



MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN
ANNUAL ACTUARIAL VALUATION REPORT DECEMBER 31, 2016
INGHAM CO (3303)



Spring, 2017

Ingham Co

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, 2016. The report includes the determination of liabilities and contribution rates resulting from the participation of Ingham Co (3303) 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 70 years. Ingham Co 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, 2016 annual actuarial valuation is to:

- Measure funding progress
- Establish contribution requirements for the fiscal year beginning January 1, 2018
- 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, 2016 furnished by MERS. In accordance with Actuarial Standards of Practice No. 23, the data was checked for internal and year to year consistency as well as general reasonableness, but was not otherwise audited. CBIZ Retirement Plan Services does not assume responsibility for the accuracy or completeness of the data used in this valuation.

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

www.mersofmich.com/Portals/0/Assets/Resources/AAV-Appendix/MERS-2016AnnualActuarialValuation-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

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Executive Summary

Actuarial Assumptions and Methods Adopted with the December 31, 2015 Valuations

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 changes to the assumptions and methods based on the 2015 Experience Study were first reflected in the December 31, 2015 valuations. The impact of these changes is being phased-in over a 5 year period. The phase-in allows the employer to spread the impact of the new assumptions over 5 fiscal years. This report continues to provide contributions both with and without the phase-in adjustments.

The assumptions and methods are described in the [Appendix](#) on the MERS website.

As part of the recent Experience Study, the following changes are first reflected in the December 31, 2016 annual valuation:

- The asset smoothing was changed from 10 to 5 years. The gain (loss) recognized each year will be 20% of the current year's gain (loss) plus 20% of the gain (loss) from each of the 4 preceding years. The cumulative difference between the market value and valuation assets as of December 31, 2015 will be recognized over 4 years.
- Annual changes in Unfunded Accrued Liability (UAL) will be amortized over fixed periods, creating "layers" of UAL. This will require removing and creating "layers" of UAL on an annual basis.
 - o 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.

MERS created a dedicated resource page on their website for additional information on these topics (<http://www.mersofmich.com/Employer/Work-Scenarios/Unfunded-Liability>).

Funded Ratio and Required Employer Contributions

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

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

Your Funded Ratio:

	12/31/2016	12/31/2015
Funded Ratio	66%	66%

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

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

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

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

Your Required Employer Contributions:

Your computed employer contributions are shown in the following table. Employee contributions, if any, are in addition to the computed employer contributions. Changes to the assumptions and methods based on the 2015 Experience Study were first reflected in the December 31, 2015 valuations. The impact of these changes is being phased-in over a 5 year period. The phase-in allows the employer to spread the impact of the new assumptions over 5 fiscal years. This valuation reflects the second year of the phase-in.

Your minimum required contribution is the amount in the "Phase-in" columns. By default, MERS will invoice you the phased-in contribution amount, but strongly encourages you to contribute more than the minimum required contribution. If for 2017 your municipality is making employer contributions based on rates without the phase-in applied, contact MERS to ensure this rate is used again for 2018 and not the defaulted phase-in rates.

	Percentage of Payroll				Monthly \$ Based on Projected Payroll			
	Phase-in	No Phase-in	Phase-in	No Phase-in	Phase-in	No Phase-in	Phase-in	No Phase-in
	Valuation Date: 12/31/2016	12/31/2016	12/31/2015	12/31/2015	12/31/2016	12/31/2016	12/31/2015	12/31/2015
Fiscal Year Beginning:	January 1, 2018	January 1, 2018	January 1, 2017	January 1, 2017	January 1, 2018	January 1, 2018	January 1, 2017	January 1, 2017
Division								
01 - Confidential	-	-	-	-	\$ 33,439	\$ 35,920	\$ 25,732	\$ 29,040
02 - Sheriff FOP Spvs	-	-	-	-	135,744	144,753	125,108	137,120
04 - MCF	-	-	-	-	0	1,236	949	4,749
06 - Tmts 243/Sup hired 1/1	-	-	-	25.93%	1,357	1,432	1,684	1,784
07 - Gnrl Hrly/AFSCME DB	-	-	-	-	53,474	57,287	49,363	54,447
09 - Judges	0.00%	0.00%	385.24%	385.24%	0	0	19,689	19,689
10 - Gnrl Mgmt	-	-	-	-	159,487	173,290	153,115	171,519
11 - Gnrl Library	-	-	-	-	0	0	14,077	16,253
12 - Gnrl ICEA Profs	-	-	-	-	97,525	109,465	88,137	104,057
13 - Gnrl OPEIU Prob	-	-	-	-	49,720	53,059	47,707	52,159
14 - Gnrl TOPS UAW	-	-	-	-	155,997	172,713	156,033	178,321
15 - Animal Cntrl FOP	-	-	-	-	14,364	15,384	13,538	14,898
16 - Gnrl Commsnrs	-	-	-	-	669	819	995	1,195
17 - ICEA Nurses	-	-	-	-	30,571	34,441	26,964	32,124
18 - ICEA Ct. Prof	-	-	-	-	40,197	44,352	39,065	44,605
19 - Cnstutnl Offcls	-	-	-	-	0	0	2,100	3,192
21 - FOP Shrf Deputies	-	-	-	-	77,758	85,858	79,514	90,314
22 - FOP 911 Non-Sup frmr E	-	-	-	-	8,322	8,727	8,562	9,102
23 - FOP Non-Sup (frm Lans	-	-	-	-	10,779	11,094	12,949	13,369
24 - Sheriff Deputies-MAP	-	-	-	-	43,325	45,965	39,063	42,583
40 - ICEA Unit 111	-	-	-	-	2,211	2,913	233	1,169
41 - MCF Management	-	-	-	-	2,648	4,142	715	2,707
42 - ICEA Unit 11	-	-	-	-	2,678	3,575	2,608	3,804
43 - ICEA Unit 1	-	-	-	-	506	1,148	1,335	2,191
44 - MCF Exec Mgr	-	-	-	-	1,783	2,245	785	1,401
70 - Admin Salaried	-	-	-	-	35,497	37,624	31,889	34,725
71 - Admin/Union/OPEIU	-	-	-	-	18,565	19,873	19,160	20,904
73 - Dept. Heads	-	-	-	-	17,986	19,096	17,830	19,310
74 - AFSCME Hired After 9/1	-	-	-	-	1,986	2,016	1,624	1,664

	Percentage of Payroll				Monthly \$ Based on Projected Payroll			
	Phase-in	No Phase-in	Phase-in	No Phase-in	Phase-in	No Phase-in	Phase-in	No Phase-in
	Valuation Date: 12/31/2016	12/31/2016	12/31/2015	12/31/2015	12/31/2016	12/31/2016	12/31/2015	12/31/2015
Fiscal Year Beginning:	January 1, 2018	January 1, 2018	January 1, 2017	January 1, 2017	January 1, 2018	January 1, 2018	January 1, 2017	January 1, 2017
Division								
75 - Adm/OPEIU Pro after 7/	-	-	-	-	223	223	216	216
76 - OPEIU Sup/Admin Sal af	-	-	-	-	153	165	659	675
90 - Asst Pros Attnys	-	-	-	-	43,303	46,711	40,868	45,412
91 - Parks Union Empl	-	-	-	-	1,109	1,298	1,255	1,507
92 - Parks Non Union	-	-	-	-	6,951	7,386	6,028	6,608
93 - Lgl Rsrch Clerks	-	-	-	-	0	0	0	0
94 - Zoo Hires after 7/1/07	-	-	-	-	3,004	3,094	3,246	3,366
95 - UAW Local 2256	2.52%	4.67%	5.42%	7.43%	317	587	972	1,332
96 - City Zoo Director	-	-	-	-	0	0	0	0
97 - Teamts 243 Spv (frm Ls	-	-	-	-	4,669	4,789	4,461	4,621
98 - MNA Nurses	-	-	-	-	16,332	18,861	18,000	21,372
99 - Team 243 Zoo Hired pr	-	-	-	-	0	0	0	0
HA - Elected Offcls after 1	4.97%	5.15%	4.89%	5.05%	1,187	1,229	1,674	1,730
HB - Commsnrs after 1/1/201	5.79%	6.02%	5.65%	5.94%	151	157	156	164
HC - GenMgt & Conf /Leg Res	5.41%	5.55%	5.25%	5.45%	20,415	20,940	18,301	19,001
HD - FOP 911 Non-Sup aft 1/	3.85%	3.87%	3.93%	3.96%	5,010	5,031	4,282	4,310
HE - Sheriff Dep MAP after	6.31%	6.34%	6.46%	6.51%	2,883	2,895	2,173	2,189
HF - TOPS UAW New Hires 3/1	5.78%	5.84%	5.67%	5.76%	30,538	30,850	26,678	27,094
HG - FOP Sher/Deputies as o	6.51%	6.53%	6.45%	6.47%	8,833	8,857	8,642	8,674
HI - Animal Control-FOP aft	4.38%	4.40%	5.02%	5.05%	1,327	1,333	1,239	1,247
HJ - Gen.ICEA Prof. after 1	5.90%	5.99%	6.07%	6.20%	14,454	14,673	13,676	13,968
HK - Asst.Pros.Attnys after	5.02%	5.03%	5.07%	5.08%	2,481	2,484	2,205	2,209
HL - ICEA P.H. Nurses after	5.50%	5.56%	5.44%	5.51%	2,895	2,925	3,020	3,060
HM - UAW Zoo New Hires as 5	5.34%	5.40%	5.37%	5.46%	1,291	1,306	1,133	1,153
HN - Gen OPEIU Prob after 1	5.35%	5.40%	5.35%	5.44%	1,223	1,235	997	1,013
HP - MNA Nurse Prac/Clinic	6.17%	6.30%	5.95%	6.12%	7,261	7,420	7,471	7,683
HQ - AFSCME Hired After 1/1	6.18%	6.22%	6.01%	6.09%	3,337	3,358	2,234	2,262
HR - Parks Union Emp after	5.85%	5.96%	5.89%	6.09%	627	639	467	483
HS - OPEIU Tech/Cler after	5.85%	5.85%			892	892		
HT - ICEA Court Prof after	5.95%	6.04%	6.11%	6.24%	3,676	3,733	3,448	3,524
HU - Team 243 Zoo Hires aft	6.41%	6.72%	6.14%	6.40%	494	518	766	798
Municipality Total					\$ 1,181,624	\$ 1,282,016	\$ 1,154,790	\$ 1,294,066

Employee contribution rates reflected in the valuations are shown below:

Valuation Date:	Employee Contribution Rate	
	12/31/2016	12/31/2015
Division		
01 - Confidential	6.56%	6.56%
02 - Sheriff FOP Spvs	19.61%	19.61%
04 - MCF	0.00%	0.00%
06 - Tmts 243/Sup hired 1/1	1.70%	1.70%
07 - Gnrl Hrly/AFSCME DB	1.20%	1.20%
09 - Judges	3.14%	3.14%
10 - Gnrl Mgmt	7.59%	7.59%

Valuation Date:	Employee Contribution Rate	
	12/31/2016	12/31/2015
Division		
11 - Gnrl Library	0.00%	0.00%
12 - Gnrl ICEA Profs	13.42%	13.42%
13 - Gnrl OPEIU Prob	9.71%	9.71%
14 - Gnrl TOPS UAW	4.82%	4.82%
15 - Animal Cntrl FOP	15.49%	15.49%
16 - Gnrl Commsnrs	4.76%	4.76%
17 - ICEA Nurses	11.87%	11.87%
18 - ICEA Ct. Prof	9.84%	9.84%
19 - Cnstatnl Offcls	9.66%	9.66%
21 - FOP Shrf Deputies	10.96%	10.96%
22 - FOP 911 Non-Sup frmr E	1.20%	1.20%
23 - FOP Non-Sup (frm Lansi	2.70%	2.70%
24 - Sheriff Deputies-MAP	12.16%	12.16%
40 - ICEA Unit 111	2.50%	2.50%
41 - MCF Management	0.00%	0.00%
42 - ICEA Unit 11	3.45%	3.45%
43 - ICEA Unit 1	3.51%	3.51%
44 - MCF Exec Mgr	0.00%	0.00%
70 - Admin Salaried	1.20%	1.20%
71 - Admin/Union/OPEIU	1.20%	1.20%
73 - Dept. Heads	1.20%	1.20%
74 - AFSCME Hired After 9/1	1.20%	1.20%
75 - Adm/OPEIU Pro after 7/	1.20%	1.20%
76 - OPEIU Sup/Admin Sal af	1.20%	1.20%
90 - Asst Pros Attnys	1.40%	1.40%
91 - Parks Union Empl	1.20%	1.20%
92 - Parks Non Union	1.20%	1.20%
93 - Lgl Rsrch Clerks	1.20%	1.20%
94 - Zoo Hires after 7/1/07	1.20%	1.20%
95 - UAW Local 2256	2.90%	2.90%
96 - City Zoo Director	3.50%	3.50%
97 - Teamts 243 Spv (frm Ls	1.70%	1.70%
98 - MNA Nurses	13.07%	13.07%
99 - Team 243 Zoo Hired pr	1.20%	1.20%
HA - Elected Offcls after 1	0.00%	0.00%
HB - Commsnrs after 1/1/201	0.00%	0.00%
HC - GenMgt & Conf /Leg Res	0.00%	0.00%
HD - FOP 911 Non-Sup aft 1/	0.00%	0.00%
HE - Sheriff Dep MAP after	0.00%	0.00%
HF - TOPS UAW New Hires 3/1	0.00%	0.00%
HG - FOP Sher/Deputies as o	0.00%	0.00%
HI - Animal Control-FOP aft	0.00%	0.00%
HJ - Gen.ICEA Prof. after 1	0.00%	0.00%
HK - Asst.Pros.Attnys after	0.00%	0.00%

Valuation Date:	Employee Contribution Rate	
	12/31/2016	12/31/2015
Division		
HL - ICEA P.H. Nurses after	0.00%	0.00%
HM - UAW Zoo New Hires as 5	0.00%	0.00%
HN - Gen OPEIU Prob after 1	0.00%	0.00%
HP - MNA Nurse Prac/Clinic	0.00%	0.00%
HQ - AFSCME Hired After 1/1	0.00%	0.00%
HR - Parks Union Emp after	0.00%	0.00%
HS - OPEIU Tech/Cler after	0.00%	0.00%
HT - ICEA Court Prof after	0.00%	0.00%
HU - Team 243 Zoo Hires aft	0.00%	0.00%

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 \$ 1,993,341, instead of \$ 1,282,016.
- To accelerate to a 100% funding ratio in 20 years, estimated monthly employer contributions for the entire employer would be \$ 1,347,159, instead of \$ 1,282,016.

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

How and Why Do These Numbers Change?

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

- Changes in benefit provisions (see Table 2)
- Changes in actuarial assumptions and methods (see the [Appendix](#))
- Experience of the plan (investment experience and demographic experience); this is the difference between actual experience of the plan and the actuarial assumptions. For example:
 - o Lower actual investment returns would result in higher required employer contributions, and vice-versa.
 - o Smaller than assumed pay increases would lower required employer contributions.
 - o Reductions in the number of active employees would lower required contribution dollars, but would usually increase the contribution rate expressed as a percentage of (the now lower) payroll.

- o Retirements at earlier ages than assumed would usually increase required employer contributions.
- o More non-vested terminations of employment than assumed would decrease required contributions.
- o More disabilities or survivor (death) benefits than assumed would increase required contributions.
- o Longer lifetimes after retirement than assumed would increase required employer contributions.

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

Comments on 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 2016 was 5.14%.

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

If the December 31, 2016 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 62% (instead of 66%); and ii) your total employer contribution requirement for the fiscal year starting January 1, 2018 would be \$ 17,061,924 (instead of \$ 15,384,192).

The asset smoothing method is a powerful tool for reducing the volatility of your required employer contributions. **However, if the current 8% 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 Defined Benefit retirement plans, the plan sponsor, and the plan participants are exposed to certain risks. While risks cannot be eliminated entirely, they can be managed through various strategies. Below are a few examples of risk (this is not an all-inclusive list):

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

The MERS Retirement Board adopts certain assumptions and methods to manage the economic and demographic risks, and the contribution volatility risks. For example, the investment risk is the largest economic risk and is managed by having a balanced portfolio and a clearly defined investment strategy. Demographic risks are managed by preparing special studies called experience studies on a regular basis to determine if the assumptions used are reasonable compared to the experience. Risk may be managed 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. 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, 2016 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 Investment Return			
	Lower Future Annual Returns		Valuation Assumption	Higher Returns
	5.75%	6.75%	7.75%	8.75%
12/31/2016 Valuation Results				
Accrued Liability	\$ 571,669,031	\$ 510,003,702	\$ 458,447,084	\$ 415,013,937
Valuation Assets	\$ 303,682,816	\$ 303,682,816	\$ 303,682,816	\$ 303,682,816
Unfunded Accrued Liability	\$ 267,986,215	\$ 206,320,886	\$ 154,764,268	\$ 111,331,121
Funded Ratio	53%	60%	66%	73%
Monthly Normal Cost	\$ 771,094	\$ 563,145	\$ 403,867	\$ 281,065
Monthly Amortization Payment	\$ 1,340,673	\$ 1,105,558	\$ 876,289	\$ 694,605
Total Employer Contribution¹	\$ 2,114,859	\$ 1,674,466	\$ 1,282,016	\$ 975,670

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

Projection Scenarios

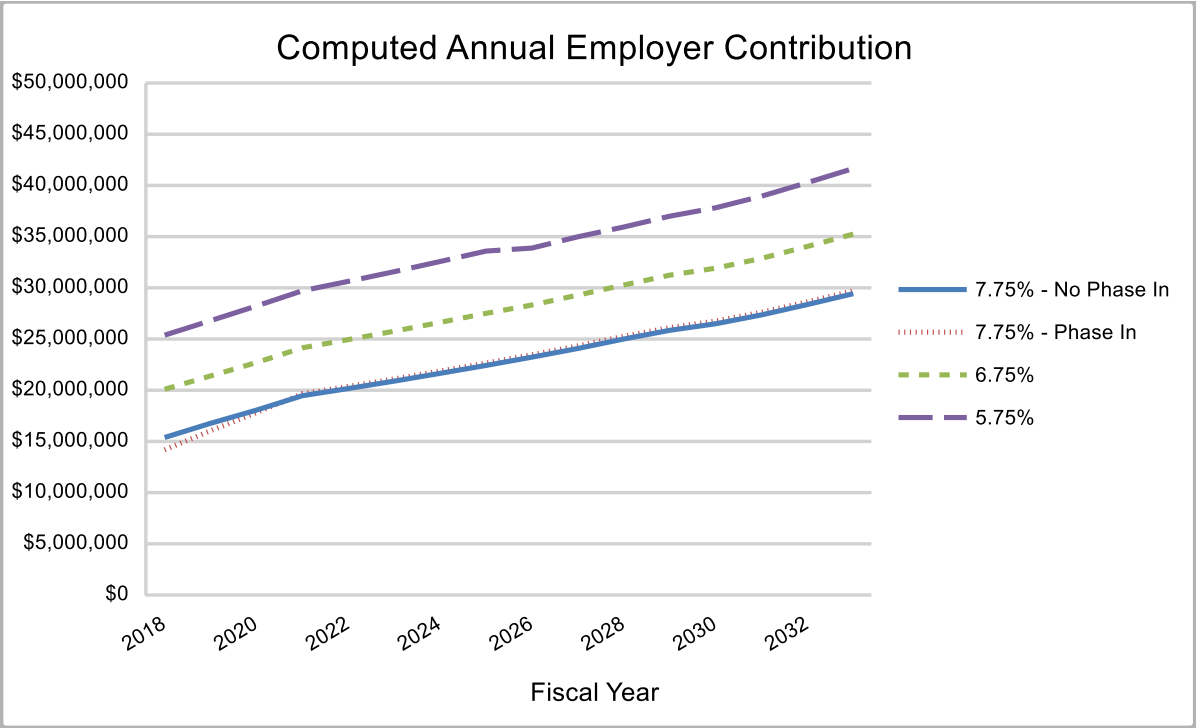
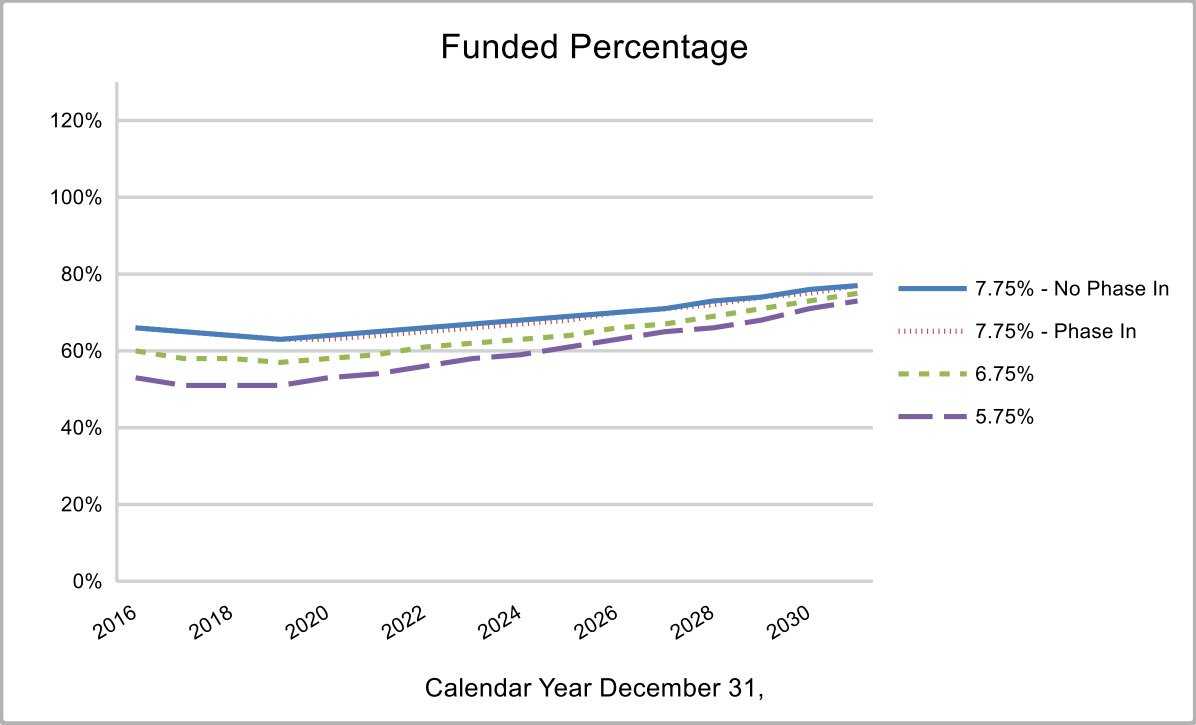
The next two pages show projections of the plan's funded ratio and computed employer contributions under the actuarial assumptions used in the valuation and alternate assumed long-term investment return scenarios. All four projections take into account the past investment losses that will continue to affect the smoothed rate of return in the short term. 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.

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

Valuation Year Ending 12/31	Fiscal Year Beginning 1/1	Actuarial Accrued Liability	Valuation Assets	Funded Percentage	Computed Annual Employer Contribution
7.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return					
WITH 5-YEAR PHASE-IN					
2016	2018	\$ 458,447,084	\$ 303,682,816	66%	\$ 14,179,488
2017	2019	472,600,000	307,000,000	65%	16,000,000
2018	2020	487,600,000	310,700,000	64%	17,800,000
2019	2021	502,100,000	313,900,000	63%	19,700,000
2020	2022	515,900,000	326,300,000	63%	20,400,000
2021	2023	529,100,000	339,600,000	64%	21,100,000
NO 5-YEAR PHASE-IN					
2016	2018	\$ 458,447,084	\$ 303,682,816	66%	\$ 15,384,192
2017	2019	472,600,000	307,000,000	65%	16,800,000
2018	2020	487,600,000	312,000,000	64%	18,100,000
2019	2021	502,100,000	316,000,000	63%	19,500,000
2020	2022	515,900,000	328,800,000	64%	20,200,000
2021	2023	529,100,000	342,100,000	65%	20,900,000
6.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return					
NO 5-YEAR PHASE-IN					
2016	2018	\$ 510,003,702	\$ 303,682,816	60%	\$ 20,093,592
2017	2019	525,100,000	304,100,000	58%	21,400,000
2018	2020	541,100,000	311,000,000	58%	22,700,000
2019	2021	556,400,000	316,800,000	57%	24,100,000
2020	2022	571,000,000	331,400,000	58%	24,900,000
2021	2023	584,900,000	346,500,000	59%	25,800,000
5.75% Assumed Interest Discount Rate and Future Annual Market Rate of Return					
NO 5-YEAR PHASE-IN					
2016	2018	\$ 571,669,031	\$ 303,682,816	53%	\$ 25,378,308
2017	2019	588,000,000	301,100,000	51%	26,800,000
2018	2020	605,000,000	310,500,000	51%	28,200,000
2019	2021	621,200,000	319,000,000	51%	29,700,000
2020	2022	636,700,000	336,300,000	53%	30,600,000
2021	2023	651,300,000	354,100,000	54%	31,600,000



Employer Contribution Details For the Fiscal Year Beginning January 1, 2018

Table 1

Division	Employer Contributions ¹			Computed Employer Contribut. With Phase-In	Blended ER Rate No Phase-In ⁵	Blended ER Rate With Phase-In ⁵	Employee Contribut. Rate	Employee Contribut. Conversion Factor ²
	Normal Cost	Payment of the Unfunded Accrued Liability ⁴	Computed Employer Contribut. No Phase-In					
Percentage of Payroll								
01 - Confidential	-	-	-	-	25.91%	24.04%	6.56%	
02 - Sheriff FOP Spvs	-	-	-	-			19.61%	
04 - MCF	-	-	-	-			0.00%	
06 - Tmts 243/Sup hired	-	-	-	-			1.70%	
07 - Gnrl Hrly/AFSCME D	-	-	-	-	26.42%	24.79%	1.20%	
09 - Judges	11.16%	-48.95%	0.00%	0.00%			3.14%	0.85%
10 - Gnrl Mgmt	-	-	-	-	25.91%	24.04%	7.59%	
11 - Gnrl Library	-	-	-	-			0.00%	
12 - Gnrl ICEA Profs	-	-	-	-	19.25%	17.37%	13.42%	
13 - Gnrl OPEIU Prob	-	-	-	-	31.67%	29.71%	9.71%	
14 - Gnrl TOPS UAW	-	-	-	-	15.73%	14.41%	4.82%	
15 - Animal Cntrl FOP	-	-	-	-	36.47%	34.23%	15.49%	
16 - Gnrl Commsnrs	-	-	-	-	10.05%	8.44%	4.76%	
17 - ICEA Nurses	-	-	-	-	37.94%	33.98%	11.87%	
18 - ICEA Ct. Prof	-	-	-	-	23.01%	20.99%	9.84%	
19 - Cnstutnl Offcls	-	-	-	-	0.00%	0.00%	9.66%	
21 - FOP Shrf Deputies	-	-	-	-	26.30%	24.04%	10.96%	
22 - FOP 911 Non-Sup fr	-	-	-	-	8.43%	8.18%	1.20%	
23 - FOP Non-Sup (frm L	-	-	-	-	8.43%	8.18%	2.70%	
24 - Sheriff Deputies-M	-	-	-	-	16.36%	15.47%	12.16%	
40 - ICEA Unit 111	-	-	-	-			2.50%	
41 - MCF Management	-	-	-	-			0.00%	
42 - ICEA Unit 11	-	-	-	-			3.45%	
43 - ICEA Unit 1	-	-	-	-			3.51%	
44 - MCF Exec Mgr	-	-	-	-			0.00%	

Table 1 (continued)

Division	Employer Contributions ¹			Computed Employer Contribut. With Phase-In	Blended ER Rate No Phase-In ⁵	Blended ER Rate With Phase-In ⁵	Employee Contribut. Rate	Employee Contribut. Conversion Factor ²
	Normal Cost	Payment of the Unfunded Accrued Liability ⁴	Computed Employer Contribut. No Phase-In					
70 - Admin Salaried	-	-	-	-	-	-	1.20%	
71 - Admin/Union/OPEIU	-	-	-	-	36.07%	33.82%	1.20%	
73 - Dept. Heads	-	-	-	-	25.91%	24.04%	1.20%	
74 - AFSCME Hired After	-	-	-	-	26.42%	24.79%	1.20%	
75 - Adm/OPEIU Pro afte	-	-	-	-	36.07%	33.82%	1.20%	
76 - OPEIU Sup/Admin Sa	-	-	-	-	-	-	1.20%	
90 - Asst Pros Attnys	-	-	-	-	22.48%	20.92%	1.40%	
91 - Parks Union Empl	-	-	-	-	8.08%	7.25%	1.20%	
92 - Parks Non Union	-	-	-	-	-	-	1.20%	
93 - Lgl Rsrch Clerks	-	-	-	-	25.91%	24.04%	1.20%	
94 - Zoo Hires after 7/	-	-	-	-	7.45%	7.27%	1.20%	
95 - UAW Local 2256	15.89%	-11.22%	4.67%	2.52%	-	-	2.90%	0.88%
96 - City Zoo Director	-	-	-	-	-	-	3.50%	
97 - Teamts 243 Spv (fr	-	-	-	-	-	-	1.70%	
98 - MNA Nurses	-	-	-	-	10.38%	9.32%	13.07%	
99 - Team 243 Zoo Hired	-	-	-	-	0.00%	0.00%	1.20%	
HA - Elected Offcls aft	4.97%	0.18%	5.15%	4.97%	0.00%	0.00%	0.00%	0.86%
HB - Commsnrs after 1/1	5.90%	0.12%	6.02%	5.79%	10.05%	8.44%	0.00%	0.81%
HC - GenMgt & Conf /Leg	5.50%	0.05%	5.55%	5.41%	25.91%	24.04%	0.00%	0.88%
HD - FOP 911 Non-Sup af	3.96%	-0.09%	3.87%	3.85%	8.43%	8.18%	0.00%	0.94%
HE - Sheriff Dep MAP af	6.62%	-0.28%	6.34%	6.31%	16.36%	15.47%	0.00%	0.91%
HF - TOPS UAW New Hires	5.89%	-0.05%	5.84%	5.78%	15.73%	14.41%	0.00%	0.90%
HG - FOP Sher/Deputies	6.46%	0.07%	6.53%	6.51%	26.30%	24.04%	0.00%	0.92%
HI - Animal Control-FOP	4.54%	-0.14%	4.40%	4.38%	36.47%	34.23%	0.00%	0.94%
HJ - Gen.ICEA Prof. aft	5.82%	0.17%	5.99%	5.90%	19.25%	17.37%	0.00%	0.91%
HK - Asst.Pros.Attnys a	5.08%	-0.05%	5.03%	5.02%	22.48%	20.92%	0.00%	0.92%
HL - ICEA P.H. Nurses a	5.47%	0.09%	5.56%	5.50%	37.94%	33.98%	0.00%	0.94%
HM - UAW Zoo New Hires	5.27%	0.13%	5.40%	5.34%	7.45%	7.27%	0.00%	0.93%
HN - Gen OPEIU Prob aft	5.32%	0.08%	5.40%	5.35%	31.67%	29.71%	0.00%	0.90%
HP - MNA Nurse Prac/Cli	6.38%	-0.08%	6.30%	6.17%	10.38%	9.32%	0.00%	0.86%

Table 1 (continued)

Division	Employer Contributions ¹			Computed Employer Contribut. With Phase-In	Blended ER Rate No Phase-In ⁵	Blended ER Rate With Phase-In ⁵	Employee Contribut. Rate	Employee Contribut. Conversion Factor ²
	Normal Cost	Payment of the Unfunded Accrued Liability ⁴	Computed Employer Contribut. No Phase-In					
HQ - AFSCME Hired After	6.23%	-0.01%	6.22%	6.18%	26.42%	24.79%	0.00%	0.86%
HR - Parks Union Emp af	5.76%	0.20%	5.96%	5.85%	8.08%	7.25%	0.00%	0.87%
HS - OPEIU Tech/Cler af	5.70%	0.15%	5.85%	5.85%	36.07%	33.82%	0.00%	0.89%
HT - ICEA Court Prof af	5.91%	0.13%	6.04%	5.95%	23.01%	20.99%	0.00%	0.89%
HU - Team 243 Zoo Hires	7.08%	-0.36%	6.72%	6.41%	0.00%	0.00%	0.00%	0.80%
Estimated Monthly Contribution³								
01 - Confidential	\$ 9,005	\$ 26,915	\$ 35,920	\$ 33,439				
02 - Sheriff FOP Spvs	1,993	142,760	144,753	135,744				
04 - MCF	20,164	(18,928)	1,236	0				
06 - Tmts 243/Sup hired	0	1,432	1,432	1,357				
07 - Gnrl Hrly/AFSCME D	16,610	40,677	57,287	53,474				
09 - Judges	549	(2,409)	0	0				
10 - Gnrl Mgmt	30,500	142,790	173,290	159,487				
11 - Gnrl Library	0	0	0	0				
12 - Gnrl ICEA Profs	16,374	93,091	109,465	97,525				
13 - Gnrl OPEIU Prob	6,120	46,939	53,059	49,720				
14 - Gnrl TOPS UAW	60,774	111,939	172,713	155,997				
15 - Animal Cntrl FOP	640	14,744	15,384	14,364				
16 - Gnrl Commsnrs	383	436	819	669				
17 - ICEA Nurses	1,972	32,469	34,441	30,571				
18 - ICEA Ct. Prof	7,404	36,948	44,352	40,197				
19 - Cnstutnl Offcls	418	(418)	0	0				
21 - FOP Shrf Deputies	14,370	71,488	85,858	77,758				
22 - FOP 911 Non-Sup fr	5,649	3,078	8,727	8,322				
23 - FOP Non-Sup (frm L	8,882	2,212	11,094	10,779				
24 - Sheriff Deputies-M	13,840	32,125	45,965	43,325				
40 - ICEA Unit 111	7,046	(4,133)	2,913	2,211				
41 - MCF Management	9,977	(5,835)	4,142	2,648				
42 - ICEA Unit 11	5,765	(2,190)	3,575	2,678				

Table 1 (continued)

Division	Employer Contributions ¹			Computed Employer Contribut. With Phase-In	Blended ER Rate No Phase-In ⁵	Blended ER Rate With Phase-In ⁵	Employee Contribut. Rate	Employee Contribut. Conversion Factor ²
	Normal Cost	Payment of the Unfunded Accrued Liability ⁴	Computed Employer Contribut. No Phase-In					
43 - ICEA Unit 1	2,790	(1,642)	1,148	506				
44 - MCF Exec Mgr	2,309	(64)	2,245	1,783				
70 - Admin Salaried	3,124	34,500	37,624	35,497				
71 - Admin/Union/OPEIU	5,025	14,848	19,873	18,565				
73 - Dept. Heads	3,604	15,492	19,096	17,986				
74 - AFSCME Hired After	1,727	289	2,016	1,986				
75 - Adm/OPEIU Pro afte	197	26	223	223				
76 - OPEIU Sup/Admin Sa	277	(112)	165	153				
90 - Asst Pros Attnys	18,624	28,087	46,711	43,303				
91 - Parks Union Empl	1,048	250	1,298	1,109				
92 - Parks Non Union	0	7,386	7,386	6,951				
93 - Lgl Rsrch Clerks	1,178	(1,178)	0	0				
94 - Zoo Hires after 7/	2,287	807	3,094	3,004				
95 - UAW Local 2256	1,997	(1,410)	587	317				
96 - City Zoo Director	0	0	0	0				
97 - Teamts 243 Spv (fr	3,376	1,413	4,789	4,669				
98 - MNA Nurses	6,533	12,328	18,861	16,332				
99 - Team 243 Zoo Hired	1,111	(1,111)	0	0				
HA - Elected Offcls aft	1,186	43	1,229	1,187				
HB - Commsnrs after 1/1	154	3	157	151				
HC - GenMgt & Conf /Leg	20,765	175	20,940	20,415				
HD - FOP 911 Non-Sup af	5,145	(114)	5,031	5,010				
HE - Sheriff Dep MAP af	3,025	(130)	2,895	2,883				
HF - TOPS UAW New Hires	31,118	(268)	30,850	30,538				
HG - FOP Sher/Deputies	8,762	95	8,857	8,833				
HI - Animal Control-FOP	1,376	(43)	1,333	1,327				
HJ - Gen.ICEA Prof. aft	14,246	427	14,673	14,454				
HK - Asst.Pros.Attnys a	2,508	(24)	2,484	2,481				
HL - ICEA P.H. Nurses a	2,879	46	2,925	2,895				
HM - UAW Zoo New Hires	1,275	31	1,306	1,291				

Table 1 (continued)

Division	Employer Contributions ¹			Computed Employer Contribut. With Phase-In	Blended ER Rate No Phase-In ⁵	Blended ER Rate With Phase-In ⁵	Employee Contribut. Rate	Employee Contribut. Conversion Factor ²
	Normal Cost	Payment of the Unfunded Accrued Liability ⁴	Computed Employer Contribut. No Phase-In					
HN - Gen OPEIU Prob aft	1,217	18	1,235	1,223				
HP - MNA Nurse Prac/Cli	7,520	(100)	7,420	7,261				
HQ - AFSCME Hired After	3,364	(6)	3,358	3,337				
HR - Parks Union Emp af	618	21	639	627				
HS - OPEIU Tech/Cler af	869	23	892	892				
HT - ICEA Court Prof af	3,652	81	3,733	3,676				
HU - Team 243 Zoo Hires	546	(28)	518	494				
Total Municipality	\$ 403,867	\$ 876,289	\$ 1,282,016	\$ 1,181,624				
Estimated Annual Contribution³	\$ 4,846,404	\$ 10,515,468	\$ 15,384,192	\$ 14,179,488				

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

² If employee contributions are increased/decreased by 1.00% of pay, the employer contribution requirement will decrease/increase by the Employee Contribution Conversion Factor. The conversion factor is usually under 1%, because employee contributions may be refunded at termination of employment, and not used to fund retirement pensions. Employer contributions will all be used to fund pensions.

³ For divisions that are open to new hires, estimated contributions are based on projected fiscal year payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts. For divisions that will have no new hires (ie closed divisions), invoices will be based on the above dollar amounts which are based on projected fiscal year payroll. See description of Open Divisions and Closed Divisions in the [Appendix](#).

⁴ If projected assets exceed projected liabilities as of the beginning of the January 1, 2018 fiscal year, the negative unfunded accrued liability is treated as overfunding credit and is used to reduce the contribution. This amortization is used to reduce the employer contribution rate. Note that if the overfunding credit is larger than the normal cost, the full credit is shown above but the total contribution requirement is zero. This will cause the displayed normal cost and unfunded accrued liability contributions to not add across.

⁵ For linked divisions, the employer will be invoiced the Computed Employer Contribution with Phase-in rate shown above for each linked division (a contribution rate for the open division; a contribution dollar for the closed-but-linked division), unless the employer elects to contribute the Blended Employer Contribution rate shown above, by contacting MERS at 800-767-2308.

Please see the Comments on Asset Smoothing in the Executive Summary of this report.

Benefit Provisions

Table 2

01 - Confidentials: Closed to new hires, linked to Division HC

	2016 Valuation	2015 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):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	3 years	3 years
Employee Contributions:	6.56%	6.56%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

02 - Sheriff FOP Spvs: Closed to new hires, linked to Division HO

	2016 Valuation	2015 Valuation
Benefit Multiplier:	3.20% Multiplier (80% max)	3.20% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/15	55/15
	25 and Out	25 and Out
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	19.61%	19.61%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

04 - MCF: Closed to new hires

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Svc x (1.20% times FAC<\$4,200, plus 1.70% times FAC>\$4,200)	Svc x (1.20% times FAC<\$4,200, plus 1.70% 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:	0%	0%
DC Plan for New Hires:	1/1/2014	1/1/2014
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

06 - Tmts 243/Sup hired 1/1/09: Closed to new hires		
	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.8% for first 12 yrs 9 months, 1.8% for next 8 yrs 5 months; 2.0% for svc after 12/31/2012 (No max)	2.8% for first 12 yrs 9 months, 1.8% for next 8 yrs 5 months; 2.0% for svc after 12/31/2012 (No max)
Normal Retirement Age:	58	58
Vesting:	8 years	8 years
Early Retirement (Unreduced):	50/25	50/25
	58/8	58/8
Early Retirement (Reduced):	55/15	55/15
Final Average Compensation:	2 years	2 years
Employee Contributions:	1.70%	1.70%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)
07 - Gnrl Hrly/AFSCME DB: Closed to new hires, linked to Division HQ		
	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	8 years	8 years
Early Retirement (Unreduced):	55/20	55/20
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	3 years	3 years
Employee Contributions:	1.20%	1.20%
Act 88:	Yes (Adopted 4/3/1986)	Yes (Adopted 4/3/1986)
09 - Judges: Open Division		
	2016 Valuation	2015 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):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	5 years	5 years
Employee Contributions:	3.14%	3.14%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)
10 - Gnrl Mgmt: Closed to new hires, linked to Division HC		
	2016 Valuation	2015 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):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	3 years	3 years
Employee Contributions:	7.59%	7.59%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

11 - Gnrl Library: Closed to new hires		
	2016 Valuation	2015 Valuation
Benefit Multiplier:	Svc x (1.20% times FAC<\$4,200, plus 1.70% times FAC>\$4,200)	Svc x (1.20% times FAC<\$4,200, plus 1.70% times FAC>\$4,200)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	50/25 55/15	50/25 55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)
12 - Gnrl ICEA Profs: Closed to new hires, linked to Division HJ		
	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	5 years	5 years
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	13.42%	13.42%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)
13 - Gnrl OPEIU Prob: Closed to new hires, linked to Division HN		
	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	3 years	3 years
Employee Contributions:	9.71%	9.71%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)
14 - Gnrl TOPS UAW: Closed to new hires, linked to Division HF		
	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	5 years	5 years
Employee Contributions:	4.82%	4.82%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

15 - Animal Cntrl FOP: Closed to new hires, linked to Division HI

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/15 25 and Out	55/15 25 and Out
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	15.49%	15.49%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

16 - Gnrl Commsnrs: Closed to new hires, linked to Division HB

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.00% to Social Security Age (no max); 1.70% after SS Age (no max)	2.00% to Social Security Age (no max); 1.70% after SS Age (no max)
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	5 years	5 years
Employee Contributions:	4.76%	4.76%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

17 - ICEA Nurses: Closed to new hires, linked to Division HL

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.25% Multiplier (80% max)	2.25% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	3 years	3 years
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	11.87%	11.87%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

18 - ICEA Ct. Prof: Closed to new hires, linked to Division HT

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.25% Multiplier (80% max)	2.25% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/15 20 and Out	55/15 20 and Out
Early Retirement (Reduced):	-	-
Final Average Compensation:	5 years	5 years
Employee Contributions:	9.84%	9.84%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

19 - Cnstutnl Offcls: Closed to new hires, linked to Division HA

	2016 Valuation	2015 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):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	3 years	3 years
Employee Contributions:	9.66%	9.66%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

21 - FOP Shrf Deputies: Closed to new hires, linked to Division HG

	2016 Valuation	2015 Valuation
Benefit Multiplier:	3.20% Multiplier (80% max)	3.20% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/15 25 and Out	55/15 25 and Out
Early Retirement (Reduced):	-	-
Final Average Compensation:	5 years	5 years
Employee Contributions:	10.96%	10.96%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

22 - FOP 911 Non-Sup frmr E.L: Closed to new hires, linked to Division HD

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	50/25	50/25
Early Retirement (Reduced):	55/15	55/15
Final Average Compensation:	3 years	3 years
Employee Contributions:	1.20%	1.20%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

23 - FOP Non-Sup (frm Lansing: Closed to new hires, linked to Division HD)

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Bridged Benefit: 1.60% Multiplier (no max) Termination FAC; to 2.00% Multiplier (no max)	Bridged Benefit: 1.60% Multiplier (no max) Termination FAC; to 2.00% Multiplier (no max)
Bridged Benefit Date:	12/31/2012	12/31/2012
Normal Retirement Age:	58	58
Vesting:	8 years	8 years
Early Retirement (Unreduced):	50/25	50/25
Early Retirement (Reduced):	55/15	55/15
Final Average Compensation:	2 years	2 years
Employee Contributions:	2.70%	2.70%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

24 - Sheriff Deputies-MAP: Closed to new hires, linked to Division HE

	2016 Valuation	2015 Valuation
Benefit Multiplier:	3.20% Multiplier (80% max)	3.20% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/15 25 and Out	55/15 25 and Out
Early Retirement (Reduced):	-	-
Final Average Compensation:	5 years	5 years
Employee Contributions:	12.16%	12.16%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

40 - ICEA Unit 111: Closed to new hires

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.00% to Social Security Age (no max); 1.70% after SS Age (no max)	2.00% to Social Security Age (no max); 1.70% after SS Age (no max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	5 years	5 years
Employee Contributions:	2.50%	2.50%
DC Plan for New Hires:	1/1/2014	1/1/2014
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

41 - MCF Management: Closed to new hires		
	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.00% to Social Security Age (no max); 1.70% after SS Age (no max)	2.00% to Social Security Age (no max); 1.70% after SS Age (no max)
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	5 years	5 years
Employee Contributions:	0%	0%
DC Plan for New Hires:	1/1/2014	1/1/2014
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

42 - ICEA Unit 11: Closed to new hires		
	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.00% to Social Security Age (no max); 1.70% after SS Age (no max)	2.00% to Social Security Age (no max); 1.70% after SS Age (no max)
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	3 years	3 years
Employee Contributions:	3.45%	3.45%
DC Plan for New Hires:	1/1/2014	1/1/2014
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

43 - ICEA Unit 1: Closed to new hires		
	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.00% to Social Security Age (no max); 1.70% after SS Age (no max)	2.00% to Social Security Age (no max); 1.70% after SS Age (no max)
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	5 years	5 years
Employee Contributions:	3.51%	3.51%
DC Plan for New Hires:	1/1/2014	1/1/2014
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

44 - MCF Exec Mgr: Closed to new hires

	2016 Valuation	2015 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):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	3 years	3 years
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	0%	0%
DC Plan for New Hires:	1/1/2014	1/1/2014
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

70 - Admin Salaried: Closed to new hires, linked to Division HV

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	8 years	8 years
Early Retirement (Unreduced):	55/20	55/20
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	3 years	3 years
Employee Contributions:	1.20%	1.20%
Act 88:	Yes (Adopted 4/3/1986)	Yes (Adopted 4/3/1986)

71 - Admin/Union/OPEIU: Closed to new hires, linked to Division HS

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	8 years	8 years
Early Retirement (Unreduced):	55/20	55/20
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	3 years	3 years
Employee Contributions:	1.20%	1.20%
Act 88:	Yes (Adopted 4/3/1986)	Yes (Adopted 4/3/1986)

Table 2 (continued)

73 - Dept. Heads: Closed to new hires, linked to Division HC		
	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	8 years	8 years
Early Retirement (Unreduced):	55/20	55/20
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	3 years	3 years
Employee Contributions:	1.20%	1.20%
Act 88:	Yes (Adopted 4/3/1986)	Yes (Adopted 4/3/1986)
74 - AFSCME Hired After 9/19/2011: Closed to new hires, linked to Division HQ		
	2016 Valuation	2015 Valuation
Benefit Multiplier:	1.50% Multiplier (no max)	1.50% Multiplier (no max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	1.20%	1.20%
Act 88:	Yes (Adopted 4/3/1986)	Yes (Adopted 4/3/1986)
75 - Adm/OPEIU Pro after 7/1/2011: Closed to new hires, linked to Division HS		
	2016 Valuation	2015 Valuation
Benefit Multiplier:	1.50% Multiplier (no max)	1.50% Multiplier (no max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	1.20%	1.20%
Act 88:	Yes (Adopted 4/3/1986)	Yes (Adopted 4/3/1986)
76 - OPEIU Sup/Admin Sal aft 7/1/11: Closed to new hires, linked to Division HV		
	2016 Valuation	2015 Valuation
Benefit Multiplier:	1.50% Multiplier (no max)	1.50% Multiplier (no max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	1.20%	1.20%
Act 88:	Yes (Adopted 4/3/1986)	Yes (Adopted 4/3/1986)

Table 2 (continued)

90 - Asst Pros Attnys: Closed to new hires, linked to Division HK

	2016 Valuation	2015 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):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	5 years	5 years
Employee Contributions:	1.40%	1.40%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

91 - Parks Union Empl: Closed to new hires, linked to Division HR

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.25% Multiplier (80% max)	2.25% Multiplier (80% max)
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:	1.20%	1.20%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

92 - Parks Non Union: Closed to new hires

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.50% Multiplier (80% max)	2.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/25	55/25
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	3 years	3 years
Employee Contributions:	1.20%	1.20%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

93 - Lgl Rsrch Clerks: Closed to new hires, linked to Division HC

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Svc x (1.20% times FAC<\$4,200, plus 1.70% times FAC>\$4,200)	Svc x (1.20% times FAC<\$4,200, plus 1.70% 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:	1.20%	1.20%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

94 - Zoo Hires after 7/1/07: Closed to new hires, linked to Division HM

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.00% Multiplier (no max)	2.00% Multiplier (no max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	50/25 55/15	50/25 55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	1.20%	1.20%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

95 - UAW Local 2256: Open Division

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.80% Multiplier for Svc < 35 yrs, 1.50% for Svc > 35 yrs (100% max)	2.80% Multiplier for Svc < 35 yrs, 1.50% for Svc > 35 yrs (100% max)
Normal Retirement Age:	58	58
Vesting:	8 years	8 years
Early Retirement (Unreduced):	Rule of 65	Rule of 65
Early Retirement (Reduced):	-	-
Final Average Compensation:	2 years	2 years
Employee Contributions:	2.90%	2.90%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

96 - City Zoo Director: Closed to new hires

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.80% Multiplier for Svc < 35 yrs, 1.50% for Svc > 35 yrs (100% max)	2.80% Multiplier for Svc < 35 yrs, 1.50% for Svc > 35 yrs (100% max)
Normal Retirement Age:	58	58
Vesting:	8 years	8 years
Early Retirement (Unreduced):	Rule of 65	Rule of 65
Early Retirement (Reduced):	-	-
Final Average Compensation:	2 years	2 years
Employee Contributions:	3.50%	3.50%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

97 - Teamts 243 Spv (frm Lsg): Closed to new hires, linked to Division HH

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Bridged Benefit: 1.80% Multiplier (no max) Termination FAC; to 2.00% Multiplier (no max)	Bridged Benefit: 1.80% Multiplier (no max) Termination FAC; to 2.00% Multiplier (no max)
Bridged Benefit Date:	12/31/2012	12/31/2012
Normal Retirement Age:	58	58
Vesting:	8 years	8 years
Early Retirement (Unreduced):	50/25	50/25
Early Retirement (Reduced):	55/15	55/15
Final Average Compensation:	2 years	2 years
Employee Contributions:	1.70%	1.70%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

98 - MNA Nurses: Closed to new hires, linked to Division HP

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.25% Multiplier (80% max)	2.25% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	55/15	55/15
Early Retirement (Reduced):	50/25	50/25
Final Average Compensation:	3 years	3 years
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	13.07%	13.07%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

99 - Team 243 Zoo Hired pr 4/1/13: Closed to new hires, linked to Division HU

	2016 Valuation	2015 Valuation
Benefit Multiplier:	2.00% Multiplier (80% max)	2.00% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	8 years	8 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	50/25 55/15	50/25 55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	1.20%	1.20%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

HA - Elected Offcls after 1/1/2013: Open Division, linked to Division 19

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.00% Multiplier	Hybrid Plan - 1.00% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1968)	Yes (Adopted 9/29/1968)

HB - Commsnrs after 1/1/2013: Open Division, linked to Division 16

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.00% Multiplier	Hybrid Plan - 1.00% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

HC - GenMgt & Conf /Leg Res af 1/1/2015: Open Division, linked to Division 01, 10, 73, 93

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.00% Multiplier	Hybrid Plan - 1.00% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

HD - FOP 911 Non-Sup aft 1/1/13: Open Division, linked to Division 22, 23

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.00% Multiplier	Hybrid Plan - 1.00% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

HE - Sheriff Dep MAP after 1/1/13: Open Division, linked to Division 24

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.50% Multiplier	Hybrid Plan - 1.50% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	55/25	55/25
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

HF - TOPS UAW New Hires 3/1/13 : Open Division, linked to Division 14

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.25% Multiplier	Hybrid Plan - 1.25% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

HG - FOP Sher/Deputies as of 1/1/13: Open Division, linked to Division 21

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.50% Multiplier	Hybrid Plan - 1.50% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	55/25	55/25
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

HI - Animal Control-FOP aft 4/1/13: Open Division, linked to Division 15

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.25% Multiplier	Hybrid Plan - 1.25% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

HJ - Gen.ICEA Prof. after 1/1/2013: Open Division, linked to Division 12

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.25% Multiplier	Hybrid Plan - 1.25% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

HK - Asst.Pros.Attnys after 4/1/13: Open Division, linked to Division 90

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.25% Multiplier	Hybrid Plan - 1.25% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

HL - ICEA P.H. Nurses after 4/1/13 : Open Division, linked to Division 17

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.25% Multiplier	Hybrid Plan - 1.25% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

HM - UAW Zoo New Hires as 5/1/13: Open Division, linked to Division 94

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.25% Multiplier	Hybrid Plan - 1.25% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

HN - Gen OPEIU Prob after 1/1/13: Open Division, linked to Division 13

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.25% Multiplier	Hybrid Plan - 1.25% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

HP - MNA Nurse Prac/Clinic 1/1/14: Open Division, linked to Division 98

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.25% Multiplier	Hybrid Plan - 1.25% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

HQ - AFSCME Hired After 1/1/2014: Open Division, linked to Division 07, 74

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.25% Multiplier	Hybrid Plan - 1.25% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 4/3/1986)	Yes (Adopted 4/3/1986)

HR - Parks Union Emp after 1/1/2014: Open Division, linked to Division 91

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.25% Multiplier	Hybrid Plan - 1.25% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Table 2 (continued)

HS - OPEIU Tech/Cler after 1/1/2014: Open Division, linked to Division 71, 75

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.25% Multiplier	Hybrid Plan - 1.25% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 4/3/1986)	Yes (Adopted 4/3/1986)

HT - ICEA Court Prof after 4/15/14: Open Division, linked to Division 18

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.25% Multiplier	Hybrid Plan - 1.25% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

HU - Team 243 Zoo Hires aft 4/1/13: Open Division, linked to Division 99

	2016 Valuation	2015 Valuation
Benefit Multiplier:	Hybrid Plan - 1.25% Multiplier	Hybrid Plan - 1.25% Multiplier
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	-	-
Early Retirement (Reduced):	-	-
Final Average Compensation:	3 years	3 years
Employee Contributions:	0%	0%
Act 88:	Yes (Adopted 9/29/1965)	Yes (Adopted 9/29/1965)

Participant Summary

Table 3

Division	2016 Valuation		2015 Valuation		2016 Valuation		
	Number	Annual Payroll ¹	Number	Annual Payroll ¹	Average Age	Average Benefit Service ²	Average Eligibility Service ²
01 - Confidential							
Active Employees	26	\$ 1,491,645	27	\$ 1,362,123	50.4	12.8	14.3
Vested Former Employees	21	177,103	21	155,301	51.3	9.1	15.0
Retirees and Beneficiaries	53	754,355	45	630,271	68.0		
02 - Sheriff FOP Spvs							
Active Employees	24	\$ 1,959,610	24	\$ 2,015,741	44.2	17.9	18.2
Vested Former Employees	4	138,916	4	138,916	46.4	15.0	15.3
Retirees and Beneficiaries	73	2,748,950	69	2,623,680	65.8		
04 - MCF							
Active Employees	104	\$ 3,791,573	123	\$ 4,250,081	43.1	10.7	10.8
Vested Former Employees	31	142,311	33	168,151	53.8	11.7	13.8
Retirees and Beneficiaries	73	471,345	71	436,267	71.7		
06 - Tmts 243/Sup hired 1							
Active Employees	0	\$ 0	1	\$ 76,681	0.0	0.0	0.0
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	1	46,158	0	0	50.1		
07 - Gnrl Hrly/AFSCME DB							
Active Employees	35	\$ 1,922,525	36	\$ 1,878,630	51.1	17.1	17.6
Vested Former Employees	9	75,134	9	75,134	52.8	8.3	14.6
Retirees and Beneficiaries	64	1,117,716	69	1,135,407	72.0		
09 - Judges							
Active Employees	2	\$ 54,868	2	\$ 56,978	72.5	28.9	28.9
Vested Former Employees	1	3,772	1	3,772	59.2	5.5	6.0
Retirees and Beneficiaries	8	104,042	9	106,863	69.8		
10 - Gnrl Mgmt							
Active Employees	62	\$ 5,840,820	66	\$ 6,385,814	52.4	16.2	17.8
Vested Former Employees	17	340,751	19	422,166	49.3	9.9	12.1
Retirees and Beneficiaries	119	3,657,364	112	3,348,623	69.3		
11 - Gnrl Library							
Active Employees	0	\$ 0	0	\$ 0	0.0	0.0	0.0
Vested Former Employees	5	31,770	7	40,107	54.4	14.5	24.4
Retirees and Beneficiaries	35	231,155	34	225,870	73.4		
12 - Gnrl ICEA Profs							
Active Employees	84	\$ 5,337,361	94	\$ 6,019,588	49.5	13.7	15.1
Vested Former Employees	17	267,908	20	284,786	46.5	11.9	13.2
Retirees and Beneficiaries	104	2,488,059	92	2,147,873	67.1		

Table 3 (continued)

Division	2016 Valuation		2015 Valuation		2016 Valuation		
	Number	Annual Payroll ¹	Number	Annual Payroll ¹	Average Age	Average Benefit Service ²	Average Eligibility Service ²
13 - Gnrl OPEIU Prob							
Active Employees	28	\$ 1,763,530	30	\$ 1,921,796	38.4	10.2	11.1
Vested Former Employees	2	43,669	3	56,383	53.7	13.8	17.5
Retirees and Beneficiaries	42	1,148,139	42	1,148,139	64.7		
14 - Gnrl TOPS UAW							
Active Employees	237	\$ 9,984,768	257	\$ 10,941,576	50.5	14.7	15.2
Vested Former Employees	44	330,130	51	400,943	50.3	9.7	13.0
Retirees and Beneficiaries	282	4,014,259	269	3,825,451	69.2		
15 - Animal Cntrl FOP							
Active Employees	4	\$ 182,878	4	\$ 179,650	38.6	7.7	7.9
Vested Former Employees	2	16,565	3	22,737	43.6	6.8	8.2
Retirees and Beneficiaries	9	286,988	9	281,168	58.5		
16 - Gnrl Commsnrs							
Active Employees	6	\$ 92,636	8	\$ 129,731	53.7	14.3	14.3
Vested Former Employees	7	18,251	7	18,666	47.5	8.2	9.6
Retirees and Beneficiaries	12	40,666	10	36,924	67.7		
17 - ICEA Nurses							
Active Employees	10	\$ 633,246	11	\$ 730,666	51.3	15.3	15.9
Vested Former Employees	13	125,790	13	125,790	49.7	7.9	11.0
Retirees and Beneficiaries	66	1,254,429	66	1,185,973	71.5		
18 - ICEA Ct. Prof							
Active Employees	31	\$ 2,038,698	34	\$ 2,318,589	49.1	14.2	19.1
Vested Former Employees	3	13,359	3	16,226	46.5	4.0	14.2
Retirees and Beneficiaries	50	1,083,112	48	1,022,077	68.3		
19 - Cnstutnl Offcls							
Active Employees	2	\$ 184,543	4	\$ 435,956	61.8	24.0	24.0
Vested Former Employees	1	28,812	1	28,812	39.0	13.9	13.9
Retirees and Beneficiaries	10	208,544	9	155,912	77.0		
21 - FOP Shrf Deputies							
Active Employees	39	\$ 2,669,859	43	\$ 3,173,422	43.9	14.1	14.2
Vested Former Employees	19	357,087	20	395,080	45.1	9.5	15.9
Retirees and Beneficiaries	110	2,606,561	108	2,540,561	66.1		
22 - FOP 911 Non-Sup frm							
Active Employees	8	\$ 638,477	8	\$ 642,528	45.1	16.3	17.1
Vested Former Employees	3	44,251	2	24,441	36.8	7.6	8.6
Retirees and Beneficiaries	0	0	0	0	0.0		
23 - FOP Non-Sup (frm Lan							
Active Employees	17	\$ 1,313,548	20	\$ 1,513,309	41.9	12.5	13.6
Vested Former Employees	5	40,757	3	8,177	34.6	6.2	8.3
Retirees and Beneficiaries	2	30,502	1	21,425	44.9		

Table 3 (continued)

Division	2016 Valuation		2015 Valuation		2016 Valuation		
	Number	Annual Payroll ¹	Number	Annual Payroll ¹	Average Age	Average Benefit Service ²	Average Eligibility Service ²
24 - Sheriff Deputies-MAP							
Active Employees	43	\$ 2,994,259	43	\$ 2,857,309	41.2	14.4	14.6
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	12	304,405	12	303,588	55.3		
40 - ICEA Unit 111							
Active Employees	29	\$ 1,365,958	31	\$ 1,416,709	44.4	9.3	9.4
Vested Former Employees	2	2,666	2	2,666	51.6	2.1	13.8
Retirees and Beneficiaries	35	296,604	36	303,228	71.8		
41 - MCF Management							
Active Employees	21	\$ 1,460,145	23	\$ 1,478,983	46.2	11.5	11.6
Vested Former Employees	14	126,546	13	105,768	49.0	8.5	9.4
Retirees and Beneficiaries	19	182,234	18	170,722	71.5		
42 - ICEA Unit 11							
Active Employees	15	\$ 983,565	20	\$ 1,312,266	51.3	6.8	7.7
Vested Former Employees	4	28,158	5	34,553	50.1	8.3	10.9
Retirees and Beneficiaries	9	138,013	7	71,435	68.3		
43 - ICEA Unit 1							
Active Employees	9	\$ 536,286	12	\$ 716,788	45.8	10.6	10.6
Vested Former Employees	5	54,173	5	34,473	46.0	12.1	12.1
Retirees and Beneficiaries	10	97,586	7	59,137	70.3		
44 - MCF Exec Mgr							
Active Employees	1	\$ 172,519	1	\$ 157,392	57.1	13.4	13.4
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	1	48,768	1	47,708	75.4		
70 - Admin Salaried							
Active Employees	4	\$ 372,012	4	\$ 346,409	52.6	21.0	21.0
Vested Former Employees	1	195	1	195	50.3	1.3	8.0
Retirees and Beneficiaries	26	752,228	26	752,228	69.6		
71 - Admin/Union/OPEIU							
Active Employees	8	\$ 473,076	9	\$ 558,882	51.0	13.3	17.0
Vested Former Employees	6	95,247	5	62,810	43.0	11.1	14.0
Retirees and Beneficiaries	14	418,867	14	418,867	67.6		
73 - Dept. Heads							
Active Employees	3	\$ 333,941	4	\$ 447,775	55.4	15.2	25.4
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	9	348,403	8	282,810	66.0		
74 - AFSCME Hired After 9							
Active Employees	8	\$ 412,460	8	\$ 365,335	41.0	3.5	3.5
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		

Table 3 (continued)

Division	2016 Valuation		2015 Valuation		2016 Valuation		
	Number	Annual Payroll ¹	Number	Annual Payroll ¹	Average Age	Average Benefit Service ²	Average Eligibility Service ²
75 - Adm/OPEIU Pro after							
Active Employees	1	\$ 57,517	1	\$ 58,182	31.7	3.5	3.5
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
76 - OPEIU Sup/Admin Sal							
Active Employees	1	\$ 65,691	2	\$ 134,685	38.4	4.3	4.3
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
90 - Asst Pros Attnys							
Active Employees	25	\$ 2,121,190	25	\$ 2,115,362	45.8	12.6	13.0
Vested Former Employees	13	213,643	13	213,643	50.4	8.7	10.3
Retirees and Beneficiaries	33	850,991	33	850,991	66.2		
91 - Parks Union Empl							
Active Employees	3	\$ 154,967	4	\$ 204,792	46.1	14.5	14.5
Vested Former Employees	2	23,980	2	23,980	51.7	12.1	12.1
Retirees and Beneficiaries	2	28,024	1	7,293	64.8		
92 - Parks Non Union							
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	3	175,903	3	175,903	64.0		
93 - Lgl Rsrch Clerks							
Active Employees	5	\$ 275,727	6	\$ 313,672	35.0	6.1	6.1
Vested Former Employees	1	1,337	1	1,337	33.1	1.9	3.9
Retirees and Beneficiaries	2	24,183	2	24,183	68.6		
94 - Zoo Hires after 7/1/							
Active Employees	9	\$ 409,428	10	\$ 453,904	38.5	8.3	8.3
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	2	16,490	2	16,490	62.7		
95 - UAW Local 2256							
Active Employees	3	\$ 140,126	4	\$ 199,925	35.8	12.1	12.1
Vested Former Employees	3	57,535	3	57,535	42.4	14.6	14.6
Retirees and Beneficiaries	1	18,578	1	18,578	69.4		
96 - City Zoo Director							
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	2	44,074	2	44,074	64.3		
97 - Teamts 243 Spv (frm							
Active Employees	5	\$ 419,639	5	\$ 421,518	45.5	10.7	12.8
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		

Table 3 (continued)

Division	2016 Valuation		2015 Valuation		2016 Valuation		
	Number	Annual Payroll ¹	Number	Annual Payroll ¹	Average Age	Average Benefit Service ²	Average Eligibility Service ²
98 - MNA Nurses							
Active Employees	29	\$ 1,862,460	36	\$ 2,290,354	55.8	10.2	11.1
Vested Former Employees	5	66,453	4	43,835	44.4	7.8	8.2
Retirees and Beneficiaries	10	265,095	8	180,805	62.8		
99 - Team 243 Zoo Hired p							
Active Employees	3	\$ 159,080	3	\$ 172,837	49.6	12.3	12.3
Vested Former Employees	1	16,343	1	16,343	41.3	11.0	11.0
Retirees and Beneficiaries	0	0	0	0	0.0		
HA - Elected Offcls after							
Active Employees	2	\$ 177,444	2	\$ 174,755	50.4	3.0	3.0
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
HB - Commsnrs after 1/1/2							
Active Employees	1	\$ 15,547	1	\$ 15,251	61.0	2.0	2.0
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
HC - GenMgt & Conf /Leg R							
Active Employees	40	\$ 2,761,100	33	\$ 2,321,621	46.3	1.9	3.9
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	1	1,533	0	0	64.7		
HD - FOP 911 Non-Sup aft							
Active Employees	27	\$ 1,334,560	22	\$ 1,123,747	29.9	1.8	2.0
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
HE - Sheriff Dep MAP afte							
Active Employees	7	\$ 335,943	8	\$ 236,414	30.2	1.3	1.3
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
HF - TOPS UAW New Hires 3							
Active Employees	132	\$ 4,448,928	114	\$ 3,782,205	38.7	1.8	2.4
Vested Former Employees	1	275	1	275	28.3	1.4	3.8
Retirees and Beneficiaries	0	0	0	0	0.0		
HG - FOP Sher/Deputies as							
Active Employees	26	\$ 1,345,335	28	\$ 1,295,918	29.6	2.1	2.5
Vested Former Employees	1	1,345	1	1,345	27.8	2.0	3.3
Retirees and Beneficiaries	0	0	0	0	0.0		
HI - Animal Control-FOP a							
Active Employees	9	\$ 328,148	8	\$ 264,529	27.0	1.8	1.8
Vested Former Employees	1	14	1	14	53.8	0.3	7.8
Retirees and Beneficiaries	0	0	0	0	0.0		

Table 3 (continued)

Division	2016 Valuation		2015 Valuation		2016 Valuation		
	Number	Annual Payroll ¹	Number	Annual Payroll ¹	Average Age	Average Benefit Service ²	Average Eligibility Service ²
HJ - Gen.ICEA Prof. after							
Active Employees	37	\$ 1,854,427	32	\$ 1,568,101	39.0	2.2	3.5
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	1	1,333	0	0	65.7		
HK - Asst.Prof.Attnys aft							
Active Employees	6	\$ 318,478	5	\$ 266,067	32.5	1.8	2.4
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
HL - ICEA P.H. Nurses aft							
Active Employees	8	\$ 464,738	8	\$ 456,208	36.6	2.4	3.4
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
HM - UAW Zoo New Hires as							
Active Employees	6	\$ 249,579	5	\$ 210,751	32.7	2.5	2.5
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
HN - Gen OPEIU Prob after							
Active Employees	4	\$ 147,431	3	\$ 102,314	38.2	1.5	2.0
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
HP - MNA Nurse Prac/Clini							
Active Employees	17	\$ 962,604	19	\$ 979,822	44.6	1.7	2.0
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
HQ - AFSCME Hired After 1							
Active Employees	7	\$ 308,666	3	\$ 116,563	41.6	0.7	0.7
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
HR - Parks Union Emp afte							
Active Employees	3	\$ 112,107	2	\$ 65,440	40.8	1.0	1.0
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
HS - OPEIU Tech/Cler afte							
Active Employees	2	\$ 118,045		\$	36.2	0.6	0.6
Vested Former Employees	0	0			0.0	0.0	0.0
Retirees and Beneficiaries	0	0			0.0		
HT - ICEA Court Prof afte							
Active Employees	6	\$ 291,012	5	\$ 224,578	40.9	1.8	6.2
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		

Table 3 (continued)

Division	2016 Valuation		2015 Valuation		2016 Valuation		
	Number	Annual Payroll ¹	Number	Annual Payroll ¹	Average Age	Average Benefit Service ²	Average Eligibility Service ²
HU - Team 243 Zoo Hires a							
Active Employees	1	\$ 76,404	2	\$ 128,795	57.2	1.9	1.9
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
Total Municipality							
Active Employees	1285	\$ 70,321,127	1343	\$ 73,389,017	45.1	10.3	11.1
Vested Former Employees	264	2,884,246	278	2,984,360	48.8	9.7	12.8
Retirees and Beneficiaries	1305	26,305,656	1244	24,600,524	68.6		
Total Participants	2854		2865				

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

² Description can be found under Miscellaneous and Technical Assumptions in the [Appendix](#).

Reported Assets (Market Value)

Table 4

Division	2016 Valuation		2015 Valuation	
	Employer and Retiree ¹	Employee ²	Employer and Retiree ¹	Employee ²
01 - Confidentials	\$ 6,392,261	\$ 1,310,030	\$ 5,771,786	\$ 1,073,909
02 - Sheriff FOP Spvs	10,544,633	4,711,507	9,851,747	4,658,647
04 - MCF	11,219,307	11,299	10,424,493	13,339
06 - Tmts 243/Sup hired 1/1/09	253,517	41,023	209,381	39,346
07 - Gnrl Hrly/AFSCME DB	11,054,517	104,185	10,427,288	102,413
09 - Judges	1,255,944	32,536	214,680	30,554
10 - Gnrl Mgmt	27,556,545	5,739,833	24,988,032	5,957,496
11 - Gnrl Library	2,186,846	15,597	1,346,332	17,757
12 - Gnrl ICEA Profs	22,762,486	8,693,201	20,347,573	8,688,895
13 - Gnrl OPEIU Prob	5,689,755	1,613,230	5,586,691	1,528,588
14 - Gnrl TOPS UAW	44,466,637	5,786,839	41,379,797	5,664,770
15 - Animal Cntrl FOP	1,505,011	345,334	1,452,514	314,335
16 - Gnrl Commsnrs	443,094	108,068	406,042	110,308
17 - ICEA Nurses	8,691,442	1,688,336	8,387,200	1,741,582
18 - ICEA Ct. Prof	6,796,270	2,340,421	6,232,662	2,694,436
19 - Cnstutnl Offcls	2,681,269	348,592	2,100,214	724,587
21 - FOP Shrf Deputies	20,438,257	4,681,756	19,248,200	4,974,564
22 - FOP 911 Non-Sup frmr E.L	1,810,862	34,271	1,537,984	26,385
23 - FOP Non-Sup (frm Lansing)	1,609,137	876,766	1,135,601	852,369
24 - Sheriff Deputies-MAP	5,047,995	4,040,604	4,003,800	3,588,681
40 - ICEA Unit 111	4,113,796	350,437	3,922,554	321,308
41 - MCF Management	5,184,460	130,783	4,724,806	129,681
42 - ICEA Unit 11	2,425,940	313,769	2,167,864	344,001
43 - ICEA Unit 1	1,709,129	251,679	1,534,083	275,591
44 - MCF Exec Mgr	817,572	178,106	740,970	176,605
70 - Admin Salaried	3,281,809	18,587	3,340,459	14,004
71 - Admin/Union/OPEIU	3,205,296	19,673	3,074,528	13,744
73 - Dept. Heads	2,021,231	16,617	1,902,696	26,413
74 - AFSCME Hired After 9/19/2011	59,916	13,267	35,562	8,247
75 - Adm/OPEIU Pro after 7/1/2011	9,127	1,986	6,342	1,285
76 - OPEIU Sup/Admin Sal aft 7/1/11	31,662	3,063	22,394	2,191
90 - Asst Pros Attnys	9,564,253	422,430	8,958,925	389,424
91 - Parks Union Empl	715,343	5,971	647,400	5,046
92 - Parks Non Union	776,772	0	808,134	0
93 - Lgl Rsrch Clerks	512,134	6,415	482,810	2,545
94 - Zoo Hires after 7/1/07	394,061	18,316	323,857	12,971
95 - UAW Local 2256	864,908	57,234	946,514	63,519
96 - City Zoo Director	746,163	0	712,447	0
97 - Teamts 243 Spv (frm Lsg)	280,811	163,023	175,238	154,575
98 - MNA Nurses	3,259,525	2,442,937	2,531,006	2,424,866
99 - Team 243 Zoo Hired pr 4/1/13	462,055	54,871	338,018	49,898

Table 4 (continued)

Division	2016 Valuation		2015 Valuation	
	Employer and Retiree ¹	Employee ²	Employer and Retiree ¹	Employee ²
HA - Elected Offcls after 1/1/2013	26,074	0	16,036	0
HB - Commsnrs after 1/1/2013	1,602	0	729	0
HC - GenMgt & Conf /Leg Res af 1/1/2015	396,987	0	224,515	0
HD - FOP 911 Non-Sup aft 1/1/13	159,365	0	94,329	0
HE - Sheriff Dep MAP after 1/1/13	42,406	0	6,418	0
HF - TOPS UAW New Hires 3/1/13	621,678	0	336,078	0
HG - FOP Sher/Deputies as of 1/1/13	231,988	0	134,174	0
HI - Animal Control-FOP aft 4/1/13	39,905	0	22,047	0
HJ - Gen.ICEA Prof. after 1/1/2013	239,527	0	115,568	0
HK - Asst.Procs.Attnys after 4/1/13	38,560	0	19,937	0
HL - ICEA P.H. Nurses after 4/1/13	61,761	0	34,298	0
HM - UAW Zoo New Hires as 5/1/13	38,084	0	21,190	0
HN - Gen OPEIU Prob after 1/1/13	13,854	0	4,918	0
HP - MNA Nurse Prac/Clinic 1/1/14	129,445	0	63,612	0
HQ - AFSCME Hired After 1/1/2014	18,893	81	6,376	80
HR - Parks Union Emp after 1/1/2014	5,597	0	1,023	0
HS - OPEIU Tech/Cler after 1/1/2014	4,549	0		
HT - ICEA Court Prof after 4/15/14	25,951	0	7,842	0
HU - Team 243 Zoo Hires aft 4/1/13	15,529	0	9,006	0
Municipality Total	\$ 234,953,503	\$ 46,992,673	\$ 213,566,720	\$ 47,218,955
Combined Reserves	\$ 281,946,176		\$ 260,785,675	

¹ Reserve for Employer Contributions and Benefit Payments

² Reserve for Employee Contributions

The December 31, 2016 valuation assets are equal to 1.077095 times the reported market value of assets (compared to 1.135382 as of December 31, 2015). The derivation of valuation assets is described, and detailed calculations of valuation assets are shown, in the [Appendix](#).

Flow of Valuation Assets

Table 5

Year Ended 12/31	Employer Contributions		Employee Contributions	Investment Income	Benefit Payments	Employee Contribution Refunds	Net Transfers	Valuation Asset Balance
	Required	Additional						
2006	\$ 5,893,614		\$ 4,199,751	\$ 14,009,368	\$ (9,927,501)	\$ (443,686)	\$ 124,271	\$ 187,358,412
2007	6,403,000		4,466,313	15,172,720	(10,948,291)	(295,400)	21,446	202,178,200
2008	6,562,864		4,521,145	9,465,140	(12,344,490)	(389,878)	96,120	210,089,101
2009	7,753,659		4,648,851	10,497,335	(13,385,685)	(534,188)	148,193	219,217,266
2010	7,249,727		4,470,769	12,004,125	(14,735,243)	(432,670)	58,097	227,832,071
2011	7,454,683	\$ 0	4,460,014	11,762,970	(15,853,045)	(443,211)	63,742	235,277,224
2012	8,648,349	5,079,740	4,472,856	14,919,041	(18,702,263)	(633,057)	19,289,442	268,351,332
2013	10,052,429	0	4,506,307	15,889,337	(21,508,753)	(451,449)	918,223	277,757,426
2014	10,487,999	88,305	4,901,032	17,462,277	(22,731,682)	(442,233)	(22,892)	287,500,232
2015	11,259,041	2,371,949	4,364,238	14,642,040	(23,810,545)	(316,609)	81,012	296,091,358
2016	12,040,277	1,842,173	3,941,384	15,168,668	(25,337,947)	(306,211)	243,114	303,682,816

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, 2016

Table 6

Division	Actuarial Accrued Liability	Valuation Assets ¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
01 - Confidential				
Active Employees	\$ 4,287,423	\$ 993,687	23.2%	\$ 3,293,736
Vested Former Employees	1,105,819	300,564	27.2%	805,255
Retirees And Beneficiaries	7,525,872	6,986,070	92.8%	539,802
Pending Refunds	<u>15,778</u>	<u>15,778</u>	100.0%	<u>0</u>
Total	\$ 12,934,892	\$ 8,296,099	64.1%	\$ 4,638,793
02 - Sheriff FOP Spvs				
Active Employees	\$ 11,019,273	\$ 4,185,862	38.0%	\$ 6,833,411
Vested Former Employees	704,431	525,638	74.6%	178,793
Retirees And Beneficiaries	29,585,231	11,720,812	39.6%	17,864,419
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 41,308,935	\$ 16,432,312	39.8%	\$ 24,876,623
04 - MCF				
Active Employees	\$ 5,040,766	\$ 6,967,271	138.2%	\$ (1,926,505)
Vested Former Employees	947,808	947,808	100.0%	0
Retirees And Beneficiaries	4,181,181	4,181,181	100.0%	0
Pending Refunds	<u>170</u>	<u>170</u>	100.0%	<u>0</u>
Total	\$ 10,169,925	\$ 12,096,430	118.9%	\$ (1,926,505)
06 - Tmts 243/Sup hired 1/1/09				
Active Employees	\$ 0	\$ 0	0.0%	\$ 0
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	549,161	317,248	57.8%	231,913
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 549,161	\$ 317,248	57.8%	\$ 231,913
07 - Gnrl Hrly/AFSCME DB				
Active Employees	\$ 7,663,292	\$ 577,685	7.5%	\$ 7,085,607
Vested Former Employees	483,698	483,698	100.0%	0
Retirees And Beneficiaries	10,954,987	10,954,987	100.0%	0
Pending Refunds	<u>2,612</u>	<u>2,612</u>	100.0%	<u>0</u>
Total	\$ 19,104,589	\$ 12,018,982	62.9%	\$ 7,085,607
09 - Judges				
Active Employees	\$ 258,872	\$ 339,209	131.0%	\$ (80,337)
Vested Former Employees	38,284	38,284	100.0%	0
Retirees And Beneficiaries	1,010,322	1,010,322	100.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 1,307,478	\$ 1,387,815	106.1%	\$ (80,337)

Table 6 (continued)

Division	Actuarial Accrued Liability	Valuation Assets ¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
10 - Gnrl Mgmt				
Active Employees	\$ 21,684,460	\$ 4,805,929	22.2%	\$ 16,878,531
Vested Former Employees	2,269,980	838,045	36.9%	1,431,935
Retirees And Beneficiaries	36,724,647	30,126,265	82.0%	6,598,382
Pending Refunds	<u>93,123</u>	<u>93,123</u>	100.0%	<u>0</u>
Total	\$ 60,772,210	\$ 35,863,362	59.0%	\$ 24,908,848
11 - Gnrl Library				
Active Employees	\$ 0	\$ 76,031	0.0%	\$ (76,031)
Vested Former Employees	243,994	243,994	100.0%	0
Retirees And Beneficiaries	2,052,215	2,052,215	100.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 2,296,209	\$ 2,372,240	103.3%	\$ (76,031)
12 - Gnrl ICEA Profs				
Active Employees	\$ 19,195,839	\$ 7,351,102	38.3%	\$ 11,844,737
Vested Former Employees	1,991,356	935,688	47.0%	1,055,668
Retirees And Beneficiaries	28,501,004	25,209,527	88.5%	3,291,477
Pending Refunds	<u>384,446</u>	<u>384,446</u>	100.0%	<u>0</u>
Total	\$ 50,072,645	\$ 33,880,763	67.7%	\$ 16,191,882
13 - Gnrl OPEIU Prob				
Active Employees	\$ 3,673,527	\$ 1,449,080	39.4%	\$ 2,224,447
Vested Former Employees	372,966	99,212	26.6%	273,754
Retirees And Beneficiaries	11,944,201	6,252,779	52.3%	5,691,422
Pending Refunds	<u>64,938</u>	<u>64,938</u>	100.0%	<u>0</u>
Total	\$ 16,055,632	\$ 7,866,009	49.0%	\$ 8,189,623
14 - Gnrl TOPS UAW				
Active Employees	\$ 32,580,936	\$ 13,021,508	40.0%	\$ 19,559,428
Vested Former Employees	2,031,990	2,031,990	100.0%	0
Retirees And Beneficiaries	38,776,256	38,776,256	100.0%	0
Pending Refunds	<u>298,014</u>	<u>298,014</u>	100.0%	<u>0</u>
Total	\$ 73,687,196	\$ 54,127,768	73.5%	\$ 19,559,428
15 - Animal Cntrl FOP				
Active Employees	\$ 357,515	\$ 197,111	55.1%	\$ 160,404
Vested Former Employees	175,026	91,392	52.2%	83,634
Retirees And Beneficiaries	3,976,488	1,647,663	41.4%	2,328,825
Pending Refunds	<u>56,831</u>	<u>56,831</u>	100.0%	<u>0</u>
Total	\$ 4,565,860	\$ 1,992,997	43.6%	\$ 2,572,863
16 - Gnrl Commsnrs				
Active Employees	\$ 198,779	\$ 119,841	60.3%	\$ 78,938
Vested Former Employees	79,415	79,415	100.0%	0
Retirees And Beneficiaries	378,515	378,515	100.0%	0
Pending Refunds	<u>15,883</u>	<u>15,883</u>	100.0%	<u>0</u>
Total	\$ 672,592	\$ 593,654	88.3%	\$ 78,938

Table 6 (continued)

Division	Actuarial Accrued Liability	Valuation Assets¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
17 - ICEA Nurses				
Active Employees	\$ 2,507,091	\$ 953,630	38.0%	\$ 1,553,461
Vested Former Employees	938,202	607,776	64.8%	330,426
Retirees And Beneficiaries	13,255,468	9,491,671	71.6%	3,763,797
Pending Refunds	<u>126,930</u>	<u>126,930</u>	100.0%	<u>0</u>
Total	\$ 16,827,691	\$ 11,180,007	66.4%	\$ 5,647,684
18 - ICEA Ct. Prof				
Active Employees	\$ 6,214,455	\$ 2,261,549	36.4%	\$ 3,952,906
Vested Former Employees	77,224	63,701	82.5%	13,523
Retirees And Beneficiaries	9,992,894	7,502,050	75.1%	2,490,844
Pending Refunds	<u>13,784</u>	<u>13,784</u>	100.0%	<u>0</u>
Total	\$ 16,298,357	\$ 9,841,084	60.4%	\$ 6,457,273
19 - Cnstutnl Offcls				
Active Employees	\$ 1,049,116	\$ 1,306,520	124.5%	\$ (257,404)
Vested Former Employees	62,237	62,237	100.0%	0
Retirees And Beneficiaries	1,894,691	1,894,691	100.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 3,006,044	\$ 3,263,448	108.6%	\$ (257,404)
21 - FOP Shrf Deputies				
Active Employees	\$ 10,650,101	\$ 3,429,345	32.2%	\$ 7,220,756
Vested Former Employees	1,737,585	1,031,448	59.4%	706,137
Retirees And Beneficiaries	27,006,371	22,411,735	83.0%	4,594,636
Pending Refunds	<u>184,112</u>	<u>184,112</u>	100.0%	<u>0</u>
Total	\$ 39,578,169	\$ 27,056,640	68.4%	\$ 12,521,529
22 - FOP 911 Non-Sup frmr E.L				
Active Employees	\$ 2,440,532	\$ 1,901,654	77.9%	\$ 538,878
Vested Former Employees	85,730	85,730	100.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 2,526,262	\$ 1,987,384	78.7%	\$ 538,878
23 - FOP Non-Sup (frm Lansing				
Active Employees	\$ 2,508,697	\$ 2,111,305	84.2%	\$ 397,392
Vested Former Employees	125,891	125,891	100.0%	0
Retirees And Beneficiaries	365,182	365,182	100.0%	0
Pending Refunds	<u>75,176</u>	<u>75,176</u>	100.0%	<u>0</u>
Total	\$ 3,074,946	\$ 2,677,554	87.1%	\$ 397,392
24 - Sheriff Deputies-MAP				
Active Employees	\$ 11,740,451	\$ 6,157,100	52.4%	\$ 5,583,351
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	3,632,185	3,632,185	100.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 15,372,636	\$ 9,789,285	63.7%	\$ 5,583,351

Table 6 (continued)

Division	Actuarial Accrued Liability	Valuation Assets ¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
40 - ICEA Unit 111				
Active Employees	\$ 1,797,004	\$ 2,244,931	124.9%	\$ (447,927)
Vested Former Employees	17,608	17,608	100.0%	0
Retirees And Beneficiaries	2,456,686	2,456,686	100.0%	0
Pending Refunds	<u>89,178</u>	<u>89,178</u>	100.0%	<u>0</u>
Total	\$ 4,360,476	\$ 4,808,403	110.3%	\$ (447,927)
41 - MCF Management				
Active Employees	\$ 2,873,217	\$ 3,494,210	121.6%	\$ (620,993)
Vested Former Employees	608,446	608,446	100.0%	0
Retirees And Beneficiaries	1,615,723	1,615,723	100.0%	0
Pending Refunds	<u>6,643</u>	<u>6,643</u>	100.0%	<u>0</u>
Total	\$ 5,104,029	\$ 5,725,022	112.2%	\$ (620,993)
42 - ICEA Unit 11				
Active Employees	\$ 1,072,560	\$ 1,311,820	122.3%	\$ (239,260)
Vested Former Employees	137,191	137,191	100.0%	0
Retirees And Beneficiaries	1,432,849	1,432,849	100.0%	0
Pending Refunds	<u>69,067</u>	<u>69,067</u>	100.0%	<u>0</u>
Total	\$ 2,711,667	\$ 2,950,927	108.8%	\$ (239,260)
43 - ICEA Unit 1				
Active Employees	\$ 838,274	\$ 1,003,551	119.7%	\$ (165,277)
Vested Former Employees	235,459	235,459	100.0%	0
Retirees And Beneficiaries	852,023	852,023	100.0%	0
Pending Refunds	<u>20,943</u>	<u>20,943</u>	100.0%	<u>0</u>
Total	\$ 1,946,699	\$ 2,111,976	108.5%	\$ (165,277)
44 - MCF Exec Mgr				
Active Employees	\$ 642,377	\$ 658,439	102.5%	\$ (16,062)
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	414,001	414,001	100.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 1,056,378	\$ 1,072,440	101.5%	\$ (16,062)
70 - Admin Salaried				
Active Employees	\$ 1,856,930	\$ 18,587	1.0%	\$ 1,838,343
Vested Former Employees	987	0	0.0%	987
Retirees And Beneficiaries	7,698,759	3,536,253	45.9%	4,162,506
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 9,556,676	\$ 3,554,840	37.2%	\$ 6,001,836
71 - Admin/Union/OPEIU				
Active Employees	\$ 1,538,493	\$ 15,735	1.0%	\$ 1,522,758
Vested Former Employees	265,026	3,938	1.5%	261,088
Retirees And Beneficiaries	4,267,861	3,453,925	80.9%	813,936
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 6,071,380	\$ 3,473,598	57.2%	\$ 2,597,782

Table 6 (continued)

Division	Actuarial Accrued Liability	Valuation Assets ¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
73 - Dept. Heads				
Active Employees	\$ 1,190,072	\$ 15,890	1.3%	\$ 1,174,182
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	3,708,673	2,179,066	58.8%	1,529,607
Pending Refunds	0	0	0.0%	0
Total	\$ 4,898,745	\$ 2,194,956	44.8%	\$ 2,703,789
74 - AFSCME Hired After 9/19/2011				
Active Employees	\$ 128,110	\$ 78,825	61.5%	\$ 49,285
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 128,110	\$ 78,825	61.5%	\$ 49,285
75 - Adm/OPEIU Pro after 7/1/2011				
Active Employees	\$ 16,353	\$ 11,970	73.2%	\$ 4,383
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 16,353	\$ 11,970	73.2%	\$ 4,383
76 - OPEIU Sup/Admin Sal aft 7/1/11				
Active Employees	\$ 22,871	\$ 36,119	157.9%	\$ (13,248)
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	<u>1,283</u>	<u>1,283</u>	100.0%	0
Total	\$ 24,154	\$ 37,402	154.8%	\$ (13,248)
90 - Asst Pros Attnys				
Active Employees	\$ 5,732,262	\$ 836,797	14.6%	\$ 4,895,465
Vested Former Employees	1,146,460	1,146,460	100.0%	0
Retirees And Beneficiaries	8,766,702	8,766,702	100.0%	0
Pending Refunds	<u>6,647</u>	<u>6,647</u>	100.0%	0
Total	\$ 15,652,071	\$ 10,756,606	68.7%	\$ 4,895,465
91 - Parks Union Empl				
Active Employees	\$ 350,498	\$ 307,463	87.7%	\$ 43,035
Vested Former Employees	145,834	145,834	100.0%	0
Retirees And Beneficiaries	323,627	323,627	100.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 819,959	\$ 776,924	94.8%	\$ 43,035
92 - Parks Non Union				
Active Employees	\$ 0	\$ 0	0.0%	\$ 0
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	1,967,588	836,657	42.5%	1,130,931
Pending Refunds	0	0	0.0%	0
Total	\$ 1,967,588	\$ 836,657	42.5%	\$ 1,130,931

Table 6 (continued)

Division	Actuarial Accrued Liability	Valuation Assets¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
93 - Lgl Rsrch Clerks				
Active Employees	\$ 189,316	\$ 368,781	194.8%	\$ (179,465)
Vested Former Employees	1,859	1,859	100.0%	0
Retirees And Beneficiaries	186,822	186,822	100.0%	0
Pending Refunds	<u>1,065</u>	<u>1,065</u>	100.0%	<u>0</u>
Total	\$ 379,062	\$ 558,527	147.3%	\$ (179,465)
94 - Zoo Hires after 7/1/07				
Active Employees	\$ 416,426	\$ 274,567	65.9%	\$ 141,859
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	168,075	168,075	100.0%	0
Pending Refunds	<u>1,527</u>	<u>1,527</u>	100.0%	<u>0</u>
Total	\$ 586,028	\$ 444,169	75.8%	\$ 141,859
95 - UAW Local 2256				
Active Employees	\$ 482,495	\$ 627,123	130.0%	\$ (144,628)
Vested Former Employees	200,293	200,293	100.0%	0
Retirees And Beneficiaries	165,819	165,819	100.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 848,607	\$ 993,235	117.0%	\$ (144,628)
96 - City Zoo Director				
Active Employees	\$ 0	\$ 384,111	0.0%	\$ (384,111)
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	419,577	419,577	100.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 419,577	\$ 803,688	191.5%	\$ (384,111)
97 - Teamts 243 Spv (frm Lsg)				
Active Employees	\$ 725,582	\$ 478,051	65.9%	\$ 247,531
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 725,582	\$ 478,051	65.9%	\$ 247,531
98 - MNA Nurses				
Active Employees	\$ 4,573,286	\$ 2,403,081	52.5%	\$ 2,170,205
Vested Former Employees	373,242	373,242	100.0%	0
Retirees And Beneficiaries	3,273,615	3,273,615	100.0%	0
Pending Refunds	<u>92,155</u>	<u>92,155</u>	100.0%	<u>0</u>
Total	\$ 8,312,298	\$ 6,142,093	73.9%	\$ 2,170,205
99 - Team 243 Zoo Hired pr 4/1/13				
Active Employees	\$ 278,560	\$ 514,775	184.8%	\$ (236,215)
Vested Former Employees	42,003	42,003	100.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 320,563	\$ 556,778	173.7%	\$ (236,215)

Table 6 (continued)

Division	Actuarial Accrued Liability	Valuation Assets¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
HA - Elected Offcls after 1/1/2013				
Active Employees	\$ 35,454	\$ 28,084	79.2%	\$ 7,370
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 35,454	\$ 28,084	79.2%	\$ 7,370
HB - Commsnrs after 1/1/2013				
Active Employees	\$ 2,279	\$ 1,726	75.7%	\$ 553
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 2,279	\$ 1,726	75.7%	\$ 553
HC - GenMgt & Conf /Leg Res af 1/1/2015				
Active Employees	\$ 442,661	\$ 412,500	93.2%	\$ 30,161
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	15,093	15,093	100.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 457,754	\$ 427,593	93.4%	\$ 30,161
HD - FOP 911 Non-Sup aft 1/1/13				
Active Employees	\$ 158,755	\$ 171,651	108.1%	\$ (12,896)
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 158,755	\$ 171,651	108.1%	\$ (12,896)
HE - Sheriff Dep MAP after 1/1/13				
Active Employees	\$ 30,362	\$ 45,675	150.4%	\$ (15,313)
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 30,362	\$ 45,675	150.4%	\$ (15,313)
HF - TOPS UAW New Hires 3/1/13				
Active Employees	\$ 638,516	\$ 669,340	104.8%	\$ (30,824)
Vested Former Employees	266	266	100.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 638,782	\$ 669,606	104.8%	\$ (30,824)
HG - FOP Sher/Deputies as of 1/1/13				
Active Employees	\$ 264,341	\$ 248,621	94.1%	\$ 15,720
Vested Former Employees	1,252	1,252	100.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 265,593	\$ 249,873	94.1%	\$ 15,720

Table 6 (continued)

Division	Actuarial Accrued Liability	Valuation Assets ¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
HI - Animal Control-FOP aft 4/1/13				
Active Employees	\$ 38,286	\$ 42,889	112.0%	\$ (4,603)
Vested Former Employees	92	92	100.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 38,378	\$ 42,981	112.0%	\$ (4,603)
HJ - Gen.ICEA Prof. after 1/1/2013				
Active Employees	\$ 318,514	\$ 242,577	76.2%	\$ 75,937
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	15,416	15,416	100.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 333,930	\$ 257,993	77.3%	\$ 75,937
HK - Asst.Prof.Attnys after 4/1/13				
Active Employees	\$ 38,734	\$ 41,533	107.2%	\$ (2,799)
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 38,734	\$ 41,533	107.2%	\$ (2,799)
HL - ICEA P.H. Nurses after 4/1/13				
Active Employees	\$ 74,434	\$ 66,522	89.4%	\$ 7,912
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 74,434	\$ 66,522	89.4%	\$ 7,912
HM - UAW Zoo New Hires as 5/1/13				
Active Employees	\$ 46,234	\$ 41,020	88.7%	\$ 5,214
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 46,234	\$ 41,020	88.7%	\$ 5,214
HN - Gen OPEIU Prob after 1/1/13				
Active Employees	\$ 17,916	\$ 14,922	83.3%	\$ 2,994
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 17,916	\$ 14,922	83.3%	\$ 2,994
HP - MNA Nurse Prac/Clinic 1/1/14				
Active Employees	\$ 128,457	\$ 139,425	108.5%	\$ (10,968)
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	0	0	0.0%	0
Total	\$ 128,457	\$ 139,425	108.5%	\$ (10,968)

Table 6 (continued)

Division	Actuarial Accrued Liability	Valuation Assets¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
HQ - AFSCME Hired After 1/1/2014				
Active Employees	\$ 19,835	\$ 20,437	103.0%	\$ (602)
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 19,835	\$ 20,437	103.0%	\$ (602)
HR - Parks Union Emp after 1/1/2014				
Active Employees	\$ 9,435	\$ 6,029	63.9%	\$ 3,406
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 9,435	\$ 6,029	63.9%	\$ 3,406
HS - OPEIU Tech/Cler after 1/1/2014				
Active Employees	\$ 7,773	\$ 4,900	63.0%	\$ 2,873
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 7,773	\$ 4,900	63.0%	\$ 2,873
HT - ICEA Court Prof after 4/15/14				
Active Employees	\$ 41,982	\$ 27,952	66.6%	\$ 14,030
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 41,982	\$ 27,952	66.6%	\$ 14,030
HU - Team 243 Zoo Hires aft 4/1/13				
Active Employees	\$ 13,566	\$ 16,726	123.3%	\$ (3,160)
Vested Former Employees	0	0	0.0%	0
Retirees And Beneficiaries	0	0	0.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 13,566	\$ 16,726	123.3%	\$ (3,160)
Total Municipality				
Active Employees	\$ 170,123,345	\$ 75,532,774	44.4%	\$ 94,590,571
Vested Former Employees	16,647,654	11,506,454	69.1%	5,141,200
Retirees and Beneficiaries	270,055,780	215,023,283	79.6%	55,032,497
Pending Refunds	<u>1,620,305</u>	<u>1,620,305</u>	100.0%	<u>0</u>
Total Participants	\$ 458,447,084	\$ 303,682,816	66.2%	\$ 154,764,268
The following results show the combined accrued liabilities and assets for each set of linked divisions. These results are already included in the table above.				

Table 6 (continued)

Division	Actuarial Accrued Liability	Valuation Assets¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
Linked Divisions HC, 01, 10, 73, 93				
Active Employees	\$ 27,793,932	\$ 6,596,787	23.7%	\$ 21,197,145
Vested Former Employees	3,377,658	1,140,468	33.8%	2,237,190
Retirees and Beneficiaries	48,161,107	39,493,316	82.0%	8,667,791
Pending Refunds	<u>109,966</u>	<u>109,966</u>	100.0%	<u>0</u>
Total	\$ 79,442,663	\$ 47,340,537	59.6%	\$ 32,102,126
Linked Divisions HQ, 07, 74				
Active Employees	\$ 7,811,237	\$ 676,947	8.7%	\$ 7,134,290
Vested Former Employees	483,698	483,698	100.0%	0
Retirees and Beneficiaries	10,954,987	10,954,987	100.0%	0
Pending Refunds	<u>2,612</u>	<u>2,612</u>	100.0%	<u>0</u>
Total	\$ 19,252,534	\$ 12,118,244	62.9%	\$ 7,134,290
Linked Divisions HJ, 12				
Active Employees	\$ 19,514,353	\$ 7,593,679	38.9%	\$ 11,920,674
Vested Former Employees	1,991,356	935,688	47.0%	1,055,668
Retirees and Beneficiaries	28,516,420	25,224,943	88.5%	3,291,477
Pending Refunds	<u>384,446</u>	<u>384,446</u>	100.0%	<u>0</u>
Total	\$ 50,406,575	\$ 34,138,756	67.7%	\$ 16,267,819
Linked Divisions HN, 13				
Active Employees	\$ 3,691,443	\$ 1,464,002	39.7%	\$ 2,227,441
Vested Former Employees	372,966	99,212	26.6%	273,754
Retirees and Beneficiaries	11,944,201	6,252,779	52.3%	5,691,422
Pending Refunds	<u>64,938</u>	<u>64,938</u>	100.0%	<u>0</u>
Total	\$ 16,073,548	\$ 7,880,931	49.0%	\$ 8,192,617
Linked Divisions HF, 14				
Active Employees	\$ 33,219,452	\$ 13,690,848	41.2%	\$ 19,528,604
Vested Former Employees	2,032,256	2,032,256	100.0%	0
Retirees and Beneficiaries	38,776,256	38,776,256	100.0%	0
Pending Refunds	<u>298,014</u>	<u>298,014</u>	100.0%	<u>0</u>
Total	\$ 74,325,978	\$ 54,797,374	73.7%	\$ 19,528,604
Linked Divisions HI, 15				
Active Employees	\$ 395,801	\$ 240,000	60.6%	\$ 155,801
Vested Former Employees	175,118	91,484	52.2%	83,634
Retirees and Beneficiaries	3,976,488	1,647,663	41.4%	2,328,825
Pending Refunds	<u>56,831</u>	<u>56,831</u>	100.0%	<u>0</u>
Total	\$ 4,604,238	\$ 2,035,978	44.2%	\$ 2,568,260
Linked Divisions HB, 16				
Active Employees	\$ 201,058	\$ 121,567	60.5%	\$ 79,491
Vested Former Employees	79,415	79,415	100.0%	0
Retirees and Beneficiaries	378,515	378,515	100.0%	0
Pending Refunds	<u>15,883</u>	<u>15,883</u>	100.0%	<u>0</u>
Total	\$ 674,871	\$ 595,380	88.2%	\$ 79,491

Table 6 (continued)

Division	Actuarial Accrued Liability	Valuation Assets ¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
Linked Divisions HL, 17				
Active Employees	\$ 2,581,525	\$ 1,020,152	39.5%	\$ 1,561,373
Vested Former Employees	938,202	607,776	64.8%	330,426
Retirees and Beneficiaries	13,255,468	9,491,671	71.6%	3,763,797
Pending Refunds	<u>126,930</u>	<u>126,930</u>	100.0%	<u>0</u>
Total	\$ 16,902,125	\$ 11,246,529	66.5%	\$ 5,655,596
Linked Divisions HT, 18				
Active Employees	\$ 6,256,437	\$ 2,289,501	36.6%	\$ 3,966,936
Vested Former Employees	77,224	63,701	82.5%	13,523
Retirees and Beneficiaries	9,992,894	7,502,050	75.1%	2,490,844
Pending Refunds	<u>13,784</u>	<u>13,784</u>	100.0%	<u>0</u>
Total	\$ 16,340,339	\$ 9,869,036	60.4%	\$ 6,471,303
Linked Divisions HA, 19				
Active Employees	\$ 1,084,570	\$ 1,334,604	123.1%	\$ (250,034)
Vested Former Employees	62,237	62,237	100.0%	0
Retirees and Beneficiaries	1,894,691	1,894,691	100.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 3,041,498	\$ 3,291,532	108.2%	\$ (250,034)
Linked Divisions HG, 21				
Active Employees	\$ 10,914,442	\$ 3,677,966	33.7%	\$ 7,236,476
Vested Former Employees	1,738,837	1,032,700	59.4%	706,137
Retirees and Beneficiaries	27,006,371	22,411,735	83.0%	4,594,636
Pending Refunds	<u>184,112</u>	<u>184,112</u>	100.0%	<u>0</u>
Total	\$ 39,843,762	\$ 27,306,513	68.5%	\$ 12,537,249
Linked Divisions HD, 22, 23				
Active Employees	\$ 5,107,984	\$ 4,184,610	81.9%	\$ 923,374
Vested Former Employees	211,621	211,621	100.0%	0
Retirees and Beneficiaries	365,182	365,182	100.0%	0
Pending Refunds	<u>75,176</u>	<u>75,176</u>	100.0%	<u>0</u>
Total	\$ 5,759,963	\$ 4,836,589	84.0%	\$ 923,374
Linked Divisions HE, 24				
Active Employees	\$ 11,770,813	\$ 6,202,775	52.7%	\$ 5,568,038
Vested Former Employees	0	0	0.0%	0
Retirees and Beneficiaries	3,632,185	3,632,185	100.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 15,402,998	\$ 9,834,960	63.9%	\$ 5,568,038
Linked Divisions HS, 71, 75				
Active Employees	\$ 1,562,619	\$ 32,605	2.1%	\$ 1,530,014
Vested Former Employees	265,026	3,938	1.5%	261,088
Retirees and Beneficiaries	4,267,861	3,453,925	80.9%	813,936
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 6,095,506	\$ 3,490,468	57.3%	\$ 2,605,038

Table 6 (continued)

Division	Actuarial Accrued Liability	Valuation Assets¹	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
Linked Divisions HK, 90				
Active Employees	\$ 5,770,996	\$ 878,330	15.2%	\$ 4,892,666
Vested Former Employees	1,146,460	1,146,460	100.0%	0
Retirees and Beneficiaries	8,766,702	8,766,702	100.0%	0
Pending Refunds	<u>6,647</u>	<u>6,647</u>	100.0%	<u>0</u>
Total	\$ 15,690,805	\$ 10,798,139	68.8%	\$ 4,892,666
Linked Divisions HR, 91				
Active Employees	\$ 359,933	\$ 313,492	87.1%	\$ 46,441
Vested Former Employees	145,834	145,834	100.0%	0
Retirees and Beneficiaries	323,627	323,627	100.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 829,394	\$ 782,953	94.4%	\$ 46,441
Linked Divisions HM, 94				
Active Employees	\$ 462,660	\$ 315,587	68.2%	\$ 147,073
Vested Former Employees	0	0	0.0%	0
Retirees and Beneficiaries	168,075	168,075	100.0%	0
Pending Refunds	<u>1,527</u>	<u>1,527</u>	100.0%	<u>0</u>
Total	\$ 632,262	\$ 485,189	76.7%	\$ 147,073
Linked Divisions HP, 98				
Active Employees	\$ 4,701,743	\$ 2,542,506	54.1%	\$ 2,159,237
Vested Former Employees	373,242	373,242	100.0%	0
Retirees and Beneficiaries	3,273,615	3,273,615	100.0%	0
Pending Refunds	<u>92,155</u>	<u>92,155</u>	100.0%	<u>0</u>
Total	\$ 8,440,755	\$ 6,281,518	74.4%	\$ 2,159,237
Linked Divisions HU, 99				
Active Employees	\$ 292,126	\$ 531,501	181.9%	\$ (239,375)
Vested Former Employees	42,003	42,003	100.0%	0
Retirees and Beneficiaries	0	0	0.0%	0
Pending Refunds	<u>0</u>	<u>0</u>	0.0%	<u>0</u>
Total	\$ 334,129	\$ 573,504	171.6%	\$ (239,375)

¹ Includes both employer and employee assets.

Please see the Comments on Asset Smoothing in the Executive Summary of this report.

See Section 46 of the Plan Document for MERS Fiscal Responsibility policy, on the MERS website at:

<https://employerportal.mersofmich.com/SharePointFormsService/Default.aspx?Publication=MERSPlanDocument.pdf>.

Actuarial Accrued Liabilities - Comparative Schedule

Table 7

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2002	\$ 183,747,506	\$ 138,299,599	75%	\$ 45,447,907
2003	199,547,894	150,287,493	75%	49,260,401
2004	215,946,290	162,405,350	75%	53,540,940
2005	228,698,783	173,502,595	76%	55,196,188
2006	243,300,405	187,358,412	77%	55,941,993
2007	260,328,809	202,178,200	78%	58,150,609
2008	277,233,448	210,089,101	76%	67,144,347
2009	288,190,459	219,217,266	76%	68,973,193
2010	304,134,483	227,832,071	75%	76,302,412
2011	322,746,120	235,277,224	73%	87,468,896
2012	370,727,362	268,351,332	72%	102,376,030
2013	386,573,382	277,757,426	72%	108,815,956
2014	406,282,243	287,500,232	71%	118,782,011
2015	447,961,301	296,091,358	66%	151,869,943
2016	458,447,084	303,682,816	66%	154,764,268

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

Division 01 - Confidential

Table 8-01: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 6,852,460	\$ 5,364,809	78%	\$ 1,487,651
2007	6,745,980	5,408,159	80%	1,337,821
2008	7,198,726	5,673,988	79%	1,524,738
2009	7,501,519	5,869,427	78%	1,632,092
2010	8,099,853	6,303,821	78%	1,796,032
2011	8,688,022	6,540,376	75%	2,147,646
2012	9,017,965	6,697,078	74%	2,320,887
2013	9,843,151	7,293,797	74%	2,549,354
2014	10,432,022	7,596,980	73%	2,835,042
2015	11,464,358	7,772,479	68%	3,691,879
2016	12,934,892	8,296,099	64%	4,638,793

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

Table 9-01: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	32	\$ 1,358,941	12.65%	5.36%
2007	32	1,332,376	12.44%	5.36%
2008	32	1,311,576	13.39%	5.36%
2009	33	1,407,767	13.59%	5.36%
2010	38	1,675,376	13.56%	5.36%
2011	36	1,616,829	15.68%	5.36%
2012	35	1,597,928	\$ 21,262	5.36%
2013	31	1,416,012	\$ 20,963	6.56%
2014	28	1,314,972	\$ 22,348	6.56%
2015	27	1,362,123	\$ 29,040	6.56%
2016	26	1,491,645	\$ 35,920	6.56%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 02 - Sheriff FOP Spvs

Table 8-02: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 27,308,500	\$ 15,778,647	58%	\$ 11,529,853
2007	28,963,782	16,785,897	58%	12,177,885
2008	30,598,492	17,036,017	56%	13,562,475
2009	30,521,311	16,616,645	54%	13,904,666
2010	31,808,099	16,641,633	52%	15,166,466
2011	32,687,429	16,411,528	50%	16,275,901
2012	34,314,880	16,367,240	48%	17,947,640
2013	35,226,002	16,160,200	46%	19,065,802
2014	36,961,016	16,418,633	44%	20,542,383
2015	40,413,041	16,474,840	41%	23,938,201
2016	41,308,935	16,432,312	40%	24,876,623

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

Table 9-02: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	31	\$ 2,223,259	25.54%	19.61%
2007	31	2,250,880	27.29%	19.61%
2008	28	2,102,359	33.74%	19.61%
2009	26	1,970,089	36.89%	19.61%
2010	24	1,863,824	42.84%	19.61%
2011	23	1,789,113	49.34%	19.61%
2012	22	1,694,784	62.96%	19.61%
2013	23	1,810,805	\$ 99,500	19.61%
2014	24	1,902,148	\$ 109,745	19.61%
2015	24	2,015,741	\$ 137,120	19.61%
2016	24	1,959,610	\$ 144,753	19.61%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 04 - MCF

Table 8-04: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 6,178,455	\$ 5,542,100	90%	\$ 636,355
2007	6,509,669	6,018,132	92%	491,537
2008	7,015,188	6,353,810	91%	661,378
2009	7,063,531	6,675,209	95%	388,322
2010	7,523,171	7,055,623	94%	467,548
2011	7,866,893	7,412,362	94%	454,531
2012	8,197,929	10,010,428	122%	(1,812,499)
2013	8,727,735	10,646,305	122%	(1,918,570)
2014	9,170,136	10,951,921	119%	(1,781,785)
2015	10,076,905	11,850,927	118%	(1,774,022)
2016	10,169,925	12,096,430	119%	(1,926,505)

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

Table 9-04: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	153	\$ 4,040,561	6.26%	0.00%
2007	146	4,018,672	6.12%	0.00%
2008	156	4,569,410	6.62%	0.00%
2009	156	4,691,144	6.24%	0.00%
2010	162	4,972,042	6.35%	0.00%
2011	161	5,042,352	6.74%	0.00%
2012	161	5,183,354	1.78%	0.00%
2013	161	5,232,035	2.23%	0.00%
2014	150	5,006,159	\$ 7,763	0.00%
2015	123	4,250,081	\$ 4,749	0.00%
2016	104	3,791,573	\$ 1,236	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 06 - Tmts 243/Sup hired 1/1/09

Table 8-06: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2015	\$ 472,031	\$ 282,400	60%	\$ 189,631
2016	549,161	317,248	58%	231,913

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

Table 9-06: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2015	1	\$ 76,681	25.93%	1.70%
2016	0	0	\$ 1,432	1.70%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 07 - Gnrl Hrly/AFSCME DB

Table 8-07: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2012	\$ 17,322,079	\$ 12,353,313	71%	\$ 4,968,766
2013	16,781,870	11,952,612	71%	4,829,258
2014	17,850,632	12,048,086	68%	5,802,546
2015	18,730,904	11,955,233	64%	6,775,671
2016	19,104,589	12,018,982	63%	7,085,607

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

Table 9-07: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2012	49	\$ 2,327,219	\$ 48,287	0.00%
2013	39	1,818,999	\$ 40,863	0.00%
2014	37	1,911,704	\$ 46,996	1.20%
2015	36	1,878,630	\$ 54,447	1.20%
2016	35	1,922,525	\$ 57,287	1.20%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 09 - Judges

Table 8-09: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 1,425,657	\$ 550,456	39%	\$ 875,201
2007	1,411,643	554,237	39%	857,406
2008	1,282,360	527,988	41%	754,372
2009	1,256,818	484,232	39%	772,586
2010	1,262,740	455,759	36%	806,981
2011	1,353,924	424,920	31%	929,004
2012	1,305,314	387,747	30%	917,567
2013	1,298,744	335,365	26%	963,379
2014	1,278,606	306,371	24%	972,235
2015	1,332,391	278,434	21%	1,053,957
2016	1,307,478	1,387,815	106%	(80,337)

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

Table 9-09: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	4	\$ 109,736	51.68%	3.14%
2007	4	109,736	51.60%	3.14%
2008	3	82,302	58.61%	3.14%
2009	3	82,302	59.36%	3.14%
2010	3	82,302	61.83%	3.14%
2011	3	82,302	71.60%	3.14%
2012	2	54,868	110.52%	3.14%
2013	2	54,868	114.92%	3.14%
2014	2	54,868	116.42%	3.14%
2015	2	56,978	385.24%	3.14%
2016	2	54,868	0.00%	3.14%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 10 - Gnrl Mgmt

Table 8-10: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 36,857,629	\$ 27,343,876	74%	\$ 9,513,753
2007	39,890,994	29,557,588	74%	10,333,406
2008	41,270,920	29,975,119	73%	11,295,801
2009	43,246,303	30,924,563	72%	12,321,740
2010	46,498,176	32,228,901	69%	14,269,275
2011	49,251,360	32,908,336	67%	16,343,024
2012	50,458,446	33,213,800	66%	17,244,646
2013	52,066,870	33,851,353	65%	18,215,517
2014	54,296,342	34,815,395	64%	19,480,947
2015	59,344,172	35,134,995	59%	24,209,177
2016	60,772,210	35,863,362	59%	24,908,848

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

Table 9-10: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	80	\$ 6,241,730	14.44%	6.39%
2007	87	6,693,324	14.90%	6.39%
2008	87	7,022,632	15.19%	6.39%
2009	86	7,134,709	16.19%	6.39%
2010	85	7,144,007	17.88%	6.39%
2011	80	7,019,436	20.38%	6.39%
2012	79	6,771,847	\$ 125,132	6.39%
2013	74	6,401,503	\$ 126,204	7.59%
2014	69	6,171,921	\$ 134,659	7.59%
2015	66	6,385,814	\$ 171,519	7.59%
2016	62	5,840,820	\$ 173,290	7.59%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 11 - Gnrl Library

Table 8-11: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 2,420,459	\$ 2,269,063	94%	\$ 151,396
2007	2,459,819	2,280,838	93%	178,981
2008	2,384,616	2,200,426	92%	184,190
2009	2,393,819	2,072,225	87%	321,594
2010	2,326,700	1,968,632	85%	358,068
2011	2,330,809	1,866,224	80%	464,585
2012	2,305,885	1,741,653	76%	564,232
2013	2,279,329	1,658,190	73%	621,139
2014	2,257,398	1,594,761	71%	662,637
2015	2,336,974	1,548,762	66%	788,212
2016	2,296,209	2,372,240	103%	(76,031)

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

Table 9-11: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	0	\$ 0	\$ 911	0.00%
2007	0	0	\$ 1,141	0.00%
2008	0	0	\$ 1,265	0.00%
2009	0	0	\$ 2,518	0.00%
2010	0	0	\$ 3,053	0.00%
2011	0	0	\$ 4,635	0.00%
2012	0	0	\$ 6,679	0.00%
2013	0	0	\$ 9,191	0.00%
2014	0	0	\$ 11,103	0.00%
2015	0	0	\$ 16,253	0.00%
2016	0	0	\$ 0	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 12 - Gnrl ICEA Profs

Table 8-12: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 24,938,421	\$ 18,312,872	73%	\$ 6,625,549
2007	26,820,726	20,206,178	75%	6,614,548
2008	28,692,256	21,773,934	76%	6,918,322
2009	30,963,619	23,764,021	77%	7,199,598
2010	32,826,862	25,118,571	77%	7,708,291
2011	35,851,841	26,941,281	75%	8,910,560
2012	37,604,395	28,261,674	75%	9,342,721
2013	39,598,835	29,991,323	76%	9,607,512
2014	41,681,056	31,347,132	75%	10,333,924
2015	47,922,246	32,967,483	69%	14,954,763
2016	50,072,645	33,880,763	68%	16,191,882

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

Table 9-12: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	126	\$ 6,553,689	7.43%	13.42%
2007	124	6,578,499	7.60%	13.42%
2008	126	6,903,993	7.36%	13.42%
2009	125	6,937,202	8.11%	13.42%
2010	122	6,815,438	8.85%	13.42%
2011	123	6,970,997	10.17%	13.42%
2012	117	6,683,973	11.67%	13.42%
2013	109	6,376,282	\$ 66,819	13.42%
2014	101	5,959,692	\$ 71,049	13.42%
2015	94	6,019,588	\$ 104,057	13.42%
2016	84	5,337,361	\$ 109,465	13.42%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 13 - Gnrl OPEIU Prob

Table 8-13: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 11,146,258	\$ 8,547,484	77%	\$ 2,598,774
2007	11,532,889	8,985,802	78%	2,547,087
2008	12,662,562	9,006,840	71%	3,655,722
2009	13,327,193	8,963,773	67%	4,363,420
2010	13,639,726	8,847,496	65%	4,792,230
2011	13,993,183	8,726,898	62%	5,266,285
2012	14,478,965	8,496,425	59%	5,982,540
2013	14,646,300	8,331,674	57%	6,314,626
2014	14,944,777	8,197,332	55%	6,747,445
2015	16,093,769	8,078,560	50%	8,015,209
2016	16,055,632	7,866,009	49%	8,189,623

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

Table 9-13: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	38	\$ 2,059,204	8.96%	9.71%
2007	38	1,968,144	9.27%	9.71%
2008	38	1,915,209	13.25%	9.71%
2009	40	2,194,372	14.15%	9.71%
2010	34	1,938,642	17.24%	9.71%
2011	35	2,011,550	18.46%	9.71%
2012	33	1,829,292	23.57%	9.71%
2013	32	1,788,914	\$ 38,444	9.71%
2014	32	1,864,676	\$ 42,012	9.71%
2015	30	1,921,796	\$ 52,159	9.71%
2016	28	1,763,530	\$ 53,059	9.71%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 14 - Gnrl TOPS UAW

Table 8-14: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 44,049,781	\$ 38,657,304	88%	\$ 5,392,477
2007	47,620,829	41,879,214	88%	5,741,615
2008	50,851,765	43,760,925	86%	7,090,840
2009	53,495,592	45,481,926	85%	8,013,666
2010	56,277,483	47,323,743	84%	8,953,740
2011	60,248,867	49,136,722	82%	11,112,145
2012	62,864,768	50,452,839	80%	12,411,929
2013	64,489,270	51,699,774	80%	12,789,496
2014	66,270,233	52,930,820	80%	13,339,413
2015	72,712,972	53,413,555	74%	19,299,417
2016	73,687,196	54,127,768	74%	19,559,428

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

Table 9-14: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	402	\$ 13,643,453	9.78%	3.62%
2007	406	14,098,731	9.97%	3.62%
2008	402	14,411,744	10.20%	3.62%
2009	398	14,636,178	10.80%	3.62%
2010	389	14,398,613	11.45%	3.62%
2011	384	14,512,500	12.83%	3.62%
2012	364	13,795,186	14.01%	3.62%
2013	327	12,547,291	\$ 136,803	4.82%
2014	283	11,156,676	\$ 135,242	4.82%
2015	257	10,941,576	\$ 178,321	4.82%
2016	237	9,984,768	\$ 172,713	4.82%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 15 - Animal Cntrl FOP

Table 8-15: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 2,547,019	\$ 1,387,886	54%	\$ 1,159,133
2007	2,651,398	1,552,696	59%	1,098,702
2008	3,543,295	1,898,449	54%	1,644,846
2009	3,691,482	1,905,178	52%	1,786,304
2010	3,810,017	1,998,423	52%	1,811,594
2011	4,063,448	2,047,158	50%	2,016,290
2012	4,163,616	2,021,539	49%	2,142,077
2013	4,253,213	2,024,998	48%	2,228,215
2014	4,247,536	2,024,665	48%	2,222,871
2015	4,537,300	2,006,049	44%	2,531,251
2016	4,565,860	1,992,997	44%	2,572,863

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

Table 9-15: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	9	\$ 392,312	16.29%	15.49%
2007	10	436,485	14.25%	15.49%
2008	7	345,299	27.65%	15.49%
2009	9	407,155	25.34%	15.49%
2010	8	339,899	30.85%	15.49%
2011	8	307,521	38.49%	15.49%
2012	10	344,170	39.58%	15.49%
2013	5	190,441	\$ 11,971	15.49%
2014	4	158,367	\$ 12,098	15.49%
2015	4	179,650	\$ 14,898	15.49%
2016	4	182,878	\$ 15,384	15.49%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 16 - Gnrl Commsnrs

Table 8-16: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 423,565	\$ 375,822	89%	\$ 47,743
2007	443,956	405,794	91%	38,162
2008	450,313	429,292	95%	21,021
2009	457,663	454,956	99%	2,707
2010	488,670	486,993	100%	1,677
2011	532,984	517,401	97%	15,583
2012	600,294	548,094	91%	52,200
2013	641,292	569,925	89%	71,367
2014	655,491	582,214	89%	73,277
2015	701,504	586,254	84%	115,250
2016	672,592	593,654	88%	78,938

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

Table 9-16: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	11	\$ 162,724	7.36%	3.56%
2007	13	201,689	6.89%	3.56%
2008	10	155,928	6.63%	3.56%
2009	14	216,882	5.90%	3.56%
2010	14	217,301	6.03%	3.56%
2011	14	220,749	6.53%	3.56%
2012	10	150,514	\$ 903	3.56%
2013	9	142,391	\$ 870	4.76%
2014	8	127,001	\$ 874	4.76%
2015	8	129,731	\$ 1,195	4.76%
2016	6	92,636	\$ 819	4.76%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 17 - ICEA Nurses

Table 8-17: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 14,386,752	\$ 11,423,810	79%	\$ 2,962,942
2007	15,457,633	12,451,766	81%	3,005,867
2008	16,276,364	12,947,979	80%	3,328,385
2009	16,629,558	13,466,398	81%	3,163,160
2010	17,948,440	14,195,685	79%	3,752,755
2011	19,024,002	14,824,405	78%	4,199,597
2012	20,105,415	15,456,731	77%	4,648,684
2013	15,513,711	11,931,260	77%	3,582,451
2014	15,670,461	11,798,867	75%	3,871,594
2015	16,747,400	11,500,037	69%	5,247,363
2016	16,827,691	11,180,007	66%	5,647,684

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

Table 9-17: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	72	\$ 3,727,464	8.16%	11.87%
2007	74	3,850,897	8.21%	11.87%
2008	66	3,658,770	8.41%	11.87%
2009	68	3,784,846	8.11%	11.87%
2010	68	3,954,809	8.95%	11.87%
2011	70	4,040,427	9.79%	11.87%
2012	69	4,090,895	10.91%	11.87%
2013	16	1,010,215	\$ 20,288	11.87%
2014	13	816,716	\$ 22,929	11.87%
2015	11	730,666	\$ 32,124	11.87%
2016	10	633,246	\$ 34,441	11.87%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 18 - ICEA Ct. Prof

Table 8-18: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 10,980,626	\$ 7,879,997	72%	\$ 3,100,629
2007	11,525,007	8,288,751	72%	3,236,256
2008	12,146,695	8,399,801	69%	3,746,894
2009	12,209,605	8,661,046	71%	3,548,559
2010	12,807,391	8,911,394	70%	3,895,997
2011	13,272,867	9,144,370	69%	4,128,497
2012	13,712,176	9,301,266	68%	4,410,910
2013	14,200,050	9,639,056	68%	4,560,994
2014	14,951,637	9,973,650	67%	4,977,987
2015	16,573,788	10,135,666	61%	6,438,122
2016	16,298,357	9,841,084	60%	6,457,273

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

Table 9-18: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	35	\$ 2,062,761	10.91%	9.84%
2007	33	2,020,357	11.73%	9.84%
2008	34	2,157,341	12.39%	9.84%
2009	34	2,195,745	11.81%	9.84%
2010	35	2,368,458	12.23%	9.84%
2011	35	2,378,722	13.14%	9.84%
2012	34	2,323,013	15.06%	9.84%
2013	37	2,406,454	15.56%	9.84%
2014	38	2,417,163	\$ 33,761	9.84%
2015	34	2,318,589	\$ 44,605	9.84%
2016	31	2,038,698	\$ 44,352	9.84%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 19 - Cnstitutnl Offcls

Table 8-19: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 2,482,842	\$ 2,108,004	85%	\$ 374,838
2007	2,424,498	2,310,245	95%	114,253
2008	2,714,577	2,482,074	91%	232,503
2009	2,779,443	2,570,332	92%	209,111
2010	2,928,379	2,696,373	92%	232,006
2011	3,058,785	2,814,334	92%	244,451
2012	3,201,491	2,926,843	91%	274,648
2013	3,315,245	3,035,889	92%	279,356
2014	3,417,113	3,133,454	92%	283,659
2015	3,574,146	3,207,228	90%	366,918
2016	3,006,044	3,263,448	109%	(257,404)

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

Table 9-19: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	6	\$ 543,266	9.35%	8.46%
2007	6	556,968	6.77%	8.46%
2008	6	508,408	8.06%	8.46%
2009	6	585,024	7.11%	8.46%
2010	6	596,786	7.54%	8.46%
2011	6	596,726	8.06%	8.46%
2012	5	508,136	\$ 3,067	8.46%
2013	5	508,136	\$ 2,728	9.66%
2014	5	508,136	\$ 2,829	9.66%
2015	4	435,956	\$ 3,192	9.66%
2016	2	184,543	\$ 0	9.66%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 21 - FOP Shrf Deputies

Table 8-21: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 33,808,876	\$ 26,430,749	78%	\$ 7,378,127
2007	36,847,372	28,806,287	78%	8,041,085
2008	39,475,086	29,943,919	76%	9,531,167
2009	39,839,734	31,063,154	78%	8,776,580
2010	41,315,874	32,121,689	78%	9,194,185
2011	43,760,023	33,080,030	76%	10,679,993
2012	45,123,671	33,399,381	74%	11,724,290
2013	36,369,354	27,433,726	75%	8,935,628
2014	37,669,090	27,679,819	74%	9,989,271
2015	40,424,661	27,502,090	68%	12,922,571
2016	39,578,169	27,056,640	68%	12,521,529

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

Table 9-21: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	154	\$ 7,614,243	10.15%	10.96%
2007	154	8,214,896	10.36%	10.96%
2008	150	8,309,954	11.82%	10.96%
2009	137	8,101,859	10.93%	10.96%
2010	126	7,496,536	12.12%	10.96%
2011	125	7,523,553	13.86%	10.96%
2012	127	7,441,066	15.54%	10.96%
2013	63	3,852,224	\$ 63,217	10.96%
2014	53	3,618,387	\$ 71,301	10.96%
2015	43	3,173,422	\$ 90,314	10.96%
2016	39	2,669,859	\$ 85,858	10.96%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 22 - FOP 911 Non-Sup frmr E.L

Table 8-22: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	\$ 1,898,657	\$ 1,313,404	69%	\$ 585,253
2014	1,883,042	1,541,238	82%	341,804
2015	2,318,372	1,776,156	77%	542,216
2016	2,526,262	1,987,384	79%	538,878

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

Table 9-22: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	11	\$ 873,401	\$ 10,771	1.20%
2014	9	656,406	\$ 7,618	1.20%
2015	8	642,528	\$ 9,102	1.20%
2016	8	638,477	\$ 8,727	1.20%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 23 - FOP Non-Sup (frm Lansing)

Table 8-23: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	\$ 2,243,869	\$ 1,799,795	80%	\$ 444,074
2015	2,814,112	2,257,105	80%	557,007
2016	3,074,946	2,677,554	87%	397,392

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

Table 9-23: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2014	24	\$ 1,617,402	9.53%	2.70%
2015	20	1,513,309	\$ 13,369	2.70%
2016	17	1,313,548	\$ 11,094	2.70%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 24 - Sheriff Deputies-MAP

Table 8-24: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	\$ 10,901,326	\$ 7,202,020	66%	\$ 3,699,306
2014	11,824,667	7,796,065	66%	4,028,602
2015	13,764,921	8,620,366	63%	5,144,555
2016	15,372,636	9,789,285	64%	5,583,351

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

Table 9-24: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	52	\$ 3,169,234	\$ 32,898	12.16%
2014	48	3,010,499	\$ 34,966	12.16%
2015	43	2,857,309	\$ 42,583	12.16%
2016	43	2,994,259	\$ 45,965	12.16%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 40 - ICEA Unit 111

Table 8-40: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 3,134,080	\$ 3,104,906	99%	\$ 29,174
2007	3,032,270	3,059,369	101%	(27,099)
2008	3,083,525	3,031,049	98%	52,476
2009	3,145,657	3,069,158	98%	76,499
2010	3,319,782	3,157,671	95%	162,111
2011	3,582,475	3,204,068	89%	378,407
2012	3,628,715	4,331,524	119%	(702,809)
2013	3,870,859	4,451,211	115%	(580,352)
2014	3,915,669	4,440,428	113%	(524,759)
2015	4,199,462	4,818,405	115%	(618,943)
2016	4,360,476	4,808,403	110%	(447,927)

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

Table 9-40: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	39	\$ 1,357,787	5.45%	3.00%
2007	39	1,459,015	5.45%	3.00%
2008	36	1,363,097	5.58%	3.00%
2009	40	1,520,059	5.71%	3.00%
2010	40	1,548,611	6.14%	3.00%
2011	42	1,716,366	7.30%	3.00%
2012	38	1,614,142	0.12%	3.00%
2013	42	1,795,063	2.57%	3.00%
2014	35	1,471,786	2.23%	2.50%
2015	31	1,416,709	\$ 1,169	2.50%
2016	29	1,365,958	\$ 2,913	2.50%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 41 - MCF Management

Table 8-41: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 2,047,129	\$ 1,907,769	93%	\$ 139,360
2007	2,223,290	2,112,662	95%	110,628
2008	2,514,624	2,262,483	90%	252,141
2009	2,557,415	2,450,241	96%	107,174
2010	2,868,918	2,689,822	94%	179,096
2011	3,170,146	2,866,392	90%	303,754
2012	3,422,346	4,053,173	118%	(630,827)
2013	3,790,326	4,341,724	115%	(551,398)
2014	4,202,195	4,579,092	109%	(376,897)
2015	4,768,895	5,511,697	116%	(742,802)
2016	5,104,029	5,725,022	112%	(620,993)

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

Table 9-41: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	23	\$ 1,099,133	9.50%	0.00%
2007	22	1,103,262	9.72%	0.00%
2008	22	1,205,473	10.11%	0.00%
2009	23	1,244,343	9.17%	0.00%
2010	22	1,179,156	9.70%	0.00%
2011	23	1,294,336	10.49%	0.00%
2012	23	1,339,060	3.03%	0.00%
2013	24	1,425,009	4.93%	0.00%
2014	26	1,634,399	\$ 7,932	0.00%
2015	23	1,478,983	\$ 2,707	0.00%
2016	21	1,460,145	\$ 4,142	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 42 - ICEA Unit 11

Table 8-42: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 1,042,417	\$ 724,938	70%	\$ 317,479
2007	1,146,704	774,966	68%	371,738
2008	1,247,456	928,100	74%	319,356
2009	1,316,786	1,088,823	83%	227,963
2010	1,462,347	1,251,176	86%	211,171
2011	1,639,538	1,378,420	84%	261,118
2012	1,806,133	2,147,571	119%	(341,438)
2013	1,965,923	2,336,318	119%	(370,395)
2014	2,172,754	2,481,413	114%	(308,659)
2015	2,497,299	2,851,926	114%	(354,627)
2016	2,711,667	2,950,927	109%	(239,260)

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

Table 9-42: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	6	\$ 314,901	11.52%	3.95%
2007	14	697,841	9.09%	3.95%
2008	22	1,121,337	7.40%	3.95%
2009	24	1,254,843	6.78%	3.95%
2010	25	1,335,899	6.68%	3.95%
2011	23	1,270,097	7.44%	3.95%
2012	23	1,284,938	2.78%	3.95%
2013	24	1,419,125	3.55%	3.95%
2014	23	1,420,810	\$ 4,273	3.45%
2015	20	1,312,266	\$ 3,804	3.45%
2016	15	983,565	\$ 3,575	3.45%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 43 - ICEA Unit 1

Table 8-43: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 715,421	\$ 580,978	81%	\$ 134,443
2007	1,033,397	834,836	81%	198,561
2008	1,158,849	922,806	80%	236,043
2009	1,120,261	941,498	84%	178,763
2010	1,102,651	949,799	86%	152,852
2011	1,171,987	997,573	85%	174,414
2012	1,374,530	1,551,801	113%	(177,271)
2013	1,482,017	1,716,161	116%	(234,144)
2014	1,579,741	1,758,743	111%	(179,002)
2015	1,901,958	2,054,671	108%	(152,713)
2016	1,946,699	2,111,976	109%	(165,277)

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

Table 9-43: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	9	\$ 356,184	7.40%	3.51%
2007	12	485,721	7.73%	3.51%
2008	13	564,417	7.91%	3.51%
2009	11	479,237	7.80%	3.51%
2010	10	482,266	7.80%	3.51%
2011	10	499,894	8.25%	3.51%
2012	14	680,771	2.38%	3.51%
2013	13	705,512	1.94%	3.51%
2014	11	624,193	\$ 1,210	3.51%
2015	12	716,788	\$ 2,191	3.51%
2016	9	536,286	\$ 1,148	3.51%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 44 - MCF Exec Mgr

Table 8-44: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 238,051	\$ 164,404	69%	\$ 73,647
2007	270,934	202,806	75%	68,128
2008	308,771	242,090	78%	66,681
2009	348,576	291,527	84%	57,049
2010	394,932	335,011	85%	59,921
2011	498,758	332,775	67%	165,983
2012	539,187	572,665	106%	(33,478)
2013	578,192	597,522	103%	(19,330)
2014	803,032	790,765	99%	12,267
2015	957,626	1,041,798	109%	(84,172)
2016	1,056,378	1,072,440	102%	(16,062)

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

Table 9-44: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	1	\$ 119,043	20.35%	0.00%
2007	1	123,882	20.06%	0.00%
2008	1	129,277	19.51%	0.00%
2009	1	136,218	18.47%	0.00%
2010	0	0	\$ 188	0.00%
2011	1	119,301	26.86%	0.00%
2012	1	128,868	13.58%	0.00%
2013	1	130,425	16.52%	0.00%
2014	1	141,785	\$ 1,992	0.00%
2015	1	157,392	\$ 1,401	0.00%
2016	1	172,519	\$ 2,245	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 70 - Admin Salaried

Table 8-70: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2012	\$ 8,172,992	\$ 4,247,069	52%	\$ 3,925,923
2013	8,834,817	4,355,025	49%	4,479,792
2014	8,997,091	4,088,358	45%	4,908,733
2015	9,442,843	3,808,597	40%	5,634,246
2016	9,556,676	3,554,840	37%	6,001,836

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

Table 9-70: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2012	3	\$ 226,828	\$ 22,529	0.00%
2013	4	299,200	\$ 25,755	0.00%
2014	4	336,577	\$ 28,568	1.20%
2015	4	346,409	\$ 34,725	1.20%
2016	4	372,012	\$ 37,624	1.20%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 71 - Admin/Union/OPEIU

Table 8-71: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2012	\$ 5,859,684	\$ 3,535,179	60%	\$ 2,324,505
2013	5,869,621	3,521,525	60%	2,348,096
2014	5,805,384	3,528,503	61%	2,276,881
2015	6,154,755	3,506,368	57%	2,648,387
2016	6,071,380	3,473,598	57%	2,597,782

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

Table 9-71: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2012	9	\$ 554,156	\$ 18,563	0.00%
2013	10	594,306	\$ 18,411	0.00%
2014	10	591,558	\$ 17,909	1.20%
2015	9	558,882	\$ 20,904	1.20%
2016	8	473,076	\$ 19,873	1.20%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 73 - Dept. Heads

Table 8-73: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2012	\$ 3,822,037	\$ 2,089,183	55%	\$ 1,732,854
2013	4,257,762	2,180,917	51%	2,076,845
2014	4,416,746	2,180,460	49%	2,236,286
2015	4,839,878	2,190,276	45%	2,649,602
2016	4,898,745	2,194,956	45%	2,703,789

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

Table 9-73: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2012	3	\$ 293,414	\$ 12,906	0.00%
2013	4	409,299	\$ 15,306	1.20%
2014	4	416,886	\$ 16,022	1.20%
2015	4	447,775	\$ 19,310	1.20%
2016	3	333,941	\$ 19,096	1.20%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 74 - AFSCME Hired After 9/19/2011

Table 8-74: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2012	\$ 2,781	\$ 7,551	272%	\$ (4,770)
2013	14,929	19,627	132%	(4,698)
2014	44,805	33,532	75%	11,273
2015	78,716	49,740	63%	28,976
2016	128,110	78,825	62%	49,285

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

Table 9-74: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2012	2	\$ 77,674	5.57%	0.00%
2013	6	204,277	5.68%	0.00%
2014	9	391,473	\$ 1,531	1.20%
2015	8	365,335	\$ 1,664	1.20%
2016	8	412,460	\$ 2,016	1.20%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 75 - Adm/OPEIU Pro after 7/1/2011

Table 8-75: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	3,061	2,029	66%	1,032
2014	5,886	4,829	82%	1,057
2015	11,757	8,660	74%	3,097
2016	16,353	11,970	73%	4,383

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

Table 9-75: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	1	56,835	5.60%	0.00%
2014	1	48,427	\$ 152	1.20%
2015	1	58,182	\$ 216	1.20%
2016	1	57,517	\$ 223	1.20%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 76 - OPEIU Sup/Admin Sal aft 7/1/11

Table 8-76: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2012	\$ (362)	\$ 1,228	0%	\$ (1,590)
2013	8,430	10,286	122%	(1,856)
2014	19,371	17,540	91%	1,831
2015	36,833	27,913	76%	8,920
2016	24,154	37,402	155%	(13,248)

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

Table 9-76: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2012	2	\$ 60,668	6.08%	0.00%
2013	2	121,472	6.58%	0.00%
2014	2	122,678	\$ 516	1.20%
2015	2	134,685	\$ 675	1.20%
2016	1	65,691	\$ 165	1.20%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 90 - Asst Pros Attnys

Table 8-90: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 8,530,792	\$ 7,331,435	86%	\$ 1,199,357
2007	9,386,372	7,982,361	85%	1,404,011
2008	10,141,945	8,520,593	84%	1,621,352
2009	10,761,474	8,878,331	83%	1,883,143
2010	11,518,891	9,246,536	80%	2,272,355
2011	12,290,471	9,616,476	78%	2,673,995
2012	12,847,248	9,862,410	77%	2,984,838
2013	13,335,238	10,185,756	76%	3,149,482
2014	13,965,420	10,462,444	75%	3,502,976
2015	15,287,117	10,613,947	69%	4,673,170
2016	15,652,071	10,756,606	69%	4,895,465

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

Table 9-90: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	31	\$ 2,149,529	13.17%	1.40%
2007	30	2,046,925	13.73%	1.40%
2008	30	2,163,912	13.74%	1.40%
2009	30	2,175,538	14.59%	1.40%
2010	30	2,276,559	15.43%	1.40%
2011	31	2,352,931	16.76%	1.40%
2012	31	2,369,655	18.11%	1.40%
2013	29	2,245,339	\$ 33,948	1.40%
2014	27	2,127,081	\$ 36,005	1.40%
2015	25	2,115,362	\$ 45,412	1.40%
2016	25	2,121,190	\$ 46,711	1.40%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 91 - Parks Union Empl

Table 8-91: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 307,770	\$ 269,664	88%	\$ 38,106
2007	341,487	316,252	93%	25,235
2008	395,929	359,261	91%	36,668
2009	432,699	417,898	97%	14,801
2010	462,374	471,441	102%	(9,067)
2011	509,661	524,996	103%	(15,335)
2012	573,906	577,289	101%	(3,383)
2013	619,927	630,705	102%	(10,778)
2014	644,085	688,394	107%	(44,309)
2015	769,556	740,775	96%	28,781
2016	819,959	776,924	95%	43,035

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

Table 9-91: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	7	\$ 273,951	8.92%	0.00%
2007	6	239,863	9.52%	0.00%
2008	7	291,759	9.14%	0.00%
2009	7	309,576	8.72%	0.00%
2010	6	252,433	8.29%	0.00%
2011	7	280,013	8.27%	0.00%
2012	7	306,038	8.76%	0.00%
2013	6	262,819	8.58%	0.00%
2014	5	226,234	\$ 903	1.20%
2015	4	204,792	\$ 1,507	1.20%
2016	3	154,967	\$ 1,298	1.20%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 92 - Parks Non Union

Table 8-92: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 1,303,505	\$ 1,065,127	82%	\$ 238,378
2007	1,391,315	1,130,188	81%	261,127
2008	1,603,216	1,113,095	69%	490,121
2009	1,639,324	1,050,416	64%	588,908
2010	1,685,046	1,030,975	61%	654,071
2011	1,742,611	1,018,154	58%	724,457
2012	1,709,765	1,003,456	59%	706,309
2013	1,805,046	1,002,399	56%	802,647
2014	1,921,580	998,391	52%	923,189
2015	1,990,475	917,541	46%	1,072,934
2016	1,967,588	836,657	43%	1,130,931

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

Table 9-92: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	2	\$ 143,923	17.23%	0.00%
2007	2	157,991	17.09%	0.00%
2008	1	78,846	42.78%	0.00%
2009	1	83,274	46.82%	0.00%
2010	1	86,972	49.31%	0.00%
2011	1	92,077	52.73%	0.00%
2012	1	92,111	55.43%	0.00%
2013	1	92,922	61.00%	1.20%
2014	0	0	\$ 5,105	0.00%
2015	0	0	\$ 6,608	1.20%
2016	0	0	\$ 7,386	1.20%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 93 - Lgl Rsrch Clerks

Table 8-93: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 173,940	\$ 236,312	136%	\$ (62,372)
2007	196,845	273,176	139%	(76,331)
2008	215,918	299,063	139%	(83,145)
2009	233,026	335,214	144%	(102,188)
2010	290,877	371,589	128%	(80,712)
2011	333,789	406,038	122%	(72,249)
2012	342,860	438,927	128%	(96,067)
2013	356,505	486,406	136%	(129,901)
2014	326,830	527,696	162%	(200,866)
2015	360,935	551,063	153%	(190,128)
2016	379,062	558,527	147%	(179,465)

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

Table 9-93: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2006	7	\$ 271,510	3.39%	0.00%
2007	8	354,267	4.00%	0.00%
2008	7	325,997	3.58%	0.00%
2009	8	368,381	3.21%	0.00%
2010	6	262,729	2.88%	0.00%
2011	8	358,280	4.66%	0.00%
2012	8	337,116	3.06%	0.00%
2013	6	286,084	1.23%	0.00%
2014	7	318,873	0.00%	0.00%
2015	6	313,672	\$ 0	1.20%
2016	5	275,727	\$ 0	1.20%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 94 - Zoo Hires after 7/1/07

Table 8-94: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2009	\$ 138,774	\$ 89,025	64%	\$ 49,749
2010	203,851	150,140	74%	53,711
2011	301,816	217,789	72%	84,027
2012	390,484	298,088	76%	92,396
2013	545,464	518,993	95%	26,471
2014	473,567	335,499	71%	138,068
2015	542,326	382,428	71%	159,898
2016	586,028	444,169	76%	141,859

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

Table 9-94: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2009	12	\$ 492,222	8.24%	0.00%
2010	12	508,896	8.99%	0.00%
2011	14	610,175	9.39%	0.00%
2012	15	670,702	9.27%	0.00%
2013	16	728,645	\$ 4,310	1.20%
2014	12	518,384	\$ 3,692	1.20%
2015	10	453,904	\$ 3,366	1.20%
2016	9	409,428	\$ 3,094	1.20%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 95 - UAW Local 2256

Table 8-95: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2009	\$ 725,022	\$ 876,901	121%	\$ (151,879)
2010	865,123	999,626	116%	(134,503)
2011	938,655	1,096,960	117%	(158,305)
2012	1,025,192	1,184,465	116%	(159,273)
2013	882,498	1,146,124	130%	(263,626)
2014	979,485	1,098,041	112%	(118,556)
2015	998,050	1,146,773	115%	(148,723)
2016	848,607	993,235	117%	(144,628)

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

Table 9-95: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2009	9	\$ 376,371	11.42%	1.70%
2010	9	395,770	12.45%	1.70%
2011	7	329,580	11.81%	1.70%
2012	7	327,072	11.42%	1.70%
2013	5	229,679	1.96%	2.90%
2014	5	229,044	11.15%	2.90%
2015	4	199,925	7.43%	2.90%
2016	3	140,126	4.67%	2.90%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 96 - City Zoo Director

Table 8-96: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2009	\$ 394,255	\$ 755,149	192%	\$ (360,894)
2010	398,110	823,549	207%	(425,439)
2011	581,776	821,238	141%	(239,462)
2012	432,575	813,702	188%	(381,127)
2013	422,742	814,781	193%	(392,039)
2014	415,103	815,405	196%	(400,302)
2015	427,706	808,899	189%	(381,193)
2016	419,577	803,688	192%	(384,111)

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

Table 9-96: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2009	1	\$ 87,405	0.00%	3.50%
2010	1	81,368	0.00%	3.50%
2011	1	81,766	0.00%	3.50%
2012	0	0	\$ 0	0.00%
2013	0	0	\$ 0	0.00%
2014	0	0	\$ 0	0.00%
2015	0	0	\$ 0	3.50%
2016	0	0	\$ 0	3.50%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 97 - Teamts 243 Spv (frm Lsg)

Table 8-97: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	\$ 780,996	\$ 334,842	43%	\$ 446,154
2015	644,812	374,464	58%	270,348
2016	725,582	478,051	66%	247,531

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

Table 9-97: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2014	6	\$ 454,332	\$ 5,585	1.70%
2015	5	421,518	\$ 4,621	1.70%
2016	5	419,639	\$ 4,789	1.70%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 98 - MNA Nurses

Table 8-98: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	\$ 5,769,165	\$ 4,247,380	74%	\$ 1,521,785
2014	6,446,507	4,889,999	76%	1,556,508
2015	7,975,840	5,626,808	71%	2,349,032
2016	8,312,298	6,142,093	74%	2,170,205

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

Table 9-98: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	56	\$ 3,187,650	7.47%	11.87%
2014	41	2,450,159	\$ 14,624	13.07%
2015	36	2,290,354	\$ 21,372	13.07%
2016	29	1,862,460	\$ 18,861	13.07%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 99 - Team 243 Zoo Hired pr 4/1/13

Table 8-99: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	\$ 175,075	\$ 397,584	227%	\$ (222,509)
2015	312,089	440,433	141%	(128,344)
2016	320,563	556,778	174%	(236,215)

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

Table 9-99: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2014	2	\$ 105,168	\$ 0	1.20%
2015	3	172,837	\$ 0	1.20%
2016	3	159,080	\$ 0	1.20%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HA - Elected Offcls after 1/1/2013

Table 8-HA: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	4,046	4,476	111%	(430)
2014	9,563	8,998	94%	565
2015	21,777	18,207	84%	3,570
2016	35,454	28,084	79%	7,370

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

Table 9-HA: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	1	88,590	4.65%	0.00%
2014	1	88,590	4.44%	0.00%
2015	2	174,755	5.05%	0.00%
2016	2	177,444	5.15%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HB - Commsnrs after 1/1/2013

Table 8-HB: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2015	1,000	828	83%	172
2016	2,279	1,726	76%	553

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

Table 9-HB: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2015	1	15,251	5.94%	0.00%
2016	1	15,547	6.02%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HC - GenMgt & Conf /Leg Res af 1/1/2015

Table 8-HC: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	25,923	25,459	98%	464
2014	115,206	104,690	91%	10,516
2015	272,361	254,910	94%	17,451
2016	457,754	427,593	93%	30,161

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

Table 9-HC: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	14	675,138	5.43%	0.00%
2014	29	1,830,682	5.12%	0.00%
2015	33	2,321,621	5.45%	0.00%
2016	40	2,761,100	5.55%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HD - FOP 911 Non-Sup aft 1/1/13

Table 8-HD: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	\$ 15,265	\$ 19,189	126%	\$ (3,924)
2014	45,025	50,536	112%	(5,511)
2015	99,782	107,099	107%	(7,317)
2016	158,755	171,651	108%	(12,896)

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

Table 9-HD: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	14	\$ 506,722	4.04%	0.00%
2014	15	655,962	3.90%	0.00%
2015	22	1,123,747	3.96%	0.00%
2016	27	1,334,560	3.87%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HE - Sheriff Dep MAP after 1/1/13

Table 8-HE: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2015	3,158	7,287	231%	(4,129)
2016	30,362	45,675	150%	(15,313)

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

Table 9-HE: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2015	8	236,414	6.51%	0.00%
2016	7	335,943	6.34%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HF - TOPS UAW New Hires 3/1/13

Table 8-HF: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	\$ 37,104	\$ 34,732	94%	\$ 2,372
2014	159,397	157,472	99%	1,925
2015	415,534	381,577	92%	33,957
2016	638,782	669,606	105%	(30,824)

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

Table 9-HF: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	45	\$ 1,121,406	5.54%	0.00%
2014	88	2,428,003	5.64%	0.00%
2015	114	3,782,205	5.76%	0.00%
2016	132	4,448,928	5.84%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HG - FOP Sher/Deputies as of 1/1/13

Table 8-HG: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	\$ 10,285	\$ 12,712	124%	\$ (2,427)
2014	45,449	70,672	156%	(25,223)
2015	148,803	152,339	102%	(3,536)
2016	265,593	249,873	94%	15,720

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

Table 9-HG: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	9	\$ 310,186	5.63%	0.00%
2014	21	663,617	6.02%	0.00%
2015	28	1,295,918	6.47%	0.00%
2016	26	1,345,335	6.53%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HI - Animal Control-FOP aft 4/1/13

Table 8-HI: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	\$ 1,173	\$ 4,517	385%	\$ (3,344)
2014	6,781	12,320	182%	(5,539)
2015	19,617	25,032	128%	(5,415)
2016	38,378	42,981	112%	(4,603)

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

Table 9-HI: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	5	\$ 141,577	4.72%	0.00%
2014	5	145,217	4.55%	0.00%
2015	8	264,529	5.05%	0.00%
2016	9	328,148	4.40%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HJ - Gen.ICEA Prof. after 1/1/2013

Table 8-HJ: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	\$ 8,395	\$ 8,804	105%	\$ (409)
2014	56,694	45,040	79%	11,654
2015	224,225	131,214	59%	93,011
2016	333,930	257,993	77%	75,937

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

Table 9-HJ: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	10	\$ 347,501	5.71%	0.00%
2014	18	816,087	6.08%	0.00%
2015	32	1,568,101	6.20%	0.00%
2016	37	1,854,427	5.99%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HK - Asst.Prof.Attnys after 4/1/13

Table 8-HK: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	\$ (170)	\$ 2,063	0%	\$ (2,233)
2014	7,812	9,989	128%	(2,177)
2015	24,485	22,636	92%	1,849
2016	38,734	41,533	107%	(2,799)

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

Table 9-HK: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	2	\$ 80,323	4.61%	0.00%
2014	4	185,487	4.86%	0.00%
2015	5	266,067	5.08%	0.00%
2016	6	318,478	5.03%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HL - ICEA P.H. Nurses after 4/1/13

Table 8-HL: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	\$ 3,678	\$ 4,210	115%	\$ (532)
2014	12,404	17,385	140%	(4,981)
2015	41,064	38,941	95%	2,123
2016	74,434	66,522	89%	7,912

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

Table 9-HL: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	3	\$ 123,070	4.56%	0.00%
2014	7	258,546	4.91%	0.00%
2015	8	456,208	5.51%	0.00%
2016	8	464,738	5.56%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HM - UAW Zoo New Hires as 5/1/13

Table 8-HM: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	\$ 2,941	\$ 3,227	110%	\$ (286)
2014	11,800	10,647	90%	1,153
2015	27,174	24,059	89%	3,115
2016	46,234	41,020	89%	5,214

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

Table 9-HM: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	3	\$ 105,681	5.46%	0.00%
2014	3	122,893	5.65%	0.00%
2015	5	210,751	5.46%	0.00%
2016	6	249,579	5.40%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HN - Gen OPEIU Prob after 1/1/13

Table 8-HN: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2013	\$ 1,331	\$ 1,319	99%	\$ 12
2014	3,507	3,053	87%	454
2015	7,345	5,584	76%	1,761
2016	17,916	14,922	83%	2,994

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

Table 9-HN: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2013	1	\$ 20,195	6.58%	0.00%
2014	1	22,170	6.71%	0.00%
2015	3	102,314	5.44%	0.00%
2016	4	147,431	5.40%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HP - MNA Nurse Prac/Clinic 1/1/14

Table 8-HP: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	\$ 9,990	\$ 14,712	147%	\$ (4,722)
2015	62,149	72,224	116%	(10,075)
2016	128,457	139,425	109%	(10,968)

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

Table 9-HP: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2014	9	\$ 337,272	5.89%	0.00%
2015	19	979,822	6.12%	0.00%
2016	17	962,604	6.30%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HQ - AFSCME Hired After 1/1/2014

Table 8-HQ: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	\$ (25)	\$ 1,502	0%	\$ (1,527)
2015	4,739	7,330	155%	(2,591)
2016	19,835	20,437	103%	(602)

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

Table 9-HQ: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2014	1	\$ 35,606	5.16%	0.00%
2015	3	116,563	6.09%	0.00%
2016	7	308,666	6.22%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HR - Parks Union Emp after 1/1/2014

Table 8-HR: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2015	2,732	1,161	43%	1,571
2016	9,435	6,029	64%	3,406

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

Table 9-HR: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2015	2	65,440	6.09%	0.00%
2016	3	112,107	5.96%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HS - OPEIU Tech/Cler after 1/1/2014

Table 8-HS: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2016	7,773	4,900	63%	2,873

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

Table 9-HS: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2016	2	118,045	5.85%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HT - ICEA Court Prof after 4/15/14

Table 8-HT: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	\$ (25)	\$ 733	0%	\$ (758)
2015	18,119	8,904	49%	9,215
2016	41,982	27,952	67%	14,030

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

Table 9-HT: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2014	1	\$ 31,820	5.89%	0.00%
2015	5	224,578	6.24%	0.00%
2016	6	291,012	6.04%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division HU - Team 243 Zoo Hires aft 4/1/13

Table 8-HU: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2014	\$ 2,219	\$ 3,327	150%	\$ (1,108)
2015	12,342	10,225	83%	2,117
2016	13,566	16,726	123%	(3,160)

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

Table 9-HU: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2014	1	\$ 41,648	4.52%	0.00%
2015	2	128,795	6.40%	0.00%
2016	1	76,404	6.72%	0.00%

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

² For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 7.

See the Benefit Provision History on page 184 for past benefit provision changes.

Division 01 - Confidential

Table 10-01: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 3,691,879	23	\$ 3,840,751	22	\$ 261,924
Gain/Loss	12/31/2016	830,914	22	895,310	22	61,056
Total				\$ 4,736,061		\$ 322,980

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 02 - Sheriff FOP Spvs

Table 10-02: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 23,938,201	23	\$ 24,663,353	22	\$ 1,681,932
Gain/Loss	12/31/2016	424,361	22	457,249	22	31,188
Total				\$ 25,120,602		\$ 1,713,120

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 04 - MCF

Table 10-04: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (1,774,022)	10	\$ (1,637,115)	10	\$ (200,244)
Gain/Loss	12/31/2016	(204,045)	10	(219,859)	10	(26,892)
Total				\$ (1,856,974)		\$ (227,136)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 06 - Tmts 243/Sup hired 1/1/09

Table 10-06: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 189,631	23	\$ 192,428	20	\$ 13,968
Gain/Loss	12/31/2016	41,179	20	44,370	20	3,216
Total				\$ 236,798		\$ 17,184

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 07 - Gnrl Hrly/AFSCME DB

Table 10-07: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 6,775,671	23	\$ 6,988,719	22	\$ 476,604
Gain/Loss	12/31/2016	156,705	22	168,850	22	11,520
Total				\$ 7,157,569		\$ 488,124

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 09 - Judges

Table 10-09: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Gain/Loss	12/31/2016	(301,514)	15	(324,881)	15	(28,908)
Total				\$ (324,881)		\$ (28,908)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 10 - Gnrl Mgmt

Table 10-10: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 24,209,177	23	\$ 25,094,115	22	\$ 1,711,308
Gain/Loss	12/31/2016	29,517	22	31,805	22	2,172
Total				\$ 25,125,920		\$ 1,713,480

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 11 - Gnrl Library

Table 10-11: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Gain/Loss	12/31/2016	(264,053)	10	(284,517)	10	(34,800)
Total				\$ (284,517)		\$ (34,800)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 12 - Gnrl ICEA Profs

Table 10-12: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 14,954,763	23	\$ 15,613,729	22	\$ 1,064,784
Gain/Loss	12/31/2016	711,791	22	766,955	22	52,308
Total				\$ 16,380,684		\$ 1,117,092

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 13 - Gnrl OPEIU Prob

Table 10-13: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 8,015,209	23	\$ 8,269,893	22	\$ 563,964
Gain/Loss	12/31/2016	(9,490)	22	(10,226)	22	(696)
Total				\$ 8,259,667		\$ 563,268

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 14 - Gnrl TOPS UAW

Table 10-14: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 19,299,417	23	\$ 20,182,114	22	\$ 1,376,328
Gain/Loss	12/31/2016	(449,941)	22	(484,811)	22	(33,060)
Total				\$ 19,697,303		\$ 1,343,268

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 15 - Animal Cntrl FOP

Table 10-15: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 2,531,251	23	\$ 2,606,830	22	\$ 177,780
Gain/Loss	12/31/2016	(11,655)	22	(12,558)	22	(852)
Total				\$ 2,594,272		\$ 176,928

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 16 - Gnrl Commsnrs

Table 10-16: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 115,250	23	\$ 121,287	22	\$ 8,268
Gain/Loss	12/31/2016	(41,307)	22	(44,508)	22	(3,036)
Total				\$ 76,779		\$ 5,232

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 17 - ICEA Nurses

Table 10-17: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 5,247,363	23	\$ 5,448,059	22	\$ 371,532
Gain/Loss	12/31/2016	246,255	22	265,340	22	18,096
Total				\$ 5,713,399		\$ 389,628

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 18 - ICEA Ct. Prof

Table 10-18: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 6,438,122	23	\$ 6,682,896	22	\$ 455,748
Gain/Loss	12/31/2016	(168,425)	22	(181,478)	22	(12,372)
Total				\$ 6,501,418		\$ 443,376

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 19 - Cnstitutnl Offcls

Table 10-19: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortiza-tion Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortiza-tion Period**	Amortization Payment
Gain/Loss	12/31/2016	(281,697)	15	(303,529)	15	(27,000)
Total				\$ (303,529)		\$ (27,000)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 21 - FOP Shrf Deputies

Table 10-21: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 12,922,571	23	\$ 13,365,407	22	\$ 911,460
Gain/Loss	12/31/2016	(729,487)	22	(786,022)	22	(53,604)
Total				\$ 12,579,385		\$ 857,856

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 22 - FOP 911 Non-Sup frmr E.L

Table 10-22: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 542,216	23	\$ 569,493	22	\$ 38,832
Gain/Loss	12/31/2016	(25,735)	22	(27,730)	22	(1,896)
Total				\$ 541,763		\$ 36,936

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 23 - FOP Non-Sup (frm Lansing)

Table 10-23: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 557,007	23	\$ 571,688	22	\$ 38,988
Gain/Loss	12/31/2016	(169,398)	22	(182,526)	22	(12,444)
Total				\$ 389,162		\$ 26,544

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 24 - Sheriff Deputies-MAP

Table 10-24: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 5,144,555	23	\$ 5,320,750	22	\$ 362,856
Gain/Loss	12/31/2016	308,137	22	332,018	22	22,644
Total				\$ 5,652,768		\$ 385,500

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 40 - ICEA Unit 111

Table 10-40: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (618,943)	10	\$ (577,001)	10	\$ (70,572)
Gain/Loss	12/31/2016	159,158	10	171,493	10	20,976
Total				\$ (405,508)		\$ (49,596)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 41 - MCF Management

Table 10-41: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (742,802)	10	\$ (722,947)	10	\$ (88,428)
Gain/Loss	12/31/2016	139,645	10	150,468	10	18,408
Total				\$ (572,479)		\$ (70,020)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 42 - ICEA Unit 11

Table 10-42: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (354,627)	10	\$ (321,860)	10	\$ (39,372)
Gain/Loss	12/31/2016	99,373	10	107,074	10	13,092
Total				\$ (214,786)		\$ (26,280)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 43 - ICEA Unit 1

Table 10-43: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (152,713)	10	\$ (127,224)	10	\$ (15,564)
Gain/Loss	12/31/2016	(31,425)	10	(33,860)	10	(4,140)
Total				\$ (161,084)		\$ (19,704)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 44 - MCF Exec Mgr

Table 10-44: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (84,172)	10	\$ (82,451)	10	\$ (10,080)
Gain/Loss	12/31/2016	70,685	10	76,163	10	9,312
Total				\$ (6,288)		\$ (768)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 70 - Admin Salaried

Table 10-70: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 5,634,246	23	\$ 5,802,934	22	\$ 395,736
Gain/Loss	12/31/2016	248,568	22	267,832	22	18,264
Total				\$ 6,070,766		\$ 414,000

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 71 - Admin/Union/OPEIU

Table 10-71: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 2,648,387	23	\$ 2,729,180	22	\$ 186,120
Gain/Loss	12/31/2016	(108,036)	22	(116,409)	22	(7,944)
Total				\$ 2,612,771		\$ 178,176

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 73 - Dept. Heads

Table 10-73: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 2,649,602	23	\$ 2,741,423	22	\$ 186,948
Gain/Loss	12/31/2016	(14,167)	22	(15,265)	22	(1,044)
Total				\$ 2,726,158		\$ 185,904

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 74 - AFSCME Hired After 9/19/2011

Table 10-74: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 28,976	23	\$ 32,232	22	\$ 2,196
Gain/Loss	12/31/2016	17,323	22	18,666	22	1,272
Total				\$ 50,898		\$ 3,468

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 75 - Adm/OPEIU Pro after 7/1/2011

Table 10-75: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 3,097	23	\$ 4,000	22	\$ 276
Gain/Loss	12/31/2016	416	22	448	22	36
Total				\$ 4,448		\$ 312

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 76 - OPEIU Sup/Admin Sal aft 7/1/11

Table 10-76: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Gain/Loss	12/31/2016	(13,966)	15	(15,048)	15	(1,344)
Total				\$ (15,048)		\$ (1,344)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 90 - Asst Pros Attnys

Table 10-90: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 4,673,170	23	\$ 4,871,176	22	\$ 332,196
Gain/Loss	12/31/2016	65,982	22	71,096	22	4,848
Total				\$ 4,942,272		\$ 337,044

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 91 - Parks Union Empl

Table 10-91: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 28,781	23	\$ 37,070	22	\$ 2,532
Gain/Loss	12/31/2016	6,283	22	6,770	22	468
Total				\$ 43,840		\$ 3,000

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 92 - Parks Non Union

Table 10-92: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 1,072,934	20	\$ 1,094,788	18	\$ 85,404
Gain/Loss	12/31/2016	38,442	18	41,421	18	3,228
Total				\$ 1,136,209		\$ 88,632

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 93 - Lgl Rsrch Clerks

Table 10-93: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (190,128)	10	\$ (178,559)	10	\$ (21,840)
Gain/Loss	12/31/2016	8,405	15	9,056	15	804
Total				\$ (169,503)		\$ (21,036)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 94 - Zoo Hires after 7/1/07

Table 10-94: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 159,898	23	\$ 158,934	22	\$ 10,836
Gain/Loss	12/31/2016	(15,720)	22	(16,938)	22	(1,152)
Total				\$ 141,996		\$ 9,684

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 95 - UAW Local 2256

Table 10-95: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (148,723)	10	\$ (142,487)	10	\$ (17,424)
Gain/Loss	12/31/2016	5,287	15	5,697	15	504
Total				\$ (136,790)		\$ (16,920)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 96 - City Zoo Director

Table 10-96: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (381,193)	10	\$ (390,400)	10	\$ (47,748)
Gain/Loss	12/31/2016	26,646	10	28,711	10	3,516
Total				\$ (361,689)		\$ (44,232)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 97 - Teamts 243 Spv (frm Lsg)

Table 10-97: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 270,348	23	\$ 264,012	22	\$ 18,000
Gain/Loss	12/31/2016	(14,220)	22	(15,322)	22	(1,044)
Total				\$ 248,690		\$ 16,956

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 98 - MNA Nurses

Table 10-98: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 2,349,032	23	\$ 2,477,211	22	\$ 168,936
Gain/Loss	12/31/2016	(285,803)	22	(307,953)	22	(21,000)
Total				\$ 2,169,258		\$ 147,936

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division 99 - Team 243 Zoo Hired pr 4/1/13

Table 10-99: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (128,344)	10	\$ (117,330)	10	\$ (14,352)
Gain/Loss	12/31/2016	(112,771)	15	(121,511)	15	(10,812)
Total				\$ (238,841)		\$ (25,164)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HA - Elected Offcls after 1/1/2013

Table 10-HA: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 3,570	23	\$ 5,343	22	\$ 360
Gain/Loss	12/31/2016	2,053	22	2,212	22	156
Total				\$ 7,555		\$ 516

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HB - Commsnrs after 1/1/2013

Table 10-HB: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 172	23	\$ 187	22	\$ 12
Gain/Loss	12/31/2016	368	22	396	22	24
Total				\$ 583		\$ 36

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HC - GenMgt & Conf /Leg Res af 1/1/2015

Table 10-HC: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 17,451	23	\$ 28,144	22	\$ 1,920
Gain/Loss	12/31/2016	2,433	22	2,622	22	180
Total				\$ 30,766		\$ 2,100

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HD - FOP 911 Non-Sup aft 1/1/13

Table 10-HD: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (7,317)	10	\$ (6,096)	10	\$ (744)
Gain/Loss	12/31/2016	(6,486)	15	(6,989)	15	(624)
Total				\$ (13,085)		\$ (1,368)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HE - Sheriff Dep MAP after 1/1/13

Table 10-HE: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (4,129)	10	\$ (4,246)	10	\$ (516)
Gain/Loss	12/31/2016	(10,863)	15	(11,705)	15	(1,044)
Total				\$ (15,951)		\$ (1,560)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HF - TOPS UAW New Hires 3/1/13

Table 10-HF: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Gain/Loss	12/31/2016	(33,542)	15	(36,142)	15	(3,216)
Total				\$ (36,142)		\$ (3,216)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HG - FOP Sher/Deputies as of 1/1/13

Table 10-HG: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (3,536)	10	\$ 2,643	22	\$ 180
Gain/Loss	12/31/2016	13,116	22	14,133	22	960
Total				\$ 16,776		\$ 1,140

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HI - Animal Control-FOP aft 4/1/13

Table 10-HI: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (5,415)	10	\$ (3,744)	10	\$ (456)
Gain/Loss	12/31/2016	(665)	15	(717)	15	(60)
Total				\$ (4,461)		\$ (516)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HJ - Gen.ICEA Prof. after 1/1/2013

Table 10-HJ: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 93,011	23	\$ 98,663	22	\$ 6,732
Gain/Loss	12/31/2016	(21,888)	22	(23,584)	22	(1,608)
Total				\$ 75,079		\$ 5,124

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HK - Asst.Prof.Attnys after 4/1/13

Table 10-HK: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Gain/Loss	12/31/2016	(2,949)	15	(3,178)	15	(288)
Total				\$ (3,178)		\$ (288)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HL - ICEA P.H. Nurses after 4/1/13

Table 10-HL: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 2,123	23	\$ 5,325	22	\$ 360
Gain/Loss	12/31/2016	2,646	22	2,851	22	192
Total				\$ 8,176		\$ 552

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HM - UAW Zoo New Hires as 5/1/13

Table 10-HM: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 3,115	23	\$ 2,777	22	\$ 192
Gain/Loss	12/31/2016	2,463	22	2,654	22	180
Total				\$ 5,431		\$ 372

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HN - Gen OPEIU Prob after 1/1/13

Table 10-HN: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 1,761	23	\$ 161	22	\$ 12
Gain/Loss	12/31/2016	2,821	22	3,040	22	204
Total				\$ 3,201		\$ 216

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HP - MNA Nurse Prac/Clinic 1/1/14

Table 10-HP: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (10,075)	10	\$ (6,950)	10	\$ (852)
Gain/Loss	12/31/2016	(3,650)	15	(3,933)	15	(348)
Total				\$ (10,883)		\$ (1,200)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HQ - AFSCME Hired After 1/1/2014

Table 10-HQ: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ (2,591)	10	\$ (539)	10	\$ (72)
Gain/Loss	12/31/2016	(20)	15	(22)	15	0
Total				\$ (561)		\$ (72)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HR - Parks Union Emp after 1/1/2014

Table 10-HR: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 1,571	23	\$ 1,700	22	\$ 120
Gain/Loss	12/31/2016	1,712	22	1,845	22	132
Total				\$ 3,545		\$ 252

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HS - OPEIU Tech/Cler after 1/1/2014

Table 10-HS: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Gain/Loss	12/31/2016	2,873	15	3,096	15	276
Total				\$ 3,096		\$ 276

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HT - ICEA Court Prof after 4/15/14

Table 10-HT: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Initial	12/31/2015	\$ 9,215	23	\$ 10,951	22	\$ 744
Gain/Loss	12/31/2016	3,149	22	3,393	22	228
Total				\$ 14,344		\$ 972

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

Division HU - Team 243 Zoo Hires aft 4/1/13

Table 10-HU: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance	Original Amortization Period**	Amounts for Fiscal Year Beginning 1/1/2018		
				Outstanding UAL Balance*	Amortization Period**	Amortization Payment
Gain/Loss	12/31/2016	(3,461)	15	(3,729)	15	(336)
Total				\$ (3,729)		\$ (336)

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

** Please see the [Appendix](#) on the MERS website for a description of the amortization policy.

The unfunded accrued liability as of December 31, 2016 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2016 valuation to take into account the expected future contributions that are based on past valuations. The projected unfunded accrued liability is amortized over the appropriate period.

GASB 68 Information

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

Actuarial Valuation Date:	12/31/2016
Measurement Date of Total Pension Liability (TPL):	12/31/2016

At 12/31/2016, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits:	1,305
Inactive employees entitled to but not yet receiving benefits:	264
Active employees:	<u>1,285</u>
	2,854

Total Pension Liability as of 12/31/2015 measurement date:	\$ 436,493,318
Total Pension Liability as of 12/31/2016 measurement date:	\$ 446,885,085
Service Cost for the year ending on the 12/31/2016 measurement date:	\$ 7,964,327

Change in the Total Pension Liability due to:

- Benefit changes ¹ :	\$ 0
- Differences between expected and actual experience ² :	\$ (6,140,673)
- Changes in assumptions ² :	\$ 0

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

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

Average expected remaining service lives of all employees (active and inactive):	4
Covered employee payroll: (Needed for Required Supplementary Information)	\$ 70,321,127

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

	1% Decrease (7.00%)	Current Discount Rate (8.00%)	1% Increase (9.00%)
Change in Net Pension Liability as of 12/31/2016:	\$ 49,369,376	-	\$ (41,648,816)

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.

GASB 68 Information

This page is for those municipalities who need to “roll-forward” their total pension liability due to the timing of completion of the actuarial valuation in relation to their fiscal year-end.

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

Actuarial Valuation Date:	12/31/2016
Measurement Date of Total Pension Liability (TPL):	12/31/2017

At 12/31/2016, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits:	1,305
Inactive employees entitled to but not yet receiving benefits:	264
Active employees:	<u>1,285</u>
	2,854

Total Pension Liability as of 12/31/2016 measurement date:	\$ 451,650,756
Total Pension Liability as of 12/31/2017 measurement date:	\$ 462,384,530
Service Cost for the year ending on the 12/31/2017 measurement date:	\$ 7,970,907
Change in the Total Pension Liability due to:	
- Benefit changes ¹ :	\$ 0
- Differences between expected and actual experience ² :	\$ (5,146,928)
- Changes in assumptions ² :	\$ 0

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

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

Average expected remaining service lives of all employees (active and inactive):	4
Covered employee payroll: (Needed for Required Supplementary Information)	\$ 70,321,127

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

	1% Decrease (7.00%)	Current Discount Rate (8.00%)	1% Increase (9.00%)
Change in Net Pension Liability as of 12/31/2017:	\$ 50,301,445	-	\$ (42,467,984)

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.

Benefit Provision History

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

01 - Confidential

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2013	Member Contribution Rate 6.56%
1/1/2002	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2002	Benefit B-4 (80% max)
1/1/2002	Member Contribution Rate 5.36%
6/25/1996	Day of work defined as 4 Hours a Day for Part Time employees.
6/25/1996	Day of work defined as 8 Hours a Day for Full Time employees.
1/1/1995	Benefit B-3 (80% max)
1/1/1995	Member Contribution Rate 4.50%
12/31/1994	Member Contribution Rate 0.00%
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
1/1/1993	6 Year Vesting
10/1/1991	Benefit F55 (With 15 Years of Service)
10/1/1991	Member Contribution Rate 1.00%
7/1/1991	Benefit C-2/Base B-1
10/1/1990	Member Contribution Rate 0.00%
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
12/16/1986	Blanket Resolution (All Service)
10/15/1980	Exclude Temporary Employees
1/1/1969	Benefit C-1 (Old)
9/29/1965	Covered by Act 88
11/15/1950	Benefit FAC-5 (5 Year Final Average Compensation)
11/15/1950	10 Year Vesting
11/15/1950	Benefit C (Old)
11/15/1950	Member Contribution Rate 0.00%
11/15/1950	Fiscal Month - January

02 - Sheriff FOP Spvs

12/1/2016	Service Credit Purchase Estimates - Yes
10/1/1997	3.2% Multiplier (80% max)
10/1/1997	Member Contribution Rate 19.61%
1/1/1995	25 Years & Out
1/1/1995	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/1995	Benefit B-4 (80% max)
1/1/1995	Member Contribution Rate 10.45%
12/31/1994	Member Contribution Rate 0.00%
7/1/1994	Member Contribution Rate 5.40%
6/30/1994	Member Contribution Rate 0.00%
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
7/1/1993	Benefit B-3 (80% max)

02 - Sheriff FOP Spvs

7/1/1993	Member Contribution Rate 6.40%
6/30/1993	Member Contribution Rate 0.00%
10/1/1991	Member Contribution Rate 1.85%
1/1/1991	Member Contribution Rate 1.60%
10/1/1990	Benefit F50 (With 25 Years of Service)
10/1/1990	Member Contribution Rate 1.80%
1/1/1990	Day of work defined as 4 Hours a Day for Part Time employees.
1/1/1990	Day of work defined as 8 Hours a Day for Full Time employees.
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
1/1/1987	Benefit C-2/Base C-1 (Old)
12/16/1986	Blanket Resolution (All Service)
1/1/1986	Benefit F55 (With 15 Years of Service)
1/1/1986	Member Contribution Rate 1.00%
10/15/1980	Exclude Temporary Employees
1/1/1976	Member Contribution Rate 0.00%
1/1/1969	Benefit C-1 (Old)
9/29/1965	Covered by Act 88
11/15/1950	Benefit FAC-5 (5 Year Final Average Compensation)
11/15/1950	10 Year Vesting
11/15/1950	Benefit C (Old)
11/15/1950	Member Contribution Rate 3.00% Under \$4,200.00 - Then 5.00%
11/15/1950	Fiscal Month - January

04 - MCF

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	DC Adoption Date 01-01-2014
1/1/1995	Flexible E 2% COLA Adopted (01/01/1995)
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
10/15/1980	Exclude Temporary Employees
6/1/1977	Member Contribution Rate 0.00%
1/1/1969	Benefit C-1 (Old)
9/29/1965	Covered by Act 88
11/15/1950	Benefit FAC-5 (5 Year Final Average Compensation)
11/15/1950	10 Year Vesting
11/15/1950	Benefit C (Old)
11/15/1950	Member Contribution Rate 3.00% Under \$4,200.00 - Then 5.00%
11/15/1950	Fiscal Month - January

06 - Tmts 243/Sup hired 1/1/09

12/1/2016	Service Credit Purchase Estimates - Yes
10/1/2014	Participant Contribution Rate 1.7%
1/1/2013	Benefit B-2
1/1/2013	Participant Contribution Rate 1.2%
7/1/2012	Day of work defined as 8 Hours a Day for All employees.
7/1/2012	Benefit FAC-2 (2 Year Final Average Compensation)

06 - Tmts 243/Sup hired 1/1/09

7/1/2012	8 Year Vesting
7/1/2012	1.8% multiplier
7/1/2012	Benefit F50 (With 25 Years of Service)
7/1/2012	Eligible at Age 58 (With 8 Years of Service)
7/1/2012	Eligible at Age 58 (With 8 Years of Service)
7/1/2012	Participant Contribution Rate 6.349%
6/30/2012	Current FAC
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

07 - Gnrl Hrly/AFSCME DB

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	Member Contribution Rate 1.20%
6/1/2012	Day of work defined as 8 Hours a Day for All employees.
6/1/2012	Benefit FAC-3 (3 Year Final Average Compensation)
6/1/2012	Exclude Temporary Employees
6/1/2012	8 Year Vesting
6/1/2012	Benefit B-4 (80% max)
6/1/2012	Benefit F55 (With 20 Years of Service)
6/1/2012	Member Contribution Rate 0.00%
6/1/2012	Fiscal Month - January
4/3/1986	Covered by Act 88

09 - Judges

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2002	Benefit B-4 (80% max)
1/1/2002	Member Contribution Rate 3.14%
1/1/1998	6 Year Vesting
1/1/1998	Benefit B-3 (80% max)
1/1/1998	Benefit F55 (With 15 Years of Service)
4/1/1991	Benefit FAC-5 (5 Year Final Average Compensation)
4/1/1991	10 Year Vesting
4/1/1991	Benefit C-1 (Old)
4/1/1991	Member Contribution Rate 0.00%
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

10 - Gnrl Mgmt

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2013	Member Contribution Rate 7.59%
1/1/2002	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2002	Benefit B-4 (80% max)
1/1/2002	Member Contribution Rate 6.39%
6/25/1996	Day of work defined as 4 Hours a Day for Part Time employees.

10 - Gnrl Mgmt

6/25/1996	Day of work defined as 8 Hours a Day for Full Time employees.
1/1/1995	Benefit B-3 (80% max)
1/1/1995	Member Contribution Rate 5.00%
12/31/1994	Member Contribution Rate 0.00%
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
1/1/1993	6 Year Vesting
7/1/1991	Member Contribution Rate 1.00%
7/1/1988	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/1988	Benefit C-2/Base B-1
7/1/1988	Member Contribution Rate 3.00%
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
7/1/1987	Member Contribution Rate 0.00%
12/16/1986	Blanket Resolution (All Service)
5/1/1986	10 Year Vesting
5/1/1986	Benefit F55 (With 15 Years of Service)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

11 - Gnrl Library

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
3/24/1992	Day of work defined as 4 Hours a Day for Part Time employees.
3/24/1992	Day of work defined as 8 Hours a Day for Full Time employees.
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
7/1/1987	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/1987	10 Year Vesting
7/1/1987	Benefit C-1 (Old)
7/1/1987	Member Contribution Rate 0.00%
7/1/1987	Fiscal Month - January
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88

12 - Gnrl ICEA Profs

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2003	Benefit B-4 (80% max)
1/1/2003	Member Contribution Rate 13.42%
1/1/2003	E2 2.5% COLA for future retirees (01/01/2003)
6/1/1997	Benefit F55 (With 15 Years of Service)
6/1/1997	Member Contribution Rate 6.08%
5/31/1997	Member Contribution Rate 0.00%
1/1/1995	Benefit B-3 (80% max)
1/1/1995	Member Contribution Rate 4.10%
12/31/1994	Member Contribution Rate 0.00%
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)

12 - Gnrl ICEA Profs

1/1/1992	Day of work defined as 4 Hours a Day for Part Time employees.
1/1/1992	Day of work defined as 8 Hours a Day for Full Time employees.
1/1/1992	Benefit C-2/Base B-1
1/1/1992	Member Contribution Rate 1.10%
12/31/1991	Member Contribution Rate 0.00%
10/1/1990	Member Contribution Rate 0.90%
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
12/16/1986	Blanket Resolution (All Service)
7/1/1983	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/1983	10 Year Vesting
7/1/1983	Benefit C-2/Base C-1 (Old)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

13 - Gnrl OPEIU Prob

12/1/2016	Service Credit Purchase Estimates - Yes
7/1/2003	Benefit B-4 (80% max)
7/1/2003	Member Contribution Rate 9.71%
10/1/2002	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/1998	Benefit B-3 (80% max)
1/1/1998	Member Contribution Rate 7.13%
12/31/1997	Member Contribution Rate 7.10%
1/1/1995	Benefit C-2/Base B-1
1/1/1995	Member Contribution Rate 2.96%
12/31/1994	Member Contribution Rate 0.00%
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
1/1/1992	Day of work defined as 4 Hours a Day for Part Time employees.
1/1/1992	Day of work defined as 8 Hours a Day for Full Time employees.
10/1/1991	Member Contribution Rate 1.88%
9/30/1991	Member Contribution Rate 0.00%
10/1/1990	Benefit C-1 (Old)
10/1/1990	Member Contribution Rate 1.80%
12/1/1988	Benefit F55 (With 15 Years of Service)
12/1/1988	Member Contribution Rate 1.00%
1/1/1988	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1988	10 Year Vesting
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
12/16/1986	Blanket Resolution (All Service)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

14 - Gnrl TOPS UAW

12/1/2016	Service Credit Purchase Estimates - Yes
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14 - Gnrl TOPS UAW

3/1/2013	Member Contribution Rate 4.82%
1/1/2004	Benefit B-4 (80% max)
1/1/2004	Member Contribution Rate 3.62%
1/1/2001	Member Contribution Rate 1.60%
10/1/1995	Benefit B-3 (80% max)
10/1/1995	Member Contribution Rate 4.85%
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
1/1/1992	Day of work defined as 4 Hours a Day for Part Time employees.
1/1/1992	Day of work defined as 8 Hours a Day for Full Time employees.
7/1/1991	Member Contribution Rate 1.00%
1/1/1989	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1989	10 Year Vesting
1/1/1989	Benefit C-2/Base C-1 (Old)
1/1/1989	Benefit F55 (With 15 Years of Service)
1/1/1989	Member Contribution Rate 3.00%
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
12/16/1986	Blanket Resolution (All Service)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

15 - Animal Cntrl FOP

12/1/2016	Service Credit Purchase Estimates - Yes
6/1/2002	25 Years & Out
6/1/2002	Member Contribution Rate 15.49%
1/1/2001	Member Contribution Rate 14.28%
1/1/2001	E2 2.5% COLA for future retirees (01/01/2001)
7/1/1997	Benefit FAC-3 (3 Year Final Average Compensation)
7/1/1997	Benefit B-4 (80% max)
7/1/1997	Benefit F50 (With 25 Years of Service)
7/1/1997	Member Contribution Rate 8.90%
1/1/1994	E 2% COLA Adopted (01/01/1994)
1/1/1993	Day of work defined as 4 Hours a Day for Part Time employees.
1/1/1993	Day of work defined as 8 Hours a Day for Full Time employees.
1/1/1993	Benefit B-1
1/1/1993	Member Contribution Rate 1.10%
10/1/1990	Member Contribution Rate 0.90%
1/1/1990	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1990	10 Year Vesting
1/1/1990	Benefit C-1 (Old)
1/1/1990	Benefit F55 (With 15 Years of Service)
1/1/1990	Member Contribution Rate 0.00%
1/1/1988	E 2% COLA Adopted (01/01/1988)
12/16/1986	Blanket Resolution (All Service)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88

15 - Animal Cntrl FOP

11/15/1950 Fiscal Month - January

16 - Gnrl Commsnrs

12/1/2016 Service Credit Purchase Estimates - Yes
 1/1/2013 Member Contribution Rate 4.76%
 1/1/1999 6 Year Vesting
 1/1/1994 Flexible E 2% COLA Adopted (01/01/1994)
 10/1/1991 Member Contribution Rate 3.56%
 10/1/1990 Benefit F55 (With 15 Years of Service)
 12/2/1988 Member Contribution Rate 0.00%
 12/1/1988 Benefit FAC-5 (5 Year Final Average Compensation)
 12/1/1988 10 Year Vesting
 12/1/1988 Benefit C-2/Base B-1
 12/1/1988 Member Contribution Rate 4.00%
 1/1/1988 Flexible E 2% COLA Adopted (01/01/1988)
 12/16/1986 Blanket Resolution (All Service)
 10/15/1980 Exclude Temporary Employees
 9/29/1965 Covered by Act 88
 11/15/1950 Fiscal Month - January

17 - ICEA Nurses

12/1/2016 Service Credit Purchase Estimates - Yes
 1/1/2001 E2 2.5% COLA for future retirees (07/01/1995)
 1/1/2000 E2 2.4% COLA for future retirees (07/01/1995)
 7/1/1999 Benefit FAC-3 (3 Year Final Average Compensation)
 7/1/1999 6 Year Vesting
 7/1/1999 Benefit B-3 (80% max)
 7/1/1999 Member Contribution Rate 11.87%
 1/1/1996 E2 2.5% COLA for future retirees (07/01/1995)
 7/1/1995 Benefit F55 (With 15 Years of Service)
 7/1/1995 Member Contribution Rate 5.07%
 6/30/1995 Member Contribution Rate 0.00%
 1/1/1994 E 2% COLA Adopted (01/01/1994)
 1/1/1991 Day of work defined as 4 Hours a Day for Part Time employees.
 1/1/1991 Day of work defined as 8 Hours a Day for Full Time employees.
 10/1/1990 Member Contribution Rate 0.70%
 1/1/1990 Benefit FAC-5 (5 Year Final Average Compensation)
 1/1/1990 10 Year Vesting
 1/1/1990 Benefit C-2/Base C-1 (Old)
 1/1/1990 Member Contribution Rate 1.00%
 1/1/1988 E 2% COLA Adopted (01/01/1988)
 12/16/1986 Blanket Resolution (All Service)
 10/15/1980 Exclude Temporary Employees
 9/29/1965 Covered by Act 88
 11/15/1950 Fiscal Month - January

18 - ICEA Ct. Prof

12/1/2016	Service Credit Purchase Estimates - Yes
6/1/1997	20 Years & Out
6/1/1997	Member Contribution Rate 9.84%
5/31/1997	Member Contribution Rate 0.00%
1/1/1995	Benefit B-3 (80% max)
1/1/1995	Member Contribution Rate 7.50%
12/31/1994	Member Contribution Rate 0.00%
1/1/1994	E 2% COLA Adopted (01/01/1994)
1/1/1992	Member Contribution Rate 3.10%
1/1/1992	Day of work defined as 4 Hours a Day for Part Time employees.
1/1/1992	Day of work defined as 8 Hours a Day for Full Time employees.
1/1/1991	10 Year Vesting
1/1/1991	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1991	Benefit C-2/Base B-1
1/1/1991	Benefit F55 (With 15 Years of Service)
1/1/1991	Member Contribution Rate 2.80%
1/1/1988	E 2% COLA Adopted (01/01/1988)
12/16/1986	Blanket Resolution (All Service)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

19 - Cnstutnl Offcls

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2013	Member Contribution Rate 9.66%
1/1/2002	Member Contribution Rate 8.46%
1/1/2002	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2002	Benefit B-4 (80% max)
1/1/2000	Member Contribution Rate 5.00%
1/1/2000	6 Year Vesting
1/1/1999	Member Contribution Rate 6.00%
6/25/1996	Day of work defined as 4 Hours a Day for Part Time employees.
6/25/1996	Day of work defined as 8 Hours a Day for Full Time employees.
1/1/1995	Member Contribution Rate 7.00%
1/1/1995	Benefit B-3 (80% max)
12/31/1994	Member Contribution Rate 0.00%
1/1/1994	E 2% COLA Adopted (01/01/1994)
4/1/1991	Benefit FAC-5 (5 Year Final Average Compensation)
4/1/1991	10 Year Vesting
4/1/1991	Benefit F55 (With 15 Years of Service)
4/1/1991	Member Contribution Rate 3.00%
4/1/1991	Benefit C-2/Base B-1
1/1/1988	E 2% COLA Adopted (01/01/1988)
12/16/1986	Blanket Resolution (All Service)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88

19 - Cnstutnl Offcls

11/15/1950	Fiscal Month - January
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21 - FOP Shrf Deputies

12/1/2016	Service Credit Purchase Estimates - Yes
2/1/2001	25 Years & Out
2/1/2001	Member Contribution Rate 10.96%
1/1/1998	3.2% Multiplier (80% max)
1/1/1998	Member Contribution Rate 10.43%
1/1/1994	Benefit B-4 (80% max)
1/1/1994	Member Contribution Rate 6.55%
1/1/1994	E 2% COLA Adopted (01/01/1994)
12/31/1993	Member Contribution Rate 0.00%
10/1/1991	Member Contribution Rate 1.65%
10/1/1990	Member Contribution Rate 1.60%
5/3/1990	Day of work defined as 4 Hours a Day for Part Time employees.
5/3/1990	Day of work defined as 8 Hours a Day for Full Time employees.
1/1/1990	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1990	10 Year Vesting
1/1/1990	Benefit C-2/Base C-1 (Old)
1/1/1990	Benefit F50 (With 25 Years of Service)
1/1/1990	Benefit F55 (With 15 Years of Service)
1/1/1990	Member Contribution Rate 1.00%
1/1/1988	E 2% COLA Adopted (01/01/1988)
12/16/1986	Blanket Resolution (All Service)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

22 - FOP 911 Non-Sup frmr E.L

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2013	Member Contribution Rate 1.20%
7/1/2012	Day of work defined as 8 Hours a Day for All employees.
7/1/2012	Benefit FAC-3 (3 Year Final Average Compensation)
7/1/2012	10 Year Vesting
7/1/2012	Benefit B-4 (80% max)
7/1/2012	Benefit F50 (With 25 Years of Service)
7/1/2012	Member Contribution Rate 0.00%
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

23 - FOP Non-Sup (frm Lansing)

12/1/2016	Service Credit Purchase Estimates - Yes
7/1/2014	Member Contribution Rate 2.70%
1/1/2013	Benefit B-2
1/1/2013	Member Contribution Rate 1.20%

23 - FOP Non-Sup (frm Lansing

12/31/2012	Current FAC
7/1/2012	8 Year Vesting
7/1/2012	1.60% multiplier (No max)
7/1/2012	Benefit F50 (With 25 Years of Service)
7/1/2012	Eligible at Age 58 (With 8 Years of Service)
7/1/2012	Member Contribution Rate 6.50%
7/1/2012	Day of work defined as 8 Hours a Day for All employees.
7/1/2012	Benefit FAC-2 (Highest 24 of last 120 mths)
7/1/2012	Exclude Temporary Employees
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

24 - Sheriff Deputies-MAP

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2013	Day of work defined as 8 Hours a Day for All employees.
1/1/2013	25 Years & Out
1/1/2013	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/2013	Exclude Temporary Employees
1/1/2013	10 Year Vesting
1/1/2013	3.2% Multiplier (80% max)
1/1/2013	Benefit F55 (With 15 Years of Service)
1/1/2013	Member Contribution Rate 12.16%
12/16/1986	Blanket Resolution (All Service)
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

40 - ICEA Unit 111

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	Member Contribution Rate 2.50%
1/1/2014	DC Adoption Date 01-01-2014
1/1/1995	Flexible E 2% COLA Adopted (01/01/1995)
12/1/1988	Benefit FAC-5 (5 Year Final Average Compensation)
12/1/1988	10 Year Vesting
12/1/1988	Benefit C-2/Base B-1
12/1/1988	Benefit F55 (With 15 Years of Service)
12/1/1988	Member Contribution Rate 3.00%
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
	Fiscal Month - January

41 - MCF Management

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	DC Adoption Date 01-01-2014
1/1/1995	Flexible E 2% COLA Adopted (01/01/1995)

41 - MCF Management

10/1/1990	Member Contribution Rate 0.00%
1/1/1990	6 Year Vesting
4/1/1989	Benefit FAC-5 (5 Year Final Average Compensation)
4/1/1989	10 Year Vesting
4/1/1989	Benefit C-2/Base B-1
4/1/1989	Benefit F55 (With 15 Years of Service)
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
	Fiscal Month - January

42 - ICEA Unit 11

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	Member Contribution Rate 3.45%
1/1/2014	DC Adoption Date 01-01-2014
4/1/1997	Benefit FAC-3 (3 Year Final Average Compensation)
4/1/1997	Member Contribution Rate 3.95%
4/1/1996	Member Contribution Rate 3.44%
1/1/1996	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1996	6 Year Vesting
1/1/1996	Benefit C-2/Base B-1
1/1/1996	Benefit F55 (With 15 Years of Service)
1/1/1996	Member Contribution Rate 3.40%
1/1/1988	E 2% COLA Adopted (01/01/1988)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
	Fiscal Month - January

43 - ICEA Unit 1

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	DC Adoption Date 01-01-2014
4/1/1996	Member Contribution Rate 3.51%
1/1/1996	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1996	6 Year Vesting
1/1/1996	Benefit C-2/Base B-1
1/1/1996	Benefit F55 (With 15 Years of Service)
1/1/1996	Member Contribution Rate 3.50%
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
	Fiscal Month - January

44 - MCF Exec Mgr

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	DC Adoption Date 01-01-2014
1/1/2004	E2 2.5% COLA for future retirees (09/01/2003)

44 - MCF Exec Mgr

9/1/2003	Benefit FAC-3 (3 Year Final Average Compensation)
9/1/2003	6 Year Vesting
9/1/2003	Benefit B-4 (80% max)
9/1/2003	Benefit F55 (With 15 Years of Service)
9/1/2003	Member Contribution Rate 0.00%
9/29/1965	Covered by Act 88
	Fiscal Month - January

70 - Admin Salaried

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	Member Contribution Rate 1.20%
6/1/2012	Fiscal Month - January
6/1/2012	Day of work defined as 8 Hours a Day for All employees.
6/1/2012	Benefit FAC-3 (3 Year Final Average Compensation)
6/1/2012	8 Year Vesting
6/1/2012	Benefit B-4 (80% max)
6/1/2012	Benefit F55 (With 20 Years of Service)
6/1/2012	Member Contribution Rate 0.00%
11/8/1995	Exclude Temporary Employees
4/3/1986	Covered by Act 88

71 - Admin/Union/OPEIU

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	Member Contribution Rate 1.20%
6/1/2012	Day of work defined as 8 Hours a Day for All employees.
6/1/2012	Benefit FAC-3 (3 Year Final Average Compensation)
6/1/2012	8 Year Vesting
6/1/2012	Benefit B-4 (80% max)
6/1/2012	Benefit F55 (With 20 Years of Service)
6/1/2012	Member Contribution Rate 0.00%
6/1/2012	Fiscal Month - January
11/8/1995	Exclude Temporary Employees
4/3/1986	Covered by Act 88

73 - Dept. Heads

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2013	Member Contribution Rate 1.20%
6/1/2012	Day of work defined as 8 Hours a Day for All employees.
6/1/2012	Benefit FAC-3 (3 Year Final Average Compensation)
6/1/2012	8 Year Vesting
6/1/2012	Benefit B-4 (80% max)
6/1/2012	Benefit F55 (With 20 Years of Service)
6/1/2012	Member Contribution Rate 0.00%
6/1/2012	Fiscal Month - January
11/8/1995	Exclude Temporary Employees

73 - Dept. Heads

4/3/1986	Covered by Act 88
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74 - AFSCME Hired After 9/19/2011

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	Member Contribution Rate 1.20%
6/1/2012	Day of work defined as 8 Hours a Day for All employees.
6/1/2012	Benefit FAC-5 (5 Year Final Average Compensation)
6/1/2012	Exclude Temporary Employees
6/1/2012	10 Year Vesting
6/1/2012	Benefit C-1 (New)
6/1/2012	Member Contribution Rate 0.00%
6/1/2012	Fiscal Month - January
4/3/1986	Covered by Act 88

75 - Adm/OPEIU Pro after 7/1/2011

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	Member Contribution Rate 1.20%
6/1/2012	Fiscal Month - January
6/1/2012	Day of work defined as 8 Hours a Day for All employees.
6/1/2012	Benefit FAC-5 (5 Year Final Average Compensation)
6/1/2012	Exclude Temporary Employees
6/1/2012	10 Year Vesting
6/1/2012	Benefit C-1 (New)
6/1/2012	Member Contribution Rate 0.00%
4/3/1986	Covered by Act 88

76 - OPEIU Sup/Admin Sal aft 7/1/11

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	Member Contribution Rate 1.20%
7/1/2012	Day of work defined as 8 Hours a Day for All employees.
7/1/2012	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/2012	Exclude Temporary Employees
7/1/2012	10 Year Vesting
7/1/2012	Benefit C-1 (New)
7/1/2012	Member Contribution Rate 0.00%
6/1/2012	Fiscal Month - January
4/3/1986	Covered by Act 88

90 - Asst Pros Attnys

12/1/2016	Service Credit Purchase Estimates - Yes
10/1/1998	6 Year Vesting
10/1/1998	Benefit B-4 (80% max)
10/1/1998	Benefit F55 (With 15 Years of Service)
4/1/1993	Benefit FAC-5 (5 Year Final Average Compensation)

90 - Asst Pros Attnys

4/1/1993	10 Year Vesting
4/1/1993	Benefit B-3 (80% max)
4/1/1993	Member Contribution Rate 1.40%
7/1/1992	Day of work defined as 4 Hours a Day for Part Time employees.
7/1/1992	Day of work defined as 8 Hours a Day for Full Time employees.
1/1/1988	E 2% COLA Adopted (01/01/1988)
12/16/1986	Blanket Resolution (All Service)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

91 - Parks Union Empl

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	Member Contribution Rate 1.20%
6/25/1996	Day of work defined as 4 Hours a Day for Part Time employees.
6/25/1996	Day of work defined as 8 Hours a Day for Full Time employees.
7/1/1995	Benefit B-3 (80% max)
1/1/1995	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1995	10 Year Vesting
1/1/1995	Benefit C-1 (Old)
1/1/1995	Member Contribution Rate 0.00%
1/1/1988	E 2% COLA Adopted (01/01/1988)
12/16/1986	Blanket Resolution (All Service)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

92 - Parks Non Union

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2013	Member Contribution Rate 1.20%
1/1/2002	Benefit FAC-3 (3 Year Final Average Compensation)
6/25/1996	Day of work defined as 4 Hours a Day for Part Time employees.
6/25/1996	Day of work defined as 8 Hours a Day for Full Time employees.
7/1/1995	Benefit B-4 (80% max)
7/1/1995	Benefit F55 (With 25 Years of Service)
1/1/1995	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1995	10 Year Vesting
1/1/1995	Benefit C-1 (Old)
1/1/1995	Member Contribution Rate 0.00%
1/1/1988	E 2% COLA Adopted (01/01/1988)
12/16/1986	Blanket Resolution (All Service)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

93 - Lgl Rsrch Clerks

12/1/2016	Service Credit Purchase Estimates - Yes
5/1/2015	Participant Contribution Rate 1.2%
1/1/1998	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1998	10 Year Vesting
1/1/1998	Benefit C-1 (Old)
1/1/1998	Member Contribution Rate 0.00%
6/25/1996	Day of work defined as 4 Hours a Day for Part Time employees.
6/25/1996	Day of work defined as 8 Hours a Day for Full Time employees.
1/1/1988	E 2% COLA Adopted (01/01/1988)
12/16/1986	Blanket Resolution (All Service)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

94 - Zoo Hires after 7/1/07

12/1/2016	Service Credit Purchase Estimates - Yes
6/1/2013	Member Contribution Rate 1.20%
7/1/2007	Day of work defined as 8 Hours a Day for Group employees.
7/1/2007	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/2007	10 Year Vesting
7/1/2007	Benefit B-2
7/1/2007	Member Contribution Rate 0.00%
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

95 - UAW Local 2256

12/1/2016	Service Credit Purchase Estimates - Yes
6/1/2013	Member Contribution Rate 2.90%
7/1/2007	Day of work defined as 8 Hours a Day for Group employees.
7/1/2007	Rule of 65 (Age + Service) Retirement
7/1/2007	Benefit FAC-2 (2 Year Final Average Compensation)
7/1/2007	8 Year Vesting
7/1/2007	2.8% Mult. for Svc <35, 1.5% for Svc >35 yrs (100% max)
7/1/2007	Eligible at Age 58 (With 8 Years of Service)
7/1/2007	Member Contribution Rate 1.70%
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

96 - City Zoo Director

12/1/2016	Service Credit Purchase Estimates - Yes
7/1/2007	Day of work defined as 8 Hours a Day for Group employees.
7/1/2007	Rule of 65 (Age + Service) Retirement
7/1/2007	Benefit FAC-2 (2 Year Final Average Compensation)
7/1/2007	8 Year Vesting
7/1/2007	2.8% Mult. for Svc <35, 1.5% for Svc >35 yrs (100% max)

96 - City Zoo Director

7/1/2007	Eligible at Age 58 (With 8 Years of Service)
7/1/2007	Member Contribution Rate 3.50%
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

97 - Teamts 243 Spv (frm Lsg)

12/1/2016	Service Credit Purchase Estimates - Yes
10/1/2014	Member Contribution Rate 1.70%
1/1/2013	Benefit B-2
1/1/2013	Member Contribution Rate 1.20%
12/31/2012	Current FAC
7/1/2012	Day of work defined as 8 Hours a Day for All employees.
7/1/2012	Benefit FAC-2 (2 Year Final Average Compensation)
7/1/2012	8 Year Vesting
7/1/2012	1.8% multiplier
7/1/2012	Benefit F50 (With 25 Years of Service)
7/1/2012	Eligible at Age 58 (With 8 Years of Service)
7/1/2012	Member Contribution Rate 6.35%
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

98 - MNA Nurses

12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2014	Member Contribution Rate 13.07%
4/1/2013	Day of work defined as 8 Hours a Day for All employees.
4/1/2013	Benefit FAC-3 (3 Year Final Average Compensation)
4/1/2013	6 Year Vesting
4/1/2013	Benefit B-3 (80% max)
4/1/2013	Benefit F55 (With 15 Years of Service)
4/1/2013	Member Contribution Rate 11.87%
4/1/2013	E2 2.5% COLA for future retirees
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

99 - Team 243 Zoo Hired pr 4/1/13

12/1/2016	Service Credit Purchase Estimates - Yes
6/1/2013	Member Contribution Rate 1.20%
4/1/2013	Day of work defined as 8 Days a Day for All employees.
4/1/2013	Benefit FAC-5 (5 Year Final Average Compensation)
4/1/2013	8 Year Vesting
4/1/2013	2.0% multiplier (80% max)
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

HA - Elected Offcls after 1/1/2013

10/1/2015	Hybrid Elapsed Time
1/1/2013	Pickup
1/1/2013	Rollovers
1/1/2013	6 Year Vesting
1/1/2013	1.0% Multiplier
1/1/2013	Day of work defined as 8 Hours a Day for All employees.
1/1/2013	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2013	Loans
9/29/1968	Covered by ACT 88
11/15/1950	Fiscal Month - January

HB - Commsnrs after 1/1/2013

10/1/2015	Hybrid Elapsed Time
1/1/2013	Day of work defined as 8 Hours a Day for Commissioners employees.
1/1/2013	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2013	Loans
1/1/2013	Pickup
1/1/2013	Rollovers
1/1/2013	6 Year Vesting
1/1/2013	1.0% Multiplier
9/29/1965	Covered by ACT 88
11/15/1950	Fiscal Month - January

HC - GenMgt & Conf /Leg Res af 1/1/2015

10/1/2015	Hybrid Elapsed Time
5/1/2015	Day of work defined as 8 Hours a Day for All employees.
1/1/2013	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2013	Loans
1/1/2013	Pickup
1/1/2013	Rollovers
1/1/2013	6 Year Vesting
1/1/2013	1.0% Multiplier
9/29/1965	Covered by ACT 88
11/15/1950	Fiscal Month - January

HD - FOP 911 Non-Sup aft 1/1/13

10/1/2015	Hybrid Elapsed Time
1/1/2013	Day of work defined as 8 Hours a Day for All employees.
1/1/2013	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2013	Loans
1/1/2013	Pickup
1/1/2013	Rollovers
1/1/2013	6 Year Vesting
1/1/2013	1.0% Multiplier
9/29/1965	Covered by ACT 88

HD - FOP 911 Non-Sup aft 1/1/13

11/15/1950 Fiscal Month - January

HE - Sheriff Dep MAP after 1/1/13

10/1/2015 Hybrid Elapsed Time
 1/1/2013 Day of work defined as 8 Hours a Day for All employees.
 1/1/2013 Benefit FAC-3 (3 Year Final Average Compensation)
 1/1/2013 Loans
 1/1/2013 Pickup
 1/1/2013 Rollovers
 1/1/2013 6 Year Vesting
 1/1/2013 1.5% Multiplier
 1/1/2013 Benefit F55 (With 25 Years of Service)
 10/15/1980 Exclude Temporary Employees
 9/29/1965 Covered by ACT 88
 11/15/1950 Fiscal Month - January

HF - TOPS UAW New Hires 3/1/13

10/1/2015 Hybrid Elapsed Time
 3/1/2013 Day of work defined as 8 Hours a Day for All employees.
 3/1/2013 Benefit FAC-3 (3 Year Final Average Compensation)
 3/1/2013 Loans
 3/1/2013 Pickup
 3/1/2013 Rollovers
 3/1/2013 6 Year Vesting
 3/1/2013 1.25% Multiplier
 10/15/1980 Exclude Temporary Employees
 9/29/1965 Covered by ACT 88
 11/15/1950 Fiscal Month - January

HG - FOP Sher/Deputies as of 1/1/13

10/1/2015 Hybrid Elapsed Time
 1/1/2013 Day of work defined as 8 Hours a Day for All employees.
 1/1/2013 Benefit FAC-3 (3 Year Final Average Compensation)
 1/1/2013 Loans
 1/1/2013 Pickup
 1/1/2013 Rollovers
 1/1/2013 6 Year Vesting
 1/1/2013 1.5% Multiplier
 1/1/2013 Benefit F55 (With 25 Years of Service)
 10/15/1980 Exclude Temporary Employees
 9/29/1965 Covered by ACT 88
 11/15/1950 Fiscal Month - January

HI - Animal Control-FOP aft 4/1/13

10/1/2015	Hybrid Elapsed Time
4/1/2013	Benefit FAC-3 (3 Year Final Average Compensation)
4/1/2013	Loans
4/1/2013	Pickup
4/1/2013	Exclude Temporary Employees
4/1/2013	Rollovers
4/1/2013	6 Year Vesting
4/1/2013	1.25% Multiplier
9/29/1965	Covered by ACT 88
11/15/1950	Fiscal Month - January

HJ - Gen.ICEA Prof. after 1/1/2013

10/1/2015	Hybrid Elapsed Time
1/1/2013	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2013	Loans
1/1/2013	Pickup
1/1/2013	Exclude Temporary Employees
1/1/2013	Rollovers
1/1/2013	6 Year Vesting
1/1/2013	1.25% Multiplier
9/29/1965	Covered by ACT 88
11/15/1950	Fiscal Month - January

HK - Asst.Prof.Attnys after 4/1/13

10/1/2015	Hybrid Elapsed Time
4/1/2013	Benefit FAC-3 (3 Year Final Average Compensation)
4/1/2013	Loans
4/1/2013	Pickup
4/1/2013	Exclude Temporary Employees
4/1/2013	Rollovers
4/1/2013	6 Year Vesting
4/1/2013	1.25% Multiplier
9/29/1965	Covered by ACT 88
11/15/1950	Fiscal Month - January

HL - ICEA P.H. Nurses after 4/1/13

10/1/2015	Hybrid Elapsed Time
4/1/2013	Benefit FAC-3 (3 Year Final Average Compensation)
4/1/2013	Loans
4/1/2013	Pickup
4/1/2013	Rollovers
4/1/2013	6 Year Vesting
4/1/2013	1.25% Multiplier
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by ACT 88

HL - ICEA P.H. Nurses after 4/1/13

11/15/1950	Fiscal Month - January
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HM - UAW Zoo New Hires as 5/1/13

10/1/2015	Hybrid Elapsed Time
5/1/2013	Day of work defined as 8 Hours a Day for All employees.
5/1/2013	Benefit FAC-3 (3 Year Final Average Compensation)
5/1/2013	Loans
5/1/2013	Pickup
5/1/2013	Rollovers
5/1/2013	6 Year Vesting
5/1/2013	1.25% Multiplier
9/29/1965	Covered by ACT 88
11/15/1950	Fiscal Month - January

HN - Gen OPEIU Prob after 1/1/13

10/1/2015	Hybrid Elapsed Time
1/1/2013	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2013	Loans
1/1/2013	Pickup
1/1/2013	Exclude Temporary Employees
1/1/2013	Rollovers
1/1/2013	6 Year Vesting
1/1/2013	1.25% Multiplier
9/29/1965	Covered by ACT 88
11/15/1950	Fiscal Month - January

HP - MNA Nurse Prac/Clinic 1/1/14

10/1/2015	Hybrid Elapsed Time
1/1/2014	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2014	Loans
1/1/2014	Non Standard Compensation Definition
1/1/2014	Pickup
1/1/2014	Rollovers
1/1/2014	6 Year Vesting
1/1/2014	1.25% Multiplier
1/1/2014	Day of work defined as 8 Hours a Day for All employees.
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by ACT 88
11/15/1950	Fiscal Month - January

HQ - AFSCME Hired After 1/1/2014

10/1/2015	Hybrid Elapsed Time
1/1/2014	Day of work defined as 8 Hours a Day for All employees.
1/1/2014	Benefit FAC-3 (3 Year Final Average Compensation)

HQ - AFSCME Hired After 1/1/2014

1/1/2014	Loans
1/1/2014	Pickup
1/1/2014	Rollovers
1/1/2014	6 Year Vesting
1/1/2014	1.25% Multiplier
6/1/2012	Exclude Temporary Employees
6/1/2012	Fiscal Month - January
4/3/1986	Covered by ACT 88

HR - Parks Union Emp after 1/1/2014

10/1/2015	Hybrid Elapsed Time
1/1/2014	Day of work defined as 8 Days a Day for All employees.
1/1/2014	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2014	Loans
1/1/2014	Pickup
1/1/2014	Exclude Temporary Employees
1/1/2014	Rollovers
1/1/2014	6 Year Vesting
1/1/2014	1.25% Multiplier
9/29/1965	Covered by ACT 88
11/15/1950	Fiscal Month - January

HS - OPEIU Tech/Cler after 1/1/2014

10/1/2015	Hybrid Elapsed Time
1/1/2014	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2014	Loans
1/1/2014	Pickup
1/1/2014	Exclude Temporary Employees
1/1/2014	Rollovers
1/1/2014	6 Year Vesting
1/1/2014	1.25% Multiplier
6/1/2012	Fiscal Month - January
4/3/1986	Covered by ACT 88

HT - ICEA Court Prof after 4/15/14

10/1/2015	Hybrid Elapsed Time
5/1/2014	Day of work defined as 8 Hours a Day for All employees.
5/1/2014	Benefit FAC-3 (3 Year Final Average Compensation)
5/1/2014	Loans
5/1/2014	Pickup
5/1/2014	Rollovers
5/1/2014	6 Year Vesting
5/1/2014	1.25% Multiplier
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by ACT 88

HT - ICEA Court Prof after 4/15/14

11/15/1950 Fiscal Month - January

HU - Team 243 Zoo Hires aft 4/1/13

10/1/2015 Hybrid Elapsed Time
4/1/2013 Benefit FAC-3 (3 Year Final Average Compensation)
4/1/2013 Loans
4/1/2013 Pickup
4/1/2013 Rollovers
4/1/2013 6 Year Vesting
4/1/2013 1.25% Multiplier
9/29/1965 Covered by ACT 88
11/15/1950 Fiscal Month - January

Plan Provisions, Actuarial Assumptions, and Actuarial Funding Method

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology can be found in the [Appendix](#). Some actuarial assumptions are specific to this municipality and its divisions. These are listed below.

Increase in Final Average Compensation

Division	FAC Increase Assumption
01 - Confidential	3.00%
02 - Sheriff FOP Spvs	3.00%
04 - MCF	3.00%
07 - Gnrl Hrly/AFSCME DB	4.00%
09 - Judges	3.00%
10 - Gnrl Mgmt	3.00%
12 - Gnrl ICEA Profs	3.00%
13 - Gnrl OPEIU Prob	3.00%
14 - Gnrl TOPS UAW	3.00%
15 - Animal Cntrl FOP	3.00%
16 - Gnrl Commsnrs	3.00%
17 - ICEA Nurses	3.00%
18 - ICEA Ct. Prof	3.00%
19 - Cnstutnl Offcls	3.00%
21 - FOP Shrf Deputies	3.00%
22 - FOP 911 Non-Sup frmr E.	4.00%
23 - FOP Non-Sup (frm Lansin	4.00%
24 - Sheriff Deputies-MAP	3.00%
40 - ICEA Unit 111	3.00%
41 - MCF Management	3.00%
42 - ICEA Unit 11	3.00%
43 - ICEA Unit 1	3.00%
44 - MCF Exec Mgr	3.00%
70 - Admin Salaried	4.00%
71 - Admin/Union/OPEIU	4.00%
73 - Dept. Heads	4.00%
74 - AFSCME Hired After 9/19	4.00%
75 - Adm/OPEIU Pro after 7/1	4.00%
76 - OPEIU Sup/Admin Sal aft	4.00%
90 - Asst Pros Attnys	3.00%
91 - Parks Union Empl	3.00%
93 - Lgl Rsrch Clerks	3.00%
94 - Zoo Hires after 7/1/07	3.00%
95 - UAW Local 2256	3.00%
97 - Teamts 243 Spv (frm Lsg	4.00%
98 - MNA Nurses	3.00%
99 - Team 243 Zoo Hired pr 4	3.00%

Division	FAC Increase Assumption
HA - Elected Offcls after 1/	3.00%
HB - Commsnrs after 1/1/2013	3.00%
HC - GenMgt & Conf /Leg Res	3.00%
HD - FOP 911 Non-Sup aft 1/1	3.00%
HE - Sheriff Dep MAP after 1	3.00%
HF - TOPS UAW New Hires 3/1/	3.00%
HG - FOP Sher/Deputies as of	3.00%
HI - Animal Control-FOP aft	3.00%
HJ - Gen.ICEA Prof. after 1/	3.00%
HK - Asst.Pros.Attnys after	3.00%
HL - ICEA P.H. Nurses after	3.00%
HM - UAW Zoo New Hires as 5/	3.00%
HN - Gen OPEIU Prob after 1/	3.00%
HP - MNA Nurse Prac/Clinic 1	3.00%
HQ - AFSCME Hired After 1/1/	4.00%
HR - Parks Union Emp after 1	3.00%
HS - OPEIU Tech/Cler after 1	4.00%
HT - ICEA Court Prof after 4	3.00%
HU - Team 243 Zoo Hires aft	3.00%

Withdrawal Rate Scaling Factor

Division	Withdrawal Rate Scaling Factor
All Divisions	101%

Miscellaneous and Technical Assumptions

Loads – None.

Amortization Policy for Closed Divisions

Closed Division	Amortization Option
04 - MCF	Accelerated to 5-Year Amortization
06 - Tmts 243/Sup hired 1/1/	Accelerated to 15-Year Amortization
11 - Gnrl Library	Accelerated to 5-Year Amortization
40 - ICEA Unit 111	Accelerated to 15-Year Amortization
41 - MCF Management	Accelerated to 5-Year Amortization
42 - ICEA Unit 11	Accelerated to 5-Year Amortization
43 - ICEA Unit 1	Accelerated to 5-Year Amortization
44 - MCF Exec Mgr	Accelerated to 5-Year Amortization
92 - Parks Non Union	Accelerated to 5-Year Amortization
96 - City Zoo Director	Accelerated to 5-Year Amortization