923,860 | 257,989 | 2,813,056 | 4,994,905 | 3,056,710 | 61.2\% |
| Lac Vieux Desert Ban | 8402 | 147,066 | 3,142 | 0 | 150,208 | 138,343 | 92.1\% |
| Laingsburg, City of | 7608 | 206,845 | 74,974 | 0 | 281,819 | 308,612 | 109.5\% |
| Lake Co | 4301 | 6,777,394 | 400,913 | 3,306,838 | 10,485,145 | 8,659,629 | 82.6\% |


| Municipality Name | Number | Employer Liability | Employee Liability | Retired Liability | Total Liability | Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lake CRC | 4302 | 2,723,641 | 256,546 | 5,812,159 | 8,792,346 | 5,658,574 | 64.4\% |
| Lakeland Lib Coop | 4106 | 442,573 | 151,611 | 329,486 | 923,670 | 878,262 | 95.1\% |
| Lake Linden, Vlg of | 3105 | 532,199 | 0 | 471,655 | 1,003,854 | 701,518 | 69.9\% |
| Lake Odessa, Village | 3402 | 70,281 | 47,311 | 13,060 | 130,652 | 192,789 | 147.6\% |
| Lake Orion, Vlg of | 6318 | 1,346,078 | 338,863 | 2,355,743 | 4,040,684 | 3,051,725 | 75.5\% |
| Lakeshore Coordinati | 7007 | 533,115 | 0 | 350,677 | 883,792 | 1,001,879 | 113.4\% |
| Lansing Chtr Twp | 3320 | 1,336,573 | 3,076,727 | 1,198,214 | 5,611,514 | 5,611,511 | 100.0\% |
| Lansing HC | 3311 | 3,027,629 | 0 | 5,523,412 | 8,551,041 | 7,544,527 | 88.2\% |
| Lapeer, City of | 4401 | 10,692,283 | 94,764 | 7,890,453 | 18,677,500 | 14,131,184 | 75.7\% |
| Lapeer Co | 4403 | 48,257,713 | 2,082,731 | 29,520,413 | 79,860,857 | 73,526,774 | 92.1\% |
| Lapeer CRC | 4402 | 5,497,518 | 2,153,759 | 5,905,876 | 13,557,153 | 8,747,320 | 64.5\% |
| Lapeer Dist Lib | 4410 | 1,571,827 | 314,925 | 2,180,942 | 4,067,694 | 2,965,601 | 72.9\% |
| Lathrup Vlg, City of | 6311 | 1,845,384 | 660,090 | 3,863,737 | 6,369,211 | 5,439,945 | 85.4\% |
| Laurium, Vlg of | 3104 | 961,785 | 0 | 735,417 | 1,697,202 | 1,139,083 | 67.1\% |
| Lawrence, Vlg of | 8004 | 71,669 | 0 | 51,525 | 123,194 | 150,512 | 122.2\% |
| Leelanau Co | 4501 | 12,013,406 | 320,937 | 6,465,953 | 18,800,296 | 13,857,631 | 73.7\% |
| Leelanau CRC | 4503 | 2,469,910 | 723,857 | 2,161,323 | 5,355,090 | 3,225,089 | 60.2\% |
| Leoni Twp | 3804 | 758,331 | 1,042,758 | 3,507,747 | 5,308,836 | 4,618,100 | 87.0\% |
| Leslie, City of | 3313 | 485,213 | 191,649 | 661,694 | 1,338,556 | 1,149,842 | 85.9\% |
| Leslie Twp | 3319 | 130,114 | 105,410 | 0 | 235,524 | 197,388 | 83.8\% |
| Lexington, Vlg of | 7708 | 1,204,434 | 264,235 | 451,573 | 1,920,242 | 1,419,430 | 73.9\% |
| Lima Twp | 8112 | 203,605 | 106,192 | 21,596 | 331,393 | 334,147 | 100.8\% |
| Litchfield, City of | 3006 | 300,602 | 202,451 | 926,752 | 1,429,805 | 1,050,925 | 73.5\% |
| Livingston Co | 4703 | 48,884,746 | 833,209 | 47,208,627 | 96,926,582 | 71,482,681 | 73.7\% |
| Livingston Co CMH Au | 4712 | 10,681,547 | 558,665 | 2,656,659 | 13,896,871 | 14,276,661 | 102.7\% |
| Livingston CRC | 4701 | 10,512,845 | 684,993 | 5,971,643 | 17,169,481 | 16,024,500 | 93.3\% |
| Looking Glass Rgnl F | 2311 | 91,400 | 0 | 0 | 91,400 | 126,968 | 138.9\% |
| Loutit Dist Lib | 7013 | 865,820 | 177,644 | 380,498 | 1,423,962 | 1,331,007 | 93.5\% |
| Lowell, City of | 4104 | 4,263,401 | 1,581,718 | 5,230,147 | 11,075,266 | 8,500,217 | 76.7\% |
| Luce Co | 4804 | 3,145,461 | 193,854 | 2,381,399 | 5,720,714 | 3,626,235 | 63.4\% |
| Luce CRC | 4801 | 2,788,692 | 1,131 | 5,720,386 | 8,510,209 | 4,621,692 | 54.3\% |
| Ludington, City of | 5302 | 6,122,412 | 2,528 | 10,028,387 | 16,153,327 | 12,893,316 | 79.8\% |
| Ludington-Mason Dist | 5303 | 1,262,027 | 6,182 | 328,014 | 1,596,223 | 1,514,295 | 94.9\% |
| Luna Pier, City of | 5802 | 859,354 | 246,360 | 3,409,112 | 4,514,826 | 2,749,579 | 60.9\% |
| Lyons, Vlg of | 3411 | 57,367 | 27,722 | 0 | 85,089 | 107,678 | 126.5\% |
| Mackinac Co | 4901 | 7,821,310 | 83,872 | 5,391,467 | 13,296,649 | 10,366,555 | 78.0\% |
| Mackinac Co HC | 4905 | 59,566 | 2,285 | 332,416 | 394,267 | 212,544 | 53.9\% |
| Mackinac CRC | 4903 | 2,028,615 | 5,434 | 5,594,311 | 7,628,360 | 4,183,263 | 54.8\% |
| Mackinac Straits Hos | 4902 | 13,010,897 | 1,171,257 | 4,455,546 | 18,637,700 | 13,942,100 | 74.8\% |
| Mackinaw City, Vlg o | 1606 | 246,557 | 128,043 | 312,302 | 686,902 | 611,067 | 89.0\% |
| Madison, Chtr Twp of | 4605 | 447,620 | 277,183 | 215,728 | 940,531 | 746,709 | 79.4\% |
| Madison Heights, Cit | 6308 | 12,161,457 | 871,116 | 21,093,583 | 34,126,156 | 26,547,659 | 77.8\% |
| Manistee, City of | 5105 | 4,302,075 | 2,664,336 | 7,186,344 | 14,152,755 | 14,693,334 | 103.8\% |
| Manistee Co | 5101 | 19,176,413 | 1,838,421 | 15,577,699 | 36,592,533 | 28,836,132 | 78.8\% |
| Manistee CRC | 5103 | 4,630,827 | 159 | 5,940,005 | 10,570,991 | 5,659,923 | 53.5\% |
| Manistee HC | 5107 | 109,332 | 166,770 | 71,537 | 347,639 | 453,795 | 130.5\% |
| Manistique, City of | 7504 | 4,815,794 | 27,310 | 6,410,153 | 11,253,257 | 6,155,310 | 54.7\% |
| Manlius Twp | 0311 | 270,758 | 74,583 | 0 | 345,341 | 278,495 | 80.6\% |
| Manton, City of | 8304 | 478,680 | 173,531 | 869,036 | 1,521,247 | 732,617 | 48.2\% |
| Marenisco Twp | 2704 | 227,736 | 0 | 0 | 227,736 | 210,132 | 92.3\% |
| Marine City, City of | 7704 | 0 | 0 | 27,932 | 27,932 | 43,524 | 155.8\% |
| Marion, Vlg of | 6704 | 251,543 | 71,939 | 194,267 | 517,749 | 425,368 | 82.2\% |
| Marlette, City of | 7405 | 527,325 | 389,711 | 429,000 | 1,346,036 | 1,062,304 | 78.9\% |
| Marquette, City of | 5201 | 15,701,664 | 3,874,054 | 26,123,796 | 45,699,514 | 31,052,228 | 67.9\% |
| Marquette Brd of Lig | 5209 | 7,415,541 | 2,184,095 | 25,349,553 | 34,949,189 | 23,384,100 | 66.9\% |
| Marquette Chtr Twp | 5215 | 785,006 | 416,306 | 320,994 | 1,522,306 | 1,191,851 | 78.3\% |
| Marquette Co | 5202 | 27,659,208 | 3,799,740 | 48,959,373 | 80,418,321 | 54,460,076 | 67.7\% |
| Marquette Co Arpt | 5210 | 1,154,345 | 52,969 | 1,285,399 | 2,492,713 | 1,683,843 | 67.6\% |
| Marquette Co Solid W | 5213 | 954,593 | 288,900 | 424,556 | 1,668,049 | 1,622,597 | 97.3\% |
| Marquette Co Trans A | 5206 | 1,275,729 | 302,009 | 1,205,222 | 2,782,960 | 2,606,358 | 93.7\% |


| Municipality Name | Number | Employer Liability | Employee Liability | Retired <br> Liability | Total <br> Liability | Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marquette CRC | 5211 | 6,653,421 | 985,364 | 15,974,785 | 23,613,570 | 11,228,114 | 47.5\% |
| Marshall, City of | 1306 | 7,036,289 | 3,554,660 | 17,730,018 | 28,320,967 | 23,297,013 | 82.3\% |
| Marshall Area Firefi | 1313 | 111,178 | 156,259 | 0 | 267,437 | 343,444 | 128.4\% |
| Marshall Dist Lib | 1309 | 0 | 0 | 267,124 | 267,124 | 191,206 | 71.6\% |
| Mason, City of | 3304 | 2,946,530 | 2,204,250 | 9,030,712 | 14,181,492 | 11,124,695 | 78.4\% |
| Mason Co | 5301 | 20,185,015 | 44,534 | 20,556,505 | 40,786,054 | 35,011,617 | 85.8\% |
| Mason CRC | 5305 | 3,670,835 | 457,839 | 1,642,129 | 5,770,803 | 3,808,678 | 66.0\% |
| Mason-Oceana Cty Enh | 6403 | 1,064,129 | 221,194 | 82,218 | 1,367,541 | 1,289,654 | 94.3\% |
| Mastodon Township | 3613 | 0 | 0 | 44,498 | 44,498 | 40,526 | 91.1\% |
| MBS Intl Arpt | 0902 | 2,993,857 | 41,525 | 5,438,507 | 8,473,889 | 6,013,444 | 71.0\% |
| Meceola Central Disp | 5405 | 1,210,463 | 36,038 | 501,888 | 1,748,389 | 1,388,764 | 79.4\% |
| Mecosta Co | 5403 | 12,243,105 | 465,920 | 15,337,743 | 28,046,768 | 27,565,169 | 98.3\% |
| Mecosta County Gener | 5404 | 2,575,739 | 209,901 | 5,043,302 | 7,828,942 | 7,959,998 | 101.7\% |
| Mecosta CRC | 5401 | 2,295,806 | 1,004,612 | 5,448,376 | 8,748,794 | 7,844,750 | 89.7\% |
| Melvindale, City of | 8215 | 10,924,744 | 2,215,344 | 21,488,286 | 34,628,374 | 18,581,412 | 53.7\% |
| Melvindale HC | 8220 | 902,685 | 8,209 | 125,566 | 1,036,460 | 735,549 | 71.0\% |
| Menominee, City of | 5501 | 4,553,794 | 124,894 | 3,591,708 | 8,270,396 | 7,425,613 | 89.8\% |
| Menominee Co | 5502 | 8,303,584 | 600,346 | 8,707,227 | 17,611,157 | 12,967,694 | 73.6\% |
| Menominee CRC | 5503 | 1,587,906 | 0 | 2,461,890 | 4,049,796 | 2,595,308 | 64.1\% |
| Meridian Chtr Twp | 3315 | 17,891,921 | 3,628,545 | 24,055,826 | 45,576,292 | 27,192,819 | 59.7\% |
| MERS | 2308 | 8,938,756 | 1,396,291 | 1,558,188 | 11,893,235 | 11,347,345 | 95.4\% |
| Metamora Twp | 4409 | 564,605 | 91,770 | 0 | 656,375 | 712,795 | 108.6\% |
| Mich. Grand River Wa | 3306 | 0 | 0 | 12,164 | 12,164 | 7,437 | 61.1\% |
| Mich Muni Risk Mgmt | 8237 | 446,016 | 183,649 | 0 | 629,665 | 723,928 | 115.0\% |
| Mich S Central Power | 3002 | 6,974,244 | 232,049 | 3,019,185 | 10,225,478 | 8,776,797 | 85.8\% |
| Middleville, Vlg of | 0803 | 423,317 | 110,682 | 820,789 | 1,354,788 | 1,139,091 | 84.1\% |
| Midland, City of | 5601 | 34,583,880 | 2,613,923 | 80,460,450 | 117,658,253 | 80,166,101 | 68.1\% |
| Midland Co Central D | 5604 | 1,111,994 | 339,476 | 669,152 | 2,120,622 | 1,728,528 | 81.5\% |
| Midland CRC | 5602 | 3,606,750 | 1,022,975 | 9,734,805 | 14,364,530 | 10,202,700 | 71.0\% |
| Mid-Mich Dist Hlth D | 5901 | 3,815,274 | 681,567 | 3,084,679 | 7,581,520 | 6,936,701 | 91.5\% |
| Mid-Mich Lib League | 8306 | 382,966 | 4,273 | 173,407 | 560,646 | 614,121 | 109.5\% |
| Mid Peninsula Lbry C | 3609 | 0 | 2,026 | 274,855 | 276,881 | 193,361 | 69.8\% |
| Milan, City of | 5801 | 2,695,884 | 14,586 | 8,317,508 | 11,027,978 | 6,112,885 | 55.4\% |
| Milan Lib | 5806 | 164,164 | 0 | 138,578 | 302,742 | 253,519 | 83.7\% |
| Milford, Vlg of | 6313 | 5,330,368 | 408,204 | 5,179,777 | 10,918,349 | 7,661,239 | 70.2\% |
| Millington, Vlg of | 7904 | 761,159 | 224,086 | 377,590 | 1,362,835 | 1,291,310 | 94.8\% |
| Missaukee Co | 5702 | 3,029,523 | 259,963 | 1,054,118 | 4,343,604 | 3,195,724 | 73.6\% |
| MOA Solid Waste Mgmt | 6002 | 337,962 | 0 | 235,882 | 573,844 | 717,844 | 125.1\% |
| Monroe HC | 5808 | 339,011 | 52,393 | 1,140,704 | 1,532,108 | 992,666 | 64.8\% |
| Montague, City of | 6112 | 1,756,017 | 606,112 | 1,451,493 | 3,813,622 | 2,974,629 | 78.0\% |
| Montcalm CRC | 5905 | 3,463,956 | 653,576 | 10,118,562 | 14,236,094 | 9,654,400 | 67.8\% |
| Montmorency Co | 6001 | 3,724,485 | 43,458 | 5,177,953 | 8,945,896 | 5,853,830 | 65.4\% |
| Montrose, City of | 2509 | 315,388 | 8,099 | 685,960 | 1,009,447 | 499,100 | 49.4\% |
| Mt. Morris Chtr Twp | 2503 | 9,282,457 | 791,425 | 16,497,582 | 26,571,464 | 16,244,540 | 61.1\% |
| Mt. Pleasant, City o | 3701 | 7,423,277 | 2,049,095 | 14,104,457 | 23,576,829 | 18,695,806 | 79.3\% |
| Muir, Vlg of | 3405 | 204,707 | 37,429 | 169,573 | 411,709 | 284,176 | 69.0\% |
| Mundy, Chtr Twp of | 2517 | 2,082,696 | 1,126,440 | 2,292,194 | 5,501,330 | 3,958,764 | 72.0\% |
| Munising, City of | 0202 | 2,883,401 | 10,519 | 3,700,548 | 6,594,468 | 5,364,142 | 81.3\% |
| Muskegon, City of | 6116 | 30,104,224 | 11,008,091 | 47,279,077 | 88,391,392 | 88,810,354 | 100.5\% |
| Muskegon Area Dist L | 6117 | 914,600 | 79,119 | 247,065 | 1,240,784 | 1,190,021 | 95.9\% |
| Muskegon Chtr Twp | 6108 | 7,609,355 | 2,305,362 | 5,027,704 | 14,942,421 | 12,639,325 | 84.6\% |
| Muskegon Co | 6103 | 93,257,801 | 10,245,531 | 112,161,784 | 215,665,116 | 173,067,836 | 80.2\% |
| Muskegon CRC | 6101 | 6,725,688 | 130,825 | 14,260,545 | 21,117,058 | 16,220,720 | 76.8\% |
| Muskegon HC | 6113 | 447,027 | 61,676 | 0 | 508,703 | 484,358 | 95.2\% |
| Muskegon Heights, Ci | 6102 | 5,232,255 | 2,568,901 | 22,853,790 | 30,654,946 | 25,666,492 | 83.7\% |
| Muskegon Heights HC | 6115 | 347,578 | 89,607 | 643,172 | 1,080,357 | 748,777 | 69.3\% |
| Negaunee, City of | 5203 | 4,374,343 | 43,688 | 5,889,055 | 10,307,086 | 7,150,947 | 69.4\% |
| Negaunee Twp | 5217 | 118,065 | 102,317 | 86,495 | 306,877 | 217,388 | 70.8\% |
| Network180 | 4109 | 10,865,884 | 3,110,181 | 5,765,053 | 19,741,118 | 21,895,495 | 110.9\% |
| Newaygo CMH | 6207 | 1,595,823 | 0 | 916,717 | 2,512,540 | 3,382,123 | 134.6\% |


| Municipality Name | Number | Employer Liability | Employee Liability | Retired <br> Liability | Total Liability | Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Newaygo Co | 6201 | 10,242,942 | 295,215 | 12,485,097 | 23,023,254 | 19,163,556 | 83.2\% |
| Newaygo CRC | 6212 | 3,171,288 | 148,498 | 4,655,826 | 7,975,612 | 6,573,492 | 82.4\% |
| Newaygo MCF | 6204 | 2,924,055 | 1,416,218 | 5,907,508 | 10,247,781 | 9,892,793 | 96.5\% |
| Newaygo Soil \& Wtr C | 6205 | 75,101 | 18,019 | 0 | 93,120 | 108,098 | 116.1\% |
| New Baltimore, City | 5016 | 6,685,514 | 1,186,588 | 3,297,901 | 11,170,003 | 10,402,835 | 93.1\% |
| Newberry, Vlg of | 4802 | 1,795,395 | 16,707 | 2,075,141 | 3,887,243 | 2,730,994 | 70.3\% |
| New Buffalo, City of | 1113 | 727,553 | 682,879 | 421,968 | 1,832,400 | 1,349,745 | 73.7\% |
| Niles Dist Lib | 1105 | 472,844 | 148,027 | 58,398 | 679,269 | 754,453 | 111.1\% |
| N Muskegon, City of | 6104 | 1,730,293 | 546,796 | 3,399,943 | 5,677,032 | 4,646,296 | 81.8\% |
| No. Mich. Comm. Mntl | 2403 | 0 | 0 | 34,193 | 34,193 | 42,570 | 124.5\% |
| Northern Lakes CMH A | 2808 | 8,620,870 | 9,260 | 13,647,187 | 22,277,317 | 20,948,234 | 94.0\% |
| Northfield Twp | 8117 | 499,769 | 431,915 | 0 | 931,684 | 886,790 | 95.2\% |
| North Houghton Co Wt | 3106 | 309,991 | 0 | 0 | 309,991 | 290,346 | 93.7\% |
| Northpointe Bhvrl Hl | 2207 | 5,241,985 | 783,147 | 2,552,370 | 8,577,502 | 9,239,134 | 107.7\% |
| Northville, City of | 8208 | 6,130,199 | 136,726 | 11,860,836 | 18,127,761 | 11,399,920 | 62.9\% |
| Northville Chtr Twp | 8230 | 13,883,838 | 5,425,235 | 4,801,814 | 24,110,887 | 17,066,696 | 70.8\% |
| Northville Dist Lib | 8229 | 1,721,277 | 12,050 | 365,857 | 2,099,184 | 1,825,382 | 87.0\% |
| Norton Shores, City | 6106 | 12,890,025 | 82,309 | 20,669,299 | 33,641,633 | 20,035,573 | 59.6\% |
| Norway, City of | 2204 | 4,916,849 | 1,049,770 | 10,221,322 | 16,187,941 | 8,650,104 | 53.4\% |
| Novi, City of | 6320 | 35,992,715 | 5,075,067 | 29,355,848 | 70,423,630 | 49,237,072 | 69.9\% |
| NW Mich Cmnty Hlth A | 1502 | 3,166,137 | 7,794 | 2,150,883 | 5,324,814 | 4,472,773 | 84.0\% |
| NW Rgnl Arpt Comm | 2805 | 2,829,331 | 29,551 | 1,185,410 | 4,044,292 | 3,496,505 | 86.5\% |
| Oceana Co | 6402 | 14,120,481 | 2,793,255 | 11,781,991 | 28,695,727 | 25,389,321 | 88.5\% |
| Oceola Twp | 4717 | 240,218 | 354,801 | 0 | 595,019 | 582,636 | 97.9\% |
| Ogemaw Co | 6502 | 8,417,842 | 2,165,055 | 11,633,861 | 22,216,758 | 19,413,645 | 87.4\% |
| Ogemaw Co EMS Auth | 6508 | 1,329,188 | 309,150 | 86,586 | 1,724,924 | 1,790,529 | 103.8\% |
| Ogemaw CRC | 6503 | 3,116,453 | 1,018,154 | 3,854,557 | 7,989,164 | 4,973,942 | 62.3\% |
| Olive Twp | 7009 | 78,646 | 45,408 | 195,165 | 319,219 | 278,553 | 87.3\% |
| Onaway, City of | 7105 | 368,404 | 45,537 | 245,488 | 659,429 | 576,008 | 87.3\% |
| Ontonagon, Vlg of | 6603 | 3,021,942 | 1,221,864 | 10,043,661 | 14,287,467 | 11,730,330 | 82.1\% |
| Ontonagon Co | 6602 | 4,713,914 | 13,923 | 3,243,203 | 7,971,040 | 6,240,418 | 78.3\% |
| Ontonagon Co Economi | 6605 | 0 | 0 | 106,274 | 106,274 | 80,323 | 75.6\% |
| Ontonagon CRC | 6604 | 7,304,987 | 0 | 10,700,212 | 18,005,199 | 9,356,339 | 52.0\% |
| Orchard Lake, City o | 6312 | 3,554,747 | 153,726 | 935,595 | 4,644,068 | 3,900,067 | 84.0\% |
| Oronoko Chtr Twp | 1114 | 480,118 | 42,508 | 1,141,357 | 1,663,983 | 1,220,079 | 73.3\% |
| Osceola Co | 6701 | 8,484,972 | 450,437 | 4,188,094 | 13,123,503 | 11,785,375 | 89.8\% |
| Osceola CRC | 6703 | 2,070,902 | 195,102 | 4,760,723 | 7,026,727 | 5,223,580 | 74.3\% |
| Oscoda Chtr Twp | 3503 | 955,885 | 133,079 | 2,222,632 | 3,311,596 | 2,481,058 | 74.9\% |
| Oscoda Co | 6801 | 2,990,015 | 358,742 | 5,543,044 | 8,891,801 | 6,333,725 | 71.2\% |
| Oscoda Wurtsmith Arp | 6802 | 95,397 | 87,311 | 70,639 | 253,347 | 232,914 | 91.9\% |
| Otisville, Vlg of | 2506 | 563,291 | 35,716 | 339,714 | 938,721 | 861,456 | 91.8\% |
| Otsego Co | 6902 | 8,545,420 | 377,200 | 7,679,667 | 16,602,287 | 12,086,707 | 72.8\% |
| Otsego CRC | 6901 | 2,773,636 | 0 | 6,776,704 | 9,550,340 | 6,419,431 | 67.2\% |
| Ottawa Co | 7003 | 100,202,612 | 12,164,658 | 71,979,665 | 184,346,935 | 152,352,857 | 82.6\% |
| Ottawa Co Central Di | 7008 | 1,027,442 | 71,541 | 698,392 | 1,797,375 | 1,737,661 | 96.7\% |
| Ottawa CRC | 7002 | 16,514,411 | 1,033,779 | 27,308,398 | 44,856,588 | 32,668,905 | 72.8\% |
| Otter Lake, Vlg of | 4408 | 71,864 | 11,828 | 0 | 83,692 | 74,478 | 89.0\% |
| Owosso, City of | 7607 | 989,197 | 251,436 | 3,110,297 | 4,350,930 | 3,640,481 | 83.7\% |
| Oxford, Township of | 6327 | 838,834 | 0 | 2,925,662 | 3,764,496 | 2,790,499 | 74.1\% |
| Oxford, Vlg of | 6326 | 1,023,376 | 0 | 1,669,890 | 2,693,266 | 1,861,533 | 69.1\% |
| Parchment, City of | 3901 | 1,082,624 | 481,299 | 1,207,942 | 2,771,865 | 2,457,399 | 88.7\% |
| Pathways(Spr.Bhvl.Mn | 5214 | 14,526,907 | 1,033,339 | 36,887,307 | 52,447,553 | 31,255,203 | 59.6\% |
| Paw Paw, Vlg of | 8002 | 2,183,028 | 781,772 | 3,705,869 | 6,670,669 | 6,216,930 | 93.2\% |
| Paw Paw Lk Reg Jnt S | 1103 | 663,193 | 121,915 | 634,397 | 1,419,505 | 1,100,027 | 77.5\% |
| Pellston, Vlg of | 2404 | 229,973 | 50,406 | 0 | 280,379 | 239,059 | 85.3\% |
| Pennfield Chtr Twp | 1312 | 620,740 | 333,616 | 821,514 | 1,775,870 | 1,354,340 | 76.3\% |
| Pentwater, Vlg of | 6401 | 582,310 | 208,208 | 711,351 | 1,501,869 | 1,287,100 | 85.7\% |
| Perrinton, Vlg of | 2909 | 16,088 | 14,349 | 0 | 30,437 | 57,258 | 188.1\% |
| Petersburg, City of | 5807 | 187,730 | 113,080 | 0 | 300,810 | 276,823 | 92.0\% |
| Petoskey, City of | 2402 | 11,879,959 | 96,706 | 8,500,767 | 20,477,432 | 17,439,426 | 85.2\% |


| Municipality Name | Number | Employer Liability | Employee Liability | Retired <br> Liability | Total <br> Liability | Value of Assets | Percent <br> Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pewamo, Vlg of | 3407 | 157,010 | 16,826 | 0 | 173,836 | 139,959 | 80.5\% |
| Pigeon, Vlg of | 3203 | 294,964 | 114,312 | 570,813 | 980,089 | 710,949 | 72.5\% |
| Pinckney, Village of | 4706 | 1,218,830 | 272,295 | 529,063 | 2,020,188 | 1,790,719 | 88.6\% |
| Pinconning, City of | 0904 | 425,693 | 184,747 | 1,323,106 | 1,933,546 | 1,589,582 | 82.2\% |
| Pittsfield Chtr Twp | 8110 | 8,990,637 | 4,063,942 | 5,786,500 | 18,841,079 | 14,829,823 | 78.7\% |
| Pleasant Ridge, City | 6301 | 2,093,455 | 4,156 | 2,194,275 | 4,291,886 | 2,741,316 | 63.9\% |
| Plymouth, Chtr Twp o | 8238 | 6,364,415 | 6,073,147 | 8,686,112 | 21,123,674 | 16,573,088 | 78.5\% |
| Plymouth, City of | 8202 | 2,133,929 | 7,581 | 14,463,197 | 16,604,707 | 8,704,141 | 52.4\% |
| Plymouth Dist Lib | 8221 | 1,545,467 | 122,897 | 1,400,097 | 3,068,461 | 3,322,115 | 108.3\% |
| Pokagon Band of Pota | MI01 | 4,601,632 | 427,178 | 326,289 | 5,355,099 | 6,706,329 | 125.2\% |
| Port Austin, Vlg of | 3208 | 137,004 | 70,755 | 325,678 | 533,437 | 499,019 | 93.5\% |
| Port Austin Area Swr | 3210 | 960 | 25,739 | 53,807 | 80,506 | 153,882 | 191.1\% |
| Port Huron, City of | 7702 | 39,576,613 | 2,911,727 | 88,727,356 | 131,215,696 | 95,743,922 | 73.0\% |
| Port Huron Chtr Twp | 7711 | 1,028,065 | 708,490 | 734,336 | 2,470,891 | 1,953,864 | 79.1\% |
| Port Huron HC | 7712 | 3,006,593 | 2,631 | 2,657,746 | 5,666,970 | 4,899,919 | 86.5\% |
| Portland, City of | 3401 | 5,585,936 | 130,957 | 5,175,752 | 10,892,645 | 7,119,568 | 65.4\% |
| Port Sanilac, Vlg of | 7403 | 641,047 | 83,183 | 118,302 | 842,532 | 580,531 | 68.9\% |
| Port Sheldon Twp | 7018 | 165,219 | 446,971 | 0 | 612,190 | 647,227 | 105.7\% |
| Potterville, City of | 2313 | 258,969 | 123,220 | 0 | 382,189 | 351,035 | 91.8\% |
| Presque Isle Co | 7104 | 4,828,881 | 958,562 | 3,829,861 | 9,617,304 | 7,732,452 | 80.4\% |
| Presque Isle CRC | 7101 | 2,766,672 | 41,910 | 5,488,005 | 8,296,587 | 5,674,290 | 68.4\% |
| PRIDE Youth Programs | 6210 | 420,292 | 0 | 113,257 | 533,549 | 472,410 | 88.5\% |
| Ravenna, Vlg of | 6111 | 387,477 | 28,121 | 0 | 415,598 | 403,600 | 97.1\% |
| Reading, City of | 3003 | 236,688 | 0 | 47,633 | 284,321 | 275,436 | 96.9\% |
| Redford, Chtr Twp of | 8209 | 13,750,485 | 330,267 | 30,860,878 | 44,941,630 | 34,512,997 | 76.8\% |
| Redford Twp Dist Lib | 8228 | 1,121,007 | 50,698 | 795,601 | 1,967,306 | 1,776,386 | 90.3\% |
| Reed City, City of | 6702 | 2,750,957 | 6,517 | 2,476,854 | 5,234,328 | 3,701,659 | 70.7\% |
| Richfield Twp (Genes | 2514 | 1,162,103 | 533,812 | 1,676,725 | 3,372,640 | 2,039,971 | 60.5\% |
| Richfield Twp (Rosco | 7202 | 669,871 | 241,547 | 1,340,002 | 2,251,420 | 1,401,589 | 62.3\% |
| Richland Twp | 7310 | 2,435,051 | 64,423 | 706,510 | 3,205,984 | 2,226,348 | 69.4\% |
| Richmond, City of | 5012 | 835,331 | 664,811 | 308,158 | 1,808,300 | 1,217,199 | 67.3\% |
| Rochester, City of | 6307 | 4,892,479 | 1,691,620 | 11,426,444 | 18,010,543 | 14,752,580 | 81.9\% |
| Rockford, City of | 4103 | 4,227,597 | 62,236 | 1,401,695 | 5,691,528 | 4,502,640 | 79.1\% |
| Rockwood, City of | 5810 | 830,757 | 0 | 1,117,643 | 1,948,400 | 2,081,848 | 106.8\% |
| Rogers City, City of | 7102 | 1,781,951 | 385,632 | 7,529,016 | 9,696,599 | 6,091,892 | 62.8\% |
| Romeo, Vlg of | 5005 | 2,755,813 | 88,897 | 3,176,866 | 6,021,576 | 4,432,092 | 73.6\% |
| Romeo Dist Lib | 5006 | 1,018,259 | 168,902 | 1,353,457 | 2,540,618 | 1,674,631 | 65.9\% |
| Romulus, City of | 8225 | 13,462,414 | 2,654,936 | 26,297,456 | 42,414,806 | 19,946,665 | 47.0\% |
| Roosevelt Park, City | 6107 | 1,521,150 | 4,852 | 2,805,994 | 4,331,996 | 3,127,878 | 72.2\% |
| Roscommon Co | 7201 | 10,258,325 | 1,549,714 | 6,920,137 | 18,728,176 | 16,225,168 | 86.6\% |
| Roscommon Co Trans A | 7205 | 1,408,697 | 4,680 | 496,249 | 1,909,626 | 1,736,812 | 91.0\% |
| Rose City, City of | 6504 | 277,307 | 98,172 | 135,594 | 511,073 | 584,402 | 114.3\% |
| Rose Twp | 6506 | 40,095 | 18,934 | 18,241 | 77,270 | 281,028 | 363.7\% |
| Royal Oak, Chtr Twp | 6306 | 551,627 | 189,344 | 2,037,651 | 2,778,622 | 4,555,826 | 164.0\% |
| Saginaw, City of | 7301 | 21,063,400 | 5,953,883 | 113,197,908 | 140,215,191 | 70,432,198 | 50.2\% |
| Saginaw, Pub Lib of | 7317 | 521,697 | 263,659 | 111,145 | 896,501 | 1,466,939 | 163.6\% |
| Saginaw Chtr Twp | 7314 | 6,016,435 | 1,070,388 | 8,799,279 | 15,886,102 | 11,218,376 | 70.6\% |
| Saginaw Co | 7303 | 33,779,704 | 2,895,225 | 100,787,299 | 137,462,228 | 90,752,010 | 66.0\% |
| Saginaw Co 911 Com C | 7316 | 4,448,950 | 144,836 | 5,060,150 | 9,653,936 | 7,542,481 | 78.1\% |
| Saginaw Co CMH | 7318 | 6,221,894 | 131,518 | 9,792,711 | 16,146,123 | 10,503,283 | 65.1\% |
| Saginaw CRC | 7304 | 6,329,656 | 2,349,771 | 17,819,117 | 26,498,544 | 24,385,884 | 92.0\% |
| Saginaw HC | 7321 | 1,443,166 | 342,608 | 2,026,113 | 3,811,887 | 2,059,715 | 54.0\% |
| Saginaw-Midland Muni | 7305 | 1,370,595 | 359,020 | 1,870,223 | 3,599,838 | 2,760,242 | 76.7\% |
| Saginaw Trans Sys Au | 7319 | 1,197,847 | 105,384 | 26,936 | 1,330,167 | 1,438,240 | 108.1\% |
| Saline, City of | 8105 | 9,776,887 | 257,636 | 9,499,569 | 19,534,092 | 13,961,876 | 71.5\% |
| Sandusky, City of | 7402 | 1,847,529 | 390,995 | 1,514,731 | 3,753,255 | 2,044,460 | 54.5\% |
| Sandusky Dist Lib | 7404 | 122,197 | 46,439 | 0 | 168,636 | 176,822 | 104.9\% |
| Sanilac CRC | 7410 | 1,102,885 | 3,954,346 | 0 | 5,057,231 | 4,894,804 | 96.8\% |
| Saranac HC | 3413 | 173,882 | 103,320 | 331,169 | 608,371 | 397,214 | 65.3\% |
| Saugatuck, City of | 0307 | 960,917 | 29,422 | 369,356 | 1,359,695 | 1,268,387 | 93.3\% |


| Municipality Name | Number | Employer Liability | Employee Liability | Retired <br> Liability | Total <br> Liability | Value of Assets | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Saugatuck Twp | 0305 | 305,157 | 7,002 | 427,147 | 739,306 | 310,865 | 42.0\% |
| Saugatuck Twp Fire D | 0313 | 55,665 | 0 | 302,820 | 358,485 | 371,642 | 103.7\% |
| Sault Ste. Marie, Ci | 1701 | 7,537,708 | 3,372,388 | 13,507,985 | 24,418,081 | 21,087,835 | 86.4\% |
| Sault Ste. Marie HC | 4906 | 485,198 | 166,886 | 772,883 | 1,424,967 | 1,222,824 | 85.8\% |
| SCCMUA | 1905 | 1,536,753 | 536,702 | 608,108 | 2,681,563 | 2,737,284 | 102.1\% |
| Schoolcraft Co | 7503 | 11,109,096 | 1,991,283 | 12,921,189 | 26,021,568 | 19,243,924 | 74.0\% |
| Schoolcraft CRC | 7501 | 3,410,045 | 21,081 | 8,885,103 | 12,316,229 | 6,746,576 | 54.8\% |
| Schoolcraft Memorial | 7505 | 7,345,660 | 2,450,666 | 8,622,207 | 18,418,533 | 15,051,215 | 81.7\% |
| Scio Twp | 8116 | 889,554 | 722,737 | 69,308 | 1,681,599 | 1,369,871 | 81.5\% |
| Scottville, City of | 5308 | 150,724 | 242,464 | 0 | 393,188 | 438,141 | 111.4\% |
| Sebewaing, Vlg of | 3205 | 1,973,236 | 623,567 | 3,788,916 | 6,385,719 | 4,457,756 | 69.8\% |
| SEMCOG | 8210 | 11,843,884 | 17,190 | 12,260,038 | 24,121,112 | 26,511,581 | 109.9\% |
| SE Oakland Co Rsrc R | 6310 | 1,403,103 | 30,583 | 3,645,299 | 5,078,985 | 4,093,378 | 80.6\% |
| SE Oakland Co Wtr Au | 6309 | 4,209,469 | 110,055 | 3,535,918 | 7,855,442 | 5,394,858 | 68.7\% |
| Shepherd, Vlg of | 3704 | 129,161 | 39,806 | 140,576 | 309,543 | 446,011 | 144.1\% |
| Shiawassee Co | 7602 | 39,997,665 | 1,015,426 | 49,582,000 | 90,595,091 | 59,855,811 | 66.1\% |
| Shiawassee Co CMH | 7609 | 6,170,529 | 38,837 | 3,759,441 | 9,968,807 | 9,433,412 | 94.6\% |
| Shiawassee Council o | 7605 | 418,469 | 142,696 | 120,780 | 681,945 | 580,043 | 85.1\% |
| Shiawassee CRC | 7601 | 4,437,830 | 1,441,258 | 11,650,469 | 17,529,557 | 11,228,007 | 64.1\% |
| Shiawassee Dist Lib | 7606 | 602,283 | 291,312 | 697,596 | 1,591,191 | 1,544,415 | 97.1\% |
| Sims Whitney Util Au | 0606 | 107,984 | 0 | 0 | 107,984 | 180,255 | 166.9\% |
| SMART | 8216 | 88,113,954 | 4,376,326 | 98,380,406 | 190,870,686 | 157,583,693 | 82.6\% |
| South Haven, City of | 8001 | 6,221,625 | 2,488,637 | 11,970,116 | 20,680,378 | 21,695,636 | 104.9\% |
| South Haven Area ESA | 8005 | 1,680,749 | 779,554 | 2,455,863 | 4,916,166 | 3,300,822 | 67.1\% |
| South Lyon, City of | 6315 | 7,360,493 | 415,542 | 2,626,334 | 10,402,369 | 7,824,448 | 75.2\% |
| Sparta, Vlg of | 4107 | 2,013,084 | 495,466 | 1,570,505 | 4,079,055 | 2,334,015 | 57.2\% |
| Springfield, City of | 1303 | 2,900,343 | 668,754 | 5,411,943 | 8,981,040 | 7,464,911 | 83.1\% |
| Spring Lake, Vlg of | 7015 | 917,930 | 804,835 | 1,283,083 | 3,005,848 | 2,166,924 | 72.1\% |
| Spring Lake Dist Lib | 7016 | 742,069 | 272,345 | 137,509 | 1,151,923 | 1,174,748 | 102.0\% |
| St. Charles, Vlg of | 7308 | 1,168,291 | 153,511 | 1,842,227 | 3,164,029 | 2,292,515 | 72.5\% |
| St. Clair, City of | 7703 | 7,877,190 | 539,519 | 8,495,058 | 16,911,767 | 11,554,552 | 68.3\% |
| St. Clair HC | 7715 | 256,419 | 0 | 294,970 | 551,389 | 387,213 | 70.2\% |
| St. Ignace, City of | 4904 | 5,154,080 | 73,743 | 3,502,394 | 8,730,217 | 6,272,604 | 71.8\% |
| St. Johns, City of | 1902 | 4,986,557 | 82,058 | 10,317,348 | 15,385,963 | 9,567,052 | 62.2\% |
| St. Louis, City of | 2902 | 2,120,223 | 357,924 | 4,886,673 | 7,364,820 | 5,370,378 | 72.9\% |
| Stambaugh Twp | 3615 | 34,482 | 17,891 | 47,568 | 99,941 | 70,494 | 70.5\% |
| Standish, City of | 0601 | 833,391 | 20,495 | 1,444,739 | 2,298,625 | 1,489,183 | 64.8\% |
| Stanton, City of | 5903 | 0 | 0 | 58,336 | 58,336 | 95,038 | 162.9\% |
| St Clair Shores HC | 5007 | 565,235 | 254,893 | 1,064,172 | 1,884,300 | 1,245,365 | 66.1\% |
| Stephenson, City of | 5504 | 271,219 | 0 | 68,127 | 339,346 | 193,054 | 56.9\% |
| Sterling, Vlg of | 0605 | 38,816 | 27,564 | 45,160 | 111,540 | 254,025 | 227.7\% |
| St Joseph Co | 7803 | 16,778,530 | 2,431,109 | 10,953,101 | 30,162,740 | 31,358,854 | 104.0\% |
| St Louis HC | 2908 | 612,516 | 0 | 0 | 612,516 | 493,003 | 80.5\% |
| Stockbridge, Vlg of | 3316 | 198,436 | 159,683 | 319,913 | 678,032 | 470,093 | 69.3\% |
| Sturgis HC | 7805 | 46,010 | 0 | 0 | 46,010 | 42,359 | 92.1\% |
| Summit Twp | 3803 | 3,319,915 | 39,115 | 6,412,178 | 9,771,208 | 7,044,096 | 72.1\% |
| Sumpter Twp | 8226 | 2,587,248 | 1,581,029 | 1,168,587 | 5,336,864 | 3,531,834 | 66.2\% |
| Superior Chtr Twp | 8109 | 2,292,957 | 1,249,761 | 1,182,936 | 4,725,654 | 3,839,240 | 81.2\% |
| Superiorland Lib Coo | 5208 | 138,931 | 49,677 | 624,214 | 812,822 | 841,892 | 103.6\% |
| Swan Creek Twp | 7309 | 279,850 | 71,474 | 222,846 | 574,170 | 445,977 | 77.7\% |
| Swartz Creek, City o | 2504 | 1,986,839 | 324,678 | 6,221,450 | 8,532,967 | 7,924,796 | 92.9\% |
| SW Shiawassee ESA | 7611 | 256,228 | 86,152 | 0 | 342,380 | 351,817 | 102.8\% |
| Sylvan Lake, City of | 6314 | 895,584 | 375,391 | 779,154 | 2,050,129 | 1,744,361 | 85.1\% |
| Tawas Police Auth | 3504 | 352,904 | 198,065 | 521,513 | 1,072,482 | 600,254 | 56.0\% |
| Taylor HC | 8231 | 206,843 | 100,175 | 0 | 307,018 | 326,333 | 106.3\% |
| The Lib Network | 8218 | 2,189,548 | 791,285 | 3,010,391 | 5,991,224 | 5,432,761 | 90.7\% |
| Three Rivers, City o | 7801 | 5,708,891 | 1,252,158 | 7,297,552 | 14,258,601 | 11,172,653 | 78.4\% |
| Tittabawassee, Twp o | 7322 | 313,868 | 1,554,250 | 0 | 1,868,118 | 1,969,777 | 105.4\% |
| Traverse Area Dist L | 2807 | 2,806,720 | 299,087 | 2,245,692 | 5,351,499 | 3,984,649 | 74.5\% |
| Traverse City, City | 2801 | 23,722,375 | 608,742 | 32,214,397 | 56,545,514 | 41,600,136 | 73.6\% |


| Municipality Name | Number | Employer Liability | Employee Liability | Retired <br> Liability | Total Liability | Value of Assets | Percent <br> Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Trenton, City of | 8203 | 9,418,134 | 2,382,196 | 30,794,342 | 42,594,672 | 29,031,469 | 68.2\% |
| Tri-County Aging Con | 3307 | 3,565,941 | 21,131 | 2,641,009 | 6,228,081 | 6,661,697 | 107.0\% |
| Trio Council on Agin | 6507 | 60,960 | 0 | 204,494 | 265,454 | 272,242 | 102.6\% |
| Tuscarora Twp | 1604 | 1,020,166 | 20,692 | 510,051 | 1,550,909 | 936,590 | 60.4\% |
| Tuscola Co | 7902 | 10,574,230 | 3,169,834 | 12,581,231 | 26,325,295 | 23,419,238 | 89.0\% |
| Tuscola Co CMH | 7907 | 4,514,657 | 2,437,964 | 3,590,694 | 10,543,315 | 11,367,928 | 107.8\% |
| Tuscola Co Hlth Dpt | 7901 | 3,151,958 | 795,878 | 3,994,144 | 7,941,980 | 6,825,380 | 85.9\% |
| Tuscola Co MCF | 7906 | 3,374,005 | 2,757,042 | 4,399,173 | 10,530,220 | 11,297,110 | 107.3\% |
| Tuscola CRC | 7908 | 1,657,965 | 735,599 | 1,921,250 | 4,314,814 | 3,089,765 | 71.6\% |
| Twin Cities Pub Sfty | 3610 | 0 | 13,183 | 74,685 | 87,868 | 97,873 | 111.4\% |
| Ubly, Vlg of | 3212 | 171,089 | 168,385 | 384,389 | 723,863 | 483,099 | 66.7\% |
| Utica, City of | 5008 | 1,539,455 | 736,941 | 1,890,827 | 4,167,223 | 2,920,071 | 70.1\% |
| Van Buren Co | 8006 | 10,113,998 | 6,830,852 | 6,258,061 | 23,202,911 | 16,162,118 | 69.7\% |
| Van Buren Dist Lib | 8007 | 745,271 | 336,056 | 249,279 | 1,330,606 | 1,344,612 | 101.1\% |
| Van Buren Twp | 8236 | 6,012,216 | 3,305,920 | 933,566 | 10,251,702 | 8,120,096 | 79.2\% |
| Vassar, City of | 7903 | 2,112,284 | 671,948 | 2,908,132 | 5,692,364 | 4,870,375 | 85.6\% |
| Vevay Twp | 3318 | 39,286 | 90,499 | 363,521 | 493,306 | 319,390 | 64.7\% |
| Vicksburg, Vlg of | 3902 | 1,179,387 | 0 | 1,159,804 | 2,339,191 | 1,615,962 | 69.1\% |
| Vicksburg Dist Lib | 3904 | 76,920 | 0 | 26,972 | 103,892 | 80,504 | 77.5\% |
| Vienna, Chtr Twp of | 2522 | 690,213 | 344,853 | 136,506 | 1,171,572 | 922,789 | 78.8\% |
| Wakefield, City of | 2701 | 1,060,171 | 365,183 | 2,784,936 | 4,210,290 | 2,947,855 | 70.0\% |
| Walker, City of | 4112 | 7,814,862 | 415,915 | 9,297,103 | 17,527,880 | 10,233,341 | 58.4\% |
| Walled Lake, City of | 6324 | 4,175,860 | 1,387,932 | 6,402,809 | 11,966,601 | 4,689,287 | 39.2\% |
| Washtenaw Co | 8113 | 30,253,318 | 14,297,998 | 4,802,812 | 49,354,128 | 44,474,881 | 90.1\% |
| Washtenaw CRC | 8102 | 17,284,207 | 5,165,652 | 26,126,507 | 48,576,366 | 33,152,973 | 68.2\% |
| Wayland, City of | 0304 | 3,297,056 | 35,318 | 1,359,464 | 4,691,838 | 4,222,670 | 90.0\% |
| Wayne, City of | 8242 | 18,577,257 | 6,612,985 | 68,662,936 | 93,853,178 | 72,105,966 | 76.8\% |
| Wayne HC | 8252 | 279,747 | 142,046 | 0 | 421,793 | 402,050 | 95.3\% |
| Webberville, Vlg of | 3314 | 103,009 | 92,580 | 114,035 | 309,624 | 251,119 | 81.1\% |
| West Branch, City of | 6505 | 1,549,628 | 529,739 | 1,764,551 | 3,843,918 | 3,260,846 | 84.8\% |
| West Branch Dist Lib | 6509 | 217,918 | 70,695 | 0 | 288,613 | 324,768 | 112.5\% |
| Westland,City of | 8211 | 28,284,665 | 357,256 | 75,873,271 | 104,515,192 | 57,465,343 | 55.0\% |
| Westphalia, Vlg of | 1907 | 281,945 | 0 | 131,854 | 413,799 | 347,054 | 83.9\% |
| Wexford Co | 8302 | 10,214,230 | 2,302,607 | 10,853,212 | 23,370,049 | 16,998,826 | 72.7\% |
| Wexford CRC | 8303 | 4,936,142 | 449,444 | 6,017,699 | 11,403,285 | 7,115,313 | 62.4\% |
| White Cloud, City of | 6206 | 278,176 | 0 | 439,142 | 717,318 | 501,228 | 69.9\% |
| White Cloud/Sherman | 6211 | 136,621 | 55,920 | 0 | 192,541 | 159,692 | 82.9\% |
| White Cloud Cmnty Li | 6208 | 207,769 | 22,126 | 117,133 | 347,028 | 308,537 | 88.9\% |
| Whitehall, City of | 6105 | 2,490,113 | 0 | 2,278,641 | 4,768,754 | 3,879,635 | 81.4\% |
| White Lake Chtr Twp | 6325 | 9,193,137 | 4,092,164 | 7,381,928 | 20,667,229 | 16,739,933 | 81.0\% |
| White Pigeon, Vlg of | 7804 | 75,570 | 15,725 | 0 | 91,295 | 98,430 | 107.8\% |
| White Pine Lib | 5904 | 90,004 | 28,171 | 93,666 | 211,841 | 126,054 | 59.5\% |
| Willard Pub Lib | 1308 | 1,119,701 | 423,516 | 66,868 | 1,610,085 | 1,604,040 | 99.6\% |
| Williamston, City of | 3310 | 1,046,269 | 593,919 | 2,273,881 | 3,914,069 | 2,842,280 | 72.6\% |
| W Iron Co Swr Auth | 3612 | 247,090 | 4,429 | 715,600 | 967,119 | 638,132 | 66.0\% |
| Wixom, City of | 6316 | 11,866,722 | 1,591,260 | 9,536,122 | 22,994,104 | 15,626,617 | 68.0\% |
| W Mich CMH Sys | 5304 | 2,031,093 | 118,051 | 2,508,704 | 4,657,848 | 4,497,247 | 96.6\% |
| W Mich Shoreline Rgn | 6110 | 2,132,382 | 19,789 | 564,398 | 2,716,569 | 4,068,035 | 149.7\% |
| Wolverine Lake, Vlg | 6329 | 399,255 | 516,670 | 1,692,437 | 2,608,362 | 1,323,068 | 50.7\% |
| W UP Dist Hlth Dept | 3101 | 6,556,817 | 60,027 | 4,734,354 | 11,351,198 | 8,824,378 | 77.7\% |
| WUPPDR | 3108 | 306,630 | 440,704 | 306,027 | 1,053,361 | 1,075,811 | 102.1\% |
| Ypsilanti, City of | 8101 | 3,511,265 | 1,340,904 | 6,935,445 | 11,787,614 | 17,795,672 | 151.0\% |
| Ypsilanti, Twp of | 8104 | 5,170,895 | 2,613,317 | 9,401,955 | 17,186,167 | 14,009,840 | 81.5\% |
| Ypsilanti Cmnty Util | 8106 | 20,422,992 | 1,320,150 | 19,575,354 | 41,318,496 | 28,817,702 | 69.7\% |
| Ypsilanti HC | 8115 | 318,254 | 156,603 | 215,936 | 690,793 | 691,039 | 100.0\% |
| Totals - Active Groups | 700 | 3,709,954,832 | 651,661,670 | 4,938,653,467 | 9,300,269,969 | 6,927,831,046 | 74.5\% |
| Totals - Closed Groups | 15 | 4,488,563 | 406,921 | 12,056,059 | 16,951,543 | 17,591,890 | 103.8\% |
| Totals - MERS | 715 | 3,714,443,395 | 652,068,591 | 4,950,709,526 | 9,317,221,512 | 6,945,422,936 | 74.5\% |


| Municipality Name | Number |
| :---: | :---: |
| 21st Dist Ct | 8243 |
| 23rd Jud Dist Ct | 8223 |
| 26th Jud Cir Ct | 0403 |
| 34th Dist Ct | 8235 |
| 35th Dist Ct | 8234 |
| 41 B Dist Ct | 5014 |
| Addison Fire Dept | 4607 |
| Adrian, City of | 4601 |
| Aitkin Memorial Dist | 7407 |
| Albion, City of | 1301 |
| Alcona Co | 0101 |
| Alger Co | 0203 |
| Alger CRC | 0201 |
| Algonac, City of | 7707 |
| Allegan, City of | 0309 |
| Allegan Co | 0302 |
| Allegan CRC | 0301 |
| Alma, City of | 2901 |
| Almont, Vlg of | 4407 |
| Alpena Co | 0401 |
| Alpena CRC | 0402 |
| Alpena Rgnl Med Ctr | 0405 |
| Alpena Sr Citizens C | 0404 |
| Alpha, Vlg of | 3614 |
| Antrim Co | 0502 |
| Antrim CRC | 0501 |
| Arenac Co | 0603 |
| Arenac CRC | 0604 |
| Ash Twp | 5804 |
| Auburn, City of | 0905 |
| Au Gres, City of | 0602 |
| Bad Axe, City of | 3211 |
| Bad Axe Area Dist Li | 3214 |
| Bancroft, Vlg of | 7610 |
| Bangor, City of | 8003 |
| Baraga, Vlg of | 0704 |
| Baraga Co | 0702 |
| Baraga Co Memorial H | 0703 |
| Baraga CRC | 0701 |
| Baroda Twp | 1109 |
| Barry Co | 0802 |
| Barry Co CMH Auth | 0804 |
| Barry Eaton Dist Hlt | 2303 |
| Barton Hills, Vlg of | 8107 |
| Bates Twp | 3616 |
| Bath Charter Twp | 1909 |
| Battle Creek, City o | 1302 |
| Bay Area Trans Auth | 2810 |
| Bay City, City of | 0901 |
| Bay City HC | 0906 |
| Bayliss Pub Lib | 1702 |
| Bay Metro Trans Auth | 0907 |
| Beecher Metro Dist S | 2501 |
| Belding, City of | 3410 |
| Belleville, City of | 8213 |
| Benzie/Leelanau Dist | 4504 |
| Benzie Co | 1003 |
| Benzie Co Comm on Ag | 1006 |
| Benzie Co MCF (The M | 1004 |
| Benzie CRC | 1001 |
| Benzie Shores Dist L | 1005 |
| Benzie Trans Auth | 1007 |


| Amortization Period(s) | Normal Cost | Amortization Payment | Employer Contribution |
| :---: | :---: | :---: | :---: |
| 28 | 32,760 | 8,664 | 41,424 |
| 28 | 26,472 | 9,888 | 36,360 |
| 28, 10 | 56,784 | $(39,888)$ | 16,896 |
| 28 | 144,156 | 90,180 | 234,336 |
| 28 | 23,508 | 55,632 | 79,140 |
| 28, 25, 10 | 106,524 | 36,552 | 143,076 |
| 28 | 15,384 | 2,676 | 18,060 |
| 28, 12 | 613,560 | 522,960 | 1,136,520 |
| 28 | 4,536 | 1,488 | 6,024 |
| 28, 26, 14, 12, 10 | 141,420 | $(59,148)$ | 82,272 |
| 28, 19, 10 | 191,448 | 156,876 | 348,324 |
| 28, 24, 12, 10 | 164,796 | 173,964 | 338,760 |
| 28 | 87,024 | 93,564 | 180,588 |
| 28, 10 | 63,780 | 10,644 | 74,424 |
| 28, 14, 10 | 81,096 | 59,208 | 140,304 |
| 28, 14, 12, 10 | 494,784 | 953,640 | 1,448,424 |
| 28 | 147,108 | 255,708 | 402,816 |
| 28, 19, 12, 10 | 147,504 | 132,000 | 279,504 |
| 28 | 40,896 | 23,916 | 64,812 |
| 28, 20, 18 | 246,612 | 260,988 | 507,600 |
| 28, 18, 10 | 114,696 | 86,448 | 201,144 |
| 28, 26, 12, 10 | 1,586,628 | 2,081,316 | 3,667,944 |
| 20 | 0 | 38,352 | 38,352 |
| 28, 10 | 2,316 | (252) | 2,064 |
| 28, 12 | 825,408 | 244,428 | 1,069,836 |
| 28 | 157,944 | 275,520 | 433,464 |
| 28, 18, 12 | 174,588 | 168,336 | 342,924 |
| 28 | 41,748 | 168,864 | 210,612 |
| 28 | 11,700 | 14,556 | 26,256 |
| 28 | 22,212 | 23,856 | 46,068 |
| 20 | 17,784 | 39,672 | 57,456 |
| 28 | 60,576 | 125,520 | 186,096 |
| 28 | 3,600 | 396 | 3,996 |
| 28 | 2,364 | 2,808 | 5,172 |
| 28, 10 | 39,144 | $(39,144)$ | 0 |
| 28, 10 | 43,488 | 68,640 | 112,128 |
| 28 | 126,348 | 69,768 | 196,116 |
| 20, 12 | 239,544 | 404,580 | 644,124 |
| 28 | 100,392 | 120,744 | 221,136 |
| 28 | 18,948 | 540 | 19,488 |
| 28, 16, 12 | 1,194,396 | 693,612 | 1,888,008 |
| 28 | 185,496 | 26,460 | 211,956 |
| 28 | 299,004 | 166,332 | 465,336 |
| 28 | 8,148 | 4,224 | 12,372 |
| 28 | 3,516 | 9,228 | 12,744 |
| 28 | 78,468 | 46,080 | 124,548 |
| 28, 26, 10 | 1,566,276 | 1,795,476 | 3,361,752 |
| 28, 10 | 172,788 | $(39,096)$ | 133,692 |
| 28, 12, 10 | 346,872 | 2,053,908 | 2,400,780 |
| 12 | 79,452 | 11,736 | 91,188 |
| 28, 10 | 9,120 | $(9,120)$ | 0 |
| 28 | 323,280 | 192,552 | 515,832 |
| 28, 16 | 55,440 | 88,044 | 143,484 |
| 28 | $(2,340)$ | 27,336 | 24,996 |
| 28 | 89,484 | 141,828 | 231,312 |
| 19 | 22,452 | 780 | 23,232 |
| 28 | 297,432 | 162,840 | 460,272 |
| 28 | 34,308 | 10,992 | 45,300 |
| 28 | 183,768 | 22,920 | 206,688 |
| 28 | 82,104 | 187,956 | 270,060 |
| 28 | 3,348 | 180 | 3,528 |
| 25, 10 | 39,096 | $(8,664)$ | 30,432 |


| Municipality Name | Number |
| :---: | :---: |
| Berkley, City of | 6304 |
| Berrien Springs, Vlg | 1102 |
| Bessemer, City of | 2702 |
| Beverly Hills, Vlg o | 6321 |
| Big Rapids, City of | 5402 |
| Big Rapids HC | 5406 |
| Bingham Farms, Vlg o | 6332 |
| Birch Run, Vlg of | 7315 |
| Bishop Intl Arpt Aut | 2507 |
| Blackman Chtr Twp | 3806 |
| Blissfield, Vlg of | 4606 |
| Bloomfield Hills, Ci | 6302 |
| Blue Water Area Tran | 7709 |
| Boyne City, City of | 1506 |
| Branch Co | 1205 |
| Brandon Chtr Twp of | 6333 |
| Breckenridge, Vlg of | 2906 |
| Bridgeport Chtr Twp | 7307 |
| Bridgman, City of | 1110 |
| Brighton, Chtr Twp o | 4711 |
| Brighton, City of | 4704 |
| Brighton Area Fire A | 4715 |
| Britton, Vlg of | 4604 |
| Brnch-Hillsdale-St J | 1202 |
| Bronson, City of | 1204 |
| Brooklyn, Vlg of | 3801 |
| Brownstown, Chtr Twp | 8247 |
| Buchanan, City of | 1101 |
| Buchanan Dist Lib | 1108 |
| Buena Vista Chtr Twp | 7312 |
| Burton, City of | 2508 |
| Butman Township | 2604 |
| Cadillac, City of | 8301 |
| Cadillac/Wexford Tra | 8305 |
| Calhoun Co | 1311 |
| Calhoun CRC | 1307 |
| Canton, Chtr Twp of | 8233 |
| Canton Pub Lib | 8232 |
| Capac, Vlg of | 7705 |
| Capital Area Dist Li | 3317 |
| Capital Region Arprt | 3305 |
| Carleton, Vlg of | 5805 |
| Carrollton Twp | 7320 |
| Cascade Chtr Twp | 4110 |
| Caseville, Vlg of | 3207 |
| Caspian, City of | 3608 |
| Cass Co | 1402 |
| Cass Co MCF | 1403 |
| Cass Dist Lib | 1404 |
| Cedar Springs, City | 4105 |
| Center Line, City of | 5001 |
| Central Lake, Vlg of | 0504 |
| Central Mich Dist Hl | 3705 |
| Charlevoix, City of | 1505 |
| Charlevoix Co | 1503 |
| Charlevoix CRC | 1501 |
| Charlotte, City of | 2301 |
| Charlotte Dist Lib | 2309 |
| Cheboygan, City of | 1602 |
| Cheboygan Co | 1603 |
| Cheboygan CRC | 1601 |
| Chelsea, City of | 8103 |


| Amortization Period(s) | Normal Cost | Amortization Payment | Employer Contribution |
| :---: | :---: | :---: | :---: |
| 28, 10 | 191,028 | 253,044 | 444,072 |
| 28, 10 | 29,268 | $(29,268)$ | 0 |
| 28 | 39,912 | 28,392 | 68,304 |
| 28, 10 | 72,096 | 24,660 | 96,756 |
| 20, 12 | 74,256 | 439,920 | 514,176 |
| 20 | 17,340 | 27,264 | 44,604 |
| 28 | 9,216 | 1,212 | 10,428 |
| 28, 10 | 16,560 | 4,020 | 20,580 |
| 28 | 157,632 | 32,988 | 190,620 |
| 28 | 103,092 | 140,052 | 243,144 |
| 28, 10 | 91,704 | $(21,816)$ | 69,888 |
| $28,25,18,14,10$ | 291,300 | 679,044 | 970,344 |
| 28 | 189,696 | 51,864 | 241,560 |
| 28, 18 | 81,912 | 116,616 | 198,528 |
| 28, 10 | 142,524 | (324) | 142,200 |
| 28, 10 | 92,124 | 31,740 | 123,864 |
| 28, 10 | 3,204 | 64,788 | 67,992 |
| 28, 10 | 115,008 | 103,764 | 218,772 |
| 28 | 29,904 | 20,916 | 50,820 |
| 28, 10 | 28,980 | $(14,496)$ | 14,484 |
| 28 | 357,420 | 221,772 | 579,192 |
| 28, 10 | 10,308 | $(2,220)$ | 8,088 |
| 28, 10 | 1,320 | $(1,320)$ | 0 |
| 28, 10 | 187,296 | $(31,824)$ | 155,472 |
| 28, 25 | 4,320 | 30,708 | 35,028 |
| 28 | 14,736 | 16,476 | 31,212 |
| 25 | 514,620 | 202,356 | 716,976 |
| 28, 12, 10 | 64,488 | 15,936 | 80,424 |
| 28, 10 | 4,848 | $(2,616)$ | 2,232 |
| 28, 12 | 200,940 | 117,024 | 317,964 |
| 28 | 92,952 | 1,299,144 | 1,392,096 |
|  | 0 | 1,236 | 1,236 |
| 28, 10 | 209,784 | 12,564 | 222,348 |
| 28 | 59,592 | 5,592 | 65,184 |
| 28 | 147,372 | 731,808 | 879,180 |
| 28, 24 | 272,460 | 316,476 | 588,936 |
| 28, 26 | 1,465,860 | 1,383,852 | 2,849,712 |
| 28 | 36,564 | 1,380 | 37,944 |
| 28 | 31,236 | 69,576 | 100,812 |
| 28, 10 | 277,308 | $(29,400)$ | 247,908 |
| 28, 10 | 232,980 | 184,224 | 417,204 |
| 28 | 11,544 | 9,288 | 20,832 |
| 28 | 74,592 | 30,084 | 104,676 |
| 28 | 115,704 | 63,708 | 179,412 |
| 28 | 38,076 | 10,704 | 48,780 |
| 28 | 15,000 | 19,932 | 34,932 |
| 28, 10 | 373,332 | 164,940 | 538,272 |
| 28, 10 | 74,364 | $(66,876)$ | 7,488 |
| 28, 10 | 20,004 | $(10,800)$ | 9,204 |
| 28, 10 | 52,668 | 13,224 | 65,892 |
| 28, 10 | 63,216 | 155,160 | 218,376 |
| 25, 10 | 12,444 | $(1,920)$ | 10,524 |
| 19 | 206,388 | 360,684 | 567,072 |
| 28 | 205,536 | 188,256 | 393,792 |
| 28, 10 | 1,131,948 | 506,088 | 1,638,036 |
| 28, 25, 10 | 101,196 | 89,796 | 190,992 |
| 28, 10 | 191,340 | 259,152 | 450,492 |
| 28 | 12,672 | 12,444 | 25,116 |
| 28 | 90,396 | 152,748 | 243,144 |
| 28 | 443,016 | 207,120 | 650,136 |
| 28 | 202,368 | 357,684 | 560,052 |
| 12 | 88,572 | 347,016 | 435,588 |


| Municipality Name | Number |
| :---: | :---: |
| Chelsea Area Fire Au | 8118 |
| Chesaning, Vlg of | 7313 |
| Chesterfield Twp | 5009 |
| Chesterfield Twp Lib | 5010 |
| Chikaming Twp | 1112 |
| Chippewa Co | 1703 |
| Chippewa CRC | 1704 |
| Chippewa River Dist | 3707 |
| Chocolay, Chtr Twp o | 5218 |
| Clare, City of | 1804 |
| Clare Co | 1802 |
| Clare Co Trans Auth | 1806 |
| Clare CRC | 1801 |
| Clawson, City of | 6305 |
| Clay Twp | 7706 |
| Clearwater Twp | 4005 |
| Clinton, Vlg of | 4602 |
| Clinton Co | 1903 |
| Clinton CRC | 1901 |
| Clinton-Eaton-Ingham | 3308 |
| Clinton Twp | 5002 |
| Clio, City of | 2523 |
| CMH of Central Mich | 3708 |
| Coldwater, City of | 1201 |
| Coldwater Brd of Pub | 1203 |
| Coleman, City of | 5603 |
| Coloma, City of | 1118 |
| Coloma Chtr Twp | 1107 |
| Columbiaville, Vlg o | 4406 |
| Coopersville, City o | 7005 |
| Coopersville Area Di | 7011 |
| Corunna City of | 7604 |
| Corwith Twp | 6904 |
| Covert Twp | 8010 |
| Crawford Co | 2001 |
| Crawford Co Trans Au | 2004 |
| Crawford CRC | 2002 |
| Croswell, City of | 7401 |
| Crystal Falls, City | 3603 |
| Crystal Falls Comm H | 3618 |
| Ctrl Dispatch of Mus | 6109 |
| Ctrl Wayne Co Sanita | 8214 |
| Davison, City of | 2516 |
| Davison Richfield Sr | 2525 |
| Davison Twp | 2519 |
| Dearborn, City of | 8251 |
| Deerfield, Vlg of | 4603 |
| Delta Chtr Twp | 2306 |
| Delta Co | 2102 |
| Delta CRC | 2105 |
| Delta-Menominee Dist | 2103 |
| Detour, Vlg of | 1706 |
| Detroit HC | 8241 |
| DeWitt, City of | 1908 |
| DeWitt Chtr Twp | 1910 |
| Dexter, Vlg of | 8217 |
| Dexter Area Fire Dep | 8219 |
| Dexter Twp | 8111 |
| Dickinson Co | 2206 |
| Dickinson CRC | 2203 |
| Dickinson-Iron Dist | 3605 |
| Dimondale, Vlg of | 2304 |


| Amortization Period(s) | Normal Cost | Amortization Payment | Employer Contribution |
| :---: | :---: | :---: | :---: |
| 25, 10 | 31,992 | $(3,456)$ | 28,536 |
| 28, 14 | 23,124 | 118,560 | 141,684 |
| 28, 25 | 591,756 | 297,660 | 889,416 |
| 28, 10 | 28,356 | $(19,284)$ | 9,072 |
| 28 | 20,760 | 19,092 | 39,852 |
| 28, 10 | 752,508 | 397,572 | 1,150,080 |
| 28, 10 | 202,992 | 279,840 | 482,832 |
| 28, 10 | 54,888 | $(18,132)$ | 36,756 |
| 10, 10 | 23,556 | (948) | 22,608 |
| 28 | 94,140 | 113,364 | 207,504 |
| 28 | 287,304 | 132,000 | 419,304 |
| 28 | 2,148 | 1,896 | 4,044 |
| 28 | 83,796 | 95,736 | 179,532 |
| 19, 12 | 124,836 | 984,552 | 1,109,388 |
| 28 | 85,572 | 114,192 | 199,764 |
| 28, 10 | 5,100 | $(2,088)$ | 3,012 |
| 28, 10 | 46,320 | $(46,320)$ | 0 |
| 28, 24, 22, 20, 10 | 767,460 | 534,168 | 1,301,628 |
| 28, 10 | 191,376 | 254,508 | 445,884 |
| 28, 12, 10 | 2,188,188 | 1,379,652 | 3,567,840 |
| 28 | 703,044 | 824,640 | 1,527,684 |
| 28 | 35,568 | 6,204 | 41,772 |
| 28 | 1,510,980 | 35,448 | 1,546,428 |
| 28, 12 | 65,400 | 190,416 | 255,816 |
| 20, 14 | 79,188 | 285,036 | 364,224 |
| 28 | 25,296 | 34,332 | 59,628 |
| 25 | 8,676 | 3,960 | 12,636 |
| 28, 25, 10 | 18,636 | 35,664 | 54,300 |
| 28 | 3,564 | 2,952 | 6,516 |
| 28 | 28,284 | 4,824 | 33,108 |
| 28, 10 | 2,580 | 1,632 | 4,212 |
| 28, 18, 10 | 62,652 | 96,288 | 158,940 |
| 28, 10 | (36) | 36 | 0 |
| 25 | 41,544 | 15,984 | 57,528 |
| 28, 22, 20, 19, 10 | 216,456 | 288,360 | 504,816 |
| 28 | 62,088 | 16,404 | 78,492 |
| 28 | 98,964 | 199,740 | 298,704 |
| 28 | 137,040 | 170,040 | 307,080 |
| 28, 26 | 52,452 | 120,780 | 173,232 |
|  | 0 | 123,204 | 123,204 |
| 28 | 62,208 | 23,100 | 85,308 |
| 12 | 0 | 35,640 | 35,640 |
| 28 | 111,960 | 172,128 | 284,088 |
| 26 | 0 | 5,760 | 5,760 |
| 28 | 204,456 | 112,164 | 316,620 |
| 25, 10 | 425,340 | $(81,960)$ | 343,380 |
| 28 | 17,748 | 5,880 | 23,628 |
| 28 | $(14,448)$ | 172,980 | 158,532 |
| 28, 26, 22, 20, 10 | 508,788 | 262,164 | 770,952 |
| 28 | 122,940 | 230,592 | 353,532 |
| 28, 10 | 156,144 | $(131,856)$ | 24,288 |
| 28 | 14,244 | 11,700 | 25,944 |
| 28, 10 | 617,832 | $(65,268)$ | 552,564 |
| 28 | 72,648 | 87,384 | 160,032 |
| 28 | 80,040 | 24,720 | 104,760 |
| 28 | 48,528 | 38,364 | 86,892 |
| 28 | 33,192 | 6,372 | 39,564 |
| 28 | 3,972 | 2,736 | 6,708 |
| 28, 10 | 353,172 | 331,356 | 684,528 |
| 28, 24 | 132,888 | 145,728 | 278,616 |
| 28, 19, 12 | 83,880 | 112,692 | 196,572 |
| 28 | 11,268 | 6,576 | 17,844 |


| Municipality Name | Number |
| :---: | :---: |
| Dist Hlth Dept \#10 | 5104 |
| Dist Hlth Dept \# 2 | 6501 |
| Dist Hlth Dept \# 4 | 7103 |
| Douglas, City of Vlg | 0303 |
| Dowagiac, City of | 1401 |
| Dowagiac Dist Lib | 1406 |
| Dowagiac HC | 1405 |
| Drummond Island Twp | 1708 |
| Dryden, Vlg of | 4405 |
| Dundee, Vlg of | 5803 |
| Durand, City of | 7603 |
| East China Chtr Twp | 7701 |
| East Grand Rapids, Ci | 4101 |
| East Jordan, City of | 1504 |
| East Lansing, City o | 3301 |
| Eastpointe HC | 5011 |
| Eaton Co | 2302 |
| Eaton Co MCF | 2305 |
| Eaton Rapids, City o | 2307 |
| Eau Claire, Vlg of | 1104 |
| Ecorse, City of | 8206 |
| Elderly Housing Corp | 8222 |
| Elkton, Vlg of | 3206 |
| Elsie, Village of | 1906 |
| Emmett, Chtr Twp | 1310 |
| Emmett CRC | 2401 |
| Erie, Township of | 5812 |
| Escanaba, City of | 2101 |
| Essexville, City of | 0903 |
| E UP Reg Planning \& | 1709 |
| E UP Trans Auth | 1705 |
| Evart, City of | 6705 |
| Evart Local Dev Fina | 6706 |
| Farmington, City of | 6343 |
| Farmington Cmnty Lib | 6319 |
| Farwell, Vlg of | 1805 |
| Fenton, City of | 2505 |
| Ferndale HC | 6345 |
| Ferrysburg, City of | 7106 |
| Flat Rock, City of | 8212 |
| Flint, Chtr Twp of | 2512 |
| Flint Pub Lib | 2518 |
| Flushing, Chtr Twp o | 2515 |
| Flushing, City of | 2502 |
| Forsyth Twp | 5212 |
| Fowler, Vlg of | 1904 |
| Fowlerville, Vlg of | 4705 |
| Fowlerville Dist Lib | 4710 |
| Frankenmuth, City of | 7306 |
| Frankfort, City of | 1002 |
| Franklin, Vlg of | 6323 |
| Fraser, City of | 5003 |
| Fremont, City of | 6203 |
| Fremont Area Dist Li | 6209 |
| Gaastra, City of | 3617 |
| Garden City, City of | 8255 |
| Gaylord, City of | 6903 |
| Genesee Chtr Twp | 2510 |
| Genoa Twp | 4713 |
| Gladstone, City of | 2106 |
| Gladwin, City of | 2605 |
| Gladwin City HC | 2608 |


| Amortization Period(s) | Normal Cost | Amortization Payment | Employer Contribution |
| :---: | :---: | :---: | :---: |
| 28 | 158,052 | 446,016 | 604,068 |
| 12 | 68,580 | 109,500 | 178,080 |
| 12 | 65,244 | 285,396 | 350,640 |
| 28 | 81,360 | 27,144 | 108,504 |
| 28 | 133,440 | 385,176 | 518,616 |
| 28 | 1,356 | 156 | 1,512 |
| 28, 10 | 13,200 | $(4,584)$ | 8,616 |
| 28 | 8,616 | 96 | 8,712 |
| 28 | 5,220 | 1,752 | 6,972 |
| 28 | 7,020 | 51,180 | 58,200 |
| 28 | 74,244 | 41,532 | 115,776 |
| 28 | 75,288 | 76,824 | 152,112 |
| 12, 10 | 54,108 | 732,024 | 786,132 |
| 28 | 66,852 | 25,692 | 92,544 |
| 28, 20, 19, 14, 12, 10 | 1,514,256 | 3,767,316 | 5,281,572 |
| 28 | 17,580 | 900 | 18,480 |
| 28, 10 | 1,026,312 | 2,047,908 | 3,074,220 |
| 28, 10 | 296,976 | $(7,056)$ | 289,920 |
| 28, 25 | 165,984 | 164,580 | 330,564 |
| 28 | 3,228 | 10,392 | 13,620 |
| 28, 18, 16, 12 | 366,888 | 1,294,800 | 1,661,688 |
| 28 | 22,740 | 31,236 | 53,976 |
| 12, 10 | 2,388 | 14,952 | 17,340 |
|  | 0 | 0 | 0 |
| 28 | 62,892 | 32,388 | 95,280 |
| 12 | 76,104 | 453,384 | 529,488 |
| 25, 10 | 4,860 | (288) | 4,572 |
| 28, 22, 20, 19 | 317,208 | 746,148 | 1,063,356 |
| 28, 12, 10 | 56,316 | 71,700 | 128,016 |
| 25, 10 | 6,756 | $(4,596)$ | 2,160 |
| 28 | 123,684 | 157,140 | 280,824 |
| 28 | 57,300 | 6,432 | 63,732 |
| 28 | 4,272 | 7,632 | 11,904 |
| 20, 10 | 383,724 | 1,284 | 385,008 |
| 12, 10 | 45,732 | 33,000 | 78,732 |
| 28 | 7,980 | 3,420 | 11,400 |
| 28, 25, 19, 12, 10 | 250,692 | 169,404 | 420,096 |
| 25 | 10,920 | 15,984 | 26,904 |
| 28 | 20,208 | 18,492 | 38,700 |
| 28, 10 | 230,436 | 394,968 | 625,404 |
| 28, 10 | 187,776 | 273,984 | 461,760 |
| 28, 10 | 81,852 | $(16,680)$ | 65,172 |
| 28 | 54,096 | 123,264 | 177,360 |
| 28, 22 | 213,216 | 332,604 | 545,820 |
| 28, 22, 10 | 63,240 | 134,052 | 197,292 |
| 28 | 10,800 | 3,672 | 14,472 |
| 28, 10 | 39,948 | $(19,152)$ | 20,796 |
| 28 | 9,072 | 72 | 9,144 |
| 28, 10 | 126,096 | 147,576 | 273,672 |
| 28 | 42,540 | 51,852 | 94,392 |
| 28, 10 | 68,400 | 105,360 | 173,760 |
|  | 0 | 0 | 0 |
| 28 | 165,936 | 152,388 | 318,324 |
| 28 | 33,780 | 9,588 | 43,368 |
| 28 | 4,188 | 936 | 5,124 |
| 25, 23 | 707,676 | 851,832 | 1,559,508 |
| 28 | 178,836 | 134,844 | 313,680 |
| 28 | 254,076 | 368,688 | 622,764 |
| 28, 10 | 16,164 | (468) | 15,696 |
| 24, 12 | 87,852 | 459,744 | 547,596 |
| 28 | 40,824 | 936 | 41,760 |
| 28 | 36,468 | 48,276 | 84,744 |


| Municipality Name | Number |
| :---: | :---: |
| Gladwin Co | 2602 |
| Gladwin Co Dist Lib | 2607 |
| Gladwin CRC | 2601 |
| Gogebic-Iron Wastewa | 2703 |
| Grand Beach, Vlg of | 1117 |
| Grand Blanc, City of | 2513 |
| Grand Blanc Chtr Twp | 2511 |
| Grand Haven, City of | 7010 |
| Grand Ledge, City of | 2312 |
| Grand Ledge Area ESA | 2310 |
| Grand Rapids H C | 4108 |
| Grand Traverse Co | 2803 |
| Grand Traverse CRC | 2802 |
| Grand Traverse Pavil | 2809 |
| Grandville, City of | 4102 |
| Gratiot Co | 2905 |
| Gratiot CRC | 2903 |
| Grayling, City of | 2003 |
| Green Oak Chtr Twp | 4708 |
| Greenville, City of | 5906 |
| Grosse Ile Twp | 8207 |
| Grosse Pointe Park, | 8201 |
| Grosse Pte-Clntn Rfs | 5004 |
| Groveland Twp | 6335 |
| Hackley Pub Lib | 6114 |
| Hamburg Twp | 4709 |
| Hamtramck, City of | 8205 |
| Hamtramck Housing Co | 8250 |
| Hancock, City of | 3107 |
| Harbor Beach, City o | 3201 |
| Harbor Springs, City | 2405 |
| Harbor Springs Area | 2406 |
| Harrison, City of | 1803 |
| Hartland Deerfield T | 4716 |
| Hastings, City of | 0801 |
| Hazel Park, City of | 6336 |
| Helen Newberry Joy H | 4805 |
| Henika Dist Lib | 0310 |
| Herrick Dist Lib | 7012 |
| Hiawatha Bhvrl Hlth | 1707 |
| Hillsdale, City of | 3001 |
| Hillsdale Co | 3005 |
| Hillsdale CRC | 3004 |
| Hlth Source of Sagin | 7311 |
| Holland, City of | 7001 |
| Holland Area Cmnty P | 7014 |
| Holland Hospital | 7006 |
| Holly, Vlg of | 6317 |
| Homer, Vlg of | 1304 |
| Houghton, City of | 3109 |
| Houghton Co | 3102 |
| Houghton CRC | 3103 |
| Houghton Lake Pub Li | 7203 |
| Howard City, Vlg of | 5902 |
| Howard Twp | 1106 |
| Howell, City of | 4702 |
| Howell Area Fire Aut | 4714 |
| Howell-Carnegie Dist | 4707 |
| Hudsonville, City of | 7004 |
| Huntington Woods, Ci | 6303 |
| Hurley Med Ctr | 2521 |
| Huron Chtr Twp | 8224 |


| Amortization Period(s) | Normal Cost | Amortization Payment | Employer Contribution |
| :---: | :---: | :---: | :---: |
| 28 | 335,184 | 155,556 | 490,740 |
| 28 | 15,732 | 7,476 | 23,208 |
| 28, 10 | 123,000 | 198,720 | 321,720 |
| 28 | 27,660 | 21,636 | 49,296 |
| 25, 10 | 17,472 | $(2,616)$ | 14,856 |
| 28 | 118,848 | 127,740 | 246,588 |
| 28, 14 | 225,984 | 397,956 | 623,940 |
| 28, 16, 14, 10 | 959,088 | 29,448 | 988,536 |
| 25 | 13,620 | 46,572 | 60,192 |
| 28 | 49,980 | 3,792 | 53,772 |
| 12 | 20,148 | 37,980 | 58,128 |
| 28, 16 | 709,608 | 3,146,976 | 3,856,584 |
| 12 | 33,840 | 272,640 | 306,480 |
| 28, 10 | 663,432 | 161,916 | 825,348 |
| 6 | 91,512 | 903,564 | 995,076 |
| 12, 10 | 242,244 | 596,232 | 838,476 |
| 28 | 152,556 | 207,312 | 359,868 |
| 28, 23, 18, 10 | 33,060 | 75,372 | 108,432 |
| 28 | 65,436 | 62,616 | 128,052 |
| 28 | 1,176 | 57,540 | 58,716 |
| 28 | 386,892 | 364,500 | 751,392 |
| 28, 10 | 352,920 | 528,012 | 880,932 |
|  | 0 | 81,458 | 81,458 |
| 28, 10 | 29,580 | 3,636 | 33,216 |
| 28, 10 | 12,516 | (144) | 12,372 |
| 28 | 54,564 | 44,700 | 99,264 |
| 28, 26, 12, 10 | 557,412 | 3,271,152 | 3,828,564 |
| 28, 10 | 103,632 | $(12,564)$ | 91,068 |
| 28 | 38,736 | 28,464 | 67,200 |
| 28, 22, 10 | 45,420 | 12,132 | 57,552 |
| 28 | 48,600 | 65,580 | 114,180 |
| 25 | 26,196 | 2,556 | 28,752 |
| 28 | 32,064 | 26,076 | 58,140 |
| 28 | 29,028 | 228 | 29,256 |
| 28, 10 | 199,764 | 310,620 | 510,384 |
| 28, 10 | 450,624 | 830,472 | 1,281,096 |
| 12 | 87,744 | 436,044 | 523,788 |
| 28, 10 | 10,200 | $(10,200)$ | 0 |
| 28 | 179,652 | 58,092 | 237,744 |
| 28, 18, 14, 12, 10 | 174,696 | 106,380 | 281,076 |
| 28, 12, 10 | 239,616 | $(7,164)$ | 232,452 |
| 28 | 32,220 | 113,940 | 146,160 |
| 28 | 48,060 | 119,016 | 167,076 |
| 28, 26, 24, 22, 12 | 705,048 | 239,340 | 944,388 |
| 28, 22, 20, 14 | 1,147,440 | 2,067,444 | 3,214,884 |
| 28, 10 | 38,928 | $(4,164)$ | 34,764 |
|  | 0 | 11,994 | 11,994 |
| 28 | 136,908 | 230,388 | 367,296 |
| 28, 10 | 32,076 | $(12,168)$ | 19,908 |
| 10, 10 | 77,736 | $(32,316)$ | 45,420 |
| 28 | 369,732 | 383,928 | 753,660 |
| 28 | 55,524 | 55,212 | 110,736 |
| 28, 10 | 26,532 | $(6,492)$ | 20,040 |
| 18 | 13,632 | 10,884 | 24,516 |
| 28, 10 | 6,132 | (648) | 5,484 |
| 28 | 294,816 | 354,648 | 649,464 |
| 28, 26 | 28,776 | 7,992 | 36,768 |
| 28 | 34,548 | 1,752 | 36,300 |
| 24, 19, 12, 10 | 9,672 | 91,356 | 101,028 |
| 28, 19, 12 | 138,732 | 647,088 | 785,820 |
| 28, 25, 23, 21 | 4,253,640 | 5,011,392 | 9,265,032 |
| 28 | 243,852 | 259,860 | 503,712 |


| Municipality Name | Number |
| :---: | :---: |
| Huron Co | 3204 |
| Huron CRC | 3202 |
| Imlay City, City of | 4404 |
| Independence Twp | 6328 |
| Indianfields Twp | 7905 |
| Ingham Co | 3303 |
| Ingham CRC | 3302 |
| Interurban Trans Aut | 0308 |
| Ionia, City of | 3403 |
| Ionia Cmnty Lib | 3412 |
| Ionia Co | 3408 |
| Ionia CRC | 3404 |
| Ionia HC | 3406 |
| Iosco Co | 3501 |
| Iosco CRC | 3502 |
| Iron Co | 3606 |
| Iron Co HC | 3611 |
| Iron CRC | 3602 |
| Iron Mountain, City | 2201 |
| Iron Mountain-Kingsf | 2205 |
| Iron River, City of | 3601 |
| Ironwood, City of | 2706 |
| Isabella Co | 3703 |
| Isabella Co Trans Co | 3709 |
| Isabella CRC | 3702 |
| Ishpeming, City of | 5204 |
| Ishpeming Area Joint | 5207 |
| Ishpeming Twp | 5216 |
| Ithaca, City of | 2904 |
| Jackson Dist Lib | 3802 |
| Jackson Trans Auth | 3805 |
| Jordan Valley Dist L | 1507 |
| Kalamazoo, Chtr Twp | 3907 |
| Kalamazoo Lake Swr \& | 0306 |
| Kalamazoo Pub Lib | 3903 |
| Kalkaska, Village of | 4001 |
| Kalkaska Co | 4003 |
| Kalkaska CRC | 4002 |
| Kalkaska Pub Trans A | 4004 |
| Keego Harbor, City o | 6322 |
| Kent CRC | 4111 |
| Keweenaw Co | 4202 |
| Keweenaw CRC | 4201 |
| Kinde, Vlg of | 3209 |
| Kingsford, City of | 2202 |
| L.M.A.S. Dist Hlth D | 4803 |
| L'Anse, Vlg of | 0705 |
| Lac Vieux Desert Ban | 8402 |
| Laingsburg, City of | 7608 |
| Lake Co | 4301 |
| Lake CRC | 4302 |
| Lakeland Lib Coop | 4106 |
| Lake Linden, Vlg of | 3105 |
| Lake Odessa, Village | 3402 |
| Lake Orion, Vlg of | 6318 |
| Lakeshore Coordinati | 7007 |
| Lansing Chtr Twp | 3320 |
| Lansing HC | 3311 |
| Lapeer, City of | 4401 |
| Lapeer Co | 4403 |
| Lapeer CRC | 4402 |
| Lapeer Dist Lib | 4410 |


| Amortization Period(s) | Normal Cost |
| :---: | :---: |
| 28, 10 | 1,166,616 |
| 28 | 191,544 |
| 28 | 127,032 |
| 28 | 151,656 |
| 28 | 2,304 |
| 28, 26, 25, 12, 10 | 3,819,468 |
| 28 | 442,740 |
| 28, 10 | 17,832 |
| 28, 12, 10 | 252,840 |
| 28, 22, 10 | 13,152 |
| 28, 10 | 188,076 |
| 28 | 121,044 |
| 28 | 13,032 |
| 28, 22, 20, 14, 12 | 440,904 |
| 28 | 46,248 |
| 28, 20, 18, 10 | 738,360 |
| 28 | 14,364 |
| 28 | 114,948 |
| 28 | 84,216 |
| 28 | 11,232 |
| 28, 10 | 113,052 |
| 25 | 145,692 |
| 28, 14, 12, 10 | 606,480 |
| 28, 10 | 10,404 |
| 28, 25 | 108,852 |
| 28 | 108,744 |
| 28 | 21,132 |
| 28 | 20,448 |
| 20, 19 | 23,532 |
| 28, 10 | 96,900 |
| 28, 10 | 103,860 |
| 28, 10 | 4,968 |
| 25 | 244,716 |
| 28 | 24,024 |
| 28 | 230,892 |
| 28 | 52,368 |
| 28, 10 | 410,640 |
| 28 | 117,636 |
| 28, 10 | 35,316 |
| 28 | 24,036 |
| 5 | 0 |
| 28 | 45,300 |
| 28 | 76,104 |
| 28 | 1,164 |
| 28 | 69,540 |
| 28, 10 | 57,228 |
| 28 | 76,380 |
| 25 | 22,044 |
| 28, 10 | 13,656 |
| 28, 10 | 418,812 |
| 28 | 93,864 |
| 28 | 14,676 |
| 28, 26, 10 | 15,372 |
| 25, 10 | 7,644 |
| 24, 19, 10 | 37,956 |
| 28, 10 | 36,024 |
| 25, 10 | 142,428 |
| 28 | 192,156 |
| 28 | 453,264 |
| 28, 10 | 2,062,380 |
| 28, 12, 10 | 113,328 |
| 28 | 53,892 |

Total
Employer Contribution

1,656,864
458,364
192,420
228,060
15,744
7,863,672
964,728
4,368
639,588
18,804
235,728
565,272
22,980
846,000
129,672
914,808
18,108
416,376
349,572
25,008
201,732
547,656
1,409,904

212,772
327,600
25,176
27,816
90,480
24,852
106,812
3,108
303,360
33,396
250,992
137,304
520,176
334,536
33,828
88,884
42,648
68,076
182,772
7,440
124,764
37,860
177,480
22,704
10,644
515,244
258,156
16,764
33,312
792
102,960
23,580
135,120
246,720
689,232
2,369,844
383,916
111,420

| Municipality Name | Number |
| :---: | :---: |
| Lathrup Vlg, City of | 6311 |
| Laurium, Vlg of | 3104 |
| Lawrence, Vlg of | 8004 |
| Leelanau Co | 4501 |
| Leelanau CRC | 4503 |
| Leoni Twp | 3804 |
| Leslie, City of | 3313 |
| Leslie Twp | 3319 |
| Lexington, Vlg of | 7708 |
| Lima Twp | 8112 |
| Litchfield, City of | 3006 |
| Livingston Co | 4703 |
| Livingston Co CMH Au | 4712 |
| Livingston CRC | 4701 |
| Looking Glass Rgnl F | 2311 |
| Loutit Dist Lib | 7013 |
| Lowell, City of | 4104 |
| Luce Co | 4804 |
| Luce CRC | 4801 |
| Ludington, City of | 5302 |
| Ludington-Mason Dist | 5303 |
| Luna Pier, City of | 5802 |
| Lyons, Vlg of | 3411 |
| Mackinac Co | 4901 |
| Mackinac Co HC | 4905 |
| Mackinac CRC | 4903 |
| Mackinac Straits Hos | 4902 |
| Mackinaw City, Vlg o | 1606 |
| Madison, Chtr Twp of | 4605 |
| Madison Heights, Cit | 6308 |
| Manistee, City of | 5105 |
| Manistee Co | 5101 |
| Manistee CRC | 5103 |
| Manistee HC | 5107 |
| Manistique, City of | 7504 |
| Manlius Twp | 0311 |
| Manton, City of | 8304 |
| Marenisco Twp | 2704 |
| Marine City, City of | 7704 |
| Marion, Vlg of | 6704 |
| Marlette, City of | 7405 |
| Marquette, City of | 5201 |
| Marquette Brd of Lig | 5209 |
| Marquette Chtr Twp | 5215 |
| Marquette Co | 5202 |
| Marquette Co Arpt | 5210 |
| Marquette Co Solid W | 5213 |
| Marquette Co Trans A | 5206 |
| Marquette CRC | 5211 |
| Marshall, City of | 1306 |
| Marshall Area Firefi | 1313 |
| Marshall Dist Lib | 1309 |
| Mason, City of | 3304 |
| Mason Co | 5301 |
| Mason CRC | 5305 |
| Mason-Oceana Cty Enh | 6403 |
| Mastodon Township | 3613 |
| MBS Intl Arpt | 0902 |
| Meceola Central Disp | 5405 |
| Mecosta Co | 5403 |
| Mecosta County Gener | 5404 |
| Mecosta CRC | 5401 |


| Amortization Period(s) | Normal Cost | Amortization Payment | Employer Contribution |
| :---: | :---: | :---: | :---: |
| 28, 10 | 66,084 | 52,404 | 118,488 |
| 28 | 37,272 | 29,076 | 66,348 |
| 19, 14, 10 | 0 | 48 | 48 |
| 28 | 482,892 | 258,780 | 741,672 |
| 28 | 61,812 | 111,024 | 172,836 |
| 28, 24 | 42,768 | 40,848 | 83,616 |
| 28, 10 | 28,500 | 1,716 | 30,216 |
| 28 | 4,404 | 1,884 | 6,288 |
| 28, 19, 10 | 32,316 | 27,264 | 59,580 |
| 28, 10 | 8,604 | (480) | 8,124 |
| 28 | 16,500 | 20,292 | 36,792 |
| 28, 19, 14, 10 | 1,803,816 | 1,348,824 | 3,152,640 |
| 28, 10 | 429,600 | $(46,992)$ | 382,608 |
| 28 | 336,636 | 59,676 | 396,312 |
| 28, 10 | 14,040 | $(3,852)$ | 10,188 |
| 28 | 66,264 | 4,596 | 70,860 |
| 28, 12 | 127,044 | 137,772 | 264,816 |
| 28 | 102,432 | 110,304 | 212,736 |
| 28, 10 | 86,196 | 218,364 | 304,560 |
| 28 | 280,824 | 170,868 | 451,692 |
| 28 | 36,744 | 4,068 | 40,812 |
| 28, 24 | 39,444 | 93,000 | 132,444 |
| 28, 10 | 4,692 | $(2,424)$ | 2,268 |
| 28, 18 | 170,628 | 201,960 | 372,588 |
| 26 | 0 | 10,980 | 10,980 |
| 28, 19 | 76,704 | 213,708 | 290,412 |
| 28, 12 | 912,036 | 259,620 | 1,171,656 |
| 28 | 24,900 | 3,768 | 28,668 |
| 28 | 16,332 | 10,116 | 26,448 |
| 28, 26, 20, 10 | 378,588 | 482,148 | 860,736 |
| 28, 10 | 167,256 | $(50,700)$ | 116,556 |
| 28, 10 | 894,564 | 439,920 | 1,334,484 |
| 28, 14 | 130,332 | 348,132 | 478,464 |
| 28, 10 | 6,540 | $(6,540)$ | 0 |
| 28 | 184,140 | 267,084 | 451,224 |
| 28 | 4,356 | 3,396 | 7,752 |
| 28, 10 | 19,644 | 40,140 | 59,784 |
| 28 | 12,120 | 816 | 12,936 |
|  | 0 | 0 | 0 |
| 28 | 6,432 | 4,692 | 11,124 |
| 28 | 24,480 | 14,904 | 39,384 |
| 28, 12 | 577,656 | 1,018,308 | 1,595,964 |
| 19, 12 | 163,944 | 955,872 | 1,119,816 |
| 28 | 46,992 | 17,556 | 64,548 |
| 28, 18, 14, 12, 10 | 868,524 | 2,379,840 | 3,248,364 |
| 19 | 21,264 | 58,932 | 80,196 |
| 28, 10 | 39,624 | (624) | 39,000 |
| 28 | 49,320 | 8,400 | 57,720 |
| 28, 14 | 247,116 | 666,984 | 914,100 |
| 28, 26, 10 | 210,300 | 270,636 | 480,936 |
| 28, 10 | 22,380 | $(8,880)$ | 13,500 |
| 18 | 0 | 5,940 | 5,940 |
| 28, 10 | 105,516 | 164,760 | 270,276 |
| 28, 19 | 735,072 | 329,052 | 1,064,124 |
| 28 | 126,060 | 103,704 | 229,764 |
| 28, 18 | 58,356 | 4,956 | 63,312 |
|  | 0 | 1,557 | 1,557 |
| 28, 10 | 151,608 | 133,668 | 285,276 |
| 28 | 50,664 | 18,648 | 69,312 |
| 14, 12, 10 | 252,432 | 39,840 | 292,272 |
|  | 0 | 260,391 | 260,391 |
| 28, 10 | 67,872 | 47,268 | 115,140 |


| Municipality Name | Number |
| :---: | :---: |
| Melvindale, City of | 8215 |
| Melvindale HC | 8220 |
| Menominee, City of | 5501 |
| Menominee Co | 5502 |
| Menominee CRC | 5503 |
| Meridian Chtr Twp | 3315 |
| MERS | 2308 |
| Metamora Twp | 4409 |
| Mich. Grand River Wa | 3306 |
| Mich Muni Risk Mgmt | 8237 |
| Mich S Central Power | 3002 |
| Middleville, Vlg of | 0803 |
| Midland, City of | 5601 |
| Midland Co Central D | 5604 |
| Midland CRC | 5602 |
| Mid-Mich Dist Hlth D | 5901 |
| Mid-Mich Lib League | 8306 |
| Mid Peninsula Lbry C | 3609 |
| Milan, City of | 5801 |
| Milan Lib | 5806 |
| Milford, Vlg of | 6313 |
| Millington, Vlg of | 7904 |
| Missaukee Co | 5702 |
| MOA Solid Waste Mgmt | 6002 |
| Monroe HC | 5808 |
| Montague, City of | 6112 |
| Montcalm CRC | 5905 |
| Montmorency Co | 6001 |
| Montrose, City of | 2509 |
| Mt. Morris Chtr Twp | 2503 |
| Mt. Pleasant, City o | 3701 |
| Muir, Vlg of | 3405 |
| Mundy, Chtr Twp of | 2517 |
| Munising, City of | 0202 |
| Muskegon, City of | 6116 |
| Muskegon Area Dist L | 6117 |
| Muskegon Chtr Twp | 6108 |
| Muskegon Co | 6103 |
| Muskegon CRC | 6101 |
| Muskegon HC | 6113 |
| Muskegon Heights, Ci | 6102 |
| Muskegon Heights HC | 6115 |
| Negaunee, City of | 5203 |
| Negaunee Twp | 5217 |
| Network180 | 4109 |
| Newaygo CMH | 6207 |
| Newaygo Co | 6201 |
| Newaygo CRC | 6212 |
| Newaygo MCF | 6204 |
| Newaygo Soil \& Wtr C | 6205 |
| New Baltimore, City | 5016 |
| Newberry, Vlg of | 4802 |
| New Buffalo, City of | 1113 |
| Niles Dist Lib | 1105 |
| N Muskegon, City of | 6104 |
| No. Mich. Comm. Mntl | 2403 |
| Northern Lakes CMH A | 2808 |
| Northfield Twp | 8117 |
| North Houghton Co Wt | 3106 |
| Northpointe Bhvrl Hl | 2207 |
| Northville, City of | 8208 |
| Northville Chtr Twp | 8230 |


| Amortization Period(s) | Normal Cost | Amortization Payment | Employer Contribution |
| :---: | :---: | :---: | :---: |
| 28, 20, 18 | 317,820 | 995,184 | 1,313,004 |
| 28 | 32,592 | 15,756 | 48,348 |
| 28 | 116,844 | 43,524 | 160,368 |
| 28, 24, 12, 10 | 369,840 | 261,732 | 631,572 |
| 28, 24 | 51,396 | 82,668 | 134,064 |
| 28 | 582,264 | 967,944 | 1,550,208 |
| 28 | 1,005,264 | 27,336 | 1,032,600 |
| 28, 10 | 39,804 | $(6,024)$ | 33,780 |
|  | 0 | 426 | 426 |
| 28, 10 | 23,280 | $(12,348)$ | 10,932 |
| 28, 20 | 225,036 | 78,540 | 303,576 |
| 28, 12 | 16,344 | 13,032 | 29,376 |
| 28, 18 | 1,211,280 | 2,859,888 | 4,071,168 |
| 28, 20 | 57,072 | 20,448 | 77,520 |
| 28, 24 | 103,380 | 228,984 | 332,364 |
| 28, 10 | 180,024 | 31,320 | 211,344 |
| 28, 10 | 7,992 | $(5,304)$ | 2,688 |
|  | 0 | 9,691 | 9,691 |
| 28, 14, 12 | 85,860 | 430,608 | 516,468 |
| 28 | 11,304 | 2,580 | 13,884 |
| 28, 12 | 138,696 | 206,100 | 344,796 |
| 28 | 9,576 | 3,744 | 13,320 |
| 28 | 117,912 | 59,568 | 177,480 |
| 28, 10 | 19,752 | $(15,924)$ | 3,828 |
| 28 | 33,516 | 27,828 | 61,344 |
| 28 | 50,796 | 44,532 | 95,328 |
| 28 | 173,520 | 241,116 | 414,636 |
| 28, 22 | 173,544 | 171,012 | 344,556 |
| 28, 12 | 21,096 | 30,576 | 51,672 |
| 28 | 342,420 | 549,252 | 891,672 |
| 28, 10 | 362,628 | 257,136 | 619,764 |
| 28 | 5,076 | 6,600 | 11,676 |
| 28 | 97,764 | 80,904 | 178,668 |
| 28, 14 | 114,480 | 65,808 | 180,288 |
| 13, 10, 5, 10 | 824,544 | 187,896 | 1,012,440 |
| 28 | 59,724 | 2,712 | 62,436 |
| 28 | 239,280 | 122,592 | 361,872 |
| 28, 24, 22, 20, 10 | 3,057,696 | 2,320,536 | 5,378,232 |
| 28 | 321,312 | 257,736 | 579,048 |
| 28 | 21,468 | 1,104 | 22,572 |
| 28, 18, 10 | 211,728 | 282,900 | 494,628 |
| 28 | 12,120 | 17,988 | 30,108 |
| 28 | 146,376 | 165,492 | 311,868 |
| 28 | 6,348 | 4,572 | 10,920 |
| 28, 10 | 613,296 | $(219,984)$ | 393,312 |
| 14, 10 | 15,360 | $(15,360)$ | 0 |
| 20, 18, 14, 12, 10 | 225,240 | 362,256 | 587,496 |
| 25, 23, 10 | 156,420 | 80,748 | 237,168 |
| 28, 18, 10 | 210,360 | 9,828 | 220,188 |
| 28, 10 | 3,996 | $(1,656)$ | 2,340 |
| 15, 10 | 177,936 | 61,596 | 239,532 |
| 28, 20, 10 | 51,504 | 61,536 | 113,040 |
| 25 | 31,152 | 26,256 | 57,408 |
| 28, 10 | 21,636 | $(8,232)$ | 13,404 |
| 28 | 63,936 | 52,884 | 116,820 |
|  | 0 | 0 | 0 |
| 14 | 182,472 | 129,168 | 311,640 |
| 28 | 51,804 | 2,328 | 54,132 |
| 28 | 12,540 | 948 | 13,488 |
| 28, 12, 10 | 267,084 | $(59,484)$ | 207,600 |
| 20, 19, 18, 14, 12 | 128,316 | 589,140 | 717,456 |
| 28, 25 | 959,364 | 372,648 | 1,332,012 |


| Municipality Name | Number |
| :---: | :---: |
| Northville Dist Lib | 8229 |
| Norton Shores, City | 6106 |
| Norway, City of | 2204 |
| Novi, City of | 6320 |
| NW Mich Cmnty Hlth A | 1502 |
| NW Rgnl Arpt Comm | 2805 |
| Oceana Co | 6402 |
| Oceola Twp | 4717 |
| Ogemaw Co | 6502 |
| Ogemaw Co EMS Auth | 6508 |
| Ogemaw CRC | 6503 |
| Olive Twp | 7009 |
| Onaway, City of | 7105 |
| Ontonagon, Vlg of | 6603 |
| Ontonagon Co | 6602 |
| Ontonagon Co Economi | 6605 |
| Ontonagon CRC | 6604 |
| Orchard Lake, City o | 6312 |
| Oronoko Chtr Twp | 1114 |
| Osceola Co | 6701 |
| Osceola CRC | 6703 |
| Oscoda Chtr Twp | 3503 |
| Oscoda Co | 6801 |
| Oscoda Wurtsmith Arp | 6802 |
| Otisville, Vlg of | 2506 |
| Otsego Co | 6902 |
| Otsego CRC | 6901 |
| Ottawa Co | 7003 |
| Ottawa Co Central Di | 7008 |
| Ottawa CRC | 7002 |
| Otter Lake, Vlg of | 4408 |
| Owosso, City of | 7607 |
| Oxford, Township of | 6327 |
| Oxford, Vlg of | 6326 |
| Parchment, City of | 3901 |
| Pathways(Spr.Bhvl.Mn | 5214 |
| Paw Paw, Vlg of | 8002 |
| Paw Paw Lk Reg Jnt S | 1103 |
| Pellston, Vlg of | 2404 |
| Pennfield Chtr Twp | 1312 |
| Pentwater, Vlg of | 6401 |
| Perrinton, Vlg of | 2909 |
| Petersburg, City of | 5807 |
| Petoskey, City of | 2402 |
| Pewamo, Vlg of | 3407 |
| Pigeon, Vlg of | 3203 |
| Pinckney, Village of | 4706 |
| Pinconning, City of | 0904 |
| Pittsfield Chtr Twp | 8110 |
| Pleasant Ridge, City | 6301 |
| Plymouth, Chtr Twp o | 8238 |
| Plymouth, City of | 8202 |
| Plymouth Dist Lib | 8221 |
| Pokagon Band of Pota | MI01 |
| Port Austin, Vlg of | 3208 |
| Port Austin Area Swr | 3210 |
| Port Huron, City of | 7702 |
| Port Huron Chtr Twp | 7711 |
| Port Huron HC | 7712 |
| Portland, City of | 3401 |
| Port Sanilac, Vlg of | 7403 |
| Port Sheldon Twp | 7018 |


| Amortization Period(s) | Normal Cost | Amortization Payment | Employer Contribution |
| :---: | :---: | :---: | :---: |
| 28 | 81,180 | 13,476 | 94,656 |
| 28 | 577,488 | 705,420 | 1,282,908 |
| 28 | 173,208 | 397,272 | 570,480 |
| 28, 24, 20, 19, 10 | 884,328 | 1,253,712 | 2,138,040 |
| 12 | 50,904 | 88,176 | 139,080 |
| 28 | 99,276 | 28,704 | 127,980 |
| 28, 26, 10 | 798,012 | 132,948 | 930,960 |
| 28 | 16,200 | 372 | 16,572 |
| 28, 22, 20 | 278,064 | 177,372 | 455,436 |
| 28, 10 | 82,884 | $(10,932)$ | 71,952 |
| 28 | 84,480 | 158,868 | 243,348 |
| 28 | 3,228 | 2,124 | 5,352 |
| 28 | 15,120 | 4,344 | 19,464 |
| 28, 20, 12, 10 | 33,816 | 180,984 | 214,800 |
| 28 | 147,396 | 90,924 | 238,320 |
| 19 | 0 | 1,896 | 1,896 |
| 28 | 207,888 | 456,444 | 664,332 |
| 28, 12 | 46,464 | 64,800 | 111,264 |
| 28 | 44,508 | 23,112 | 67,620 |
| 28, 25 | 363,132 | 70,296 | 433,428 |
| 28 | 57,840 | 94,860 | 152,700 |
| 28, 24 | 57,024 | 43,800 | 100,824 |
| 28, 10 | 148,728 | 133,344 | 282,072 |
| 25 | 9,108 | 1,224 | 10,332 |
| 28, 19, 10 | 14,304 | 5,364 | 19,668 |
| 28, 10 | 397,416 | 252,768 | 650,184 |
| 28 | 122,112 | 166,092 | 288,204 |
| 28 | 3,879,312 | 1,678,812 | 5,558,124 |
| 18, 12, 10 | 23,520 | 9,636 | 33,156 |
| 28, 26 | 584,328 | 634,008 | 1,218,336 |
| 28 | 1,536 | 468 | 2,004 |
| 28, 14, 10 | $(25,152)$ | 38,700 | 13,548 |
| 28 | 98,220 | 51,456 | 149,676 |
| 28 | 59,856 | 43,908 | 103,764 |
| 28 | 22,620 | 16,560 | 39,180 |
| 26, 19, 12 | 260,760 | 1,719,480 | 1,980,240 |
| 28, 10 | 106,836 | 11,400 | 118,236 |
| 28 | 16,164 | 16,632 | 32,796 |
| 28 | 2,832 | 2,100 | 4,932 |
| 28 | 46,584 | 21,828 | 68,412 |
| 28 | 17,172 | 11,532 | 28,704 |
| 28, 10 | 3,720 | $(2,724)$ | 996 |
| 28 | 12,144 | 1,152 | 13,296 |
| 28 | 467,784 | 159,864 | 627,648 |
| 28 | 5,244 | 1,728 | 6,972 |
| 28, 10 | 10,248 | 13,968 | 24,216 |
| 28, 12 | 40,920 | 15,156 | 56,076 |
| 28, 10 | 21,408 | 15,144 | 36,552 |
| 28, 26, 10 | 406,908 | 196,620 | 603,528 |
| 28, 12 | 70,380 | 100,356 | 170,736 |
| 28, 20, 15, 10 | 331,788 | 259,680 | 591,468 |
| 20, 12, 10 | 24,756 | 787,296 | 812,052 |
| 28, 10 | 76,776 | $(25,512)$ | 51,264 |
| 25, 10 | 702,000 | 0 | 702,000 |
| 28 | 6,900 | 1,932 | 8,832 |
| 14, 10 | 0 | 0 | 0 |
| 28, 22, 10 | 1,273,416 | 2,024,664 | 3,298,080 |
| 28 | 52,980 | 26,940 | 79,920 |
| 28 | 109,332 | 38,784 | 148,116 |
| 28, 10 | 198,048 | 197,952 | 396,000 |
| 28 | 17,940 | 13,416 | 31,356 |
| 25, 10 | 17,664 | $(4,200)$ | 13,464 |


| Municipality Name | Number |
| :---: | :---: |
| Potterville, City of | 2313 |
| Presque Isle Co | 7104 |
| Presque Isle CRC | 7101 |
| PRIDE Youth Programs | 6210 |
| Ravenna, Vlg of | 6111 |
| Reading, City of | 3003 |
| Redford, Chtr Twp of | 8209 |
| Redford Twp Dist Lib | 8228 |
| Reed City, City of | 6702 |
| Richfield Twp (Genes | 2514 |
| Richfield Twp (Rosco | 7202 |
| Richland Twp | 7310 |
| Richmond, City of | 5012 |
| Rochester, City of | 6307 |
| Rockford, City of | 4103 |
| Rockwood, City of | 5810 |
| Rogers City, City of | 7102 |
| Romeo, Vlg of | 5005 |
| Romeo Dist Lib | 5006 |
| Romulus, City of | 8225 |
| Roosevelt Park, City | 6107 |
| Roscommon Co | 7201 |
| Roscommon Co Trans A | 7205 |
| Rose City, City of | 6504 |
| Rose Twp | 6506 |
| Royal Oak, Chtr Twp | 6306 |
| Saginaw, City of | 7301 |
| Saginaw, Pub Lib of | 7317 |
| Saginaw Chtr Twp | 7314 |
| Saginaw Co | 7303 |
| Saginaw Co 911 Com C | 7316 |
| Saginaw Co CMH | 7318 |
| Saginaw CRC | 7304 |
| Saginaw HC | 7321 |
| Saginaw-Midland Muni | 7305 |
| Saginaw Trans Sys Au | 7319 |
| Saline, City of | 8105 |
| Sandusky, City of | 7402 |
| Sandusky Dist Lib | 7404 |
| Sanilac CRC | 7410 |
| Saranac HC | 3413 |
| Saugatuck, City of | 0307 |
| Saugatuck Twp | 0305 |
| Saugatuck Twp Fire D | 0313 |
| Sault Ste. Marie, Ci | 1701 |
| Sault Ste. Marie HC | 4906 |
| SCCMUA | 1905 |
| Schoolcraft Co | 7503 |
| Schoolcraft CRC | 7501 |
| Schoolcraft Memorial | 7505 |
| Scio Twp | 8116 |
| Scottville, City of | 5308 |
| Sebewaing, Vlg of | 3205 |
| SEMCOG | 8210 |
| SE Oakland Co Rsrc R | 6310 |
| SE Oakland Co Wtr Au | 6309 |
| Shepherd, Vlg of | 3704 |
| Shiawassee Co | 7602 |
| Shiawassee Co CMH | 7609 |
| Shiawassee Council o | 7605 |
| Shiawassee CRC | 7601 |
| Shiawassee Dist Lib | 7606 |


| Amortization Period(s) | Normal Cost | Amortization Payment | Employer Contribution |
| :---: | :---: | :---: | :---: |
| 25 | 26,496 | 1,596 | 28,092 |
| 28, 18 | 166,368 | 99,720 | 266,088 |
| 28 | 94,152 | 138,084 | 232,236 |
| 28 | 6,648 | 3,408 | 10,056 |
| 28 | 8,184 | 564 | 8,748 |
| 28 | 6,552 | 384 | 6,936 |
| 28 | 593,856 | 557,076 | 1,150,932 |
| 28 | 69,120 | 9,972 | 79,092 |
| 28 | 87,384 | 87,144 | 174,528 |
| 28 | 15,804 | 69,504 | 85,308 |
| 28 | 42,636 | 44,304 | 86,940 |
| 28 | 58,272 | 50,736 | 109,008 |
| 28 | 25,152 | 30,624 | 55,776 |
| 28, 10 | 243,228 | 172,128 | 415,356 |
| 28 | 147,912 | 61,644 | 209,556 |
| 28, 10 | 58,260 | $(16,584)$ | 41,676 |
| 28 | 114,816 | 190,584 | 305,400 |
| 28, 10 | 113,964 | 80,016 | 193,980 |
| 14, 12 | 38,796 | 81,660 | 120,456 |
| 28, 10 | 465,636 | 1,212,660 | 1,678,296 |
| 28, 10 | 91,188 | 63,564 | 154,752 |
| 28, 26 | 445,728 | 137,232 | 582,960 |
| 28 | 63,228 | 8,148 | 71,376 |
| 28, 10 | 8,112 | $(7,380)$ | 732 |
| 28, 10 | 1,548 | $(1,548)$ | 0 |
| 28, 22, 18, 16, 10 | 17,508 | $(17,508)$ | 0 |
| 12 | 463,428 | 7,112,808 | 7,576,236 |
| 28, 10 | 45,084 | $(45,084)$ | 0 |
| 28 | 155,052 | 244,200 | 399,252 |
| 19, 14, 12 | 502,452 | 4,638,288 | 5,140,740 |
| 14 | 110,976 | 197,820 | 308,796 |
| 28, 19, 14 | 109,608 | 308,976 | 418,584 |
| 28, 10 | 270,528 | 112,800 | 383,328 |
| 20, 19, 10 | 21,072 | 129,852 | 150,924 |
| 28, 12 | 34,572 | 70,344 | 104,916 |
| 28, 10 | 103,164 | $(9,552)$ | 93,612 |
| 28, 24, 10 | 405,744 | 324,300 | 730,044 |
| 28 | 50,616 | 88,932 | 139,548 |
| 28, 10 | 2,244 | (924) | 1,320 |
| 25 | 133,320 | 9,132 | 142,452 |
| 28 | 7,992 | 11,028 | 19,020 |
| 28, 10 | 25,008 | 5,364 | 30,372 |
| 28 | 19,008 | 22,236 | 41,244 |
| 25, 10 | 7,680 | $(1,296)$ | 6,384 |
| 28 | 191,796 | 175,464 | 367,260 |
| 28 | 19,812 | 10,584 | 30,396 |
| 28, 10 | 50,280 | $(6,096)$ | 44,184 |
| 28, 22, 10 | 543,900 | 357,396 | 901,296 |
| 28 | 151,716 | 294,612 | 446,328 |
| 16, 14, 12, 10 | 134,604 | 343,296 | 477,900 |
| 28, 25, 10 | 65,328 | 17,016 | 82,344 |
| 25, 10 | 19,752 | $(4,440)$ | 15,312 |
| 28 | 47,916 | 102,012 | 149,928 |
| 28, 10 | 404,640 | $(246,636)$ | 158,004 |
| 28 | 48,888 | 53,772 | 102,660 |
| 28, 12 | 98,040 | 153,024 | 251,064 |
| 28, 10 | 10,488 | $(10,440)$ | 48 |
| 28, 12, 10 | 1,379,484 | 1,665,612 | 3,045,096 |
| 28, 10 | 324,252 | 18,516 | 342,768 |
| 28 | 5,304 | 5,496 | 10,800 |
| 28, 10 | 128,628 | 345,024 | 473,652 |
| 28 | 10,872 | 2,520 | 13,392 |


| Municipality Name | Number |
| :---: | :---: |
| Sims Whitney Util Au | 0606 |
| SMART | 8216 |
| South Haven, City of | 8001 |
| South Haven Area ESA | 8005 |
| South Lyon, City of | 6315 |
| Sparta, Vlg of | 4107 |
| Springfield, City of | 1303 |
| Spring Lake, Vlg of | 7015 |
| Spring Lake Dist Lib | 7016 |
| St. Charles, Vlg of | 7308 |
| St. Clair, City of | 7703 |
| St. Clair HC | 7715 |
| St. Ignace, City of | 4904 |
| St. Johns, City of | 1902 |
| St. Louis, City of | 2902 |
| Stambaugh Twp | 3615 |
| Standish, City of | 0601 |
| Stanton, City of | 5903 |
| St Clair Shores HC | 5007 |
| Stephenson, City of | 5504 |
| Sterling, Vlg of | 0605 |
| St Joseph Co | 7803 |
| St Louis HC | 2908 |
| Stockbridge, Vlg of | 3316 |
| Sturgis HC | 7805 |
| Summit Twp | 3803 |
| Sumpter Twp | 8226 |
| Superior Chtr Twp | 8109 |
| Superiorland Lib Coo | 5208 |
| Swan Creek Twp | 7309 |
| Swartz Creek, City o | 2504 |
| SW Shiawassee ESA | 7611 |
| Sylvan Lake, City of | 6314 |
| Tawas Police Auth | 3504 |
| Taylor HC | 8231 |
| The Lib Network | 8218 |
| Three Rivers, City o | 7801 |
| Tittabawassee, Twp o | 7322 |
| Traverse Area Dist L | 2807 |
| Traverse City, City | 2801 |
| Trenton, City of | 8203 |
| Tri-County Aging Con | 3307 |
| Trio Council on Agin | 6507 |
| Tuscarora Twp | 1604 |
| Tuscola Co | 7902 |
| Tuscola Co CMH | 7907 |
| Tuscola Co Hlth Dpt | 7901 |
| Tuscola Co MCF | 7906 |
| Tuscola CRC | 7908 |
| Twin Cities Pub Sfty | 3610 |
| Ubly, Vlg of | 3212 |
| Utica, City of | 5008 |
| Van Buren Co | 8006 |
| Van Buren Dist Lib | 8007 |
| Van Buren Twp | 8236 |
| Vassar, City of | 7903 |
| Vevay Twp | 3318 |
| Vicksburg, Vlg of | 3902 |
| Vicksburg Dist Lib | 3904 |
| Vienna, Chtr Twp of | 2522 |
| Wakefield, City of | 2701 |
| Walker, City of | 4112 |


| Amortization Period(s) | Normal Cost |
| :---: | :---: |
| 28, 10 | 5,904 |
| 28, 10 | 3,505,656 |
| 28, 12, 10 | 285,276 |
| 28, 20 | 40,548 |
| 28 | 262,848 |
| 28 | 57,336 |
| 28 | 125,412 |
| 28 | 32,952 |
| 28, 10 | 34,944 |
| 28 | 66,048 |
| 28, 19, 12, 10 | 226,140 |
| 25 | 14,988 |
| 28 | 162,000 |
| 28, 18 | 146,880 |
| 28, 14, 12 | 48,240 |
| 28 | 1,392 |
| 12 | 14,376 |
|  | 0 |
| 28 | 26,604 |
| 28 | 13,896 |
| 28, 10 | 3,576 |
| 28, 25, 10 | 530,916 |
| 28 | 16,164 |
| 28 | 24,768 |
| 25 | 12,384 |
| 28, 10 | 178,284 |
| 28, 25, 18 | 72,588 |
| 28 | 95,928 |
| 28, 10 | 1,848 |
| 28 | 6,372 |
| 28, 14 | 38,028 |
| 25, 10 | 47,880 |
| 28 | 26,424 |
| 28 | 1,728 |
| 28, 10 | 16,092 |
| 28, 16 | 67,020 |
| 28, 10 | 231,396 |
| 25, 10 | 50,472 |
| 28 | 133,668 |
| 28, 10 | 858,168 |
| 19 | 164,220 |
| 28, 10 | 177,420 |
|  | 0 |
| 28 | 57,348 |
| 28, 22, 12 | 428,568 |
| 28, 10 | 229,920 |
| 28 | 105,744 |
| 28, 10 | 187,392 |
| 28, 25, 10 | 48,288 |
|  | 0 |
| 28 | 4,944 |
| 28, 10 | 55,308 |
| 28 | 343,944 |
| 28, 10 | 30,708 |
| 28 | 283,992 |
| 28 | 68,148 |
| 28 | 3,228 |
| 28 | 68,076 |
| 28 | 6,108 |
| 28 | 36,708 |
| 28 | 37,656 |
| 18 | 232,524 |

Amortization Payment
$(5,904)$
$1,907,988$
$(96,420)$
92,052
135,144
91,500
79,740
43,104
$(2,712)$
45,372
299,040
9,156

9,156
129,216 414,324 189,852
1,536
82,236
0
33,636
7,524
$(3,576)$
$(245,220)$
5,988
10,740
180
148,788
111,936
46,512
$(1,848)$
6,612
44,820
$(1,080)$
15,936
24,492
$(2,472)$
31,392
154,620
$(10,356)$
72,000
826,236

1,001,064

| $(46,860)$ | 130,560 |
| :---: | ---: |
| 6,485 | 6,485 |
| 33,396 | 90,744 |
| 159,396 | 587,964 |
| $(89,976)$ | 139,944 |
| 59,928 | 165,672 |
| $(78,900)$ | 108,492 |
| 61,992 | 110,280 |
| 3,075 | 3,075 |
| 12,564 | 17,508 |
| 63,612 | 118,920 |
| 363,516 | 707,460 |
| $(2,196)$ | 28,512 |
| 111,432 | 395,424 |
| 42,972 | 111,120 |
| 9,432 | 12,660 |
| 37,452 | 105,528 |
| 1,260 | 7,368 |
| 12,672 | 49,380 |
| 66,672 | 104,328 |
| 552,684 | 785,208 |

MERS 12/31/2010 Valuation - Results by Municipality

| Municipality Name | Number | Amortization Period(s) | Normal Cost | Amortization Payment | Employer Contribution |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Walled Lake, City of | 6324 | 28 | 139,836 | 386,052 | 525,888 |
| Washtenaw Co | 8113 | 28, 25, 24, 10 | 1,384,080 | 260,232 | 1,644,312 |
| Washtenaw CRC | 8102 | 28 | 608,076 | 814,176 | 1,422,252 |
| Wayland, City of | 0304 | 28 | 128,508 | 23,520 | 152,028 |
| Wayne, City of | 8242 | 25, 19, 10 | 900,372 | 1,470,228 | 2,370,600 |
| Wayne HC | 8252 | 25 | 20,196 | 1,164 | 21,360 |
| Webberville, Vlg of | 3314 | 28 | 2,136 | 2,988 | 5,124 |
| West Branch, City of | 6505 | 28, 10 | 62,496 | 29,520 | 92,016 |
| West Branch Dist Lib | 6509 | 25, 10 | 8,208 | $(4,212)$ | 3,996 |
| Westland, City of | 8211 | 28, 10 | 1,322,136 | 2,623,884 | 3,946,020 |
| Westphalia, Vlg of | 1907 | 28 | 7,308 | 3,492 | 10,800 |
| Wexford Co | 8302 | 28, 12, 10 | 373,500 | 343,800 | 717,300 |
| Wexford CRC | 8303 | 28 | 166,188 | 226,092 | 392,280 |
| White Cloud, City of | 6206 | 28 | 20,712 | 11,280 | 31,992 |
| White Cloud/Sherman | 6211 | 28 | 13,368 | 1,620 | 14,988 |
| White Cloud Cmnty Li | 6208 | 28 | 7,452 | 2,292 | 9,744 |
| Whitehall, City of | 6105 | 28 | 91,896 | 49,212 | 141,108 |
| White Lake Chtr Twp | 6325 | 28, 10 | 343,368 | 206,076 | 549,444 |
| White Pigeon, Vlg of | 7804 | 28, 10 | 10,224 | (684) | 9,540 |
| White Pine Lib | 5904 | 28, 12 | 1,884 | 7,884 | 9,768 |
| Willard Pub Lib | 1308 | 28, 10 | 73,716 | $(1,620)$ | 72,096 |
| Williamston, City of | 3310 | 28, 26 | 51,048 | 63,360 | 114,408 |
| W Iron Co Swr Auth | 3612 | 28 | 20,928 | 17,112 | 38,040 |
| Wixom, City of | 6316 | 28, 19, 12, 10 | 413,256 | 416,280 | 829,536 |
| W Mich CMH Sys | 5304 | 12 | 35,016 | 21,348 | 56,364 |
| W Mich Shoreline Rgn | 6110 | 28, 10 | 70,848 | $(70,848)$ | 0 |
| Wolverine Lake, Vlg | 6329 | 28, 23 | $(9,816)$ | 67,680 | 57,864 |
| W UP Dist Hlth Dept | 3101 | 28, 18 | 116,448 | 153,636 | 270,084 |
| WUPPDR | 3108 | 28, 10 | 29,796 | $(2,208)$ | 27,588 |
| Ypsilanti, City of | 8101 | 28, 26, 10 | 179,316 | $(179,316)$ | 0 |
| Ypsilanti, Twp of | 8104 | 28 | 196,968 | 165,792 | 362,760 |
| Ypsilanti Cmnty Util | 8106 | 28 | 521,808 | 648,288 | 1,170,096 |
| Ypsilanti HC | 8115 | 28, 10 | 28,332 | (360) | 27,972 |
| Totals - Active Groups | 700 |  | 135,564,840 | 148,950,816 | 284,515,656 |
| Totals - Closed Groups | 15 |  | 0 | 499,517 | 499,517 |
| Totals - MERS | 715 |  | 135,564,840 | 149,450,333 | 285,015,173 |


| Municipality Name | Number | Active | Retired | Vested | Refunds | Total | Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21st Dist Ct | 8243 | 1,414,945 | 210,529 | 0 | 0 | 1,625,474 | 83.0\% |
| 23rd Jud Dist Ct | 8223 | 1,168,177 | 1,174,181 | 109,943 | 313 | 2,452,614 | 107.5\% |
| 26th Jud Cir Ct | 0403 | 1,550,156 | 441,768 | 679,927 | 0 | 2,671,851 | 115.5\% |
| 34th Dist Ct | 8235 | 3,703,280 | 1,600,110 | 67,334 | 268 | 5,370,992 | 74.3\% |
| 35th Dist Ct | 8234 | 1,943,611 | 2,205,518 | 0 | 17,811 | 4,166,940 | 72.7\% |
| 41 B Dist Ct | 5014 | 2,584,830 | 2,847,914 | 998,257 | 14,886 | 6,445,887 | 92.6\% |
| Addison Fire Dept | 4607 | 103,003 | 0 | 0 | 0 | 103,003 | 137.2\% |
| Adrian, City of | 4601 | 18,099,391 | 28,297,619 | 1,583,203 | 125,235 | 48,105,448 | 85.8\% |
| Aitkin Memorial Dist | 7407 | 37,284 | 0 | 0 | 0 | 37,284 | 208.8\% |
| Albion, City of | 1301 | 3,883,662 | 7,026,307 | 714,108 | 2,222 | 11,626,299 | 131.4\% |
| Alcona Co | 0101 | 5,656,182 | 4,582,033 | 220,495 | 0 | 10,458,710 | 74.7\% |
| Alger Co | 0203 | 3,980,223 | 5,276,699 | 91,212 | 0 | 9,348,134 | 73.6\% |
| Alger CRC | 0201 | 2,739,030 | 5,066,494 | 161,864 | 6,109 | 7,973,497 | 82.2\% |
| Algonac, City of | 7707 | 2,302,179 | 1,705,733 | 409,281 | 7,049 | 4,424,242 | 98.3\% |
| Allegan, City of | 0309 | 1,826,491 | 1,736,856 | 131,262 | 0 | 3,694,609 | 78.1\% |
| Allegan Co | 0302 | 15,723,383 | 28,530,795 | 4,100,961 | 68,310 | 48,423,449 | 83.8\% |
| Allegan CRC | 0301 | 8,609,430 | 11,396,283 | 101,514 | 24,980 | 20,132,207 | 74.7\% |
| Alma, City of | 2901 | 6,892,477 | 10,431,265 | 414,678 | 33,722 | 17,772,142 | 97.2\% |
| Almont, Vlg of | 4407 | 1,343,450 | 482,079 | 12,237 | 698 | 1,838,464 | 87.7\% |
| Alpena Co | 0401 | 5,950,218 | 8,164,477 | 1,580,557 | 12,339 | 15,707,591 | 78.4\% |
| Alpena CRC | 0402 | 4,302,805 | 5,759,348 | 54,917 | 0 | 10,117,070 | 83.4\% |
| Alpena Rgnl Med Ctr | 0405 | 58,406,759 | 62,167,492 | 5,808,041 | 5,283 | 126,387,575 | 90.4\% |
| Alpena Sr Citizens C | 0404 | 0 | 739,368 | 0 | 0 | 739,368 | 28.0\% |
| Alpha, Vlg of | 3614 | 6,018 | 0 | 31,559 | 0 | 37,577 | 117.4\% |
| Antrim Co | 0502 | 13,656,976 | 10,996,293 | 1,709,642 | 54,092 | 26,417,003 | 95.4\% |
| Antrim CRC | 0501 | 3,507,871 | 7,127,959 | 0 | 0 | 10,635,830 | 60.0\% |
| Arenac Co | 0603 | 3,510,220 | 4,104,651 | 744,627 | 22,494 | 8,381,992 | 85.4\% |
| Arenac CRC | 0604 | 1,928,562 | 3,775,348 | 68,836 | 0 | 5,772,746 | 47.4\% |
| Ash Twp | 5804 | 34,565 | 488,036 | 4,920 | 0 | 527,521 | 54.0\% |
| Auburn, City of | 0905 | 488,279 | 1,295,646 | 0 | 0 | 1,783,925 | 78.5\% |
| Au Gres, City of | 0602 | 1,240,800 | 905,443 | 0 | 0 | 2,146,243 | 69.2\% |
| Bad Axe, City of | 3211 | 2,032,015 | 3,377,102 | 0 | 1,472 | 5,410,589 | 66.6\% |
| Bad Axe Area Dist Li | 3214 | 40,353 | 0 | 0 | 0 | 40,353 | 110.0\% |
| Bancroft, Vlg of | 7610 | 5,562 | 76,618 | 0 | 0 | 82,180 | 42.2\% |
| Bangor, City of | 8003 | 805,516 | 556,657 | 149,209 | 1,114 | 1,512,496 | 146.2\% |
| Baraga, Vlg of | 0704 | 333,159 | 2,306,662 | 48,282 | 0 | 2,688,103 | 62.0\% |
| Baraga Co | 0702 | 2,357,016 | 2,458,107 | 289,932 | 0 | 5,105,055 | 80.5\% |
| Baraga Co Memorial H | 0703 | 7,911,179 | 5,755,675 | 1,444,678 | 2,000 | 15,113,532 | 77.4\% |
| Baraga CRC | 0701 | 2,116,781 | 4,013,357 | 0 | 0 | 6,130,138 | 68.2\% |
| Baroda Twp | 1109 | 131,289 | 0 | 0 | 0 | 131,289 | 125.0\% |
| Barry Co | 0802 | 22,212,049 | 19,296,795 | 2,063,657 | 40,961 | 43,613,462 | 83.8\% |
| Barry Co CMH Auth | 0804 | 3,258,625 | 0 | 211,972 | 24,566 | 3,495,163 | 109.4\% |
| Barry Eaton Dist Hlt | 2303 | 6,714,686 | 6,190,660 | 1,739,419 | 33,864 | 14,678,629 | 81.3\% |
| Barton Hills, Vlg of | 8107 | 625,187 | 125,059 | 0 | 0 | 750,246 | 76.9\% |
| Bates Twp | 3616 | 224,458 | 112,127 | 0 | 0 | 336,585 | 46.9\% |
| Bath Charter Twp | 1909 | 2,391,425 | 1,110,266 | 275,081 | 2,982 | 3,779,754 | 96.3\% |
| Battle Creek, City o | 1302 | 40,158,231 | 70,766,231 | 4,975,998 | 113,916 | 116,014,376 | 76.1\% |
| Bay Area Trans Auth | 2810 | 1,912,331 | 480,695 | 258,721 | 18,592 | 2,670,339 | 109.1\% |
| Bay City, City of | 0901 | 9,798,749 | 48,809,511 | 1,253,636 | 27,241 | 59,889,137 | 75.6\% |
| Bay City HC | 0906 | 2,570,522 | 2,832,284 | 0 |  | 5,402,806 | 108.6\% |
| Bayliss Pub Lib | 1702 | 169,144 | 474,868 | 37,776 | 8,121 | 689,909 | 178.1\% |
| Bay Metro Trans Auth | 0907 | 6,199,251 | 2,585,284 | 422,427 | 0 | 9,206,962 | 70.6\% |
| Beecher Metro Dist S | 2501 | 1,103,473 | 4,440,140 | 84,488 | 0 | 5,628,101 | 81.2\% |
| Belding, City of | 3410 | 620,129 | 660,560 | 7,667 | 0 | 1,288,356 | 74.8\% |
| Belleville, City of | 8213 | 2,238,753 | 3,700,222 | 256,161 | 0 | 6,195,136 | 64.5\% |
| Benzie/Leelanau Dist | 4504 | 346,128 | 65,432 | 0 | 0 | 411,560 | 124.0\% |
| Benzie Co | 1003 | 3,326,695 | 4,257,717 | 2,401,489 | 10,460 | 9,996,361 | 90.3\% |
| Benzie Co Comm on Ag | 1006 | 292,848 | 406,532 | 29,111 | 0 | 728,491 | 81.1\% |
| Benzie Co MCF (The M | 1004 | 2,871,557 | 2,718,641 | 653,107 | 34,896 | 6,278,201 | 94.8\% |
| Benzie CRC | 1001 | 2,030,545 | 4,280,125 | 133,757 | 829 | 6,445,256 | 47.6\% |
| Benzie Shores Dist L | 1005 | 205,437 | 0 | 0 | 0 | 205,437 | 86.6\% |


| Municipality Name | Number | Active | Retired | $\begin{aligned} & \text { Deferred } \\ & \text { Vested } \end{aligned}$ | Pending Refunds | Total | Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benzie Trans Auth | 1007 | 223,752 | 0 | 0 | 4,296 | 228,048 | 133.3\% |
| Berkley, City of | 6304 | 4,935,875 | 12,973,163 | 694,250 | 57,258 | 18,660,546 | 78.2\% |
| Berrien Springs, Vlg | 1102 | 776,307 | 340,234 | 114,718 | 0 | 1,231,259 | 126.7\% |
| Bessemer, City of | 2702 | 606,567 | 1,305,888 | 68,238 | 10,296 | 1,990,989 | 86.6\% |
| Beverly Hills, Vlg o | 6321 | 801,152 | 1,959,363 | 448,093 | 174 | 3,208,782 | 85.6\% |
| Big Rapids, City of | 5402 | 6,281,507 | 7,400,313 | 224,501 | 0 | 13,906,321 | 61.9\% |
| Big Rapids HC | 5406 | 646,441 | 417,145 | 76,086 | 0 | 1,139,672 | 94.5\% |
| Bingham Farms, Vlg o | 6332 | 191,992 | 0 | 0 | 0 | 191,992 | 76.7\% |
| Birch Run, Vlg of | 7315 | 593,741 | 68,178 | 21,059 | 29,307 | 712,285 | 110.2\% |
| Bishop Intl Arpt Aut | 2507 | 2,800,134 | 1,306,387 | 127,063 | 27,414 | 4,260,998 | 116.6\% |
| Blackman Chtr Twp | 3806 | 2,009,675 | 2,435,864 | 190,773 | 0 | 4,636,312 | 89.1\% |
| Blissfield, Vlg of | 4606 | 2,329,229 | 403,303 | 36,160 | 0 | 2,768,692 | 105.7\% |
| Bloomfield Hills, Ci | 6302 | 2,922,617 | 20,981,086 | 455,574 | 7,182 | 24,366,459 | 64.4\% |
| Blue Water Area Tran | 7709 | 3,955,575 | 693,432 | 269,486 | 0 | 4,918,493 | 79.3\% |
| Boyne City, City of | 1506 | 4,194,567 | 4,300,190 | 234,165 | 18,100 | 8,747,022 | 80.5\% |
| Branch Co | 1205 | 971,289 | 75,416 | 0 | 0 | 1,046,705 | 159.4\% |
| Brandon Chtr Twp of | 6333 | 2,710,873 | 2,104,296 | 117,386 | 1,062 | 4,933,617 | 89.0\% |
| Breckenridge,Vlg of | 2906 | 262,210 | 2,14,951 | 68,917 | 2,079 | 2,448,157 | 54.0\% |
| Bridgeport Chtr Twp | 7307 | 1,787,926 | 3,370,669 | 1,044,894 | 31,686 | 6,235,175 | 81.2\% |
| Bridgman, City of | 1110 | 921,217 | 163,674 | 22,734 | 0 | 1,107,625 | 73.9\% |
| Brighton, Chtr Twp o | 4711 | 374,236 | 658,772 | 278,056 | 27,351 | 1,338,415 | 120.9\% |
| Brighton, City of | 4704 | 4,702,939 | 6,196,130 | 274,858 | 0 | 11,173,927 | 89.5\% |
| Brighton Area Fire A | 4715 | 128,818 | 215,352 | 0 | 0 | 344,170 | 104.6\% |
| Britton, Vlg of | 4604 | 138,454 | 0 | 0 | 0 | 138,454 | 224.9\% |
| Brnch-Hillsdale-St J | 1202 | 4,330,906 | 4,758,460 | 983,289 | 44,291 | 10,116,946 | 108.8\% |
| Bronson, City of | 1204 | 988,396 | 288,672 | 28,330 | 386 | 1,305,784 | 67.9\% |
| Brooklyn, Vlg of | 3801 | 361,483 | 757,369 | 0 | 8,585 | 1,127,437 | 71.2\% |
| Brownstown, Chtr Twp | 8247 | 8,747,516 | 2,096,634 | 51,337 | 18,465 | 10,913,952 | 105.1\% |
| Buchanan, City of | 1101 | 1,703,299 | 3,541,557 | 293,025 | 28,928 | 5,566,809 | 128.7\% |
| Buchanan Dist Lib | 1108 | 96,077 | 36,040 | 9,737 | 0 | 141,854 | 120.2\% |
| Buena Vista Chtr Twp | 7312 | 4,536,665 | 4,244,237 | 380,585 | 55,344 | 9,216,831 | 80.7\% |
| Burton, City of | 2508 | 5,704,405 | 32,058,275 | 635,135 | 8,794 | 38,406,609 | 48.6\% |
| Butman Township | 2604 | 0 | 0 | 133,752 | 0 | 133,752 | 104.1\% |
| Cadillac, City of | 8301 | 4,559,373 | 6,348,454 | 656,568 | 0 | 11,564,395 | 100.0\% |
| Cadillac/Wexford Tra | 8305 | 986,469 | 362,406 | 42,624 | 0 | 1,391,499 | 88.2\% |
| Calhoun Co | 1311 | 11,145,699 | 12,803,100 | 165,942 | 143,187 | 24,257,928 | 63.4\% |
| Calhoun CRC | 1307 | 4,411,167 | 8,046,075 | 974,907 | 7,070 | 13,439,219 | 61.8\% |
| Canton, Chtr Twp of | 8233 | 32,258,007 | 40,944,910 | 431,389 | 75,635 | 73,709,941 | 86.6\% |
| Canton Pub Lib | 8232 | 1,590,522 | 1,684,962 | 98,165 | 0 | 3,373,649 | 96.6\% |
| Capac, Vlg of | 7705 | 732,688 | 1,222,651 | 233,761 | 3,184 | 2,192,284 | 40.1\% |
| Capital Area Dist Li | 3317 | 3,126,778 | 680,941 | 28,393 | 125,802 | 3,961,914 | 117.7\% |
| Capital Region Arprt | 3305 | 2,721,432 | 9,745,075 | 868,513 | 6,141 | 13,341,161 | 80.0\% |
| Carleton, Vlg of | 5805 | 740,296 | 173,724 | 20,703 | 7,002 | 941,725 | 77.2\% |
| Carrollton Twp | 7320 | 1,758,257 | 400,605 | 61,781 | 1,792 | 2,222,435 | 94.2\% |
| Cascade Chtr Twp | 4110 | 2,686,006 | 1,976,404 | 491,426 | 6,413 | 5,160,249 | 90.5\% |
| Caseville, Vlg of | 3207 | 1,329,210 | 125,668 | 0 | 841 | 1,455,719 | 91.0\% |
| Caspian, City of | 3608 | 434,764 | 590,844 | 30,418 | 0 | 1,056,026 | 62.3\% |
| Cass Co | 1402 | 7,953,924 | 8,254,952 | 879,733 | 95,443 | 17,184,052 | 96.7\% |
| Cass Co MCF | 1403 | 2,045,828 | 1,412,950 | 446,379 | 96,114 | 4,001,271 | 126.5\% |
| Cass Dist Lib | 1404 | 253,112 | 204,474 | 86,771 | 11,251 | 555,608 | 133.0\% |
| Cedar Springs, City | 4105 | 904,268 | 1,493,117 | 113,958 | 29,060 | 2,540,403 | 96.3\% |
| Center Line, City of | 5001 | 703,163 | 7,105,851 | 93,639 | 52,511 | 7,955,164 | 66.4\% |
| Central Lake, Vlg of | 0504 | 30,458 | 0 | 0 | 0 | 30,458 | 240.9\% |
| Central Mich Dist Hl | 3705 | 6,934,304 | 7,362,358 | 1,306,190 | 88,790 | 15,691,642 | 80.8\% |
| Charlevoix, City of | 1505 | 5,265,343 | 5,011,967 | 609,256 | 3,765 | 10,890,331 | 75.5\% |
| Charlevoix Co | 1503 | 14,412,734 | 16,201,695 | 2,054,711 | 15,717 | 32,684,857 | 81.0\% |
| Charlevoix CRC | 1501 | 2,361,097 | 3,792,996 | 238,255 | 223 | 6,392,571 | 76.8\% |
| Charlotte, City of | 2301 | 6,919,086 | 8,193,668 | 905,783 | 25,266 | 16,043,803 | 79.3\% |
| Charlotte Dist Lib | 2309 | 240,229 | 324,935 | 0 | 0 | 565,164 | 61.0\% |
| Cheboygan, City of | 1602 | 3,001,338 | 5,787,686 | 43,366 | 14,672 | 8,847,062 | 74.8\% |
| Cheboygan Co | 1603 | 8,983,389 | 7,646,847 | 1,232,150 | 50,168 | 17,912,554 | 86.5\% |


| Municipality Name | Number | Active | Retired | Vested | Refunds | Total | Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cheboygan CRC | 1601 | 4,177,705 | 11,202,341 | 169,920 | 0 | 15,549,966 | 63.0\% |
| Chelsea, City of | 8103 | 2,442,408 | 6,726,305 | 232,963 | 0 | 9,401,676 | 73.4\% |
| Chelsea Area Fire Au | 8118 | 118,266 | 0 | 0 | 11,916 | 130,182 | 159.6\% |
| Chesaning, Vlg of | 7313 | 710,813 | 1,936,908 | 69,621 | 0 | 2,717,342 | 22.3\% |
| Chesterfield Twp | 5009 | 12,752,478 | 4,530,435 | 390,465 | 36,429 | 17,709,807 | 92.9\% |
| Chesterfield Twp Lib | 5010 | 690,685 | 91,440 | 0 | 6,088 | 788,213 | 124.7\% |
| Chikaming Twp | 1112 | 1,267,664 | 276,542 | 50,330 | 11,716 | 1,606,252 | 74.2\% |
| Chippewa Co | 1703 | 15,708,631 | 14,544,760 | 1,518,801 | 130,580 | 31,902,772 | 86.4\% |
| Chippewa CRC | 1704 | 5,080,840 | 9,396,118 | 179,169 | 69 | 14,656,196 | 71.6\% |
| Chippewa River Dist | 3707 | 1,134,275 | 610,194 | 11,320 | 7,480 | 1,763,269 | 126.5\% |
| Chocolay, Chtr Twp o | 5218 | 815,206 | 0 | 0 | 0 | 815,206 | 101.7\% |
| Clare, City of | 1804 | 1,790,668 | 4,470,472 | 290,205 | 11,776 | 6,563,121 | 75.9\% |
| Clare Co | 1802 | 5,240,298 | 8,378,778 | 667,960 | 73,498 | 14,360,534 | 96.1\% |
| Clare Co Trans Auth | 1806 | 59,826 | 93,603 | 0 | 0 | 153,429 | 70.1\% |
| Clare CRC | 1801 | 2,107,211 | 6,440,452 | 16,037 | 3,990 | 8,567,690 | 89.1\% |
| Clawson, City of | 6305 | 4,949,462 | 16,521,999 | 161,149 | 6,866 | 21,639,476 | 51.4\% |
| Clay Twp | 7706 | 3,368,919 | 2,648,030 | 452,810 | 37,007 | 6,506,766 | 73.7\% |
| Clearwater Twp | 4005 | 87,657 | 0 | 0 | 0 | 87,657 | 98.9\% |
| Clinton, Vlg of | 4602 | 2,291,502 | 931,392 | 296,040 | 5,682 | 3,524,616 | 123.2\% |
| Clinton Co | 1903 | 18,834,788 | 15,617,499 | 1,328,474 | 9,191 | 35,789,952 | 89.4\% |
| Clinton CRC | 1901 | 5,887,947 | 8,788,366 | 457,460 | 33,262 | 15,167,035 | 80.0\% |
| Clinton-Eaton-Ingham | 3308 | 61,126,627 | 46,075,596 | 7,053,156 | 304,630 | 114,560,009 | 81.9\% |
| Clinton Twp | 5002 | 26,220,163 | 29,148,473 | 518,783 | 199,564 | 56,086,983 | 78.2\% |
| Clio, City of | 2523 | 342,898 | 325,737 | 115,589 | 0 | 784,224 | 96.4\% |
| CMH of Central Mich | 3708 | 20,752,819 | 16,952,593 | 4,607,498 | 24,102 | 42,337,012 | 109.3\% |
| Coldwater, City of | 1201 | 5,139,859 | 8,474,127 | 485,984 | 22,073 | 14,122,043 | 93.2\% |
| Coldwater Brd of Pub | 1203 | 3,612,076 | 6,212,684 | 644,018 | 12,050 | 10,480,828 | 69.6\% |
| Coleman, City of | 5603 | 1,196,814 | 883,140 | 0 | 0 | 2,079,954 | 62.6\% |
| Coloma, City of | 1118 | 541,487 | 0 | 0 | 0 | 541,487 | 81.9\% |
| Coloma Chtr Twp | 1107 | 364,242 | 1,285,051 | 0 | 4,981 | 1,654,274 | 74.0\% |
| Columbiaville, Vlg o | 4406 | 163,465 | 128,625 | 0 | 0 | 292,090 | 96.8\% |
| Coopersville, City o | 7005 | 858,337 | 902,474 | 93,806 | 17,730 | 1,872,347 | 101.2\% |
| Coopersville Area Di | 7011 | 70,840 | 121,740 | 42,831 | 0 | 235,411 | 97.2\% |
| Corunna City of | 7604 | 680,852 | 2,822,239 | 626,716 | 0 | 4,129,807 | 71.2\% |
| Corwith Twp | 6904 | 41,630 | 0 | 0 | 0 | 41,630 | 125.9\% |
| Covert Twp | 8010 | 678,450 | 0 | 19,475 | 830 | 698,755 | 86.3\% |
| Crawford Co | 2001 | 5,781,211 | 8,166,898 | 656,597 | 3,589 | 14,608,295 | 76.0\% |
| Crawford Co Trans Au | 2004 | 1,294,428 | 2,096,076 | 106,314 | 4,425 | 3,501,243 | 101.3\% |
| Crawford CRC | 2002 | 1,789,891 | 4,778,015 | 0 | 0 | 6,567,906 | 49.0\% |
| Croswell, City of | 7401 | 3,324,896 | 4,114,791 | 119,451 | 265 | 7,559,403 | 65.4\% |
| Crystal Falls, City | 3603 | 1,198,076 | 5,442,430 | 816,257 | 0 | 7,456,763 | 76.3\% |
| Crystal Falls Comm H | 3618 | 0 | 2,239,813 | 1,280,310 | 0 | 3,520,123 | 100.6\% |
| Ctrl Dispatch of Mus | 6109 | 1,975,222 | 1,955,086 | 41,587 | 44,021 | 4,015,916 | 105.0\% |
| Ctrl Wayne Co Sanita | 8214 | 0 | 2,882,829 | 211,845 | 0 | 3,094,674 | 89.7\% |
| Davison, City of | 2516 | 1,915,180 | 4,948,750 | 59,256 | 15,708 | 6,938,894 | 77.0\% |
| Davison Richfield Sr | 2525 | 0 | 259,919 | 0 | 0 | 259,919 | 62.6\% |
| Davison Twp | 2519 | 4,073,912 | 2,419,824 | 78,719 | 0 | 6,572,455 | 94.8\% |
| Dearborn, City of | 8251 | 638,336 | 0 | 0 | 28,480 | 666,816 | 339.7\% |
| Deerfield, Vlg of | 4603 | 791,856 | 375,259 | 0 | 0 | 1,167,115 | 93.6\% |
| Delta Chtr Twp | 2306 | 1,520,207 | 7,415,069 | 217,755 | 52,396 | 9,205,427 | 84.3\% |
| Delta Co | 2102 | 10,494,971 | 14,071,265 | 1,046,603 | 0 | 25,612,839 | 94.3\% |
| Delta CRC | 2105 | 4,422,126 | 4,024,182 | 381,142 | 0 | 8,827,450 | 52.8\% |
| Delta-Menominee Dist | 2103 | 2,579,068 | 1,401,683 | 2,058,099 | 3,826 | 6,042,676 | 127.9\% |
| Detour, Vlg of | 1706 | 52,995 | 348,148 | 3,159 | 0 | 404,302 | 52.7\% |
| Detroit HC | 8241 | 4,957,296 | 1,620,980 | 794,927 | 3,168 | 7,376,371 | 128.9\% |
| DeWitt, City of | 1908 | 651,924 | 2,701,158 | 127,009 | 11,200 | 3,491,291 | 65.1\% |
| DeWitt Chtr Twp | 1910 | 2,039,793 | 157,481 | 193,589 | 15,774 | 2,406,637 | 111.8\% |
| Dexter, Vlg of | 8217 | 1,264,259 | 1,362,224 | 0 | 15,240 | 2,641,723 | 99.8\% |
| Dexter Area Fire Dep | 8219 | 139,157 | 309,190 | 0 | 9,925 | 458,272 | 94.5\% |
| Dexter Twp | 8111 | 361,956 | 237,087 | 9,097 | 19,311 | 627,451 | 85.1\% |
| Dickinson Co | 2206 | 7,185,692 | 13,840,916 | 909,586 | 75,076 | 22,011,270 | 80.9\% |


| Municipality Name | Number | Active | Retired | Vested | Refunds | Total | Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dickinson CRC | 2203 | 2,879,358 | 5,135,203 | 187,732 | 0 | 8,202,293 | 71.1\% |
| Dickinson-Iron Dist | 3605 | 2,204,490 | 3,723,857 | 805,002 | 13,759 | 6,747,108 | 81.7\% |
| Dimondale, Vlg of | 2304 | 345,682 | 247,346 | 105,739 | 0 | 698,767 | 88.5\% |
| Dist Hlth Dept \#10 | 5104 | 9,694,855 | 13,527,718 | 795,135 | 3,112 | 24,020,820 | 63.0\% |
| Dist Hlth Dept \# 2 | 6501 | 2,434,660 | 2,562,407 | 936,249 | 16,955 | 5,950,271 | 85.9\% |
| Dist Hlth Dept \# 4 | 7103 | 5,666,073 | 7,117,442 | 930,021 | 17,272 | 13,730,808 | 86.8\% |
| Douglas, City of Vlg | 0303 | 590,199 | 1,078,342 | 221,742 | 591 | 1,890,874 | 89.4\% |
| Dowagiac, City of | 1401 | 5,772,413 | 9,280,088 | 759,067 | 44,140 | 15,855,708 | 57.4\% |
| Dowagiac Dist Lib | 1406 | 29,390 | 0 | 27,241 | 0 | 56,631 | 85.3\% |
| Dowagiac HC | 1405 | 72,771 | 0 | 45,693 | 0 | 118,464 | 134.0\% |
| Drummond Island Twp | 1708 | 33,661 | 0 | 16,989 | 0 | 50,650 | 162.6\% |
| Dryden, Vlg of | 4405 | 43,966 | 233,595 | 58,027 | 0 | 335,588 | 101.4\% |
| Dundee, Vlg of | 5803 | 423,950 | 3,113,722 | 0 | 52,257 | 3,589,929 | 78.8\% |
| Durand, City of | 7603 | 1,728,472 | 1,933,912 | 259,838 | 0 | 3,922,222 | 92.0\% |
| East China Chtr Twp | 7701 | 2,753,812 | 3,162,322 | 206,210 | 4,722 | 6,127,066 | 81.0\% |
| East Grand Rapids, Ci | 4101 | 1,713,596 | 14,580,792 | 482,608 | 9,532 | 16,786,528 | 67.2\% |
| East Jordan, City of | 1504 | 2,001,028 | 1,381,076 | 267,686 | 9,588 | 3,659,378 | 89.5\% |
| East Lansing, City o | 3301 | 33,043,530 | 97,556,368 | 3,732,928 | 35,318 | 134,368,144 | 73.8\% |
| Eastpointe HC | 5011 | 452,334 | 0 | 0 | 0 | 452,334 | 110.0\% |
| Eaton Co | 2302 | 32,052,960 | 59,829,372 | 3,214,764 | 323,690 | 95,420,786 | 75.6\% |
| Eaton Co MCF | 2305 | 2,797,819 | 2,130,607 | 498,038 | 169,367 | 5,595,831 | 112.1\% |
| Eaton Rapids, City o | 2307 | 5,773,192 | 3,802,441 | 496,875 | 18,282 | 10,090,790 | 77.7\% |
| Eau Claire, Vlg of | 1104 | 121,151 | 294,065 | 0 | 1,826 | 417,042 | 52.9\% |
| Ecorse, City of | 8206 | 6,274,050 | 33,708,491 | 111,204 | 3,236 | 40,096,981 | 54.8\% |
| Elderly Housing Corp | 8222 | 420,751 | 1,823,381 | 182,977 | 1,040 | 2,428,149 | 73.4\% |
| Elkton, Vlg of | 3206 | 268,748 | 259,283 | 27,561 | 0 | 555,592 | 90.2\% |
| Elsie, Village of | 1906 | 0 | 13,464 | 95,727 | 1,168 | 110,359 | 154.4\% |
| Emmett, Chtr Twp | 1310 | 1,204,777 | 1,321,331 | 72,095 | 5,754 | 2,603,957 | 103.0\% |
| Emmett CRC | 2401 | 2,198,134 | 9,376,159 | 251,658 | 0 | 11,825,951 | 68.5\% |
| Erie, Township of | 5812 | 2,717 | 0 | 0 | 0 | 2,717 | 214.2\% |
| Escanaba, City of | 2101 | 11,044,312 | 17,173,156 | 679,963 | 26,187 | 28,923,618 | 69.5\% |
| Essexville, City of | 0903 | 2,623,072 | 3,345,829 | 150,344 | 0 | 6,119,245 | 83.7\% |
| E UP Reg Planning \& | 1709 | 44,532 | 0 | 0 | 0 | 44,532 | 218.8\% |
| E UP Trans Auth | 1705 | 3,146,348 | 4,755,362 | 29,823 | 0 | 7,931,533 | 65.5\% |
| Evart, City of | 6705 | 636,481 | 610,140 | 223,926 | 0 | 1,470,547 | 94.9\% |
| Evart Local Dev Fina | 6706 | 22,330 | 426,857 | 0 | 0 | 449,187 | 71.8\% |
| Farmington, City of | 6343 | 4,364,363 | 12,284,370 | 236,104 | 113 | 16,884,950 | 117.9\% |
| Farmington Cmnty Lib | 6319 | 3,789,608 | 3,586,985 | 64,861 | 6,838 | 7,448,292 | 92.2\% |
| Farwell, Vlg of | 1805 | 375,034 | 0 | 0 | 0 | 375,034 | 74.3\% |
| Fenton, City of | 2505 | 4,617,446 | 6,378,868 | 94,263 | 6,821 | 11,097,398 | 84.7\% |
| Ferndale HC | 6345 | 452,028 | 0 | 0 | 0 | 452,028 | 61.0\% |
| Ferrysburg, City of | 7106 | 1,039,601 | 382,521 | 51,330 | 0 | 1,473,452 | 75.9\% |
| Flat Rock, City of | 8212 | 5,953,450 | 10,424,211 | 268,114 | 56,988 | 16,702,763 | 70.4\% |
| Flint, Chtr Twp of | 2512 | 7,794,958 | 11,384,775 | 278,840 | 12,519 | 19,471,092 | 88.9\% |
| Flint Pub Lib | 2518 | 582,753 | 0 | 0 | 0 | 582,753 | 178.8\% |
| Flushing, Chtr Twp o | 2515 | 801,360 | 3,747,838 | 42,537 | 28,108 | 4,619,843 | 70.9\% |
| Flushing, City of | 2502 | 4,280,029 | 8,989,249 | 595,080 | 0 | 13,864,358 | 66.9\% |
| Forsyth Twp | 5212 | 1,358,767 | 3,352,926 | 456,689 | 0 | 5,168,382 | 59.6\% |
| Fowler, Vlg of | 1904 | 41,254 | 186,345 | 17,542 | 0 | 245,141 | 94.9\% |
| Fowlerville, Vlg of | 4705 | 1,391,822 | 1,381,695 | 116,984 | 23,857 | 2,914,358 | 104.1\% |
| Fowlerville Dist Lib | 4710 | 257,914 | 0 | 0 | 1,137 | 259,051 | 87.5\% |
| Frankenmuth, City of | 7306 | 5,016,074 | 6,165,307 | 139,244 | 1,146 | 11,321,771 | 84.1\% |
| Frankfort, City of | 1002 | 867,441 | 1,640,925 | 1,876 | 540 | 2,510,782 | 67.7\% |
| Franklin, Vlg of | 6323 | 1,790,448 | 2,163,775 | 4,532 | 4,408 | 3,963,163 | 86.7\% |
| Fraser, City of | 5003 | 0 | 147,573 | 0 | 0 | 147,573 | 174.0\% |
| Fremont, City of | 6203 | 2,917,767 | 5,136,480 | 349,416 | 0 | 8,403,663 | 73.4\% |
| Fremont Area Dist Li | 6209 | 305,875 | 506,613 | 37,885 | 0 | 850,373 | 86.9\% |
| Gaastra, City of | 3617 | 157,629 | 0 | 0 | 0 | 157,629 | 92.4\% |
| Garden City, City of | 8255 | 11,214,534 | 54,006,178 | 389,053 | 0 | 65,609,765 | 85.4\% |
| Gaylord, City of | 6903 | 4,303,965 | 3,612,169 | 109,809 | 729 | 8,026,672 | 86.9\% |
| Genesee Chtr Twp | 2510 | 3,126,987 | 10,476,703 | 455,395 | 65,951 | 14,125,036 | 59.3\% |


| Municipality Name | Number | Active | Retired | Vested | Refunds | Total | Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Genoa Twp | 4713 | 50,350 | 0 | 0 | 0 | 50,350 | 247.6\% |
| Gladstone, City of | 2106 | 1,424,504 | 8,002,248 | 184,611 | 0 | 9,611,363 | 61.9\% |
| Gladwin, City of | 2605 | 214,457 | 223,634 | 0 | 0 | 438,091 | 181.2\% |
| Gladwin City HC | 2608 | 1,224,953 | 1,405,096 | 90,726 | 18,643 | 2,739,418 | 65.7\% |
| Gladwin Co | 2602 | 5,291,191 | 7,311,887 | 1,054,028 | 51,758 | 13,708,864 | 90.0\% |
| Gladwin Co Dist Lib | 2607 | 328,148 | 481,650 | 46,594 | 1,643 | 858,035 | 90.3\% |
| Gladwin CRC | 2601 | 2,614,678 | 8,973,409 | 154,295 | 0 | 11,742,382 | 73.8\% |
| Gogebic-Iron Wastewa | 2703 | 1,232,230 | 934,086 | 0 | 0 | 2,166,316 | 76.7\% |
| Grand Beach, Vlg of | 1117 | 47,722 | 0 | 0 | 0 | 47,722 | 143.5\% |
| Grand Blanc, City of | 2513 | 5,513,872 | 2,789,257 | 272,728 | 1,166 | 8,577,023 | 85.9\% |
| Grand Blanc Chtr Twp | 2511 | 3,465,304 | 8,568,505 | 2,187 | 14,626 | 12,050,622 | 72.6\% |
| Grand Haven, City of | 7010 | 25,151,923 | 35,689,964 | 1,915,392 | 65,993 | 62,823,272 | 110.4\% |
| Grand Ledge, City of | 2312 | 1,281,877 | 888,994 | 0 | 0 | 2,170,871 | 68.0\% |
| Grand Ledge Area ESA | 2310 | 449,323 | 0 | 110,764 | 0 | 560,087 | 136.4\% |
| Grand Rapids H C | 4108 | 1,087,837 | 430,917 | 0 | 0 | 1,518,754 | 76.6\% |
| Grand Traverse Co | 2803 | 18,011,856 | 55,018,636 | 3,446,785 | 6,651 | 76,483,928 | 53.1\% |
| Grand Traverse CRC | 2802 | 2,328,073 | 7,103,382 | 236,562 | 0 | 9,668,017 | 71.9\% |
| Grand Traverse Pavil | 2809 | 10,713,915 | 5,915,156 | 1,820,770 | 86,198 | 18,536,039 | 92.2\% |
| Grandville, City of | 4102 | 4,725,079 | 10,977,860 | 987,077 | 0 | 16,690,016 | 70.6\% |
| Gratiot Co | 2905 | 10,095,579 | 10,964,508 | 1,000,131 | 0 | 22,060,218 | 78.3\% |
| Gratiot CRC | 2903 | 4,014,055 | 10,014,158 | 0 | 0 | 14,028,213 | 76.1\% |
| Grayling, City of | 2003 | 510,104 | 2,902,444 | 106,105 | 0 | 3,518,653 | 76.1\% |
| Green Oak Chtr Twp | 4708 | 852,720 | 996,595 | 0 | 613 | 1,849,928 | 99.5\% |
| Greenville, City of | 5906 | 2,460,474 | 2,006,736 | 59,772 | 26,981 | 4,553,963 | 86.6\% |
| Grosse Ile Twp | 8207 | 6,528,443 | 13,970,332 | 717,916 | 1,938 | 21,218,629 | 81.8\% |
| Grosse Pointe Park, | 8201 | 12,712,697 | 17,656,961 | 249,843 | 81,621 | 30,701,122 | 81.7\% |
| Grosse Pte-Clntn Rfs | 5004 | 0 | 2,126,450 | 160,904 | 40,012 | 2,327,366 | 110.2\% |
| Groveland Twp | 6335 | 624,303 | 378,057 | 188,516 | 0 | 1,190,876 | 98.9\% |
| Hackley Pub Lib | 6114 | 63,246 | 0 | 0 | 0 | 63,246 | 130.5\% |
| Hamburg Twp | 4709 | 724,491 | 797,067 | 131,143 | 8,639 | 1,661,340 | 109.0\% |
| Hamtramck, City of | 8205 | 11,925,197 | 76,365,209 | 1,461,998 | 251,648 | 90,004,052 | 63.4\% |
| Hamtramck Housing Co | 8250 | 735,664 | 0 | 0 | 0 | 735,664 | 128.2\% |
| Hancock, City of | 3107 | 1,765,433 | 185,890 | 0 | 9,057 | 1,960,380 | 83.5\% |
| Harbor Beach, City o | 3201 | 2,071,726 | 2,819,152 | 464,724 | 7,876 | 5,363,478 | 100.4\% |
| Harbor Springs, City | 2405 | 1,783,675 | 1,781,368 | 0 | 16,630 | 3,581,673 | 71.4\% |
| Harbor Springs Area | 2406 | 539,417 | 0 | 0 | 0 | 539,417 | 97.6\% |
| Harrison, City of | 1803 | 1,476,444 | 949,024 | 107,717 | 5,208 | 2,538,393 | 81.9\% |
| Hartland Deerfield T | 4716 | 93,806 | 0 | 0 | 0 | 93,806 | 292.2\% |
| Hastings, City of | 0801 | 4,083,593 | 8,902,183 | 448,915 | 24,855 | 13,459,546 | 68.1\% |
| Hazel Park, City of | 6336 | 15,147,906 | 34,699,611 | 846,546 | 56,064 | 50,750,127 | 84.2\% |
| Helen Newberry Joy H | 4805 | 3,127,346 | 11,034,950 | 586,148 | 66,761 | 14,815,205 | 77.0\% |
| Henika Dist Lib | 0310 | 356,451 | 0 | 0 | 0 | 356,451 | 108.6\% |
| Herrick Dist Lib | 7012 | 4,087,928 | 1,951,968 | 256,468 | 0 | 6,296,364 | 83.0\% |
| Hiawatha Bhvrl Hlth | 1707 | 6,080,938 | 5,658,062 | 1,561,812 | 42,265 | 13,343,077 | 93.9\% |
| Hillsdale, City of | 3001 | 9,421,847 | 6,697,950 | 1,014,858 | 37,418 | 17,172,073 | 107.3\% |
| Hillsdale Co | 3005 | 3,111,388 | 1,688,566 | 160,413 | 2,533 | 4,962,900 | 65.2\% |
| Hillsdale CRC | 3004 | 4,624,404 | 3,310,435 | 35,818 | 4,757 | 7,975,414 | 71.7\% |
| Hlth Source of Sagin | 7311 | 15,687,062 | 15,820,579 | 3,053,020 | 17,604 | 34,578,265 | 93.6\% |
| Holland, City of | 7001 | 36,263,087 | 61,526,679 | 2,941,911 | 53,966 | 100,785,643 | 80.3\% |
| Holland Area Cmnty P | 7014 | 319,091 | 117,220 | 0 | 12,204 | 448,515 | 122.7\% |
| Holland Hospital | 7006 | 0 | 1,754,300 | 321,802 | 0 | 2,076,102 | 104.4\% |
| Holly, Vlg of | 6317 | 945,954 | 9,408,714 | 504,475 | 3,355 | 10,862,498 | 69.3\% |
| Homer, Vlg of | 1304 | 428,059 | 363,713 | 270,302 | 0 | 1,062,074 | 115.1\% |
| Houghton, City of | 3109 | 1,899,290 | 174,675 | 0 | 0 | 2,073,965 | 112.3\% |
| Houghton Co | 3102 | 9,692,143 | 10,307,495 | 585,215 | 27,674 | 20,612,527 | 70.0\% |
| Houghton CRC | 3103 | 1,068,948 | 2,683,721 | 0 | 0 | 3,752,669 | 75.3\% |
| Houghton Lake Pub Li | 7203 | 316,426 | 0 | 58,721 | 0 | 375,147 | 121.5\% |
| Howard City, Vlg of | 5902 | 181,182 | 424,178 | 32,735 | 0 | 638,095 | 92.6\% |
| Howard Twp | 1106 | 53,427 | 0 | 0 | 0 | 53,427 | 127.7\% |
| Howell, City of | 4702 | 5,554,084 | 10,347,073 | 1,440,978 | 57,726 | 17,399,861 | 70.5\% |
| Howell Area Fire Aut | 4714 | 252,015 | 278,513 | 0 | 0 | 530,528 | 110.9\% |


| Municipality Name | Number | Active | Retired | Deferred Vested | Pending Refunds | Total | Percen Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Howell-Carnegie Dist | 4707 | 786,555 | 185,465 | 26,280 | 0 | 998,300 | 96.0\% |
| Hudsonville, City of | 7004 | 283,041 | 1,308,240 | 448,964 | 2,759 | 2,043,004 | 65.1\% |
| Huntington Woods, Ci | 6303 | 4,748,160 | 15,143,853 | 282,243 | 58,332 | 20,232,588 | 58.1\% |
| Hurley Med Ctr | 2521 | 116,461,028 | 116,458,435 | 13,252,039 | 575,165 | 246,746,667 | 68.4\% |
| Huron Chtr Twp | 8224 | 6,039,346 | 6,497,951 | 9,321 | 58,081 | 12,604,699 | 83.3\% |
| Huron Co | 3204 | 30,022,904 | 34,683,570 | 4,521,013 | 411,824 | 69,639,311 | 90.4\% |
| Huron CRC | 3202 | 5,235,818 | 15,419,383 | 176,092 | 0 | 20,831,293 | 84.4\% |
| Imlay City, City of | 4404 | 2,537,933 | 2,358,080 | 266,680 | 0 | 5,162,693 | 82.9\% |
| Independence Twp | 6328 | 4,486,628 | 1,155,677 | 0 | 1,709 | 5,644,014 | 102.8\% |
| Indianfields Twp | 7905 | 47,637 | 175,145 | 65,758 | 0 | 288,540 | 11.6\% |
| Ingham Co | 3303 | 114,841,812 | 153,196,741 | 15,174,238 | 1,184,059 | 284,396,850 | 80.1\% |
| Ingham CRC | 3302 | 8,441,888 | 21,880,973 | 1,110,025 | 2,559 | 31,435,445 | 73.3\% |
| Interurban Trans Aut | 0308 | 919,322 | 0 | 0 | 0 | 919,322 | 106.7\% |
| Ionia, City of | 3403 | 4,349,416 | 7,204,794 | 891,161 | 475 | 12,445,846 | 63.0\% |
| Ionia Cmnty Lib | 3412 | 279,332 | 65,838 | 35,598 | 0 | 380,768 | 92.4\% |
| Ionia Co | 3408 | 2,821,096 | 1,346,385 | 241,864 | 18,353 | 4,427,698 | 113.2\% |
| Ionia CRC | 3404 | 3,537,732 | 8,833,019 | 56,592 | 0 | 12,427,343 | 40.1\% |
| Ionia HC | 3406 | 562,103 | 272,998 | 0 | 3,265 | 838,366 | 94.7\% |
| Iosco Co | 3501 | 9,311,019 | 9,652,110 | 1,299,625 | 24,957 | 20,287,711 | 79.9\% |
| Iosco CRC | 3502 | 3,960,362 | 3,887,456 | 147,388 | 0 | 7,995,206 | 81.1\% |
| Iron Co | 3606 | 13,548,573 | 8,871,848 | 847,553 | 96,642 | 23,364,616 | 93.1\% |
| Iron Co HC | 3611 | 292,897 | 41,764 | 13,609 | 0 | 348,270 | 115.4\% |
| Iron CRC | 3602 | 3,676,639 | 7,325,366 | 64,324 | 0 | 11,066,329 | 47.8\% |
| Iron Mountain, City | 2201 | 2,605,057 | 8,092,000 | 135,669 | 960 | 10,833,686 | 57.6\% |
| Iron Mountain-Kingsf | 2205 | 258,219 | 344,813 | 21,685 | 467 | 625,184 | 95.1\% |
| Iron River, City of | 3601 | 3,922,846 | 3,307,101 | 22,883 | 490 | 7,253,320 | 79.8\% |
| Ironwood, City of | 2706 | 4,797,452 | 11,679,925 | 210,503 | 0 | 16,687,880 | 63.7\% |
| Isabella Co | 3703 | 20,862,087 | 16,985,173 | 2,832,225 | 19,140 | 40,698,625 | 85.3\% |
| Isabella Co Trans Co | 3709 | 1,116,795 | 423,549 | 0 | 1,534 | 1,541,878 | 109.3\% |
| Isabella CRC | 3702 | 3,195,806 | 5,988,611 | 406,297 | 38,721 | 9,629,435 | 86.5\% |
| Ishpeming, City of | 5204 | 2,688,605 | 8,186,418 | 220,806 | 44,370 | 11,140,199 | 71.8\% |
| Ishpeming Area Joint | 5207 | 653,947 | 33,722 | 39,716 | 0 | 727,385 | 113.6\% |
| Ishpeming Twp | 5216 | 848,488 | 251,570 | 0 | 0 | 1,100,058 | 83.6\% |
| Ithaca, City of | 2904 | 1,137,502 | 2,686,568 | 79,796 | 0 | 3,903,866 | 76.5\% |
| Jackson Dist Lib | 3802 | 2,233,006 | 2,318,240 | 601,675 | 28,809 | 5,181,730 | 114.3\% |
| Jackson Trans Auth | 3805 | 3,350,960 | 641,904 | 142,428 | 20,369 | 4,155,661 | 102.6\% |
| Jordan Valley Dist L | 1507 | 90,090 | 18,884 | 0 | 0 | 108,974 | 156.7\% |
| Kalamazoo, Chtr Twp | 3907 | 7,380,476 | 1,238,230 | 197,070 | 0 | 8,815,776 | 89.2\% |
| Kalamazoo Lake Swr \& | 0306 | 644,226 | 359,641 | 115,159 | 0 | 1,119,026 | 85.7\% |
| Kalamazoo Pub Lib | 3903 | 2,475,883 | 314,568 | 76,531 | 0 | 2,866,982 | 118.5\% |
| Kalkaska, Village of | 4001 | 1,038,168 | 3,041,160 | 5,120 | 5,038 | 4,089,486 | 70.1\% |
| Kalkaska Co | 4003 | 6,250,829 | 7,409,714 | 494,323 | 39,960 | 14,194,826 | 94.3\% |
| Kalkaska CRC | 4002 | 1,592,868 | 6,273,504 | 222,773 | 0 | 8,089,145 | 57.1\% |
| Kalkaska Pub Trans A | 4004 | 340,773 | 971,410 | 271,089 | 6,863 | 1,590,135 | 104.5\% |
| Keego Harbor, City o | 6322 | 687,696 | 2,506,030 | 433,617 | 9,250 | 3,636,593 | 66.4\% |
| Kent CRC | 4111 | 0 | 400,508 | 0 | 0 | 400,508 | 46.0\% |
| Keweenaw Co | 4202 | 1,125,309 | 547,233 | 70,707 | 7,067 | 1,750,316 | 94.0\% |
| Keweenaw CRC | 4201 | 1,443,815 | 4,438,463 | 0 | 0 | 5,882,278 | 68.5\% |
| Kinde, Vlg of | 3209 | 15,013 | 179,570 | 0 | 0 | 194,583 | 41.5\% |
| Kingsford, City of | 2202 | 3,276,825 | 3,022,999 | 2,162 | 508 | 6,302,494 | 82.5\% |
| L.M.A.S. Dist Hlth D | 4803 | 902,184 | 3,945,015 | 2,485,188 | 695 | 7,333,082 | 108.2\% |
| L'Anse, Vlg of | 0705 | 1,964,389 | 2,813,056 | 89,419 | 0 | 4,866,864 | 62.8\% |
| Lac Vieux Desert Ban | 8402 | 116,113 | 0 | 0 | 0 | 116,113 | 119.1\% |
| Laingsburg, City of | 7608 | 211,150 | 0 | 0 | 1,054 | 212,204 | 145.4\% |
| Lake Co | 4301 | 5,306,849 | 3,306,838 | 451,345 | 12,546 | 9,077,578 | 95.4\% |
| Lake CRC | 4302 | 2,582,211 | 5,812,159 | 44,402 | 0 | 8,438,772 | 67.1\% |
| Lakeland Lib Coop | 4106 | 274,758 | 329,486 | 242,703 | 6,534 | 853,481 | 102.9\% |
| Lake Linden, Vlg of | 3105 | 487,817 | 471,655 | 51,235 | 0 | 1,010,707 | 69.4\% |
| Lake Odessa, Village | 3402 | 117,037 | 13,060 | 0 | 0 | 130,097 | 148.2\% |
| Lake Orion, Vlg of | 6318 | 1,562,415 | 2,355,743 | 51,952 | 26,159 | 3,996,269 | 76.4\% |
| Lakeshore Coordinati | 7007 | 487,749 | 350,677 | 25,381 | 0 | 863,807 | 116.0\% |


| Municipality Name | Number | Active | Retired | Vested | Refunds | Total | Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lansing Chtr Twp | 3320 | 4,291,337 | 1,198,214 | 0 | 324 | 5,489,875 | 102.2\% |
| Lansing HC | 3311 | 1,765,607 | 5,523,412 | 718,478 | 0 | 8,007,497 | 94.2\% |
| Lapeer, City of | 4401 | 7,444,691 | 7,890,453 | 511,356 | 0 | 15,846,500 | 89.2\% |
| Lapeer Co | 4403 | 36,835,690 | 29,520,413 | 4,486,249 | 116,951 | 70,959,303 | 103.6\% |
| Lapeer CRC | 4402 | 6,319,555 | 5,905,876 | 225,944 | 43,738 | 12,495,113 | 70.0\% |
| Lapeer Dist Lib | 4410 | 1,788,962 | 2,180,942 | 4,261 | 9,133 | 3,983,298 | 74.5\% |
| Lathrup Vlg, City of | 6311 | 1,996,477 | 3,863,737 | 0 | 48,301 | 5,908,515 | 92.1\% |
| Laurium, Vlg of | 3104 | 710,574 | 735,417 | 34,377 | 0 | 1,480,368 | 76.9\% |
| Lawrence, Vlg of | 8004 | 0 | 51,525 | 71,669 | 0 | 123,194 | 122.2\% |
| Leelanau Co | 4501 | 9,574,854 | 6,465,953 | 1,169,342 | 9,739 | 17,219,888 | 80.5\% |
| Leelanau CRC | 4503 | 2,727,928 | 2,161,323 | 281,367 | 11,452 | 5,182,070 | 62.2\% |
| Leoni Twp | 3804 | 497,773 | 3,507,747 | 1,150,969 | 25,551 | 5,182,040 | 89.1\% |
| Leslie, City of | 3313 | 486,529 | 661,694 | 18,958 | 856 | 1,168,037 | 98.4\% |
| Leslie Twp | 3319 | 196,020 | 0 | 0 | 0 | 196,020 | 100.7\% |
| Lexington, Vlg of | 7708 | 1,312,986 | 451,573 | 73,501 | 137 | 1,838,197 | 77.2\% |
| Lima Twp | 8112 | 350,983 | 21,596 | 0 | 0 | 372,579 | 89.7\% |
| Litchfield, City of | 3006 | 351,703 | 926,752 | 75,589 | 6,921 | 1,360,965 | 77.2\% |
| Livingston Co | 4703 | 33,954,790 | 47,208,627 | 5,239,194 | 29,696 | 86,432,307 | 82.7\% |
| Livingston Co CMH Au | 4712 | 8,565,578 | 2,656,659 | 1,630,317 | 0 | 12,852,554 | 111.1\% |
| Livingston CRC | 4701 | 10,038,070 | 5,971,643 | 742,523 | 0 | 16,752,236 | 95.7\% |
| Looking Glass Rgnl F | 2311 | 77,524 | 0 | 809 | 0 | 78,333 | 162.1\% |
| Loutit Dist Lib | 7013 | 895,147 | 380,498 | 0 | 544 | 1,276,189 | 104.3\% |
| Lowell, City of | 4104 | 4,042,870 | 5,230,147 | 910,038 | 17,859 | 10,200,914 | 83.3\% |
| Luce Co | 4804 | 2,969,267 | 2,381,399 | 364,554 | 3,512 | 5,718,732 | 63.4\% |
| Luce CRC | 4801 | 2,256,207 | 5,720,386 | 235,477 | 0 | 8,212,070 | 56.3\% |
| Ludington, City of | 5302 | 5,129,717 | 10,028,387 | 379,716 | 0 | 15,537,820 | 83.0\% |
| Ludington-Mason Dist | 5303 | 1,451,269 | 328,014 | 56,289 | 0 | 1,835,572 | 82.5\% |
| Luna Pier, City of | 5802 | 1,134,018 | 3,409,112 | 0 | 15,279 | 4,558,409 | 60.3\% |
| Lyons, Vlg of | 3411 | 75,727 | 0 | 0 | 6,337 | 82,064 | 131.2\% |
| Mackinac Co | 4901 | 6,200,802 | 5,391,467 | 592,883 | 0 | 12,185,152 | 85.1\% |
| Mackinac Co HC | 4905 | 0 | 332,416 | 61,851 | 0 | 394,267 | 53.9\% |
| Mackinac CRC | 4903 | 1,561,854 | 5,594,311 | 87,589 | 0 | 7,243,754 | 57.7\% |
| Mackinac Straits Hos | 4902 | 10,032,646 | 4,455,546 | 1,472,275 | 103,397 | 16,063,864 | 86.8\% |
| Mackinaw City, Vlg o | 1606 | 130,617 | 312,302 | 0 | 0 | 442,919 | 138.0\% |
| Madison, Chtr Twp of | 4605 | 461,281 | 215,728 | 79,553 | 0 | 756,562 | 98.7\% |
| Madison Heights, Cit | 6308 | 10,198,489 | 21,093,583 | 1,320,100 | 20,379 | 32,632,551 | 81.4\% |
| Manistee, City of | 5105 | 6,134,700 | 7,186,344 | 68,278 | 7,838 | 13,397,160 | 109.7\% |
| Manistee Co | 5101 | 15,500,010 | 15,577,699 | 1,527,960 | 47,697 | 32,653,366 | 88.3\% |
| Manistee CRC | 5103 | 3,228,137 | 5,940,005 | 542,376 | 0 | 9,710,518 | 58.3\% |
| Manistee HC | 5107 | 279,960 | 71,537 | 0 | 17,522 | 369,019 | 123.0\% |
| Manistique, City of | 7504 | 3,931,430 | 6,410,153 | 1,944 | 0 | 10,343,527 | 59.5\% |
| Manlius Twp | 0311 | 377,429 | 0 | 21,990 | 0 | 399,419 | 69.7\% |
| Manton, City of | 8304 | 585,686 | 869,036 | 51,487 | 0 | 1,506,209 | 48.6\% |
| Marenisco Twp | 2704 | 243,679 | 0 | 0 | 0 | 243,679 | 86.2\% |
| Marine City, City of | 7704 | 0 | 27,932 | 0 | 0 | 27,932 | 155.8\% |
| Marion, Vlg of | 6704 | 315,682 | 194,267 | 1,827 | 0 | 511,776 | 83.1\% |
| Marlette, City of | 7405 | 539,808 | 429,000 | 289,768 | 0 | 1,258,576 | 84.4\% |
| Marquette, City of | 5201 | 14,863,477 | 26,123,796 | 1,100,301 | 21,187 | 42,108,761 | 73.7\% |
| Marquette Brd of Lig | 5209 | 8,167,850 | 25,349,553 | 279,036 | 24,427 | 33,820,866 | 69.1\% |
| Marquette Chtr Twp | 5215 | 1,014,532 | 320,994 | 137,936 | 0 | 1,473,462 | 80.9\% |
| Marquette Co | 5202 | 24,519,595 | 48,959,373 | 3,098,622 | 220,344 | 76,797,934 | 70.9\% |
| Marquette Co Arpt | 5210 | 1,395,154 | 1,285,399 | 42,631 | 0 | 2,723,184 | 61.8\% |
| Marquette Co Solid W | 5213 | 867,251 | 424,556 | 171,329 | 3,746 | 1,466,882 | 110.6\% |
| Marquette Co Trans A | 5206 | 1,427,383 | 1,205,222 | 177,917 | 0 | 2,810,522 | 92.7\% |
| Marquette CRC | 5211 | 4,521,845 | 15,974,785 | 596,878 | 14,050 | 21,107,558 | 53.2\% |
| Marshall, City of | 1306 | 8,068,252 | 17,730,018 | 900,435 | 112,668 | 26,811,373 | 86.9\% |
| Marshall Area Firefi | 1313 | 189,129 | 0 | 0 | 14,106 | 203,235 | 169.0\% |
| Marshall Dist Lib | 1309 | 0 | 267,124 | 0 | 0 | 267,124 | 71.6\% |
| Mason, City of | 3304 | 3,902,966 | 9,030,712 | 299,905 | 26,251 | 13,259,834 | 83.9\% |
| Mason Co | 5301 | 15,809,999 | 20,556,505 | 2,548,415 | 0 | 38,914,919 | 90.0\% |
| Mason CRC | 5305 | 3,741,514 | 1,642,129 | 224,085 | 2,647 | 5,610,375 | 67.9\% |


| Municipality Name | Number | Active | Retired | Vested | Refunds | Total | Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mason-Oceana Cty Enh | 6403 | 909,131 | 82,218 | 53,073 | 3,945 | 1,048,367 | 123.0\% |
| Mastodon Township | 3613 | 0 | 44,498 | 0 | 0 | 44,498 | 91.1\% |
| MBS Intl Arpt | 0902 | 2,142,263 | 5,438,507 | 97,742 | 0 | 7,678,512 | 78.3\% |
| Meceola Central Disp | 5405 | 846,635 | 501,888 | 13,644 | 0 | 1,362,167 | 102.0\% |
| Mecosta Co | 5403 | 8,876,302 | 15,337,743 | 2,094,620 | 14,990 | 26,323,655 | 104.7\% |
| Mecosta County Gener | 5404 | 0 | 5,043,302 | 2,785,640 | 0 | 7,828,942 | 101.7\% |
| Mecosta CRC | 5401 | 2,781,815 | 5,448,376 | 321,980 | 16,625 | 8,568,796 | 91.6\% |
| Melvindale, City of | 8215 | 7,893,944 | 21,488,286 | 449,495 | 1,698 | 29,833,423 | 62.3\% |
| Melvindale HC | 8220 | 316,882 | 125,566 | 356,651 | 0 | 799,099 | 92.0\% |
| Menominee, City of | 5501 | 3,342,658 | 3,591,708 | 1,085,287 | 0 | 8,019,653 | 92.6\% |
| Menominee Co | 5502 | 6,870,061 | 8,707,227 | 584,485 | 7,734 | 16,169,507 | 80.2\% |
| Menominee CRC | 5503 | 1,404,945 | 2,461,890 | 0 | 0 | 3,866,835 | 67.1\% |
| Meridian Chtr Twp | 3315 | 12,685,142 | 24,055,826 | 772,325 | 48,516 | 37,561,809 | 72.4\% |
| MERS | 2308 | 7,237,187 | 1,558,188 | 341,525 | 63,420 | 9,200,320 | 123.3\% |
| Metamora Twp | 4409 | 412,620 | 0 | 81,004 | 0 | 493,624 | 144.4\% |
| Mich. Grand River Wa | 3306 | 0 | 12,164 | 0 | 0 | 12,164 | 61.1\% |
| Mich Muni Risk Mgmt | 8237 | 778,323 | 0 | 0 | 0 | 778,323 | 93.0\% |
| Mich S Central Power | 3002 | 4,855,922 | 3,019,185 | 690,058 | 0 | 8,565,165 | 102.5\% |
| Middleville, Vlg of | 0803 | 462,672 | 820,789 | 42,254 | 3,605 | 1,329,320 | 85.7\% |
| Midland, City of | 5601 | 27,760,972 | 80,460,450 | 2,836,461 | 110,040 | 111,167,923 | 72.1\% |
| Midland Co Central D | 5604 | 868,088 | 669,152 | 0 | 8,119 | 1,545,359 | 111.9\% |
| Midland CRC | 5602 | 3,124,299 | 9,734,805 | 99,843 | 19,905 | 12,978,852 | 78.6\% |
| Mid-Mich Dist Hlth D | 5901 | 2,307,219 | 3,084,679 | 839,305 | 47,795 | 6,278,998 | 110.5\% |
| Mid-Mich Lib League | 8306 | 218,793 | 173,407 | 219,294 | 0 | 611,494 | 100.4\% |
| Mid Peninsula Lbry C | 3609 | 0 | 274,855 | 0 | 2,026 | 276,881 | 69.8\% |
| Milan, City of | 5801 | 986,094 | 8,317,508 | 842,399 | 0 | 10,146,001 | 60.2\% |
| Milan Lib | 5806 | 215,532 | 138,578 | 0 | 0 | 354,110 | 71.6\% |
| Milford, Vlg of | 6313 | 4,415,417 | 5,179,777 | 302,193 | 14,401 | 9,911,788 | 77.3\% |
| Millington, Vlg of | 7904 | 735,826 | 377,590 | 327,903 | 436 | 1,441,755 | 89.6\% |
| Missaukee Co | 5702 | 2,804,230 | 1,054,118 | 219,511 | 1,785 | 4,079,644 | 78.3\% |
| MOA Solid Waste Mgmt | 6002 | 233,210 | 235,882 | 60,714 | 0 | 529,806 | 135.5\% |
| Monroe HC | 5808 | 269,752 | 1,140,704 | 0 | 0 | 1,410,456 | 70.4\% |
| Montague, City of | 6112 | 1,911,940 | 1,451,493 | 103,659 | 0 | 3,467,092 | 85.8\% |
| Montcalm CRC | 5905 | 2,905,316 | 10,118,562 | 379,437 | 64 | 13,403,379 | 72.0\% |
| Montmorency Co | 6001 | 2,979,212 | 5,177,953 | 610,635 | 2,778 | 8,770,578 | 66.7\% |
| Montrose, City of | 2509 | 180,234 | 685,960 | 59,636 | 2,682 | 928,512 | 53.8\% |
| Mt. Morris Chtr Twp | 2503 | 5,298,073 | 16,497,582 | 943,012 | 8,394 | 22,747,061 | 71.4\% |
| Mt. Pleasant, City o | 3701 | 7,038,428 | 14,104,457 | 783,976 | 63,971 | 21,990,832 | 85.0\% |
| Muir, Vlg of | 3405 | 236,713 | 169,573 | 0 | 0 | 406,286 | 69.9\% |
| Mundy, Chtr Twp of | 2517 | 2,293,500 | 2,292,194 | 38,311 | 20,879 | 4,644,884 | 85.2\% |
| Munising, City of | 0202 | 1,910,351 | 3,700,548 | 270,905 | 0 | 5,881,804 | 91.2\% |
| Muskegon, City of | 6116 | 29,383,515 | 47,279,077 | 3,251,624 | 89,493 | 80,003,709 | 111.0\% |
| Muskegon Area Dist L | 6117 | 978,452 | 247,065 | 0 | 2,675 | 1,228,192 | 96.9\% |
| Muskegon Chtr Twp | 6108 | 8,065,977 | 5,027,704 | 247,776 | 48,999 | 13,390,456 | 94.4\% |
| Muskegon Co | 6103 | 78,049,894 | 112,161,784 | 10,731,374 | 503,489 | 201,446,541 | 85.9\% |
| Muskegon CRC | 6101 | 5,610,455 | 14,260,545 | 397,156 | 0 | 20,268,156 | 80.0\% |
| Muskegon HC | 6113 | 492,338 | 0 | 0 | 0 | 492,338 | 98.4\% |
| Muskegon Heights, Ci | 6102 | 4,360,740 | 22,853,790 | 806,826 | 211,103 | 28,232,459 | 90.9\% |
| Muskegon Heights HC | 6115 | 221,598 | 643,172 | 44,072 | 1,248 | 910,090 | 82.3\% |
| Negaunee, City of | 5203 | 3,480,575 | 5,889,055 | 202,413 | 0 | 9,572,043 | 74.7\% |
| Negaunee Twp | 5217 | 220,736 | 86,495 | 0 | 0 | 307,231 | 70.8\% |
| Network180 | 4109 | 10,643,347 | 5,765,053 | 1,182,404 | 47,765 | 17,638,569 | 124.1\% |
| Newaygo CMH | 6207 | 1,724,530 | 916,717 | 75,324 | 0 | 2,716,571 | 124.5\% |
| Newaygo Co | 6201 | 8,861,065 | 12,485,097 | 590,698 | 28,187 | 21,965,047 | 87.2\% |
| Newaygo CRC | 6212 | 2,306,150 | 4,655,826 | 147,811 | 0 | 7,109,787 | 92.5\% |
| Newaygo MCF | 6204 | 2,674,650 | 5,907,508 | 832,386 | 240,375 | 9,654,919 | 102.5\% |
| Newaygo Soil \& Wtr C | 6205 | 52,484 | 0 | 41,491 | 4,841 | 98,816 | 109.4\% |
| New Baltimore, City | 5016 | 6,810,291 | 3,297,901 | 68,139 | 14,308 | 10,190,639 | 102.1\% |
| Newberry, Vlg of | 4802 | 1,207,896 | 2,075,141 | 359,426 | 0 | 3,642,463 | 75.0\% |
| New Buffalo, City of | 1113 | 1,181,103 | 421,968 | 154,873 | 17,989 | 1,775,933 | 76.0\% |
| Niles Dist Lib | 1105 | 557,165 | 58,398 | 0 | 2,333 | 617,896 | 122.1\% |


| Municipality Name | Number | Active | Retired | Vested | Refunds | Total | Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N Muskegon, City of | 6104 | 1,833,261 | 3,399,943 | 70,721 | 1,008 | 5,304,933 | 87.6\% |
| No. Mich. Comm. Mntl | 2403 | 0 | 34,193 | 0 | 0 | 34,193 | 124.5\% |
| Northern Lakes CMH A | 2808 | 7,421,156 | 13,647,187 | 1,360,571 | 0 | 22,428,914 | 93.4\% |
| Northfield Twp | 8117 | 393,556 | 0 | 77,410 | 0 | 470,966 | 188.3\% |
| North Houghton Co Wt | 3106 | 221,105 | 0 | 17,191 | 0 | 238,296 | 121.8\% |
| Northpointe Bhvrl Hl | 2207 | 4,138,296 | 2,552,370 | 1,163,132 | 29,562 | 7,883,360 | 117.2\% |
| Northville, City of | 8208 | 4,481,999 | 11,860,836 | 510,005 | 10,101 | 16,862,941 | 67.6\% |
| Northville Chtr Twp | 8230 | 11,967,459 | 4,801,814 | 164,230 | 0 | 16,933,503 | 100.8\% |
| Northville Dist Lib | 8229 | 1,558,454 | 365,857 | 124,819 | 0 | 2,049,130 | 89.1\% |
| Norton Shores, City | 6106 | 9,586,902 | 20,669,299 | 355,952 | 16,213 | 30,628,366 | 65.4\% |
| Norway, City of | 2204 | 4,601,233 | 10,221,322 | 0 | 10,140 | 14,832,695 | 58.3\% |
| Novi, City of | 6320 | 23,672,854 | 29,355,848 | 3,046,442 | 237,792 | 56,312,936 | 87.4\% |
| NW Mich Cmnty Hlth A | 1502 | 2,489,228 | 2,150,883 | 606,754 | 0 | 5,246,865 | 85.2\% |
| NW Rgnl Arpt Comm | 2805 | 2,803,799 | 1,185,410 | 153,970 | 0 | 4,143,179 | 84.4\% |
| Oceana Co | 6402 | 12,713,287 | 11,781,991 | 1,434,306 | 114,504 | 26,044,088 | 97.5\% |
| Oceola Twp | 4717 | 564,717 | 0 | 23,487 | 884 | 589,088 | 98.9\% |
| Ogemaw Co | 6502 | 9,115,128 | 11,633,861 | 791,437 | 74,182 | 21,614,608 | 89.8\% |
| Ogemaw Co EMS Auth | 6508 | 1,181,595 | 86,586 | 63,351 | 39,948 | 1,371,480 | 130.6\% |
| Ogemaw CRC | 6503 | 3,442,034 | 3,854,557 | 95,856 | 14,921 | 7,407,368 | 67.1\% |
| Olive Twp | 7009 | 120,274 | 195,165 | 0 | 0 | 315,439 | 88.3\% |
| Onaway, City of | 7105 | 310,790 | 245,488 | 32,926 | 0 | 589,204 | 97.8\% |
| Ontonagon, Vlg of | 6603 | 1,440,536 | 10,043,661 | 2,627,149 | 157,157 | 14,268,503 | 82.2\% |
| Ontonagon Co | 6602 | 4,104,571 | 3,243,203 | 385,064 | 0 | 7,732,838 | 80.7\% |
| Ontonagon Co Economi | 6605 | 0 | 106,274 | 0 | 0 | 106,274 | 75.6\% |
| Ontonagon CRC | 6604 | 7,157,373 | 10,700,212 | 0 | 0 | 17,857,585 | 52.4\% |
| Orchard Lake, City o | 6312 | 4,076,770 | 935,595 | 70,310 | 193 | 5,082,868 | 76.7\% |
| Oronoko Chtr Twp | 1114 | 270,313 | 1,141,357 | 67,177 | 5,851 | 1,484,698 | 82.2\% |
| Osceola Co | 6701 | 6,334,358 | 4,188,094 | 1,382,294 | 2,780 | 11,907,526 | 99.0\% |
| Osceola CRC | 6703 | 1,846,173 | 4,760,723 | 205,796 | 3,302 | 6,815,994 | 76.6\% |
| Oscoda Chtr Twp | 3503 | 578,128 | 2,222,632 | 107,875 | 2,034 | 2,910,669 | 85.2\% |
| Oscoda Co | 6801 | 2,293,449 | 5,543,044 | 680,480 | 20,923 | 8,537,896 | 74.2\% |
| Oscoda Wurtsmith Arp | 6802 | 186,221 | 70,639 | 0 | 0 | 256,860 | 90.7\% |
| Otisville, Vlg of | 2506 | 594,791 | 339,714 | 42,218 | 0 | 976,723 | 88.2\% |
| Otsego Co | 6902 | 5,691,026 | 7,679,667 | 1,840,740 | 7,668 | 15,219,101 | 79.4\% |
| Otsego CRC | 6901 | 1,939,286 | 6,776,704 | 75,725 | 0 | 8,791,715 | 73.0\% |
| Ottawa Co | 7003 | 78,351,877 | 71,979,665 | 9,379,344 | 624,720 | 160,335,606 | 95.0\% |
| Ottawa Co Central Di | 7008 | 992,424 | 698,392 | 117,234 | 8,873 | 1,816,923 | 95.6\% |
| Ottawa CRC | 7002 | 15,413,382 | 27,308,398 | 361,250 | 847 | 43,083,877 | 75.8\% |
| Otter Lake, Vlg of | 4408 | 82,776 | 0 | 0 | 0 | 82,776 | 90.0\% |
| Owosso, City of | 7607 | 895,808 | 3,110,297 | 0 | 0 | 4,006,105 | 90.9\% |
| Oxford, Township of | 6327 | 306,719 | 2,925,662 | 160,082 | 0 | 3,392,463 | 82.3\% |
| Oxford, Vlg of | 6326 | 419,855 | 1,669,890 | 63,826 | 0 | 2,153,571 | 86.4\% |
| Parchment, City of | 3901 | 1,495,625 | 1,207,942 | 29,727 | 0 | 2,733,294 | 89.9\% |
| Pathways(Spr.Bhvl.Mn | 5214 | 11,410,080 | 36,887,307 | 3,633,540 | 44,308 | 51,975,235 | 60.1\% |
| Paw Paw, Vlg of | 8002 | 2,190,774 | 3,705,869 | 191,678 | 41,066 | 6,129,387 | 101.4\% |
| Paw Paw Lk Reg Jnt S | 1103 | 653,094 | 634,397 | 1,876 | 0 | 1,289,367 | 85.3\% |
| Pellston, Vlg of | 2404 | 242,717 | 0 | 0 | 0 | 242,717 | 98.5\% |
| Pennfield Chtr Twp | 1312 | 756,509 | 821,514 | 0 | 0 | 1,578,023 | 85.8\% |
| Pentwater, Vlg of | 6401 | 518,466 | 711,351 | 226,119 | 10,931 | 1,466,867 | 87.7\% |
| Perrinton, Vlg of | 2909 | 2,204 | 0 | 17,490 | 3,160 | 22,854 | 250.5\% |
| Petersburg, City of | 5807 | 188,877 | 0 | 0 | 0 | 188,877 | 146.6\% |
| Petoskey, City of | 2402 | 8,986,602 | 8,500,767 | 1,004,985 | 0 | 18,492,354 | 94.3\% |
| Pewamo, Vlg of | 3407 | 111,017 | 0 | 0 | 0 | 111,017 | 126.1\% |
| Pigeon, Vlg of | 3203 | 353,706 | 570,813 | 5,102 | 0 | 929,621 | 76.5\% |
| Pinckney, Village of | 4706 | 1,465,620 | 529,063 | 14,621 | 8,120 | 2,017,424 | 88.8\% |
| Pinconning, City of | 0904 | 607,018 | 1,323,106 | 0 | 10,418 | 1,940,542 | 81.9\% |
| Pittsfield Chtr Twp | 8110 | 6,917,730 | 5,786,500 | 1,978,339 | 176,189 | 14,858,758 | 99.8\% |
| Pleasant Ridge, City | 6301 | 1,367,338 | 2,194,275 | 316,089 | 0 | 3,877,702 | 70.7\% |
| Plymouth, Chtr Twp o | 8238 | 7,181,213 | 8,686,112 | 207,511 | 110,645 | 16,185,481 | 102.4\% |
| Plymouth, City of | 8202 | 1,304,239 | 14,463,197 | 442,892 | 0 | 16,210,328 | 53.7\% |
| Plymouth Dist Lib | 8221 | 1,813,583 | 1,400,097 | 6,112 | 0 | 3,219,792 | 103.2\% |


| Municipality Name | Number | Active | Retired | $\begin{gathered} \text { Deferred } \\ \text { Vested } \end{gathered}$ | Refunds | Total | Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pokagon Band of Pota | MI01 | 3,610,266 | 326,289 | 0 | 1,009 | 3,937,564 | 170.3\% |
| Port Austin, Vlg of | 3208 | 186,632 | 325,678 | 7,755 | 3,348 | 523,413 | 95.3\% |
| Port Austin Area Swr | 3210 | 0 | 53,807 | 19,560 | 7,139 | 80,506 | 191.1\% |
| Port Huron, City of | 7702 | 28,401,134 | 88,727,356 | 2,101,096 | 45,730 | 119,275,316 | 80.3\% |
| Port Huron Chtr Twp | 7711 | 1,170,002 | 734,336 | 352,938 | 6,099 | 2,263,375 | 86.3\% |
| Port Huron HC | 7712 | 2,373,853 | 2,657,746 | 350,037 | 0 | 5,381,636 | 91.0\% |
| Portland, City of | 3401 | 4,421,638 | 5,175,752 | 221,552 | 632 | 9,819,574 | 72.5\% |
| Port Sanilac, Vlg of | 7403 | 514,381 | 118,302 | 52,685 | 10,174 | 695,542 | 83.5\% |
| Port Sheldon Twp | 7018 | 605,828 | 0 | 0 | 0 | 605,828 | 106.8\% |
| Potterville, City of | 2313 | 275,986 | 0 | 2,090 | 0 | 278,076 | 126.2\% |
| Presque Isle Co | 7104 | 5,105,664 | 3,829,861 | 238,524 | 9,985 | 9,184,034 | 84.2\% |
| Presque Isle CRC | 7101 | 2,618,248 | 5,488,005 | 0 | 0 | 8,106,253 | 70.0\% |
| PRIDE Youth Programs | 6210 | 292,647 | 113,257 | 0 | 0 | 405,904 | 116.4\% |
| Ravenna, Vlg of | 6111 | 366,884 | 0 | 22,789 | 0 | 389,673 | 103.6\% |
| Reading, City of | 3003 | 159,660 | 47,633 | 34,057 | 0 | 241,350 | 114.1\% |
| Redford, Chtr Twp of | 8209 | 9,336,735 | 30,860,878 | 2,187,072 | 6,275 | 42,390,960 | 81.4\% |
| Redford Twp Dist Lib | 8228 | 1,022,774 | 795,601 | 13,001 | 0 | 1,831,376 | 97.0\% |
| Reed City, City of | 6702 | 2,432,832 | 2,476,854 | 355,247 | 805 | 5,265,738 | 70.3\% |
| Richfield Twp (Genes | 2514 | 1,318,161 | 1,676,725 | 64,880 | 0 | 3,059,766 | 66.7\% |
| Richfield Twp (Rosco | 7202 | 329,871 | 1,340,002 | 271,345 | 10,275 | 1,951,493 | 71.8\% |
| Richland Twp | 7310 | 2,195,896 | 706,510 | 1,365 | 1,703 | 2,905,474 | 76.6\% |
| Richmond, City of | 5012 | 1,365,533 | 308,158 | 0 | 0 | 1,673,691 | 72.7\% |
| Rochester, City of | 6307 | 4,536,567 | 11,426,444 | 67,967 | 46,959 | 16,077,937 | 91.8\% |
| Rockford, City of | 4103 | 2,363,697 | 1,401,695 | 1,113,597 | 0 | 4,878,989 | 92.3\% |
| Rockwood, City of | 5810 | 342,537 | 1,117,643 | 89,199 | 0 | 1,549,379 | 134.4\% |
| Rogers City, City of | 7102 | 1,262,349 | 7,529,016 | 187,963 | 3,592 | 8,982,920 | 67.8\% |
| Romeo, Vlg of | 5005 | 1,993,603 | 3,176,866 | 209,845 | 0 | 5,380,314 | 82.4\% |
| Romeo Dist Lib | 5006 | 875,099 | 1,353,457 | 193,681 | 6,480 | 2,428,717 | 69.0\% |
| Romulus, City of | 8225 | 7,521,051 | 26,297,456 | 118,833 | 83,991 | 34,021,331 | 58.6\% |
| Roosevelt Park, City | 6107 | 764,905 | 2,805,994 | 400,632 | 0 | 3,971,531 | 78.8\% |
| Roscommon Co | 7201 | 8,393,011 | 6,920,137 | 1,051,235 | 30,225 | 16,394,608 | 99.0\% |
| Roscommon Co Trans A | 7205 | 1,356,234 | 496,249 | 38,151 | 0 | 1,890,634 | 91.9\% |
| Rose City, City of | 6504 | 361,922 | 135,594 | 42,970 | 3,096 | 543,582 | 107.5\% |
| Rose Twp | 6506 | 55,858 | 18,241 | 0 | 0 | 74,099 | 379.3\% |
| Royal Oak, Chtr Twp | 6306 | 670,514 | 2,037,651 | 95,101 | 49,667 | 2,852,933 | 159.7\% |
| Saginaw, City of | 7301 | 19,713,577 | 113,197,908 | 2,351,450 | 132,613 | 135,395,548 | 52.0\% |
| Saginaw, Pub Lib of | 7317 | 603,104 | 111,145 | 0 | 18,582 | 732,831 | 200.2\% |
| Saginaw Chtr Twp | 7314 | 5,239,226 | 8,799,279 | 204,622 | 2,236 | 14,245,363 | 78.8\% |
| Saginaw Co | 7303 | 34,284,833 | 100,787,299 | 2,945,251 | 36,994 | 138,054,377 | 65.7\% |
| Saginaw Co 911 Com C | 7316 | 4,242,907 | 5,060,150 | 93,900 | 0 | 9,396,957 | 80.3\% |
| Saginaw Co CMH | 7318 | 5,032,987 | 9,792,711 | 1,650,063 | 647 | 16,476,408 | 63.7\% |
| Saginaw CRC | 7304 | 5,899,362 | 17,819,117 | 347,440 | 6,638 | 24,072,557 | 101.3\% |
| Saginaw HC | 7321 | 1,109,475 | 2,026,113 | 437,693 | 20,840 | 3,594,121 | 57.3\% |
| Saginaw-Midland Muni | 7305 | 1,522,455 | 1,870,223 | 0 | 11,655 | 3,404,333 | 81.1\% |
| Saginaw Trans Sys Au | 7319 | 779,976 | 26,936 | 382,531 | 0 | 1,189,443 | 120.9\% |
| Saline, City of | 8105 | 8,387,469 | 9,499,569 | 397,739 | 0 | 18,284,777 | 76.4\% |
| Sandusky, City of | 7402 | 1,747,749 | 1,514,731 | 174,518 | 2,027 | 3,439,025 | 59.4\% |
| Sandusky Dist Lib | 7404 | 121,341 | 0 | 44,444 | 6,090 | 171,875 | 102.9\% |
| Sanilac CRC | 7410 | 5,263,310 | 0 | 0 | 31,339 | 5,294,649 | 92.4\% |
| Saranac HC | 3413 | 151,292 | 331,169 | 0 | 0 | 482,461 | 82.3\% |
| Saugatuck, City of | 0307 | 876,716 | 369,356 | 150,613 | 0 | 1,396,685 | 90.8\% |
| Saugatuck Twp | 0305 | 257,520 | 427,147 | 21,866 | 0 | 706,533 | 44.0\% |
| Saugatuck Twp Fire D | 0313 | 70,872 | 302,820 | 0 | 0 | 373,692 | 99.5\% |
| Sault Ste. Marie, Ci | 1701 | 9,584,731 | 13,507,985 | 231,245 | 21,453 | 23,345,414 | 90.3\% |
| Sault Ste. Marie HC | 4906 | 590,998 | 772,883 | 17,367 | 10,214 | 1,391,462 | 87.9\% |
| SCCMUA | 1905 | 1,183,618 | 608,108 | 592,636 | 25,393 | 2,409,755 | 113.6\% |
| Schoolcraft Co | 7503 | 10,264,472 | 12,921,189 | 1,465,078 | 89,706 | 24,740,445 | 77.8\% |
| Schoolcraft CRC | 7501 | 2,900,022 | 8,885,103 | 64,846 | 0 | 11,849,971 | 56.9\% |
| Schoolcraft Memorial | 7505 | 6,751,096 | 8,622,207 | 1,797,103 | 22,867 | 17,193,273 | 87.5\% |
| Scio Twp | 8116 | 1,323,145 | 69,308 | 0 | 20,659 | 1,413,112 | 96.9\% |
| Scottville, City of | 5308 | 450,114 | 0 | 0 | 0 | 450,114 | 97.3\% |

Termination Liability

| Municipality Name | Number | Active | Retired | Deferred Vested | Pending <br> Refunds | Total | Percent <br> Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sebewaing, Vlg of | 3205 | 1,666,277 | 3,788,916 | 314,939 | 2,328 | 5,772,460 | 77.2\% |
| SEMCOG | 8210 | 8,165,781 | 12,260,038 | 1,961,928 | 0 | 22,387,747 | 118.4\% |
| SE Oakland Co Rsrc R | 6310 | 743,293 | 3,645,299 | 323,255 | 0 | 4,711,847 | 86.9\% |
| SE Oakland Co Wtr Au | 6309 | 3,895,257 | 3,535,918 | 28,515 | 0 | 7,459,690 | 72.3\% |
| Shepherd, Vlg of | 3704 | 61,423 | 140,576 | 0 | 694 | 202,693 | 220.0\% |
| Shiawassee Co | 7602 | 31,590,366 | 49,582,000 | 4,869,710 | 13,644 | 86,055,720 | 69.6\% |
| Shiawassee Co CMH | 7609 | 3,840,953 | 3,759,441 | 1,423,053 | 0 | 9,023,447 | 104.5\% |
| Shiawassee Council o | 7605 | 409,730 | 120,780 | 218,313 | 0 | 748,823 | 77.5\% |
| Shiawassee CRC | 7601 | 4,212,508 | 11,650,469 | 134,798 | 0 | 15,997,775 | 70.2\% |
| Shiawassee Dist Lib | 7606 | 851,097 | 697,596 | 25,568 | 0 | 1,574,261 | 98.1\% |
| Sims Whitney Util Au | 0606 | 114,086 | 0 | 9,216 | 0 | 123,302 | 146.2\% |
| SMART | 8216 | 69,485,876 | 98,380,406 | 11,461,749 | 130,165 | 179,458,196 | 87.8\% |
| South Haven, City of | 8001 | 6,444,183 | 11,970,116 | 512,037 | 13,917 | 18,940,253 | 114.5\% |
| South Haven Area ESA | 8005 | 1,697,307 | 2,455,863 | 0 | 0 | 4,153,170 | 79.5\% |
| South Lyon, City of | 6315 | 6,116,147 | 2,626,334 | 105,807 | 17,498 | 8,865,786 | 88.3\% |
| Sparta, Vlg of | 4107 | 1,835,729 | 1,570,505 | 39,888 | 16,265 | 3,462,387 | 67.4\% |
| Springfield, City of | 1303 | 1,899,635 | 5,411,943 | 315,985 | 23,586 | 7,651,149 | 97.6\% |
| Spring Lake, Vlg of | 7015 | 969,626 | 1,283,083 | 0 | 2,830 | 2,255,539 | 96.1\% |
| Spring Lake Dist Lib | 7016 | 1,167,549 | 137,509 | 0 | 0 | 1,305,058 | 90.0\% |
| St. Charles, Vlg of | 7308 | 1,052,045 | 1,842,227 | 127,196 | 0 | 3,021,468 | 75.9\% |
| St. Clair, City of | 7703 | 6,863,471 | 8,495,058 | 352,810 | 0 | 15,711,339 | 73.5\% |
| St. Clair HC | 7715 | 306,951 | 294,970 | 0 | 0 | 601,921 | 64.3\% |
| St. Ignace, City of | 4904 | 4,445,188 | 3,502,394 | 246,410 | 1,798 | 8,195,790 | 76.5\% |
| St. Johns, City of | 1902 | 3,722,085 | 10,317,348 | 625,587 | 93 | 14,665,113 | 65.2\% |
| St. Louis, City of | 2902 | 2,326,105 | 4,886,673 | 138,589 | 489 | 7,351,856 | 73.0\% |
| Stambaugh Twp | 3615 | 32,831 | 47,568 | 0 | 0 | 80,399 | 87.7\% |
| Standish, City of | 0601 | 801,454 | 1,444,739 | 107,262 | 0 | 2,353,455 | 63.3\% |
| Stanton, City of | 5903 | 0 | 58,336 | 0 | 0 | 58,336 | 162.9\% |
| St Clair Shores HC | 5007 | 680,215 | 1,064,172 | 72,545 | 0 | 1,816,932 | 68.5\% |
| Stephenson, City of | 5504 | 207,776 | 68,127 | 0 | 0 | 275,903 | 70.0\% |
| Sterling, Vlg of | 0605 | 56,430 | 45,160 | 0 | 0 | 101,590 | 250.0\% |
| St Joseph Co | 7803 | 13,727,810 | 10,953,101 | 2,234,774 | 14,043 | 26,929,728 | 116.4\% |
| St Louis HC | 2908 | 556,209 | 0 | 0 | 0 | 556,209 | 88.6\% |
| Stockbridge, Vlg of | 3316 | 256,271 | 319,913 | 13,155 | 4,246 | 593,585 | 79.2\% |
| Sturgis HC | 7805 | 39,178 | 0 | 0 | 0 | 39,178 | 108.1\% |
| Summit Twp | 3803 | 1,883,704 | 6,412,178 | 215,199 | 0 | 8,511,081 | 82.8\% |
| Sumpter Twp | 8226 | 2,477,680 | 1,168,587 | 142,447 | 46,340 | 3,835,054 | 92.1\% |
| Superior Chtr Twp | 8109 | 3,072,021 | 1,182,936 | 0 | 492 | 4,255,449 | 90.2\% |
| Superiorland Lib Coo | 5208 | 183,096 | 624,214 | 13,070 | 0 | 820,380 | 102.6\% |
| Swan Creek Twp | 7309 | 435,577 | 222,846 | 0 | 0 | 658,423 | 67.7\% |
| Swartz Creek, City o | 2504 | 2,348,485 | 6,221,450 | 0 | 11,659 | 8,581,594 | 92.3\% |
| SW Shiawassee ESA | 7611 | 140,296 | 0 | 0 | 6,750 | 147,046 | 239.3\% |
| Sylvan Lake, City of | 6314 | 1,102,058 | 779,154 | 15,446 | 18,531 | 1,915,189 | 91.1\% |
| Tawas Police Auth | 3504 | 467,049 | 521,513 | 26,321 | 0 | 1,014,883 | 59.1\% |
| Taylor HC | 8231 | 265,007 | 0 | 0 | 4,180 | 269,187 | 121.2\% |
| The Lib Network | 8218 | 2,125,606 | 3,010,391 | 465,297 | 37,538 | 5,638,832 | 96.3\% |
| Three Rivers, City o | 7801 | 4,716,394 | 7,297,552 | 1,179,001 | 34,473 | 13,227,420 | 84.5\% |
| Tittabawassee, Twp o | 7322 | 1,938,656 | 0 | 0 | 0 | 1,938,656 | 101.6\% |
| Traverse Area Dist L | 2807 | 2,547,307 | 2,245,692 | 119,799 | 3,449 | 4,916,247 | 81.1\% |
| Traverse City, City | 2801 | 20,610,505 | 32,214,397 | 1,762,288 | 0 | 54,587,190 | 76.2\% |
| Trenton, City of | 8203 | 11,846,524 | 30,794,342 | 31,136 | 1,477 | 42,673,479 | 68.0\% |
| Tri-County Aging Con | 3307 | 2,449,522 | 2,641,009 | 611,414 | 0 | 5,701,945 | 116.8\% |
| Trio Council on Agin | 6507 | 0 | 204,494 | 60,960 | 0 | 265,454 | 102.6\% |
| Tuscarora Twp | 1604 | 649,420 | 510,051 | 0 | 3,951 | 1,163,422 | 80.5\% |
| Tuscola Co | 7902 | 10,438,308 | 12,581,231 | 688,520 | 74,150 | 23,782,209 | 98.5\% |
| Tuscola Co CMH | 7907 | 5,050,983 | 3,590,694 | 660,209 | 194,581 | 9,496,467 | 119.7\% |
| Tuscola Co Hlth Dpt | 7901 | 3,514,966 | 3,994,144 | 93,334 | 21,648 | 7,624,092 | 89.5\% |
| Tuscola Co MCF | 7906 | 4,399,181 | 4,399,173 | 580,095 | 207,886 | 9,586,335 | 117.8\% |
| Tuscola CRC | 7908 | 2,421,180 | 1,921,250 | 22,927 | 0 | 4,365,357 | 70.8\% |
| Twin Cities Pub Sfty | 3610 | 0 | 74,685 | 13,183 | 0 | 87,868 | 111.4\% |
| Ubly, Vlg of | 3212 | 293,796 | 384,389 | 0 | 3,309 | 681,494 | 70.9\% |

Gabriel Roeder Smith \& Company

MERS 12/31/2010 Valuation - Results by Municipality
Termination Liability

| Municipality Name | Number | r Active | Retired | Deferred Vested | Pending <br> Refunds | Total | Percent Funded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Utica, City of | 5008 | 1,455,953 | 1,890,827 | 406,304 | 9,383 | 3,762,467 | 77.6\% |
| Van Buren Co | 8006 | 14,990,552 | 6,258,061 | 427,579 | 178,392 | 21,854,584 | 74.0\% |
| Van Buren Dist Lib | 8007 | 1,090,325 | 249,279 | 30,006 | 16,252 | 1,385,862 | 97.0\% |
| Van Buren Twp | 8236 | 7,278,152 | 933,566 | 166,102 | 35,647 | 8,413,467 | 96.5\% |
| Vassar, City of | 7903 | 2,361,747 | 2,908,132 | 191,019 | 1,065 | 5,461,963 | 89.2\% |
| Vevay Twp | 3318 | 143,850 | 363,521 | 0 | 4,899 | 512,270 | 62.3\% |
| Vicksburg, Vlg of | 3902 | 783,832 | 1,159,804 | 127,896 | 0 | 2,071,532 | 78.0\% |
| Vicksburg Dist Lib | 3904 | 79,666 | 26,972 | 0 | 0 | 106,638 | 75.5\% |
| Vienna, Chtr Twp of | 2522 | 881,809 | 136,506 | 110,944 | 5,180 | 1,134,439 | 81.3\% |
| Wakefield, City of | 2701 | 1,308,275 | 2,784,936 | 0 | 857 | 4,094,068 | 72.0\% |
| Walker, City of | 4112 | 5,841,950 | 9,297,103 | 420,773 | 0 | 15,559,826 | 65.8\% |
| Walled Lake, City of | 6324 | 3,777,115 | 6,402,809 | 485,837 | 75,787 | 10,741,548 | 43.7\% |
| Washtenaw Co | 8113 | 20,136,000 | 4,802,812 | 1,155,950 | 282,599 | 26,377,361 | 168.6\% |
| Washtenaw CRC | 8102 | 17,226,911 | 26,126,507 | 522,415 | 115,262 | 43,991,095 | 75.4\% |
| Wayland, City of | 0304 | 2,729,973 | 1,359,464 | 482,575 | 9,734 | 4,581,746 | 92.2\% |
| Wayne, City of | 8242 | 17,328,147 | 68,662,936 | 2,163,360 | 294,500 | 88,448,943 | 81.5\% |
| Wayne HC | 8252 | 438,686 | 0 | 0 | 0 | 438,686 | 91.6\% |
| Webberville, Vlg of | 3314 | 38,852 | 114,035 | 137,262 | 326 | 290,475 | 86.5\% |
| West Branch, City of | 6505 | 1,794,554 | 1,764,551 | 254,199 | 27,855 | 3,841,159 | 84.9\% |
| West Branch Dist Lib | 6509 | 321,560 | 0 | 0 | 0 | 321,560 | 101.0\% |
| Westland, City of | 8211 | 18,274,552 | 75,873,271 | 2,951,954 | 5,707 | 97,105,484 | 59.2\% |
| Westphalia, Vlg of | 1907 | 306,337 | 131,854 | 0 | 0 | 438,191 | 79.2\% |
| Wexford Co | 8302 | 9,347,256 | 10,853,212 | 1,243,211 | 68,019 | 21,511,698 | 79.0\% |
| Wexford CRC | 8303 | 2,930,068 | 6,017,699 | 963,221 | 9,368 | 9,920,356 | 71.7\% |
| White Cloud, City of | 6206 | 170,183 | 439,142 | 93,782 | 0 | 703,107 | 71.3\% |
| White Cloud/Sherman | 6211 | 126,029 | 0 | 0 | 0 | 126,029 | 126.7\% |
| White Cloud Cmnty Li | 6208 | 214,306 | 117,133 | 0 | 0 | 331,439 | 93.1\% |
| Whitehall, City of | 6105 | 2,293,428 | 2,278,641 | 133,345 | 0 | 4,705,414 | 82.5\% |
| White Lake Chtr Twp | 6325 | 9,294,738 | 7,381,928 | 473,852 | 73,783 | 17,224,301 | 97.2\% |
| White Pigeon, Vlg of | 7804 | 87,568 | 0 | 0 | 0 | 87,568 | 112.4\% |
| White Pine Lib | 5904 | 127,655 | 93,666 | 0 | 0 | 221,321 | 57.0\% |
| Willard Pub Lib | 1308 | 1,131,098 | 66,868 | 64,347 | 8,155 | 1,270,468 | 126.3\% |
| Williamston, City of | 3310 | 1,054,190 | 2,273,881 | 544,338 | 15,600 | 3,888,009 | 73.1\% |
| W Iron Co Swr Auth | 3612 | 217,451 | 715,600 | 0 | 0 | 933,051 | 68.4\% |
| Wixom, City of | 6316 | 10,556,563 | 9,536,122 | 414,012 | 32,609 | 20,539,306 | 76.1\% |
| W Mich CMH Sys | 5304 | 2,046,209 | 2,508,704 | 184,796 | 22,691 | 4,762,400 | 94.4\% |
| W Mich Shoreline Rgn | 6110 | 2,123,113 | 564,398 | 168,699 | 0 | 2,856,210 | 142.4\% |
| Wolverine Lake, Vlg | 6329 | 576,014 | 1,692,437 | 90,227 | 14,897 | 2,373,575 | 55.7\% |
| W UP Dist Hlth Dept | 3101 | 3,861,852 | 4,734,354 | 2,537,475 | 0 | 11,133,681 | 79.3\% |
| WUPPDR | 3108 | 684,028 | 306,027 | 0 | 0 | 990,055 | 108.7\% |
| Ypsilanti, City of | 8101 | 3,861,229 | 6,935,445 | 438,855 | 115,019 | 11,350,548 | 156.8\% |
| Ypsilanti, Twp of | 8104 | 5,961,729 | 9,401,955 | 316,901 | 61,140 | 15,741,725 | 89.0\% |
| Ypsilanti Cmnty Util | 8106 | 16,571,762 | 19,575,354 | 1,612,794 | 21,418 | 37,781,328 | 76.3\% |
| Ypsilanti HC | 8115 | 488,248 | 215,936 | 31,465 | 22,401 | 758,050 | 91.2\% |
| Totals - Active Groups | 700 | 3,231,864,165 | 4,938,653,467 | 360,979,721 | 15,643,660 | 8,547,141,013 | 81.1\% |
| Totals - Closed Groups | 15 | 0 | 12,056,059 | 4,852,278 | 43,206 | 16,951,543 | 103.8\% |
| Totals - MERS | 715 | 3,231,864,165 | 4,950,709,526 | 365,831,999 | 15,686,866 | 8,564,092,556 | 81.1\% |


[^0]:    \# 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 (see page 29).

[^1]:    * Based on valuation payroll. For divisions that are open to new hires, the actual required contributions will be based on current monthly payrolls (during fiscal years beginning in 2012) times the computed employer contribution rate(s) shown in Tables 15 and 16 of the individual municipality actuarial valuation reports. The ARC shown here is the sum of the ARC's calculated separately for each division. This ARC excludes 15 closed municipalities.

[^2]:    * First year benefit payments include $\$ 15.7$ million of pending refunds of accumulated member contributions to terminated employees.

[^3]:    \# See final paragraph on page 99.

[^4]:    \# See final paragraph on page 99

[^5]:    \# See final paragraph on page 99.

