



# Municipal Employees' Retirement System of Michigan

Ingham County (3303)

in the

MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM  
OF MICHIGAN

Annual Actuarial Valuation as of December 31, 2003





**GABRIEL, ROEDER, SMITH & COMPANY**

**Consultants & Actuaries**

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June 25, 2004

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, 2003. The report includes the determination of liabilities and contribution rates resulting from the participation of Ingham County in the Municipal Employees' Retirement System of Michigan ("MERS").

MERS is an agent multiple-employer public employee pension plan and is a tax-qualified plan under section 401(a) of the Internal Revenue Code. MERS is an independent non-profit corporation pursuant to Public Act 220 of 1996, and is an instrumentality of the participating municipalities and courts. Ingham County is responsible for the employer contributions needed to provide MERS benefits for its employees and former employees under the Michigan Constitution and the MERS Plan Document.

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

- For this annual actuarial valuation, the Retirement Board adopted a one-time adjustment to the method of calculating the actuarial value of assets. Please refer to page 170 for an explanation of the Board's action.

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

To the best of our knowledge, this report is complete and accurate and was made in accordance with generally recognized actuarial methods in compliance with Act No. 220 of the Public Acts of 1996, as amended, and the MERS Plan Document as revised. The actuarial assumptions used for this valuation produce results that we believe are reasonable. The Retirement Board of the Municipal Employees' Retirement System of Michigan confirms that the System provides for payment of the required employer contribution as described in Section 20m of Act No. 314 of 1965 (MCL 38.1140m).

Please contact Laura Kramer at MERS if you would like to receive future annual valuations in electronic format, instead of a printed report (800-767-6377; [LKramer@mersofmich.com](mailto:LKramer@mersofmich.com)).

Sincerely,

GABRIEL, ROEDER, SMITH & COMPANY

Alan Sonnanstine, MAAA, ASA

Cathy Nagy, MAAA, FSA

Jim Koss, MAAA, ASA

# TABLE OF CONTENTS

|   | <b>Page</b> |
|---|-------------|
| Executive Summary   | 2           |
| Table 1      Benefit Provisions Evaluated and/or Considered                     | 6           |
| Table 2      Membership Summary   | 12          |
| Table 3      Active Members in the Valuation - Comparative Schedule             | 16          |
| Table 4      Flow of Active Membership  | 16          |
| Table 5      Vested Former Members in the Valuation - Comparative Schedule      | 17          |
| Table 6      Flow of Vested Former Members                                      | 17          |
| Table 7      Retirees and Beneficiaries in the Valuation - Comparative Schedule | 18          |
| Table 8      Flow of Retirees and Beneficiaries                                 | 18          |
| Table 9      Retirees and Beneficiaries on the Rolls - by Type of Benefit       | 19          |
| Table 10     Reported Assets (Market Value)                                     | 20          |
| Table 11     Flow of Valuation Assets (Actuarial Value)                         | 21          |
| Table 12     Termination Liabilities and Present Value of Accrued Benefits      | 22          |
| Table 13     Actuarial Accrued Liabilities and Valuation Assets                 | 26          |
| Table 14     Actuarial Accrued Liabilities - Comparative Schedule               | 35          |
| Table 15     Computed Employer Contributions to the Retirement System           | 36          |
| Table 16     Computed Employer Contributions by Division                        | 38          |
| Table 17     Computed Contributions - Comparative Statement by Division         | 39          |
| Table 18     Flow of Active Membership by Division                              | 40          |
| Table 19     Flow of Vested Former Members by Division                          | 40          |
| Table 20     Flow of Retirees and Beneficiaries by Division                     | 40          |
| Table 21     Flow of Valuation Assets (Actuarial Value) by Division             | 41          |
| Table 22     Actuarial Accrued Liabilities - Comparative Schedule by Division   | 41          |
| Table 23     GASB 25 and GASB 27 Information                                    | 134         |
| Table 24     Benefit Provision History  | 135         |
| Appendix    Summary of MERS Provisions, Methods and Assumptions                 | 149         |
| Introduction  | 150         |
| Summary of Plan Provisions  | 151         |
| Actuarial Assumptions   | 158         |
| Actuarial Funding Method  | 166         |
| Asset Valuation Method  | 169         |

# **Ingham County (3303)**

## **Executive Summary**

### **Required Employer Contributions**

The computed minimum required employer contributions to the retirement system for the fiscal years beginning January 1, 2005 (2003 Valuation) and January 1, 2004 (2002 Valuation) are as follows:

# Ingham County (3303)

## Executive Summary (continued)

| Division                  | Minimum Required Monthly Employer Contributions @ |                |                               |                  |
|---------------------------|---|----------------|-------------------------------|------------------|
|                           | Percentage of Payroll                             |                | \$ Based on Valuation Payroll |                  |
|                           | 2003 Valuation                                    | 2002 Valuation | 2003 Valuation                | 2002 Valuation   |
| 01 - Confidential         | 11.40%  | 12.14%         | \$12,836                      | \$11,925         |
| 02 - Sheriff FOP Spvs     | 22.43%  | 21.52%         | 38,459                        | 35,226           |
| 04 - MCF *                | 7.26%   | 7.02%          | 19,588                        | 14,879           |
| 09 - Judges               | 29.75%  | 32.09%         | 4,081                         | 3,670            |
| 10 - Gnrl Mgmt            | 12.30%  | 12.75%         | 58,939                        | 57,294           |
| 11 - Gnrl Library         | -%  | -%             | 1,375                         | 1,129            |
| 12 - Gnrl ICEA Profs *    | 7.97%   | 11.69%         | 38,423                        | 58,491           |
| 13 - Gnrl OPEIU Prob *    | 8.47%   | 8.57%          | 12,796                        | 13,163           |
| 14 - Gnrl TOPS UAW *      | 10.35%  | 10.14%         | 100,181                       | 95,555           |
| 15 - Animal Cntrl FOP     | 15.94%  | 16.06%         | 4,383                         | 4,159            |
| 16 - Gnrl Commsnrs *      | 7.55%   | 5.82%          | 1,014                         | 668              |
| 17 - ICEA Nurses          | 8.54%   | 9.39%          | 22,112                        | 23,894           |
| 18 - ICEA Ct. Prof        | 11.35%  | 11.42%         | 18,308                        | 17,930           |
| 19 - Cnstutnl Offcls      | 9.31%   | 9.59%          | 3,876                         | 3,876            |
| 21 - FOP Shrf Deputies    | 9.68%   | 9.44%          | 54,786                        | 52,600           |
| 40 - ICEA Unit 111        | 7.23%   | 6.45%          | 5,785                         | 4,453            |
| 41 - MCF Management       | 9.07%   | 9.23%          | 5,753                         | 6,020            |
| 42 - ICEA Unit 11 *       | 8.51%   | 8.46%          | 2,460                         | 2,699            |
| 43 - ICEA Unit 1 *        | 16.39%  | 14.63%         | 3,037                         | 2,852            |
| 44 - MCF Exec Mgr *       | 23.01%  |                | 2,078                         |                  |
| 90 - Asst Pros Attnys     | 13.63%  | 13.96%         | 21,891                        | 21,217           |
| 91 - Parks Union Empl     | 8.02%   | 9.44%          | 1,231                         | 1,257            |
| 92 - Parks Non Union      | 12.74%  | 13.80%         | 1,980                         | 2,084            |
| 93 - Lgl Rsrch Clerks     | 6.71%   | 7.16%          | 1,229                         | 1,354            |
| <b>Total Municipality</b> |   |                | <b>\$436,601</b>              | <b>\$436,395</b> |

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

# Ingham County (3303)

## Executive Summary (continued)

\* *The current year's required employer contributions reflect a change in benefit provisions, a change in member contribution rates, or a phase out of the temporary contribution adjustment. Please see Tables 16 and 17 for details.*

For additional details see Table 15.

It is important to note that the contribution rates shown above are not expected to remain at present levels indefinitely. If future experience were to match the valuation assumptions exactly, the computed employer rates would trend over time toward the long-term cost of system benefits, known as the Normal Cost (see Table 15). Prospective benefit changes as well as Retirement System gains and losses will also affect future contribution rates.

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

There were no changes in actuarial assumptions. For benefit provision changes see Table 1.

### 2003 System Experience

Calendar year 2003 saw asset return reminiscent of the bull market of the late 1990's. MERS system assets returned over 24% on a market value basis. The Retirement Board adopted a one-time adjustment in the Actuarial Value of Assets to slightly accelerate the recognition of this gain. This resulted in more stable employer contribution requirements and funded ratios. Please refer to page 170 for an explanation of the Board's actions.

The reader should note that, given that the actuarial value of assets is currently 9% higher than the market value, meeting the actuarial assumption will require average future market returns that exceed the 8% investment return assumption.

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

### 2003 Funded Position

## **Ingham County (3303)**

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

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

# Ingham County (3303)

## Table 1

### Benefit Provisions Evaluated and/or Considered

| Division             | 2003 Valuation  | 2002 Valuation  |
|----------------------|---|---|
| 1 - Confidential     | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>5.36% Member Contrib.<br>Act 88 Election (09/29/1965)                | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>5.36% Member Contrib.<br>Act 88 Election (09/29/1965)                |
| 2 - Sheriff FOP Spvs | 3.20% - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>F/N(25)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>19.61% Member Contrib.<br>Act 88 Election (09/29/1965) | 3.20% - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>F/N(25)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>19.61% Member Contrib.<br>Act 88 Election (09/29/1965) |
| 4 - MCF              | C-1 Old<br>Normal Ret Age: 60<br>V-10<br>FAC-5<br>E (2.0%) (01/01/1995)<br>0.00% Member Contrib.  | C-1 Old<br>Normal Ret Age: 60<br>V-10<br>FAC-5<br>E (2.0%) (01/01/1995)<br>0.00% Member Contrib.  |
| 9 - Judges           | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-5<br>3.14% Member Contrib.<br>Act 88 Election (09/29/1965)   | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-5<br>3.14% Member Contrib.<br>Act 88 Election (09/29/1965)   |
| 10 - Gnrl Mgmt       | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>6.39% Member Contrib.<br>Act 88 Election (09/29/1965)                | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>6.39% Member Contrib.<br>Act 88 Election (09/29/1965)                |



# Ingham County (3303)

## Table 1 (continued)

### Benefit Provisions Evaluated and/or Considered

| Division             | 2003 Valuation  | 2002 Valuation   |
|----------------------|---|--|
| 11 - Gnrl Library #  | C-1 Old<br>Normal Ret Age: 60<br>V-10<br>FAC-5<br>E (2.0%) (01/01/1994)<br>0.00% Member Contrib.<br>Act 88 Election (09/29/1965)  | C-1 Old<br>Normal Ret Age: 60<br>V-10<br>FAC-5<br>E (2.0%) (01/01/1994)<br>0.00% Member Contrib.<br>Act 88 Election (09/29/1965)   |
| 12 - Gnrl ICEA Profs | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>FAC-5<br>E (2.0%) (01/01/1994)<br>E-2 (2.5%) (01/01/2003)<br>13.42% Member Contrib.<br>Act 88 Election (09/29/1965) | B-3 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>FAC-5<br>E (2.0%) (01/01/1994)<br>E-2 (2.5%) (01/01/2003)<br>6.08% Member Contrib.<br>Act 88 Election (09/29/1965) |
| 13 - Gnrl OPEIU Prob | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>9.71% Member Contrib.<br>Act 88 Election (09/29/1965)                             | B-3 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>7.13% Member Contrib.<br>Act 88 Election (09/29/1965)                            |
| 14 - Gnrl TOPS UAW   | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>FAC-5<br>E (2.0%) (01/01/1994)<br>3.62% Member Contrib.<br>Act 88 Election (09/29/1965)                             | B-3 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>FAC-5<br>E (2.0%) (01/01/1994)<br>1.60% Member Contrib.<br>Act 88 Election (09/29/1965)                            |

# Ingham County (3303)

## Table 1 (continued)

### Benefit Provisions Evaluated and/or Considered

| Division              | 2003 Valuation   | 2002 Valuation   |
|-----------------------|--|--|
| 15 - Animal Cntrl FOP | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>F/N(25)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>E-2 (2.5%) (01/01/2001)<br>15.49% Member Contrib.<br>Act 88 Election (09/29/1965) | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>F/N(25)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>E-2 (2.5%) (01/01/2001)<br>15.49% Member Contrib.<br>Act 88 Election (09/29/1965) |
| 16 - Gnrl Commsnrs    | C-2 (B-1 Base)<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-5<br>E (2.0%) (01/01/1994)<br>3.56% Member Contrib.<br>Act 88 Election (09/29/1965)  | C-2 (B-1 Base)<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-5<br>E (2.0%) (01/01/1994)<br>3.56% Member Contrib.<br>Act 88 Election (09/29/1965)  |
| 17 - ICEA Nurses      | B-3 - 80% Max<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>E-2 (2.5%) (07/01/1995)<br>11.87% Member Contrib.<br>Act 88 Election (09/29/1965)             | B-3 - 80% Max<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>E-2 (2.5%) (07/01/1995)<br>11.87% Member Contrib.<br>Act 88 Election (09/29/1965)             |
| 18 - ICEA Ct. Prof    | B-3 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>F/N(20)<br>FAC-5<br>E (2.0%) (01/01/1994)<br>9.84% Member Contrib.<br>Act 88 Election (09/29/1965)                             | B-3 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>F/N(20)<br>FAC-5<br>E (2.0%) (01/01/1994)<br>9.84% Member Contrib.<br>Act 88 Election (09/29/1965)                             |

# Ingham County (3303)

## Table 1 (continued)

### Benefit Provisions Evaluated and/or Considered

| Division               | 2003 Valuation  | 2002 Valuation  |
|------------------------|---|---|
| 19 - Cnstutnl Offcls   | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>8.46% Member Contrib.<br>Act 88 Election (09/29/1965)                | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-3<br>E (2.0%) (01/01/1994)<br>8.46% Member Contrib.<br>Act 88 Election (09/29/1965)                |
| 21 - FOP Shrf Deputies | 3.20% - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>F/N(25)<br>FAC-5<br>E (2.0%) (01/01/1994)<br>10.96% Member Contrib.<br>Act 88 Election (09/29/1965) | 3.20% - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>F/N(25)<br>FAC-5<br>E (2.0%) (01/01/1994)<br>10.96% Member Contrib.<br>Act 88 Election (09/29/1965) |
| 40 - ICEA Unit 111     | C-2 (B-1 Base)<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>FAC-5<br>E (2.0%) (01/01/1995)<br>3.00% Member Contrib.<br>Act 88 Election (09/29/1965)              | C-2 (B-1 Base)<br>Normal Ret Age: 60<br>V-10<br>F55(15)<br>FAC-5<br>E (2.0%) (01/01/1995)<br>3.00% Member Contrib.<br>Act 88 Election (09/29/1965)              |
| 41 - MCF Management    | C-2 (B-1 Base)<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-5<br>E (2.0%) (01/01/1995)<br>0.00% Member Contrib.<br>Act 88 Election (09/29/1965)               | C-2 (B-1 Base)<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-5<br>E (2.0%) (01/01/1995)<br>0.00% Member Contrib.<br>Act 88 Election (09/29/1965)               |
| 42 - ICEA Unit 11      | C-2 (B-1 Base)<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-3<br>E (2.0%) (01/01/1988)<br>3.95% Member Contrib.<br>Act 88 Election (09/29/1965)               | C-2 (B-1 Base)<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-3<br>E (2.0%) (01/01/1988)<br>3.95% Member Contrib.<br>Act 88 Election (09/29/1965)               |

# Ingham County (3303)

## Table 1 (continued)

### Benefit Provisions Evaluated and/or Considered

| Division              | 2003 Valuation   | 2002 Valuation  |
|-----------------------|--|---|
| 43 - ICEA Unit 1      | C-2 (B-1 Base)<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-5<br>3.51% Member Contrib.<br>Act 88 Election (09/29/1965)                           | C-2 (B-1 Base)<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-5<br>3.50% Member Contrib.<br>Act 88 Election (09/29/1965)                          |
| 44 - MCF Exec Mgr     | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-3<br>E-2 (2.5%) (09/01/2003)<br>0.00% Member Contrib.<br>Act 88 Election (09/29/1965) |   |
| 90 - Asst Pros Attnys | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-5<br>E (2.0%) (01/01/1988)<br>1.40% Member Contrib.<br>Act 88 Election (09/29/1965)   | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-6<br>F55(15)<br>FAC-5<br>E (2.0%) (01/01/1988)<br>1.40% Member Contrib.<br>Act 88 Election (09/29/1965)  |
| 91 - Parks Union Empl | B-3 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>FAC-5<br>E (2.0%) (01/01/1988)<br>0.00% Member Contrib.<br>Act 88 Election (09/29/1965)             | B-3 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>FAC-5<br>E (2.0%) (01/01/1988)<br>0.00% Member Contrib.<br>Act 88 Election (09/29/1965)            |
| 92 - Parks Non Union  | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(25)<br>FAC-3<br>E (2.0%) (01/01/1988)<br>0.00% Member Contrib.<br>Act 88 Election (09/29/1965)  | B-4 - 80% Max<br>Normal Ret Age: 60<br>V-10<br>F55(25)<br>FAC-3<br>E (2.0%) (01/01/1988)<br>0.00% Member Contrib.<br>Act 88 Election (09/29/1965) |

## Ingham County (3303)

### Table 1 (continued)

#### Benefit Provisions Evaluated and/or Considered

| Division              | 2003 Valuation   | 2002 Valuation   |
|-----------------------|--|--|
| 93 - Lgl Rsrch Clerks | C-1 Old<br>Normal Ret Age: 60<br>V-10<br>FAC-5<br>E (2.0%) (01/01/1988)<br>0.00% Member Contrib.<br>Act 88 Election (09/29/1965) | C-1 Old<br>Normal Ret Age: 60<br>V-10<br>FAC-5<br>E (2.0%) (01/01/1988)<br>0.00% Member Contrib.<br>Act 88 Election (09/29/1965) |

# This division is closed to new hires. Please refer to the Amortization of Unfunded Actuarial Accrued Liability on page 167.

# Ingham County (3303)

## Table 2

### Membership Summary

| Division                   | 2003 Valuation |                 | 2002 Valuation |                 |
|----------------------------|----------------|-----------------|----------------|-----------------|
|                            | Number         | Annual Payroll* | Number         | Annual Payroll* |
| 1 - Confidential           |                |                 |                |                 |
| Active Members             | 34             | \$1,351,175     | 32             | \$1,178,762     |
| Vested Former Members      | 12             | 90,266          | 13             | 86,215          |
| Retirees and Beneficiaries | 22             | 153,332         | 36             | 194,074         |
| 2 - Sheriff FOP Spvs       |                |                 |                |                 |
| Active Members             | 32             | \$2,057,522     | 32             | \$1,964,293     |
| Vested Former Members      | 2              | 31,636          | 1              | 4,610           |
| Retirees and Beneficiaries | 47             | 1,383,836       | 49             | 1,317,123       |
| 4 - MCF                    |                |                 |                |                 |
| Active Members             | 131            | \$3,237,587     | 115            | \$2,543,513     |
| Vested Former Members      | 32             | 129,925         | 32             | 125,436         |
| Retirees and Beneficiaries | 66             | 229,483         | 68             | 231,178         |
| 9 - Judges                 |                |                 |                |                 |
| Active Members             | 6              | \$164,604       | 5              | \$137,270       |
| Vested Former Members      | 2              | 6,745           | 1              | 4,348           |
| Retirees and Beneficiaries | 6              | 61,658          | 5              | 58,089          |
| 10 - Gnrl Mgmt             |                |                 |                |                 |
| Active Members             | 81             | \$5,750,099     | 79             | \$5,392,347     |
| Vested Former Members      | 18             | 213,171         | 18             | 235,668         |
| Retirees and Beneficiaries | 49             | 1,039,868       | 50             | 1,018,286       |
| 11 - Gnrl Library          |                |                 |                |                 |
| Active Members             | 0              | 0               | 0              | 0               |
| Vested Former Members      | 29             | 227,023         | 29             | 227,023         |
| Retirees and Beneficiaries | 21             | 99,871          | 21             | 99,871          |
| 12 - Gnrl ICEA Profs       |                |                 |                |                 |
| Active Members             | 123            | \$5,785,130     | 132            | \$6,004,201     |
| Vested Former Members      | 25             | 248,517         | 26             | 248,517         |
| Retirees and Beneficiaries | 29             | 385,232         | 20             | 245,119         |
| 13 - Gnrl OPEIU Prob       |                |                 |                |                 |
| Active Members             | 36             | \$1,812,911     | 36             | \$1,843,133     |
| Vested Former Members      | 7              | 57,375          | 8              | 66,086          |
| Retirees and Beneficiaries | 9              | 149,388         | 6              | 89,491          |

# Ingham County (3303)

**Table 2 (continued)**

## Membership Summary

| Division                   | 2003 Valuation |                 | 2002 Valuation |                 |
|----------------------------|----------------|-----------------|----------------|-----------------|
|                            | Number         | Annual Payroll* | Number         | Annual Payroll* |
| 14 - Gnrl TOPS UAW         |                |                 |                |                 |
| Active Members             | 384            | \$11,615,252    | 386            | \$11,308,351    |
| Vested Former Members      | 55             | 338,759         | 56             | 337,265         |
| Retirees and Beneficiaries | 161            | 1,382,335       | 154            | 1,296,226       |
| 15 - Animal Cntrl FOP      |                |                 |                |                 |
| Active Members             | 9              | \$329,988       | 9              | \$310,758       |
| Vested Former Members      | 1              | 6,172           | 1              | 6,172           |
| Retirees and Beneficiaries | 4              | 65,919          | 4              | 64,706          |
| 16 - Gnrl Commsnrs         |                |                 |                |                 |
| Active Members             | 11             | \$161,215       | 10             | \$137,720       |
| Vested Former Members      | 4              | 8,576           | 4              | 8,576           |
| Retirees and Beneficiaries | 7              | 23,016          | 6              | 20,098          |
| 17 - ICEA Nurses           |                |                 |                |                 |
| Active Members             | 69             | \$3,107,037     | 67             | \$3,053,506     |
| Vested Former Members      | 11             | 79,570          | 12             | 81,263          |
| Retirees and Beneficiaries | 32             | 286,201         | 28             | 250,711         |
| 18 - ICEA Ct. Prof         |                |                 |                |                 |
| Active Members             | 37             | \$1,935,719     | 37             | \$1,883,979     |
| Vested Former Members      | 9              | 60,347          | 7              | 51,871          |
| Retirees and Beneficiaries | 31             | 537,997         | 23             | 476,523         |
| 19 - Cnstutnl Offcls       |                |                 |                |                 |
| Active Members             | 6              | \$499,590       | 6              | \$485,039       |
| Vested Former Members      | 0              | 0               | 0              | 0               |
| Retirees and Beneficiaries | 7              | 94,987          | 7              | 96,192          |
| 21 - FOP Shrf Deputies     |                |                 |                |                 |
| Active Members             | 150            | \$6,791,675     | 153            | \$6,686,427     |
| Vested Former Members      | 17             | 85,877          | 18             | 85,877          |
| Retirees and Beneficiaries | 68             | 1,299,340       | 60             | 1,217,094       |
| 40 - ICEA Unit 111         |                |                 |                |                 |
| Active Members             | 32             | \$960,275       | 28             | \$828,543       |
| Vested Former Members      | 6              | 33,967          | 5              | 33,967          |
| Retirees and Beneficiaries | 27             | 227,321         | 27             | 231,422         |

# Ingham County (3303)

## Table 2 (continued)

### Membership Summary

| Division                   | 2003 Valuation |                 | 2002 Valuation |                 |
|----------------------------|----------------|-----------------|----------------|-----------------|
|                            | Number         | Annual Payroll* | Number         | Annual Payroll* |
| 41 - MCF Management        |                |                 |                |                 |
| Active Members             | 19             | \$761,154       | 18             | \$782,621       |
| Vested Former Members      | 8              | 49,857          | 10             | 61,523          |
| Retirees and Beneficiaries | 9              | 56,939          | 8              | 52,672          |
| 42 - ICEA Unit 11          |                |                 |                |                 |
| Active Members             | 9              | \$346,899       | 10             | \$382,838       |
| Vested Former Members      | 2              | 6,702           | 2              | 6,702           |
| Retirees and Beneficiaries | 1              | 10,146          | 1              | 10,146          |
| 43 - ICEA Unit 1           |                |                 |                |                 |
| Active Members             | 6              | \$222,356       | 6              | \$233,997       |
| Vested Former Members      | 3              | 17,326          | 3              | 17,326          |
| Retirees and Beneficiaries | 5              | 64,714          | 5              | 64,714          |
| 44 - MCF Exec Mgr          |                |                 |                |                 |
| Active Members             | 1              | \$108,383       |                |                 |
| Vested Former Members      | 0              | 0               |                |                 |
| Retirees and Beneficiaries | 0              | 0               |                |                 |
| 90 - Asst Pros Attnys      |                |                 |                |                 |
| Active Members             | 32             | \$1,927,390     | 32             | \$1,823,812     |
| Vested Former Members      | 16             | 252,516         | 15             | 239,618         |
| Retirees and Beneficiaries | 4              | 92,599          | 5              | 97,627          |
| 91 - Parks Union Empl      |                |                 |                |                 |
| Active Members             | 6              | \$184,247       | 5              | \$159,732       |
| Vested Former Members      | 1              | 8,511           | 0              | 0               |
| Retirees and Beneficiaries | 0              | 0               | 0              | 0               |
| 92 - Parks Non Union       |                |                 |                |                 |
| Active Members             | 3              | \$186,496       | 3              | \$181,220       |
| Vested Former Members      | 0              | 0               | 0              | 0               |
| Retirees and Beneficiaries | 0              | 0               | 0              | 0               |
| 93 - Lgl Rsrch Clerks      |                |                 |                |                 |
| Active Members             | 6              | \$219,613       | 6              | \$227,014       |
| Vested Former Members      | 0              | 0               | 0              | 0               |
| Retirees and Beneficiaries | 0              | 0               | 0              | 0               |



# Ingham County (3303)

## Table 2 (continued)

### Membership Summary

| Division                          | 2003 Valuation    |                     | 2002 Valuation    |                     |
|-----------------------------------|-------------------|---------------------|-------------------|---------------------|
|                                   | Number            | Annual Payroll*     | Number            | Annual Payroll*     |
| <b>Total Municipality</b>         |                   |                     |                   |                     |
| <b>Active Members</b>             | <b>1223</b>       | <b>\$49,516,317</b> | <b>1207</b>       | <b>\$47,549,076</b> |
| <b>Vested Former Members</b>      | <b>260</b>        | <b>1,952,838</b>    | <b>261</b>        | <b>1,928,063</b>    |
| <b>Retirees and Beneficiaries</b> | <b><u>605</u></b> | <b>7,644,182</b>    | <b><u>583</u></b> | <b>7,131,362</b>    |
| <b>Total Participants</b>         | <b>2088</b>       |                     | <b>2051</b>       |                     |

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

# Ingham County (3303)

## Table 3

### Active Members in the Valuation - Comparative Schedule

| Valuation<br>Date<br>12/31 | Number | Annual<br>Payroll | Average Pay  |               | Average<br>Age | Average<br>Benefit<br>Service | Average<br>Vesting<br>Service |
|----------------------------|--------|-------------------|--------------|---------------|----------------|-------------------------------|-------------------------------|
|                            |        |                   | Annual<br>\$ | %<br>Increase |                |                               |                               |
| 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                           |
| 2002                       | 1,207  | 47,549,076        | 39,394       | 5.1           | 42.8           | 9.4                           | 9.7                           |
| 2003                       | 1,223  | 49,516,317        | 40,488       | 2.8           | 43.3           | 9.7                           | 9.9                           |

## Table 4

### Flow of Active Membership

| Year<br>Ended<br>12/31 | Retired | Disabled | Died<br>(Survivor<br>Benefit) | Other Termination |            | Net<br>Transfers | New<br>Member | End of<br>Year |
|------------------------|---------|----------|-------------------------------|-------------------|------------|------------------|---------------|----------------|
|                        |         |          |                               | Vested            | Non-Vested |                  |               |                |
| 2001                   | (26)    | (1)      |                               | (53)              | (78)       |                  | 160           | 1199           |
| 2002                   | (31)    | (1)      |                               | (16)              | (91)       |                  | 147           | 1207           |
| 2003                   | (18)    | (1)      |                               | (16)              | (92)       |                  | 143           | 1223           |

# 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 |
|----------------------|--------|--------------------------|-------------|-------------------------|-------------------------|
| 1993                 | 159    | \$                       |             |                         |                         |
| 1994                 | 164    |                          |             |                         |                         |
| 1995                 | 169    |                          |             |                         |                         |
| 1996                 | 193    |                          |             |                         |                         |
| 1997                 | 221    |                          |             |                         |                         |
| 1998                 | 218    | 1,870,506                | 47.7        | 11.0                    | 12.5                    |
| 1999                 | 227    |                          |             |                         |                         |
| 2000                 | 236    |                          |             |                         |                         |
| 2001                 | 286    |                          |             |                         |                         |
| 2002                 | 261    |                          |             |                         |                         |
| 2003                 | 260    | 1,952,838                | 49.4        | 11.9                    | 13.6                    |

## Table 6

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Net Transfers | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|---------------|-----|-------------|
| 2001             | (10)    |                |                         | (15)            |               | 75  | 286         |
| 2002             | (11)    | (2)            |                         | (29)            | (1)           | 18  | 261         |
| 2003             | (10)    | (3)            | (1)                     | (6)             |               | 19  | 260         |

# Ingham County (3303)

## Table 7

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

| Valuation<br>Date<br>12/31 | Retirees |                    | Beneficiaries |                    | Total Recipients |                    | No. of<br>Actives<br>per<br>Recip. | Benefits<br>As % of<br>Active<br>Payroll |
|----------------------------|----------|--------------------|---------------|--------------------|------------------|--------------------|------------------------------------|--|
|                            | Number   | Annual<br>Benefits | Number        | Annual<br>Benefits | Number           | Annual<br>Benefits |                                    |  |
| 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                                     |
| 2002                       | 522      | 6,749,230          | 61            | 382,132            | 583              | 7,131,362          | 2.1                                | 15.0                                     |
| 2003                       | 541      | 7,208,811          | 64            | 435,371            | 605              | 7,644,182          | 2.0                                | 15.4                                     |

## Table 8

### Flow of Retirees and Beneficiaries

| Year<br>Ended<br>12/31 | Added to Rolls |                    |                      | Removed from Rolls |                    |                      | Year End |                    |
|------------------------|----------------|--------------------|----------------------|--------------------|--------------------|----------------------|----------|--------------------|
|                        | Number@        | Annual<br>Benefits | Benefit<br>Adjust. * | Number             | Annual<br>Benefits | Benefit<br>Adjust. # | Number   | Annual<br>Benefits |
| 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          |
| 2002                   | 48             | 970,505            | 7,588                | (24)               | (194,125)          | (43,388)             | 583      | 7,131,362          |
| 2003                   | 60             | 755,729            | 10,456               | (38)               | (211,216)          | (42,149)             | 605      | 7,644,182          |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

**Table 9**

## **Retirees and Beneficiaries on the Rolls as of December 31, 2003**

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

| <b>Benefits Being Paid to:</b>      | <b>Annual Benefits</b> |               |
|-------------------------------------|------------------------|---------------|
|                                     | <b>Number</b>          | <b>Amount</b> |
| Age and service retirants           | 517                    | \$6,992,515   |
| Non-duty disability retirants       | 21                     | 205,700       |
| Duty disability retirants           | 3                      | 10,596        |
| Beneficiaries of deceased retirants | 40                     | 287,487       |
| Beneficiaries of deceased members:  |                        |               |
| Non-duty death                      | 23                     | 128,729       |
| Duty death                          | <u>1</u>               | <u>19,155</u> |
| Total Benefits Being Paid           | 605                    | \$7,644,182   |

# Ingham County (3303)

## Table 10

### Reported Assets (Market Value)

| Division                  | 2003 Valuation           |                      | 2002 Valuation           |                      |
|---------------------------|--------------------------|----------------------|--------------------------|----------------------|
|                           | Employer<br>And Retiree* | Employee#            | Employer<br>And Retiree* | Employee#            |
| 01 - Confidential         | \$ 3,363,890             | \$ 516,218           | \$ 2,846,642             | \$ 435,973           |
| 02 - Sheriff FOP Spvs     | 10,220,138               | 2,814,120            | 8,592,369                | 2,448,999            |
| 04 - MCF                  | 4,094,100                | 51,260               | 3,323,838                | 51,357               |
| 09 - Judges               | 475,846                  | 26,415               | 386,703                  | 22,843               |
| 10 - Gnrl Mgmt            | 16,962,348               | 2,801,794            | 13,312,215               | 2,391,199            |
| 11 - Gnrl Library         | 1,864,227                | 129,981              | 1,570,243                | 128,663              |
| 12 - Gnrl ICEA Profs      | 8,930,002                | 2,905,795            | 6,421,306                | 2,282,930            |
| 13 - Gnrl OPEIU Prob      | 4,980,976                | 1,086,991            | 3,932,795                | 1,005,177            |
| 14 - Gnrl TOPS UAW        | 25,530,489               | 3,258,334            | 20,125,185               | 3,176,714            |
| 15 - Animal Cntrl FOP     | 695,240                  | 219,940              | 546,293                  | 171,471              |
| 16 - Gnrl Commsnrs        | 236,082                  | 52,621               | 182,267                  | 46,917               |
| 17 - ICEA Nurses          | 5,904,229                | 1,943,520            | 4,376,871                | 1,612,438            |
| 18 - ICEA Ct. Prof        | 4,851,891                | 1,253,455            | 3,740,772                | 1,036,965            |
| 19 - Cnstutnl Offcls      | 1,261,035                | 293,017              | 989,984                  | 247,046              |
| 21 - FOP Shrf Deputies    | 14,935,015               | 4,555,815            | 11,732,685               | 3,947,286            |
| 40 - ICEA Unit 111        | 2,451,251                | 223,303              | 2,117,118                | 196,835              |
| 41 - MCF Management       | 1,219,994                | 85,736               | 965,093                  | 57,301               |
| 42 - ICEA Unit 11         | 271,241                  | 105,886              | 202,347                  | 104,255              |
| 43 - ICEA Unit 1          | 407,742                  | 83,951               | 366,899                  | 91,365               |
| 44 - MCF Exec Mgr         | 60,706                   | 0                    |                          |                      |
| 90 - Asst Pros Attnys     | 4,693,704                | 393,251              | 3,586,389                | 363,368              |
| 91 - Parks Union Empl     | 150,871                  | 0                    | 104,007                  | 0                    |
| 92 - Parks Non Union      | 686,879                  | 53,100               | 519,754                  | 52,315               |
| 93 - Lgl Rsrch Clerks     | 126,275                  | 0                    | 83,235                   | 0                    |
| <b>Total Municipality</b> | <b>\$114,374,171</b>     | <b>\$ 22,854,503</b> | <b>\$ 90,025,010</b>     | <b>\$ 19,871,417</b> |
| <b>Combined Reserves</b>  | <b>\$137,228,674</b>     |                      | <b>\$109,896,427</b>     |                      |

\* Reserve for Employer Contributions and Benefit Payments

# Reserve for Employee Contributions

The December 31, 2003 Valuation Assets are equal to 1.095161 times the reported Market Value of assets. The derivation of Valuation Assets is described on page 169.

# Ingham County (3303)

## Table 11

### Flow of Valuation Assets (Actuarial Value)

| Year<br>Ended<br>12/31 | Contributions |              | Investment<br>Income | Benefit<br>Payments | Member<br>Contrib.<br>Refunds | Net<br>Transfers | Balance        |
|------------------------|---------------|--------------|----------------------|---------------------|-------------------------------|------------------|----------------|
|                        | Employer      | Member       |                      |                     |                               |                  |                |
| 2001                   | \$ 3,969,561  | \$ 2,669,220 | \$ 9,655,853         | \$ (6,165,634)      | \$ (498,267)                  | \$ 116,076       | \$ 133,055,221 |
| 2002                   | 4,297,730     | 3,001,615    | 4,906,444            | (6,903,572)         | (216,746)                     | 158,907          | 138,299,599    |
| 2003                   | 4,851,575     | 3,500,439    | 11,281,677           | (7,468,123)         | (246,135)                     | 68,461           | 150,287,493    |

# Ingham County (3303)

## Table 12

### Termination Liability and Present Value of Accrued Benefits as of December 31, 2003

| Termination Liability*   | Division   | PVAB*<br>Present Value of<br>Accrued Benefits                              | Valuation<br>Assets | PVAB<br>Percent<br>Funded | Unfunded<br>(Overfunded)<br>PVAB |
|--|--|--|---------------------|---------------------------|----------------------------------|
| \$ 2,458,608<br>539,132<br>1,559,987<br><u>1,548</u><br>\$ 4,559,275       | 01 - Confidential<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total     | \$ 2,034,507<br>539,132<br>1,559,987<br><u>1,548</u><br>\$ 4,135,174       | \$ 4,249,343        | 102.8%                    | \$ (114,169)                     |
| \$ 4,388,458<br>109,842<br>15,275,182<br><u>0</u><br>\$ 19,773,482         | 02 - Sheriff FOP Spvs<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total | \$ 5,538,940<br>109,842<br>15,275,182<br><u>0</u><br>\$ 20,923,964         | \$ 14,274,611       | 68.2%                     | \$ 6,649,353                     |
| \$ 1,696,948<br>664,357<br>1,904,964<br><u>148</u><br>\$ 4,266,417         | 04 - MCF<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total              | \$ 1,581,269<br>664,357<br>1,904,964<br><u>148</u><br>\$ 4,150,738         | \$ 4,539,837        | 109.4%                    | \$ (389,099)                     |
| \$ 483,058<br>64,009<br>642,532<br><u>0</u><br>\$ 1,189,599                | 09 - Judges<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total           | \$ 364,712<br>64,009<br>642,532<br><u>0</u><br>\$ 1,071,253                | \$ 550,057          | 51.3%                     | \$ 521,196                       |
| \$ 15,114,063<br>1,214,730<br>10,272,723<br><u>45,776</u><br>\$ 26,647,292 | 10 - Gnrl Mgmt<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total        | \$ 11,717,604<br>1,214,730<br>10,272,723<br><u>45,776</u><br>\$ 23,250,833 | \$ 21,644,918       | 93.1%                     | \$ 1,605,915                     |
| \$ 0<br>1,556,051<br>909,935<br><u>0</u><br>\$ 2,465,986                   | 11 - Gnrl Library<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total     | \$ 0<br>1,556,051<br>909,935<br><u>0</u><br>\$ 2,465,986                   | \$ 2,183,979        | 88.6%                     | \$ 282,007                       |
| \$ 10,160,296<br>1,651,648<br>4,005,246<br><u>156,867</u><br>\$ 15,974,057 | 12 - Gnrl ICEA Profs<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total  | \$ 8,622,660<br>1,651,648<br>4,005,246<br><u>156,867</u><br>\$ 14,436,421  | \$ 12,962,103       | 89.8%                     | \$ 1,474,318                     |



# Ingham County (3303)

## Table 12 (continued)

### Termination Liability and Present Value of Accrued Benefits as of December 31, 2003

| Termination Liability*  | Division   | PVAB*<br>Present Value of<br>Accrued Benefits                               | Valuation<br>Assets | PVAB<br>Percent<br>Funded | Unfunded<br>(Overfunded)<br>PVAB |
|---|--|---|---------------------|---------------------------|----------------------------------|
| \$ 6,428,780<br>395,304<br>1,647,735<br><u>0</u><br>\$ 8,471,819            | 13 - Gnrl OPEIU Prob<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total  | \$ 4,793,741<br>395,304<br>1,647,735<br><u>0</u><br>\$ 6,836,780            | \$ 6,645,401        | 97.2%                     | \$ 191,379                       |
| \$ 15,041,270<br>1,793,141<br>13,116,077<br><u>142,352</u><br>\$ 30,092,840 | 14 - Gnrl TOPS UAW<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total    | \$ 13,225,938<br>1,793,141<br>13,116,077<br><u>142,352</u><br>\$ 28,277,508 | \$ 31,528,396       | 111.5%                    | \$ (3,250,888)                   |
| \$ 487,136<br>76,596<br>865,223<br><u>9,623</u><br>\$ 1,438,578             | 15 - Animal Cntrl FOP<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total | \$ 586,981<br>76,596<br>865,223<br><u>9,623</u><br>\$ 1,538,423             | \$ 1,002,269        | 65.1%                     | \$ 536,154                       |
| \$ 105,869<br>36,973<br>177,334<br><u>10,572</u><br>\$ 330,748              | 16 - Gnrl Commsnrs<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total    | \$ 88,899<br>36,973<br>177,334<br><u>10,572</u><br>\$ 313,778               | \$ 316,176          | 100.8%                    | \$ (2,398)                       |
| \$ 6,384,665<br>676,433<br>3,085,185<br><u>32,112</u><br>\$ 10,178,395      | 17 - ICEA Nurses<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total      | \$ 5,229,011<br>676,433<br>3,085,185<br><u>32,112</u><br>\$ 9,022,741       | \$ 8,594,549        | 95.3%                     | \$ 428,192                       |
| \$ 3,402,507<br>354,835<br>5,317,531<br><u>2,658</u><br>\$ 9,077,531        | 18 - ICEA Ct. Prof<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total    | \$ 3,033,754<br>354,835<br>5,317,531<br><u>2,658</u><br>\$ 8,708,778        | \$ 6,686,337        | 76.8%                     | \$ 2,022,441                     |
| \$ 1,245,794<br>0<br>748,313<br><u>0</u><br>\$ 1,994,107                    | 19 - Cnstutnl Offcls<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total  | \$ 984,476<br>0<br>748,313<br><u>0</u><br>\$ 1,732,789                      | \$ 1,701,937        | 98.2%                     | \$ 30,852                        |

# Ingham County (3303)

## Table 12 (continued)

### Termination Liability and Present Value of Accrued Benefits as of December 31, 2003

| Termination Liability*  | Division  | PVAB*<br>Present Value of<br>Accrued Benefits                           | Valuation<br>Assets | PVAB<br>Percent<br>Funded | Unfunded<br>(Overfunded)<br>PVAB |
|---|---|---|---------------------|---------------------------|----------------------------------|
| \$ 7,571,298<br>421,450<br>13,713,804<br><u>20,920</u><br>\$ 21,727,472 | 21 - FOP Shrf Deputies<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total | \$ 8,273,739<br>421,450<br>13,713,804<br><u>20,920</u><br>\$ 22,429,913 | \$ 21,345,597       | 95.2%                     | \$ 1,084,316                     |
| \$ 649,906<br>194,766<br>2,015,445<br><u>39,712</u><br>\$ 2,899,829     | 40 - ICEA Unit 111<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total     | \$ 545,626<br>194,766<br>2,015,445<br><u>39,712</u><br>\$ 2,795,549     | \$ 2,929,067        | 104.8%                    | \$ (133,518)                     |
| \$ 366,828<br>221,844<br>474,104<br><u>885</u><br>\$ 1,063,661          | 41 - MCF Management<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total    | \$ 365,438<br>221,844<br>474,104<br><u>885</u><br>\$ 1,062,271          | \$ 1,429,985        | 134.6%                    | \$ (367,714)                     |
| \$ 282,950<br>34,139<br>97,095<br><u>24,407</u><br>\$ 438,591           | 42 - ICEA Unit 11<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total      | \$ 237,673<br>34,139<br>97,095<br><u>24,407</u><br>\$ 393,314           | \$ 413,015          | 105.0%                    | \$ (19,701)                      |
| \$ 226,765<br>53,451<br>596,524<br><u>9,505</u><br>\$ 886,245           | 43 - ICEA Unit 1<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total       | \$ 186,462<br>53,451<br>596,524<br><u>9,505</u><br>\$ 845,942           | \$ 538,483          | 63.7%                     | \$ 307,459                       |
| \$ 0<br>0<br>0<br><u>0</u><br>\$ 0                                      | 44 - MCF Exec Mgr<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total      | \$ 122,043<br>0<br>0<br><u>0</u><br>\$ 122,043                          | \$ 66,483           | 54.5%                     | \$ 55,560                        |
| \$ 3,521,284<br>1,464,647<br>965,351<br><u>1,463</u><br>\$ 5,952,745    | 90 - Asst Pros Attnys<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total  | \$ 2,861,679<br>1,464,647<br>965,351<br><u>1,463</u><br>\$ 5,293,140    | \$ 5,571,035        | 105.3%                    | \$ (277,895)                     |

# Ingham County (3303)

## Table 12 (continued)

### Termination Liability and Present Value of Accrued Benefits as of December 31, 2003

| <b>Termination Liability*</b>   | <b>Division</b>   | <b>PVAB*<br/>Present Value of<br/>Accrued Benefits</b>  | <b>Valuation<br/>Assets</b> | <b>PVAB<br/>Percent<br/>Funded</b> | <b>Unfunded<br/>(Overfunded)<br/>PVAB</b> |
|---|---|---|-----------------------------|------------------------------------|---|
| \$ 52,428<br>40,069<br>0<br><u>0</u><br>\$ 92,497   | 91 - Parks Union Empl<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total  | \$ 56,088<br>40,069<br>0<br><u>0</u><br>\$ 96,157   | \$ 165,228                  | 171.8%                             | \$ (69,071)                               |
| \$ 986,619<br>0<br>0<br><u>0</u><br>\$ 986,619  | 92 - Parks Non Union<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total   | \$ 724,046<br>0<br>0<br><u>0</u><br>\$ 724,046  | \$ 810,396                  | 111.9%                             | \$ (86,350)                               |
| \$ 111,569<br>0<br>0<br><u>0</u><br>\$ 111,569  | 93 - Lgl Rsrch Clerks<br>Active Members<br>Vested Former Members<br>Retirees and Beneficiaries<br>Pending Refunds<br>Total  | \$ 96,690<br>0<br>0<br><u>0</u><br>\$ 96,690  | \$ 138,291                  | 143.0%                             | \$ (41,601)                               |
| <b>\$ 81,167,099</b><br><b>11,563,417</b><br><b>77,390,290</b><br><b>498,548</b><br><b>\$ 170,619,354</b> | <b>Total Municipality</b><br><b>Active Members</b><br><b>Vested Former Members</b><br><b>Retirees and Beneficiaries</b><br><b>Pending Refunds</b><br><b>Total</b> | <b>\$ 71,271,976</b><br><b>11,563,417</b><br><b>77,390,290</b><br><b>498,548</b><br><b>\$ 160,724,231</b> | <b>\$ 150,287,493</b>       | <b>93.5%</b>                       | <b>\$ 10,436,738</b>                      |

\* The Termination Liability represents the present value of benefits payable in the event that all active members terminate employment on December 31, 2003, 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, 2003. 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. Pending refunds represent expected refunds of accumulated member contributions to persons who have terminated membership before becoming eligible for pension benefits.

# Ingham County (3303)

## Table 13

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2003

| Division   | Actuarial<br>Accrued<br>Liabilities | Valuation<br>Assets  | Percent<br>Funded | Unfunded<br>(Overfunded)<br>Accrued<br>Liabilities |
|--|-------------------------------------|----------------------|-------------------|--|
| 01 -Confidentials  |                                     |                      |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                      |                   |  |
| Active Members   | \$ 2,852,945                        | \$ 1,715,379         | 60.1%             | \$ 1,137,566                                       |
| Vested Former Members                                      | 457,762                             | 457,762              | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>1,559,987</u>                    | <u>1,559,987</u>     | 100.0             | <u>0</u>   |
| Total  | \$ 4,870,694                        | \$ 3,733,128         | 76.6%             | \$ 1,137,566                                       |
| Reserve for Employee Contributions                         |                                     |                      |                   |  |
| Active Members   | \$ 433,297                          | \$ 433,297           |                   |  |
| Vested Former Members                                      | 81,370                              | 81,370               |                   |  |
| Pending Refunds  | <u>1,548</u>                        | <u>1,548</u>         |                   |  |
| Total  | \$ 516,215                          | \$ 516,215           | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 5,386,909</b>                 | <b>\$ 4,249,343</b>  | <b>78.9%</b>      | <b>\$ 1,137,566</b>                                |
| 02 -Sheriff FOP Spvs                                       |                                     |                      |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                      |                   |  |
| Active Members   | \$ 5,538,299                        | \$ 0                 | 0.0%              | \$ 5,538,299                                       |
| Vested Former Members                                      | 28,084                              | 0                    | 0.0               | 28,084   |
| Retirees and Beneficiaries                                 | <u>15,275,182</u>                   | <u>11,460,489</u>    | 75.0              | <u>3,814,693</u>                                   |
| Total  | \$ 20,841,565                       | \$ 11,460,489        | 55.0%             | \$ 9,381,076                                       |
| Reserve for Employee Contributions                         |                                     |                      |                   |  |
| Active Members   | \$ 2,732,364                        | \$ 2,732,364         |                   |  |
| Vested Former Members                                      | 81,758                              | 81,758               |                   |  |
| Pending Refunds  | <u>0</u>                            | <u>0</u>             |                   |  |
| Total  | \$ 2,814,122                        | \$ 2,814,122         | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 23,655,687</b>                | <b>\$ 14,274,611</b> | <b>60.3%</b>      | <b>\$ 9,381,076</b>                                |
| 04 -MCF  |                                     |                      |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                      |                   |  |
| Active Members   | \$ 2,945,963                        | \$ 1,934,447         | 65.7%             | \$ 1,011,516                                       |
| Vested Former Members                                      | 649,166                             | 649,166              | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>1,904,964</u>                    | <u>1,904,964</u>     | 100.0             | <u>0</u>   |
| Total  | \$ 5,500,093                        | \$ 4,488,577         | 81.6%             | \$ 1,011,516                                       |
| Reserve for Employee Contributions                         |                                     |                      |                   |  |
| Active Members   | \$ 35,921                           | \$ 35,921            |                   |  |
| Vested Former Members                                      | 15,191                              | 15,191               |                   |  |
| Pending Refunds  | <u>148</u>                          | <u>148</u>           |                   |  |
| Total  | \$ 51,260                           | \$ 51,260            | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 5,551,353</b>                 | <b>\$ 4,539,837</b>  | <b>81.8%</b>      | <b>\$ 1,011,516</b>                                |

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2003

| Division   | Actuarial<br>Accrued<br>Liabilities | Valuation<br>Assets  | Percent<br>Funded | Unfunded<br>(Overfunded)<br>Accrued<br>Liabilities |
|--|-------------------------------------|----------------------|-------------------|--|
| 09 -Judges   |                                     |                      |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                      |                   |  |
| Active Members   | \$ 447,190                          | \$ 0                 | 0.0%              | \$ 447,190   |
| Vested Former Members                                      | 51,565                              | 0                    | 0.0               | 51,565   |
| Retirees and Beneficiaries                                 | <u>642,532</u>                      | <u>523,641</u>       | 81.5              | <u>118,891</u>                                     |
| Total  | \$ 1,141,287                        | \$ 523,641           | 45.9%             | \$ 617,646   |
| Reserve for Employee Contributions                         |                                     |                      |                   |  |
| Active Members   | \$ 13,972                           | \$ 13,972            |                   |  |
| Vested Former Members                                      | 12,444                              | 12,444               |                   |  |
| Pending Refunds  | <u>0</u>                            | <u>0</u>             |                   |  |
| Total  | \$ 26,416                           | \$ 26,416            | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 1,167,703</b>                 | <b>\$ 550,057</b>    | <b>47.1%</b>      | <b>\$ 617,646</b>                                  |
| 10 -Gnrl Mgmt  |                                     |                      |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                      |                   |  |
| Active Members   | \$ 14,164,223                       | \$ 7,624,474         | 53.8%             | \$ 6,539,749                                       |
| Vested Former Members                                      | 945,931                             | 945,931              | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>10,272,723</u>                   | <u>10,272,723</u>    | 100.0             | <u>0</u>   |
| Total  | \$ 25,382,877                       | \$ 18,843,128        | 74.2%             | \$ 6,539,749                                       |
| Reserve for Employee Contributions                         |                                     |                      |                   |  |
| Active Members   | \$ 2,487,215                        | \$ 2,487,215         |                   |  |
| Vested Former Members                                      | 268,799                             | 268,799              |                   |  |
| Pending Refunds  | <u>45,776</u>                       | <u>45,776</u>        |                   |  |
| Total  | \$ 2,801,790                        | \$ 2,801,790         | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 28,184,667</b>                | <b>\$ 21,644,918</b> | <b>76.8%</b>      | <b>\$ 6,539,749</b>                                |
| 11 -Gnrl Library   |                                     |                      |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                      |                   |  |
| Active Members   | \$ 0                                | \$ 0                 | 0.0%              | \$ 0   |
| Vested Former Members                                      | 1,426,071                           | 1,144,064            | 80.2              | 282,007  |
| Retirees and Beneficiaries                                 | <u>909,935</u>                      | <u>909,935</u>       | 100.0             | <u>0</u>   |
| Total  | \$ 2,336,006                        | \$ 2,053,999         | 87.9%             | \$ 282,007   |
| Reserve for Employee Contributions                         |                                     |                      |                   |  |
| Active Members   | \$ 0                                | \$ 0                 |                   |  |
| Vested Former Members                                      | 129,980                             | 129,980              |                   |  |
| Pending Refunds  | <u>0</u>                            | <u>0</u>             |                   |  |
| Total  | \$ 129,980                          | \$ 129,980           | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 2,465,986</b>                 | <b>\$ 2,183,979</b>  | <b>88.6%</b>      | <b>\$ 282,007</b>                                  |

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2003

| Division   | Actuarial<br>Accrued<br>Liabilities | Valuation<br>Assets  | Percent<br>Funded | Unfunded<br>(Overfunded)<br>Accrued<br>Liabilities |
|--|-------------------------------------|----------------------|-------------------|--|
| <b>12 - Gnrl ICEA Profs</b>                                |                                     |                      |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                      |                   |  |
| Active Members   | \$ 10,958,975                       | \$ 4,596,604         | 41.9%             | \$ 6,362,371                                       |
| Vested Former Members                                      | 1,465,073                           | 1,465,073            | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>4,005,246</u>                    | <u>4,005,246</u>     | 100.0             | <u>0</u>   |
| Total  | \$ 16,429,294                       | \$ 10,066,923        | 61.3%             | \$ 6,362,371                                       |
| Reserve for Employee Contributions                         |                                     |                      |                   |  |
| Active Members   | \$ 2,551,738                        | \$ 2,551,738         |                   |  |
| Vested Former Members                                      | 186,575                             | 186,575              |                   |  |
| Pending Refunds  | <u>156,867</u>                      | <u>156,867</u>       |                   |  |
| Total  | \$ 2,895,180                        | \$ 2,895,180         | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 19,324,474</b>                | <b>\$ 12,962,103</b> | <b>67.1%</b>      | <b>\$ 6,362,371</b>                                |
| <b>13 - Gnrl OPEIU Prob</b>                                |                                     |                      |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                      |                   |  |
| Active Members   | \$ 5,833,879                        | \$ 3,591,454         | 61.6%             | \$ 2,242,425                                       |
| Vested Former Members                                      | 357,788                             | 357,788              | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>1,647,735</u>                    | <u>1,647,735</u>     | 100.0             | <u>0</u>   |
| Total  | \$ 7,839,402                        | \$ 5,596,977         | 71.4%             | \$ 2,242,425                                       |
| Reserve for Employee Contributions                         |                                     |                      |                   |  |
| Active Members   | \$ 1,010,908                        | \$ 1,010,908         |                   |  |
| Vested Former Members                                      | 37,516                              | 37,516               |                   |  |
| Pending Refunds  | <u>0</u>                            | <u>0</u>             |                   |  |
| Total  | \$ 1,048,424                        | \$ 1,048,424         | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 8,887,826</b>                 | <b>\$ 6,645,401</b>  | <b>74.8%</b>      | <b>\$ 2,242,425</b>                                |
| <b>14 - Gnrl TOPS UAW</b>                                  |                                     |                      |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                      |                   |  |
| Active Members   | \$ 19,842,557                       | \$ 13,694,833        | 69.0%             | \$ 6,147,724                                       |
| Vested Former Members                                      | 1,491,854                           | 1,491,854            | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>13,116,077</u>                   | <u>13,116,077</u>    | 100.0             | <u>0</u>   |
| Total  | \$ 34,450,488                       | \$ 28,302,764        | 82.2%             | \$ 6,147,724                                       |
| Reserve for Employee Contributions                         |                                     |                      |                   |  |
| Active Members   | \$ 2,781,993                        | \$ 2,781,993         |                   |  |
| Vested Former Members                                      | 301,287                             | 301,287              |                   |  |
| Pending Refunds  | <u>142,352</u>                      | <u>142,352</u>       |                   |  |
| Total  | \$ 3,225,632                        | \$ 3,225,632         | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 37,676,120</b>                | <b>\$ 31,528,396</b> | <b>83.7%</b>      | <b>\$ 6,147,724</b>                                |

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2003

| Division   | Actuarial<br>Accrued<br>Liabilities | Valuation<br>Assets | Percent<br>Funded | Unfunded<br>(Overfunded)<br>Accrued<br>Liabilities |
|--|-------------------------------------|---------------------|-------------------|--|
| <b>15 - Animal Cntrl FOP</b>                               |                                     |                     |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                     |                   |  |
| Active Members   | \$ 801,799                          | \$ 0                | 0.0%              | \$ 801,799   |
| Vested Former Members                                      | 76,596                              | 0                   | 0.0               | 76,596   |
| Retirees and Beneficiaries                                 | <u>865,223</u>                      | <u>782,328</u>      | 90.4              | <u>82,895</u>                                      |
| Total  | \$ 1,743,618                        | \$ 782,328          | 44.9%             | \$ 961,290   |
| Reserve for Employee Contributions                         |                                     |                     |                   |  |
| Active Members   | \$ 210,318                          | \$ 210,318          |                   |  |
| Vested Former Members                                      | 0                                   | 0                   |                   |  |
| Pending Refunds  | <u>9,623</u>                        | <u>9,623</u>        |                   |  |
| Total  | \$ 219,941                          | \$ 219,941          | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 1,963,559</b>                 | <b>\$ 1,002,269</b> | <b>51.0%</b>      | <b>\$ 961,290</b>                                  |
| <b>16 - Gnrl Commsnrs</b>                                  |                                     |                     |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                     |                   |  |
| Active Members   | \$ 119,531                          | \$ 57,099           | 47.8%             | \$ 62,432  |
| Vested Former Members                                      | 29,125                              | 29,125              | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>177,334</u>                      | <u>177,334</u>      | 100.0             | <u>0</u>   |
| Total  | \$ 325,990                          | \$ 263,558          | 80.8%             | \$ 62,432  |
| Reserve for Employee Contributions                         |                                     |                     |                   |  |
| Active Members   | \$ 34,198                           | \$ 34,198           |                   |  |
| Vested Former Members                                      | 7,848                               | 7,848               |                   |  |
| Pending Refunds  | <u>10,572</u>                       | <u>10,572</u>       |                   |  |
| Total  | \$ 52,618                           | \$ 52,618           | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 378,608</b>                   | <b>\$ 316,176</b>   | <b>83.5%</b>      | <b>\$ 62,432</b>                                   |
| <b>17 - ICEA Nurses</b>                                    |                                     |                     |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                     |                   |  |
| Active Members   | \$ 5,360,379                        | \$ 3,001,162        | 56.0%             | \$ 2,359,217                                       |
| Vested Former Members                                      | 567,046                             | 567,046             | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>3,085,185</u>                    | <u>3,085,185</u>    | 100.0             | <u>0</u>   |
| Total  | \$ 9,012,610                        | \$ 6,653,393        | 73.8%             | \$ 2,359,217                                       |
| Reserve for Employee Contributions                         |                                     |                     |                   |  |
| Active Members   | \$ 1,799,657                        | \$ 1,799,657        |                   |  |
| Vested Former Members                                      | 109,387                             | 109,387             |                   |  |
| Pending Refunds  | <u>32,112</u>                       | <u>32,112</u>       |                   |  |
| Total  | \$ 1,941,156                        | \$ 1,941,156        | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 10,953,766</b>                | <b>\$ 8,594,549</b> | <b>78.5%</b>      | <b>\$ 2,359,217</b>                                |

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2003

| Division   | Actuarial<br>Accrued<br>Liabilities | Valuation<br>Assets  | Percent<br>Funded | Unfunded<br>(Overfunded)<br>Accrued<br>Liabilities |
|--|-------------------------------------|----------------------|-------------------|--|
| 18 -ICEA Ct. Prof  |                                     |                      |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                      |                   |  |
| Active Members   | \$ 2,889,711                        | \$ 0                 | 0.0%              | \$ 2,889,711                                       |
| Vested Former Members                                      | 260,455                             | 165,174              | 63.4              | 95,281   |
| Retirees and Beneficiaries                                 | <u>5,317,531</u>                    | <u>5,317,531</u>     | 100.0             | <u>0</u>   |
| Total  | \$ 8,467,697                        | \$ 5,482,705         | 64.7%             | \$ 2,984,992                                       |
| Reserve for Employee Contributions                         |                                     |                      |                   |  |
| Active Members   | \$ 1,106,594                        | \$ 1,106,594         |                   |  |
| Vested Former Members                                      | 94,380                              | 94,380               |                   |  |
| Pending Refunds  | <u>2,658</u>                        | <u>2,658</u>         |                   |  |
| Total  | \$ 1,203,632                        | \$ 1,203,632         | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 9,671,329</b>                 | <b>\$ 6,686,337</b>  | <b>69.1%</b>      | <b>\$ 2,984,992</b>                                |
| 19 -Cnstutnl Offcls  |                                     |                      |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                      |                   |  |
| Active Members   | \$ 1,030,483                        | \$ 660,606           | 64.1%             | \$ 369,877   |
| Vested Former Members                                      | 0                                   | 0                    | 0.0               | 0  |
| Retirees and Beneficiaries                                 | <u>748,313</u>                      | <u>748,313</u>       | 100.0             | <u>0</u>   |
| Total  | \$ 1,778,796                        | \$ 1,408,919         | 79.2%             | \$ 369,877   |
| Reserve for Employee Contributions                         |                                     |                      |                   |  |
| Active Members   | \$ 293,018                          | \$ 293,018           |                   |  |
| Vested Former Members                                      | 0                                   | 0                    |                   |  |
| Pending Refunds  | <u>0</u>                            | <u>0</u>             |                   |  |
| Total  | \$ 293,018                          | \$ 293,018           | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 2,071,814</b>                 | <b>\$ 1,701,937</b>  | <b>82.1%</b>      | <b>\$ 369,877</b>                                  |
| 21 -FOP Shrf Deputies                                      |                                     |                      |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                      |                   |  |
| Active Members   | \$ 9,254,368                        | \$ 2,787,385         | 30.1%             | \$ 6,466,983                                       |
| Vested Former Members                                      | 319,419                             | 319,419              | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>13,713,804</u>                   | <u>13,713,804</u>    | 100.0             | <u>0</u>   |
| Total  | \$ 23,287,591                       | \$ 16,820,608        | 72.2%             | \$ 6,466,983                                       |
| Reserve for Employee Contributions                         |                                     |                      |                   |  |
| Active Members   | \$ 4,402,038                        | \$ 4,402,038         |                   |  |
| Vested Former Members                                      | 102,031                             | 102,031              |                   |  |
| Pending Refunds  | <u>20,920</u>                       | <u>20,920</u>        |                   |  |
| Total  | \$ 4,524,989                        | \$ 4,524,989         | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 27,812,580</b>                | <b>\$ 21,345,597</b> | <b>76.7%</b>      | <b>\$ 6,466,983</b>                                |



# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2003

| Division   | Actuarial<br>Accrued<br>Liabilities | Valuation<br>Assets | Percent<br>Funded | Unfunded<br>(Overfunded)<br>Accrued<br>Liabilities |
|--|-------------------------------------|---------------------|-------------------|--|
| 40 -ICEA Unit 111  |                                     |                     |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                     |                   |  |
| Active Members   | \$ 756,151                          | \$ 532,981          | 70.5%             | \$ 223,170   |
| Vested Former Members                                      | 157,336                             | 157,336             | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>2,015,445</u>                    | <u>2,015,445</u>    | 100.0             | <u>0</u>   |
| Total  | \$ 2,928,932                        | \$ 2,705,762        | 92.4%             | \$ 223,170   |
| Reserve for Employee Contributions                         |                                     |                     |                   |  |
| Active Members   | \$ 146,163                          | \$ 146,163          |                   |  |
| Vested Former Members                                      | 37,430                              | 37,430              |                   |  |
| Pending Refunds  | <u>39,712</u>                       | <u>39,712</u>       |                   |  |
| Total  | \$ 223,305                          | \$ 223,305          | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 3,152,237</b>                 | <b>\$ 2,929,067</b> | <b>92.9%</b>      | <b>\$ 223,170</b>                                  |
| 41 -MCF Management   |                                     |                     |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                     |                   |  |
| Active Members   | \$ 713,907                          | \$ 677,416          | 94.9%             | \$ 36,491  |
| Vested Former Members                                      | 192,729                             | 192,729             | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>474,104</u>                      | <u>474,104</u>      | 100.0             | <u>0</u>   |
| Total  | \$ 1,380,740                        | \$ 1,344,249        | 97.4%             | \$ 36,491  |
| Reserve for Employee Contributions                         |                                     |                     |                   |  |
| Active Members   | \$ 55,736                           | \$ 55,736           |                   |  |
| Vested Former Members                                      | 29,115                              | 29,115              |                   |  |
| Pending Refunds  | <u>885</u>                          | <u>885</u>          |                   |  |
| Total  | \$ 85,736                           | \$ 85,736           | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 1,466,476</b>                 | <b>\$ 1,429,985</b> | <b>97.5%</b>      | <b>\$ 36,491</b>                                   |
| 42 -ICEA Unit 11   |                                     |                     |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                     |                   |  |
| Active Members   | \$ 308,011                          | \$ 184,061          | 59.8%             | \$ 123,950   |
| Vested Former Members                                      | 26,048                              | 26,048              | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>97,095</u>                       | <u>97,095</u>       | 100.0             | <u>0</u>   |
| Total  | \$ 431,154                          | \$ 307,204          | 71.3%             | \$ 123,950   |
| Reserve for Employee Contributions                         |                                     |                     |                   |  |
| Active Members   | \$ 73,313                           | \$ 73,313           |                   |  |
| Vested Former Members                                      | 8,091                               | 8,091               |                   |  |
| Pending Refunds  | <u>24,407</u>                       | <u>24,407</u>       |                   |  |
| Total  | \$ 105,811                          | \$ 105,811          | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 536,965</b>                   | <b>\$ 413,015</b>   | <b>76.9%</b>      | <b>\$ 123,950</b>                                  |

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2003

| Division   | Actuarial<br>Accrued<br>Liabilities | Valuation<br>Assets | Percent<br>Funded | Unfunded<br>(Overfunded)<br>Accrued<br>Liabilities |
|--|-------------------------------------|---------------------|-------------------|--|
| 43 -ICEA Unit 1  |                                     |                     |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                     |                   |  |
| Active Members   | \$ 250,911                          | \$ 0                | 0.0%              | \$ 250,911   |
| Vested Former Members                                      | 26,205                              | 0                   | 0.0               | 26,205   |
| Retirees and Beneficiaries                                 | <u>596,524</u>                      | <u>454,531</u>      | 76.2              | <u>141,993</u>                                     |
| Total  | \$ 873,640                          | \$ 454,531          | 52.0%             | \$ 419,109   |
| Reserve for Employee Contributions                         |                                     |                     |                   |  |
| Active Members   | \$ 47,201                           | \$ 47,201           |                   |  |
| Vested Former Members                                      | 27,246                              | 27,246              |                   |  |
| Pending Refunds  | <u>9,505</u>                        | <u>9,505</u>        |                   |  |
| Total  | \$ 83,952                           | \$ 83,952           | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 957,592</b>                   | <b>\$ 538,483</b>   | <b>56.2%</b>      | <b>\$ 419,109</b>                                  |
| 44 -MCF Exec Mgr   |                                     |                     |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                     |                   |  |
| Active Members   | \$ 162,962                          | \$ 66,483           | 40.8%             | \$ 96,479  |
| Vested Former Members                                      | 0                                   | 0                   | 0.0               | 0  |
| Retirees and Beneficiaries                                 | <u>0</u>                            | <u>0</u>            | 0.0               | <u>0</u>   |
| Total  | \$ 162,962                          | \$ 66,483           | 40.8%             | \$ 96,479  |
| Reserve for Employee Contributions                         |                                     |                     |                   |  |
| Active Members   | \$ 0                                | \$ 0                |                   |  |
| Vested Former Members                                      | 0                                   | 0                   |                   |  |
| Pending Refunds  | <u>0</u>                            | <u>0</u>            |                   |  |
| Total  | \$ 0                                | \$ 0                | 0.0%              | \$ 0   |
| Division Total   | <b>\$ 162,962</b>                   | <b>\$ 66,483</b>    | <b>40.8%</b>      | <b>\$ 96,479</b>                                   |
| 90 -Asst Pros Attnys                                       |                                     |                     |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                     |                   |  |
| Active Members   | \$ 4,188,968                        | \$ 2,933,271        | 70.0%             | \$ 1,255,697                                       |
| Vested Former Members                                      | 1,279,161                           | 1,279,161           | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>965,351</u>                      | <u>965,351</u>      | 100.0             | <u>0</u>   |
| Total  | \$ 6,433,480                        | \$ 5,177,783        | 80.5%             | \$ 1,255,697                                       |
| Reserve for Employee Contributions                         |                                     |                     |                   |  |
| Active Members   | \$ 206,303                          | \$ 206,303          |                   |  |
| Vested Former Members                                      | 185,486                             | 185,486             |                   |  |
| Pending Refunds  | <u>1,463</u>                        | <u>1,463</u>        |                   |  |
| Total  | \$ 393,252                          | \$ 393,252          | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 6,826,732</b>                 | <b>\$ 5,571,035</b> | <b>81.6%</b>      | <b>\$ 1,255,697</b>                                |

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2003

| Division   | Actuarial<br>Accrued<br>Liabilities | Valuation<br>Assets | Percent<br>Funded | Unfunded<br>(Overfunded)<br>Accrued<br>Liabilities |
|--|-------------------------------------|---------------------|-------------------|--|
| 91 -Parks Union Empl                                       |                                     |                     |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                     |                   |  |
| Active Members   | \$ 124,249                          | \$ 125,159          | 100.7%            | \$ (910)   |
| Vested Former Members                                      | 40,069                              | 40,069              | 100.0             | 0  |
| Retirees and Beneficiaries                                 | <u>0</u>                            | <u>0</u>            | 0.0               | <u>0</u>   |
| Total  | \$ 164,318                          | \$ 165,228          | 100.6%            | \$ (910)   |
| Reserve for Employee Contributions                         |                                     |                     |                   |  |
| Active Members   | \$ 0                                | \$ 0                |                   |  |
| Vested Former Members                                      | 0                                   | 0                   |                   |  |
| Pending Refunds  | <u>0</u>                            | <u>0</u>            |                   |  |
| Total  | \$ 0                                | \$ 0                | 0.0%              | \$ 0   |
| Division Total   | <b>\$ 164,318</b>                   | <b>\$ 165,228</b>   | <b>100.6%</b>     | <b>\$ (910)</b>                                    |
| 92 -Parks Non Union  |                                     |                     |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                     |                   |  |
| Active Members   | \$ 940,515                          | \$ 757,296          | 80.5%             | \$ 183,219   |
| Vested Former Members                                      | 0                                   | 0                   | 0.0               | 0  |
| Retirees and Beneficiaries                                 | <u>0</u>                            | <u>0</u>            | 0.0               | <u>0</u>   |
| Total  | \$ 940,515                          | \$ 757,296          | 80.5%             | \$ 183,219   |
| Reserve for Employee Contributions                         |                                     |                     |                   |  |
| Active Members   | \$ 53,100                           | \$ 53,100           |                   |  |
| Vested Former Members                                      | 0                                   | 0                   |                   |  |
| Pending Refunds  | <u>0</u>                            | <u>0</u>            |                   |  |
| Total  | \$ 53,100                           | \$ 53,100           | 100.0%            | \$ 0   |
| Division Total   | <b>\$ 993,615</b>                   | <b>\$ 810,396</b>   | <b>81.6%</b>      | <b>\$ 183,219</b>                                  |
| 93 -Lgl Rsrch Clerks                                       |                                     |                     |                   |  |
| Reserve for Employer Contributions<br>and Benefit Payments |                                     |                     |                   |  |
| Active Members   | \$ 134,616                          | \$ 138,291          | 102.7%            | \$ (3,675)   |
| Vested Former Members                                      | 0                                   | 0                   | 0.0               | 0  |
| Retirees and Beneficiaries                                 | <u>0</u>                            | <u>0</u>            | 0.0               | <u>0</u>   |
| Total  | \$ 134,616                          | \$ 138,291          | 102.7%            | \$ (3,675)   |
| Reserve for Employee Contributions                         |                                     |                     |                   |  |
| Active Members   | \$ 0                                | \$ 0                |                   |  |
| Vested Former Members                                      | 0                                   | 0                   |                   |  |
| Pending Refunds  | <u>0</u>                            | <u>0</u>            |                   |  |
| Total  | \$ 0                                | \$ 0                | 0.0%              | \$ 0   |
| Division Total   | <b>\$ 134,616</b>                   | <b>\$ 138,291</b>   | <b>102.7%</b>     | <b>\$ (3,675)</b>                                  |

# Ingham County (3303)

## Table 13 (continued)

### Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2003

| Division   | Actuarial<br>Accrued<br>Liabilities | Valuation<br>Assets   | Percent<br>Funded | Unfunded<br>(Overfunded)<br>Accrued<br>Liabilities |
|--|-------------------------------------|-----------------------|-------------------|--|
| <b>Municipality Totals</b>   |                                     |                       |                   |  |
| <b>Reserve for Employer Contributions<br/>    and Benefit Payments</b> |                                     |                       |                   |  |
| Active Members   | \$ 89,620,592                       | \$ 45,078,401         | 50.3%             | \$ 44,542,191                                      |
| Vested Former Members  | 9,847,483                           | 9,287,745             | 94.3              | 559,738  |
| Retirees and Beneficiaries   | <u>77,390,290</u>                   | <u>73,231,818</u>     | 94.6              | <u>4,158,472</u>                                   |
| <b>Total</b>   | <b>\$ 176,858,365</b>               | <b>\$ 127,597,964</b> | <b>72.1%</b>      | <b>\$ 49,260,401</b>                               |
| <b>Reserve for Employee Contributions</b>                              |                                     |                       |                   |  |
| Active Members   | \$ 20,475,047                       | \$ 20,475,047         |                   |  |
| Vested Former Members  | 1,715,934                           | 1,715,934             |                   |  |
| Pending Refunds  | <u>498,548</u>                      | <u>498,548</u>        |                   |  |
| <b>Total</b>   | <b>\$ 22,689,529</b>                | <b>\$ 22,689,529</b>  | <b>100.0%</b>     | <b>\$ 0</b>  |
| <b>Municipality Total</b>  | <b>\$ 199,547,894</b>               | <b>\$ 150,287,493</b> | <b>75.3%</b>      | <b>\$ 49,260,401</b>                               |

# Ingham County (3303)

## Table 14

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation<br>Date<br>December 31 | Accrued<br>Liabilities | Valuation<br>Assets | Funded<br>Percent | Unfunded<br>Accrued<br>Liability | UAL as<br>Percent of<br>Annual<br>Payroll |
|----------------------------------|------------------------|---------------------|-------------------|----------------------------------|---|
| 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  |
| 2002                             | 183,747,506            | 138,299,599         | 75                | 45,447,907                       | 96  |
| 2003                             | 199,547,894            | 150,287,493         | 75                | 49,260,401                       | 99  |

**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, 2005

| Division                     | Employer Contributions @ |                              |                                      |
|------------------------------|--------------------------|------------------------------|--------------------------------------|
|                              | Normal Cost              | Unfunded Accrued Liability # | Total Required Employer Contribution |
| <b>Percentage of Payroll</b> |                          |                              |                                      |
| 01 - Confidential            | 6.88%                    | 4.52%                        | 11.40%                               |
| 02 - Sheriff FOP Spvs        | (2.02)%                  | 24.45%                       | 22.43%                               |
| 04 - MCF                     | 5.58%                    | 1.68%                        | 7.26%                                |
| 09 - Judges                  | 9.63%                    | 20.12%                       | 29.75%                               |
| 10 - Gnrl Mgmt               | 6.20%                    | 6.10%                        | 12.30%                               |
| 11 - Gnrl Library            | -%                       | -%                           | -%                                   |
| 12 - Gnrl ICEA Profs         | 2.07%                    | 5.90%                        | 7.97%                                |
| 13 - Gnrl OPEIU Prob         | 1.84%                    | 6.63%                        | 8.47%                                |
| 14 - Gnrl TOPS UAW           | 7.51%                    | 2.84%                        | 10.35%                               |
| 15 - Animal Cntrl FOP        | 0.32%                    | 15.62%                       | 15.94%                               |
| 16 - Gnrl Commsnrs           | 5.47%                    | 2.08%                        | 7.55%                                |
| 17 - ICEA Nurses             | 4.47%                    | 4.07%                        | 8.54%                                |
| 18 - ICEA Ct. Prof           | 3.08%                    | 8.27%                        | 11.35%                               |
| 19 - Cnstutnl Offcls         | 5.34%                    | 3.97%                        | 9.31%                                |
| 21 - FOP Shrf Deputies       | 4.57%                    | 5.11%                        | 9.68%                                |
| 40 - ICEA Unit 111           | 5.98%                    | 1.25%                        | 7.23%                                |
| 41 - MCF Management          | 8.81%                    | 0.26%                        | 9.07%                                |
| 42 - ICEA Unit 11            | 6.59%                    | 1.92%                        | 8.51%                                |
| 43 - ICEA Unit 1             | 6.28%                    | 10.11%                       | 16.39%                               |
| 44 - MCF Exec Mgr            | 18.24%                   | 4.77%                        | 23.01%                               |
| 90 - Asst Pros Attnys        | 10.14%                   | 3.49%                        | 13.63%                               |
| 91 - Parks Union Empl        | 8.08%                    | (0.06)%                      | 8.02%                                |
| 92 - Parks Non Union         | 7.47%                    | 5.27%                        | 12.74%                               |
| 93 - Lgl Rsrch Clerks        | 6.91%                    | (0.20)%                      | 6.71%                                |

# Ingham County (3303)

## Table 15 (continued)

### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Division                               | Employer Contributions @ |                              |                                      |
|--|--------------------------|------------------------------|--------------------------------------|
|  | Normal Cost              | Unfunded Accrued Liability # | Total Required Employer Contribution |
| <b>Estimated Monthly Contribution*</b> |                          |                              |                                      |
| 01 - Confidential                      | \$ 7,747                 | \$ 5,089                     | \$ 12,836                            |
| 02 - Sheriff FOP Spvs                  | (3,463)                  | 41,922                       | 38,459                               |
| 04 - MCF                               | 15,055                   | 4,533                        | 19,588                               |
| 09 - Judges                            | 1,321                    | 2,760                        | 4,081                                |
| 10 - Gnrl Mgmt                         | 29,709                   | 29,230                       | 58,939                               |
| 11 - Gnrl Library                      | 0                        | 1,375                        | 1,375                                |
| 12 - Gnrl ICEA Profs                   | 9,979                    | 28,444                       | 38,423                               |
| 13 - Gnrl OPEIU Prob                   | 2,780                    | 10,016                       | 12,796                               |
| 14 - Gnrl TOPS UAW                     | 72,692                   | 27,489                       | 100,181                              |
| 15 - Animal Cntrl FOP                  | 88                       | 4,295                        | 4,383                                |
| 16 - Gnrl Commsnrs                     | 735                      | 279                          | 1,014                                |
| 17 - ICEA Nurses                       | 11,574                   | 10,538                       | 22,112                               |
| 18 - ICEA Ct. Prof                     | 4,968                    | 13,340                       | 18,308                               |
| 19 - Cnstutnl Offcls                   | 2,223                    | 1,653                        | 3,876                                |
| 21 - FOP Shrf Deputies                 | 25,865                   | 28,921                       | 54,786                               |
| 40 - ICEA Unit 111                     | 4,785                    | 1,000                        | 5,785                                |
| 41 - MCF Management                    | 5,588                    | 165                          | 5,753                                |
| 42 - ICEA Unit 11                      | 1,905                    | 555                          | 2,460                                |
| 43 - ICEA Unit 1                       | 1,164                    | 1,873                        | 3,037                                |
| 44 - MCF Exec Mgr                      | 1,647                    | 431                          | 2,078                                |
| 90 - Asst Pros Attnys                  | 16,286                   | 5,605                        | 21,891                               |
| 91 - Parks Union Empl                  | 1,241                    | (10)                         | 1,231                                |
| 92 - Parks Non Union                   | 1,161                    | 819                          | 1,980                                |
| 93 - Lgl Rsrch Clerks                  | 1,265                    | (36)                         | 1,229                                |
| <b>Total Municipality</b>              | <b>\$ 216,315</b>        | <b>\$ 220,286</b>            | <b>\$ 436,601</b>                    |
| <b>Estimated Annual Contribution*</b>  |                          |                              |                                      |
| <b>Total Municipality</b>              | <b>\$ 2,595,780</b>      | <b>\$2,643,432</b>           | <b>\$ 5,239,212</b>                  |

@ 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, 2005**

| Contribution for                                      | Employer Contribution @                |   |
|---|--|---|
|   | As Percentage of Active Member Payroll | Estimated Monthly Dollar Contribution * |
| Normal Cost (in addition to member contributions)     | 6.88%                                  | \$7,747                                 |
| Amortization of Unfunded Accrued Liability (30 years) | <u>4.52</u>                            | <u>5,089</u>                            |
| Total Long Term Contribution                          | 11.40                                  | 12,836                                  |
| Overfunding Credit #                                  | <u>0.00</u>                            | <u>0</u>                                |
| <b>Total Contribution</b>                             | <b>11.40%</b>                          | <b>\$12,836</b>                         |

@ The above Employer contribution requirement is based on Member contributions of 5.36% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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 01 - Confidential

**Table 17A**

### Computed Employer Contributions - Comparative Statement

| Valuation<br>Date<br>December 31, | Active Members |              | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|----------------|--------------|--|-------------------------------------|
|                                   |                |              | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
| 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                                |
| 2002                              | 32             | 1,178,762    | 12.14  | 12.14                               |
| 2003                              | 34             | 1,351,175    | 11.40  | 11.40                               |

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

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 01 - Confidential

**Table 18A**

### Flow of Active Membership

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

**Table 19A**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             | (1)     |                |                         |                 | (32)     | 1  | 3   | 13          |
| 2002             |         |                |                         | (1)             |          |    | 1   | 13          |
| 2003             |         |                |                         |                 | (2)      |    | 1   | 12          |

**Table 20A**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             | 1              | \$ 3,457        | \$               | (1)                | \$ (1,149)      | \$               | 37       | \$ 169,678      |
| 2002             | 2              | 42,414          |                  | (3)                | (15,183)        | (2,835)          | 36       | 194,074         |
| 2003             | 1              | 25,088          |                  | (15)               | (65,830)        |                  | 22       | 153,332         |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 01 - Confidential

**Table 21A**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |           | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer*    |        | Balance      |
|------------------|---------------|-----------|-------------------|------------------|-------------------------|--------------|--------|--------------|
|                  | Employer      | Member    |                   |                  |                         | Out          | In     |              |
| 2001             | \$ 116,795    | \$ 55,393 | \$ 283,566        | \$ (168,952)     | \$ 0                    | \$ (601,816) | \$ 0   | \$ 4,149,727 |
| 2002             | 132,207       | 67,918    | 112,514           | (180,958)        | (4,268)                 | (146,120)    | 0      | 4,131,020    |
| 2003             | 151,966       | 75,729    | 327,767           | (199,432)        | (2,184)                 | (253,961)    | 18,438 | 4,249,343    |

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

**Table 22A**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 4,916,347        | \$ 4,149,727     | 84%            | \$ 766,620                 | 62%                              |
| 2002                       | 5,306,662           | 4,131,020        | 78             | 1,175,642                  | 100                              |
| 2003                       | 5,386,909           | 4,249,343        | 79             | 1,137,566                  | 84                               |

# Ingham County (3303)

## Division 02 - Sheriff FOP Spvs

### Table 16B

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)        | (2.02)%                                   | \$(3,463)                                  |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>24.45</u>                              | <u>41,922</u>                              |
| Total Long Term Contribution                             | 22.43                                     | 38,459                                     |
| Overfunding Credit #                                     | <u>0.00</u>                               | <u>0</u>                                   |
| <b>Total Contribution</b>                                | <b>22.43%</b>                             | <b>\$38,459</b>                            |

@ The above Employer contribution requirement is based on Member contributions of 19.61% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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 02 - Sheriff FOP Spvs

**Table 17B**

### Computed Employer Contributions - Comparative Statement

| Valuation<br>Date<br>December 31, | Active Members    |              | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|-------------------|--------------|--|-------------------------------------|
|                                   |                   |              | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
| Number                            | Annual<br>Payroll |              |  |                                     |
| 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                               |
| 2002                              | 32                | 1,964,293    | 21.52  | 21.52                               |
| 2003                              | 32                | 2,057,522    | 22.43  | 22.43                               |

Notes: 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.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 02 - Sheriff FOP Spvs

**Table 18B**

### Flow of Active Membership

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

**Table 19B**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             |         |                |                         |                 | (4)      | 1  |     | 2           |
| 2002             | (1)     |                |                         |                 |          |    |     | 1           |
| 2003             |         |                |                         |                 |          |    | 1   | 2           |

**Table 20B**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             | 1              | \$ 46,610       | \$               | (2)                | \$ (27,413)     | \$ (1,124)       | 46       | \$ 1,232,024    |
| 2002             | 3              | 97,241          | 4,130            |                    |                 | (16,272)         | 49       | 1,317,123       |
| 2003             | 3              | 94,123          |                  | (5)                | (27,410)        |                  | 47       | 1,383,836       |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 02 - Sheriff FOP Spvs

**Table 21B**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |            | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |           | Balance       |
|------------------|---------------|------------|-------------------|------------------|-------------------------|-----------|-----------|---------------|
|                  | Employer      | Member     |                   |                  |                         | Out       | In        |               |
| 2001             | \$ 335,049    | \$ 364,516 | \$ 988,337        | \$ (1,220,618)   | \$ 0                    | \$ 0      | \$ 77,596 | \$ 13,829,148 |
| 2002             | 396,280       | 391,201    | 416,706           | (1,276,451)      | 0                       | 0         | 138,170   | 13,895,054    |
| 2003             | 412,747       | 403,045    | 961,220           | (1,391,782)      | 0                       | (105,653) | 99,980    | 14,274,611    |

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

**Table 22B**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 21,466,776       | \$ 13,829,148    | 64%            | \$ 7,637,628               | 411%                             |
| 2002                       | 22,500,406          | 13,895,054       | 62             | 8,605,352                  | 438                              |
| 2003                       | 23,655,687          | 14,274,611       | 60             | 9,381,076                  | 456                              |

# Ingham County (3303)

## Division 04 - MCF

### Table 16C

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)        | 5.58%                                     | \$15,055                                   |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>1.68</u>                               | <u>4,533</u>                               |
| Total Long Term Contribution                             | 7.26                                      | 19,588                                     |
| Overfunding Credit #                                     | <u>0.00</u>                               | <u>0</u>                                   |
| <b>Total Contribution</b>                                | <b>7.26%</b>                              | <b>\$19,588</b>                            |

@ The above Employer contribution requirement is based on Member contributions of 0.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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 04 - MCF

**Table 17C**

### Computed Employer Contributions - Comparative Statement

| Valuation<br>Date<br>December 31, | Active Members |                   | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|----------------|-------------------|--|-------------------------------------|
|                                   |                |                   | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
|                                   | Number         | Annual<br>Payroll |  |                                     |
| 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                                |
| 2002                              | 115            | 2,543,513         | 7.56   | 7.02                                |
| 2003                              | 131            | 3,237,587         | 7.26   | 7.26                                |

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.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 04 - MCF

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

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             | (1)     | (1)      |                         | (5)               | (33)       | (1)      |    | 37         | 121         |
| 2002             |         |          |                         | (1)               | (38)       |          |    | 35         | 115         |
| 2003             |         |          |                         | (2)               | (25)       |          |    | 43         | 131         |

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

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             | (2)     | (1)            |                         | (2)             |          |    | 9   | 37          |
| 2002             |         |                |                         | (7)             |          |    | 2   | 32          |
| 2003             | (1)     |                |                         |                 |          |    | 2   | 32          |

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

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             | 4              | \$ 21,035       | \$               | (4)                | \$ (12,747)     | \$               | 71       | \$ 249,151      |
| 2002             | 1              | 3,602           |                  | (4)                | (21,575)        |                  | 68       | 231,178         |
| 2003             | 2              | 8,898           |                  | (4)                | (10,593)        |                  | 66       | 229,483         |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 04 - MCF

**Table 21C**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |        | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |      | Balance      |
|------------------|---------------|--------|-------------------|------------------|-------------------------|-----------|------|--------------|
|                  | Employer      | Member |                   |                  |                         | Out       | In   |              |
| 2001             | \$ 134,202    | \$ 582 | \$ 298,955        | \$ (248,568)     | \$ 0                    | \$ 0      | \$ 0 | \$ 4,203,569 |
| 2002             | 158,819       | 624    | 129,958           | (231,899)        | 0                       | (13,543)  | 0    | 4,247,528    |
| 2003             | 208,400       | 191    | 328,562           | (244,844)        | 0                       | 0         | 0    | 4,539,837    |

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

**Table 22C**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 5,186,800        | \$ 4,203,569     | 81%            | \$ 983,231                 | 38%                              |
| 2002                       | 5,222,062           | 4,247,528        | 81             | 974,534                    | 38                               |
| 2003                       | 5,551,353           | 4,539,837        | 82             | 1,011,516                  | 31                               |

# Ingham County (3303)

## Division 09 - Judges

### Table 16D

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)        | 9.63%                                     | \$1,321                                    |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>20.12</u>                              | <u>2,760</u>                               |
| Total Long Term Contribution                             | 29.75                                     | 4,081                                      |
| Overfunding Credit #                                     | <u>0.00</u>                               | <u>0</u>                                   |
| <b>Total Contribution</b>                                | <b>29.75%</b>                             | <b>\$4,081</b>                             |

@ The above Employer contribution requirement is based on Member contributions of 3.14% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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<br>Date<br>December 31, | Active Members |                   | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|----------------|-------------------|--|-------------------------------------|
|                                   |                |                   | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
|                                   | Number         | Annual<br>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                               |
| 2002                              | 5              | 137,270           | 32.09  | 32.09                               |
| 2003                              | 6              | 164,604           | 29.75  | 29.75                               |

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

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 09 - Judges

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

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

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

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             |         |                |                         | (1)             | (1)      | 1  |     | 1           |
| 2002             |         |                |                         |                 |          |    |     | 1           |
| 2003             |         |                |                         |                 |          |    | 1   | 2           |

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

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             |                | \$              | \$               |                    | \$              | \$               | 3        | \$ 20,722       |
| 2002             | 3              | 43,009          |                  | (1)                | (5,642)         |                  | 5        | 58,089          |
| 2003             | 1              | 3,569           |                  |                    |                 |                  | 6        | 61,658          |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 09 - Judges

**Table 21D**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |        | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer*    |            | Balance    |
|------------------|---------------|--------|-------------------|------------------|-------------------------|--------------|------------|------------|
|                  | Employer      | Member |                   |                  |                         | Out          | In         |            |
| 2001             | \$ 29,200     | \$ 0   | \$ 29,735         | \$ (20,722)      | \$ (275,653)            | \$ (281,056) | \$ 284,731 | \$ 485,390 |
| 2002             | 22,269        | 6,030  | 19,372            | (17,666)         | 0                       | 0            | 0          | 515,395    |
| 2003             | 32,592        | 5,164  | 37,420            | (58,089)         | 0                       | 0            | 17,575     | 550,057    |

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

**Table 22D**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 815,236          | \$ 485,390       | 60%            | \$ 329,846                 | 168%                             |
| 2002                       | 1,097,589           | 515,395          | 47             | 582,194                    | 424                              |
| 2003                       | 1,167,703           | 550,057          | 47             | 617,646                    | 375                              |

**Ingham County (3303)**

**Division 10 - Gnrl Mgmt**

**Table 16E**

**Computed Employer Contributions to the Retirement System  
For the Fiscal Year Beginning January 1, 2005**

| <b>Contribution for</b>                                  | <b>Employer Contribution @</b>                    |  |
|--|---|--|
|  | <b>As Percentage of<br/>Active Member Payroll</b> | <b>Estimated Monthly<br/>Dollar Contribution *</b> |
| Normal Cost (in addition to member contributions)        | 6.20%   | \$29,709   |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>6.10</u>                                       | <u>29,230</u>                                      |
| Total Long Term Contribution                             | 12.30   | 58,939   |
| Overfunding Credit #                                     | <u>0.00</u>                                       | <u>0</u>   |
| <b>Total Contribution</b>                                | <b>12.30%</b>                                     | <b>\$58,939</b>                                    |

@ The above Employer contribution requirement is based on Member contributions of 6.39% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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<br>Date<br>December 31, | Active Members |                   | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|----------------|-------------------|--|-------------------------------------|
|                                   |                |                   | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
|                                   | Number         | Annual<br>Payroll |  |                                     |
| 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                                |
| 2002                              | 79             | 5,392,347         | 12.75  | 12.75                               |
| 2003                              | 81             | 5,750,099         | 12.30  | 12.30                               |

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

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 10 - Gnrl Mgmt

**Table 18E**

### Flow of Active Membership

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             | (7)     |          |                         | (3)               | (2)        | (2)      | 6  | 8          | 80          |
| 2002             |         |          |                         | (2)               | (1)        |          | 5  | 4          | 79          |
| 2003             |         |          |                         | (1)               | (1)        |          | 2  | 2          | 81          |

**Table 19E**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             | (2)     |                |                         |                 |          | 2  | 4   | 20          |
| 2002             |         |                |                         | (2)             |          |    | 2   | 18          |
| 2003             |         |                |                         |                 |          |    | 1   | 18          |

**Table 20E**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             | 1              | \$ 11,706       | \$               |                    | \$              | (3,507)          | 44       | \$ 752,492      |
| 2002             | 10             | 337,308         |                  | (4)                | (71,514)        |                  | 50       | 1,018,286       |
| 2003             | 1              | 40,556          |                  | (2)                | (15,869)        | (3,105)          | 49       | 1,039,868       |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 10 - Gnrl Mgmt

**Table 21E**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |            | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |            | Balance       |
|------------------|---------------|------------|-------------------|------------------|-------------------------|-----------|------------|---------------|
|                  | Employer      | Member     |                   |                  |                         | Out       | In         |               |
| 2001             | \$ 426,804    | \$ 257,085 | \$ 1,363,992      | \$ (744,291)     | \$ (15,107)             | \$ 0      | \$ 180,151 | \$ 18,823,795 |
| 2002             | 599,686       | 351,366    | 739,404           | (924,941)        | (20,244)                | 0         | 192,958    | 19,762,024    |
| 2003             | 648,062       | 363,306    | 1,677,545         | (1,018,375)      | (6,168)                 | 0         | 218,524    | 21,644,918    |

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

**Table 22E**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 22,378,557       | \$ 18,823,795    | 84%            | \$ 3,554,762               | 68%                              |
| 2002                       | 26,400,949          | 19,762,024       | 75             | 6,638,925                  | 123                              |
| 2003                       | 28,184,667          | 21,644,918       | 77             | 6,539,749                  | 114                              |

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

**Table 16F**

**Computed Employer Contributions to the Retirement System**  
**For the Fiscal Year Beginning January 1, 2005**

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)        | 0.00%                                     | \$0  |
| Amortization of Unfunded<br>Accrued Liability (26 years) | <u>0.00</u>                               | <u>1,375</u>                               |
| Total Long Term Contribution                             | 0.00                                      | 1,375                                      |
| Overfunding Credit #                                     | <u>0.00</u>                               | <u>0</u>                                   |
| <b>Total Contribution</b>                                | <b>0.00%</b>                              | <b>\$1,375</b>                             |

@ The above Employer contribution requirement is based on Member contributions of 0.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 26 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<br>Date<br>December 31, | Active Members |                   | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|----------------|-------------------|--|-------------------------------------|
|                                   |                |                   | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
|                                   | Number         | Annual<br>Payroll |  |                                     |
| 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                 | -  | -                                   |
| 2002                              | 0              | 0                 | -  | -                                   |
| 2003                              | 0              | 0                 | -  | -                                   |

Notes: Actuarial assumptions were revised for the 1993 valuation.  
Actuarial assumptions were revised for the 1997 valuation.  
Actuarial assumptions were revised for the 2000 valuation.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 11 - Gnrl Library

**Table 18F**

### Flow of Active Membership

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

**Table 19F**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             | (1)     |                |                         |                 |          |    | 24  | 31          |
| 2002             | (1)     |                |                         | (1)             |          |    |     | 29          |
| 2003             |         |                |                         |                 |          |    |     | 29          |

**Table 20F**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             | 1              | \$ 4,206        | \$               | (1)                | \$ (3,724)      | \$               | 20       | \$ 95,499       |
| 2002             | 2              | 5,913           |                  | (1)                | (1,541)         |                  | 21       | 99,871          |
| 2003             |                |                 |                  |                    |                 |                  | 21       | 99,871          |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 11 - Gnrl Library

**Table 21F**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |        | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |      | Balance      |
|------------------|---------------|--------|-------------------|------------------|-------------------------|-----------|------|--------------|
|                  | Employer      | Member |                   |                  |                         | Out       | In   |              |
| 2001             | \$ 71,726     | \$ 0   | \$ 156,633        | \$ (90,139)      | \$ 0                    | \$ 0      | \$ 0 | \$ 2,179,827 |
| 2002             | 2,787         | 0      | 53,795            | (98,414)         | 0                       | 0         | 0    | 2,137,995    |
| 2003             | 0             | 0      | 145,855           | (99,871)         | 0                       | 0         | 0    | 2,183,979    |

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

**Table 22F**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 2,303,218        | \$ 2,179,827     | 95%            | \$ 123,391                 | %                                |
| 2002                       | 2,380,510           | 2,137,995        | 90             | 242,515                    |                                  |
| 2003                       | 2,465,986           | 2,183,979        | 89             | 282,007                    |                                  |

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

**Table 16G**

**Computed Employer Contributions to the Retirement System**  
**For the Fiscal Year Beginning January 1, 2005**

| Contribution for                                      | Employer Contribution @                |   |
|---|--|---|
|   | As Percentage of Active Member Payroll | Estimated Monthly Dollar Contribution * |
| Normal Cost (in addition to member contributions)     | 2.07%                                  | \$9,979                                 |
| Amortization of Unfunded Accrued Liability (30 years) | <u>5.90</u>                            | <u>28,444</u>                           |
| Total Long Term Contribution                          | 7.97                                   | 38,423                                  |
| Overfunding Credit #                                  | <u>0.00</u>                            | <u>0</u>                                |
| <b>Total Contribution</b>                             | <b>7.97%</b>                           | <b>\$38,423</b>                         |

@ The above Employer contribution requirement is based on Member contributions of 13.42% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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.

**Note:** A change in benefit provisions and/or member contributions was reflected in the actuarial valuation (see Table 1). The effects of the change(s), as it relates to the benefits of current and future active members, are shown below:

|  |                  |
|--|------------------|
| <b>Increase in Actuarial Accrued Liabilities:</b>  | <b>\$688,820</b> |
| <b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b> |                  |
| Normal Cost:   | (4.60)%          |
| Amortization Payment:  | 0.64%            |
| Total:   | (3.96)%          |

The full effects of the changes, if any, on the benefits of current retirees and beneficiaries, and the effect of any window benefit provisions are included in the liabilities of retirees and beneficiaries.



# Ingham County (3303)

## Division 12 - Gnrl ICEA Profs

Table 17G

### Computed Employer Contributions - Comparative Statement

| Valuation<br>Date<br>December 31, | Active Members    |              | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|-------------------|--------------|--|-------------------------------------|
|                                   |                   |              | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
| Number                            | Annual<br>Payroll |              |  |                                     |
| 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                                |
| 2002                              | 132               | 6,004,201    | 11.69  | 11.69                               |
| 2003                              | 123               | 5,785,130    | 7.97   | 7.97                                |

Notes: 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.  
Adoption of Benefit E-2 (2.5%) reflected in 2002 valuation.  
Adoption of Benefit B-4 - 80% Maximum, 13.42% Member Contributions reflected in 2003 valuation.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 12 - Gnrl ICEA Profs

**Table 18G**

### Flow of Active Membership

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             | (1)     |          |                         | (6)               | (9)        | (1)      | 4  | 30         | 130         |
| 2002             | (1)     |          |                         | (2)               | (6)        |          |    | 11         | 132         |
| 2003             | (6)     |          |                         |                   | (12)       |          | 1  | 8          | 123         |

**Table 19G**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             |         |                |                         | (1)             | (1)      | 7  | 7   | 30          |
| 2002             | (1)     | (1)            |                         | (4)             |          |    | 2   | 26          |
| 2003             |         |                |                         | (1)             |          |    |     | 25          |

**Table 20G**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             | 2              | \$ 10,185       | \$ 345           |                    | \$              | \$               | 19       | \$ 230,384      |
| 2002             | 3              | 36,169          |                  | (2)                | (21,434)        |                  | 20       | 245,119         |
| 2003             | 10             | 167,032         |                  | (1)                | (26,919)        |                  | 29       | 385,232         |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 12 - Gnrl ICEA Profs

**Table 21G**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |            | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |            | Balance      |
|------------------|---------------|------------|-------------------|------------------|-------------------------|-----------|------------|--------------|
|                  | Employer      | Member     |                   |                  |                         | Out       | In         |              |
| 2001             | \$ 276,700    | \$ 310,813 | \$ 742,356        | \$ (222,486)     | \$ (51,984)             | \$ 0      | \$ 269,808 | \$ 9,918,034 |
| 2002             | 391,596       | 373,448    | 498,430           | (228,904)        | (40,116)                | (1,063)   | 42,456     | 10,953,881   |
| 2003             | 414,893       | 798,687    | 1,112,729         | (338,999)        | (38,003)                | 0         | 58,915     | 12,962,103   |

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

**Table 22G**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 12,197,172       | \$ 9,918,034     | 81%            | \$ 2,279,138               | 44%                              |
| 2002                       | 16,574,719          | 10,953,881       | 66             | 5,620,838                  | 94                               |
| 2003                       | 19,324,474          | 12,962,103       | 67             | 6,362,371                  | 110                              |

# Ingham County (3303)

## Division 13 - Gnrl OPEIU Prob

### Table 16H

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for                                      | Employer Contribution @                |   |
|---|--|---|
|   | As Percentage of Active Member Payroll | Estimated Monthly Dollar Contribution * |
| Normal Cost (in addition to member contributions)     | 1.84%                                  | \$2,780                                 |
| Amortization of Unfunded Accrued Liability (30 years) | <u>6.63</u>                            | <u>10,016</u>                           |
| Total Long Term Contribution                          | 8.47                                   | 12,796                                  |
| Overfunding Credit #                                  | <u>0.00</u>                            | <u>0</u>                                |
| <b>Total Contribution</b>                             | <b>8.47%</b>                           | <b>\$12,796</b>                         |

@ The above Employer contribution requirement is based on Member contributions of 9.71% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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.

**Note:** A change in benefit provisions and/or member contributions was reflected in the actuarial valuation (see Table 1). The effects of the change(s), as it relates to the benefits of current and future active members, are shown below:

|  |                  |
|--|------------------|
| <b>Increase in Actuarial Accrued Liabilities:</b>  | <b>\$409,070</b> |
| <b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b> |                  |
| Normal Cost:   | (1.19)%          |
| Amortization Payment:  | 1.21%            |
| Total:   | 0.02%            |

The full effects of the changes, if any, on the benefits of current retirees and beneficiaries, and the effect of any window benefit provisions are included in the liabilities of retirees and beneficiaries.

# Ingham County (3303)

## Division 13 - Gnrl OPEIU Prob

Table 17H

### Computed Employer Contributions - Comparative Statement

| Valuation<br>Date<br>December 31, | Active Members    |              | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|-------------------|--------------|--|-------------------------------------|
|                                   |                   |              | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
| Number                            | Annual<br>Payroll |              |  |                                     |
| 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                                |
| 2002                              | 36                | 1,843,133    | 8.57   | 8.57                                |
| 2003                              | 36                | 1,812,911    | 8.47   | 8.47                                |

Notes: 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.  
Adoption of Benefit FAC-3 reflected in 2002 valuation.  
Adoption of Benefit B-4 - 80% Maximum, 9.71% Member Contributions reflected in 2003 valuation.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 13 - Gnrl OPEIU Prob

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

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             |         |          |                         |                   |            | (2)      | 2  |            | 38          |
| 2002             | (1)     |          |                         |                   |            | (1)      |    |            | 36          |
| 2003             | (1)     | (1)      |                         |                   |            | (2)      |    | 4          | 36          |

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

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

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

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             |                | \$              | \$               |                    | \$              | \$               | 5        | \$ 72,984       |
| 2002             | 1              | 16,507          |                  |                    |                 |                  | 6        | 89,491          |
| 2003             | 3              | 59,897          |                  |                    |                 |                  | 9        | 149,388         |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 13 - Gnrl OPEIU Prob

**Table 21H**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |            | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |           | Balance      |
|------------------|---------------|------------|-------------------|------------------|-------------------------|-----------|-----------|--------------|
|                  | Employer      | Member     |                   |                  |                         | Out       | In        |              |
| 2001             | \$ 150,011    | \$ 130,848 | \$ 441,623        | \$ (72,984)      | \$ 0                    | \$ 0      | \$ 62,361 | \$ 5,806,864 |
| 2002             | 130,566       | 135,002    | 248,803           | (88,116)         | 0                       | (18,908)  | 0         | 6,214,211    |
| 2003             | 153,055       | 158,368    | 462,872           | (101,452)        | 0                       | (241,653) | 0         | 6,645,401    |

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

**Table 22H**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 7,277,059        | \$ 5,806,864     | 80%            | \$ 1,470,195               | 79%                              |
| 2002                       | 8,088,136           | 6,214,211        | 77             | 1,873,925                  | 102                              |
| 2003                       | 8,887,826           | 6,645,401        | 75             | 2,242,425                  | 124                              |

# Ingham County (3303)

## Division 14 - Gnrl TOPS UAW

**Table 16I**

### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for                                      | Employer Contribution @                |   |
|---|--|---|
|   | As Percentage of Active Member Payroll | Estimated Monthly Dollar Contribution * |
| Normal Cost (in addition to member contributions)     | 7.51%                                  | \$72,692                                |
| Amortization of Unfunded Accrued Liability (30 years) | <u>2.84</u>                            | <u>27,489</u>                           |
| Total Long Term Contribution                          | 10.35                                  | 100,181                                 |
| Overfunding Credit #                                  | <u>0.00</u>                            | <u>0</u>                                |
| <b>Total Contribution</b>                             | <b>10.35%</b>                          | <b>\$100,181</b>                        |

@ The above Employer contribution requirement is based on Member contributions of 3.62% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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.

**Note:** A change in benefit provisions and/or member contributions was reflected in the actuarial valuation (see Table 1). The effects of the change(s), as it relates to the benefits of current and future active members, are shown below:

|  |                    |
|--|--------------------|
| <b>Increase in Actuarial Accrued Liabilities:</b>  | <b>\$1,498,041</b> |
| <b>Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll</b> |                    |
| Normal Cost:   | (0.64)%            |
| Amortization Payment:  | 0.69%              |
| Total:   | 0.05%              |

The full effects of the changes, if any, on the benefits of current retirees and beneficiaries, and the effect of any window benefit provisions are included in the liabilities of retirees and beneficiaries.



# Ingham County (3303)

## Division 14 - Gnrl TOPS UAW

**Table 17I**

### Computed Employer Contributions - Comparative Statement

| Valuation<br>Date<br>December 31, | Active Members |                   | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|----------------|-------------------|--|-------------------------------------|
|                                   |                |                   | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
|                                   | Number         | Annual<br>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                                |
| 2002                              | 386            | 11,308,351        | 10.14  | 10.14                               |
| 2003                              | 384            | 11,615,252        | 10.35  | 10.35                               |

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

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 14 - Gnrl TOPS UAW

**Table 18I**

### Flow of Active Membership

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             | (9)     |          |                         | (8)               | (12)       | (10)     | 2  | 37         | 374         |
| 2002             | (9)     |          |                         | (5)               | (19)       | (2)      | 1  | 46         | 386         |
| 2003             | (4)     |          |                         | (6)               | (27)       | (4)      |    | 39         | 384         |

**Table 19I**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             | (2)     |                |                         | (3)             | (1)      | 9  | 10  | 61          |
| 2002             | (3)     |                |                         | (7)             |          |    | 5   | 56          |
| 2003             | (4)     | (1)            | (1)                     | (3)             |          | 1  | 7   | 55          |

**Table 20I**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             | 13             | \$ 171,348      | \$               | (2)                | \$ (4,851)      | \$ (1,343)       | 149      | \$ 1,205,706    |
| 2002             | 12             | 150,770         |                  | (7)                | (43,557)        | (16,693)         | 154      | 1,296,226       |
| 2003             | 13             | 123,281         |                  | (6)                | (22,474)        | (14,698)         | 161      | 1,382,335       |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 14 - Gnrl TOPS UAW

**Table 21I**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |            | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer*    |        | Balance       |
|------------------|---------------|------------|-------------------|------------------|-------------------------|--------------|--------|---------------|
|                  | Employer      | Member     |                   |                  |                         | Out          | In     |               |
| 2001             | \$ 1,040,229  | \$ 177,309 | \$ 2,049,991      | \$ (1,134,770)   | \$ (34,699)             | \$ (177,623) | \$ 0   | \$ 28,414,971 |
| 2002             | 1,050,966     | 184,585    | 1,006,871         | (1,315,853)      | (32,307)                | (1,434)      | 16,569 | 29,324,368    |
| 2003             | 1,169,392     | 190,903    | 2,315,988         | (1,355,912)      | (56,107)                | (60,236)     | 0      | 31,528,396    |

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

**Table 22I**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 31,926,883       | \$ 28,414,971    | 89%            | \$ 3,511,912               | 33%                              |
| 2002                       | 33,645,046          | 29,324,368       | 87             | 4,320,678                  | 38                               |
| 2003                       | 37,676,120          | 31,528,396       | 84             | 6,147,724                  | 53                               |

# Ingham County (3303)

## Division 15 - Animal Cntrl FOP

Table 16J

### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)        | 0.32%                                     | \$88                                       |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>15.62</u>                              | <u>4,295</u>                               |
| Total Long Term Contribution                             | 15.94                                     | 4,383                                      |
| Overfunding Credit #                                     | <u>0.00</u>                               | <u>0</u>                                   |
| <b>Total Contribution</b>                                | <b>15.94%</b>                             | <b>\$4,383</b>                             |

@ The above Employer contribution requirement is based on Member contributions of 15.49% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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 15 - Animal Cntrl FOP****Table 17J****Computed Employer Contributions - Comparative Statement**

| <b>Valuation<br/>Date<br/>December 31,</b> | <b>Active Members</b> |                           | <b>Employer Contribution as<br/>Percent of Payroll</b> |  |
|--|-----------------------|---------------------------|--|--|
|  |                       |                           | <b>Regular<br/>Contribution</b>                        | <b>Minimum<br/>Required<br/>Contribution</b> |
|  | <b>Number</b>         | <b>Annual<br/>Payroll</b> |  |  |
| 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  |
| 2002                                       | 9                     | 310,758                   | 16.06  | 16.06  |
| 2003                                       | 9                     | 329,988                   | 15.94  | 15.94  |

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

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 15 - Animal Cntrl FOP

**Table 18J**

### Flow of Active Membership

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             | (2)     |          |                         |                   | (2)        |          |    | 1          | 9           |
| 2002             |         |          |                         |                   |            |          |    | 2          | 9           |
| 2003             |         |          |                         |                   | (1)        |          |    | 1          | 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 |     |             |
| 2001             |         |                |                         |                 |          |    |     | 1           |
| 2002             |         |                |                         |                 |          |    |     | 1           |
| 2003             |         |                |                         |                 |          |    |     | 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 |
| 2001             | 2              | \$              | \$               |                    | \$              | \$               | 2        | \$ 15,550       |
| 2002             |                | 49,156          |                  |                    |                 |                  | 4        | 64,706          |
| 2003             |                |                 | 1,213            |                    |                 |                  | 4        | 65,919          |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 15 - Animal Cntrl FOP

**Table 21J**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |           | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |      | Balance    |
|------------------|---------------|-----------|-------------------|------------------|-------------------------|-----------|------|------------|
|                  | Employer      | Member    |                   |                  |                         | Out       | In   |            |
| 2001             | \$ 37,177     | \$ 50,267 | \$ 60,753         | \$ (15,549)      | \$ 0                    | \$ 0      | \$ 0 | \$ 802,507 |
| 2002             | 52,782        | 49,726    | 42,675            | (44,417)         | 0                       | (965)     | 965  | 903,273    |
| 2003             | 41,528        | 50,492    | 76,260            | (64,706)         | (4,578)                 | 0         | 0    | 1,002,269  |

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

**Table 22J**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 1,536,591        | \$ 802,507       | 52%            | \$ 734,084                 | 225%                             |
| 2002                       | 1,822,913           | 903,273          | 50             | 919,640                    | 296                              |
| 2003                       | 1,963,559           | 1,002,269        | 51             | 961,290                    | 291                              |

# Ingham County (3303)

## Division 16 - Gnrl Commsnrs

### Table 16K

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)        | 5.47%                                     | \$735                                      |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>2.08</u>                               | <u>279</u>                                 |
| Total Long Term Contribution                             | 7.55                                      | 1,014                                      |
| Overfunding Credit #                                     | <u>0.00</u>                               | <u>0</u>                                   |
| <b>Total Contribution</b>                                | <b>7.55%</b>                              | <b>\$1,014</b>                             |

@ The above Employer contribution requirement is based on Member contributions of 3.56% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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 16 - Gnrl Commsnrs

**Table 17K**

### Computed Employer Contributions - Comparative Statement

| Valuation<br>Date<br>December 31, | Active Members |                   | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|----------------|-------------------|--|-------------------------------------|
|                                   |                |                   | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
|                                   | Number         | Annual<br>Payroll |  |                                     |
| 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                                |
| 2002                              | 10             | 137,720           | 6.58   | 5.82                                |
| 2003                              | 11             | 161,215           | 7.55   | 7.55                                |

Notes: 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.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 16 - Gnrl Commsnrs

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

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             |         |          |                         |                   |            |          |    | 5          | 10          |
| 2002             |         |          |                         |                   |            |          |    |            | 10          |
| 2003             |         |          |                         |                   |            |          |    | 1          | 11          |

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

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             |         |                |                         |                 |          |    |     | 5           |
| 2002             | (1)     |                |                         |                 |          |    |     | 4           |
| 2003             |         |                |                         |                 |          |    |     | 4           |

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

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             |                | \$              | \$               |                    | \$              | \$               | 5        | \$ 17,888       |
| 2002             | 1              | 2,210           |                  |                    |                 |                  | 6        | 20,098          |
| 2003             | 1              | 2,918           |                  |                    |                 |                  | 7        | 23,016          |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 16 - Gnrl Commsnrs

**Table 21K**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |          | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |        | Balance    |
|------------------|---------------|----------|-------------------|------------------|-------------------------|-----------|--------|------------|
|                  | Employer      | Member   |                   |                  |                         | Out       | In     |            |
| 2001             | \$ 3,089      | \$ 4,739 | \$ 19,980         | \$ (17,888)      | \$ 0                    | \$ (734)  | \$ 734 | \$ 292,469 |
| 2002             | 4,448         | 4,903    | 7,616             | (21,018)         | 0                       | 0         | 0      | 288,418    |
| 2003             | 6,414         | 5,062    | 21,373            | (20,097)         | 0                       | 0         | 15,006 | 316,176    |

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

**Table 22K**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 308,598          | \$ 292,469       | 95%            | \$ 16,129                  | 12%                              |
| 2002                       | 320,249             | 288,418          | 90             | 31,831                     | 23                               |
| 2003                       | 378,608             | 316,176          | 84             | 62,432                     | 39                               |

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

**Table 16L**

**Computed Employer Contributions to the Retirement System**  
**For the Fiscal Year Beginning January 1, 2005**

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)        | 4.47%                                     | \$11,574                                   |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>4.07</u>                               | <u>10,538</u>                              |
| Total Long Term Contribution                             | 8.54                                      | 22,112                                     |
| Overfunding Credit #                                     | <u>0.00</u>                               | <u>0</u>                                   |
| <b>Total Contribution</b>                                | <b>8.54%</b>                              | <b>\$22,112</b>                            |

@ The above Employer contribution requirement is based on Member contributions of 11.87% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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 17 - ICEA Nurses

**Table 17L**

### Computed Employer Contributions - Comparative Statement

| Valuation<br>Date<br>December 31, | Active Members |                   | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|----------------|-------------------|--|-------------------------------------|
|                                   |                |                   | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
|                                   | Number         | Annual<br>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                                |
| 2002                              | 67             | 3,053,506         | 9.39   | 9.39                                |
| 2003                              | 69             | 3,107,037         | 8.54   | 8.54                                |

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.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 17 - ICEA Nurses

**Table 18L**

### Flow of Active Membership

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             | (3)     |          |                         |                   | (1)        |          |    | 5          | 68          |
| 2002             |         |          |                         | (1)               | (4)        | (2)      |    | 6          | 67          |
| 2003             | (2)     |          |                         | (2)               | (1)        |          |    | 7          | 69          |

**Table 19L**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             |         |                |                         | (2)             |          | 2  | 1   | 13          |
| 2002             | (2)     | (1)            |                         |                 |          |    | 2   | 12          |
| 2003             | (2)     |                |                         | (1)             |          |    | 2   | 11          |

**Table 20L**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             | 3              | \$ 28,496       | \$ 2,723         |                    | \$              | \$ (4,586)       | 26       | \$ 227,252      |
| 2002             | 2              | 23,186          | 3,458            |                    |                 | (3,185)          | 28       | 250,711         |
| 2003             | 4              | 31,059          | 4,431            |                    |                 |                  | 32       | 286,201         |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 17 - ICEA Nurses

**Table 21L**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |            | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer*  |          | Balance      |
|------------------|---------------|------------|-------------------|------------------|-------------------------|------------|----------|--------------|
|                  | Employer      | Member     |                   |                  |                         | Out        | In       |              |
| 2001             | \$ 196,369    | \$ 321,184 | \$ 515,290        | \$ (222,531)     | \$ (19,418)             | \$ (2,030) | \$ 8,531 | \$ 6,930,971 |
| 2002             | 214,553       | 375,409    | 321,239           | (235,471)        | (24,793)                | (44,638)   | 0        | 7,537,270    |
| 2003             | 259,070       | 367,377    | 700,881           | (268,685)        | (2,306)                 | 0          | 942      | 8,594,549    |

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

**Table 22L**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 8,916,596        | \$ 6,930,971     | 78%            | \$ 1,985,625               | 73%                              |
| 2002                       | 10,315,515          | 7,537,270        | 73             | 2,778,245                  | 91                               |
| 2003                       | 10,953,766          | 8,594,549        | 78             | 2,359,217                  | 76                               |

**Ingham County (3303)**

**Division 18 - ICEA Ct. Prof**

**Table 16M**

**Computed Employer Contributions to the Retirement System  
For the Fiscal Year Beginning January 1, 2005**

| <b>Contribution for</b>                               | <b>Employer Contribution @</b>                    |  |
|---|---|--|
|   | <b>As Percentage of<br/>Active Member Payroll</b> | <b>Estimated Monthly<br/>Dollar Contribution *</b> |
| Normal Cost (in addition to member contributions)     | 3.08%   | \$4,968  |
| Amortization of Unfunded Accrued Liability (30 years) | <u>8.27</u>                                       | <u>13,340</u>                                      |
| Total Long Term Contribution                          | 11.35   | 18,308   |
| Overfunding Credit #                                  | <u>0.00</u>                                       | <u>0</u>   |
| <b>Total Contribution</b>                             | <b>11.35%</b>                                     | <b>\$18,308</b>                                    |

@ The above Employer contribution requirement is based on Member contributions of 9.84% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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<br>Date<br>December 31, | Active Members |                   | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|----------------|-------------------|--|-------------------------------------|
|                                   |                |                   | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
|                                   | Number         | Annual<br>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                               |
| 2002                              | 37             | 1,883,979         | 11.42  | 11.42                               |
| 2003                              | 37             | 1,935,719         | 11.35  | 11.35                               |

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.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 18 - ICEA Ct. Prof

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

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             | (4)     |          |                         |                   |            | (1)      | 3  | 1          | 34          |
| 2002             | (1)     |          |                         | (1)               |            |          | 1  | 4          | 37          |
| 2003             | (1)     |          |                         | (1)               |            |          | 1  | 1          | 37          |

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

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             |         |                |                         |                 |          | 2  |     | 6           |
| 2002             |         |                |                         |                 |          |    | 1   | 7           |
| 2003             |         |                |                         |                 |          | 1  | 1   | 9           |

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

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             | 4              | \$ 112,268      | \$ 287           |                    | \$              | \$               | 22       | \$ 456,377      |
| 2002             | 1              | 20,146          |                  |                    |                 |                  | 23       | 476,523         |
| 2003             | 8              | 63,559          |                  |                    |                 | (2,085)          | 31       | 537,997         |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 18 - ICEA Ct. Prof

**Table 21M**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |            | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |            | Balance      |
|------------------|---------------|------------|-------------------|------------------|-------------------------|-----------|------------|--------------|
|                  | Employer      | Member     |                   |                  |                         | Out       | In         |              |
| 2001             | \$ 165,138    | \$ 168,083 | \$ 436,013        | \$ (385,979)     | \$ (2,795)              | \$ 0      | \$ 190,379 | \$ 5,942,900 |
| 2002             | 166,027       | 186,458    | 186,390           | (470,786)        | 0                       | 0         | 1,573      | 6,012,562    |
| 2003             | 220,253       | 197,222    | 498,014           | (482,800)        | 0                       | 0         | 241,086    | 6,686,337    |

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

**Table 22M**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 8,326,341        | \$ 5,942,900     | 71%            | \$ 2,383,441               | 151%                             |
| 2002                       | 8,966,621           | 6,012,562        | 67             | 2,954,059                  | 157                              |
| 2003                       | 9,671,329           | 6,686,337        | 69             | 2,984,992                  | 154                              |

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

**Table 16N**

**Computed Employer Contributions to the Retirement System**  
**For the Fiscal Year Beginning January 1, 2005**

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)        | 5.34%                                     | \$2,223                                    |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>3.97</u>                               | <u>1,653</u>                               |
| Total Long Term Contribution                             | 9.31                                      | 3,876                                      |
| Overfunding Credit #                                     | <u>0.00</u>                               | <u>0</u>                                   |
| <b>Total Contribution</b>                                | <b>9.31%</b>                              | <b>\$3,876</b>                             |

@ The above Employer contribution requirement is based on Member contributions of 8.46% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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 19 - Cnstutnl Offcls

**Table 17N**

### Computed Employer Contributions - Comparative Statement

| Valuation<br>Date<br>December 31, | Active Members    |            | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|-------------------|------------|--|-------------------------------------|
|                                   |                   |            | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
| Number                            | Annual<br>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                                |
| 2002                              | 6                 | 485,039    | 9.59   | 9.59                                |
| 2003                              | 6                 | 499,590    | 9.31   | 9.31                                |

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.  
Adoption of Benefit FAC-3, B-4 - 80% Maximum, 8.46% Member Contributions reflected in 2002 valuation.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 19 - Cnstutnl Offcls

**Table 18N**

### Flow of Active Membership

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

**Table 19N**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             |         |                |                         |                 |          |    |     | 0           |
| 2002             |         |                |                         |                 |          |    |     | 0           |
| 2003             |         |                |                         |                 |          |    |     | 0           |

**Table 20N**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             |                | \$              | \$               |                    | \$              | \$               | 7        | \$ 96,192       |
| 2002             |                |                 |                  |                    |                 |                  | 7        | 96,192          |
| 2003             | 3              | 20,866          |                  | (3)                | (22,071)        |                  | 7        | 94,987          |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 19 - Cnstitutnl Offcls

**Table 21N**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |           | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |        | Balance      |
|------------------|---------------|-----------|-------------------|------------------|-------------------------|-----------|--------|--------------|
|                  | Employer      | Member    |                   |                  |                         | Out       | In     |              |
| 2001             | \$ 27,281     | \$ 23,198 | \$ 108,386        | \$ (96,192)      | \$ 0                    | \$ 0      | \$ 0   | \$ 1,531,883 |
| 2002             | 31,140        | 41,034    | 48,880            | (96,192)         | 0                       | 0         | 0      | 1,556,745    |
| 2003             | 41,566        | 42,265    | 126,111           | (92,008)         | 0                       | 0         | 27,258 | 1,701,937    |

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

**Table 22N**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 1,684,832        | \$ 1,531,883     | 91%            | \$ 152,949                 | 33%                              |
| 2002                       | 1,941,581           | 1,556,745        | 80             | 384,836                    | 79                               |
| 2003                       | 2,071,814           | 1,701,937        | 82             | 369,877                    | 74                               |

# Ingham County (3303)

## Division 21 - FOP Shrf Deputies

### Table 160

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)        | 4.57%                                     | \$25,865                                   |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>5.11</u>                               | <u>28,921</u>                              |
| Total Long Term Contribution                             | 9.68                                      | 54,786                                     |
| Overfunding Credit #                                     | <u>0.00</u>                               | <u>0</u>                                   |
| <b>Total Contribution</b>                                | <b>9.68%</b>                              | <b>\$54,786</b>                            |

@ The above Employer contribution requirement is based on Member contributions of 10.96% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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 21 - FOP Shrf Deputies

**Table 17O**

### Computed Employer Contributions - Comparative Statement

| Valuation<br>Date<br>December 31, | Active Members    |              | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|-------------------|--------------|--|-------------------------------------|
|                                   |                   |              | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
| Number                            | Annual<br>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                                |
| 2002                              | 153               | 6,686,427    | 9.44   | 9.44                                |
| 2003                              | 150               | 6,791,675    | 9.68   | 9.68                                |

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.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 21 - FOP Shrf Deputies

**Table 180**

### Flow of Active Membership

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

**Table 190**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             | (1)     |                |                         | (2)             |          | 7  | 5   | 20          |
| 2002             |         |                |                         | (3)             | (1)      |    | 2   | 18          |
| 2003             |         |                |                         | (1)             |          |    |     | 17          |

**Table 200**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             | 7              | \$ 179,878      | \$ 1,077         |                    | \$              | (1,720)          | 57       | \$ 1,089,816    |
| 2002             | 5              | 142,874         |                  | (2)                | (13,679)        | (1,917)          | 60       | 1,217,094       |
| 2003             | 9              | 110,616         | 4,812            | (1)                | (15,022)        | (18,160)         | 68       | 1,299,340       |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 21 - FOP Shrf Deputies

**Table 210**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |            | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer*   |            | Balance       |
|------------------|---------------|------------|-------------------|------------------|-------------------------|-------------|------------|---------------|
|                  | Employer      | Member     |                   |                  |                         | Out         | In         |               |
| 2001             | \$ 519,780    | \$ 735,558 | \$ 1,406,277      | \$ (1,058,811)   | \$ (84,300)             | \$ (22,913) | \$ 149,858 | \$ 19,266,850 |
| 2002             | 489,336       | 760,140    | 653,931           | (1,213,814)      | (85,751)                | (138,170)   | 0          | 19,732,522    |
| 2003             | 596,429       | 766,122    | 1,581,967         | (1,269,865)      | (131,925)               | (100,198)   | 170,545    | 21,345,597    |

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

**Table 220**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 24,125,583       | \$ 19,266,850    | 80%            | \$ 4,858,733               | 73%                              |
| 2002                       | 25,762,655          | 19,732,522       | 77             | 6,030,133                  | 90                               |
| 2003                       | 27,812,580          | 21,345,597       | 77             | 6,466,983                  | 95                               |

**Ingham County (3303)**

**Division 40 - ICEA Unit 111**

**Table 16P**

**Computed Employer Contributions to the Retirement System  
For the Fiscal Year Beginning January 1, 2005**

| <b>Contribution for</b>                                  | <b>Employer Contribution @</b>                    |  |
|--|---|--|
|  | <b>As Percentage of<br/>Active Member Payroll</b> | <b>Estimated Monthly<br/>Dollar Contribution *</b> |
| Normal Cost (in addition to member contributions)        | 5.98%   | \$4,785  |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>1.25</u>                                       | <u>1,000</u>                                       |
| Total Long Term Contribution                             | 7.23  | 5,785  |
| Overfunding Credit #                                     | <u>0.00</u>                                       | <u>0</u>   |
| <b>Total Contribution</b>                                | <b>7.23%</b>                                      | <b>\$5,785</b>                                     |

@ The above Employer contribution requirement is based on Member contributions of 3.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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 40 - ICEA Unit 111

**Table 17P**

### Computed Employer Contributions - Comparative Statement

| Valuation<br>Date<br>December 31, | Active Members |                   | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|----------------|-------------------|--|-------------------------------------|
|                                   |                |                   | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
|                                   | Number         | Annual<br>Payroll |  |                                     |
| 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                                |
| 2002                              | 28             | 828,543           | 6.45   | 6.45                                |
| 2003                              | 32             | 960,275           | 7.23   | 7.23                                |

Notes: 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.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 40 - ICEA Unit 111

**Table 18P**

### Flow of Active Membership

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             | (3)     |          |                         |                   | (2)        |          |    | 2          | 22          |
| 2002             |         |          |                         |                   | (5)        |          | 2  | 9          | 28          |
| 2003             |         |          |                         |                   | (7)        |          |    | 11         | 32          |

**Table 19P**

### Flow of Vested Former Members

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

**Table 20P**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             | 4              | \$ 32,213       | \$               |                    | \$              | \$ (3,356)       | 27       | \$ 231,422      |
| 2002             |                |                 |                  |                    |                 |                  | 27       | 231,422         |
| 2003             |                |                 |                  |                    |                 | (4,101)          | 27       | 227,321         |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 40 - ICEA Unit 111

**Table 21P**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |           | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer*  |          | Balance      |
|------------------|---------------|-----------|-------------------|------------------|-------------------------|------------|----------|--------------|
|                  | Employer      | Member    |                   |                  |                         | Out        | In       |              |
| 2001             | \$ 14,296     | \$ 21,972 | \$ 210,472        | \$ (221,381)     | \$ (2,005)              | \$ (3,660) | \$ 3,352 | \$ 3,029,975 |
| 2002             | 18,721        | 23,034    | 63,748            | (231,855)        | (6,725)                 | 0          | 15,105   | 2,912,003    |
| 2003             | 37,442        | 28,333    | 187,213           | (231,423)        | (4,180)                 | (321)      | 0        | 2,929,067    |

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

**Table 22P**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 2,918,874        | \$ 3,029,975     | 104%           | \$ (111,101)               | 0%                               |
| 2002                       | 3,007,746           | 2,912,003        | 97             | 95,743                     | 12                               |
| 2003                       | 3,152,237           | 2,929,067        | 93             | 223,170                    | 23                               |

# Ingham County (3303)

## Division 41 - MCF Management

### Table 16Q

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)        | 8.81%                                     | \$5,588                                    |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>0.26</u>                               | <u>165</u>                                 |
| Total Long Term Contribution                             | 9.07                                      | 5,753                                      |
| Overfunding Credit #                                     | <u>0.00</u>                               | <u>0</u>                                   |
| <b>Total Contribution</b>                                | <b>9.07%</b>                              | <b>\$5,753</b>                             |

@ The above Employer contribution requirement is based on Member contributions of 0.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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 41 - MCF Management****Table 17Q****Computed Employer Contributions - Comparative Statement**

| <b>Valuation<br/>Date<br/>December 31,</b> | <b>Active Members</b> |                           | <b>Employer Contribution as<br/>Percent of Payroll</b> |  |
|--|-----------------------|---------------------------|--|--|
|  |                       |                           | <b>Regular<br/>Contribution</b>                        | <b>Minimum<br/>Required<br/>Contribution</b> |
|  | <b>Number</b>         | <b>Annual<br/>Payroll</b> |  |  |
| 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   |
| 2002                                       | 18                    | 782,621                   | 9.23   | 9.23   |
| 2003                                       | 19                    | 761,154                   | 9.07   | 9.07   |

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.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 41 - MCF Management

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

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             |         |          |                         | (3)               | (4)        |          |    | 6          | 18          |
| 2002             |         |          |                         |                   | (3)        |          |    | 3          | 18          |
| 2003             |         |          |                         |                   | (3)        | (1)      | 2  | 3          | 19          |

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

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             |         |                |                         |                 |          |    | 3   | 10          |
| 2002             |         |                |                         |                 |          |    |     | 10          |
| 2003             | (1)     | (1)            |                         |                 |          |    |     | 8           |

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

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             |                | \$              | \$               |                    | \$              | \$               | 8        | \$ 52,672       |
| 2002             |                |                 |                  |                    |                 |                  | 8        | 52,672          |
| 2003             | 1              | 4,267           |                  |                    |                 |                  | 9        | 56,939          |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 41 - MCF Management

### Table 21Q

#### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |        | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |          | Balance      |
|------------------|---------------|--------|-------------------|------------------|-------------------------|-----------|----------|--------------|
|                  | Employer      | Member |                   |                  |                         | Out       | In       |              |
| 2001             | \$ 79,895     | \$ 0   | \$ 89,535         | \$ (52,922)      | \$ (649)                | \$ 0      | \$ 1,022 | \$ 1,227,752 |
| 2002             | 64,333        | 88     | 46,962            | (52,672)         | (65)                    | 0         | 238      | 1,286,636    |
| 2003             | 71,663        | 149    | 114,743           | (57,295)         | 0                       | (14,538)  | 28,627   | 1,429,985    |

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

### Table 22Q

#### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 1,172,178        | \$ 1,227,752     | 105%           | \$ (55,574)                | 0%                               |
| 2002                       | 1,307,854           | 1,286,636        | 98             | 21,218                     | 3                                |
| 2003                       | 1,466,476           | 1,429,985        | 98             | 36,491                     | 5                                |

**Ingham County (3303)**

**Division 42 - ICEA Unit 11**

**Table 16R**

**Computed Employer Contributions to the Retirement System  
For the Fiscal Year Beginning January 1, 2005**

| <b>Contribution for</b>                               | <b>Employer Contribution @</b>                    |  |
|---|---|--|
|   | <b>As Percentage of<br/>Active Member Payroll</b> | <b>Estimated Monthly<br/>Dollar Contribution *</b> |
| Normal Cost (in addition to member contributions)     | 6.59%   | \$1,905  |
| Amortization of Unfunded Accrued Liability (30 years) | <u>1.92</u>                                       | <u>555</u>   |
| Total Long Term Contribution                          | 8.51  | 2,460  |
| Overfunding Credit #                                  | <u>0.00</u>                                       | <u>0</u>   |
| <b>Total Contribution</b>                             | <b>8.51%</b>                                      | <b>\$2,460</b>                                     |

@ The above Employer contribution requirement is based on Member contributions of 3.95% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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 42 - ICEA Unit 11****Table 17R****Computed Employer Contributions - Comparative Statement**

| <b>Valuation<br/>Date<br/>December 31,</b> | <b>Active Members</b> |                           | <b>Employer Contribution as<br/>Percent of Payroll</b> |  |
|--|-----------------------|---------------------------|--|--|
|  |                       |                           | <b>Regular<br/>Contribution</b>                        | <b>Minimum<br/>Required<br/>Contribution</b> |
|  | <b>Number</b>         | <b>Annual<br/>Payroll</b> |  |  |
| 1995                                       | 14                    | \$ 427,567                | 5.59%  | 4.03%  |
| 1996                                       | 11                    | 285,375                   | 6.08   | 5.60   |
| 1997                                       | 16                    | 376,839                   | 5.52   | 5.52   |
| 1998                                       | 8                     | 264,468                   | 7.13   | 7.13   |
| 1999                                       | 9                     | 318,233                   | 7.12   | 7.12   |
| 2000                                       | 9                     | 330,997                   | 6.82   | 6.81   |
| 2001                                       | 9                     | 381,171                   | 8.67   | 8.22   |
| 2002                                       | 10                    | 382,838                   | 8.69   | 8.46   |
| 2003                                       | 9                     | 346,899                   | 8.51   | 8.51   |

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.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 42 - ICEA Unit 11

**Table 18R**

### Flow of Active Membership

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

**Table 19R**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             | (1)     |                |                         | (1)             |          |    | 1   | 4           |
| 2002             |         |                |                         | (2)             |          |    |     | 2           |
| 2003             |         |                |                         |                 |          |    |     | 2           |

**Table 20R**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             | 1              | \$ 10,146       | \$               |                    | \$              | \$               | 1        | \$ 10,146       |
| 2002             |                |                 |                  |                    |                 |                  | 1        | 10,146          |
| 2003             |                |                 |                  |                    |                 |                  | 1        | 10,146          |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 42 - ICEA Unit 11

**Table 21R**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |           | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |       | Balance    |
|------------------|---------------|-----------|-------------------|------------------|-------------------------|-----------|-------|------------|
|                  | Employer      | Member    |                   |                  |                         | Out       | In    |            |
| 2001             | \$ 27,140     | \$ 14,818 | \$ 24,862         | \$ (10,146)      | \$ (1,866)              | \$ (757)  | \$ 44 | \$ 336,159 |
| 2002             | 26,108        | 14,918    | 19,124            | (10,146)         | (80)                    | (238)     | 0     | 385,845    |
| 2003             | 30,627        | 13,582    | 30,571            | (10,146)         | (684)                   | (36,780)  | 0     | 413,015    |

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

**Table 22R**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 458,069          | \$ 336,159       | 73%            | \$ 121,910                 | 32%                              |
| 2002                       | 499,413             | 385,845          | 77             | 113,568                    | 30                               |
| 2003                       | 536,965             | 413,015          | 77             | 123,950                    | 36                               |

# Ingham County (3303)

## Division 43 - ICEA Unit 1

### Table 16S

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for                                      | Employer Contribution @                |   |
|---|--|---|
|   | As Percentage of Active Member Payroll | Estimated Monthly Dollar Contribution * |
| Normal Cost (in addition to member contributions)     | 6.28%                                  | \$1,164                                 |
| Amortization of Unfunded Accrued Liability (30 years) | <u>10.11</u>                           | <u>1,873</u>                            |
| Total Long Term Contribution                          | 16.39                                  | 3,037                                   |
| Overfunding Credit #                                  | <u>0.00</u>                            | <u>0</u>                                |
| <b>Total Contribution</b>                             | <b>16.39%</b>                          | <b>\$3,037</b>                          |

@ The above Employer contribution requirement is based on Member contributions of 3.51% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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.

**Note:** A change in benefit provisions and/or member contributions was reflected in the actuarial valuation (see Table 1). The effects of the change(s), as it relates to the benefits of current and future active members, are shown below:

|   |         |
|---|---------|
| Increase in Actuarial Accrued Liabilities:  | \$(8)   |
| Increase in Computed Long Term Employer Contribution As a Percentage of Active Member Payroll |         |
| Normal Cost:  | (0.01)% |
| Amortization Payment:   | 0.00%   |
| Total:  | (0.01)% |

The full effects of the changes, if any, on the benefits of current retirees and beneficiaries, and the effect of any window benefit provisions are included in the liabilities of retirees and beneficiaries.



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

| <b>Valuation<br/>Date<br/>December 31,</b> | <b>Active Members</b> |                           | <b>Employer Contribution as<br/>Percent of Payroll</b> |  |
|--|-----------------------|---------------------------|--|--|
|  |                       |                           | <b>Regular<br/>Contribution</b>                        | <b>Minimum<br/>Required<br/>Contribution</b> |
|  | <b>Number</b>         | <b>Annual<br/>Payroll</b> |  |  |
| 1995                                       | 8                     | \$ 313,942                | 7.53%  | 5.44%  |
| 1996                                       | 12                    | 432,683                   | 8.84   | 8.15   |
| 1997                                       | 9                     | 323,039                   | 10.39  | 10.39  |
| 1998                                       | 6                     | 253,946                   | 11.99  | 11.99  |
| 1999                                       | 5                     | 211,746                   | 12.18  | 12.18  |
| 2000                                       | 7                     | 243,297                   | 12.55  | 12.55  |
| 2001                                       | 9                     | 299,551                   | 12.45  | 11.63  |
| 2002                                       | 6                     | 233,997                   | 15.04  | 14.63  |
| 2003                                       | 6                     | 222,356                   | 16.39  | 16.39  |

Notes: Actuarial assumptions were revised for the 1997 valuation.  
Adoption of 3.50% member contributions reflected in 1998 valuation.  
Actuarial assumptions were revised for the 2000 valuation.  
Adoption of 3.51% Member Contributions reflected in 2003 valuation.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 43 - ICEA Unit 1

**Table 18S**

### Flow of Active Membership

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             |         |          |                         |                   | (1)        |          |    | 3          | 9           |
| 2002             |         |          |                         |                   | (2)        | (1)      |    |            | 6           |
| 2003             |         |          |                         |                   | (1)        | (1)      |    | 2          | 6           |

**Table 19S**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             |         |                |                         | (2)             |          |    |     | 3           |
| 2002             |         |                |                         |                 |          |    |     | 3           |
| 2003             |         |                |                         |                 |          |    |     | 3           |

**Table 20S**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             |                | \$              | \$               |                    | \$              | \$               | 5        | \$ 67,200       |
| 2002             |                |                 |                  |                    |                 | (2,486)          | 5        | 64,714          |
| 2003             |                |                 |                  |                    |                 |                  | 5        | 64,714          |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 43 - ICEA Unit 1

**Table 21S**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |          | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer*  |          | Balance    |
|------------------|---------------|----------|-------------------|------------------|-------------------------|------------|----------|------------|
|                  | Employer      | Member   |                   |                  |                         | Out        | In       |            |
| 2001             | \$ 34,066     | \$ 9,884 | \$ 40,727         | \$ (67,200)      | \$ (9,791)              | \$ (1,476) | \$ 1,476 | \$ 587,407 |
| 2002             | 35,461        | 9,905    | 14,187            | (66,371)         | (2,323)                 | (5,918)    | 4,356    | 576,704    |
| 2003             | 24,835        | 7,488    | 27,909            | (64,714)         | 0                       | (33,739)   | 0        | 538,483    |

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

**Table 22S**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 961,401          | \$ 587,407       | 61%            | \$ 373,994                 | 125%                             |
| 2002                       | 1,000,555           | 576,704          | 58             | 423,851                    | 181                              |
| 2003                       | 957,592             | 538,483          | 56             | 419,109                    | 188                              |

# Ingham County (3303)

## Division 44 - MCF Exec Mgr

Table 16T

### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)        | 18.24%                                    | \$1,647                                    |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>4.77</u>                               | <u>431</u>                                 |
| Total Long Term Contribution                             | 23.01                                     | 2,078                                      |
| Overfunding Credit #                                     | <u>0.00</u>                               | <u>0</u>                                   |
| <b>Total Contribution</b>                                | <b>23.01%</b>                             | <b>\$2,078</b>                             |

@ The above Employer contribution requirement is based on Member contributions of 0.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 30 year amortization) will decrease/increase by 0.80% of pay.

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

# Only applies if assets exceed accrued liabilities.

**Ingham County (3303)**

**Division 44 - MCF Exec Mgr**

**Table 17T**

**Computed Employer Contributions - Comparative Statement**

| <b>Valuation<br/>Date<br/>December 31,</b> | <b>Active Members</b> |                           | <b>Employer Contribution as<br/>Percent of Payroll</b> |
|--|-----------------------|---------------------------|--|
|  | <b>Number</b>         | <b>Annual<br/>Payroll</b> |  |
| 2003                                       | 1                     | \$ 108,383                | 23.01%   |

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

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 44 - MCF Exec Mgr

**Table 18T**

### Flow of Active Membership

| Year Ended<br>12/31 | Retired | Disabled | Died<br>(Survivor<br>Benefit) | Other Termination |            | Transfer |    | New<br>Member | End of<br>Year |
|---------------------|---------|----------|-------------------------------|-------------------|------------|----------|----|---------------|----------------|
|                     |         |          |                               | Vested            | Non-Vested | Out      | In |               |                |
| 2003                |         |          |                               |                   |            |          | 1  |               | 1              |

**Table 19T**

### Flow of Vested Former Members

| Year Ended<br>12/31 | Retired | Return<br>To Work | Died<br>(Survivor<br>Benefit) | Forfeit<br>Benefit | Transfer |    | New | End of<br>Year |
|---------------------|---------|-------------------|-------------------------------|--------------------|----------|----|-----|----------------|
|                     |         |                   |                               |                    | Out      | In |     |                |
| 2003                |         |                   |                               |                    |          |    |     | 0              |

**Table 20T**

### Flow of Retirees and Beneficiaries

| Year Ended<br>12/31 | Added to Rolls |                    |                     | Removed from Rolls |                    |                     | Year End |                    |
|---------------------|----------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------|--------------------|
|                     | Number@        | Annual<br>Benefits | Benefit<br>Adjust.* | Number             | Annual<br>Benefits | Benefit<br>Adjust.# | Number   | Annual<br>Benefits |
| 2003                |                | \$                 | \$                  |                    | \$                 | \$                  | 0        | \$ 0               |

@ Includes beneficiaries of retirees who died during the year.

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

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

**Ingham County (3303)****Division 44 - MCF Exec Mgr****Table 21T****Flow of Valuation Assets (Actuarial Value)**

| <b>Year<br/>Ended<br/>12/31</b> | <b>Contributions</b> |               | <b>Investment<br/>Income</b> | <b>Benefit<br/>Payments</b> | <b>Member<br/>Contrib.<br/>Refunds</b> | <b>Transfer*</b> |           | <b>Balance</b> |
|---------------------------------|----------------------|---------------|------------------------------|-----------------------------|--|------------------|-----------|----------------|
|                                 | <b>Employer</b>      | <b>Member</b> |                              |                             |  | <b>Out</b>       | <b>In</b> |                |
| 2003                            | \$ 1,647             | \$ 0          | \$ 8,085                     | \$ 0                        | \$ 0                                   | \$ 0             | \$ 56,751 | \$ 66,483      |

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

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

| <b>Valuation<br/>Date<br/>December 31</b> | <b>Accrued<br/>Liabilities</b> | <b>Valuation<br/>Assets</b> | <b>Funded<br/>Percent</b> | <b>Unfunded<br/>Accrued<br/>Liability</b> | <b>UAL as<br/>Percent of<br/>Annual<br/>Payroll</b> |
|---|--------------------------------|-----------------------------|---------------------------|---|---|
| 2003                                      | \$ 162,962                     | \$ 66,483                   | 41%                       | \$ 96,479                                 | 89%   |

# Ingham County (3303)

## Division 90 - Asst Pros Attnys

Table 16U

### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)        | 10.14%                                    | \$16,286                                   |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>3.49</u>                               | <u>5,605</u>                               |
| Total Long Term Contribution                             | 13.63                                     | 21,891                                     |
| Overfunding Credit #                                     | <u>0.00</u>                               | <u>0</u>                                   |
| <b>Total Contribution</b>                                | <b>13.63%</b>                             | <b>\$21,891</b>                            |

@ The above Employer contribution requirement is based on Member contributions of 1.40% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 30 year amortization) will decrease/increase by 0.92% 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 17U

### Computed Employer Contributions - Comparative Statement

| Valuation<br>Date<br>December 31, | Active Members    |              | Employer Contribution as<br>Percent of Payroll |                                     |
|-----------------------------------|-------------------|--------------|--|-------------------------------------|
|                                   |                   |              | Regular<br>Contribution                        | Minimum<br>Required<br>Contribution |
| Number                            | Annual<br>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                               |
| 2002                              | 32                | 1,823,812    | 13.96  | 13.96                               |
| 2003                              | 32                | 1,927,390    | 13.63  | 13.63                               |

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.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 90 - Asst Pros Attnys

**Table 18U**

### Flow of Active Membership

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             |         |          |                         | (3)               | (1)        | (1)      |    | 6          | 30          |
| 2002             |         |          |                         | (1)               |            |          |    | 3          | 32          |
| 2003             |         |          |                         | (1)               |            |          |    | 1          | 32          |

**Table 19U**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             | (1)     |                |                         |                 |          | 5  | 6   | 14          |
| 2002             |         |                |                         |                 |          |    | 1   | 15          |
| 2003             |         |                |                         |                 |          |    | 1   | 16          |

**Table 20U**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             | 1              | \$ 8,246        | \$               |                    | \$              | \$               | 5        | \$ 97,627       |
| 2002             |                |                 |                  |                    |                 |                  | 5        | 97,627          |
| 2003             |                |                 |                  | (1)                | (5,028)         |                  | 4        | 92,599          |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 90 - Asst Pros Attnys

**Table 21U**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |           | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer*  |           | Balance      |
|------------------|---------------|-----------|-------------------|------------------|-------------------------|------------|-----------|--------------|
|                  | Employer      | Member    |                   |                  |                         | Out        | In        |              |
| 2001             | \$ 225,254    | \$ 22,971 | \$ 328,575        | \$ (93,505)      | \$ 0                    | \$ (4,527) | \$ 40,928 | \$ 4,445,017 |
| 2002             | 247,769       | 25,826    | 232,163           | (97,628)         | (74)                    | 0          | 117,514   | 4,970,587    |
| 2003             | 262,996       | 26,954    | 446,233           | (97,628)         | 0                       | (38,107)   | 0         | 5,571,035    |

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

**Table 22U**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 5,629,717        | \$ 4,445,017     | 79%            | \$ 1,184,700               | 73%                              |
| 2002                       | 6,359,505           | 4,970,587        | 78             | 1,388,918                  | 76                               |
| 2003                       | 6,826,732           | 5,571,035        | 82             | 1,255,697                  | 65                               |

# Ingham County (3303)

## Division 91 - Parks Union Empl

### Table 16V

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)          | 8.08%                                     | \$1,241                                    |
| Amortization of Unfunded<br>Accrued Liability (30 years) # | <u>(0.03)</u>                             | <u>(5)</u>                                 |
| Total Long Term Contribution                               | 8.05                                      | 1,236                                      |
| Overfunding Credit #                                       | <u>(0.03)</u>                             | <u>(5)</u>                                 |
| <b>Total Contribution</b>                                  | <b>8.02%</b>                              | <b>\$1,231</b>                             |

@ The above Employer contribution requirement is based on Member contributions of 0.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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 0.06% ( 0.03% plus 0.03% ). The additional 0.03% results from spreading the negative unfunded accrued liability over 10 years instead of 30 years.

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

| <b>Valuation<br/>Date<br/>December 31,</b> | <b>Active Members</b> |                           | <b>Employer Contribution as<br/>Percent of Payroll</b> |  |
|--|-----------------------|---------------------------|--|--|
|  |                       |                           | <b>Regular<br/>Contribution</b>                        | <b>Minimum<br/>Required<br/>Contribution</b> |
|  | <b>Number</b>         | <b>Annual<br/>Payroll</b> |  |  |
| 1994                                       | 3                     | \$ 76,666                 | 10.51%   | 5.48%  |
| 1995                                       | 3                     | 82,837                    | 11.15  | 8.06   |
| 1996                                       | 3                     | 80,234                    | 11.50  | 10.61  |
| 1997                                       | 5                     | 144,342                   | 12.37  | 12.37  |
| 1998                                       | 5                     | 160,579                   | 10.70  | 10.70  |
| 1999                                       | 6                     | 195,920                   | 10.42  | 10.42  |
| 2000                                       | 6                     | 199,329                   | 10.37  | 10.37  |
| 2001                                       | 5                     | 167,040                   | 11.30  | 11.30  |
| 2002                                       | 5                     | 159,732                   | 9.44   | 9.44   |
| 2003                                       | 6                     | 184,247                   | 8.02   | 8.02   |

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

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 91 - Parks Union Empl

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

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

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

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             |         |                |                         |                 |          |    |     | 0           |
| 2002             |         |                |                         |                 |          |    |     | 0           |
| 2003             |         |                |                         |                 |          |    | 1   | 1           |

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

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             |                | \$              | \$               |                    | \$              | \$               | 0        | \$ 0            |
| 2002             |                |                 |                  |                    |                 |                  | 0        | 0               |
| 2003             |                |                 |                  |                    |                 |                  | 0        | 0               |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 91 - Parks Union Empl

**Table 21V**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |        | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer*   |      | Balance    |
|------------------|---------------|--------|-------------------|------------------|-------------------------|-------------|------|------------|
|                  | Employer      | Member |                   |                  |                         | Out         | In   |            |
| 2001             | \$ 20,080     | \$ 0   | \$ 5,528          | \$ 0             | \$ 0                    | \$ (58,303) | \$ 0 | \$ 104,266 |
| 2002             | 18,925        | 0      | 7,697             | 0                | 0                       | 0           | 0    | 130,888    |
| 2003             | 19,450        | 0      | 14,890            | 0                | 0                       | 0           | 0    | 165,228    |

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

**Table 22V**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 179,060          | \$ 104,266       | 58%            | \$ 74,794                  | 45%                              |
| 2002                       | 168,356             | 130,888          | 78             | 37,468                     | 23                               |
| 2003                       | 164,318             | 165,228          | 101            | (910)                      | 0                                |

# Ingham County (3303)

## Division 92 - Parks Non Union

### Table 16W

#### Computed Employer Contributions to the Retirement System For the Fiscal Year Beginning January 1, 2005

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)        | 7.47%                                     | \$1,161                                    |
| Amortization of Unfunded<br>Accrued Liability (30 years) | <u>5.27</u>                               | <u>819</u>                                 |
| Total Long Term Contribution                             | 12.74                                     | 1,980                                      |
| Overfunding Credit #                                     | <u>0.00</u>                               | <u>0</u>                                   |
| <b>Total Contribution</b>                                | <b>12.74%</b>                             | <b>\$1,980</b>                             |

@ The above Employer contribution requirement is based on Member contributions of 0.00% of pay. If Member contributions are increased/decreased by 1.00% of pay, the Employer long term contribution requirement (based on a 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 92 - Parks Non Union****Table 17W****Computed Employer Contributions - Comparative Statement**

| <b>Valuation<br/>Date<br/>December 31,</b> | <b>Active Members</b> |                           | <b>Employer Contribution as<br/>Percent of Payroll</b> |  |
|--|-----------------------|---------------------------|--|--|
|  |                       |                           | <b>Regular<br/>Contribution</b>                        | <b>Minimum<br/>Required<br/>Contribution</b> |
|  | <b>Number</b>         | <b>Annual<br/>Payroll</b> |  |  |
| 1994                                       | 5                     | \$ 210,478                | 12.50%   | 6.53%  |
| 1995                                       | 5                     | 190,147                   | 14.25  | 10.29  |
| 1996                                       | 4                     | 168,458                   | 15.00  | 13.84  |
| 1997                                       | 5                     | 178,782                   | 13.26  | 13.26  |
| 1998                                       | 5                     | 214,974                   | 13.33  | 13.33  |
| 1999                                       | 4                     | 196,079                   | 12.49  | 12.49  |
| 2000                                       | 3                     | 171,663                   | 12.58  | 12.58  |
| 2001                                       | 3                     | 178,325                   | 12.69  | 12.69  |
| 2002                                       | 3                     | 181,220                   | 13.80  | 13.80  |
| 2003                                       | 3                     | 186,496                   | 12.74  | 12.74  |

Notes: Adoption of Benefit F55 (25 years) reflected in 1995 valuation.  
Actuarial assumptions were revised for the 1997 valuation.  
Actuarial assumptions were revised for the 2000 valuation.  
Adoption of Benefit FAC-3 reflected in 2002 valuation.

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 92 - Parks Non Union

**Table 18W**

### Flow of Active Membership

| Year Ended 12/31 | Retired | Disabled | Died (Survivor Benefit) | Other Termination |            | Transfer |    | New Member | End of Year |
|------------------|---------|----------|-------------------------|-------------------|------------|----------|----|------------|-------------|
|                  |         |          |                         | Vested            | Non-Vested | Out      | In |            |             |
| 2001             |         |          |                         |                   |            |          |    |            | 3           |
| 2002             |         |          |                         |                   |            |          |    |            | 3           |
| 2003             |         |          |                         |                   |            |          |    |            | 3           |

**Table 19W**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             |         |                |                         |                 |          |    |     | 0           |
| 2002             |         |                |                         |                 |          |    |     | 0           |
| 2003             |         |                |                         |                 |          |    |     | 0           |

**Table 20W**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             |                | \$              | \$               |                    | \$              | \$               | 0        | \$ 0            |
| 2002             |                |                 |                  |                    |                 |                  | 0        | 0               |
| 2003             |                |                 |                  |                    |                 |                  | 0        | 0               |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 92 - Parks Non Union

**Table 21W**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |        | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |      | Balance    |
|------------------|---------------|--------|-------------------|------------------|-------------------------|-----------|------|------------|
|                  | Employer      | Member |                   |                  |                         | Out       | In   |            |
| 2001             | \$ 22,273     | \$ 0   | \$ 48,447         | \$ 0             | \$ 0                    | \$ 0      | \$ 0 | \$ 665,460 |
| 2002             | 25,026        | 0      | 29,437            | 0                | 0                       | 0         | 0    | 719,923    |
| 2003             | 25,960        | 0      | 64,513            | 0                | 0                       | 0         | 0    | 810,396    |

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

**Table 22W**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 851,222          | \$ 665,460       | 78%            | \$ 185,762                 | 104%                             |
| 2002                       | 934,422             | 719,923          | 77             | 214,499                    | 118                              |
| 2003                       | 993,615             | 810,396          | 82             | 183,219                    | 98                               |

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

**Table 16X**

**Computed Employer Contributions to the Retirement System**  
**For the Fiscal Year Beginning January 1, 2005**

| Contribution for   | Employer Contribution @                   |  |
|--|---|--|
|  | As Percentage of<br>Active Member Payroll | Estimated Monthly<br>Dollar Contribution * |
| Normal Cost (in addition to member contributions)          | 6.91%                                     | \$1,265                                    |
| Amortization of Unfunded<br>Accrued Liability (30 years) # | <u>(0.09)</u>                             | <u>(16)</u>                                |
| Total Long Term Contribution                               | 6.82                                      | 1,249                                      |
| Overfunding Credit #                                       | <u>(0.11)</u>                             | <u>(20)</u>                                |
| <b>Total Contribution</b>                                  | <b>6.71%</b>                              | <b>\$1,229</b>                             |

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

# 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 0.20% ( 0.09% plus 0.11% ). The additional 0.11% results from spreading the negative unfunded accrued liability over 10 years instead of 30 years.

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

**Table 17X**

**Computed Employer Contributions - Comparative Statement**

| <b>Valuation<br/>Date<br/>December 31,</b> | <b>Active Members</b> |                           | <b>Employer Contribution as<br/>Percent of Payroll</b> |
|--|-----------------------|---------------------------|--|
|  | <b>Number</b>         | <b>Annual<br/>Payroll</b> |  |
| 1997                                       | 8                     | \$ 250,777                | 6.84%  |
| 1998                                       | 5                     | 175,963                   | 7.21   |
| 1999                                       | 6                     | 163,718                   | 6.95   |
| 2000                                       | 8                     | 225,369                   | 6.73   |
| 2001                                       | 7                     | 235,907                   | 7.68   |
| 2002                                       | 6                     | 227,014                   | 7.16   |
| 2003                                       | 6                     | 219,613                   | 6.71   |

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

Up to 15 years of benefit changes are reflected in this table. For a complete benefit history see Table 24.

# Ingham County (3303)

## Division 93 - Lgl Rsrch Clerks

**Table 18X**

### Flow of Active Membership

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

**Table 19X**

### Flow of Vested Former Members

| Year Ended 12/31 | Retired | Return To Work | Died (Survivor Benefit) | Forfeit Benefit | Transfer |    | New | End of Year |
|------------------|---------|----------------|-------------------------|-----------------|----------|----|-----|-------------|
|                  |         |                |                         |                 | Out      | In |     |             |
| 2001             |         |                |                         |                 |          |    |     | 0           |
| 2002             |         |                |                         |                 |          |    |     | 0           |
| 2003             |         |                |                         |                 |          |    |     | 0           |

**Table 20X**

### Flow of Retirees and Beneficiaries

| Year Ended 12/31 | Added to Rolls |                 |                  | Removed from Rolls |                 |                  | Year End |                 |
|------------------|----------------|-----------------|------------------|--------------------|-----------------|------------------|----------|-----------------|
|                  | Number@        | Annual Benefits | Benefit Adjust.* | Number             | Annual Benefits | Benefit Adjust.# | Number   | Annual Benefits |
| 2001             |                | \$              | \$               |                    | \$              | \$               | 0        | \$ 0            |
| 2002             |                |                 |                  |                    |                 |                  | 0        | 0               |
| 2003             |                |                 |                  |                    |                 |                  | 0        | 0               |

@ Includes beneficiaries of retirees who died during the year.

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

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

# Ingham County (3303)

## Division 93 - Lgl Rsrch Clerks

**Table 21X**

### Flow of Valuation Assets (Actuarial Value)

| Year Ended 12/31 | Contributions |        | Investment Income | Benefit Payments | Member Contrib. Refunds | Transfer* |      | Balance   |
|------------------|---------------|--------|-------------------|------------------|-------------------------|-----------|------|-----------|
|                  | Employer      | Member |                   |                  |                         | Out       | In   |           |
| 2001             | \$ 17,007     | \$ 0   | \$ 5,820          | \$ 0             | \$ 0                    | \$ 0      | \$ 0 | \$ 80,280 |
| 2002             | 17,925        | 0      | 6,542             | 0                | 0                       | 0         | 0    | 104,747   |
| 2003             | 20,588        | 0      | 12,956            | 0                | 0                       | 0         | 0    | 138,291   |

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

**Table 22X**

### Actuarial Accrued Liabilities - Comparative Schedule

| Valuation Date December 31 | Accrued Liabilities | Valuation Assets | Funded Percent | Unfunded Accrued Liability | UAL as Percent of Annual Payroll |
|----------------------------|---------------------|------------------|----------------|----------------------------|----------------------------------|
| 2001                       | \$ 107,904          | \$ 80,280        | 74%            | \$ 27,624                  | 12%                              |
| 2002                       | 124,042             | 104,747          | 84             | 19,295                     | 8                                |
| 2003                       | 134,616             | 138,291          | 103            | (3,675)                    | 0                                |

## Ingham County (3303)

### Table 23

#### **GASB 25 And GASB 27 Information**

The following information has been prepared to provide the information necessary to comply with GASB Statements Number 25 and 27. Statement 25 is effective for fiscal years beginning after June 15, 1996 and Statement 27 is effective for fiscal years beginning after June 15, 1998.

All entries and the annual employer contribution amount were based on the actuarial methods and assumptions used in the December 31, 2003 actuarial valuation. The entry age normal actuarial method was used to determine the disclosure entries.

#### **GASB 25 Information (as of 12/31/2003)**

##### Actuarial Accrued Liability

|  |                    |
|--|--------------------|
| Retirees and beneficiaries currently receiving benefits  | \$77,390,290       |
| Terminated employees (vested former members) not yet receiving benefits                            | 11,563,417         |
| Non-vested terminated employees (pending refunds of accumulated member contributions)              | 498,548            |
| Current employees -<br>Accumulated employee contributions<br>including allocated investment income | 20,475,047         |
| Employer financed  | <u>89,620,592</u>  |
| Total Actuarial Accrued Liability  | \$199,547,894      |
| Net Assets Available for Benefits at Actuarial Value   | <u>150,287,493</u> |
| (Market Value is \$137,228,674 )   |                    |
| Unfunded (Overfunded) Actuarial Accrued Liability  | \$49,260,401       |

#### **GASB 27 Information (as of 12/31/2003)**

|   |                 |
|---|-----------------|
| Fiscal Year Beginning   | January 1, 2005 |
| Annual Required Contribution (ARC)                            | \$ 5,239,212*   |
| Amortization Factor Used - Underfunded Liabilities (30 years) | 0.053632        |
| Amortization Factor Used - Underfunded Liabilities (26 years) | 0.058519        |
| 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, 2005) times the computed employer contribution rate(s) shown in Tables 15 and 16.



# Ingham County (3303)

## Table 24

### Benefit Provision History

The following benefit provision history is provided by MERS. Any corrections to this history or discrepancies between this information and information displayed elsewhere in the valuation report should be reported to MERS' Employer Services Division, to the attention of Laura Kramer (800-767-6377; LKramer@mersofmich.com).

#### Division 01 - Ingham County-Confidentials

##### Provisions by Date

|            |   |
|------------|---|
| 1/1/2002   | Benefit B-4   |
| 1/1/2002   | Benefit FAC-3 (3 Year Final Average Compensation)         |
| 1/1/2002   | Member Contribution Rate 5.36%                            |
| 6/25/1996  | Day of Work Definition                                    |
| 1/1/1995   | Benefit B-3   |
| 1/1/1995   | Benefit Maximum 80% of FAC                                |
| 1/1/1995   | Member Contribution Rate 4.50%                            |
| 12/31/1994 | Member Contribution Rate 0%                               |
| 1/1/1994   | Benefit E Adopted ( 1994-01-01 )                          |
| 1/1/1993   | 6 Year Vesting  |
| 10/1/1991  | Benefit F55 (With 15 Years of Service)                    |
| 10/1/1991  | Member Contribution Rate 1.00%                            |
| 7/1/1991   | Benefit C-2   |
| 7/1/1991   | Base B-1  |
| 10/1/1990  | Member Contribution Rate 0%                               |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                          |
| 12/16/1986 | Blanket Resolution (Service Purchases)                    |
| 10/15/1980 | Exclude Temporary Employees                               |
| 12/1/1970  | 10 Year Vesting   |
| 1/1/1969   | Benefit C-1 (Old)   |
| 9/29/1965  | Covered by Act 88   |
| 11/15/1950 | Benefit C (Old)   |
| 11/15/1950 | No Benefit Maximum  |
| 11/15/1950 | Benefit FAC-5 (5 Year Final Average Compensation)         |
| 11/15/1950 | Member Contribution Rate 3.00% Under \$4,200 - Then 5.00% |
| 11/15/1950 | Fiscal Year - January                                     |

#### Division 02 - Ingham County-Sheriff FOP Spvs

##### Provisions by Date

|           |                                   |
|-----------|-----------------------------------|
| 10/1/1997 | 3.2% Multiplier                   |
| 10/1/1997 | Benefit Maximum 80% of FAC        |
| 10/1/1997 | Member Contribution Rate 19.6100% |
| 1/1/1995  | Benefit B-4                       |
| 1/1/1995  | Benefit Maximum 80% of FAC        |
| 1/1/1995  | 25 Years & Out                    |

## **Ingham County (3303)**

### **Table 24 (continued)**

#### **Benefit Provision History**

##### **Division 02 - Ingham County-Sheriff FOP Spvs**

###### Provisions by Date

|            |   |
|------------|---|
| 1/1/1995   | Benefit FAC-3 (3 Year Final Average Compensation)         |
| 1/1/1995   | Member Contribution Rate 10.45%                           |
| 12/31/1994 | No Benefit F50  |
| 12/31/1994 | Member Contribution Rate 0%                               |
| 7/1/1994   | Member Contribution Rate 5.4000%                          |
| 6/30/1994  | Member Contribution Rate 0%                               |
| 1/1/1994   | Benefit E Adopted ( 1994-01-01 )                          |
| 7/1/1993   | Benefit B-3   |
| 7/1/1993   | Benefit Maximum 80% of FAC                                |
| 7/1/1993   | Member Contribution Rate 6.4000%                          |
| 6/30/1993  | Member Contribution Rate 0%                               |
| 10/1/1991  | Member Contribution Rate 1.8500%                          |
| 1/1/1991   | Member Contribution Rate 1.6000%                          |
| 10/1/1990  | Benefit F50 (With 25 Years of Service)                    |
| 10/1/1990  | Member Contribution Rate 1.8000%                          |
| 1/1/1990   | Day of Work Definition                                    |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                          |
| 1/1/1987   | Benefit C-2   |
| 1/1/1987   | Base C-1 (Old)  |
| 12/16/1986 | Blanket Resolution (Service Purchases)                    |
| 1/1/1986   | Benefit F55 (With 15 Years of Service)                    |
| 1/1/1986   | Member Contribution Rate 1.00%                            |
| 10/15/1980 | Exclude Temporary Employees                               |
| 1/1/1976   | Member Contribution Rate 0%                               |
| 12/1/1970  | 10 Year Vesting   |
| 1/1/1969   | Benefit C-1 (Old)   |
| 9/29/1965  | Covered by Act 88   |
| 11/15/1950 | Benefit C (Old)   |
| 11/15/1950 | No Benefit Maximum  |
| 11/15/1950 | Benefit FAC-5 (5 Year Final Average Compensation)         |
| 11/15/1950 | Member Contribution Rate 3.00% Under \$4,200 - Then 5.00% |
| 11/15/1950 | Fiscal Year - January                                     |

##### **Division 04 - Ingham County-MCF**

###### Provisions by Date

|            |                                  |
|------------|----------------------------------|
| 1/1/1995   | Benefit E Adopted ( 1995-01-01 ) |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 ) |
| 10/15/1980 | Exclude Temporary Employees      |
| 12/1/1970  | 10 Year Vesting                  |
| 1/1/1969   | Benefit C-1 (Old)                |
| 11/15/1950 | Benefit C (Old)                  |

# Ingham County (3303)

## Table 24 (continued)

### Benefit Provision History

#### Division 04 - Ingham County-MCF

##### Provisions by Date

|            |   |
|------------|---|
| 11/15/1950 | Benefit FAC-5 (5 Year Final Average Compensation)         |
| 11/15/1950 | Member Contribution Rate 3.00% Under \$4,200 - Then 5.00% |
| 11/15/1950 | Fiscal Year - January                                     |
| 11/15/1950 | No Benefit Maximum  |

#### Division 09 - Ingham Cnty-Judges

##### Provisions by Date

|            |   |
|------------|---|
| 1/1/2002   | Benefit B-4                                       |
| 1/1/2002   | Member Contribution Rate 3.1400%                  |
| 1/1/1998   | Benefit B-3                                       |
| 1/1/1998   | Benefit Maximum 80% of FAC                        |
| 1/1/1998   | Benefit F55 (With 15 Years of Service)            |
| 1/1/1998   | 6 Year Vesting                                    |
| 4/1/1991   | Benefit C-1 (Old)                                 |
| 4/1/1991   | No Benefit Maximum                                |
| 4/1/1991   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 4/1/1991   | 10 Year Vesting                                   |
| 4/1/1991   | Member Contribution Rate 0%                       |
| 4/1/1991   | Fiscal Year - January                             |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

#### Division 10 - Ingham County-Gnrl Mgmt

##### Provisions by Date

|            |   |
|------------|---|
| 1/1/2002   | Benefit B-4                                       |
| 1/1/2002   | Benefit FAC-3 (3 Year Final Average Compensation) |
| 1/1/2002   | Member Contribution Rate 6.3900%                  |
| 6/25/1996  | Day of Work Definition                            |
| 1/1/1995   | Benefit B-3                                       |
| 1/1/1995   | Benefit Maximum 80% of FAC                        |
| 1/1/1995   | Member Contribution Rate 5.00%                    |
| 12/31/1994 | Member Contribution Rate 0%                       |
| 1/1/1994   | Benefit E Adopted ( 1994-01-01 )                  |
| 1/1/1993   | 6 Year Vesting                                    |
| 7/1/1991   | Member Contribution Rate 1.00%                    |
| 7/1/1988   | Benefit C-2                                       |
| 7/1/1988   | Base B-1  |
| 7/1/1988   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 7/1/1988   | Member Contribution Rate 3.00%                    |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 7/1/1987   | Member Contribution Rate 0%                       |

# Ingham County (3303)

## Table 24 (continued)

### Benefit Provision History

#### Division 10 - Ingham County-Gnrl Mgmt

##### Provisions by Date

|            |  |
|------------|--|
| 12/16/1986 | Blanket Resolution (Service Purchases) |
| 5/1/1986   | No Benefit Maximum                     |
| 5/1/1986   | Benefit F55 (With 15 Years of Service) |
| 5/1/1986   | 10 Year Vesting                        |
| 5/1/1986   | Fiscal Year - January                  |
| 10/15/1980 | Exclude Temporary Employees            |
| 9/29/1965  | Covered by Act 88                      |

#### Division 11 - Ingham County-Gnrl Library

##### Provisions by Date

|            |   |
|------------|---|
| 1/1/1994   | Benefit E Adopted ( 1994-01-01 )                  |
| 3/24/1992  | Day of Work Definition                            |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 7/1/1987   | Benefit C-1 (Old)                                 |
| 7/1/1987   | No Benefit Maximum                                |
| 7/1/1987   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 7/1/1987   | Member Contribution Rate 0%                       |
| 7/1/1987   | Fiscal Year - January                             |
| 7/1/1987   | 10 Year Vesting                                   |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

#### Division 12 - Ingham County-Gnrl ICEA Profs

##### Provisions by Date

|            |  |
|------------|--|
| 1/1/2003   | Benefit B-4  |
| 1/1/2003   | Member Contribution Rate 13.4200%                            |
| 1/1/2003   | Benefit E-2 Annual Increases for future retirees ( 2003-01-0 |
| 6/1/1997   | Benefit F55 (With 15 Years of Service)                       |
| 6/1/1997   | Member Contribution Rate 6.08%                               |
| 5/31/1997  | Member Contribution Rate 0%                                  |
| 1/1/1995   | Benefit B-3  |
| 1/1/1995   | Benefit Maximum 80% of FAC                                   |
| 1/1/1995   | Member Contribution Rate 4.1000%                             |
| 12/31/1994 | Member Contribution Rate 0%                                  |
| 1/1/1994   | Benefit E Adopted ( 1994-01-01 )                             |
| 1/1/1992   | Benefit C-2  |
| 1/1/1992   | Base B-1   |
| 1/1/1992   | No Benefit Maximum   |
| 1/1/1992   | Day of Work Definition                                       |
| 1/1/1992   | Member Contribution Rate 1.10%                               |
| 12/31/1991 | Member Contribution Rate 0%                                  |

## **Ingham County (3303)**

### **Table 24 (continued)**

#### **Benefit Provision History**

##### **Division 12 - Ingham County-Gnrl ICEA Profs**

###### Provisions by Date

|            |   |
|------------|---|
| 10/1/1990  | No Benefit Maximum                                |
| 10/1/1990  | Benefit FAC-5 (5 Year Final Average Compensation) |
| 10/1/1990  | Member Contribution Rate 0.90%                    |
| 10/1/1990  | Fiscal Year - January                             |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 12/16/1986 | Blanket Resolution (Service Purchases)            |
| 7/1/1983   | Benefit C-2                                       |
| 7/1/1983   | Base C-1 (Old)                                    |
| 7/1/1983   | 10 Year Vesting                                   |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

##### **Division 13 - Ingham County-Gnrl OPEIU Prob**

###### Provisions by Date

|            |   |
|------------|---|
| 7/1/2003   | Benefit B-4                                       |
| 7/1/2003   | Member Contribution Rate 9.71%                    |
| 10/1/2002  | Benefit FAC-3 (3 Year Final Average Compensation) |
| 1/1/1998   | Benefit B-3                                       |
| 1/1/1998   | Benefit Maximum 80% of FAC                        |
| 1/1/1998   | Member Contribution Rate 7.1300%                  |
| 12/31/1997 | Member Contribution Rate 7.1000%                  |
| 1/1/1995   | Benefit C-2                                       |
| 1/1/1995   | Base B-1  |
| 1/1/1995   | Member Contribution Rate 2.9600%                  |
| 12/31/1994 | Member Contribution Rate 0%                       |
| 1/1/1994   | Benefit E Adopted ( 1994-01-01 )                  |
| 1/1/1992   | Day of Work Definition                            |
| 10/1/1991  | Member Contribution Rate 1.8800%                  |
| 9/30/1991  | Member Contribution Rate 0%                       |
| 10/1/1990  | Benefit C-1 (Old)                                 |
| 10/1/1990  | No Benefit Maximum                                |
| 10/1/1990  | Benefit FAC-5 (5 Year Final Average Compensation) |
| 10/1/1990  | 10 Year Vesting                                   |
| 10/1/1990  | Member Contribution Rate 1.8000%                  |
| 10/1/1990  | Fiscal Year - January                             |
| 12/1/1988  | Benefit F55 (With 15 Years of Service)            |
| 12/1/1988  | Member Contribution Rate 1.00%                    |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 12/16/1986 | Blanket Resolution (Service Purchases)            |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

## **Ingham County (3303)**

### **Table 24 (continued)**

#### **Benefit Provision History**

##### **Division 14 - Ingham County-Gnrl TOPS UAW**

###### Provisions by Date

|            |   |
|------------|---|
| 1/1/2004   | Benefit B-4                                       |
| 1/1/2004   | Member Contribution Rate 3.62%                    |
| 1/1/2001   | Member Contribution Rate 1.6000%                  |
| 10/1/1995  | Benefit B-3                                       |
| 10/1/1995  | Benefit Maximum 80% of FAC                        |
| 10/1/1995  | Member Contribution Rate 4.85%                    |
| 1/1/1994   | Benefit E Adopted ( 1994-01-01 )                  |
| 1/1/1992   | Day of Work Definition                            |
| 7/1/1991   | Member Contribution Rate 1.00%                    |
| 10/1/1990  | No Benefit Maximum                                |
| 10/1/1990  | Benefit FAC-5 (5 Year Final Average Compensation) |
| 10/1/1990  | 10 Year Vesting                                   |
| 10/1/1990  | Fiscal Year - January                             |
| 1/1/1989   | Benefit C-2                                       |
| 1/1/1989   | Base C-1 (Old)                                    |
| 1/1/1989   | Benefit F55 (With 15 Years of Service)            |
| 1/1/1989   | Member Contribution Rate 3.00%                    |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 12/16/1986 | Blanket Resolution (Service Purchases)            |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

##### **Division 15 - Ingham County-Animal Cntrl FOP**

###### Provisions by Date

|           |  |
|-----------|--|
| 6/1/2002  | No Benefit F50   |
| 6/1/2002  | 25 Years & Out   |
| 6/1/2002  | Member Contribution Rate 15.4900%                            |
| 1/1/2001  | Member Contribution Rate 14.28%                              |
| 1/1/2001  | Benefit E-2 Annual Increases for future retirees ( 2001-01-0 |
| 7/1/1997  | Benefit B-4  |
| 7/1/1997  | Benefit Maximum 80% of FAC                                   |
| 7/1/1997  | Benefit F50 (With 25 Years of Service)                       |
| 7/1/1997  | Benefit FAC-3 (3 Year Final Average Compensation)            |
| 7/1/1997  | Member Contribution Rate 8.90%                               |
| 1/1/1994  | Benefit E Adopted ( 1994-01-01 )                             |
| 1/1/1993  | Benefit B-1  |
| 1/1/1993  | No Benefit Maximum   |
| 1/1/1993  | Day of Work Definition                                       |
| 1/1/1993  | Member Contribution Rate 1.10%                               |
| 10/1/1990 | Member Contribution Rate 0.90%                               |

# Ingham County (3303)

## Table 24 (continued)

### Benefit Provision History

#### Division 15 - Ingham County-Animal Cntrl FOP

##### Provisions by Date

|            |   |
|------------|---|
| 1/1/1990   | Benefit C-1 (Old)                                 |
| 1/1/1990   | Benefit F55 (With 15 Years of Service)            |
| 1/1/1990   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 1/1/1990   | 10 Year Vesting                                   |
| 1/1/1990   | Member Contribution Rate 0%                       |
| 1/1/1990   | Fiscal Year - January                             |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 12/16/1986 | Blanket Resolution (Service Purchases)            |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

#### Division 16 - Ingham County-Gnrl Commsnrs

##### Provisions by Date

|            |   |
|------------|---|
| 1/1/1999   | 6 Year Vesting                                    |
| 1/1/1994   | Benefit E Adopted ( 1994-01-01 )                  |
| 10/1/1991  | Member Contribution Rate 3.5600%                  |
| 10/1/1990  | Benefit F55 (With 15 Years of Service)            |
| 12/2/1988  | Member Contribution Rate 0%                       |
| 12/1/1988  | Benefit C-2                                       |
| 12/1/1988  | Base B-1  |
| 12/1/1988  | No Benefit Maximum                                |
| 12/1/1988  | Benefit FAC-5 (5 Year Final Average Compensation) |
| 12/1/1988  | 10 Year Vesting                                   |
| 12/1/1988  | Member Contribution Rate 4.00%                    |
| 12/1/1988  | Fiscal Year - January                             |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 12/16/1986 | Blanket Resolution (Service Purchases)            |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

#### Division 17 - Ingham County-ICEA Nurses

##### Provisions by Date

|          |  |
|----------|--|
| 1/1/2001 | Benefit E-2 Annual Increases for future retirees ( 1995-07-0 |
| 1/1/2000 | Benefit E-2 Annual Increases for future retirees ( 1995-07-0 |
| 7/1/1999 | Benefit B-3  |
| 7/1/1999 | Benefit Maximum 80% of FAC                                   |
| 7/1/1999 | Benefit FAC-3 (3 Year Final Average Compensation)            |
| 7/1/1999 | 6 Year Vesting   |
| 7/1/1999 | Member Contribution Rate 11.8700%                            |
| 1/1/1996 | Benefit E-2 Annual Increases for future retirees ( 1995-07-0 |
| 7/1/1995 | Benefit F55 (With 15 Years of Service)                       |

# Ingham County (3303)

## Table 24 (continued)

### Benefit Provision History

#### Division 17 - Ingham County-ICEA Nurses

##### Provisions by Date

|            |   |
|------------|---|
| 7/1/1995   | Member Contribution Rate 5.0700%                  |
| 6/30/1995  | Member Contribution Rate 0%                       |
| 1/1/1994   | Benefit E Adopted ( 1994-01-01 )                  |
| 1/1/1991   | Day of Work Definition                            |
| 10/1/1990  | Member Contribution Rate 0.70%                    |
| 1/1/1990   | Benefit C-2                                       |
| 1/1/1990   | Base C-1 (Old)                                    |
| 1/1/1990   | No Benefit Maximum                                |
| 1/1/1990   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 1/1/1990   | 10 Year Vesting                                   |
| 1/1/1990   | Member Contribution Rate 1.00%                    |
| 1/1/1990   | Fiscal Year - January                             |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 12/16/1986 | Blanket Resolution (Service Purchases)            |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

#### Division 18 - Ingham County-ICEA Ct. Prof

##### Provisions by Date

|            |   |
|------------|---|
| 6/1/1997   | 20 Years & Out                                    |
| 6/1/1997   | Member Contribution Rate 9.84%                    |
| 5/31/1997  | Member Contribution Rate 0%                       |
| 1/1/1995   | Benefit B-3                                       |
| 1/1/1995   | Benefit Maximum 80% of FAC                        |
| 1/1/1995   | Member Contribution Rate 7.5000%                  |
| 12/31/1994 | Member Contribution Rate 0%                       |
| 1/1/1994   | Benefit E Adopted ( 1994-01-01 )                  |
| 1/1/1992   | No Benefit Maximum                                |
| 1/1/1992   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 1/1/1992   | 10 Year Vesting                                   |
| 1/1/1992   | Day of Work Definition                            |
| 1/1/1992   | Member Contribution Rate 3.1000%                  |
| 1/1/1991   | Benefit C-2                                       |
| 1/1/1991   | Base B-1  |
| 1/1/1991   | Benefit F55 (With 15 Years of Service)            |
| 1/1/1991   | Member Contribution Rate 2.8000%                  |
| 1/1/1991   | Fiscal Year - January                             |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 12/16/1986 | Blanket Resolution (Service Purchases)            |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |



# Ingham County (3303)

## Table 24 (continued)

### Benefit Provision History

#### Division 19 - Ingham County-Cnstutnl Offcls

##### Provisions by Date

|            |   |
|------------|---|
| 1/1/2002   | Benefit B-4                                       |
| 1/1/2002   | Benefit FAC-3 (3 Year Final Average Compensation) |
| 1/1/2002   | Member Contribution Rate 8.46%                    |
| 1/1/2000   | 6 Year Vesting                                    |
| 1/1/2000   | Member Contribution Rate 5.00%                    |
| 1/1/1999   | Member Contribution Rate 6.00%                    |
| 6/25/1996  | Day of Work Definition                            |
| 1/1/1995   | Benefit B-3                                       |
| 1/1/1995   | Benefit Maximum 80% of FAC                        |
| 1/1/1995   | Member Contribution Rate 7.00%                    |
| 12/31/1994 | Member Contribution Rate 0%                       |
| 1/1/1994   | Benefit E Adopted ( 1994-01-01 )                  |
| 4/1/1991   | Benefit C-2                                       |
| 4/1/1991   | Base B-1  |
| 4/1/1991   | No Benefit Maximum                                |
| 4/1/1991   | Benefit F55 (With 15 Years of Service)            |
| 4/1/1991   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 4/1/1991   | 10 Year Vesting                                   |
| 4/1/1991   | Member Contribution Rate 3.00%                    |
| 10/1/1990  | Fiscal Year - January                             |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 12/16/1986 | Blanket Resolution (Service Purchases)            |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

#### Division 20 - Ingham County-Sheriff/Sheriff

##### Provisions by Date

|            |   |
|------------|---|
| 1/1/2000   | Member Contribution Rate 5.00%                    |
| 1/1/1999   | Member Contribution Rate 6.00%                    |
| 1/1/1995   | Benefit B-3                                       |
| 1/1/1995   | Benefit Maximum 80% of FAC                        |
| 1/1/1995   | Member Contribution Rate 7.00%                    |
| 12/31/1994 | Member Contribution Rate 0%                       |
| 1/1/1994   | Benefit E Adopted ( 1994-01-01 )                  |
| 10/1/1990  | Benefit C-2                                       |
| 10/1/1990  | Base B-1  |
| 10/1/1990  | No Benefit Maximum                                |
| 10/1/1990  | Benefit F55 (With 15 Years of Service)            |
| 10/1/1990  | Benefit FAC-5 (5 Year Final Average Compensation) |
| 10/1/1990  | 10 Year Vesting                                   |

# Ingham County (3303)

## Table 24 (continued)

### Benefit Provision History

#### Division 20 - Ingham County-Sheriff/Sheriff

##### Provisions by Date

|           |                                  |
|-----------|----------------------------------|
| 10/1/1990 | Member Contribution Rate 3.00%   |
| 10/1/1990 | Fiscal Year - January            |
| 1/1/1988  | Benefit E Adopted ( 1988-01-01 ) |

#### Division 21 - Ingham Cnty-FOP Shrf Deputies

##### Provisions by Date

|            |   |
|------------|---|
| 2/1/2001   | No Benefit F50                                    |
| 2/1/2001   | 25 Years & Out                                    |
| 2/1/2001   | Member Contribution Rate 10.96%                   |
| 1/1/1998   | 3.2% Multiplier                                   |
| 1/1/1998   | Benefit Maximum 80% of FAC                        |
| 1/1/1998   | Member Contribution Rate 10.43%                   |
| 1/1/1994   | Benefit B-4                                       |
| 1/1/1994   | Benefit Maximum 80% of FAC                        |
| 1/1/1994   | Member Contribution Rate 6.5500%                  |
| 1/1/1994   | Benefit E Adopted ( 1994-01-01 )                  |
| 12/31/1993 | Member Contribution Rate 0%                       |
| 10/1/1991  | Member Contribution Rate 1.6500%                  |
| 10/1/1990  | Member Contribution Rate 1.6000%                  |
| 5/3/1990   | Day of Work Definition                            |
| 1/1/1990   | Benefit C-2                                       |
| 1/1/1990   | Base C-1 (Old)                                    |
| 1/1/1990   | No Benefit Maximum                                |
| 1/1/1990   | Benefit F50 (With 25 Years of Service)            |
| 1/1/1990   | Benefit F55 (With 15 Years of Service)            |
| 1/1/1990   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 1/1/1990   | 10 Year Vesting                                   |
| 1/1/1990   | Member Contribution Rate 1.00%                    |
| 1/1/1990   | Fiscal Year - January                             |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 12/16/1986 | Blanket Resolution (Service Purchases)            |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

#### Division 40 - Ingham County-ICEA Unit 111

##### Provisions by Date

|           |                                  |
|-----------|----------------------------------|
| 1/1/1995  | Benefit E Adopted ( 1995-01-01 ) |
| 12/1/1988 | Benefit C-2                      |
| 12/1/1988 | Member Contribution Rate 3.00%   |
| 12/1/1988 | Fiscal Year - January            |
| 12/1/1988 | 10 Year Vesting                  |

# Ingham County (3303)

## Table 24 (continued)

### Benefit Provision History

#### Division 40 - Ingham County-ICEA Unit 111

##### Provisions by Date

|            |   |
|------------|---|
| 12/1/1988  | Base B-1  |
| 12/1/1988  | No Benefit Maximum                                |
| 12/1/1988  | Benefit F55 (With 15 Years of Service)            |
| 12/1/1988  | Benefit FAC-5 (5 Year Final Average Compensation) |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

#### Division 41 - Ingham County-MCF Management

##### Provisions by Date

|            |   |
|------------|---|
| 1/1/1995   | Benefit E Adopted ( 1995-01-01 )                  |
| 10/1/1990  | Member Contribution Rate 0%                       |
| 1/1/1990   | 6 Year Vesting                                    |
| 4/1/1989   | Benefit C-2                                       |
| 4/1/1989   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 4/1/1989   | Fiscal Year - January                             |
| 4/1/1989   | Benefit F55 (With 15 Years of Service)            |
| 4/1/1989   | Base B-1  |
| 4/1/1989   | No Benefit Maximum                                |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

#### Division 42 - Ingham County-ICEA Unit 11

##### Provisions by Date

|            |   |
|------------|---|
| 4/1/1997   | Benefit FAC-3 (3 Year Final Average Compensation) |
| 4/1/1997   | Member Contribution Rate 3.9500%                  |
| 4/1/1996   | Member Contribution Rate 3.44%                    |
| 1/1/1996   | Benefit C-2                                       |
| 1/1/1996   | Base B-1  |
| 1/1/1996   | No Benefit Maximum                                |
| 1/1/1996   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 1/1/1996   | Member Contribution Rate 3.4000%                  |
| 1/1/1996   | Fiscal Year - January                             |
| 1/1/1996   | 6 Year Vesting                                    |
| 1/1/1996   | Benefit F55 (With 15 Years of Service)            |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

# Ingham County (3303)

## Table 24 (continued)

### Benefit Provision History

#### Division 43 - Ingham County-ICEA Unit 1

##### Provisions by Date

|            |   |
|------------|---|
| 4/1/1996   | Member Contribution Rate 3.5100%                  |
| 1/1/1996   | Benefit C-2                                       |
| 1/1/1996   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 1/1/1996   | Member Contribution Rate 3.5000%                  |
| 1/1/1996   | Fiscal Year - January                             |
| 1/1/1996   | 6 Year Vesting                                    |
| 1/1/1996   | Benefit F55 (With 15 Years of Service)            |
| 1/1/1996   | Base B-1  |
| 1/1/1996   | No Benefit Maximum                                |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

#### Division 44 - Ingham County-MCF Exec Mgr

##### Provisions by Date

|           |  |
|-----------|--|
| 1/1/2004  | Benefit E-2 Annual Increases for future retirees ( 2003-09-0 |
| 9/1/2003  | Benefit B-4  |
| 9/1/2003  | Fiscal Year - January  |
| 9/1/2003  | Benefit Maximum 80% of FAC                                   |
| 9/1/2003  | Benefit F55 (With 15 Years of Service)                       |
| 9/1/2003  | Benefit FAC-3 (3 Year Final Average Compensation)            |
| 9/1/2003  | Member Contribution Rate 0%                                  |
| 9/1/2003  | 6 Year Vesting   |
| 9/29/1965 | Covered by Act 88  |

#### Division 90 - Ingham County-Asst Pros Attnys

##### Provisions by Date

|            |   |
|------------|---|
| 10/1/1998  | Benefit B-4                                       |
| 10/1/1998  | Benefit F55 (With 15 Years of Service)            |
| 10/1/1998  | 6 Year Vesting                                    |
| 4/1/1993   | Benefit B-3                                       |
| 4/1/1993   | Benefit Maximum 80% of FAC                        |
| 4/1/1993   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 4/1/1993   | 10 Year Vesting                                   |
| 4/1/1993   | Member Contribution Rate 1.4000%                  |
| 4/1/1993   | Fiscal Year - January                             |
| 7/1/1992   | Day of Work Definition                            |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 12/16/1986 | Blanket Resolution (Service Purchases)            |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

# Ingham County (3303)

## Table 24 (continued)

### Benefit Provision History

#### Division 91 - Ingham County-Parks Union Empl

##### Provisions by Date

|            |   |
|------------|---|
| 6/25/1996  | Day of Work Definition                            |
| 7/1/1995   | Benefit B-3                                       |
| 7/1/1995   | Benefit Maximum 80% of FAC                        |
| 1/1/1995   | Benefit C-1 (Old)                                 |
| 1/1/1995   | No Benefit Maximum                                |
| 1/1/1995   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 1/1/1995   | 10 Year Vesting                                   |
| 1/1/1995   | Member Contribution Rate 0%                       |
| 1/1/1995   | Fiscal Year - January                             |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 12/16/1986 | Blanket Resolution (Service Purchases)            |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

#### Division 92 - Ingham County-Parks Non Union

##### Provisions by Date

|            |   |
|------------|---|
| 1/1/2002   | Benefit FAC-3 (3 Year Final Average Compensation) |
| 6/25/1996  | Day of Work Definition                            |
| 7/1/1995   | Benefit B-4                                       |
| 7/1/1995   | Benefit Maximum 80% of FAC                        |
| 7/1/1995   | Benefit F55 (With 25 Years of Service)            |
| 1/1/1995   | Benefit C-1 (Old)                                 |
| 1/1/1995   | No Benefit Maximum                                |
| 1/1/1995   | Benefit FAC-5 (5 Year Final Average Compensation) |
| 1/1/1995   | 10 Year Vesting                                   |
| 1/1/1995   | Member Contribution Rate 0%                       |
| 1/1/1995   | Fiscal Year - January                             |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )                  |
| 12/16/1986 | Blanket Resolution (Service Purchases)            |
| 10/15/1980 | Exclude Temporary Employees                       |
| 9/29/1965  | Covered by Act 88                                 |

#### Division 93 - Ingham County-Lgl Rsrch Clerks

##### Provisions by Date

|          |   |
|----------|---|
| 1/1/1998 | Benefit C-1 (Old)                                 |
| 1/1/1998 | No Benefit Maximum                                |
| 1/1/1998 | Benefit FAC-5 (5 Year Final Average Compensation) |
| 1/1/1998 | 10 Year Vesting                                   |
| 1/1/1998 | Member Contribution Rate 0%                       |
| 1/1/1998 | Fiscal Year - January                             |

# **Ingham County (3303)**

## **Table 24 (continued)**

### **Benefit Provision History**

#### **Division 93 - Ingham County-Lgl Rsrch Clerks**

##### Provisions by Date

|            |  |
|------------|--|
| 6/25/1996  | Day of Work Definition                 |
| 1/1/1988   | Benefit E Adopted ( 1988-01-01 )       |
| 12/16/1986 | Blanket Resolution (Service Purchases) |
| 10/15/1980 | Exclude Temporary Employees            |
| 9/29/1965  | Covered by Act 88                      |

**APPENDIX**

**SUMMARY OF**

**PLAN PROVISIONS**

**AND**

**ACTUARIAL ASSUMPTIONS**

**AND**

**ACTUARIAL FUNDING METHOD**

**AS OF DECEMBER 31, 2003**

**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, 2003 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.

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

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



## **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.

### **Maximum Benefit Payable by MERS**

The maximum benefit that may be paid by MERS is governed by Section 415 of the Internal Revenue Code (see page 157). Benefits in excess of the maximum benefit will be paid by the MERS Excess Benefit Plan.

### **Act 88 (Reciprocal Retirement Act, 1961 P.A. 88)**

If the municipality has elected to come under the provision of Act 88 (see Table 1), service with former and future public employers in Michigan may be used to satisfy the service eligibility conditions of MERS.

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

MERS plan benefits are based on a member's final average compensation (FAC), subject to the dollar compensation limits under Section 401(a)(17) of the Internal Revenue Code (see page 157). For this purpose, final average compensation means one-fifth of the aggregate amount of compensation (as defined in the MERS Plan Document, Section 2A(6)) paid to a member during the period of 5 consecutive years of the member's credited service in which the aggregate compensation paid is highest, known as FAC-5. Adoption of Benefit FAC-3 results in final average compensation being averaged over 3 years, instead of 5 years.

**Disability Retirement Allowance (Plan Section 24)**

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

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

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

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

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

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

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

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

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

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

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

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

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

**Duty-Connected Death Allowance (Plan Section 27)**

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

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

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

**Member Contributions (Plan Sections 32 and 35)**

Each member contributes a percent of annual compensation, as selected by the municipality, on the member's annual compensation up to the compensation limit under Section 401(a)(17) of the Internal Revenue Code (see page 157). 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 1.5%) are refunded with spousal consent, to the member, if living, or to the member's surviving spouse, if any, or to a named beneficiary (after spousal consent, if applicable).

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

## **Post-Retirement Adjustments (Plan Sections 20-22)**

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

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

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

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

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

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

**Municipal Employees' Retirement System of Michigan  
IRC Section 415(b)(1)(A) Benefit Dollar Limits - 2004**

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

| <b>Age at Retirement</b> | <b>General Employees</b> | <b>Police, Fire &amp; Emergency Medical#</b> |
|--------------------------|--------------------------|--|
| 35                       | \$ 29,208                | \$ 165,000                                   |
| 36                       | 30,882                   | 165,000                                      |
| 37                       | 32,664                   | 165,000                                      |
| 38                       | 34,562                   | 165,000                                      |
| 39                       | 36,585                   | 165,000                                      |
| 40                       | 38,743                   | 165,000                                      |
| 41                       | 41,047                   | 165,000                                      |
| 42                       | 43,509                   | 165,000                                      |
| 43                       | 46,142                   | 165,000                                      |
| 44                       | 48,961                   | 165,000                                      |
| 45                       | 51,982                   | 165,000                                      |
| 46                       | 55,224                   | 165,000                                      |
| 47                       | 58,706                   | 165,000                                      |
| 48                       | 62,452                   | 165,000                                      |
| 49                       | 66,486                   | 165,000                                      |
| 50                       | 70,836                   | 165,000                                      |
| 51                       | 75,535                   | 165,000                                      |
| 52                       | 80,618                   | 165,000                                      |
| 53                       | 86,126                   | 165,000                                      |
| 54                       | 92,104                   | 165,000                                      |
| 55                       | 98,605                   | 165,000                                      |
| 56                       | 105,689                  | 165,000                                      |
| 57                       | 113,422                  | 165,000                                      |
| 58                       | 121,884                  | 165,000                                      |
| 59                       | 131,162                  | 165,000                                      |
| 60                       | 141,385                  | 165,000                                      |
| 61                       | 152,595                  | 165,000                                      |
| 62                       | 165,000                  | 165,000                                      |
| 63                       | 165,000                  | 165,000                                      |
| 64                       | 165,000                  | 165,000                                      |
| 65 & older               | 165,000                  | 165,000                                      |

# If individual has at least 15 years of police, fire, and/or emergency medical service. Otherwise, same as general employees.

**IRC Section 401(a)(17) Compensation Limit - 2004**

For 2004 the IRC Section 401(a)(17) limit is \$205,000. This limit is indexed with inflation in \$5,000 increments.

## **ACTUARIAL ASSUMPTIONS**

### **Actuarial Assumptions**

To calculate MERS contribution requirements, assumptions are made about future events that could affect the amount and timing of benefits to be paid and the assets to be accumulated. The economic and demographic assumptions include:

- An assumed rate of investment return that is used to discount liabilities and project what plan assets will earn.
- A mortality table projecting the number of members who will die before retirement and the duration of benefit payments after retirement.
- Assumed retirement rates projecting when members will retire and commence receiving retirement benefits.
- A set of withdrawal and disability rates to estimate the number of members who will leave the work force before retirement.
- Assumed rates of salary increase to project member compensation in future years.

The actuarial assumptions used in connection with this December 31, 2003 actuarial valuation are unchanged from the December 31, 2002 valuation assumptions. 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 2003 actuarial valuation, the net long-term investment yield is assumed to be 8%.

The reader should note that, given that the actuarial value of assets is currently 9% higher than the market value, meeting the actuarial assumption will require average future market returns that exceed the 8% investment return assumption.

### **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:

| <b>Age</b> | <b>Base<br/>(Wage Inflation)</b> | <b>Merit and<br/>Longevity</b> | <b>Total Percentage<br/>Increase in Salary</b> |
|------------|----------------------------------|--------------------------------|--|
| 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   |

## **Inflation**

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

## **Payroll Growth**

For divisions that are not closed to new hires, the number of active members is projected to remain constant, and the total payroll is projected to increase 4.5% annually in the long term.

## 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 shown below:

| Sample<br>Ages | Years of<br>Service | % of Active Members Withdrawing<br>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<br>F50 or F55 or F(N)                                | With F55 | With F50 |
| 50              |  |          | 22%      |
| 51              |  |          | 22       |
| 52              |  |          | 22       |
| 53              |  |          | 22       |
| 54              |  |          | 24       |
| 55              |  | 18%      | 18       |
| 56              |  | 15       | 14       |
| 57              |  | 10       | 16       |
| 58              |  | 15       | 18       |
| 59              |  | 20       | 18       |
| 60              | 20%  | 20       | 20       |
| 61              | 24   | 24       | 24       |
| 62              | 24   | 24       | 24       |
| 63              | 24   | 24       | 24       |
| 64              | 27   | 27       | 27       |
| 65              | 30   | 30       | 30       |
| 66              | 30   | 30       | 30       |
| 67              | 30   | 30       | 30       |
| 68              | 30   | 30       | 30       |
| 69              | 30   | 30       | 30       |
| 70              | 100  | 100      | 100      |

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

| <b>Years of Service</b> | <b>Percent of Eligible Active Members Retiring Within Next Year</b> | <b>Years of Service</b> | <b>Percent of Eligible Active Members Retiring Within Next Year</b> | <b>Years of Service</b> | <b>Percent of Eligible Active Members Retiring Within Next Year</b> |
|-------------------------|---|-------------------------|---|-------------------------|---|
| 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

| <b>Retirement Ages</b> | <b>Percent of Eligible Active Members Retiring Within Next Year</b> |
|------------------------|---|
| 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.

90% of active member deaths are assumed to be non-duty deaths and 10% of the deaths are assumed to be duty related.

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

| Age | Expected Years<br>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<br>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.   |
| Pay Adjustment             | - For new hires the reported pay is annualized. If reported service is less than 1 year and reported date of hire is between 1/1/2003 and 12/31/2003, then annualized pay is equal to reported pay times 12, divided by (13 less month of hire).  |
| Decrement Timing           | - Decrements of all types are assumed to occur mid-year.  |
| Future Service             | - Members are assumed to earn 1.0 years of service in each future year.   |
| Eligibility Testing        | - Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.  |
| Benefit Service            | - Exact fractional service is used to determine the amount of benefit payable.  |
| 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 (all retiring members are assumed to elect Form of Payment SL).  |
| 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.   |
| Maximum Compensation       | - The dollar compensation limits under Section 401(a)(17) of the Internal Revenue Code are projected to increase 4.5% annually. No member or employer contributions are projected to be made on the portion of any member's annual compensation in excess of the IRC Section 401(a)(17) limit for the year. |
| Maximum Benefit            | - The dollar benefit limitations under Section 415 of the Internal Revenue Code are projected to increase 4.5% annually. Employee divisions 02, 20-29, 05 and 50-59 are presumed eligible for the public safety benefit limits.   |

## **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, 2003, 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 a 30 year amortization. For divisions that are closed to new hires, the amortization period for positive unfunded liabilities is decreased annually by 2 years until the period reaches 5 years. At that point, the amortization period will remain at 5 years. Shorter amortization periods may be elected by a municipality (but not shorter than 5 years for negative unfunded liabilities). Table 16 in the results section of this report indicates the current length of the amortization period for each division. Note that when the 10 year amortization is used for negative unfunded liabilities, Table 16 reports the amortization in two parts: i) a long term credit based on the long term amortization period (usually 30 years), plus ii) an overfunding credit resulting from using a 10 year amortization.

## **Present Value of Accrued Benefits**

The present value of accrued benefits represents the actuarial value of benefits that have been earned as of the valuation date for all members of the valuation division. This benefit reflects the final average compensation and plan benefit service of each member, and plan features of the member's valuation division as of the valuation date. Included in this value is the current value of vested benefits for members who have met plan vesting requirements and the current value of non-vested benefits for members who have not yet met plan vesting requirements. Regardless of plan vesting service, all member contributions are vested. Active members are assumed to continue in employment until retirement, death, disability or termination, but benefit amounts are frozen 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 2003, 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 8.00%. The corresponding amounts for 2002, 2001, 2000 and 1999 were 3.43%, 7.72%, 10.36% and 15.38%, respectively.

For the December 31, 2003 valuation, the actuarial value of assets is equal to 109.52% of market value (compared to 125.85%, 110.60%, 100.07% and 87.89% in 2002, 2001, 2000 and 1999, respectively). This percentage is applied to each division's reported market value of assets to estimate the actuarial value of assets for the division. The chart on page 171 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 9% higher than the market value, meeting the actuarial assumption will require average future market returns that exceed the 8% investment return assumption.

## **ONE-TIME CHANGE TO THE ASSET VALUATION METHOD**

The very favorable investment environment of 2003 reversed the downward asset trend of the previous three years. The MERS portfolio generated over 24% investment return in 2003. Normally in the actuarial valuation process, this investment gain would be equally spread over five years (2003-2007), as described on the previous page. This is standard practice among public employee retirement plans, and reduces the volatility in the results of the actuarial valuations.

Given the market turnaround, at the March 10, 2004 meeting, the Retirement Board adopted a one-time adjustment to the actuarial valuation process to slightly accelerate the recognition of the favorable investment return of 2003. MERS-wide, this will prevent the average funded levels from declining this year, and the average 2005 employer contribution requirements from increasing.

The Retirement Board's action will result in more stable contribution requirements in the 2003 actuarial reports. Of course, each of the 1,800+ employee divisions is different. As always, some contribution rates will decrease and some will increase, depending on changes in the covered employee and retiree groups, and changes (if any) in adopted benefit provisions.

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

| Valuation Date December 31:                               | 1999             | 2000             | 2001             | 2002             | 2003             |
|---|------------------|------------------|------------------|------------------|------------------|
| 1. Beginning of Year Assets                               |                  |                  |                  |                  |                  |
| a) Market Value   | \$ 3,411,188,529 | \$ 3,941,864,651 | \$ 3,788,886,471 | \$ 3,647,820,869 | \$ 3,285,304,333 |
| b) Valuation Assets                                       | 3,031,278,484    | 3,464,584,875    | 3,791,423,339    | 4,034,377,419    | 4,134,404,645    |
| 2. End of Year Market Value Assets                        | 3,941,864,651    | 3,788,886,471    | 3,647,820,869    | 3,285,304,333    | 4,071,997,180    |
| 3. Net Additions to Market Value                          |                  |                  |                  |                  |                  |
| a) Net Contributions                                      | 161,911,772      | 162,703,877      | 154,103,475      | 167,427,558      | 223,450,393      |
| b) Net Investment Income = (3d) - (3a) - (3c)             | 561,188,970      | (122,407,374)    | (93,269,286)     | (324,926,459)    | 792,139,959      |
| c) Benefit Payments                                       | (192,424,619)    | (193,274,683)    | (201,899,791)    | (205,017,635)    | (228,897,505)    |
| d) Total Additions to Market Value = (2) - (1a)           | 530,676,123      | (152,978,180)    | (141,065,602)    | (362,516,536)    | 786,692,847      |
| 4. Average Valuation Assets =<br>(1b) + .5x[(3a) + (3c)]  | 3,016,022,060    | 3,449,299,472    | 3,767,525,181    | 4,015,582,381    | 4,131,681,089    |
| 5. Expected Income at Valuation Rate = 8% x (4)           | 241,281,765      | 275,943,958      | 301,402,014      | 321,246,590      | 330,534,487      |
| 6. Gain (Loss) = (3b) - (5)                               | 319,907,205      | (398,351,332)    | (394,671,300)    | (646,173,049)    | 461,605,472      |
| 7. Phased-In Recognition of Investment Return             |                  |                  |                  |                  |                  |
| a) Current Year: 0.2 x (6)                                | 63,981,441       | (79,670,266)     | (78,934,260)     | (129,234,610)    |                  |
| b) First Prior Year                                       | 40,228,410       | 63,981,441       | (79,670,266)     | (78,934,260)     |                  |
| c) Second Prior Year                                      | 43,743,056       | 40,228,410       | 63,981,441       | (79,670,266)     |                  |
| d) Third Prior Year                                       | 13,182,671       | 43,743,056       | 40,228,410       | 63,981,441       |                  |
| e) Fourth Prior Year                                      | 61,401,895       | 13,182,671       | 43,743,057       | 40,228,408       |                  |
| f) 1999-2003 Years Combined                               | N/A              | N/A              | N/A              | N/A              | 0                |
| g) Total Recognized Investment Gain (Loss)                | 222,537,473      | 81,465,312       | (10,651,618)     | (183,629,287)    | 0                |
| 8. Change in Valuation Assets<br>(3a) + (3c) + (5) + (7g) | 433,306,391      | 326,838,464      | 242,954,080      | 100,027,226      | 325,087,375      |
| 9. End of Year Assets                                     |                  |                  |                  |                  |                  |
| a) Market Value = (2)                                     | 3,941,864,651    | 3,788,886,471    | 3,647,820,869    | 3,285,304,333    | 4,071,997,180    |
| b) Valuation Assets = (1b) + (8)                          | 3,464,584,875    | 3,791,423,339    | 4,034,377,419    | 4,134,404,645    | 4,459,492,020    |
| c) Difference Between Market & Valuation Assets           | 477,279,776      | (2,536,868)      | (386,556,550)    | (849,100,312)    | (387,494,840)    |
| 10. Recognized Rate of Return = [(5) + (7g)] / (4)        | 15.38%           | 10.36%           | 7.72%            | 3.43%            | 8.00%            |
| 11. Market Rate of Return                                 | 16.53%           | (3.12%)          | (2.48%)          | (8.95%)          | 24.13%           |
| 12. Valuation Asset Adjustment Factor = (9b) / (9a)       | 0.878920         | 1.000670         | 1.105969         | 1.258454         | 1.095161         |



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