

# MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN

ANNUAL ACTUARIAL VALUATION REPORT DECEMBER 31, 2015 FRASER, CITY OF (5003)



Spring, 2016

Fraser, City of

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

This report presents the results of the Annual Actuarial Valuation, prepared as of December 31, 2015. The report includes the determination of liabilities and contribution rates resulting from the participation of Fraser, City of (5003) in the Municipal Employees' Retirement System of Michigan ("MERS"). MERS is a nonprofit organization, independent from the State, that has provided retirement plans for municipal employees for more than 65 years. Fraser, City of is responsible for the employer contributions needed to provide MERS benefits for its employees and former employees under the Michigan Constitution and the MERS Plan Document.

The purpose of the December 31, 2015 annual actuarial valuation is to:

- Measure funding progress
- Establish contribution requirements for the fiscal year beginning July 1, 2017
- Provide actuarial information in connection with applicable Governmental Accounting Standards Board (GASB) statements

This valuation report should not be relied upon for any other purpose. Reliance on information contained in this report by anyone for anything other than the intended purpose could be misleading.

The valuation uses financial data, plan provision data, and participant data as of December 31, 2015 furnished by MERS. In accordance with Actuarial Standards of Practice No. 23, the data was checked for internal and year to year consistency as well as general reasonableness, but was not otherwise audited. CBIZ Retirement Plan Services does not assume responsibility for the accuracy or completeness of the data used in this valuation.

The actuarial assumptions and methods are adopted by the MERS Retirement Board, and are reviewed every five years in an Experience Study. The most recent study was completed in 2015, and this December 31, 2015 valuation report reflects changes in assumptions and methods. Please refer to the division-specific assumptions described in table(s) in this report, and to the Appendix on the MERS website at:

www.mersofmich.com/Portals/0/Assets/Resources/AAV-Appendix/MERS-2015AnnualActuarialValuation-Appendix.pdf.



The actuarial assumptions used for this valuation produce results that we believe are reasonable.

To the best of our knowledge, this report is complete and accurate, was prepared in conformity with generally recognized actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and is in compliance with Act No. 220 of the Public Acts of 1996, as amended, and the MERS Plan Document as revised. All of the undersigned are members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The Retirement Board of the Municipal Employees' Retirement System of Michigan confirms that the System provides for payment of the required employer contribution as described in Section 20m of Act No. 314 of 1965 (MCL 38.1140m).

This information is purely actuarial in nature. It is not intended to serve as a substitute for legal, accounting or investment advice.

This report was prepared at the request of the Retirement Board and may be provided only in its entirety by the municipality to other interested parties (MERS customarily provides the full report on request to associated third parties such as the auditor for the municipality). CBIZ Retirement Plan Services is not responsible for the consequences of any unauthorized use.

You should notify MERS if you disagree with anything contained in the report or are aware of any information that would affect the results of the report that have not been communicated to us. If you have reason to believe that the plan provisions are incorrectly described, that important plan provisions relevant to this valuation are not described, that conditions have changed since the calculations were made, that the information provided in this report is inaccurate or is in anyway incomplete, or if you need further information in order to make an informed decision on the subject matter in this report, please contact your Regional Manager at 1.800.767.MERS(6377).

Sincerely,

Cathy Nagy, MAAA, FSA Jim Koss, MAAA, ASA Curtis Powell, MAAA, EA Alan Sonnanstine, MAAA, ASA

# **TABLE OF CONTENTS**

	Page
Executive Summary	5
Employer Contribution Details  Table 1	15
Benefit Provisions Table 2	17
Participant Summary Table 3	19
Reported Assets (Market Value) Table 4	20
Flow of Valuation Assets Table 5	21
Actuarial Accrued Liabilities and Valuation Assets Table 6	22
Actuarial Accrued Liabilities - Comparative Schedule  Table 7	24
Division-Based Comparative Schedules Tables 8 and 9	25
GASB 68 Information	32
Benefit Provision History	33
Plan Provisions, Actuarial Assumptions, and Actuarial Funding Method	36

## **Executive Summary**

## **New Actuarial Assumptions and Methods**

The actuarial assumptions and methods are adopted by the MERS Retirement Board, and are reviewed every five years in an Experience Study. The Experience Study is a comprehensive, detailed analysis that reviews MERS' funding policy and compares actual experience with the current actuarial assumptions; the study recommends adjustments as necessary. The most recent study was completed in 2015, and this December 31, 2015 valuation report reflects several changes in actuarial assumptions.

The main assumption and method changes were:

- The mortality table was adjusted to reflect longer lifetimes.
- The assumed annual rate of investment return, net of all expenses, was lowered from 8% to 7.75%.
- The asset smoothing was changed from 10 to 5 years.
- The amortization period was moved to a fixed period amortization for the December 31, 2014 annual valuations.
  - o The period will continue to gradually decrease for both open and closed divisions until the current unfunded accrued liability (UAL) is completely paid off.
  - o Moving to this type of "fixed period amortization" means that all unfunded liabilities will be fully funded by a specific date in the future.
  - Once the amortization period drops below 15 years (10 years for closed divisions), any future liability and asset gains or losses will be spread over a 15-year fixed period for open divisions and a 10-year fixed period for closed divisions — creating "layers" of UAL on an annual basis.
  - o This transparent method allows tracking of what changed your UAL, and sets a fixed period in time in which that UAL change will be fully funded.

Various other actuarial assumptions were revised, but the revisions had a smaller impact than the two assumption changes above (first two bullets). For a summary of all of the actuarial assumptions and methods, please refer to the division-specific assumptions described on the last page of this report, and to the <a href="#">Appendix</a>.

The new amortization period layers and the new 5-year asset smoothing do not impact this 2015 annual valuation, other than the 6 year projections. These method changes will first impact the December 31, 2016 annual valuations.

The impacts of the assumption changes on the funded ratio and the required employer contributions are displayed on the next few pages. While these changes in assumptions will mean larger liabilities and contributions than anticipated by the prior assumptions for most employers, they will ensure each employer makes reasonable progress towards funding the unfunded liabilities of the employer. When

discussing changes in assumptions it is important to remember that, although the assumptions used impact the annual contributions, the true cost of the plan will be based on what will actually happen in the future – independent of the assumptions used. MERS recognizes that many municipalities are already taking steps to reduce their UAL. The MERS Board approved a "phase in" of the total impact of the assumption changes over the next 5 years (impacting fiscal years beginning 2017 – 2021) as an option for you. Of course, if the employer pays less in the first 4 years, they will likely have to pay somewhat more in later years.

MERS created a dedicated resource page on their website, www.mersofmich.com, regarding this topic, with links to frequently asked questions, upcoming events and additional details.

## Impacts from the Assumption Changes

The new actuarial assumptions changed your December 31, 2015 percent funded from 58% to 56%, a change of -2%.

The new assumptions changed your total monthly employer contribution requirement, before any phase-in, from \$171,548 to \$189,517, a change of \$17,969 (a 10% increase). Under the 5-year phase-in the first year increase is instead 2% (from \$171,548 to \$175,145 monthly).

Additional detail is shown on the following pages.

## **Funded Ratio and Required Employer Contributions**

The MERS Defined Benefit Plan is an agent multiple-employer plan, meaning that assets are pooled for investment purposes but separate accounts are maintained for each individual employer. Each municipality is responsible for their own plan liabilities; MERS does not borrow from one municipality's account to pay for another.

The funded ratio of a plan is the percentage of the dollar value of the accrued benefits that is covered by the actuarial value of assets.

#### Your Funded Ratio:

For comparison purposes, we have included your December 31, 2015 funded ratio if it had been calculated under the previous assumptions. Note: Your actual funded level as of December 31, 2015 is the amount listed under the new assumptions.

	New Assumptions	Previous As	ssumptions
	12/31/2015	12/31/2015	12/31/2014
Funded Ratio	56%	58%	58%

Michigan Law requires that pension plans be pre-funded, meaning money is set aside now to pay for future benefits. Pension plans are usually funded by employer and employee contributions, and investment income.

How quickly a plan attains the 100% funding goal depends on many factors such as:

- The current funded ratio
- The future experience of the plan
- The amortization period

It is more important to look at the trend in the funded ratio over a period of time than at a particular point in time.

## **Your Required Employer Contributions:**

Your computed employer contributions are shown in the following table. Employee contributions, if any, are in addition to the computed employer contributions. Note: Your minimum required contribution is the amount listed under the new assumptions, with phase-in. For comparison purposes, we have included your computed employer contribution if it had been calculated under the previous assumptions.

	Percentage of Payroll			Monthly \$ Based on Valuation Payroll								
	Ne		_	ious		New			Previous			
	Assum	ptions	Assum	ptions		Assum	ptio			Assum	ptio	ns
	Phase-in	Full Impact			P	hase-in		Full Impact				
Valuation Date:			12/31/2015	12/31/2014		2/31/2015		2/31/2015	12	/31/2015	12	/31/2014
Fiscal Year Beginning:	July 1, 2017	July 1, 2017	July 1, 2017	July 1, 2016		July 1, 2017		July 1, 2017		July 1, 2017		July 1, 2016
Division												
02 - Plc Dfrd&Rtd	-	-	-	-	\$	0	\$	0	\$	0	\$	0
10 - Supervisor/Management	167.55%	183.31%	163.01%	268.51%		32,183		35,211		31,425		30,156
11 - Clerical/Court	10.38%	11.77%	10.00%	2.78%		3,652		4,140	İ	3,531		1,026
20 - POLC	63.17%	68.31%	61.66%	54.67%		64,060		69,272		62,756		53,756
21 - POAM	26.84%	28.70%	26.28%	26.85%		54,859		58,659		53,908		53,153
22 - Dispatch	11.91%	12.82%	11.63%	10.23%		2,915		3,139		2,858		2,339
23 - DPW	31.12%	34.00%	30.28%	24.85%		17,476		19,096		17,070		12,683
Municipality Total					\$	175,145	\$	189,517	\$	171,548	\$	153,113

Under the new assumptions, both the full impact and the phased in employer contribution requirements are shown in the table above. The phase in allows the employer to spread the increase of the new actuarial assumptions over 5 fiscal years. By default, MERS will invoice you the phased in contribution amount. However, MERS strongly encourages employers to contribute more than the minimum required contribution, including paying the full amount of the impact of the changes, if possible.

Employee contribution rates reflected in the valuations are shown below:

	Employee Contribution Rate			
Valuation Date:	12/31/2015	12/31/2014		
Division				
02 - Plc Dfrd&Rtd	3% < ; 5% >	3% < ; 5% >		
10 - Supervisor/Management	7.00%	5.00%		
11 - Clerical/Court	7.00%	7.00%		
20 - POLC	7.00%	7.00%		
21 - POAM	7.00%	7.00%		
22 - Dispatch	7.00%	7.00%		
23 - DPW	7.00%	7.00%		

The employer may contribute more than the minimum required contributions, as these additional contributions will earn investment income and may result in lower future contribution requirements.

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

Assuming that experience of the plan meets actuarial assumptions:

- To accelerate to a 100% funding ratio in 10 years, estimated monthly employer contributions for the entire employer would be \$ 305,925, instead of \$ 189,517.
- To accelerate to a 100% funding ratio in 20 years, estimated monthly employer contributions for the entire employer would be \$ 202,600, instead of \$ 189,517.

If you are interested in making additional contributions, please contact MERS and they can assist you with evaluating your options.

## **How and Why Do These Numbers Change?**

In a defined benefit plan contributions vary from one annual actuarial valuation to the next as a result of the following:

- Changes in benefit provisions (see Table 2)
- Changes in actuarial assumptions and methods (see the <u>Appendix</u>)
- Experience of the plan (investment experience and demographic experience); this is the difference between actual experience of the plan and the actuarial assumptions

Actuarial valuations do not affect the ultimate cost of the plan; the benefit payments (current and future) determine the cost of the plan. Actuarial valuations only affect the timing of the contributions into the plan. Because assumptions are for the long term, plan experience will not match the actuarial assumptions in any given year (except by coincidence). Each annual actuarial valuation will adjust the required employer contributions up or down based on the prior year's actual experience.

# **Comments on Asset Smoothing**

The actuarial value of assets, used to determine both your funded ratio and your required employer contribution, is based on a smoothed value of assets (10-year smoothing prior to 2016; 5-year smoothing beginning in 2016). A smoothing method reduces the volatility of the valuation results, which affects your required employer contribution and funded ratio. The smoothed actuarial rate of return for 2015 was 5.21%.

As of December 31, 2015 the actuarial value of assets is 113% of market value. This means that meeting the actuarial assumption in the next few years will require average annual market returns that exceed the 7.75% investment return assumption.

If the December 31, 2015 valuation results were based on market value on that date instead of smoothed funding value: i) the funded percent of your entire municipality would be 49% (instead of 56%); and ii) your total employer contribution requirement for the fiscal year starting July 1, 2017 would be \$ 2,542,548 (instead of \$ 2,274,204).

The asset smoothing method is a powerful tool for reducing the volatility of your required employer contributions. However, if the current 13% difference between the smoothed value and the market value of assets is not made up, the result would be gradual increases in your employer contribution requirement over the next few years (to around the levels described above).

#### Risk Characteristics of Defined Benefit Plans

It is important to understand that retirement plans, by their nature, are exposed to certain risks. While risks cannot be eliminated entirely, they can be mitigated through various strategies. Below are a few examples of risk (this is not an all-inclusive list):

- Economic investment return, wage inflation, etc.
- Demographic longevity, disability, retirement, etc.
- Plan Sponsor and Employees contribution volatility, attract/retain employees, etc.

The MERS Retirement Board adopts certain assumptions and methods to mitigate the economic and demographic risks, and the contribution volatility risks. For example, the investment risk is the largest economic risk and is mitigated by having a balanced portfolio and a clearly defined investment strategy. Demographic risks vary based on the age of the workforce and are mitigated by preparing special studies called experience studies on a regular basis to determine if the assumptions used are reasonable compared to the experience. Risk may be mitigated through a plan design that provides benefits that are sustainable in the long run. An Experience Study is completed every five years to review the assumptions and methods. The next Experience Study will be completed in 2020.

## Alternate Scenarios to Estimate the Potential Volatility of Results ("What If Scenarios")

The calculations in this report are based on assumptions about long-term economic and demographic behavior. These assumptions will never materialize in a given year, except by coincidence. Therefore the results will vary from one year to the next. The volatility of the results depends upon the characteristics of the plan. For example:

- Open divisions that have substantial assets compared to their active employee payroll will have more volatile employer contribution rates due to investment return fluctuations.
- Open divisions that have substantial accrued liability compared to their active employee payroll will have more volatile employer contribution rates due to demographic experience fluctuations.
- Small divisions will have more volatile contribution patterns than larger divisions because statistical fluctuations are relatively larger among small populations.
- Shorter amortization periods result in more volatile contribution patterns.

The analysis in this section is intended to review the potential volatility of the actuarial valuation results. It is important to note that calculations in this report are mathematical estimates based upon assumptions regarding future events, which may or may not materialize. Actuarial calculations can and do vary from one valuation to the next, sometimes significantly depending on the group's size.

Many assumptions are important in determining the required employer contributions.

#### For example:

• Lower investment returns would result in higher required employer contributions, and vice-versa.

- Smaller than projected pay increases would lower required employer contributions.
- Reductions in the number of active employees would lower required contribution dollars, but would usually increase the contribution rate expressed as a percentage of (the now lower) payroll.
- Retirements at earlier ages than projected would usually increase required employer contributions.
- More non-vested terminations of employment than projected would decrease required contributions.
- More disabilities or survivor (death) benefits than projected would increase required contributions.
- Longer lifetimes after retirement than projected would increase required employer contributions.

In the table below, we show the impact of varying one actuarial assumption: the future annual rate of investment return. Lower investment returns would result in higher required employer contributions, and vice-versa.

The relative impact of each investment return scenario below will vary from year to year, as the participant demographics change. The impact of each scenario should be analyzed for a given year, not from year to year. The results in the table are based on the December 31, 2015 valuation, and are for the municipality in total, not by division. These results do not reflect a 5-year phase in of the impact of the new actuarial assumptions.

		Assumed Future Annual Smoothed Rate of I					Investment Return		
	1	Lower Future /	Annu	al Returns		Valuation ssumption	Hiç	gher Returns	
12/31/2015 Valuation Results		5.75%		6.75%		7.75%		8.75%	
Accrued Liability	\$	68,543,002	\$	61,047,163	\$	54,774,413	\$	49,477,932	
Valuation Assets	\$	30,616,978	\$	30,616,978	\$	30,616,978	\$	30,616,978	
Unfunded Accrued Liability	\$	37,926,024	\$	30,430,185	\$	24,157,435	\$	18,860,954	
Funded Ratio		45%		50%		56%		62%	
Monthly Normal Cost	\$	102,754	\$	73,828	\$	51,731	\$	34,649	
Monthly Amortization Payment	\$	180,820	\$	158,270	\$	135,447	\$	111,446	
Total Employer Contribution <sup>1</sup>	\$	285,551	\$	234,253	\$	189,517	\$	148,623	

<sup>1</sup> If assets exceed accrued liabilities for a division, the division's amortization payment is negative and is used to reduce the division's employer contribution requirement. If the overfunding credit is larger than the normal cost, the division's full credit is included in the municipality's amortization payment above but the division's total contribution requirement is zero. This can cause the displayed normal cost and amortization payment to not add up to the displayed total employer contribution.

## Six Year Projection Scenarios

The table on the following page illustrates the plan's projected liabilities and computed employer contributions for the next six fiscal years, under the new actuarial assumptions and under three future economic/assumption scenarios. All four projections take into account the past financial losses that will continue to affect the smoothed rate of return for the next four years. Under the 7.75% scenarios, two sets of projections are shown:

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

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

Year Ending   12/31   Reginning   12/31   Re	Valuation	Fiscal Year				Computed Annual
12/31			Actuarial Accrued		Funded	
7.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return WITH 5-YEAR PHASE-IN 2015   2017   \$ 54,774,413   \$ 30,616,978   56%   \$ 2,101,7 2016   2018   56,540,965   31,058,532   55%   2,314,5 2017   2019   58,354,226   31,443,703   54%   2,536,0 2018   2020   60,220,370   31,810,862   53%   2,768,6 2019   2021   62,163,859   32,304,186   52%   3,011,1 2020   2022   64,175,416   33,884,090   53%   3,137,8  NO 5-YEAR PHASE-IN 2015   2017   \$ 54,774,413   \$ 30,616,978   56%   \$ 2,274,2 2016   2018   56,540,965   31,058,532   55%   2,431,5 2017   2019   58,354,226   31,540,015   54%   2,599,4 2018   2020   60,220,370   32,068,449   53%   2,781,5 2019   2021   62,163,859   32,667,752   53%   2,976,6 2020   2022   64,175,416   34,313,818   54%   3,102,5  6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return NO 5-YEAR PHASE-IN 2015   2017   \$ 61,047,163   \$ 30,616,978   50%   \$ 2,811,0 2016   2018   62,961,091   30,764,712   49%   2,981,5 2017   2019   64,924,529   31,232,403   48%   3,160,7 2018   2020   66,943,949   32,024,204   48%   3,354,0				Valuation Assets		
WITH 5-YEAR PHASE-IN           2015         2017         \$ 54,774,413         \$ 30,616,978         56%         \$ 2,101,7           2016         2018         56,540,965         31,058,532         55%         2,314,5           2017         2019         58,354,226         31,443,703         54%         2,536,0           2018         2020         60,220,370         31,810,862         53%         2,768,8           2019         2021         62,163,859         32,304,186         52%         3,011,1           2020         2022         64,175,416         33,884,090         53%         3,137,8           NO 5-YEAR PHASE-IN           2015         2017         \$ 54,774,413         \$ 30,616,978         56%         \$ 2,274,2           2016         2018         56,540,965         31,058,532         55%         2,431,5           2017         2019         58,354,226         31,540,015         54%         2,599,4           2018         2020         60,220,370         32,068,449         53%         2,781,5           2019         2021         62,163,859         32,667,752         53%         2,976,8           2020         2022         64,175,416					3	
WITH 5-YEAR PHASE-IN           2015         2017         \$ 54,774,413         \$ 30,616,978         56%         \$ 2,101,7           2016         2018         56,540,965         31,058,532         55%         2,314,5           2017         2019         58,354,226         31,443,703         54%         2,536,0           2018         2020         60,220,370         31,810,862         53%         2,768,8           2019         2021         62,163,859         32,304,186         52%         3,011,1           2020         2022         64,175,416         33,884,090         53%         3,137,8           NO 5-YEAR PHASE-IN           2015         2017         \$ 54,774,413         \$ 30,616,978         56%         \$ 2,274,2           2016         2018         56,540,965         31,058,532         55%         2,431,5           2017         2019         58,354,226         31,540,015         54%         2,599,4           2018         2020         60,220,370         32,068,449         53%         2,781,5           2019         2021         62,163,859         32,667,752         53%         2,976,8           2020         2022         64,175,416	7.75% Assun	ned Interest I	। Discount Rate and Fu	। ture Annual Market Ra	ı ate of Return	
2015         2017         \$ 54,774,413         \$ 30,616,978         56%         \$ 2,101,7           2016         2018         56,540,965         31,058,532         55%         2,314,5           2017         2019         58,354,226         31,443,703         54%         2,536,0           2018         2020         60,220,370         31,810,862         53%         2,768,6           2019         2021         62,163,859         32,304,186         52%         3,011,1           2020         2022         64,175,416         33,884,090         53%         3,137,6           NO 5-YEAR PHASE-IN           2015         2017         \$ 54,774,413         \$ 30,616,978         56%         \$ 2,274,2           2016         2018         56,540,965         31,058,532         55%         2,431,5           2017         2019         58,354,226         31,540,015         54%         2,599,4           2018         2020         60,220,370         32,068,449         53%         2,781,5           2019         2021         62,163,859         32,667,752         53%         2,976,8           2020         2022         64,175,416         34,313,818         54%         3,102,5<	1					
2016         2018         56,540,965         31,058,532         55%         2,314,5           2017         2019         58,354,226         31,443,703         54%         2,536,0           2018         2020         60,220,370         31,810,862         53%         2,768,6           2019         2021         62,163,859         32,304,186         52%         3,011,1           2020         2022         64,175,416         33,884,090         53%         3,137,6           NO 5-YEAR PHASE-IN           2015         2017         \$ 54,774,413         \$ 30,616,978         56%         \$ 2,274,2           2016         2018         56,540,965         31,058,532         55%         2,431,5           2017         2019         58,354,226         31,540,015         54%         2,599,4           2018         2020         60,220,370         32,068,449         53%         2,781,5           2019         2021         62,163,859         32,667,752         53%         2,976,8           2020         2022         64,175,416         34,313,818         54%         3,102,5           6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return         NO 5-YEAR PHASE-IN	1 .			\$ 30,616,978	56%	\$ 2,101,740
2017         2019         58,354,226         31,443,703         54%         2,536,0           2018         2020         60,220,370         31,810,862         53%         2,768,8           2019         2021         62,163,859         32,304,186         52%         3,011,1           2020         2022         64,175,416         33,884,090         53%         3,137,8           NO 5-YEAR PHASE-IN           2015         2017         \$ 54,774,413         \$ 30,616,978         56%         \$ 2,274,2           2016         2018         56,540,965         31,058,532         55%         2,431,5           2017         2019         58,354,226         31,540,015         54%         2,599,4           2018         2020         60,220,370         32,068,449         53%         2,781,5           2019         2021         62,163,859         32,667,752         53%         2,976,8           2020         2022         64,175,416         34,313,818         54%         3,102,5           6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return           NO 5-YEAR PHASE-IN         2015         2017         \$ 61,047,163         \$ 30,616,978         50%         \$ 2,811,0	2016	2018		· · · · · · · · · · · · · · · · · · ·	55%	2,314,536
2018         2020         60,220,370         31,810,862         53%         2,768,8           2019         2021         62,163,859         32,304,186         52%         3,011,1           2020         2022         64,175,416         33,884,090         53%         3,137,8           NO 5-YEAR PHASE-IN           2015         2017         \$ 54,774,413         \$ 30,616,978         56%         \$ 2,274,2           2016         2018         56,540,965         31,058,532         55%         2,431,5           2017         2019         58,354,226         31,540,015         54%         2,599,4           2018         2020         60,220,370         32,068,449         53%         2,781,5           2019         2021         62,163,859         32,667,752         53%         2,976,8           2020         2022         64,175,416         34,313,818         54%         3,102,5           6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return           NO 5-YEAR PHASE-IN         2015         2017         \$ 61,047,163         \$ 30,616,978         50%         \$ 2,811,0           2016         2018         62,961,091         30,764,712         49%         2,981,5	2017	2019	58,354,226	31,443,703	54%	2,536,008
2019         2021         62,163,859         32,304,186         52%         3,011,1           2020         2022         64,175,416         33,884,090         53%         3,137,8           NO 5-YEAR PHASE-IN           2015         2017         \$ 54,774,413         \$ 30,616,978         56%         \$ 2,274,2           2016         2018         56,540,965         31,058,532         55%         2,431,5           2017         2019         58,354,226         31,540,015         54%         2,599,4           2018         2020         60,220,370         32,068,449         53%         2,781,5           2019         2021         62,163,859         32,667,752         53%         2,976,8           2020         2022         64,175,416         34,313,818         54%         3,102,5           6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return           NO 5-YEAR PHASE-IN         2015         2017         \$ 61,047,163         \$ 30,616,978         50%         \$ 2,811,0           2016         2018         62,961,091         30,764,712         49%         2,981,9           2017         2019         64,924,529         31,232,403         48%         3,160,7	2018	2020	1	· · · · ·	53%	2,768,868
NO 5-YEAR PHASE-IN   2015   2017   \$ 54,774,413   \$ 30,616,978   56%   \$ 2,274,2   2016   2018   56,540,965   31,058,532   55%   2,431,5   2017   2019   58,354,226   31,540,015   54%   2,599,4   2018   2020   60,220,370   32,068,449   53%   2,781,5   2019   2021   62,163,859   32,667,752   53%   2,976,8   2020   2022   64,175,416   34,313,818   54%   3,102,5   2015   2017   \$ 61,047,163   \$ 30,616,978   50%   \$ 2,811,0   2016   2018   62,961,091   30,764,712   49%   2,981,5   2017   2019   64,924,529   31,232,403   48%   3,160,7   2018   2020   66,943,949   32,024,204   48%   3,354,0   3	2019	2021	1	· · · · ·	52%	3,011,136
NO 5-YEAR PHASE-IN  2015   2017   \$ 54,774,413   \$ 30,616,978   56%   \$ 2,274,2  2016   2018   56,540,965   31,058,532   55%   2,431,5  2017   2019   58,354,226   31,540,015   54%   2,599,4  2018   2020   60,220,370   32,068,449   53%   2,781,5  2019   2021   62,163,859   32,667,752   53%   2,976,8  2020   2022   64,175,416   34,313,818   54%   3,102,5  6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return  NO 5-YEAR PHASE-IN  2015   2017   \$ 61,047,163   \$ 30,616,978   50%   \$ 2,811,0  2016   2018   62,961,091   30,764,712   49%   2,981,5  2017   2019   64,924,529   31,232,403   48%   3,160,7  2018   2020   66,943,949   32,024,204   48%   3,354,0	2020	2022	1	· · · · ·		3,137,856
2015         2017         \$ 54,774,413         \$ 30,616,978         56%         \$ 2,274,2           2016         2018         56,540,965         31,058,532         55%         2,431,5           2017         2019         58,354,226         31,540,015         54%         2,599,4           2018         2020         60,220,370         32,068,449         53%         2,781,5           2019         2021         62,163,859         32,667,752         53%         2,976,8           2020         2022         64,175,416         34,313,818         54%         3,102,5           6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return           NO 5-YEAR PHASE-IN         2015         2017         \$ 61,047,163         \$ 30,616,978         50%         \$ 2,811,0           2016         2018         62,961,091         30,764,712         49%         2,981,9           2017         2019         64,924,529         31,232,403         48%         3,160,7           2018         2020         66,943,949         32,024,204         48%         3,354,0			, , ,	, , , , , , , , , , , , , , , , , , , ,		, , , , , , , , , , , , , , , , , , , ,
2016         2018         56,540,965         31,058,532         55%         2,431,5           2017         2019         58,354,226         31,540,015         54%         2,599,4           2018         2020         60,220,370         32,068,449         53%         2,781,5           2019         2021         62,163,859         32,667,752         53%         2,976,8           2020         2022         64,175,416         34,313,818         54%         3,102,5           6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return           NO 5-YEAR PHASE-IN         2015         2017         \$ 61,047,163         \$ 30,616,978         50%         \$ 2,811,0           2016         2018         62,961,091         30,764,712         49%         2,981,9           2017         2019         64,924,529         31,232,403         48%         3,160,7           2018         2020         66,943,949         32,024,204         48%         3,354,0	NO 5-YEA	AR PHASE-IN	<u> </u>			
2017         2019         58,354,226         31,540,015         54%         2,599,4           2018         2020         60,220,370         32,068,449         53%         2,781,5           2019         2021         62,163,859         32,667,752         53%         2,976,8           2020         2022         64,175,416         34,313,818         54%         3,102,5           6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return           NO 5-YEAR PHASE-IN         2015         2017         \$ 61,047,163         \$ 30,616,978         50%         \$ 2,811,0           2016         2018         62,961,091         30,764,712         49%         2,981,9           2017         2019         64,924,529         31,232,403         48%         3,160,7           2018         2020         66,943,949         32,024,204         48%         3,354,0	2015	2017	\$ 54,774,413	\$ 30,616,978	56%	\$ 2,274,204
2018         2020         60,220,370         32,068,449         53%         2,781,5           2019         2021         62,163,859         32,667,752         53%         2,976,8           2020         2022         64,175,416         34,313,818         54%         3,102,5           6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return           NO 5-YEAR PHASE-IN         2015         2017         \$ 61,047,163         \$ 30,616,978         50%         \$ 2,811,0           2016         2018         62,961,091         30,764,712         49%         2,981,9           2017         2019         64,924,529         31,232,403         48%         3,160,7           2018         2020         66,943,949         32,024,204         48%         3,354,0	2016	2018	56,540,965	31,058,532	55%	2,431,572
2019         2021         62,163,859         32,667,752         53%         2,976,8           2020         2022         64,175,416         34,313,818         54%         3,102,5           6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return           NO 5-YEAR PHASE-IN         2015         2017         \$ 61,047,163         \$ 30,616,978         50%         \$ 2,811,0           2016         2018         62,961,091         30,764,712         49%         2,981,9           2017         2019         64,924,529         31,232,403         48%         3,160,7           2018         2020         66,943,949         32,024,204         48%         3,354,0	2017	2019	58,354,226	31,540,015	54%	2,599,404
2020         2022         64,175,416         34,313,818         54%         3,102,5           6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return NO 5-YEAR PHASE-IN           2015         2017         \$ 61,047,163         \$ 30,616,978         50%         \$ 2,811,00           2016         2018         62,961,091         30,764,712         49%         2,981,90           2017         2019         64,924,529         31,232,403         48%         3,160,70           2018         2020         66,943,949         32,024,204         48%         3,354,00	2018	2020	60,220,370	32,068,449	53%	2,781,564
6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return  NO 5-YEAR PHASE-IN  2015   2017   \$ 61,047,163   \$ 30,616,978   50%   \$ 2,811,000  2016   2018   62,961,091   30,764,712   49%   2,981,900  2017   2019   64,924,529   31,232,403   48%   3,160,700  2018   2020   66,943,949   32,024,204   48%   3,354,000  3,354,000	2019	2021	62,163,859	32,667,752	53%	2,976,828
NO 5-YEAR PHASE-IN         2015       2017       \$ 61,047,163       \$ 30,616,978       50%       \$ 2,811,0         2016       2018       62,961,091       30,764,712       49%       2,981,9         2017       2019       64,924,529       31,232,403       48%       3,160,7         2018       2020       66,943,949       32,024,204       48%       3,354,0	2020	2022	64,175,416	34,313,818	54%	3,102,588
NO 5-YEAR PHASE-IN         2015       2017       \$ 61,047,163       \$ 30,616,978       50%       \$ 2,811,0         2016       2018       62,961,091       30,764,712       49%       2,981,9         2017       2019       64,924,529       31,232,403       48%       3,160,7         2018       2020       66,943,949       32,024,204       48%       3,354,0					1	
2015         2017         \$ 61,047,163         \$ 30,616,978         50%         \$ 2,811,0           2016         2018         62,961,091         30,764,712         49%         2,981,9           2017         2019         64,924,529         31,232,403         48%         3,160,7           2018         2020         66,943,949         32,024,204         48%         3,354,0	6.75% Assun	ned Interest I	າ Discount Rate and Fu	। ture Annual Market Ra	ate of Return	
2016         2018         62,961,091         30,764,712         49%         2,981,9           2017         2019         64,924,529         31,232,403         48%         3,160,7           2018         2020         66,943,949         32,024,204         48%         3,354,0	NO 5-YEA	R PHASE-IN				
2017     2019     64,924,529     31,232,403     48%     3,160,7       2018     2020     66,943,949     32,024,204     48%     3,354,0	2015	2017	\$ 61,047,163	\$ 30,616,978	50%	\$ 2,811,036
2018 2020 66,943,949 32,024,204 48% 3,354,0	2016	2018	62,961,091	30,764,712	49%	2,981,928
	2017	2019	64,924,529	31,232,403	48%	3,160,716
2010 2021 60.043.883 32.874.088 489/ 2.564.4	2018	2020	66,943,949	32,024,204	48%	3,354,072
2013   2021   03,040,000   32,014,300   40/0   3,304,4	2019	2021	69,043,883	32,874,988	48%	3,564,408
2020 2022 71,214,780 34,818,565 49% 3,709,4	2020	2022	71,214,780	34,818,565	49%	3,709,452
5.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return	5.75% Assun					
NO 5-YEAR PHASE-IN	NO 5-YEA	R PHASE-IN				
2015   2017   \$ 68,543,002   \$ 30,616,978   45%   \$ 3,426,6	2015	2017	\$ 68,543,002	\$ 30,616,978	45%	\$ 3,426,612
2016 2018 70,625,560 30,470,806 43% 3,613,9	2016	2018	70,625,560	30,470,806	43%	3,613,920
2017 2019 72,761,804 30,970,890 43% 3,807,7	2017	2019	72,761,804	30,970,890	43%	3,807,720
2018 2020 74,958,625 32,112,899 43% 4,016,9	2018	2020	74,958,625	32,112,899	43%	4,016,916
2019 2021 77,240,851 33,298,046 43% 4,245,3	2019	2021	77,240,851	33,298,046	43%	4,245,372
2020 2022 79,598,756 35,467,011 45% 4,426,3	2020	2022	79,598,756	35,467,011	45%	4,426,320

# Employer Contribution Details (Without a 5-year Phase-In) For the Fiscal Year Beginning July 1, 2017

Table 1

	Amort.	Emplo	yer Contribu	tions <sup>1</sup>			
Division	Period for Unfund. Liab. <sup>4,5</sup>	Normal Cost	Unfunded Accrued Liability	Total Computed Employer Contribut.	Blended Employer Contribut. <sup>6</sup>	Employee Contribution Rate	Employee Contribut. Conversion Factor <sup>2</sup>
Percentage of Payroll							
02 - Plc Dfrd&Rtd	4	-	-	-		3% < ; 5% >	
10 - Supervisor/Managem	23	9.39%	173.92%	183.31%		7.00%	0.95%
11 - Clerical/Court	23	9.58%	2.19%	11.77%		7.00%	0.92%
20 - POLC	23	12.16%	56.15%	68.31%		7.00%	0.87%
21 - POAM	23	12.93%	15.77%	28.70%		7.00%	0.85%
22 - Dispatch	23	9.26%	3.56%	12.82%		7.00%	0.91%
23 - DPW	23	9.85%	24.15%	34.00%		7.00%	0.91%
Estimated Monthly							
Contribution <sup>3</sup>							
02 - Plc Dfrd&Rtd	4	\$ 0	\$ (2,339)	\$ 0			
10 - Supervisor/Managem	23	1,804	33,407	35,211			
11 - Clerical/Court	23	3,370	770	4,140			
20 - POLC	23	12,331	56,941	69,272			
21 - POAM	23	26,427	32,232	58,659			
22 - Dispatch	23	2,267	872	3,139			
23 - DPW	23	5,532	13,564	19,096			
Total Municipality		\$ 51,731	\$ 135,447	\$ 189,517			
Estimated Annual							
Contribution <sup>3</sup>		\$ 620,772	\$ 1,625,364	\$ 2,274,204			

<sup>1</sup> The above employer contribution requirements are in addition to the employee contributions, if any.

If employee contributions are increased/decreased by 1.00% of pay, the employer contribution requirement will decrease/increase by the Employee Contribution Conversion Factor. The conversion factor is usually under 1%, because employee contributions may be refunded at termination of employment, and not used to fund retirement pensions. Employer contributions will all be used to fund pensions.

<sup>&</sup>lt;sup>3</sup> For divisions that are open to new hires, estimated contributions are based on projected fiscal year payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts. For divisions that will have no new hires, invoices will be based on the above dollar amounts which are based on projected fiscal year payroll. See description of Open Divisions and Closed Divisions in the <a href="Appendix">Appendix</a>.

<sup>&</sup>lt;sup>4</sup> If projected assets exceed projected liabilities as of the beginning of the July 1, 2017 fiscal year, the negative unfunded accrued liability is amortized (spread) over 10 years. This amortization is used to reduce the employer contribution rate. Note that if the overfunding credit is larger than the normal cost, the full credit is shown above but the total contribution requirement is zero. This will cause the displayed normal cost and unfunded accrued liability contributions to not add across.

<sup>&</sup>lt;sup>5</sup> If the division is closed to new hires, with new hires not covered by MERS Defined Benefit Plan or Hybrid Plan provisions, the amortization period will decrease as follows: Under Amortization Option A, the period will decrease by 2 years each valuation year, until it reaches 6 or 5 years. Then it decreases by 1 year each valuation year until the UAL is paid off. Under Amortization Option B, the period will decrease by 2 years each valuation year, until it reaches 16 or 15 years. Thereafter, the period will reduce by 1 year each valuation year, until the UAL is paid off. This will result in amortization payments that increase faster than the usual 3.75% each year. If the division is closed to new hires, with new hires (and transfers) covered by MERS Defined Benefit Plan or Hybrid Plan provisions, the standard open division amortization period will apply.

<sup>&</sup>lt;sup>6</sup> For linked divisions, the employer will be invoiced the Total Required Employer Contribution rate shown above for each linked division (a contribution rate for the open division; a contribution dollar for the closed-but-linked division), unless the employer elects to contribute the Blended Employer Contribution rate shown above, by contacting MERS at 800-767-2308.

**Note** that the Employer Contribution Details shown in Table 1 do **not** reflect phase-in over 5 fiscal years (beginning in 2017) of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 1 above. The contribution requirements including the 5-year phase-in are shown on page 8.

Please see the Comments on Asset Smoothing.

# **Benefit Provisions**

# Table 2

02 - Plc Dfrd&Rtd: Closed to new hires					
	2015 Valuation	2014 Valuation			
Benefit Multiplier:	Svc x (1.00% times FAC<\$4,200, plus 1.50% times FAC>\$4,200)	Svc x (1.00% times FAC<\$4,200, plus 1.50% times FAC>\$4,200)			
Normal Retirement Age:	60	60			
Vesting:	10 years	10 years			
Early Retirement (Unreduced):	-	-			
Early Retirement (Reduced):	50/25	50/25			
	55/15	55/15			
Final Average Compensation:	5 years	5 years			
Employee Contributions:	3% under \$4,200; 5% over \$4,200	3% under \$4,200; 5% over \$4,200			
Act 88:	No	No			

10 - Supervisor/Management: Open Division					
	2015 Valuation	2014 Valuation			
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)			
Normal Retirement Age:	60	60			
Vesting:	6 years	6 years			
Early Retirement (Unreduced):	50/25	50/25			
	55/10	55/10			
Early Retirement (Reduced):	-	-			
Final Average Compensation:	5 years	5 years			
Employee Contributions:	7%	5%			
Act 88:	Yes (Adopted 4/13/1967)	Yes (Adopted 4/13/1967)			

11 - Clerical/Court: Open Division					
	2015 Valuation	2014 Valuation			
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)			
Normal Retirement Age:	60	60			
Vesting:	6 years	6 years			
Early Retirement (Unreduced):	50/25	50/25			
	55/15	55/15			
Early Retirement (Reduced):	-	-			
Final Average Compensation:	5 years	5 years			
Employee Contributions:	7%	7%			
Act 88:	Yes (Adopted 4/13/1967)	Yes (Adopted 4/13/1967)			

# Table 2 (continued)

20 - POLC: Open Division					
	2015 Valuation	2014 Valuation			
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)			
Normal Retirement Age:	55	55			
Vesting:	10 years	10 years			
Early Retirement (Unreduced):	50/25	50/25			
Early Retirement (Reduced):	-	-			
Final Average Compensation:	3 years	3 years			
Employee Contributions:	7%	7%			
Act 88:	Yes (Adopted 4/13/1967)	Yes (Adopted 4/13/1967)			

21 - POAM: Open Division		
	2015 Valuation	2014 Valuation
Benefit Multiplier:	2.50% Multiplier (75% max)	2.50% Multiplier (75% max)
Normal Retirement Age:	55	55
Vesting:	10 years	10 years
Early Retirement (Unreduced):	50/25	50/25
Early Retirement (Reduced):	-	-
Final Average Compensation:	5 years	5 years
COLA for Future Retirees:	2% (Non-Compound)	2% (Non-Compound)
<b>Employee Contributions:</b>	7%	7%
Act 88:	Yes (Adopted 7/1/2014)	Yes (Adopted 7/1/2014)

22 - Dispatch: Open Division									
	2015 Valuation	2014 Valuation							
Benefit Multiplier:	2.50% Multiplier (no max)	2.50% Multiplier (no max)							
Normal Retirement Age:	60	60							
Vesting:	6 years	6 years							
Early Retirement (Unreduced):	50/25	50/25							
	55/10	55/10							
Early Retirement (Reduced):	-	-							
Final Average Compensation:	5 years	5 years							
Employee Contributions:	7%	7%							
Act 88:	Yes (Adopted 4/13/1967)	Yes (Adopted 4/13/1967)							

23 - DPW: Open Division		
	2015 Valuation	2014 Valuation
Benefit Multiplier:	2.75% Multiplier (80% max)	2.75% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	50/25	50/25
	55/10	55/10
Early Retirement (Reduced):	-	-
Final Average Compensation:	5 years	5 years
Employee Contributions:	7%	7%
Act 88:	Yes (Adopted 4/13/1967)	Yes (Adopted 4/13/1967)

# **Participant Summary**

Table 3

	2015	5 Va	aluation	2014	1 V	aluation	2	2015 Valuati	on
Division	Number		Annual Payroll <sup>1</sup>	Moreshau		Annual Payroll <sup>1</sup>	Average	Average Benefit Service <sup>2</sup>	Average Eligibility Service <sup>2</sup>
Division	Number	-	Payroll	Number	┞	Payroll	Age	Service-	Service-
02 - Plc Dfrd&Rtd		L.	0		۳ ا	0	0.0	0.0	0.0
Active Employees	0	\$	0	0	\$	0	0.0	0.0	0.0
Vested Former Employees	0		0	0		0	0.0	0.0	0.0
Retirees and Beneficiaries	4	<u> </u>	13,202	4	_	13,202	78.1		
10 - Supervisor/Managemen		_	010101		_		40.0		
Active Employees	3	\$	210,194	2	\$	134,772	40.0	6.5	7.0
Vested Former Employees	6		68,224	7		0	47.5	0.0	9.9
Retirees and Beneficiaries	33	<u> </u>	877,142	31	L	846,647	64.9		
11 - Clerical/Court									
Active Employees	9	\$	384,957	10	\$	442,581	38.2	9.4	9.4
Vested Former Employees	5		41,509	4		0	47.9	1.9	9.5
Retirees and Beneficiaries	11	<u> </u>	186,049	10	L	168,912	73.3		
20 - POLC									
Active Employees	11	\$	1,109,721	11	\$	1,179,932	43.8	18.7	18.7
Vested Former Employees	0		0	0		0	0.0	0.0	0.0
Retirees and Beneficiaries	31		1,452,494	29	L	1,249,758	65.8		
21 - POAM									
Active Employees	27	\$	2,236,591	29	\$	2,375,577	42.7	15.7	15.8
Vested Former Employees	2		33,000	1		29,987	37.0	1.2	9.3
Retirees and Beneficiaries	13		359,994	12		359,994	68.8		
22 - Dispatch									
Active Employees	5	\$	267,956	5	\$	274,336	41.1	9.8	9.8
Vested Former Employees	1		11,872	1		0	50.4	0.0	11.8
Retirees and Beneficiaries	1		40,041	1		40,041	58.2		
23 - DPW									
Active Employees	9	\$	614,640	9	\$	612,438	44.3	17.6	18.0
Vested Former Employees	5		55,197	5		0	51.1	0.0	10.7
Retirees and Beneficiaries	11	ĺ	312,047	11		312,047	64.9		
Total Municipality		Γ							
Active Employees	64	\$	4,824,059	66	\$	5,019,636	42.2	14.7	14.8
Vested Former Employees	19		209,802	18		29,987	47.6	0.6	10.0
Retirees and Beneficiaries	<u>104</u>		3,240,969	<u>98</u>		2,990,601	67.0		
Total Participants	187			182					

<sup>1</sup> Annual payroll for active employees; annual deferred benefits payable for vested former employees; annual benefits being paid for retirees and beneficiaries.

 $<sup>^{2}\,</sup>$  Description can be found under Miscellaneous and Technical Assumptions in the  $\underline{\text{Appendix}}.$ 

# **Reported Assets (Market Value)**

Table 4

	2015 Va	luation	2014 Va	luation
	Employer and		Employer and	
Division	Retiree <sup>1</sup>	Employee <sup>2</sup>	Retiree <sup>1</sup>	Employee <sup>2</sup>
02 - Plc Dfrd&Rtd	\$ 259,870	\$ 0	\$ 277,188	\$ 0
10 - Supervisor/Management	3,147,701	118,217	2,968,080	28,602
11 - Clerical/Court	1,924,364	212,926	2,212,899	191,125
20 - POLC	9,124,586	640,555	9,779,818	538,580
21 - POAM	5,886,903	1,067,862	5,572,250	827,431
22 - Dispatch	743,321	143,950	784,862	102,616
23 - DPW	3,384,741	311,238	3,644,395	242,358
Municipality Total	\$ 24,471,486	\$ 2,494,748	\$ 25,239,492	\$ 1,930,712
Combined Reserves	\$ 26,90	66,234	\$ 27,170,204	

<sup>&</sup>lt;sup>1</sup> Reserve for Employer Contributions and Benefit Payments

The December 31, 2015 valuation assets are equal to 1.135382 times the reported market value of assets (compared to 1.059937 as of December 31, 2014). The derivation of valuation assets is described, and detailed calculations of valuation assets are shown, in the <u>Appendix</u>.

<sup>&</sup>lt;sup>2</sup> Reserve for Employee Contributions

#### Flow of Valuation Assets

#### Table 5

Year						Employee		Valuation
Ended	Employer Co	ontributions	Employee	Investment	Benefit	Contribution	Net	Asset
12/31	Required	Additional	Contributions	Income	Payments	Refunds	Transfers	Balance
		,						
2014	\$ 27,105,032	0	\$ 0	\$ 1,941,362	\$ (538,524)	\$ 0	\$ 0	\$ 28,798,705
2015	3,402,661	4,351	690,780	1,536,478	(3,344,392)	0	(471,605)	30,616,978

#### Notes:

Transfers in and out are usually related to the transfer of participants between municipalities, and to employer and employee payments for service credit purchases (if any) that the governing body has approved.

Additional employer contributions, if any, are shown separately starting in 2011. Prior to 2011, additional contributions are combined with the required employer contributions.

In the actuarial valuation additional employer contributions are combined with required contributions and used to reduce computed future required employer contributions.

The investment income column reflects the recognized investment income based on the smoothed value of assets. It does not reflect the market value investment return in any given year.

# Actuarial Accrued Liabilities and Valuation Assets As of December 31, 2015

Table 6

Table 6							Unfunded
						(0	overfunded)
Division	Ac	Actuarial crued Liability	Valı	lation Assets <sup>1</sup>	Percent Funded		Accrued Liabilities
02 - Plc Dfrd&Rtd	1	Cided Liability	vait	dation Assets	1 ercent i unaea		Liabilities
Active Employees	\$	0	\$	204,982	0.0%	\$	(204,982)
	a	0	Ψ	204,962	0.0%	Ψ	1 1
Vested Former Employees Retirees And Beneficiaries		· ·		-			0
		90,070		90,070	100.0% 0.0%		0
Pending Refunds Total	\$	<u>0</u>	\$	<u>0</u>	327.6%	\$	(204.092)
	<b>→</b>	90,070	<b>→</b>	295,052	327.0%	<b>P</b>	(204,982)
10 - Supervisor/Management		005 000	φ.	50.400	00.40/	φ.	007.000
Active Employees	\$	285,228	\$	58,196	20.4%	\$	227,032
Vested Former Employees		341,403		58,956	17.3%		282,447
Retirees And Beneficiaries		9,295,196		3,590,913	38.6%		5,704,283
Pending Refunds		<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	9,921,827	\$	3,708,065	37.4%	\$	6,213,762
11 - Clerical/Court							
Active Employees	\$	742,316	\$	656,519	88.4%	\$	85,797
Vested Former Employees		197,619		197,619	100.0%		0
Retirees And Beneficiaries		1,572,503		1,572,503	100.0%		0
Pending Refunds		<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	2,512,438	\$	2,426,641	96.6%	\$	85,797
20 - POLC							
Active Employees	\$	6,120,317	\$	640,555	10.5%	\$	5,479,762
Vested Former Employees		0		0	0.0%		0
Retirees And Beneficiaries		14,877,671		10,446,610	70.2%		4,431,061
Pending Refunds		<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	20,997,988	\$	11,087,165	52.8%	\$	9,910,823
21 - POAM							
Active Employees	\$	10,076,380	\$	4,400,100	43.7%	\$	5,676,280
Vested Former Employees		173,633		173,633	100.0%		0
Retirees And Beneficiaries		3,322,582		3,322,582	100.0%		0
Pending Refunds		<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	13,572,595	\$	7,896,315	58.2%	\$	5,676,280
22 - Dispatch							
Active Employees	\$	605,548	\$	460,648	76.1%	\$	144,900
Vested Former Employees		95,468		95,468	100.0%		0
Retirees And Beneficiaries		435,714		435,714	100.0%		0
Pending Refunds		<u>15,562</u>		<u>15,562</u>	100.0%		<u>0</u>
Total	\$	1,152,292	\$	1,007,392	87.4%	\$	144,900

# Table 6 (continued)

Division	Aco	Actuarial crued Liability	Valu	uation Assets <sup>1</sup>	Percent Funded	(0	Unfunded Overfunded) Accrued Liabilities
23 - DPW							
Active Employees	\$	2,677,660	\$	346,805	13.0%	\$	2,330,855
Vested Former Employees		446,279		446,279	100.0%		0
Retirees And Beneficiaries	İ	3,403,264		3,403,264	100.0%		0
Pending Refunds	İ	<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	6,527,203	\$	4,196,348	64.3%	\$	2,330,855
Total Municipality							
Active Employees	\$	20,507,449	\$	6,767,805	33.0%	\$	13,739,644
Vested Former Employees		1,254,402		971,955	77.5%		282,447
Retirees and Beneficiaries		32,997,000		22,861,656	69.3%		10,135,344
Pending Refunds		<u>15,562</u>		<u>15,562</u>	100.0%		<u>0</u>
Total Participants	\$	54,774,413	\$	30,616,978	55.9%	\$	24,157,435

<sup>&</sup>lt;sup>1</sup> Includes both employer and employee assets.

# Please see the Comments on Asset Smoothing.

See the MERS Fiscal Responsibility Policy on the MERS website at:

http://www.mersofmich.com/Portals/0/Assets/PageResources/MERS/PlanDocument/Pension/MERSPlanDocument Section46.pdf.

# **Actuarial Accrued Liabilities - Comparative Schedule**

Table 7

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities	
2014	\$ 49,905,166	\$ 28,798,705	58%	\$ 21,106,461	
2015	54,774,413	30,616,978	56%	24,157,435	

Notes: Actuarial assumptions were revised for the 2004, 2008, 2009, 2010, 2011, 2012 and 2015 actuarial valuations.

### Division 02 - Plc Dfrd&Rtd

Table 8-02: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	\$ 87,969	\$ 293,802	334%	\$ (205,833)
2015	90,070	295,052	328%	(204,982)

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

Table 9-02: Computed Employer Contributions - Comparative Schedule

		Active	Employees	Computed	Employee
ĺ	Valuation Date		Annual	Employer	Contribution
	December 31	Number	Payroll	Contribution <sup>1</sup>	Rate <sup>2</sup>
ĺ	2014	0	\$ 0	\$0	0.00%
Ī	2015	0	0	\$0	0.00%

<sup>&</sup>lt;sup>1</sup> For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

**Note:** The contributions shown in Table 9 for the 12/31/2015 valuation do **not** reflect phase-in over 5 fiscal years (beginning in 2017) of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 8.

<sup>&</sup>lt;sup>2</sup> For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

# **Division 10 - Supervisor/Management**

Table 8-10: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	\$ 9,094,283	\$ 3,176,294	35%	\$ 5,917,989
	9,921,827	3,708,065	37%	6,213,762

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

Table 9-10: Computed Employer Contributions - Comparative Schedule

	Active	Empl	oyees	Computed	Employee	
Valuation Date		Annual		Employer	Contribution	
December 31	Number		Payroll	Contribution <sup>1</sup>	Rate <sup>2</sup>	
2014	2	\$	134,772	268.51%	5.00%	
2015	3		210,194	183.31%	7.00%	

<sup>&</sup>lt;sup>1</sup> For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

**Note:** The contributions shown in Table 9 for the 12/31/2015 valuation do **not** reflect phase-in over 5 fiscal years (beginning in 2017) of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 8.

<sup>&</sup>lt;sup>2</sup> For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

#### **Division 11 - Clerical/Court**

Table 8-11: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	\$ 2,272,913	\$ 2,548,114	112%	\$ (275,201)
	2,512,438	2,426,641	97%	85,797

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

Table 9-11: Computed Employer Contributions - Comparative Schedule

	Active	Em	ployees	Computed	Employee
Valuation Date			Annual	Employer	Contribution
December 31	Number		Payroll	Contribution <sup>1</sup>	Rate <sup>2</sup>
2014	10	\$	442,581	2.78%	7.00%
2015	9		384,957	11.77%	7.00%

<sup>&</sup>lt;sup>1</sup> For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

**Note:** The contributions shown in Table 9 for the 12/31/2015 valuation do **not** reflect phase-in over 5 fiscal years (beginning in 2017) of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 8.

<sup>&</sup>lt;sup>2</sup> For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

### **Division 20 - POLC**

Table 8-20: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial rued Liability	Val	uation Assets	Percent Funded	(	Unfunded Overfunded) Accrued Liabilities
2014	\$ 19,386,868	\$	10,936,852	56%	\$	8,450,016
					1	9,910,823

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

Table 9-20: Computed Employer Contributions - Comparative Schedule

	Active	Em	ployees	Computed	Employee
Valuation Date		Annual		Employer	Contribution
December 31	Number		Payroll	Contribution <sup>1</sup>	Rate <sup>2</sup>
2014	11	\$	1,179,932	54.67%	7.00%
2015	11		1,109,721	68.31%	7.00%

<sup>&</sup>lt;sup>1</sup> For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

**Note:** The contributions shown in Table 9 for the 12/31/2015 valuation do **not** reflect phase-in over 5 fiscal years (beginning in 2017) of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 8.

<sup>&</sup>lt;sup>2</sup> For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

### **Division 21 - POAM**

Table 8-21: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	\$ 12,412,485	\$ 6,783,259	55%	\$ 5,629,226
2017	, ,	+ -,,		

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

Table 9-21: Computed Employer Contributions - Comparative Schedule

					<b>-</b>	
		Active	Em	ployees	Computed	Employee
ĺ	Valuation Date			Annual	Employer	Contribution
	December 31	Number		Payroll	Contribution <sup>1</sup>	Rate <sup>2</sup>
ĺ	2014	29	\$	2,375,577	26.85%	7.00%
Ī	2015	27		2,236,591	28.70%	7.00%

<sup>&</sup>lt;sup>1</sup> For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

**Note:** The contributions shown in Table 9 for the 12/31/2015 valuation do **not** reflect phase-in over 5 fiscal years (beginning in 2017) of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 8.

<sup>&</sup>lt;sup>2</sup> For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

# **Division 22 - Dispatch**

Table 8-22: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability		Valuation Assets		Percent Funded	(	Unfunded (Overfunded) Accrued Liabilities	
2014	\$	981,973	\$	940,671	96%	\$	41,302	
2015	i	1.152.292		1,007,392	87%		144,900	

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

Table 9-22: Computed Employer Contributions - Comparative Schedule

	Active	Emp	oloyees	Computed	Employee
Valuation Date		Annual		Employer	Contribution
December 31	Number		Payroll	Contribution <sup>1</sup>	Rate <sup>2</sup>
2014	5	\$	274,336	10.23%	7.00%
2015	5		267,956	12.82%	7.00%

<sup>&</sup>lt;sup>1</sup> For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

**Note:** The contributions shown in Table 9 for the 12/31/2015 valuation do **not** reflect phase-in over 5 fiscal years (beginning in 2017) of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 8.

<sup>&</sup>lt;sup>2</sup> For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

### **Division 23 - DPW**

Table 8-23: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	\$ 5,668,675	\$ 4,119,713	73%	\$ 1,548,962

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

Table 9-23: Computed Employer Contributions - Comparative Schedule

					<b>-</b>	
		Active	Em	ployees	Computed	Employee
ĺ	Valuation Date			Annual	Employer	Contribution
	December 31	Number		Payroll	Contribution <sup>1</sup>	Rate <sup>2</sup>
ĺ	2014	9	\$	612,438	24.85%	7.00%
Ī	2015	9		614,640	34.00%	7.00%

<sup>&</sup>lt;sup>1</sup> For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

**Note:** The contributions shown in Table 9 for the 12/31/2015 valuation do **not** reflect phase-in over 5 fiscal years (beginning in 2017) of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 8.

<sup>&</sup>lt;sup>2</sup> For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

#### **GASB 68 Information**

The following information has been prepared to provide some of the information necessary to complete GASB Statement No. 68 disclosures. Statement 68 is effective for fiscal years beginning after June 15, 2014. Additional resources, including an Implementation Guide, are available at <a href="https://www.mersofmich.com">www.mersofmich.com</a>.

Actuarial Valuation Date:		12/31/2015
Measurement Date of Total Pension Liability (TPL):		12/31/2015
At 12/31/2015, the following employees were covered by the benefit terms: Inactive employees or beneficiaries currently receiving benefits: Inactive employees entitled to but not yet receiving benefits: Active employees:		104 19 <u>64</u> 187
Total Pension Liability as of 12/31/2014 measurement date:	\$	48,661,939
Total Pension Liability as of 12/31/2015 measurement date:	\$	53,366,998
Service Cost for the year ending on the 12/31/2015 measurement date:	\$	859,087
Change in the Total Pension Liability due to:		
<ul> <li>Benefit changes<sup>1</sup>:</li> <li>Differences between expected and actual experience<sup>2</sup>:</li> <li>Changes in assumptions<sup>2</sup>:</li> </ul>	\$ \$ \$	(852) 1,095,026 2,184,098

<sup>&</sup>lt;sup>1</sup> A change in liability due to benefit changes is immediately recognized when calculating pension expense for the year.

Average expected remaining service lives of all employees (active and inactive):

Covered employee payroll: (Needed for Required Supplementary Information) \$ 4,824,059

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

Change in Net Pension Liability as of 12/31/2015:

1% Decrease Current Discount 1% Increase (7.00%) Rate (8.00%) (9.00%) (5.083.660)

Note: The current discount rate shown for GASB 68 purposes is higher than the MERS assumed rate of return. This is because for GASB 68 purposes, the discount rate must be gross of administrative expenses, whereas for funding purposes it is net of administrative expenses.

<sup>&</sup>lt;sup>2</sup> Changes in liability due to differences between actual and expected experience, and changes in assumptions, are recognized in pension expense over the average remaining service lives of all employees.

# **Benefit Provision History**

The following benefit provision history is provided by MERS. Any corrections to this history or discrepancies between this information and information displayed elsewhere in the valuation report should be reported to MERS. All provisions are listed by date of adoption.

#### 02 - Plc Dfrd&Rtd

7/1/1966	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/1966	10 Year Vesting
7/1/1966	Benefit C (Old)
7/1/1966	Member Contribution Rate 3.00% Under \$4,200.00 - Then 5.00%
7/1/1966	Fiscal Month - July

### 10 - Supervisor/Management

1/13/2014	Blanket Resolution (Generic Service)
7/1/2014	Day of work defined as 120 Hours a Month for All employees.
7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/2014	Exclude Temporary Employees requiring less than 12 months
7/1/2014	6 Year Vesting
7/1/2014	Benefit B-4 (80% max)
7/1/2014	Benefit F50 (With 25 Years of Service)
7/1/2014	Benefit F55 (With 10 Years of Service)
7/1/2014	Participant Contribution Rate 7%
4/13/1967	Covered by Act 88
7/1/1966	Fiscal Month - July

#### 11 - Clerical/Court

11/13/2014	Blanket Resolution (Generic Service)
7/1/2014	Day of work defined as 128 Hours a Month for All employees.
7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/2014	Non Standard Compensation Definition
7/1/2014	Exclude Temporary Employees requiring less than 12 months
7/1/2014	6 Year Vesting
7/1/2014	Benefit B-4 (80% max)
7/1/2014	Benefit F50 (With 25 Years of Service)
7/1/2014	Benefit F55 (With 15 Years of Service)
7/1/2014	Member Contribution Rate 7.00%
4/13/1967	Covered by Act 88
7/1/1966	Fiscal Month - July

#### **20 - POLC**

11/13/2014	Blanket Resolution (Generic Service)
7/1/2014	Day of work defined as 120 Hours a Month for All employees.
7/1/2014	Benefit FAC-3 (3 Year Final Average Compensation)
7/1/2014	Non Standard Compensation Definition
7/1/2014	Exclude Temporary Employees requiring less than 12 months

20 DOLC	
20 - POLC	
7/1/2014	10 Year Vesting
7/1/2014	Benefit B-4 (80% max)
7/1/2014	Benefit F50 (With 25 Years of Service)
7/1/2014	Benefit F55 (With 10 Years of Service)
7/1/2014	Member Contribution Rate 7.00%
4/13/1967	Covered by Act 88
7/1/1966	Fiscal Month - July
21 - POAM	
11/13/2014	Blanket Resolution (Generic Service)
7/1/2014	Covered by Act 88
7/1/2014	Day of work defined as 120 Hours a Month for All employees.
7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/2014	Non Standard Compensation Definition
7/1/2014	Exclude Temporary Employees requiring less than 12 months
7/1/2014	10 Year Vesting
7/1/2014	Benefit B-4 (75% max)
7/1/2014	Benefit F50 (With 25 Years of Service)
7/1/2014	Benefit F55 (With 10 Years of Service)
7/1/2014	Member Contribution Rate 7.00%
7/1/2014	E2 2% COLA for future retirees
7/1/1966	Fiscal Month - July
22 - Dispatch	
•	Displicat Decelution (Comprise Compies)
11/13/2014	Blanket Resolution (Generic Service)
7/1/2014	Day of work defined as 128 Hours a Month for All employees.
7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/2014 7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation)  Non Standard Compensation Definition
7/1/2014 7/1/2014 7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation)  Non Standard Compensation Definition  Exclude Temporary Employees requiring less than 12 months
7/1/2014 7/1/2014 7/1/2014 7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation)  Non Standard Compensation Definition  Exclude Temporary Employees requiring less than 12 months 6 Year Vesting
7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation)  Non Standard Compensation Definition  Exclude Temporary Employees requiring less than 12 months 6 Year Vesting 2.5% Multiplier (no max)
7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation)  Non Standard Compensation Definition  Exclude Temporary Employees requiring less than 12 months 6 Year Vesting 2.5% Multiplier (no max)  Benefit F50 (With 25 Years of Service)
7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation)  Non Standard Compensation Definition  Exclude Temporary Employees requiring less than 12 months 6 Year Vesting 2.5% Multiplier (no max)  Benefit F50 (With 25 Years of Service)  Benefit F55 (With 10 Years of Service)
7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation) Non Standard Compensation Definition Exclude Temporary Employees requiring less than 12 months 6 Year Vesting 2.5% Multiplier (no max) Benefit F50 (With 25 Years of Service) Benefit F55 (With 10 Years of Service) Member Contribution Rate 7.00%
7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation)  Non Standard Compensation Definition  Exclude Temporary Employees requiring less than 12 months 6 Year Vesting 2.5% Multiplier (no max)  Benefit F50 (With 25 Years of Service)  Benefit F55 (With 10 Years of Service)
7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 4/13/1967 7/1/1966	Benefit FAC-5 (5 Year Final Average Compensation) Non Standard Compensation Definition Exclude Temporary Employees requiring less than 12 months 6 Year Vesting 2.5% Multiplier (no max) Benefit F50 (With 25 Years of Service) Benefit F55 (With 10 Years of Service) Member Contribution Rate 7.00% Covered by Act 88
7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 4/13/1967	Benefit FAC-5 (5 Year Final Average Compensation) Non Standard Compensation Definition Exclude Temporary Employees requiring less than 12 months 6 Year Vesting 2.5% Multiplier (no max) Benefit F50 (With 25 Years of Service) Benefit F55 (With 10 Years of Service) Member Contribution Rate 7.00% Covered by Act 88 Fiscal Month - July
7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 4/13/1967 7/1/1966	Benefit FAC-5 (5 Year Final Average Compensation) Non Standard Compensation Definition Exclude Temporary Employees requiring less than 12 months 6 Year Vesting 2.5% Multiplier (no max) Benefit F50 (With 25 Years of Service) Benefit F55 (With 10 Years of Service) Member Contribution Rate 7.00% Covered by Act 88 Fiscal Month - July  Blanket Resolution (Generic Service)
7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 4/13/1967 7/1/1966 23 - DPW 11/13/2014 7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation) Non Standard Compensation Definition Exclude Temporary Employees requiring less than 12 months 6 Year Vesting 2.5% Multiplier (no max) Benefit F50 (With 25 Years of Service) Benefit F55 (With 10 Years of Service) Member Contribution Rate 7.00% Covered by Act 88 Fiscal Month - July  Blanket Resolution (Generic Service) Day of work defined as 128 Hours a Month for All employees.
7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 4/13/1967 7/1/1966  23 - DPW 11/13/2014 7/1/2014 7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation) Non Standard Compensation Definition Exclude Temporary Employees requiring less than 12 months 6 Year Vesting 2.5% Multiplier (no max) Benefit F50 (With 25 Years of Service) Benefit F55 (With 10 Years of Service) Member Contribution Rate 7.00% Covered by Act 88 Fiscal Month - July  Blanket Resolution (Generic Service) Day of work defined as 128 Hours a Month for All employees. Benefit FAC-5 (5 Year Final Average Compensation)
7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 4/13/1967 7/1/1966  23 - DPW 11/13/2014 7/1/2014 7/1/2014 7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation) Non Standard Compensation Definition Exclude Temporary Employees requiring less than 12 months 6 Year Vesting 2.5% Multiplier (no max) Benefit F50 (With 25 Years of Service) Benefit F55 (With 10 Years of Service) Member Contribution Rate 7.00% Covered by Act 88 Fiscal Month - July  Blanket Resolution (Generic Service) Day of work defined as 128 Hours a Month for All employees. Benefit FAC-5 (5 Year Final Average Compensation) Non Standard Compensation Definition
7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 4/13/1967 7/1/1966  23 - DPW 11/13/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation) Non Standard Compensation Definition Exclude Temporary Employees requiring less than 12 months 6 Year Vesting 2.5% Multiplier (no max) Benefit F50 (With 25 Years of Service) Benefit F55 (With 10 Years of Service) Member Contribution Rate 7.00% Covered by Act 88 Fiscal Month - July  Blanket Resolution (Generic Service) Day of work defined as 128 Hours a Month for All employees. Benefit FAC-5 (5 Year Final Average Compensation) Non Standard Compensation Definition Exclude Temporary Employees requiring less than 12 months
7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 7/1/2014 4/13/1967 7/1/1966  23 - DPW 11/13/2014 7/1/2014 7/1/2014 7/1/2014	Benefit FAC-5 (5 Year Final Average Compensation) Non Standard Compensation Definition Exclude Temporary Employees requiring less than 12 months 6 Year Vesting 2.5% Multiplier (no max) Benefit F50 (With 25 Years of Service) Benefit F55 (With 10 Years of Service) Member Contribution Rate 7.00% Covered by Act 88 Fiscal Month - July  Blanket Resolution (Generic Service) Day of work defined as 128 Hours a Month for All employees. Benefit FAC-5 (5 Year Final Average Compensation) Non Standard Compensation Definition

# 23 - DPW

7/1/2014	Benefit F50 (With 25 Years of Service)
7/1/2014	Benefit F55 (With 10 Years of Service)
7/1/2014	Member Contribution Rate 7.00%
4/13/1967	Covered by Act 88
7/1/1966	Fiscal Month - July

# Plan Provisions, Actuarial Assumptions, and Actuarial Funding Method

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology can be found in the <u>Appendix</u>. Some actuarial assumptions are specific to this municipality and its divisions. These are listed below.

## **Increase in Final Average Compensation**

Division	FAC Increase Assumption
10 - Supervisor/Management	3.00%
11 - Clerical/Court	3.00%
20 - POLC	14.00%
21 - POAM	8.00%
22 - Dispatch	7.00%
23 - DPW	0.00%

# Withdrawal Rate Scaling Factor

Division	Withdrawal Rate Scaling Factor
All Divisions	30%

# **Miscellaneous and Technical Assumptions**

Loads - None.

# **Amortization Policy for Closed Divisions**

Closed Division	Amortization Option
All Closed Divisions	Option A