

MACOMB COUNTY EMPLOYEES RETIREMENT SYSTEM
SIXTY-EIGHTH ANNUAL ACTUARIAL VALUATION
DECEMBER 31, 2013

CONTENTS

<u>Section</u>	<u>Page</u>	
		<i>Introduction</i>
A	1-3	Executive Summary
B	1	Financial Objective
	2-3	Computed Contributions
	4	Determination of Unfunded Accrued Liability
	5	Development of Experience Gain (Loss)
	6	Assets and Accrued Liabilities
	7-10	Computed Employer Contributions - Comparative Statement
C	1	Summary of Benefit Provisions
	2	Summary of DROP Provisions
	3	Revenues and Expenditures/Assets and Reserves
	4	Determination of Valuation Assets
	5-9	Plan Member Data
	10	Inactive Member Data
	11-14	Active Member Data
D	1	Valuation Methods
	2-7	Actuarial Assumptions Used for the Valuation
	8-9	Glossary
E	1-2	Financial Disclosure Information
Appendix	1-5	Summary of Benefit Provisions

October 15, 2014

The Retirement Commission
Macomb County Employees Retirement System
Mount Clemens, Michigan

**Re: Macomb County Employees Retirement System Actuarial Valuation as of
December 31, 2013**

Ladies and Gentlemen:


The results of the December 31, 2013 annual actuarial valuation of the Macomb County Employees Retirement System are presented in this report. The purpose of the valuation is to measure the System's funding progress, to determine the employer contribution rate for the fiscal year ending December 31, 2015, and to provide actuarial information for any applicable Governmental Accounting Standards Board (GASB) Statements. This report should not be relied upon for any other purpose. This report may be provided to parties other than the System only in its entirety and only with the permission of the Commission.

The valuation was based upon information furnished by the County, concerning Retirement System benefits, financial transactions, plan provisions, active members, terminated members, retirees and beneficiaries. Data was checked for internal and year-to-year consistency, but was not otherwise audited by us. As a result, we are unable to assume responsibility for the accuracy or completeness of the information provided.

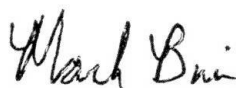
Future actuarial measurements may differ significantly from those presented in this report due to such factors as experience differing from that anticipated by actuarial assumptions, changes in plan provisions, actuarial assumptions/methods or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements.

To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Macomb County Employees Retirement System as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. Louise Gates and Mark Buis are independent of the plan sponsor and are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,



Louise Gates, ASA, MAAA



Mark Buis, FSA, MAAA

LG/MB:mrh

SECTION A

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

1. Required Employer Contributions - Fiscal Year Beginning January 1, 2015

The computed employer contributions are as follows:

Division	Computed Employer Contributions*	
	% of Payroll	\$ Based on Projected Payroll
General County	14.92%	\$ 11,939,383
Sheriff's Department	19.98	5,715,220
Road Commission	23.39	2,956,376
Martha T. Berry MCF	10.67	670,623

* Contribution rates are calculated as a percentage of the payroll of all active members (including those in the DROP). Dollar contributions are based on projected valuation payroll.

Additional detail on these contributions is shown on page B-2.

2. Contribution Rate Comparison

Division	Valuation as of December 31	
	2012	2013
General County	15.42%	14.92%
Sheriff's Department	20.90	19.98
Road Commission	24.48	23.39
Martha T. Berry MCF	12.05	10.67

3. Reasons for Change

There are three general reasons why contribution rates change from one valuation to the next. The first is a change in the benefits or eligibility conditions of the plan. The second is a change in the valuation assumptions and methods. The third is the effect of differences during the year between the plan's actual experience and what the assumptions predicted.

This valuation of the System reflects the following benefit provision changes reported in connection with this valuation of the System:

- Union members of the Road Commission who meet certain eligibility requirements may join the Deferred Retirement Option Plan (DROP).
- New union and nonunion Road Commission employees hired after certain dates in 2013 are eligible to retire at age 60 with completion of 15 years of service instead of age 60 with 8 years of service.
- New Corrections Officers hired after May 2013 can retire at age 60 with completion of 15 years of service instead of age 60 with 8 years.

In addition, a technical change was made to the development of General division contribution requirements. This change was made to facilitate the upcoming GASB Statement No. 67 calculations effective for the plan's December 31, 2014 fiscal year end.

The DROP provision increased contribution requirements, while the change in the retirement benefit eligibility condition decreased contribution requirements. The change in the retirement benefit eligibility condition in the corrections officers group had a minor but favorable impact on Sheriff's department contributions while the technical change resulted in a small increase in County contributions.

The remaining changes in contribution amounts over the prior year are due to Retirement System experience.

4. 2013 System Experience

One way the System's experience affects costs is the effect it has on the unfunded accrued liability. This is referred to as the experience gain or loss for the year. During calendar year 2013 System experience was overall favorable. The return on System assets was higher than long term expectations (7.5% per year). The recognized rate of investment return in this valuation of the System was 10.55%. In addition, pay increases were lower than assumed for many employees during 2013.

5. Year 2013 Funding Position

The change in funding position over the prior year is due primarily to the favorable experience during calendar year 2013. This year valuation assets represent 95% of accrued liabilities; last year the ratio was 92%.

6. Retiree Reserve Balance

The retiree liabilities for all divisions are larger than the assets allocated to the retiree reserve balances as of December 31, 2013, except for the Road Commission. The liabilities and reserves are shown below:

	<u>General County</u>	<u>Sheriff's Department</u>	<u>Road Commission</u>	<u>Martha T. Berry MCF</u>
Retiree Liability	\$366,170,276	\$141,291,104	\$75,958,621	\$25,740,618
Retiree Reserve	<u>332,750,979</u>	<u>122,354,302</u>	<u>81,450,190</u>	<u>22,877,597</u>
Unfunded Liability	\$ 33,419,297	\$ 18,936,802	\$(5,491,569)	\$ 2,863,021

As of the valuation date, there is a shortfall in the retiree reserve for all groups, except for the Road Commission. We recommend assets equal to the unfunded liabilities for the General, Sheriff's and MTB groups be transferred from the Retirement System employer reserve to fully fund the retiree liability.

7. Experience Study

We recommend that the Board authorize the actuary to prepare a study of Retirement System experience. The GFOA recommends such studies once every 5 years. The last study for the System was performed more than 5 years ago.

SECTION B

**VALUATION RESULTS AND
COMPARATIVE INFORMATION**

FINANCIAL OBJECTIVE

The financial objective of the Retirement System is to establish and receive contributions, expressed as a percentage of active member payroll, which will follow the expected pattern from year-to-year and will not have to be increased substantially for future generations of taxpayers. Your annual actuarial valuations determine how well the objective is being met.

The Retirement Commission of the Macomb County Employees Retirement System confirms that the System provides for payment of the required employer contribution as described in Section 20m of Michigan Public Act No. 728.

CONTRIBUTION RATES

The Retirement System is supported by contributions from the employers and active members and by the investment income earned on System assets. Most General members and Martha T. Berry MCF members hired before January 1, 2002 contribute 3.5% of their pay (RN's and LPN's contribute 2.5% of their pay) and all General members and Martha T. Berry MCF members hired on or after January 1, 2002 contribute 2.5% of their pay. All Road Commission members contribute 3.5% of their pay. The Sheriff's Department members contribute 4.0% of their pay. The employer provides an actuarially determined contribution, the remainder needed to meet the financial objective.

Member and employer contributions cover both (i) normal cost, and (ii) the financing of the unfunded accrued liability over a period of future years. The normal cost is the portion of System costs allocated to the current year by the valuation method described in Section D. The unfunded accrued liability is the portion of System costs not covered by present system assets and future normal costs.

The contribution requirements for the fiscal year beginning January 1, 2015 are presented on pages B-2 and B-3.

**CONTRIBUTIONS TO PROVIDE BENEFITS
MEMBER AND EMPLOYER PORTIONS
FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2015**

Contribution for	% of Active Member Payroll*			
	General County	Sheriff's Department	Road Commission	Martha T. Berry MCF
Normal cost:				
Age and service	13.86 %	19.41 %	16.58 %	13.03 %
Disability	0.69	0.95	1.03	0.79
Death-in-service	0.43	0.43	0.51	0.44
Total	<u>14.98</u>	<u>20.79</u>	<u>18.12</u>	<u>14.26</u>
Administrative expenses	0.10	0.10	0.10	0.10
Member contributions:				
Total**	2.26	3.47	3.40	2.50
Future refunds	<u>0.28</u>	<u>0.11</u>	<u>0.15</u>	<u>0.27</u>
Available	1.98	3.36	3.25	2.23
Employer normal cost	<u>13.10</u>	<u>17.53</u>	<u>14.97</u>	<u>12.13</u>
UAAL as a Level Percent-of-Payroll	<u>1.82</u>	<u>2.45</u>	<u>8.42</u>	<u>(1.46)</u>
Total Computed Employer Rate	<u>14.92 %</u>	<u>19.98 %</u>	<u>23.39 %</u>	<u>10.67 %</u>

* Including payroll of members currently in the DROP.

** Weighted average.

For each division, the Unfunded Actuarial Accrued Liabilities (UAAL) or excess assets were amortized as a level percent-of-payroll over a period of 20 years.

Procedures for determining dollar contribution amounts are shown on the following page.

CONVERTING CONTRIBUTION RATES TO DOLLAR AMOUNTS

For any period of time, the percent-of-payroll contribution rates need to be converted to dollar amounts. We recommend one of the following procedures.

- (1) Contribute dollar amounts for a period which are equal to the employer's percent-of-payroll contribution requirement multiplied by the covered active member payroll for the period (including the payroll of the members in the DROP). Adjustments should be made as necessary to exclude items of pay that are not covered compensation for Retirement System benefits and to include non-payroll payments that are covered compensation.
- (2) **Contribute the dollar amounts shown on page A-1 of this report.** These amounts are based on the contribution rates and reported payroll information adjusted to reflect assumed payroll increases between the valuation date and the beginning of the fiscal year for which the contributions are being determined.

TIMING OF CONTRIBUTION PAYMENTS

The contributions in this report anticipate regular payments throughout the year. Examples would be at each payroll date or in 12 monthly installments. **If the employer contribution pattern is significantly different, an adjustment to the costs may be appropriate.** For example, a lump sum contribution at the beginning of the year is available for investment throughout the year and, therefore, ought to be somewhat smaller than 12 monthly payments. Similarly, a lump sum contribution at the end of the year will not generate any investment income that year and so must be greater than 12 monthly payments.

**DETERMINATION OF UNFUNDED ACCRUED LIABILITY
AS OF DECEMBER 31, 2013**

	General County	Sheriff's Department	Road Commission	Martha T. Berry MCF
A. Accrued Liability				
1. For retirees and beneficiaries*				
a. Benefit payments	\$366,170,276	\$ 141,291,104	\$ 75,958,621	\$25,740,618
b. Reserves	0	0	0	0
c. Total	<u>366,170,276</u>	<u>141,291,104</u>	<u>75,958,621</u>	<u>25,740,618</u>
2. For vested terminated members	13,236,748	2,327,429	1,120,958	1,537,756
3. For present active members				
a. Value of expected future benefit payments	222,785,995	131,661,264	61,776,513	16,619,780
b. Value of future normal costs	90,601,437	53,175,012	22,749,931	9,659,101
c. Active member liability: (a) - (b)	<u>132,184,558</u>	<u>78,486,252</u>	<u>39,026,582</u>	<u>6,960,679</u>
4. Total	<u>511,591,582</u>	<u>222,104,785</u>	<u>116,106,161</u>	<u>34,239,053</u>
B. Valuation Assets	<u>490,030,405</u>	<u>211,707,158</u>	<u>100,314,995</u>	<u>35,599,982</u>
C. Unfunded Accrued Liability (Overfunding):				
(A.4) - (B)	<u>21,561,177</u>	<u>10,397,627</u>	<u>15,791,166</u>	<u>(1,360,929)</u>
D. Funding %	<u>95.8%</u>	<u>95.3%</u>	<u>86.4%</u>	<u>104.0%</u>

* Includes liabilities for individuals in the DROP.

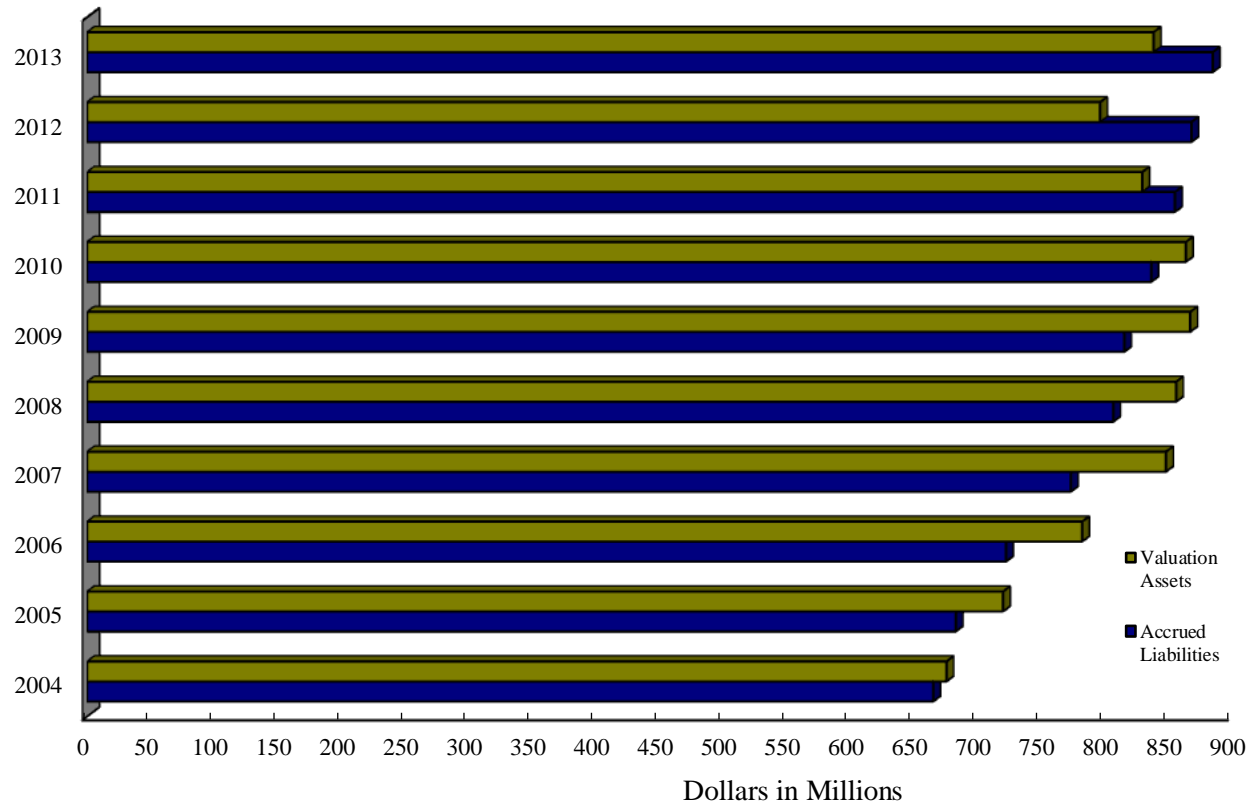
**DEVELOPMENT OF EXPERIENCE GAIN (LOSS)
YEAR ENDED DECEMBER 31, 2013**

Actual experience will never (except by coincidence) exactly match assumed experience. It is hoped that gains and losses will cancel each other over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the experience gain (loss) for all divisions is shown below.

	Year Ending December 31, 2013
(1) UAAL at start of year	\$ 71,613,155
(2) Normal cost	19,659,491
(3) Actual contributions	23,652,418
(4) Interest accrual	5,223,057
(5) Expected UAAL before changes: (1)+(2)-(3)+(4)	72,843,285
(6) Change from benefits/methods	(1,341,963)
(7) Change in assumptions	0
(8) Expected UAAL after changes: (5)+(6)+(7)	71,501,322
(9) Actual UAAL at end-of-year	46,389,041
(10) Gain (loss): (8)-(9)	25,112,281
(11) Gain (loss) as percent of actuarial accrued liabilities at start of year	2.9%

ASSETS & ACCRUED LIABILITIES FOR ALL SYSTEM MEMBERS

Valuation Year



2004 assets equaled 102% of accrued liabilities.

2013 assets equaled 95% of accrued liabilities.

**COMPUTED EMPLOYER CONTRIBUTIONS
COMPARATIVE STATEMENT
GENERAL COUNTY**

Valuation Date December 31	Active Members		Inactives*	Employer Contributions as Payroll Percents	
	No.	Valuation Payroll			
		Total**	Average		No.
1995 #	1,890	\$61,805,904	\$ 32,702	747	7.82 %
1996 #	1,918	65,074,258	33,928	785	8.14
1997	1,957	68,048,675	34,772	827	6.53
1998	2,000	70,559,895	35,280	860	3.83
1999	2,027	75,078,616	37,039	861	0.63
2000 #	2,043	74,236,121	36,337	889	2.19
2001 #	1,866	72,321,085	38,757	911	1.11
2002 @	2,080	83,635,826	40,210	954	4.26
2003 @	2,131	87,545,515	41,082	1,072	9.01
2004 #	2,158	92,266,683	42,756	1,169	14.57
2004 #!	2,158	92,266,683	42,756	1,169	12.19
2005 @	2,118	91,068,299	42,997	1,294	11.80
2006	1,956	85,539,496	43,732	1,486	11.58
2007 #	1,825	83,093,296	45,531	1,652	11.19
2008 #@	1,546	71,003,823	45,927	1,575	8.55
2009 #	1,497	67,006,513	44,761	1,620	9.00
2010	1,452	64,855,997	44,667	1,687	10.57
2011	1,422	64,566,970	45,406	1,755	13.22
2012 #	1,334	62,604,753	46,930	1,801	15.42
2013	1,328	61,207,481	46,090	1,895	14.92

Benefit changes included in this valuation.

@ Actuarial assumptions or methods revised.

* Retirees, beneficiaries & members in the DROP beginning in 2004.

! Amortization period revised.

** Excludes pay for DROP members.

**COMPUTED EMPLOYER CONTRIBUTIONS
COMPARATIVE STATEMENT
SHERIFF'S DEPARTMENT**

Valuation Date December 31,	Active Members		Inactives*	Employer Contributions as Payroll Percents	
	No.	Valuation Payroll			
		Total**			Average
1995 #	331	\$ 15,453,538	\$46,687	128	18.88 %
1996 #	338	16,640,938	49,234	131	19.24
1997	352	16,866,535	47,916	132	15.99
1998	366	18,086,823	49,418	137	11.43
1999	372	18,956,773	50,959	147	6.66
2000 #	370	20,109,034	54,349	155	5.61
2001	362	21,502,952	59,400	163	5.47
2002 @	406	23,293,023	57,372	188	13.36
2003 #@	415	24,523,879	59,094	197	16.27
2004 #	415	25,627,831	61,754	209	20.69
2004 #!	415	25,627,831	61,754	209	19.80
2005 @	438	28,029,893	63,995	220	17.56
2006	432	27,984,382	64,779	230	14.67
2007 #	426	28,981,620	68,032	237	14.15
2008	422	29,124,791	69,016	241	15.29
2009	419	28,638,488	68,350	248	15.66
2010	401	25,952,721	64,720	261	14.99
2011	390	25,162,695	64,520	277	17.83
2012 #	376	24,246,340	64,485	290	20.90
2013 #	377	23,629,228	62,677	316	19.98

Benefit changes included in this valuation.

* Retirees, beneficiaries & members in the DROP beginning in 2004.

@ Actuarial assumptions or methods changed.

! Amortization period revised.

** Excludes pay for members electing DROP.

**COMPUTED EMPLOYER CONTRIBUTIONS
COMPARATIVE STATEMENT
ROAD COMMISSION**

Valuation Date December 31,	No.	Active Members		Inactives*	Employer Contributions as Payroll Percents
		Total**	Average		
1995 #	273	\$ 10,833,071	\$39,682	224	20.99 %
1996	269	10,857,267	40,362	232	18.16
1997	266	11,170,663	41,995	243	15.28
1998	278	12,148,390	43,699	247	11.70
1999	259	11,546,310	44,580	248	7.01
2000 #	247	10,939,384	44,289	249	3.24
2001	287	13,155,595	45,838	252	6.98
2002 @	309	14,370,596	46,507	256	10.40
2003 @	315	15,166,250	48,147	265	14.92
2004 #	315	16,363,729	51,948	262	19.16
2004 #!	315	16,363,729	51,948	262	17.92
2005 @	295	15,788,396	53,520	265	16.08
2006	293	15,297,108	52,209	272	13.65
2007 #	263	14,621,336	55,594	295	13.09
2008 @	254	14,449,299	56,887	297	11.68
2009 #	245	14,421,101	58,862	302	15.09
2010	230	13,144,747	57,151	313	17.95
2011	216	12,613,964	58,398	325	21.46
2012 #	213	12,423,961	58,328	317	24.48
2013 #	207	11,685,197	56,450	322	23.39

- # Benefit changes included in this valuation.
- @ Actuarial assumptions or methods changed.
- * Retirees, beneficiaries & members in the DROP beginning in 2004.
- ! Amortization period revised.
- ** Excludes pay for members electing DROP.

**COMPUTED EMPLOYER CONTRIBUTIONS
COMPARATIVE STATEMENT
MARTHA T. BERRY MCF**

Valuation Date December 31,	Active Members		Inactives*	Employer Contributions as Payroll Percents	
	No.	Valuation Payroll			
		Total**	Average	No.	
2008 #@	174	\$ 7,244,761	\$41,637	167	9.20 %
2009 #	164	6,456,836	39,371	171	8.19
2010	174	6,841,775	39,321	178	9.03
2011	170	6,556,551	38,568	185	10.56
2012 #	156	6,116,820	39,210	183	12.05
2013	156	5,730,969	36,737	196	10.67

- # Benefit changes included in this valuation.
 @ Actuarial assumptions or methods changed.
 * Retirees, beneficiaries & members in the DROP beginning in 2004.
 ** Excludes pay for DROP members.

SECTION C

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

**BRIEF SUMMARY OF ANCILLARY BENEFIT PROVISIONS
(DECEMBER 31, 2013)**

Eligibility	Amount
REGULAR RETIREMENT	
Please refer to the Appendix.	
DEFERRED RETIREMENT	
Please refer to the Appendix.	
NON-DUTY DEATH-IN-SERVICE	
10 or more years of service.	Computed as a regular retirement but actuarially reduced in accordance with a 100% joint and survivor election.
DUTY DEATH-IN-SERVICE	
No age or service requirements. Must be in receipt of worker's compensation.	Refund of accumulated contributions. Upon termination of worker's compensation payments the same amount is paid to the spouse and to unmarried children under 18.
NON-DUTY DISABILITY	
10 or more years of service.	Computed as a regular retirement with a minimum benefit of \$400 per month.
DUTY DISABILITY	
No age or service requirements. Must be in receipt of worker's compensation.	Computed as a regular retirement with a minimum benefit of \$400 per month. During the worker's compensation period the County financed portion cannot exceed the difference between 65% of final average compensation and worker's compensation payments.
MEMBER CONTRIBUTIONS	
Please refer to the Appendix.	

SUMMARY OF DROP PROVISIONS

Please refer to the Appendix for DROP eligibility provisions. The other provisions of the DROP are listed below:

- The DROP is a forward DROP.
- Members can DROP when they first become eligible for an unreduced benefit.
- Upon entering the DROP, 100% of the member's monthly retirement benefit will be credited to the DROP account.
- The DROP account will be credited with the same interest rate used to accumulate member contributions (currently 3.5%).
- The maximum DROP period is five years. Members may continue to work past the maximum DROP period but no additional retirement benefits will be credited to the member's DROP account. Interest on the DROP account will continue to accrue for members working past the maximum DROP period.
- Member contributions to the Retirement System will cease upon entering the DROP.
- Upon actual retirement, the member would receive a monthly annuity equal to the accrued benefit credited to the DROP account under any form of payment available from the plan, and the lump sum amount accumulated in the DROP account. Members elect their form of payment at time of DROP.
- The monthly annuity as of the DROP date is calculated based on service, final average compensation and benefit provisions as of the DROP date less the annuity withdrawal reduction, if applicable; this amount is not changed for any subsequent changes in pay or benefit provisions. The annuity withdrawal is paid at the time of DROP.
- For POLC (Union 1 & 20) and MCDPSA (Union 26), interest is earned on the DROP account balance at the end of each month, and shall be paid to the employee's DROP account no later than the last day of the following month.
- For POLC (Union 1), effective August 20, 2010, for new entries into DROP, upon reaching the five year maximum DROP participation period, the DROP participant shall terminate his/her employment.
- For POAM (Union 7), effective August 6, 2010, an employee of Macomb County who is a member of the POAM-Deputies and Dispatchers, may voluntarily elect to participate in the DROP, upon obtaining the minimum age and service requirements for a normal service retirement.

**REPORTED FINANCIAL INFORMATION
YEAR ENDED DECEMBER 31, 2013
(MARKET VALUE)**

Revenues and Disbursements during 2013

Revenues:

a. Member contributions	\$ 3,719,676	
b. Employer contributions	19,932,742	
c. Interest and dividends	7,894,397	
d. Investment gains (losses)	<u>157,241,288</u>	
e. Total		\$188,788,103

Disbursements:

a. Refunds of member contributions	503,386	
b. Annuity Withdrawals	4,068,009	
c. Retirement and DROP Benefits Paid	58,653,389	
d. Investment expenses	4,627,754	
e. Administrative expenses	<u>183,500</u>	
f. Total		68,036,038

Reserve Increase:

Total revenues minus total disbursements	<u>\$ 120,752,065</u>
--	-----------------------

Assets and Reserves as of December 31, 2013

Assets:

a. Cash & payables*	\$ 20,137,627
b. Short-term investments	0
c. Government bonds	0
d. Corporate bonds	122,351
e. Equities	712,426,230
f. Real estate	0
g. Limited partnerships	<u>176,003,311</u>

Total \$908,689,519

Reserve Accounts:

a. Member contributions	\$ 45,727,274
b. Reserve for benefits now being paid	559,433,068
c. Reserve for future benefits	299,099,248
d. Supplemental reserve	4,429,929

Total \$908,689,519

* Includes receivables.

DETERMINATION OF VALUATION ASSETS

Year Ended December 31:	2012	2013	2014	2015	2016	2017
A. Funding Value Beginning of Year	\$828,692,442	\$795,605,544				
B. Market Value End of Year	787,937,454	908,689,519				
C. Market Value Beginning of Year	738,848,279	787,937,454				
D. Non-Investment Net Cash Flow	(34,012,716)	(39,755,866)				
E. Investment Income						
E1. Market Total: B - C - D	83,101,891	160,507,931				
E2. Amount for Immediate Recognition (7.5%)	60,876,456	58,179,571				
E3. Amount for Phased-In Recognition: E1-E2	22,225,435	102,328,360				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.2 x E3	4,445,087	20,465,672				
F2. First Prior Year	(14,853,155)	4,445,087	\$20,465,672			
F3. Second Prior Year	5,545,340	(14,853,155)	4,445,087	\$20,465,672		
F4. Third Prior Year	8,020,345	5,545,340	(14,853,155)	4,445,087	\$20,465,672	
F5. Fourth Prior Year	(\$63,108,255)	8,020,347	5,545,338	(14,853,153)	4,445,087	\$20,465,672
G. Total of Items F1 - F5	(59,950,638)	23,623,291	15,602,942	10,057,606	24,910,759	20,465,672
H. Funding Value End of Year: A + D + E2 + G	795,605,544	837,652,540				
I. Difference between Market & Funding Value	(7,668,090)	71,036,979	55,434,037	45,376,431	20,465,672	0
J. Recognized Rate of Return - Funding Value Basis (G+E2)/(1/2*(A+H-(G+E2)))	0.11%	10.55%				
K. Recognized Rate of Return - Market Value Basis E1/(1/2*(B+C-(E1)))	11.51%	20.90%				

**RETIREES, BENEFICIARIES AND DROP MEMBERS
AS OF DECEMBER 31, 2013
TABULATED BY RETIREMENT TYPE
GENERAL COUNTY**

Age	Age and Service		Death-in-Service Survivor		Disability		Totals	
	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances
20 - 24	2	\$ 17,851			1	\$ 9,316	3	\$ 27,167
25 - 29	2	22,404			2	19,419	4	41,823
30 - 34	3	53,476					3	53,476
35 - 39					1	7,884	1	7,884
40 - 44	4	26,528			2	24,070	6	50,598
45 - 49	3	21,712			4	48,993	7	70,705
50 - 54	135	3,585,943	3	\$ 43,635	9	171,777	147	3,801,355
55 - 59	254	5,742,435	1	11,012	7	111,907	262	5,865,354
60 - 64	403	8,166,946	2	43,192	8	77,082	413	8,287,220
65 - 69	332	5,966,367	3	37,358	6	53,027	341	6,056,752
70-74	250	4,034,547	3	31,543	13	156,137	266	4,222,227
75-79	140	1,967,116	1	35,774	8	75,331	149	2,078,221
80-84	133	1,410,740	3	29,170	4	41,752	140	1,481,662
85-89	85	908,633	4	31,696	2	17,318	91	957,647
90+	57	403,293	2	7,033	3	4,945	62	415,271
Totals	1,803	\$32,327,991	22	\$270,413	70	\$818,958	1,895	\$33,417,362

**RETIREES, BENEFICIARIES AND DROP MEMBERS
AS OF DECEMBER 31, 2013
TABULATED BY RETIREMENT TYPE**

SHERIFF'S DEPARTMENT

Age	Age and Service		Death-in-Service Survivor		Disability		Totals	
	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances
35 - 39	1	\$ 39,059			1	\$ 22,925	2	\$ 61,984
40 - 44					3	128,602	3	128,602
45 - 49	23	1,089,563			2	48,818	25	1,138,381
50 - 54	41	1,996,889	1	\$ 27,328	3	71,432	45	2,095,649
55 - 59	71	3,378,655			6	160,719	77	3,539,374
60 - 64	40	1,607,497			4	92,932	44	1,700,429
65 - 69	27	948,509	1	34,242	5	102,041	33	1,084,792
70 - 74	38	1,352,801			1	15,031	39	1,367,832
75 - 79	20	471,522					20	471,522
80 - 84	11	182,493			2	18,644	13	201,137
85 - 89	12	126,087					12	126,087
90+	3	42,436					3	42,436
Totals	287	\$11,235,511	2	\$61,570	27	\$661,144	316	\$11,958,225

**RETIREES, BENEFICIARIES AND DROP MEMBERS
AS OF DECEMBER 31, 2013
TABULATED BY RETIREMENT TYPE**

ROAD COMMISSION

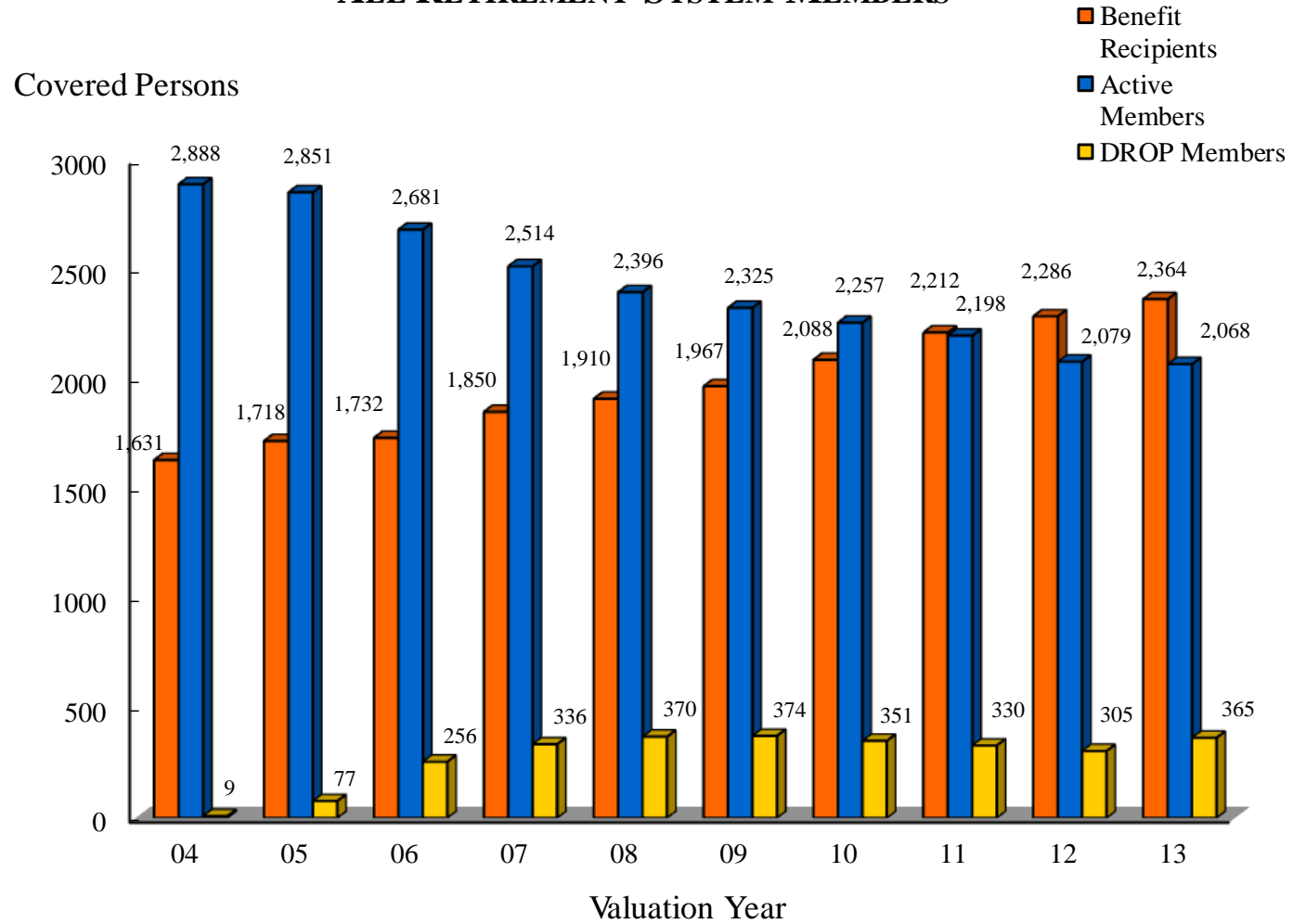
Age	Age and Service		Death-in-Service Survivor		Disability		Totals	
	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances
Under 20					1	\$ 7,187	1	\$ 7,187
20 - 24					1	7,187	1	7,187
25 - 29					1	7,187	1	7,187
35 - 39					1	2,396	1	2,396
40 - 44					3	18,316	3	18,316
45 - 49	2	\$ 68,059			3	59,352	5	127,411
50 - 54	24	712,624	1	\$ 23,419		\$	25	736,043
55 - 59	49	1,505,382	1	30,240	5	82,072	55	1,617,694
60 - 64	57	1,603,860			3	30,494	60	1,634,354
65 - 69	31	867,309			1	12,949	32	880,258
70 - 74	28	606,073	1	31,504	3	27,336	32	664,913
75 - 79	32	678,111			1	12,229	33	690,340
80 - 84	31	525,988	1	5,197	5	25,956	37	557,141
85 - 89	18	249,188			2	21,314	20	270,502
90+	15	114,659	1	6,355			16	121,014
Totals	287	\$6,931,253	5	\$96,715	30	\$313,975	322	\$7,341,943

**RETIREES, BENEFICIARIES AND DROP MEMBERS
AS OF DECEMBER 31, 2013
TABULATED BY RETIREMENT TYPE**

MARTHA T. BERRY MCF

Age	Age and Service		Death-in-Service Survivor		Disability		Totals	
	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances
35 - 39	2	\$ 12,966					2	\$ 12,966
40 - 44	2	3,339					2	3,339
45 - 49			1	\$ 10,350	3	\$ 35,181	4	45,531
50 - 54	11	202,122			2	36,399	13	238,521
55 - 59	21	486,491			1	22,892	22	509,383
60 - 64	37	590,321			1	6,181	38	596,502
65 - 69	24	341,386			4	24,893	28	366,279
70 - 74	24	269,415			1	9,341	25	278,756
75 - 79	26	245,375	1	6,388	4	23,622	31	275,385
80 - 84	11	80,398			3	7,399	14	87,797
85 - 89	11	64,435			1	6,813	12	71,248
90 +	5	20,379					5	20,379
Totals	174	\$2,316,627	2	\$16,738	20	\$172,721	196	\$2,506,086

ACTIVE MEMBERS, DROP MEMBERS & BENEFIT RECIPIENTS ALL RETIREMENT SYSTEM MEMBERS



Inactive members included in the valuation are summarized in the table below. An inactive member is a person who has left covered employment after completing 8 or more years of service, but has not yet applied for a retirement allowance, and who has not withdrawn his or her accumulated contributions from the Employees' Savings Fund. Included in this group are 4 employees who are covered under the Reciprocal Retirement Act.

**Inactive Members December 31, 2013
Tabulated by Valuation Divisions**

Valuation Divisions	Number	Estimated Deferred
General County	185	\$2,009,172
Sheriff's Department	18	406,111
Road Commission	14	173,999
Martha T. Berry MCF	19	206,603
Totals	236	\$2,795,885

**GENERAL COUNTY ACTIVE MEMBERS DECEMBER 31, 2013
BY AGE AND YEARS OF SERVICE**

Age	Years of Service on Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll*
20-24	7							7	\$ 112,703
25-29	52	9	1					62	2,105,478
30-34	47	39	15					101	4,344,802
35-39	70	62	56	10				198	9,081,530
40-44	66	60	58	45	7	1		237	11,171,144
45-49	45	50	57	45	32	18	1	248	12,361,950
50-54	47	64	56	28	12	13	1	221	10,349,637
55-59	36	51	52	12	11	2		164	7,579,909
60	5	7	4	1				17	763,379
61	2	5	2			1		10	430,066
62	4	9	8			1		22	1,038,571
63		3	2	3	1			9	331,584
64		2						2	103,279
65		2	2	3	1	1		9	497,612
66	2	1	1	1				5	313,098
67		3						3	82,740
68		3						3	98,821
69				1				1	48,429
70		1						1	6,325
71	1							1	36,223
73		2			1			3	232,345
75	1		1					2	77,012
76	1							1	27,111
79+			1					1	13,733
Totals	386	373	316	149	65	37	2	1,328	\$61,207,481

* Valuation Payroll excludes pay for members electing the DROP.

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 45.7 years
Service: 9.5 years
Annual Pay: \$46,090

SHERIFF'S DEPARTMENT ACTIVE MEMBERS DECEMBER 31, 2013
BY AGE AND YEARS OF SERVICE

Age	Years of Service on Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll*
20-24	13							13	\$ 497,433
25-29	24	4						28	1,114,368
30-34	16	25	18					59	3,300,501
35-39	3	8	40	10				61	4,069,893
40-44	2	17	21	56	5			101	7,024,799
45-49	1	6	12	25	26			70	4,629,402
50-54	1	6	11	2	14			34	2,264,723
55-59	1	1		4	5			11	728,109
Totals	61	67	102	97	50			377	\$23,629,228

* Valuation Payroll excludes pay for members electing the DROP.

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 40.1 years

Service: 12.4 years

Annual Pay: \$62,677

**ROAD COMMISSION ACTIVE MEMBERS DECEMBER 31, 2013
BY AGE AND YEARS OF SERVICE**

Age	Years of Service on Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll*
20-24	1							1	\$ 29,909
25-29	3	2						5	239,744
30-34	2	4	12					18	907,850
35-39	2	5	18	6				31	1,798,336
40-44	2	4	13	15	10			44	2,388,391
45-49	4	3	8	9	11	15		50	3,020,152
50-54	3	2	11	8	7	5		36	2,089,059
55-59		3	6	6	1			16	863,068
61		1	2	1				4	261,866
63			1					1	45,043
74						1		1	41,779
Totals	17	24	71	45	29	21		207	\$11,685,197

* Valuation Payroll excludes pay for members electing the DROP.

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 44.5 years

Service: 15.1 years

Annual Pay: \$56,450

MARTHA T. BERRY MCF ACTIVE MEMBERS DECEMBER 31, 2013
BY AGE AND YEARS OF SERVICE

Age	Years of Service on Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll*
20-24	5							5	\$ 105,795
25-29	14							14	395,587
30-34	20	7						27	1,123,313
35-39	10	7	3					20	652,862
40-44	15	6	6	3	2			32	1,280,802
45-49	10	3	6	4	3			26	905,950
50-54	8	2	3	2		1		16	637,296
55-59	4	2	4					10	359,643
60		2	1					3	116,364
61		2						2	123,192
62	1							1	30,165
Totals	87	31	23	9	5	1		156	\$5,730,969

* Valuation Payroll excludes pay for members electing the DROP.

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 41.3 years

Service: 6.1 years

Annual Pay: \$36,737

SECTION D

ACTUARIAL COST METHODS AND ACTUARIAL ASSUMPTIONS

VALUATION METHODS

Actuarial Cost Method: Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an individual entry-age actuarial cost method having the following characteristics:

- (i) the annual normal costs for each individual active member, payable from the date of hire to the date of retirement, are sufficient to accumulate to the value of the member's benefits.
- (ii) each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Amortization of Unfunded Actuarial Valuation Method: Unfunded actuarial accrued liabilities were amortized by level percent-of-payroll contributions (principal and interest combined) over 20 years. Active member payroll was assumed to increase 5.0% for the purpose of determining the level-percent contributions.

Asset Valuation Method: The actuarial value equals:

- (a) Actuarial value of assets from the previous valuation, plus
- (b) employer and member contributions since the last valuation, minus
- (c) benefit payments and refunds since the last valuation, plus
- (d) estimated investment income at the assumed investment return, plus
- (e) portion of gain (loss) recognized in the current valuation.

For the above purpose, gain (loss) is defined as the excess during the period of the investment return on the market value of assets over the expected investment income. Twenty percent of the difference is recognized over a 5-year period in the actuarial value of assets.

This method was first adopted for the December 31, 2005 actuarial valuation.

ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

Investment Return (net of investment expenses).

2.5% per year in excess of pay inflation (real rate of return). If pay inflation matches the assumption of 5.0%, this implies a 7.5% rate of return.

This assumption is used to equate the value of payments due at different points in time and was first used for the December 31, 1993 valuation. Approximate rates of investment return, for the purpose of comparisons with assumed rates, are shown below. Actual increases in average active member pay are also shown for comparative purposes.

	Year Ended December 31					5-Year Average*
	2013	2012	2011	2010	2009	
Rate of Investment Return	10.5 %	0.1 %	0.1 %	3.3 %	3.5 %	3.4 %

* *Compound rate of increase.*

The nominal rate of return was computed using the approximate formula $i = I$ divided by $1/2 (A + B - I)$, where I is actual investment income net of expenses, A is the beginning of year asset value, and B is the end of year asset value.

These rates of return should not be used for measurement of an investment advisor's performance or for comparison with other systems.

Pay Projections. These assumptions are used to project current pays to those upon which benefits will be based. The assumptions were first used for the December 31, 2005 valuation.

Years of Service	Annual Rate of Pay Increase								
	Base (Economic)	Merit and Longevity				Total			
		General County	Sheriff's Department	Road Commission	Martha T. Berry MCF	General County	Sheriff's Department	Road Commission	Martha T. Berry MCF
1	5.0%	3.0 %	7.0 %	6.0 %	3.0 %	8.0%	12.0%	11.0%	8.0%
2	5.0	3.0	7.0	6.0	3.0	8.0	12.0	11.0	8.0
3	5.0	3.0	7.0	6.0	3.0	8.0	12.0	11.0	8.0
4	5.0	3.0	4.0	6.0	3.0	8.0	9.0	11.0	8.0
5	5.0	3.0	4.0	6.0	3.0	8.0	9.0	11.0	8.0
6	5.0	3.0	4.0	6.0	3.0	8.0	9.0	11.0	8.0
7	5.0	1.0	4.0	2.0	1.0	6.0	9.0	7.0	6.0
8	5.0	1.0	1.0	2.0	1.0	6.0	6.0	7.0	6.0
9	5.0	1.0	1.0	2.0	1.0	6.0	6.0	7.0	6.0
10	5.0	1.0	1.0	2.0	1.0	6.0	6.0	7.0	6.0
11+	5.0	1.0	1.0	1.0	1.0	6.0	6.0	6.0	6.0

The mortality table (a risk assumption) used was the RP 2000 Mortality Table, adjusted for projected mortality improvements to 2015 with no setbacks for males or females. This table was first used for the December 31, 2005 valuation. The membership size in the plan is not sufficiently large to determine if there is a margin for mortality improvement. However, based on our experience with a broad cross section of plans similar in nature to this plan it is our opinion that there is a provision for future mortality improvement in the current mortality assumption. Sample values follow:

Sample Ages	Single Life Retirement Values			
	Values at Retirement of		Future Life	
	\$1 Monthly for Life		Expectancy (years)	
	Men	Women	Men	Women
50	\$144.50	\$146.68	32.29	34.38
55	136.81	139.67	27.59	29.64
60	126.95	130.80	23.05	25.08
65	115.04	120.11	18.79	20.80
70	101.33	107.82	14.89	16.86
75	85.49	93.96	11.34	13.29
80	68.54	78.58	8.25	10.09

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each pension payment being made after retirement.

The table above was set forward 4 years for males and females for the purpose of valuing disabled lives.

Rates of disability were as follows:

Sample Ages	% of Active Members Becoming Disabled within Next Year
25	0.09 %
30	0.11
35	0.15
40	0.22
45	0.36
50	0.61
55	1.01
60	1.66

The rates of retirement (a risk assumption) used to measure the probability of eligible members retiring during the next year were as follows:

Retirement Ages	General County	Sheriff's Department	Road Commission	Martha T. Berry MCF	Retirement Service	Sheriff's Department
50	15 %			15 %	25	50 %
51	15			15	26	40
52	15			15	27	40
53	15			15	28	40
54	15			15	29	40
55	15		25 %	15	30	40
56	15		25	15	31	35
57	15		25	15	32	25
58	15		25	15	33	25
59	25		25	25	34	25
60	25	25 %	25	25	35 & Up	100
61	25	25	30	25		
62	25	25	30	25		
63	25	25	30	25		
64	25	25	30	25		
65	25	100	100	25		
66	25			25		
67	25			25		
68	25			25		
69	25			25		
70 & Up	100			100		

These tables were first used for the December 31, 2005 valuation.

For all General County and Martha T. Berry MCF members hired on or after January 1, 2002 the following retirement probabilities will apply:

Retirement Ages	General County	Martha T. Berry MCF
55	10 %	10 %
56	10	10
57	10	10
58	10	10
59	20	20
60	20	20
61	20	20
62	25	25
63	25	25
64	25	25
65	25	25
66	25	25
67	25	25
68	25	25
69	25	25
70 & Up	100	100

Rates of separation from active membership (a risk assumption) were as follows: (rates do not apply to members eligible for regular retirement and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

**Sample Rates of Separation from Active Employment
Before Retirement, Death or Disability**

Sample Ages	Years of Service	% of Active Members Separating within Next Year			
		General County	Sheriff's Department	Road Commission	Martha T. Berry MCF
ALL	0	12.00 %	4.00 %	6.50 %	12.00 %
	1	9.00	4.00	6.00	9.00
	2	8.00	3.00	5.50	8.00
	3	6.00	3.00	5.00	6.00
	4	6.00	3.00	4.50	6.00
25	5 & Over	5.80	1.60	2.50	5.80
30		5.30	1.10	2.00	5.30
35		4.30	1.00	2.00	4.30
40		3.30	0.75	1.50	3.30
45		2.30	0.50	1.00	2.30
50		1.80	0.25	0.50	1.80
55		1.75	0.25	0.50	1.75
60	1.50	0.25	0.50	1.50	

These tables were first used for the December 31, 2005 valuation.

Effect of lump sum payments on FAC: 4.5% for General County and Martha T. Berry MCF members.

11.0% for Command Officer and Inspectors hired before 12/1/96; 1% for other CBU members.

6.0% for Road Commission members.

Administrative expense load: 0.10% of payroll.

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption:	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses.
Pay Increase Timing:	Six months after the valuation date.
Decrement Timing:	Decrements of all other types are assumed to occur mid-year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.
Decrement Relativity:	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation:	Disability and death-in-service decrements do not operate during the first 5 years of service. Disability and withdrawal do not operate during retirement eligibility.
Normal Form of Benefit:	The assumed normal form of benefit is the straight life form.
Incidence of Contributions:	Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits.

GLOSSARY

Actuarial Accrued Liability - The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as “accrued liability” or “past service liability.”

Accrued Service - The service credited under the plan which was rendered before the date of the actuarial valuation.

Actuarial Assumptions - Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method - A mathematical budgeting procedure for allocating the dollar amount of the “actuarial present value of future plan benefits” between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the “actuarial funding method.”

Actuarial Equivalent - A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

Actuarial Present Value - The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest and taking into account the probability of payment.

Amortization - Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Experience Gain (Loss) - A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

Normal Cost - The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as “current service cost.” Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Plan Termination Liability - The actuarial present value of future plan benefits based on the assumption that there will be no further accruals for future service and salary. The termination liability will generally be less than the liabilities computed on a “going concern” basis and is not normally determined in a routine actuarial valuation.

Reserve Account - An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

Unfunded Actuarial Accrued Liability - The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as “unfunded accrued liability.”

Valuation Assets - The value of current plan assets recognized for valuation purposes. Generally based on book value plus a portion of unrealized appreciation or depreciation.

SECTION E

FINANCIAL DISCLOSURE INFORMATION

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b) – (a)	Funded Ratio (a)/(b)	Covered Payroll** (c)	UAAL as a Percentage of Covered Payroll [(b) – (a)] / (c)
12/31/04 *	\$674,857,869	\$664,487,155	\$(10,370,714)	101.6	\$ 134,258,243	(7.7) %
12/31/05 #	719,336,871	682,144,687	(37,192,184)	105.5	134,886,588	(27.6)
12/31/06	781,450,248	721,657,669	(59,792,579)	108.3	128,820,986	(46.4)
12/31/07	847,305,155	772,649,767	(74,655,387)	109.7	126,696,252	(58.9)
12/31/08 #*	855,265,571	805,888,089	(49,377,481)	106.1	121,822,674	(40.5)
12/31/09 *	866,356,598	814,563,728	(51,792,870)	106.4	116,522,938	(44.4)
12/31/10 *	862,915,501	837,167,835	(25,747,666)	103.1	110,795,240	(23.2)
12/31/11	828,692,442	854,323,946	25,631,504	97.0	108,900,180	23.5
12/31/12 *	795,605,544	867,218,699	71,613,155	91.7	105,391,874	67.9
12/31/13 #*	837,652,540	884,041,581	46,389,041	94.8	102,252,875	45.4

* *Plan amended.*

** *Excludes pay for members electing DROP.*

Certain assumptions or methods revised.

Actuarial Cost Method

Individual Entry Age Normal

Asset Valuation Method

Market value with 5-year smoothing of gains and losses

Amortization Method

Closed, 20 years, level percent-of-pay

Principal Actuarial Assumptions
(last revised for the 12/93 special valuation):

- Net Investment Return 7.5%
- Projected Salary Increases 5.0% base pay increase plus merit and longevity
- Cost-of-Living Adjustments None

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Valuation Year Ended December 31	Fiscal Year Ended December 31	Annual Required Contribution
2004	2006	\$ 20,215,000
2005	2007	19,121,329
2006	2008	18,658,076
2007	2009	18,507,521
2008	2010	15,170,777
2009	2011	16,050,489
2010	2012	16,604,841
2011	2013	19,932,742
2012	2014	22,152,820
2013	2015	21,281,602

APPENDIX

SUMMARY OF BENEFIT PROVISIONS

BENEFIT PROVISION SUMMARY AS OF DECEMBER 31, 2013 FOR GENERAL EMPLOYEES

Division Code	Division Name	Benefit Tier	Service Needed to Vest	DROP Eligible?	Retirement Eligibility		Retirement Benefit		FAC Period	Employee Contribution
					Eligibility (age/service)	Multiplier	Employer Maximum			
0	General Non Union	Hired on or before 12/31/01 or vested by 2/26/09	8 years	No	60/8, Rule of 70 (min age 50)		2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	No	55/25, 60/8		2.20%	66% of FAC	5 years	2.5%
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15		2.20%	66% of FAC	5 years	2.5%
2	UAW Animal Shelter	Hired on or before 12/31/01 or vested by 2/27/09	8 years	Yes*	60/8, Rule of 70 (min age 50)		2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8		2.20%	66% of FAC	5 years	2.5%
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15		2.20%	66% of FAC	5 years	2.5%
3	AFSCME Local 411	Hired on or before 12/31/01 or vested by 2/27/09	8 years	Yes*	60/8, Rule of 70 (min age 50)		2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8		2.20%	66% of FAC	5 years	2.5%
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15		2.20%	66% of FAC	5 years	2.5%
6	Macomb County Environmental Health Association	Hired on or before 12/31/01 or vested by 5/1/09	8 years	Yes*	60/8, Rule of 70 (min age 50)		2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8		2.20%	66% of FAC	5 years	2.5%
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15		2.20%	66% of FAC	5 years	2.5%
8	Teamsters 214 Court Reporters	Hired on or before 12/31/01 or vested by 2/27/09	8 years	Yes*	60/8, Rule of 70 (min age 50)		2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8		2.20%	66% of FAC	5 years	2.5%
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15		2.20%	66% of FAC	5 years	2.5%
9	International Union of Operating Engineers (Boiler Operators)	Hired on or before 12/31/01 or vested by 5/1/09	8 years	Yes*	60/8, Rule of 70 (min age 50)		2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8		2.20%	66% of FAC	5 years	2.5%
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15		2.20%	66% of FAC	5 years	2.5%
10	TPOAM Circuit Court Officers	Hired on or before 12/31/01 or vested by 7/24/09	8 years	Yes*	60/8, Rule of 70 (min age 50)		2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8		2.20%	66% of FAC	5 years	2.5%
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15		2.20%	66% of FAC	5 years	2.5%
11	MNA Unit I Health Dept.	Hired on or before 12/31/01 or vested by 5/1/09	8 years	Yes*	60/8, Rule of 70 (min age 50)		2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8		2.20%	66% of FAC	5 years	2.5%
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15		2.20%	66% of FAC	5 years	2.5%
12	UAW Local 412 Unit 49 Information Technology	Hired on or before 12/31/01 or vested by 2/27/09	8 years	Yes*	60/8, Rule of 70 (min age 50)		2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8		2.20%	66% of FAC	5 years	2.5%
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15		2.20%	66% of FAC	5 years	2.5%
13	UAW Local 889 Specialized Offices	Hired on or before 12/31/01 or vested by 2/27/09	8 years	Yes*	60/8, Rule of 70 (min age 50)		2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8		2.20%	66% of FAC	5 years	2.5%
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15		2.20%	66% of FAC	5 years	2.5%
15	Building Trades Association	Hired on or before 12/31/01 or vested by 5/1/09	8 years	Yes*	60/8, Rule of 70 (min age 50)		2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8		2.20%	66% of FAC	5 years	2.5%
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15		2.20%	66% of FAC	5 years	2.5%

* Must be vested on 12/31/2012, otherwise not eligible for DROP.

BENEFIT PROVISION SUMMARY AS OF DECEMBER 31, 2013 FOR GENERAL EMPLOYEES

Division Code	Division Name	Benefit Tier	Service Needed to Vest	DROP Eligible?	Retirement Eligibility		Retirement Benefit		FAC Period	Employee Contribution
					Eligibility (age/service)	Multiplier	Employer Maximum			
16	UAW Local 412 Unit 46 Assistant Prosecutors	Hired on or before 12/31/01 or vested by 9/14/09	8 years	Yes*	60/8, Rule of 70 (min age 50)	2.4%/ 1% (26 yrs)	65% of FAC	4 years	3.5%	
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%	
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%	
18	Teamsters Local 214 FOC/Circuit Court	Hired on or before 12/31/01 or vested by 7/24/09	8 years	Yes*	60/8, Rule of 70 (min age 50)	2.4%/ 1% (26 yrs)	65% of FAC	4 years	3.5%	
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%	
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%	
19	General	Hired on or before 12/31/01 or vested by 2/27/09	8 years	Yes*	60/8, Rule of 70 (min age 50)	2.4%/ 1% (26 yrs)	65% of FAC	4 years	3.5%	
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%	
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%	
21	POAM JJC	Hired on or before 12/31/01 or vested by 5/1/09	8 years	Yes*	60/8, Rule of 70 (min age 50)	2.4%/ 1% (26 yrs)	65% of FAC	4 years	3.5%	
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%	
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%	
24	UAW Local 889 MCCSA	Hired on or before 12/31/01 or vested by 2/27/09	8 years	Yes*	60/8, Rule of 70 (min age 50)	2.4%/ 1% (26 yrs)	65% of FAC	4 years	3.5%	
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%	
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%	
25	UAW Local 412 Unit 75 Supervisors	Hired on or before 12/31/01 or vested by 2/27/09	8 years	Yes*	60/8, Rule of 70 (min age 50)	2.4%/ 1% (26 yrs)	65% of FAC	4 years	3.5%	
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%	
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%	
27	TPOAM Macomb Co. Senior Service Employees Association	Hired on or before 12/31/01 or vested by 2/27/09	8 years	Yes*	60/8, Rule of 70 (min age 50)	2.4%/ 1% (26 yrs)	65% of FAC	4 years	3.5%	
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%	
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%	
28	TPOAM Juvenile Court & Justice Center Employees	Hired on or before 12/31/01 or vested by 6/19/09	8 years	Yes*	60/8, Rule of 70 (min age 50)	2.4%/ 1% (26 yrs)	65% of FAC	4 years	3.5%	
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%	
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%	
30	UAW Local 412 Unit 95 Assistant Corporation Counsel	Hired on or before 12/31/01 or vested by 2/27/09	8 years	Yes*	60/8, Rule of 70 (min age 50)	2.4%/ 1% (26 yrs)	65% of FAC	4 years	3.5%	
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%	
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%	
43	UAW Local 889 Probate Court/ Corporation Counsel	Hired on or before 12/31/01 or vested by 6/19/09	8 years	Yes*	60/8, Rule of 70 (min age 50)	2.4%/ 1% (26 yrs)	65% of FAC	4 years	3.5%	
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%	
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%	
44	UAW Local 412 - Unit 98 MCCSA Professionals	Hired on or before 12/31/01 or vested by 2/26/09	8 years	Yes*	60/8, Rule of 70 (min age 50)	2.4%/ 1% (26 yrs)	65% of FAC	4 years	3.5%	
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%	
		Hired on/after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%	

* Must be vested on 12/31/2012, otherwise not eligible for DROP.

BENEFIT PROVISION SUMMARY AS OF DECEMBER 31, 2013 FOR GENERAL EMPLOYEES

Division Code	Division Name	Benefit Tier	Service Needed to Vest	DROP Eligible?	Retirement Eligibility	Retirement Benefit		FAC Period	Member Contribution
					Eligibility (age/service)	Multiplier	Employer Maximum		
1	POLC- Command	Hired before 8/20/2010	8 years	Yes	60/8, 25 & out	2.4%(26 yrs) / 1%	65% of FAC	3 years	4%
		Hired on/after 8/20/2010	15 years	Yes	60/15, 25 & out	2.4%(26 yrs) / 1%	65% of FAC	3 years	4%
7	POAM Deputies	Hired before 6/1/2013	8 years	Yes*	60/8, 25 & out	2.64% for 25 yrs	66% of FAC	3 years	4%
7	POAM Dispatchers	Hired Into the County on or after 6/1/2013	15 years	No	60/15, 25 & out	2.64% for 25 yrs	66% of FAC	3 years	4%
		Hired before 6/1/2013	8 years	Yes*	60/8, 25 & out	2.4%(26 yrs) / 1%	66% of FAC	3 years	4%
		Hired Into the County on or after 6/1/2013	15 years	No	60/15, 25 & out	2.4%(26 yrs) / 1%	66% of FAC	3 years	4%
20	POLC Captains	Hired before 6/1/2013	8 years	Yes	60/8, 25 & out	2.4%(26 yrs) / 1%	65% of FAC	3 years	4%
		Hired Into the County on or after 6/1/2013	15 years	Yes	60/15, 25 & out	2.4%(26 yrs) / 1%	65% of FAC	3 years	4%
26	Corrections Officers	Hired before 6/1/2013	8 years	Yes*	60/8, 25 & out	2.4%(26 yrs) / 1%	66% of FAC	3 years	4%
		Hired Into the County on or after 6/1/2013	15 years	No	60/15, 25 & out	2.4%(26 yrs) / 1%	66% of FAC	3 years	4%

* Must be vested on 12/31/2012, otherwise not eligible for DROP

BENEFIT PROVISION SUMMARY AS OF DECEMBER 31, 2013 FOR ROAD COMMISSION EMPLOYEES

Division Code	Division Name	Benefit Tier	Service Needed to Vest	DROP Eligible?	Retirement Eligibility	Retirement Benefit		FAC Period	Member Contributions
					Eligibility (age/service)	Multiplier	Employer Maximum		
31	Road Commission Non Union	Hired into the County (Dept of Roads) before 4/1/11	8 years	No	60/8, Rule of 70 (min age 55)	2.4% / 1% (26 yrs)	65% of FAC	3 years	3.5%
		Hired into the County (Dept of Roads) on or after 4/1/11 and before 6/1/13	8 years	No	55/25, 60/8	2.4% / 1% (26 yrs)	65% of FAC	3 years	3.5%
		Hired into the County (Dept of Roads) on or after 6/1/13	15 years	No	55/25, 60/15	2.4% / 1% (26 yrs)	65% of FAC	3 years	3.5%
32	Road Commission ADTECH	Hired before 10/19/09	8 years	Yes*	60/8, Rule of 70 (min age 55)	2.4% / 1% (26 yrs)	65% of FAC	3 years	3.5%
		Hired on/after 10/19/09 and before 12/17/13	8 years	Yes*	55/25, 60/8	2.4% / 1% (26 yrs)	65% of FAC	3 years	3.5%
		Hired on/after 12/17/13	15 years	No	55/25, 60/15	2.4% / 1% (26 yrs)	65% of FAC	3 years	3.5%
33	Road Commission AFSCME Local 893	Hired before 6/15/10	8 years	Yes*	Rule of 70 (min age 55)	2.4% / 1% (26 yrs)	65% of FAC	3 years	3.5%
		Hired on/after 6/15/10 and before 6/1/13	8 years	Yes*	55/25, 65/8	2.4% / 1% (26 yrs)	65% of FAC	3 years	3.5%
		Hired on/after 6/1/13	15 years	No	55/25, 65/15	2.4% / 1% (26 yrs)	65% of FAC	3 years	3.5%

* Must be vested on 12/31/2012, otherwise not eligible for DROP.

BENEFIT PROVISION SUMMARY AS OF DECEMBER 31, 2013 FOR MARTHA T. BERRY EMPLOYEES

Division Code	Division Name	Benefit Tier	Service Needed to Vest	DROP Eligible?	Retirement Eligibility	Retirement Benefit			Member Contributions
					Eligibility (age/service)	Multiplier	Employer Maximum	FAC Period	
4	MNA (RNs at MTB)	Hired before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%
		Hired on or after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%
5	Service Employees International Union (LPNs at MTB)	Hired before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%
		Hired on or after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%
14	AFSCME 411 MTB	Hired on or before 12/31/2001 or vested by 6/15/2009	8 years	Yes*	60/8, Rule of 70 (min age 50)	2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%
		Hired on or after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%
40	MTB Non Union Employees	Hired on or before 12/31/2001 or vested by 2/26/2009	8 years	No	60/8, Rule of 70 (min age 50)	2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	No	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%
		Hired on or after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%
42	MTB UAW Supervisors	Hired on or before 12/31/2001 or vested by 6/26/2009	8 years	Yes*	60/8, Rule of 70 (min age 50)	2.4% / 1% (26 yrs)	65% of FAC	4 years	3.5%
		Hired on/after 1/1/2002 & before 1/1/2012	8 years	Yes*	55/25, 60/8	2.20%	66% of FAC	5 years	2.5%
		Hired on or after 1/1/2012	15 years	No	55/25, 60/15	2.20%	66% of FAC	5 years	2.5%

* Must be vested on 12/31/2012, otherwise not eligible for DROP.