



Municipal Employees' Retirement System
of Michigan

MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN
ANNUAL ACTUARIAL VALUATION REPORT
INGHAM COUNTY (3303)
DECEMBER 31, 2010



June 6, 2011

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, 2010. 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 revised actuarial assumptions and/or methods. Please refer to page 224 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 only in its entirety by the municipality to other interested parties (MERS or the Actuary customarily provides the full report on request to related third parties such as the auditor for the municipality).

Please contact the Finance Department at MERS if you would like to receive future annual valuations in electronic format, instead of a printed report (800-767-2308; billingteam@mersofmich.com).

Sincerely,

Alan Sonnanstine, MAAA, ASA

Cathy Nagy, MAAA, FSA

Jim Koss, MAAA, ASA

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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, 2012 (2010 Valuation) and January 1, 2011 (2009 Valuation) are as follows:

Division	Minimum Required Monthly Employer Contributions @			
	Percentage of Payroll		\$ Based on Valuation Payroll	
	2010 Valuation	2009 Valuation	2010 Valuation	2009 Valuation
01 - Confidential	13.56%	13.59%	\$18,932	\$15,943
02 - Sheriff FOP Spvs	42.84%	36.89%	66,538	60,563
04 - MCF	6.35%	6.24%	26,311	24,394
09 - Judges	61.83%	59.36%	4,241	4,072
10 - Gnrl Mgmt	17.88%	16.19%	106,446	96,259
11 - Gnrl Library #	-%	-%	3,053	2,518
12 - Gnrl ICEA Profs	8.85%	8.11%	50,264	46,883
13 - Gnrl OPEIU Prob	17.24%	14.15%	27,852	25,876
14 - Gnrl TOPS UAW	11.45%	10.80%	137,386	131,726
15 - Animal Cntrl FOP	30.85%	25.34%	8,738	8,598
16 - Gnrl Commsnrs	6.03%	5.90%	1,092	1,067
17 - ICEA & MNA Nurses	8.95%	8.11%	29,496	25,580
18 - ICEA Ct. Prof	12.23%	11.81%	24,139	21,610
19 - Cnstutnl Offcls	7.54%	7.11%	3,749	3,466
21 - FOP Shrf Deputies	12.12%	10.93%	75,715	73,794
40 - ICEA Unit 111	6.14%	5.71%	7,924	7,233
41 - MCF Management	9.70%	9.17%	9,532	9,509
42 - ICEA Unit 11	6.68%	6.78%	7,437	7,089
43 - ICEA Unit 1	7.80%	7.80%	3,134	3,115
44 - MCF Exec Mgr #	-%	18.47%	188	2,097
90 - Asst Pros Attnys	15.43%	14.59%	29,272	26,451
91 - Parks Union Empl	8.29%	8.72%	1,744	2,249
92 - Parks Non Union	49.31%	46.82%	3,574	3,249
93 - Lgl Rsrch Clerks	2.88%	3.21%	631	985
94 - Zoo Hires after 7/	8.99%	8.24%	3,812	3,380
95 - UAW Local 2256	12.45%	11.42%	4,106	3,581
96 - Teamsters 580	0.00%	0.00%	0	0
Total Municipality			\$655,306	\$611,287

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

Ingham County (3303)

Executive Summary (continued)

This division will not have new hires. Invoices will be based on the dollar contribution amounts shown in this table (see page 251).

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

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 2010 valuation reflects changes in actuarial assumptions and/or methods (please refer to page 224). The effects of the changes are shown in the note below Table 16 for each division. For benefit provision changes see Table 1.

2010 System Experience

Based on the smoothed Actuarial Value of Assets, the recognized rate of investment return for MERS overall was 5.7% (up from 5.3% in 2009, but 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.

2010 Funded Position

The ratio of the Valuation Assets to the Actuarial Accrued Liability for Ingham County in aggregate is 75%; last year's ratio was 76%.

Comments on the Investment Markets

Executive Summary (continued)

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

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

If the December 31, 2010 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 64% (instead of 75%); and ii) your total employer contribution requirement for the fiscal year starting January 1, 2012 would be \$9,650,148 (instead of \$7,863,672). If the investment markets do not fully make-up for the 2008 losses, employer contribution requirements may rise. MERS' investment strategy employs diversification using various asset categories (stocks, bonds, and to a smaller extent real estate and private equity) to capture as much of the upside return as possible while managing acceptable risk. If contribution increases do become necessary, MERS would work to impose them incrementally.

Remember that only three-tenths of the 2008 market losses are reflected in this actuarial valuation report. As was true for past market downturns, MERS expects the markets to continue to rebound. By the time the 2008 market losses would be fully recognized (over the following 7 years), future market gains are expected to partly or fully offset 2008 market losses. This smoothing method is a powerful tool for reducing the volatility of 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 7 years (as described above).

Possible Future Changes in Actuarial Assumptions

Actuarial assumptions are reviewed every five years, and sometimes more often. The most recent review of MERS actuarial assumptions was completed in March 2010, and covered the 2004-2008

Executive Summary (continued)

valuation years. All areas of activity were studied, and the Retirement Board adopted revised actuarial assumptions that will be reflected in this valuation (see page 224), and in the December 31, 2011 valuation. MERS expects to provide employers with general updates concerning pending revised actuarial assumptions and the ongoing effects of the financial markets.

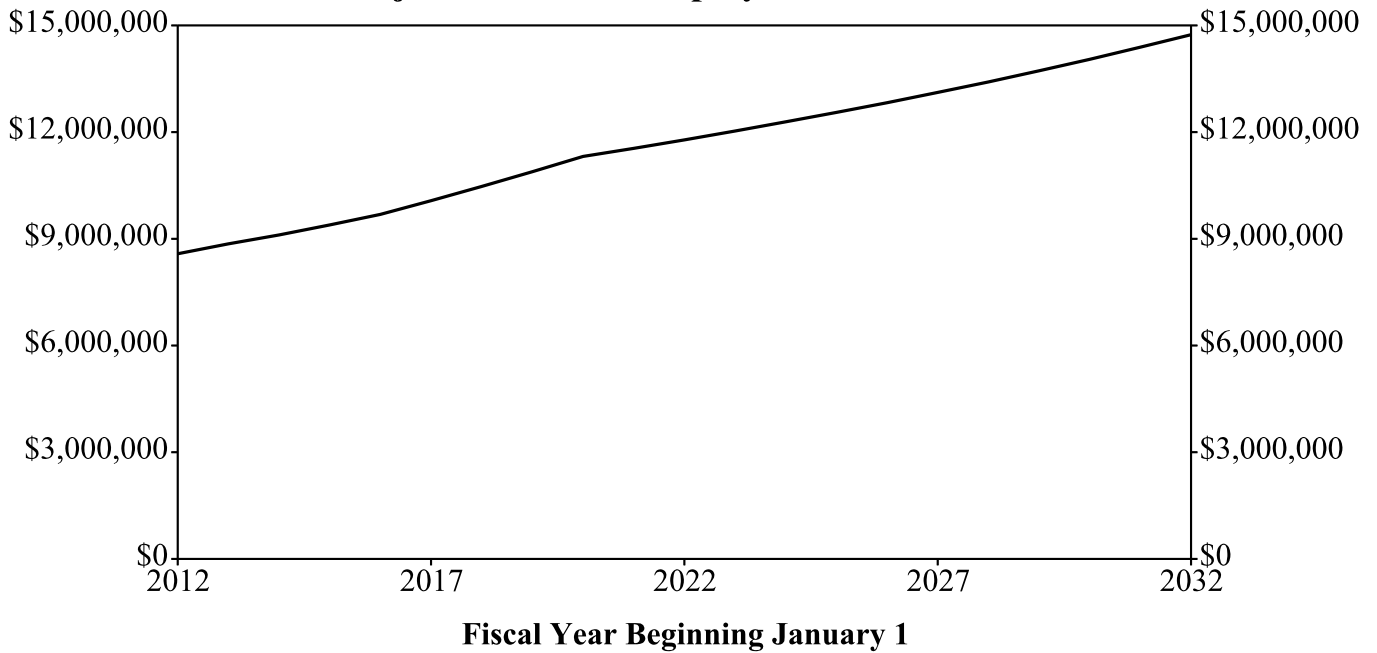
Projections of Employer Contributions and Funded Percentage - Combined for All Divisions

The following page combines the projections for each division (see chart 17.5 for each division) into a projection for the municipality as a whole. Please refer to page 248 for a discussion of the projection. As noted there, the projection should not be used for short term budgeting purposes because the assumptions are designed to be a long term expectation of future events. For example, the projection assumes that the 10-year smoothed actuarial value of assets always reflects 8% annual investment income (which would require all of the 2008 market losses to be recouped sooner than is likely).

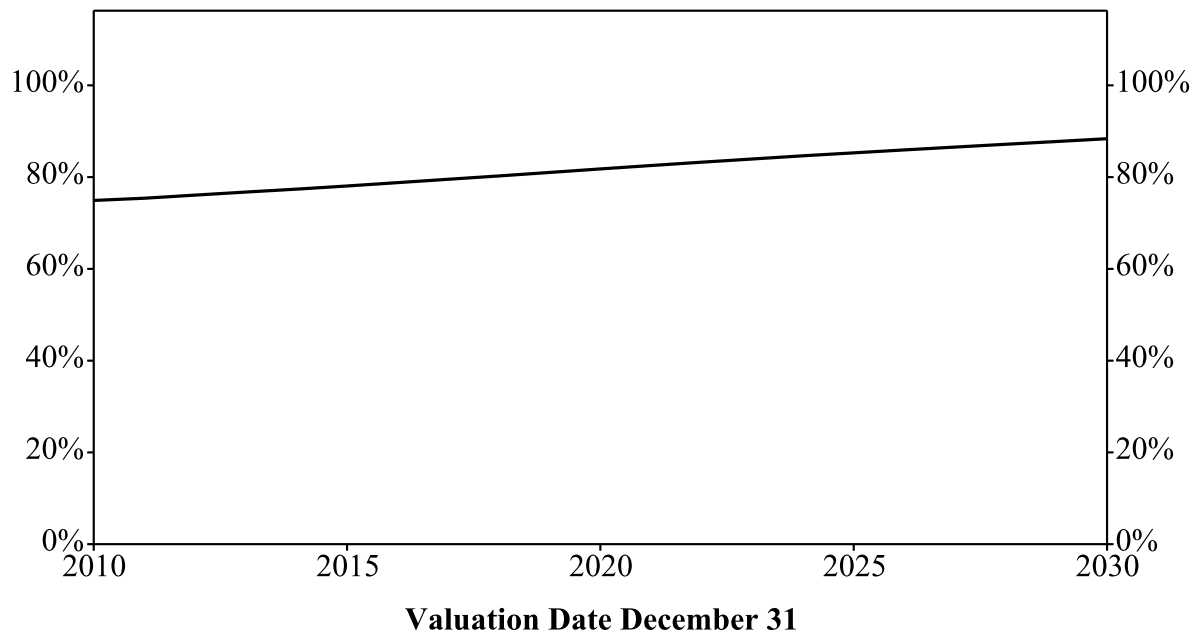
Comment on Actuarial Calculations - The projections of your future employer contributions in this report are based on the current actuarial assumptions used in the December 31, 2010 actuarial valuation. As always, your required employer contribution rate changes every year, in response to demographic changes, financial experience, benefit provision changes, etc, within your specific plan. The results of future actuarial valuations will differ from the projections, sometimes materially.

Ingham County (3303)
Executive Summary (concluded)
All Divisions Combined

Projected Annual Employer Contributions



Projected Funded Percentage



Note: Please refer to page 248 for a discussion of the projection.

Ingham County (3303)

Table 1

Benefit Provisions Evaluated and/or Considered

Division	2010 Valuation	2009 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. Act 88 Election (09/29/1965)	C-1 Old Normal Ret Age: 60 V-10 FAC-5 E (2.0%) (01/01/1995) 0.00% Member Contrib. Act 88 Election (09/29/1965)
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	2010 Valuation	2009 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	2010 Valuation	2009 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 & MNA 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	2010 Valuation	2009 Valuation
19 - Cnstutnl 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)
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)

Ingham County (3303)

Table 1 (continued)

Benefit Provisions Evaluated and/or Considered

Division	2010 Valuation	2009 Valuation
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)
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)

Ingham County (3303)

Table 1 (continued)

Benefit Provisions Evaluated and/or Considered

Division	2010 Valuation	2009 Valuation
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)
94 - Zoo Hires after 7	B-2 Normal Ret Age: 60 V-10 FAC-5 0.00% Member Contrib. Act 88 Election (09/29/1965)	B-2 Normal Ret Age: 60 V-10 FAC-5 0.00% Member Contrib. Act 88 Election (09/29/1965)
95 - UAW Local 2256	2.8%<35,1.5%>35-100% Normal Ret Age: 58 V-8 FAC-2 Rule of 65 1.70% Member Contrib. Act 88 Election (09/29/1965)	2.8%<35,1.5%>35-100% Normal Ret Age: 58 V-8 FAC-2 Rule of 65 1.70% Member Contrib. Act 88 Election (09/29/1965)
96 - Teamsters 580	2.8%<35,1.5%>35-100% Normal Ret Age: 58 V-8 FAC-2 Rule of 65 3.50% Member Contrib. Act 88 Election (09/29/1965)	2.8%<35,1.5%>35-100% Normal Ret Age: 58 V-8 FAC-2 Rule of 65 3.50% Member Contrib. Act 88 Election (09/29/1965)

This division is closed to new hires or had no active members, so the closed division amortization policy applies. Please refer to the Amortization of Unfunded Actuarial Accrued Liability on page 247 and Open Divisions and Closed Divisions on page 251.

MERS provides the actuary with the benefit provisions in effect in Table 1 above. Any corrections to the benefit provisions should be reported to your Regional Manager in the MERS Office of Marketing and Employer services.

Ingham County (3303)

Table 2

Membership Summary

Division	2010 Valuation		2009 Valuation	
	Number	Annual Payroll*	Number	Annual Payroll*
01 - Confidential				
Active Members	38	\$1,675,376	33	\$1,407,767
Vested Former Members	20	133,246	19	184,868
Retirees and Beneficiaries	30	393,706	32	354,143
02 - Sheriff FOP Spvs				
Active Members	24	\$1,863,824	26	\$1,970,089
Vested Former Members	4	98,013	3	60,581
Retirees and Beneficiaries	60	2,076,808	57	1,961,311
04 - MCF				
Active Members	162	\$4,972,042	156	\$4,691,144
Vested Former Members	36	153,075	35	162,411
Retirees and Beneficiaries	70	318,766	70	306,269
09 - Judges				
Active Members	3	\$82,302	3	\$82,302
Vested Former Members	1	3,772	1	3,772
Retirees and Beneficiaries	8	94,369	8	94,369
10 - Gnrl Mgmt				
Active Members	85	\$7,144,007	86	\$7,134,709
Vested Former Members	20	363,705	22	397,081
Retirees and Beneficiaries	88	2,498,718	83	2,286,063
11 - Gnrl Library				
Active Members	0	0	0	0
Vested Former Members	13	67,889	13	80,914
Retirees and Beneficiaries	29	200,388	30	196,849
12 - Gnrl ICEA Profs				
Active Members	122	\$6,815,438	125	\$6,937,202
Vested Former Members	20	285,888	22	304,887
Retirees and Beneficiaries	56	1,101,724	51	934,480
13 - Gnrl OPEIU Prob				
Active Members	34	\$1,938,642	40	\$2,194,372
Vested Former Members	7	122,184	8	139,791
Retirees and Beneficiaries	30	914,350	28	794,998

Ingham County (3303)

Table 2 (continued)

Membership Summary

Division	2010 Valuation		2009 Valuation	
	Number	Annual Payroll*	Number	Annual Payroll*
14 - Gnrl TOPS UAW				
Active Members	389	\$14,398,613	398	\$14,636,178
Vested Former Members	47	340,381	48	350,925
Retirees and Beneficiaries	207	2,529,789	195	2,309,189
15 - Animal Cntrl FOP				
Active Members	8	\$339,899	9	\$407,155
Vested Former Members	1	6,172	1	6,172
Retirees and Beneficiaries	8	169,989	8	166,379
16 - Gnrl Commsnrs				
Active Members	14	\$217,301	14	\$216,882
Vested Former Members	7	18,950	8	19,141
Retirees and Beneficiaries	6	17,391	6	17,391
17 - ICEA & MNA Nurses				
Active Members	68	\$3,954,809	68	\$3,784,846
Vested Former Members	8	61,360	8	60,585
Retirees and Beneficiaries	59	885,307	54	777,623
18 - ICEA Ct. Prof				
Active Members	35	\$2,368,458	34	\$2,195,745
Vested Former Members	5	38,380	5	38,380
Retirees and Beneficiaries	41	727,328	41	726,158
19 - Cnstutnl Offcls				
Active Members	6	\$596,786	6	\$585,024
Vested Former Members	0	0	0	0
Retirees and Beneficiaries	7	118,888	7	118,888
21 - FOP Shrf Deputies				
Active Members	126	\$7,496,536	137	\$8,101,859
Vested Former Members	18	201,025	17	155,906
Retirees and Beneficiaries	89	2,064,968	85	1,934,700
40 - ICEA Unit 111				
Active Members	40	\$1,548,611	40	\$1,520,059
Vested Former Members	6	33,168	6	40,151
Retirees and Beneficiaries	28	246,619	26	223,801

Ingham County (3303)

Table 2 (continued)

Membership Summary

Division	2010 Valuation		2009 Valuation	
	Number	Annual Payroll*	Number	Annual Payroll*
41 - MCF Management				
Active Members	22	\$1,179,156	23	\$1,244,343
Vested Former Members	14	115,867	13	118,376
Retirees and Beneficiaries	13	96,147	12	76,424
42 - ICEA Unit 11				
Active Members	25	\$1,335,899	24	\$1,254,843
Vested Former Members	2	10,251	1	3,723
Retirees and Beneficiaries	6	69,201	6	69,201
43 - ICEA Unit 1				
Active Members	10	\$482,266	11	\$479,237
Vested Former Members	7	45,191	7	45,191
Retirees and Beneficiaries	5	49,768	5	49,768
44 - MCF Exec Mgr				
Active Members	0	0	1	\$136,218
Vested Former Members	0	0	0	0
Retirees and Beneficiaries	1	39,854	0	0
90 - Asst Pros Attnys				
Active Members	30	\$2,276,559	30	\$2,175,538
Vested Former Members	17	243,923	17	243,923
Retirees and Beneficiaries	19	473,172	17	467,956
91 - Parks Union Empl				
Active Members	6	\$252,433	7	\$309,576
Vested Former Members	1	8,511	1	8,511
Retirees and Beneficiaries	0	0	0	0
92 - Parks Non Union				
Active Members	1	\$86,972	1	\$83,274
Vested Former Members	0	0	0	0
Retirees and Beneficiaries	2	100,364	2	100,364
93 - Lgl Rsrch Clerks				
Active Members	6	\$262,729	8	\$368,381
Vested Former Members	1	24,701	1	1,161
Retirees and Beneficiaries	0	0	0	0

Ingham County (3303)

Table 2 (continued)

Membership Summary

Division	2010 Valuation		2009 Valuation	
	Number	Annual Payroll*	Number	Annual Payroll*
94 - Zoo Hires after 7/1/07				
Active Members	12	\$508,896	12	\$492,222
Vested Former Members	0	0	0	0
Retirees and Beneficiaries	0	0	0	0
95 - UAW Local 2256				
Active Members	9	\$395,770	9	\$376,371
Vested Former Members	0	0	0	0
Retirees and Beneficiaries	0	0	0	0
96 - Teamsters 580				
Active Members	1	\$81,368	1	\$87,405
Vested Former Members	0	0	0	0
Retirees and Beneficiaries	0	0	0	0
Total Municipality				
Active Members	1276	\$62,274,692	1302	\$62,872,741
Vested Former Members	255	2,375,652	256	2,426,450
Retirees and Beneficiaries	<u>862</u>	15,187,614	<u>823</u>	13,966,324
Total Participants	2393		2381	

* 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			
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
2009	1,302	62,872,741	48,289	2.1	44.3	9.7	10.2
2010	1,276	62,274,692	48,805	1.1	44.7	10.1	10.6

* See description on page 244.

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
2009	(33)	(2)		(16)	(65)	1	133	1302
2010	(32)	(3)	(1)	(15)	(71)		96	1276

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*
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
2009	256	2,426,450	50.8	11.3	13.8
2010	255	2,375,652	51.1	10.8	13.7

* See description on page 244.

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
2009	(17)	(2)		(6)	(1)	19	256
2010	(16)	(2)		(4)		21	255

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		
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
2009	748	13,346,841	75	619,483	823	13,966,324	1.6	22.2
2010	787	14,480,904	75	706,710	862	15,187,614	1.5	24.4

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
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
2009	59	1,193,891	37,933	(17)	(147,897)	(24,276)	823	13,966,324
2010	59	1,380,497	47,288	(20)	(162,950)	(43,545)	862	15,187,614

@ 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, 2010

Distribution by Type of Benefit Being Paid

Benefits Being Paid to:	Annual Benefits	
	Number	Amount
Age and service retirants	760	\$14,071,742
Non-duty disability retirants	22	372,933
Duty disability retirants	5	36,229
Beneficiaries of deceased retirants*	55	526,784
Beneficiaries of deceased members:		
Non-duty death	19	160,771
Duty death	<u>1</u>	<u>19,155</u>
Total Benefits Being Paid	862	\$15,187,614

* Alternate Payees, if any, are all included with beneficiaries of deceased retirants.

Ingham County (3303)

Table 10

Reported Assets (Market Value)

Division	2010 Valuation		2009 Valuation	
	Employer And Retiree*	Employee#	Employer And Retiree*	Employee#
01 - Confidential	\$ 4,508,376	\$ 912,303	\$ 3,887,629	\$ 801,655
02 - Sheriff FOP Spvs	10,164,510	4,145,691	9,228,841	4,046,760
04 - MCF	6,029,723	37,433	5,295,553	37,498
09 - Judges	362,128	29,781	359,748	27,121
10 - Gnrl Mgmt	22,750,210	4,963,539	20,019,668	4,687,014
11 - Gnrl Library	1,670,191	22,643	1,630,487	25,084
12 - Gnrl ICEA Profs	14,105,589	7,493,962	11,846,137	7,139,745
13 - Gnrl OPEIU Prob	6,362,615	1,245,379	5,864,684	1,296,778
14 - Gnrl TOPS UAW	35,397,135	5,296,724	31,183,471	5,153,582
15 - Animal Cntrl FOP	1,239,865	478,586	1,094,783	427,328
16 - Gnrl Commsnrs	310,553	108,214	263,286	100,194
17 - ICEA & MNA Nurses	8,514,580	3,692,341	7,251,204	3,507,558
18 - ICEA Ct. Prof	5,267,031	2,395,909	4,656,241	2,263,362
19 - Cnstutnl Offcls	1,731,386	587,235	1,518,276	535,249
21 - FOP Shrf Deputies	19,181,426	8,440,131	16,784,520	8,032,887
40 - ICEA Unit 111	2,387,592	327,701	2,136,089	315,965
41 - MCF Management	2,200,443	112,545	1,847,236	110,345
42 - ICEA Unit 11	831,611	244,280	678,419	191,479
43 - ICEA Unit 1	644,302	172,434	584,847	167,348
44 - MCF Exec Mgr	288,077	0	232,911	0
90 - Asst Pros Attnys	7,548,828	402,302	6,723,856	369,344
91 - Parks Union Empl	405,394	0	333,873	0
92 - Parks Non Union	873,124	13,415	825,836	13,377
93 - Lgl Rsrch Clerks	319,531	0	267,814	0
94 - Zoo Hires after 7/1/07	93,311	35,795	71,088	37
95 - UAW Local 2256	813,901	45,681	661,742	38,844
96 - Teamsters 580	661,269	46,904	523,724	79,590
Total Municipality	\$154,662,701	\$ 41,250,928	\$135,771,963	\$ 39,368,144
Combined Reserves	\$195,913,629		\$175,140,107	

* Reserve for Employer Contributions and Benefit Payments

Reserve for Employee Contributions

Ingham County (3303)

Table 10 (continued)

Reported Assets (Market Value)

The December 31, 2010 Valuation Assets are equal to 1.162921 times the reported Market Value of assets. The derivation of Valuation Assets is described on page 253 and the detailed calculations are shown on pages 254 - 256.

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
2009	7,753,659	4,648,851	10,497,335	(13,385,685)	(534,188)	148,193	219,217,266
2010	7,249,727	4,470,769	12,004,125	(14,735,243)	(432,670)	58,097	227,832,071

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

Ingham County (3303)

Table 12

Termination Liability as of December 31, 2010

Division	Termination Liability*	Valuation Assets	Percent Funded	Unfunded (Overfunded)
01 - Confidential Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 3,162,491 789,619 3,859,921 <u>1,187</u> \$ 7,813,218	\$ 6,303,821	80.7%	\$ 1,509,397
02 - Sheriff FOP Spvs Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 5,782,977 360,987 22,331,691 <u>0</u> \$ 28,475,655	\$ 16,641,633	58.4%	\$ 11,834,022
04 - MCF Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 2,795,261 994,098 2,563,643 <u>167</u> \$ 6,353,169	\$ 7,055,623	111.1%	\$ (702,454)
09 - Judges Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 358,395 22,197 941,118 <u>0</u> \$ 1,321,710	\$ 455,759	34.5%	\$ 865,951
10 - Gnrl Mgmt Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 18,779,087 2,266,149 24,850,590 <u>59,999</u> \$ 45,955,825	\$ 32,228,901	70.1%	\$ 13,726,924
11 - Gnrl Library Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 0 465,493 1,861,207 <u>0</u> \$ 2,326,700	\$ 1,968,632	84.6%	\$ 358,068

Ingham County (3303)

Table 12 (continued)

Termination Liability and Present Value of Accrued Benefits as of December 31, 2010

Division	Termination Liability*	Valuation Assets	Percent Funded	Unfunded (Overfunded)
12 - Gnrl ICEA Profs Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 16,953,155 2,348,992 12,051,319 <u>319,902</u> \$ 31,673,368	\$ 25,118,571	79.3%	\$ 6,554,797
13 - Gnrl OPEIU Prob Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 2,599,480 999,744 9,779,242 <u>24,789</u> \$ 13,403,255	\$ 8,847,496	66.0%	\$ 4,555,759
14 - Gnrl TOPS UAW Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 26,375,069 2,242,637 23,441,977 <u>272,656</u> \$ 52,332,339	\$ 47,323,743	90.4%	\$ 5,008,596
15 - Animal Cntrl FOP Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 962,838 59,716 2,325,013 <u>10,889</u> \$ 3,358,456	\$ 1,998,423	59.5%	\$ 1,360,033
16 - Gnrl Commsnrs Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 269,237 88,919 136,343 <u>16,080</u> \$ 510,579	\$ 486,993	95.4%	\$ 23,586
17 - ICEA & MNA Nurses Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 7,459,483 453,226 9,551,142 <u>87,402</u> \$ 17,551,253	\$ 14,195,685	80.9%	\$ 3,355,568

Ingham County (3303)

Table 12 (continued)

Termination Liability and Present Value of Accrued Benefits as of December 31, 2010

Division	Termination Liability*	Valuation Assets	Percent Funded	Unfunded (Overfunded)
18 - ICEA Ct. Prof Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 5,599,171 322,886 6,807,166 4,481 \$ 12,733,704	\$ 8,911,394	70.0%	\$ 3,822,310
19 - Cnstatnl Offcls Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 1,999,856 0 1,050,135 0 \$ 3,049,991	\$ 2,696,373	88.4%	\$ 353,618
21 - FOP Shrf Deputies Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 12,230,646 872,652 21,325,194 233,428 \$ 34,661,920	\$ 32,121,689	92.7%	\$ 2,540,231
40 - ICEA Unit 111 Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 919,553 206,966 2,006,196 73,269 \$ 3,205,984	\$ 3,157,671	98.5%	\$ 48,313
41 - MCF Management Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 1,178,300 616,724 812,547 6,883 \$ 2,614,454	\$ 2,689,822	102.9%	\$ (75,368)
42 - ICEA Unit 11 Active Members Vested Former Members Retirees and Beneficiaries Pending Refunds Total	\$ 546,922 61,341 634,866 53,621 \$ 1,296,750	\$ 1,251,176	96.5%	\$ 45,574

Ingham County (3303)

Table 12 (continued)

Termination Liability and Present Value of Accrued Benefits as of December 31, 2010

Division	Termination Liability*	Valuation Assets	Percent Funded	Unfunded (Overfunded)
43 - ICEA Unit 1				
Active Members	\$ 390,366			
Vested Former Members	233,819			
Retirees and Beneficiaries	401,143			
Pending Refunds	<u>13,017</u>			
Total	\$ 1,038,345	\$ 949,799	91.5%	\$ 88,546
44 - MCF Exec Mgr				
Active Members	\$ 0			
Vested Former Members	0			
Retirees and Beneficiaries	394,932			
Pending Refunds	<u>0</u>			
Total	\$ 394,932	\$ 335,011	84.8%	\$ 59,921
90 - Asst Pros Attnys				
Active Members	\$ 4,628,275			
Vested Former Members	1,483,136			
Retirees and Beneficiaries	4,903,249			
Pending Refunds	<u>6,289</u>			
Total	\$ 11,020,949	\$ 9,246,536	83.9%	\$ 1,774,413
91 - Parks Union Empl				
Active Members	\$ 296,028			
Vested Former Members	74,864			
Retirees and Beneficiaries	0			
Pending Refunds	<u>0</u>			
Total	\$ 370,892	\$ 471,441	127.1%	\$ (100,549)
92 - Parks Non Union				
Active Members	\$ 486,049			
Vested Former Members	0			
Retirees and Beneficiaries	1,168,107			
Pending Refunds	<u>0</u>			
Total	\$ 1,654,156	\$ 1,030,975	62.3%	\$ 623,181
93 - Lgl Rsrch Clerks				
Active Members	\$ 37,373			
Vested Former Members	210,073			
Retirees and Beneficiaries	0			
Pending Refunds	<u>0</u>			
Total	\$ 247,446	\$ 371,589	150.2%	\$ (124,143)

Ingham County (3303)

Table 12 (continued)

Termination Liability and Present Value of Accrued Benefits as of December 31, 2010

Division	Termination Liability*	Valuation Assets	Percent Funded	Unfunded (Overfunded)
94 - Zoo Hires after 7				
Active Members	\$ 134,097			
Vested Former Members	0			
Retirees and Beneficiaries	0			
Pending Refunds	0			
Total	\$ 134,097	\$ 150,140	112.0%	\$ (16,043)
95 - UAW Local 2256				
Active Members	\$ 388,346			
Vested Former Members	0			
Retirees and Beneficiaries	0			
Pending Refunds	0			
Total	\$ 388,346	\$ 999,626	257.4%	\$ (611,280)
96 - Teamsters 580				
Active Members	\$ 509,357			
Vested Former Members	0			
Retirees and Beneficiaries	0			
Pending Refunds	0			
Total	\$ 509,357	\$ 823,549	161.7%	\$ (314,192)
Total Municipality				
Active Members	\$ 114,841,812			
Vested Former Members	15,174,238			
Retirees and Beneficiaries	153,196,741			
Pending Refunds	1,184,059			
Total	\$ 284,396,850	\$ 227,832,071	80.1%	\$ 56,564,779

* The Termination Liability represents the present value of benefits payable in the event that all active members terminate employment on December 31, 2010, based upon the valuation interest and mortality assumptions. 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, 2010

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
01 - Confidential				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 2,707,772	\$ 911,740	33.7%	\$ 1,796,032
Vested Former Members	623,899	623,899	100.0	0
Retirees and Beneficiaries	<u>3,859,921</u>	<u>3,859,921</u>	100.0	<u>0</u>
Total	\$ 7,191,592	\$ 5,395,560	75.0%	\$ 1,796,032
Reserve for Employee Contributions				
Active Members	\$ 741,354	\$ 741,354		
Vested Former Members	165,720	165,720		
Pending Refunds	<u>1,187</u>	<u>1,187</u>		
Total	\$ 908,261	\$ 908,261	100.0%	\$ 0
Division Total	\$ 8,099,853	\$ 6,303,821	77.8%	\$ 1,796,032
02 - Sheriff FOP Spvs				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 5,294,552	\$ 0	0.0%	\$ 5,294,552
Vested Former Members	36,165	0	0.0	36,165
Retirees and Beneficiaries	<u>22,331,691</u>	<u>12,495,942</u>	56.0	<u>9,835,749</u>
Total	\$ 27,662,408	\$ 12,495,942	45.2%	\$ 15,166,466
Reserve for Employee Contributions				
Active Members	\$ 3,820,869	\$ 3,820,869		
Vested Former Members	324,822	324,822		
Pending Refunds	<u>0</u>	<u>0</u>		
Total	\$ 4,145,691	\$ 4,145,691	100.0%	\$ 0
Division Total	\$ 31,808,099	\$ 16,641,633	52.3%	\$ 15,166,466
04 - MCF				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 3,938,784	\$ 3,471,236	88.1%	\$ 467,548
Vested Former Members	983,310	983,310	100.0	0
Retirees and Beneficiaries	<u>2,563,643</u>	<u>2,563,643</u>	100.0	<u>0</u>
Total	\$ 7,485,737	\$ 7,018,189	93.8%	\$ 467,548
Reserve for Employee Contributions				
Active Members	\$ 26,479	\$ 26,479		
Vested Former Members	10,788	10,788		
Pending Refunds	<u>167</u>	<u>167</u>		
Total	\$ 37,434	\$ 37,434	100.0%	\$ 0
Division Total	\$ 7,523,171	\$ 7,055,623	93.8%	\$ 467,548

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2010

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
09 - Judges				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 274,726	\$ 0	0.0%	\$ 274,726
Vested Former Members	17,116	0	0.0	17,116
Retirees and Beneficiaries	<u>941,118</u>	<u>425,979</u>	45.3	<u>515,139</u>
Total	\$ 1,232,960	\$ 425,979	34.5%	\$ 806,981
Reserve for Employee Contributions				
Active Members	\$ 24,699	\$ 24,699		
Vested Former Members	5,081	5,081		
Pending Refunds	<u>0</u>	<u>0</u>		
Total	\$ 29,780	\$ 29,780	100.0%	\$ 0
Division Total	\$ 1,262,740	\$ 455,759	36.1%	\$ 806,981
10 - Gnrl Mgmt				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 15,081,189	\$ 811,914	5.4%	\$ 14,269,275
Vested Former Members	1,612,951	1,612,951	100.0	0
Retirees and Beneficiaries	<u>24,850,590</u>	<u>24,850,590</u>	100.0	<u>0</u>
Total	\$ 41,544,730	\$ 27,275,455	65.7%	\$ 14,269,275
Reserve for Employee Contributions				
Active Members	\$ 4,240,249	\$ 4,240,249		
Vested Former Members	653,198	653,198		
Pending Refunds	<u>59,999</u>	<u>59,999</u>		
Total	\$ 4,953,446	\$ 4,953,446	100.0%	\$ 0
Division Total	\$ 46,498,176	\$ 32,228,901	69.3%	\$ 14,269,275
11 - Gnrl Library				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 0	\$ 0	0.0%	\$ 0
Vested Former Members	442,849	84,781	19.1	358,068
Retirees and Beneficiaries	<u>1,861,207</u>	<u>1,861,207</u>	100.0	<u>0</u>
Total	\$ 2,304,056	\$ 1,945,988	84.5%	\$ 358,068
Reserve for Employee Contributions				
Active Members	\$ 0	\$ 0		
Vested Former Members	22,644	22,644		
Pending Refunds	<u>0</u>	<u>0</u>		
Total	\$ 22,644	\$ 22,644	100.0%	\$ 0
Division Total	\$ 2,326,700	\$ 1,968,632	84.6%	\$ 358,068

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2010

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	\$ 11,362,530	\$ 3,654,239	32.2%	\$ 7,708,291
Vested Former Members	1,919,046	1,919,046	100.0	0
Retirees and Beneficiaries	<u>12,051,319</u>	<u>12,051,319</u>	100.0	<u>0</u>
Total	\$ 25,332,895	\$ 17,624,604	69.6%	\$ 7,708,291
Reserve for Employee Contributions				
Active Members	\$ 6,744,119	\$ 6,744,119		
Vested Former Members	429,946	429,946		
Pending Refunds	<u>319,902</u>	<u>319,902</u>		
Total	\$ 7,493,967	\$ 7,493,967	100.0%	\$ 0
Division Total	\$ 32,826,862	\$ 25,118,571	76.5%	\$ 7,708,291
13 - Gnrl OPEIU Prob				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 1,818,928	\$ 0	0.0%	\$ 1,818,928
Vested Former Members	797,027	0	0.0	797,027
Retirees and Beneficiaries	<u>9,779,242</u>	<u>7,602,967</u>	77.7	<u>2,176,275</u>
Total	\$ 12,395,197	\$ 7,602,967	61.3%	\$ 4,792,230
Reserve for Employee Contributions				
Active Members	\$ 1,017,023	\$ 1,017,023		
Vested Former Members	202,717	202,717		
Pending Refunds	<u>24,789</u>	<u>24,789</u>		
Total	\$ 1,244,529	\$ 1,244,529	100.0%	\$ 0
Division Total	\$ 13,639,726	\$ 8,847,496	64.9%	\$ 4,792,230
14 - Gnrl TOPS UAW				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 25,674,562	\$ 16,720,822	65.1%	\$ 8,953,740
Vested Former Members	1,891,939	1,891,939	100.0	0
Retirees and Beneficiaries	<u>23,441,977</u>	<u>23,441,977</u>	100.0	<u>0</u>
Total	\$ 51,008,478	\$ 42,054,738	82.4%	\$ 8,953,740
Reserve for Employee Contributions				
Active Members	\$ 4,645,651	\$ 4,645,651		
Vested Former Members	350,698	350,698		
Pending Refunds	<u>272,656</u>	<u>272,656</u>		
Total	\$ 5,269,005	\$ 5,269,005	100.0%	\$ 0
Division Total	\$ 56,277,483	\$ 47,323,743	84.1%	\$ 8,953,740

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2010

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	\$ 946,703	\$ 0	0.0%	\$ 946,703
Vested Former Members	59,716	0	0.0	59,716
Retirees and Beneficiaries	<u>2,325,013</u>	<u>1,519,838</u>	65.4	<u>805,175</u>
Total	\$ 3,331,432	\$ 1,519,838	45.6%	\$ 1,811,594
Reserve for Employee Contributions				
Active Members	\$ 467,696	\$ 467,696		
Vested Former Members	0	0		
Pending Refunds	<u>10,889</u>	<u>10,889</u>		
Total	\$ 478,585	\$ 478,585	100.0%	\$ 0
Division Total	\$ 3,810,017	\$ 1,998,423	52.5%	\$ 1,811,594
16 - Gnrl Commsnrs				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 190,326	\$ 188,649	99.1%	\$ 1,677
Vested Former Members	53,784	53,784	100.0	0
Retirees and Beneficiaries	<u>136,343</u>	<u>136,343</u>	100.0	<u>0</u>
Total	\$ 380,453	\$ 378,776	99.6%	\$ 1,677
Reserve for Employee Contributions				
Active Members	\$ 57,002	\$ 57,002		
Vested Former Members	35,135	35,135		
Pending Refunds	<u>16,080</u>	<u>16,080</u>		
Total	\$ 108,217	\$ 108,217	100.0%	\$ 0
Division Total	\$ 488,670	\$ 486,993	99.7%	\$ 1,677
17 - ICEA & MNA Nurses				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 4,501,017	\$ 748,262	16.6%	\$ 3,752,755
Vested Former Members	208,661	208,661	100.0	0
Retirees and Beneficiaries	<u>9,551,142</u>	<u>9,551,142</u>	100.0	<u>0</u>
Total	\$ 14,260,820	\$ 10,508,065	73.7%	\$ 3,752,755
Reserve for Employee Contributions				
Active Members	\$ 3,355,653	\$ 3,355,653		
Vested Former Members	244,565	244,565		
Pending Refunds	<u>87,402</u>	<u>87,402</u>		
Total	\$ 3,687,620	\$ 3,687,620	100.0%	\$ 0
Division Total	\$ 17,948,440	\$ 14,195,685	79.1%	\$ 3,752,755

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2010

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	\$ 3,385,462	\$ 0	0.0%	\$ 3,385,462
Vested Former Members	265,711	0	0.0	265,711
Retirees and Beneficiaries	<u>6,807,166</u>	<u>6,562,342</u>	96.4	<u>244,824</u>
Total	\$ 10,458,339	\$ 6,562,342	62.7%	\$ 3,895,997
Reserve for Employee Contributions				
Active Members	\$ 2,287,396	\$ 2,287,396		
Vested Former Members	57,175	57,175		
Pending Refunds	<u>4,481</u>	<u>4,481</u>		
Total	\$ 2,349,052	\$ 2,349,052	100.0%	\$ 0
Division Total	\$ 12,807,391	\$ 8,911,394	69.6%	\$ 3,895,997
19 - Cnstutnl Offcls				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 1,291,008	\$ 1,059,002	82.0%	\$ 232,006
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	<u>1,050,135</u>	<u>1,050,135</u>	100.0	<u>0</u>
Total	\$ 2,341,143	\$ 2,109,137	90.1%	\$ 232,006
Reserve for Employee Contributions				
Active Members	\$ 587,236	\$ 587,236		
Vested Former Members	0	0		
Pending Refunds	<u>0</u>	<u>0</u>		
Total	\$ 587,236	\$ 587,236	100.0%	\$ 0
Division Total	\$ 2,928,379	\$ 2,696,373	92.1%	\$ 232,006
21 - FOP Shrf Deputies				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 11,391,032	\$ 2,196,847	19.3%	\$ 9,194,185
Vested Former Members	359,742	359,742	100.0	0
Retirees and Beneficiaries	<u>21,325,194</u>	<u>21,325,194</u>	100.0	<u>0</u>
Total	\$ 33,075,968	\$ 23,881,783	72.2%	\$ 9,194,185
Reserve for Employee Contributions				
Active Members	\$ 7,493,568	\$ 7,493,568		
Vested Former Members	512,910	512,910		
Pending Refunds	<u>233,428</u>	<u>233,428</u>		
Total	\$ 8,239,906	\$ 8,239,906	100.0%	\$ 0
Division Total	\$ 41,315,874	\$ 32,121,689	77.7%	\$ 9,194,185

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2010

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	\$ 819,587	\$ 657,476	80.2%	\$ 162,111
Vested Former Members	166,298	166,298	100.0	0
Retirees and Beneficiaries	<u>2,006,196</u>	<u>2,006,196</u>	100.0	<u>0</u>
Total	\$ 2,992,081	\$ 2,829,970	94.6%	\$ 162,111
Reserve for Employee Contributions				
Active Members	\$ 213,764	\$ 213,764		
Vested Former Members	40,668	40,668		
Pending Refunds	<u>73,269</u>	<u>73,269</u>		
Total	\$ 327,701	\$ 327,701	100.0%	\$ 0
Division Total	\$ 3,319,782	\$ 3,157,671	95.1%	\$ 162,111
41 - MCF Management				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 1,363,313	\$ 1,184,217	86.9%	\$ 179,096
Vested Former Members	580,513	580,513	100.0	0
Retirees and Beneficiaries	<u>812,547</u>	<u>812,547</u>	100.0	<u>0</u>
Total	\$ 2,756,373	\$ 2,577,277	93.5%	\$ 179,096
Reserve for Employee Contributions				
Active Members	\$ 69,451	\$ 69,451		
Vested Former Members	36,211	36,211		
Pending Refunds	<u>6,883</u>	<u>6,883</u>		
Total	\$ 112,545	\$ 112,545	100.0%	\$ 0
Division Total	\$ 2,868,918	\$ 2,689,822	93.8%	\$ 179,096
42 - ICEA Unit 11				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 535,694	\$ 324,523	60.6%	\$ 211,171
Vested Former Members	47,595	47,595	100.0	0
Retirees and Beneficiaries	<u>634,866</u>	<u>634,866</u>	100.0	<u>0</u>
Total	\$ 1,218,155	\$ 1,006,984	82.7%	\$ 211,171
Reserve for Employee Contributions				
Active Members	\$ 176,825	\$ 176,825		
Vested Former Members	13,746	13,746		
Pending Refunds	<u>53,621</u>	<u>53,621</u>		
Total	\$ 244,192	\$ 244,192	100.0%	\$ 0
Division Total	\$ 1,462,347	\$ 1,251,176	85.6%	\$ 211,171

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2010

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	\$ 361,705	\$ 208,853	57.7%	\$ 152,852
Vested Former Members	167,367	167,367	100.0	0
Retirees and Beneficiaries	<u>401,143</u>	<u>401,143</u>	100.0	<u>0</u>
Total	\$ 930,215	\$ 777,363	83.6%	\$ 152,852
Reserve for Employee Contributions				
Active Members	\$ 92,967	\$ 92,967		
Vested Former Members	66,452	66,452		
Pending Refunds	<u>13,017</u>	<u>13,017</u>		
Total	\$ 172,436	\$ 172,436	100.0%	\$ 0
Division Total	\$ 1,102,651	\$ 949,799	86.1%	\$ 152,852
44 - MCF Exec Mgr				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 0	\$ 0	0.0%	\$ 0
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	<u>394,932</u>	<u>335,011</u>	84.8	<u>59,921</u>
Total	\$ 394,932	\$ 335,011	84.8%	\$ 59,921
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	\$ 394,932	\$ 335,011	84.8%	\$ 59,921
90 - Asst Pros Attnys				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 4,838,588	\$ 2,566,233	53.0%	\$ 2,272,355
Vested Former Members	1,374,749	1,374,749	100.0	0
Retirees and Beneficiaries	<u>4,903,249</u>	<u>4,903,249</u>	100.0	<u>0</u>
Total	\$ 11,116,586	\$ 8,844,231	79.6%	\$ 2,272,355
Reserve for Employee Contributions				
Active Members	\$ 287,629	\$ 287,629		
Vested Former Members	108,387	108,387		
Pending Refunds	<u>6,289</u>	<u>6,289</u>		
Total	\$ 402,305	\$ 402,305	100.0%	\$ 0
Division Total	\$ 11,518,891	\$ 9,246,536	80.3%	\$ 2,272,355

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2010

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	\$ 387,510	\$ 396,577	102.3%	\$ (9,067)
Vested Former Members	74,864	74,864	100.0	0
Retirees and Beneficiaries	<u>0</u>	<u>0</u>	0.0	<u>0</u>
Total	\$ 462,374	\$ 471,441	102.0%	\$ (9,067)
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	\$ 462,374	\$ 471,441	102.0%	\$ (9,067)
92 - Parks Non Union Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 503,524	\$ 0	0.0%	\$ 503,524
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	<u>1,168,107</u>	<u>1,017,560</u>	87.1	<u>150,547</u>
Total	\$ 1,671,631	\$ 1,017,560	60.9%	\$ 654,071
Reserve for Employee Contributions				
Active Members	\$ 13,415	\$ 13,415		
Vested Former Members	0	0		
Pending Refunds	<u>0</u>	<u>0</u>		
Total	\$ 13,415	\$ 13,415	100.0%	\$ 0
Division Total	\$ 1,685,046	\$ 1,030,975	61.2%	\$ 654,071
93 - Lgl Rsrch Clerks Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 80,804	\$ 161,516	199.9%	\$ (80,712)
Vested Former Members	210,073	210,073	100.0	0
Retirees and Beneficiaries	<u>0</u>	<u>0</u>	0.0	<u>0</u>
Total	\$ 290,877	\$ 371,589	127.7%	\$ (80,712)
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	\$ 290,877	\$ 371,589	127.7%	\$ (80,712)

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2010

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
94 - Zoo Hires after 7/1/07				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 168,056	\$ 114,345	68.0%	\$ 53,711
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	0	0	0.0	0
Total	\$ 168,056	\$ 114,345	68.0%	\$ 53,711
Reserve for Employee Contributions				
Active Members	\$ 35,795	\$ 35,795		
Vested Former Members	0	0		
Pending Refunds	0	0		
Total	\$ 35,795	\$ 35,795	100.0%	\$ 0
Division Total	\$ 203,851	\$ 150,140	73.7%	\$ 53,711
95 - UAW Local 2256				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 819,441	\$ 953,944	116.4%	\$ (134,503)
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	0	0	0.0	0
Total	\$ 819,441	\$ 953,944	116.4%	\$ (134,503)
Reserve for Employee Contributions				
Active Members	\$ 45,682	\$ 45,682		
Vested Former Members	0	0		
Pending Refunds	0	0		
Total	\$ 45,682	\$ 45,682	100.0%	\$ 0
Division Total	\$ 865,123	\$ 999,626	115.5%	\$ (134,503)
96 - Teamsters 580				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 351,206	\$ 776,645	221.1%	\$ (425,439)
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	0	0	0.0	0
Total	\$ 351,206	\$ 776,645	221.1%	\$ (425,439)
Reserve for Employee Contributions				
Active Members	\$ 46,904	\$ 46,904		
Vested Former Members	0	0		
Pending Refunds	0	0		
Total	\$ 46,904	\$ 46,904	100.0%	\$ 0
Division Total	\$ 398,110	\$ 823,549	206.9%	\$ (425,439)

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2010

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
Municipality Totals				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 98,088,019	\$ 37,107,040	37.8%	\$ 60,980,979
Vested Former Members	11,893,375	10,359,572	87.1	1,533,803
Retirees and Beneficiaries	<u>153,196,741</u>	<u>139,409,111</u>	91.0	<u>13,787,630</u>
Total	\$ 263,178,135	\$ 186,875,723	71.0%	\$ 76,302,412
Reserve for Employee Contributions				
Active Members	\$ 36,491,426	\$ 36,491,426		
Vested Former Members	3,280,863	3,280,863		
Pending Refunds	<u>1,184,059</u>	<u>1,184,059</u>		
Total	\$ 40,956,348	\$ 40,956,348	100.0%	\$ 0
Municipality Total	\$ 304,134,483	\$ 227,832,071	74.9%	\$ 76,302,412

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
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
2009	288,190,459	219,217,266	76	68,973,193	110
2010	304,134,483	227,832,071	75	76,302,412	123

Notes: Actuarial assumptions were revised for the 1997, 2000, 2004, 2008, 2009 and 2010 actuarial valuations.

Ingham County (3303)

Table 15

Computed Employer Contributions to the Retirement System

For the Fiscal Year Beginning January 1, 2012

Division	Employer Contributions @		
	Normal Cost	Unfunded Accrued Liability #	Total Required Employer Contribution
Percentage of Payroll			
01 - Confidentials	7.95%	5.61%	13.56%
02 - Sheriff FOP Spvs	(0.08)%	42.92%	42.84%
04 - MCF	5.85%	0.50%	6.35%
09 - Judges	10.36%	51.47%	61.83%
10 - Gnrl Mgmt	7.33%	10.55%	17.88%
11 - Gnrl Library &	-%	-%	-%
12 - Gnrl ICEA Profs	2.89%	5.96%	8.85%
13 - Gnrl OPEIU Prob	4.13%	13.11%	17.24%
14 - Gnrl TOPS UAW	8.16%	3.29%	11.45%
15 - Animal Cntrl FOP	2.65%	28.20%	30.85%
16 - Gnrl Commsnrs	5.98%	0.05%	6.03%
17 - ICEA & MNA Nurses	3.94%	5.01%	8.95%
18 - ICEA Ct. Prof	3.59%	8.64%	12.23%
19 - Cnstutnl Offcls	5.48%	2.06%	7.54%
21 - FOP Shrf Deputies	5.64%	6.48%	12.12%
40 - ICEA Unit 111	5.57%	0.57%	6.14%
41 - MCF Management	8.88%	0.82%	9.70%
42 - ICEA Unit 11	5.86%	0.82%	6.68%
43 - ICEA Unit 1	6.14%	1.66%	7.80%
44 - MCF Exec Mgr &	-%	-%	-%
90 - Asst Pros Attnys	10.16%	5.27%	15.43%
91 - Parks Union Empl	8.72%	(0.43)%	8.29%
92 - Parks Non Union	9.80%	39.51%	49.31%
93 - Lgl Rsrch Clerks	6.17%	(3.29)%	2.88%
94 - Zoo Hires after 7/1/07	8.36%	0.63%	8.99%
95 - UAW Local 2256	15.94%	(3.49)%	12.45%
96 - Teamsters 580	14.61%	(60.29)%	0.00%

Ingham County (3303)

Table 15 (continued)

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Division	Employer Contributions @		
	Normal Cost	Unfunded Accrued Liability #	Total Required Employer Contribution
Estimated Monthly Contribution*			
01 - Confidential	\$ 11,100	\$ 7,832	\$ 18,932
02 - Sheriff FOP Spvs	(125)	66,663	66,538
04 - MCF	24,239	2,072	26,311
09 - Judges	711	3,530	4,241
10 - Gnrl Mgmt	43,638	62,808	106,446
11 - Gnrl Library	0	3,053	3,053
12 - Gnrl ICEA Profs	16,414	33,850	50,264
13 - Gnrl OPEIU Prob	6,672	21,180	27,852
14 - Gnrl TOPS UAW	97,910	39,476	137,386
15 - Animal Cntrl FOP	750	7,988	8,738
16 - Gnrl Commsnrs	1,083	9	1,092
17 - ICEA & MNA Nurses	12,985	16,511	29,496
18 - ICEA Ct. Prof	7,086	17,053	24,139
19 - Cnstutnl Offcls	2,725	1,024	3,749
21 - FOP Shrf Deputies	35,234	40,481	75,715
40 - ICEA Unit 111	7,188	736	7,924
41 - MCF Management	8,726	806	9,532
42 - ICEA Unit 11	6,524	913	7,437
43 - ICEA Unit 1	2,467	667	3,134
44 - MCF Exec Mgr	0	188	188
90 - Asst Pros Attnys	19,274	9,998	29,272
91 - Parks Union Empl	1,834	(90)	1,744
92 - Parks Non Union	710	2,864	3,574
93 - Lgl Rsrch Clerks	1,351	(720)	631
94 - Zoo Hires after 7/1/07	3,545	267	3,812
95 - UAW Local 2256	5,257	(1,151)	4,106
96 - Teamsters 580	991	(991)	0
Total Municipality	\$ 318,289	\$ 337,017	\$ 655,306
Estimated Annual Contribution*			
Total Municipality	\$ 3,819,468	\$4,044,204	\$ 7,863,672

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

* For divisions that are open to new hires, estimated contributions are 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 divisions that will have no new hires, invoices will be based on the above dollar amounts which are based on projected fiscal year payroll. See Open Divisions and Closed Divisions on page 251.

Ingham County (3303)

Table 15 (continued)

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

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 - Confidential

Table 16A

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	12.47%	\$17,410
Member Contributions	5.36	7,483
Less Potential Refunds	<u>(0.84)</u>	<u>(1,173)</u>
Net Member Contributions	4.52	6,310
Employer Normal Cost @	7.95%	\$11,100
Amortization of Unfunded Accrued Liability (28 years)	<u>5.61</u>	<u>7,832</u>
Total Long Term Contribution	13.56	18,932
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	13.56%	\$18,932 *

@ 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 0.84% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(28,358)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.20%
Amortization Payment:	(0.08)%
Total:	0.12%

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
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%
2009	33	1,407,767	13.59%	13.59%
2010	38	1,675,376	13.56%	13.56%

Notes:

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.

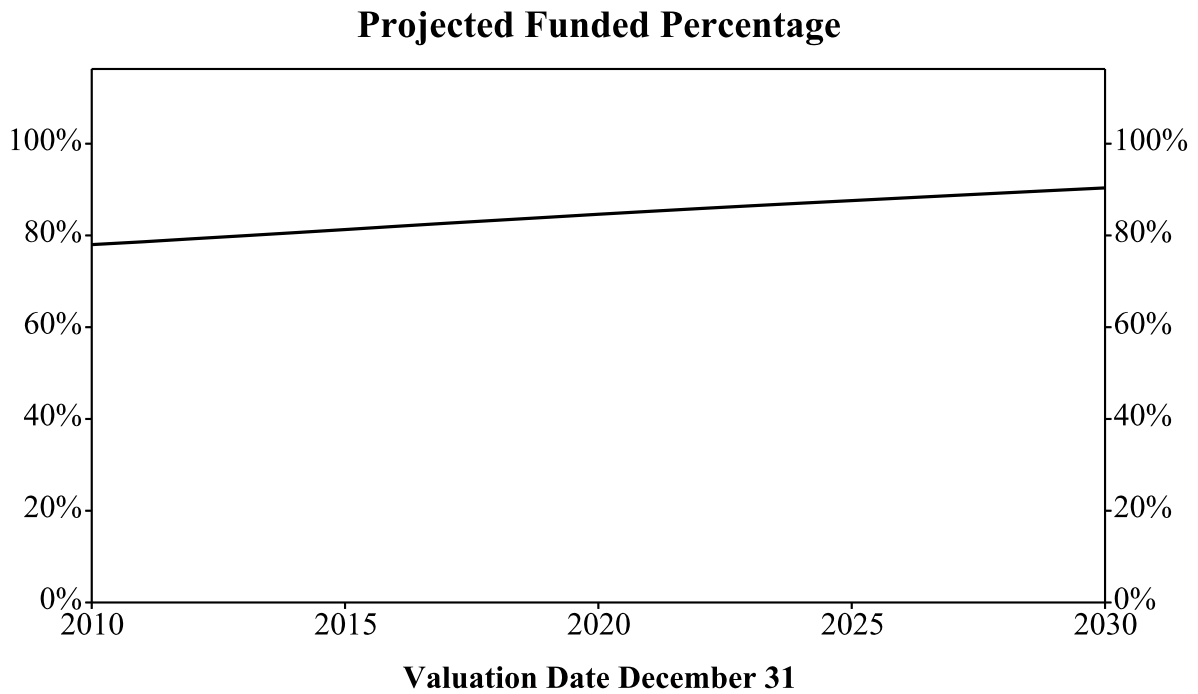
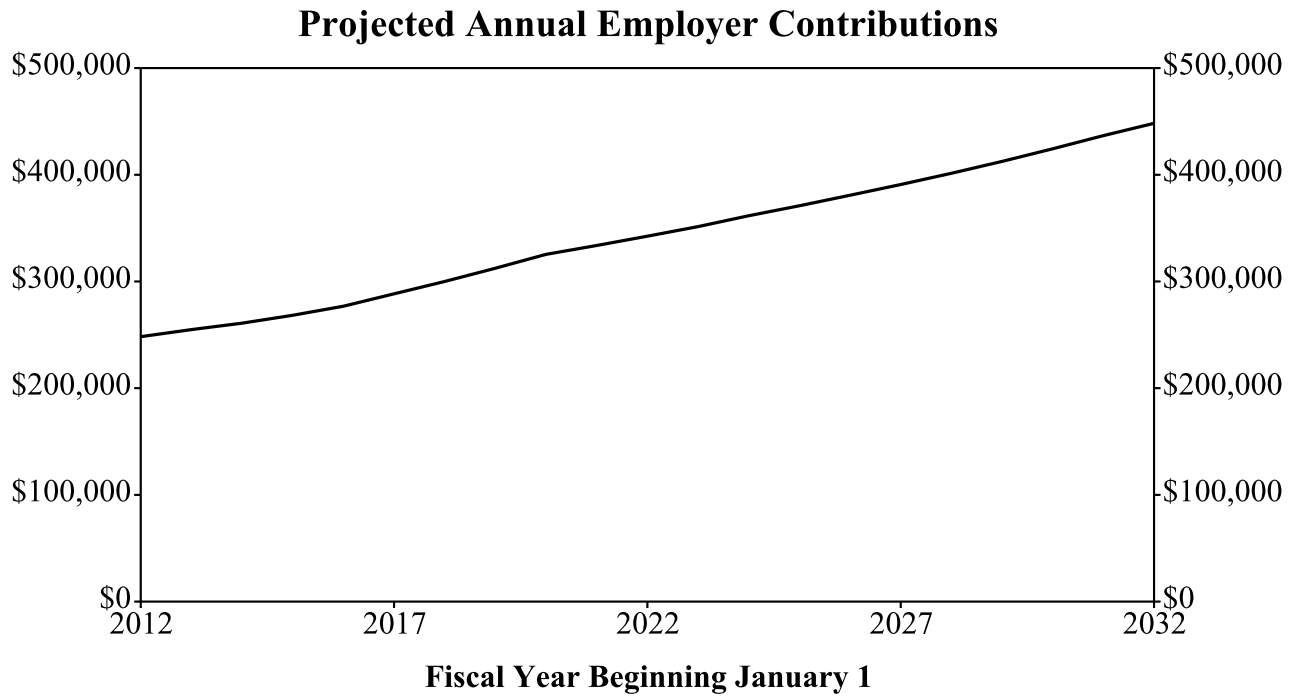
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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
2009	(1)			(2)	(1)		1	4	33
2010					(1)		3	3	38

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
2009				(1)			2	19
2010	(1)			(1)			3	20

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
2009	2	30,909					32	354,143
2010	1	40,596	86	(3)	(1,119)		30	393,706

@ 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 - Confidential

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
2009	177,581	76,828	267,661	(323,842)	(7,977)	0	5,188	5,869,427
2010	207,107	83,510	368,998	(360,529)	(39,018)	0	174,326	6,303,821

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

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
2009	7,501,519	5,869,427	78	1,632,092	116
2010	8,099,853	6,303,821	78	1,796,032	107

Ingham County (3303)

Division 02 - Sheriff FOP Spvs

Table 16B

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	15.61%	\$24,245
Member Contributions	19.61	30,458
Less Potential Refunds	<u>(3.92)</u>	<u>(6,088)</u>
Net Member Contributions	15.69	24,370
Employer Normal Cost @	(0.08)%	\$(125)
Amortization of Unfunded Accrued Liability (28 years)	<u>42.92</u>	<u>66,663</u>
Total Long Term Contribution	42.84	66,538
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	42.84%	\$66,538 *

@ 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 0.82% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(52,848)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.27%
Amortization Payment:	(0.14)%
Total:	0.13%

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
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%
2009	26	1,970,089	36.89%	36.89%
2010	24	1,863,824	42.84%	42.84%

Notes:

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.

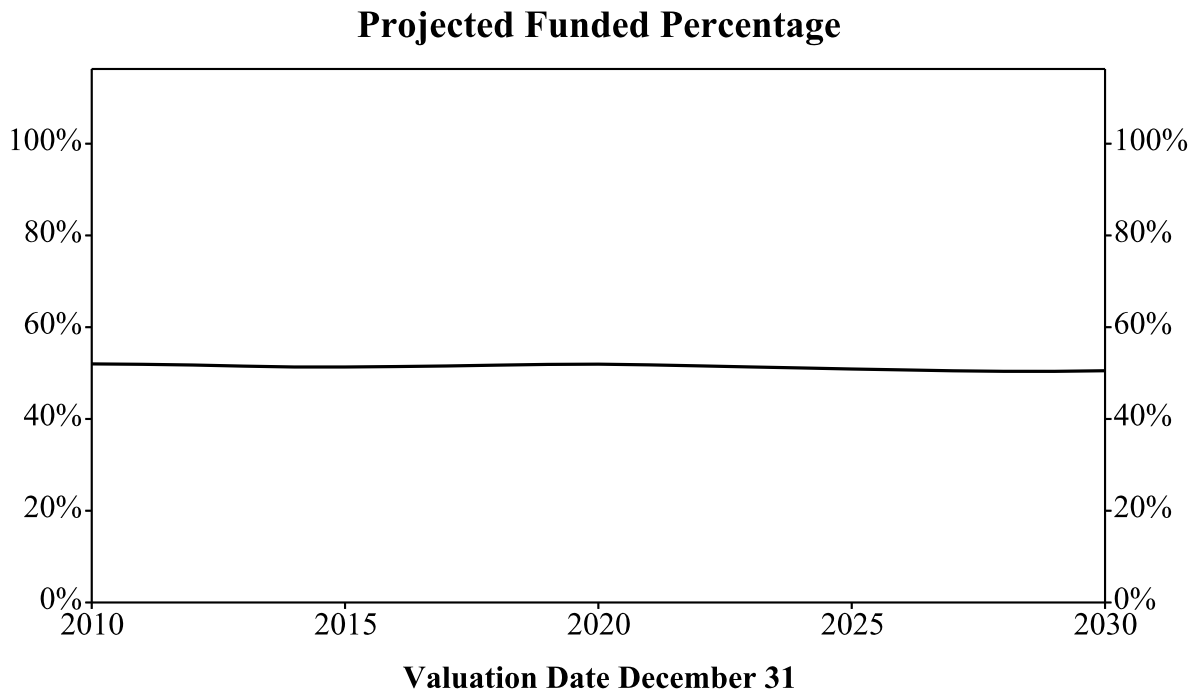
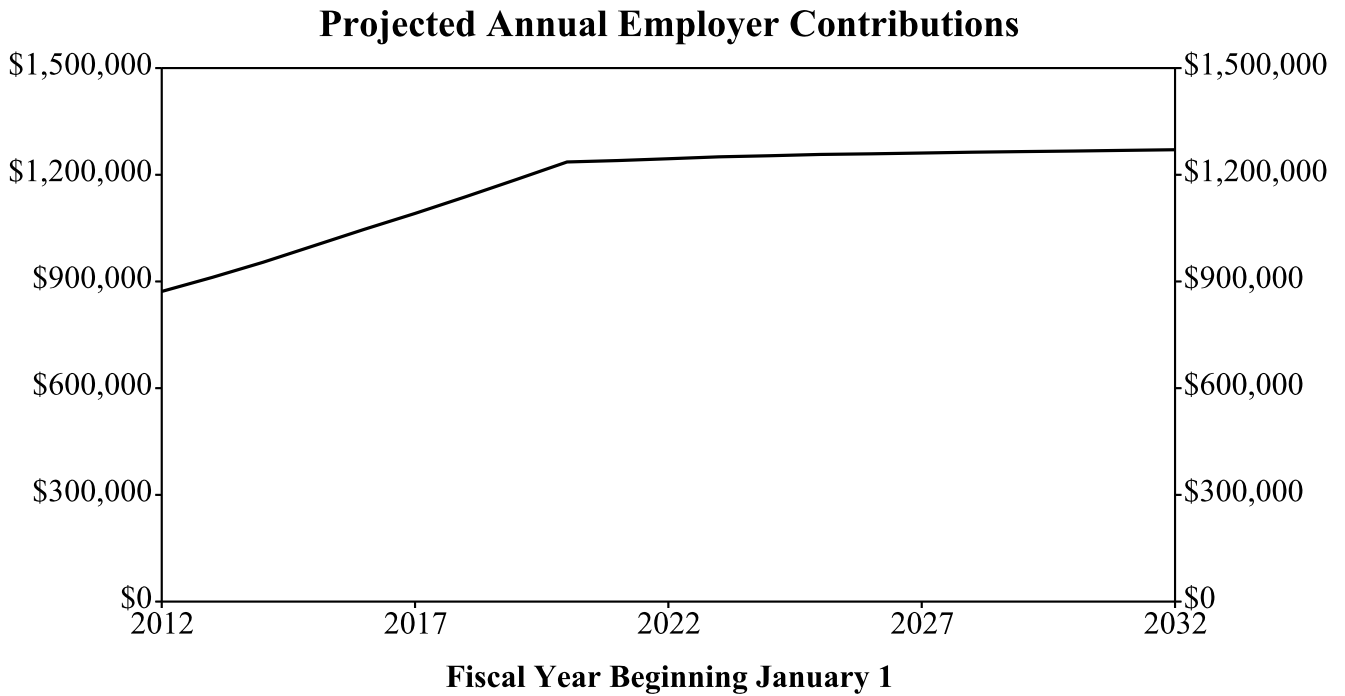
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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
2009	(2)				(1)		1		26
2010	(2)			(1)	(1)		2		24

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
2009								3
2010							1	4

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	\$ 4,130	(2)	\$ (27,413)	\$ (1,124)	46	\$ 1,232,024
2002	3	97,241				(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	2,636				51	1,539,682
2007	3	178,194		(1)	(5,443)		53	1,712,433
2008	3	153,064					56	1,868,133
2009	2	131,732		(1)	(38,554)		57	1,961,311
2010	3	140,093				(24,596)	60	2,076,808

@ 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
2009	579,677	417,086	527,428	(1,891,478)	(158,329)	0	106,244	16,616,645
2010	664,289	387,222	772,236	(2,005,882)	(128,025)	0	335,148	16,641,633

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

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
2009	30,521,311	16,616,645	54	13,904,666	706
2010	31,808,099	16,641,633	52	15,166,466	814

Ingham County (3303)

Division 04 - MCF

Table 16C

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	5.85%	\$24,239
Member Contributions	0.00	0
Less Potential Refunds	<u>0.00</u>	<u>0</u>
Net Member Contributions	0.00	0
Employer Normal Cost @	5.85%	\$24,239
Amortization of Unfunded Accrued Liability (28 years)	<u>0.50</u>	<u>2,072</u>
Total Long Term Contribution	6.35	26,311
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	6.35%	\$26,311 *

@ 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.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(62,134)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.09%
Amortization Payment:	(0.06)%
Total:	0.03%

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

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

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
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%
2009	156	4,691,144	6.24%	6.24%
2010	162	4,972,042	6.35%	6.35%

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.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 valuation.

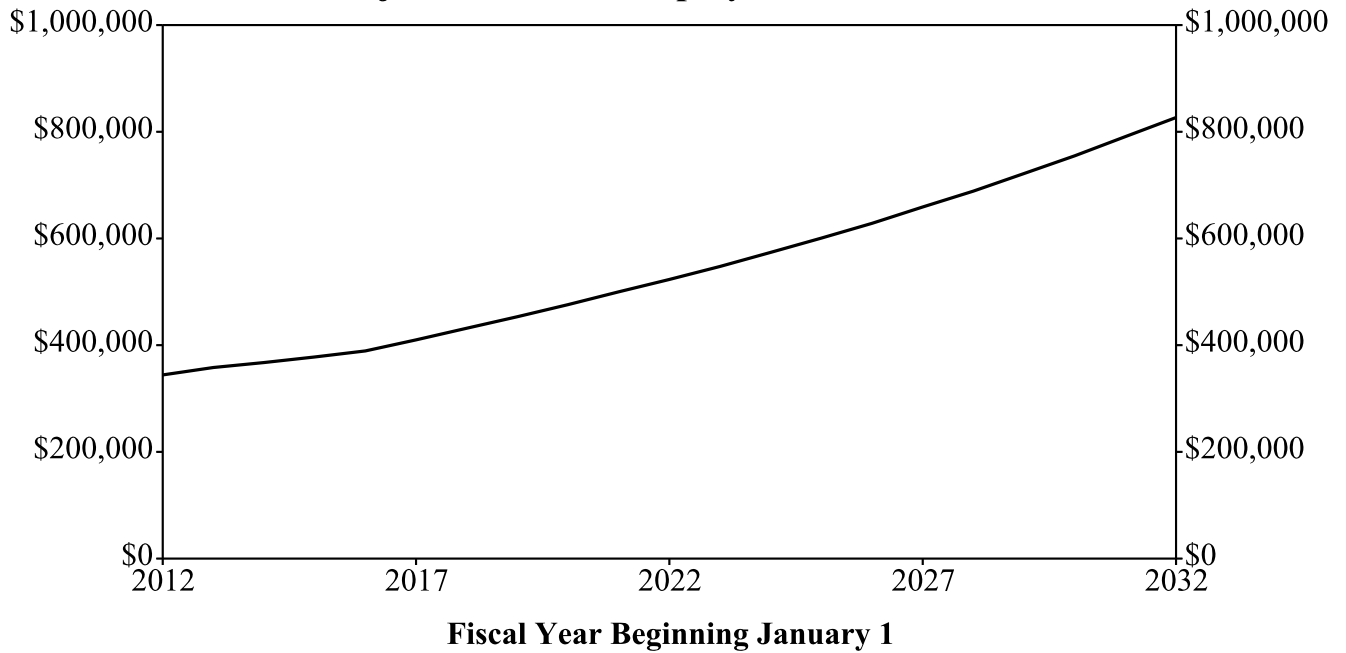
The most recent 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 25.

Ingham County (3303)

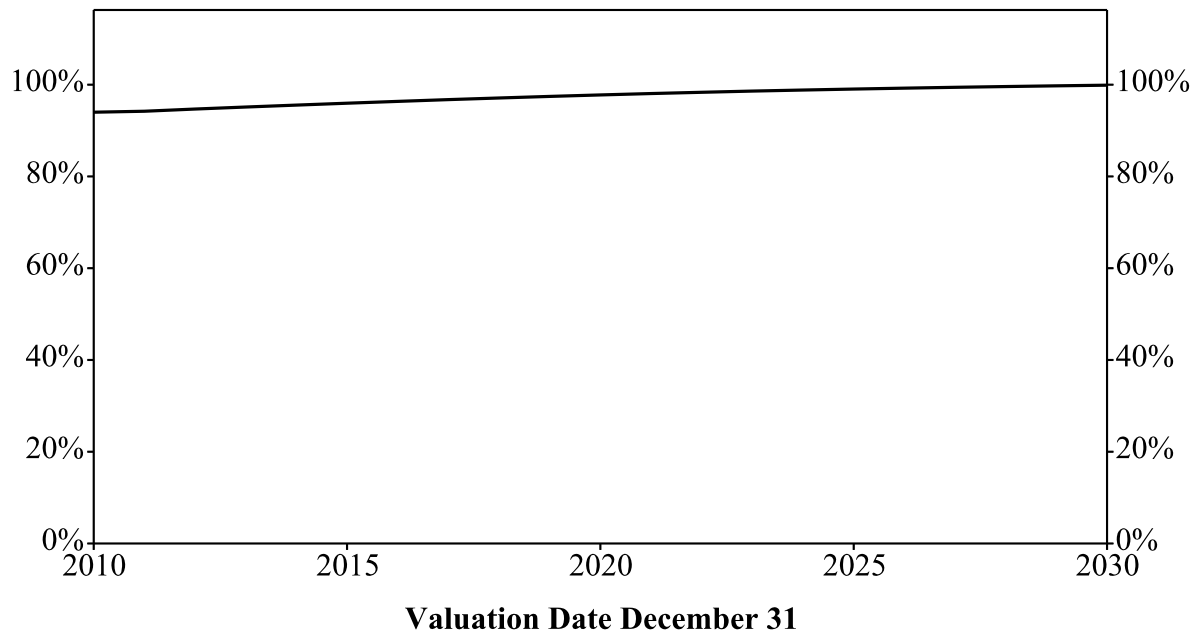
Division 04 - MCF

Chart 17.5C

Projected Annual Employer Contributions



Projected Funded Percentage



Note: Please refer to page 248 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
2009	(1)			(1)	(25)	(1)		28	156
2010	(2)			(1)	(17)	(2)		28	162

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
2009	(5)	(1)					2	35
2010	(2)						3	36

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
2009	6	34,012		(1)	(1,583)		70	306,269
2010	4	25,748		(4)	(13,251)		70	318,766

@ 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
2009	285,720	0	331,106	(295,427)	0	0	0	6,675,209
2010	324,582	39	390,358	(311,709)	0	(22,969)	113	7,055,623

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

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
2009	7,063,531	6,675,209	95	388,322	8
2010	7,523,171	7,055,623	94	467,548	9

Ingham County (3303)

Division 09 - Judges

Table 16D

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	12.96%	\$889
Member Contributions	3.14	215
Less Potential Refunds	<u>(0.54)</u>	<u>(37)</u>
Net Member Contributions	2.60	178
Employer Normal Cost @	10.36%	\$711
Amortization of Unfunded Accrued Liability (28 years)	<u>51.47</u>	<u>3,530</u>
Total Long Term Contribution	61.83	4,241
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	61.83%	\$4,241 *

@ 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 0.84% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$390
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.19%
Amortization Payment:	0.04%
Total:	0.23%

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
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%
2009	3	82,302	59.36%	59.36%
2010	3	82,302	61.83%	61.83%

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.

Actuarial assumptions were revised for the 2009 valuation.

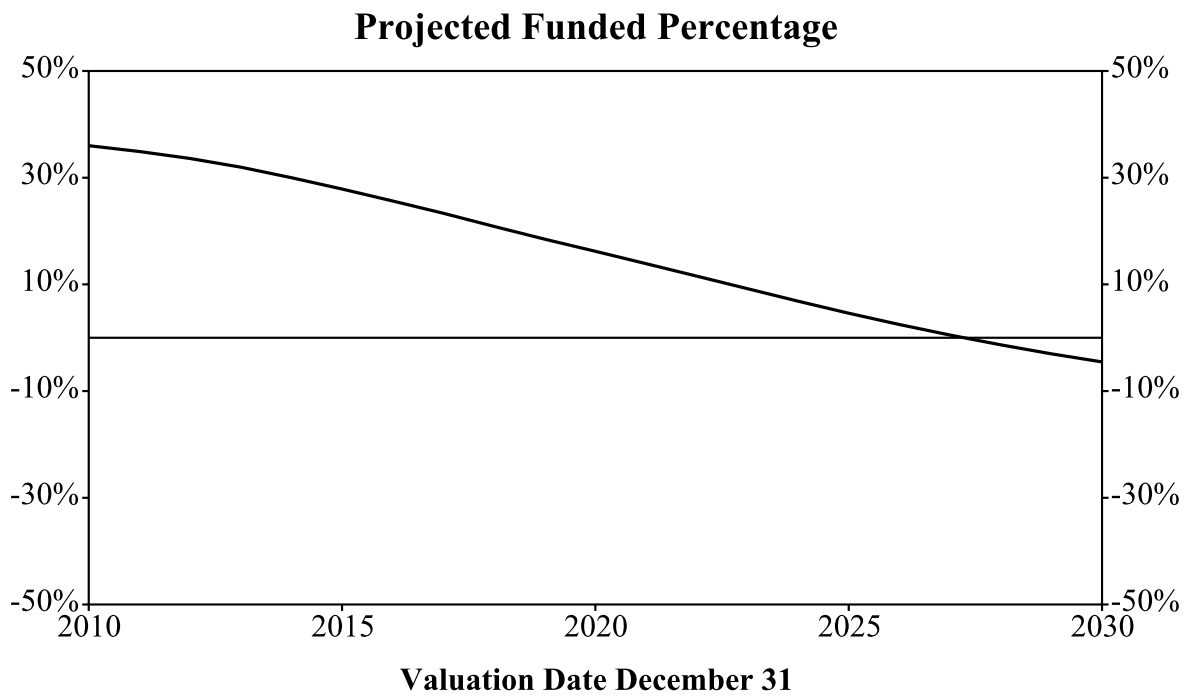
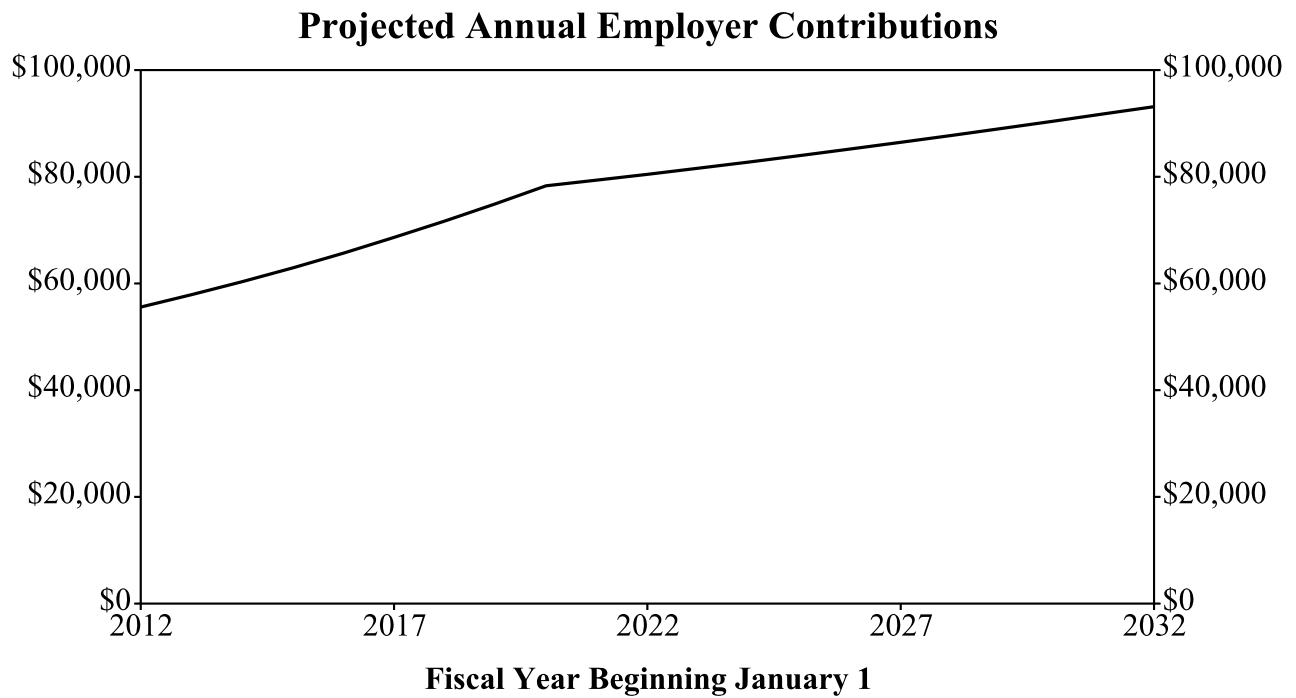
Actuarial assumptions and methods were revised for the 2010 valuation.

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 248 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
2009									3
2010									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
2009							1	1
2010								1

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
2009				(1)	(4,055)		8	94,369
2010							8	94,369

@ 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
2009	42,468	2,584	6,099	(94,907)	0	0	0	484,232
2010	48,237	2,584	15,075	(94,369)	0	0	0	455,759

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

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
2009	1,256,818	484,232	39	772,586	939
2010	1,262,740	455,759	36	806,981	981

Ingham County (3303)

Division 10 - Gnrl Mgmt

Table 16E

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	12.78%	\$76,084
Member Contributions	6.39	38,042
Less Potential Refunds	<u>(0.94)</u>	<u>(5,596)</u>
Net Member Contributions	5.45	32,446
Employer Normal Cost @	7.33%	\$43,638
Amortization of Unfunded Accrued Liability (28 years)	<u>10.55</u>	<u>62,808</u>
Total Long Term Contribution	17.88	106,446
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	17.88%	\$106,446 *

@ 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 0.84% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(13,512)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.23%
Amortization Payment:	0.00%
Total:	0.23%

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**

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
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%
2009	86	7,134,709	16.19%	16.19%
2010	85	7,144,007	17.88%	17.88%

Notes:

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.

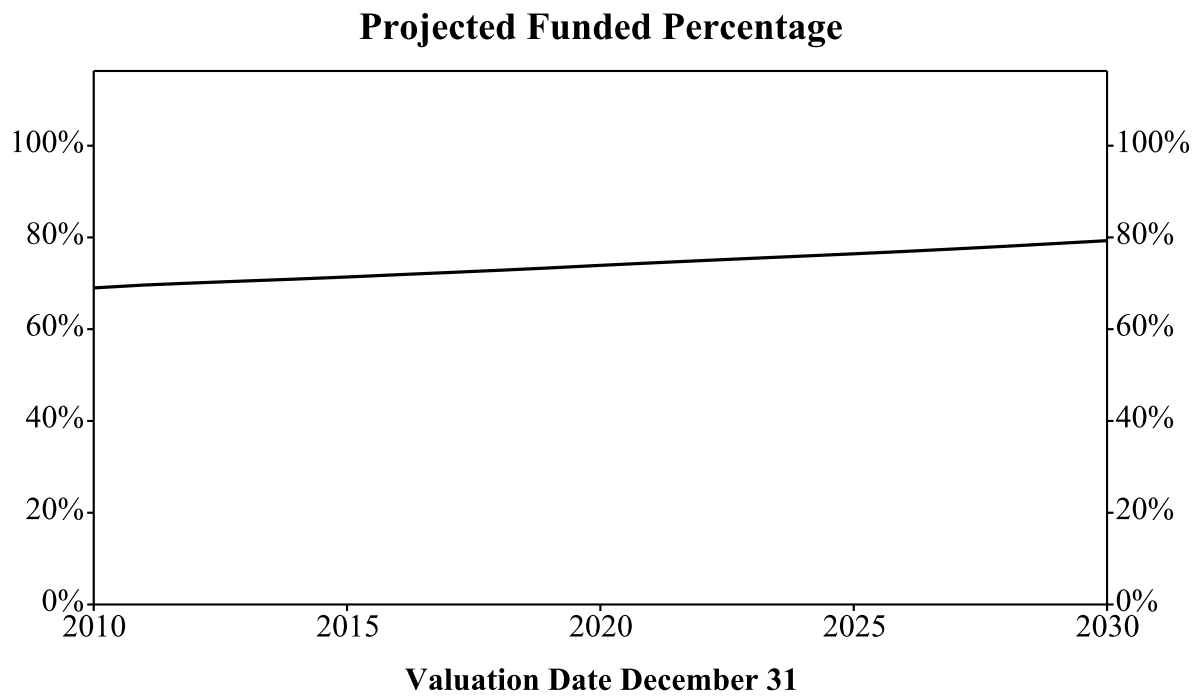
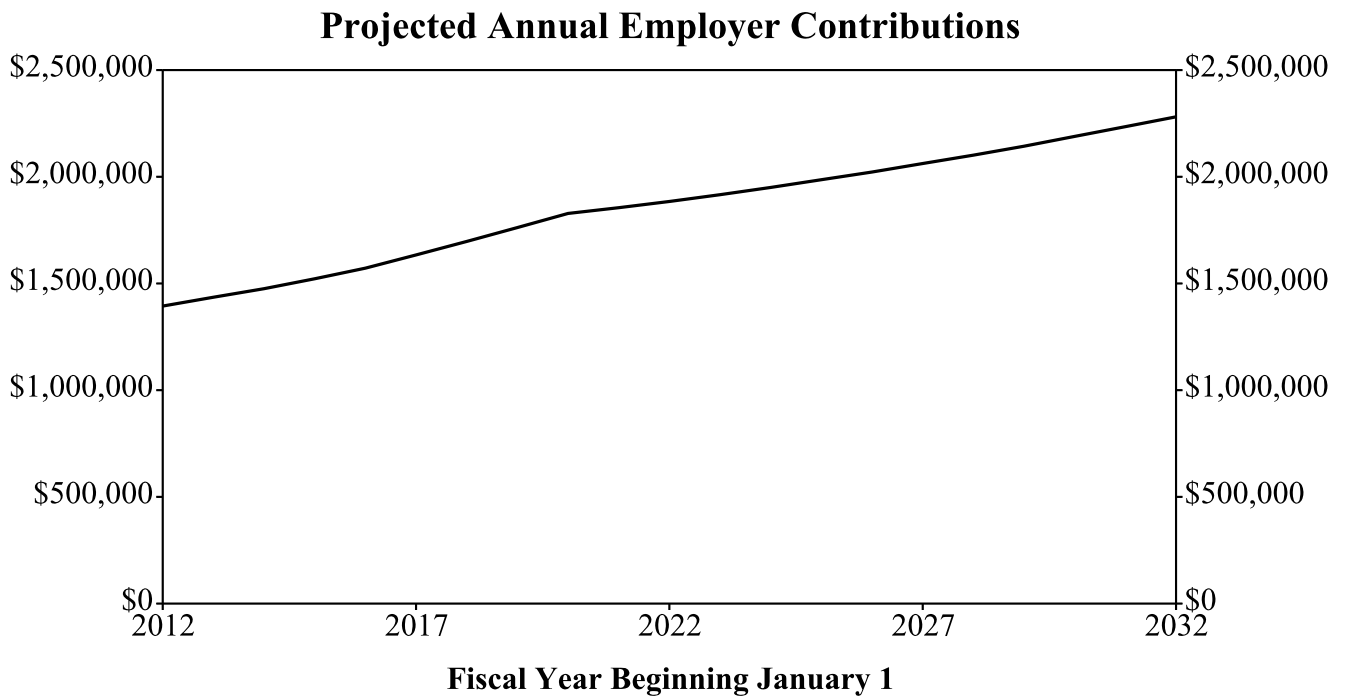
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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
2009	(4)			(2)	(3)		4	4	86
2010	(5)			(1)	(3)	(1)	5	4	85

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
2009	(3)						2	22
2010	(1)	(2)					1	20

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
2009	7	153,045		(2)	(18,927)		83	2,286,063
2010	6	219,726		(1)	(5,610)	(1,461)	88	2,498,718

@ 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
2009	1,080,864	465,457	1,387,307	(2,215,701)	(10,869)	0	242,386	30,924,563
2010	1,115,450	471,339	1,720,667	(2,437,783)	(32,888)	0	467,553	32,228,901

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

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
2009	43,246,303	30,924,563	72	12,321,740	173
2010	46,498,176	32,228,901	69	14,269,275	200

Ingham County (3303)
Division 11 - Gnrl Library

Table 16F

Computed Employer Contributions to the Retirement System
For the Fiscal Year Beginning January 1, 2012

Contribution for	Monthly Dollar Contribution *
Total Normal Cost	\$0
Member Contributions	0
Less Potential Refunds	<u>0</u>
Net Member Contributions	0
Employer Normal Cost @	\$0
Amortization of Unfunded Accrued Liability (12 years) ^	<u>3,053</u> ^
Total Long Term Contribution	3,053
Overfunding Credit #	<u>0</u>
Total Employer Contribution @	\$3,053 *

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

* The monthly dollar contribution is based on projected fiscal year payroll. Monthly invoices will be based on the dollar amount shown above.

Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2012 fiscal year (see Table 24).

^ This division is closed to new hires. Note that the 12 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
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
2009	0	0	\$ 2,518	\$ 2,518
2010	0	0	\$ 3,053	\$ 3,053

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.

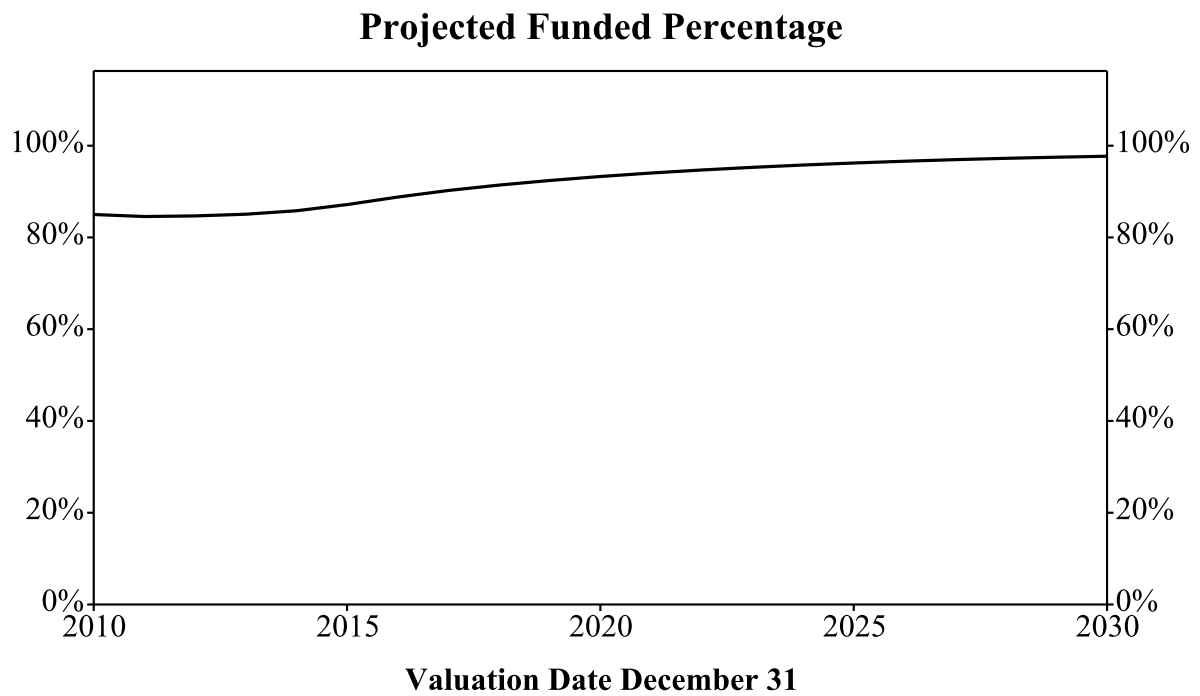
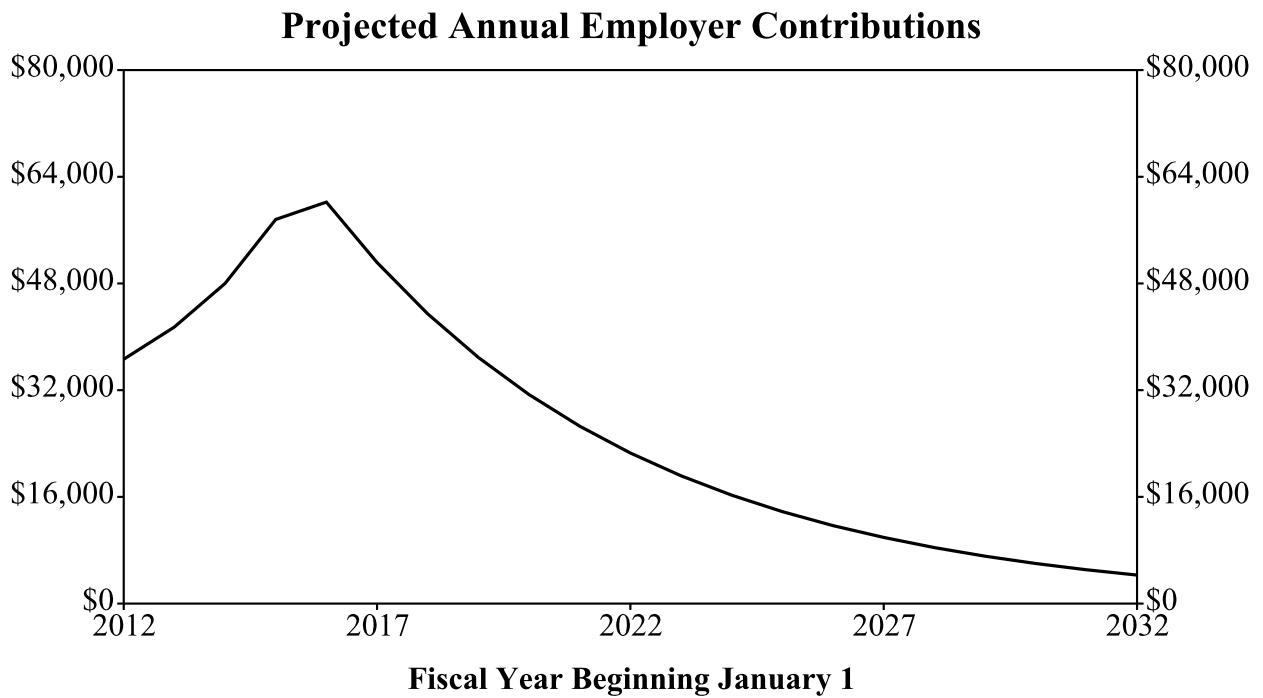
Actuarial assumptions were revised for the 2000 valuation.

Actuarial assumptions were revised for the 2004 valuation.

Actuarial assumptions were revised for the 2010 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 248 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
2009									0
2010									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
2009	(2)							13
2010	(1)						1	13

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
2009	2	21,824		(2)	(1,778)		30	196,849
2010	1	12,182		(2)	(8,643)		29	200,388

@ 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
2009	13,692	0	46,698	(188,591)	0	0	0	2,072,225
2010	15,180	0	73,645	(192,418)	0	0	0	1,968,632

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

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	
2009	2,393,819	2,072,225	87	321,594	
2010	2,326,700	1,968,632	85	358,068	

Ingham County (3303)

Division 12 - Gnrl ICEA Profs

Table 16G

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	13.29%	\$75,481
Member Contributions	13.42	76,219
Less Potential Refunds	<u>(3.02)</u>	<u>(17,152)</u>
Net Member Contributions	10.40	59,067
Employer Normal Cost @	2.89%	\$16,414
Amortization of Unfunded Accrued Liability (28 years)	<u>5.96</u>	<u>33,850</u>
Total Long Term Contribution	8.85	50,264
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	8.85%	\$50,264 *

@ 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 0.79% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(11,688)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.24%
Amortization Payment:	0.00%
Total:	0.24%

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
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%
2009	125	6,937,202	8.11%	8.11%
2010	122	6,815,438	8.85%	8.85%

Notes:

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.

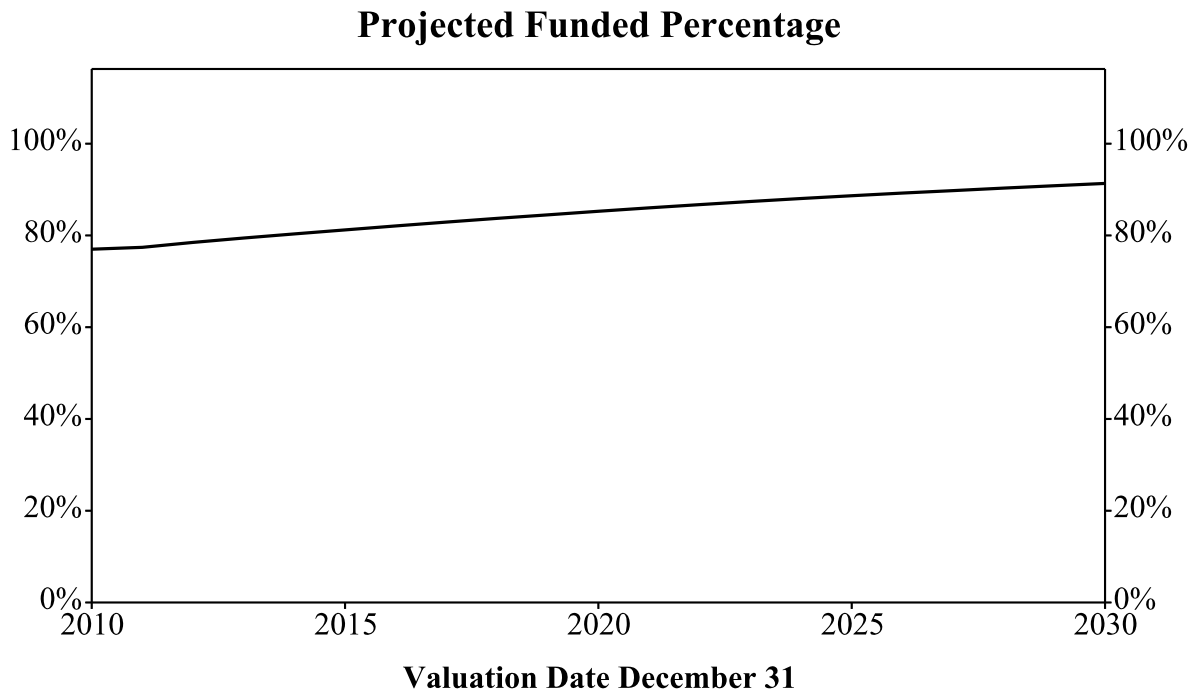
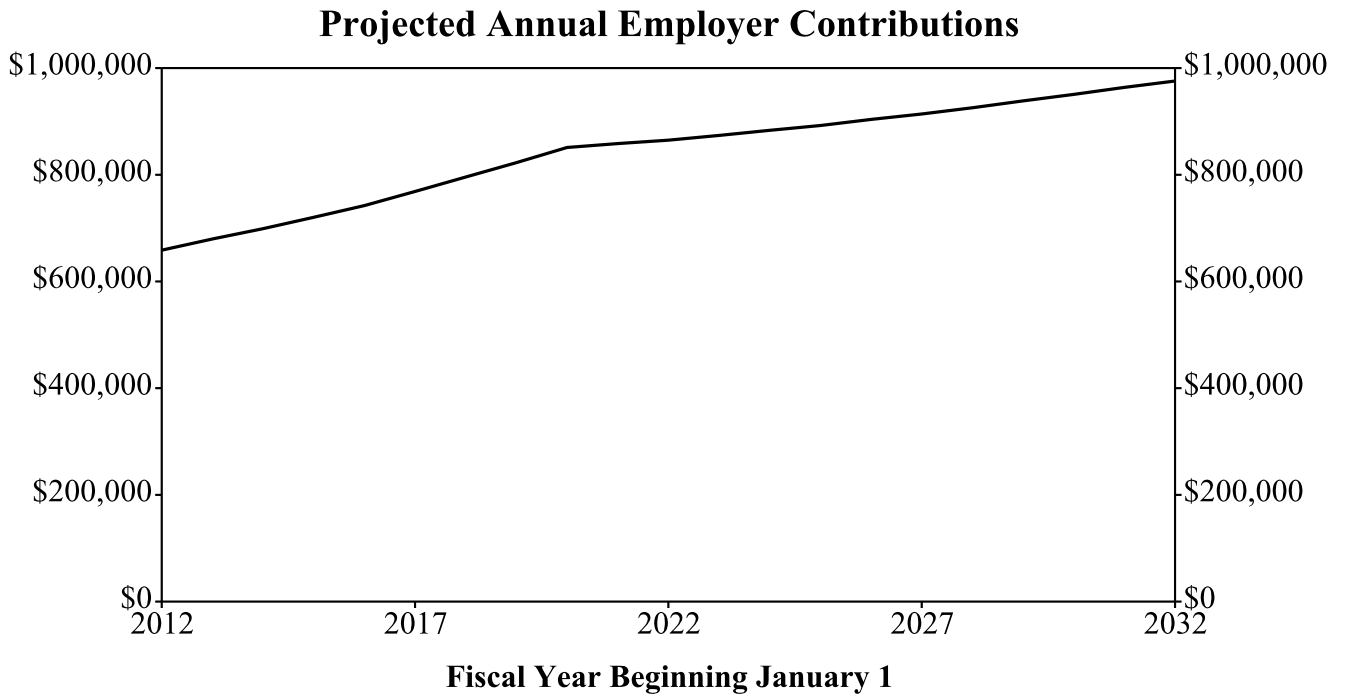
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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
2009	(2)			(2)	(5)	(1)	1	8	125
2010	(2)	(1)		(1)	(3)	(5)	2	7	122

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
2009	(2)			(1)			2	22
2010	(3)						1	20

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
2009	7	104,724	12,951	(1)	(5,016)	(412)	51	934,480
2010	7	201,713	19,071	(2)	(53,540)		56	1,101,724

@ 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
2009	541,986	959,360	1,378,899	(887,649)	(17,503)	0	14,994	23,764,021
2010	509,682	930,183	1,393,021	(1,138,504)	(75,456)	(264,376)	0	25,118,571

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

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
2009	30,963,619	23,764,021	77	7,199,598	104
2010	32,826,862	25,118,571	77	7,708,291	113

Ingham County (3303)

Division 13 - Gnrl OPEIU Prob

Table 16H

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	11.97%	\$19,338
Member Contributions	9.71	15,687
Less Potential Refunds	<u>(1.87)</u>	<u>(3,021)</u>
Net Member Contributions	7.84	12,666
Employer Normal Cost @	4.13%	\$6,672
Amortization of Unfunded Accrued Liability (28 years)	<u>13.11</u>	<u>21,180</u>
Total Long Term Contribution	17.24	27,852
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	17.24%	\$27,852 *

@ 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 0.84% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(16,088)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.21%
Amortization Payment:	(0.03)%
Total:	0.18%

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
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%
2009	40	2,194,372	14.15%	14.15%
2010	34	1,938,642	17.24%	17.24%

Notes:

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.

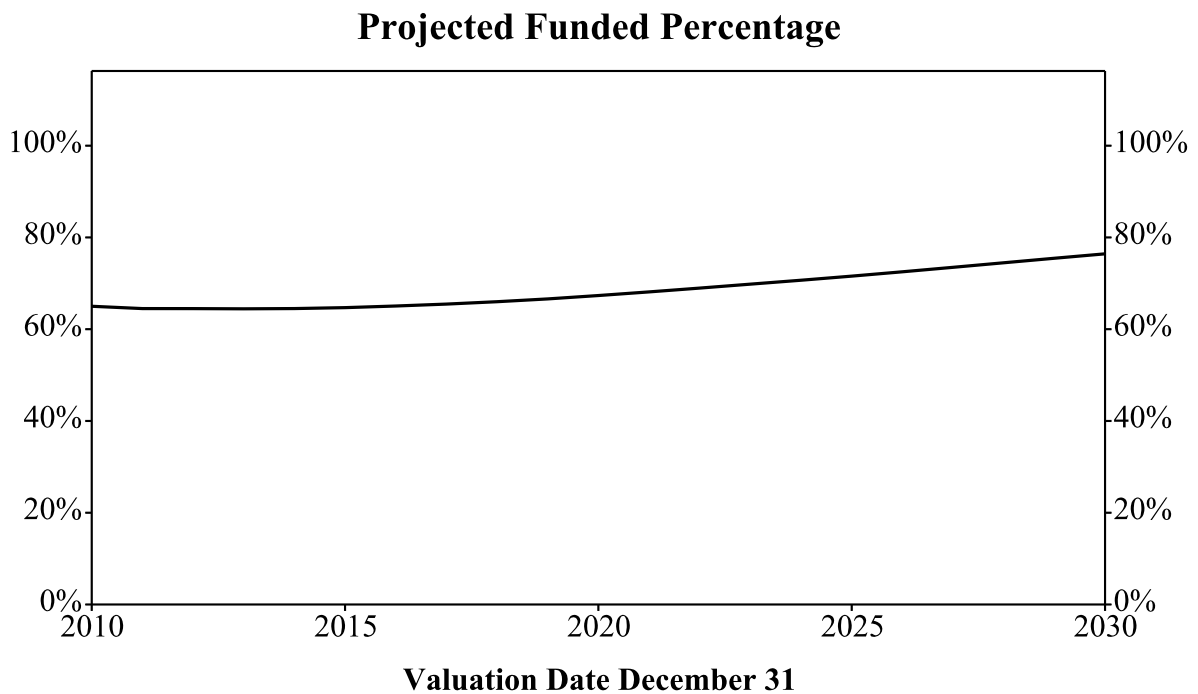
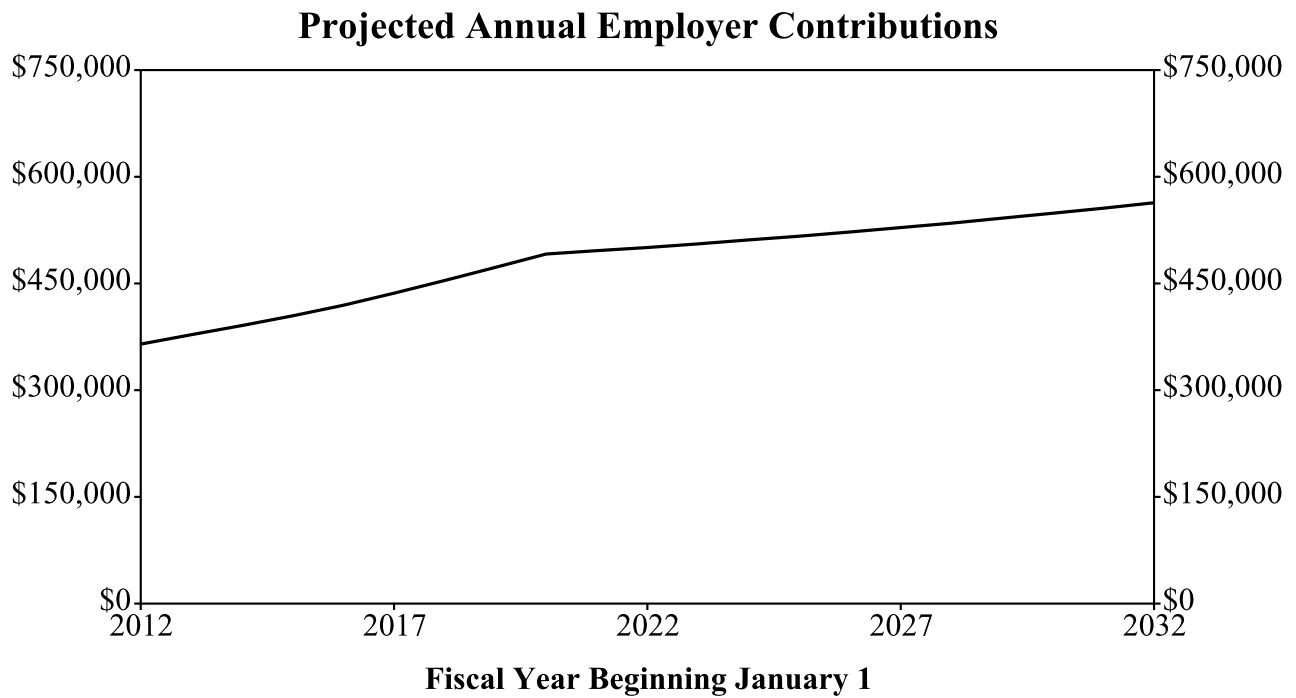
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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
2009	(1)						2	1	40
2010	(2)				(3)	(1)			34

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
2009								8
2010	(1)							7

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
2009	1	7,233	2,812				28	794,998
2010	3	117,147	4,053	(1)	(1,848)		30	914,350

@ 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
2009	202,465	211,875	322,904	(787,528)	0	0	7,217	8,963,773
2010	278,658	205,463	389,938	(881,334)	(39,686)	(69,316)	0	8,847,496

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

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
2009	13,327,193	8,963,773	67	4,363,420	199
2010	13,639,726	8,847,496	65	4,792,230	247

Ingham County (3303)

Division 14 - Gnrl TOPS UAW

Table 16I

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	10.96%	\$131,507
Member Contributions	3.62	43,436
Less Potential Refunds	<u>(0.82)</u>	<u>(9,839)</u>
Net Member Contributions	2.80	33,597
Employer Normal Cost @	8.16%	\$97,910
Amortization of Unfunded Accrued Liability (28 years)	<u>3.29</u>	<u>39,476</u>
Total Long Term Contribution	11.45	137,386
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	11.45%	\$137,386 *

@ 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 0.80% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(123,012)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.20%
Amortization Payment:	(0.04)%
Total:	0.16%

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

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
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%
2009	398	14,636,178	10.80%	10.80%
2010	389	14,398,613	11.45%	11.45%

Notes:

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.

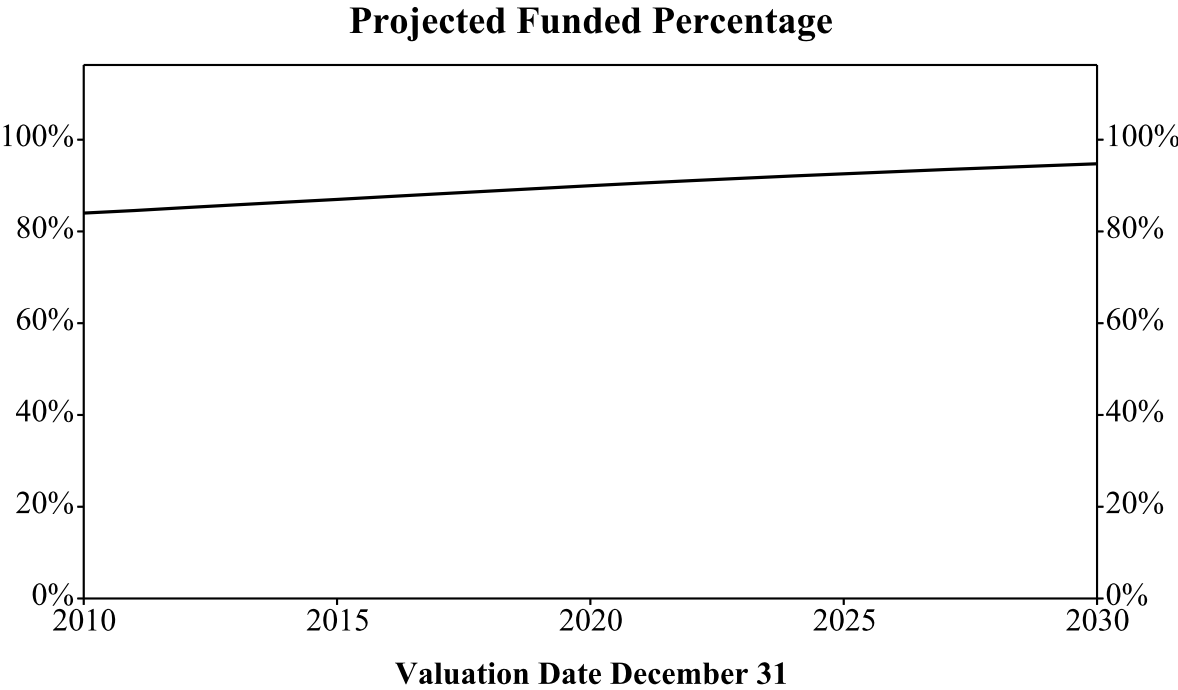
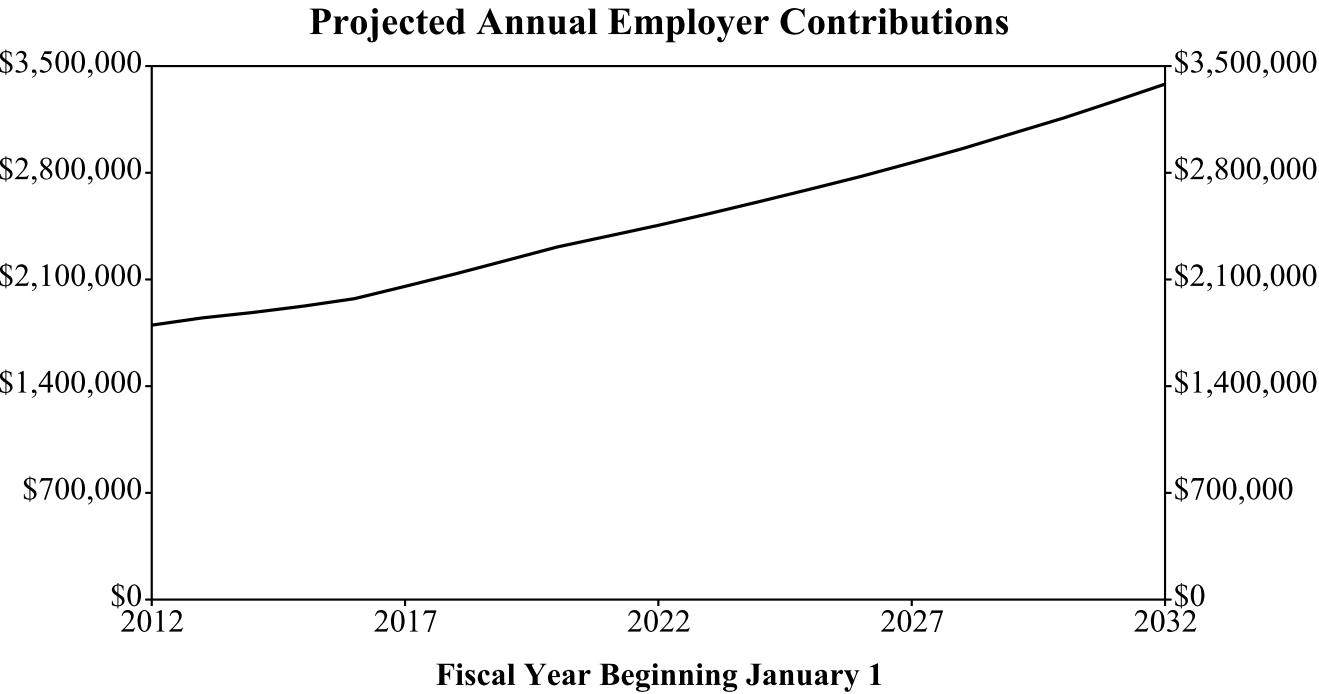
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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
2009	(13)	(2)		(2)	(13)	(5)		31	398
2010	(12)	(1)		(2)	(15)	(4)	1	24	389

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
2009	(1)			(2)			2	48
2010	(2)			(1)			2	47

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
2009	18	343,751	792	(3)	(10,065)	(4,706)	195	2,309,189
2010	16	275,458	3,016	(4)	(57,874)		207	2,529,789

@ 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
2009	1,476,270	537,592	2,148,326	(2,197,032)	(50,159)	(193,996)	0	45,481,926
2010	1,497,514	538,877	2,508,078	(2,435,357)	(34,064)	(233,231)	0	47,323,743

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

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
2009	53,495,592	45,481,926	85	8,013,666	55
2010	56,277,483	47,323,743	84	8,953,740	62

Ingham County (3303)

Division 15 - Animal Cntrl FOP

Table 16J

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	14.78%	\$4,186
Member Contributions	15.49	4,388
Less Potential Refunds	<u>(3.36)</u>	<u>(952)</u>
Net Member Contributions	12.13	3,436
Employer Normal Cost @	2.65%	\$750
Amortization of Unfunded Accrued Liability (28 years)	<u>28.20</u>	<u>7,988</u>
Total Long Term Contribution	30.85	8,738
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	30.85%	\$8,738 *

@ 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 0.75% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(1,711)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.26%
Amortization Payment:	(0.01)%
Total:	0.25%

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**

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
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%
2009	9	407,155	25.34%	25.34%
2010	8	339,899	30.85%	30.85%

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.

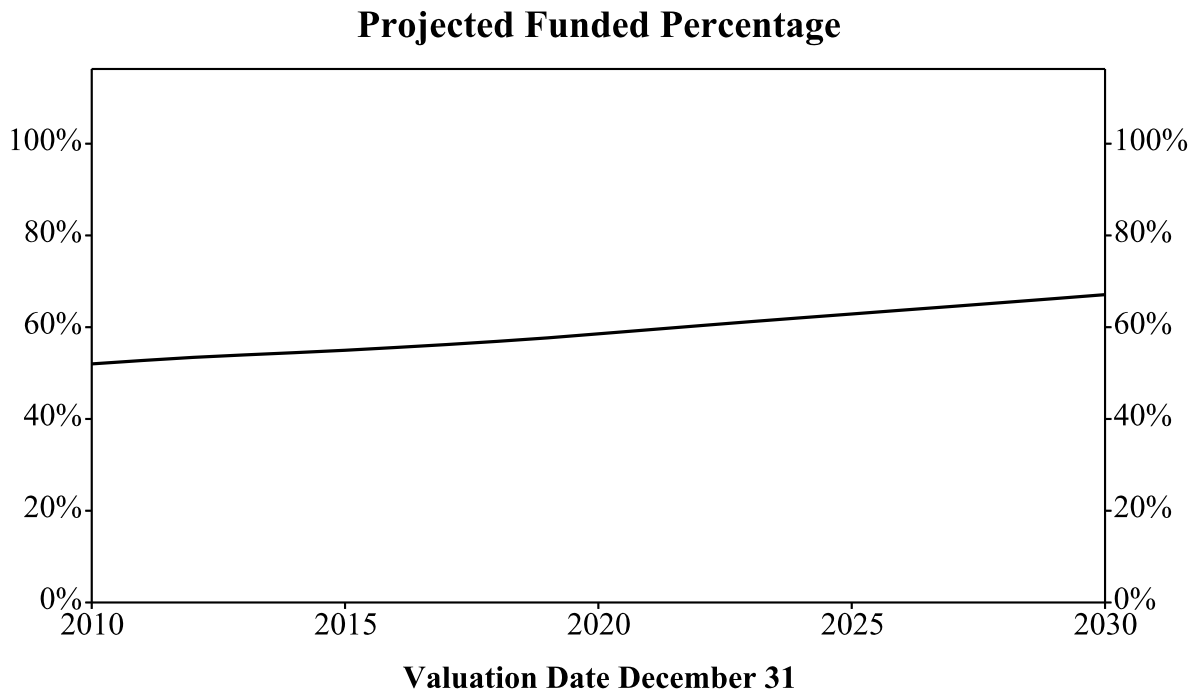
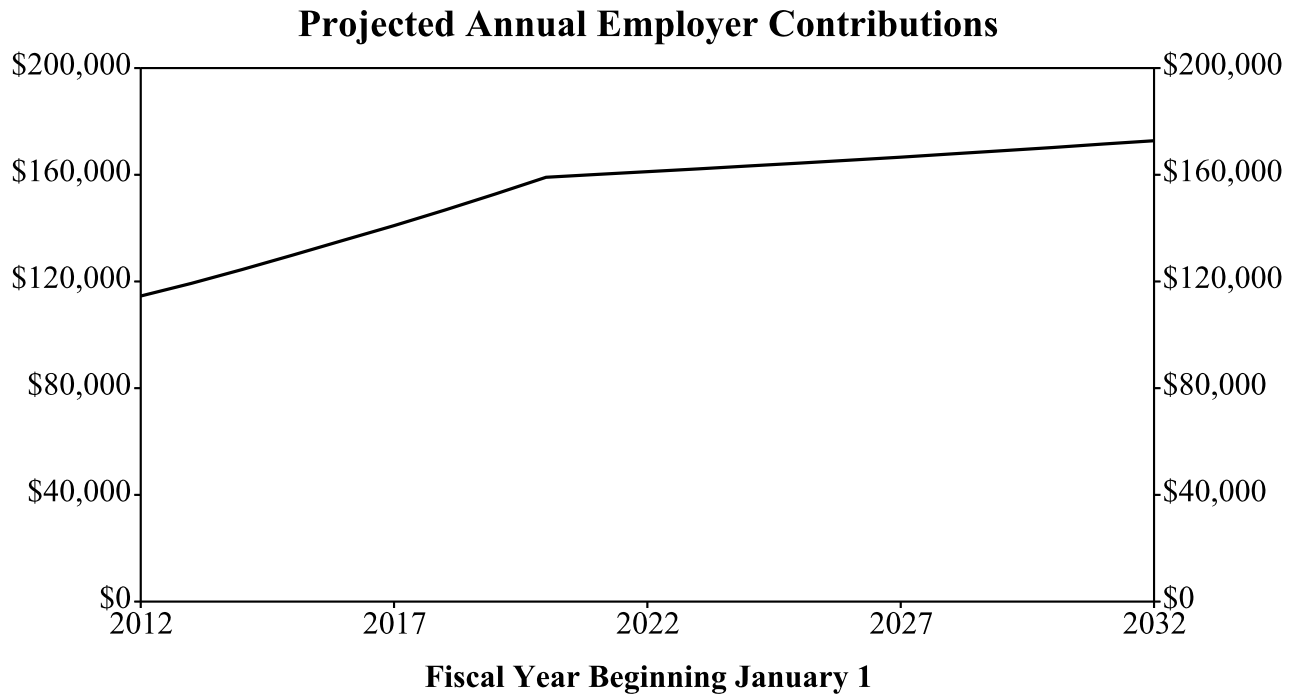
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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)				(1)			1	7
2009					(1)			3	9
2010					(1)				8

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
2009								1
2010								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
2009			3,610				8	166,379
2010			3,610				8	169,989

@ 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
2009	55,509	60,934	70,022	(162,767)	(16,969)	(22)	22	1,905,178
2010	102,102	57,199	107,462	(166,378)	(7,140)	0	0	1,998,423

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

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
2009	3,691,482	1,905,178	52	1,786,304	439
2010	3,810,017	1,998,423	52	1,811,594	533

Ingham County (3303)

Division 16 - Gnrl Commsnrs

Table 16K

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	8.96%	\$1,623
Member Contributions	3.56	645
Less Potential Refunds	<u>(0.58)</u>	<u>(105)</u>
Net Member Contributions	2.98	540
Employer Normal Cost @	5.98%	\$1,083
Amortization of Unfunded Accrued Liability (28 years)	<u>0.05</u>	9
Total Long Term Contribution	6.03	1,092
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	6.03%	\$1,092 *

@ 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 0.86% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(1,122)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.14%
Amortization Payment:	(0.02)%
Total:	0.12%

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

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
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%
2009	14	216,882	5.90%	5.90%
2010	14	217,301	6.03%	6.03%

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.

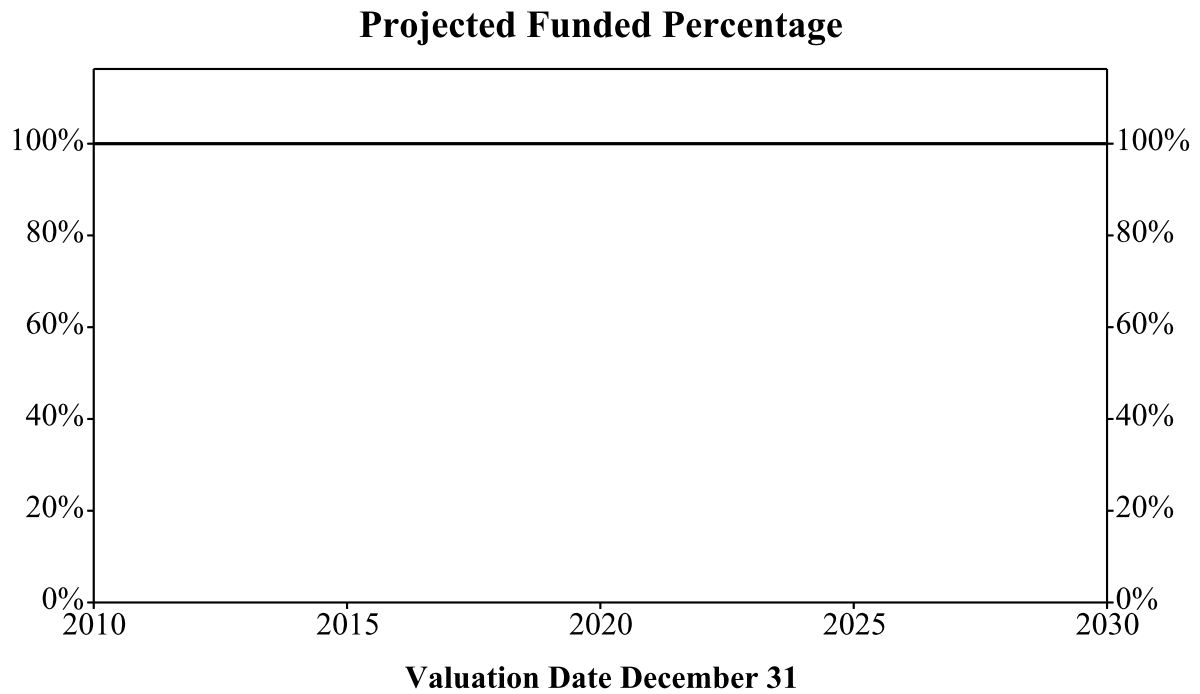
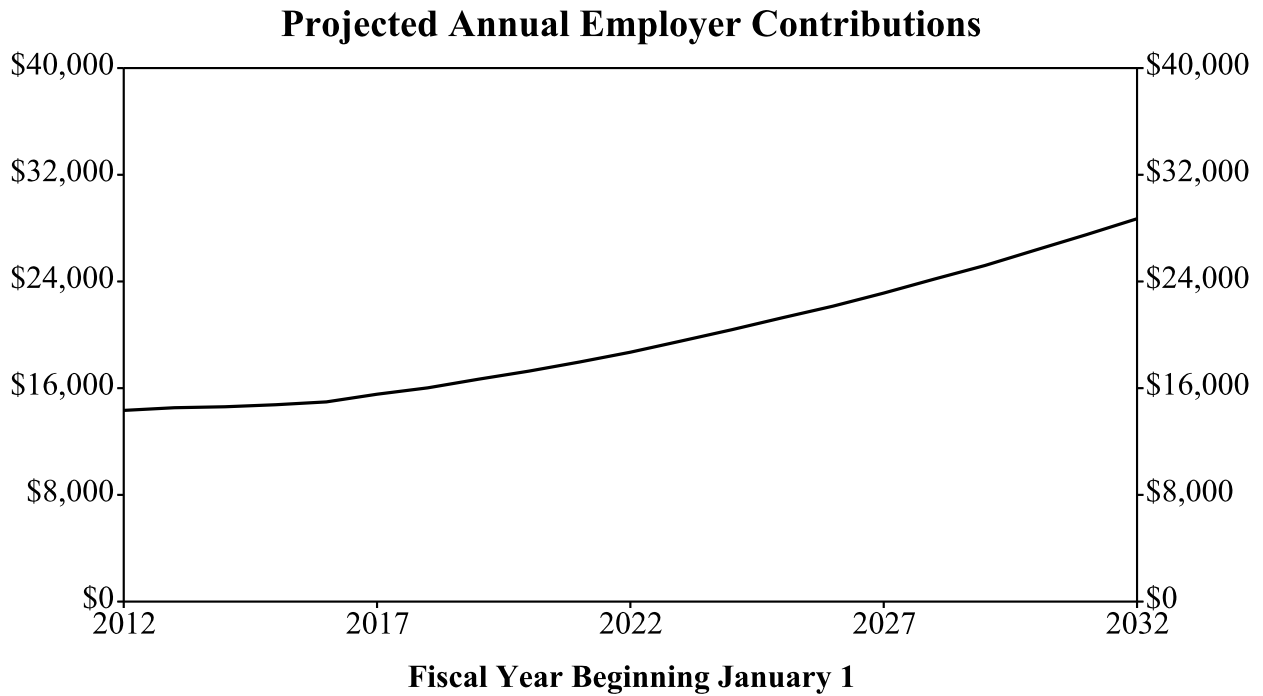
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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
2009				(1)				5	14
2010					(1)			1	14

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
2009							1	8
2010				(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
2009				(1)	(2,413)		6	17,391
2010							6	17,391

@ 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
2009	14,806	7,697	22,592	(19,401)	(30)	0	0	454,956
2010	14,331	7,740	27,357	(17,391)	0	0	0	486,993

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

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
2009	457,663	454,956	99	2,707	1
2010	488,670	486,993	100	1,677	1

Ingham County (3303)

Division 17 - ICEA & MNA Nurses

Table 16L

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	13.89%	\$45,777
Member Contributions	11.87	39,120
Less Potential Refunds	<u>(1.92)</u>	<u>(6,328)</u>
Net Member Contributions	9.95	32,792
Employer Normal Cost @	3.94%	\$12,985
Amortization of Unfunded Accrued Liability (28 years)	<u>5.01</u>	<u>16,511</u>
Total Long Term Contribution	8.95	29,496
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	8.95%	\$29,496 *

@ 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 0.85% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(53,385)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.21%
Amortization Payment:	(0.07)%
Total:	0.14%

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

Ingham County (3303)

Division 17 - ICEA & MNA Nurses

Table 17L

Computed Employer Contributions - Comparative Statement

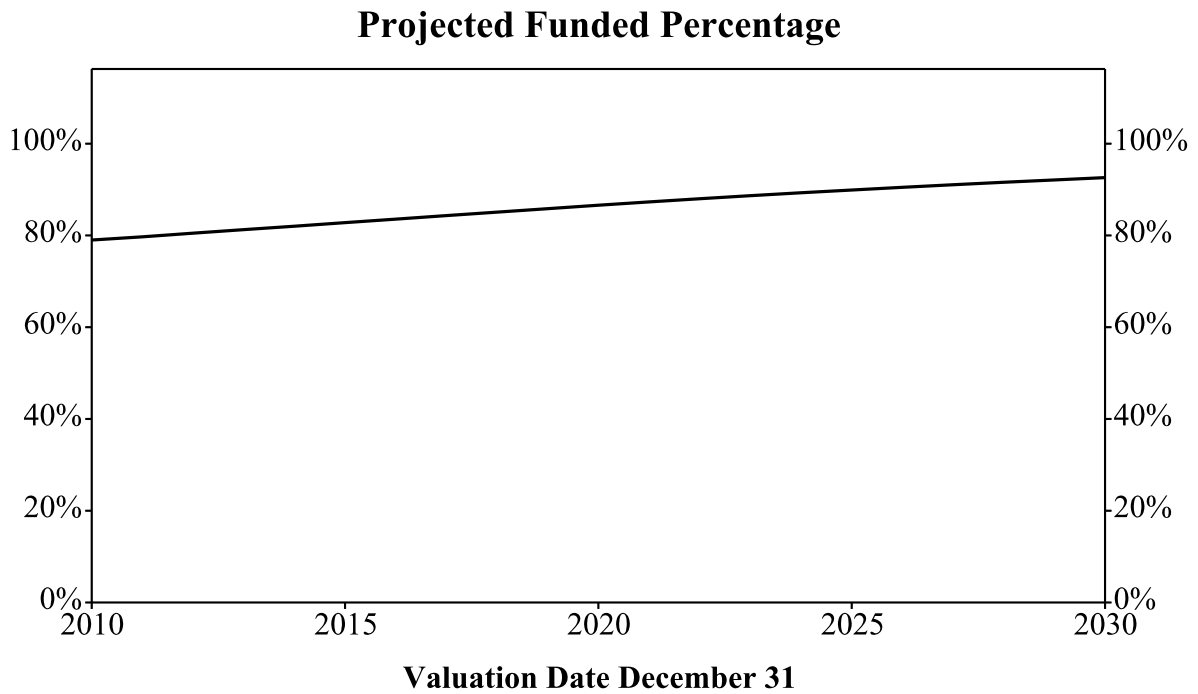
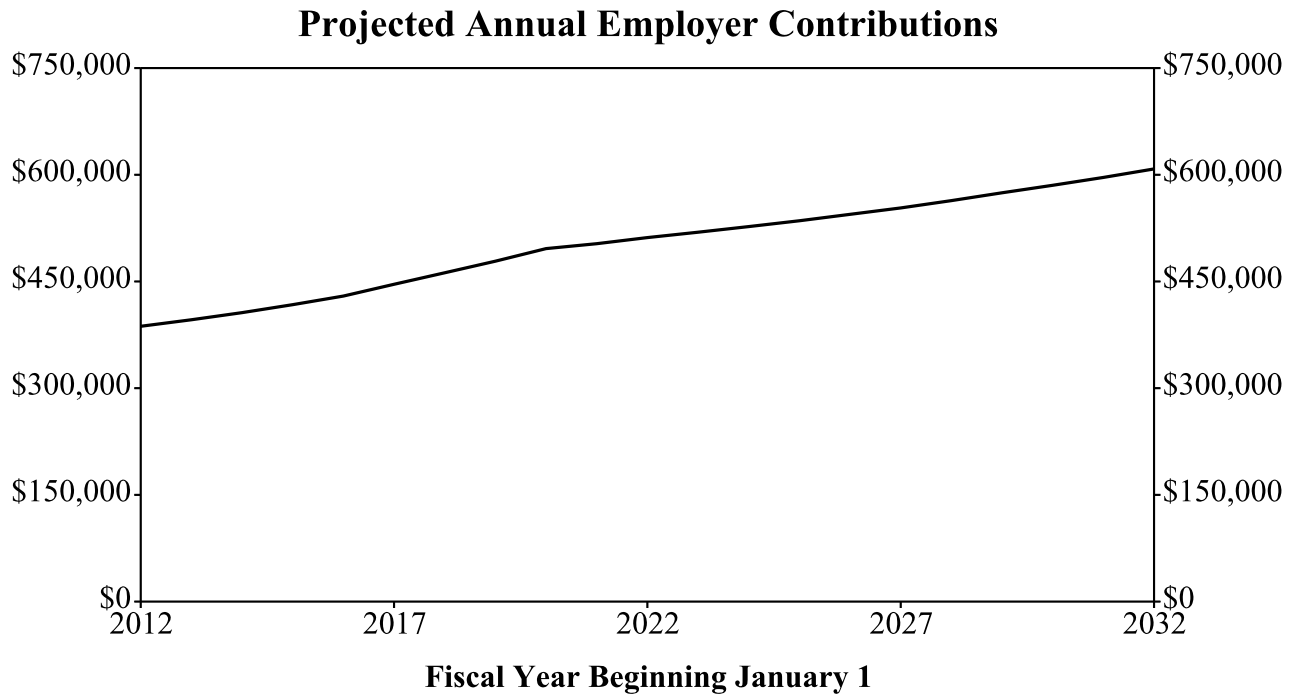
Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1996	64	\$ 2,067,117	9.54%	8.80%
1997	60	2,062,206	8.13%	8.13%
1998	63	2,321,552	7.68%	7.68%
1999	66	2,449,404	7.26%	7.26%
2000	67	2,553,922	6.79%	6.79%
2001	68	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%
2009	68	3,784,846	8.11%	8.11%
2010	68	3,954,809	8.95%	8.95%

Notes:

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.
Actuarial assumptions were revised for the 2009 valuation.
Actuarial assumptions and methods were revised for the 2010 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 & MNA Nurses
Chart 17.5L



Note: Please refer to page 248 for a discussion of the projection.

Ingham County (3303)

Division 17 - ICEA & MNA 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
2009				(1)	(2)	(1)		6	68
2010	(3)		(1)	(1)	(2)	(1)	1	7	68

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
2009		(1)					1	8
2010	(1)						1	8

Ingham County (3303)

Division 17 - ICEA & MNA 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
2009			16,915			(1,389)	54	777,623
2010	5	96,617	15,461			(4,394)	59	885,307

@ 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 & MNA 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
2009	310,104	448,784	625,256	(763,364)	(54,133)	(48,228)	0	13,466,398
2010	336,933	477,826	780,084	(846,710)	(2,988)	(73,955)	58,097	14,195,685

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

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
2009	16,629,558	13,466,398	81	3,163,160	84
2010	17,948,440	14,195,685	79	3,752,755	95

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

Table 16M

Computed Employer Contributions to the Retirement System
For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	11.36%	\$22,421
Member Contributions	9.84	19,421
Less Potential Refunds	<u>(2.07)</u>	<u>(4,086)</u>
Net Member Contributions	7.77	15,335
Employer Normal Cost @	3.59%	\$7,086
Amortization of Unfunded Accrued Liability (28 years)	<u>8.64</u>	<u>17,053</u>
Total Long Term Contribution	12.23	24,139
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	12.23%	\$24,139 *

@ 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 0.82% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$14,813
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.20%
Amortization Payment:	0.05%
Total:	0.25%

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
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%
2009	34	2,195,745	11.81%	11.81%
2010	35	2,368,458	12.23%	12.23%

Notes:

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.

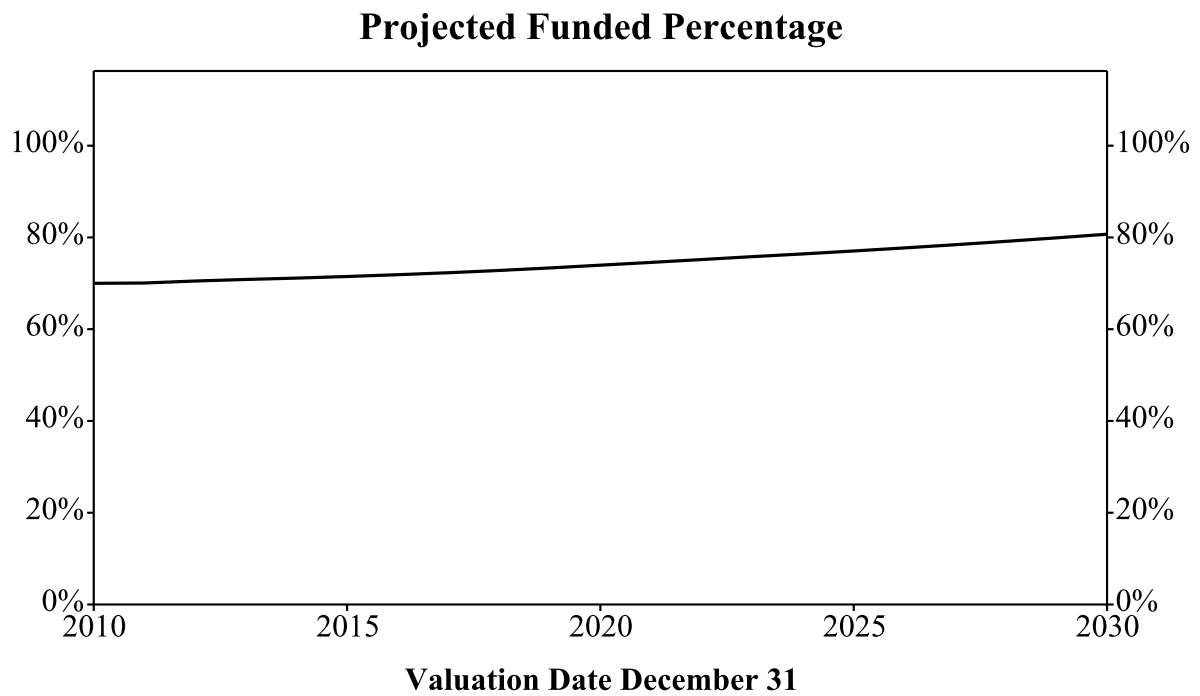
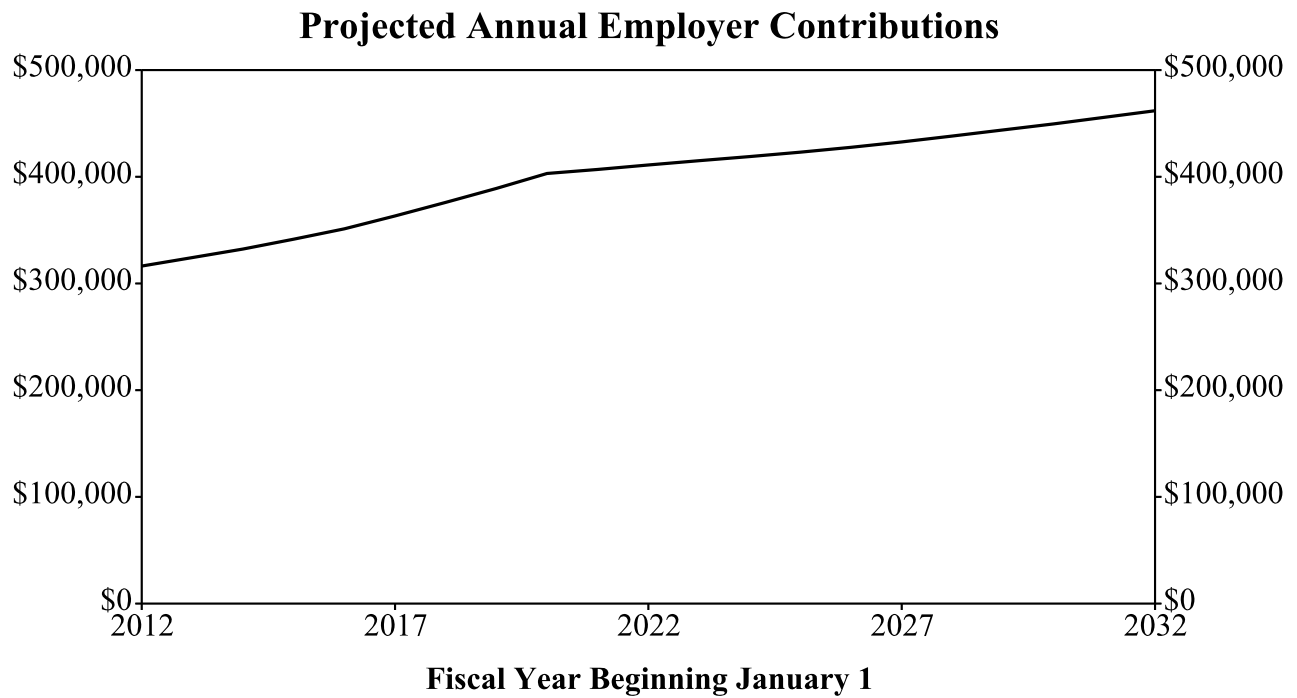
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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
2009	(1)							1	34
2010								1	35

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
2009					(1)			5
2010								5

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
2009	1	31,784	566	(2)	(35,846)	(13,058)	41	726,158
2010			1,170				41	727,328

@ 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
2009	266,054	223,047	366,533	(715,191)	0	(27,419)	148,221	8,661,046
2010	292,453	232,950	453,273	(727,327)	0	(1,469)	468	8,911,394

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

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
2009	12,209,605	8,661,046	71	3,548,559	162
2010	12,807,391	8,911,394	70	3,895,997	164

Ingham County (3303)
Division 19 - Cnstatnl Offcls

Table 16N

Computed Employer Contributions to the Retirement System
For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	12.60%	\$6,266
Member Contributions	8.46	4,207
Less Potential Refunds	<u>(1.34)</u>	<u>(666)</u>
Net Member Contributions	7.12	3,541
Employer Normal Cost @	5.48%	\$2,725
Amortization of Unfunded Accrued Liability (28 years)	<u>2.06</u>	<u>1,024</u>
Total Long Term Contribution	7.54	3,749
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	7.54%	\$3,749 *

@ 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 0.85% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(614)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.19%
Amortization Payment:	0.01%
Total:	0.20%

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
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%
2009	6	585,024	7.11%	7.11%
2010	6	596,786	7.54%	7.54%

Notes:

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.

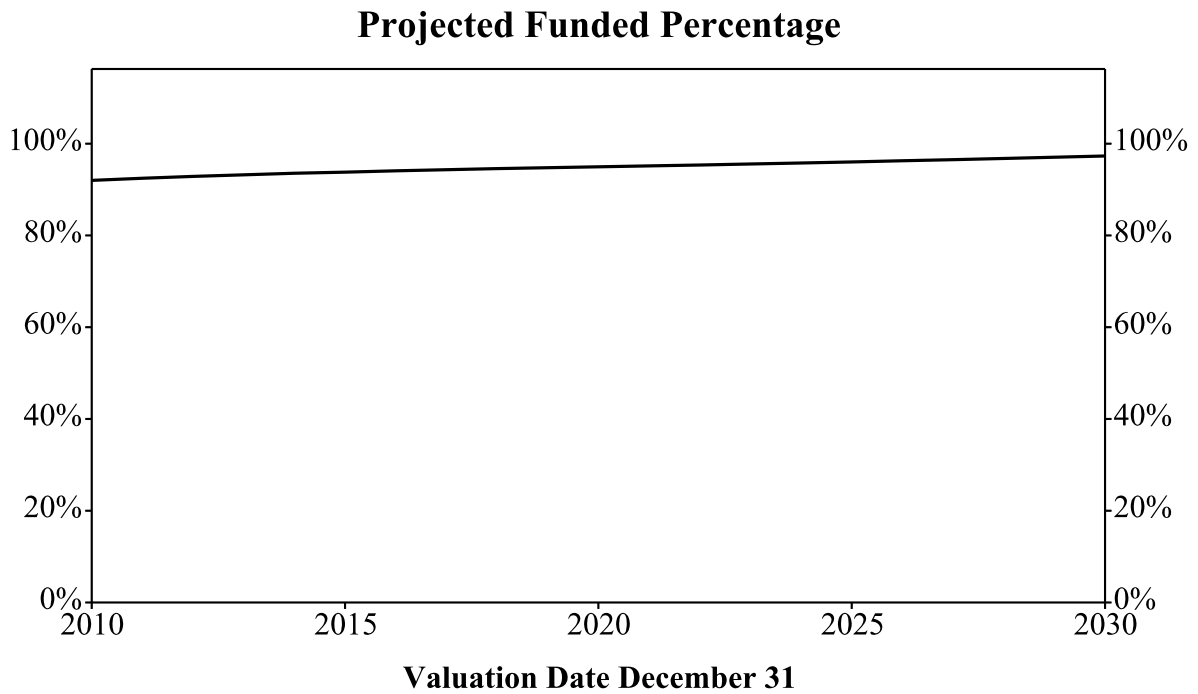
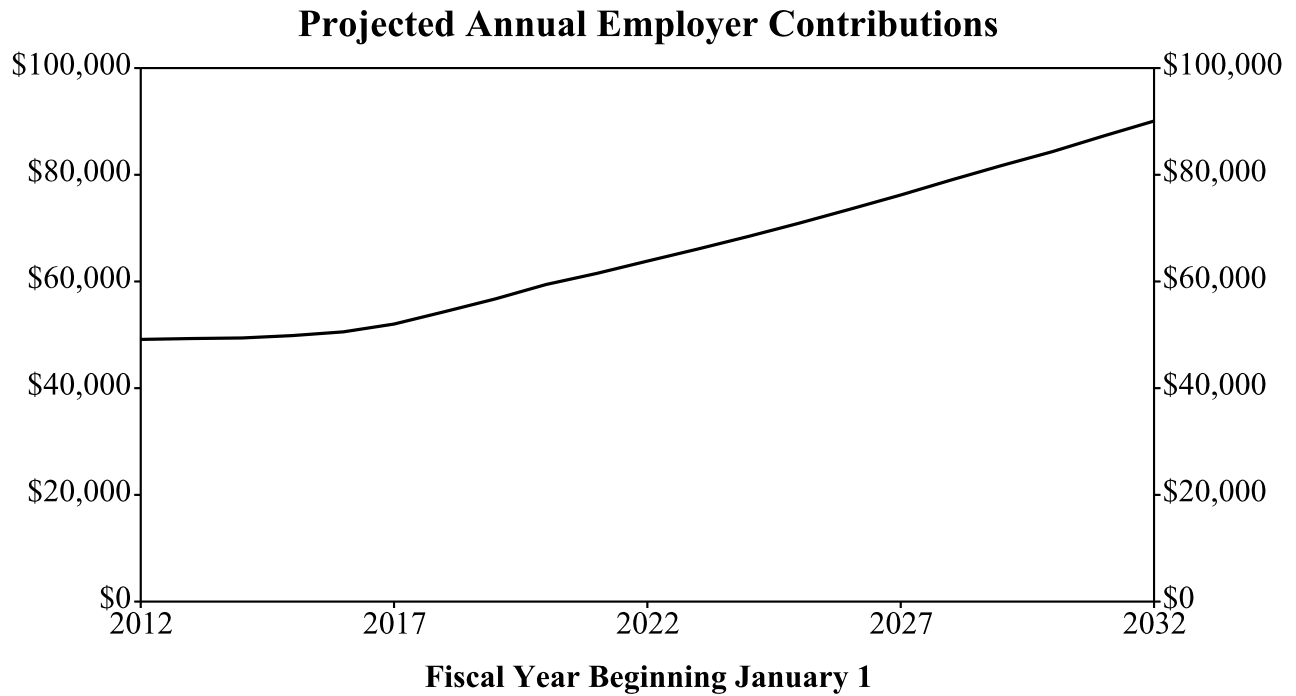
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 for a discussion of the projection.

Ingham County (3303)

Division 19 - Cnstatnl 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	(1)								6
2002									6
2003									6
2004									6
2005									6
2006									6
2007									6
2008							1		6
2009									6
2010									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
2009								0
2010								0

Ingham County (3303)
Division 19 - Cnstitutnl 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
2009			124				7	118,888
2010							7	118,888

@ 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
2009	39,606	49,493	118,048	(118,889)	0	0	0	2,570,332
2010	48,101	50,488	146,341	(118,889)	0	0	0	2,696,373

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

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
2009	2,779,443	2,570,332	92	209,111	36
2010	2,928,379	2,696,373	92	232,006	39

Ingham County (3303)

Division 21 - FOP Shrf Deputies

Table 160

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	14.32%	\$89,459
Member Contributions	10.96	68,468
Less Potential Refunds	<u>(2.28)</u>	<u>(14,243)</u>
Net Member Contributions	8.68	54,225
Employer Normal Cost @	5.64%	\$35,234
Amortization of Unfunded Accrued Liability (28 years)	<u>6.48</u>	<u>40,481</u>
Total Long Term Contribution	12.12	75,715
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	12.12%	\$75,715 *

@ 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 0.74% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(74,981)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.32%
Amortization Payment:	(0.04)%
Total:	0.28%

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
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%
2009	137	8,101,859	10.93%	10.93%
2010	126	7,496,536	12.12%	12.12%

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.

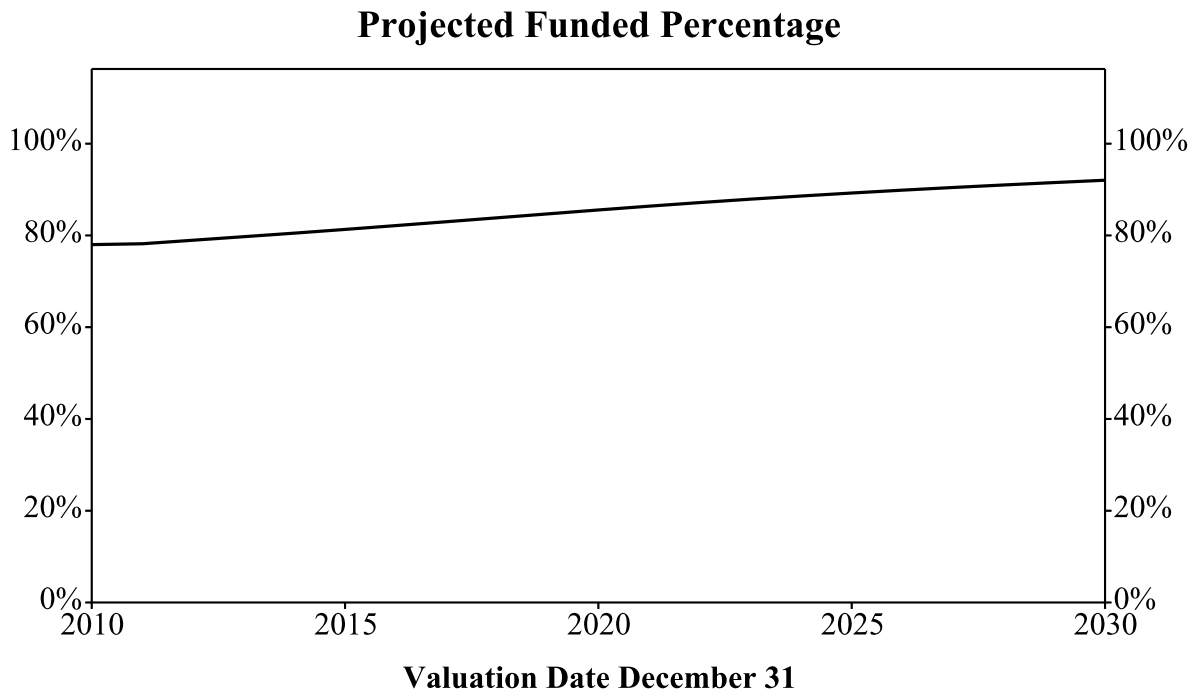
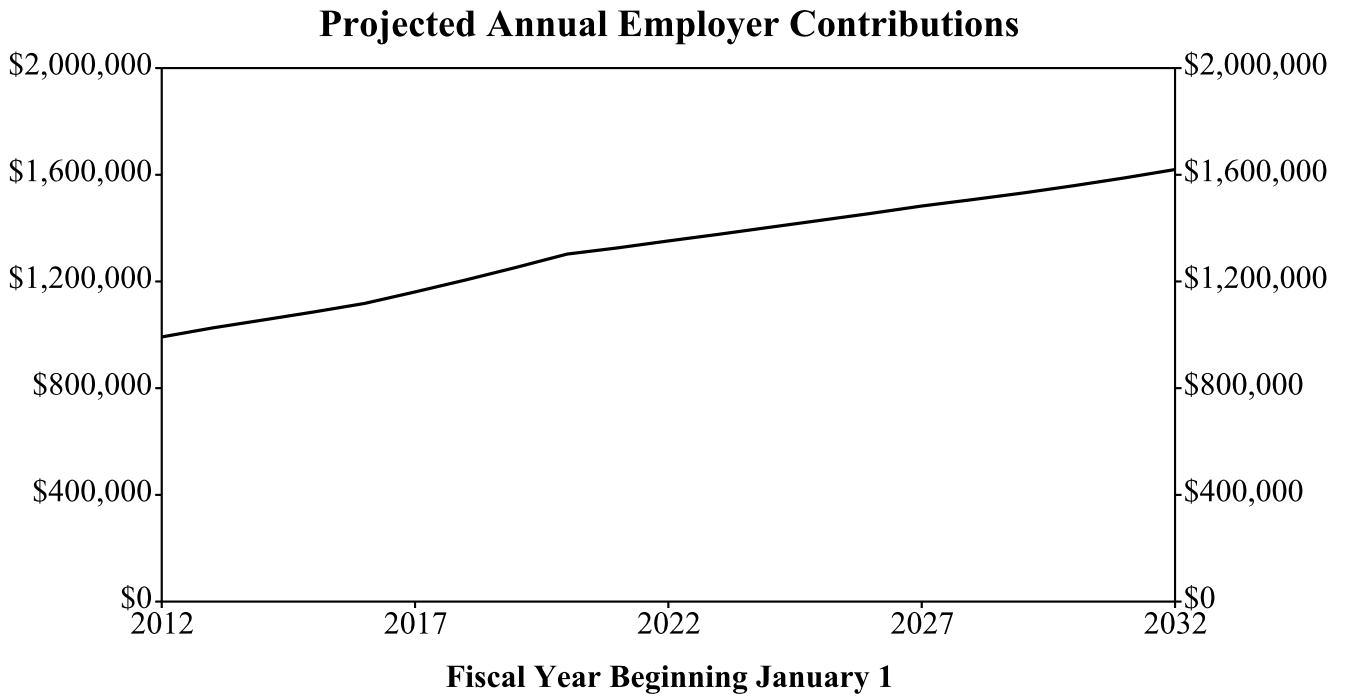
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 for a discussion of the projection.

Ingham County (3303)

Division 21 - FOP Shrf Deputies

Table 180
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
2009	(7)			(1)	(4)	(1)			137
2010	(2)	(1)		(3)	(5)	(2)		2	126

Table 190
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
2009				(2)			1	17
2010	(2)						3	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
2009	8	233,889		(2)	(22,244)	(1,725)	85	1,934,700
2010	7	161,002	821	(3)	(21,065)	(10,490)	89	2,064,968

@ 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
2009	876,055	927,840	1,428,646	(1,802,626)	(204,436)	(106,244)	0	31,063,154
2010	933,787	867,551	1,659,676	(1,999,851)	(67,480)	(335,148)	0	32,121,689

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

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
2009	39,839,734	31,063,154	78	8,776,580	108
2010	41,315,874	32,121,689	78	9,194,185	123

Ingham County (3303)
Division 40 - ICEA Unit 111

Table 16P

Computed Employer Contributions to the Retirement System
For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	7.83%	\$10,105
Member Contributions	3.00	3,872
Less Potential Refunds	<u>(0.74)</u>	<u>(955)</u>
Net Member Contributions	2.26	2,917
Employer Normal Cost @	5.57%	\$7,188
Amortization of Unfunded Accrued Liability (28 years)	<u>0.57</u>	<u>736</u>
Total Long Term Contribution	6.14	7,924
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	6.14%	\$7,924 *

@ 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 0.81% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(13,801)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.12%
Amortization Payment:	(0.04)%
Total:	0.08%

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**

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
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%
2009	40	1,520,059	5.71%	5.71%
2010	40	1,548,611	6.14%	6.14%

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.

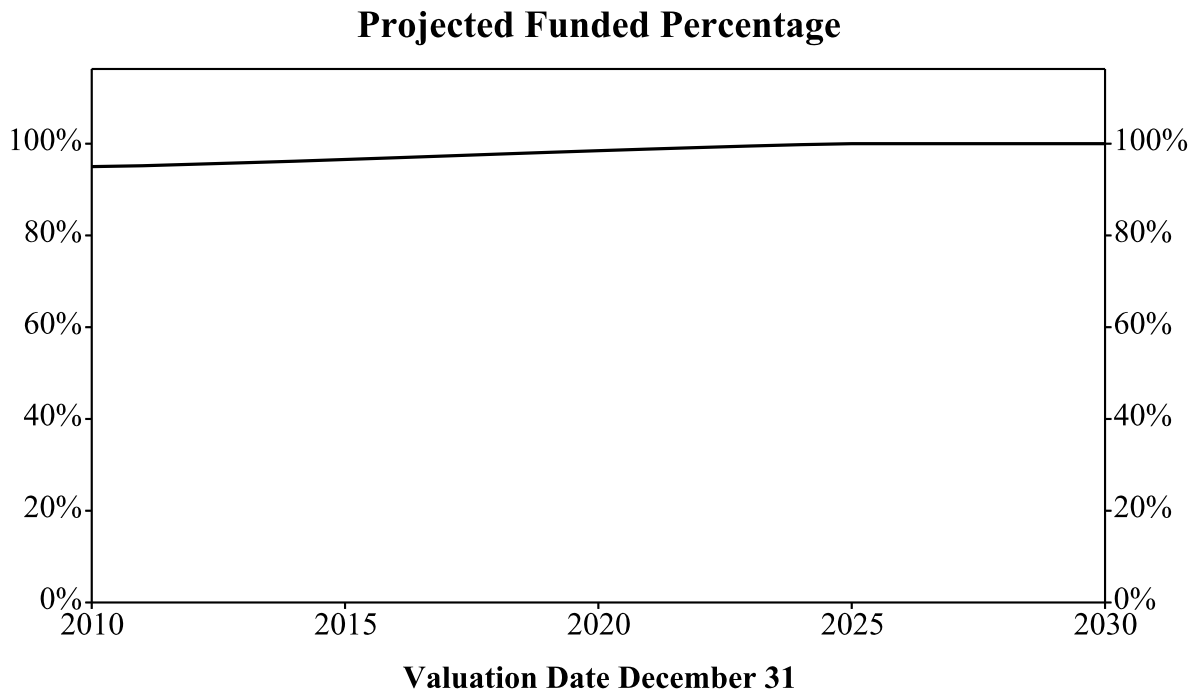
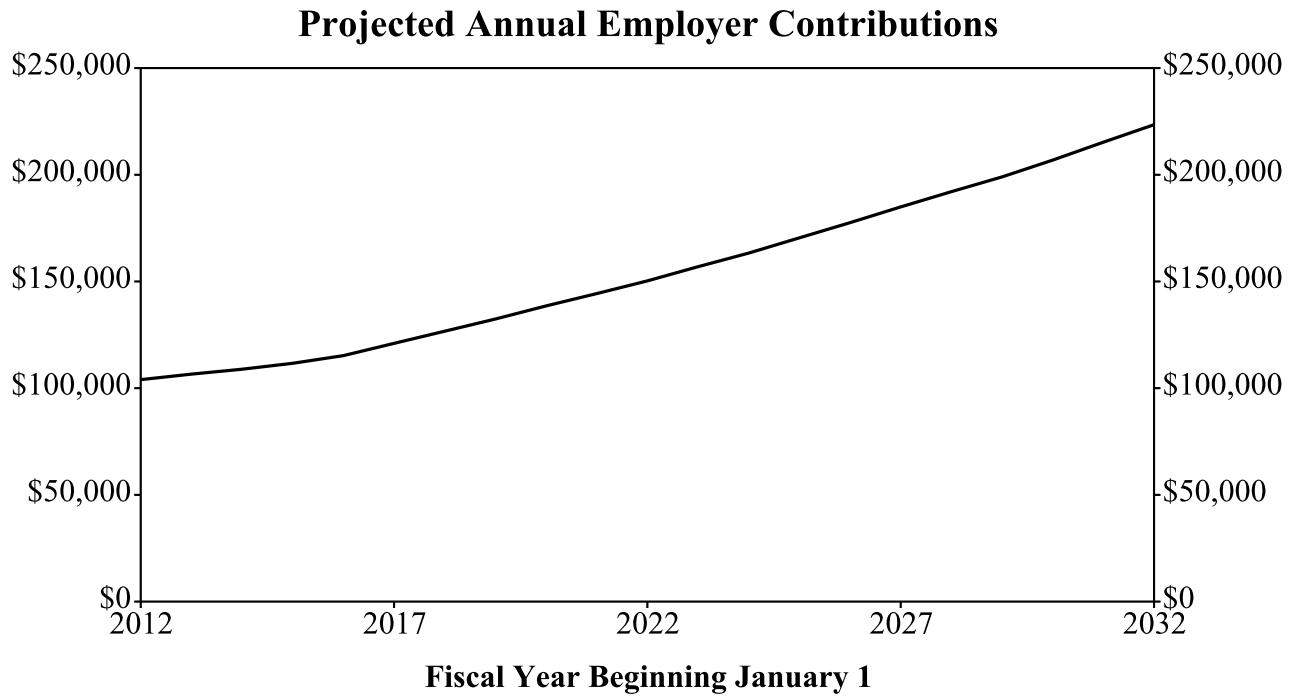
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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
2009					(4)		2	6	40
2010	(1)			(1)	(6)	(1)	3	6	40

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
2009								6
2010	(1)						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
2009			163	(1)	(7,416)	(2,986)	26	223,801
2010	2	24,318				(1,500)	28	246,619

@ 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
2009	78,302	43,168	126,109	(228,352)	(4,310)	0	23,192	3,069,158
2010	88,475	47,825	160,793	(228,079)	(5,219)	0	24,718	3,157,671

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

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
2009	3,145,657	3,069,158	98	76,499	5
2010	3,319,782	3,157,671	95	162,111	10

Ingham County (3303)

Division 41 - MCF Management

Table 16Q

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	8.88%	\$8,726
Member Contributions	0.00	0
Less Potential Refunds	<u>0.00</u>	<u>0</u>
Net Member Contributions	0.00	0
Employer Normal Cost @	8.88%	\$8,726
Amortization of Unfunded Accrued Liability (28 years)	<u>0.82</u>	<u>806</u>
Total Long Term Contribution	9.70	9,532
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	9.70%	\$9,532 *

@ 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 0.88% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(16,463)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.14%
Amortization Payment:	(0.07)%
Total:	0.07%

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**

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
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%
2009	23	1,244,343	9.17%	9.17%
2010	22	1,179,156	9.70%	9.70%

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.

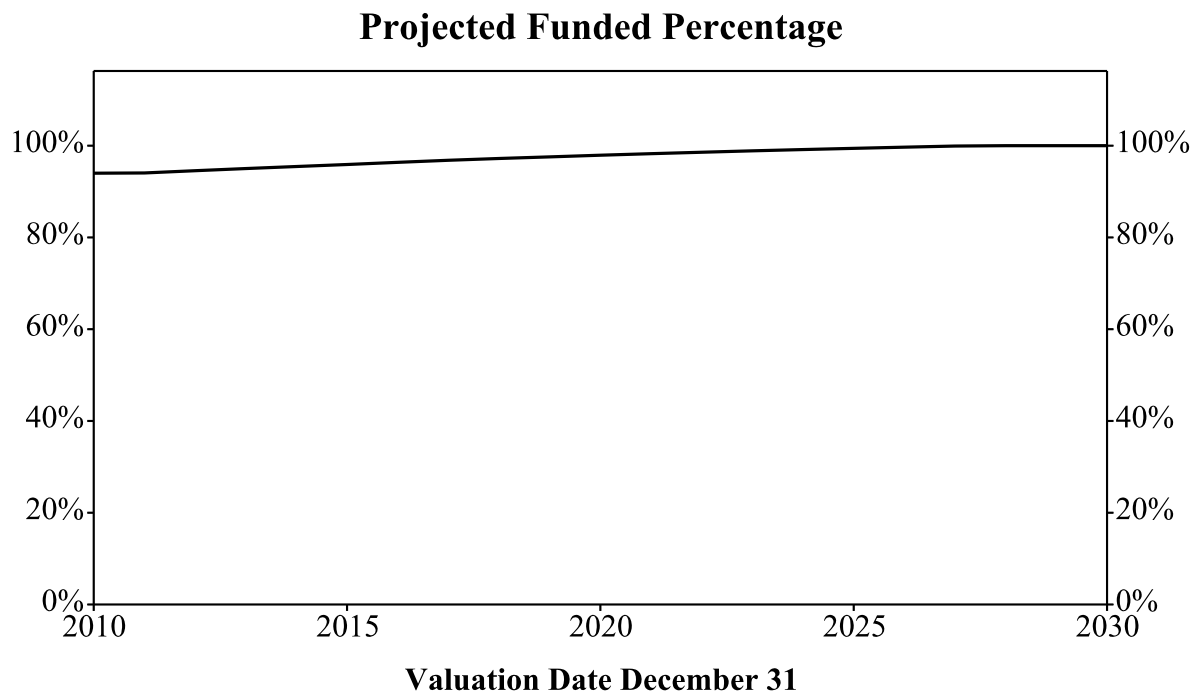
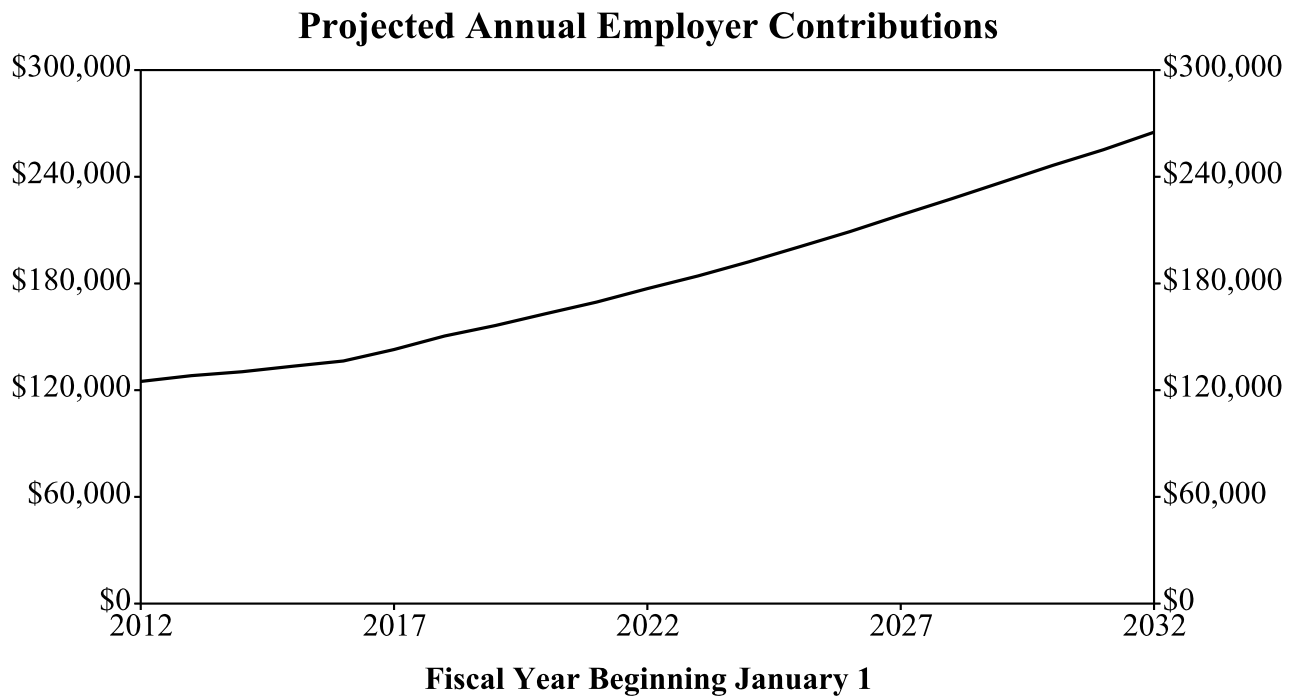
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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
2009				(1)	(2)			4	23
2010				(2)	(2)	(1)	2	2	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
2009	(1)						1	13
2010	(1)						2	14

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
2009	1	6,176					12	76,424
2010	1	20,827				(1,104)	13	96,147

@ 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
2009	119,389	86	137,910	(75,395)	0	0	5,768	2,450,241
2010	121,022	165	165,711	(85,010)	0	0	37,693	2,689,822

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

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
2009	2,557,415	2,450,241	96	107,174	9
2010	2,868,918	2,689,822	94	179,096	15

Ingham County (3303)

Division 42 - ICEA Unit 11

Table 16R

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	9.23%	\$10,275
Member Contributions	3.95	4,397
Less Potential Refunds	<u>(0.58)</u>	<u>(646)</u>
Net Member Contributions	3.37	3,751
Employer Normal Cost @	5.86%	\$6,524
Amortization of Unfunded Accrued Liability (28 years)	<u>0.82</u>	<u>913</u>
Total Long Term Contribution	6.68	7,437
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	6.68%	\$7,437 *

@ 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 0.88% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(14,325)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.15%
Amortization Payment:	(0.05)%
Total:	0.10%

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
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%
2009	24	1,254,843	6.78%	6.78%
2010	25	1,335,899	6.68%	6.68%

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.

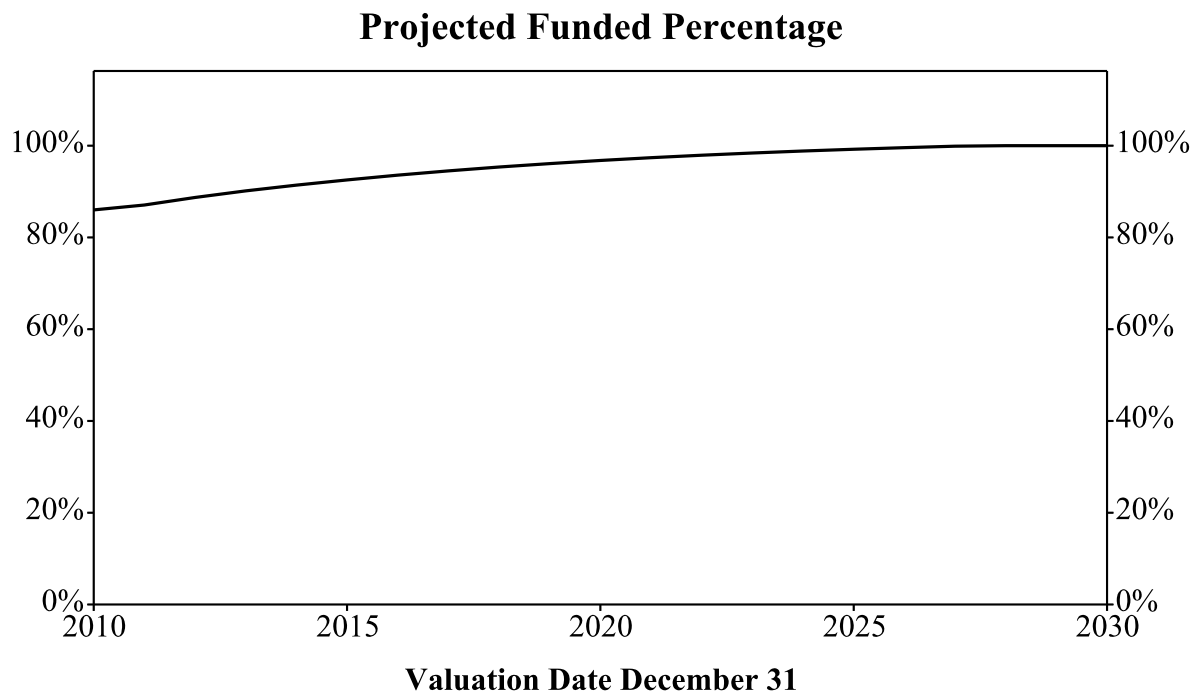
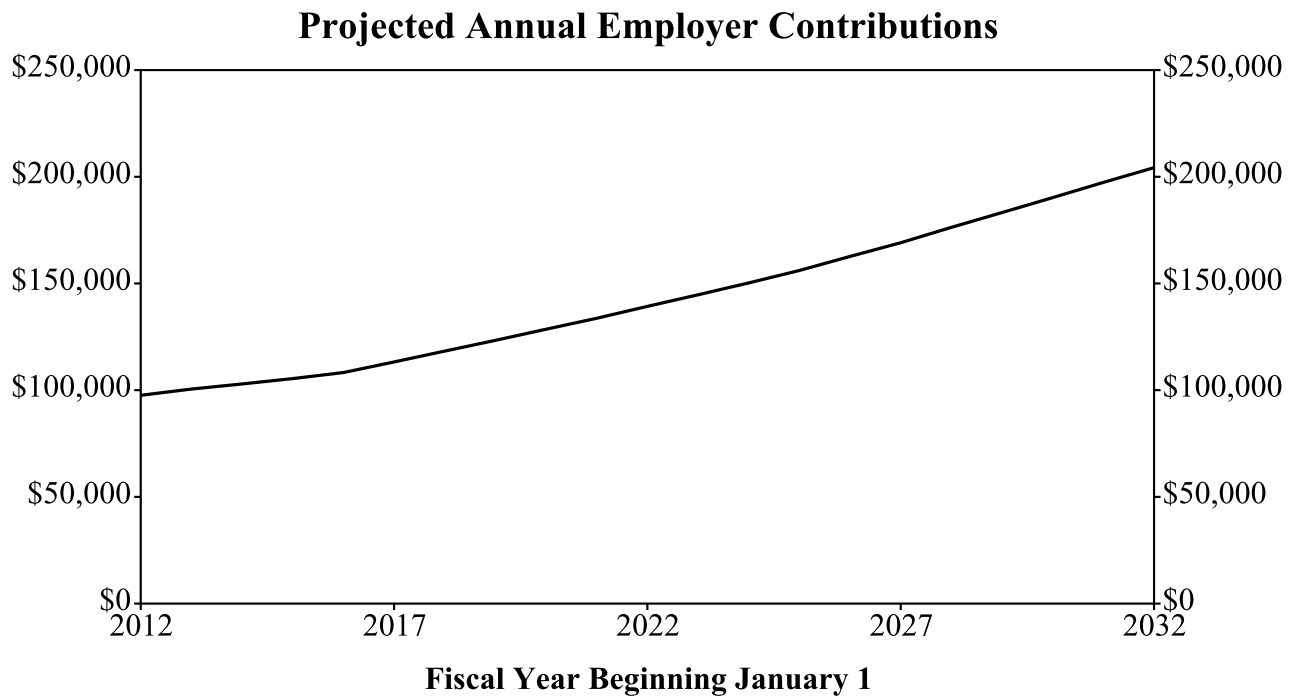
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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
2009					(3)			5	24
2010				(1)	(5)			7	25

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
2009								1
2010							1	2

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
2009							6	69,201
2010							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
2009	115,738	50,405	78,441	(69,200)	(9,473)	(5,188)	0	1,088,823
2010	95,783	51,533	83,507	(69,200)	(463)	0	1,193	1,251,176

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

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
2009	1,316,786	1,088,823	83	227,963	18
2010	1,462,347	1,251,176	86	211,171	16

Ingham County (3303)

Division 43 - ICEA Unit 1

Table 16S

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	9.17%	\$3,685
Member Contributions	3.51	1,411
Less Potential Refunds	<u>(0.48)</u>	<u>(193)</u>
Net Member Contributions	3.03	1,218
Employer Normal Cost @	6.14%	\$2,467
Amortization of Unfunded Accrued Liability (28 years)	<u>1.66</u>	<u>667</u>
Total Long Term Contribution	7.80	3,134
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	7.80%	\$3,134 *

@ 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 0.90% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(2,894)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.15%
Amortization Payment:	(0.02)%
Total:	0.13%

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**

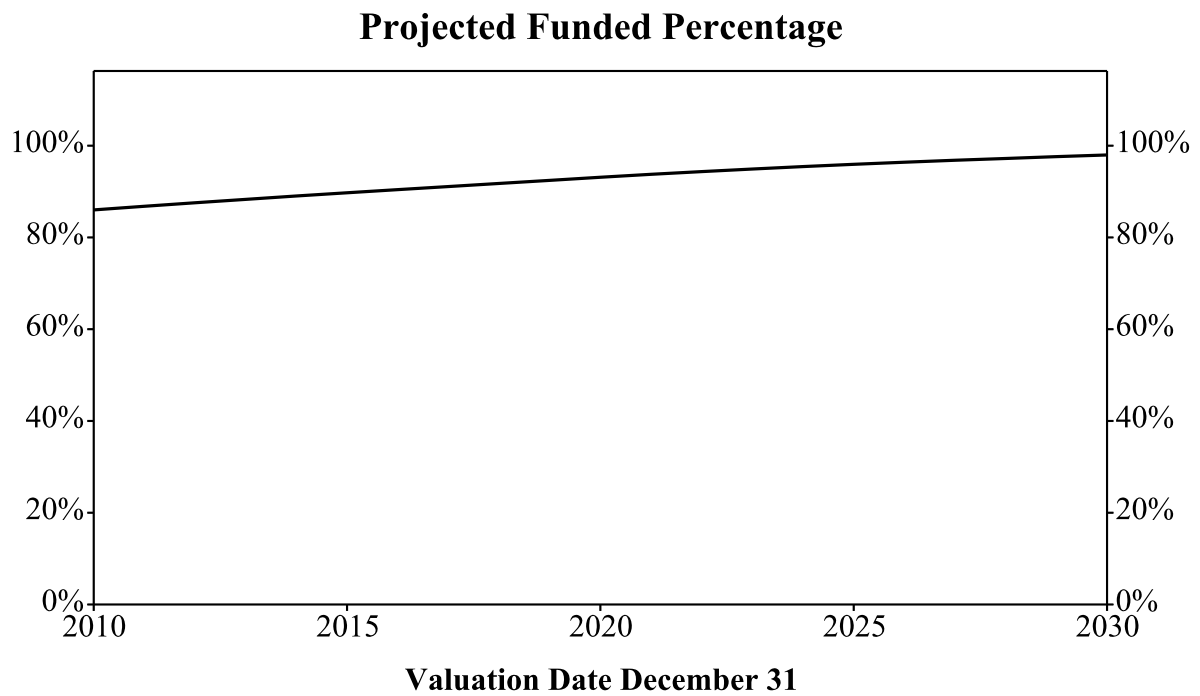
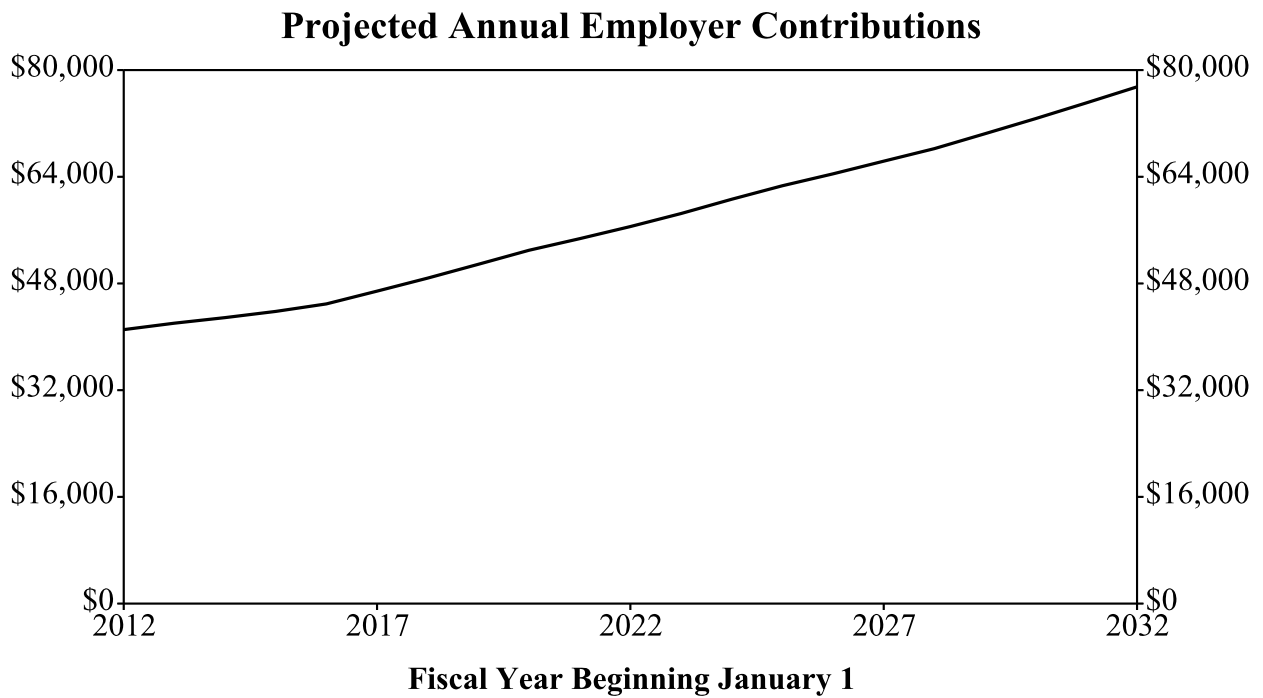
Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1996	12	\$ 432,683	8.84%	8.15%
1997	9	323,039	10.39%	10.39%
1998	6	253,946	11.99%	11.99%
1999	5	211,746	12.18%	12.18%
2000	7	243,297	12.55%	12.55%
2001	9	299,551	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%
2009	11	479,237	7.80%	7.80%
2010	10	482,266	7.80%	7.80%

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.
Actuarial assumptions were revised for the 2009 valuation.
Actuarial assumptions and methods were revised for the 2010 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 248 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
2009				(1)		(1)			11
2010					(1)	(2)	1	1	10

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
2009							1	7
2010								7

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
2009							5	49,768
2010							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
2009	37,681	17,276	37,275	(49,769)	0	(23,771)	0	941,498
2010	37,615	16,775	44,671	(49,769)	(243)	(40,748)	0	949,799

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

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
2009	1,120,261	941,498	84	178,763	37
2010	1,102,651	949,799	86	152,852	32

Ingham County (3303)

Division 44 - MCF Exec Mgr

Table 16T

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	Monthly Dollar Contribution *
Total Normal Cost	\$0
Member Contributions	0
Less Potential Refunds	<u>0</u>
Net Member Contributions	0
Employer Normal Cost @	\$0
Amortization of Unfunded Accrued Liability (26 years) ^	<u>188</u> ^
Total Long Term Contribution	188
Overfunding Credit #	<u>0</u>
Total Employer Contribution @	\$188 *

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

* The monthly dollar contribution is based on projected fiscal year payroll. Monthly invoices will be based on the dollar amount shown above.

Only applies if projected assets exceed projected liabilities as of the beginning of the January 1, 2012 fiscal year (see Table 24).

^ This division is closed to new hires. This line displays the amortization funding requirement, and is based on a 26 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 \$3,288 and the ARC is \$3,288). Note that the 26 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 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%
2009	1	136,218	18.47%
2010	0	0	\$ 188 #

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

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.

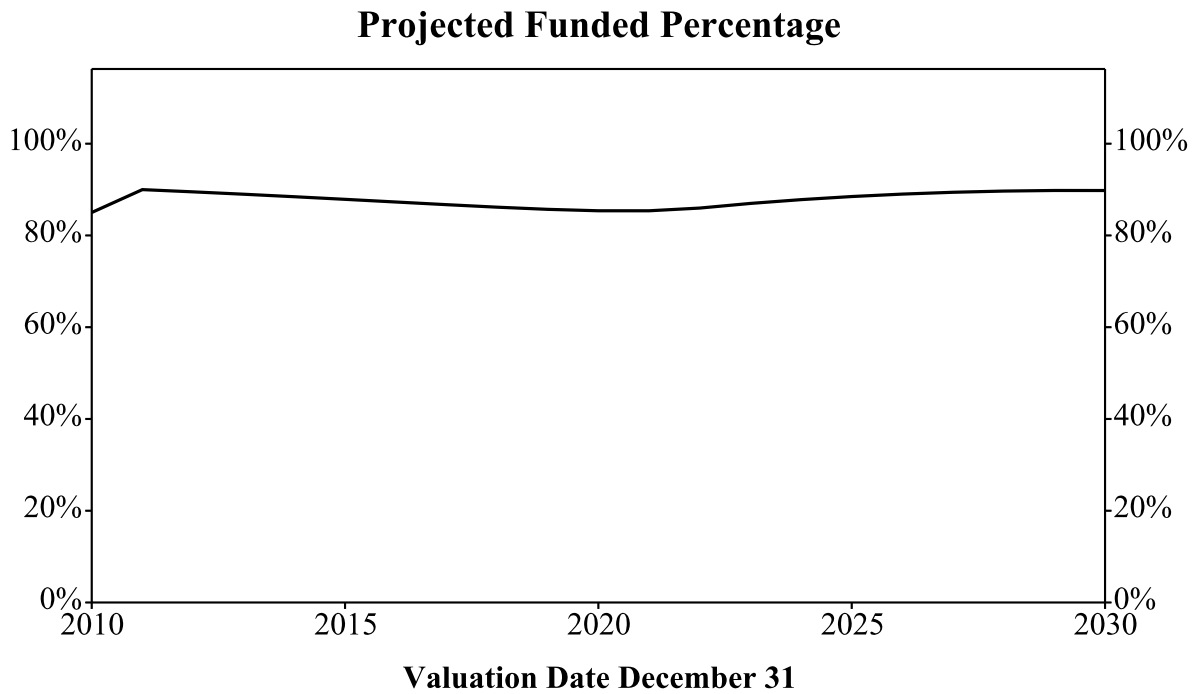
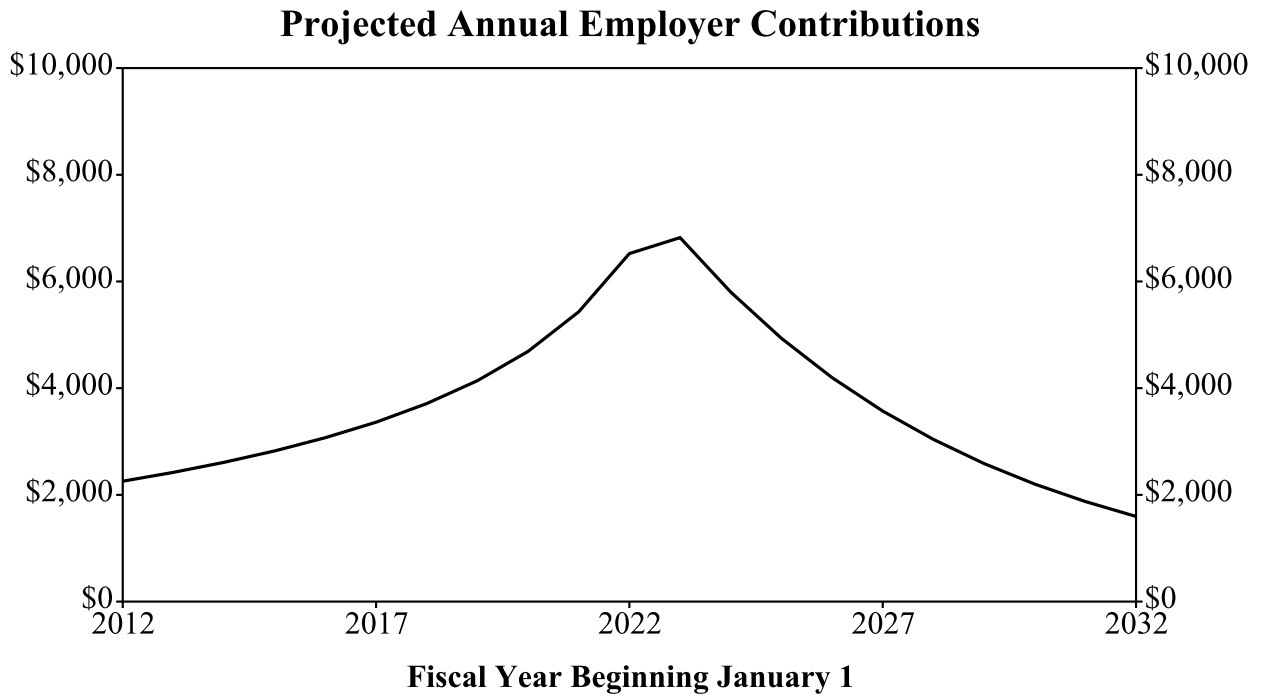
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions were revised for the 2010 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 248 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
2009									1
2010	(1)								0

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
2009								0
2010								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
2009							0	0
2010	1	39,854					1	39,854

@ 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
2009	27,325	0	22,112	0	0	0	0	291,527
2010	21,219	0	22,265	0	0	0	0	335,011

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

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
2009	348,576	291,527	84	57,049	42
2010	394,932	335,011	85	59,921	

Ingham County (3303)

Division 90 - Asst Pros Attnys

Table 16U

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	11.36%	\$21,551
Member Contributions	1.40	2,656
Less Potential Refunds	<u>(0.20)</u>	<u>(379)</u>
Net Member Contributions	1.20	2,277
Employer Normal Cost @	10.16%	\$19,274
Amortization of Unfunded Accrued Liability (28 years)	<u>5.27</u>	<u>9,998</u>
Total Long Term Contribution	15.43	29,272
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	15.43%	\$29,272 *

@ 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 0.89% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(1,303)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.18%
Amortization Payment:	0.01%
Total:	0.19%

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

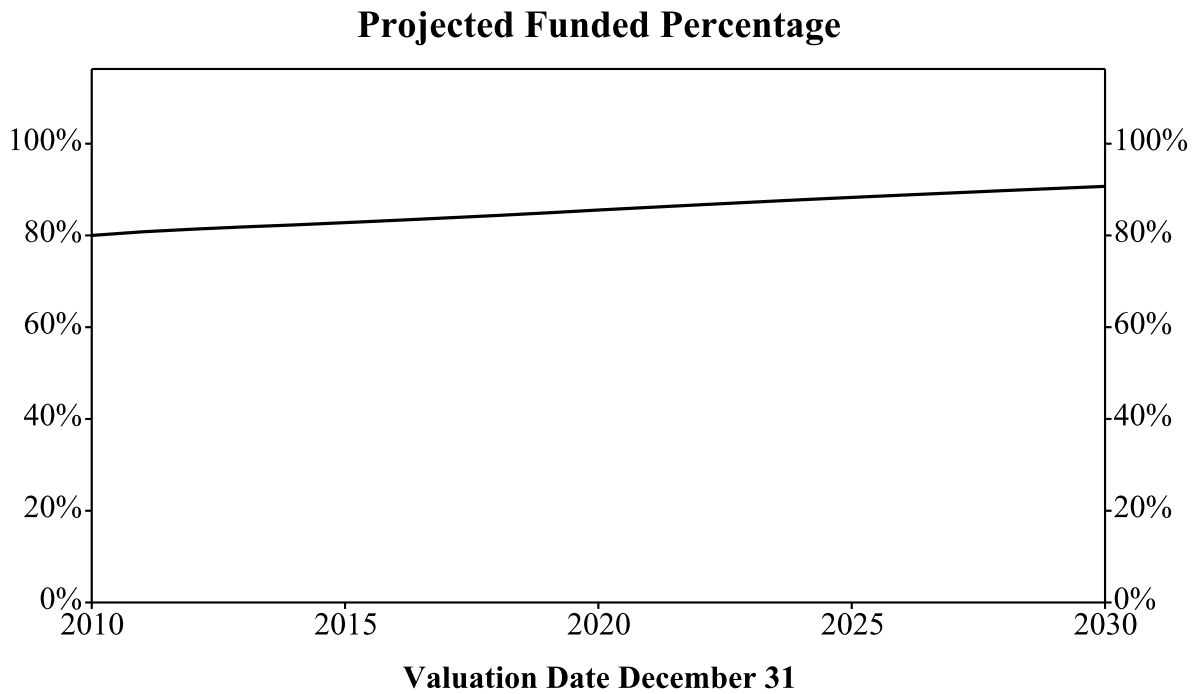
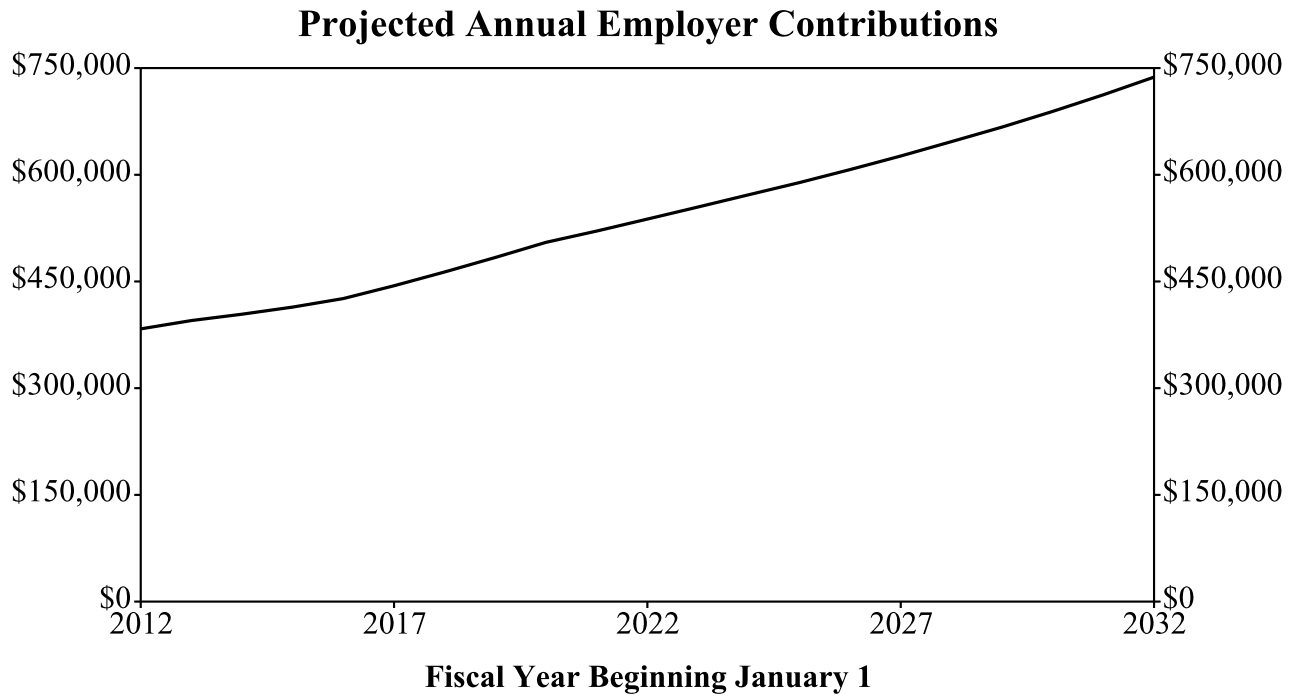
Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
1996	29	\$ 1,607,654	10.68%	9.85%
1997	29	1,596,005	8.88%	8.88%
1998	28	1,719,998	14.40%	14.40%
1999	29	1,534,889	13.77%	13.77%
2000	29	1,681,667	13.44%	13.44%
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%
2009	30	2,175,538	14.59%	14.59%
2010	30	2,276,559	15.43%	15.43%

Notes:

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.
Actuarial assumptions were revised for the 2009 valuation.
Actuarial assumptions and methods were revised for the 2010 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 248 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
2009	(1)			(2)				3	30
2010					(1)			1	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
2009	(3)						2	17
2010								17

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
2009	4	94,812					17	467,956
2010	2	5,216					19	473,172

@ 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
2009	301,490	30,950	423,539	(398,212)	0	(29)	0	8,878,331
2010	312,880	31,924	491,791	(468,390)	0	0	0	9,246,536

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

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
2009	10,761,474	8,878,331	83	1,883,143	87
2010	11,518,891	9,246,536	80	2,272,355	100

Ingham County (3303)

Division 91 - Parks Union Empl

Table 16V

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	8.72%	\$1,834
Member Contributions	0.00	0
Less Potential Refunds	<u>0.00</u>	<u>0</u>
Net Member Contributions	0.00	0
Employer Normal Cost @	8.72%	\$1,834
Amortization of Unfunded Accrued Liability (28 years) #	<u>(0.20)</u>	<u>(42)</u>
Total Long Term Contribution	8.52	1,792
Overfunding Credit #	<u>(0.23)</u>	<u>(48)</u>
Total Employer Contribution @	8.29%	\$1,744 *

@ 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.

* Estimated contributions are 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, 2012 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 0.43% (0.20% plus 0.23%). The additional 0.23% results from spreading the negative unfunded accrued liability over 10 years instead of 28 years.

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(4,274)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.13%
Amortization Payment:	(0.09)%
Total:	0.04%

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**

Valuation Date December 31,	Active Members		Employer Contribution	
	Number	Annual Payroll	Regular Contribution	Minimum Required Contribution
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%
2009	7	309,576	8.72%	8.72%
2010	6	252,433	8.29%	8.29%

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.

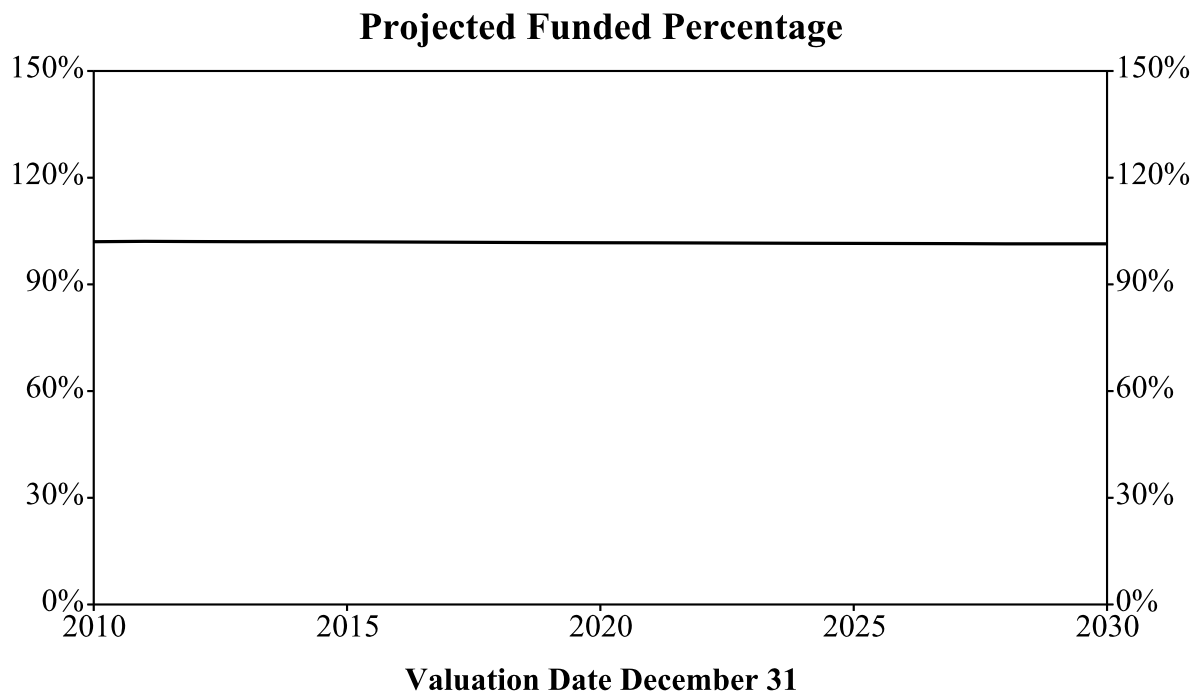
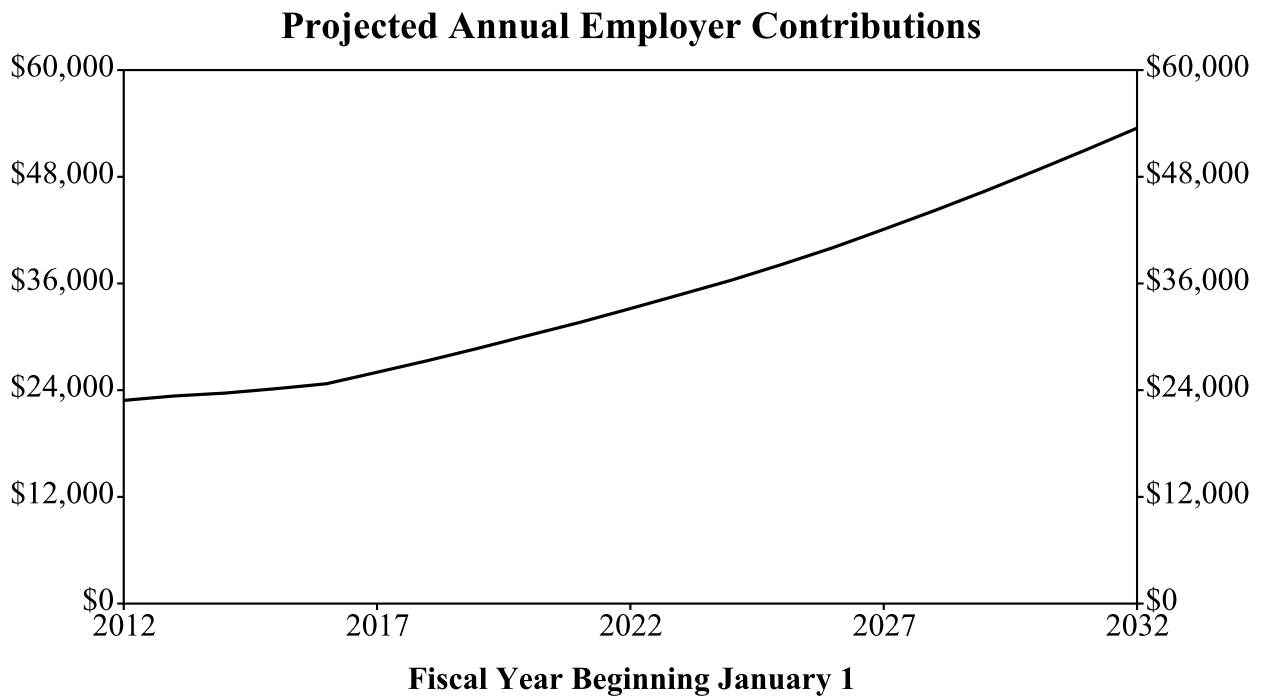
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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
2009									7
2010					(1)				6

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
2009								1
2010								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
2009							0	0
2010							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
2009	29,472	0	29,307	0	0	(142)	0	417,898
2010	23,198	0	30,345	0	0	0	0	471,441

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

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
2009	432,699	417,898	97	14,801	5
2010	462,374	471,441	102	(9,067)	0

Ingham County (3303)

Division 92 - Parks Non Union

Table 16W

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	9.80%	\$710
Member Contributions	0.00	0
Less Potential Refunds	<u>0.00</u>	<u>0</u>
Net Member Contributions	0.00	0
Employer Normal Cost @	9.80%	\$710
Amortization of Unfunded Accrued Liability (28 years)	<u>39.51</u>	<u>2,864</u>
Total Long Term Contribution	49.31	3,574
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	49.31%	\$3,574 *

@ 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 0.72% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$643
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.22%
Amortization Payment:	0.05%
Total:	0.27%

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
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%
2009	1	83,274	46.82%	46.82%
2010	1	86,972	49.31%	49.31%

Notes:

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.

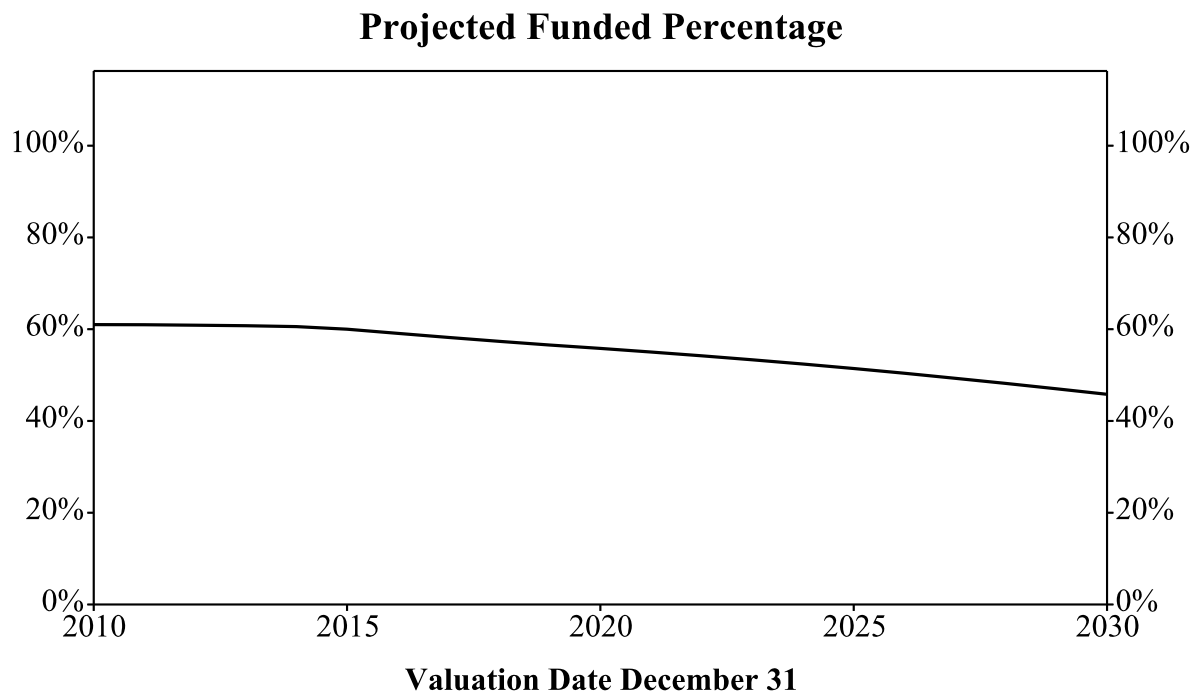
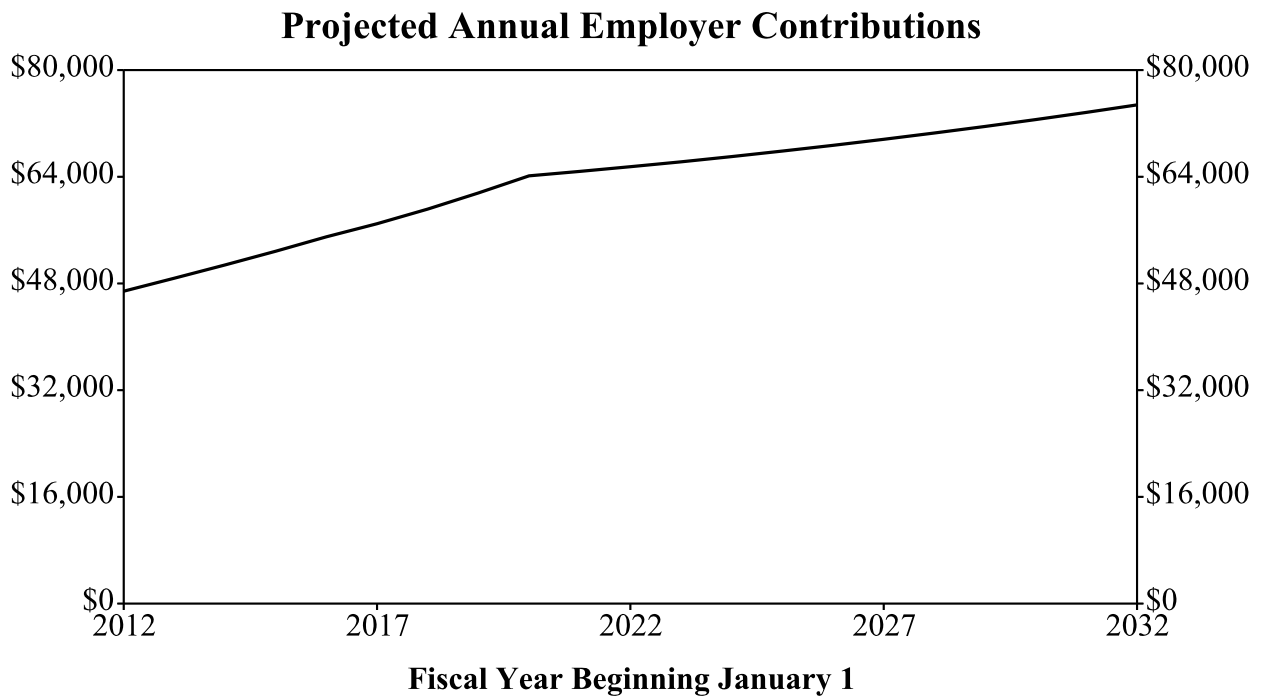
Actuarial assumptions and methods were revised for the 2008 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions and methods were revised for the 2010 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 248 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
2009									1
2010									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
2009								0
2010								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
2009							2	100,364
2010							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
2009	14,232	0	23,453	(100,364)	0	0	0	1,050,416
2010	37,207	0	43,716	(100,364)	0	0	0	1,030,975

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

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
2009	1,639,324	1,050,416	64	588,908	707
2010	1,685,046	1,030,975	61	654,071	752

Ingham County (3303)

Division 93 - Lgl Rsrch Clerks

Table 16X

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	6.17%	\$1,351
Member Contributions	0.00	0
Less Potential Refunds	<u>0.00</u>	<u>0</u>
Net Member Contributions	0.00	0
Employer Normal Cost @	6.17%	\$1,351
Amortization of Unfunded Accrued Liability (28 years) #	<u>(1.53)</u>	<u>(335)</u>
Total Long Term Contribution	4.64	1,016
Overfunding Credit #	<u>(1.76)</u>	<u>(385)</u>
Total Employer Contribution @	2.88%	\$631 *

@ 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 0.84% of pay.

* Estimated contributions are 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, 2012 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 3.29% (1.53% plus 1.76%). The additional 1.76% results from spreading the negative unfunded accrued liability over 10 years instead of 28 years.

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(2,451)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.10%
Amortization Payment:	(0.04)%
Total:	0.06%

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

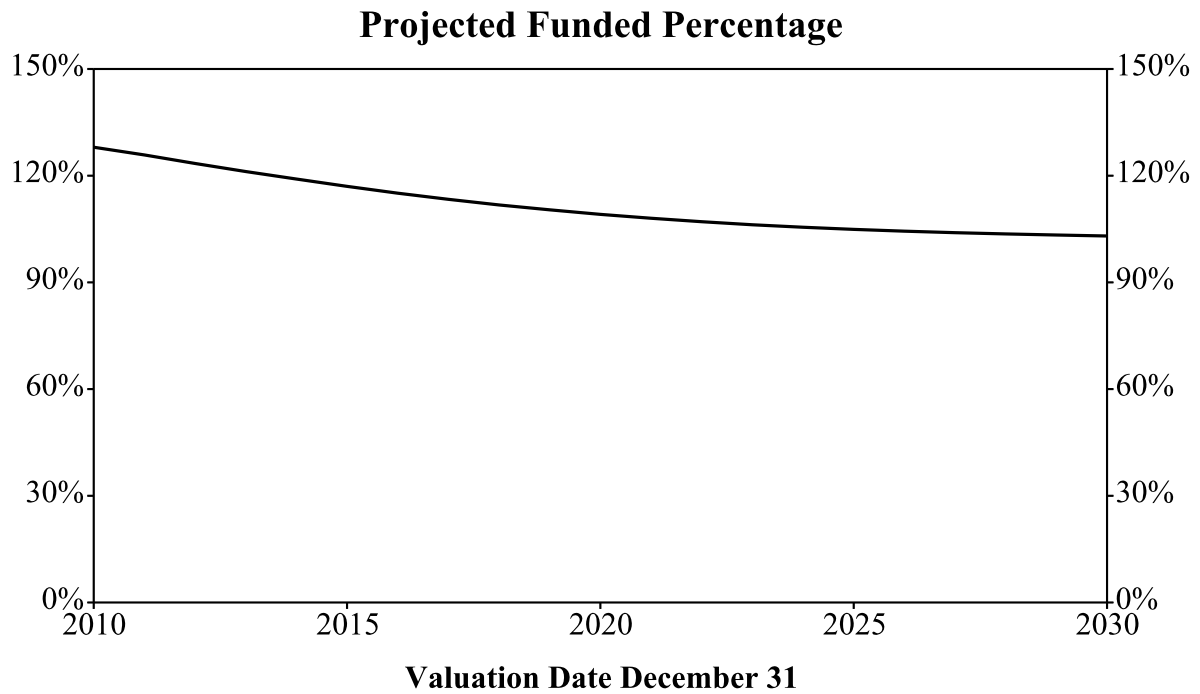
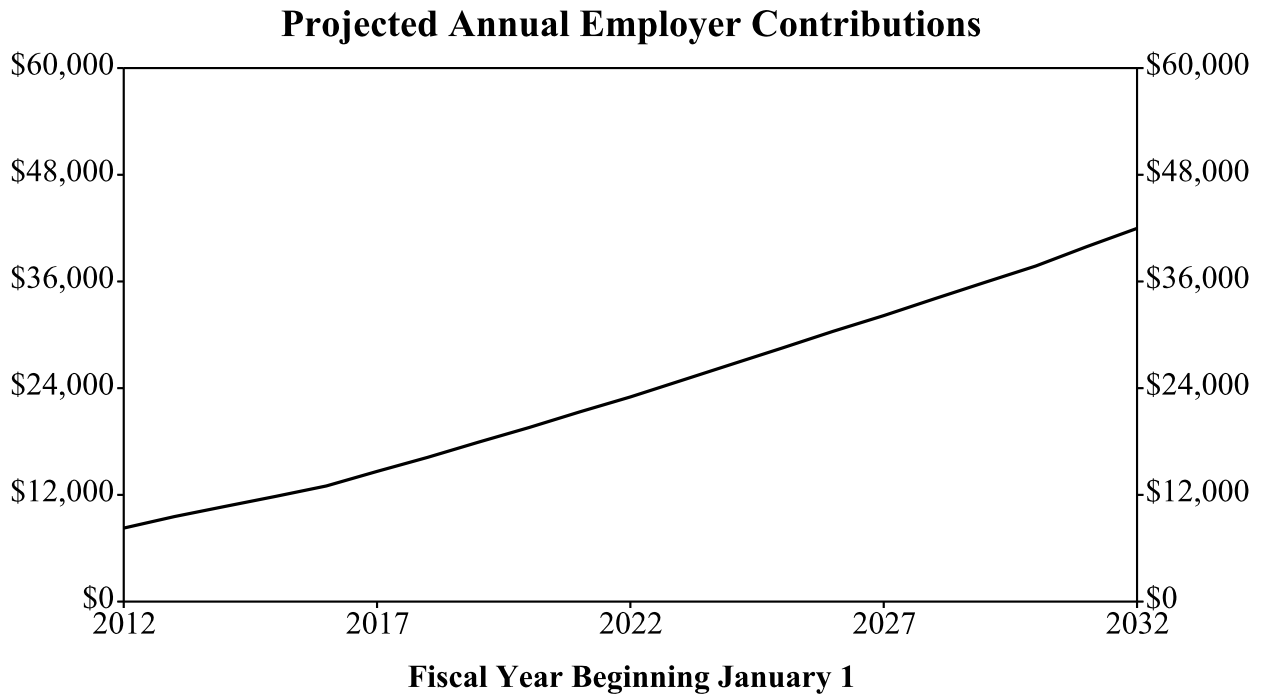
Valuation Date December 31,	Active Members		Employer Contribution
	Number	Annual Payroll	
1997	8	\$ 250,777	6.84%
1998	5	175,963	7.21%
1999	6	163,718	6.95%
2000	8	225,369	6.73%
2001	7	235,907	7.68%
2002	6	227,014	7.16%
2003	6	219,613	6.71%
2004	7	267,468	6.31%
2005	6	240,550	5.20%
2006	7	271,510	3.39%
2007	8	354,267	4.00%
2008	7	325,997	3.58%
2009	8	368,381	3.21%
2010	6	262,729	2.88%

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.
Actuarial assumptions were revised for the 2009 valuation.
Actuarial assumptions and methods were revised for the 2010 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 248 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
2009					(1)			2	8
2010				(1)	(3)			2	6

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
2009							1	1
2010				(1)			1	1

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
2009							0	0
2010							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
2009	15,313	0	20,838	0	0	0	0	335,214
2010	13,553	0	22,822	0	0	0	0	371,589

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

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
2009	233,026	335,214	144	(102,188)	0
2010	290,877	371,589	128	(80,712)	0

Ingham County (3303)

Division 94 - Zoo Hires after 7/1/07

Table 16Y

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	8.36%	\$3,545
Member Contributions	0.00	0
Less Potential Refunds	<u>0.00</u>	<u>0</u>
Net Member Contributions	0.00	0
Employer Normal Cost @	8.36%	\$3,545
Amortization of Unfunded Accrued Liability (25 years)	<u>0.63</u>	<u>267</u>
Total Long Term Contribution	8.99	3,812
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Employer Contribution @	8.99%	\$3,812 *

@ 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 25 year amortization) will decrease/increase by 0.84% of pay.

* Estimated contributions are 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, 2012 fiscal year (see Table 24).

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(5,625)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.15%
Amortization Payment:	(0.06)%
Total:	0.09%

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

Ingham County (3303)

Division 94 - Zoo Hires after 7/1/07

Table 17Y

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution
	Number	Annual Payroll	
2009	12	\$ 492,222	8.24%
2010	12	508,896	8.99%

Notes:

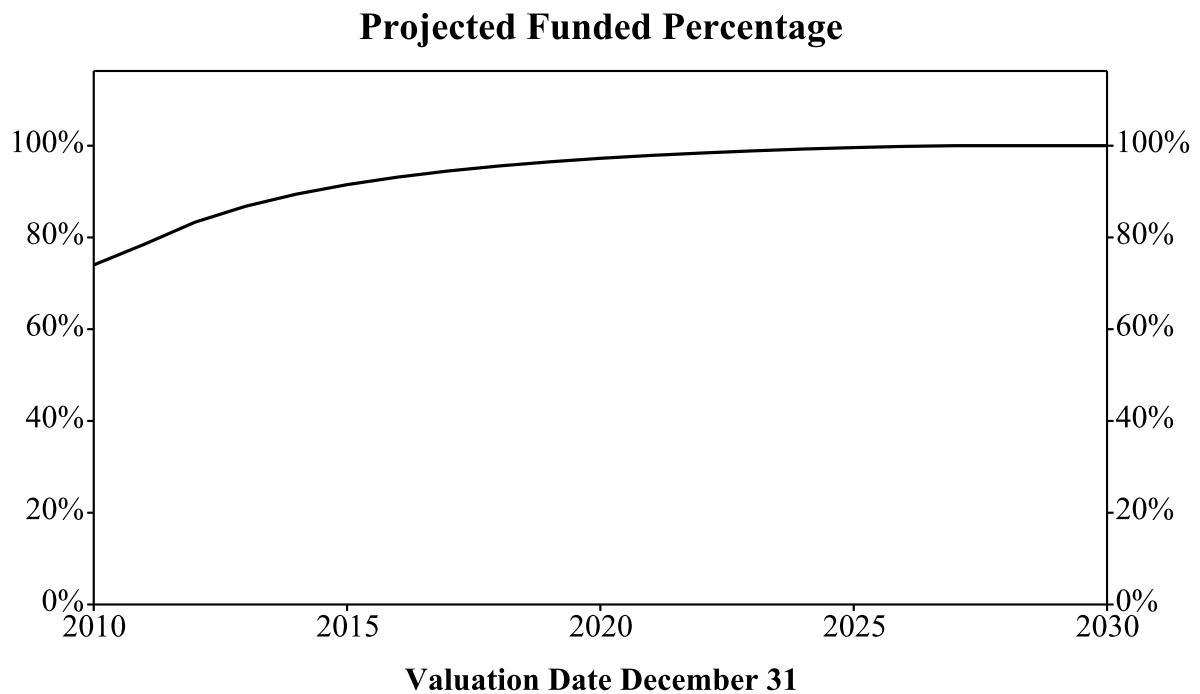
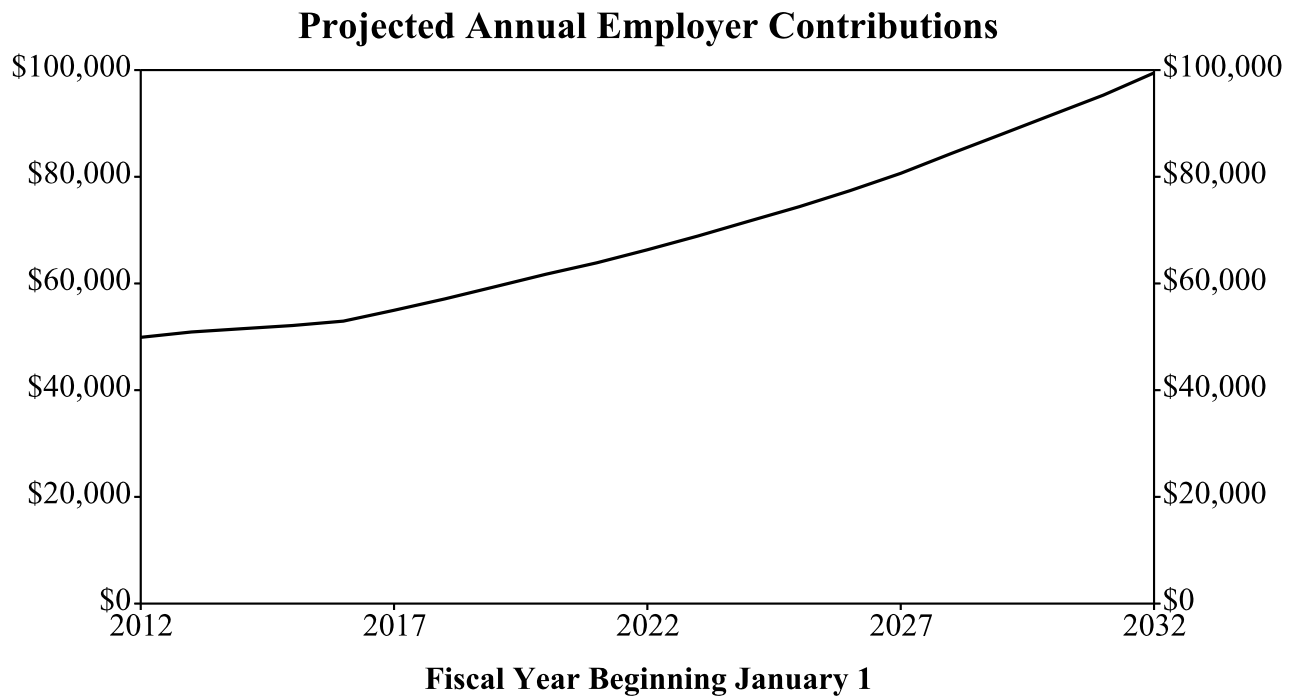
Adoption of Benefit V-10, FAC-5, B-2, Normal Retirement: 60, 0.00% Member Contributions reflected in 2009 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions were revised for the 2010 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 94 - Zoo Hires after 7/1/07
Chart 17.5Y



Note: Please refer to page 248 for a discussion of the projection.

Ingham County (3303)

Division 94 - Zoo Hires after 7/1/07

Table 18Y
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		
2009								12	12
2010									12

Table 19Y
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		
2009								0
2010								0

Ingham County (3303)

Division 94 - Zoo Hires after 7/1/07

Table 20Y
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
2009		\$	\$		\$	\$	0	\$ 0
2010							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 94 - Zoo Hires after 7/1/07

Table 21Y
Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2009	\$ 65,389	\$ 37	\$ 23,599	\$ 0	\$ 0	\$ 0	\$ 0	\$ 89,025
2010	44,834	0	16,281	0	0	(35,658)	35,658	150,140

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

Table 22Y
Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2009	\$ 138,774	\$ 89,025	64%	\$ 49,749	10%
2010	203,851	150,140	74	53,711	11

Ingham County (3303)

Division 95 - UAW Local 2256

Table 16Z

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	17.35%	\$5,722
Member Contributions	1.70	561
Less Potential Refunds	<u>(0.29)</u>	<u>(96)</u>
Net Member Contributions	1.41	465
Employer Normal Cost @	15.94%	\$5,257
Amortization of Unfunded Accrued Liability (25 years) #	<u>(1.75)</u>	<u>(577)</u>
Total Long Term Contribution	14.19	4,680
Overfunding Credit #	<u>(1.74)</u>	<u>(574)</u>
Total Employer Contribution @	12.45%	\$4,106 *

@ The above Employer contribution requirement is based on Member contributions of 1.70% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 25 year amortization) will decrease/increase by 0.88% of pay.

* Estimated contributions are 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, 2012 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 3.49% (1.75% plus 1.74%). The additional 1.74% results from spreading the negative unfunded accrued liability over 10 years instead of 25 years.

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$(17,349)
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.30%
Amortization Payment:	(0.25)%
Total:	0.05%

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

Ingham County (3303)
Division 95 - UAW Local 2256

Table 17Z

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution
	Number	Annual Payroll	
2009	9	\$ 376,371	11.42%
2010	9	395,770	12.45%

Notes:

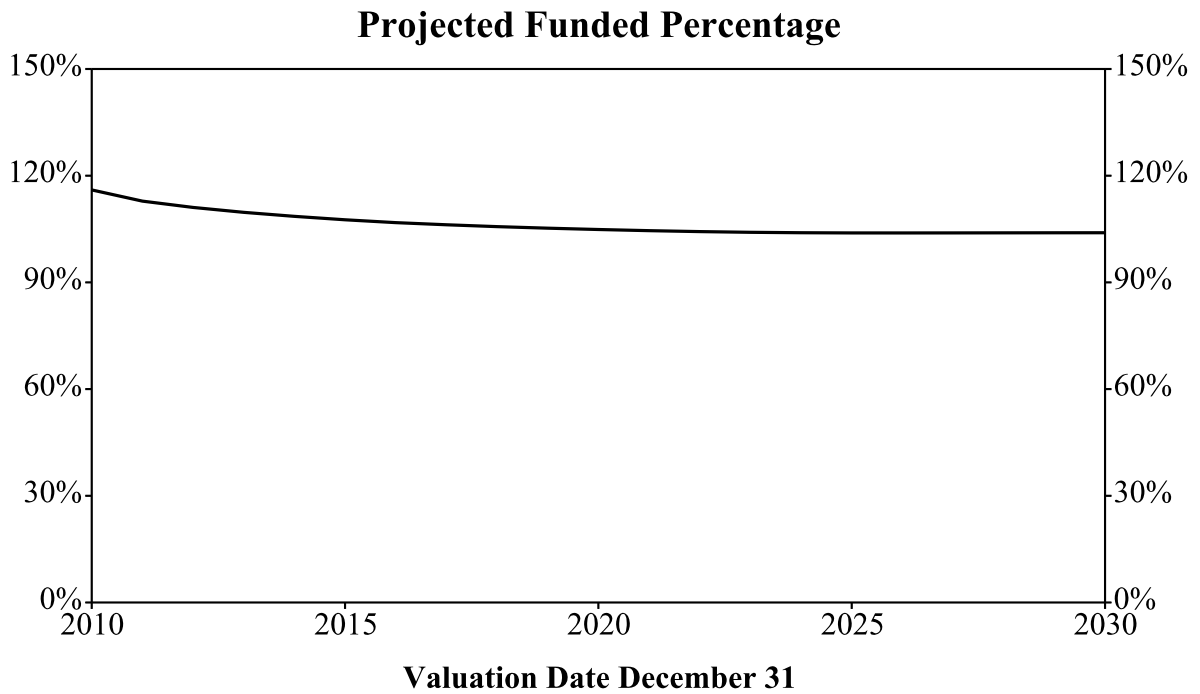
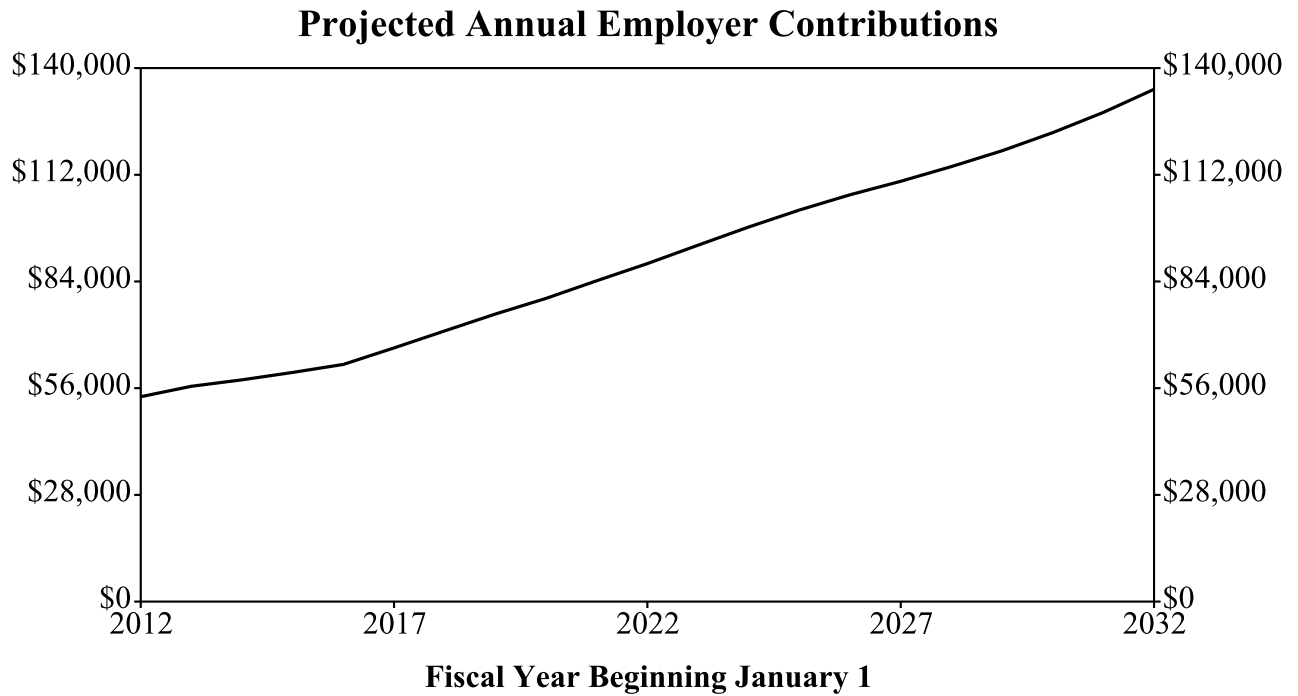
Adoption of Benefit V-8, Rule of 65, 1.70% Member Contributions, FAC-2, 2.8% svc <35 yrs, 1.5% svc >35 yrs - 100% Max, Normal Retirement: 58 reflected in 2009 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions were revised for the 2010 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 95 - UAW Local 2256
Chart 17.5Z



Note: Please refer to page 248 for a discussion of the projection.

Ingham County (3303)

Division 95 - UAW Local 2256

Table 18Z
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		
2009								9	9
2010									9

Table 19Z
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		
2009								0
2010								0

Ingham County (3303)
Division 95 - UAW Local 2256

Table 20Z
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
2009		\$	\$		\$	\$	0	\$ 0
2010							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 95 - UAW Local 2256

Table 21Z
Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2009	\$ 554,826	\$ 38,804	\$ 283,271	\$ 0	\$ 0	\$ 0	\$ 0	\$ 876,901
2010	49,432	6,728	66,565	0	0	0	0	999,626

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

Table 22Z
Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2009	\$ 725,022	\$ 876,901	121%	\$ (151,879)	0%
2010	865,123	999,626	116	(134,503)	0

Ingham County (3303)
Division 96 - Teamsters 580

Table 16

Computed Employer Contributions to the Retirement System
For the Fiscal Year Beginning January 1, 2012

Contribution for	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Total Normal Cost	17.32%	\$1,174
Member Contributions	3.50	237
Less Potential Refunds	<u>(0.79)</u>	<u>(54)</u>
Net Member Contributions	2.71	183
Employer Normal Cost @	14.61%	\$991
Amortization of Unfunded Accrued Liability (25 years) #	<u>(30.15)</u>	<u>(2,044)</u>
Total Long Term Contribution	0.00	(1,053)
Overfunding Credit #	<u>(30.14)</u>	<u>(2,044)</u>
Total Employer Contribution @	0.00%	\$0 *

@ The above Employer contribution requirement is based on Member contributions of 3.50% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 25 year amortization) will decrease/increase by 0.80% of pay.

* Estimated contributions are 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, 2012 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 60.29% (30.15% plus 30.14%). The additional 30.14% results from spreading the negative unfunded accrued liability over 10 years instead of 25 years.

Note: Changes in actuarial assumptions and/or methods were reflected in the December 31, 2010 actuarial valuation. The effects of the changes are shown below:

Increase in Actuarial Accrued Liabilities:	\$161
Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll	
Normal Cost:	0.30%
Amortization Payment:	0.03%
Total:	0.33%

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

Ingham County (3303)
Division 96 - Teamsters 580

Table 17

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution
	Number	Annual Payroll	
2009	1	\$ 87,405	0.00%
2010	1	81,368	0.00%

Notes:

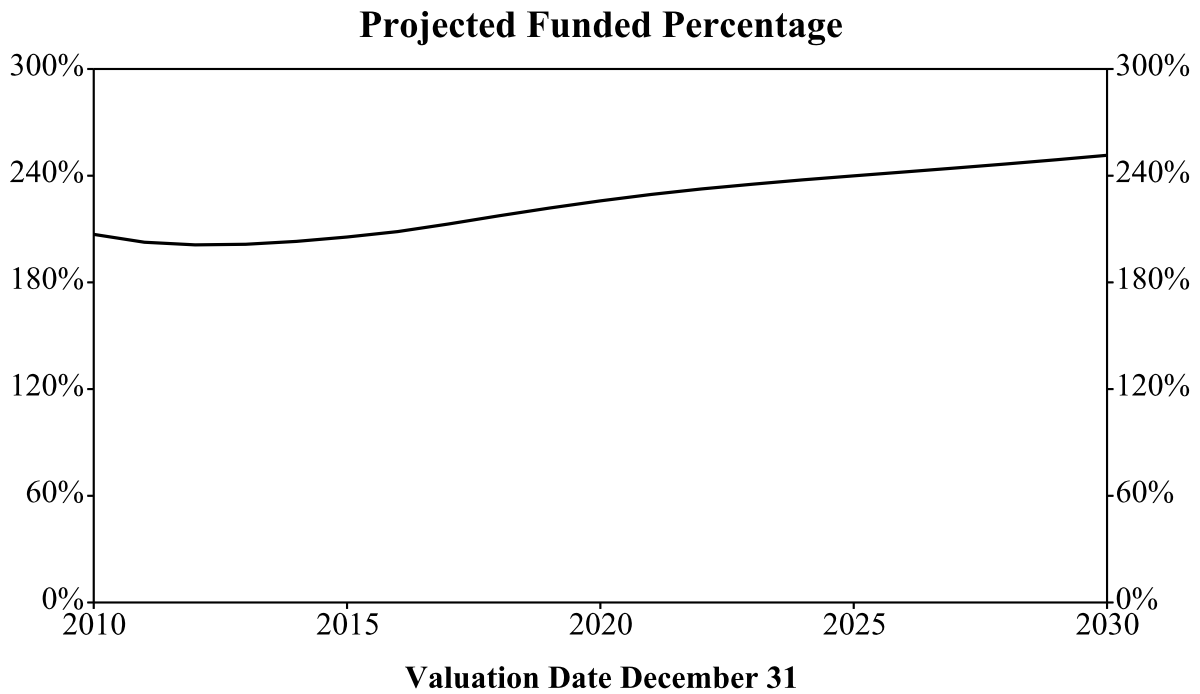
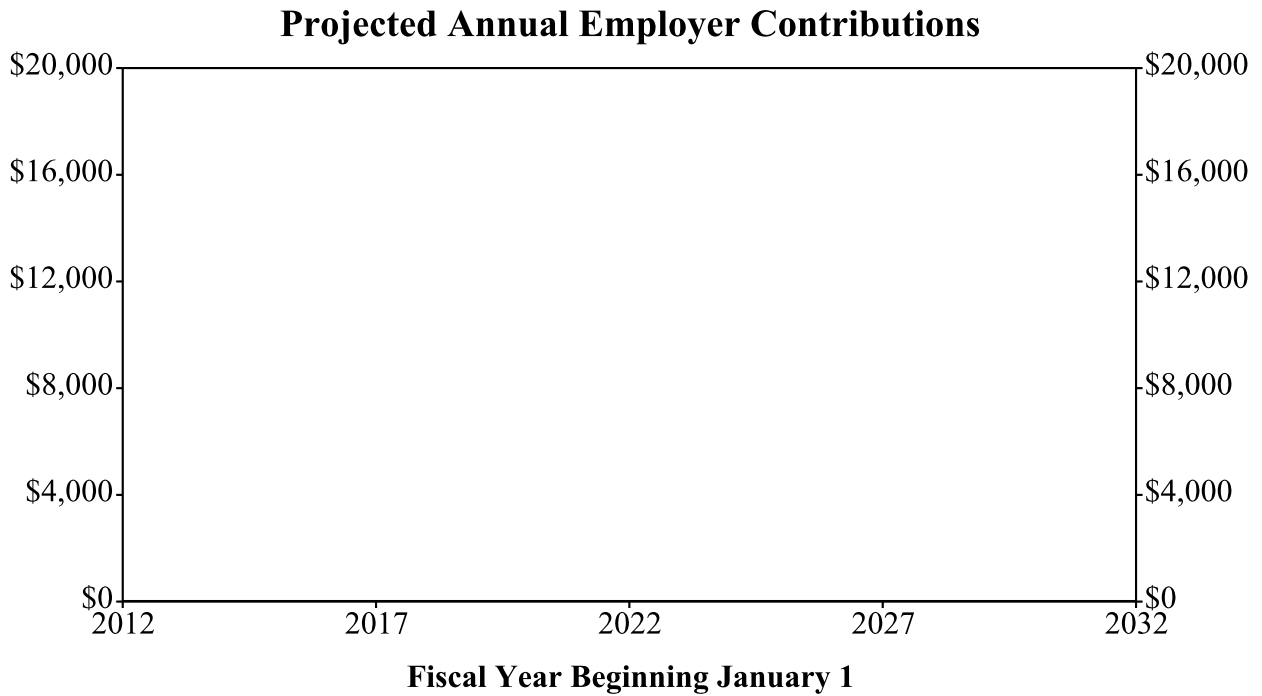
Adoption of Benefit V-8, Rule of 65, 3.50% Member Contributions, FAC-2, 2.8% svc <35 yrs, 1.5% svc >35 yrs - 100% Max, Normal Retirement: 58 reflected in 2009 valuation.

Actuarial assumptions were revised for the 2009 valuation.

Actuarial assumptions were revised for the 2010 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 96 - Teamsters 580
Chart 17.5



Note: Please refer to page 248 for a discussion of the projection.

Ingham County (3303)

Division 96 - Teamsters 580

Table 18
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		
2009								1	1
2010									1

Table 19
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		
2009								0
2010								0

Ingham County (3303)

Division 96 - Teamsters 580

Table 20
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
2009		\$	\$		\$	\$	0	\$ 0
2010							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 96 - Teamsters 580

Table 21
Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer*		Balance
	Employer	Member				Out	In	
2009	\$ 431,645	\$ 79,548	\$ 243,956	\$ 0	\$ 0	\$ 0	\$ 0	\$ 755,149
2010	16,103	2,848	49,449	0	0	(35,658)	35,658	823,549

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

Table 22
Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Accrued Liabilities	Valuation Assets	Funded Percent	Unfunded Accrued Liability	UAL as Percent of Annual Payroll
2009	\$ 394,255	\$ 755,149	192%	\$ (360,894)	0%
2010	398,110	823,549	207	(425,439)	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, 2010 actuarial valuation. The entry age normal actuarial method was used to determine the disclosure entries.

GASB 25 Information (as of 12/31/2010)

Actuarial Accrued Liability

Retirees and beneficiaries currently receiving benefits	\$153,196,741
Terminated employees (vested former members) not yet receiving benefits	15,174,238
Non-vested terminated employees (pending refunds of accumulated member contributions)	1,184,059
Current employees - Accumulated employee contributions including allocated investment income	36,491,426
Employer financed	<u>98,088,019</u>
Total Actuarial Accrued Liability	\$304,134,483
Net Assets Available for Benefits at Actuarial Value	<u>227,832,071</u>
(Market Value is \$195,913,629)	
Unfunded (Overfunded) Actuarial Accrued Liability	\$76,302,412

GASB 27 Information (as of 12/31/2010)

Fiscal Year Beginning	January 1, 2012
Annual Required Contribution (ARC)	\$ 7,864,704*
Amortization Factor Used - Underfunded Liabilities (28 years)	0.055889
Amortization Factor Used - Underfunded Liabilities (26 years)	0.058519
Amortization Factor Used - Underfunded Liabilities (25 years)	0.060002
Amortization Factor Used - Underfunded Liabilities (12 years)	0.103112
Amortization Factor Used - Underfunded Liabilities (30 year level \$)	0.085453
Amortization Factor Used - Overfunded Liabilities (10 years)	0.119963

* Based on valuation payroll (based on projected fiscal year payroll for divisions that will have no new hires). 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, 2012) 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, 2012)

Division	Unfunded Accrued Liability 12/31/2010	Employer Normal Cost	Expected Employer Contrib.	Interest	Unfunded Accrued Liability 1/1/2012	Projected Fiscal Year Payroll
01 - Confidentiali	\$ 1,796,032	\$ 139,186	\$ (237,929)	\$ 139,733	\$ 1,837,022	\$ 1,829,553
02 - Sheriff FO	15,166,466	(1,558)	(718,505)	1,184,515	15,630,918	2,035,342
04 - MCF	467,548	303,953	(324,217)	36,593	483,877	5,429,594
09 - Judges	806,981	8,910	(51,053)	62,873	827,711	89,876
10 - Gnrl Mgmt	14,269,275	547,220	(1,208,662)	1,115,084	14,722,917	7,801,434
11 - Gnrl Libra #	358,068	0	(30,216)	27,437	355,289	-
12 - Gnrl ICEA	7,708,291	205,830	(577,605)	601,792	7,938,308	7,442,629
13 - Gnrl OPEIU	4,792,230	83,669	(286,662)	375,259	4,964,496	2,117,046
14 - Gnrl TOPS	8,953,740	1,227,799	(1,625,028)	700,410	9,256,921	15,723,646
15 - Animal Cnt	1,811,594	9,413	(90,006)	141,704	1,872,705	371,178
16 - Gnrl Comms	1,677	13,579	(13,398)	141	1,999	237,299
17 - ICEA & MNA	3,752,755	162,831	(335,168)	293,327	3,873,745	4,318,750
18 - ICEA Ct. P	3,895,997	88,854	(292,302)	303,542	3,996,091	2,586,416
19 - Cnstutnl O	232,006	34,176	(44,341)	18,154	239,995	651,705
21 - FOP Shrf D	9,194,185	441,831	(856,243)	718,958	9,498,731	8,186,405
40 - ICEA Unit	162,111	90,139	(92,405)	12,878	172,723	1,691,121
41 - MCF Manage	179,096	109,421	(112,994)	14,185	189,708	1,287,668
42 - ICEA Unit	211,171	81,806	(94,650)	16,380	214,707	1,458,835
43 - ICEA Unit	152,852	30,944	(39,310)	11,894	156,380	526,647
44 - MCF Exec M #	59,921	0	(25,164)	3,787	38,544	-
90 - Asst Pros	2,272,355	241,707	(347,097)	177,573	2,344,538	2,486,059
91 - Parks Unio	(9,067)	23,003	(23,003)	(725)	(9,792)	275,663
92 - Parks Non	654,071	8,907	(42,553)	50,980	671,405	94,976
93 - Lgl Rsrch	(80,712)	16,940	(8,813)	(6,132)	(78,717)	286,907
94 - Zoo Hires	53,711	44,458	(43,820)	4,322	58,671	555,727
95 - UAW Local	(134,503)	65,925	(47,231)	(10,012)	(125,821)	432,191
96 - Teamsters	(425,439)	12,423	0	(33,538)	(446,554)	88,856

This division will have no new hires.

The unfunded accrued liability as of December 31, 2010 (see Table 13) is projected to the beginning of the fiscal year for which employer contributions are being calculated (January 1, 2012). This allows the 2010 valuation to take into account the expected future contributions that are based on past valuations. This projection process will result in more stable computed contribution rates, and was first used for the December 31, 2004 actuarial valuations.

The projected unfunded accrued liability is amortized over the appropriate period (see 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

Ingham County (3303)

Table 24 (continued)

Development of Projected Unfunded Accrued Liability

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 4 hours a day for part-time employees
6/25/1996	Day of work defined as 8 hours a day for full-time employees
1/1/1995	Benefit B-3 (80% max)
1/1/1995	Member Contribution Rate 4.50%
12/31/1994	Member Contribution Rate 0.00%
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
1/1/1994	E Cola Increase Type Percent
1/1/1994	E Cola Increase Amount 2
1/1/1994	E Cola Adoption Date 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	Member Contribution Rate 3.00% Under \$4,200.00 - Then 5.00%
11/15/1950	Fiscal Month - January
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	Member Contribution Rate 19.61%
10/1/1997	3.2% Multiplier (80% max)
1/1/1995	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/1995	Member Contribution Rate 10.45%
1/1/1995	Benefit B-4 (80% max)

Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 02 - Sheriff FOP Spvs

Provisions by Date

1/1/1995	25 Years & Out
12/31/1994	Member Contribution Rate 0.00%
7/1/1994	Member Contribution Rate 5.40%
6/30/1994	Member Contribution Rate 0.00%
1/1/1994	E Cola Increase Type Percent
1/1/1994	E Cola Increase Amount 2
1/1/1994	E Cola Adoption Date 01-01-1994
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
7/1/1993	Benefit B-3 (80% max)
7/1/1993	Member Contribution Rate 6.40%
6/30/1993	Member Contribution Rate 0.00%
10/1/1991	Member Contribution Rate 1.85%
1/1/1991	Member Contribution Rate 1.60%
10/1/1990	Benefit F50 (With 25 Years of Service)
10/1/1990	Member Contribution Rate 1.80%
1/1/1990	Day of work defined as 8 hours a day for fulltime employees
1/1/1990	Day of work defined as 4 hours a day for part-time employees
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
1/1/1987	Benefit C-2/Base C-1 (Old)
12/16/1986	Blanket Resolution (All Service)
1/1/1986	Benefit F55 (With 15 Years of Service)
1/1/1986	Member Contribution Rate 1.00%
10/15/1980	Exclude Temporary Employees
1/1/1976	Member Contribution Rate 0.00%
1/1/1969	Benefit C-1 (Old)
9/29/1965	Covered by Act 88
11/15/1950	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 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	E Cola Increase Type Percent
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Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 04 - MCF

Provisions by Date

1/1/1995	E Cola Adoption Date 01-01-1995
1/1/1995	Flexible E 2% COLA Adopted (01/01/1995)
1/1/1995	E Cola Increase Amount 2
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)
10/15/1980	Exclude Temporary Employees
6/1/1977	Member Contribution Rate 0.00%
1/1/1969	Benefit C-1 (Old)
9/29/1965	Covered by Act 88
11/15/1950	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	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 for full-time employees
6/25/1996	Day of work defined as 4 hours a day for part-time 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)
1/1/1994	E Cola Increase Type Percent

Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 10 - Gnrl Mgmt

Provisions by Date

1/1/1994	E Cola Increase Amount 2
1/1/1994	E Cola Adoption Date 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
9/29/1965	Covered by Act 88
11/15/1950	Fiscal Month - January

Division 11 - Gnrl Library

Provisions by Date

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

Division 12 - Gnrl ICEA Profs

Provisions by Date

1/1/2003	E2 2.5% Annual COLA for future retirees (01/01/2003)
1/1/2003	Member Contribution Rate 13.42%
1/1/2003	Benefit B-4 (80% max)
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%

Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 12 - Gnrl ICEA Profs

Provisions by Date

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	E Cola Increase Type Percent
1/1/1994	E Cola Increase Amount 2
1/1/1994	E Cola Adoption Date 01-01-1994
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
1/1/1992	Day of work defined as 4 hours a day for part-time employees
1/1/1992	Member Contribution Rate 1.10%
1/1/1992	Day of work defined as 8 hours a day for full-time employees
1/1/1992	Benefit C-2/Base B-1
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
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	Member Contribution Rate 7.13%
1/1/1998	Benefit B-3 (80% max)
12/31/1997	Member Contribution Rate 7.10%
1/1/1995	Benefit C-2/Base B-1
1/1/1995	Member Contribution Rate 2.96%
12/31/1994	Member Contribution Rate 0.00%
1/1/1994	E Cola Adoption Date 01-01-1994
1/1/1994	Flexible E 2% COLA Adopted (01/01/1994)
1/1/1994	E Cola Increase Type Percent
1/1/1994	E Cola Increase Amount 2
1/1/1992	Day of work defined as 8 hours a day for full-time employees
1/1/1992	Day of work defined as 4 hours a day for part-time employees
10/1/1991	Member Contribution Rate 1.88%
9/30/1991	Member Contribution Rate 0.00%

Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 13 - Gnrl OPEIU Prob

Provisions by Date

10/1/1990	Member Contribution Rate 1.80%
10/1/1990	Benefit C-1 (Old)
10/1/1990	10 Year Vesting
10/1/1990	Benefit FAC-5 (5 Year Final Average Compensation)
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)
1/1/1994	E Cola Increase Type Percent
1/1/1994	E Cola Increase Amount 2
1/1/1994	E Cola Adoption Date 01-01-1994
1/1/1992	Day of work defined as 8 hours a day for full time employees
1/1/1992	Day of work defined a 4 hours a day for part-time employees
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%

Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 15 - Animal Cntrl FOP

Provisions by Date

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 F50 (With 25 Years of Service)
7/1/1997	Member Contribution Rate 8.90%
7/1/1997	Benefit B-4 (80% max)
7/1/1997	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/1994	E Cola Increase Type Percent
1/1/1994	E Cola Increase Amount 2
1/1/1994	E Cola Adoption Date 01-01-1994
1/1/1994	E 2% COLA Adopted (01/01/1994)
1/1/1993	Benefit B-1
1/1/1993	Day of work defined as 4 hours a day for part-time employees
1/1/1993	Member Contribution Rate 1.10%
1/1/1993	Day of work defined as 8 hours a day for full-time employees
10/1/1990	Member Contribution Rate 0.90%
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%
1/1/1990	Benefit C-1 (Old)
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

Division 16 - Gnrl Commsnrs

Provisions by Date

1/1/1999	6 Year Vesting
1/1/1994	E Cola Increase Type Percent
1/1/1994	E Cola Increase Amount 2
1/1/1994	E Cola Adoption Date 01-01-1994
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	Member Contribution Rate 4.00%
12/1/1988	Benefit C-2/Base B-1
12/1/1988	10 Year Vesting
12/1/1988	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1988	Flexible E 2% COLA Adopted (01/01/1988)

Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 16 - Gnrl Commsnrs

Provisions by Date

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 & MNA 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 Cola Increase Type Percent
1/1/1994	E Cola Increase Amount 2
1/1/1994	E Cola Adoption Date 01-01-1994
1/1/1994	E 2% COLA Adopted (01/01/1994)
1/1/1991	Day of work defined as 4 hours a day for part-time employees
1/1/1991	Day of defined as 8 hours a day for full-time employees
10/1/1990	Member Contribution Rate 0.70%
1/1/1990	Benefit C-2/Base C-1 (Old)
1/1/1990	Member Contribution Rate 1.00%
1/1/1990	10 Year Vesting
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 18 - ICEA Ct. Prof

Provisions by Date

6/1/1997	Member Contribution Rate 9.84%
6/1/1997	20 Years & Out
5/31/1997	Member Contribution Rate 0.00%
1/1/1995	Member Contribution Rate 7.50%
1/1/1995	Benefit B-3 (80% max)
12/31/1994	Member Contribution Rate 0.00%
1/1/1994	E 2% COLA Adopted (01/01/1994)

Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 18 - ICEA Ct. Prof

Provisions by Date

1/1/1994	E Cola Increase Type Percent
1/1/1994	E Cola Increase Amount 2
1/1/1994	E Cola Adoption Date 01-01-1994
1/1/1992	Day of work defined as 4 hours a day for part-time employees
1/1/1992	Member Contribution Rate 3.10%
1/1/1992	Day of work defined as 8 hours a day for full-time employees
1/1/1991	Benefit C-2/Base B-1
1/1/1991	Benefit F55 (With 15 Years of Service)
1/1/1991	Member Contribution Rate 2.80%
1/1/1991	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1991	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

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 4 hours a day for part-time employees
6/25/1996	Day of work defined as 8 hours a day for full-time employees
1/1/1995	Benefit B-3 (80% max)
1/1/1995	Member Contribution Rate 7.00%
12/31/1994	Member Contribution Rate 0.00%
1/1/1994	E Cola Increase Type Percent
1/1/1994	E Cola Increase Amount 2
1/1/1994	E Cola Adoption Date 01-01-1994
1/1/1994	E 2% COLA Adopted (01/01/1994)
4/1/1991	Benefit FAC-5 (5 Year Final Average Compensation)
4/1/1991	Benefit F55 (With 15 Years of Service)
4/1/1991	Member Contribution Rate 3.00%
4/1/1991	Benefit C-2/Base B-1
4/1/1991	10 Year Vesting
1/1/1988	E 2% COLA Adopted (01/01/1988)
12/16/1986	Blanket Resolution (All Service)

Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 19 - Cnstutnl Offcls

Provisions by Date

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 Member Contribution Rate 10.96%
2/1/2001 25 Years & Out
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 Member Contribution Rate 6.55%
1/1/1994 E Cola Increase Type Percent
1/1/1994 E Cola Increase Amount 2
1/1/1994 E Cola Adoption Date 01-01-1994
1/1/1994 E 2% COLA Adopted (01/01/1994)
12/31/1993 Member Contribution Rate 0.00%
10/1/1991 Member Contribution Rate 1.65%
10/1/1990 Member Contribution Rate 1.60%
5/3/1990 Day of work defined as 8 hours a day for full-time employees
5/3/1990 Day of work defined as 4 hours a day of part-time employees
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 10 Year Vesting
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)
1/1/1995 E Cola Increase Type Percent
1/1/1995 E Cola Increase Amount 2
1/1/1995 E Cola Adoption Date 01-01-1995
12/1/1988 10 Year Vesting
12/1/1988 Benefit FAC-5 (5 Year Final Average Compensation)

Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 40 - ICEA Unit 111

Provisions by Date

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
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 41 - MCF Management

Provisions by Date

1/1/1995	E Cola Increase Type Percent
1/1/1995	E Cola Increase Amount 2
1/1/1995	E Cola Adoption Date 01-01-1995
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 F55 (With 15 Years of Service)
4/1/1989	Benefit C-2/Base B-1
4/1/1989	Benefit FAC-5 (5 Year Final Average Compensation)
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	Member Contribution Rate 3.95%
4/1/1997	Benefit FAC-3 (3 Year Final Average Compensation)
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	Benefit C-2/Base B-1
1/1/1996	Benefit F55 (With 15 Years of Service)
1/1/1996	Member Contribution Rate 3.40%
1/1/1988	E Cola Increase Type Percent
1/1/1988	E Cola Increase Amount 2
1/1/1988	E Cola Adoption Date 01-01-1988
1/1/1988	E 2% COLA Adopted (01/01/1988)
10/15/1980	Exclude Temporary Employees
9/29/1965	Covered by Act 88

Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 42 - ICEA Unit 11

Provisions by Date

Fiscal Month - January

Division 43 - ICEA Unit 1

Provisions by Date

4/1/1996 Member Contribution Rate 3.51%
1/1/1996 Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1996 6 Year Vesting
1/1/1996 Benefit C-2/Base B-1
1/1/1996 Benefit F55 (With 15 Years of Service)
1/1/1996 Member Contribution Rate 3.50%
10/15/1980 Exclude Temporary Employees
9/29/1965 Covered by Act 88
Fiscal Month - January

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 6 Year Vesting
9/1/2003 Benefit FAC-3 (3 Year Final Average Compensation)
9/1/2003 Benefit B-4 (80% max)
9/1/2003 Benefit F55 (With 15 Years of Service)
9/1/2003 Member Contribution Rate 0.00%
9/29/1965 Covered by Act 88
Fiscal Month - January

Division 90 - Asst Pros Attnys

Provisions by Date

10/1/1998 Benefit B-4 (80% max)
10/1/1998 Benefit F55 (With 15 Years of Service)
10/1/1998 6 Year Vesting
4/1/1993 Member Contribution Rate 1.40%
4/1/1993 Benefit B-3 (80% max)
4/1/1993 10 Year Vesting
4/1/1993 Benefit FAC-5 (5 Year Final Average Compensation)
7/1/1992 Day of work defined as 8 hours a day for full-time employees
7/1/1992 Day of work defined as 4 hours a day for part-time employees
1/1/1988 E Cola Increase Type Percent
1/1/1988 E Cola Increase Amount 2
1/1/1988 E Cola Adoption Date 01-01-1988
1/1/1988 E 2% COLA Adopted (01/01/1988)

Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 90 - Asst Pros Attnys

Provisions by Date

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	Member Contribution Rate 0.00%
1/1/1995	10 Year Vesting
1/1/1995	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1995	Benefit C-1 (Old)
1/1/1988	E Cola Increase Type Percent
1/1/1988	E Cola Increase Amount 2
1/1/1988	E Cola Adoption Date 01-01-1988
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 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 F55 (With 25 Years of Service)
7/1/1995	Benefit B-4 (80% max)
1/1/1995	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1995	Member Contribution Rate 0.00%
1/1/1995	10 Year Vesting
1/1/1995	Benefit C-1 (Old)
1/1/1988	E Cola Increase Type Percent
1/1/1988	E Cola Increase Amount 2
1/1/1988	E Cola Adoption Date 01-01-1988
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

Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 92 - Parks Non Union

Provisions by Date

11/15/1950 Fiscal Month - January

Division 93 - Lgl Rsrch Clerks

Provisions by Date

1/1/1998 Benefit FAC-5 (5 Year Final Average Compensation)

1/1/1998 Member Contribution Rate 0.00%

1/1/1998 Benefit C-1 (Old)

1/1/1998 10 Year Vesting

6/25/1996 Day of work defined as 4 hours a day for part-time employees

6/25/1996 Day of work defined as 8 hours a day for full-time employees

1/1/1988 E Cola Adoption Date 01-01-1988

1/1/1988 E Cola Increase Type Percent

1/1/1988 E Cola Increase Amount 2

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 94 - Zoo Hires after 7/1/07

Provisions by Date

7/1/2007 Benefit FAC-5 (5 Year Final Average Compensation)

7/1/2007 Day of work defined as 8 hours per day

7/1/2007 Member Contribution Rate 0.00%

7/1/2007 Benefit B-2

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 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 1.70%

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

Ingham County (3303)

Table 25 (continued)

Benefit Provision History

Division 96 - Teamsters 580

Provisions by Date

7/1/2007	Benefit FAC-2 (2 Year Final Average Compensation)
7/1/2007	2.8% Mult. for Svc <35, 1.5% for Svc >35 yrs (100% max)
7/1/2007	Member Contribution Rate 3.50%
7/1/2007	Eligible at Age 58 (With 8 Years of Service)
7/1/2007	Day of work defined as 8 hours per day
7/1/2007	Rule of 65 (Age + Service) Retirement
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, 2010

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

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

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

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

ASSUMPTION AND METHOD CHANGES FOR THE DECEMBER 31, 2010 ACTUARIAL VALUATION

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

- Temporary lower wage inflation assumption (see page 237).
- New assumption related to increases in final average compensation for some municipalities (see page 238)
- The standard amortization period for positive unfunded accrued liabilities is maintained at 28 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 232 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 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 66 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 235). 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. MERS maintains a statewide Act 88 adoption list:

www.mersofmich.com/images/stories/Forms/Member/form_77.pdf

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

MERS plan benefits are based on a member's final average compensation (FAC), subject to the dollar compensation limits under Section 401(a)(17) of the Internal Revenue Code (see page 235). 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 an Option II survivor allowance. Payment of a retirement allowance to the surviving spouse of a deceased member commences immediately. Payment of a retirement allowance to the surviving spouse of a deceased vested former member commences on the date the member would have first satisfied eligibility for retirement for an unreduced service retirement allowance. The amount of a surviving spouse's retirement allowance shall be 85% of the deceased member's or deceased vested former member's accrued retirement allowance computed in the same manner as a service retirement allowance, based on service and final average compensation at time of death.

The amount of a surviving spouse's benefit is always the larger of i) the benefit computed as a contingent survivor beneficiary, and ii) the 85% of accrued retirement allowance benefit described above.

If there is no named beneficiary and no retirement allowance being paid to a surviving spouse, unmarried children under age 21 will be paid an equal share of 50% of the deceased member's or deceased vested former member's accrued retirement allowance. The reduction for retirement before age 60 is not applied.

If no retirement allowance becomes payable at death, the member's accumulated contributions, if any, are paid to the beneficiary or to the decedent's estate.

Duty-Connected Death Allowance (Plan Section 27)

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

Adoption of optional Benefit Program D-2 will provide a retirement allowance for a duty-connected death that is the greater of:

- (i) 25% of the member's final average compensation; or
- (ii) A benefit based on 10 years of credited service in addition to the member's actual period of service, provided the total years of service do not exceed the greater of 30 years or the member's actual period of service.

Member Contributions (Plan Sections 32 and 35)

Each member 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 235). Any percentage from 0% to 10% (in 0.1% increments) may be selected. A 3%/5% contribution program was available prior to 1985 and may be continued (until any new benefit programs are adopted), but not adopted, after 1984. Under this program the member contributes 3% of the first \$4,200 of annual compensation and 5% of portions of annual compensation over \$4,200. Interest is credited to accumulated member contributions each December 31 (and reflected in the Annual Member Statement provided to each member) at a rate determined by MERS, currently the one-year U.S. Treasury Bill rate determined as of each December 31. The interest rate credited for the 12-month period ending on the valuation date was 0.28%.

If a member leaves the employ of the municipality, or dies, without a retirement allowance or other benefit payable on his/her account, the member's accumulated contributions plus interest (as described above) are refunded with spousal consent, to the member, if living, or to the member's surviving spouse, if any, or to a named beneficiary (after spousal consent, if applicable).

Note for MERS' Defined Contribution Program (Plan Section 19A): The Annual Actuarial Valuation addresses assets and liabilities for participation under MERS' Defined Benefit Programs. MERS' Defined Contribution Program (Benefit Program DC), which first became available for adoption in late 1997, is not addressed in the valuation results as it is not a defined benefit program.

Post-Retirement Adjustments (Plan Sections 20-22)

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

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

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

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

A retiring member electing form of payment SL (straight life retirement allowance) is normally paid a lifetime retirement allowance, with payments terminating at death. The retiring member could provide benefits to a surviving spouse or another named beneficiary (see below) by electing Option II (100% continuation to beneficiary) or Option II-A (75% continuation to beneficiary) or Option III (50% continuation to beneficiary). A surviving spouse is automatically the beneficiary to an Option II, IIA or III allowance unless the spouse, in writing, relinquishes the benefit to the member electing a straight life allowance or to another named beneficiary. Electing these alternate forms of payment would lower the retiring member's retirement allowance.

If Benefit Program RS50% is adopted, a member retiring on or after the effective date of Benefit RS50% may elect form of payment SL and still provide a 50% survivor benefit to the member's spouse. To be eligible for a surviving spouse benefit, the retiring member and spouse must have been married to each other both at the time of death and during the full one-year period just before retirement.

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

Any member 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 225 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 235). 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. MERS maintains a statewide Act 88 adoption list:

http://www.mersofmich.com/images/stories/Forms/Member/form_77.pdf

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

Computed under defined benefit plan Benefit Program FAC-3.

Disability Retirement Allowance (Plan Section 24)

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

Non-Duty Death Allowance (Plan Sections 26 and 28)

Benefits are the same as under the defined benefit plan.

Duty-Connected Death Allowance (Plan Section 27)

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

Member Contributions (Plan Section 19B)

None

Post-Retirement Adjustments (Plan Sections 20-22)

None

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

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

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

None

Part II - Defined Contribution Portion of Hybrid Plan

Employer Contributions (Plan Section 19B)

Contribution Amount - Any percentage of compensation allowed by federal law.

Vesting Schedule - One of the following vesting schedules for employer contributions can be adopted by the employer:

1. Immediate vesting upon participation, or
2. 100% vesting after stated years (participant is 100% vested after not to exceed maximum 5 years of service ("cliff" vesting)), or
3. Graded vesting percentages per year of service, not to exceed maximum 6 years of service for 100% vesting, nor be less than certain stated minimums

Member Contributions (Plan Section 19B)

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

Vesting Schedule - 100% immediate vesting

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

The limits are based on the retiree's age at retirement. The limit at ages 62-65 is indexed with inflation, in \$5,000 increments. The limits at earlier ages are then increased proportionately. The limit applies to the retiree's or beneficiary's employer-financed straight life benefit, except in the case of an Option II, IIA, or III election with the retiree's spouse as named beneficiary, in which case the limit applies to the employer-financed portion of the reduced joint and survivor benefit.

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

Requires that the member have at least 15 years of police, fire, and/or armed forces service as defined in the final regulations issues on April 5, 2007. Otherwise, use the limits for general members.

IRC Section 401(a)(17) Compensation Limit - 2011

For 2011 the IRC Section 401(a)(17) limit is \$245,000. This limit is indexed with inflation in \$5,000 increments.

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, 2010 actuarial valuation are unchanged from the December 31, 2009 valuation assumptions, with the exceptions noted on page 224. The actuarial assumptions currently utilized are summarized below and on the following pages.

Interest Rate

Funding plan benefits involves the accumulation of assets to pay benefits in the future. These assets are invested and the net rate of investment earnings is a significant factor in determining the contributions required to support the ultimate cost of benefits. For the 2010 actuarial valuation, the net long-term investment yield is assumed to be 8%. This assumption was first used for the December 31, 1981 actuarial valuations.

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

Please see the Comments on the 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% (1% for calendar years 2011-2014) plus a percentage based on an age-related scale to reflect merit, longevity and promotional pay increases.

The pay increase assumption for selected ages is shown below. The 4.5% long-term 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

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

Inflation

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

Payroll Growth

For divisions that are open to new hires, the number of active members is projected to remain constant, and the total payroll is projected to increase 4.5% annually in the long term (1% annually for calendar years 2011 - 2014). This assumption was first used for the December 31, 1997 actuarial valuations.

Increase in Final Average Compensation

The 1999-2003 and 2004-2008 experience studies determined that for some retirees of some municipalities, the actual final average compensation (FAC) at retirement was larger than would be expected based on reported annual pays and FAC's for the years just before retirement. Some possible sources for the differences are:

- Lump sum payments for unused paid time off. Unused sick leave payouts have been excluded from FAC since the mid 1970s. However, since that time it has become popular to combine sick and vacation time into paid time off, which is included in the FAC. Consequently, the lump sums that are includible in FAC have grown over the years.
- Extra overtime pay during the final year of employment. Our studies only reflect any increase in overtime during the final year, not any increase that occurs during the full 3 to 5 year averaging period.

We analyzed the variation among municipalities. The amount of unexpected FAC increase varies quite a bit between municipalities. Some municipalities show no sign of FAC loading, while other municipalities show increases above the average increase. This is presumably the result of different personnel policies among municipalities.

The Retirement Board adopted new FAC assumptions to be first used for the December 31, 2010 annual actuarial valuations. These assumptions reflect an FAC load of 0% to 4% for each municipality, based on the municipality's experience. The FAC increase assumption(s) for your municipality are shown in the table below.

Division	FAC Increase Assumption
01 - Confidential	2.00%
02 - Sheriff FOP Spvs	2.00
04 - MCF	2.00
09 - Judges	2.00
10 - Gnrl Mgmt	2.00
11 - Gnrl Library	N/A
12 - Gnrl ICEA Profs	2.00
13 - Gnrl OPEIU Prob	2.00
14 - Gnrl TOPS UAW	2.00
15 - Animal Cntrl FOP	2.00
16 - Gnrl Commsnrs	2.00
17 - ICEA & MNA Nurses	2.00
18 - ICEA Ct. Prof	2.00
19 - Cnstutnl Offcls	2.00
21 - FOP Shrf Deputies	2.00
40 - ICEA Unit 111	2.00
41 - MCF Management	2.00
42 - ICEA Unit 11	2.00
43 - ICEA Unit 1	2.00
44 - MCF Exec Mgr	N/A
90 - Asst Pros Attnys	2.00
91 - Parks Union Empl	2.00
92 - Parks Non Union	2.00
93 - Lgl Rsrch Clerks	2.00
94 - Zoo Hires after 7/1/07	2.00
95 - UAW Local 2256	2.00
96 - Teamsters 580	2.00

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.

Division	Withdrawal Rate Scaling Factor
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.

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

Retirement Rates

A schedule of retirement rates is used to measure the probability of eligible members retiring during the next year. The retirement rates for Normal Retirement are determined by each member's replacement index at the time of retirement. The replacement index is defined as the approximate percentage of the member's pay (after reducing for MERS member contributions) that will be replaced by the member's benefit at retirement. The index is calculated as:

$$\text{Replacement Index} = 100 \times \text{Accrued Benefit} \div [\text{Pay less Member Contributions}]$$

Retirement rates for Early (reduced) Retirement are determined by the member's age at early retirement.

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

NORMAL RETIREMENT

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

EARLY RETIREMENT - REDUCED BENEFIT

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year
50	2%
51	2
52	3
53	5
54	8
55	4
56	4
57	4
58	6
59	8

Disability Rates

Disability rates are used in the valuation to estimate the incidence of member disability in future years.

The assumed rates of disablement at 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 Payment	- Future retiring members are assumed to elect:

<u>Form of Payment</u>	<u>Percentage</u>
SL	40%
II	30
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 31, determined annually. The long-term rate assumed in the valuation is 4%, which is consistent with the 3% to 4% price inflation assumption.
- DROP+ Assumptions - Each eligible member is assumed to make the DROP+ election with the most valuable combination of lump sum and reduced monthly benefit.
- The retirement probabilities on page 241 are used for members who are *not* covered by Benefit Program DROP+. For members covered by Benefit Program DROP+, it is assumed that retirement will be delayed long enough to become eligible for at least 4 years worth of DROP+ lump sum.

ACTUARIAL FUNDING METHOD

The Retirement Board has adopted funding methodology for the Retirement System to achieve the following major objectives:

- Develop level required contribution rates as a percentage of payroll (for divisions that are open to new hires);
- Finance benefits earned by present employees on a current basis;
- Accumulate assets to enhance members' benefit security;
- Produce investment earnings on accumulated assets to help meet future benefit costs;
- Make it possible to estimate the long-term actuarial cost of proposed amendments to System provisions; and
- Assist in maintaining the Retirement System's long-term financial viability.

The basic funding objective is a level pattern of cost as a percentage of pay throughout each member's working lifetime. The funding method used in this actuarial valuation – the entry age normal cost method – is intended to i) meet this objective, and ii) result in a relatively level long-term contribution requirement as a percentage of pay. This actuarial method was first used for the December 31, 1993 actuarial 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, 2010, if contributions sufficient to meet the normal costs of the Retirement System had been made each year in the past, benefit provisions had always been the same as current benefit provisions, and actual past experience had always conformed to current actuarial assumptions. If assets equaled the total accrued liability, there would be no unfunded liability and future contribution requirements would consist solely of the calculated normal cost rates.

Amortization of Unfunded Actuarial Accrued Liability

The unfunded actuarial accrued liability is projected to the beginning of the fiscal year for which employer contributions are being calculated (see page 206 for a description of the projection). The projected unfunded accrued liability is then amortized by level percent of payroll contributions over a period of years. Active member payroll is assumed to increase 4.5% a year for the purpose of determining the level percent contributions.

The standard amortization period to fund the unfunded liability is 28 years for positive unfunded liabilities in the 2010 valuation. This period will be reduced by one year in each of the next eight annual valuations, reaching 20 years in the 2018 valuation. Beginning with the 2019 valuation the 20 year period will be reestablished with each annual valuation. Section 20m of Act No. 314 of the Public Acts of 1965 as amended (MCL 38.1140m) requires that the amortization period not exceed 30 years.

The standard amortization period for negative unfunded liabilities is 10 years, with the 10 year period reestablished with each annual actuarial valuation.

For divisions that are closed to new hires, and the new hires are not covered by MERS defined benefit or hybrid provisions (in a linked division, as discussed on page 251), 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, as discussed on page 251), a 30-year level dollar amortization is used, if it results in a higher amortization payment.

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 237). If the number of active members remains constant, projected total active member payroll will increase about 4.5% annually (1% annually for calendar years 2011-2014), 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, 2012 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, transfers and rehires enter the open division - see page 251), 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, transfers and rehires - see page 251) 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 2018 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 page 251 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 was reviewed in the 2004-2008 study of MERS experience, and beginning with the December 31, 2011 valuation, a minimum contribution will become effective, based on cash flow needs. The projections in this report reflect the minimum contribution requirement, if applicable, in fiscal years starting in 2013 and later.

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, before the funded percentage begins to head up toward 100% funding. The minimum contribution requirement based on cash flow needs (see previous paragraph) will keep the funded percentage from going negative. However, 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, transfers and rehires – see page 251 for a discussion of linked divisions) will typically show a projected funded percentage that declines and may even become 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. The minimum contribution requirement based on cash flow needs will result in a positive funded percentage by 2014 or 2015. However 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 needed, 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.

Open Divisions and Closed Divisions

Open divisions will include the future new hires within an employee classification (bargaining unit). Rehired members will also become members of the open division. Members transferred to the employee classification will also become members of the open division, unless the Alternate Transfer Provision is adopted by the municipality. In the latter case, each transferring member is given a choice of entering the open division or a closed division within the employee classification (if there are still active members in the closed division, and the closed division is of the same type - defined benefit, hybrid, or defined contribution - as the division from which the member transferred).

There may also be one or more divisions within the employee classification that no longer accept new hires. These are generally referred to as closed divisions, but in some situations are linked to the open division with the new hires (for actuarial valuation purposes - see Linked Divisions below). Note that a division is also treated like a closed division if the division has no active members reported as of the valuation date.

Linked Divisions

The closed division funding policy described at the bottom of page 247 was adopted by the Retirement Board (Amortization Policy for Closed Divisions Within Open Municipalities, as revised by the Retirement Board on March 9, 2010). 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, transfers and rehires 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 2010, the approximate net investment return on average total assets at actuarial value (determined as the actuarial value of investment income divided by the average actuarial value of assets during the year) was 5.74%. The corresponding amounts for 2009, 2008, 2007 and 2006 were 5.30%, 4.73%, 8.12%, and 8.14%, respectively.

For the December 31, 2010 valuation, the actuarial value of assets is equal to 116.29% of market value (compared to 125.17%, 139.15%, 98.85%, and 98.62% in 2009, 2008, 2007, and 2006, respectively). This percentage is applied to each division's reported market value of assets to estimate the actuarial value of assets for the division. The chart on page 254 provides the details of the derivation of the actuarial value of assets for the retirement system in the aggregate.

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

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

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

Valuation Date December 31:	2001	2002	2003	2004	2005
1. Beginning of Year Assets					
a) Market Value	\$ 3,788,886,471	\$ 3,647,820,869	\$ 3,285,304,333	\$ 4,071,997,180	\$ 4,619,201,287
b) Valuation Assets	3,791,423,339	4,034,377,419	4,134,404,645	4,459,492,020	4,732,208,229
2. End of Year Market Value Assets	3,647,820,869	3,285,304,333	4,071,997,180	4,619,201,287	4,906,288,690
3. Net Additions to Market Value					
a) Net Contributions	154,103,475	167,427,558	223,450,393	223,057,268	277,589,524
b) Net Investment Income = (3d) - (3a) - (3c)	(93,269,286)	(324,926,459)	792,139,959	577,562,751	288,223,418
c) Benefit Payments	(201,899,791)	(205,017,635)	(228,897,505)	(253,415,912)	(278,725,539)
d) Total Additions to Market Value = (2) - (1a)	(141,065,602)	(362,516,536)	786,692,847	547,204,107	287,087,403
4. Average Valuation Assets = (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

Municipal Employees' Retirement System of Michigan
Derivation of Actuarial Value of Assets (cont.)

Valuation Date December 31:	2006	2007	2008	2009	2010
1. Beginning of Year Assets					
a) Market Value	\$ 4,906,288,690	\$ 5,590,042,317	\$ 6,071,046,914	\$ 4,512,260,955	\$ 5,276,645,338
b) Valuation Assets	5,039,071,709	5,512,924,466	6,001,040,078	6,278,731,673	6,604,608,397
2. End of Year Market Value Assets	5,590,042,317	6,071,046,914	4,512,260,955	5,276,645,338	5,971,593,444
3. Net Additions to Market Value					
a) Net Contributions	371,505,157	386,942,952	374,214,134	413,354,720	423,489,032
b) Net Investment Income = (3d) - (3a) - (3c)	622,409,716	442,377,206	(1,553,001,917)	771,066,207	733,059,352
c) Benefit Payments	(310,161,246)	(348,315,561)	(379,998,176)	(420,036,544)	(461,600,278)
d) Total Additions to Market Value = (2) - (1a)	683,753,627	481,004,597	(1,558,785,959)	764,384,383	694,948,106
4. Average Valuation Assets = (1b) + .5x[(3a) + (3c)]	5,069,743,665	5,532,238,162	5,998,148,057	6,275,390,761	6,585,552,774
5. Expected Income at Valuation Rate = 8% x (4)	405,579,493	442,579,053	479,851,845	502,031,261	526,844,222
6. Gain (Loss) = (3b) - (5)	216,830,223	(201,847)	(2,032,853,762)	269,034,946	206,215,130
7. Phased-In Recognition of Investment Return					
a) Current Year: 0.1 x (6)	21,683,022	(20,185)	(203,285,376)	26,903,495	20,621,513
b) First Prior Year	(14,753,669)	21,683,022	(20,185)	(203,285,376)	26,903,495
c) Second Prior Year		(14,753,669)	21,683,022	(20,185)	(203,285,376)
d) Third Prior Year			(14,753,669)	21,683,022	(20,185)
e) Fourth Prior Year				(14,753,669)	21,683,022
f) Fifth Prior Year					(14,753,669)
g) Sixth Prior Year					
h) Seventh Prior Year					
i) Eighth Prior Year					
j) Ninth Prior Year					
k) Total Recognized Investment Gain (Loss)	6,929,353	6,909,168	(196,376,208)	(169,472,713)	(148,851,200)
8. Change in Valuation Assets (3a) + (3c) + (5) + (7k)	473,852,757	488,115,612	277,691,595	325,876,724	339,881,776
9. End of Year Assets					
a) Market Value = (2)	5,590,042,317	6,071,046,914	4,512,260,955	5,276,645,338	5,971,593,444
b) Valuation Assets = (1b) + (8)	5,512,924,466	6,001,040,078	6,278,731,673	6,604,608,397	6,944,490,173
c) Difference Between Market & Valuation Assets	77,117,851	70,006,836	(1,766,470,718)	(1,327,963,059)	(972,896,729)
10. Recognized Rate of Return = [(5) + (7k)] / (4)	8.14%	8.12%	4.73%	5.30%	5.74%
11. Market Rate of Return	12.61%	7.89%	(25.59%)	17.10%	13.94%
12. Valuation Asset Adjustment Factor = (9b) / (9a)	0.986204	0.988469	1.391482	1.251668	1.162921

Municipal Employees' Retirement System of Michigan
Derivation of Actuarial Value of Assets (cont.)

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



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MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN

ANNUAL ACTUARIAL VALUATION REPORT

INGHAM COUNTY (3303)

DECEMBER 31, 2010