



# Municipal Employees' Retirement System of Michigan

**MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN**  
ANNUAL ACTUARIAL VALUATION REPORT  
INGHAM COUNTY (3303)  
DECEMBER 31, 2008



June 11, 2009

The Retirement Board  
Municipal Employees' Retirement System of Michigan

Ladies and Gentlemen:

This report presents the results of the Annual Actuarial Valuation, prepared as of December 31, 2008. The report includes the determination of liabilities and contribution rates resulting from the participation of Ingham County in the Municipal Employees' Retirement System of Michigan ("MERS").

MERS is an agent multiple-employer public employee pension plan and is a tax-qualified plan under section 401(a) of the Internal Revenue Code (most recent letter of Favorable Determination issued June 15, 2005). MERS is an independent non-profit public corporation established by the Legislature pursuant to Public Act 220 of 1996, as amended, and is an instrumentality of the participating municipalities and courts. Ingham County 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.

For this annual actuarial valuation, the Retirement Board adopted new actuarial assumptions and/or methods. Please refer to page 198 for an explanation of the Board's action.

The valuation utilized information furnished by the MERS administrative staff concerning Retirement System benefits, financial transactions, and individual member information. Data was checked for consistency with the prior year, but was not otherwise audited by us.

To the best of our knowledge, this report is complete and accurate and was made in accordance with generally recognized actuarial methods 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 actuarial assumptions used for this valuation produce results that we believe are reasonable. The Retirement Board of the Municipal Employees' Retirement System of Michigan confirms that the System provides for payment of the required employer contribution as described in Section 20m of Act No. 314 of 1965 (MCL 38.1140m).

**Please review the Comments on the Investment Markets on page 3.**

**This report may be provided to other interested parties only in its entirety and only with the prior permission of MERS and the municipality.**

Please contact Sharlene Pallick at MERS if you would like to receive future annual valuations in electronic format, instead of a printed report (800-767-6377 ext. 252; SPallick@mersofmich.com).

Sincerely,

Alan Sonnanstine, MAAA, ASA

Cathy Nagy, MAAA, FSA

Jim Koss, MAAA, ASA

# TABLE OF CONTENTS

	<b>Page</b>
Executive Summary	2
Table 1 Benefit Provisions Evaluated and/or Considered	5
Table 2 Membership Summary	11
Table 3 Active Members in the Valuation - Comparative Schedule	15
Table 4 Flow of Active Membership	15
Table 5 Vested Former Members in the Valuation - Comparative Schedule	16
Table 6 Flow of Vested Former Members	16
Table 7 Retirees and Beneficiaries in the Valuation - Comparative Schedule	17
Table 8 Flow of Retirees and Beneficiaries	17
Table 9 Retirees and Beneficiaries on the Rolls - by Type of Benefit	18
Table 10 Reported Assets (Market Value)	19
Table 11 Flow of Valuation Assets (Actuarial Value)	20
Table 12 Termination Liabilities and Present Value of Accrued Benefits	21
Table 13 Actuarial Accrued Liabilities and Valuation Assets	26
Table 14 Actuarial Accrued Liabilities - Comparative Schedule	35
Table 15 Computed Employer Contributions to the Retirement System	36
Table 16 Computed Employer Contributions by Division	38
Table 17 Computed Contributions - Comparative Statement by Division	39
Chart 17.5 Projected Contributions and Funded Percent by Division	40
Table 18 Flow of Active Membership by Division	41
Table 19 Flow of Vested Former Members by Division	41
Table 20 Flow of Retirees and Beneficiaries by Division	42
Table 21 Flow of Valuation Assets (Actuarial Value) by Division	43
Table 22 Actuarial Accrued Liabilities - Comparative Schedule by Division	43
Table 23 GASB 25 and GASB 27 Information	182
Table 24 Development of Projected Unfunded Accrued Liability	183
Table 25 Benefit Provision History	184
Appendix Summary of MERS Provisions, Methods and Assumptions	197
Introduction	198
Summary of Plan Provisions - Defined Benefit Plan	199
Summary of Plan Provisions - Hybrid Plan	206
Actuarial Assumptions	210
Actuarial Funding Method	219
Asset Valuation Method	225

# Ingham County (3303)

## Executive Summary

### Required Employer Contributions

The computed minimum required employer contributions to the retirement system for the fiscal years beginning January 1, 2010 (2008 Valuation) and January 1, 2009 (2007 Valuation) are as follows:

Division	Minimum Required Monthly Employer Contributions @			
	Percentage of Payroll		\$ Based on Valuation Payroll	
	2008 Valuation	2007 Valuation	2008 Valuation	2007 Valuation
01 - Confidential	13.39%	12.44%	\$14,635	\$13,812
02 - Sheriff FOP Spvs	33.74%	27.29%	59,111	51,188
04 - MCF	6.62%	6.12%	25,208	20,495
09 - Judges	58.61%	51.60%	4,020	4,719
10 - Gnrl Mgmt	15.19%	14.90%	88,895	83,109
11 - Gnrl Library #	-%	-%	1,265	1,141
12 - Gnrl ICEA Profs	7.36%	7.60%	42,345	41,664
13 - Gnrl OPEIU Prob	13.25%	9.27%	21,147	15,203
14 - Gnrl TOPS UAW	10.20%	9.97%	122,499	117,137
15 - Animal Cntrl FOP	27.65%	14.25%	7,956	5,183
16 - Gnrl Commsnrs	6.63%	6.89%	862	1,158
17 - ICEA Nurses	8.41%	8.21%	25,642	26,346
18 - ICEA Ct. Prof	12.39%	11.73%	22,275	19,749
19 - Cnstutnl Offcls	8.06%	6.77%	3,415	3,142
21 - FOP Shrf Deputies	11.82%	10.36%	81,853	70,922
40 - ICEA Unit 111	5.58%	5.45%	6,339	6,627
41 - MCF Management	10.11%	9.72%	10,156	8,936
42 - ICEA Unit 11	7.40%	9.09%	6,915	5,286
43 - ICEA Unit 1	7.91%	7.73%	3,721	3,129
44 - MCF Exec Mgr	19.51%	20.06%	2,102	2,071
90 - Asst Pros Attnys	13.74%	13.73%	24,777	23,420
91 - Parks Union Empl	9.14%	9.52%	2,223	1,903
92 - Parks Non Union	42.78%	17.09%	2,810	2,250
93 - Lgl Rsrch Clerks	3.58%	4.00%	973	1,181
<b>Total Municipality</b>			<b>\$581,144</b>	<b>\$529,771</b>

@ The above employer contribution requirements are in addition to the member contributions, if any, shown in Table 1.

# This division will not have new hires. Invoices will be based on the dollar contribution amounts shown in this table.

**Please see the Comments on the Investment Markets on page 3.**

## **Ingham County (3303)**

### **Executive Summary (continued)**

For additional details see Table 15.

It is important to note that the contribution rates shown above are not expected to remain at present levels indefinitely. If future experience were to match the valuation assumptions exactly, the computed employer rates for divisions that are open to new hires would trend over time toward the long-term cost of system benefits, known as the Normal Cost (see Table 15). For underfunded divisions that are closed to new hires and are not linked to an open division, the computed employer dollar contribution would increase 4%-8% annually, until full funding is reached. The required employer contribution for such a closed division typically reaches its highest level about 11-12 years after the division becomes closed. Prospective benefit changes as well as Retirement System gains and losses will also affect future contribution rates.

Contribution rates will change from one year to the next as a result of changes in benefit provisions, changes in the actuarial assumptions, and experience of the plan (investment experience and demographic experience).

The 2008 valuation reflects changes in actuarial assumptions and/or methods (please refer to page 198). The effects of the changes are shown in the note below Table 16 for each division. For benefit provision changes see Table 1.

#### **2008 System Experience**

Based on the smoothed Actuarial Value of Assets, the recognized rate of investment return for MERS overall was 4.7% (less than the 8% actuarial assumption). On average this will result in increases in computed employer contributions.

Demographic experience varied by division. This reflects what actually happened to participants (active members, retirees, and vested former members) compared to what was projected by the actuarial assumptions.

#### **2008 Funded Position**

The ratio of the Valuation Assets to the Actuarial Accrued Liability for Ingham County in aggregate is 76%; last year's ratio was 78%.

#### **Comments on the Investment Markets**

The dramatic price declines across the world financial markets in 2008 led to volatility unlike any experienced in decades. 2009 has continued to be only somewhat less volatile. This is a crisis of the global economy focused on the financial sector. The U.S. government and business leaders

## **Ingham County (3303)**

### **Executive Summary (continued)**

are doing all they can to address the issues. Even so, it is going to be difficult in the short term to meet the investment assumption of 8% annual return.

The actuarial value of assets (funding value), used to determine both your funded status and your required employer contribution, is based on a 10-year smoothed value of assets. Only a portion (one-tenth) of the 2008 investment market losses were recognized in this actuarial valuation report. This reduces the volatility of the valuation results, which affects your required employer contribution and actuarial funded percentage.

As of December 31, 2008 the actuarial value of assets is 139% of market value. This means that meeting the actuarial assumption in the next few years will require average annual market returns that substantially exceed the 8% investment return assumption.

If the December 31, 2008 valuation results were based on market value on that date instead of 10-year smoothed funding value: i) the funded percent of your entire municipality would be 54% (instead of 76%); and ii) your total employer contribution requirement for the fiscal year starting January 1, 2010 would be \$10,267,656 (instead of \$6,973,728). If the investment markets do not turn around, employer contribution requirements can be expected to rise. MERS is doing everything it can to make sure that if this proves to be the case, the increases are incremental as opposed to steep.

Remember that only one-tenth of the 2008 market losses are reflected in this actuarial valuation report. As was true for past market downturns, MERS expects the markets to rebound over time. By the time the 2008 market losses would be fully recognized (over the following 9 years), future market gains are expected to partly or fully offset 2008 market losses. This smoothing method is a powerful tool for reducing the volatility of your required employer contributions. However, if the financial markets do not rebound, the result would be gradual increases in your employer contribution requirement over the next 9 years (as described above).

### **Possible Future Changes in Actuarial Assumptions**

Actuarial assumptions are reviewed every five years, and sometimes more often. The next review of MERS actuarial assumptions will begin in July 2009, and will cover the 2004-2008 valuation years. All areas of activity will be studied, and it is very likely that there will be new actuarial assumptions reflected in the December 31, 2009 and December 31, 2010 valuations. As done in February 2009, MERS expects to provide employers with updates concerning pending new actuarial assumptions and the ongoing effects of the financial markets.

# Ingham County (3303)

## Table 1

### Benefit Provisions Evaluated and/or Considered

Division	2008 Valuation	2007 Valuation
01 - Confidential	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-3 E (2.0%) (01/01/1994) 5.36% Member Contrib. Act 88 Election (09/29/1965)	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-3 E (2.0%) (01/01/1994) 5.36% Member Contrib. Act 88 Election (09/29/1965)
02 - Sheriff FOP Spvs	3.20% - 80% Max Normal Ret Age: 60 V-10 F55(15) F/N(25) FAC-3 E (2.0%) (01/01/1994) 19.61% Member Contrib. Act 88 Election (09/29/1965)	3.20% - 80% Max Normal Ret Age: 60 V-10 F55(15) F/N(25) FAC-3 E (2.0%) (01/01/1994) 19.61% Member Contrib. Act 88 Election (09/29/1965)
04 - MCF	C-1 Old Normal Ret Age: 60 V-10 FAC-5 E (2.0%) (01/01/1995) 0.00% Member Contrib.	C-1 Old Normal Ret Age: 60 V-10 FAC-5 E (2.0%) (01/01/1995) 0.00% Member Contrib.
09 - Judges	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 3.14% Member Contrib. Act 88 Election (09/29/1965)	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 3.14% Member Contrib. Act 88 Election (09/29/1965)
10 - Gnrl Mgmt	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-3 E (2.0%) (01/01/1994) 6.39% Member Contrib. Act 88 Election (09/29/1965)	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-3 E (2.0%) (01/01/1994) 6.39% Member Contrib. Act 88 Election (09/29/1965)

# Ingham County (3303)

## Table 1 (continued)

### Benefit Provisions Evaluated and/or Considered

Division	2008 Valuation	2007 Valuation
11 - Gnrl Library#	C-1 Old Normal Ret Age: 60 V-10 FAC-5 E (2.0%) (01/01/1994) 0.00% Member Contrib. Act 88 Election (09/29/1965)	C-1 Old Normal Ret Age: 60 V-10 FAC-5 E (2.0%) (01/01/1994) 0.00% Member Contrib. Act 88 Election (09/29/1965)
12 - Gnrl ICEA Profs	B-4 - 80% Max Normal Ret Age: 60 V-10 F55(15) FAC-5 E (2.0%) (01/01/1994) E-2 (2.5%) (01/01/2003) 13.42% Member Contrib. Act 88 Election (09/29/1965)	B-4 - 80% Max Normal Ret Age: 60 V-10 F55(15) FAC-5 E (2.0%) (01/01/1994) E-2 (2.5%) (01/01/2003) 13.42% Member Contrib. Act 88 Election (09/29/1965)
13 - Gnrl OPEIU Prob	B-4 - 80% Max Normal Ret Age: 60 V-10 F55(15) FAC-3 E (2.0%) (01/01/1994) 9.71% Member Contrib. Act 88 Election (09/29/1965)	B-4 - 80% Max Normal Ret Age: 60 V-10 F55(15) FAC-3 E (2.0%) (01/01/1994) 9.71% Member Contrib. Act 88 Election (09/29/1965)
14 - Gnrl TOPS UAW	B-4 - 80% Max Normal Ret Age: 60 V-10 F55(15) FAC-5 E (2.0%) (01/01/1994) 3.62% Member Contrib. Act 88 Election (09/29/1965)	B-4 - 80% Max Normal Ret Age: 60 V-10 F55(15) FAC-5 E (2.0%) (01/01/1994) 3.62% Member Contrib. Act 88 Election (09/29/1965)



# Ingham County (3303)

## Table 1 (continued)

### Benefit Provisions Evaluated and/or Considered

Division	2008 Valuation	2007 Valuation
15 - Animal Cntrl FOP	B-4 - 80% Max Normal Ret Age: 60 V-10 F55(15) F/N(25) FAC-3 E (2.0%) (01/01/1994) E-2 (2.5%) (01/01/2001) 15.49% Member Contrib. Act 88 Election (09/29/1965)	B-4 - 80% Max Normal Ret Age: 60 V-10 F55(15) F/N(25) FAC-3 E (2.0%) (01/01/1994) E-2 (2.5%) (01/01/2001) 15.49% Member Contrib. Act 88 Election (09/29/1965)
16 - Gnrl Commsnrs	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-5 E (2.0%) (01/01/1994) 3.56% Member Contrib. Act 88 Election (09/29/1965)	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-5 E (2.0%) (01/01/1994) 3.56% Member Contrib. Act 88 Election (09/29/1965)
17 - ICEA Nurses	B-3 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-3 E (2.0%) (01/01/1994) E-2 (2.5%) (07/01/1995) 11.87% Member Contrib. Act 88 Election (09/29/1965)	B-3 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-3 E (2.0%) (01/01/1994) E-2 (2.5%) (07/01/1995) 11.87% Member Contrib. Act 88 Election (09/29/1965)
18 - ICEA Ct. Prof	B-3 - 80% Max Normal Ret Age: 60 V-10 F55(15) F/N(20) FAC-5 E (2.0%) (01/01/1994) 9.84% Member Contrib. Act 88 Election (09/29/1965)	B-3 - 80% Max Normal Ret Age: 60 V-10 F55(15) F/N(20) FAC-5 E (2.0%) (01/01/1994) 9.84% Member Contrib. Act 88 Election (09/29/1965)

# Ingham County (3303)

## Table 1 (continued)

### Benefit Provisions Evaluated and/or Considered

Division	2008 Valuation	2007 Valuation
19 - Cnstatnl Offcls	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-3 E (2.0%) (01/01/1994) 8.46% Member Contrib. Act 88 Election (09/29/1965)	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-3 E (2.0%) (01/01/1994) 8.46% Member Contrib. Act 88 Election (09/29/1965)
21 - FOP Shrf Deputies	3.20% - 80% Max Normal Ret Age: 60 V-10 F55(15) F/N(25) FAC-5 E (2.0%) (01/01/1994) 10.96% Member Contrib. Act 88 Election (09/29/1965)	3.20% - 80% Max Normal Ret Age: 60 V-10 F55(15) F/N(25) FAC-5 E (2.0%) (01/01/1994) 10.96% Member Contrib. Act 88 Election (09/29/1965)
40 - ICEA Unit 111	C-2 (B-1 Base) Normal Ret Age: 60 V-10 F55(15) FAC-5 E (2.0%) (01/01/1995) 3.00% Member Contrib. Act 88 Election (09/29/1965)	C-2 (B-1 Base) Normal Ret Age: 60 V-10 F55(15) FAC-5 E (2.0%) (01/01/1995) 3.00% Member Contrib. Act 88 Election (09/29/1965)
41 - MCF Management	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-5 E (2.0%) (01/01/1995) 0.00% Member Contrib. Act 88 Election (09/29/1965)	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-5 E (2.0%) (01/01/1995) 0.00% Member Contrib. Act 88 Election (09/29/1965)

# Ingham County (3303)

## Table 1 (continued)

### Benefit Provisions Evaluated and/or Considered

Division	2008 Valuation	2007 Valuation
42 - ICEA Unit 11	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-3 E (2.0%) (01/01/1988) 3.95% Member Contrib. Act 88 Election (09/29/1965)	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-3 E (2.0%) (01/01/1988) 3.95% Member Contrib. Act 88 Election (09/29/1965)
43 - ICEA Unit 1	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-5 3.51% Member Contrib. Act 88 Election (09/29/1965)	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-5 3.51% Member Contrib. Act 88 Election (09/29/1965)
44 - MCF Exec Mgr	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-3 E-2 (2.5%) (09/01/2003) 0.00% Member Contrib. Act 88 Election (09/29/1965)	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-3 E-2 (2.5%) (09/01/2003) 0.00% Member Contrib. Act 88 Election (09/29/1965)
90 - Asst Pros Attnys	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 E (2.0%) (01/01/1988) 1.40% Member Contrib. Act 88 Election (09/29/1965)	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 E (2.0%) (01/01/1988) 1.40% Member Contrib. Act 88 Election (09/29/1965)
91 - Parks Union Empl	B-3 - 80% Max Normal Ret Age: 60 V-10 FAC-5 E (2.0%) (01/01/1988) 0.00% Member Contrib. Act 88 Election (09/29/1965)	B-3 - 80% Max Normal Ret Age: 60 V-10 FAC-5 E (2.0%) (01/01/1988) 0.00% Member Contrib. Act 88 Election (09/29/1965)

# Ingham County (3303)

## Table 1 (continued)

### Benefit Provisions Evaluated and/or Considered

Division	2008 Valuation	2007 Valuation
92 - Parks Non Union	B-4 - 80% Max Normal Ret Age: 60 V-10 F55(25) FAC-3 E (2.0%) (01/01/1988) 0.00% Member Contrib. Act 88 Election (09/29/1965)	B-4 - 80% Max Normal Ret Age: 60 V-10 F55(25) FAC-3 E (2.0%) (01/01/1988) 0.00% Member Contrib. Act 88 Election (09/29/1965)
93 - Lgl Rsrch Clerks	C-1 Old Normal Ret Age: 60 V-10 FAC-5 E (2.0%) (01/01/1988) 0.00% Member Contrib. Act 88 Election (09/29/1965)	C-1 Old Normal Ret Age: 60 V-10 FAC-5 E (2.0%) (01/01/1988) 0.00% Member Contrib. Act 88 Election (09/29/1965)

# This division is closed to new hires, so the closed division amortization policy applies. Please refer to the Amortization of Unfunded Actuarial Accrued Liability on page 220.

# Ingham County (3303)

## Table 2

### Membership Summary

Division	2008 Valuation		2007 Valuation	
	Number	Annual Payroll*	Number	Annual Payroll*
01 - Confidential				
Active Members	32	\$1,311,576	32	\$1,332,376
Vested Former Members	18	172,334	13	90,730
Retirees and Beneficiaries	30	323,234	27	312,064
02 - Sheriff FOP Spvs				
Active Members	28	\$2,102,359	31	\$2,250,880
Vested Former Members	3	60,581	2	29,860
Retirees and Beneficiaries	56	1,868,133	53	1,712,433
04 - MCF				
Active Members	156	\$4,569,410	146	\$4,018,672
Vested Former Members	39	181,630	38	162,286
Retirees and Beneficiaries	65	273,840	60	239,792
09 - Judges				
Active Members	3	\$82,302	4	\$109,736
Vested Former Members	0	0	1	15,123
Retirees and Beneficiaries	9	98,424	9	98,424
10 - Gnrl Mgmt				
Active Members	87	\$7,022,632	87	\$6,693,324
Vested Former Members	23	386,629	22	380,106
Retirees and Beneficiaries	78	2,151,945	75	2,100,628
11 - Gnrl Library				
Active Members	0	0	0	0
Vested Former Members	15	105,315	20	127,024
Retirees and Beneficiaries	30	176,803	29	171,516
12 - Gnrl ICEA Profs				
Active Members	126	\$6,903,993	124	\$6,578,499
Vested Former Members	23	272,677	23	272,677
Retirees and Beneficiaries	45	822,233	46	831,687
13 - Gnrl OPEIU Prob				
Active Members	38	\$1,915,209	38	\$1,968,144
Vested Former Members	8	139,791	8	101,706
Retirees and Beneficiaries	27	784,953	20	509,002

# Ingham County (3303)

## Table 2 (continued)

### Membership Summary

Division	2008 Valuation		2007 Valuation	
	Number	Annual Payroll*	Number	Annual Payroll*
14 - Gnrl TOPS UAW				
Active Members	402	\$14,411,744	406	\$14,098,731
Vested Former Members	49	332,673	47	319,242
Retirees and Beneficiaries	180	1,979,417	175	1,830,209
15 - Animal Cntrl FOP				
Active Members	7	\$345,299	10	\$436,485
Vested Former Members	1	6,172	1	6,172
Retirees and Beneficiaries	8	162,769	5	70,511
16 - Gnrl Commsnrs				
Active Members	10	\$155,928	13	\$201,689
Vested Former Members	7	16,131	6	11,599
Retirees and Beneficiaries	7	19,804	7	19,804
17 - ICEA Nurses				
Active Members	66	\$3,658,770	74	\$3,850,897
Vested Former Members	8	68,188	8	57,958
Retirees and Beneficiaries	54	762,097	50	688,786
18 - ICEA Ct. Prof				
Active Members	34	\$2,157,341	33	\$2,020,357
Vested Former Members	6	43,839	6	43,839
Retirees and Beneficiaries	42	742,712	40	691,263
19 - Cnstutnl Offcls				
Active Members	6	\$508,408	6	\$556,968
Vested Former Members	0	0	0	0
Retirees and Beneficiaries	7	118,764	6	56,320
21 - FOP Shrf Deputies				
Active Members	150	\$8,309,954	154	\$8,214,896
Vested Former Members	18	170,113	20	216,211
Retirees and Beneficiaries	79	1,724,780	74	1,521,866
40 - ICEA Unit 111				
Active Members	36	\$1,363,097	39	\$1,459,015
Vested Former Members	6	40,151	5	37,754
Retirees and Beneficiaries	27	234,040	26	220,266

# Ingham County (3303)

## Table 2 (continued)

### Membership Summary

Division	2008 Valuation		2007 Valuation	
	Number	Annual Payroll*	Number	Annual Payroll*
41 - MCF Management				
Active Members	22	\$1,205,473	22	\$1,103,262
Vested Former Members	13	115,159	13	115,159
Retirees and Beneficiaries	11	70,248	11	71,583
42 - ICEA Unit 11				
Active Members	22	\$1,121,337	14	\$697,841
Vested Former Members	1	3,723	2	7,099
Retirees and Beneficiaries	6	69,201	5	65,949
43 - ICEA Unit 1				
Active Members	13	\$564,417	12	\$485,721
Vested Former Members	6	32,324	4	23,123
Retirees and Beneficiaries	5	49,768	4	41,017
44 - MCF Exec Mgr				
Active Members	1	\$129,277	1	\$123,882
Vested Former Members	0	0	0	0
Retirees and Beneficiaries	0	0	0	0
90 - Asst Pros Attnys				
Active Members	30	\$2,163,912	30	\$2,046,925
Vested Former Members	18	267,907	16	234,974
Retirees and Beneficiaries	13	373,144	12	367,853
91 - Parks Union Empl				
Active Members	7	\$291,759	6	\$239,863
Vested Former Members	1	8,511	1	8,511
Retirees and Beneficiaries	0	0	0	0
92 - Parks Non Union				
Active Members	1	\$78,846	2	\$157,991
Vested Former Members	0	0	0	0
Retirees and Beneficiaries	2	100,364	1	40,397
93 - Lgl Rsrch Clerks				
Active Members	7	\$325,997	8	\$354,267
Vested Former Members	0	0	0	0
Retirees and Beneficiaries	0	0	0	0

# Ingham County (3303)

## Table 2 (continued)

### Membership Summary

Division	2008 Valuation		2007 Valuation	
	Number	Annual Payroll*	Number	Annual Payroll*
<b>Total Municipality</b>				
<b>Active Members</b>	<b>1284</b>	<b>\$60,699,040</b>	<b>1292</b>	<b>\$59,000,421</b>
<b>Vested Former Members</b>	<b>263</b>	<b>2,423,848</b>	<b>256</b>	<b>2,261,153</b>
<b>Retirees and Beneficiaries</b>	<b><u>781</u></b>	<b>12,906,673</b>	<b><u>735</u></b>	<b>11,661,370</b>
<b>Total Participants</b>	<b>2328</b>		<b>2283</b>	

\*     *Annual payroll for active members; annual deferred benefits payable for vested former members; annual benefits being paid for retirees and beneficiaries.*



# Ingham County (3303)

## Table 3

### Active Members in the Valuation - Comparative Schedule

Valuation Date 12/31	Number	Annual Payroll	Average Pay		Average Age	Average Benefit Service*	Average Eligibility Service*
			Annual \$	% Increase			
1998	1,161	\$ 40,831,800	\$ 35,169	13.6%	42.5	10.0	
1999	1,183	41,422,262	35,014	(0.4)	42.7	9.8	
2000	1,197	43,006,155	35,928	2.6	42.7	9.6	
2001	1,199	44,941,508	37,482	4.3	42.8	9.4	9.6
2002	1,207	47,549,076	39,394	5.1	42.8	9.4	9.7
2003	1,223	49,516,317	40,488	2.8	43.3	9.7	9.9
2004	1,230	52,999,865	43,089	6.4	43.4	9.7	9.9
2005	1,234	53,326,694	43,215	0.3	43.7	9.8	10.1
2006	1,278	56,819,304	44,460	2.9	43.7	9.7	9.9
2007	1,292	59,000,421	45,666	2.7	44.1	9.7	10.0
2008	1,284	60,699,040	47,273	3.5	44.3	9.6	10.0

\* See description on page 217.

## Table 4

### Flow of Active Membership

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Net Transfers*	New Member	End of Year
				Vested	Non-Vested			
2001	(26)	(1)		(53)	(78)		160	1199
2002	(31)	(1)		(16)	(91)		147	1207
2003	(18)	(1)		(16)	(92)		143	1223
2004	(31)	(2)		(19)	(67)		126	1230
2005	(33)			(16)	(82)		135	1234
2006	(26)			(17)	(72)		159	1278
2007	(33)		(1)	(15)	(85)		148	1292
2008	(37)	(2)		(17)	(78)	5	121	1284

\* Net transfers can include members transferring to a Defined Contribution plan or members who transfer between divisions and subsequently retire or terminate within the same plan year.

# Ingham County (3303)

## Table 5

### Vested Former Members in the Valuation - Comparative Schedule

Valuation Date 12/31	Number	Annual Deferred Benefits	Average Age	Average Benefit Service*	Average Eligibility Service*
1998	218	\$			
1999	227				
2000	236				
2001	286	1,870,506	47.7	11.0	12.5
2002	261	1,928,063	48.9	11.8	13.3
2003	260	1,952,838	49.4	11.9	13.6
2004	256	2,093,552	50.0	12.3	14.2
2005	269	2,155,352	50.3	11.7	13.6
2006	275	2,260,566	50.4	11.4	13.4
2007	256	2,261,153	50.3	11.3	13.6
2008	263	2,423,848	50.5	11.3	13.8

\* See description on page 217.

## Table 6

### Flow of Vested Former Members

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Net Transfers*	New	End of Year
2001	(10)			(15)		75	286
2002	(11)	(2)		(29)	(1)	18	261
2003	(10)	(3)	(1)	(6)		19	260
2004	(13)	(3)		(9)		21	256
2005	(6)	(1)	(1)	(2)		23	269
2006	(14)			(4)	(1)	25	275
2007	(24)	(1)		(12)		18	256
2008	(12)			(6)	1	24	263

\* Net transfers can include members transferring to a Defined Contribution plan or members who transfer between divisions and subsequently retire or terminate within the same plan year.

# Ingham County (3303)

## Table 7

### Retirees and Beneficiaries in the Valuation - Comparative Schedule

Valuation Date 12/31	Retirees		Beneficiaries		Total Recipients		No. of Actives per Recip.	Benefits As % of Active Payroll
	Number	Annual Benefits	Number	Annual Benefits	Number	Annual Benefits		
1998		\$		\$	462	\$ 4,564,053	2.5	11.2%
1999					494	5,152,654	2.4	12.4
2000					527	5,812,070	2.3	13.5
2001	500	6,045,922	59	344,860	559	6,390,782	2.1	14.2
2002	522	6,749,230	61	382,132	583	7,131,362	2.1	15.0
2003	541	7,208,811	64	435,371	605	7,644,182	2.0	15.4
2004	575	8,076,502	63	446,921	638	8,523,423	1.9	16.1
2005	599	8,925,439	68	525,754	667	9,451,193	1.9	17.7
2006	620	9,734,737	68	545,784	688	10,280,521	1.9	18.1
2007	665	11,109,207	70	552,163	735	11,661,370	1.8	19.8
2008	704	12,306,736	77	599,937	781	12,906,673	1.6	21.3

## Table 8

### Flow of Retirees and Beneficiaries

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust. *	Number	Annual Benefits	Benefit Adjust. #	Number	Annual Benefits
1998	44	\$ 921,125	\$	(11)	\$ (69,017)	\$	462	\$ 4,564,053
1999	47	709,648		(15)	(121,047)		494	5,152,654
2000	42	741,352		(9)	(81,935)		527	5,812,070
2001	43	639,794	4,432	(10)	(49,884)	(15,636)	559	6,390,782
2002	48	970,505	7,588	(24)	(194,125)	(43,388)	583	7,131,362
2003	60	755,729	10,456	(38)	(211,216)	(42,149)	605	7,644,182
2004	50	975,430	11,492	(17)	(81,764)	(25,917)	638	8,523,423
2005	46	1,074,231	19,759	(17)	(132,538)	(33,682)	667	9,451,193
2006	45	967,676	23,956	(24)	(156,722)	(5,582)	688	10,280,521
2007	61	1,468,930	28,084	(14)	(114,465)	(1,700)	735	11,661,370
2008	61	1,392,730	41,070	(15)	(164,459)	(24,038)	781	12,906,673

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

**Table 9**

## **Retirees and Beneficiaries on the Rolls as of December 31, 2008**

### **Distribution by Type of Benefit Being Paid**

<b>Benefits Being Paid to:</b>	<b>Annual Benefits</b>	
	<b>Number</b>	<b>Amount</b>
Age and service retirants	681	\$12,004,296
Non-duty disability retirants	18	262,920
Duty disability retirants	5	39,520
Beneficiaries of deceased retirants	54	413,641
Beneficiaries of deceased members:		
Non-duty death	22	167,141
Duty death	<u>1</u>	<u>19,155</u>
Total Benefits Being Paid	781	\$12,906,673

# Ingham County (3303)

## Table 10

### Reported Assets (Market Value)

Division	2008 Valuation		2007 Valuation	
	Employer And Retiree*	Employee#	Employer And Retiree*	Employee#
01 - Confidential	\$ 3,317,048	\$ 760,610	\$ 4,789,566	\$ 681,682
02 - Sheriff FOP Spvs	8,078,235	4,164,839	12,636,244	4,345,469
04 - MCF	4,525,815	40,403	6,048,227	40,110
09 - Judges	355,011	24,432	539,440	21,262
10 - Gnrl Mgmt	17,148,738	4,393,128	25,885,901	4,016,491
11 - Gnrl Library	1,525,862	55,492	2,250,669	56,776
12 - Gnrl ICEA Profs	9,213,742	6,434,275	14,805,654	5,636,239
13 - Gnrl OPEIU Prob	5,373,151	1,099,689	7,517,355	1,573,271
14 - Gnrl TOPS UAW	26,378,680	5,070,469	37,603,416	4,764,341
15 - Animal Cntrl FOP	982,574	381,762	1,102,740	468,069
16 - Gnrl Commsnrs	216,384	92,130	331,792	78,736
17 - ICEA Nurses	6,155,666	3,149,506	9,613,651	2,983,371
18 - ICEA Ct. Prof	4,124,337	1,912,249	6,493,182	1,892,262
19 - Cnstutnl Offcls	1,299,569	484,194	1,819,680	517,515
21 - FOP Shrf Deputies	13,448,432	8,071,012	21,409,333	7,732,994
40 - ICEA Unit 111	1,885,160	293,128	2,825,666	269,392
41 - MCF Management	1,521,932	104,020	2,034,041	103,266
42 - ICEA Unit 11	511,899	155,088	661,194	122,812
43 - ICEA Unit 1	503,038	160,144	693,040	151,535
44 - MCF Exec Mgr	173,980	0	205,172	0
90 - Asst Pros Attnys	5,618,163	505,231	7,633,463	442,016
91 - Parks Union Empl	258,186	0	319,941	0
92 - Parks Non Union	786,615	13,320	1,121,347	22,025
93 - Lgl Rsrch Clerks	214,924	0	276,363	0
<b>Total Municipality</b>	<b>\$113,617,141</b>	<b>\$ 37,365,121</b>	<b>\$168,617,077</b>	<b>\$ 35,919,634</b>
<b>Combined Reserves</b>	<b>\$150,982,262</b>		<b>\$204,536,711</b>	

\* Reserve for Employer Contributions and Benefit Payments

# Reserve for Employee Contributions

The December 31, 2008 Valuation Assets are equal to 1.391482 times the reported Market Value of assets. The derivation of Valuation Assets is described on page 225.

# Ingham County (3303)

## Table 11

### Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Net Transfers	Balance
	Employer	Member					
2001	\$ 3,969,561	\$ 2,669,220	\$ 9,655,853	\$ (6,165,634)	\$ (498,267)	\$ 116,076	\$ 133,055,221
2002	4,297,730	3,001,615	4,906,444	(6,903,572)	(216,746)	158,907	138,299,599
2003	4,851,575	3,500,439	11,281,677	(7,468,123)	(246,135)	68,461	150,287,493
2004	5,892,271	4,061,999	10,437,392	(8,083,733)	(225,547)	35,475	162,405,350
2005	5,771,241	4,149,559	10,568,951	(9,042,368)	(348,146)	(1,992)	173,502,595
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

# Ingham County (3303)

## Table 12

### Termination Liability and Present Value of Accrued Benefits as of December 31, 2008

Termination Liability*	Term. Liability % Funded	Division	PVAB* Present Value of Accrued Benefits	Valuation Assets	PVAB Percent Funded	Unfunded (Overfunded) PVAB
\$ 2,266,503 1,005,166 3,202,747 <u>1,954</u> \$ 6,476,370	87.6%	01 - Confidential Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 1,924,223 1,005,166 3,202,747 <u>1,954</u> \$ 6,134,090	\$ 5,673,988	92.5%	\$ 460,102
\$ 6,128,233 224,403 20,326,171 <u>0</u> \$ 26,678,807	63.9%	02 - Sheriff FOP Spvs Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 7,389,607 224,403 20,326,171 <u>0</u> \$ 27,940,181	\$ 17,036,017	61.0%	\$ 10,904,164
\$ 2,337,712 1,077,963 2,157,179 <u>166</u> \$ 5,573,020	114.0%	04 - MCF Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 2,029,477 1,077,963 2,157,179 <u>166</u> \$ 5,264,785	\$ 6,353,810	120.7%	\$ (1,089,025)
\$ 321,436 0 997,361 <u>5,045</u> \$ 1,323,842	39.9%	09 - Judges Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 266,127 0 997,361 <u>5,045</u> \$ 1,268,533	\$ 527,988	41.6%	\$ 740,545
\$ 15,969,062 2,198,538 21,507,091 <u>17,506</u> \$ 39,692,197	75.5%	10 - Gnrl Mgmt Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 12,331,160 2,198,538 21,507,091 <u>17,506</u> \$ 36,054,295	\$ 29,975,119	83.1%	\$ 6,079,176
\$ 0 745,329 1,639,287 <u>0</u> \$ 2,384,616	92.3%	11 - Gnrl Library Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 0 745,329 1,639,287 <u>0</u> \$ 2,384,616	\$ 2,200,426	92.3%	\$ 184,190

# Ingham County (3303)

## Table 12 (continued)

### Termination Liability and Present Value of Accrued Benefits as of December 31, 2008

Termination Liability*	Term. Liability % Funded	Division	PVAB* Present Value of Accrued Benefits	Valuation Assets	PVAB Percent Funded	Unfunded (Overfunded) PVAB
\$ 15,403,075 2,129,379 9,108,650 <u>310,800</u> \$ 26,951,904	80.8%	12 - Gnrl ICEA Profs Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 12,183,268 2,129,379 9,108,650 <u>310,800</u> \$ 23,732,097	\$ 21,773,934	91.7%	\$ 1,958,163
\$ 2,854,835 996,800 8,647,601 <u>0</u> \$ 12,499,236	72.1%	13 - Gnrl OPEIU Prob Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 2,214,516 996,800 8,647,601 <u>0</u> \$ 11,858,917	\$ 9,006,840	75.9%	\$ 2,852,077
\$ 24,767,398 1,975,309 18,223,224 <u>242,531</u> \$ 45,208,462	96.8%	14 - Gnrl TOPS UAW Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 19,866,051 1,975,309 18,223,224 <u>242,531</u> \$ 40,307,115	\$ 43,760,925	108.6%	\$ (3,453,810)
\$ 694,223 60,696 2,287,748 <u>21,958</u> \$ 3,064,625	61.9%	15 - Animal Cntrl FOP Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 847,295 60,696 2,287,748 <u>21,958</u> \$ 3,217,697	\$ 1,898,449	59.0%	\$ 1,319,248
\$ 211,599 70,896 160,261 <u>15,120</u> \$ 457,876	93.8%	16 - Gnrl Commsnrs Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 158,438 70,896 160,261 <u>15,120</u> \$ 404,715	\$ 429,292	106.1%	\$ (24,577)
\$ 6,471,731 495,886 8,413,004 <u>138,733</u> \$ 15,519,354	83.4%	17 - ICEA Nurses Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 5,300,681 495,886 8,413,004 <u>138,733</u> \$ 14,348,304	\$ 12,947,979	90.2%	\$ 1,400,325



# Ingham County (3303)

## Table 12 (continued)

### Termination Liability and Present Value of Accrued Benefits as of December 31, 2008

Termination Liability*	Term. Liability % Funded	Division	PVAB* Present Value of Accrued Benefits	Valuation Assets	PVAB Percent Funded	Unfunded (Overfunded) PVAB
\$ 4,460,286 299,858 6,969,236 <u>2,986</u> \$ 11,732,366	71.6%	18 - ICEA Ct. Prof Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 3,877,021 299,858 6,969,236 <u>2,986</u> \$ 11,149,101	\$ 8,399,801	75.3%	\$ 2,749,300
\$ 1,611,609 0 1,094,702 <u>0</u> \$ 2,706,311	91.7%	19 - Cnstutnl Offcls Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 1,322,031 0 1,094,702 <u>0</u> \$ 2,416,733	\$ 2,482,074	102.7%	\$ (65,341)
\$ 12,514,125 811,256 17,906,611 <u>139,184</u> \$ 31,371,176	95.5%	21 - FOP Shrf Deputies Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 13,286,178 811,256 17,906,611 <u>139,184</u> \$ 32,143,229	\$ 29,943,919	93.2%	\$ 2,199,310
\$ 693,120 294,732 1,888,490 <u>61,873</u> \$ 2,938,215	103.2%	40 - ICEA Unit 111 Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 543,358 294,732 1,888,490 <u>61,873</u> \$ 2,788,453	\$ 3,031,049	108.7%	\$ (242,596)
\$ 837,691 658,378 539,613 <u>4,673</u> \$ 2,040,355	110.9%	41 - MCF Management Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 736,177 658,378 539,613 <u>4,673</u> \$ 1,938,841	\$ 2,262,483	116.7%	\$ (323,642)
\$ 372,714 10,616 663,625 <u>36,509</u> \$ 1,083,464	85.7%	42 - ICEA Unit 11 Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 322,602 10,616 663,625 <u>36,509</u> \$ 1,033,352	\$ 928,100	89.8%	\$ 105,252

# Ingham County (3303)

## Table 12 (continued)

### Termination Liability and Present Value of Accrued Benefits as of December 31, 2008

Termination Liability*	Term. Liability % Funded	Division	PVAB* Present Value of Accrued Benefits	Valuation Assets	PVAB Percent Funded	Unfunded (Overfunded) PVAB
\$ 399,317 158,000 422,854 <u>9,682</u> \$ 989,853	93.2%	43 - ICEA Unit 1 Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 329,840 158,000 422,854 <u>9,682</u> \$ 920,376	\$ 922,806	100.3%	\$ (2,430)
\$ 337,963 0 0 <u>0</u> \$ 337,963	71.6%	44 - MCF Exec Mgr Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 287,844 0 0 <u>0</u> \$ 287,844	\$ 242,090	84.1%	\$ 45,754
\$ 3,812,885 1,614,608 3,880,174 <u>4,032</u> \$ 9,311,699	91.5%	90 - Asst Pros Attnys Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 3,034,809 1,614,608 3,880,174 <u>4,032</u> \$ 8,533,623	\$ 8,520,593	99.8%	\$ 13,030
\$ 202,261 62,423 0 <u>0</u> \$ 264,684	135.7%	91 - Parks Union Empl Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 176,369 62,423 0 <u>0</u> \$ 238,792	\$ 359,261	150.4%	\$ (120,469)
\$ 342,669 0 1,186,596 <u>0</u> \$ 1,529,265	72.8%	92 - Parks Non Union Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 247,295 0 1,186,596 <u>0</u> \$ 1,433,891	\$ 1,113,095	77.6%	\$ 320,796
\$ 189,100 0 0 <u>0</u> \$ 189,100	158.2%	93 - Lgl Rsrch Clerks Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 169,637 0 0 <u>0</u> \$ 169,637	\$ 299,063	176.3%	\$ (129,426)

# Ingham County (3303)

## Table 12 (continued)

### Termination Liability and Present Value of Accrued Benefits as of December 31, 2008

Termination Liability*	Term. Liability % Funded	Division	PVAB* Present Value of Accrued Benefits	Valuation Assets	PVAB Percent Funded	Unfunded (Overfunded) PVAB
\$ 103,199,547		<b>Total Municipality</b>	\$ 88,844,004			
14,890,236		<b>Active Members</b>	14,890,236			
131,222,225		<b>Vested Former Members</b>	131,222,225			
<u>1,012,752</u>		<b>Retirees and Beneficiaries</b>	<u>1,012,752</u>			
\$ 250,324,760	83.9%	<b>Pending Refunds</b>	\$ 235,969,217	\$ 210,089,101	89.0%	\$ 25,880,116
		<b>Total</b>				

\* The Termination Liability represents the present value of benefits payable in the event that all active members terminate employment on December 31, 2008, based upon the valuation interest and mortality assumptions. The present value of accrued benefits (PVAB) includes vested and non-vested benefits accrued as of December 31, 2008. For a non-vested active member, the PVAB represents the present value of the non-vested accrued benefit, and the Termination Liability represents the present value of the non-vested accrued benefit (deferred to age 60). For some active members the Termination Liability may exceed the PVAB, because the Termination Liability assumes that members retire at the earliest possible age for commencement of unreduced deferred benefits, whereas the PVAB assumes continued employment based on actuarial assumptions for retirement, death, disability and withdrawal. Pending refunds represent expected refunds of accumulated member contributions to persons who have terminated membership before becoming eligible for pension benefits.

**Please see the Comments on the Investment Markets on page 3.**

# Ingham County (3303)

## Table 13

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2008

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
01 - Confidential				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 2,442,925	\$ 918,187	37.6%	\$ 1,524,738
Vested Former Members	796,485	796,485	100.0	0
Retirees and Beneficiaries	<u>3,202,747</u>	<u>3,202,747</u>	100.0	<u>0</u>
Total	\$ 6,442,157	\$ 4,917,419	76.3%	\$ 1,524,738
Reserve for Employee Contributions				
Active Members	\$ 545,934	\$ 545,934		
Vested Former Members	208,681	208,681		
Pending Refunds	<u>1,954</u>	<u>1,954</u>		
Total	\$ 756,569	\$ 756,569	100.0%	\$ 0
Division Total	<b>\$ 7,198,726</b>	<b>\$ 5,673,988</b>	<b>78.8%</b>	<b>\$ 1,524,738</b>
02 - Sheriff FOP Spvs				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 6,094,802	\$ 0	0.0%	\$ 6,094,802
Vested Former Members	12,681	0	0.0	12,681
Retirees and Beneficiaries	<u>20,326,171</u>	<u>12,871,179</u>	63.3	<u>7,454,992</u>
Total	\$ 26,433,654	\$ 12,871,179	48.7%	\$ 13,562,475
Reserve for Employee Contributions				
Active Members	\$ 3,953,116	\$ 3,953,116		
Vested Former Members	211,722	211,722		
Pending Refunds	<u>0</u>	<u>0</u>		
Total	\$ 4,164,838	\$ 4,164,838	100.0%	\$ 0
Division Total	<b>\$ 30,598,492</b>	<b>\$ 17,036,017</b>	<b>55.7%</b>	<b>\$ 13,562,475</b>
04 - MCF				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 3,753,740	\$ 3,092,362	82.4%	\$ 661,378
Vested Former Members	1,063,865	1,063,865	100.0	0
Retirees and Beneficiaries	<u>2,157,179</u>	<u>2,157,179</u>	100.0	<u>0</u>
Total	\$ 6,974,784	\$ 6,313,406	90.5%	\$ 661,378
Reserve for Employee Contributions				
Active Members	\$ 26,140	\$ 26,140		
Vested Former Members	14,098	14,098		
Pending Refunds	<u>166</u>	<u>166</u>		
Total	\$ 40,404	\$ 40,404	100.0%	\$ 0
Division Total	<b>\$ 7,015,188</b>	<b>\$ 6,353,810</b>	<b>90.6%</b>	<b>\$ 661,378</b>

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2008

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
09 - Judges				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 260,568	\$ 0	0.0%	\$ 260,568
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	<u>997,361</u>	<u>503,557</u>	50.5	<u>493,804</u>
Total	\$ 1,257,929	\$ 503,557	40.0%	\$ 754,372
Reserve for Employee Contributions				
Active Members	\$ 19,386	\$ 19,386		
Vested Former Members	0	0		
Pending Refunds	<u>5,045</u>	<u>5,045</u>		
Total	\$ 24,431	\$ 24,431	100.0%	\$ 0
Division Total	<b>\$ 1,282,360</b>	<b>\$ 527,988</b>	<b>41.2%</b>	<b>\$ 754,372</b>
10 - Gnrl Mgmt				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 13,873,598	\$ 2,577,797	18.6%	\$ 11,295,801
Vested Former Members	1,507,124	1,507,124	100.0	0
Retirees and Beneficiaries	<u>21,507,091</u>	<u>21,507,091</u>	100.0	<u>0</u>
Total	\$ 36,887,813	\$ 25,592,012	69.4%	\$ 11,295,801
Reserve for Employee Contributions				
Active Members	\$ 3,674,187	\$ 3,674,187		
Vested Former Members	691,414	691,414		
Pending Refunds	<u>17,506</u>	<u>17,506</u>		
Total	\$ 4,383,107	\$ 4,383,107	100.0%	\$ 0
Division Total	<b>\$ 41,270,920</b>	<b>\$ 29,975,119</b>	<b>72.6%</b>	<b>\$ 11,295,801</b>
11 - Gnrl Library				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 0	\$ 0	0.0%	\$ 0
Vested Former Members	689,835	505,645	73.3	184,190
Retirees and Beneficiaries	<u>1,639,287</u>	<u>1,639,287</u>	100.0	<u>0</u>
Total	\$ 2,329,122	\$ 2,144,932	92.1%	\$ 184,190
Reserve for Employee Contributions				
Active Members	\$ 0	\$ 0		
Vested Former Members	55,494	55,494		
Pending Refunds	<u>0</u>	<u>0</u>		
Total	\$ 55,494	\$ 55,494	100.0%	\$ 0
Division Total	<b>\$ 2,384,616</b>	<b>\$ 2,200,426</b>	<b>92.3%</b>	<b>\$ 184,190</b>

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2008

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
12 - Gnrl ICEA Profs				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 11,314,799	\$ 4,396,477	38.9%	\$ 6,918,322
Vested Former Members	1,834,529	1,834,529	100.0	0
Retirees and Beneficiaries	<u>9,108,650</u>	<u>9,108,650</u>	100.0	<u>0</u>
Total	\$ 22,257,978	\$ 15,339,656	68.9%	\$ 6,918,322
Reserve for Employee Contributions				
Active Members	\$ 5,828,628	\$ 5,828,628		
Vested Former Members	294,850	294,850		
Pending Refunds	<u>310,800</u>	<u>310,800</u>		
Total	\$ 6,434,278	\$ 6,434,278	100.0%	\$ 0
Division Total	<b>\$ 28,692,256</b>	<b>\$ 21,773,934</b>	<b>75.9%</b>	<b>\$ 6,918,322</b>
13 - Gnrl OPEIU Prob				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 2,140,138	\$ 0	0.0%	\$ 2,140,138
Vested Former Members	775,986	0	0.0	775,986
Retirees and Beneficiaries	<u>8,647,601</u>	<u>7,908,003</u>	91.4	<u>739,598</u>
Total	\$ 11,563,725	\$ 7,908,003	68.4%	\$ 3,655,722
Reserve for Employee Contributions				
Active Members	\$ 878,023	\$ 878,023		
Vested Former Members	220,814	220,814		
Pending Refunds	<u>0</u>	<u>0</u>		
Total	\$ 1,098,837	\$ 1,098,837	100.0%	\$ 0
Division Total	<b>\$ 12,662,562</b>	<b>\$ 9,006,840</b>	<b>71.1%</b>	<b>\$ 3,655,722</b>
14 - Gnrl TOPS UAW				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 25,935,363	\$ 18,844,523	72.7%	\$ 7,090,840
Vested Former Members	1,642,322	1,642,322	100.0	0
Retirees and Beneficiaries	<u>18,223,224</u>	<u>18,223,224</u>	100.0	<u>0</u>
Total	\$ 45,800,909	\$ 38,710,069	84.5%	\$ 7,090,840
Reserve for Employee Contributions				
Active Members	\$ 4,475,338	\$ 4,475,338		
Vested Former Members	332,987	332,987		
Pending Refunds	<u>242,531</u>	<u>242,531</u>		
Total	\$ 5,050,856	\$ 5,050,856	100.0%	\$ 0
Division Total	<b>\$ 50,851,765</b>	<b>\$ 43,760,925</b>	<b>86.1%</b>	<b>\$ 7,090,840</b>

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2008

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
15 - Animal Cntrl FOP				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 813,089	\$ 0	0.0%	\$ 813,089
Vested Former Members	60,696	0	0.0	60,696
Retirees and Beneficiaries	<u>2,287,748</u>	<u>1,516,687</u>	66.3	<u>771,061</u>
Total	\$ 3,161,533	\$ 1,516,687	48.0%	\$ 1,644,846
Reserve for Employee Contributions				
Active Members	\$ 359,804	\$ 359,804		
Vested Former Members	0	0		
Pending Refunds	<u>21,958</u>	<u>21,958</u>		
Total	\$ 381,762	\$ 381,762	100.0%	\$ 0
Division Total	<b>\$ 3,543,295</b>	<b>\$ 1,898,449</b>	<b>53.6%</b>	<b>\$ 1,644,846</b>
16 - Gnrl Commsnrs				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 158,395	\$ 137,374	86.7%	\$ 21,021
Vested Former Members	39,526	39,526	100.0	0
Retirees and Beneficiaries	<u>160,261</u>	<u>160,261</u>	100.0	<u>0</u>
Total	\$ 358,182	\$ 337,161	94.1%	\$ 21,021
Reserve for Employee Contributions				
Active Members	\$ 45,641	\$ 45,641		
Vested Former Members	31,370	31,370		
Pending Refunds	<u>15,120</u>	<u>15,120</u>		
Total	\$ 92,131	\$ 92,131	100.0%	\$ 0
Division Total	<b>\$ 450,313</b>	<b>\$ 429,292</b>	<b>95.3%</b>	<b>\$ 21,021</b>
17 - ICEA Nurses				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 4,424,892	\$ 1,096,507	24.8%	\$ 3,328,385
Vested Former Members	292,621	292,621	100.0	0
Retirees and Beneficiaries	<u>8,413,004</u>	<u>8,413,004</u>	100.0	<u>0</u>
Total	\$ 13,130,517	\$ 9,802,132	74.7%	\$ 3,328,385
Reserve for Employee Contributions				
Active Members	\$ 2,803,849	\$ 2,803,849		
Vested Former Members	203,265	203,265		
Pending Refunds	<u>138,733</u>	<u>138,733</u>		
Total	\$ 3,145,847	\$ 3,145,847	100.0%	\$ 0
Division Total	<b>\$ 16,276,364</b>	<b>\$ 12,947,979</b>	<b>79.6%</b>	<b>\$ 3,328,385</b>

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2008

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
18 - ICEA Ct. Prof				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 3,096,586	\$ 0	0.0%	\$ 3,096,586
Vested Former Members	215,667	0	0.0	215,667
Retirees and Beneficiaries	<u>6,969,236</u>	<u>6,534,595</u>	93.8	<u>434,641</u>
Total	\$ 10,281,489	\$ 6,534,595	63.6%	\$ 3,746,894
Reserve for Employee Contributions				
Active Members	\$ 1,778,029	\$ 1,778,029		
Vested Former Members	84,191	84,191		
Pending Refunds	<u>2,986</u>	<u>2,986</u>		
Total	\$ 1,865,206	\$ 1,865,206	100.0%	\$ 0
Division Total	<b>\$ 12,146,695</b>	<b>\$ 8,399,801</b>	<b>69.2%</b>	<b>\$ 3,746,894</b>
19 - Cnstutnl Offcls				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 1,136,200	\$ 903,697	79.5%	\$ 232,503
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	<u>1,094,702</u>	<u>1,094,702</u>	100.0	<u>0</u>
Total	\$ 2,230,902	\$ 1,998,399	89.6%	\$ 232,503
Reserve for Employee Contributions				
Active Members	\$ 483,675	\$ 483,675		
Vested Former Members	0	0		
Pending Refunds	<u>0</u>	<u>0</u>		
Total	\$ 483,675	\$ 483,675	100.0%	\$ 0
Division Total	<b>\$ 2,714,577</b>	<b>\$ 2,482,074</b>	<b>91.4%</b>	<b>\$ 232,503</b>
21 - FOP Shrf Deputies				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 13,239,923	\$ 3,708,756	28.0%	\$ 9,531,167
Vested Former Members	418,608	418,608	100.0	0
Retirees and Beneficiaries	<u>17,906,611</u>	<u>17,906,611</u>	100.0	<u>0</u>
Total	\$ 31,565,142	\$ 22,033,975	69.8%	\$ 9,531,167
Reserve for Employee Contributions				
Active Members	\$ 7,378,112	\$ 7,378,112		
Vested Former Members	392,648	392,648		
Pending Refunds	<u>139,184</u>	<u>139,184</u>		
Total	\$ 7,909,944	\$ 7,909,944	100.0%	\$ 0
Division Total	<b>\$ 39,475,086</b>	<b>\$ 29,943,919</b>	<b>75.9%</b>	<b>\$ 9,531,167</b>



# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2008

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
40 - ICEA Unit 111				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 686,074	\$ 633,598	92.4%	\$ 52,476
Vested Former Members	243,175	243,175	100.0	0
Retirees and Beneficiaries	<u>1,888,490</u>	<u>1,888,490</u>	100.0	<u>0</u>
Total	\$ 2,817,739	\$ 2,765,263	98.1%	\$ 52,476
Reserve for Employee Contributions				
Active Members	\$ 152,356	\$ 152,356		
Vested Former Members	51,557	51,557		
Pending Refunds	<u>61,873</u>	<u>61,873</u>		
Total	\$ 265,786	\$ 265,786	100.0%	\$ 0
Division Total	<b>\$ 3,083,525</b>	<b>\$ 3,031,049</b>	<b>98.3%</b>	<b>\$ 52,476</b>
41 - MCF Management				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 1,252,725	\$ 1,000,584	79.9%	\$ 252,141
Vested Former Members	618,265	618,265	100.0	0
Retirees and Beneficiaries	<u>539,613</u>	<u>539,613</u>	100.0	<u>0</u>
Total	\$ 2,410,603	\$ 2,158,462	89.5%	\$ 252,141
Reserve for Employee Contributions				
Active Members	\$ 59,235	\$ 59,235		
Vested Former Members	40,113	40,113		
Pending Refunds	<u>4,673</u>	<u>4,673</u>		
Total	\$ 104,021	\$ 104,021	100.0%	\$ 0
Division Total	<b>\$ 2,514,624</b>	<b>\$ 2,262,483</b>	<b>90.0%</b>	<b>\$ 252,141</b>
42 - ICEA Unit 11				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 419,168	\$ 99,812	23.8%	\$ 319,356
Vested Former Members	9,661	9,661	100.0	0
Retirees and Beneficiaries	<u>663,625</u>	<u>663,625</u>	100.0	<u>0</u>
Total	\$ 1,092,454	\$ 773,098	70.8%	\$ 319,356
Reserve for Employee Contributions				
Active Members	\$ 117,538	\$ 117,538		
Vested Former Members	955	955		
Pending Refunds	<u>36,509</u>	<u>36,509</u>		
Total	\$ 155,002	\$ 155,002	100.0%	\$ 0
Division Total	<b>\$ 1,247,456</b>	<b>\$ 928,100</b>	<b>74.4%</b>	<b>\$ 319,356</b>

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2008

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
43 - ICEA Unit 1				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 473,782	\$ 237,739	50.2%	\$ 236,043
Vested Former Members	102,069	102,069	100.0	0
Retirees and Beneficiaries	<u>422,854</u>	<u>422,854</u>	100.0	<u>0</u>
Total	\$ 998,705	\$ 762,662	76.4%	\$ 236,043
Reserve for Employee Contributions				
Active Members	\$ 94,531	\$ 94,531		
Vested Former Members	55,931	55,931		
Pending Refunds	<u>9,682</u>	<u>9,682</u>		
Total	\$ 160,144	\$ 160,144	100.0%	\$ 0
Division Total	<b>\$ 1,158,849</b>	<b>\$ 922,806</b>	<b>79.6%</b>	<b>\$ 236,043</b>
44 - MCF Exec Mgr				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 308,771	\$ 242,090	78.4%	\$ 66,681
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	<u>0</u>	<u>0</u>	0.0	<u>0</u>
Total	\$ 308,771	\$ 242,090	78.4%	\$ 66,681
Reserve for Employee Contributions				
Active Members	\$ 0	\$ 0		
Vested Former Members	0	0		
Pending Refunds	<u>0</u>	<u>0</u>		
Total	\$ 0	\$ 0	0.0%	\$ 0
Division Total	<b>\$ 308,771</b>	<b>\$ 242,090</b>	<b>78.4%</b>	<b>\$ 66,681</b>
90 - Asst Pros Attnys				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 4,382,476	\$ 2,761,124	63.0%	\$ 1,621,352
Vested Former Members	1,374,062	1,374,062	100.0	0
Retirees and Beneficiaries	<u>3,880,174</u>	<u>3,880,174</u>	100.0	<u>0</u>
Total	\$ 9,636,712	\$ 8,015,360	83.2%	\$ 1,621,352
Reserve for Employee Contributions				
Active Members	\$ 260,655	\$ 260,655		
Vested Former Members	240,546	240,546		
Pending Refunds	<u>4,032</u>	<u>4,032</u>		
Total	\$ 505,233	\$ 505,233	100.0%	\$ 0
Division Total	<b>\$ 10,141,945</b>	<b>\$ 8,520,593</b>	<b>84.0%</b>	<b>\$ 1,621,352</b>

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2008

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
91 - Parks Union Empl Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 333,506	\$ 296,838	89.0%	\$ 36,668
Vested Former Members	62,423	62,423	100.0	0
Retirees and Beneficiaries	<u>0</u>	<u>0</u>	0.0	<u>0</u>
Total	\$ 395,929	\$ 359,261	90.7%	\$ 36,668
Reserve for Employee Contributions				
Active Members	\$ 0	\$ 0		
Vested Former Members	0	0		
Pending Refunds	<u>0</u>	<u>0</u>		
Total	\$ 0	\$ 0	0.0%	\$ 0
Division Total	<b>\$ 395,929</b>	<b>\$ 359,261</b>	<b>90.7%</b>	<b>\$ 36,668</b>
92 - Parks Non Union Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 403,300	\$ 0	0.0%	\$ 403,300
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	<u>1,186,596</u>	<u>1,099,775</u>	92.7	<u>86,821</u>
Total	\$ 1,589,896	\$ 1,099,775	69.2%	\$ 490,121
Reserve for Employee Contributions				
Active Members	\$ 13,320	\$ 13,320		
Vested Former Members	0	0		
Pending Refunds	<u>0</u>	<u>0</u>		
Total	\$ 13,320	\$ 13,320	100.0%	\$ 0
Division Total	<b>\$ 1,603,216</b>	<b>\$ 1,113,095</b>	<b>69.4%</b>	<b>\$ 490,121</b>
93 - Lgl Rsrch Clerks Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 215,918	\$ 299,063	138.5%	\$ (83,145)
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	<u>0</u>	<u>0</u>	0.0	<u>0</u>
Total	\$ 215,918	\$ 299,063	138.5%	\$ (83,145)
Reserve for Employee Contributions				
Active Members	\$ 0	\$ 0		
Vested Former Members	0	0		
Pending Refunds	<u>0</u>	<u>0</u>		
Total	\$ 0	\$ 0	0.0%	\$ 0
Division Total	<b>\$ 215,918</b>	<b>\$ 299,063</b>	<b>138.5%</b>	<b>\$ (83,145)</b>

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2008

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
<b>Municipality Totals</b>				
<b>Reserve for Employer Contributions and Benefit Payments</b>				
Active Members	\$ 97,160,738	\$ 41,246,528	42.5%	\$ 55,914,210
Vested Former Members	11,759,600	10,510,380	89.4	1,249,220
Retirees and Beneficiaries	<u>131,222,225</u>	<u>121,241,308</u>	92.4	<u>9,980,917</u>
Total	\$ 240,142,563	\$ 172,998,216	72.0%	\$ 67,144,347
<b>Reserve for Employee Contributions</b>				
Active Members	\$ 32,947,497	\$ 32,947,497		
Vested Former Members	3,130,636	3,130,636		
Pending Refunds	<u>1,012,752</u>	<u>1,012,752</u>		
Total	\$ 37,090,885	\$ 37,090,885	100.0%	\$ 0
<b>Municipality Total</b>	<b>\$ 277,233,448</b>	<b>\$ 210,089,101</b>	<b>75.8%</b>	<b>\$ 67,144,347</b>

Please see the Comments on the Investment Markets on page 3.

# Ingham County (3303)

## Table 14

### Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
1994	\$ 82,445,154	\$ 56,238,777	68%	\$ 26,206,377	76%
1995	91,267,612	62,529,929	69	28,737,683	82
1996	100,596,375	70,095,587	70	30,500,788	83
1997	113,279,199	83,334,248	74	29,944,951	81
1998	129,697,752	95,427,165	74	34,270,587	84
1999	137,512,089	111,156,340	81	26,355,749	64
2000	152,754,990	123,308,414	81	29,446,576	68
2001	165,645,014	133,055,221	80	32,589,793	73
2002	183,747,506	138,299,599	75	45,447,907	96
2003	199,547,894	150,287,493	75	49,260,401	99
2004	215,946,290	162,405,350	75	53,540,940	101
2005	228,698,783	173,502,595	76	55,196,188	104
2006	243,300,405	187,358,412	77	55,941,993	98
2007	260,328,809	202,178,200	78	58,150,609	99
2008	277,233,448	210,089,101	76	67,144,347	111

**Notes:** Actuarial assumptions were revised for the 1997, 2000, 2004, and 2008 actuarial valuations.

# Ingham County (3303)

## Table 15

### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Division	Employer Contributions @		
	Normal Cost	Unfunded Accrued Liability #	Total Required Employer Contribution
<b>Percentage of Payroll</b>			
01 - Confidential	7.25%	6.14%	13.39%
02 - Sheriff FOP Spvs	(0.38)%	34.12%	33.74%
04 - MCF	5.84%	0.78%	6.62%
09 - Judges	10.25%	48.36%	58.61%
10 - Gnrl Mgmt	6.75%	8.44%	15.19%
11 - Gnrl Library &	-%	-%	-%
12 - Gnrl ICEA Profs	2.13%	5.23%	7.36%
13 - Gnrl OPEIU Prob	3.05%	10.20%	13.25%
14 - Gnrl TOPS UAW	7.61%	2.59%	10.20%
15 - Animal Cntrl FOP	2.00%	25.65%	27.65%
16 - Gnrl Commsnrs	5.94%	0.69%	6.63%
17 - ICEA Nurses	3.64%	4.77%	8.41%
18 - ICEA Ct. Prof	3.26%	9.13%	12.39%
19 - Cnstutnl Offcls	5.60%	2.46%	8.06%
21 - FOP Shrf Deputies	5.74%	6.08%	11.82%
40 - ICEA Unit 111	5.37%	0.21%	5.58%
41 - MCF Management	8.99%	1.12%	10.11%
42 - ICEA Unit 11	6.00%	1.40%	7.40%
43 - ICEA Unit 1	5.71%	2.20%	7.91%
44 - MCF Exec Mgr	16.84%	2.67%	19.51%
90 - Asst Pros Attnys	9.82%	3.92%	13.74%
91 - Parks Union Empl	8.50%	0.64%	9.14%
92 - Parks Non Union	8.88%	33.90%	42.78%
93 - Lgl Rsrch Clerks	6.33%	(2.75)%	3.58%

# Ingham County (3303)

## Table 15 (continued)

### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Division	Employer Contributions @		
	Normal Cost	Unfunded Accrued Liability #	Total Required Employer Contribution
<b>Estimated Monthly Contribution*</b>			
01 - Confidential	\$ 7,924	\$ 6,711	\$ 14,635
02 - Sheriff FOP Spvs	(666)	59,777	59,111
04 - MCF	22,238	2,970	25,208
09 - Judges	703	3,317	4,020
10 - Gnrl Mgmt	39,502	49,393	88,895
11 - Gnrl Library	0	1,265	1,265
12 - Gnrl ICEA Profs	12,255	30,090	42,345
13 - Gnrl OPEIU Prob	4,868	16,279	21,147
14 - Gnrl TOPS UAW	91,394	31,105	122,499
15 - Animal Cntrl FOP	575	7,381	7,956
16 - Gnrl Commsnrs	772	90	862
17 - ICEA Nurses	11,098	14,544	25,642
18 - ICEA Ct. Prof	5,861	16,414	22,275
19 - Cnstutnl Offcls	2,373	1,042	3,415
21 - FOP Shrf Deputies	39,749	42,104	81,853
40 - ICEA Unit 111	6,100	239	6,339
41 - MCF Management	9,031	1,125	10,156
42 - ICEA Unit 11	5,607	1,308	6,915
43 - ICEA Unit 1	2,686	1,035	3,721
44 - MCF Exec Mgr	1,814	288	2,102
90 - Asst Pros Attnys	17,708	7,069	24,777
91 - Parks Union Empl	2,067	156	2,223
92 - Parks Non Union	583	2,227	2,810
93 - Lgl Rsrch Clerks	1,720	(747)	973
<b>Total Municipality</b>	<b>\$ 285,962</b>	<b>\$ 295,182</b>	<b>\$ 581,144</b>
<b>Estimated Annual Contribution*</b>			
<b>Total Municipality</b>	<b>\$ 3,431,544</b>	<b>\$3,542,184</b>	<b>\$ 6,973,728</b>

@ The above Employer contribution requirements are in addition to the Member contributions, if any, shown in Table 1.

\* Based on Valuation Payroll. For divisions that are open to new hires, actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher). For divisions that will have no new hires, invoices will be based on the above dollar amounts.

# The amortization method and period are described in Table 16 for each division.

& This division will not have new hires. Invoices will be based on the dollar contribution amounts shown in this table.

Please see the Comments on the Investment Markets on page 3.

**Ingham County (3303)**  
**Division 01 - Confidentials**

**Table 16A**

**Computed Employer Contributions to the Retirement System  
For the Fiscal Year Beginning January 1, 2010**

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	7.25%	\$7,924
Amortization of Unfunded Accrued Liability (28 years)	<u>6.14</u>	<u>6,711</u>
Total Long Term Contribution	13.39	14,635
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>13.39%</b>	<b>\$14,635 *</b>

@ The above Employer contribution requirement is based on Member contributions of 5.36% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.89% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$(5,728)</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.22)%</b>
<b>Amortization Payment:</b>	<b>(0.03)%</b>
<b>Total:</b>	<b>(0.25)%</b>

**Please see the Comments on the Investment Markets on page 3.**



# Ingham County (3303)

## Division 01 - Confidential

Table 17A

### Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1994	25	\$ 782,010	12.74%	6.65%
1995	25	747,190	17.53%	12.66%
1996	27	868,169	12.91%	11.91%
1997	29	895,532	11.16%	11.16%
1998	30	1,002,675	10.29%	10.29%
1999	31	1,068,662	9.46%	9.46%
2000	33	1,167,155	8.45%	8.45%
2001	34	1,238,366	8.94%	8.94%
2002	32	1,178,762	12.14%	12.14%
2003	34	1,351,175	11.40%	11.40%
2004	31	1,350,633	11.04%	11.04%
2005	32	1,368,369	12.12%	12.12%
2006	32	1,358,941	12.65%	12.65%
2007	32	1,332,376	12.44%	12.44%
2008	32	1,311,576	13.39%	13.39%

Notes:

Adoption of Benefit B-3 and 4.5% member contributions reflected in 1994.

Actuarial assumptions were revised for the 1997 valuation.

Actuarial assumptions were revised for the 2000 valuation.

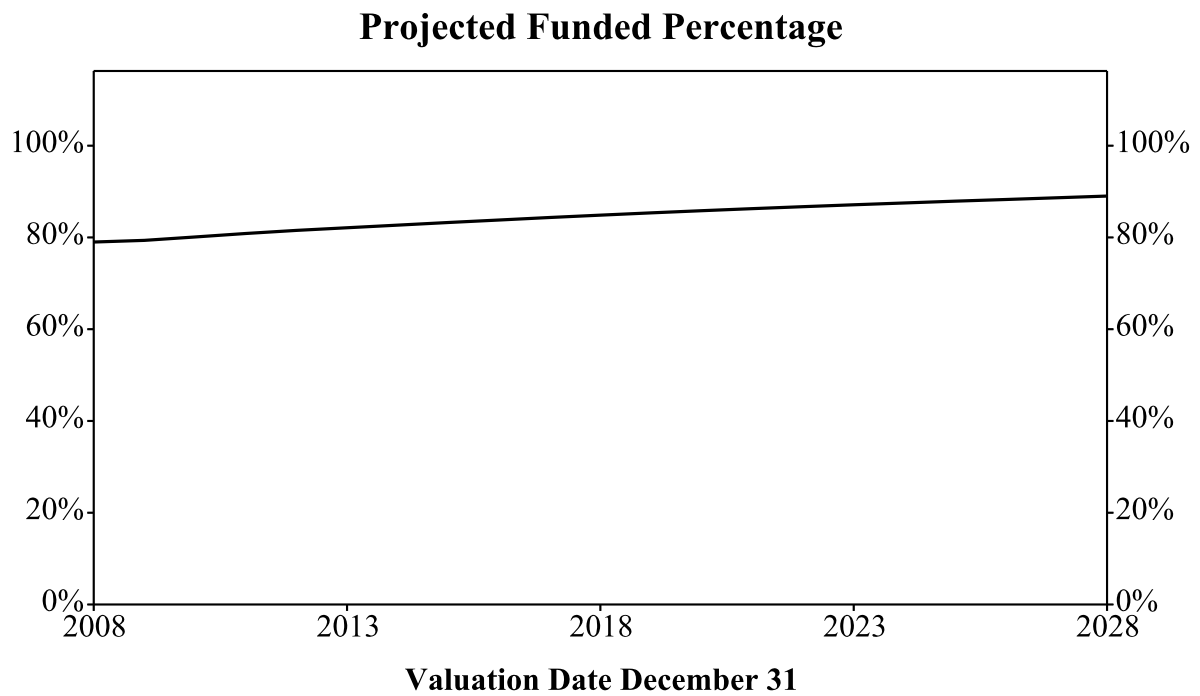
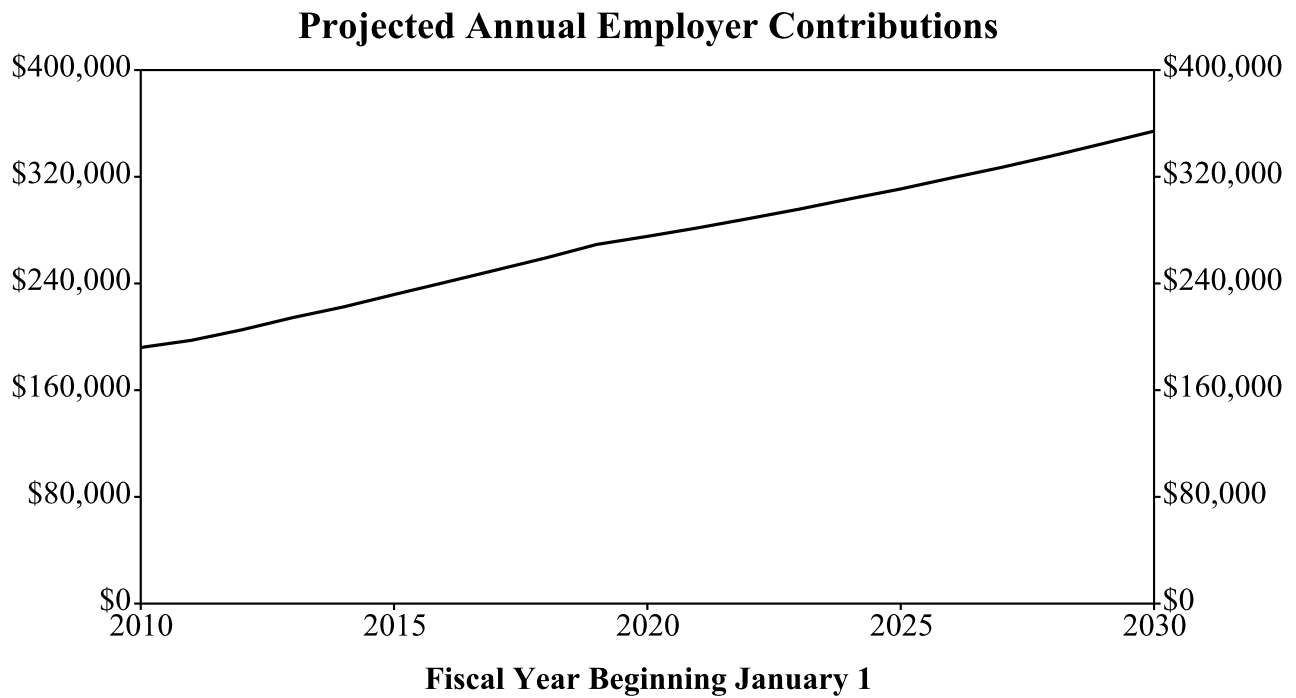
Adoption of Benefit FAC-3, B-4 - 80% Maximum, 5.36% Member Contributions reflected in 2002 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 01 - Confidential**  
**Chart 17.5A**



Note: Please refer to page 222 for a discussion of the projection.

**Ingham County (3303)**  
**Division 01 - Confidential**

**Table 18A**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001				(1)		(2)	3	1	34
2002	(1)			(1)	(1)	(2)		3	32
2003	(1)			(1)	(2)		2	4	34
2004	(1)			(1)	(1)	(2)	2		31
2005	(2)						1	2	32
2006	(1)			(1)		(1)	2	1	32
2007				(1)		(3)	1	3	32
2008	(1)			(3)	(1)		2	3	32

**Table 19A**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001	(1)				(32)	1	3	13
2002				(1)			1	13
2003					(2)		1	12
2004							1	13
2005							1	14
2006	(1)						1	14
2007	(3)						2	13
2008	(1)					1	5	18

**Ingham County (3303)**  
**Division 01 - Confidential**

**Table 20A**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001	1	\$ 3,457	\$	(1)	\$ (1,149)	\$	37	\$ 169,678
2002	2	42,414		(3)	(15,183)	(2,835)	36	194,074
2003	1	25,088		(15)	(65,830)		22	153,332
2004	1	13,333		(2)	(3,886)		21	162,779
2005	5	66,113		(2)	(1,710)		24	227,182
2006	2	41,903					26	269,085
2007	3	48,527		(2)	(5,548)		27	312,064
2008	3	11,170					30	323,234

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

**Ingham County (3303)**  
**Division 01 - Confidentials**

**Table 21A**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 116,795	\$ 55,393	\$ 283,566	\$ (168,952)	\$ 0	\$ (601,816)	\$ 0	\$ 4,149,727
2002	132,207	67,918	112,514	(180,958)	(4,268)	(146,120)	0	4,131,020
2003	151,966	75,729	327,767	(199,432)	(2,184)	(253,961)	18,438	4,249,343
2004	172,755	76,599	291,112	(163,308)	0	(90,433)	0	4,536,068
2005	160,217	75,552	298,225	(203,905)	(7,270)	(521)	23,118	4,881,484
2006	156,321	76,280	395,557	(261,270)	0	0	116,437	5,364,809
2007	169,355	74,965	426,757	(283,332)	0	(344,395)	0	5,408,159
2008	166,990	73,554	257,318	(319,507)	(696)	0	88,170	5,673,988

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22A**  
**Actuarial Accrued Liabilities - Comparative Schedule**

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 4,916,347	\$ 4,149,727	84%	\$ 766,620	62%
2002	5,306,662	4,131,020	78	1,175,642	100
2003	5,386,909	4,249,343	79	1,137,566	84
2004	5,662,961	4,536,068	80	1,126,893	83
2005	6,249,319	4,881,484	78	1,367,835	100
2006	6,852,460	5,364,809	78	1,487,651	109
2007	6,745,980	5,408,159	80	1,337,821	100
2008	7,198,726	5,673,988	79	1,524,738	116

# Ingham County (3303)

## Division 02 - Sheriff FOP Spvs

### Table 16B

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	(0.38)%	\$(666)
Amortization of Unfunded Accrued Liability (28 years)	<u>34.12</u>	<u>59,777</u>
Total Long Term Contribution	33.74	59,111
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>33.74%</b>	<b>\$59,111 *</b>

@ The above Employer contribution requirement is based on Member contributions of 19.61% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.85% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

**Increase in Actuarial Accrued Liabilities: \$102,635**

**Increase in Computed Long Term  
Employer Contribution As a Percentage  
of Active Member Payroll**

**Normal Cost: 0.77%**

**Amortization Payment: 0.31%**

**Total: 1.08%**

**Please see the Comments on the Investment Markets on page 3.**

# Ingham County (3303)

## Division 02 - Sheriff FOP Spvs

Table 17B

### Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1994	34	\$ 1,665,399	8.76%	4.58%
1995	28	1,421,507	13.89%	10.03%
1996	28	1,446,119	14.07%	12.98%
1997	30	1,609,357	17.78%	17.78%
1998	30	1,699,826	19.86%	19.86%
1999	30	1,703,939	18.03%	18.02%
2000	30	1,735,265	19.84%	19.83%
2001	31	1,858,730	20.07%	20.07%
2002	32	1,964,293	21.52%	21.52%
2003	32	2,057,522	22.43%	22.43%
2004	32	2,207,974	22.50%	22.50%
2005	31	2,118,779	24.75%	24.75%
2006	31	2,223,259	25.54%	25.54%
2007	31	2,250,880	27.29%	27.29%
2008	28	2,102,359	33.74%	33.74%

Notes:

Adoption of Benefits B-4, FAC-3 and 25 years and Out reflected in 1994.

Adoption of 10.45% member contributions reflected in 1994 valuation.

Adoption of Benefit 3.2% multiplier and 19.61% member contributions reflected in 1997 valuation.

Actuarial assumptions were revised for the 1997 valuation.

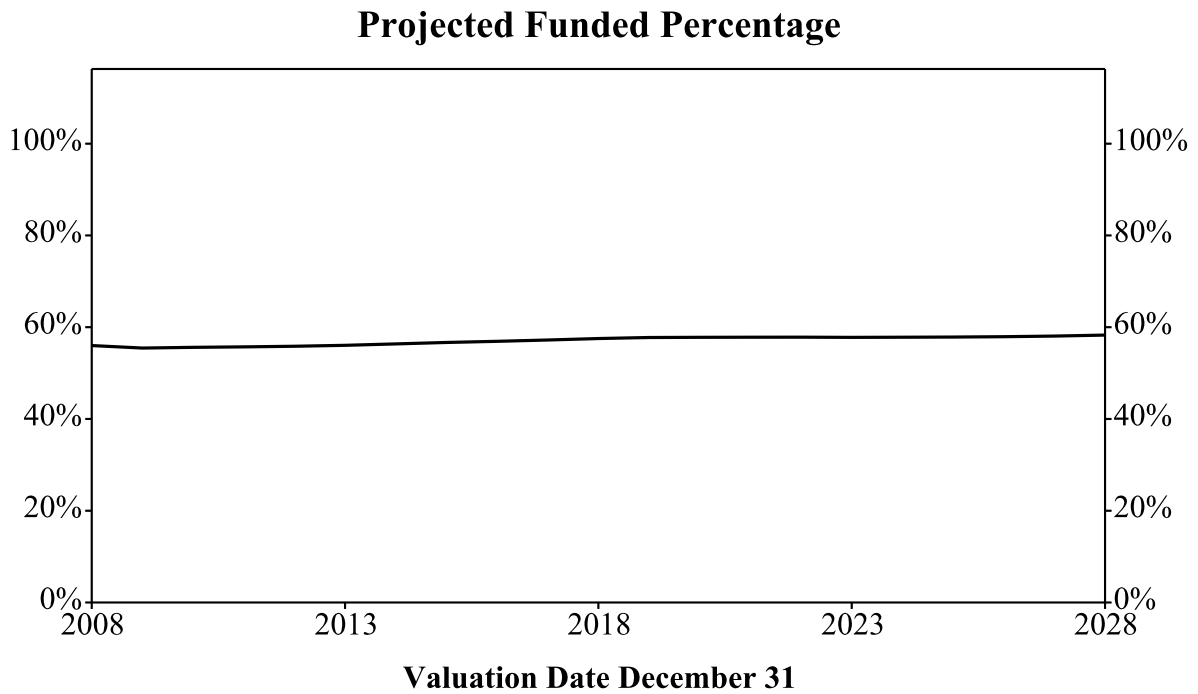
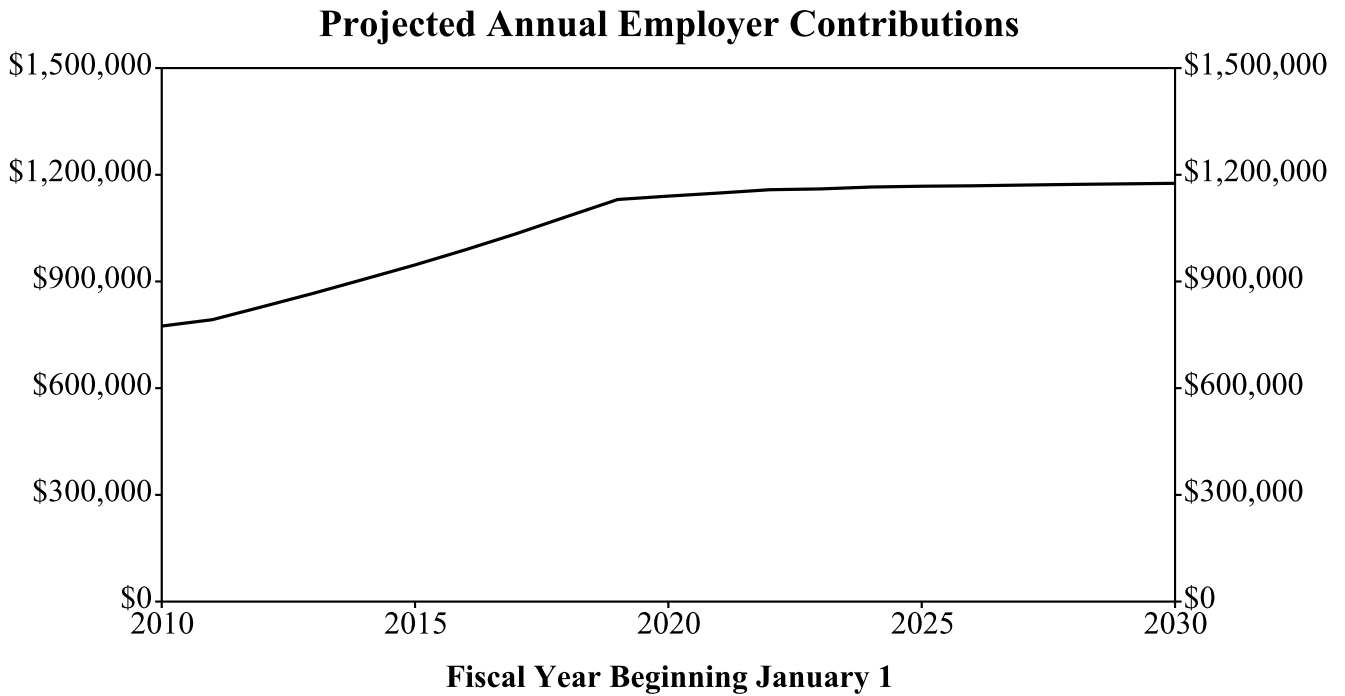
Actuarial assumptions were revised for the 2000 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 02 - Sheriff FOP Spvs**  
**Chart 17.5B**



Note: Please refer to page 222 for a discussion of the projection.



# Ingham County (3303)

## Division 02 - Sheriff FOP Spvs

**Table 18B**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001	(1)						2		31
2002	(2)						3		32
2003	(2)			(1)			3		32
2004									32
2005	(2)						1		31
2006	(1)					(1)	2		31
2007	(3)						3		31
2008	(3)			(1)	(1)		2		28

**Table 19B**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001					(4)	1		2
2002	(1)							1
2003							1	2
2004								2
2005	(1)							1
2006								1
2007							1	2
2008							1	3

# Ingham County (3303)

## Division 02 - Sheriff FOP Spvs

**Table 20B**

### Flow of Retirees and Beneficiaries

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001	1	\$ 46,610	\$	(2)	\$ (27,413)	\$ (1,124)	46	\$ 1,232,024
2002	3	97,241	4,130			(16,272)	49	1,317,123
2003	3	94,123		(5)	(27,410)		47	1,383,836
2004	1	4,435		(1)	(8,871)	(3,894)	47	1,375,506
2005	4	132,223		(1)	(23,454)		50	1,484,275
2006	1	55,407					51	1,539,682
2007	3	178,194		(1)	(5,443)		53	1,712,433
2008	3	153,064	2,636				56	1,868,133

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

## Division 02 - Sheriff FOP Spvs

**Table 21B**

### Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 335,049	\$ 364,516	\$ 988,337	\$ (1,220,618)	\$ 0	\$ 0	\$ 77,596	\$ 13,829,148
2002	396,280	391,201	416,706	(1,276,451)	0	0	138,170	13,895,054
2003	412,747	403,045	961,220	(1,391,782)	0	(105,653)	99,980	14,274,611
2004	475,156	432,984	917,233	(1,380,878)	0	0	0	14,719,106
2005	484,253	424,502	919,033	(1,439,958)	0	0	64,623	15,171,559
2006	517,000	451,070	1,206,558	(1,516,595)	0	(86,888)	35,943	15,778,647
2007	575,120	454,718	1,278,230	(1,610,934)	0	0	310,116	16,785,897
2008	587,388	452,246	727,182	(1,787,328)	0	0	270,632	17,036,017

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22B**

### Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 21,466,776	\$ 13,829,148	64%	\$ 7,637,628	411%
2002	22,500,406	13,895,054	62	8,605,352	438
2003	23,655,687	14,274,611	60	9,381,076	456
2004	25,146,699	14,719,106	59	10,427,593	472
2005	26,075,013	15,171,559	58	10,903,454	515
2006	27,308,500	15,778,647	58	11,529,853	519
2007	28,963,782	16,785,897	58	12,177,885	541
2008	30,598,492	17,036,017	56	13,562,475	645

# Ingham County (3303)

## Division 04 - MCF

### Table 16C

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	5.84%	\$22,238
Amortization of Unfunded Accrued Liability (28 years)	<u>0.78</u>	<u>2,970</u>
Total Long Term Contribution	6.62	25,208
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>6.62%</b>	<b>\$25,208 *</b>

@ The above Employer contribution requirement is based on Member contributions of 0.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.86% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$34,466</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
Normal Cost:	0.30%
Amortization Payment:	0.05%
Total:	0.35%

Please see the Comments on the Investment Markets on page 3.

**Ingham County (3303)****Division 04 - MCF****Table 17C****Computed Employer Contributions - Comparative Statement**

<b>Valuation Date December 31,</b>	<b>Active Members</b>		<b>Employer Contribution</b>	
	<b>Number</b>	<b>Annual Payroll</b>	<b>Regular Contribution</b>	<b>Minimum Required Contribution</b>
1994	173	\$ 2,282,795	5.85%	3.05%
1995	178	2,362,440	5.95%	4.30%
1996	165	2,376,442	5.91%	5.45%
1997	153	2,185,568	6.04%	6.04%
1998	128	2,542,201	5.73%	5.73%
1999	116	2,227,648	5.07%	5.07%
2000	123	2,410,936	5.66%	5.66%
2001	121	2,583,257	7.67%	6.60%
2002	115	2,543,513	7.56%	7.02%
2003	131	3,237,587	7.26%	7.26%
2004	130	3,187,862	6.72%	6.72%
2005	127	3,165,284	6.85%	6.85%
2006	153	4,040,561	6.26%	6.26%
2007	146	4,018,672	6.12%	6.12%
2008	156	4,569,410	6.62%	6.62%

**Notes:**

Adoption of Benefit E reflected in 1994 valuation.

Actuarial assumptions were revised for the 1997 valuation.

Actuarial assumptions were revised for the 2000 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

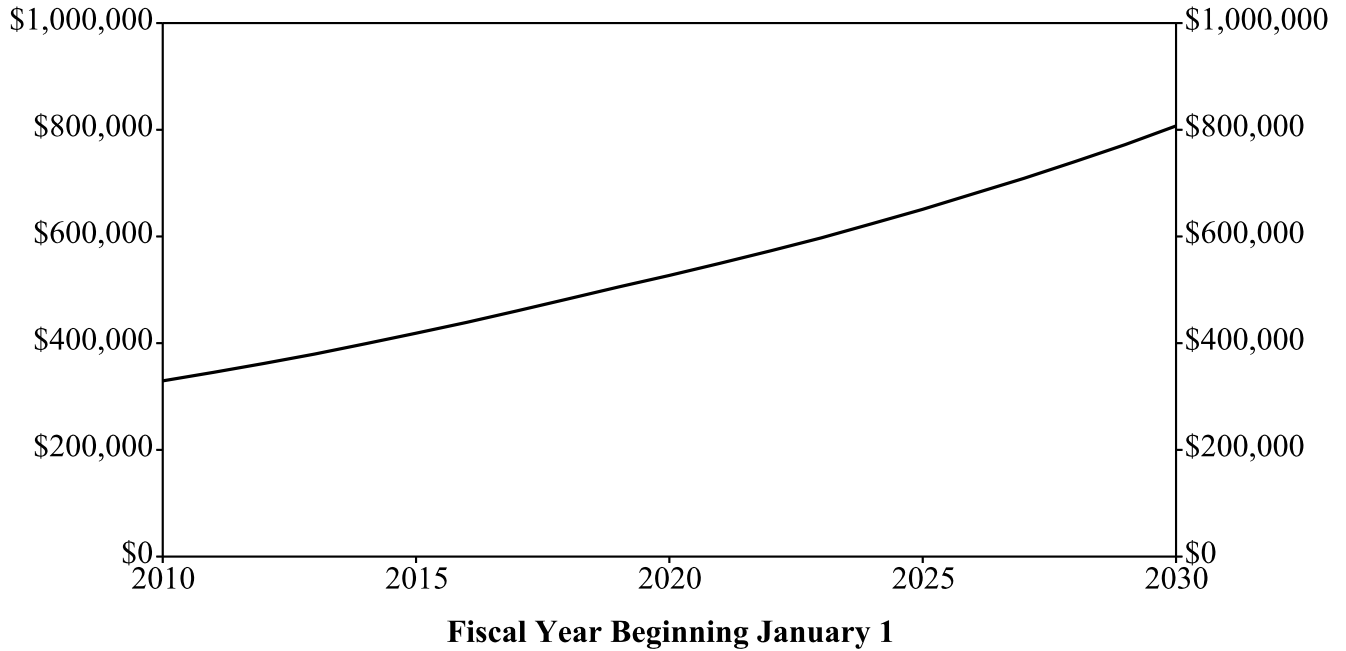
The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

# Ingham County (3303)

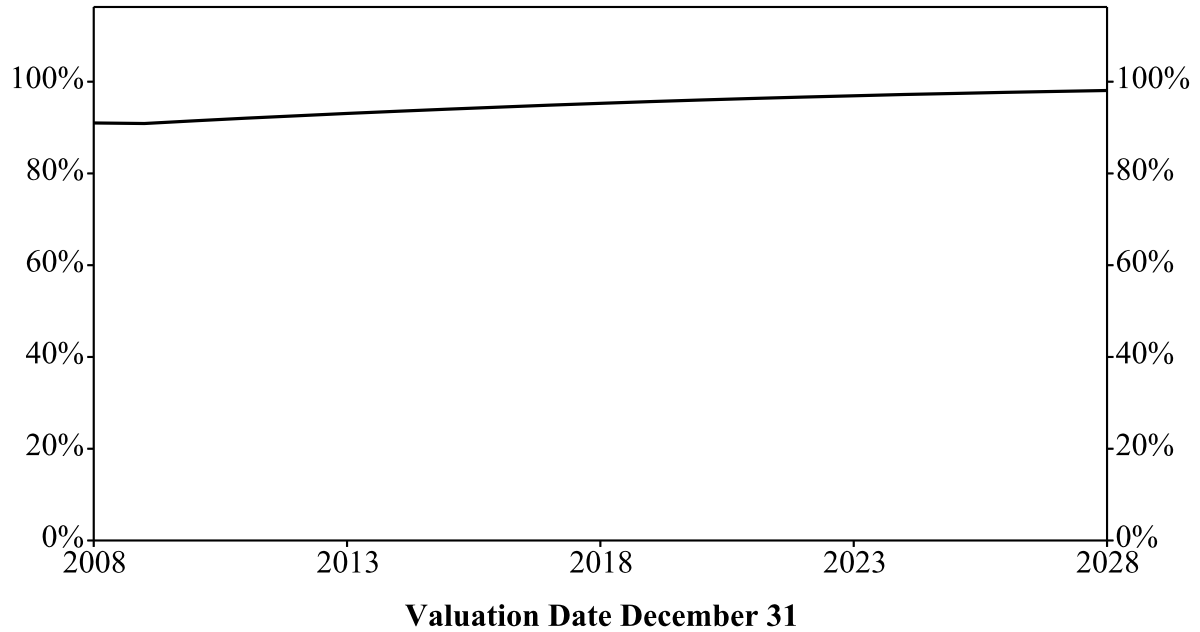
## Division 04 - MCF

### Chart 17.5C

#### Projected Annual Employer Contributions



#### Projected Funded Percentage



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 04 - MCF

**Table 18C**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001		(1)		(5)	(33)			37	121
2002	(1)			(1)	(38)	(1)		35	115
2003				(2)	(25)			43	131
2004	(2)			(1)	(21)	(2)	1	24	130
2005	(2)			(2)	(26)	(1)		28	127
2006	(1)			(4)	(16)	(1)		48	153
2007				(2)	(32)	(3)		30	146
2008	(3)			(3)	(20)			36	156

**Table 19C**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001	(2)			(2)			9	37
2002				(7)			2	32
2003	(1)	(1)					2	32
2004	(1)						1	32
2005	(1)						2	33
2006					(1)		5	37
2007	(1)						2	38
2008	(3)						4	39

# Ingham County (3303)

## Division 04 - MCF

**Table 20C**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001	4	\$ 21,035	\$	(4)	\$ (12,747)	\$	71	\$ 249,151
2002	1	3,602		(4)	(21,575)		68	231,178
2003	2	8,898		(4)	(10,593)		66	229,483
2004	3	24,699		(3)	(5,097)		66	249,085
2005	3	19,497					69	268,582
2006	1	11,180		(7)	(26,849)	(2,018)	63	250,895
2007	1	3,108		(4)	(14,211)		60	239,792
2008	6	36,097		(1)	(2,049)		65	273,840

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.



# Ingham County (3303)

## Division 04 - MCF

**Table 21C**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 134,202	\$ 582	\$ 298,955	\$ (248,568)	\$ 0	\$ 0	\$ 0	\$ 4,203,569
2002	158,819	624	129,958	(231,899)	0	(13,543)	0	4,247,528
2003	208,400	191	328,562	(244,844)	0	0	0	4,539,837
2004	234,013	182	309,990	(240,198)	0	(373)	0	4,843,451
2005	244,703	0	313,173	(259,873)	0	(1,036)	137	5,140,555
2006	257,996	0	414,673	(255,507)	0	(15,617)	0	5,542,100
2007	285,608	0	449,547	(248,386)	0	(10,737)	0	6,018,132
2008	296,148	0	290,053	(250,523)	0	0	0	6,353,810

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22C**  
**Actuarial Accrued Liabilities - Comparative Schedule**

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 5,186,800	\$ 4,203,569	81%	\$ 983,231	38%
2002	5,222,062	4,247,528	81	974,534	38
2003	5,551,353	4,539,837	82	1,011,516	31
2004	5,586,331	4,843,451	87	742,880	23
2005	5,941,938	5,140,555	87	801,383	25
2006	6,178,455	5,542,100	90	636,355	16
2007	6,509,669	6,018,132	92	491,537	12
2008	7,015,188	6,353,810	91	661,378	14

# Ingham County (3303)

## Division 09 - Judges

Table 16D

### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	10.25%	\$703
Amortization of Unfunded Accrued Liability (28 years)	<u>48.36</u>	<u>3,317</u>
Total Long Term Contribution	58.61	4,020
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>58.61%</b>	<b>\$4,020 *</b>

@ The above Employer contribution requirement is based on Member contributions of 3.14% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.86% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

**Increase in Actuarial Accrued Liabilities: \$999**

**Increase in Computed Long Term  
Employer Contribution As a Percentage  
of Active Member Payroll**

**Normal Cost: (0.53)%**

**Amortization Payment: 0.03%**

**Total: (0.50)%**

**Please see the Comments on the Investment Markets on page 3.**

# Ingham County (3303)

## Division 09 - Judges

Table 17D

### Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1994	16	\$ 323,312	10.09%	5.27%
1995	16	362,941	9.38%	6.78%
1996	19	463,138	9.21%	8.50%
1997	10	266,864	17.37%	17.37%
1998	13	351,771	15.07%	15.07%
1999	10	282,700	14.89%	14.89%
2000	7	235,139	11.60%	11.59%
2001	7	196,106	19.80%	19.80%
2002	5	137,270	32.09%	32.09%
2003	6	164,604	29.75%	29.75%
2004	5	137,220	39.05%	39.05%
2005	4	109,736	50.67%	50.67%
2006	4	109,736	51.68%	51.68%
2007	4	109,736	51.60%	51.60%
2008	3	82,302	58.61%	58.61%

Notes:

Adoption of Benefits B-3, V-6 and F55 (15 years) reflected in 1997 valuation.

Actuarial assumptions were revised for the 1997 valuation.

Actuarial assumptions were revised for the 2000 valuation.

Adoption of Benefit B-4 - 80% Maximum, 3.14% Member Contributions reflected in 2002 valuation.

Actuarial assumptions were revised for the 2004 valuation.

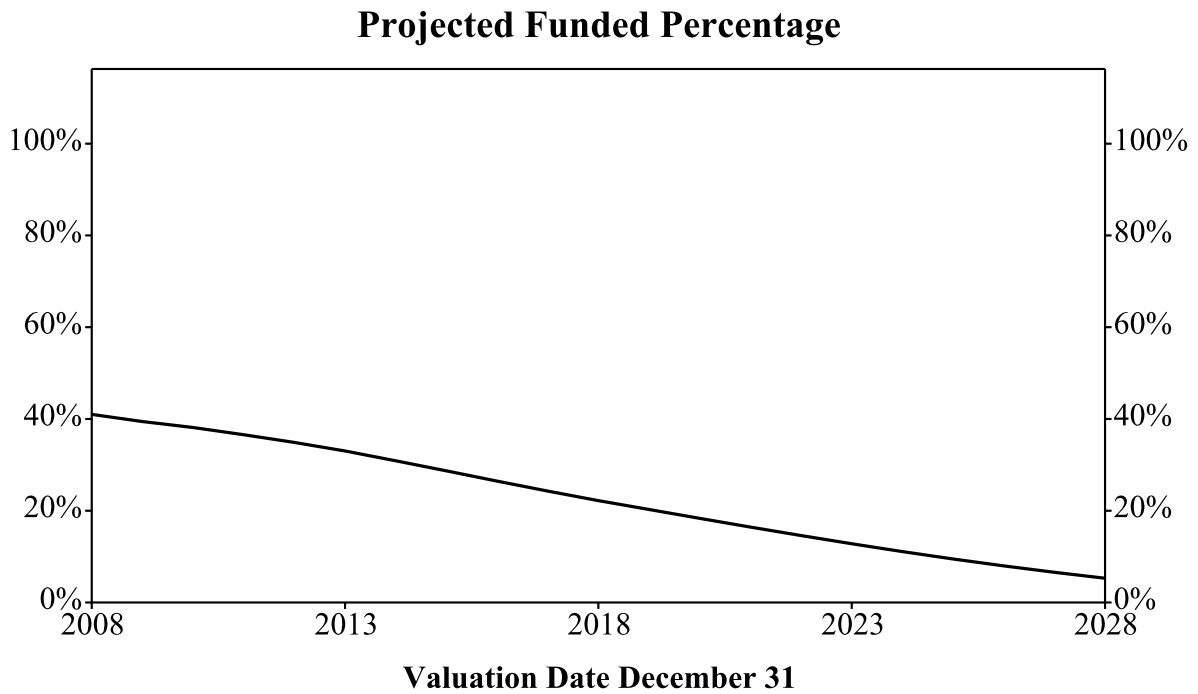
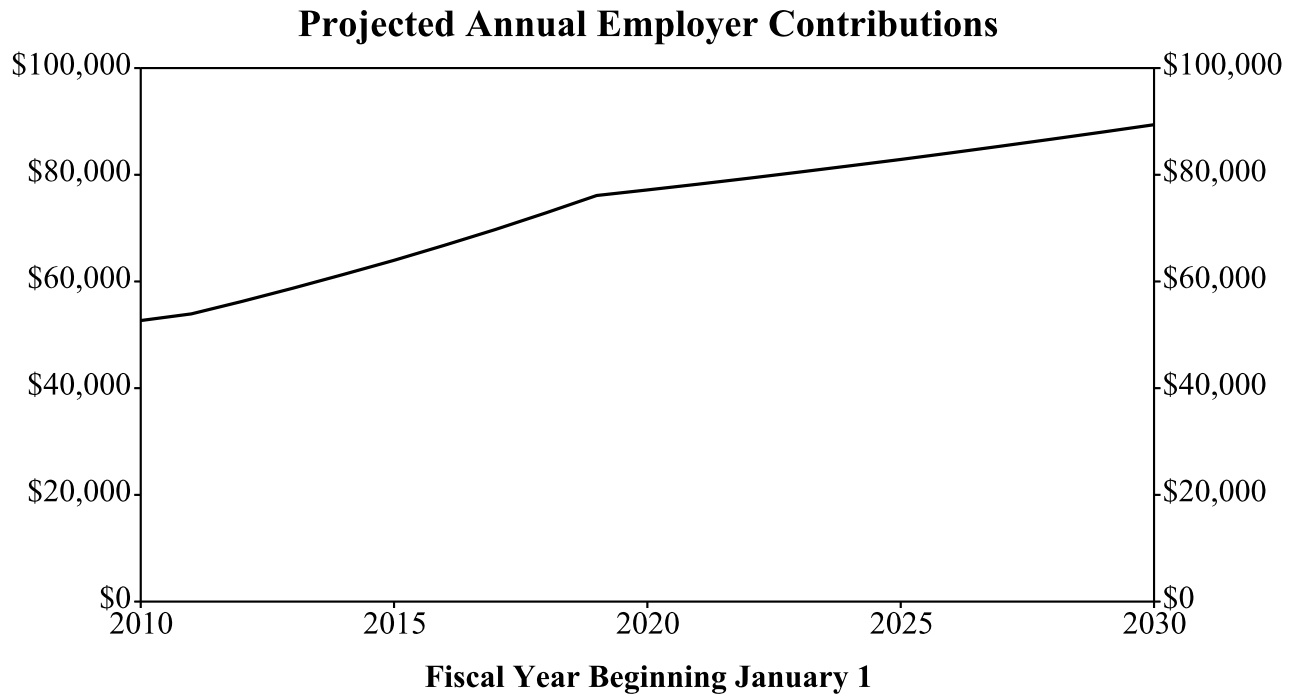
Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

# Ingham County (3303)

## Division 09 - Judges

### Chart 17.5D



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 09 - Judges

**Table 18D**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001					(1)			1	7
2002	(2)								5
2003								1	6
2004	(1)								5
2005	(1)								4
2006									4
2007									4
2008					(1)				3

**Table 19D**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001				(1)	(1)	1		1
2002								1
2003							1	2
2004	(1)						1	2
2005								2
2006								2
2007				(1)				1
2008				(1)				0

# Ingham County (3303)

## Division 09 - Judges

**Table 20D**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001		\$	\$		\$	\$	3	\$ 20,722
2002	3	43,009		(1)	(5,642)		5	58,089
2003	1	3,569					6	61,658
2004	2	19,807					8	81,465
2005	1	16,959					9	98,424
2006							9	98,424
2007							9	98,424
2008							9	98,424

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

## Division 09 - Judges

**Table 21D**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 29,200	\$ 0	\$ 29,735	\$ (20,722)	\$ (275,653)	\$ (281,056)	\$ 284,731	\$ 485,390
2002	22,269	6,030	19,372	(17,666)	0	0	0	515,395
2003	32,592	5,164	37,420	(58,089)	0	0	17,575	550,057
2004	52,837	5,169	35,776	(64,580)	0	(87)	87	579,259
2005	36,047	3,804	33,134	(91,358)	0	(274)	274	560,886
2006	42,852	3,446	41,696	(98,424)	0	0	0	550,456
2007	55,603	3,446	43,156	(98,424)	0	0	0	554,237
2008	49,623	3,015	19,537	(98,424)	0	0	0	527,988

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22D**  
**Actuarial Accrued Liabilities - Comparative Schedule**

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 815,236	\$ 485,390	60%	\$ 329,846	168%
2002	1,097,589	515,395	47	582,194	424
2003	1,167,703	550,057	47	617,646	375
2004	1,347,624	579,259	43	768,365	560
2005	1,419,034	560,886	40	858,148	782
2006	1,425,657	550,456	39	875,201	798
2007	1,411,643	554,237	39	857,406	781
2008	1,282,360	527,988	41	754,372	917

# Ingham County (3303)

## Division 10 - Gnrl Mgmt

**Table 16E**

### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	6.75%	\$39,502
Amortization of Unfunded Accrued Liability (28 years)	<u>8.44</u>	<u>49,393</u>
Total Long Term Contribution	15.19	88,895
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>15.19%</b>	<b>\$88,895 *</b>

@ The above Employer contribution requirement is based on Member contributions of 6.39% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.89% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$(23,356)</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.15)%</b>
<b>Amortization Payment:</b>	<b>(0.02)%</b>
<b>Total:</b>	<b>(0.17)%</b>

**Please see the Comments on the Investment Markets on page 3.**



**Ingham County (3303)****Division 10 - Gnrl Mgmt****Table 17E****Computed Employer Contributions - Comparative Statement**

<b>Valuation Date December 31,</b>	<b>Active Members</b>		<b>Employer Contribution</b>	
	<b>Number</b>	<b>Annual Payroll</b>	<b>Regular Contribution</b>	<b>Minimum Required Contribution</b>
1994	74	\$ 3,747,657	10.18%	5.31%
1995	71	3,782,835	10.30%	7.44%
1996	70	3,881,443	10.92%	10.07%
1997	68	3,972,349	9.47%	9.47%
1998	67	4,047,946	9.34%	9.34%
1999	76	4,643,352	8.30%	8.30%
2000	73	4,632,650	8.78%	8.78%
2001	80	5,215,460	9.27%	9.27%
2002	79	5,392,347	12.75%	12.75%
2003	81	5,750,099	12.30%	12.30%
2004	78	5,894,050	13.39%	13.39%
2005	77	5,833,792	13.99%	13.99%
2006	80	6,241,730	14.44%	14.44%
2007	87	6,693,324	14.90%	14.90%
2008	87	7,022,632	15.19%	15.19%

**Notes:**

Adoption of Benefit B-3 and 5% member contributions reflected in 1994.

Actuarial assumptions were revised for the 1997 valuation.

Actuarial assumptions were revised for the 2000 valuation.

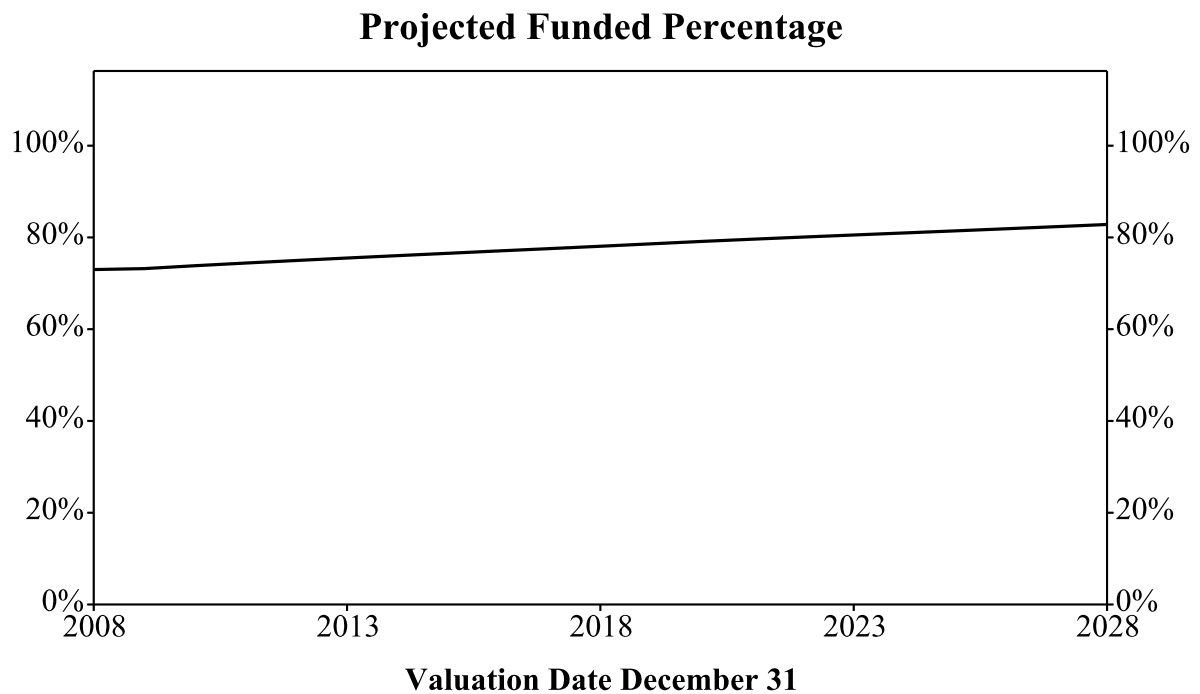
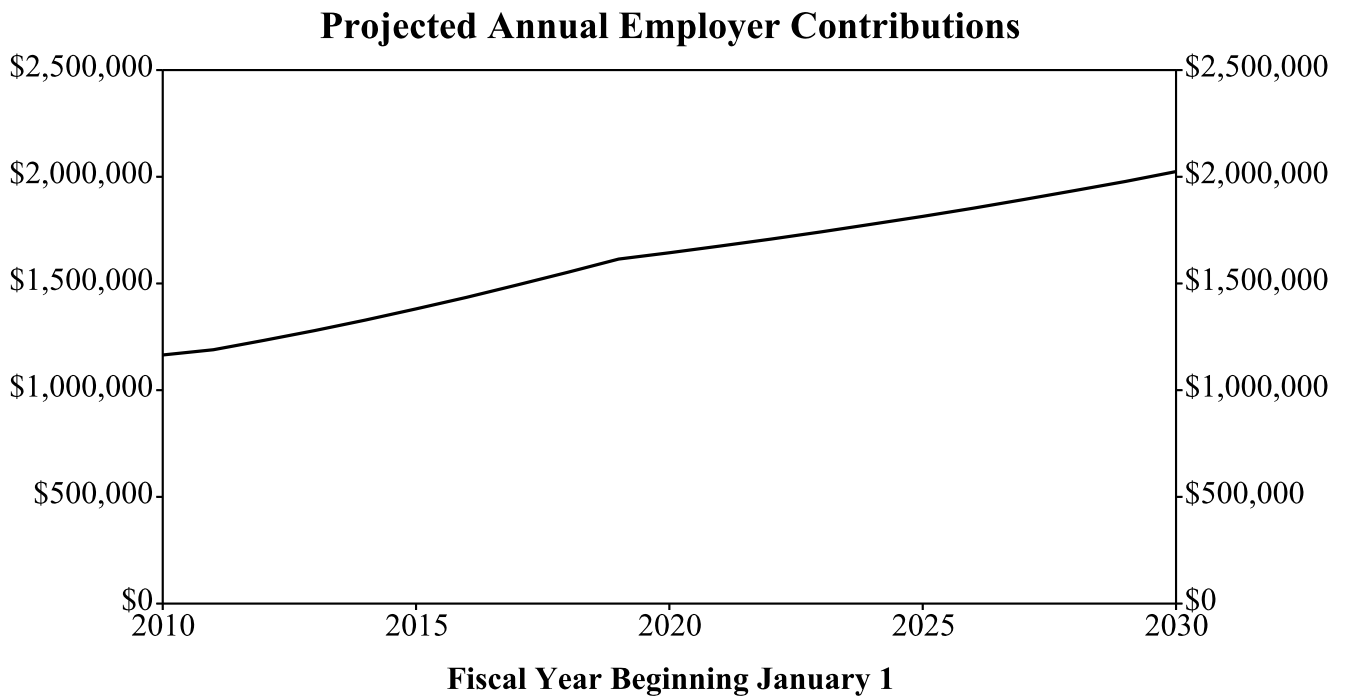
Adoption of Benefit FAC-3, B-4 - 80% Maximum, 6.39% Member Contributions reflected in 2002 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 10 - Gnrl Mgmt**  
**Chart 17.5E**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 10 - Gnrl Mgmt

**Table 18E**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001				(3)	(2)	(2)	6	8	80
2002	(7)			(2)	(1)		5	4	79
2003				(1)	(1)		2	2	81
2004	(7)			(2)	(4)		4	6	78
2005	(3)			(1)	(1)	(1)	3	2	77
2006	(8)			(3)	(2)		7	9	80
2007	(6)			(3)	(4)	(1)	6	15	87
2008	(2)			(2)	(4)		5	3	87

**Table 19E**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001						2	4	20
2002	(2)			(2)			2	18
2003	(1)						1	18
2004	(1)			(2)			2	17
2005							1	18
2006	(1)						4	21
2007	(1)			(1)			3	22
2008	(2)						3	23

**Ingham County (3303)**  
**Division 10 - Gnrl Mgmt**

**Table 20E**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001	1	\$ 11,706	\$		\$	\$ (3,507)	44	\$ 752,492
2002	10	337,308		(4)	(71,514)		50	1,018,286
2003	1	40,556		(2)	(15,869)	(3,105)	49	1,039,868
2004	9	302,849		(1)	(5,410)	(3,445)	57	1,333,862
2005	3	153,618	1,851			(18,848)	60	1,470,483
2006	9	342,184		(1)	(15,126)		68	1,797,541
2007	7	303,087					75	2,100,628
2008	4	90,455	4,663	(1)	(43,801)		78	2,151,945

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

**Ingham County (3303)**  
**Division 10 - Gnrl Mgmt**

**Table 21E**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 426,804	\$ 257,085	\$ 1,363,992	\$ (744,291)	\$ (15,107)	\$ 0	\$ 180,151	\$ 18,823,795
2002	599,686	351,366	739,404	(924,941)	(20,244)	0	192,958	19,762,024
2003	648,062	363,306	1,677,545	(1,018,375)	(6,168)	0	218,524	21,644,918
2004	795,251	400,093	1,535,189	(1,175,522)	(32,482)	0	419,134	23,586,581
2005	763,971	397,610	1,520,342	(1,401,101)	(53,693)	0	104,268	24,917,978
2006	839,780	403,863	2,038,880	(1,655,809)	(7,871)	0	807,055	27,343,876
2007	909,406	417,318	2,213,432	(1,993,265)	(61,179)	0	728,000	29,557,588
2008	1,025,556	452,813	1,264,558	(2,157,013)	(29,838)	(224,595)	86,050	29,975,119

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22E**  
**Actuarial Accrued Liabilities - Comparative Schedule**

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 22,378,557	\$ 18,823,795	84%	\$ 3,554,762	68%
2002	26,400,949	19,762,024	75	6,638,925	123
2003	28,184,667	21,644,918	77	6,539,749	114
2004	31,635,219	23,586,581	75	8,048,638	137
2005	33,516,643	24,917,978	74	8,598,665	147
2006	36,857,629	27,343,876	74	9,513,753	152
2007	39,890,994	29,557,588	74	10,333,406	154
2008	41,270,920	29,975,119	73	11,295,801	161

**Ingham County (3303)**  
**Division 11 - Gnrl Library**

**Table 16F**

**Computed Employer Contributions to the Retirement System  
For the Fiscal Year Beginning January 1, 2010**

Contribution for	Employer Contribution @
	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	\$0
Amortization of Unfunded Accrued Liability (16 years) ^	<u>1,265</u> ^
Total Long Term Contribution	1,265
Overfunding Credit #	<u>0</u>
<b>Total Contribution</b>	<b>\$1,265 *</b>

@ The above Employer contribution requirement is based on Member contributions of 0.00% of pay.

\* Invoices will be based on this dollar amount.

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

^ This division is closed to new hires. This line displays the amortization funding requirement, and is based on a 16 year amortization (payments increase 4.5% per year). However, for reporting and disclosure purposes under Statement Nos. 25 and 27 of the Governmental Accounting Standards Board, the annual required contribution (ARC) is based on a 30 year level dollar amortization (the annual amortization payment is \$15,780 and the ARC is \$15,780). Note that the 16 year amortization period will decrease by 2 years each valuation year, until a minimum 5 year amortization is attained. This will result in amortization payments that increase faster than 4.5% each year.

**Please see the Comments on the Investment Markets on page 3.**

# Ingham County (3303)

## Division 11 - Gnrl Library

**Table 17F**

### Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1994	38	\$ 787,259	9.55%	4.99%
1995	36	783,940	10.06%	7.26%
1996	41	811,292	9.94%	9.16%
1997	35	717,473	8.81%	8.81%
1998	25	738,984	10.99%	10.99%
1999	24	733,396	10.20%	10.20%
2000	23	718,540	9.86%	9.86%
2001	0	0	-	-
2002	0	0	-	-
2003	0	0	-	-
2004	0	0	\$ 958 #	\$ 958 #
2005	0	0	\$ 551	\$ 551
2006	0	0	\$ 911	\$ 911
2007	0	0	\$ 1,141	\$ 1,141
2008	0	0	\$ 1,265	\$ 1,265

# Beginning with this valuation, a monthly dollar contribution is shown because the division will have no new hires.

**Notes:**

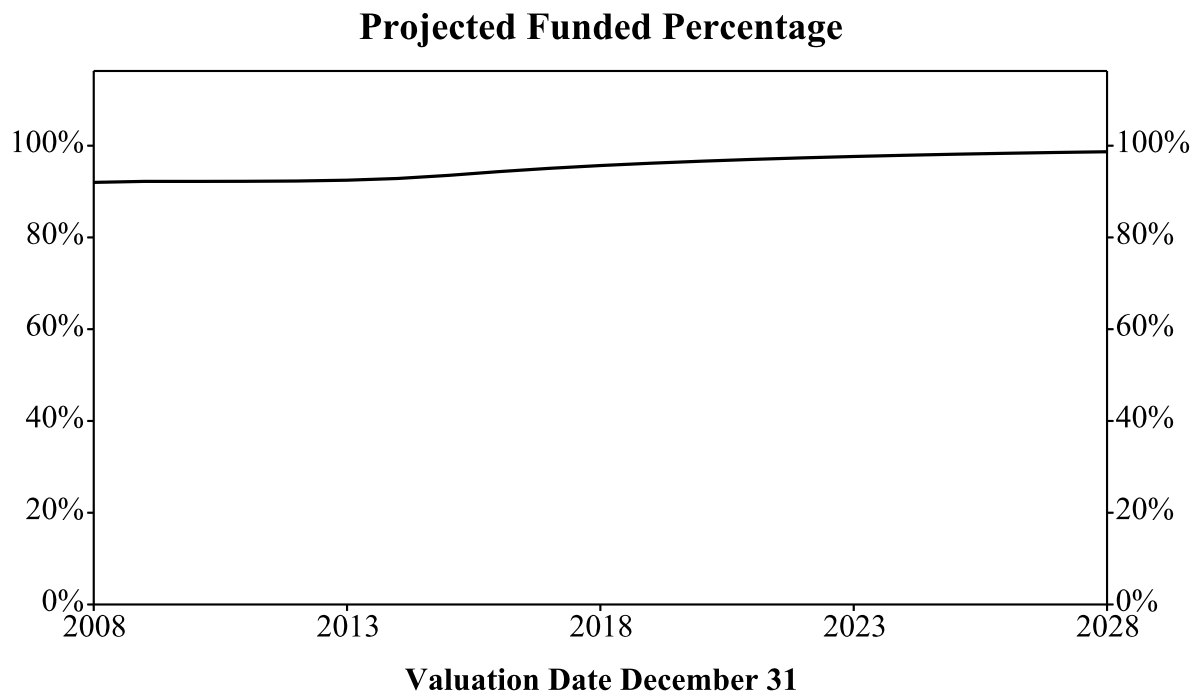
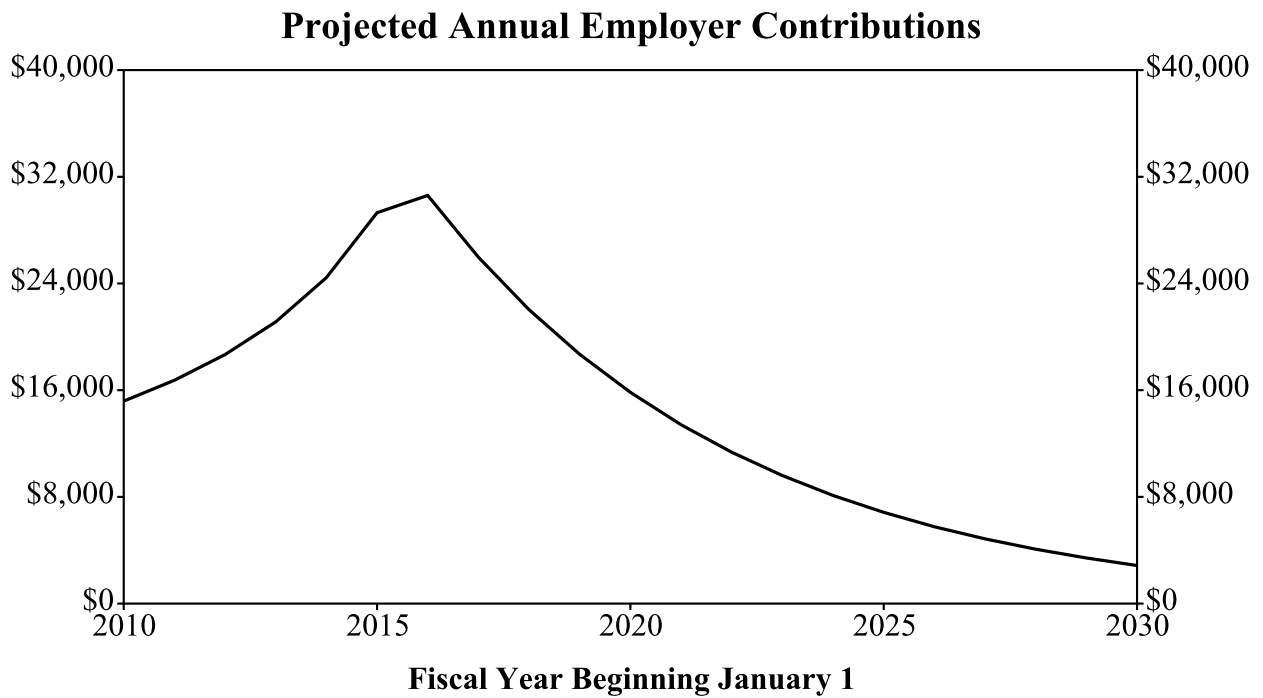
Actuarial assumptions were revised for the 1997 valuation.

Actuarial assumptions were revised for the 2000 valuation.

Actuarial assumptions were revised for the 2004 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 11 - Gnrl Library**  
**Chart 17.5F**



Note: Please refer to page 222 for a discussion of the projection.



**Ingham County (3303)**  
**Division 11 - Gnrl Library**

**Table 18F**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001				(22)	(1)				0
2002									0
2003									0
2004									0
2005									0
2006									0
2007									0
2008									0

**Table 19F**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001	(1)						24	31
2002	(1)			(1)				29
2003								29
2004	(1)							28
2005	(1)						1	28
2006	(5)							23
2007	(3)							20
2008	(2)			(3)				15

**Ingham County (3303)**  
**Division 11 - Gnrl Library**

**Table 20F**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001	1	\$ 4,206	\$	(1)	\$ (3,724)	\$	20	\$ 95,499
2002	2	5,913		(1)	(1,541)		21	99,871
2003							21	99,871
2004	1	2,664		(1)	(5,361)		21	97,174
2005	1	13,457					22	110,631
2006	5	34,872		(1)	(4,372)		26	141,131
2007	3	30,385					29	171,516
2008	3	16,751		(2)	(11,464)		30	176,803

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

**Ingham County (3303)**  
**Division 11 - Gnrl Library**

**Table 21F**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 71,726	\$ 0	\$ 156,633	\$ (90,139)	\$ 0	\$ 0	\$ 0	\$ 2,179,827
2002	2,787	0	53,795	(98,414)	0	0	0	2,137,995
2003	0	0	145,855	(99,871)	0	0	0	2,183,979
2004	0	0	139,614	(97,637)	0	0	0	2,225,956
2005	0	0	137,457	(97,395)	0	(612)	612	2,266,018
2006	11,496	0	177,532	(185,983)	0	0	0	2,269,063
2007	6,612	0	181,713	(176,550)	0	0	0	2,280,838
2008	10,932	0	82,654	(173,998)	0	0	0	2,200,426

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22F**  
**Actuarial Accrued Liabilities - Comparative Schedule**

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 2,303,218	\$ 2,179,827	95%	\$ 123,391	%
2002	2,380,510	2,137,995	90	242,515	
2003	2,465,986	2,183,979	89	282,007	
2004	2,414,640	2,225,956	92	188,684	
2005	2,370,802	2,266,018	96	104,784	
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	

# Ingham County (3303)

## Division 12 - Gnrl ICEA Profs

### Table 16G

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	2.13%	\$12,255
Amortization of Unfunded Accrued Liability (28 years)	<u>5.23</u>	<u>30,090</u>
Total Long Term Contribution	7.36	42,345
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>7.36%</b>	<b>\$42,345 *</b>

@ The above Employer contribution requirement is based on Member contributions of 13.42% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.84% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$(5,043)</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.18)%</b>
<b>Amortization Payment:</b>	<b>(0.02)%</b>
<b>Total:</b>	<b>(0.20)%</b>

**Please see the Comments on the Investment Markets on page 3.**

# Ingham County (3303)

## Division 12 - Gnrl ICEA Profs

Table 17G

### Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1994	99	\$ 3,259,462	7.54%	3.94%
1995	92	3,079,949	7.88%	5.69%
1996	104	3,723,923	8.14%	7.51%
1997	107	3,696,908	6.39%	6.39%
1998	111	4,375,372	6.32%	6.32%
1999	107	4,249,788	5.42%	5.42%
2000	113	4,575,833	6.38%	6.38%
2001	130	5,161,093	6.98%	6.98%
2002	132	6,004,201	11.69%	11.69%
2003	123	5,785,130	7.97%	7.97%
2004	122	6,164,310	7.47%	7.47%
2005	129	6,447,489	7.46%	7.46%
2006	126	6,553,689	7.43%	7.43%
2007	124	6,578,499	7.60%	7.60%
2008	126	6,903,993	7.36%	7.36%

Notes:

Adoption of Benefit B-3 reflected in 1994 valuation.

Adoption of Benefit F55 (15 years) and 6.08% member contributions reflected in 1996 valuation.

Actuarial assumptions were revised for the 1997 valuation.

Actuarial assumptions were revised for the 2000 valuation.

Adoption of Benefit E-2 (2.5%) reflected in 2002 valuation.

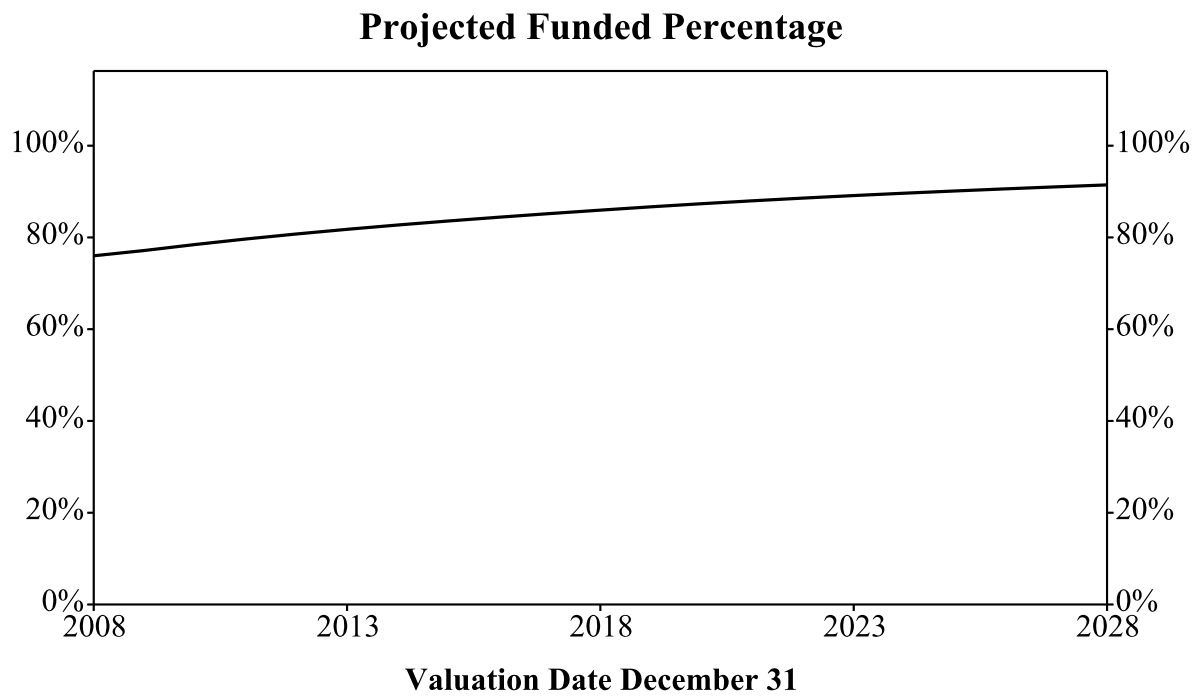
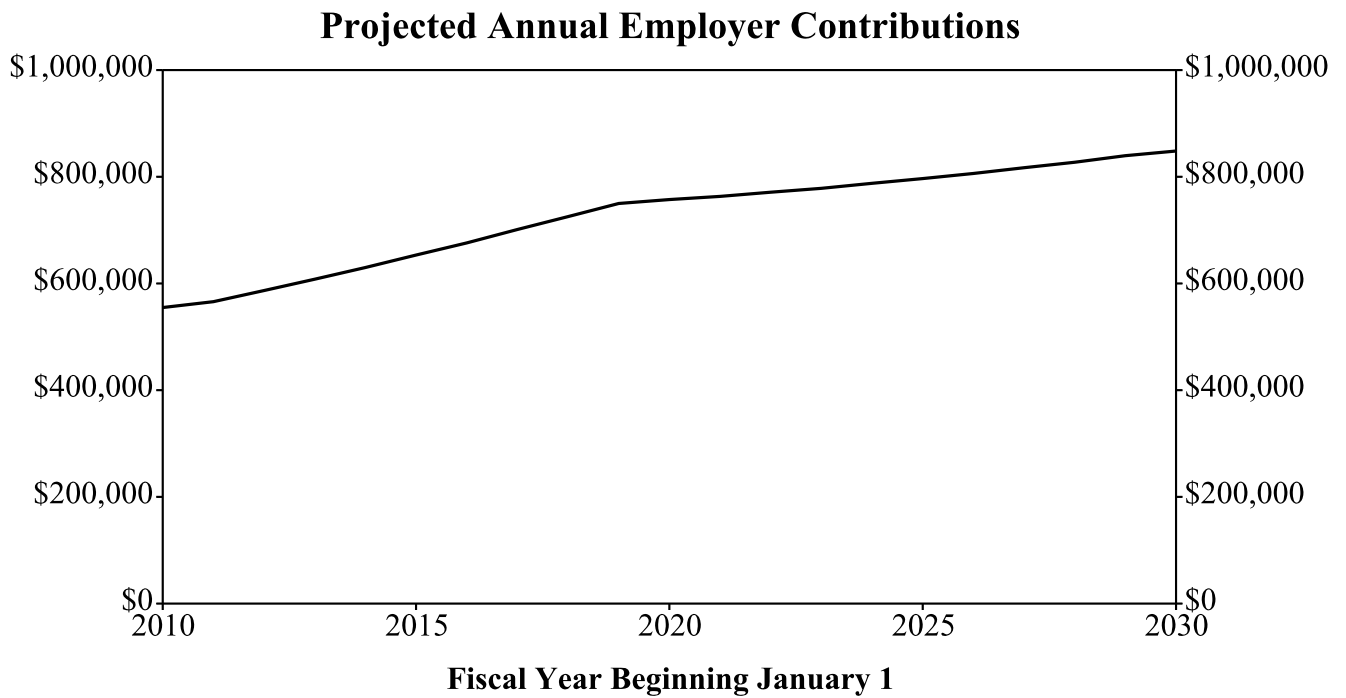
Adoption of Benefit B-4 - 80% Maximum, 13.42% Member Contributions reflected in 2003 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 12 - Gnrl ICEA Profs**  
**Chart 17.5G**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 12 - Gnrl ICEA Profs

**Table 18G**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001	(1)			(6)	(9)	(1)	4	30	130
2002	(1)			(2)	(6)			11	132
2003	(6)				(12)		1	8	123
2004	(2)			(3)	(4)	(3)	2	9	122
2005	(5)			(1)	(8)		2	19	129
2006	(1)			(1)	(8)	(4)		11	126
2007	(3)				(9)	(2)	2	10	124
2008					(7)	(2)	1	10	126

**Table 19G**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001				(1)	(1)	7	7	30
2002	(1)	(1)		(4)			2	26
2003				(1)				25
2004	(1)			(1)			3	26
2005		(1)		(1)			2	26
2006	(1)			(1)			1	25
2007	(3)						1	23
2008								23

# Ingham County (3303)

## Division 12 - Gnrl ICEA Profs

**Table 20G**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001	2	\$ 10,185	\$ 345		\$	\$	19	\$ 230,384
2002	3	36,169		(2)	(21,434)		20	245,119
2003	10	167,032		(1)	(26,919)		29	385,232
2004	3	75,269	3,511				32	464,012
2005	5	155,345	5,074	(1)	(3,773)		36	620,658
2006	3	56,598	9,763				39	687,019
2007	7	134,570	10,098				46	831,687
2008			14,574	(1)	(5,811)	(18,217)	45	822,233

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.



**Ingham County (3303)**  
**Division 12 - Gnrl ICEA Profs**

**Table 21G**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 276,700	\$ 310,813	\$ 742,356	\$ (222,486)	\$ (51,984)	\$ 0	\$ 269,808	\$ 9,918,034
2002	391,596	373,448	498,430	(228,904)	(40,116)	(1,063)	42,456	10,953,881
2003	414,893	798,687	1,112,729	(338,999)	(38,003)	0	58,915	12,962,103
2004	685,307	843,805	972,381	(408,475)	(25,019)	(216,363)	0	14,813,739
2005	517,920	873,765	1,023,224	(552,558)	(66,315)	0	63,698	16,673,473
2006	488,511	879,561	1,349,356	(636,357)	(143,856)	(297,816)	0	18,312,872
2007	494,115	892,147	1,491,429	(776,234)	(111,764)	(96,387)	0	20,206,178
2008	514,835	931,619	1,057,114	(812,523)	(102,908)	(59,844)	39,463	21,773,934

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22G**  
**Actuarial Accrued Liabilities - Comparative Schedule**

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 12,197,172	\$ 9,918,034	81%	\$ 2,279,138	44%
2002	16,574,719	10,953,881	66	5,620,838	94
2003	19,324,474	12,962,103	67	6,362,371	110
2004	21,251,862	14,813,739	70	6,438,123	104
2005	23,348,206	16,673,473	71	6,674,733	104
2006	24,938,421	18,312,872	73	6,625,549	101
2007	26,820,726	20,206,178	75	6,614,548	101
2008	28,692,256	21,773,934	76	6,918,322	100

# Ingham County (3303)

## Division 13 - Gnrl OPEIU Prob

### Table 16H

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	3.05%	\$4,868
Amortization of Unfunded Accrued Liability (28 years)	<u>10.20</u>	<u>16,279</u>
Total Long Term Contribution	13.25	21,147
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>13.25%</b>	<b>\$21,147 *</b>

@ The above Employer contribution requirement is based on Member contributions of 9.71% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.85% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$7,179</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.02)%</b>
<b>Amortization Payment:</b>	<b>0.02%</b>
<b>Total:</b>	<b>0.00%</b>

**Please see the Comments on the Investment Markets on page 3.**

# Ingham County (3303)

## Division 13 - Gnrl OPEIU Prob

Table 17H

### Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1994	37	\$ 1,324,328	10.29%	5.37%
1995	37	1,421,577	10.34%	7.47%
1996	38	1,517,127	10.17%	9.38%
1997	38	1,586,848	9.21%	9.21%
1998	38	1,635,036	9.07%	9.07%
1999	38	1,582,996	8.19%	8.18%
2000	38	1,718,096	6.62%	6.62%
2001	38	1,851,347	6.91%	6.91%
2002	36	1,843,133	8.57%	8.57%
2003	36	1,812,911	8.47%	8.47%
2004	40	2,107,514	7.91%	7.91%
2005	39	2,063,491	8.37%	8.37%
2006	38	2,059,204	8.96%	8.96%
2007	38	1,968,144	9.27%	9.27%
2008	38	1,915,209	13.25%	13.25%

Notes:

Adoption of Benefit C-2 (B-1 Base) reflected in 1994 valuation.

Adoption of Benefit B-3 and 7.13% member contributions reflected in 1997 valuation.

Actuarial assumptions were revised for the 1997 valuation.

Actuarial assumptions were revised for the 2000 valuation.

Adoption of Benefit FAC-3 reflected in 2002 valuation.

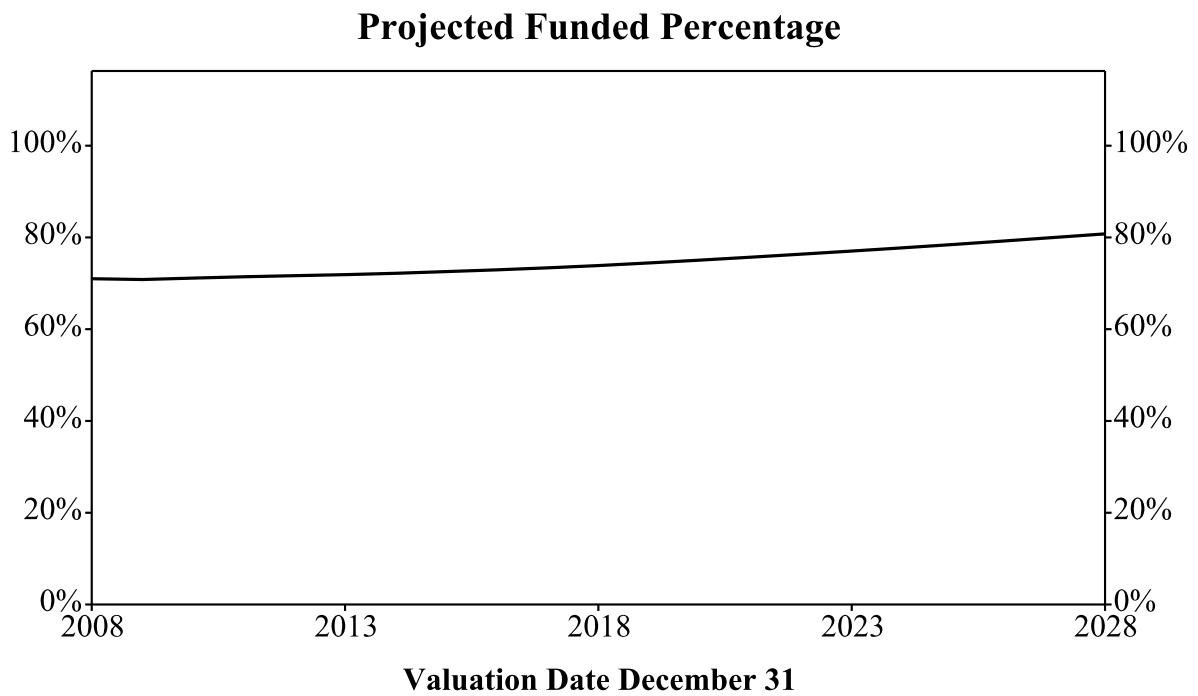
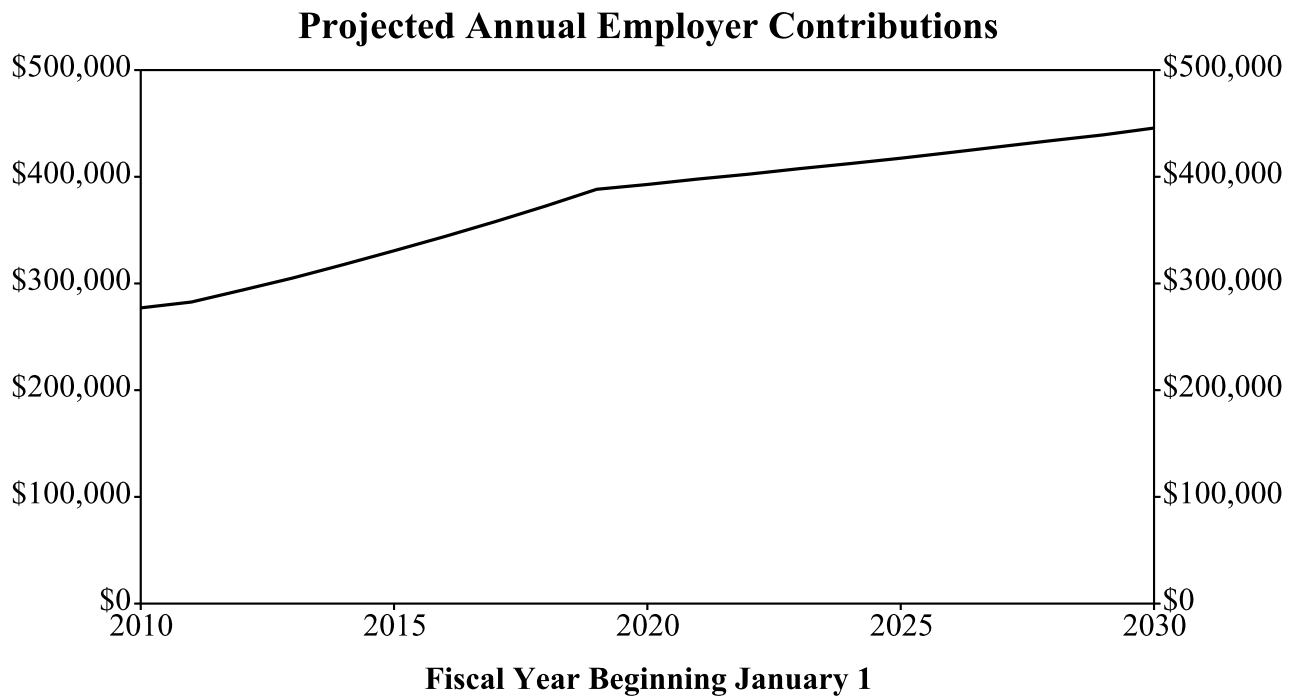
Adoption of Benefit B-4 - 80% Maximum, 9.71% Member Contributions reflected in 2003 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 13 - Gnrl OPEIU Prob**  
**Chart 17.5H**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 13 - Gnrl OPEIU Prob

**Table 18H**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001						(2)	2		38
2002	(1)					(1)			36
2003	(1)	(1)				(2)		4	36
2004	(1)				(1)	(1)	2	5	40
2005	(3)							2	39
2006	(3)			(1)		(2)	4	1	38
2007	(2)			(2)		(1)	1	4	38
2008	(5)	(1)		(1)	(2)	(1)	2	8	38

**Table 19H**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001						2		8
2002								8
2003	(1)							7
2004								7
2005								7
2006	(1)						1	7
2007	(1)						2	8
2008	(1)						1	8

# Ingham County (3303)

## Division 13 - Gnrl OPEIU Prob

**Table 20H**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001		\$	\$		\$	\$	5	\$ 72,984
2002	1	16,507					6	89,491
2003	3	59,897					9	149,388
2004	1	46,202		(1)	(8,223)		9	187,367
2005	3	104,366					12	291,733
2006	4	122,959					16	414,692
2007	4	94,310					20	509,002
2008	8	275,683	3,749	(1)	(3,481)		27	784,953

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

## Division 13 - Gnrl OPEIU Prob

**Table 21H**

### Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 150,011	\$ 130,848	\$ 441,623	\$ (72,984)	\$ 0	\$ 0	\$ 62,361	\$ 5,806,864
2002	130,566	135,002	248,803	(88,116)	0	(18,908)	0	6,214,211
2003	153,055	158,368	462,872	(101,452)	0	(241,653)	0	6,645,401
2004	177,999	198,998	461,550	(186,519)	(11,074)	(95,419)	0	7,190,936
2005	178,232	205,224	475,982	(261,811)	0	(424)	424	7,788,563
2006	165,046	202,479	639,215	(365,616)	(35,942)	(21,123)	174,862	8,547,484
2007	175,721	204,360	690,473	(457,288)	0	(174,948)	0	8,985,802
2008	186,139	202,522	368,655	(676,786)	(53,667)	(7,287)	1,462	9,006,840

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22H**

### Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 7,277,059	\$ 5,806,864	80%	\$ 1,470,195	79%
2002	8,088,136	6,214,211	77	1,873,925	102
2003	8,887,826	6,645,401	75	2,242,425	124
2004	9,593,940	7,190,936	75	2,403,004	114
2005	10,286,351	7,788,563	76	2,497,788	121
2006	11,146,258	8,547,484	77	2,598,774	126
2007	11,532,889	8,985,802	78	2,547,087	129
2008	12,662,562	9,006,840	71	3,655,722	191

# Ingham County (3303)

## Division 14 - Gnrl TOPS UAW

**Table 16I**

### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	7.61%	\$91,394
Amortization of Unfunded Accrued Liability (28 years)	<u>2.59</u>	<u>31,105</u>
Total Long Term Contribution	10.20	122,499
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>10.20%</b>	<b>\$122,499 *</b>

@ The above Employer contribution requirement is based on Member contributions of 3.62% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.85% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$(98,602)</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.25)%</b>
<b>Amortization Payment:</b>	<b>(0.05)%</b>
<b>Total:</b>	<b>(0.30)%</b>

**Please see the Comments on the Investment Markets on page 3.**



**Ingham County (3303)****Division 14 - Gnrl TOPS UAW****Table 17I****Computed Employer Contributions - Comparative Statement**

<b>Valuation Date December 31,</b>	<b>Active Members</b>		<b>Employer Contribution</b>	
	<b>Number</b>	<b>Annual Payroll</b>	<b>Regular Contribution</b>	<b>Minimum Required Contribution</b>
1994	348	\$ 7,838,512	9.60%	5.01%
1995	351	8,343,933	9.62%	6.95%
1996	343	8,364,912	9.81%	9.05%
1997	346	8,814,495	8.08%	8.08%
1998	350	9,430,825	7.35%	7.35%
1999	364	9,944,587	6.48%	6.48%
2000	374	10,401,805	6.21%	6.21%
2001	374	10,692,631	9.83%	9.83%
2002	386	11,308,351	10.14%	10.14%
2003	384	11,615,252	10.35%	10.35%
2004	392	12,686,363	10.12%	10.12%
2005	400	12,902,859	9.97%	9.97%
2006	402	13,643,453	9.78%	9.78%
2007	406	14,098,731	9.97%	9.97%
2008	402	14,411,744	10.20%	10.20%

**Notes:**

Adoption of Benefit B-3 and 4.85 member contributions reflected in 1994.

Actuarial assumptions were revised for the 1997 valuation.

Actuarial assumptions were revised for the 2000 valuation.

Adoption of 1.60% Member Contributions reflected in 2001 valuation.

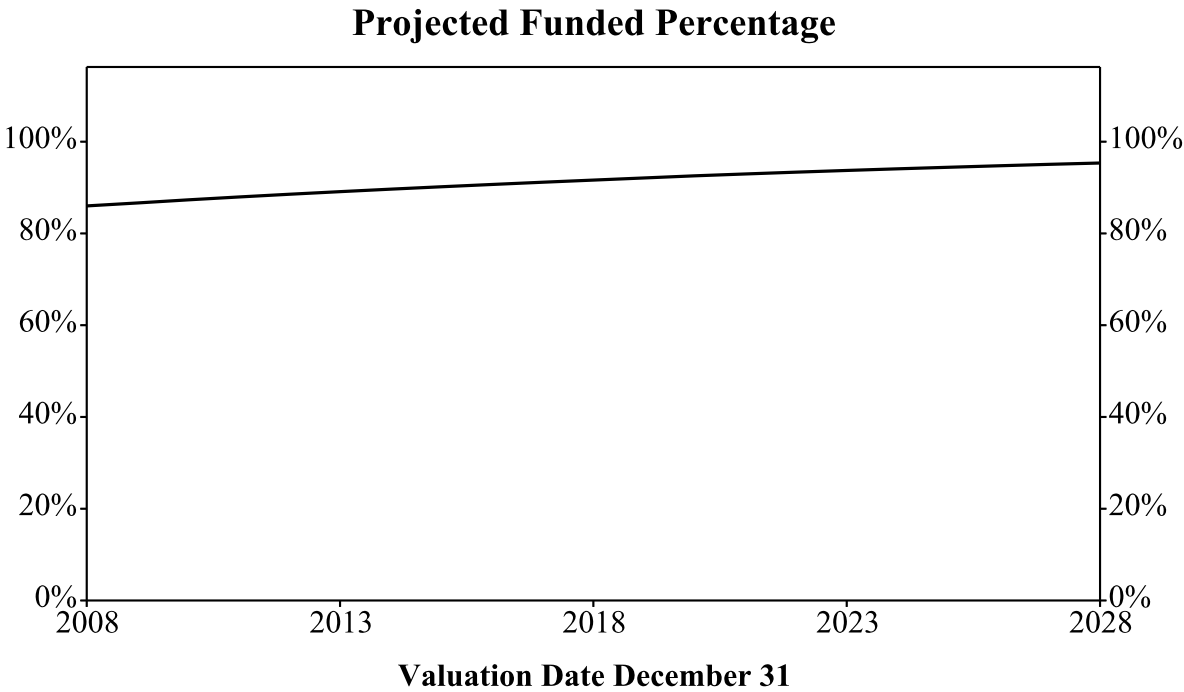
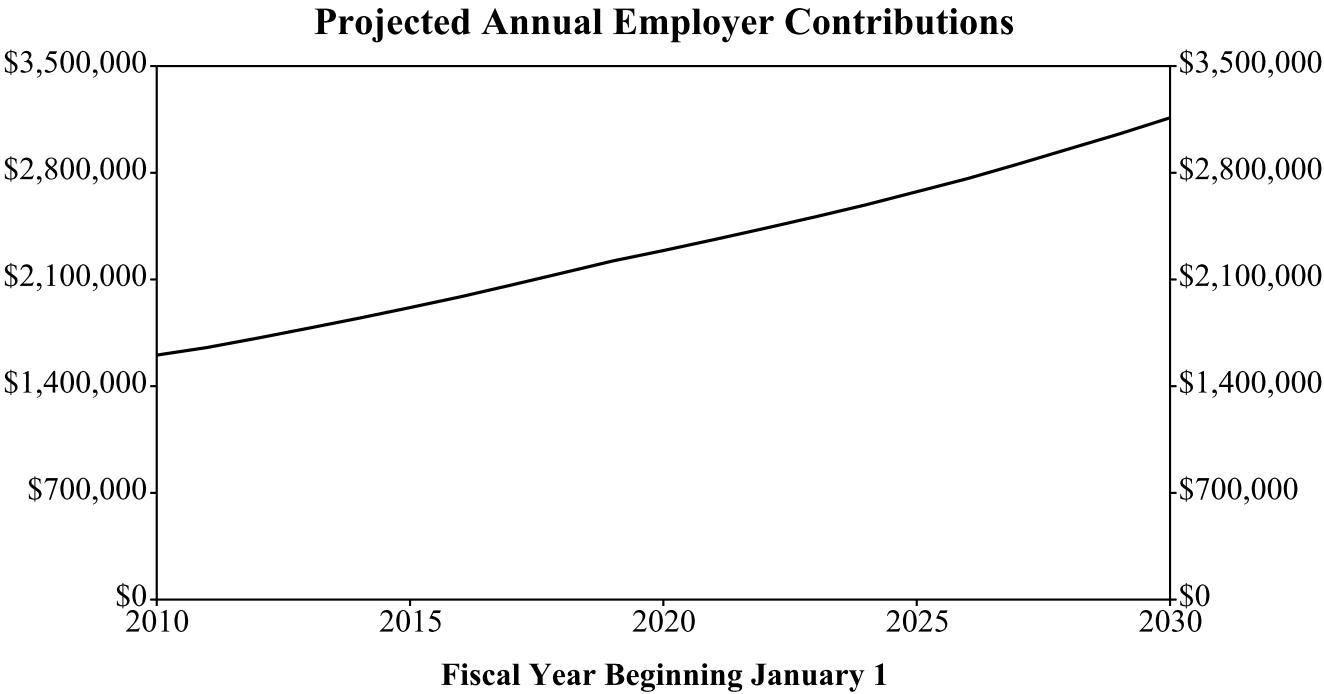
Adoption of Benefit B-4 - 80% Maximum, 3.62% Member Contributions reflected in 2003 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 14 - Gnrl TOPS UAW**  
**Chart 17.5I**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 14 - Gnrl TOPS UAW

**Table 18I**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001	(9)			(8)	(12)	(10)	2	37	374
2002	(9)			(5)	(19)	(2)	1	46	386
2003	(4)			(6)	(27)	(4)		39	384
2004	(11)	(1)		(3)	(18)	(8)	2	47	392
2005	(4)			(4)	(19)	(3)	1	37	400
2006	(2)				(19)	(7)	1	29	402
2007	(7)			(1)	(13)	(3)		28	406
2008	(7)	(1)		(1)	(17)	(5)		27	402

**Table 19I**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001	(2)			(3)	(1)	9	10	61
2002	(3)			(7)			5	56
2003	(4)	(1)	(1)	(3)		1	7	55
2004	(4)	(2)		(2)			3	50
2005							6	56
2006	(1)			(3)			3	55
2007	(5)	(1)		(3)			1	47
2008				(1)			3	49

# Ingham County (3303)

## Division 14 - Gnrl TOPS UAW

**Table 20I**

### Flow of Retirees and Beneficiaries

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001	13	\$ 171,348	\$	(2)	\$ (4,851)	\$ (1,343)	149	\$ 1,205,706
2002	12	150,770		(7)	(43,557)	(16,693)	154	1,296,226
2003	13	123,281		(6)	(22,474)	(14,698)	161	1,382,335
2004	16	268,630		(5)	(29,771)		172	1,621,194
2005	6	88,853		(8)	(59,421)		170	1,650,626
2006	4	49,956	1,649	(9)	(69,024)		165	1,633,207
2007	12	205,987	3,167	(2)	(12,152)		175	1,830,209
2008	9	172,605	662	(4)	(24,059)		180	1,979,417

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

## Division 14 - Gnrl TOPS UAW

**Table 21I**

### Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 1,040,229	\$ 177,309	\$ 2,049,991	\$ (1,134,770)	\$ (34,699)	\$ (177,623)	\$ 0	\$ 28,414,971
2002	1,050,966	184,585	1,006,871	(1,315,853)	(32,307)	(1,434)	16,569	29,324,368
2003	1,169,392	190,903	2,315,988	(1,355,912)	(56,107)	(60,236)	0	31,528,396
2004	1,306,601	468,155	2,157,148	(1,499,366)	(87,008)	(156,242)	0	33,717,684
2005	1,343,013	470,661	2,180,964	(1,631,497)	(71,761)	(147,657)	0	35,861,407
2006	1,370,701	491,377	2,904,480	(1,637,401)	(55,826)	(277,434)	0	38,657,304
2007	1,413,614	517,212	3,140,596	(1,725,864)	(33,967)	(111,127)	21,446	41,879,214
2008	1,435,337	532,730	1,988,798	(1,912,946)	(60,647)	(148,234)	46,673	43,760,925

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22I**

### Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 31,926,883	\$ 28,414,971	89%	\$ 3,511,912	33%
2002	33,645,046	29,324,368	87	4,320,678	38
2003	37,676,120	31,528,396	84	6,147,724	53
2004	40,089,522	33,717,684	84	6,371,838	50
2005	41,771,210	35,861,407	86	5,909,803	46
2006	44,049,781	38,657,304	88	5,392,477	40
2007	47,620,829	41,879,214	88	5,741,615	41
2008	50,851,765	43,760,925	86	7,090,840	49

# Ingham County (3303)

## Division 15 - Animal Cntrl FOP

### Table 16J

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	2.00%	\$575
Amortization of Unfunded Accrued Liability (28 years)	<u>25.65</u>	<u>7,381</u>
Total Long Term Contribution	27.65	7,956
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>27.65%</b>	<b>\$7,956 *</b>

@ The above Employer contribution requirement is based on Member contributions of 15.49% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.84% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

**Increase in Actuarial Accrued Liabilities:** \$(4,414)

**Increase in Computed Long Term  
Employer Contribution As a Percentage  
of Active Member Payroll**

**Normal Cost:** 0.35%

**Amortization Payment:** (0.05)%

**Total:** 0.30%

**Please see the Comments on the Investment Markets on page 3.**

**Ingham County (3303)****Division 15 - Animal Cntrl FOP****Table 17J****Computed Employer Contributions - Comparative Statement**

<b>Valuation Date December 31,</b>	<b>Active Members</b>		<b>Employer Contribution</b>	
	<b>Number</b>	<b>Annual Payroll</b>	<b>Regular Contribution</b>	<b>Minimum Required Contribution</b>
1994	9	\$ 260,831	8.19%	4.28%
1995	9	269,541	8.24%	5.95%
1996	9	264,182	8.91%	8.21%
1997	10	325,176	9.82%	9.82%
1998	10	317,713	9.11%	9.11%
1999	9	306,275	9.49%	9.49%
2000	10	330,848	14.84%	14.83%
2001	9	326,170	12.74%	12.74%
2002	9	310,758	16.06%	16.06%
2003	9	329,988	15.94%	15.94%
2004	9	358,840	16.28%	16.28%
2005	9	359,844	16.28%	16.28%
2006	9	392,312	16.29%	16.29%
2007	10	436,485	14.25%	14.25%
2008	7	345,299	27.65%	27.65%

**Notes:**

Adoption of Benefits B-4, FAC-3, F50 (25 years) and 8.9% member contributions reflected in 1997 valuation.

Actuarial assumptions were revised for the 1997 valuation.

Adoption of Benefit E-2 reflected in 2000 valuation.

Actuarial assumptions were revised for the 2000 valuation.

Adoption of 14.28% Member Contributions reflected in 2001 valuation.

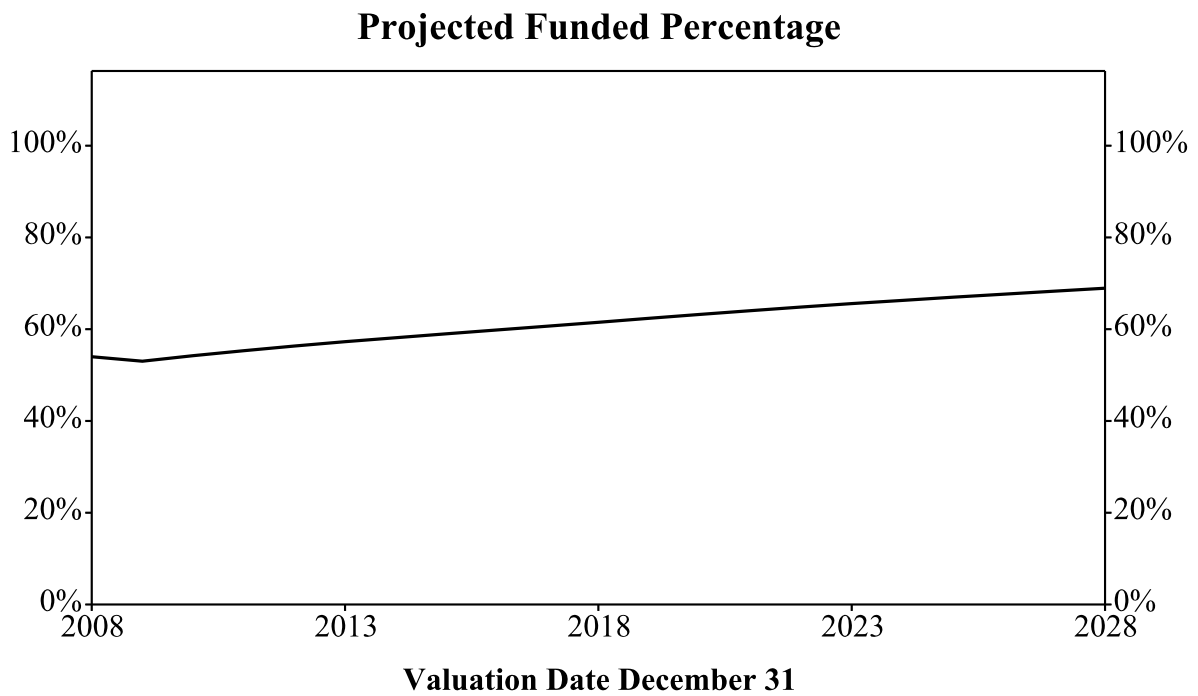
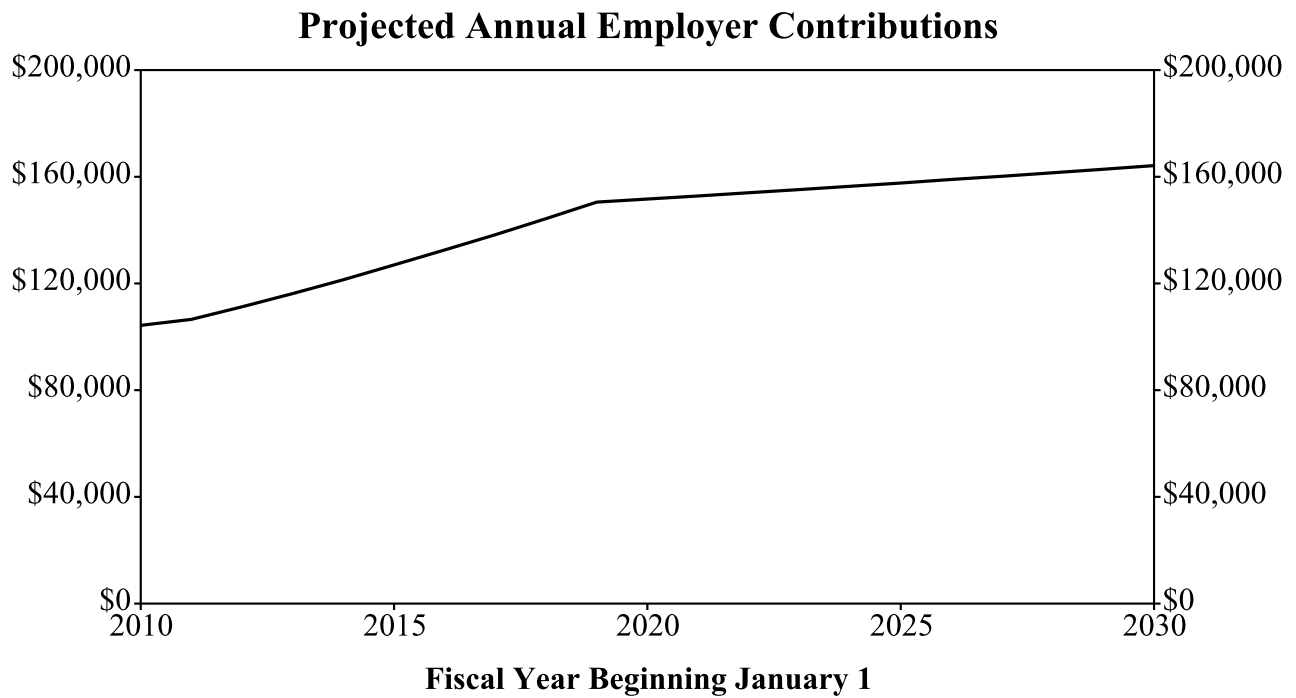
Adoption of Benefit F/N(25), 15.49% Member Contributions reflected in 2002 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 15 - Animal Cntrl FOP**  
**Chart 17.5J**



Note: Please refer to page 222 for a discussion of the projection.



# Ingham County (3303)

## Division 15 - Animal Cntrl FOP

**Table 18J**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001					(2)			1	9
2002	(2)				(1)			2	9
2003					(1)			1	9
2004					(1)	(1)		1	9
2005					(1)			1	9
2006					(1)			1	9
2007					(2)			1	10
2008	(2)				(2)			1	7

**Table 19J**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001								1
2002								1
2003								1
2004								1
2005								1
2006								1
2007								1
2008								1

# Ingham County (3303)

## Division 15 - Animal Cntrl FOP

**Table 20J**

### Flow of Retirees and Beneficiaries

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001		\$	\$		\$	\$	2	\$ 15,550
2002	2	49,156					4	64,706
2003			1,213				4	65,919
2004	1	10,670	634			(10,352)	5	66,871
2005			1,213				5	68,084
2006			1,215				5	69,299
2007			1,212				5	70,511
2008	4	103,314	1,213	(1)	(12,269)		8	162,769

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

## Division 15 - Animal Cntrl FOP

**Table 21J**

### Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 37,177	\$ 50,267	\$ 60,753	\$ (15,549)	\$ 0	\$ 0	\$ 0	\$ 802,507
2002	52,782	49,726	42,675	(44,417)	0	(965)	965	903,273
2003	41,528	50,492	76,260	(64,706)	(4,578)	0	0	1,002,269
2004	57,637	55,591	70,890	(65,919)	0	(10,205)	0	1,110,263
2005	58,849	57,503	74,440	(66,871)	0	0	0	1,234,184
2006	63,805	60,709	101,090	(68,084)	(3,818)	0	0	1,387,886
2007	70,157	66,632	111,156	(69,297)	(13,838)	0	0	1,552,696
2008	69,355	67,098	98,318	(124,754)	(21,844)	0	257,580	1,898,449

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22J**

### Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 1,536,591	\$ 802,507	52%	\$ 734,084	225%
2002	1,822,913	903,273	50	919,640	296
2003	1,963,559	1,002,269	51	961,290	291
2004	2,204,098	1,110,263	50	1,093,835	305
2005	2,317,696	1,234,184	53	1,083,512	301
2006	2,547,019	1,387,886	54	1,159,133	295
2007	2,651,398	1,552,696	59	1,098,702	252
2008	3,543,295	1,898,449	54	1,644,846	476

# Ingham County (3303)

## Division 16 - Gnrl Commsnrs

### Table 16K

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	5.94%	\$772
Amortization of Unfunded Accrued Liability (28 years)	<u>0.69</u>	<u>90</u>
Total Long Term Contribution	6.63	862
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>6.63%</b>	<b>\$862 *</b>

@ The above Employer contribution requirement is based on Member contributions of 3.56% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.88% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$(1,067)</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.28)%</b>
<b>Amortization Payment:</b>	<b>(0.06)%</b>
<b>Total:</b>	<b>(0.34)%</b>

**Please see the Comments on the Investment Markets on page 3.**

**Ingham County (3303)****Division 16 - Gnrl Commsnrs****Table 17K****Computed Employer Contributions - Comparative Statement**

<b>Valuation Date December 31,</b>	<b>Active Members</b>		<b>Employer Contribution</b>	
	<b>Number</b>	<b>Annual Payroll</b>	<b>Regular Contribution</b>	<b>Minimum Required Contribution</b>
1994	7	\$ 70,954	6.75%	3.53%
1995	8	95,310	6.91%	4.99%
1996	7	84,500	5.19%	4.79%
1997	9	103,415	4.56%	4.56%
1998	8	101,460	5.38%	5.38%
1999	8	103,005	2.33%	2.32%
2000	5	63,395	3.23%	3.23%
2001	10	133,143	6.02%	4.51%
2002	10	137,720	6.58%	5.82%
2003	11	161,215	7.55%	7.55%
2004	9	129,144	8.10%	8.10%
2005	13	189,594	8.03%	8.03%
2006	11	162,724	7.36%	7.36%
2007	13	201,689	6.89%	6.89%
2008	10	155,928	6.63%	6.63%

**Notes:**

Actuarial assumptions were revised for the 1997 valuation.

Adoption of Benefit V- 6 reflected in 1998 valuation.

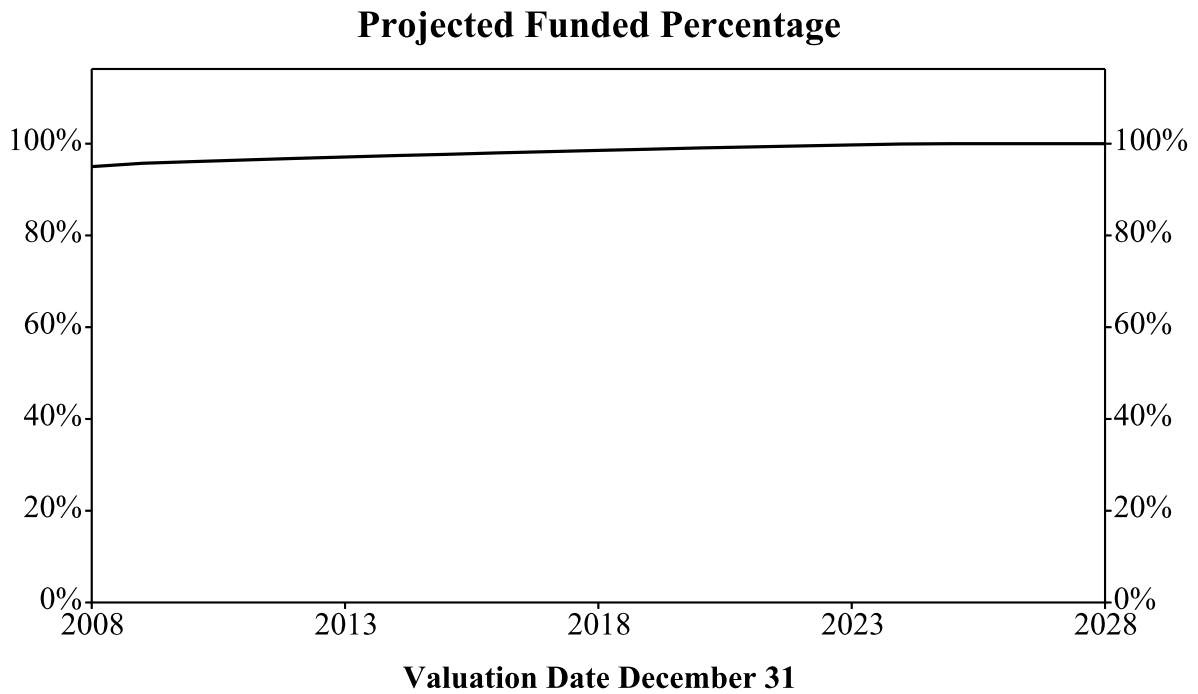
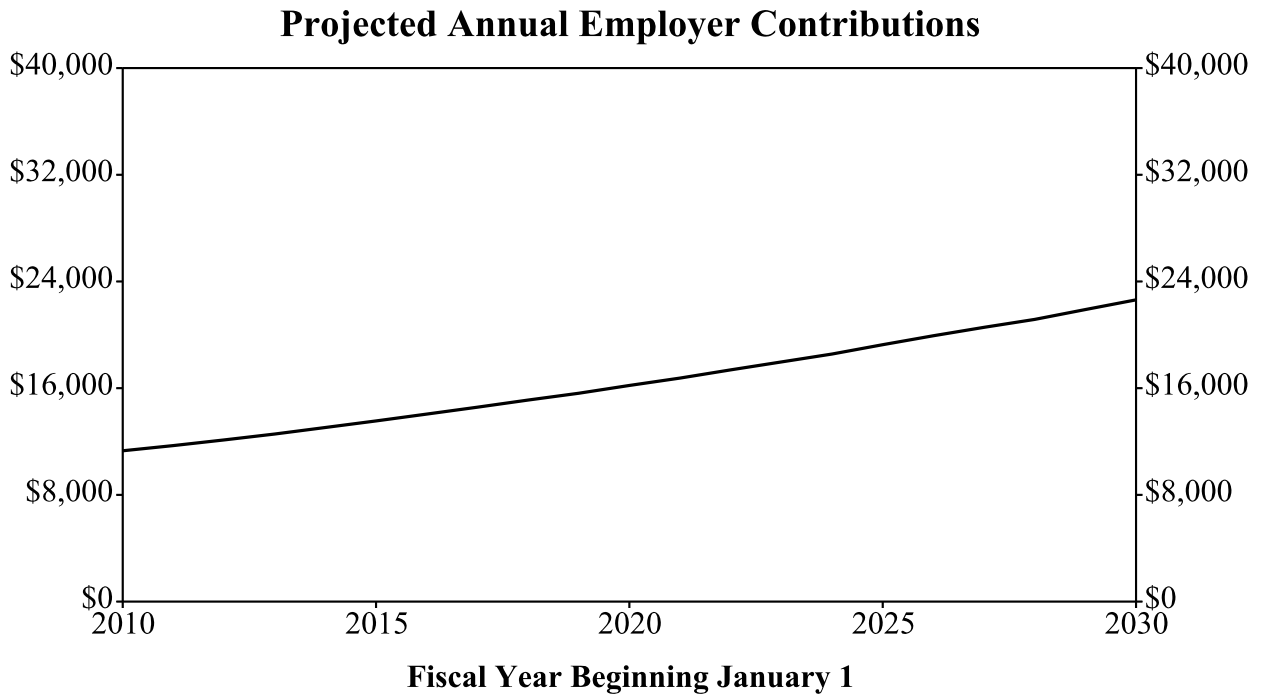
Actuarial assumptions were revised for the 2000 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 16 - Gnrl Commsnrs**  
**Chart 17.5K**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 16 - Gnrl Commsnrs

**Table 18K**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001								5	10
2002									10
2003								1	11
2004				(2)					9
2005								4	13
2006				(1)	(2)			1	11
2007								2	13
2008				(1)	(2)				10

**Table 19K**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001								5
2002	(1)							4
2003								4
2004							2	6
2005								6
2006	(1)						2	7
2007	(1)							6
2008							1	7

# Ingham County (3303)

## Division 16 - Gnrl Commsnrs

**Table 20K**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001		\$	\$		\$	\$	5	\$ 17,888
2002	1	2,210					6	20,098
2003	1	2,918					7	23,016
2004						(947)	7	22,069
2005				(1)	(2,210)		6	19,859
2006	1	2,836					7	22,695
2007	1	1,977		(1)	(4,111)	(757)	7	19,804
2008	1	2,413		(1)	(2,413)		7	19,804

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.



# Ingham County (3303)

## Division 16 - Gnrl Commsnrs

**Table 21K**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 3,089	\$ 4,739	\$ 19,980	\$ (17,888)	\$ 0	\$ (734)	\$ 734	\$ 292,469
2002	4,448	4,903	7,616	(21,018)	0	0	0	288,418
2003	6,414	5,062	21,373	(20,097)	0	0	15,006	316,176
2004	8,329	5,151	19,844	(22,774)	0	0	0	326,726
2005	14,314	6,749	20,330	(21,134)	0	(62)	62	346,985
2006	15,471	6,800	27,370	(20,804)	0	0	0	375,822
2007	15,977	7,034	29,613	(20,244)	(2,408)	(728)	728	405,794
2008	14,769	7,144	19,284	(19,803)	0	(7,880)	9,984	429,292

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22K**

## Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 308,598	\$ 292,469	95%	\$ 16,129	12%
2002	320,249	288,418	90	31,831	23
2003	378,608	316,176	84	62,432	39
2004	392,494	326,726	83	65,768	51
2005	429,244	346,985	81	82,259	43
2006	423,565	375,822	89	47,743	29
2007	443,956	405,794	91	38,162	19
2008	450,313	429,292	95	21,021	13

# Ingham County (3303)

## Division 17 - ICEA Nurses

**Table 16L**

### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	3.64%	\$11,098
Amortization of Unfunded Accrued Liability (28 years)	<u>4.77</u>	<u>14,544</u>
Total Long Term Contribution	8.41	25,642
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>8.41%</b>	<b>\$25,642 *</b>

@ The above Employer contribution requirement is based on Member contributions of 11.87% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.89% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$(5,004)</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.30)%</b>
<b>Amortization Payment:</b>	<b>(0.03)%</b>
<b>Total:</b>	<b>(0.33)%</b>

**Please see the Comments on the Investment Markets on page 3.**

# Ingham County (3303)

## Division 17 - ICEA Nurses

**Table 17L**

### Computed Employer Contributions - Comparative Statement

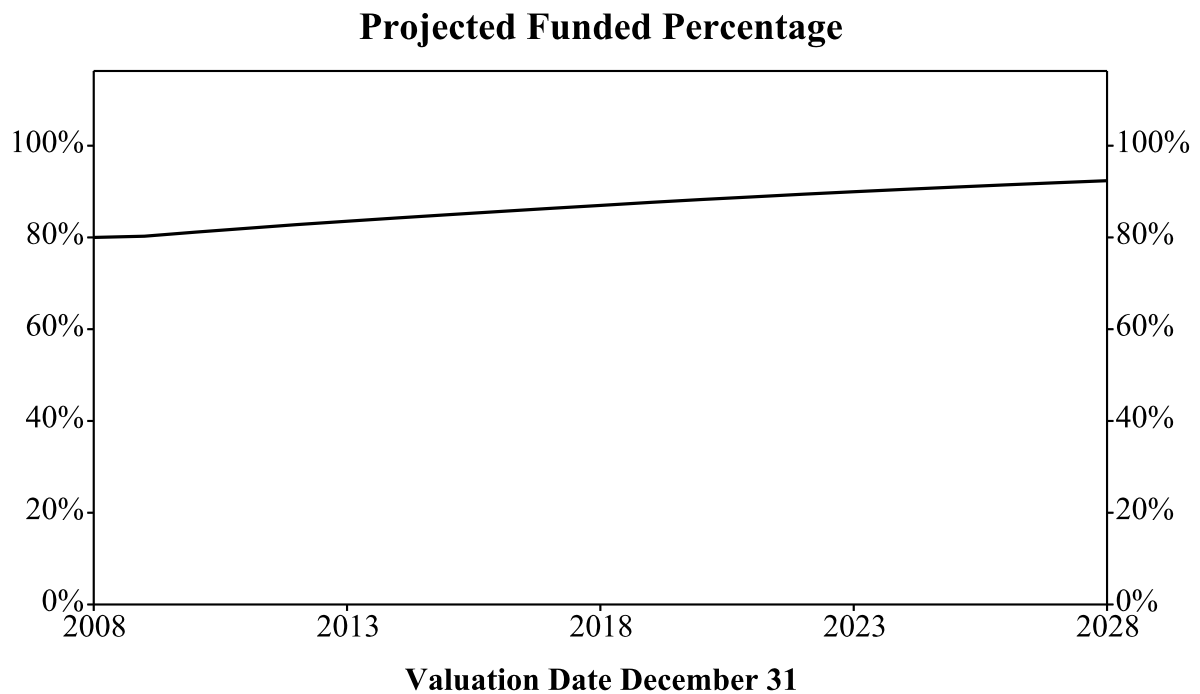
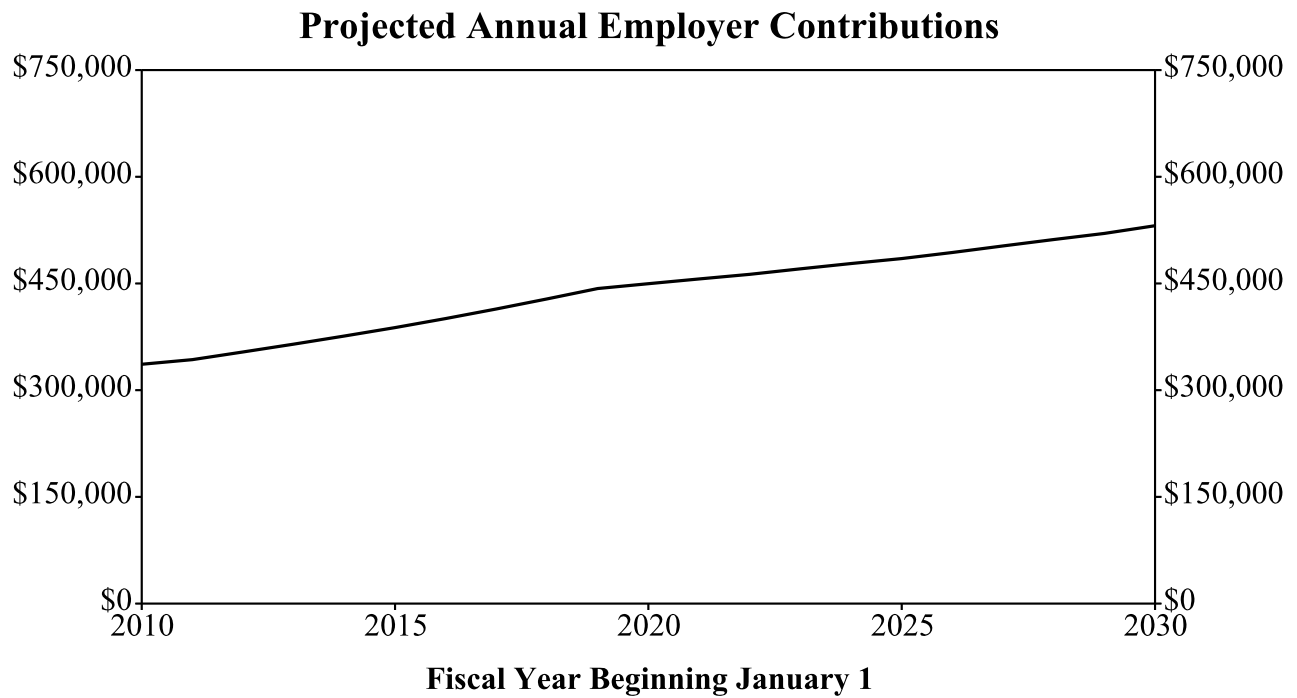
Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1994	59	\$ 1,853,322	9.79%	5.11%
1995	61	2,003,757	9.86%	7.12%
1996	64	2,067,117	9.54%	8.80%
1997	60	2,062,206	8.13%	8.13%
1998	63	2,321,552	7.68%	7.68%
1999	66	2,449,404	7.26%	7.26%
2000	67	2,553,922	6.79%	6.79%
2001	68	2,710,021	8.40%	8.40%
2002	67	3,053,506	9.39%	9.39%
2003	69	3,107,037	8.54%	8.54%
2004	71	3,533,072	7.38%	7.38%
2005	67	3,394,246	8.15%	8.15%
2006	72	3,727,464	8.16%	8.16%
2007	74	3,850,897	8.21%	8.21%
2008	66	3,658,770	8.41%	8.41%

**Notes:**

Adoption of Benefit E-2 reflected in 1994 valuation.  
Adoption of Benefit F55 (15 years) reflected in 1994 valuation.  
Adoption of 5.07% member contributions reflected in 1994 valuation.  
Actuarial assumptions were revised for the 1997 valuation.  
Adoption of Benefit B-3 reflected in 1998 valuation.  
Adoption of Benefit V- 6 reflected in 1998 valuation.  
Adoption of Benefit FAC-3 reflected in 1998 valuation.  
Adoption of 11.87% member contributions reflected in 1998 valuation.  
Actuarial assumptions were revised for the 2000 valuation.  
Actuarial assumptions were revised for the 2004 valuation.  
Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 17 - ICEA Nurses**  
**Chart 17.5L**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 17 - ICEA Nurses

**Table 18L**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001	(3)				(1)			5	68
2002				(1)	(4)	(2)		6	67
2003	(2)			(2)	(1)			7	69
2004	(4)			(1)				7	71
2005	(3)			(1)	(6)			6	67
2006	(4)			(1)	(2)	(1)	1	12	72
2007	(3)			(1)	(3)			9	74
2008	(3)			(1)	(4)	(1)		1	66

**Table 19L**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001				(2)		2	1	13
2002	(2)	(1)					2	12
2003	(2)			(1)			2	11
2004	(2)						1	10
2005	(2)						2	10
2006	(2)						1	9
2007	(1)			(1)			1	8
2008	(1)						1	8

**Ingham County (3303)**  
**Division 17 - ICEA Nurses**

**Table 20L**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001	3	\$ 28,496	\$ 2,723		\$	\$ (4,586)	26	\$ 227,252
2002	2	23,186	3,458			(3,185)	28	250,711
2003	4	31,059	4,431				32	286,201
2004	6	86,485	5,194	(1)	(3,305)		37	374,575
2005	5	104,457	8,101			(3,255)	42	483,878
2006	6	114,897	9,767	(1)	(4,747)		47	603,795
2007	4	76,401	12,682	(1)	(4,092)		50	688,786
2008	5	96,401	13,573	(1)	(36,663)		54	762,097

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

**Ingham County (3303)**  
**Division 17 - ICEA Nurses**

**Table 21L**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 196,369	\$ 321,184	\$ 515,290	\$ (222,531)	\$ (19,418)	\$ (2,030)	\$ 8,531	\$ 6,930,971
2002	214,553	375,409	321,239	(235,471)	(24,793)	(44,638)	0	7,537,270
2003	259,070	367,377	700,881	(268,685)	(2,306)	0	942	8,594,549
2004	332,173	420,228	632,125	(324,125)	(482)	(1,314)	1,314	9,654,468
2005	303,998	424,571	649,527	(425,103)	0	(1,959)	1,959	10,607,461
2006	271,060	437,855	852,302	(548,074)	(24,534)	(172,260)	0	11,423,810
2007	307,685	450,308	926,339	(645,784)	(9,449)	(1,143)	0	12,451,766
2008	321,093	468,033	594,927	(712,946)	(27,318)	(147,576)	0	12,947,979

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22L**  
**Actuarial Accrued Liabilities - Comparative Schedule**

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 8,916,596	\$ 6,930,971	78%	\$ 1,985,625	73%
2002	10,315,515	7,537,270	73	2,778,245	91
2003	10,953,766	8,594,549	78	2,359,217	76
2004	12,052,220	9,654,468	80	2,397,752	68
2005	13,329,138	10,607,461	80	2,721,677	80
2006	14,386,752	11,423,810	79	2,962,942	79
2007	15,457,633	12,451,766	81	3,005,867	78
2008	16,276,364	12,947,979	80	3,328,385	91

# Ingham County (3303)

## Division 18 - ICEA Ct. Prof

### Table 16M

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	3.26%	\$5,861
Amortization of Unfunded Accrued Liability (28 years)	<u>9.13</u>	<u>16,414</u>
Total Long Term Contribution	12.39	22,275
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>12.39%</b>	<b>\$22,275 *</b>

@ The above Employer contribution requirement is based on Member contributions of 9.84% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.84% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

**Increase in Actuarial Accrued Liabilities:** \$(2,522)

**Increase in Computed Long Term  
Employer Contribution As a Percentage  
of Active Member Payroll**

**Normal Cost:** (0.02)%

**Amortization Payment:** (0.01)%

**Total:** (0.03)%

**Please see the Comments on the Investment Markets on page 3.**



# Ingham County (3303)

## Division 18 - ICEA Ct. Prof

Table 17M

### Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1994	42	\$ 1,375,365	8.54%	4.46%
1995	38	1,375,764	9.41%	6.80%
1996	37	1,442,687	10.09%	9.30%
1997	32	1,244,090	9.57%	9.57%
1998	33	1,413,047	11.49%	11.49%
1999	37	1,559,574	9.66%	9.66%
2000	35	1,515,603	8.79%	8.78%
2001	34	1,579,323	10.99%	10.99%
2002	37	1,883,979	11.42%	11.42%
2003	37	1,935,719	11.35%	11.35%
2004	39	2,175,204	10.27%	10.27%
2005	36	2,027,572	10.71%	10.71%
2006	35	2,062,761	10.91%	10.91%
2007	33	2,020,357	11.73%	11.73%
2008	34	2,157,341	12.39%	12.39%

Notes:

Adoption of Benefits B-3 and F55 (15 years) reflected in 1994 valuation.

Adoption of 7.5% member contributions reflected in 1994 valuation.

Adoption of Benefit 20 and Out retirement reflected in 1996 valuation.

Adoption of 9.84% member contributions reflected in 1996 valuation.

Actuarial assumptions were revised for the 1997 valuation.

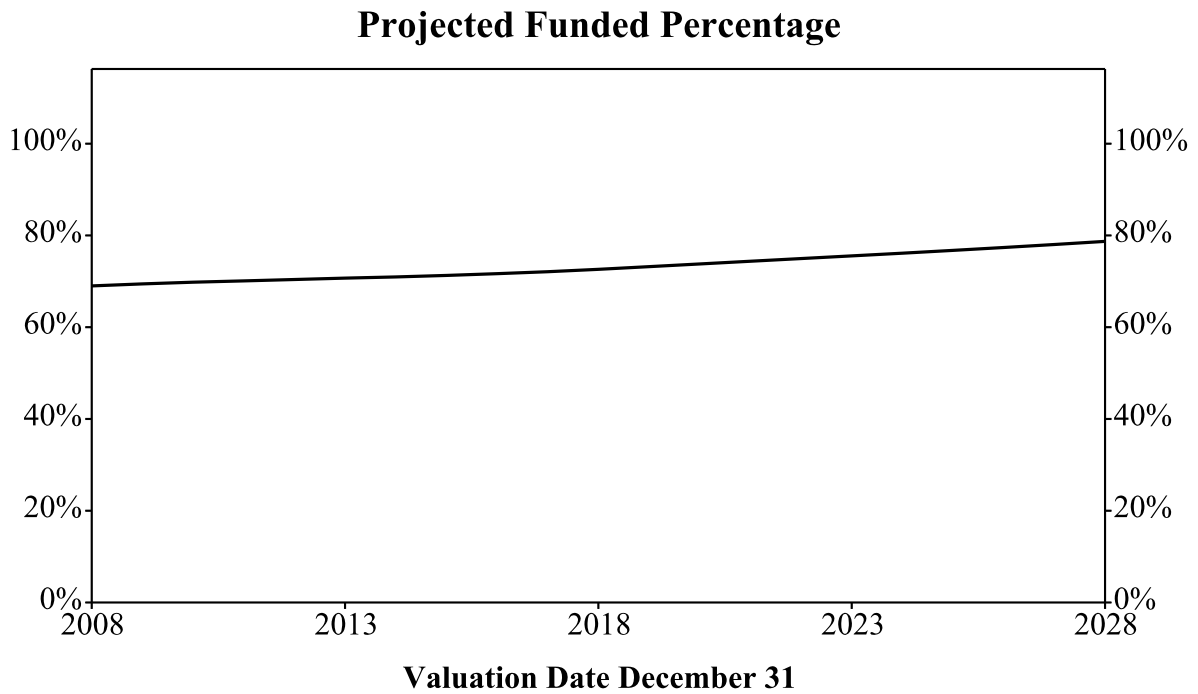
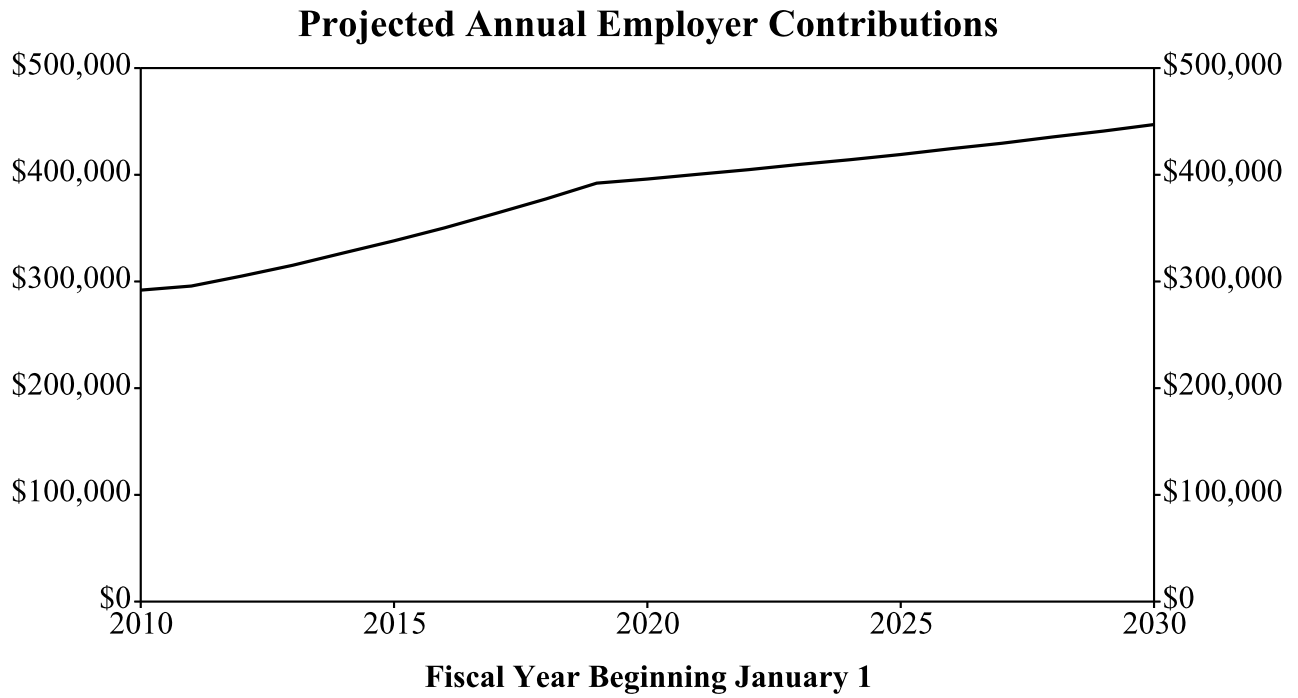
Actuarial assumptions were revised for the 2000 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 18 - ICEA Ct. Prof**  
**Chart 17.5M**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 18 - ICEA Ct. Prof

**Table 18M**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001	(4)					(1)	3	1	34
2002	(1)			(1)			1	4	37
2003	(1)			(1)			1	1	37
2004	(1)				(1)		3	1	39
2005	(1)				(2)	(1)		1	36
2006	(2)							1	35
2007	(2)		(1)					1	33
2008	(2)							3	34

**Table 19M**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001						2		6
2002							1	7
2003						1	1	9
2004	(1)							8
2005								8
2006	(1)							7
2007	(1)							6
2008								6

# Ingham County (3303)

## Division 18 - ICEA Ct. Prof

**Table 20M**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001	4	\$ 112,268	\$ 287		\$	\$	22	\$ 456,377
2002	1	20,146					23	476,523
2003	8	63,559				(2,085)	31	537,997
2004	2	32,940					33	570,937
2005	1	26,350	1,800	(1)	(9,513)		33	589,574
2006	3	25,556	1,562	(1)	(2,913)		35	613,779
2007	5	77,484					40	691,263
2008	2	51,567				(118)	42	742,712

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

**Ingham County (3303)**  
**Division 18 - ICEA Ct. Prof**

**Table 21M**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 165,138	\$ 168,083	\$ 436,013	\$ (385,979)	\$ (2,795)	\$ 0	\$ 190,379	\$ 5,942,900
2002	166,027	186,458	186,390	(470,786)	0	0	1,573	6,012,562
2003	220,253	197,222	498,014	(482,800)	0	0	241,086	6,686,337
2004	249,701	215,897	465,248	(547,992)	(16,397)	0	155,436	7,208,230
2005	241,423	209,658	454,035	(586,969)	0	(26,746)	0	7,499,631
2006	214,517	205,961	593,524	(596,862)	(36,774)	0	0	7,879,997
2007	223,872	205,849	635,692	(656,659)	0	0	0	8,288,751
2008	238,625	215,245	364,705	(707,410)	0	(115)	0	8,399,801

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22M**  
**Actuarial Accrued Liabilities - Comparative Schedule**

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 8,326,341	\$ 5,942,900	71%	\$ 2,383,441	151%
2002	8,966,621	6,012,562	67	2,954,059	157
2003	9,671,329	6,686,337	69	2,984,992	154
2004	10,317,233	7,208,230	70	3,109,003	143
2005	10,526,138	7,499,631	71	3,026,507	149
2006	10,980,626	7,879,997	72	3,100,629	150
2007	11,525,007	8,288,751	72	3,236,256	160
2008	12,146,695	8,399,801	69	3,746,894	174

# Ingham County (3303)

## Division 19 - Cnstatnl Offcls

**Table 16N**

### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	5.60%	\$2,373
Amortization of Unfunded Accrued Liability (28 years)	<u>2.46</u>	<u>1,042</u>
Total Long Term Contribution	8.06	3,415
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>8.06%</b>	<b>\$3,415 *</b>

@ The above Employer contribution requirement is based on Member contributions of 8.46% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.87% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$8,804</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.36)%</b>
<b>Amortization Payment:</b>	<b>0.07%</b>
<b>Total:</b>	<b>(0.29)%</b>

**Please see the Comments on the Investment Markets on page 3.**

# Ingham County (3303)

## Division 19 - Cnstutnl Offcls

**Table 17N**

### Computed Employer Contributions - Comparative Statement

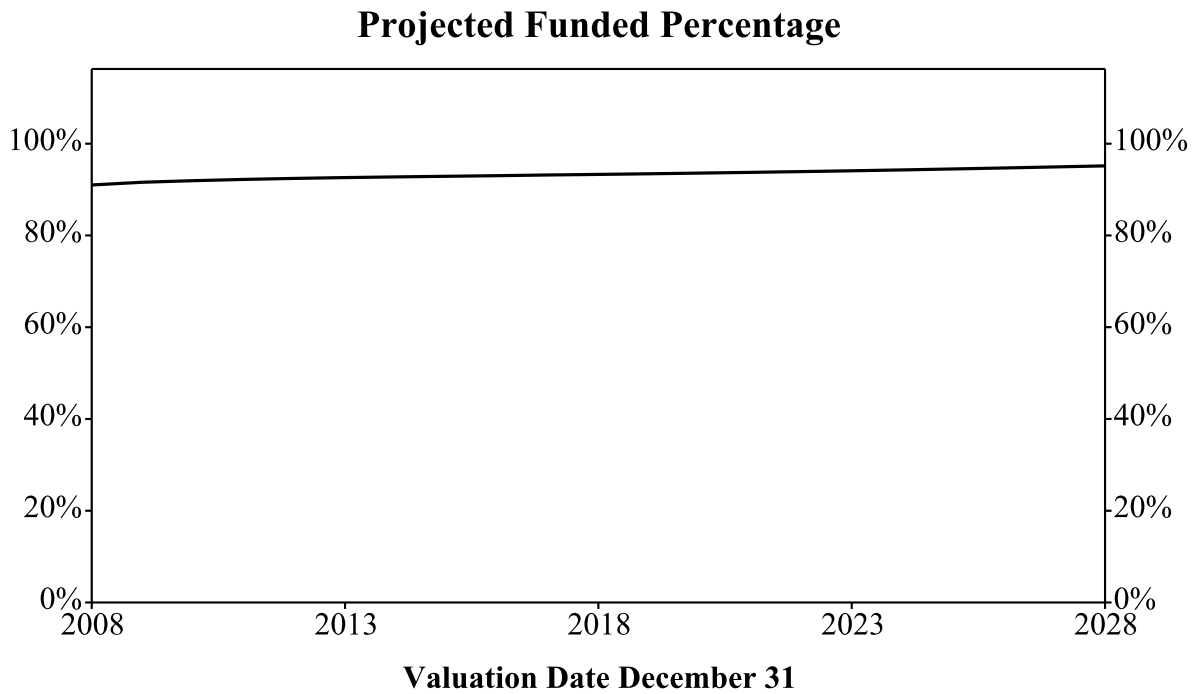
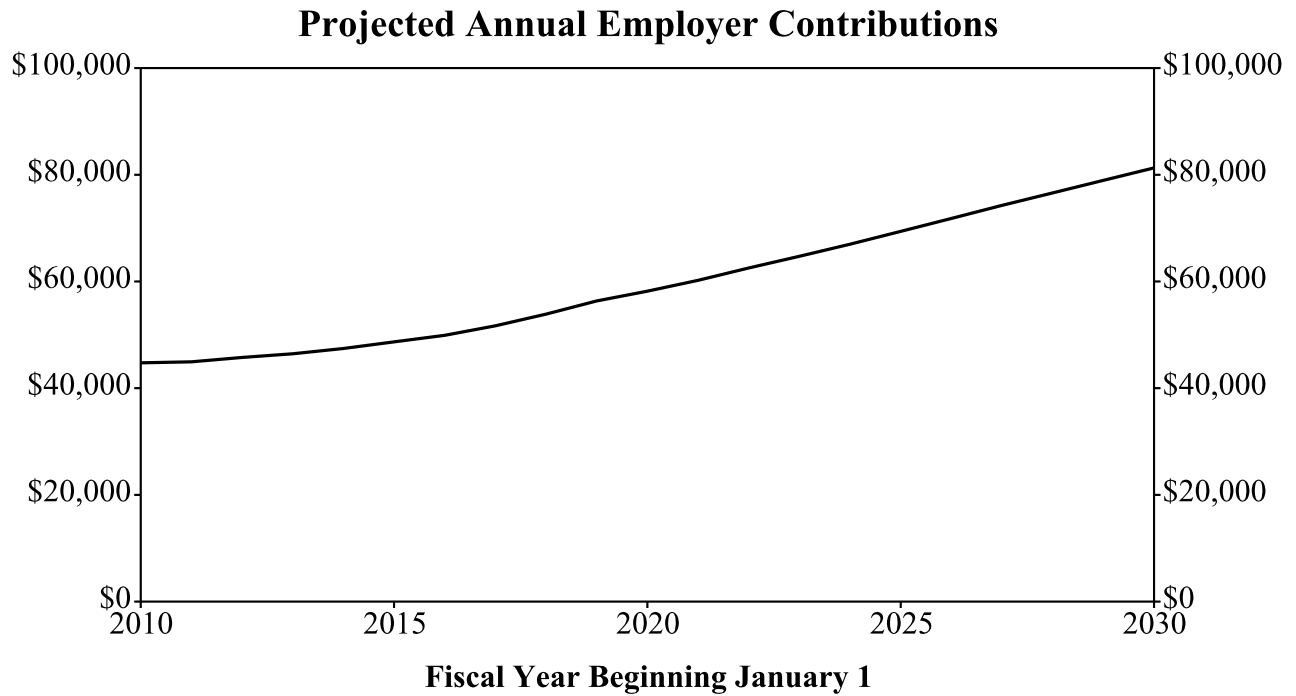
Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1994	5	\$ 264,660	10.11%	5.28%
1995	5	274,083	7.49%	5.41%
1996	4	206,565	7.36%	6.79%
1997	5	297,992	7.48%	7.48%
1998	5	315,294	8.20%	8.20%
1999	6	404,043	5.88%	5.88%
2000	6	416,485	6.42%	6.42%
2001	6	463,955	8.32%	8.32%
2002	6	485,039	9.59%	9.59%
2003	6	499,590	9.31%	9.31%
2004	6	514,577	9.76%	9.76%
2005	6	530,126	9.73%	9.73%
2006	6	543,266	9.35%	9.35%
2007	6	556,968	6.77%	6.77%
2008	6	508,408	8.06%	8.06%

**Notes:**

Adoption of Benefits B-3 and F55 (15 years) reflected in 1994 valuation.  
Adoption of 7.0% member contributions reflected in 1994 valuation.  
Actuarial assumptions were revised for the 1997 valuation.  
Adoption of 5.00% member contributions reflected in 1998 valuation.  
Adoption of 6.00% member contributions reflected in 1999 valuation.  
Adoption of 5.00% member contributions reflected in 2000 valuation.  
Adoption of Benefit V-6 reflected in 2000 valuation.  
Actuarial assumptions were revised for the 2000 valuation.  
Adoption of Benefit FAC-3, B-4 - 80% Maximum, 8.46% Member Contributions reflected in 2002 valuation.  
Actuarial assumptions were revised for the 2004 valuation.  
Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 19 - Cnstatnl Offcls**  
**Chart 17.5N**



Note: Please refer to page 222 for a discussion of the projection.



# Ingham County (3303)

## Division 19 - Cnstutnl Offcls

**Table 18N**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001									6
2002									6
2003									6
2004									6
2005									6
2006									6
2007									6
2008	(1)						1		6

**Table 19N**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001								0
2002								0
2003								0
2004								0
2005								0
2006								0
2007								0
2008								0

**Ingham County (3303)**  
**Division 19 - Cnstatnl Offcls**

**Table 20N**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001		\$	\$		\$	\$	7	\$ 96,192
2002							7	96,192
2003	3	20,866		(3)	(22,071)		7	94,987
2004							7	94,987
2005							7	94,987
2006							7	94,987
2007				(1)	(38,667)		6	56,320
2008	1	62,444					7	118,764

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

## Division 19 - Cnstutnl Offcls

**Table 21N**

### Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 27,281	\$ 23,198	\$ 108,386	\$ (96,192)	\$ 0	\$ 0	\$ 0	\$ 1,531,883
2002	31,140	41,034	48,880	(96,192)	0	0	0	1,556,745
2003	41,566	42,265	126,111	(92,008)	0	0	27,258	1,701,937
2004	49,348	43,533	116,716	(94,988)	0	0	13,089	1,829,635
2005	49,355	44,848	118,005	(94,988)	0	0	0	1,946,855
2006	53,023	45,961	157,153	(94,988)	0	0	0	2,108,004
2007	54,193	47,120	170,138	(69,210)	0	0	0	2,310,245
2008	53,650	48,543	118,077	(56,321)	0	0	7,880	2,482,074

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22N**

### Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 1,684,832	\$ 1,531,883	91%	\$ 152,949	33%
2002	1,941,581	1,556,745	80	384,836	79
2003	2,071,814	1,701,937	82	369,877	74
2004	2,227,203	1,829,635	82	397,568	77
2005	2,357,373	1,946,855	83	410,518	77
2006	2,482,842	2,108,004	85	374,838	69
2007	2,424,498	2,310,245	95	114,253	21
2008	2,714,577	2,482,074	91	232,503	46

# Ingham County (3303)

## Division 21 - FOP Shrf Deputies

### Table 160

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	5.74%	\$39,749
Amortization of Unfunded Accrued Liability (28 years)	<u>6.08</u>	<u>42,104</u>
Total Long Term Contribution	11.82	81,853
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>11.82%</b>	<b>\$81,853 *</b>

@ The above Employer contribution requirement is based on Member contributions of 10.96% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.86% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

**Increase in Actuarial Accrued Liabilities: \$364,901**

**Increase in Computed Long Term  
Employer Contribution As a Percentage  
of Active Member Payroll**

**Normal Cost: 0.47%**

**Amortization Payment: 0.27%**

**Total: 0.74%**

**Please see the Comments on the Investment Markets on page 3.**

# Ingham County (3303)

## Division 21 - FOP Shrf Deputies

### Table 170

#### Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1994	138	\$ 4,908,359	8.69%	4.54%
1995	146	5,180,610	8.56%	6.19%
1996	153	5,176,592	8.10%	7.47%
1997	143	4,952,121	8.84%	8.84%
1998	144	6,128,303	9.38%	9.38%
1999	152	5,940,955	7.73%	7.73%
2000	154	6,160,326	6.96%	6.96%
2001	154	6,621,982	8.54%	8.54%
2002	153	6,686,427	9.44%	9.44%
2003	150	6,791,675	9.68%	9.68%
2004	159	7,496,129	10.33%	10.33%
2005	150	7,540,833	10.75%	10.75%
2006	154	7,614,243	10.15%	10.15%
2007	154	8,214,896	10.36%	10.36%
2008	150	8,309,954	11.82%	11.82%

Notes:

Adoption of Benefit 3.2% multiplier and 10.43% member contributions reflected in 1997 valuation.

Actuarial assumptions were revised for the 1997 valuation.

Adoption of 10.43% member contributions reflected in 1998 valuation.

Actuarial assumptions were revised for the 2000 valuation.

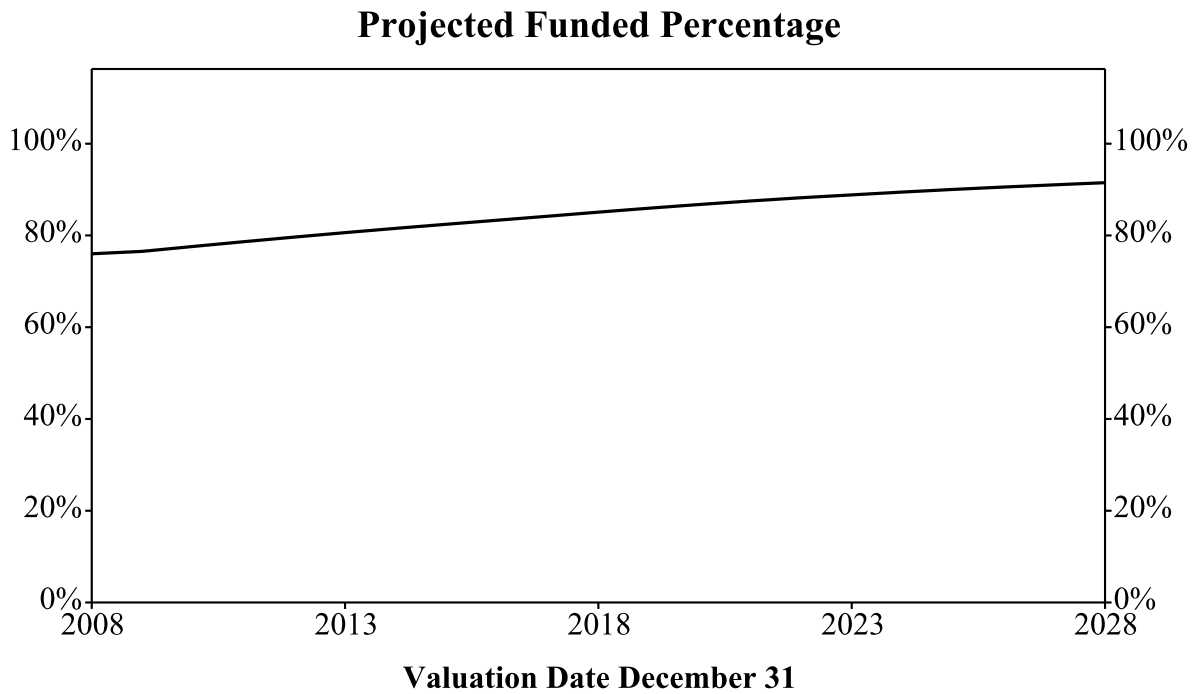
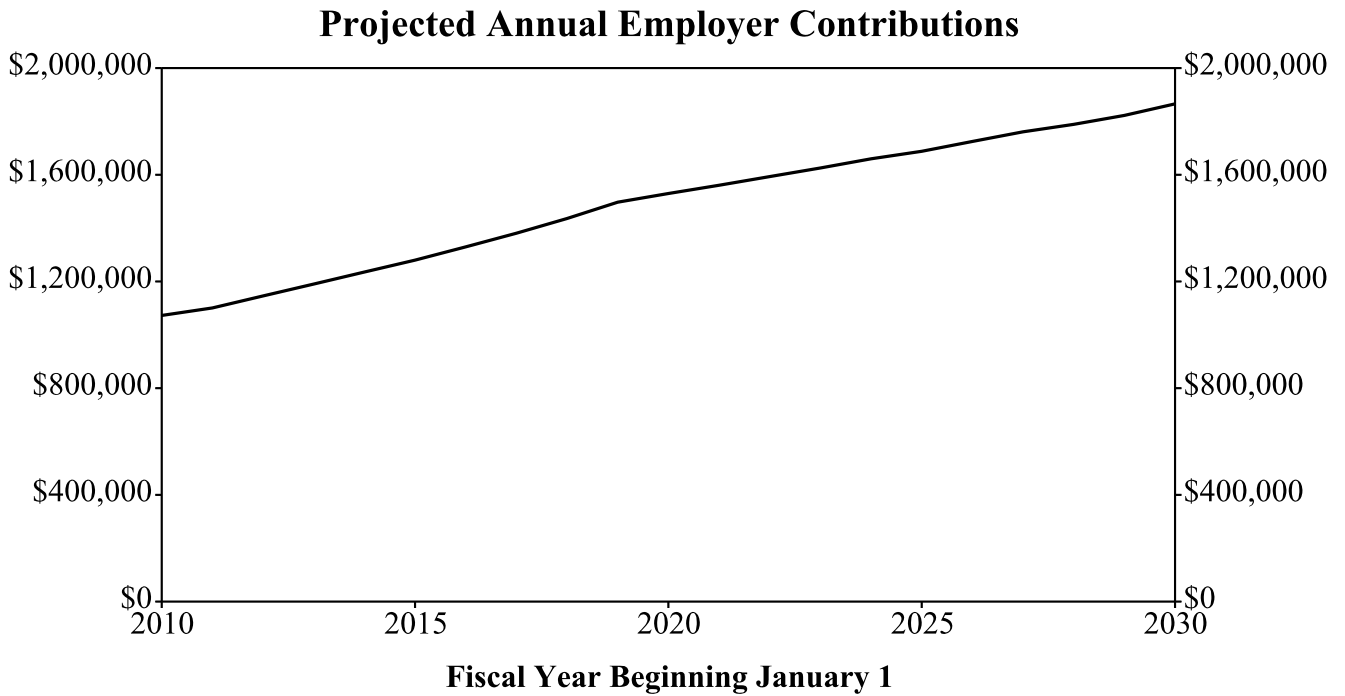
Adoption of Benefit F/N(25), 10.96% Member Contributions reflected in 2001 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 21 - FOP Shrf Deputies**  
**Chart 17.50**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 21 - FOP Shrf Deputies

**Table 18O**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001	(5)			(2)	(4)	(2)		13	154
2002	(4)	(1)		(2)	(8)	(3)		17	153
2003	(1)				(9)	(3)		10	150
2004		(1)		(2)			1	11	159
2005	(3)			(4)	(9)	(2)		9	150
2006				(3)	(8)	(2)		17	154
2007	(3)			(1)	(4)	(3)		11	154
2008	(5)				(2)	(2)	1	4	150

**Table 19O**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001	(1)			(2)		7	5	20
2002				(3)	(1)		2	18
2003				(1)				17
2004	(1)			(3)			2	15
2005				(1)			5	19
2006							5	24
2007	(2)			(3)			1	20
2008	(1)			(1)				18

# Ingham County (3303)

## Division 21 - FOP Shrf Deputies

**Table 200**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001	7	\$ 179,878	\$ 1,077		\$	\$ (1,720)	57	\$ 1,089,816
2002	5	142,874		(2)	(13,679)	(1,917)	60	1,217,094
2003	9	110,616	4,812	(1)	(15,022)	(18,160)	68	1,299,340
2004	2	44,042	2,153	(1)	(1,436)	(3,355)	69	1,340,744
2005	3	89,101	1,720	(2)	(12,557)	(9,724)	70	1,409,284
2006	2	21,477		(2)	(23,803)		70	1,406,958
2007	5	136,875		(1)	(21,967)		74	1,521,866
2008	7	226,528		(2)	(22,449)	(1,165)	79	1,724,780

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.



# Ingham County (3303)

## Division 21 - FOP Shrf Deputies

**Table 210**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 519,780	\$ 735,558	\$ 1,406,277	\$ (1,058,811)	\$ (84,300)	\$ (22,913)	\$ 149,858	\$ 19,266,850
2002	489,336	760,140	653,931	(1,213,814)	(85,751)	(138,170)	0	19,732,522
2003	596,429	766,122	1,581,967	(1,269,865)	(131,925)	(100,198)	170,545	21,345,597
2004	699,771	813,324	1,474,961	(1,330,217)	(33,890)	(2,441)	33,950	23,001,055
2005	762,886	866,539	1,498,102	(1,389,128)	(132,827)	(70,025)	0	24,536,602
2006	782,684	832,996	1,969,322	(1,408,566)	(127,783)	(154,506)	0	26,430,749
2007	993,113	1,014,616	2,141,870	(1,424,372)	(39,573)	(310,116)	0	28,806,287
2008	860,431	931,505	1,377,117	(1,679,095)	(81,694)	(330,031)	59,399	29,943,919

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 220**  
**Actuarial Accrued Liabilities - Comparative Schedule**

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 24,125,583	\$ 19,266,850	80%	\$ 4,858,733	73%
2002	25,762,655	19,732,522	77	6,030,133	90
2003	27,812,580	21,345,597	77	6,466,983	95
2004	30,508,710	23,001,055	75	7,507,655	100
2005	32,791,299	24,536,602	75	8,254,697	109
2006	33,808,876	26,430,749	78	7,378,127	97
2007	36,847,372	28,806,287	78	8,041,085	98
2008	39,475,086	29,943,919	76	9,531,167	115

# Ingham County (3303)

## Division 40 - ICEA Unit 111

### Table 16P

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	5.37%	\$6,100
Amortization of Unfunded Accrued Liability (28 years)	<u>0.21</u>	<u>239</u>
Total Long Term Contribution	5.58	6,339
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>5.58%</b>	<b>\$6,339 *</b>

@ The above Employer contribution requirement is based on Member contributions of 3.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.80% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$8,536</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.19)%</b>
<b>Amortization Payment:</b>	<b>0.03%</b>
<b>Total:</b>	<b>(0.16)%</b>

**Please see the Comments on the Investment Markets on page 3.**

**Ingham County (3303)****Division 40 - ICEA Unit 111****Table 17P****Computed Employer Contributions - Comparative Statement**

<b>Valuation Date December 31,</b>	<b>Active Members</b>		<b>Employer Contribution</b>	
	<b>Number</b>	<b>Annual Payroll</b>	<b>Regular Contribution</b>	<b>Minimum Required Contribution</b>
1994	59	\$ 1,491,914	6.62%	3.46%
1995	38	901,078	6.60%	4.77%
1996	41	979,006	5.74%	5.29%
1997	35	920,331	5.56%	5.56%
1998	35	997,054	5.12%	5.12%
1999	28	755,810	1.97%	1.96%
2000	25	736,550	2.41%	2.39%
2001	22	657,455	3.87%	3.87%
2002	28	828,543	6.45%	6.45%
2003	32	960,275	7.23%	7.23%
2004	21	676,951	4.89%	4.89%
2005	26	794,985	5.84%	5.84%
2006	39	1,357,787	5.45%	5.45%
2007	39	1,459,015	5.45%	5.45%
2008	36	1,363,097	5.58%	5.58%

**Notes:**

Adoption of Benefit E reflected in 1994 valuation.

Actuarial assumptions were revised for the 1997 valuation.

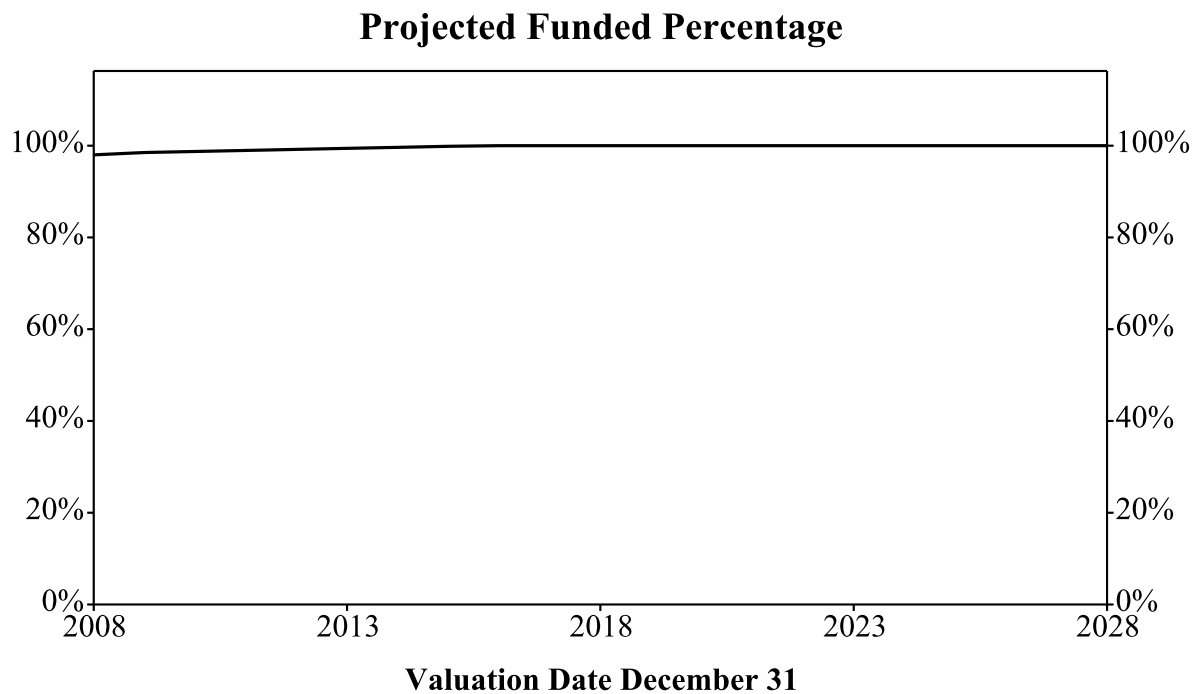
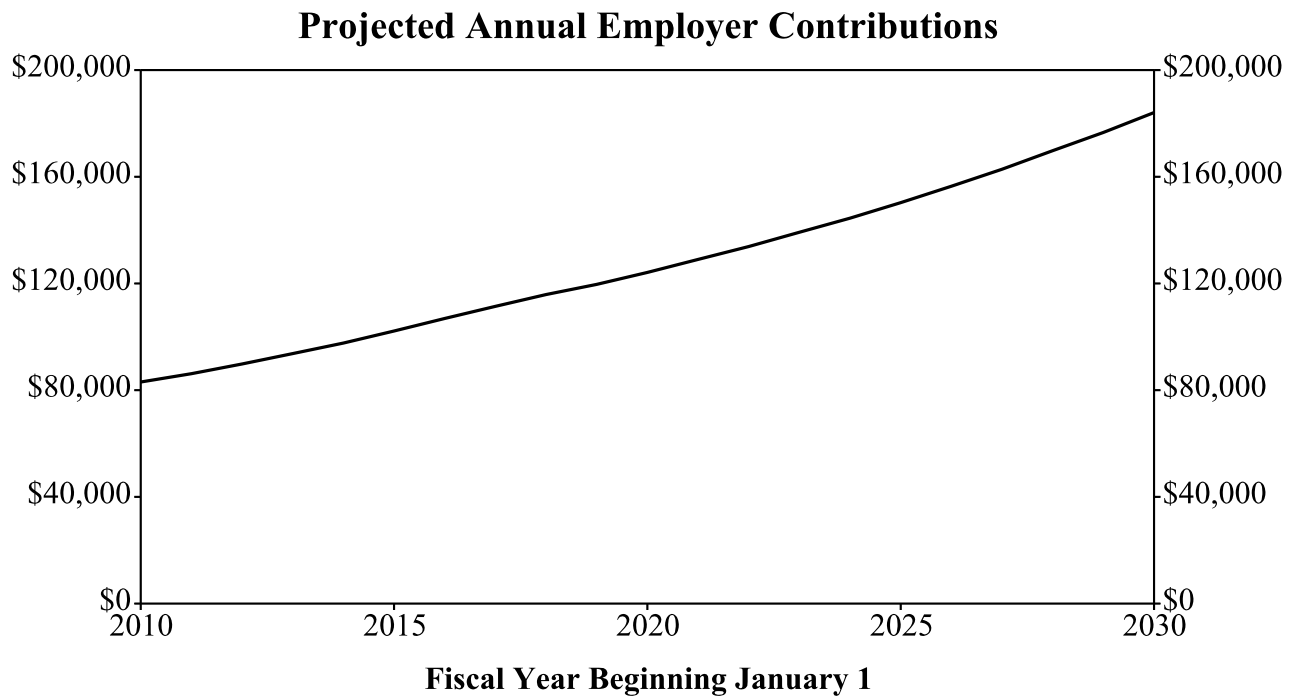
Actuarial assumptions were revised for the 2000 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 40 - ICEA Unit 111**  
**Chart 17.5P**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 40 - ICEA Unit 111

**Table 18P**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001	(3)				(2)			2	22
2002					(5)		2	9	28
2003					(7)			11	32
2004				(1)	(11)	(4)	1	4	21
2005	(1)				(5)	(1)	1	11	26
2006				(1)	(5)		3	16	39
2007					(11)	(5)	4	12	39
2008	(1)			(1)	(9)	(1)		9	36

**Table 19P**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001	(1)			(1)			2	7
2002				(2)				5
2003							1	6
2004				(1)			1	6
2005								6
2006							1	7
2007	(1)			(1)				5
2008							1	6

# Ingham County (3303)

## Division 40 - ICEA Unit 111

**Table 20P**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001	4	\$ 32,213	\$		\$	\$ (3,356)	27	\$ 231,422
2002							27	231,422
2003						(4,101)	27	227,321
2004	1	3,251		(1)	(10,404)	(3,924)	27	216,244
2005	1	14,105					28	230,349
2006				(2)	(9,888)	(894)	26	219,567
2007	1	9,916		(1)	(8,274)	(943)	26	220,266
2008	1	16,977				(3,203)	27	234,040

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

## Division 40 - ICEA Unit 111

**Table 21P**

### Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 14,296	\$ 21,972	\$ 210,472	\$ (221,381)	\$ (2,005)	\$ (3,660)	\$ 3,352	\$ 3,029,975
2002	18,721	23,034	63,748	(231,855)	(6,725)	0	15,105	2,912,003
2003	37,442	28,333	187,213	(231,423)	(4,180)	(321)	0	2,929,067
2004	56,422	25,268	181,907	(220,028)	(9,956)	(21,610)	0	2,941,070
2005	60,953	25,324	179,635	(216,470)	(13,060)	(1,662)	534	2,976,324
2006	58,947	36,366	235,463	(223,758)	(2,535)	0	24,099	3,104,906
2007	90,262	46,879	249,838	(213,048)	(18,977)	(200,491)	0	3,059,369
2008	78,292	45,255	123,531	(217,862)	(6,764)	(50,772)	0	3,031,049

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22P**

### Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 2,918,874	\$ 3,029,975	104%	\$ (111,101)	0%
2002	3,007,746	2,912,003	97	95,743	12
2003	3,152,237	2,929,067	93	223,170	23
2004	2,905,808	2,941,070	101	(35,262)	0
2005	3,002,506	2,976,324	99	26,182	3
2006	3,134,080	3,104,906	99	29,174	2
2007	3,032,270	3,059,369	101	(27,099)	0
2008	3,083,525	3,031,049	98	52,476	4

# Ingham County (3303)

## Division 41 - MCF Management

### Table 16Q

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	8.99%	\$9,031
Amortization of Unfunded Accrued Liability (28 years)	<u>1.12</u>	<u>1,125</u>
Total Long Term Contribution	10.11	10,156
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>10.11%</b>	<b>\$10,156 *</b>

@ The above Employer contribution requirement is based on Member contributions of 0.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.90% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$(1,923)</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.18)%</b>
<b>Amortization Payment:</b>	<b>(0.01)%</b>
<b>Total:</b>	<b>(0.19)%</b>

**Please see the Comments on the Investment Markets on page 3.**



**Ingham County (3303)****Division 41 - MCF Management****Table 17Q****Computed Employer Contributions - Comparative Statement**

<b>Valuation Date December 31,</b>	<b>Active Members</b>		<b>Employer Contribution</b>	
	<b>Number</b>	<b>Annual Payroll</b>	<b>Regular Contribution</b>	<b>Minimum Required Contribution</b>
1994	13	\$ 541,500	10.95%	5.72%
1995	11	293,628	11.28%	8.14%
1996	12	487,427	11.75%	10.84%
1997	15	512,335	11.64%	11.64%
1998	13	545,506	11.03%	11.03%
1999	22	845,543	9.48%	9.48%
2000	19	781,285	7.86%	7.86%
2001	18	763,973	8.14%	8.14%
2002	18	782,621	9.23%	9.23%
2003	19	761,154	9.07%	9.07%
2004	20	910,868	9.28%	9.28%
2005	22	1,001,112	9.63%	9.63%
2006	23	1,099,133	9.50%	9.50%
2007	22	1,103,262	9.72%	9.72%
2008	22	1,205,473	10.11%	10.11%

**Notes:**

Adoption of Benefit E reflected in 1994 valuation.

Actuarial assumptions were revised for the 1997 valuation.

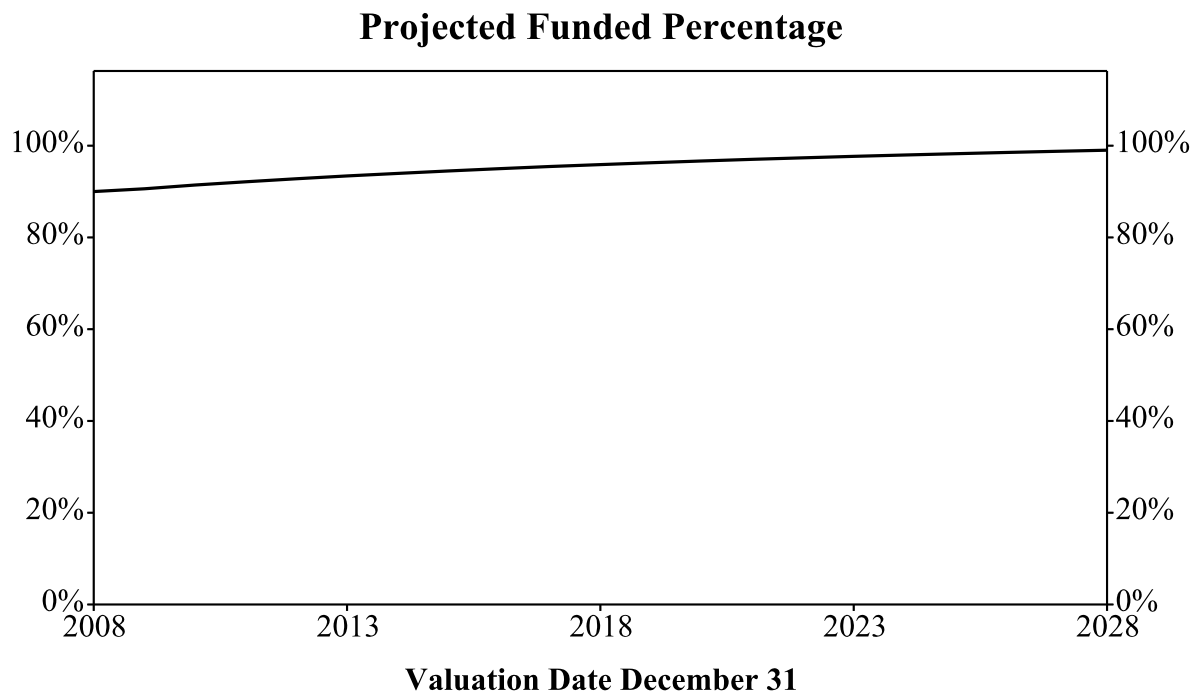
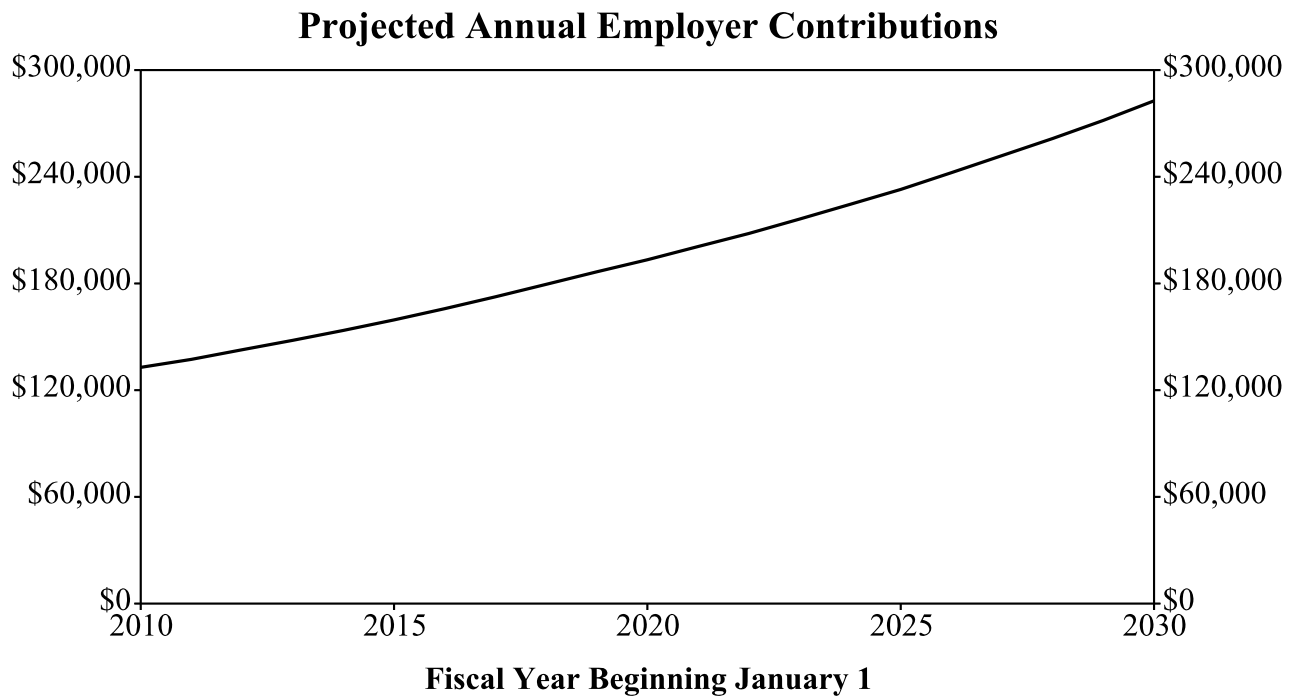
Actuarial assumptions were revised for the 2000 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 41 - MCF Management**  
**Chart 17.5Q**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 41 - MCF Management

**Table 18Q**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001				(3)	(4)			6	18
2002					(3)			3	18
2003					(3)	(1)	2	3	19
2004				(1)	(2)		2	2	20
2005				(1)	(2)		2	3	22
2006					(2)			3	23
2007	(1)			(3)	(1)	(1)	1	4	22
2008									22

**Table 19Q**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001							3	10
2002								10
2003	(1)	(1)						8
2004							2	10
2005	(1)						1	10
2006								10
2007							3	13
2008								13

# Ingham County (3303)

## Division 41 - MCF Management

**Table 20Q**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001		\$	\$		\$	\$	8	\$ 52,672
2002							8	52,672
2003	1	4,267					9	56,939
2004							9	56,939
2005	1	7,282					10	64,221
2006							10	64,221
2007	1	7,362					11	71,583
2008						(1,335)	11	70,248

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

## Division 41 - MCF Management

**Table 21Q**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 79,895	\$ 0	\$ 89,535	\$ (52,922)	\$ (649)	\$ 0	\$ 1,022	\$ 1,227,752
2002	64,333	88	46,962	(52,672)	(65)	0	238	1,286,636
2003	71,663	149	114,743	(57,295)	0	(14,538)	28,627	1,429,985
2004	77,574	0	101,983	(56,939)	0	0	23,263	1,575,866
2005	90,036	178	105,328	(63,615)	(3,220)	0	28,590	1,733,163
2006	97,557	0	141,324	(64,221)	0	(54)	0	1,907,769
2007	115,615	563	156,636	(68,516)	0	0	595	2,112,662
2008	115,063	0	105,710	(70,902)	0	(50)	0	2,262,483

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22Q**  
**Actuarial Accrued Liabilities - Comparative Schedule**

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 1,172,178	\$ 1,227,752	105%	\$ (55,574)	0%
2002	1,307,854	1,286,636	98	21,218	3
2003	1,466,476	1,429,985	98	36,491	5
2004	1,681,884	1,575,866	94	106,018	12
2005	1,870,787	1,733,163	93	137,624	14
2006	2,047,129	1,907,769	93	139,360	13
2007	2,223,290	2,112,662	95	110,628	10
2008	2,514,624	2,262,483	90	252,141	21

# Ingham County (3303)

## Division 42 - ICEA Unit 11

### Table 16R

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	6.00%	\$5,607
Amortization of Unfunded Accrued Liability (28 years)	<u>1.40</u>	<u>1,308</u>
Total Long Term Contribution	7.40	6,915
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>7.40%</b>	<b>\$6,915 *</b>

@ The above Employer contribution requirement is based on Member contributions of 3.95% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.87% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$(6,221)</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.10)%</b>
<b>Amortization Payment:</b>	<b>(0.04)%</b>
<b>Total:</b>	<b>(0.14)%</b>

**Please see the Comments on the Investment Markets on page 3.**

# Ingham County (3303)

## Division 42 - ICEA Unit 11

**Table 17R**

### Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1995	14	\$ 427,567	5.59%	4.03%
1996	11	285,375	6.08%	5.60%
1997	16	376,839	5.52%	5.52%
1998	8	264,468	7.13%	7.13%
1999	9	318,233	7.12%	7.12%
2000	9	330,997	6.82%	6.81%
2001	9	381,171	8.67%	8.22%
2002	10	382,838	8.69%	8.46%
2003	9	346,899	8.51%	8.51%
2004	12	486,936	8.82%	8.82%
2005	11	514,686	8.53%	8.53%
2006	6	314,901	11.52%	11.52%
2007	14	697,841	9.09%	9.09%
2008	22	1,121,337	7.40%	7.40%

**Notes:**

Adoption of Benefit FAC-3 reflected in 1996 valuation.

Adoption of 3.95% member contributions reflected in 1996 valuation.

Actuarial assumptions were revised for the 1997 valuation.

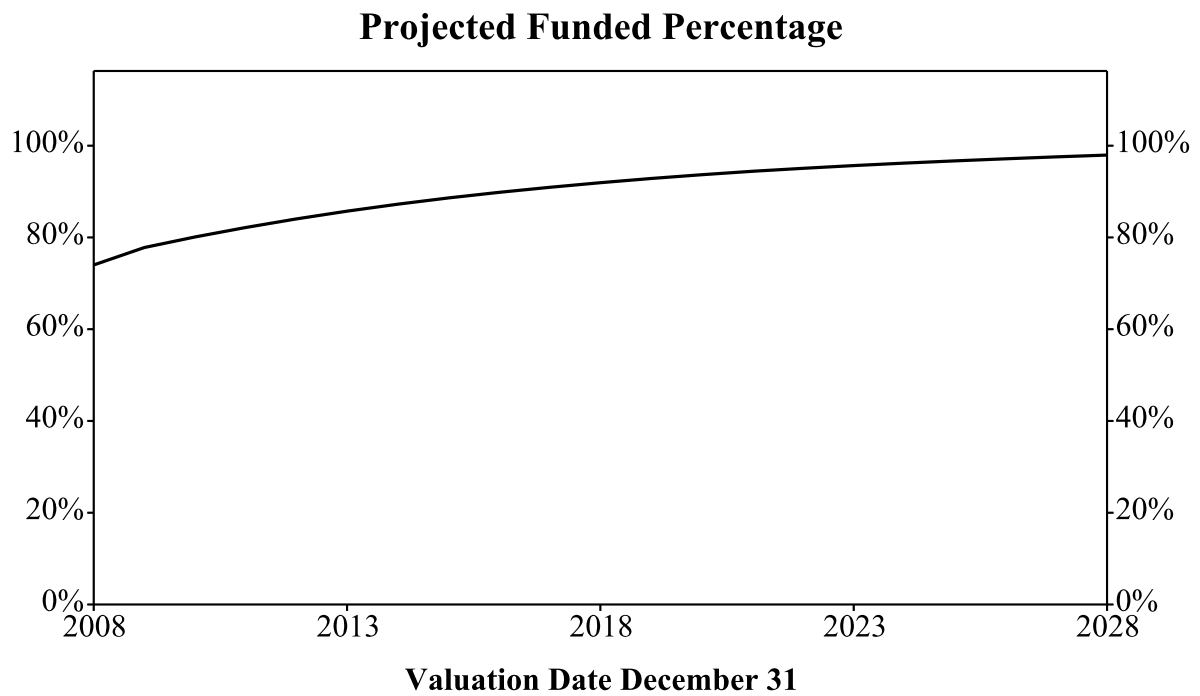
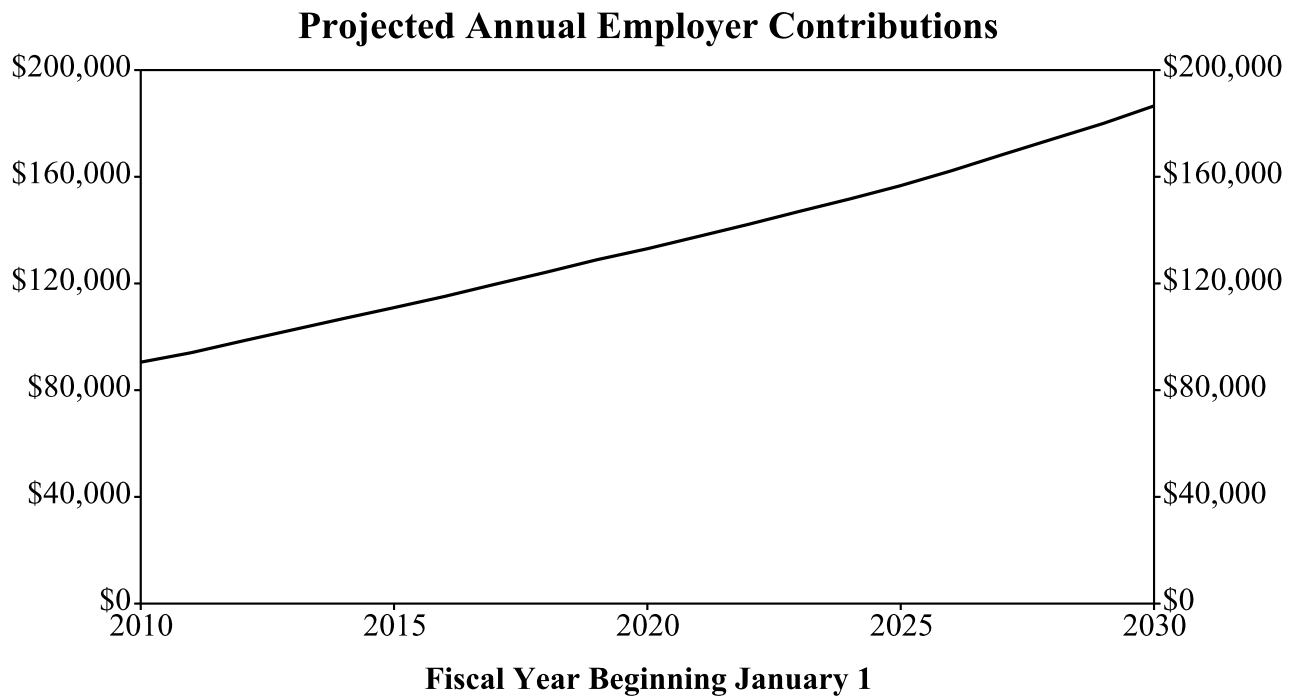
Actuarial assumptions were revised for the 2000 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 42 - ICEA Unit 11**  
**Chart 17.5R**



Note: Please refer to page 222 for a discussion of the projection.



# Ingham County (3303)

## Division 42 - ICEA Unit 11

**Table 18R**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001					(2)			2	9
2002								1	10
2003					(1)	(1)		1	9
2004					(2)		1	4	12
2005	(2)				(1)	(1)		3	11
2006	(2)			(1)	(3)			1	6
2007							1	7	14
2008					(3)		1	10	22

**Table 19R**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001	(1)			(1)			1	4
2002				(2)				2
2003								2
2004		(1)						1
2005								1
2006							1	2
2007								2
2008	(1)							1

# Ingham County (3303)

## Division 42 - ICEA Unit 11

**Table 20R**

### Flow of Retirees and Beneficiaries

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001	1	\$ 10,146	\$		\$	\$	1	\$ 10,146
2002							1	10,146
2003							1	10,146
2004							1	10,146
2005	2	9,342					3	19,488
2006	2	46,264				(728)	5	65,024
2007			925				5	65,949
2008	1	3,252					6	69,201

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

## Division 42 - ICEA Unit 11

**Table 21R**

### Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 27,140	\$ 14,818	\$ 24,862	\$ (10,146)	\$ (1,866)	\$ (757)	\$ 44	\$ 336,159
2002	26,108	14,918	19,124	(10,146)	(80)	(238)	0	385,845
2003	30,627	13,582	30,571	(10,146)	(684)	(36,780)	0	413,015
2004	39,929	17,175	40,555	(10,146)	(7,887)	0	66,579	559,220
2005	48,848	23,125	37,851	(15,657)	0	(26,066)	0	627,321
2006	47,654	21,692	51,902	(19,488)	(4,747)	0	604	724,938
2007	40,196	18,651	57,615	(66,434)	0	(155)	155	774,966
2008	109,550	38,076	55,842	(68,929)	(1,536)	0	20,131	928,100

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22R**

### Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 458,069	\$ 336,159	73%	\$ 121,910	32%
2002	499,413	385,845	77	113,568	30
2003	536,965	413,015	77	123,950	36
2004	778,753	559,220	72	219,533	45
2005	862,237	627,321	73	234,916	46
2006	1,042,417	724,938	70	317,479	101
2007	1,146,704	774,966	68	371,738	53
2008	1,247,456	928,100	74	319,356	28

# Ingham County (3303)

## Division 43 - ICEA Unit 1

### Table 16S

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	5.71%	\$2,686
Amortization of Unfunded Accrued Liability (28 years)	<u>2.20</u>	<u>1,035</u>
Total Long Term Contribution	7.91	3,721
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>7.91%</b>	<b>\$3,721 *</b>

@ The above Employer contribution requirement is based on Member contributions of 3.51% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.89% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$(5,450)</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.12)%</b>
<b>Amortization Payment:</b>	<b>(0.06)%</b>
<b>Total:</b>	<b>(0.18)%</b>

**Please see the Comments on the Investment Markets on page 3.**

# Ingham County (3303)

## Division 43 - ICEA Unit 1

Table 17S

### Computed Employer Contributions - Comparative Statement

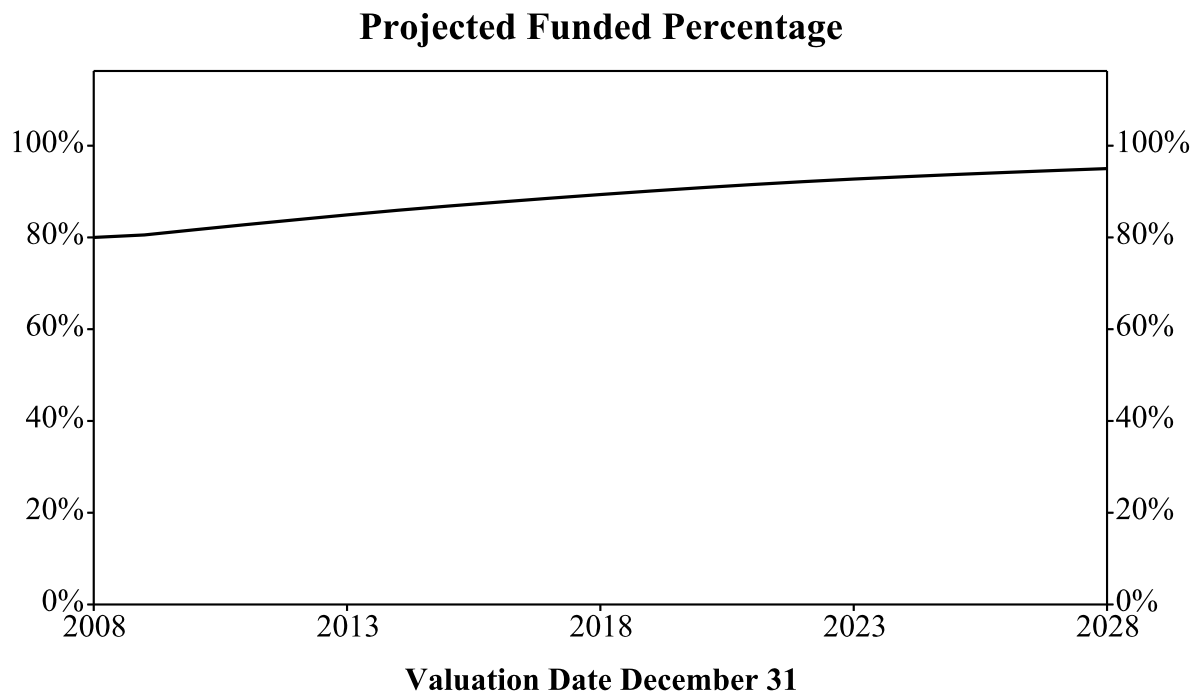
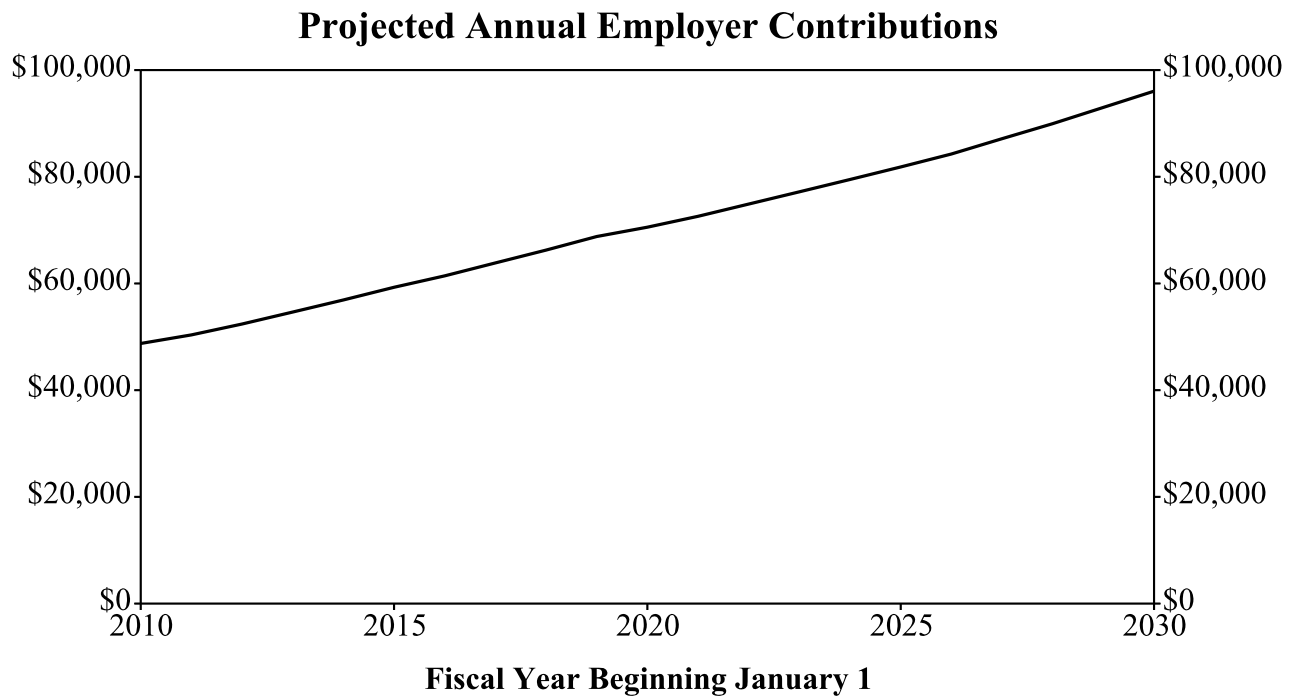
Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1995	8	\$ 313,942	7.53%	5.44%
1996	12	432,683	8.84%	8.15%
1997	9	323,039	10.39%	10.39%
1998	6	253,946	11.99%	11.99%
1999	5	211,746	12.18%	12.18%
2000	7	243,297	12.55%	12.55%
2001	9	299,551	12.45%	11.63%
2002	6	233,997	15.04%	14.63%
2003	6	222,356	16.39%	16.39%
2004	9	292,294	11.66%	11.66%
2005	10	346,063	8.05%	8.05%
2006	9	356,184	7.40%	7.40%
2007	12	485,721	7.73%	7.73%
2008	13	564,417	7.91%	7.91%

Notes:

Actuarial assumptions were revised for the 1997 valuation.  
Adoption of 3.50% member contributions reflected in 1998 valuation.  
Actuarial assumptions were revised for the 2000 valuation.  
Adoption of 3.51% Member Contributions reflected in 2003 valuation.  
Actuarial assumptions were revised for the 2004 valuation.  
Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 43 - ICEA Unit 1**  
**Chart 17.5S**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 43 - ICEA Unit 1

**Table 18S**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001					(1)			3	9
2002					(2)	(1)			6
2003					(1)	(1)		2	6
2004					(1)	(1)	2	3	9
2005				(1)		(1)	1	2	10
2006					(1)	(1)		1	9
2007					(2)	(1)	4	2	12
2008	(1)			(1)			2	1	13

**Table 19S**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001				(2)				3
2002								3
2003								3
2004								3
2005							1	4
2006								4
2007								4
2008							2	6

**Ingham County (3303)**  
**Division 43 - ICEA Unit 1**

**Table 20S**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001		\$	\$		\$	\$	5	\$ 67,200
2002						(2,486)	5	64,714
2003							5	64,714
2004							5	64,714
2005				(1)	(19,900)	(1,855)	4	42,959
2006						(1,942)	4	41,017
2007							4	41,017
2008	1	8,751					5	49,768

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.



# Ingham County (3303)

## Division 43 - ICEA Unit 1

**Table 21S**

### Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 34,066	\$ 9,884	\$ 40,727	\$ (67,200)	\$ (9,791)	\$ (1,476)	\$ 1,476	\$ 587,407
2002	35,461	9,905	14,187	(66,371)	(2,323)	(5,918)	4,356	576,704
2003	24,835	7,488	27,909	(64,714)	0	(33,739)	0	538,483
2004	47,852	11,515	25,234	(64,714)	(1,156)	(67,860)	0	489,354
2005	60,617	13,034	31,499	(59,739)	0	(496)	0	534,269
2006	43,731	13,295	42,292	(43,578)	0	(9,031)	0	580,978
2007	31,522	13,925	44,174	(42,151)	(4,245)	0	210,633	834,836
2008	45,544	19,888	43,123	(48,310)	(2,966)	0	30,691	922,806

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22S**

### Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 961,401	\$ 587,407	61%	\$ 373,994	125%
2002	1,000,555	576,704	58	423,851	181
2003	957,592	538,483	56	419,109	188
2004	830,135	489,354	59	340,781	117
2005	709,607	534,269	75	175,338	51
2006	715,421	580,978	81	134,443	38
2007	1,033,397	834,836	81	198,561	41
2008	1,158,849	922,806	80	236,043	42

# Ingham County (3303)

## Division 44 - MCF Exec Mgr

**Table 16T**

### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	16.84%	\$1,814
Amortization of Unfunded Accrued Liability (28 years)	<u>2.67</u>	<u>288</u>
Total Long Term Contribution	19.51	2,102
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>19.51%</b>	<b>\$2,102 *</b>

@ The above Employer contribution requirement is based on Member contributions of 0.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.77% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$769</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.36)%</b>
<b>Amortization Payment:</b>	<b>0.01%</b>
<b>Total:</b>	<b>(0.35)%</b>

**Please see the Comments on the Investment Markets on page 3.**

# Ingham County (3303)

## Division 44 - MCF Exec Mgr

**Table 17T**

### Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution
	Number	Annual Payroll	
2003	1	\$ 108,383	23.01%
2004	1	107,468	20.86%
2005	1	116,476	20.75%
2006	1	119,043	20.35%
2007	1	123,882	20.06%
2008	1	129,277	19.51%

Notes:

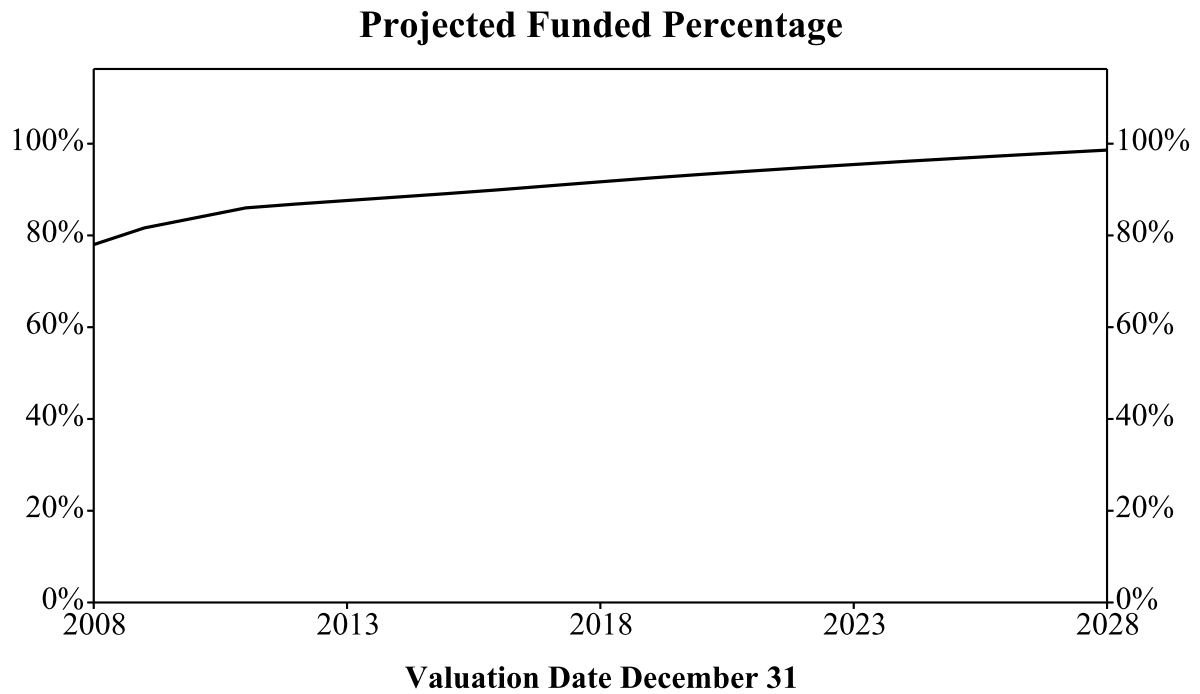
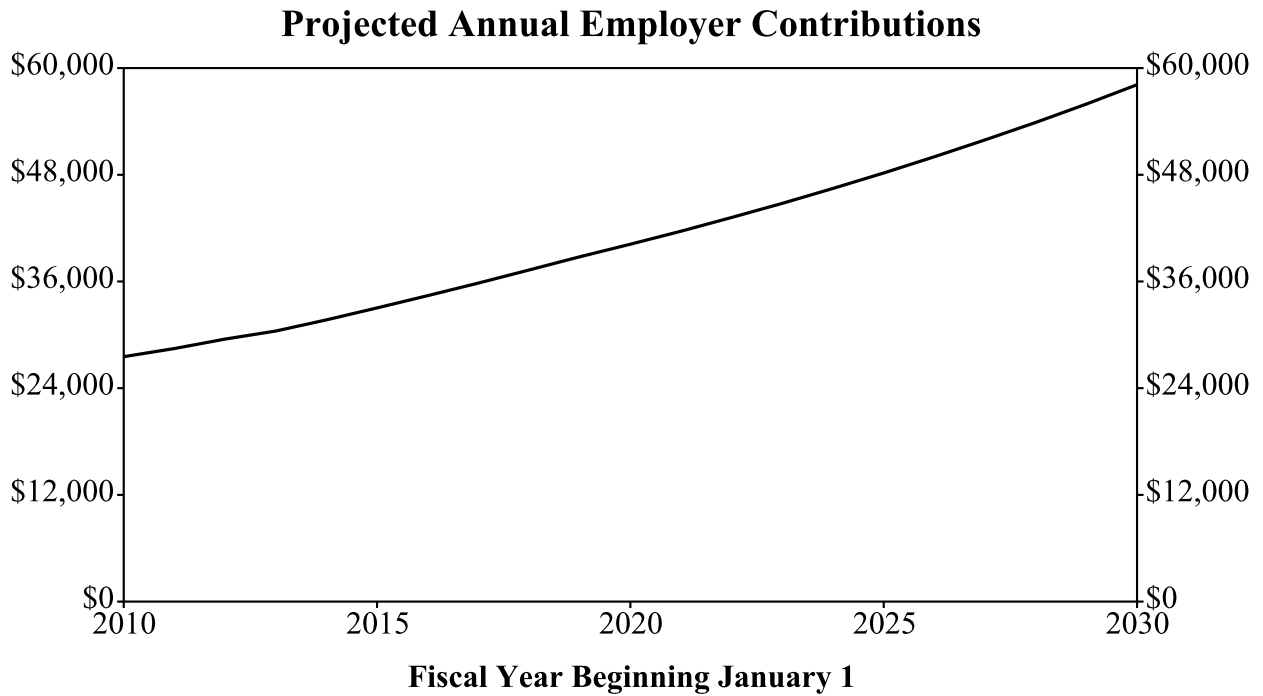
Adoption of Benefit V-6, F55(15), FAC-3, B-4 - 80% Maximum, E-2 (2.5%), Normal Retirement: 60, 0.00% Member Contributions reflected in 2003 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 44 - MCF Exec Mgr**  
**Chart 17.5T**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 44 - MCF Exec Mgr

**Table 18T**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2003							1		1
2004									1
2005									1
2006									1
2007									1
2008									1

**Table 19T**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2003								0
2004								0
2005								0
2006								0
2007								0
2008								0

# Ingham County (3303)

## Division 44 - MCF Exec Mgr

**Table 20T**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2003		\$	\$		\$	\$	0	\$ 0
2004							0	0
2005							0	0
2006							0	0
2007							0	0
2008							0	0

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

## Division 44 - MCF Exec Mgr

**Table 21T**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2003	\$ 1,647	\$ 0	\$ 8,085	\$ 0	\$ 0	\$ 0	\$ 56,751	\$ 66,483
2004	22,557	0	5,936	0	0	0	0	94,976
2005	26,801	0	7,136	0	0	0	0	128,913
2006	24,832	0	10,659	0	0	0	0	164,404
2007	25,706	0	12,696	0	0	0	0	202,806
2008	26,308	0	12,976	0	0	0	0	242,090

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22T**  
**Actuarial Accrued Liabilities - Comparative Schedule**

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2003	\$ 162,962	\$ 66,483	41%	\$ 96,479	89%
2004	175,405	94,976	54	80,429	75
2005	211,238	128,913	61	82,325	71
2006	238,051	164,404	69	73,647	62
2007	270,934	202,806	75	68,128	55
2008	308,771	242,090	78	66,681	52

# Ingham County (3303)

## Division 90 - Asst Pros Attnys

### Table 16U

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	9.82%	\$17,708
Amortization of Unfunded Accrued Liability (28 years)	<u>3.92</u>	<u>7,069</u>
Total Long Term Contribution	13.74	24,777
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>13.74%</b>	<b>\$24,777 *</b>

@ The above Employer contribution requirement is based on Member contributions of 1.40% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.91% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$2,558</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.33)%</b>
<b>Amortization Payment:</b>	<b>(0.02)%</b>
<b>Total:</b>	<b>(0.35)%</b>

**Please see the Comments on the Investment Markets on page 3.**



# Ingham County (3303)

## Division 90 - Asst Pros Attnys

Table 17U

### Computed Employer Contributions - Comparative Statement

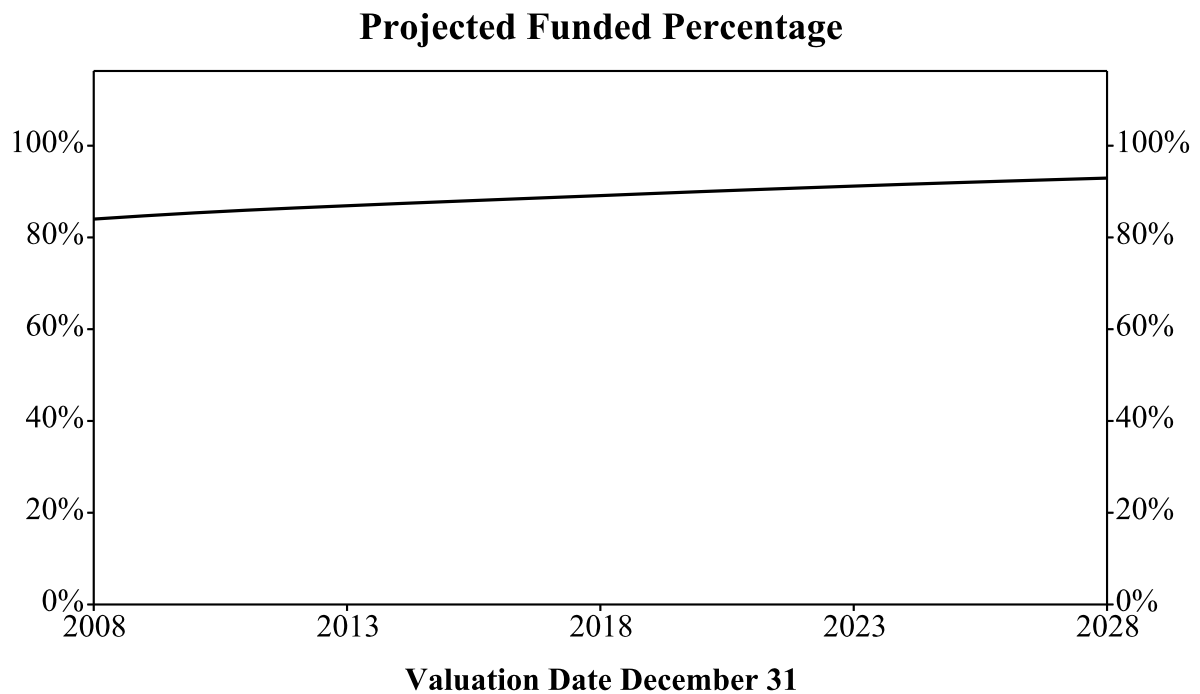
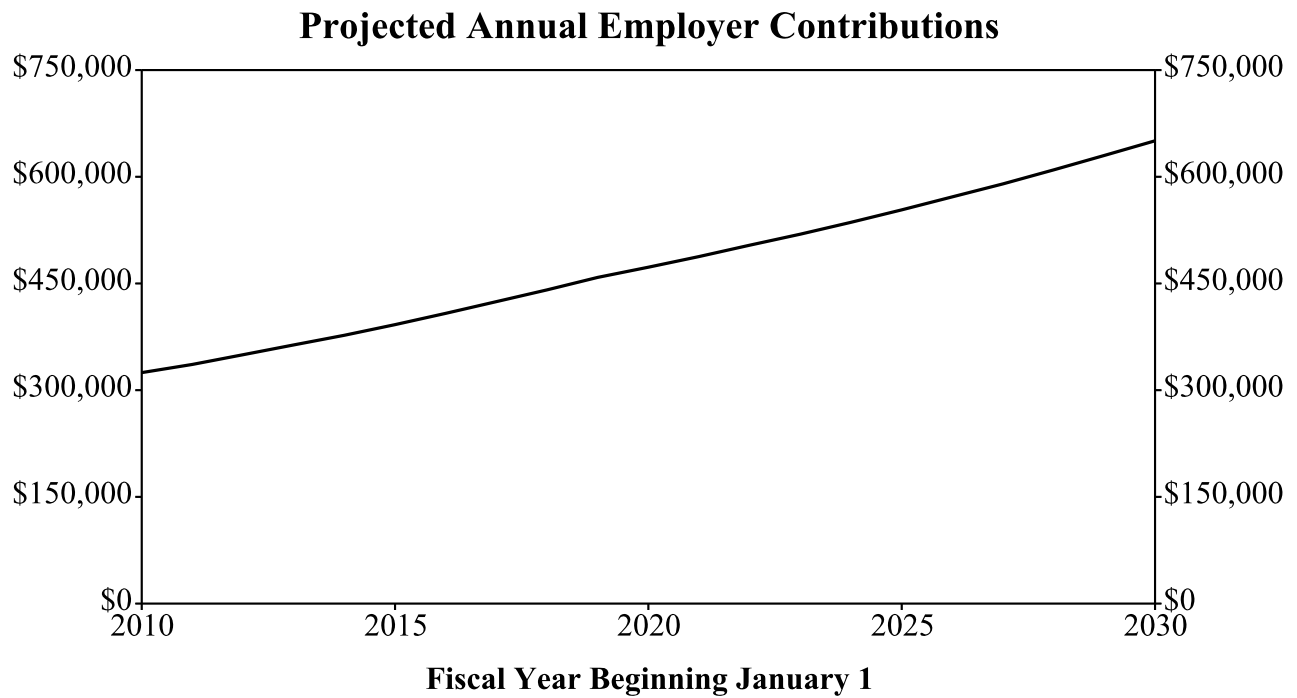
Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1994	29	\$ 1,531,585	10.93%	5.71%
1995	29	1,479,614	10.54%	7.61%
1996	29	1,607,654	10.68%	9.85%
1997	29	1,596,005	8.88%	8.88%
1998	28	1,719,998	14.40%	14.40%
1999	29	1,534,889	13.77%	13.77%
2000	29	1,681,667	13.44%	13.44%
2001	30	1,626,502	13.67%	13.67%
2002	32	1,823,812	13.96%	13.96%
2003	32	1,927,390	13.63%	13.63%
2004	28	1,906,913	14.28%	14.28%
2005	29	1,838,035	13.16%	13.16%
2006	31	2,149,529	13.17%	13.17%
2007	30	2,046,925	13.73%	13.73%
2008	30	2,163,912	13.74%	13.74%

Notes:

Adoption of Benefit B-3 reflected in 1994 valuation.  
Adoption of 1.4% member contributions reflected in 1994 valuation.  
Actuarial assumptions were revised for the 1997 valuation.  
Adoption of Benefit B-4 reflected in 1998 valuation.  
Adoption of Benefit V- 6 reflected in 1998 valuation.  
Adoption of Benefit F55 (15 years) reflected in 1998 valuation.  
Actuarial assumptions were revised for the 2000 valuation.  
Actuarial assumptions were revised for the 2004 valuation.  
Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 90 - Asst Pros Attnys**  
**Chart 17.5U**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 90 - Asst Pros Attnys

**Table 18U**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001				(3)	(1)	(1)		6	30
2002				(1)				3	32
2003				(1)				1	32
2004	(1)			(2)		(1)			28
2005	(1)			(1)		(1)		4	29
2006								2	31
2007	(3)			(1)	(2)			5	30
2008				(2)		(1)	1	2	30

**Table 19U**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001	(1)					5	6	14
2002							1	15
2003							1	16
2004							2	18
2005			(1)				1	18
2006								18
2007	(1)			(2)			1	16
2008							2	18

# Ingham County (3303)

## Division 90 - Asst Pros Attnys

**Table 20U**

### Flow of Retirees and Beneficiaries

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001	1	\$ 8,246	\$		\$	\$	5	\$ 97,627
2002							5	97,627
2003				(1)	(5,028)		4	92,599
2004	1	40,154					5	132,753
2005	2	73,163					7	205,916
2006	1	1,190					8	207,106
2007	4	160,747					12	367,853
2008	1	5,291					13	373,144

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

## Division 90 - Asst Pros Attnys

**Table 21U**

### Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 225,254	\$ 22,971	\$ 328,575	\$ (93,505)	\$ 0	\$ (4,527)	\$ 40,928	\$ 4,445,017
2002	247,769	25,826	232,163	(97,628)	(74)	0	117,514	4,970,587
2003	262,996	26,954	446,233	(97,628)	0	(38,107)	0	5,571,035
2004	282,316	28,332	400,460	(129,408)	(196)	(15,030)	0	6,137,509
2005	262,013	26,912	407,207	(163,238)	0	(12,751)	0	6,657,652
2006	305,563	30,040	544,097	(205,917)	0	0	0	7,331,435
2007	286,098	30,570	596,160	(261,902)	0	0	0	7,982,361
2008	298,401	31,859	422,318	(368,735)	0	0	154,389	8,520,593

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22U**

### Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 5,629,717	\$ 4,445,017	79%	\$ 1,184,700	73%
2002	6,359,505	4,970,587	78	1,388,918	76
2003	6,826,732	5,571,035	82	1,255,697	65
2004	7,635,030	6,137,509	80	1,497,521	79
2005	7,730,182	6,657,652	86	1,072,530	58
2006	8,530,792	7,331,435	86	1,199,357	56
2007	9,386,372	7,982,361	85	1,404,011	69
2008	10,141,945	8,520,593	84	1,621,352	75

# Ingham County (3303)

## Division 91 - Parks Union Empl

### Table 16V

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	8.50%	\$2,067
Amortization of Unfunded Accrued Liability (28 years)	<u>0.64</u>	<u>156</u>
Total Long Term Contribution	9.14	2,223
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>9.14%</b>	<b>\$2,223 *</b>

@ The above Employer contribution requirement is based on Member contributions of 0.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.85% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$(1,401)</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.49)%</b>
<b>Amortization Payment:</b>	<b>(0.05)%</b>
<b>Total:</b>	<b>(0.54)%</b>

**Please see the Comments on the Investment Markets on page 3.**

**Ingham County (3303)****Division 91 - Parks Union Empl****Table 17V****Computed Employer Contributions - Comparative Statement**

<b>Valuation Date December 31,</b>	<b>Active Members</b>		<b>Employer Contribution</b>	
	<b>Number</b>	<b>Annual Payroll</b>	<b>Regular Contribution</b>	<b>Minimum Required Contribution</b>
1994	3	\$ 76,666	10.51%	5.48%
1995	3	82,837	11.15%	8.06%
1996	3	80,234	11.50%	10.61%
1997	5	144,342	12.37%	12.37%
1998	5	160,579	10.70%	10.70%
1999	6	195,920	10.42%	10.42%
2000	6	199,329	10.37%	10.37%
2001	5	167,040	11.30%	11.30%
2002	5	159,732	9.44%	9.44%
2003	6	184,247	8.02%	8.02%
2004	6	208,094	8.92%	8.92%
2005	6	224,976	9.18%	9.18%
2006	7	273,951	8.92%	8.92%
2007	6	239,863	9.52%	9.52%
2008	7	291,759	9.14%	9.14%

**Notes:**

Actuarial assumptions were revised for the 1997 valuation.

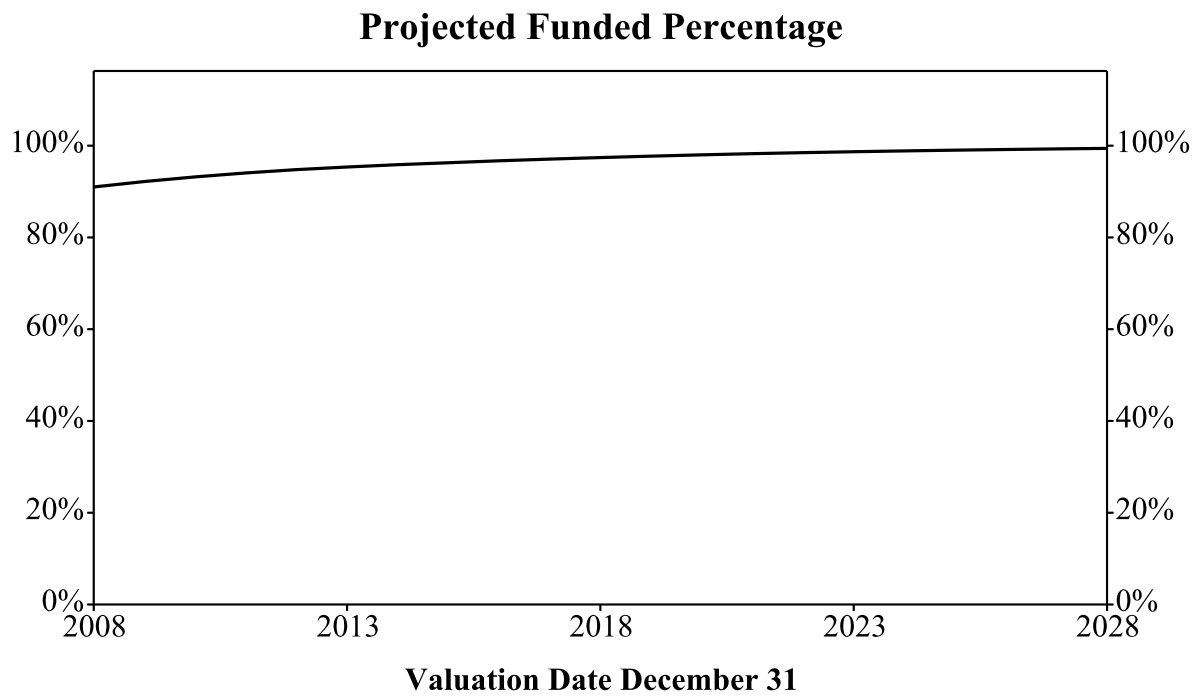
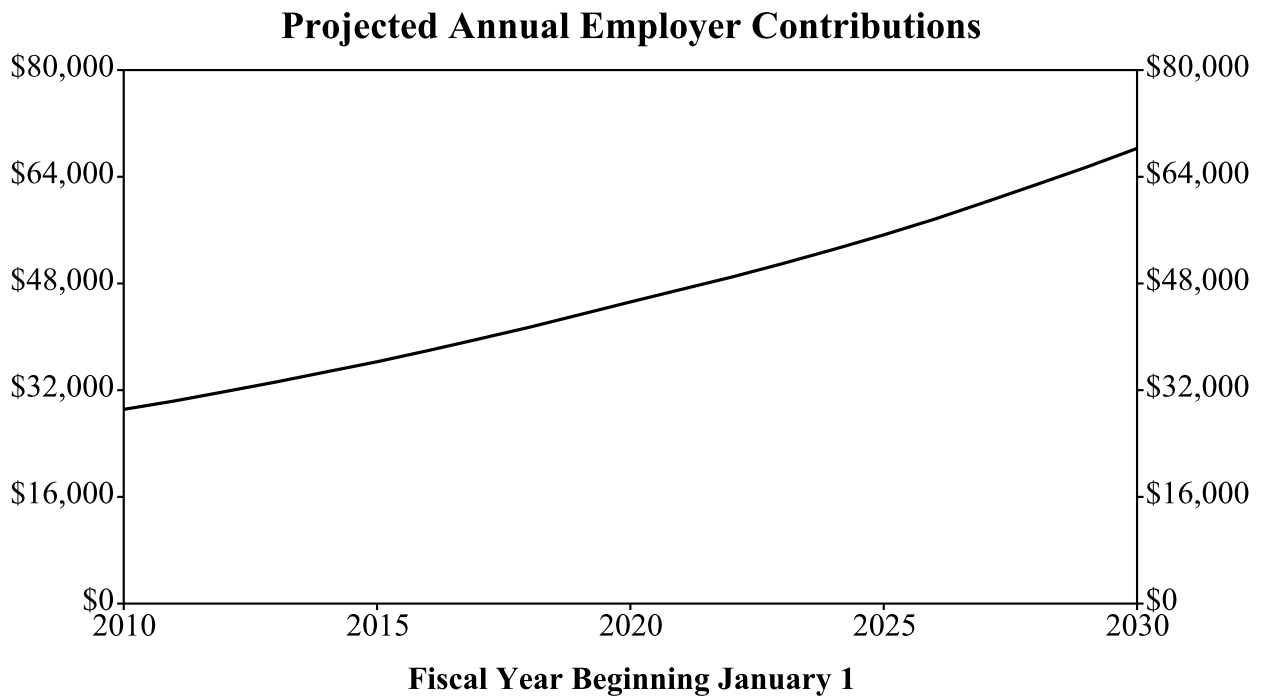
Actuarial assumptions were revised for the 2000 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 91 - Parks Union Empl**  
**Chart 17.5V**



Note: Please refer to page 222 for a discussion of the projection.



# Ingham County (3303)

## Division 91 - Parks Union Empl

**Table 18V**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001						(1)			5
2002					(2)			2	5
2003				(1)				2	6
2004									6
2005									6
2006								1	7
2007					(2)			1	6
2008								1	7

**Table 19V**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001								0
2002								0
2003							1	1
2004								1
2005								1
2006								1
2007								1
2008								1

# Ingham County (3303)

## Division 91 - Parks Union Empl

**Table 20V**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001		\$	\$		\$	\$	0	\$ 0
2002							0	0
2003							0	0
2004							0	0
2005							0	0
2006							0	0
2007							0	0
2008							0	0

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

## Division 91 - Parks Union Empl

**Table 21V**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 20,080	\$ 0	\$ 5,528	\$ 0	\$ 0	\$ (58,303)	\$ 0	\$ 104,266
2002	18,925	0	7,697	0	0	0	0	130,888
2003	19,450	0	14,890	0	0	0	0	165,228
2004	19,644	0	12,616	0	0	0	0	197,488
2005	18,043	0	13,239	0	0	0	0	228,770
2006	22,182	0	18,712	0	0	0	0	269,664
2007	25,299	0	21,289	0	0	0	0	316,252
2008	25,186	0	17,823	0	0	0	0	359,261

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22V**  
**Actuarial Accrued Liabilities - Comparative Schedule**

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 179,060	\$ 104,266	58%	\$ 74,794	45%
2002	168,356	130,888	78	37,468	23
2003	164,318	165,228	101	(910)	0
2004	210,675	197,488	94	13,187	6
2005	256,186	228,770	89	27,416	12
2006	307,770	269,664	88	38,106	14
2007	341,487	316,252	93	25,235	11
2008	395,929	359,261	91	36,668	13

# Ingham County (3303)

## Division 92 - Parks Non Union

### Table 16W

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	8.88%	\$583
Amortization of Unfunded Accrued Liability (28 years)	<u>33.90</u>	<u>2,227</u>
Total Long Term Contribution	42.78	2,810
Overfunding Credit #	<u>0.00</u>	<u>0</u>
<b>Total Contribution</b>	<b>42.78%</b>	<b>\$2,810 *</b>

@ The above Employer contribution requirement is based on Member contributions of 0.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.90% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24).

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$(8,312)</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>1.40%</b>
<b>Amortization Payment:</b>	<b>(0.51)%</b>
<b>Total:</b>	<b>0.89%</b>

**Please see the Comments on the Investment Markets on page 3.**

# Ingham County (3303)

## Division 92 - Parks Non Union

Table 17W

### Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1994	5	\$ 210,478	12.50%	6.53%
1995	5	190,147	14.25%	10.29%
1996	4	168,458	15.00%	13.84%
1997	5	178,782	13.26%	13.26%
1998	5	214,974	13.33%	13.33%
1999	4	196,079	12.49%	12.49%
2000	3	171,663	12.58%	12.58%
2001	3	178,325	12.69%	12.69%
2002	3	181,220	13.80%	13.80%
2003	3	186,496	12.74%	12.74%
2004	3	199,981	14.22%	14.22%
2005	3	197,797	12.54%	12.54%
2006	2	143,923	17.23%	17.23%
2007	2	157,991	17.09%	17.09%
2008	1	78,846	42.78%	42.78%

Notes:

Adoption of Benefit F55 (25 years) reflected in 1995 valuation.

Actuarial assumptions were revised for the 1997 valuation.

Actuarial assumptions were revised for the 2000 valuation.

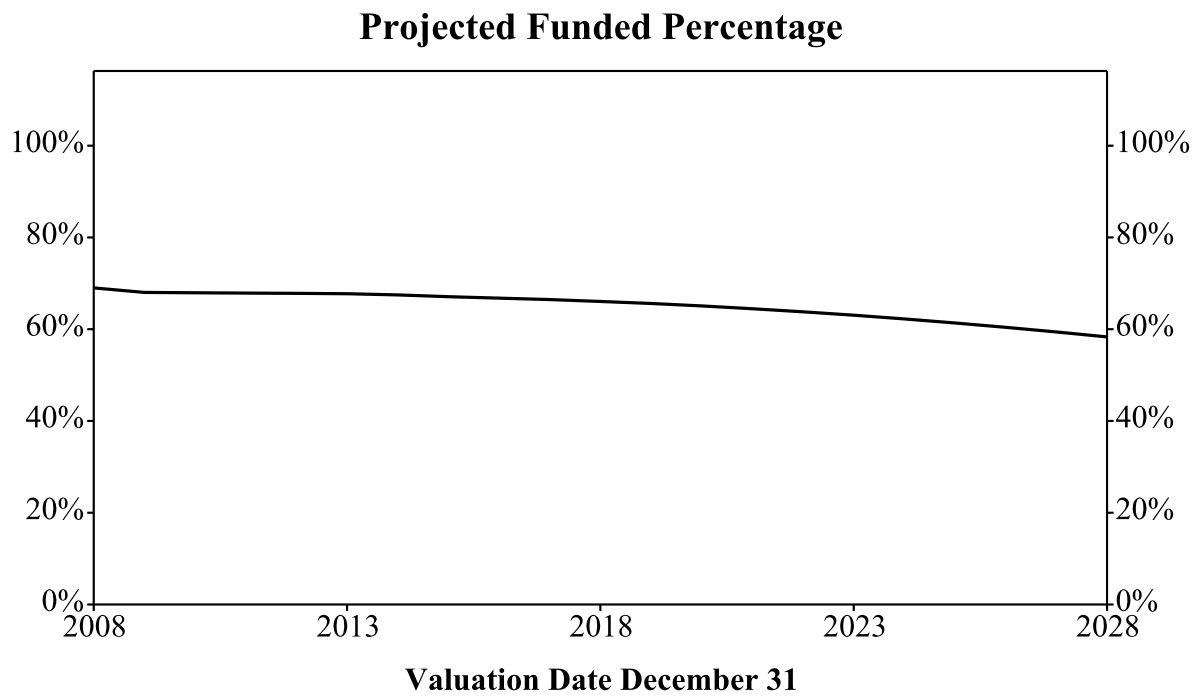
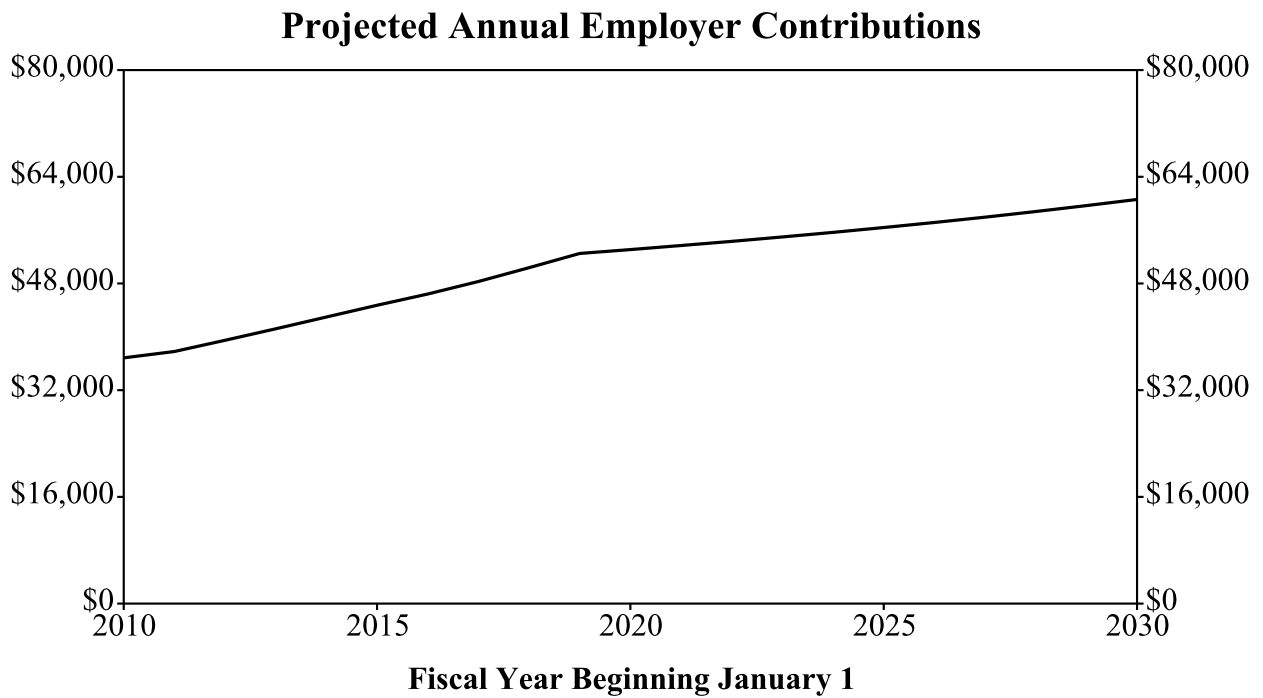
Adoption of Benefit FAC-3 reflected in 2002 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 92 - Parks Non Union**  
**Chart 17.5W**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 92 - Parks Non Union

**Table 18W**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001									3
2002									3
2003									3
2004									3
2005									3
2006	(1)								2
2007									2
2008	(1)								1

**Table 19W**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001								0
2002								0
2003								0
2004								0
2005								0
2006								0
2007								0
2008								0

# Ingham County (3303)

## Division 92 - Parks Non Union

**Table 20W**  
**Flow of Retirees and Beneficiaries**

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001		\$	\$		\$	\$	0	\$ 0
2002							0	0
2003							0	0
2004							0	0
2005							0	0
2006	1	40,397					1	40,397
2007							1	40,397
2008	1	59,967					2	100,364

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.



# Ingham County (3303)

## Division 92 - Parks Non Union

**Table 21W**  
**Flow of Valuation Assets (Actuarial Value)**

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 22,273	\$ 0	\$ 48,447	\$ 0	\$ 0	\$ 0	\$ 0	\$ 665,460
2002	25,026	0	29,437	0	0	0	0	719,923
2003	25,960	0	64,513	0	0	0	0	810,396
2004	27,597	0	58,067	0	0	0	0	896,060
2005	25,199	0	59,428	0	0	0	0	980,687
2006	24,825	0	79,814	(20,199)	0	0	0	1,065,127
2007	19,812	0	85,646	(40,397)	0	0	0	1,130,188
2008	21,391	0	41,891	(80,375)	0	0	0	1,113,095

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22W**  
**Actuarial Accrued Liabilities - Comparative Schedule**

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 851,222	\$ 665,460	78%	\$ 185,762	104%
2002	934,422	719,923	77	214,499	118
2003	993,615	810,396	82	183,219	98
2004	1,132,821	896,060	79	236,761	118
2005	1,155,434	980,687	85	174,747	88
2006	1,303,505	1,065,127	82	238,378	166
2007	1,391,315	1,130,188	81	261,127	165
2008	1,603,216	1,113,095	69	490,121	622

# Ingham County (3303)

## Division 93 - Lgl Rsrch Clerks

### Table 16X

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2010

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	6.33%	\$1,720
Amortization of Unfunded Accrued Liability (28 years) #	(1.28)	(348)
Total Long Term Contribution	5.05	1,372
Overfunding Credit #	(1.47)	(399)
<b>Total Contribution</b>	<b>3.58%</b>	<b>\$973 *</b>

@ The above Employer contribution requirement is based on Member contributions of 0.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 28 year amortization) will decrease/increase by 0.82% of pay.

\* Based on Valuation Payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts (usually higher).

# For this division, projected assets exceed projected liabilities as of the beginning of the January 1, 2010 fiscal year (see Table 24). The negative unfunded accrued liability is amortized (spread) over 10 years, and used to reduce the employer contribution rate. The total credit is 2.75% (1.28% plus 1.47% ). The additional 1.47% results from spreading the negative unfunded accrued liability over 10 years instead of 28 years.

**Note: Changes in actuarial assumptions and methods were reflected in the December 31, 2008 actuarial valuation. The effects of the changes are shown below:**

<b>Increase in Actuarial Accrued Liabilities:</b>	<b>\$709</b>
<b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b>	
<b>Normal Cost:</b>	<b>(0.19)%</b>
<b>Amortization Payment:</b>	<b>0.00%</b>
<b>Total:</b>	<b>(0.19)%</b>

Please see the Comments on the Investment Markets on page 3.

# Ingham County (3303)

## Division 93 - Lgl Rsrch Clerks

### Table 17X

#### Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution
	Number	Annual Payroll	
1997	8	\$ 250,777	6.84%
1998	5	175,963	7.21%
1999	6	163,718	6.95%
2000	8	225,369	6.73%
2001	7	235,907	7.68%
2002	6	227,014	7.16%
2003	6	219,613	6.71%
2004	7	267,468	6.31%
2005	6	240,550	5.20%
2006	7	271,510	3.39%
2007	8	354,267	4.00%
2008	7	325,997	3.58%

Notes:

Actuarial assumptions were revised for the 1997 valuation.

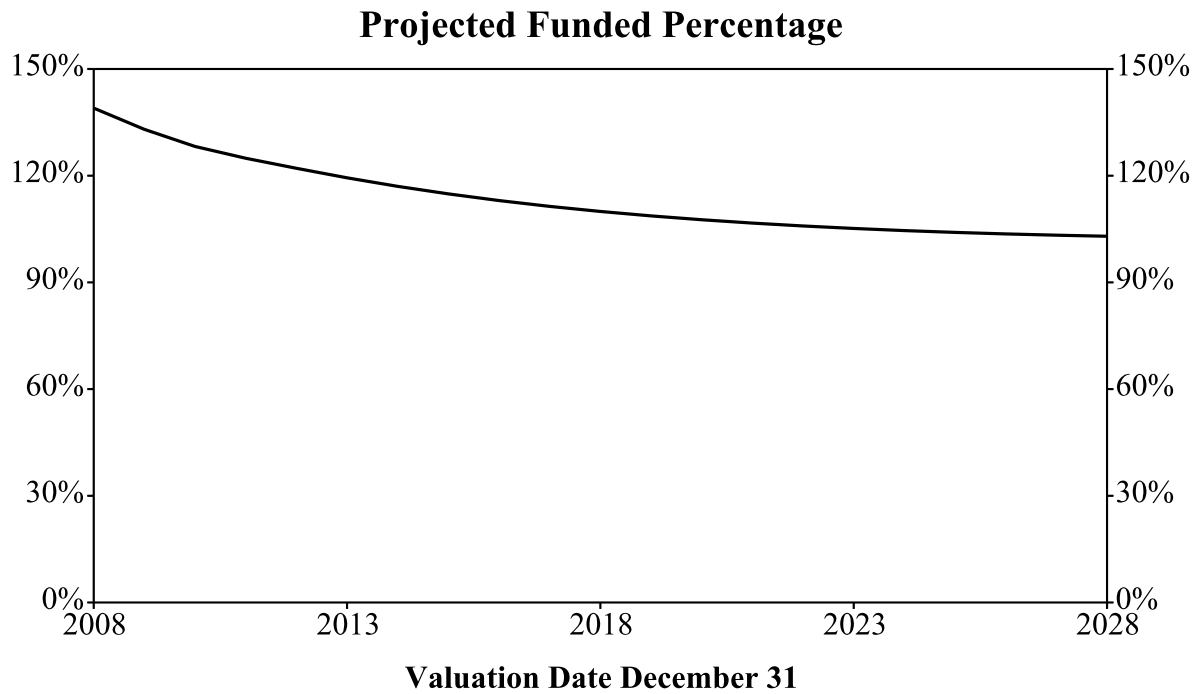
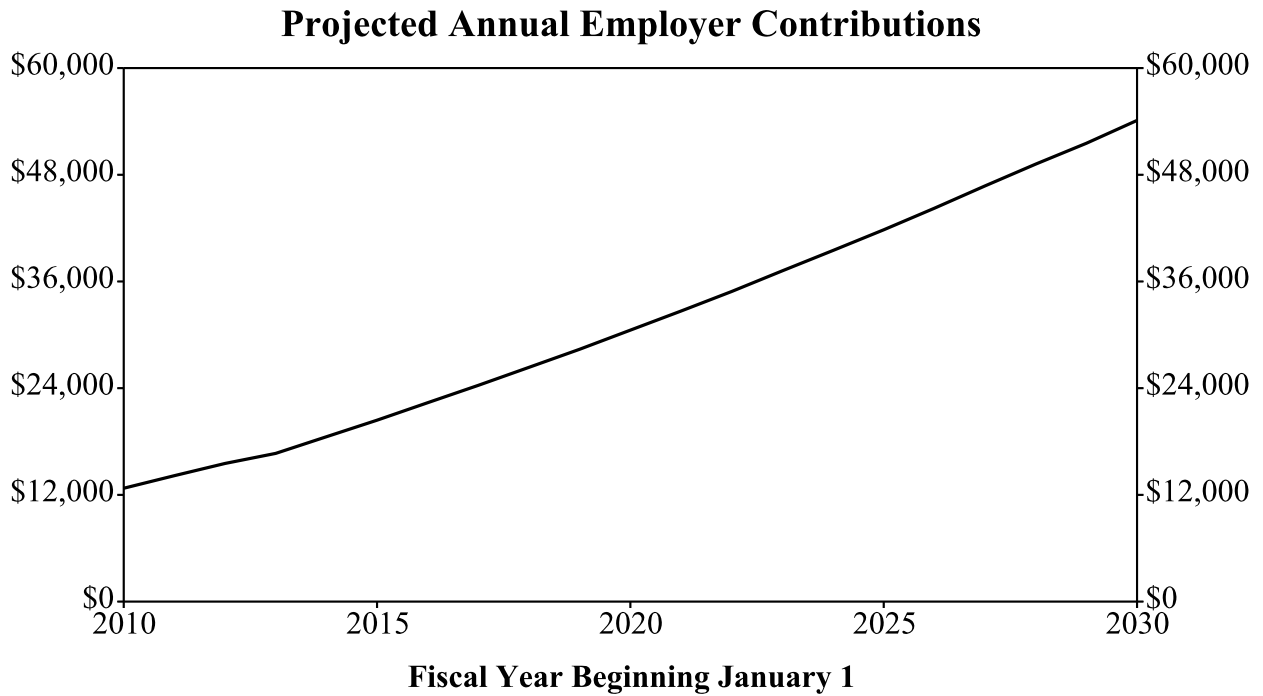
Actuarial assumptions were revised for the 2000 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions and methods were revised for the 2008 valuation.

The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

**Ingham County (3303)**  
**Division 93 - Lgl Rsrch Clerks**  
**Chart 17.5X**



Note: Please refer to page 222 for a discussion of the projection.

# Ingham County (3303)

## Division 93 - Lgl Rsrch Clerks

**Table 18X**  
**Flow of Active Membership**

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2001					(3)			2	7
2002					(2)			1	6
2003					(2)			2	6
2004					(1)			2	7
2005					(2)			1	6
2006					(3)			4	7
2007					(2)			3	8
2008					(3)			2	7

**Table 19X**  
**Flow of Vested Former Members**

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2001								0
2002								0
2003								0
2004								0
2005								0
2006								0
2007								0
2008								0

# Ingham County (3303)

## Division 93 - Lgl Rsrch Clerks

**Table 20X**

### Flow of Retirees and Beneficiaries

Year Ended 12/31	Added to Rolls			Removed from Rolls			Year End	
	Number@	Annual Benefits	Benefit Adjust.*	Number	Annual Benefits	Benefit Adjust.#	Number	Annual Benefits
2001		\$	\$		\$	\$	0	\$ 0
2002							0	0
2003							0	0
2004							0	0
2005							0	0
2006							0	0
2007							0	0
2008							0	0

@ Includes beneficiaries of retirees who died during the year.

\* Includes where applicable E, E-1, and E-2 benefits, and corrections.

# Includes where applicable C-2 and Accelerated Option benefits, and corrections.

# Ingham County (3303)

## Division 93 - Lgl Rsrch Clerks

**Table 21X**

### Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2001	\$ 17,007	\$ 0	\$ 5,820	\$ 0	\$ 0	\$ 0	\$ 0	\$ 80,280
2002	17,925	0	6,542	0	0	0	0	104,747
2003	20,588	0	12,956	0	0	0	0	138,291
2004	21,502	0	10,857	0	0	0	0	170,650
2005	19,550	0	11,655	0	0	0	0	201,855
2006	18,060	0	16,397	0	0	0	0	236,312
2007	18,339	0	18,525	0	0	0	0	273,176
2008	12,258	0	13,629	0	0	0	0	299,063

\* Transfers out and in are usually related to the transfer of participants between divisions or municipalities.

**Table 22X**

### Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2001	\$ 107,904	\$ 80,280	74%	\$ 27,624	12%
2002	124,042	104,747	84	19,295	8
2003	134,616	138,291	103	(3,675)	0
2004	165,023	170,650	103	(5,627)	0
2005	171,202	201,855	118	(30,653)	0
2006	173,940	236,312	136	(62,372)	0
2007	196,845	273,176	139	(76,331)	0
2008	215,918	299,063	139	(83,145)	0

## Ingham County (3303)

### Table 23

#### GASB 25 And GASB 27 Information

The following information has been prepared to provide the information necessary to comply with GASB Statements Number 25 and 27. Statement 25 is effective for fiscal years beginning after June 15, 1996 and Statement 27 is effective for fiscal years beginning after June 15, 1997.

All entries and the annual employer contribution amount were based on the actuarial methods and assumptions used in the December 31, 2008 actuarial valuation. The entry age normal actuarial method was used to determine the disclosure entries.

#### GASB 25 Information (as of 12/31/2008)

##### Actuarial Accrued Liability

Retirees and beneficiaries currently receiving benefits	\$131,222,225
Terminated employees (vested former members) not yet receiving benefits	14,890,236
Non-vested terminated employees (pending refunds of accumulated member contributions)	1,012,752
Current employees - Accumulated employee contributions including allocated investment income	32,947,497
Employer financed	<u>97,160,738</u>
Total Actuarial Accrued Liability	\$277,233,448
Net Assets Available for Benefits at Actuarial Value	<u>210,089,101</u>
(Market Value is \$150,982,262 )	
Unfunded (Overfunded) Actuarial Accrued Liability	\$67,144,347

#### GASB 27 Information (as of 12/31/2008)

Fiscal Year Beginning	January 1, 2010
Annual Required Contribution (ARC)	\$ 6,974,328*
Amortization Factor Used - Underfunded Liabilities (28 years)	0.055889
Amortization Factor Used - Underfunded Liabilities (16 years)	0.082185
Amortization Factor Used - Underfunded Liabilities (30 year level \$)	0.085453
Amortization Factor Used - Overfunded Liabilities (10 years)	0.119963

\* Based on valuation payroll. For divisions that are open to new hires the actual required contribution will be based on current monthly payroll (during the fiscal year beginning January 1, 2010) times the computed employer contribution rate(s) shown in Tables 15 and 16. The ARC shown here is the sum of the ARC's calculated separately for each division.



# Ingham County (3303)

## Table 24

### Development of Projected Unfunded Accrued Liability At Beginning of Fiscal Year (January 1, 2010)

Division	Unfunded Accrued Liability 12/31/2008	Employer Normal Cost	Expected Employer Contrib.	Interest	Unfunded Accrued Liability 1/1/2010	Projected Fiscal Year Payroll
01 - Confidenti	\$ 1,524,738	\$ 99,368	\$ (170,502)	\$ 119,134	\$ 1,572,738	\$ 1,432,274
02 - Sheriff FO	13,562,475	(8,348)	(599,552)	1,060,682	14,015,257	2,295,828
04 - MCF	661,378	278,862	(292,232)	52,375	700,383	4,989,909
09 - Judges	754,372	8,816	(44,379)	58,927	777,736	89,876
10 - Gnrl Mgmt	11,295,801	495,359	(1,093,459)	879,740	11,577,441	7,668,889
11 - Gnrl Libra #	184,190	0	(13,692)	14,188	184,686	-
12 - Gnrl ICEA	6,918,322	153,673	(548,315)	537,680	7,061,360	7,539,333
13 - Gnrl OPEIU	3,655,722	61,042	(185,529)	287,478	3,818,713	2,091,456
14 - Gnrl TOPS	7,090,840	1,146,087	(1,501,509)	553,050	7,288,468	15,737,984
15 - Animal Cnt	1,644,846	7,217	(51,419)	129,820	1,730,464	377,075
16 - Gnrl Comms	21,021	9,679	(11,227)	1,620	21,093	170,278
17 - ICEA Nurse	3,328,385	139,172	(313,902)	259,282	3,412,937	3,995,469
18 - ICEA Ct. P	3,746,894	73,494	(264,444)	292,114	3,848,058	2,355,870
19 - Cnstutnl O	232,503	29,752	(35,968)	18,352	244,639	555,194
21 - FOP Shrf D	9,531,167	498,456	(899,652)	746,446	9,876,417	9,074,678
40 - ICEA Unit	52,476	76,492	(77,632)	4,152	55,488	1,488,536
41 - MCF Manage	252,141	113,249	(122,445)	19,803	262,748	1,316,406
42 - ICEA Unit	319,356	70,308	(106,516)	24,100	307,248	1,224,528
43 - ICEA Unit	236,043	33,678	(45,593)	18,407	242,535	616,358
44 - MCF Exec M	66,681	22,750	(27,100)	5,160	67,491	141,173
90 - Asst Pros	1,621,352	222,058	(310,475)	126,171	1,659,106	2,363,046
91 - Parks Unio	36,668	25,915	(29,025)	2,809	36,367	318,608
92 - Parks Non	490,121	7,317	(14,081)	38,939	522,296	86,102
93 - Lgl Rsrch	(83,145)	21,564	(13,627)	(6,334)	(81,542)	355,997

# This division will have no new hires.

The unfunded accrued liability as of December 31, 2008 (see Table 13) is projected to the beginning of the fiscal year for which employer contributions are being calculated (January 1, 2010). This allows the 2008 valuation to take into account the expected future contributions that are based on past valuations. This projection process will result in more stable computed contribution rates, and was first used for the December 31, 2004 actuarial valuations.

The projected unfunded accrued liability is amortized over the appropriate period (see Table 16 for each division) to determine the amortization payment. For divisions that will have no new hires this is the dollar amortization payment. For divisions that are open to new hires this payment is divided by the projected fiscal year payroll to determine the amortization payment as a percentage of active member payroll. The resulting amortization contributions are displayed in Table 16 for each division.

# Ingham County (3303)

## Table 25

### 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 your Regional Manager in the MERS Office of Marketing and Employer Services.

#### Division 01 - Confidential

##### Provisions by Date

1/1/2002	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2002	Member Contribution Rate 5.36%
1/1/2002	Benefit B-4 (80% max)
6/25/1996	Day of work defined as 8 Hours a Mnth for fulltime employees
6/25/1996	Day of work defined as 4 Hours a Mnth for parttime employees
1/1/1995	Member Contribution Rate 4.50%
1/1/1995	Benefit B-3 (80% max)
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	10 Year Vesting
11/15/1950	Fiscal Month - January
11/15/1950	Member Contribution Rate 3.00% Under \$4,200.00 - Then 5.00%
11/15/1950	Benefit C (Old)
11/15/1950	Benefit FAC-5 (5 Year Final Average Compensation)

#### Division 02 - Sheriff FOP Spvs

##### Provisions by Date

10/1/1997	3.2% Multiplier (80% max)
10/1/1997	Member Contribution Rate 19.61%
1/1/1995	Benefit B-4 (80% max)
1/1/1995	Member Contribution Rate 10.45%
1/1/1995	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/1995	25 Years & Out
12/31/1994	Member Contribution Rate 0.00%
7/1/1994	Member Contribution Rate 5.40%

# Ingham County (3303)

## Table 25 (continued)

### Benefit Provision History

#### Division 02 - Sheriff FOP Spvs

##### Provisions by Date

6/30/1994	Member Contribution Rate 0.00%
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
7/1/1993	Member Contribution Rate 6.40%
7/1/1993	Benefit B-3 (80% max)
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	Member Contribution Rate 1.80%
10/1/1990	Benefit F50 (With 25 Years of Service)
1/1/1990	Day of work defined as 8 Hours a Mnth for fulltime employees
1/1/1990	Day of work defined as 4 Hours a Mnth for parttime 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	Member Contribution Rate 1.00%
1/1/1986	Benefit F55 (With 15 Years of Service)
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	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
11/15/1950	Benefit FAC-5 (5 Year Final Average Compensation)

#### Division 03 - Ingham Med Clsd

##### Provisions by Date

1/1/1901	10 Year Vesting
1/1/1901	Benefit FAC-5 (5 Year Final Average Compensation)
	Fiscal Month - January

#### Division 04 - MCF

##### Provisions by Date

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)
11/15/1950	10 Year Vesting
11/15/1950	Member Contribution Rate 3.00% Under \$4,200.00 - Then 5.00%

# Ingham County (3303)

## Table 25 (continued)

### Benefit Provision History

#### Division 04 - MCF

##### Provisions by Date

11/15/1950 Benefit C (Old)  
11/15/1950 Benefit FAC-5 (5 Year Final Average Compensation)  
Fiscal Month - January

#### Division 09 - Judges

##### Provisions by Date

1/1/2002 Benefit B-4 (80% max)  
1/1/2002 Member Contribution Rate 3.14%  
1/1/1998 Benefit F55 (With 15 Years of Service)  
1/1/1998 Benefit B-3 (80% max)  
1/1/1998 6 Year Vesting  
4/1/1991 Member Contribution Rate 0.00%  
4/1/1991 Benefit FAC-5 (5 Year Final Average Compensation)  
4/1/1991 Benefit C-1 (Old)  
4/1/1991 10 Year Vesting  
10/15/1980 Exclude Temporary Employees  
9/29/1965 Covered by Act 88  
11/15/1950 Fiscal Month - January

#### Division 10 - Gnrl Mgmt

##### Provisions by Date

1/1/2002 Benefit B-4 (80% max)  
1/1/2002 Member Contribution Rate 6.39%  
1/1/2002 Benefit FAC-3 (3 Year Final Average Compensation)  
6/25/1996 Day of work defined as 8 Hours a Mnth for fulltime employees  
6/25/1996 Day of work defined as 4 Hours a Mnth for parttime employees  
1/1/1995 Member Contribution Rate 5.00%  
1/1/1995 Benefit B-3 (80% max)  
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 C-2/Base B-1  
7/1/1988 Member Contribution Rate 3.00%  
7/1/1988 Benefit FAC-5 (5 Year Final Average Compensation)  
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 Benefit F55 (With 15 Years of Service)  
5/1/1986 10 Year Vesting  
10/15/1980 Exclude Temporary Employees

# Ingham County (3303)

## Table 25 (continued)

### Benefit Provision History

#### Division 10 - Gnrl Mgmt

##### Provisions by Date

9/29/1965 Covered by Act 88  
11/15/1950 Fiscal Month - January

#### Division 11 - Gnrl Library

##### Provisions by Date

1/1/1994 Flexible E 2% COLA Adopted (01/01/1994)  
3/24/1992 Day of work defined as 8 Hours a Day for fulltime employees  
3/24/1992 Day of work defined as 4 Hours a Day for parttime employees  
1/1/1988 Flexible E 2% COLA Adopted (01/01/1988)  
7/1/1987 Benefit C-1 (Old)  
7/1/1987 Fiscal Month - January  
7/1/1987 Member Contribution Rate 0.00%  
7/1/1987 Benefit FAC-5 (5 Year Final Average Compensation)  
7/1/1987 10 Year Vesting  
10/15/1980 Exclude Temporary Employees  
9/29/1965 Covered by Act 88

#### Division 12 - Gnrl ICEA Profs

##### Provisions by Date

1/1/2003 Benefit B-4 (80% max)  
1/1/2003 E2 2.5% Annual COLA for future retirees (01/01/2003)  
1/1/2003 Member Contribution Rate 13.42%  
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)  
1/1/1992 Member Contribution Rate 1.10%  
1/1/1992 Day of work defined as 8 Hours a Mnth for fulltime employees  
1/1/1992 Day of work defined as 4 Hours a Mnth for parttime employees  
1/1/1992 Benefit C-2/Base B-1  
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 Benefit C-2/Base C-1 (Old)  
7/1/1983 10 Year Vesting  
10/15/1980 Exclude Temporary Employees

# Ingham County (3303)

## Table 25 (continued)

### Benefit Provision History

#### Division 12 - Gnrl ICEA Profs

##### Provisions by Date

9/29/1965 Covered by Act 88  
11/15/1950 Fiscal Month - January

#### Division 13 - Gnrl OPEIU Prob

##### Provisions by Date

7/1/2003 Member Contribution Rate 9.71%  
7/1/2003 Benefit B-4 (80% max)  
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 Member Contribution Rate 2.96%  
1/1/1995 Benefit C-2/Base B-1  
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 8 Hours a Mnth for fulltime employees  
1/1/1992 Day of work defined as 4 Hours a Mnth for parttime 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%  
10/1/1990 Benefit FAC-5 (5 Year Final Average Compensation)  
10/1/1990 10 Year Vesting  
12/1/1988 Benefit F55 (With 15 Years of Service)  
12/1/1988 Member Contribution Rate 1.00%  
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

#### Division 14 - Gnrl TOPS UAW

##### Provisions by Date

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 Member Contribution Rate 4.85%  
10/1/1995 Benefit B-3 (80% max)  
1/1/1994 Flexible E 2% COLA Adopted (01/01/1994)  
1/1/1992 Day of work defined as 8 Hours a Mnth for fulltime employees  
1/1/1992 Day of work defined as 4 Hours a Mnth for parttime employees

# Ingham County (3303)

## Table 25 (continued)

### Benefit Provision History

#### Division 14 - Gnrl TOPS UAW

##### Provisions by Date

7/1/1991	Member Contribution Rate 1.00%
1/1/1989	Benefit F55 (With 15 Years of Service)
1/1/1989	Member Contribution Rate 3.00%
1/1/1989	10 Year Vesting
1/1/1989	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1989	Benefit C-2/Base C-1 (Old)
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

#### Division 15 - Animal Cntrl FOP

##### Provisions by Date

6/1/2002	25 Years & Out
6/1/2002	Member Contribution Rate 15.49%
1/1/2001	E2 2.5% Annual COLA for future retirees (01/01/2001)
1/1/2001	Member Contribution Rate 14.28%
7/1/1997	Benefit B-4 (80% max)
7/1/1997	Benefit FAC-3 (3 Year Final Average Compensation)
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 8 Hours a Mnth for fulltime employees
1/1/1993	Day of work defined as 4 Hours a Mnth for parttime 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 C-1 (Old)
1/1/1990	10 Year Vesting
1/1/1990	Benefit FAC-5 (5 Year Final Average Compensation)
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
11/15/1950	Fiscal Month - January

# Ingham County (3303)

## Table 25 (continued)

### Benefit Provision History

#### Division 16 - Gnrl Commsnrs

##### Provisions by Date

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	10 Year Vesting
12/1/1988	Benefit FAC-5 (5 Year Final Average Compensation)
12/1/1988	Member Contribution Rate 4.00%
12/1/1988	Benefit C-2/Base B-1
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

#### Division 17 - ICEA Nurses

##### Provisions by Date

1/1/2001	E2 2.5% Annual COLA for future retirees (07/01/1995)
7/1/1999	Member Contribution Rate 11.87%
7/1/1999	Benefit B-3 (80% max)
7/1/1999	Benefit FAC-3 (3 Year Final Average Compensation)
7/1/1999	6 Year Vesting
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 8 Hours a Mnth for fulltime employees
1/1/1991	Day of work defined as 4 Hours a Mnth for parttime employees
10/1/1990	Member Contribution Rate 0.70%
1/1/1990	Member Contribution Rate 1.00%
1/1/1990	Benefit C-2/Base C-1 (Old)
1/1/1990	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1990	10 Year Vesting
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



# Ingham County (3303)

## Table 25 (continued)

### Benefit Provision History

#### Division 18 - ICEA Ct. Prof

##### Provisions by Date

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 8 Hours a Mnth for fulltime employees
1/1/1992	Day of work defined as 4 Hours a Mnth for parttime employees
1/1/1991	Benefit F55 (With 15 Years of Service)
1/1/1991	10 Year Vesting
1/1/1991	Member Contribution Rate 2.80%
1/1/1991	Benefit C-2/Base B-1
1/1/1991	Benefit FAC-5 (5 Year Final Average Compensation)
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

#### Division 19 - Cnstutnl Offcls

##### Provisions by Date

1/1/2002	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2002	Member Contribution Rate 8.46%
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 8 Hours a Mnth for fulltime employees
6/25/1996	Day of work defined as 4 Hours a Mnth for parttime employees
1/1/1995	Benefit B-3 (80% max)
1/1/1995	Member Contribution Rate 7.00%
12/31/1994	Member Contribution Rate 0.00%
1/1/1994	E 2% COLA Adopted (01/01/1994)
4/1/1991	Member Contribution Rate 3.00%
4/1/1991	Benefit F55 (With 15 Years of Service)
4/1/1991	Benefit C-2/Base B-1
4/1/1991	Benefit FAC-5 (5 Year Final Average Compensation)
4/1/1991	10 Year Vesting

# Ingham County (3303)

## Table 25 (continued)

### Benefit Provision History

#### Division 19 - Cnstutnl Offcls

##### Provisions by Date

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

#### Division 21 - FOP Shrf Deputies

##### Provisions by Date

2/1/2001	25 Years & Out
2/1/2001	Member Contribution Rate 10.96%
1/1/1998	Member Contribution Rate 10.43%
1/1/1998	3.2% Multiplier (80% max)
1/1/1994	Benefit B-4 (80% max)
1/1/1994	E 2% COLA Adopted (01/01/1994)
1/1/1994	Member Contribution Rate 6.55%
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 Mnth for parttime employees
5/3/1990	Day of work defined as 8 Hours a Mnth for fulltime employees
1/1/1990	10 Year Vesting
1/1/1990	Member Contribution Rate 1.00%
1/1/1990	Benefit F55 (With 15 Years of Service)
1/1/1990	Benefit F50 (With 25 Years of Service)
1/1/1990	Benefit C-2/Base C-1 (Old)
1/1/1990	Benefit FAC-5 (5 Year Final Average Compensation)
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

#### Division 40 - ICEA Unit 111

##### Provisions by Date

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	Member Contribution Rate 3.00%
12/1/1988	Benefit F55 (With 15 Years of Service)
12/1/1988	Benefit C-2/Base B-1
12/1/1988	10 Year Vesting
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)

# Ingham County (3303)

## Table 25 (continued)

### Benefit Provision History

#### Division 40 - ICEA Unit 111

##### Provisions by Date

10/15/1980 Exclude Temporary Employees  
9/29/1965 Covered by Act 88  
Fiscal Month - January

#### Division 41 - MCF Management

##### Provisions by Date

1/1/1995 Flexible E 2% COLA Adopted (01/01/1995)  
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 Benefit C-2/Base B-1  
4/1/1989 Benefit F55 (With 15 Years of Service)  
4/1/1989 10 Year Vesting  
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

#### Division 42 - ICEA Unit 11

##### Provisions by Date

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 6 Year Vesting  
1/1/1996 Benefit FAC-5 (5 Year Final Average Compensation)  
1/1/1996 Member Contribution Rate 3.40%  
1/1/1996 Benefit F55 (With 15 Years of Service)  
1/1/1996 Benefit C-2/Base B-1  
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

#### Division 43 - ICEA Unit 1

##### Provisions by Date

4/1/1996 Member Contribution Rate 3.51%  
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%

# Ingham County (3303)

## Table 25 (continued)

### Benefit Provision History

#### Division 43 - ICEA Unit 1

##### Provisions by Date

1/1/1996	Benefit FAC-5 (5 Year Final Average Compensation)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88
	Fiscal Month - January

#### Division 44 - MCF Exec Mgr

##### Provisions by Date

1/1/2004	E2 2.5% Annual COLA for future retirees (09/01/2003)
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%
9/1/2003	Benefit FAC-3 (3 Year Final Average Compensation)
9/1/2003	6 Year Vesting
9/29/1965	Covered by Act 88
	Fiscal Month - January

#### Division 90 - Asst Pros Attnys

##### Provisions by Date

10/1/1998	Benefit F55 (With 15 Years of Service)
10/1/1998	Benefit B-4 (80% max)
10/1/1998	6 Year Vesting
4/1/1993	Benefit FAC-5 (5 Year Final Average Compensation)
4/1/1993	Member Contribution Rate 1.40%
4/1/1993	Benefit B-3 (80% max)
4/1/1993	10 Year Vesting
7/1/1992	Day of work defined as 8 Hours a Mnth for fulltime employees
7/1/1992	Day of work defined as 4 Hours a Mnth for parttime 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

#### Division 91 - Parks Union Empl

##### Provisions by Date

6/25/1996	Day of work defined as 4 Hours a Day for parttime employees
6/25/1996	Day of work defined as 8 Hours a Day for fulltime employees
7/1/1995	Benefit B-3 (80% max)
1/1/1995	10 Year Vesting
1/1/1995	Benefit C-1 (Old)

# Ingham County (3303)

## Table 25 (continued)

### Benefit Provision History

#### Division 91 - Parks Union Empl

##### Provisions by Date

1/1/1995	Member Contribution Rate 0.00%
1/1/1995	Benefit FAC-5 (5 Year Final Average Compensation)
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

#### Division 92 - Parks Non Union

##### Provisions by Date

1/1/2002	Benefit FAC-3 (3 Year Final Average Compensation)
6/25/1996	Day of work defined as 8 Hours a Day for fulltime employees
6/25/1996	Day of work defined as 4 Hours a Day for parttime employees
7/1/1995	Benefit F55 (With 25 Years of Service)
7/1/1995	Benefit B-4 (80% max)
1/1/1995	Member Contribution Rate 0.00%
1/1/1995	10 Year Vesting
1/1/1995	Benefit C-1 (Old)
1/1/1995	Benefit FAC-5 (5 Year Final Average Compensation)
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

#### Division 93 - Lgl Rsrch Clerks

##### Provisions by Date

1/1/1998	Member Contribution Rate 0.00%
1/1/1998	Benefit C-1 (Old)
1/1/1998	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1998	10 Year Vesting
6/25/1996	Day of work defined as 4 Hours a Mnth for parttime employees
6/25/1996	Day of work defined as 8 Hours a Mnth for fulltime 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

# Ingham County (3303)

## Table 25 (continued)

### Benefit Provision History

#### Division 94 - Zoo Hires after 7/1/07

##### Provisions by Date

7/1/2007	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/2007	Benefit B-2
7/1/2007	Member Contribution Rate 0.00%
7/1/2007	Day of work defined as 8 hours per day
7/1/2007	10 Year Vesting
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

#### Division 95 - UAW Local 2256

##### Provisions by Date

7/1/2007	Eligible at Age 58 (With 8 Years of Service)
7/1/2007	Benefit FAC-2 (2 Year Final Average Compensation)
7/1/2007	Rule of 65 (Age + Service) Retirement
7/1/2007	2.8% Mult. for Svc <35, 1.5% for Svc >35 yrs (100% max)
7/1/2007	Member Contribution Rate 1.70%
7/1/2007	Day of work defined as 8 hours per day
7/1/2007	8 Year Vesting
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

#### Division 96 - Teamsters 580

##### Provisions by Date

7/1/2007	Benefit FAC-2 (2 Year Final Average Compensation)
7/1/2007	Rule of 65 (Age + Service) Retirement
7/1/2007	Day of work defined as 8 hours per day
7/1/2007	Eligible at Age 58 (With 8 Years of Service)
7/1/2007	Member Contribution Rate 3.50%
7/1/2007	2.8% Mult. for Svc <35, 1.5% for Svc >35 yrs (100% max)
7/1/2007	8 Year Vesting
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

**APPENDIX**

**SUMMARY OF**

**PLAN PROVISIONS**

**AND**

**ACTUARIAL ASSUMPTIONS**

**AND**

**ACTUARIAL FUNDING METHOD**

**AS OF DECEMBER 31, 2008**

**FOR THE**

**MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM**

**OF MICHIGAN**

## **INTRODUCTION**

An actuarial valuation is the mathematical process that estimates plan liabilities and employer contribution requirements for purposes of financing the retirement system. This process is repeated annually to update the liabilities and contribution requirements for changes in member census and plan features, and to reflect actual plan experience in the process. The valuation reflects the present provisions of the Municipal Employees' Retirement Act of 1984, as amended by 1996 Public Act 220 (as amended), as embodied in the MERS Plan Document (as revised). The specific benefit provisions in effect for each municipality are listed in Table 1 in the results section of the report.

In addition to utilizing current membership and financial data, an actuarial valuation requires the use of a series of assumptions regarding uncertain future events. The assumptions and methods used in the December 31, 2008 actuarial valuation are those adopted by the Retirement Board. The actuarial assumptions were last revised as of December 31, 2008 to reflect the results of the study of plan experience covering the period from December 31, 1998 through December 31, 2003.

There have been no changes in the funding method which was adopted by the Retirement Board commencing with the December 31, 1993 valuations. The basic funding method is entry age normal and employer contribution amounts are developed as a level percentage of payroll.

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

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology follow this section.

### **ASSUMPTION AND METHOD CHANGES FOR THE DECEMBER 31, 2008 ACTUARIAL VALUATION**

The December 31, 2008 actuarial valuation reflects the following change(s) in the actuarial assumptions and/or methods:

- Revised rates of expected employee turnover (withdrawal, or termination of employment before retirement).
- The standard amortization period for positive unfunded accrued liabilities is maintained at 28 years, instead of being reduced to 27 years.

The effects of these changes are shown in the note below Table 16 for each division.



## **SUMMARY OF PLAN PROVISIONS - DEFINED BENEFIT PLAN \***

The benefits summarized in this section are intended only as general information regarding the Municipal Employees' Retirement System of Michigan. They are not a substitute for Act. No. 220 of the Public Acts of 1996, and the MERS Plan Document as revised. If any conflict occurs between the information in this summary and Act. No. 220 of the Public Acts of 1996, as amended, or the MERS Plan Document, as revised, the provisions of Act. No. 220 and the MERS Plan Document govern.

### **Eligibility for Retirement (Plan Section 10)**

Age 60 with 10 or more years of credited service (reduced to 8 or 6 years if either Benefit V-8 or V-6, respectively, is adopted).

Age 55 with 15 or more years of credited service (reduced benefit unless Benefit F55 is adopted).

Age 50 with 25 or more years of credited service (reduced benefit unless Benefit F50 is adopted).

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

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

Benefit F50 - Age 50 with a required period of credited service of either 25 or 30 years.

Benefit F55 - Age 55 with a required period of credited service of 15, 20, 25 or 30 years.

Benefit F(N) - Any age with a required period of credited service of either 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 or 30 years.

### **Mandatory Retirement**

None.

### **Deferred Retirement (Plan Section 12)**

Termination of membership before age 60 other than by retirement or death, after 10 years of credited service (8 or 6 years if Benefit V-8 or V-6 is adopted). Retirement allowance begins upon application filed with MERS and satisfaction of the eligibility requirements for retirement. The deferred retirement allowance is computed in the same manner as a service retirement allowance, based on the benefit program in effect as of the date of termination of membership.

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

*\* Please see page 206 for a description of the Hybrid Plan.*

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

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

- Benefit A - 1.0% of a member's final average compensation (FAC). Benefit A may not be adopted after January 2, 1986.
- Benefit B - Contact MERS office for details. Benefit B may not be adopted after January 2, 1986.
- Benefit C New - 1.3% of FAC.
- Benefit C Old - Sum of 1.0% times the first \$4,200 of FAC, plus 1.5% times the portion of FAC over \$4,200. Benefit C Old may not be adopted after January 2, 1986.
- Benefit C-1 New - 1.5% of FAC.
- Benefit C-1 Old - Sum of 1.2% times the first \$4,200 of FAC, plus 1.7% times the portion of FAC over \$4,200. Benefit C-1 Old may not be adopted after January 2, 1986.
- Benefit B-1 - 1.7% of FAC.
- Benefit C-2 - 2.0% of FAC, payable until attainment of the age at which unreduced Social Security benefits are available (currently age 65 for normal retirement, gradually increasing to age 67). Upon attainment of this age, the benefit reverts to the basic Benefit A, C New, C Old, C-1 New, C-1 Old or B-1.
- Benefit B-2 - 2.0% of FAC.
- Benefit B-3 - 2.25% of FAC, with a maximum benefit of 80% of FAC.
- Benefit B-4 - 2.5% of FAC, with a maximum benefit of 80% of FAC.

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

The maximum benefit that may be paid by MERS is governed by Section 415 of the Internal Revenue Code (see page 209). Benefits in excess of the maximum benefit will be paid by the MERS Excess Benefit Plan under Plan Section 55A.

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

If the municipality has elected to come under the provision of Act 88 (see Table 1), service with former and future public employers in Michigan may be used to satisfy the service eligibility conditions of MERS.

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

MERS plan benefits are based on a member's final average compensation (FAC), subject to the dollar compensation limits under Section 401(a)(17) of the Internal Revenue Code (see page 209). For this purpose, final average compensation means one-fifth of the aggregate amount of compensation (as defined in the MERS Plan Document, Section 2A(6)) paid to a member during the period of 5 consecutive years of the member's credited service in which the aggregate compensation paid is highest, known as FAC-5. Adoption of Benefit FAC-3 results in final average compensation being averaged over 3 years, instead of 5 years.

**Disability Retirement Allowance (Plan Section 24)**

Total and permanent disability while employed by a participating municipality and after meeting the vesting requirement of the benefit program. The service requirement is waived if the disability is the natural and proximate result of duty-connected causes.

The allowance is computed in the same manner as a service retirement allowance, except that the reduction for retirement before age 60 is not applied.

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

Adoption of optional Benefit Program D-2 will provide a retirement allowance for a duty-connected disability that is the greater of:

- (i) 25% of the member's final average compensation; or
- (ii) A benefit based on 10 years of credited service in addition to the member's actual period of service, provided the total years of service do not exceed the greater of 30 years or the member's actual period of service.

**Non-Duty Death Allowance (Plan Sections 26 and 28)**

If a member or vested former member with the minimum years of service required to be vested dies before retirement, a monthly survivor allowance may be payable.

If the member is married, the spouse is the automatic beneficiary unless the spouse, in writing, declines a benefit in favor of another named beneficiary.

A contingent survivor beneficiary (named in an Option II Contingent Beneficiary Designation form filed with MERS) will receive a retirement allowance computed in the same manner as a service retirement allowance, based on service and final average compensation at death, but reduced to reflect an Option II (100% joint and survivor) election. The reduction for retirement before age 60 is not applied. Payment of a retirement allowance to the contingent survivor beneficiary of a deceased member commences immediately. Payment of a retirement allowance to the contingent survivor beneficiary of a deceased vested former member commences on the date the member would have first satisfied eligibility for retirement with an unreduced service retirement allowance.

If there is no named beneficiary and the member leaves a spouse, the spouse will receive a survivor allowance. Payment of a retirement allowance to the surviving spouse of a deceased member commences immediately. Payment of a retirement allowance to the surviving spouse of a deceased vested former member commences on the date the member would have first satisfied eligibility for retirement for an unreduced service retirement allowance. The amount of a surviving spouse's retirement allowance shall be 85% of the deceased member's or deceased vested former member's accrued retirement allowance computed in the same manner as a service retirement allowance, based on service and final average compensation at time of death.

The amount of a surviving spouse's benefit is always the larger of i) the benefit computed as a contingent survivor beneficiary, and ii) the 85% of accrued retirement allowance benefit described above.

If there is no named beneficiary and no retirement allowance being paid to a surviving spouse, unmarried children under age 21 will be paid an equal share of 50% of the deceased member's or deceased vested former member's accrued retirement allowance. The reduction for retirement before age 60 is not applied.

If no retirement allowance becomes payable at death, the member's accumulated contributions, if any, are paid to the beneficiary or to the decedent's estate.

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

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

Adoption of optional Benefit Program D-2 will provide a retirement allowance for a duty-connected death that is the greater of:

- (i) 25% of the member's final average compensation; or
- (ii) A benefit based on 10 years of credited service in addition to the member's actual period of service, provided the total years of service do not exceed the greater of 30 years or the member's actual period of service.

### **Member Contributions (Plan Sections 32 and 35)**

Each member contributes a percent of annual compensation, as selected by the municipality, on the member's annual compensation up to the compensation limit under Section 401(a)(17) of the Internal Revenue Code (see page 209). Any percentage from 0% to 10% (in 0.1% increments) may be selected. A 3%/5% contribution program was available prior to 1985 and may be continued (until any new benefit programs are adopted), but not adopted, after 1984. Under this program the member contributes 3% of the first \$4,200 of annual compensation and 5% of portions of annual compensation over \$4,200. Interest is credited to accumulated member contributions each December 31 (and reflected in the Annual Member Statement provided to each member) at a rate determined by MERS, currently the one-year U.S. Treasury Bill rate determined as of each December 1. The interest rate credited for the 12-month period ending on the valuation date was 0.73%.

If a member leaves the employ of the municipality, or dies, without a retirement allowance or other benefit payable on his/her account, the member's accumulated contributions plus interest (as described above) are refunded with spousal consent, to the member, if living, or to the member's surviving spouse, if any, or to a named beneficiary (after spousal consent, if applicable).

**Note for MERS' Defined Contribution Program (Plan Section 19A):** The Annual Actuarial Valuation addresses assets and liabilities for participation under MERS' Defined Benefit Programs. MERS' Defined Contribution Program (Benefit Program DC), which first became available for adoption in late 1997, is not addressed in the valuation results as it is not a defined benefit program.

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

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

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

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

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

A retiring member electing form of payment SL (straight life retirement allowance) is normally paid a lifetime retirement allowance, with payments terminating at death. The retiring member could provide benefits to a surviving spouse or another named beneficiary (see below) by electing Option II (100% continuation to beneficiary) or Option II-A (75% continuation to beneficiary) or Option III (50% continuation to beneficiary). A surviving spouse is automatically the beneficiary to an Option II, IIA or III allowance unless the spouse, in writing, relinquishes the benefit to the member electing a straight life allowance or to another named beneficiary. Electing these alternate forms of payment would lower the retiring member's retirement allowance.

If Benefit Program RS50% is adopted, a member retiring on or after the effective date of Benefit RS50% may elect form of payment SL and still provide a 50% survivor benefit to the member's spouse. To be eligible for a surviving spouse benefit, the retiring member and spouse must have been married to each other both at the time of death and during the full one-year period just before retirement.

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

Any member who is eligible to retire with full, immediate retirement benefits has the option to:

- (i) Retire immediately and receive a monthly benefit payable immediately, or
- (ii) Delay his or her retirement date and continue to work.

If the member is covered by Benefit Program DROP+ and the member retires at least 12 months after first becoming eligible for unreduced benefits, at actual retirement the member *has the option* to receive a partial lump sum and a reduced monthly benefit:

- (i) The member can elect a lump sum equal to 12, 24, 36, 48, or 60 times the member's monthly accrued benefit (if the member has delayed retirement at least that many months).
- (ii) For each 12 months included in the lump sum, the member's lifetime benefit is reduced by the DROP+ Percentage adopted by the employer. The employer can adopt any of the following DROP+ reduction percentages: 4%, 5%, 6%, 7%, or 8%.

## SUMMARY OF PLAN PROVISIONS - HYBRID PLAN \*

The benefits summarized in this section are intended only as general information regarding the Municipal Employees' Retirement System of Michigan. They are not a substitute for Act. No. 220 of the Public Acts of 1996, and the MERS Plan Document as revised. If any conflict occurs between the information in this summary and Act. No. 220 of the Public Acts of 1996, as amended, or the MERS Plan Document, as revised, the provisions of Act. No. 220 and the MERS Plan Document govern.

### Part I - Defined Benefit Portion of Hybrid Plan

#### Eligibility for Retirement (Plan Section 19B)

Age 60 and 6 or more years of service.

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

None

#### Mandatory Retirement

None

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

Termination of membership before age 60 other than death, after 6 years of credited service. Retirement allowances begin upon application filed with MERS, at age 60 or later. The deferred retirement allowance is computed in the same manner as a service retirement allowance, based on the final average compensation and years of service at termination.

#### Service Retirement Allowance (Plan Section 19B)

Credited service at time of termination is multiplied by:

Hybrid 1.0%	1.0% of a member's final average compensation (FAC)
Hybrid 1.25%	1.25% of FAC
Hybrid 1.5%	1.5% of FAC

\* Please see page 199 for a description of the Defined Benefit Plan.



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

The maximum benefit that may be paid by MERS is governed by Section 415 of the Internal Revenue Code (see page 209). Benefits in excess of the maximum benefit will be paid by the MERS Excess Benefit Plan under Plan Section 55A.

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

If the municipality has elected to come under the provision of Act 88 (see Table 1), service with former and future public employers in Michigan may be used to satisfy the service eligibility conditions of MERS.

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

Computed under defined benefit plan Benefit Program FAC-3.

**Disability Retirement Allowance (Plan Section 24)**

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

**Non-Duty Death Allowance (Plan Sections 26 and 28)**

Benefits are the same as under the defined benefit plan.

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

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

**Member Contributions (Plan Section 19B)**

None

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

None

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

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

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

None

## **Part II - Defined Contribution Portion of Hybrid Plan**

### **Employer Contributions (Plan Section 19B)**

Contribution Amount - Any percentage of compensation allowed by federal law.

Vesting Schedule - One of the following vesting schedules for employer contributions can be adopted by the employer:

1. Immediate vesting upon participation, or
2. 100% vesting after stated years (participant is 100% vested after not to exceed maximum 5 years of service ("cliff" vesting)), or
3. Graded vesting percentages per year of service, not to exceed maximum 6 years of service for 100% vesting, nor be less than certain stated minimums

### **Member Contributions (Plan Section 19B)**

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

Vesting Schedule - 100% immediate vesting

**Municipal Employees' Retirement System of Michigan  
IRC Section 415(b)(1)(A) Benefit Dollar Limits - 2009**

The limits are based on the retiree's age at retirement. The limit at ages 62-65 is indexed with inflation, in \$5,000 increments. The limits at earlier ages are then increased proportionately. The limit applies to the retiree's or beneficiary's employer-financed straight life benefit, except in the case of an Option II, IIA, or III election with the retiree's spouse as named beneficiary, in which case the limit applies to the employer-financed portion of the reduced joint and survivor benefit.

<b>Age at Retirement</b>	<b>General Employees</b>	<b>Police and Fire Members #</b>
35	\$ 35,366	\$ 195,000
36	37,375	195,000
37	39,512	195,000
38	41,786	195,000
39	44,208	195,000
40	46,788	195,000
41	49,541	195,000
42	52,479	195,000
43	55,618	195,000
44	58,975	195,000
45	62,569	195,000
46	66,420	195,000
47	70,551	195,000
48	74,989	195,000
49	79,762	195,000
50	84,903	195,000
51	90,448	195,000
52	96,439	195,000
53	102,921	195,000
54	109,948	195,000
55	117,578	195,000
56	125,881	195,000
57	134,932	195,000
58	141,819	195,000
59	155,644	195,000
60	167,522	195,000
61	180,589	195,000
62	195,000	195,000
63	195,000	195,000
64	195,000	195,000
65 & older	195,000	195,000

# Requires that the member have at least 15 years of police, fire, and/or armed forces service as defined in the final regulations issues on April 5, 2007. Otherwise, use the limits for general members.

**IRC Section 401(a)(17) Compensation Limit - 2009**

For 2009 the IRC Section 401(a)(17) limit is \$245,000. This limit is indexed with inflation in \$5,000 increments.

## **ACTUARIAL ASSUMPTIONS**

### **Actuarial Assumptions**

To calculate MERS contribution requirements, assumptions are made about future events that could affect the amount and timing of benefits to be paid and the assets to be accumulated. The economic and demographic assumptions include:

- An assumed rate of investment return that is used to discount liabilities and project what plan assets will earn.
- A mortality table projecting the number of members who will die before retirement and the duration of benefit payments after retirement.
- Assumed retirement rates projecting when members will retire and commence receiving retirement benefits.
- A set of withdrawal and disability rates to estimate the number of members who will leave the work force before retirement.
- Assumed rates of pay increase to project member compensation in future years.

The actuarial assumptions used in connection with this December 31, 2008 actuarial valuation are unchanged from the December 31, 2007 valuation assumptions , with the exceptions noted on page 198. The actuarial assumptions currently utilized are summarized below and on the following pages.

### **Interest Rate**

Funding plan benefits involves the accumulation of assets to pay benefits in the future. These assets are invested and the net rate of investment earnings is a significant factor in determining the contributions required to support the ultimate cost of benefits. For the 2008 actuarial valuation, the net long-term investment yield is assumed to be 8%. This assumption was first used for the December 31, 1981 actuarial valuations.

The reader should note that, given that the actuarial value of assets is currently 39% higher than the market value, meeting the actuarial assumption in the next few years will require average annual market returns that substantially exceed the 8% investment return assumption.

**Please see the Comments on the the Investment Markets on page 3 .**

## Pay Increases

Because benefits are based on a member's final average compensation, it is necessary to make an assumption with respect to each member's estimated pay progression. The pay increase assumption used in the actuarial valuation projects annual pay increases of 4.5% plus a percentage based on an age-related scale to reflect merit, longevity and promotional pay increases.

The pay increase assumption for selected ages is shown below. The 4.5% wage inflation assumption was first used for the December 31, 1997 actuarial valuations. The merit and longevity pay increase assumption was first used for the December 31, 2004 actuarial valuations.

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

## Inflation

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

## Payroll Growth

For divisions that are not closed to new hires, the number of active members is projected to remain constant, and the total payroll is projected to increase 4.5% annually in the long term. This assumption was first used for the December 31, 1997 actuarial valuations.

## Withdrawal Rates

The withdrawal rates are used to estimate the number of employees at each age that are expected to terminate employment before qualifying for retirement benefits. The withdrawal rates do not apply to members eligible to retire, and do not include separation on account of death or disability. The assumed rates of withdrawal applied in the current valuation are based on years of service, and scaled up or down according to each division's experience.

<b>Division</b>	<b>Withdrawal Rate Scaling Factor</b>
All divisions	110%

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

Sample rates of withdrawal from active employment, before application of the scaling factor, are shown below. These rates were first used for the December 31, 2008 actuarial valuations.

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

## Retirement Rates

A schedule of retirement rates is used to measure the probability of eligible members retiring during the next year. To reflect the impact plan design may have on retirement experience, separate retirement rates apply to valuation divisions without Benefits F50, F55 or F(N), to those divisions that have adopted F55, to those that have adopted F50, and to those that have adopted F(N). The retirement rates in use for each category are shown below and on the next page. The Normal Retirement rates were first used for the December 31, 2000 actuarial valuations. The Early Retirement rates were first used for the December 31, 2004 actuarial valuations.

### NORMAL RETIREMENT - AGE BASED BENEFIT PROVISIONS - F(N) NOT ADOPTED

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year		
	Without F50 or F55 or F(N)	With F55	With F50
50			22%
51			22
52			22
53			22
54			24
55		18%	18
56		15	14
57		10	16
58		15	18
59		20	18
60	20%	20	20
61	24	24	24
62	24	24	24
63	24	24	24
64	27	27	27
65	30	30	30
66	30	30	30
67	30	30	30
68	30	30	30
69	30	30	30
70	100	100	100

# **NORMAL RETIREMENT - SERVICE BASED BENEFIT PROVISION - F(N) ADOPTED**

<b>Age</b>	<b>Percent of Eligible Active Members Retiring Within Next Year</b>	<b>Age</b>	<b>Percent of Eligible Active Members Retiring Within Next Year</b>	<b>Age</b>	<b>Percent of Eligible Active Members Retiring Within Next Year</b>
40	22%	51	22%	61	24%
41	22	52	22	62	24
42	22	53	22	63	24
43	22	54	24	64	27
44	22	55	18	65	30
45	22	56	14	66	30
46	22	57	16	67	30
47	22	58	18	68	30
48	22	59	18	69	30
49	22	60	20	70	100
50	22				

Municipalities that have adopted a non-standard benefit multiplier after December 31, 1996 that is in excess of the B-4, 2.5% multiplier, will have a retirement rate equal to 75% at the first age at which unreduced plan benefits are available.

## **EARLY RETIREMENT - REDUCED BENEFIT**

<b>Retirement Ages</b>	<b>Percent of Eligible Active Members Retiring Within Next Year</b>
50	2%
51	2
52	3
53	5
54	8
55	4
56	4
57	4
58	6
59	8



## Disability Rates

Disability rates are used in the valuation to estimate the incidence of member disability in future years.

The assumed rates of disablement at various ages are shown below. These rates were first used for the December 31, 2004 actuarial valuations.

Sample Ages	Percent Becoming Disabled Within Next Year
20	0.02%
25	0.02
30	0.02
35	0.06
40	0.06
45	0.11
50	0.24
55	0.41
60	0.41
65	0.41

85% of the disabilities are assumed to be non-duty and 15% of the disabilities are assumed to be duty related. For those plans which have adopted disability provision D-2, 70% of the disabilities are assumed to be non-duty and 30% are assumed to be duty related.

## Mortality Table

In estimating the amount of the reserves required at the time of retirement to pay a member's benefit for the remainder of his or her lifetime, it is necessary to make an assumption with respect to the probability of surviving to retirement and the life expectancy after retirement.

The mortality table used to project the mortality experience of plan members is a 50% Male - 50% Female blend of the 1994 Group Annuity Mortality Table. For disabled retirees, the regular mortality table is used with a 10-year set forward in ages to reflect the higher expected mortality rates of disabled members. These mortality tables were first used for the December 31, 2004 actuarial valuations.

90% of active member deaths are assumed to be non-duty deaths and 10% of the deaths are assumed to be duty related.

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

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

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

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

## Miscellaneous and Technical Assumptions

Loads	- None
Marriage Assumptions	- 70% of males and 70% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses.
Pay Increase Timing	- Beginning of valuation year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
Pay Adjustment	- None.
Decrement Timing	- Decrements of all types are assumed to occur mid-year.
Future Service	- Members are assumed to earn 1.0 years of service in each future year.
Eligibility Testing	- Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Benefit Service	- Exact fractional service is used to determine the amount of benefit payable. Benefit service is the service used in the benefit formula.
Eligibility Service	- The larger of reported Eligibility Service and reported Vesting Service was used as eligibility service in the valuation. Eligibility service is the service used to meet the conditions for retirement, and is generally equal to or larger than benefit service.
Decrement Relativity	- Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation	- Disability and withdrawal do not operate during retirement eligibility.
Normal Form of Benefit	- Future retiring members are assumed to elect:

<u>Form of Payment</u>	<u>Percentage</u>
SL	45%
II	25
IIA	10
III	15
IV	5

Incidence of Contributions	- Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits.
Maximum Compensation	- The dollar compensation limits under Section 401(a)(17) of the Internal Revenue Code are projected to increase 4.5% annually. No member or employer contributions are projected to be made on the portion of any member's annual compensation in excess of the IRC Section 401(a)(17) limit for the year.

## Miscellaneous and Technical Assumptions (continued)

- Maximum Benefit - The dollar benefit limitations under Section 415 of the Internal Revenue Code are projected to increase 4.5% annually. Employee divisions 02, 20-29 (Police), 05 and 50-59 (Fire) are presumed eligible for the public safety benefit limits. No benefits in excess of the IRC section 415 limits are projected to be paid, except as provided under the Qualified Excess Benefit Arrangement, Plan Section 55A.
- Member Contribution Interest - The interest rate credited on member contributions is the one-year Treasury Bill rate as of December 1, determined annually. The long-term rate assumed in the valuation is 4%, which is consistent with the 3% to 4% price inflation assumption.
- DROP+ Assumptions - Each eligible member is assumed to make the DROP+ election with the most valuable combination of lump sum and reduced monthly benefit.
- The retirement probabilities on pages 213 - 214 are used for members who are *not* covered by Benefit Program DROP+. For members covered by Benefit Program DROP+, it is assumed that retirement will be delayed long enough to become eligible for at least 4 years worth of DROP+ lump sum.

## **ACTUARIAL FUNDING METHOD**

The Retirement Board has adopted funding methodology for the Retirement System to achieve the following major objectives:

- Develop level required contribution rates as a percentage of payroll;
- Finance benefits earned by present employees on a current basis;
- Accumulate assets to enhance members' benefit security;
- Produce investment earnings on accumulated assets to help meet future benefit costs;
- Make it possible to estimate the long-term actuarial cost of proposed amendments to System provisions; and
- Assist in maintaining the Retirement System's long-term financial viability.

The basic funding objective is a level pattern of cost as a percentage of pay throughout each member's working lifetime. The funding method used in this actuarial valuation – the entry age normal cost method – is intended to i) meet this objective, and ii) result in a relatively level long-term contribution requirement as a percentage of pay. This actuarial method was first used for the December 31, 1993 actuarial valuations.

Under the entry age normal cost method, the total actuarially-determined contribution requirement is equal to the sum of the normal cost plus the payment required to fund the unfunded actuarial accrued liability over a period of years. Funding or amortizing the unfunded actuarial accrued liability includes a payment toward the liability (principal) plus a payment to reflect the time value of money (interest).

### **Normal Cost**

In general terms, the normal cost is the cost of benefit rights accruing on the basis of current service. Technically, the normal cost rate is the level percentage-of-pay contribution required each year, with respect to each member, to accumulate over his or her projected working lifetime the reserves needed to meet the cost of earned benefits. The normal cost represents the ultimate cost of the Retirement System, if the unfunded liability is paid up and the actual experience of the System conforms to the assumptions.

## **Actuarial Accrued Liability**

The total actuarial present value of future benefits is computed using the valuation's actuarial assumptions. Subtracting the present value of future normal costs results in the actuarial accrued liability.

The total actuarial accrued liability essentially represents the amount that would have been accumulated as of December 31, 2008, if contributions sufficient to meet the normal costs of the Retirement System had been made each year in the past, benefit provisions had always been the same as current benefit provisions, and actual past experience had always conformed to current actuarial assumptions. If assets equaled the total accrued liability, there would be no unfunded liability and future contribution requirements would consist solely of the calculated normal cost rates.

## **Amortization of Unfunded Actuarial Accrued Liability**

The unfunded actuarial accrued liability is projected to the beginning of the fiscal year for which employer contributions are being calculated (see page 183 for a description of the projection). The projected unfunded accrued liability is then amortized by level percent of payroll contributions over a period of years. Active member payroll is assumed to increase 4.5% a year for the purpose of determining the level percent contributions.

The standard amortization period to fund the unfunded liability is 28 years for positive unfunded liabilities in the 2008 valuation. This period will also be used for the 2009 valuation, and then will be reduced by one year in each of the next eight annual valuations, reaching 20 years in the 2017 valuation. Beginning with the 2018 valuation the 20 year period will be reestablished with each annual valuation. Section 20m of Act No. 314 of the Public Acts of 1965 as amended (MCL 38.1140m) requires that the amortization period not exceed 30 years.

The standard amortization period for negative unfunded liabilities is 10 years, with the 10 year period reestablished with each annual actuarial valuation.

For divisions that are closed to new hires, and the new hires are not covered by MERS defined benefit or hybrid provisions (in a linked division), the otherwise applicable MERS-wide standard amortization period for positive unfunded liabilities in effect in the valuation year in which the division is closed is decreased annually by 2 years until the period reaches 5 years. At that point, the amortization period will remain at 5 years.

Shorter amortization periods may be elected by a municipality (but not shorter than 5 years for

negative unfunded liabilities).

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

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

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

### **Present Value of Accrued Benefits**

The present value of accrued benefits represents the actuarial value of benefits that have been earned as of the valuation date for all members of the valuation division. This benefit reflects the final average compensation and plan benefit service of each member, and plan features of the member's valuation division as of the valuation date. Included in this value is the current value of vested benefits for members who have met plan vesting requirements and the current value of non-vested benefits for members who have not yet met plan vesting requirements. Regardless of plan vesting service, all member contributions are vested. Active members are assumed to continue in employment until retirement, death, disability or termination, but benefit amounts are frozen, for valuation purposes only, on the valuation date.

### **Termination Liability**

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

## Projections of Employer Contributions and Funded Percentage

The 20-year projections of employer contributions and funded percentages displayed in Chart 17.5 are based on the following assumptions:

- All demographic assumptions will be met during the projection period, including the assumption that active members' pays increase in accordance with the pay increase assumption (see page 211). If the number of active members remains constant, projected total active member payroll will increase about 4.5% annually, the wage inflation assumption. For open divisions (an open division is open to newly hired employees), this projected payroll growth results in increasing employer contributions even when the employer contribution rate is stable or slowly declining.
- The actuarial value of assets will earn the assumed 8% return each year during the projection period (see **Comments on the Investment Markets on page 3**).
- There will be no benefit changes during the projection period.
- The employer contributions through January 1, 2010 are not affected, and are based on previous annual actuarial valuations.
- For open divisions (new hires are added to the division), the number of active members is assumed to remain constant. However, if an open division is linked to a division that will have no new hires (whose new hires enter the open division), the total number of active members in the linked divisions (combined) is assumed to remain constant. For closed divisions (no new hires), the number of active members is assumed to gradually decline to zero, based on the assumptions for retirement, disability, termination, and death.

**The projected contribution amounts should not be used for short term budgeting purposes because the assumptions are designed to be a long term expectation of future events. These projections illustrate the long term pattern of employer contributions under current funding policies. A projection of contribution rates for budgeting purposes would require additional short-term actuarial analysis, which is beyond the scope of this report.**

Most open division projections (an open division is open to newly hired employees) will show a very gradual change, up or down, in the funded percentage toward 100% funding. For divisions that are currently less than 100% funded, the reader may be surprised at how long it takes to approach 100% funding. This happens because the standard amortization period for unfunded accrued liabilities, after declining to 20 years in the 2017 annual actuarial valuations, will be reset each year thereafter to a new 20 year period. This results in more stable employer contribution rates, but also a very gradual approach to 100% funding. Additional employer contributions would accelerate the funding progress.



A closed division (no new hires) that is not linked to an open division (see the next page for a discussion of linked divisions) and is less than 100% funded will have a projected employer contribution that increases each year for the first 11-12 years after closure. This results in a more rapid amortization of unfunded accrued liabilities and a more rapid increase in the division's funded percentage. This is necessary to ensure that the division has adequate assets to pay benefits. However, the closed division's funded percentage may start to decline several years after all the members have retired. Once the average age of the retiree-only division reaches the late 70's or older, the 5-year amortization period may result in insufficient assets to cover the pension payout. This issue is being reviewed in the 2004-2008 study of MERS experience, and the 5-year amortization will likely be revised. For these closed divisions the projected funded percentage in Chart 17.5 may decrease (or go negative) in the later years of the projection.

A few open divisions will see a decline in the funded percentage. This is usually an open division with a very small number of active members (often only one) and a much larger number of retirees. Because the division is open to new hires, the standard amortization period is used. For many years this may result in a declining funded percentage, which may actually become negative temporarily, before the funded percentage begins to head up toward 100% funding. Negative assets means the division is temporarily borrowing from better funded divisions within the same municipality. Such a division should be considered a candidate for either merging with a different division, or an accelerated funding schedule.

A division with no new hires that is linked to an open division within the same employee classification (with new hires – please refer to the next section on Linked Divisions) will typically show a projected funded percentage that declines and even becomes negative. This is an expected condition, because the standard open division amortization policy applies to a division with no new hires that is linked to an open division. The linked division with no new hires is allowed to share the assets of the linked open division. The division with no new hires alone will run out of assets; however, the combined linked divisions will not run out of assets and the combined funded percentage will head towards 100%. For a linked division the projections also show a dashed line that represents the combined projection of all the linked divisions.

A small number of divisions currently have negative assets, and a negative funded percentage. These are generally divisions for which many or most of the employees have been transferred to a different division, with the bulk of the assets also being transferred to the other division. Negative assets means the division is temporarily borrowing from better funded divisions within the same municipality. Such a division should be considered a candidate for either merging with a different

division, or an accelerated funding schedule.

Some divisions are so well funded that no future employer contributions will be needed; assuming that there are no major changes in the covered participants, benefit provisions are not changed, and the actuarial assumptions are met. Assets substantially exceed present liabilities. The funded percentage will continue to increase during the projection period. Such a division may be a candidate for a reallocation of assets among other divisions, if appropriate.

For divisions that are affected by employer contribution rate caps, the projections of employer contributions in Chart 17.5 do not reflect the impact of the employer cap provision. Member contribution rates are assumed to remain constant at the rates shown in Table 1. The projected employer contribution rate is allowed to move up or down, as need, to adequately fund the benefit obligations. In other words, projection of the future impact of the employer cap provision is beyond the scope of the Chart 17.5 projections. Future annual actuarial valuation reports will, of course, reflect (in the results) the application of the then-current employer cap provision.

## **Linked Divisions**

The closed division funding policy described at the bottom of page 220 was adopted by the Retirement Board (Amortization Policy for Closed Divisions Within Open Municipalities, as revised by the Retirement Board on March 11, 2009). The purpose is to ensure that a defined benefit (DB) division that is closed to new hires does not run out of money. Funding the unfunded liabilities over the MERS standard amortization period will likely deplete a closed division's assets before the death of the last participant in the division. Assets cannot be shared between the closed DB division and a defined contribution (DC) plan covering the new hires, or a non-MERS DB plan covering the new hires, even if the employees are part of the same employee classification (bargaining unit).

However, if the new hires are covered by a new tier of benefits in the MERS DB Plan (including the DB portion of the MERS Hybrid Plan), there can be a sharing of employer assets between the DB division with no new hires (with the old benefit structure) and the DB/Hybrid division covering the new hires within the same employee classification. The employer can avoid the required more rapid amortization of the unfunded liabilities by putting new hires into a MERS DB or MERS Hybrid division, instead of a DC plan or non-MERS DB plan.

If a division with no new hires is "linked" to an open MERS DB division, this is indicated in Table 1, in the footnote to Table 16, and in the projections in Chart 17.5. Both the linked divisions will use the standard open division funding policy.

## ASSET VALUATION METHOD

The actuarial value of assets is determined on the basis of a method that calculates expected investment income at the valuation rate of return and adds a portion of the difference between the expected investment income and actual investment income earned on a market value basis. The difference in investment income between expected return and market return is recognized over a 10-year period at the rate of 10% per year. This asset valuation method was first adopted for the December 31, 2005 valuation, and is applied as follows:

Actuarial Value equals:

- (a) Actuarial value of assets from the previous actuarial valuation, plus
- (b) Aggregate employer and member contributions since the last valuation, minus
- (c) Benefit payments and refunds of member contributions since the last valuation, plus
- (d) Estimated investment income at the 8% valuation interest rate, plus
- (e) Portion of gain (loss) recognized in the current valuation.

For the above purpose, gain (loss) is defined as the excess during the period of the investment return on the market value of assets over the expected investment income. The portion recognized in the valuation is 10% of the current year's gain (loss) plus 10% of the gain (loss) from each of the 9 preceding years. The cumulative difference between the market value and valuation assets as of December 31, 2005 is recognized over 9 years.

During 2008, the approximate net investment return on average total assets at actuarial value (determined as the actuarial value of investment income divided by the average actuarial value of assets during the year) was 4.73%. The corresponding amounts for 2007, 2006, 2005, and 2004 were 8.12%, 8.14%, 6.51%, and 6.82%, respectively.

For the December 31, 2008 valuation, the actuarial value of assets is equal to 139.15% of market value (compared to 98.85%, 98.62%, 102.71%, and 102.45% in 2007, 2006, 2005, and 2004, respectively). This percentage is applied to each division's reported market value of assets to estimate the actuarial value of assets for the division. The chart on page 226 provides the details of the derivation of the actuarial value of assets for the retirement system in the aggregate.

The reader should note that, given that the actuarial value of assets is currently 39% higher than the market value, meeting the actuarial assumption in the next few years will require average annual market returns that substantially exceed the 8% investment return assumption.

**Please see the Comments on the Investment Markets on page 3 .**

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

Valuation Date December 31:	2006	2007	2008	2009	2010
1. Beginning of Year Assets					
a) Market Value	\$ 4,906,288,690	\$ 5,590,042,317	6,071,046,914		
b) Valuation Assets	5,039,071,709	5,512,924,466	6,001,040,078		
2. End of Year Market Value Assets	5,590,042,317	6,071,046,914	4,512,260,955		
3. Net Additions to Market Value					
a) Net Contributions	371,505,157	386,942,952	374,214,134		
b) Net Investment Income = (3d) - (3a) - (3c)	622,409,716	442,377,206	(1,553,001,917)		
c) Benefit Payments	(310,161,246)	(348,315,561)	(379,998,176)		
d) Total Additions to Market Value = (2) - (1a)	683,753,627	481,004,597	(1,558,785,959)		
4. Average Valuation Assets =					
(1b) + .5x[(3a) + (3c)]	5,069,743,665	5,532,238,162	5,998,148,057		
5. Expected Income at Valuation Rate = 8% x (4)	405,579,493	442,579,053	479,851,845		
6. Gain (Loss) = (3b) - (5)	216,830,223	(201,847)	(2,032,853,762)		
7. Phased-In Recognition of Investment Return					
a) Current Year: 0.1 x (6)	21,683,022	(20,185)	(203,285,376)		
b) First Prior Year	(14,753,669)	21,683,022	(20,185)	(203,285,376)	
c) Second Prior Year		(14,753,669)	21,683,022	(20,185)	(203,285,376)
d) Third Prior Year			(14,753,669)	21,683,022	(20,185)
e) Fourth Prior Year				(14,753,669)	21,683,022
f) Fifth Prior Year					(14,753,669)
g) Sixth Prior Year					
h) Seventh Prior Year					
i) Eighth Prior Year					
j) Ninth Prior Year					
k) Total Recognized Investment Gain (Loss)	6,929,353	6,909,168	(196,376,208)	(196,376,208)	(196,376,208)
8. Change in Valuation Assets					
(3a) + (3c) + (5) + (7k)	473,852,757	488,115,612	277,691,595		
9. End of Year Assets					
a) Market Value = (2)	5,590,042,317	6,071,046,914	4,512,260,955		
b) Valuation Assets = (1b) + (8)	5,512,924,466	6,001,040,078	6,278,731,673		
c) Difference Between Market & Valuation Assets	77,117,851	70,006,836	(1,766,470,718)		
10. Recognized Rate of Return = [(5) + (7k)] / (4)	8.14%	8.12%	4.73%		
11. Market Rate of Return	12.61%	7.89%	(25.59%)		
12. Valuation Asset Adjustment Factor = (9b) / (9a)	0.986204	0.988469	1.391482		

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

Valuation Date December 31:	2001	2002	2003	2004	2005
1. Beginning of Year Assets					
a) Market Value	\$ 3,788,886,471	\$ 3,647,820,869	\$ 3,285,304,333	\$ 4,071,997,180	\$ 4,619,201,287
b) Valuation Assets	3,791,423,339	4,034,377,419	4,134,404,645	4,459,492,020	4,732,208,229
2. End of Year Market Value Assets	3,647,820,869	3,285,304,333	4,071,997,180	4,619,201,287	4,906,288,690
3. Net Additions to Market Value					
a) Net Contributions	154,103,475	167,427,558	223,450,393	223,057,268	277,589,524
b) Net Investment Income = (3d) - (3a) - (3c)	(93,269,286)	(324,926,459)	792,139,959	577,562,751	288,223,418
c) Benefit Payments	(201,899,791)	(205,017,635)	(228,897,505)	(253,415,912)	(278,725,539)
d) Total Additions to Market Value = (2) - (1a)	(141,065,602)	(362,516,536)	786,692,847	547,204,107	287,087,403
4. Average Valuation Assets = (1b) + .5x[(3a) + (3c)]	3,767,525,181	4,015,582,381	4,131,681,089	4,444,312,698	4,731,640,222
5. Expected Income at Valuation Rate = 8% x (4)	301,402,014	321,246,590	330,534,487	355,545,016	378,531,218
6. Gain (Loss) = (3b) - (5)	(394,671,300)	(646,173,049)	461,605,472	222,017,735	(90,307,800)
7. Phased-In Recognition of Investment Return					
a) Current Year: 0.2 x (6)	(78,934,260)	(129,234,610)		44,403,547	(18,061,560)
b) First Prior Year	(79,670,266)	(78,934,260)			44,403,547
c) Second Prior Year	63,981,441	(79,670,266)			
d) Third Prior Year	40,228,410	63,981,441			
e) Fourth Prior Year	43,743,057	40,228,408			
f) 1999-2003 Years Combined	N/A	N/A	0	(96,873,710)	(96,873,710)
g) Total Recognized Investment Gain (Loss)	(10,651,618)	(183,629,287)	0	(52,470,163)	(70,531,723)
8. Change in Valuation Assets (3a) + (3c) + (5) + (7g)	242,954,080	100,027,226	325,087,375	272,716,209	306,863,480
9. End of Year Assets					
a) Market Value = (2)	3,647,820,869	3,285,304,333	4,071,997,180	4,619,201,287	4,906,288,690
b) Valuation Assets = (1b) + (8)	4,034,377,419	4,134,404,645	4,459,492,020	4,732,208,229	5,039,071,709
c) Difference Between Market & Valuation Assets	(386,556,550)	(849,100,312)	(387,494,840)	(113,006,942)	(132,783,019)
10. Recognized Rate of Return = [(5) + (7g)] / (4)	7.72%	3.43%	8.00%	6.82%	6.51%
11. Market Rate of Return	(2.48%)	(8.95%)	24.13%	14.24%	6.24%
12. Valuation Asset Adjustment Factor = (9b) / (9a)	1.105969	1.258454	1.095161	1.024465	1.027064



Gabriel Roeder Smith & Company  
Consultants & Actuaries

One Towne Square  
Suite 800  
Southfield, MI 48076-3723

248.799.9000 phone  
248.799.9020 fax  
[www.gabrielroeder.com](http://www.gabrielroeder.com)

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Jill Rhode  
Ingham County  
121 E. Maple  
P.O. Box 319  
Mason, MI 48854



Gabriel Roeder Smith & Company  
Consultants & Actuaries

One Towne Square  
Suite 800  
Southfield, MI 48076-3723

248.799.9000 phone  
248.799.9020 fax  
[www.gabrielroeder.com](http://www.gabrielroeder.com)

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Jill Rhode  
Ingham County Medical Care Facility  
341 South Jefferson  
Mason, MI 48854



Gabriel Roeder Smith & Company  
Consultants & Actuaries

One Towne Square  
Suite 800  
Southfield, MI 48076-3723

248.799.9000 phone  
248.799.9020 fax  
[www.gabrielroeder.com](http://www.gabrielroeder.com)

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Jill Rhode  
Ingham County Library  
P.O. Box 319  
121 E. Maple  
Mason, MI 48854



**MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN**

ANNUAL ACTUARIAL VALUATION REPORT

INGHAM COUNTY (3303)

DECEMBER 31, 2008