



Municipal Employees' Retirement System of Michigan

Ingham County (3303)

in the

MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM
OF MICHIGAN

Annual Actuarial Valuation as of December 31, 2001





GABRIEL, ROEDER, SMITH & COMPANY

Consultants & Actuaries

One Towne Square • Suite 800 • Southfield, Michigan 48076 • 248-799-9000 • 800-521-0498 • fax 248-799-9020

August 30, 2002

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, 2001. 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").

There are no material changes in actuarial assumptions or methods reflected in this valuation, with the following exceptions:

- Assets in excess of actuarial accrued liabilities (negative unfunded accrued liabilities) are amortized over a 10 year period, as explained on page 118.
- For divisions affected by the phase-in of new actuarial assumptions in the previous valuation (denoted with "Transition Assumptions" in the 2000 Valuation column of Table 1) this year's valuation reflects the ultimate uniform assumptions. However, the impact of the change in assumptions is phased in over a new three year period, instead of the remaining two year period. This results in a Minimum Required Contribution (Tables 15, 16 and 17) that is different from the Regular Contribution.

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

Sincerely,

GABRIEL , ROEDER , SMITH & COMPANY

Alan Sonnanstine, MAAA, ASA

Cathy Nagy, MAAA, FSA

Jim Koss, MAAA, ASA

TABLE OF CONTENTS

	Page
Table 1	Benefit Provisions Evaluated and/or Considered 2
Table 2	Membership Summary 7
Table 3	Active Members in the Valuation - Comparative Schedule 10
Table 4	Flow of Active Membership 10
Table 5	Vested Former Members in the Valuation - Comparative Schedule 11
Table 6	Flow of Vested Former Members 11
Table 7	Retirees and Beneficiaries in the Valuation - Comparative Schedule 12
Table 8	Flow of Retirees and Beneficiaries 12
Table 9	Retirees and Beneficiaries on the Rolls - by Type of Benefit 13
Table 10	Reported Assets (Market Value) 14
Table 11	Flow of Valuation Assets (Actuarial Value) 15
Table 12	Termination Liabilities and Present Value of Accrued Benefits 16
Table 13	Actuarial Accrued Liabilities and Valuation Assets 20
Table 14	Actuarial Accrued Liabilities - Comparative Schedule 28
Table 15	Computed Employer Contributions to the Retirement System 29
Table 16	Computed Employer Contributions by Division 31
Table 17	Computed Contributions - Comparative Statement by Division 32
Table 18	Flow of Active Membership by Division 33
Table 19	Flow of Vested Former Members by Division 33
Table 20	Flow of Retirees and Beneficiaries by Division 33
Table 21	Flow of Valuation Assets (Actuarial Value) by Division 33
Table 22	GASB 25 and GASB 27 Information 100
Appendix	Summary of MERS Provisions, Methods and Assumptions 101
	Introduction 102
	Summary of Plan Provisions 103
	Actuarial Assumptions 109
	Actuarial Funding Method 117
	Asset Valuation Method 120

Ingham County (3303)

Table 1

Benefit Provisions Evaluated and/or Considered

Division	2001 Valuation	2000 Valuation
1 - Confidential	B-3 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 E (2.0%) (01/01/1988) 4.50% Member Contrib.	B-3 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 E (2.0%) (01/01/1988) 4.50% Member Contrib.
2 - Sheriff FOP Spvs	3.20% - 80% Max Normal Ret Age: 60 V-10 F55(15) F/N(25) FAC-3 E (2.0%) (01/01/1988) 19.61% Member Contrib.	3.20% - 80% Max Normal Ret Age: 60 V-10 F55(15) F/N(25) FAC-3 E (2.0%) (01/01/1988) 19.61% Member Contrib.
4 - MCF	C-1 Old Normal Ret Age: 60 V-10 FAC-5 E (2.0%) (01/01/1995) 0.00% Member Contrib.	C-1 Old Normal Ret Age: 60 V-10 FAC-5 E (2.0%) (01/01/1995) 0.00% Member Contrib. Transition Assumptions
9 - Judges	B-3 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 0.00% Member Contrib.	B-3 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 0.00% Member Contrib.
10 - Gnrl Mgmt	B-3 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 E (2.0%) (01/01/1988) 5.00% Member Contrib.	B-3 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 E (2.0%) (01/01/1988) 5.00% Member Contrib.

Ingham County (3303)

Table 1 (continued)

Benefit Provisions Evaluated and/or Considered

Division	2001 Valuation	2000 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.	C-1 Old Normal Ret Age: 60 V-10 FAC-5 E (2.0%) (01/01/1994) 0.00% Member Contrib.
12 - Gnrl ICEA Profs	B-3 - 80% Max Normal Ret Age: 60 V-10 F55(15) FAC-5 E (2.0%) (01/01/1988) 6.08% Member Contrib.	B-3 - 80% Max Normal Ret Age: 60 V-10 F55(15) FAC-5 E (2.0%) (01/01/1988) 6.08% Member Contrib.
13 - Gnrl OPEIU Prob	B-3 - 80% Max Normal Ret Age: 60 V-10 F55(15) FAC-5 E (2.0%) (01/01/1988) 7.13% Member Contrib.	B-3 - 80% Max Normal Ret Age: 60 V-10 F55(15) FAC-5 E (2.0%) (01/01/1988) 7.13% Member Contrib.
14 - Gnrl TOPS UAW	B-3 - 80% Max Normal Ret Age: 60 V-10 F55(15) FAC-5 E (2.0%) (01/01/1988) 1.60% Member Contrib.	B-3 - 80% Max Normal Ret Age: 60 V-10 F55(15) FAC-5 E (2.0%) (01/01/1988) 4.85% Member Contrib.
15 - Animal Cntrl FOP	B-4 - 80% Max Normal Ret Age: 60 V-10 F50(25) F55(15) FAC-3 E-2 (2.5%) (01/01/2001) 14.28% Member Contrib.	B-4 - 80% Max Normal Ret Age: 60 V-10 F50(25) F55(15) FAC-3 E-2 (2.5%) (01/01/2001) 8.90% Member Contrib.

Ingham County (3303)

Table 1 (continued)

Benefit Provisions Evaluated and/or Considered

Division	2001 Valuation	2000 Valuation
16 - Gnrl Commsnrs	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-5 E (2.0%) (01/01/1988) 3.56% Member Contrib.	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-5 E (2.0%) (01/01/1988) 3.56% Member Contrib. Transition Assumptions
17 - ICEA Nurses	B-3 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-3 E-2 (2.5%) (07/01/1995) 11.87% Member Contrib.	B-3 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-3 E-2 (2.5%) (07/01/1995) 11.87% Member Contrib.
18 - ICEA Ct. Prof	B-3 - 80% Max Normal Ret Age: 60 V-10 F55(15) F/N(20) FAC-5 9.84% Member Contrib.	B-3 - 80% Max Normal Ret Age: 60 V-10 F55(15) F/N(20) FAC-5 9.84% Member Contrib.
19 - Cnstutnl Offcls	B-3 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 5.00% Member Contrib.	B-3 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 5.00% Member Contrib.
21 - FOP Shrf Deputies	3.20% - 80% Max Normal Ret Age: 60 V-10 F55(15) F/N(25) FAC-5 10.96% Member Contrib.	3.20% - 80% Max Normal Ret Age: 60 V-10 F50(25) F55(15) FAC-5 10.43% Member Contrib.

Ingham County (3303)

Table 1 (continued)

Benefit Provisions Evaluated and/or Considered

Division	2001 Valuation	2000 Valuation
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.	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. Transition Assumptions
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.	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.
42 - ICEA Unit 11	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-3 3.95% Member Contrib.	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-3 3.95% Member Contrib. Transition Assumptions
43 - ICEA Unit 1	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-5 3.50% Member Contrib.	C-2 (B-1 Base) Normal Ret Age: 60 V-6 F55(15) FAC-5 3.50% Member Contrib. Transition Assumptions
90 - Asst Pros Attnys	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 1.40% Member Contrib.	B-4 - 80% Max Normal Ret Age: 60 V-6 F55(15) FAC-5 1.40% Member Contrib.
91 - Parks Union Empl	B-3 - 80% Max Normal Ret Age: 60 V-10 FAC-5 0.00% Member Contrib.	B-3 - 80% Max Normal Ret Age: 60 V-10 FAC-5 0.00% Member Contrib.

Ingham County (3303)

Table 1 (continued)

Benefit Provisions Evaluated and/or Considered

Division	2001 Valuation	2000 Valuation
92 - Parks Non Union	B-4 - 80% Max Normal Ret Age: 60 V-10 F55(25) FAC-5 0.00% Member Contrib.	B-4 - 80% Max Normal Ret Age: 60 V-10 F55(25) FAC-5 0.00% Member Contrib.
93 - Lgl Rsrch Clerks	C-1 Old Normal Ret Age: 60 V-10 FAC-5 0.00% Member Contrib.	C-1 Old Normal Ret Age: 60 V-10 FAC-5 0.00% Member Contrib.

Ingham County (3303)

Table 2

Membership Summary

Division	2001 Valuation		2000 Valuation	
	Number	Annual Payroll*	Number	Annual Payroll*
1 - Confidential				
Active Members	34	\$ 1,238,366	33	\$ 1,167,155
Vested Former Members	13	65,169	42	
Retirees and Beneficiaries	37	169,678	37	
2 - Sheriff FOP Spvs				
Active Members	31	\$ 1,858,730	30	\$ 1,735,265
Vested Former Members	2	16,262	5	
Retirees and Beneficiaries	46	1,232,024	48	
4 - MCF				
Active Members	121	\$ 2,583,257	123	\$ 2,410,936
Vested Former Members	37	128,533	32	
Retirees and Beneficiaries	71	249,151	71	
9 - Judges				
Active Members	7	\$ 196,106	7	\$ 235,139
Vested Former Members	1	4,348	2	
Retirees and Beneficiaries	3	20,722	3	
10 - Gnrl Mgmt				
Active Members	80	\$ 5,215,460	73	\$ 4,632,650
Vested Former Members	20	228,041	14	
Retirees and Beneficiaries	44	752,492	43	
11 - Gnrl Library				
Active Members	0	\$ 0	23	\$ 718,540
Vested Former Members	31	233,523	8	
Retirees and Beneficiaries	20	95,499	20	
12 - Gnrl ICEA Profs				
Active Members	130	\$ 5,161,093	113	\$ 4,575,833
Vested Former Members	30	233,096	18	
Retirees and Beneficiaries	19	230,384	17	
13 - Gnrl OPEIU Prob				
Active Members	38	\$ 1,851,347	38	\$ 1,718,096
Vested Former Members	8	66,086	6	
Retirees and Beneficiaries	5	72,984	5	

Ingham County (3303)

Table 2 (continued)

Membership Summary

Division	2001 Valuation		2000 Valuation	
	Number	Annual Payroll*	Number	Annual Payroll*
14 - Gnrl TOPS UAW				
Active Members	374	\$ 10,692,631	374	\$ 10,401,805
Vested Former Members	61	321,304	48	
Retirees and Beneficiaries	149	1,205,706	138	
15 - Animal Cntrl FOP				
Active Members	9	\$ 326,170	10	\$ 330,848
Vested Former Members	1	6,172	1	
Retirees and Beneficiaries	2	15,550	2	
16 - Gnrl Commsnrs				
Active Members	10	\$ 133,143	5	\$ 63,395
Vested Former Members	5	10,786	5	
Retirees and Beneficiaries	5	17,888	5	
17 - ICEA Nurses				
Active Members	68	\$ 2,710,021	67	\$ 2,553,922
Vested Former Members	13	102,192	12	
Retirees and Beneficiaries	26	227,252	23	
18 - ICEA Ct. Prof				
Active Members	34	\$ 1,579,323	35	\$ 1,515,603
Vested Former Members	6	50,591	4	
Retirees and Beneficiaries	22	456,377	18	
19 - Cnstutnl Offcls				
Active Members	6	\$ 463,955	6	\$ 416,485
Vested Former Members	0	0	0	
Retirees and Beneficiaries	7	96,192	7	
21 - FOP Shrf Deputies				
Active Members	154	\$ 6,621,982	154	\$ 6,160,326
Vested Former Members	20	84,310	11	
Retirees and Beneficiaries	57	1,089,816	50	
40 - ICEA Unit 111				
Active Members	22	\$ 657,455	25	\$ 736,550
Vested Former Members	7	33,984	7	
Retirees and Beneficiaries	27	231,422	23	

Ingham County (3303)

Table 2 (continued)

Membership Summary

Division	2001 Valuation		2000 Valuation	
	Number	Annual Payroll*	Number	Annual Payroll*
41 - MCF Management				
Active Members	18	\$ 763,973	19	\$ 781,285
Vested Former Members	10	62,008	7	
Retirees and Beneficiaries	8	52,672	8	
42 - ICEA Unit 11				
Active Members	9	\$ 381,171	9	\$ 330,997
Vested Former Members	4	6,703	5	
Retirees and Beneficiaries	1	10,146	0	
43 - ICEA Unit 1				
Active Members	9	\$ 299,551	7	\$ 243,297
Vested Former Members	3	17,326	5	
Retirees and Beneficiaries	5	67,200	5	
90 - Asst Pros Attnys				
Active Members	30	\$ 1,626,502	29	\$ 1,681,667
Vested Former Members	14	200,072	4	
Retirees and Beneficiaries	5	97,627	4	
91 - Parks Union Empl				
Active Members	5	\$ 167,040	6	\$ 199,329
Vested Former Members	0	0	0	
Retirees and Beneficiaries	0	0	0	
92 - Parks Non Union				
Active Members	3	\$ 178,325	3	\$ 171,663
Vested Former Members	0	0	0	
Retirees and Beneficiaries	0	0	0	
93 - Lgl Rsrch Clerks				
Active Members	7	\$ 235,907	8	\$ 225,369
Vested Former Members	0	0	0	
Retirees and Beneficiaries	0	0	0	
Total Municipality				
Active Members	1199	\$ 44,941,508	1197	\$ 43,006,155
Vested Former Members	286	1,870,506	236	
Retirees and Beneficiaries	559	6,390,782	527	

* 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 Vesting Service
			Annual \$	% Increase			
1991	2,781	\$ 68,316,570	\$ 24,565	4.6%	39.1	7.4	
1992	1,197	31,954,624	26,696	8.7	41.0	9.0	
1993	1,191	32,835,580	27,569	3.3	41.8	9.4	
1994	1,214	34,660,368	28,550	3.6	42.1	9.5	
1995	1,210	35,260,750	29,141	2.1	41.9	9.7	
1996	1,222	36,804,795	30,118	3.4	42.1	9.7	
1997	1,198	37,104,777	30,972	2.8	42.3	9.9	
1998	1,161	40,831,800	35,169	13.6	42.5	10.0	
1999	1,183	41,422,262	35,014	(0.4)	42.7	9.8	
2000	1,197	43,006,155	35,928	2.6	42.7	9.6	
2001	1,199	44,941,508	37,482	4.3	42.8	9.4	9.6

Table 4

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		
2000									1197
2001	26	1		53	78	22	22	160	1199

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 Vesting Service
1991	152	\$			
1992	151				
1993	159				
1994	164				
1995	169				
1996	193				
1997	221				
1998	218				
1999	227				
2000	236				
2001	286	1,870,506	47.7	11.0	12.5

Table 6

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		
2000								236
2001	10			15	39	39	75	286

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		
1991		\$		\$	468	\$ 2,120,236	5.9	3.1%
1992					290	1,474,281	4.1	4.6
1993					312	1,822,113	3.8	5.5
1994					327	2,222,789	3.7	6.4
1995					367	2,727,135	3.3	7.7
1996					392	3,118,939	3.1	8.5
1997					429	3,711,946	2.8	10.0
1998					462	4,564,053	2.5	11.2
1999					494	5,152,654	2.4	12.4
2000					527	5,812,070	2.3	13.5
2001	500	6,045,922	59	344,860	559	6,390,782	2.1	14.2

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
1991	35	\$ 248,019	\$	8	\$ 47,293	\$	468	\$ 2,120,236
1992	20	200,120		198	846,075		290	1,474,281
1993	35	422,897		13	75,065		312	1,822,113
1994	27	439,064		12	38,388		327	2,222,789
1995	47	544,633		7	40,287		367	2,727,135
1996	33	440,912		8	49,108		392	3,118,939
1997	45	656,395		8	63,389		429	3,711,946
1998	44	921,125		11	69,017		462	4,564,053
1999	47	709,648		15	121,047		494	5,152,654
2000	42	741,352		9	81,935		527	5,812,070
2001	43	639,794	4,432	10	49,884	15,636	559	6,390,782

@ 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.

Note: Participant flow in 2001 may not add due to adjustments in 2000 data.

Ingham County (3303)

Table 9

Retirees and Beneficiaries on the Rolls as of December 31, 2001

Distribution by Type of Benefit Being Paid

Benefits Being Paid to:	Annual Benefits	
	Number	Amount
Age and service retirants	476	\$5,872,503
Non-duty disability retirants	21	162,823
Duty disability retirants	3	10,596
Beneficiaries of deceased retirants	35	203,467
Beneficiaries of deceased members:		
Non-duty death	23	122,238
Duty death	<u>1</u>	<u>19,155</u>
Total Benefits Being Paid	559	\$6,390,782

Ingham County (3303)

Table 10

Reported Assets (Market Value)

Division	2001 Valuation		2000 Valuation	
	Employer And Retiree*	Employee#	Employer And Retiree*	Employee#
01 - Confidential	\$ 3,331,811	\$ 420,308	\$ 4,004,897	\$ 456,855
02 - Sheriff FOP Spvs	10,411,055	2,093,046	11,580,033	1,695,341
04 - MCF	3,742,936	57,866	3,960,627	55,081
09 - Judges	422,715	16,167	711,861	6,813
10 - Gnrl Mgmt	14,841,654	2,178,529	15,507,238	1,836,305
11 - Gnrl Library	1,843,289	127,677	1,911,499	128,740
12 - Gnrl ICEA Profs	7,089,021	1,878,711	7,035,706	1,551,368
13 - Gnrl OPEIU Prob	4,377,859	872,617	4,393,160	698,434
14 - Gnrl TOPS UAW	22,606,900	3,085,476	23,417,834	3,058,963
15 - Animal Cntrl FOP	559,637	165,977	558,152	111,259
16 - Gnrl Commsnrs	222,890	41,556	236,801	45,559
17 - ICEA Nurses	5,005,286	1,261,590	5,166,781	962,688
18 - ICEA Ct. Prof	4,451,287	922,191	4,541,094	827,370
19 - Cnstutnl Offcls	1,187,017	198,088	1,225,839	242,386
21 - FOP Shrf Deputies	13,930,284	3,490,503	14,613,714	2,995,888
40 - ICEA Unit 111	2,567,322	172,334	2,821,596	183,320
41 - MCF Management	1,055,267	54,847	1,057,765	52,362
42 - ICEA Unit 11	217,741	86,209	210,672	71,203
43 - ICEA Unit 1	444,656	86,468	494,758	84,575
90 - Asst Pros Attnys	3,807,478	211,637	3,739,449	183,244
91 - Parks Union Empl	94,276	0	135,109	1,760
92 - Parks Non Union	551,396	50,303	545,974	48,368
93 - Lgl Rsrch Clerks	72,588	0	57,415	0
Total Municipality	\$102,834,365	\$ 17,472,100	\$107,927,974	\$ 15,297,884
Combined Reserves	\$120,306,465		\$123,225,858	

* Reserve for Employer Contributions and Benefit Payments

Reserve for Employee Contributions

The December 31, 2001 Valuation Assets are equal to 1.105969 times the reported Market Value of assets. The derivation of Valuation Assets is described on page 120.

Ingham County (3303)

Table 11

Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer		Balance
	Employer	Member				Out	In	
2000	\$	\$	\$	\$	\$	\$	\$	\$
2001	3,969,561	2,669,220	9,655,853	(6,165,634)	(498,267)	(1,154,895)	1,270,971	123,308,412 133,055,221

Ingham County (3303)

Table 12

Termination Liability and Present Value of Accrued Benefits as of December 31, 2001

Termination Liability*	Division	PVAB* Present Value of Accrued Benefits	Valuation Assets	PVAB Percent Funded	Unfunded (Overfunded) PVAB
\$ 2,288,095 365,826 <u>1,444,944</u> \$ 4,098,865	01 - Confidential Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 1,892,279 365,826 <u>1,444,944</u> \$ 3,703,049	\$ 4,149,727	112.1%	\$ (446,678)
\$ 4,112,668 163,857 <u>13,774,733</u> \$ 18,051,258	02 - Sheriff FOP Spvs Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 5,031,230 163,857 <u>13,774,733</u> \$ 18,969,820	\$ 13,829,148	72.9%	\$ 5,140,672
\$ 1,271,931 604,111 <u>2,093,346</u> \$ 3,969,388	04 - MCF Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 1,241,765 604,111 <u>2,093,346</u> \$ 3,939,222	\$ 4,203,569	106.7%	\$ (264,347)
\$ 585,308 44,111 <u>195,543</u> \$ 824,962	09 - Judges Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 447,402 44,111 <u>195,543</u> \$ 687,056	\$ 485,390	70.6%	\$ 201,666
\$ 11,849,690 1,490,186 <u>7,119,642</u> \$ 20,459,518	10 - Gnrl Mgmt Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 9,427,002 1,490,186 <u>7,119,642</u> \$ 18,036,830	\$ 18,823,795	104.4%	\$ (786,965)
\$ 0 1,398,844 <u>904,374</u> \$ 2,303,218	11 - Gnrl Library Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 0 1,398,844 <u>904,374</u> \$ 2,303,218	\$ 2,179,827	94.6%	\$ 123,391
\$ 6,106,044 1,173,573 <u>2,091,926</u> \$ 9,371,543	12 - Gnrl ICEA Profs Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 5,381,690 1,173,573 <u>2,091,926</u> \$ 8,647,189	\$ 9,918,034	114.7%	\$ (1,270,845)

Ingham County (3303)

Table 12 (continued)

Termination Liability and Present Value of Accrued Benefits as of December 31, 2001

Termination Liability*	Division	PVAB* Present Value of Accrued Benefits	Valuation Assets	PVAB Percent Funded	Unfunded (Overfunded) PVAB
\$ 4,995,209 456,938 <u>796,951</u> \$ 6,249,098	13 - Gnrl OPEIU Prob Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 3,929,476 456,938 <u>796,951</u> \$ 5,183,365	\$ 5,806,864	112.0%	\$ (623,499)
\$ 12,346,374 1,730,157 <u>11,115,824</u> \$ 25,192,355	14 - Gnrl TOPS UAW Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 10,831,128 1,730,157 <u>11,115,824</u> \$ 23,677,109	\$ 28,414,971	120.0%	\$ (4,737,862)
\$ 782,150 79,288 <u>156,583</u> \$ 1,018,021	15 - Animal Cntrl FOP Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 775,229 79,288 <u>156,583</u> \$ 1,011,100	\$ 802,507	79.4%	\$ 208,593
\$ 80,268 55,247 <u>141,480</u> \$ 276,995	16 - Gnrl Commsnrs Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 64,971 55,247 <u>141,480</u> \$ 261,698	\$ 292,469	111.8%	\$ (30,771)
\$ 4,530,743 886,180 <u>2,470,484</u> \$ 7,887,407	17 - ICEA Nurses Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 3,883,585 886,180 <u>2,470,484</u> \$ 7,240,249	\$ 6,930,971	95.7%	\$ 309,278
\$ 2,740,352 265,376 <u>4,704,516</u> \$ 7,710,244	18 - ICEA Ct. Prof Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 2,498,109 265,376 <u>4,704,516</u> \$ 7,468,001	\$ 5,942,900	79.6%	\$ 1,525,101
\$ 756,478 0 <u>777,804</u> \$ 1,534,282	19 - Cnstutnl Offcls Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 622,935 0 <u>777,804</u> \$ 1,400,739	\$ 1,531,883	109.4%	\$ (131,144)

Ingham County (3303)

Table 12 (continued)

Termination Liability and Present Value of Accrued Benefits as of December 31, 2001

Termination Liability*	Division	PVAB* Present Value of Accrued Benefits	Valuation Assets	PVAB Percent Funded	Unfunded (Overfunded) PVAB
\$ 6,810,836 445,862 <u>11,466,784</u> \$ 18,723,482	21 - FOP Shrf Deputies Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 7,504,915 445,862 <u>11,466,784</u> \$ 19,417,561	\$ 19,266,850	99.2%	\$ 150,711
\$ 436,040 166,865 <u>2,100,392</u> \$ 2,703,297	40 - ICEA Unit 111 Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 389,975 166,865 <u>2,100,392</u> \$ 2,657,232	\$ 3,029,975	114.0%	\$ (372,743)
\$ 200,095 229,178 <u>452,161</u> \$ 881,434	41 - MCF Management Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 223,099 229,178 <u>452,161</u> \$ 904,438	\$ 1,227,752	135.7%	\$ (323,314)
\$ 162,776 29,204 <u>100,794</u> \$ 292,774	42 - ICEA Unit 11 Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 183,489 29,204 <u>100,794</u> \$ 313,487	\$ 336,159	107.2%	\$ (22,672)
\$ 171,430 45,734 <u>626,721</u> \$ 843,885	43 - ICEA Unit 1 Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 153,405 45,734 <u>626,721</u> \$ 825,860	\$ 587,407	71.1%	\$ 238,453
\$ 2,597,331 1,010,157 <u>1,042,615</u> \$ 4,650,103	90 - Asst Pros Attnys Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 2,177,159 1,010,157 <u>1,042,615</u> \$ 4,229,931	\$ 4,445,017	105.1%	\$ (215,086)
\$ 61,607 0 <u>0</u> \$ 61,607	91 - Parks Union Empl Active Members Vested Former Members Retirees and Beneficiaries Total	\$ 70,195 0 <u>0</u> \$ 70,195	\$ 104,266	148.5%	\$ (34,071)

Ingham County (3303)

Table 12 (continued)

Termination Liability and Present Value of Accrued Benefits as of December 31, 2001

Termination Liability*	Division	PVAB* Present Value of Accrued Benefits	Valuation Assets	PVAB Percent Funded	Unfunded (Overfunded) PVAB
\$ 775,118	92 - Parks Non Union				
0	Active Members	\$ 587,318			
<u>0</u>	Vested Former Members	0			
\$ 775,118	Retirees and Beneficiaries	<u>0</u>			
	Total	\$ 587,318	\$ 665,460	113.3%	\$ (78,142)
\$ 95,092	93 - Lgl Rsrch Clerks				
0	Active Members	\$ 77,686			
<u>0</u>	Vested Former Members	0			
\$ 95,092	Retirees and Beneficiaries	<u>0</u>			
	Total	\$ 77,686	\$ 80,280	103.3%	\$ (2,594)
\$ 63,755,635	Total Municipality				
10,640,694	Active Members	\$ 57,394,042			
<u>63,577,617</u>	Vested Former Members	10,640,694			
\$ 137,973,946	Retirees and Beneficiaries	<u>63,577,617</u>			
	Total	\$ 131,612,353	\$ 133,055,221	101.1%	\$ (1,442,868)

* The Termination Liability represents the present value of benefits payable in the event that all active members terminate employment on December 31, 2001, based upon the valuation interest and mortality assumptions. The present value of accrued benefits (PVAB) includes vested and non-vested benefits accrued as of December 31, 2001. For a non-vested active member, the PVAB represents the present value of the non-vested accrued benefit, and may exceed the Termination Liability which represents for that member only the member's accumulated contributions, if any. For some vested active members the Termination Liability may exceed the PVAB, because the Termination Liability assumes that members retire at the earliest possible age for commencement of unreduced deferred benefits, whereas the PVAB assumes continued employment based on actuarial assumptions for retirement, death, disability and withdrawal.

Ingham County (3303)

Table 13

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2001

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
01 -Confidentials				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 2,745,213	\$ 1,978,593	72.1%	\$ 766,620
Vested Former Members	316,930	316,930	100.0	0
Retirees and Beneficiaries	<u>1,444,944</u>	<u>1,444,944</u>	100.0	<u>0</u>
Total	\$ 4,507,087	\$ 3,740,467	83.0%	\$ 766,620
Reserve for Employee Contributions				
Active Members	\$ 360,364	\$ 360,364		
Vested Former Members	<u>48,896</u>	<u>48,896</u>		
Total	\$ 409,260	\$ 409,260	100.0%	\$ 0
Division Total	\$ 4,916,347	\$ 4,149,727	84.4%	\$ 766,620
02 -Sheriff FOP Spvs				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 5,488,747	\$ 0	0.0%	\$ 5,488,747
Vested Former Members	137,066	0	0.0	137,066
Retirees and Beneficiaries	<u>13,774,733</u>	<u>11,762,918</u>	85.4	<u>2,011,815</u>
Total	\$ 19,400,546	\$ 11,762,918	60.6%	\$ 7,637,628
Reserve for Employee Contributions				
Active Members	\$ 2,039,439	\$ 2,039,439		
Vested Former Members	<u>26,791</u>	<u>26,791</u>		
Total	\$ 2,066,230	\$ 2,066,230	100.0%	\$ 0
Division Total	\$ 21,466,776	\$ 13,829,148	64.4%	\$ 7,637,628
04 -MCF				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 2,455,053	\$ 1,471,822	60.0%	\$ 983,231
Vested Former Members	588,717	588,717	100.0	0
Retirees and Beneficiaries	<u>2,093,346</u>	<u>2,093,346</u>	100.0	<u>0</u>
Total	\$ 5,137,116	\$ 4,153,885	80.9%	\$ 983,231
Reserve for Employee Contributions				
Active Members	\$ 34,290	\$ 34,290		
Vested Former Members	<u>15,394</u>	<u>15,394</u>		
Total	\$ 49,684	\$ 49,684	100.0%	\$ 0
Division Total	\$ 5,186,800	\$ 4,203,569	81.0%	\$ 983,231

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2001

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
09 - Judges				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 571,380	\$ 241,534	42.3%	\$ 329,846
Vested Former Members	32,146	32,146	100.0	0
Retirees and Beneficiaries	<u>195,543</u>	<u>195,543</u>	100.0	<u>0</u>
Total	\$ 799,069	\$ 469,223	58.7%	\$ 329,846
Reserve for Employee Contributions				
Active Members	\$ 4,202	\$ 4,202		
Vested Former Members	<u>11,965</u>	<u>11,965</u>		
Total	\$ 16,167	\$ 16,167	100.0%	\$ 0
Division Total	\$ 815,236	\$ 485,390	59.5%	\$ 329,846
10 - Gnrl Mgmt				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 11,866,064	\$ 8,311,302	70.0%	\$ 3,554,762
Vested Former Members	1,250,892	1,250,892	100.0	0
Retirees and Beneficiaries	<u>7,119,642</u>	<u>7,119,642</u>	100.0	<u>0</u>
Total	\$ 20,236,598	\$ 16,681,836	82.4%	\$ 3,554,762
Reserve for Employee Contributions				
Active Members	\$ 1,902,665	\$ 1,902,665		
Vested Former Members	<u>239,294</u>	<u>239,294</u>		
Total	\$ 2,141,959	\$ 2,141,959	100.0%	\$ 0
Division Total	\$ 22,378,557	\$ 18,823,795	84.1%	\$ 3,554,762
11 - Gnrl Library				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 0	\$ 0	0.0%	\$ 0
Vested Former Members	1,271,167	1,147,776	90.3	123,391
Retirees and Beneficiaries	<u>904,374</u>	<u>904,374</u>	100.0	<u>0</u>
Total	\$ 2,175,541	\$ 2,052,150	94.3%	\$ 123,391
Reserve for Employee Contributions				
Active Members	\$ 0	\$ 0		
Vested Former Members	<u>127,677</u>	<u>127,677</u>		
Total	\$ 127,677	\$ 127,677	100.0%	\$ 0
Division Total	\$ 2,303,218	\$ 2,179,827	94.6%	\$ 123,391

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2001

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	\$ 7,339,505	\$ 5,060,367	68.9%	\$ 2,279,138
Vested Former Members	986,447	986,447	100.0	0
Retirees and Beneficiaries	<u>2,091,926</u>	<u>2,091,926</u>	100.0	<u>0</u>
Total	\$ 10,417,878	\$ 8,138,740	78.1%	\$ 2,279,138
Reserve for Employee Contributions				
Active Members	\$ 1,592,168	\$ 1,592,168		
Vested Former Members	<u>187,126</u>	<u>187,126</u>		
Total	\$ 1,779,294	\$ 1,779,294	100.0%	\$ 0
Division Total	\$ 12,197,172	\$ 9,918,034	81.3%	\$ 2,279,138
13 - Gnrl OPEIU Prob				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 5,190,675	\$ 3,720,480	71.7%	\$ 1,470,195
Vested Former Members	416,817	416,817	100.0	0
Retirees and Beneficiaries	<u>796,951</u>	<u>796,951</u>	100.0	<u>0</u>
Total	\$ 6,404,443	\$ 4,934,248	77.0%	\$ 1,470,195
Reserve for Employee Contributions				
Active Members	\$ 832,495	\$ 832,495		
Vested Former Members	<u>40,121</u>	<u>40,121</u>		
Total	\$ 872,616	\$ 872,616	100.0%	\$ 0
Division Total	\$ 7,277,059	\$ 5,806,864	79.8%	\$ 1,470,195
14 - Gnrl TOPS UAW				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 16,394,376	\$ 12,882,464	78.6%	\$ 3,511,912
Vested Former Members	1,469,308	1,469,308	100.0	0
Retirees and Beneficiaries	<u>11,115,824</u>	<u>11,115,824</u>	100.0	<u>0</u>
Total	\$ 28,979,508	\$ 25,467,596	87.9%	\$ 3,511,912
Reserve for Employee Contributions				
Active Members	\$ 2,686,526	\$ 2,686,526		
Vested Former Members	<u>260,849</u>	<u>260,849</u>		
Total	\$ 2,947,375	\$ 2,947,375	100.0%	\$ 0
Division Total	\$ 31,926,883	\$ 28,414,971	89.0%	\$ 3,511,912

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2001

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	\$ 1,144,825	\$ 410,741	35.9%	\$ 734,084
Vested Former Members	78,323	78,323	100.0	0
Retirees and Beneficiaries	<u>156,583</u>	<u>156,583</u>	100.0	<u>0</u>
Total	\$ 1,379,731	\$ 645,647	46.8%	\$ 734,084
Reserve for Employee Contributions				
Active Members	\$ 155,895	\$ 155,895		
Vested Former Members	<u>965</u>	<u>965</u>		
Total	\$ 156,860	\$ 156,860	100.0%	\$ 0
Division Total	\$ 1,536,591	\$ 802,507	52.2%	\$ 734,084
16 - Gnrl Commsnrs				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 88,985	\$ 72,856	81.9%	\$ 16,129
Vested Former Members	46,596	46,596	100.0	0
Retirees and Beneficiaries	<u>141,480</u>	<u>141,480</u>	100.0	<u>0</u>
Total	\$ 277,061	\$ 260,932	94.2%	\$ 16,129
Reserve for Employee Contributions				
Active Members	\$ 22,886	\$ 22,886		
Vested Former Members	<u>8,651</u>	<u>8,651</u>		
Total	\$ 31,537	\$ 31,537	100.0%	\$ 0
Division Total	\$ 308,598	\$ 292,469	94.8%	\$ 16,129
17 - ICEA Nurses				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 4,404,955	\$ 2,419,330	54.9%	\$ 1,985,625
Vested Former Members	808,334	808,334	100.0	0
Retirees and Beneficiaries	<u>2,470,484</u>	<u>2,470,484</u>	100.0	<u>0</u>
Total	\$ 7,683,773	\$ 5,698,148	74.2%	\$ 1,985,625
Reserve for Employee Contributions				
Active Members	\$ 1,154,977	\$ 1,154,977		
Vested Former Members	<u>77,846</u>	<u>77,846</u>		
Total	\$ 1,232,823	\$ 1,232,823	100.0%	\$ 0
Division Total	\$ 8,916,596	\$ 6,930,971	77.7%	\$ 1,985,625

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2001

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	\$ 2,565,736	\$ 182,295	7.1%	\$ 2,383,441
Vested Former Members	204,332	204,332	100.0	0
Retirees and Beneficiaries	<u>4,704,516</u>	<u>4,704,516</u>	100.0	<u>0</u>
Total	\$ 7,474,584	\$ 5,091,143	68.1%	\$ 2,383,441
Reserve for Employee Contributions				
Active Members	\$ 790,713	\$ 790,713		
Vested Former Members	<u>61,044</u>	<u>61,044</u>		
Total	\$ 851,757	\$ 851,757	100.0%	\$ 0
Division Total	\$ 8,326,341	\$ 5,942,900	71.4%	\$ 2,383,441
19 -Cnstutnl Offcls				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 708,939	\$ 555,990	78.4%	\$ 152,949
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	<u>777,804</u>	<u>777,804</u>	100.0	<u>0</u>
Total	\$ 1,486,743	\$ 1,333,794	89.7%	\$ 152,949
Reserve for Employee Contributions				
Active Members	\$ 198,089	\$ 198,089		
Vested Former Members	<u>0</u>	<u>0</u>		
Total	\$ 198,089	\$ 198,089	100.0%	\$ 0
Division Total	\$ 1,684,832	\$ 1,531,883	90.9%	\$ 152,949
21 -FOP Shrf Deputies				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 8,851,372	\$ 3,992,639	45.1%	\$ 4,858,733
Vested Former Members	342,253	342,253	100.0	0
Retirees and Beneficiaries	<u>11,466,784</u>	<u>11,466,784</u>	100.0	<u>0</u>
Total	\$ 20,660,409	\$ 15,801,676	76.5%	\$ 4,858,733
Reserve for Employee Contributions				
Active Members	\$ 3,361,565	\$ 3,361,565		
Vested Former Members	<u>103,609</u>	<u>103,609</u>		
Total	\$ 3,465,174	\$ 3,465,174	100.0%	\$ 0
Division Total	\$ 24,125,583	\$ 19,266,850	79.9%	\$ 4,858,733

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2001

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	\$ 545,702	\$ 656,803	120.4%	\$ (111,101)
Vested Former Members	130,981	130,981	100.0	0
Retirees and Beneficiaries	<u>2,100,392</u>	<u>2,100,392</u>	100.0	<u>0</u>
Total	\$ 2,777,075	\$ 2,888,176	104.0%	\$ (111,101)
Reserve for Employee Contributions				
Active Members	\$ 105,915	\$ 105,915		
Vested Former Members	<u>35,884</u>	<u>35,884</u>		
Total	\$ 141,799	\$ 141,799	100.0%	\$ 0
Division Total	\$ 2,918,874	\$ 3,029,975	103.8%	\$ (111,101)
41 -MCF Management				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 471,939	\$ 527,513	111.8%	\$ (55,574)
Vested Former Members	194,133	194,133	100.0	0
Retirees and Beneficiaries	<u>452,161</u>	<u>452,161</u>	100.0	<u>0</u>
Total	\$ 1,118,233	\$ 1,173,807	105.0%	\$ (55,574)
Reserve for Employee Contributions				
Active Members	\$ 18,900	\$ 18,900		
Vested Former Members	<u>35,045</u>	<u>35,045</u>		
Total	\$ 53,945	\$ 53,945	100.0%	\$ 0
Division Total	\$ 1,172,178	\$ 1,227,752	104.7%	\$ (55,574)
42 -ICEA Unit 11				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 272,641	\$ 150,731	55.3%	\$ 121,910
Vested Former Members	21,345	21,345	100.0	0
Retirees and Beneficiaries	<u>100,794</u>	<u>100,794</u>	100.0	<u>0</u>
Total	\$ 394,780	\$ 272,870	69.1%	\$ 121,910
Reserve for Employee Contributions				
Active Members	\$ 55,430	\$ 55,430		
Vested Former Members	<u>7,859</u>	<u>7,859</u>		
Total	\$ 63,289	\$ 63,289	100.0%	\$ 0
Division Total	\$ 458,069	\$ 336,159	73.4%	\$ 121,910

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2001

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	\$ 239,625	\$ 0	0.0%	\$ 239,625
Vested Former Members	19,656	0	0.0	19,656
Retirees and Beneficiaries	<u>626,721</u>	<u>512,008</u>	81.7	<u>114,713</u>
Total	\$ 886,002	\$ 512,008	57.8%	\$ 373,994
Reserve for Employee Contributions				
Active Members	\$ 49,321	\$ 49,321		
Vested Former Members	<u>26,078</u>	<u>26,078</u>		
Total	\$ 75,399	\$ 75,399	100.0%	\$ 0
Division Total	\$ 961,401	\$ 587,407	61.1%	\$ 373,994
90 -Asst Pros Attnys				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 3,416,857	\$ 2,232,157	65.3%	\$ 1,184,700
Vested Former Members	959,994	959,994	100.0	0
Retirees and Beneficiaries	<u>1,042,615</u>	<u>1,042,615</u>	100.0	<u>0</u>
Total	\$ 5,419,466	\$ 4,234,766	78.1%	\$ 1,184,700
Reserve for Employee Contributions				
Active Members	\$ 160,088	\$ 160,088		
Vested Former Members	<u>50,163</u>	<u>50,163</u>		
Total	\$ 210,251	\$ 210,251	100.0%	\$ 0
Division Total	\$ 5,629,717	\$ 4,445,017	79.0%	\$ 1,184,700
91 -Parks Union Empl				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 179,060	\$ 104,266	58.2%	\$ 74,794
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	<u>0</u>	<u>0</u>	0.0	<u>0</u>
Total	\$ 179,060	\$ 104,266	58.2%	\$ 74,794
Reserve for Employee Contributions				
Active Members	\$ 0	\$ 0		
Vested Former Members	<u>0</u>	<u>0</u>		
Total	\$ 0	\$ 0	0.0%	\$ 0
Division Total	\$ 179,060	\$ 104,266	58.2%	\$ 74,794

Ingham County (3303)

Table 13 (continued)

Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2001

Division	Actuarial Accrued Liabilities	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
92 -Parks Non Union				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 800,920	\$ 615,158	76.8%	\$ 185,762
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	0	0	0.0	0
Total	\$ 800,920	\$ 615,158	76.8%	\$ 185,762
Reserve for Employee Contributions				
Active Members	\$ 50,302	\$ 50,302		
Vested Former Members	0	0		
Total	\$ 50,302	\$ 50,302	100.0%	\$ 0
Division Total	\$ 851,222	\$ 665,460	78.2%	\$ 185,762
93 -Lgl Rsrch Clerks				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 107,904	\$ 80,280	74.4%	\$ 27,624
Vested Former Members	0	0	0.0	0
Retirees and Beneficiaries	0	0	0.0	0
Total	\$ 107,904	\$ 80,280	74.4%	\$ 27,624
Reserve for Employee Contributions				
Active Members	\$ 0	\$ 0		
Vested Former Members	0	0		
Total	\$ 0	\$ 0	0.0%	\$ 0
Division Total	\$ 107,904	\$ 80,280	74.4%	\$ 27,624
Municipality Totals				
Reserve for Employer Contributions and Benefit Payments				
Active Members	\$ 75,850,473	\$ 45,667,321	60.2%	\$ 30,183,152
Vested Former Members	9,275,437	8,995,324	97.0	280,113
Retirees and Beneficiaries	<u>63,577,617</u>	<u>61,451,089</u>	96.7	<u>2,126,528</u>
Total	\$ 148,703,527	\$ 116,113,734	78.1%	\$ 32,589,793
Reserve for Employee Contributions				
Active Members	\$ 15,576,230	\$ 15,576,230		
Vested Former Members	<u>1,365,257</u>	<u>1,365,257</u>		
Total	\$ 16,941,487	\$ 16,941,487	100.0%	\$ 0
Municipality Total	\$ 165,645,014	\$ 133,055,221	80.3%	\$ 32,589,793

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
1987	\$ 39,645,235	\$ 54,072,938	136%	\$(14,427,703)	0%
1988	44,776,267	57,889,961	129	(13,113,694)	0
1989	52,525,297	64,949,909	124	(12,424,612)	0
1990	61,520,840	71,084,865	116	(9,564,025)	0
1991	69,567,734	79,736,359	115	(10,168,625)	0
1992	47,237,433	50,968,120	108	(3,730,687)	0
1993	66,392,574	52,687,283	79	13,705,291	42
1994	82,445,154	56,238,777	68	26,206,377	76
1995	91,267,612	62,529,929	69	28,737,683	82
1996	100,596,375	70,095,587	70	30,500,788	83
1997	113,279,199	83,334,248	74	29,944,951	81
1998	129,697,752	95,427,165	74	34,270,587	84
1999	137,512,089	111,156,340	81	26,355,749	64
2000	152,754,990	123,308,414	81	29,446,576	68
2001	165,645,014	133,055,221	80	32,589,793	73

Notes: Actuarial assumptions were revised for the 1993, 1997 and 2000 actuarial valuations. The funding method was changed to entry age normal for the 1993 valuation.

Ingham County (3303)

Table 15

Computed Employer Contributions to the Retirement System

For the Fiscal Year Beginning January 1, 2003

Division	Employer Contributions @			
	Normal Cost	Unfunded Accrued Liability #	Total Regular Employer Contribution	Minimum Required Contribution
Percentage of Payroll				
01 - Confidential	5.62%	3.32%	8.94%	8.94%
02 - Sheriff FOP Spvs	(1.97)	22.04	20.07	20.07
04 - MCF	5.63	2.04	7.67	6.60
09 - Judges	10.78	9.02	19.80	19.80
10 - Gnrl Mgmt	5.61	3.66	9.27	9.27
11 - Gnrl Library	-	-	-	-
12 - Gnrl ICEA Profs	4.61	2.37	6.98	6.98
13 - Gnrl OPEIU Prob	2.65	4.26	6.91	6.91
14 - Gnrl TOPS UAW	8.07	1.76	9.83	9.83
15 - Animal Cntrl FOP	0.67	12.07	12.74	12.74
16 - Gnrl Commsnrs	5.37	0.65	6.02	4.51
17 - ICEA Nurses	4.47	3.93	8.40	8.40
18 - ICEA Ct. Prof	2.90	8.09	10.99	10.99
19 - Cnstutnl Offcls	6.55	1.77	8.32	8.32
21 - FOP Shrf Deputies	4.60	3.94	8.54	8.54
40 - ICEA Unit 111	5.90	(2.03)	3.87	3.87
41 - MCF Management	9.01	(0.87)	8.14	8.14
42 - ICEA Unit 11	6.95	1.72	8.67	8.22
43 - ICEA Unit 1	5.75	6.70	12.45	11.63
90 - Asst Pros Attnys	9.76	3.91	13.67	13.67
91 - Parks Union Empl	8.90	2.40	11.30	11.30
92 - Parks Non Union	7.10	5.59	12.69	12.69
93 - Lgl Rsrch Clerks	7.05	0.63	7.68	7.68

Ingham County (3303)

Table 15 (continued)

Computed Employer Contributions to the Retirement System

For the Fiscal Year Beginning January 1, 2003

Division	Employer Contributions @			
	Normal Cost	Unfunded Accrued Liability #	Total Regular Employer Contribution	Minimum Required Contribution
Estimated Monthly Contribution*				
01 - Confidential	\$ 5,800	\$ 3,426	\$ 9,226	\$ 9,226
02 - Sheriff FOP Spvs	(3,051)	34,139	31,088	31,088
04 - MCF	12,120	4,392	16,512	14,209
09 - Judges	1,762	1,474	3,236	3,236
10 - Gnrl Mgmt	24,382	15,907	40,289	40,289
11 - Gnrl Library	0	551	551	551
12 - Gnrl ICEA Profs	19,827	10,193	30,020	30,020
13 - Gnrl OPEIU Prob	4,088	6,572	10,660	10,660
14 - Gnrl TOPS UAW	71,908	15,683	87,591	87,591
15 - Animal Cntrl FOP	182	3,281	3,463	3,463
16 - Gnrl Commsnrs	596	72	668	500
17 - ICEA Nurses	10,095	8,875	18,970	18,970
18 - ICEA Ct. Prof	3,817	10,647	14,464	14,464
19 - Cnstutnl Offcls	2,532	684	3,216	3,216
21 - FOP Shrf Deputies	25,384	21,742	47,126	47,126
40 - ICEA Unit 111	3,232	(1,113)	2,119	2,119
41 - MCF Management	5,736	(554)	5,182	5,182
42 - ICEA Unit 11	2,208	546	2,754	2,611
43 - ICEA Unit 1	1,435	1,672	3,107	2,902
90 - Asst Pros Attnys	13,229	5,300	18,529	18,529
91 - Parks Union Empl	1,239	334	1,573	1,573
92 - Parks Non Union	1,055	831	1,886	1,886
93 - Lgl Rsrch Clerks	1,386	124	1,510	1,510
Total Municipality	\$ 208,962	\$ 144,778	\$ 353,740	\$ 350,921
Estimated Annual Contribution*				
Total Municipality	\$ 2,507,544	\$1,737,336	\$ 4,244,880	\$ 4,211,052

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

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

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

Ingham County (3303)
Division 01 - Confidential

Table 16A

Computed Employer Contributions to the Retirement System
For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	5.62%	\$5,800
Amortization of Unfunded Accrued Liability (30 years)	<u>3.32</u>	<u>3,426</u>
Total Long Term Contribution	8.94	9,226
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	8.94	9,226
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	8.94%	\$9,226

@ The above Employer contribution requirement is based on Member contributions of 4.50% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 30 year amortization) will decrease/increase by 0.91% of pay.

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)

Division 01 - Confidential

Table 17A

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
1987	613	\$ 12,746,102	8.85%	0.00%
1988	459	9,072,947	9.00	0.00
1989	142	3,433,518	9.10	0.00
1990	87	2,401,545	8.60	0.00
1991	72	2,255,242	10.50	0.00
1992	71	2,356,550	10.10	2.20
1993	29	826,648	10.95	4.62
1994	25	782,010	12.74	6.65
1995	25	747,190	17.53	12.66
1996	27	868,169	12.91	11.91
1997	29	895,532	11.16	11.16
1998	30	1,002,675	10.29	10.29
1999	31	1,068,662	9.46	9.46
2000	33	1,167,155	8.45	8.45
2001	34	1,238,366	8.94	8.94

Notes: Adoption of Benefit E reflected in 1987 valuation.
Adoption of Benefits C-2 and F55 (15 years) reflected in 1991 valuation.
Adoption 1% member contributions reflected in 1991 valuation.
Adoption of Benefit V-6 reflected in 1992 valuation.
Adoption of Benefit E reflected in 1993 valuation.
Actuarial assumptions were revised for the 1993 valuation.
Adoption of Benefit B-3 and 4.5% member contributions reflected in 1994.
Actuarial assumptions were revised for the 1997 valuation.
Actuarial assumptions were revised for the 2000 valuation.

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		
2000									33
2001				1		2	3	1	34

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		
2000								42
2001	1				32	1	3	13

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
2000							37	\$ 167,370
2001	1	\$ 3,457	\$	1	\$ 1,149	\$	37	169,678

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 4,464,741
2001	116,795	55,393	283,566	(168,952)	0	(601,816)	0	4,149,727

Ingham County (3303)

Division 02 - Sheriff FOP Spvs

Table 16B

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	(1.97)%	\$(3,051)
Amortization of Unfunded Accrued Liability (30 years)	<u>22.04</u>	<u>34,139</u>
Total Long Term Contribution	20.07	31,088
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	20.07	31,088
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	20.07%	\$31,088

@ 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 30 year amortization) will decrease/increase by 0.81% of pay.

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)

Division 02 - Sheriff FOP Spvs

Table 17B

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
1987	137	\$ 3,883,225	10.47%	0.00%
1988	144	4,124,681	10.40	0.00
1989	149	4,442,989	10.30	0.00
1990	161	4,918,912	10.30	0.00
1991	172	5,840,591	9.50	0.00
1992	28	1,371,663	13.80	3.10
1993	28	1,343,669	9.71	4.10
1994	34	1,665,399	8.76	4.58
1995	28	1,421,507	13.89	10.03
1996	28	1,446,119	14.07	12.98
1997	30	1,609,357	17.78	17.78
1998	30	1,699,826	19.86	19.86
1999	30	1,703,939	18.03	18.02
2000	30	1,735,265	19.84	19.83
2001	31	1,858,730	20.07	20.07

Notes: Adoption of Benefit E reflected in 1987 valuation.
Adoption of Benefit F50 (25 years) reflected in 1989 valuation.
Adoption of 1% member contributions reflected in 1989 valuation.
Adoption of 1.85% member contributions reflected in 1992 valuation.
Adoption of Benefit B-3 reflected in 1992 valuation.
Adoption of 6.45% member contributions reflected in 1993 valuation.
Actuarial assumptions were revised for the 1993 valuation.
Adoption of Benefit E reflected in 1993 valuation.
Adoption of 10.45% member contributions reflected in 1994 valuation.
Adoption of Benefits B-4, FAC-3 and 25 years and Out reflected in 1994.
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.

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		
2000									30
2001	1						2		31

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		
2000								5
2001					4	1		2

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
2000							48	\$ 1,213,951
2001	1	\$ 46,610	\$	2	\$ 27,413	\$ 1,124	46	1,232,024

@ 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.

Note: Participant flow in 2001 may not add due to adjustments in 2000 data.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 13,284,268
2001	335,049	364,516	988,337	(1,220,618)	0	0	77,596	13,829,148

Ingham County (3303)

Division 04 - MCF

Table 16C

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	5.63%	\$12,120
Amortization of Unfunded Accrued Liability (30 years)	<u>2.04</u>	<u>4,392</u>
Total Long Term Contribution	7.67	16,512
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	7.67	16,512
Temporary Adjustment ^	<u>(1.07)</u>	<u>(2,303)</u>
Required Contribution	6.60%	\$14,209

@ 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 30 year amortization) will decrease/increase by 0.85% of pay.

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

^ Adjustments for 2001 and 2002 valuations are determined by the Retirement Board's resolution adopted March 13, 2002. See cover letter for details.

Only applies if assets exceed accrued liabilities.

Ingham County (3303)

Division 04 - MCF

Table 17C

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
1987	226	\$ 2,809,972	7.82%	0.00%
1988	175	1,881,671	7.30	0.00
1989	167	1,599,788	7.20	0.00
1990	180	1,895,478	6.80	0.00
1991	176	1,966,913	6.80	0.00
1992	190	2,192,337	6.80	1.50
1993	176	2,221,453	4.87	2.06
1994	173	2,282,795	5.85	3.05
1995	178	2,362,440	5.95	4.30
1996	165	2,376,442	5.91	5.45
1997	153	2,185,568	6.04	6.04
1998	128	2,542,201	5.73	5.73
1999	116	2,227,648	5.07	5.07
2000	123	2,410,936	5.66	5.66
2001	121	2,583,257	7.67	6.60

Notes: Adoption of Benefit E reflected in 1987 valuation.
 Actuarial assumptions were revised for the 1993 valuation.
 Adoption of Benefit E reflected in 1994 valuation.
 Actuarial assumptions were revised for the 1997 valuation.
 Actuarial assumptions were revised for the 2000 valuation.

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		
2000									123
2001		1		5	33			37	121

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		
2000								32
2001	2			2			9	37

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
2000							71	\$ 240,863
2001	4	\$ 21,035	\$	4	\$ 12,747	\$	71	249,151

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 4,018,398
2001	134,202	582	298,955	(248,568)	0	0	0	4,203,569

Ingham County (3303)

Division 09 - Judges

Table 16D

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	10.78%	\$1,762
Amortization of Unfunded Accrued Liability (30 years)	<u>9.02</u>	<u>1,474</u>
Total Long Term Contribution	19.80	3,236
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	19.80	3,236
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	19.80%	\$3,236

@ 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 30 year amortization) will decrease/increase by 0.88% of pay.

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)

Division 09 - Judges

Table 17D

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1993	17	\$ 391,399	8.36%	3.53%
1994	16	323,312	10.09	5.27
1995	16	362,941	9.38	6.78
1996	19	463,138	9.21	8.50
1997	10	266,864	17.37	17.37
1998	13	351,771	15.07	15.07
1999	10	282,700	14.89	14.89
2000	7	235,139	11.60	11.59
2001	7	196,106	19.80	19.80

Notes: Actuarial assumptions were revised for the 1993 valuation.
 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.

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		
2000									7
2001					1			1	7

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		
2000								2
2001				1	1	1		1

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
2000							3	\$ 20,722
2001		\$	\$		\$	\$	3	20,722

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 719,155
2001	29,200	0	29,735	(20,722)	(275,653)	(281,056)	284,731	485,390

Ingham County (3303)
Division 10 - Gnrl Mgmt

Table 16E

Computed Employer Contributions to the Retirement System
For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	5.61%	\$24,382
Amortization of Unfunded Accrued Liability (30 years)	<u>3.66</u>	<u>15,907</u>
Total Long Term Contribution	9.27	40,289
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	9.27	40,289
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	9.27%	\$40,289

@ The above Employer contribution requirement is based on Member contributions of 5.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 30 year amortization) will decrease/increase by 0.90% of pay.

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)

Division 10 - Gnrl Mgmt

Table 17E

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1987	61	\$ 2,277,063	9.74%	0.00%
1988	68	2,673,546	8.80	0.00
1989	73	3,043,824	8.80	0.00
1990	72	3,199,113	10.70	0.00
1991	69	3,160,627	10.90	0.00
1992	68	3,274,274	11.00	2.40
1993	70	3,428,088	9.31	3.93
1994	74	3,747,657	10.18	5.31
1995	71	3,782,835	10.30	7.44
1996	70	3,881,443	10.92	10.07
1997	68	3,972,349	9.47	9.47
1998	67	4,047,946	9.34	9.34
1999	76	4,643,352	8.30	8.30
2000	73	4,632,650	8.78	8.78
2001	80	5,215,460	9.27	9.27

Notes: Adoption of Benefit E reflected in 1987 valuation.
Adoption of Benefit C-2 and 3% member contributions reflected in 1988.
Adoption of 1% member contributions reflected in 1990 valuation.
Adoption of Benefit V-6 reflected in 1992 valuation.
Adoption of Benefit E reflected in 1993 valuation.
Actuarial assumptions were revised for the 1993 valuation.
Adoption of Benefit B-3 and 5% member contributions reflected in 1994.
Actuarial assumptions were revised for the 1997 valuation.
Actuarial assumptions were revised for the 2000 valuation.

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		
2000				3	2	2	6	8	73
2001									80

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		
2000						2	4	14
2001								20

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
2000							43	\$ 744,293
2001	1	\$ 11,706	\$		\$	\$ 3,507	44	752,492

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 17,355,161
2001	426,804	257,085	1,363,992	(744,291)	(15,107)	0	180,151	18,823,795

Ingham County (3303)
Division 11 - Gnrl Library

Table 16F

Computed Employer Contributions to the Retirement System
For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	0.00%	\$0
Amortization of Unfunded Accrued Liability (30 years)	<u>0.00</u>	<u>551</u>
Total Long Term Contribution	0.00	551
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	0.00	551
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	0.00%	\$551

@ 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 30 year amortization) will decrease/increase by 0.00% of pay.

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)

Division 11 - Gnrl Library

Table 17F

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
1987	56	\$ 668,423	9.99%	0.00%
1988	53	693,147	9.10	0.00
1989	47	690,914	9.50	0.00
1990	44	726,866	9.60	0.00
1991	84	2,332,009	9.20	0.00
1992	84	2,540,610	9.40	2.10
1993	39	778,240	8.53	3.60
1994	38	787,259	9.55	4.99
1995	36	783,940	10.06	7.26
1996	41	811,292	9.94	9.16
1997	35	717,473	8.81	8.81
1998	25	738,984	10.99	10.99
1999	24	733,396	10.20	10.20
2000	23	718,540	9.86	9.86
2001	0	0	-	-

Notes: Adoption of Benefit E reflected in 1987 valuation.
 Actuarial assumptions were revised for the 1993 valuation.
 Actuarial assumptions were revised for the 1997 valuation.
 Actuarial assumptions were revised for the 2000 valuation.

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		
2000				22	1				23
2001									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		
2000								8
2001	1						24	31

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
2000							20	\$ 95,017
2001	1	\$ 4,206	\$	1	\$ 3,724	\$	20	95,499

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 2,041,607
2001	71,726	0	156,633	(90,139)	0	0	0	2,179,827

Ingham County (3303)

Division 12 - Gnrl ICEA Profs

Table 16G

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	4.61%	\$19,827
Amortization of Unfunded Accrued Liability (30 years)	<u>2.37</u>	<u>10,193</u>
Total Long Term Contribution	6.98	30,020
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	6.98	30,020
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	6.98%	\$30,020

@ The above Employer contribution requirement is based on Member contributions of 6.08% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 30 year amortization) will decrease/increase by 0.85% of pay.

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)

Division 12 - Gnrl ICEA Profs

Table 17G

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1988	128	\$ 3,254,486	8.10%	0.00%
1989	130	3,588,309	8.30	0.00
1990	183	5,066,968	8.90	0.00
1991	147	4,189,841	9.90	0.00
1992	155	4,724,713	9.50	2.10
1993	93	3,044,030	7.04	2.97
1994	99	3,259,462	7.54	3.94
1995	92	3,079,949	7.88	5.69
1996	104	3,723,923	8.14	7.51
1997	107	3,696,908	6.39	6.39
1998	111	4,375,372	6.32	6.32
1999	107	4,249,788	5.42	5.42
2000	113	4,575,833	6.38	6.38
2001	130	5,161,093	6.98	6.98

Notes:

- Adoption of Benefit C-2 and 1% member contributions reflected in 1988.
- Adoption of 0.9% (0.7% for some) member contributions reflected in 1990.
- Adoption of Benefit C-2 (B-1 base) for some members reflected in 1991.
- Adoption of 1.1% member contributions for some members reflected in 1991.
- Adoption of Benefit E reflected in 1993 valuation.
- Actuarial assumptions were revised for the 1993 valuation.
- Adoption of Benefit B-3 reflected in 1994 valuation.
- Adoption of Benefit F55 (15 years) and 6.08% member contributions reflected in 1996 valuation.
- Actuarial assumptions were revised for the 1997 valuation.
- Actuarial assumptions were revised for the 2000 valuation.

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		
2000									113
2001	1			6	9	1	4	30	130

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		
2000								18
2001				1	1	7	7	30

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
2000							17	\$ 219,854
2001	2	\$ 10,185	\$ 345		\$	\$	19	230,384

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 8,592,827
2001	276,700	310,813	742,356	(222,486)	(51,984)	0	269,808	9,918,034

Ingham County (3303)

Division 13 - Gnrl OPEIU Prob

Table 16H

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	2.65%	\$4,088
Amortization of Unfunded Accrued Liability (30 years)	<u>4.26</u>	<u>6,572</u>
Total Long Term Contribution	6.91	10,660
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	6.91	10,660
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	6.91%	\$10,660

@ The above Employer contribution requirement is based on Member contributions of 7.13% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 30 year amortization) will decrease/increase by 0.86% of pay.

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)

Division 13 - Gnrl OPEIU Prob

Table 17H

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1988	41	\$ 1,091,980	8.90%	0.00%
1989	39	1,108,087	9.20	0.00
1990	37	1,120,341	8.70	0.00
1991	47	1,376,534	8.50	0.00
1992	46	1,481,775	8.70	1.90
1993	36	1,224,600	7.93	3.35
1994	37	1,324,328	10.29	5.37
1995	37	1,421,577	10.34	7.47
1996	38	1,517,127	10.17	9.38
1997	38	1,586,848	9.21	9.21
1998	38	1,635,036	9.07	9.07
1999	38	1,582,996	8.19	8.18
2000	38	1,718,096	6.62	6.62
2001	38	1,851,347	6.91	6.91

Notes: Adoption of Benefit F55 (15 years) reflected in 1988 valuation.
Adoption of 1% member contributions reflected in 1988 valuation.
Adoption of 1.88% member contributions reflected in 1990 valuation.
Adoption of Benefit E reflected in 1993 valuation.
Actuarial assumptions were revised for the 1993 valuation.
Adoption of Benefit C-2 (B-1 Base) reflected in 1994 valuation.
Adoption of Benefit B-3 and 7.13% member contributions reflected in 1997 valuation.
Actuarial assumptions were revised for the 1997 valuation.
Actuarial assumptions were revised for the 2000 valuation.

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		
2000						2	2		38
2001									38

Table 19H

Flow of Vested Former Members

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2000						2		6
2001								8

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
2000							5	\$ 72,984
2001		\$	\$		\$	\$	5	72,984

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 5,095,005
2001	150,011	130,848	441,623	(72,984)	0	0	62,361	5,806,864

Ingham County (3303)

Division 14 - Gnrl TOPS UAW

Table 16I

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	8.07%	\$71,908
Amortization of Unfunded Accrued Liability (30 years)	<u>1.76</u>	<u>15,683</u>
Total Long Term Contribution	9.83	87,591
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	9.83	87,591
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	9.83%	\$87,591

@ The above Employer contribution requirement is based on Member contributions of 1.60% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 30 year amortization) will decrease/increase by 0.85% of pay.

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)

Division 14 - Gnrl TOPS UAW

Table 17I

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
Number	Annual Payroll			
1989	318	\$ 6,076,867	8.20%	0.00%
1990	314	6,544,556	10.10	0.00
1991	330	6,997,120	10.20	0.00
1992	336	7,457,762	10.40	2.30
1993	333	7,477,050	8.05	3.40
1994	348	7,838,512	9.60	5.01
1995	351	8,343,933	9.62	6.95
1996	343	8,364,912	9.81	9.05
1997	346	8,814,495	8.08	8.08
1998	350	9,430,825	7.35	7.35
1999	364	9,944,587	6.48	6.48
2000	374	10,401,805	6.21	6.21
2001	374	10,692,631	9.83	9.83

Notes: Adoption of Benefits C-2 and F55 (15 years) reflected in 1989 valuation.
Adoption of 3% member contributions reflected in 1989 valuation.
Adoption of 1% member contributions reflected in 1990 valuation.
Adoption of Benefit E reflected in 1993 valuation.
Actuarial assumptions were revised for the 1993 valuation.
Adoption of Benefit B-3 and 4.85 member contributions reflected in 1994.
Actuarial assumptions were revised for the 1997 valuation.
Actuarial assumptions were revised for the 2000 valuation.
Adoption of 1.60% Member Contributions reflected in 2001 valuation.

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		
2000									
2001	9			8	12	10	2	37	374
									374

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		
2000								
2001	2			3	1	9	10	48
								61

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
2000							138	\$ 1,040,552
2001	13	\$171,348	\$	2	\$ 4,851	\$ 1,343	149	1,205,706

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$
2001	1,040,229	177,309	2,049,991	(1,134,770)	(34,699)	(177,623)	0	26,494,534
								28,414,971

Ingham County (3303)

Division 15 - Animal Cntrl FOP

Table 16J

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	0.67%	\$182
Amortization of Unfunded Accrued Liability (30 years)	<u>12.07</u>	<u>3,281</u>
Total Long Term Contribution	12.74	3,463
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	12.74	3,463
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	12.74%	\$3,463

@ The above Employer contribution requirement is based on Member contributions of 14.28% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 30 year amortization) will decrease/increase by 0.83% of pay.

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

Only applies if assets exceed accrued liabilities.

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

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1993	9	\$ 248,830	7.13%	3.01%
1994	9	260,831	8.19	4.28
1995	9	269,541	8.24	5.95
1996	9	264,182	8.91	8.21
1997	10	325,176	9.82	9.82
1998	10	317,713	9.11	9.11
1999	9	306,275	9.49	9.49
2000	10	330,848	14.84	14.83
2001	9	326,170	12.74	12.74

Notes: Actuarial assumptions were revised for the 1993 valuation.
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.

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		
2000					2			1	10
2001									9

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		
2000								1
2001								1

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
2000							2	\$ 15,550
2001		\$	\$		\$	\$	2	15,550

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 669,859
2001	37,177	50,267	60,753	(15,549)	0	0	0	802,507

Ingham County (3303)

Division 16 - Gnrl Commsnrs

Table 16K

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	5.37%	\$596
Amortization of Unfunded Accrued Liability (30 years)	<u>0.65</u>	<u>72</u>
Total Long Term Contribution	6.02	668
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	6.02	668
Temporary Adjustment ^	<u>(1.51)</u>	<u>(168)</u>
Required Contribution	4.51%	\$500

@ 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 30 year amortization) will decrease/increase by 0.89% of pay.

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

^ Adjustments for 2001 and 2002 valuations are determined by the Retirement Board's resolution adopted March 13, 2002. See cover letter for details.

Only applies if assets exceed accrued liabilities.

Ingham County (3303)

Division 16 - Gnrl Commsnrs

Table 17K

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1988	10	\$ 93,654	9.50%	0.00%
1989	19	185,480	6.30	0.00
1990	17	166,560	6.80	0.00
1991	19	185,713	7.10	0.00
1992	9	84,900	8.10	1.80
1993	10	100,880	4.04	1.71
1994	7	70,954	6.75	3.53
1995	8	95,310	6.91	4.99
1996	7	84,500	5.19	4.79
1997	9	103,415	4.56	4.56
1998	8	101,460	5.38	5.38
1999	8	103,005	2.33	2.32
2000	5	63,395	3.23	3.23
2001	10	133,143	6.02	4.51

Notes: Adoption of Benefits C-2 and F55 (15 years) reflected in 1988 valuation.
Adoption of 4% member contributions reflected in 1989 valuation.
Adoption of 3.56% member contributions reflected in 1991 valuation.
Adoption of Benefit E reflected in 1993 valuation.
Actuarial assumptions were revised for the 1993 valuation.
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.

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		
2000								5	5
2001								10	10

Table 19K

Flow of Vested Former Members

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2000								5
2001								5

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
2000							5	\$ 17,888
2001		\$	\$		\$	\$	5	17,888

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 282,549
2001	3,089	4,739	19,980	(17,888)	0	(734)	734	292,469

Ingham County (3303)

Division 17 - ICEA Nurses

Table 16L

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	4.47%	\$10,095
Amortization of Unfunded Accrued Liability (30 years)	<u>3.93</u>	<u>8,875</u>
Total Long Term Contribution	8.40	18,970
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	8.40	18,970
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	8.40%	\$18,970

@ 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 30 year amortization) will decrease/increase by 0.89% of pay.

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)

Division 17 - ICEA Nurses

Table 17L

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1993	60	\$ 1,702,354	8.74%	3.69%
1994	59	1,853,322	9.79	5.11
1995	61	2,003,757	9.86	7.12
1996	64	2,067,117	9.54	8.80
1997	60	2,062,206	8.13	8.13
1998	63	2,321,552	7.68	7.68
1999	66	2,449,404	7.26	7.26
2000	67	2,553,922	6.79	6.79
2001	68	2,710,021	8.40	8.40

Notes: Actuarial assumptions were revised for the 1993 valuation.
 Adoption of Benefit E-2 reflected in 1994 valuation.
 Adoption of Benefit F55 (15 years) reflected in 1994 valuation.
 Adoption of 5.07% member contributions reflected in 1994 valuation.
 Actuarial assumptions were revised for the 1997 valuation.
 Adoption of Benefit B-3 reflected in 1998 valuation.
 Adoption of Benefit V- 6 reflected in 1998 valuation.
 Adoption of Benefit FAC-3 reflected in 1998 valuation.
 Adoption of 11.87% member contributions reflected in 1998 valuation.
 Actuarial assumptions were revised for the 2000 valuation.

Ingham County (3303)

Division 17 - ICEA Nurses

Table 18L

Flow of Active Membership

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2000									67
2001	3				1			5	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		
2000								12
2001				2		2	1	13

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
2000							23	\$ 200,619
2001	3	\$ 28,496	\$ 2,723		\$	\$ 4,586	26	227,252

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 6,133,576
2001	196,369	321,184	515,290	(222,531)	(19,418)	(2,030)	8,531	6,930,971

Ingham County (3303)

Division 18 - ICEA Ct. Prof

Table 16M

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	2.90%	\$3,817
Amortization of Unfunded Accrued Liability (30 years)	<u>8.09</u>	<u>10,647</u>
Total Long Term Contribution	10.99	14,464
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	10.99	14,464
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	10.99%	\$14,464

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

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)**Division 18 - ICEA Ct. Prof****Table 17M****Computed Employer Contributions - Comparative Statement**

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1993	36	\$ 1,245,240	7.84%	3.31%
1994	42	1,375,365	8.54	4.46
1995	38	1,375,764	9.41	6.80
1996	37	1,442,687	10.09	9.30
1997	32	1,244,090	9.57	9.57
1998	33	1,413,047	11.49	11.49
1999	37	1,559,574	9.66	9.66
2000	35	1,515,603	8.79	8.78
2001	34	1,579,323	10.99	10.99

Notes: Actuarial assumptions were revised for the 1993 valuation.
Adoption of Benefits B-3 and F55 (15 years) reflected in 1994 valuation.
Adoption of 7.5% member contributions reflected in 1994 valuation.
Adoption of Benefit 20 and Out retirement reflected in 1996 valuation.
Adoption of 9.84% member contributions reflected in 1996 valuation.
Actuarial assumptions were revised for the 1997 valuation.
Actuarial assumptions were revised for the 2000 valuation.

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		
2000									35
2001	4					1	3	1	34

Table 19M
Flow of Vested Former Members

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2000								4
2001						2		6

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
2000							18	\$ 343,822
2001	4	\$112,268	\$ 287		\$	\$	22	456,377

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 5,372,061
2001	165,138	168,083	436,013	(385,979)	(2,795)	0	190,379	5,942,900

Ingham County (3303)

Division 19 - Cnstatnl Offcls

Table 16N

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	6.55%	\$2,532
Amortization of Unfunded Accrued Liability (30 years)	<u>1.77</u>	<u>684</u>
Total Long Term Contribution	8.32	3,216
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	8.32	3,216
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	8.32%	\$3,216

@ The above Employer contribution requirement is based on Member contributions of 5.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 30 year amortization) will decrease/increase by 0.90% of pay.

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)**Division 19 - Cnstatnl Offcls****Table 17N****Computed Employer Contributions - Comparative Statement**

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1993	5	\$ 254,947	7.58%	3.20%
1994	5	264,660	10.11	5.28
1995	5	274,083	7.49	5.41
1996	4	206,565	7.36	6.79
1997	5	297,992	7.48	7.48
1998	5	315,294	8.20	8.20
1999	6	404,043	5.88	5.88
2000	6	416,485	6.42	6.42
2001	6	463,955	8.32	8.32

Notes: Actuarial assumptions were revised for the 1993 valuation.
Adoption of Benefits B-3 and F55 (15 years) reflected in 1994 valuation.
Adoption of 7.0% member contributions reflected in 1994 valuation.
Actuarial assumptions were revised for the 1997 valuation.
Adoption of 5.00% member contributions reflected in 1998 valuation.
Adoption of 6.00% member contributions reflected in 1999 valuation.
Adoption of 5.00% member contributions reflected in 2000 valuation.
Actuarial assumptions were revised for the 2000 valuation.
Adoption of Benefit V-6 reflected in 2000 valuation.

Ingham County (3303)

Division 19 - Cnstutnl Offcls

Table 18N

Flow of Active Membership

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2000									6
2001									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		
2000								0
2001								0

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
2000							7	\$ 96,192
2001		\$	\$		\$	\$	7	96,192

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 1,469,210
2001	27,281	23,198	108,386	(96,192)	0	0	0	1,531,883

Ingham County (3303)

Division 21 - FOP Shrf Deputies

Table 160

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	4.60%	\$25,384
Amortization of Unfunded Accrued Liability (30 years)	<u>3.94</u>	<u>21,742</u>
Total Long Term Contribution	8.54	47,126
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	8.54	47,126
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	8.54%	\$47,126

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

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)**Division 21 - FOP Shrf Deputies****Table 170****Computed Employer Contributions - Comparative Statement**

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1992	141	\$ 4,625,892	9.40%	2.10%
1993	147	5,058,670	7.40	3.12
1994	138	4,908,359	8.69	4.54
1995	146	5,180,610	8.56	6.19
1996	153	5,176,592	8.10	7.47
1997	143	4,952,121	8.84	8.84
1998	144	6,128,303	9.38	9.38
1999	152	5,940,955	7.73	7.73
2000	154	6,160,326	6.96	6.96
2001	154	6,621,982	8.54	8.54

Notes: Adoption of Benefits B-4, E and 6.55% member contributions reflected in 1993 valuation.
Actuarial assumptions were revised for the 1993 valuation.
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.

Ingham County (3303)

Division 21 - FOP Shrf Deputies

Table 18O

Flow of Active Membership

Year Ended 12/31	Retired	Disabled	Died (Survivor Benefit)	Other Termination		Transfer		New Member	End of Year
				Vested	Non-Vested	Out	In		
2000									154
2001	5			2	4	2		13	154

Table 19O

Flow of Vested Former Members

Year Ended 12/31	Retired	Return To Work	Died (Survivor Benefit)	Forfeit Benefit	Transfer		New	End of Year
					Out	In		
2000								11
2001	1			2		7	5	20

Table 20O

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							50	\$ 910,581
2001	7	\$179,878	\$ 1,077		\$	\$ 1,720	57	1,089,816

@ 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.

Table 21O

Flow of Valuation Assets (Actuarial Value)

Year Ended 12/31	Contributions		Investment Income	Benefit Payments	Member Contrib. Refunds	Transfer		Balance
	Employer	Member				Out	In	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 17,621,401
2001	519,780	735,558	1,406,277	(1,058,811)	(84,300)	(22,913)	149,858	19,266,850

Ingham County (3303)

Division 40 - ICEA Unit 111

Table 16P

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	5.90%	\$3,232
Amortization of Unfunded Accrued Liability (30 years) #	<u>(0.91)</u>	<u>(499)</u>
Total Long Term Contribution	4.99	2,733
Overfunding Credit #	<u>(1.12)</u>	<u>(614)</u>
Total Regular Contribution	3.87	2,119
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	3.87%	\$2,119

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

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

For this division, assets exceed accrued liabilities (see Table 13). The negative unfunded accrued liability is amortized (spread) over 10 years, and used to reduce the employer contribution rate. The total credit is 2.03% (0.91% plus 1.12%). The additional 1.12% results from spreading the negative unfunded accrued liability over 10 years instead of 30 years.

Ingham County (3303)

Division 40 - ICEA Unit 111

Table 17P

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1988	50	\$ 951,173	8.40%	0.00%
1989	60	1,383,191	9.10	0.00
1990	63	1,445,248	9.00	0.00
1991	67	1,491,640	8.90	0.00
1992	68	1,786,644	8.60	1.90
1993	64	1,545,125	4.94	2.08
1994	59	1,491,914	6.62	3.46
1995	38	901,078	6.60	4.77
1996	41	979,006	5.74	5.29
1997	35	920,331	5.56	5.56
1998	35	997,054	5.12	5.12
1999	28	755,810	1.97	1.96
2000	25	736,550	2.41	2.39
2001	22	657,455	3.87	3.87

Notes: Adoption of Benefits C-2 and F55 (15 years) reflected in 1988 valuation.
Adoption of 3% member contributions reflected in 1988 valuation.
Adoption of 0% member contributions for some members reflected in 1989.
Actuarial assumptions were revised for the 1993 valuation.
Adoption of Benefit E reflected in 1994 valuation.
Actuarial assumptions were revised for the 1997 valuation.
Actuarial assumptions were revised for the 2000 valuation.

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		
2000									25
2001	3				2			2	22

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		
2000								7
2001	1			1			2	7

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
2000							23	\$ 202,565
2001	4	\$ 32,213	\$		\$	\$ 3,356	27	231,422

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 3,006,929
2001	14,296	21,972	210,472	(221,381)	(2,005)	(3,660)	3,352	3,029,975

Ingham County (3303)

Division 41 - MCF Management

Table 16Q

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	9.01%	\$5,736
Amortization of Unfunded Accrued Liability (30 years) #	<u>(0.39)</u>	<u>(248)</u>
Total Long Term Contribution	8.62	5,488
Overfunding Credit #	<u>(0.48)</u>	<u>(306)</u>
Total Regular Contribution	8.14	5,182
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	8.14%	\$5,182

@ 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 30 year amortization) will decrease/increase by 0.87% of pay.

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

For this division, assets exceed accrued liabilities (see Table 13). The negative unfunded accrued liability is amortized (spread) over 10 years, and used to reduce the employer contribution rate. The total credit is 0.87% (0.39% plus 0.48%). The additional 0.48% results from spreading the negative unfunded accrued liability over 10 years instead of 30 years.

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

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1993	11	\$ 471,750	9.43%	3.98%
1994	13	541,500	10.95	5.72
1995	11	293,628	11.28	8.14
1996	12	487,427	11.75	10.84
1997	15	512,335	11.64	11.64
1998	13	545,506	11.03	11.03
1999	22	845,543	9.48	9.48
2000	19	781,285	7.86	7.86
2001	18	763,973	8.14	8.14

Notes: Actuarial assumptions were revised for the 1993 valuation.
Adoption of Benefit E reflected in 1994 valuation.
Actuarial assumptions were revised for the 1997 valuation.
Actuarial assumptions were revised for the 2000 valuation.

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		
2000				3	4			6	19
2001									18

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		
2000							3	7
2001								10

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
2000							8	\$ 52,672
2001		\$	\$		\$	\$	8	52,672

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 1,110,871
2001	79,895	0	89,535	(52,922)	(649)	0	1,022	1,227,752

Ingham County (3303)

Division 42 - ICEA Unit 11

Table 16R

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	6.95%	\$2,208
Amortization of Unfunded Accrued Liability (30 years)	<u>1.72</u>	<u>546</u>
Total Long Term Contribution	8.67	2,754
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	8.67	2,754
Temporary Adjustment ^	<u>(0.45)</u>	<u>(143)</u>
Required Contribution	8.22%	\$2,611

@ 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 30 year amortization) will decrease/increase by 0.89% of pay.

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

^ Adjustments for 2001 and 2002 valuations are determined by the Retirement Board's resolution adopted March 13, 2002. See cover letter for details.

Only applies if assets exceed accrued liabilities.

Ingham County (3303)**Division 42 - ICEA Unit 11****Table 17R****Computed Employer Contributions - Comparative Statement**

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1995	14	\$ 427,567	5.59%	4.03%
1996	11	285,375	6.08	5.60
1997	16	376,839	5.52	5.52
1998	8	264,468	7.13	7.13
1999	9	318,233	7.12	7.12
2000	9	330,997	6.82	6.81
2001	9	381,171	8.67	8.22

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.

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		
2000									9
2001					2			2	9

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		
2000								5
2001	1			1			1	4

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
2000							0	\$ 0
2001	1	\$ 10,146	\$		\$	\$	1	10,146

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 282,064
2001	27,140	14,818	24,862	(10,146)	(1,866)	(757)	44	336,159

Ingham County (3303)

Division 43 - ICEA Unit 1

Table 16S

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	5.75%	\$1,435
Amortization of Unfunded Accrued Liability (30 years)	<u>6.70</u>	<u>1,672</u>
Total Long Term Contribution	12.45	3,107
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	12.45	3,107
Temporary Adjustment ^	<u>(0.82)</u>	<u>(205)</u>
Required Contribution	11.63%	\$2,902

@ 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 30 year amortization) will decrease/increase by 0.88% of pay.

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

^ Adjustments for 2001 and 2002 valuations are determined by the Retirement Board's resolution adopted March 13, 2002. See cover letter for details.

Only applies if assets exceed accrued liabilities.

Ingham County (3303)**Division 43 - ICEA Unit 1****Table 17S****Computed Employer Contributions - Comparative Statement**

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1995	8	\$ 313,942	7.53%	5.44%
1996	12	432,683	8.84	8.15
1997	9	323,039	10.39	10.39
1998	6	253,946	11.99	11.99
1999	5	211,746	12.18	12.18
2000	7	243,297	12.55	12.55
2001	9	299,551	12.45	11.63

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.

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		
2000					1			3	7
2001									9

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		
2000								5
2001				2				3

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
2000							5	\$ 67,200
2001		\$	\$		\$	\$	5	67,200

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 579,721
2001	34,066	9,884	40,727	(67,200)	(9,791)	(1,476)	1,476	587,407

Ingham County (3303)

Division 90 - Asst Pros Attnys

Table 16T

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	9.76%	\$13,229
Amortization of Unfunded Accrued Liability (30 years)	<u>3.91</u>	<u>5,300</u>
Total Long Term Contribution	13.67	18,529
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	13.67	18,529
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	13.67%	\$18,529

@ 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 30 year amortization) will decrease/increase by 0.91% of pay.

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)

Division 90 - Asst Pros Attnys

Table 17T

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1993	27	\$ 1,413,378	9.75%	4.12%
1994	29	1,531,585	10.93	5.71
1995	29	1,479,614	10.54	7.61
1996	29	1,607,654	10.68	9.85
1997	29	1,596,005	8.88	8.88
1998	28	1,719,998	14.40	14.40
1999	29	1,534,889	13.77	13.77
2000	29	1,681,667	13.44	13.44
2001	30	1,626,502	13.67	13.67

Notes: Actuarial assumptions were revised for the 1993 valuation.
Adoption of Benefit B-3 reflected in 1994 valuation.
Adoption of 1.4% member contributions reflected in 1994 valuation.
Actuarial assumptions were revised for the 1997 valuation.
Adoption of Benefit B-4 reflected in 1998 valuation.
Adoption of Benefit V- 6 reflected in 1998 valuation.
Adoption of Benefit F55 (15 years) reflected in 1998 valuation.
Actuarial assumptions were revised for the 2000 valuation.

Ingham County (3303)

Division 90 - Asst Pros Attnys

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		
2000				3	1	1		6	29
2001									30

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		
2000						5	6	4
2001	1							14

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
2000							4	\$ 89,381
2001	1	\$ 8,246	\$		\$	\$	5	97,627

@ 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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 3,925,321
2001	225,254	22,971	328,575	(93,505)	0	(4,527)	40,928	4,445,017

Ingham County (3303)

Division 91 - Parks Union Empl

Table 16U

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	8.90%	\$1,239
Amortization of Unfunded Accrued Liability (30 years)	<u>2.40</u>	<u>334</u>
Total Long Term Contribution	11.30	1,573
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	11.30	1,573
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	11.30%	\$1,573

@ 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 30 year amortization) will decrease/increase by 0.88% of pay.

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

Only applies if assets exceed accrued liabilities.

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

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1994	3	\$ 76,666	10.51%	5.48%
1995	3	82,837	11.15	8.06
1996	3	80,234	11.50	10.61
1997	5	144,342	12.37	12.37
1998	5	160,579	10.70	10.70
1999	6	195,920	10.42	10.42
2000	6	199,329	10.37	10.37
2001	5	167,040	11.30	11.30

Notes: Actuarial assumptions were revised for the 1997 valuation.
 Actuarial assumptions were revised for the 2000 valuation.

Ingham County (3303)

Division 91 - Parks Union Empl

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		
2000						1			6
2001									5

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		
2000								0
2001								0

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
2000							0	\$ 0
2001		\$	\$		\$	\$	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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 136,961
2001	20,080	0	5,528	0	0	(58,303)	0	104,266

Ingham County (3303)

Division 92 - Parks Non Union

Table 16V

Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	7.10%	\$1,055
Amortization of Unfunded Accrued Liability (30 years)	<u>5.59</u>	<u>831</u>
Total Long Term Contribution	12.69	1,886
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	12.69	1,886
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	12.69%	\$1,886

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

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)**Division 92 - Parks Non Union****Table 17V****Computed Employer Contributions - Comparative Statement**

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1994	5	\$ 210,478	12.50%	6.53%
1995	5	190,147	14.25	10.29
1996	4	168,458	15.00	13.84
1997	5	178,782	13.26	13.26
1998	5	214,974	13.33	13.33
1999	4	196,079	12.49	12.49
2000	3	171,663	12.58	12.58
2001	3	178,325	12.69	12.69

Notes: Adoption of Benefit F55 (25 years) reflected in 1995 valuation.
Actuarial assumptions were revised for the 1997 valuation.
Actuarial assumptions were revised for the 2000 valuation.

Ingham County (3303)

Division 92 - Parks Non Union

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		
2000									3
2001									3

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		
2000								0
2001								0

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
2000							0	\$ 0
2001		\$	\$		\$	\$	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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 594,740
2001	22,273	0	48,447	0	0	0	0	665,460

Ingham County (3303)
Division 93 - Lgl Rsrch Clerks

Table 16W

Computed Employer Contributions to the Retirement System
For the Fiscal Year Beginning January 1, 2003

Contribution for	Employer Contribution @	
	As Percentage of Active Member Payroll	Estimated Monthly Dollar Contribution *
Normal Cost (in addition to member contributions)	7.05%	\$1,386
Amortization of Unfunded Accrued Liability (30 years)	<u>0.63</u>	<u>124</u>
Total Long Term Contribution	7.68	1,510
Overfunding Credit #	<u>0.00</u>	<u>0</u>
Total Regular Contribution	7.68	1,510
Temporary Adjustment	<u>0.00</u>	<u>0</u>
Required Contribution	7.68%	\$1,510

@ 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 30 year amortization) will decrease/increase by 0.82% of pay.

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

Only applies if assets exceed accrued liabilities.

Ingham County (3303)

Division 93 - Lgl Rsrch Clerks

Table 17W

Computed Employer Contributions - Comparative Statement

Valuation Date December 31,	Active Members		Employer Contribution as Percent of Payroll	
			Regular Contribution	Minimum Required Contribution
	Number	Annual Payroll		
1997	8	\$ 250,777	6.84%	6.84%
1998	5	175,963	7.21	7.21
1999	6	163,718	6.95	6.95
2000	8	225,369	6.73	6.73
2001	7	235,907	7.68	7.68

Notes: Actuarial assumptions were revised for the 1997 valuation.
Actuarial assumptions were revised for the 2000 valuation.

Ingham County (3303)

Division 93 - Lgl Rsrch Clerks

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		
2000					3			2	8
2001									7

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		
2000								0
2001								0

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
2000							0	\$ 0
2001		\$	\$		\$	\$	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.

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	
2000	\$	\$	\$	\$	\$	\$	\$	\$ 57,453
2001	17,007	0	5,820	0	0	0	0	80,280

Ingham County (3303)

Table 22

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, 1998.

All entries and the annual employer contribution amount were based on the actuarial methods and assumptions used in the December 31, 2001 actuarial valuation. The entry age normal actuarial method was used to determine the disclosure entries.

GASB 25 Information (as of 12/31/2001)

Actuarial Accrued Liability

Retirees and beneficiaries currently receiving benefits	\$63,577,617
Terminated employees (vested former members) not yet receiving benefits	10,640,694
Current employees - Accumulated employee contributions including allocated investment income	15,576,230
Employer financed	<u>75,850,473</u>
Total Actuarial Accrued Liability	\$165,645,014
Net Assets Available for Benefits at Actuarial Value	<u>133,055,221</u>
(Market Value is \$120,306,468)	
Unfunded (Overfunded) Actuarial Accrued Liability	\$32,589,793

GASB 27 Information (as of 12/31/2001)

Fiscal Year Beginning	January 1, 2003
Annual Required Contribution (ARC)	\$ 4,244,880*
Amortization Factor Used - Underfunded Liabilities (30 years)	0.053632
Amortization Factor Used - Overfunded Liabilities (10 years)	0.119963

*Based on valuation payroll, but the actual required contribution will be based on current monthly payroll (during the fiscal year beginning January 1, 2003) times the computed employer contribution rate(s) shown in Tables 15 and 16.

APPENDIX

SUMMARY OF

PLAN PROVISIONS

AND

ACTUARIAL ASSUMPTIONS

AND

ACTUARIAL FUNDING METHOD

AS OF DECEMBER 31, 2001

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 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, 2001 actuarial valuation are those adopted by the Retirement Board. The actuarial assumptions were last revised as of December 31, 2000 to reflect the results of the study of plan experience covering the period from December 31, 1993 through December 31, 1998.

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.

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

SUMMARY OF PLAN PROVISIONS

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 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 withdrawn after termination of employment.

Service Retirement Allowance (Plan Sections 13-19)

Credited service at time of termination of membership is multiplied by:

- Benefit A - 1.0% of a member's final average compensation (FAC). Benefit A may not be adopted after January 2, 1986.
- Benefit B - Contact MERS office for details. Benefit B may not be adopted after January 2, 1986.
- Benefit C New - 1.3% of FAC.
- Benefit C Old - Sum of 1.0% times the first \$4,200 of FAC, plus 1.5% times the portion of FAC over \$4,200. Benefit C Old may not be adopted after January 2, 1986.
- Benefit C-1 New - 1.5% of FAC.
- Benefit C-1 Old - Sum of 1.2% times the first \$4,200 of FAC, plus 1.7% times the portion of FAC over \$4,200. Benefit C-1 Old may not be adopted after January 2, 1986.
- Benefit B-1 - 1.7% of FAC.
- Benefit C-2 - 2.0% of FAC, payable until attainment of the age at which unreduced Social Security benefits are available (currently age 65 for normal retirement, gradually increasing to age 67). Upon attainment of this age, the benefit reverts to the basic Benefit A, C New, C Old, C-1 New, C-1 Old or B-1.
- Benefit B-2 - 2.0% of FAC.
- Benefit B-3 - 2.25% of FAC, with a maximum benefit of 80% of FAC.
- Benefit B-4 - 2.5% of FAC, with a maximum benefit of 80% of FAC.

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

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

MERS plan benefits are based on a member's final average compensation (FAC). For this purpose, final average compensation means one-fifth of the aggregate amount of compensation (as defined in the MERS Plan Document, Section 2A(6)) paid to a member during the period of 5 consecutive years of the member's credited service in which the aggregate compensation paid is highest, known as FAC-5. Adoption of Benefit FAC-3 results in final average compensation being averaged over 3 years, instead of 5 years.

Disability Retirement Allowance (Plan Section 24)

Total and permanent disability while employed by a participating municipality and after meeting the vesting requirement of the benefit program. The service requirement is waived if the disability is the natural and proximate result of duty-connected causes.

The allowance is computed in the same manner as a service retirement allowance, except that the reduction for retirement before age 60 is not applied.

If disability is due to duty-connected causes, the amount of the retirement allowance shall not be less than 25% of the member's final average compensation.

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

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

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

If a member or vested former member with the minimum years of service required to be vested dies before retirement, a monthly survivor allowance may be payable.

If the member is married, the spouse is the automatic beneficiary unless the spouse, in writing, declines a benefit in favor of another named beneficiary.

A contingent survivor beneficiary (named in an Option II Contingent Beneficiary Designation form filed with MERS) will receive a retirement allowance computed in the same manner as a service retirement allowance, based on service and final average compensation at death, but reduced to reflect an Option II (100% joint and survivor) election. The reduction for retirement before age 60 is not applied. Payment of a retirement allowance to the contingent survivor beneficiary of a deceased member commences immediately. Payment of a retirement allowance to the contingent survivor beneficiary of a deceased vested former member commences on the date the member would have first satisfied eligibility for retirement with an unreduced service retirement allowance.

If there is no named beneficiary and the member leaves a spouse, the spouse will receive a survivor allowance. Payment of a retirement allowance to the surviving spouse of a deceased member commences immediately. Payment of a retirement allowance to the surviving spouse of a deceased vested former member commences on the date the member would have first satisfied eligibility for retirement for an unreduced service retirement allowance. The amount of a surviving spouse's retirement allowance shall be 85% of the deceased member's or deceased vested former member's accrued retirement allowance computed in the same manner as a service retirement allowance, based on service and final average compensation at time of death.

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

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

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

Duty-Connected Death Allowance (Plan Section 27)

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

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

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

Member Contributions (Plan Sections 32 and 35)

Each member contributes a percent of annual compensation, as selected by the municipality. 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.

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 (at a rate determined by MERS, currently 4%) 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).

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.

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 salary increase to project member compensation in future years.

The actuarial assumptions used in connection with this December 31, 2001 actuarial valuation are unchanged from the December 31, 2000 valuation assumptions, except as described in the cover letter to this report. 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 2001 actuarial valuation, the net long-term investment yield is assumed to be 8%.

Salary 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 salary progression. The salary increase assumption used in the actuarial valuation projects annual salary increases of 4.5% plus a percentage based on an age-related scale to reflect merit, longevity and promotional salary increases.

The salary increase assumption used for the valuation projects the following salary increases for selected ages:

Age	Base (Inflation)	Merit and Longevity	Total Percentage Increase in Salary
20	4.50%	4.16%	8.66%
25	4.50	2.88	7.38
30	4.50	1.98	6.48
35	4.50	1.52	6.02
40	4.50	1.10	5.60
45	4.50	0.66	5.16
50	4.50	0.32	4.82
55	4.50	0.14	4.64
60	4.50	0.00	4.50

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 for members with less than 5 years of service, and based on age for members with 5 or more years of service.

Sample rates of withdrawal from active employment are below:

Sample Ages	Years of Service	% of Active Members Withdrawing Within the Next Year
	0	18.00%
	1	18.00
	2	16.00
	3	12.00
	4	10.00
20	5 and over	9.00
25		9.00
30		9.00
35		7.00
40		5.00
45		4.00
50		4.00
55		3.00
60		3.00
65		2.00
70		0.00

Retirement Rates

A schedule of retirement rates is used to measure the probability of eligible members retiring during the next year. To reflect the impact plan design may have on retirement experience, separate retirement rates apply to valuation divisions without Benefits F50, F55 or F(N), to those divisions that have adopted F55, to those that have adopted F50, and to those that have adopted F(N). The retirement rates in use for each category are shown below:

NORMAL RETIREMENT - AGE BASED - BENEFIT F(N) NOT ADOPTED

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year		
	Without F50 or F55 or F(N)	With F55	With F50
50			22%
51			22
52			22
53			22
54			24
55		18%	18
56		14	14
57		16	16
58		18	18
59		18	18
60	20%	20	20
61	24	24	24
62	24	24	24
63	24	24	24
64	27	27	27
65	30	30	30
66	30	30	30
67	30	30	30
68	30	30	30
69	30	30	30
70	100	100	100

NORMAL RETIREMENT - SERVICE BASED - BENEFIT F(N) ADOPTED

Years of Service	Percent of Eligible Active Members Retiring Within Next Year	Years of Service	Percent of Eligible Active Members Retiring Within Next Year	Years of Service	Percent of Eligible Active Members Retiring Within Next Year
20	22%	31	22%	41	24%
21	22	32	22	42	24
22	22	33	22	43	24
23	22	34	24	44	27
24	22	35	18	45	30
25	22	36	14	46	30
26	22	37	16	47	30
27	22	38	18	48	30
28	22	39	18	49	30
29	22	40	20	50	100
30	22				

Municipalities that have adopted a non-standard benefit multiplier after December 31, 1996 that is in excess of the B-4, 2.5% multiplier, will have a retirement rate equal to 75% at the first age at which unreduced plan benefits are available.

EARLY RETIREMENT – REDUCED BENEFIT

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year
50	3%
51	3
52	5
53	8
54	15
55	4
56	4
57	4
58	8
59	10

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:

Sample Ages	Percent Becoming Disabled Within Next Year
20	0.02%
25	0.02
30	0.02
35	0.02
40	0.05
45	0.12
50	0.25
55	0.40
60	0.45
65	0.50

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 the 1994 Group Annuity Mortality Table. For disabled retirees, the regular mortality tables are used with a 3-year set forward in ages to reflect the higher expected mortality rates of disabled members.

The life expectancies and mortality rates projected by the 1994 Group Annuity Mortality table for **non-disabled** members are shown below for selected ages:

Age	Expected Years of Life Remaining		Mortality Rates	
	Male	Female	Male	Female
20	58.90	63.60	0.05%	0.03%
25	54.06	58.69	0.07	0.03
30	49.25	53.77	0.08	0.04
35	44.45	48.88	0.09	0.05
40	39.64	44.01	0.11	0.07
45	34.88	39.18	0.16	0.10
50	30.19	34.39	0.26	0.14
55	25.65	29.67	0.44	0.23
60	21.33	25.09	0.80	0.44
65	17.34	20.77	1.45	0.86
70	13.79	16.80	2.37	1.37
75	10.62	13.10	3.72	2.27
80	7.87	9.81	6.20	3.94

The life expectancies and mortality rates projected by the 1994 Group Annuity Mortality table for **disabled** members are shown below for selected ages:

Age	Expected Years of Life Remaining		Mortality Rates	
	Male	Female	Male	Female
20	55.99	60.65	0.06%	0.03%
25	51.17	55.74	0.08	0.03
30	46.37	50.83	0.08	0.04
35	41.56	45.95	0.09	0.06
40	36.77	41.11	0.14	0.09
45	32.05	36.30	0.21	0.12
50	27.45	31.55	0.36	0.19
55	23.02	26.89	0.63	0.34
60	18.89	22.46	1.15	0.67
65	15.16	18.36	1.99	1.18
70	11.84	14.54	3.12	1.83
75	8.90	11.07	5.02	3.17
80	6.50	8.08	8.25	5.49

Miscellaneous and Technical Assumptions

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.
Decrement Timing	- Decrements of all types are assumed to occur mid-year.
Eligibility Testing	- Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Benefit Service	- Exact fractional service is used to determine the amount of benefit payable.
Decrement Relativity	- Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation	- Disability and death-in-service decrements do not operate during the first 5 years of service. Disability and withdrawal do not operate during retirement eligibility.
Normal Form of Benefit	- The assumed normal form of benefit is the straight life form.
Loads	- None.
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.

ACTUARIAL FUNDING METHOD

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

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

The basic funding objective is a level pattern of cost as a percentage of salary throughout each member's working lifetime. The funding method used in this actuarial valuation – the entry age normal cost method – is intended to meet this objective and result in a relatively level long-term contribution requirement as a percentage of salary.

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-salary 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, 2001, 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

Unfunded actuarial accrued liability is 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 30 years for positive unfunded liabilities, and 10 years for negative unfunded liabilities, with these time periods reestablished with each annual actuarial valuation. However, municipalities that entered MERS before January 1, 2000 may currently have an amortization period that is longer than 30 years that reduces annually by 1 year until the period reaches 30 years. At that point, the amortization period will remain at 30 years. All new municipalities entering MERS on and after January 1, 2000 have 30 year amortization. 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 a 30 year amortization, plus ii) an overfunding credit resulting from using a 10 year amortization instead of 30 years.

Present Value of Accrued Benefits

The present value of accrued benefits represents the actuarial value of benefits that have been earned as of the valuation date for all members of the valuation division. This benefit reflects the final average compensation and plan benefit service of each member, and plan features of the member's

valuation division as of the valuation date. Included in this value is the current value of vested benefits for members who have met plan vesting requirements and the current value of non-vested benefits for member who have not yet met plan vesting requirements. Regardless of plan vesting service, all member contributions are vested. Active members are assumed to continue in employment until retirement, death, disability or termination, but benefit amounts are frozen on the valuation date.

Termination Liability

The termination liability represents the value of the benefits that have been earned as of the valuation date based on final average compensation and benefit service as of the valuation date. All active members are assumed to terminate employment on the valuation date. Vested 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 active members are assumed to only receive a refund of member contributions, if any.

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 5-year period at the rate of 20% per year. This asset valuation method was first adopted for the December 31, 1993 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 20% of the current year's gain (loss) plus 20% of the gain (loss) from each of the 4 preceding years.

During 2001, 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 7.72%. The corresponding amounts for 2000, 1999, 1998 and 1997 were 10.36%, 15.38%, 12.93% and 12.02%, respectively.

For the December 31, 2001 valuation, the actuarial value of assets is equal to 110.60% of market value (compared to 100.07%, 87.89%, 88.86% and 89.63% in 2000, 1999, 1998 and 1997, 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 the following page 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 10% higher than the market value, meeting the actuarial assumption will require average future market returns that exceed the 8% investment return assumption.

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

Valuation Date December 31:	1997	1998	1999	2000	2001
1. Beginning of Year Assets					
a) Market Value	\$ 2,602,370,729	\$ 3,003,527,525	\$ 3,411,188,529	\$ 3,941,864,651	\$ 3,788,886,471
b) Valuation Assets	2,412,858,589	2,692,161,219	3,031,278,484	3,464,584,875	3,791,423,339
2. End of Year Market Value Assets	3,003,527,525	3,411,188,529	3,941,864,651	3,788,886,471	3,647,820,869
3. Net Additions to Market Value					
a) Net Contributions	116,715,726	144,118,741	161,911,772	162,703,877	154,103,475
b) Net Investment Income = (3d) - (3a) - (3c)	411,336,769	416,174,409	561,188,970	(122,407,374)	(93,269,286)
c) Benefit Payments	(126,895,699)	(152,632,146)	(192,424,619)	(193,274,683)	(201,899,791)
d) Total Additions to Market Value = (2) - (1a)	401,156,796	407,661,004	530,676,123	(152,978,180)	(141,065,602)
4. Average Valuation Assets = (1b) + .5x[(3a) + (3c)]	2,407,768,603	2,687,904,516	3,016,022,060	3,449,299,472	3,767,525,181
5. Expected Income at Valuation Rate = 8% x (4)	192,621,488	215,032,361	241,281,765	275,943,958	301,402,014
6. Gain (Loss) = (3b) - (5)	218,715,281	201,142,048	319,907,205	(398,351,332)	(394,671,300)
7. Phased-In Recognition of Investment Return					
a) Current Year: 0.2 x (6)	43,743,056	40,228,410	63,981,441	(79,670,266)	(78,934,260)
b) First Prior Year	13,182,671	43,743,056	40,228,410	63,981,441	(79,670,266)
c) Second Prior Year	61,401,895	13,182,671	43,743,056	40,228,410	63,981,441
d) Third Prior Year	(25,957,723)	61,401,895	13,182,671	43,743,056	40,228,410
e) Fourth Prior Year	4,491,215	(25,957,723)	61,401,895	13,182,671	43,743,057
f) Total Recognized Investment Gain	96,861,114	132,598,309	222,537,473	81,465,312	(10,651,618)
8. Change in Valuation Assets (3a) + (3c) + (5) + (7f)	279,302,629	339,117,265	433,306,391	326,838,464	242,954,080
9. End of Year Assets					
a) Market Value = (2)	3,003,527,525	3,411,188,529	3,941,864,651	3,788,886,471	3,647,820,869
b) Valuation Assets = (1b) + (8)	2,692,161,219	3,031,278,484	3,464,584,875	3,791,423,339	4,034,377,419
c) Difference Between Market & Valuation Assets	311,366,306	379,910,045	477,279,776	(2,536,868)	(386,556,550)
10. Recognized Rate of Return = [(5) + (7f)] / (4)	12.02%	12.93%	15.38%	10.36%	7.72%
11. Market Rate of Return	15.84%	13.88%	16.53%	(3.12%)	(2.48%)
12. Valuation Asset Adjustment Factor = (9b) / (9a)	0.896333	0.888628	0.878920	1.000670	1.105969



GABRIEL, ROEDER, SMITH & COMPANY
Consultants & Actuaries

One Towne Square • Suite 800 • Southfield, Michigan 48076

Harold Hailey
Ingham County
5303 S. Cedar St.
H.R. Facility, Suite 2102
Lansing, MI 48911-3895



GABRIEL, ROEDER, SMITH & COMPANY
Consultants & Actuaries

One Towne Square • Suite 800 • Southfield, Michigan 48076

Jack Restuccia
Ingham County Medical Care Facility
3860 Dobie Rd.
Okemos, MI 48864



GABRIEL, ROEDER, SMITH & COMPANY
Consultants & Actuaries

One Towne Square • Suite 800 • Southfield, Michigan 48076

Debbie Bailey
Ingham County Library
401 S. Capitol
Lansing, MI 48933