

May 2003

Actuarial Valuation Reports

County of Milwaukee

MERCER

Human Resource Consulting

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May 2003

Employees' Retirement System of the County of Milwaukee

Actuarial Valuation Report as of January 1, 2003 for the
Plan Year and Fiscal Year Ending December 31, 2003

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Highlights

This report has been prepared by Mercer Human Resource Consulting on behalf of plan participants by the County of Milwaukee (the "Plan Sponsor") to:

- Determine the funding calculation under the Employees' Retirement System of the County of Milwaukee (the "Plan") for the plan and fiscal year ending December 31, 2003;
- Present the results of a valuation of the Plan as of January 1, 2003; and
- Review experience under the Plan for the year ended December 31, 2002.

The following table summarizes important contribution information.

Contributions	Plan Year Ending	
	December 31, 2003	December 31, 2002
Funding Calculation	\$ 25,242,325	\$ 8,528,477
Percentage of Payroll	9.30%	3.58%

The total funding calculation for the year is \$25,242,325. This amount will pay the normal cost for the year and amortize the unfunded actuarial accrued liability as a level percentage of pay over the next 20 years. Of this amount, it is estimated that \$418,000 will be contributed on a biweekly basis (including interest on the contributions).

Following Year's Budget Contribution

The 2004 budget contribution is \$44,354,000. It is estimated that \$417,000 will be contributed on a biweekly basis and the lump sum due is \$43,937,000.

The 2004 budget amount incorporates the following changes as Mercer understands as adopted by the Pension Board:

Assumption/Method	Change ¹	Impact on 2004 Budget Contribution
Mortality	Changed from UP 1994 to RP 2000	\$ 24,000
Salary Scale Rates	Adjusted for general employees; lowered 1.5% for deputy sheriffs	(238,000)
Withdrawal Rates	Increased for general employees with less than five years of service; lowered for general employees with greater than five years of service; adjusted for deputy sheriffs	514,000
Retirement Rates	Increased for general employees prior to age 58; lowered for general employees from age 62-65; increased for deputy sheriffs prior to age 55	616,000
Asset Smoothing Method	Changed from smoothing unrealized gains/losses to smoothing difference between total expected return vs. actual return beginning January 1, 2004 (change is phased in over 5-year period)	0 ²
Subtotal		\$ 916,000
Investment Return Assumption	Lowered from 9% to 8.5%	7,264,000
Total		\$ 8,180,000

¹ More detailed descriptions of the assumption and method changes may be found in our April 9, 2003 Experience Analysis report.

² Change does not affect the 2004 budget contribution. The effect on future contribution calculations will depend on asset returns after January 1, 2004.

Summary of Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods, or plan provisions between the two valuations are described after the summary.

	Actuarial Valuation as of	
	January 1, 2003	January 1, 2002
Funding Valuation		
Market Value of Assets	\$ 1,282,880,806	\$ 1,481,783,176
Actuarial Value of Assets	1,446,860,024	1,620,157,072
Actuarial Accrued Liability	1,542,044,756	1,492,071,562
<i>Funded Ratio</i>	93.83%	108.58%
Unfunded Actuarial Accrued Liability	95,184,732	(128,085,510)
Normal Cost	\$ 17,176,791	\$ 17,982,218
<i>Percentage of Payroll</i>	7.32%	7.32%
Participant Data		
Number of Participants in Valuation		
Active Participants	5,793	6,077
Participants with Deferred Benefits	1,525	1,348
Participants Receiving Benefits	6,637	6,511
Total	13,955	13,936
Membership Payroll*	\$ 234,679,129	\$ 238,387,178

The liability measures shown above are developed throughout the report.

**Prior-year earnings increased by the salary assumption.*

Changes

Plan Amendment

- Final Average Earnings was changed to a three-year average for non-deputy sheriffs hired after January 1, 1982.

Actuarial Assumptions

The Pension Board adopted the following change effective January 1, 2003:

- The backdrop-related assumptions were changed to 50% utilization with an average backdrop period of four years.

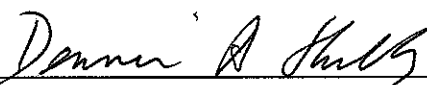
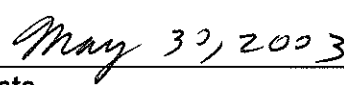
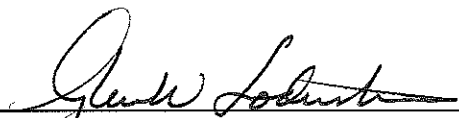

Certification

We have prepared an actuarial valuation of the Employees' Retirement System for the County of Milwaukee as of January 1, 2003 for the plan year ending December 31, 2003. The results of the valuation are set forth in this report, which reflects the provisions of the Plan effective December 24, 1967, incorporating subsequent amendments.

The valuation is based on employee and financial data which were provided by the County of Milwaukee and which are summarized in this report.

All costs, liabilities and other factors under the Plan were determined in accordance with generally accepted actuarial principles and procedures. In our opinion, the actuarial assumptions selected by the Pension Board are reasonable estimates of the anticipated experience under the Plan. This report fully and fairly discloses the actuarial position of the Plan on an ongoing basis.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained within this report.

 Dennis A. Skelly Associate, Society of Actuaries Enrolled Actuary No. 02-3209	 Date
 Glenn W. Soderstrom Fellow, Society of Actuaries Enrolled Actuary No. 02-2873	 Date
Mercer Human Resource Consulting 411 E. Wisconsin Ave., Suite 1500 Milwaukee, WI 53202 (414) 223-4200	

Section 1: Funding Results

Section 1.1 The unfunded actuarial accrued liability as of the valuation date.

Section 1.2 A development of the actuarial gain or loss during the year.

Section 1.3 The normal cost as of the valuation date.

Section 1.4 The determination of the contribution recommendations, including the actual and budgeted contributions.

Section 1.5 The actuarial present value of accrued benefits as of the valuation date.

Section 1.1

Unfunded Actuarial Accrued Liability

The actuarial accrued liability is the present value of projected plan benefits allocated to past service by the actuarial funding method being used.

	January 1, 2003	January 1, 2002
1. Actuarial Accrued Liability		
a. Active Participants		
Retirement Benefits	\$ 534,229,777	\$ 537,686,828
Withdrawal Benefits	10,591,217	8,693,210
Disability Benefits	30,477,216	30,759,304
Death Benefits	2,798,880	3,049,862
Total	578,097,090	580,189,204
b. Participants with Deferred Benefits	54,652,334	48,359,493
c. Participants Receiving Benefits	909,295,332	863,522,865
d. Actuarial Accrued Liability (a. + b. + c.)	1,542,044,756	1,492,071,562
2. Actuarial Value of Assets	1,446,860,024	1,620,157,072
3. Unfunded Actuarial Accrued Liability		
(1.d. - 2.)	\$ 95,184,732	\$ (128,085,510)

The vested accrued liability for active participants as of January 1, 2003 is \$526,892,783.

Section 1.2

Actuarial Gain/(Loss)

The actuarial gain/(loss) is comprised of both the liability gain/(loss) and the actuarial asset gain/(loss). Each of these represents the difference between the expected and actual values as of January 1, 2002.

1. Expected Actuarial Accrued Liability	
a. Actuarial Accrued Liability at January 1, 2002	\$ 1,492,971,562
b. Normal Cost at January 1, 2002	17,982,218
c. Interest on <i>a. + b.</i> to End of Year	135,904,840
d. Benefit Payments for Plan Year Ending December 31, 2002, with Interest to End of Year	123,391,677
e. Expected Actuarial Accrued Liability Before Change (<i>a. + b. + c. - d.</i>)	1,523,466,943
f. Change in Actuarial Accrued Liability at January 1, 2003, Due to Change in Plan Provisions and Actuarial Assumptions	28,907,245
g. Expected Actuarial Accrued Liability at January 1, 2003 (<i>e. + f.</i>)	1,552,374,188
2. Actuarial Accrued Liability at January 1, 2003	1,542,044,756
3. Liability Gain/(Loss) (<i>1.g. - 2.</i>)*	10,329,432
4. Expected Actuarial Value of Assets	
a. Actuarial Value of Assets at January 1, 2002	1,620,157,072
b. Interest on <i>a.</i> to End of Year	145,814,137
c. Contributions Made for Plan Year Ending December 31, 2002	2,579,984
d. Interest on <i>c.</i> to End of Year	19,484
e. Benefit Payments for Plan Year Ending December 31, 2003 with Interest to End of Year	123,391,677
f. Expense Reimbursed from Trust to the County	1,017,500
g. Expected Actuarial Value of Assets January 1, 2003 (<i>a. + b. + c. + d. - e - f.</i>)	1,644,161,500
5. Actuarial Value of Assets as of January 1, 2003	1,446,860,024
6. Actuarial Asset Gain/(Loss) (<i>5. - 4.g.</i>)	(197,301,476)
7. Actuarial Gain/(Loss) (<i>3. + 6.</i>)	\$ (186,972,044)

* The \$10,329,432 liability gain is comprised of a loss of \$1,888,344 due to salary increases higher than expected and a gain of \$11,317,776 due to the net population change.

Section 1.3

Normal Cost

	January 1, 2003	January 1, 2002
1. Present Value of Projected Benefits		
a. Active Participants		
Retirement Benefits	\$ 646,676,826	\$ 655,665,074
Withdrawal Benefits	27,255,861	26,498,376
Disability Benefits	39,239,476	40,255,211
Death Benefits	4,625,786	4,995,181
Total	717,797,949	727,413,842
b. Participants with Deferred Benefits	54,652,334	48,359,493
c. Participants Receiving Benefits	909,295,332	863,522,865
d. Total	1,681,745,615	1,639,296,200
2. Actuarial Value of Assets	1,446,860,024	1,620,157,072
3. Unfunded Actuarial Accrued Liability	95,184,732	(128,085,510)
4. Present Value of Future Normal Costs (1.d. - 2. - 3.)	139,700,859	147,224,638
5. Present Value of Future Salaries	1,905,119,382	1,946,462,476
6. Normal Cost Rate (4. ÷ 5.)	7.333%	7.564%
7. Expected Salaries*	234,239,620	237,734,236
8. Normal Cost (6. × 7.)	\$ 17,176,791	\$ 17,982,218

* Prior-year earnings increased by the salary assumption and limited by the IRS compensation limit for those under the mandatory retirement age.

Section 1.4

Contributions

The County of Milwaukee has adopted the policy developed below for funding and accounting for pension expenses. The County's policy and the amounts required for the plan year ending December 31, 2003 are shown below.

A. Actual Funding Calculation

The actual funding calculation consists of the amortization of the unfunded actuarial liability plus the normal cost.

1. Net Annual Amortizations (<i>SECTION 1.4D</i>)	\$	6,519,623
2. a. Normal Cost		17,176,791
b. Interest to December 31, 2003		1,545,911
c. Normal Cost with Interest		18,722,702
3. Total Funding Calculation, End-of-Year Basis <i>(1. + 2c., not less than zero)</i>	\$	25,242,325

B. Funding Budget Policy

	Plan Year Ending	
	December 31, 2004	December 31, 2003
1. Net Annual Amortizations	\$ 22,837,000	\$ 245,307
2. a. Normal Cost	19,832,000	18,582,485
b. Interest	1,685,000	1,672,424
c. Normal Cost with Interest	21,517,000	20,254,909
3. Total Funding Budget Policy, End-of-Year Basis <i>(1. + 2.c., not less than zero)</i>	\$ 44,354,000	\$ 20,500,216

C. Projected Lump-Sum Contribution for Year

	Plan Year Ending	
	December 31, 2004	December 31, 2003
1. Total Funding Policy Budget	\$ 44,354,000	\$ 20,500,216
2. a. Estimated Biweekly Contributions	400,000	475,000
b. Interest	17,000	21,375
c. Biweekly Contribution with Interest	417,000	496,375
3. Net Funding Policy Budget <i>(1. - 2.c., not less than zero)</i>	\$ 43,937,000	\$ 20,003,841

Section 1.4

D. Amortization Schedule for Funding Calculation

Annual amortization payments of the reestablished unfunded actuarial accrued liability and changes to the unfunded actuarial accrued liability arising from plan changes, assumption changes and actuarial gains/losses are amortized as a level percentage of payroll, assuming payroll growth of 5.5% per year over a 20-year period. Expenses paid by the County and reimbursed by the Trust are amortized on a level dollar basis over 10 years. The variance between the actual amount contributed for the year and the contribution for the year to maintain the funding schedule is amortized on a level dollar basis over five years.

Charges	Amortization Period			Balances		
	Date Created	Initial Years	Last Payment	Initial	Outstanding	Payment
Expense	1/1/1997	10	2006	\$ 689,121	\$ 344,722	\$ 106,405
Expense	1/1/1998	10	2007	739,537	445,021	114,412
Expense	1/1/1999	10	2008	710,319	493,893	110,098
Expense	1/1/2000	10	2009	655,908	512,609	101,850
Expense	1/1/2001	10	2010	799,202	688,088	124,320
Expense	1/1/2002	10	2011	780,362	728,998	121,596
Variance	1/1/2002	5	2006	5,938,089	4,945,879	1,526,638
Expense	1/1/2003	10	2012	1,017,500	1,017,500	158,547
Variance	1/1/2003	5	2007	5,929,009	5,929,009	1,524,303
Assumption change	1/1/2003	20	2022	21,144,593	21,144,593	1,543,781
Plan change	1/1/2003	20	2022	7,762,652	7,762,652	566,756
Actuarial (gain)/loss	1/1/2003	20	2022	187,872,044	187,872,044	13,716,665
Total					\$ 231,885,008	\$ 19,715,373

Credits	Amortization Period			Balances		
	Date Created	Initial Years	Last Payment	Initial	Outstanding	Payment
Variance	1/1/1999	5	2003	6,507,384	\$ 1,525,339	1,662,620
Variance	1/1/2000	5	2004	5,061,294	2,279,659	1,295,915
Variance	1/1/2001	5	2005	828,375	538,005	212,541
Reestablished unfunded	1/1/2002	20	2021	130,146,178	132,357,273	10,024,674
Total					\$ 136,700,276	\$ 13,195,750
Net Amount					\$ 95,184,732	\$ 6,519,623

Section 1.4

E. Reconciliation of Budget Contributions

1. 2003 Actual Funding Calculation		\$ 25,242,000
a. Impact of Investment Return		
i. Recognition of Losses Over Previous Four Years	\$ 5,255,000	
ii. 2003 Contribution Variance (excluding variance due to underpayment of requested contribution)	1,219,000	
iii. Subtotal		6,474,000
b. Impact of Assumption Changes		
i. Funding Interest Rate	7,264,000	
ii. Other Assumptions	916,000	
iii. Subtotal		8,180,000
c. Other Factors		
i. Projected Growth	1,349,000	
ii. 2003 Contribution Variance Due to Under Payment of Requested Contribution	1,307,000	
iii. Amortization of 2003 Expenses	140,000	
iv. Full Recognition of 1998 Contribution Variance	1,662,000	
v. Subtotal		4,458,000
2. 2003 Funding Budget		\$ 44,354,000

Section 1.5

GASB Nos. 25 and 27 Disclosure

A. Equivalent Single Amortization Period

Shown below is the derivation of the equivalent single amortization period of the unfunded calculated in accordance with GASB Statement Nos. 25 and 27. The maximum allowable amortization period is 40 years (30-years effective January 1, 2007).

	January 1, 2003	January 1, 2002
1. Covered Payroll	\$ 234,679,129	\$ 238,387,178
2. Unfunded Amount	95,184,732	(128,085,510)
3. Amortization Payment	6,519,623	(11,072,141)
4. Payment as a Level Percentage of payroll (3 ÷ 1)	2.78%	(4.64%)
5. Weighted Average Amortization Factor (2 ÷ 3)	14.60	11.57
6. Equivalent Single Amortization Period (Nearest Whole Year)	22	16

Section 2

Plan Assets

This section presents information regarding plan assets as reported by the plan administrator. The plan assets represent the portion of total plan liabilities which has been funded as of the valuation date.

Section 2.1 Summary of Assets.

Section 2.2 Reconciliation of Assets.

Section 2.3 Actuarial Value of Assets.

Section 2.4 Contributions for Prior Plan Year.

Section 2.1

Summary of Assets

Asset Category	Market Value as of December 31, 2002
1. Cash and Equivalents	\$ 37,995,385
2. General Investments	
▪ Domestic Common and Preferred Stock	412,610,738
▪ International Common and Preferred Stock	181,694,831
▪ Federal Agency and Mortgage – Backed Certificates	97,605,688
▪ U.S. Government and State Obligations	29,596,203
▪ Corporate Bonds	431,962,518
▪ International Fixed Income	54,277,131
▪ Real Estate Investment Trusts	32,742,753
▪ SBA Loan Backed Securities	117,423
▪ Venture Capital	14,937,489
3. Net Receivables (Payables)	(12,435,299)
4. Payable to OBRA Pension Plan	674,132
5. Net Assets in the Trust (1. + 2. + 3. – 4.)	1,280,430,728
6. Contributions Receivable	2,450,078
7. Net Assets Available for Benefits (5. + 6.)	\$ 1,282,880,806

Section 2.2

Reconciliation of Assets

Transactions	January 1, 2002 to January 1, 2003
Income	
1. Contributions Received or Receivable	
▪ County of Milwaukee	\$ 2,579,984
▪ Plan Participants	436,682
2. Investment Earnings	
▪ Unrealized Gains/(Losses)	(80,542,034)
▪ Realized Gains/(Losses)	(49,707,141)
▪ Interest and Dividends	50,680,500
▪ Security Lending Income	1,616,476
▪ Security Lending Rebates & Fees	(1,355,150)
▪ Investment Expense	(3,822,792)
3. Other Income	798,381
4. Total Income	\$ (79,315,094)
Disbursements	
5. Benefit Payments	\$ 118,108,390
6. Administrative Expenses	1,478,886
7. Total Disbursements	119,587,276
8. Net Income (4. - 7.)	(198,902,370)
9. Net Assets at Beginning of Year	1,481,783,176
10. Net Assets at End of Year (8. + 9.)	\$ 1,282,880,806

Section 2.3

Actuarial Value of Assets

1. Market Value of Assets, December 31, 2002		\$	1,282,880,806
2. Less 80% of Unrealized Gains and Losses in 2002:	\$	(80,542,034)	(64,433,627)
3. Less 60% of Unrealized Gains and Losses in 2001:	\$	(107,408,692)	(64,445,215)
4. Less 40% of Unrealized Gains and Losses in 2000:	\$	(163,597,647)	(65,439,059)
5. Less 20% of Unrealized Gains and Losses in 1999:	\$	151,693,413	30,338,683
6. Actuarial Value of Assets, December 31, 2002 (1. - 2. - 3. - 4. - 5.)		\$	1,446,860,024

As of	Market Value	Actuarial Asset Value	Estimated Rate of Return		Assumed Rate of Return
			Market	Actuarial	
12/31/1998	\$ 1,553,237,760	\$ 1,562,823,526	7.9	13.5	8.5
12/31/1999	1,712,804,453	1,622,710,113	15.8	9.1	8.5
12/31/2000	1,607,645,156	1,670,600,679	(1.2)	8.4	8.5
12/31/2001	1,481,783,176	1,620,157,072	(2.2)	2.6	8.5
12/31/2002	1,282,880,806	1,446,860,024	(5.9)	(3.7)	9.0
Compound Rate of Return (5 years):			2.6%	5.8%	

Section 2.4

Contributions for Prior Plan Year

		Employer		Interest		Total
3/5/2003	\$	2,147,000	\$	0	\$	2,147,000
Bi-weekly		432,984		19,484		452,468
Total	\$	2,579,984	\$	19,484	\$	2,599,468

Section 3

Basis of Valuation

This section presents and describes the basis of the valuation. The census of participants, actuarial basis and provisions of the Plan are the foundation of the valuation, since these are the present facts on which the projection of benefit payments will depend. The valuation is based on the premise that the Plan will continue in existence.

Section 3.1 The participant data used for the actuarial valuation.

Section 3.2 The actuarial funding method, procedures, and actuarial assumptions.

Section 3.3 The plan provisions valued in the actuarial valuation.

Section 3.1

B. Count of Active Participants at January 1, 2003

General Employees

Age	Years of Service									Total
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	
Under 20										0
20 - 24	70	1								71
25 - 29	236	17								253
30 - 34	261	63	24	1						349
35 - 39	218	131	152	29	1					531
40 - 44	197	118	256	145	43					759
45 - 49	161	124	273	219	161	60				998
50 - 54	124	104	245	178	200	175	53	1		1,080
55 - 59	78	63	150	149	74	85	101	8		708
60 - 64	26	33	85	57	31	21	15	12		280
65 - 69	6	5	20	13	12	5	6	1		68
70 - 74		3		1		1				5
75+	1		3			1				5
Total	1,378	662	1,208	792	522	348	175	22	0	5,107

Section 3.1

B. Count of Active Participants at January 1, 2003 (continued)

Deputy Sheriffs

Age	Years of Service									Total
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	
Under 20										0
20 - 24	20									20
25 - 29	65	13								78
30 - 34	56	96	15							167
35 - 39	28	42	57	4						131
40 - 44	9	21	37	18	2	1				88
45 - 49	1	6	33	21	18	3				82
50 - 54	1	4	12	16	19	9	2			63
55 - 59			2	1	9	10				22
60 - 64				2		1	1			4
65 - 69										0
70 - 74										0
75+										0
Total	180	182	156	62	48	24	3	0	0	655

Section 3.1

B. Count of Active Participants at January 1, 2003 (continued)

Elected Officials

Age	Years of Service									Total
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	
Under 20										0
20 - 24										0
25 - 29	2									2
30 - 34										0
35 - 39	3		1							4
40 - 44		2	1							3
45 - 49	2	1	4		1	1				9
50 - 54	1	1		1						3
55 - 59	2		2	1		1				6
60 - 64					1	1				2
65 - 69	1							1		2
70 - 74										0
75+										0
Total	11	4	8	2	2	3	0	1	0	31

Section 3.1

C. Participant Statistics

Inactive Participants as of January 1, 2003	Number	Amount of Monthly Benefit	
Participants Receiving Benefits	6,637	\$	8,080,084
Participants with Deferred Benefits	1,525	\$	874,686

Statistics for Active Participants	Number	Average		
		Age	Service	Compensation*
As of January 1, 2002				
Total	6,077	45.3	12.7	\$ 39,228
As of January 1, 2003				
Total	5,793	45.5	12.7	\$ 40,511

* Prior-year earnings increased by the salary assumption.

Section 3.2**Actuarial Basis****A. Aggregate Entry Age Normal Method**

Liabilities and contributions shown in this report are computed using the aggregate entry age normal method of funding.

The objective under this method is to fund all benefits under the Plan in installments which are level as a percentage of the group's aggregate salary, starting at the original participation dates (or employment date), and continuing until the assumed retirement, terminations, disabilities or deaths.

At the time the funding method is introduced, there will be a liability which represents the contributions which would have been accumulated if this method of funding had always been used. The difference between this frozen initial liability and the assets (if any) which are held in the fund is the unfunded actuarial accrued liability, which is typically funded over a chosen period in accordance with an amortization schedule.

A detailed description of the calculation follows:

- The **normal cost** is determined by applying to earnings an aggregate level percentage of salary which, if contributed each year, is sufficient to provide the full value of the benefits expected to be payable.
- The **present value of future normal costs** is the total of the discounted values of all active participants' normal costs, assuming these to be paid in each case from the valuation date until retirement (termination, disability or death) date.
- The **present value of projected benefits** is calculated as the value of all benefit payments expected to be paid to the plan's current participants, including active and retired members, beneficiaries, and terminated members with vested rights.
- The **actuarial accrued liability** is the excess of the present value of projected benefits over the present value of future normal costs.
- The **unfunded actuarial accrued liability** is the excess of the actuarial accrued liability over the assets of the fund.

Section 3.2

B. Valuation of Assets

The actuarial asset value is a five-year moving average where 20% of the prior four years' unrealized gains/losses are annually recognized.

C. Valuation Procedures

- Financial and Census Data: Financial data and participant data as submitted by the plan sponsor without further audit. This information is not customarily verified by a plan's actuary. The information was reviewed for internal consistency.
- No benefits are projected to be greater than the limitation currently imposed by Section 415(b)(1) of the Internal Revenue Code as applied to governmental plans.
- No actuarial accrued liability is held for nonvested, inactive participants who have a break in service, or for nonvested participants who have quit or been terminated, even if a break in service had not occurred as of the valuation date.

D. Actuarial Assumptions

Economic

<i>Investment Return</i>	<ul style="list-style-type: none"> ▪ 9.0% per year compounded annually. Investment return is assumed to be net of investment management expense.
<i>Salary Increases</i>	Averages 5.5% per year compounded annually. See table on following page for sample values.
<i>Mortality</i>	<ul style="list-style-type: none"> a. Active participants and nondisabled pensioners: The sex-distinct 1994 Uninsured Pensioner Table. b. Disabled pensioners: 1985 Unisex Pension Disability Mortality Table.
<i>Disability</i>	Graduated rates. See table on following page for sample values.
<i>Withdrawal</i>	Graduated rates. Select and ultimate based on duration of service. See tables on following pages for sample values.
<i>Retirement Age</i>	See table on following page.
<i>Percentage Married</i>	<ul style="list-style-type: none"> ▪ Males..... 80% ▪ Females 80%
<i>Age Difference</i>	Beneficiaries are assumed to be the same age as the participant.
<i>Backdrop</i>	50% of retirees are assumed to elect a Backdrop of 4 years but not earlier than participant's earliest full retirement date.

Section 3.2

D. Actuarial Assumptions (continued)

Sample Annual Rates per 100 Participants								
Attained Age	Mortality				Withdrawal - Ultimate			
	Healthy		Disabled		General	Elected*	Deputy Sheriffs	Disability
	Males	Females	Males	Females				
20	0.05	0.03	2.05	1.71	9.81	4.50	4.50	0.02
25	0.07	0.03	1.81	1.85	9.58	4.48	4.48	0.03
30	0.09	0.04	1.79	1.98	9.01	4.23	4.23	0.07
35	0.09	0.05	2.14	2.17	7.15	3.00	3.00	0.12
40	0.12	0.08	2.68	2.40	5.15	1.24	1.24	0.18
45	0.17	0.10	3.47	2.89	3.72	0.55	0.55	0.28
50	0.28	0.15	4.54	3.36	2.73	0.22	0.22	0.48
55	0.48	0.25	5.69	3.70	1.84	0.00	0.00	0.87
60	0.86	0.48	6.92	4.12	0.00	0.00	0.00	1.38
65	1.56	0.93	8.22	4.53	0.00	0.00	0.00	1.88

* Select rates for elected officials assume no turnover for first four years.

Sample Annual Rates per 100 Participants					
Employment	Separation - Select Rates General Employees				
Age	0	1	2	3	4
20	12.5	7.5	7.0	9.0	10.0
25	12.2	6.3	6.5	8.4	9.4
30	11.4	6.0	6.3	7.4	8.4
35	10.7	6.0	6.3	6.7	7.4
40	10.2	6.0	6.0	6.2	6.1
45	9.7	6.0	6.0	5.7	5.2
50	9.2	6.0	5.8	5.2	4.4
55	8.7	5.2	4.8	4.4	3.4

Section 3.2

D. Actuarial Assumptions (continued)

Sample Annual Rates Per 100 Participants

Retirement Rates			
Age	General	Deputy Sheriffs	Elected
45	0	1	0
46	0	1	0
47	0	1	0
48	0	1	0
49	0	1	0
50	2	1	0
51	2	2	0
52	2	3	0
53	2	5	0
54	2	10	0
55	10	15	0
56	10	15	7
57	10	15	7
58	15	15	7
59	15	15	7
60	20	75	20
61	20	75	20
62	30	80	45
63	25	50	30
64	25	50	30
65	35	100	40
66	30	100	30
67	30	100	30
68	30	100	30
69	30	100	30
70	100	100	100

Section 3.2

D. Actuarial Assumptions (continued)

Earnings Progression			
Age	General	Deputy Sheriffs	Elected
20	8.2%	9.7%	4.5%
25	5.9	7.4	4.5
30	5.5	7.1	4.5
35	5.2	6.7	4.5
40	4.7	6.3	4.5
45	4.5	6.0	4.5
50	4.2	5.7	4.5
55	3.9	5.4	4.5
60	3.8	5.3	4.5

Section 3.3

Summary of Plan Provisions

<i>Plan Name</i>	Employees' Retirement System of the County of Milwaukee.												
<i>Effective Date</i>	December 24, 1967.												
<i>Type of Plan</i>	Municipal retirement system administered by the Pension Board.												
<i>Employer</i>	County of Milwaukee.												
<i>Employees Included</i>	Any person regularly employed by the County at an annual wage or salary payable at stated intervals, including any person employed by the State of Wisconsin and who receives part of his compensation from the County.												
<i>Service Considered</i>	<p>Service during period of employment in the County or in any department in any town, village, city or metropolitan sewerage commission in the County, which department has by consolidation or merger been absorbed by the County.</p> <p>Creditable service shall consist of "prior service," "military service," and "membership service," for which service credit is allowable under Section 4, Chapter 201, Laws of 1937, as well as service under Executive Order 11231, July 8, 1965, for Vietnam. Additional credit for periods of military service will be earned in accordance with the following chart:</p> <table border="0" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Years of Service with Milwaukee County</th> <th style="text-align: center;">Maximum Years of Military Service Granted</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0 - 4</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">5 - 9</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">10 - 14</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">15 - 19</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">20+</td> <td style="text-align: center;">4</td> </tr> </tbody> </table>	Years of Service with Milwaukee County	Maximum Years of Military Service Granted	0 - 4	0	5 - 9	1	10 - 14	2	15 - 19	3	20+	4
Years of Service with Milwaukee County	Maximum Years of Military Service Granted												
0 - 4	0												
5 - 9	1												
10 - 14	2												
15 - 19	3												
20+	4												
<i>Benefit Service</i>	Used in determining the amount of benefits. Same as Vesting Service except service prior to becoming a Participant does not count.												

Section 3.3

Summary of Plan Provisions *(continued)*

<p><i>Earnings Considered</i></p>	<p>Earnable compensation is the full rate of compensation payable to a member if he worked the full normal working time for his position, including authorized overtime payments and the compensation rate assumed to have been received while the member is on authorized leave of absence. In cases where compensation includes maintenance, the Pension Board shall fix the value of that part of the compensation not payable in money. Compensation shall not exceed \$200,000 in the pension calculation as indexed for changes in the cost of living.</p> <p>The final average salary means the average annual earnable compensation for the highest three (3) consecutive calendar years of creditable service during which the member's earnable compensation was the highest, or if he should have less than three years of creditable service, then his average annual earnable compensation during his credited service. For non-sheriff members hired before January 1, 1982, the final average salary is increased 7.5% for each year worked after January 1, 2001, to a maximum of 25%.</p>
<p><i>County Contributions</i></p>	<p>County contributions shall be at least as great as the required amounts, actuarially determined and certified to the County Board of Supervisors by the Pension Board, which will become due and payable to the fund of the Retirement System during the year next following determination.</p>
<p><i>Voluntary Employee Contributions</i></p>	<p>Up to 10% of earnings, providing the employee was contributing on January 1, 1971.</p>

Section 3.3

Summary of Plan Provisions (continued)

Normal Pension	<p>Payable upon request of any member who has attained the minimum service and retirement age.</p> <ol style="list-style-type: none"> a. The minimum age and service requirements: <ol style="list-style-type: none"> 1.) For general employees and elected officials: Age 60 and any service. 2.) For non-union general employees and certain union general employees: The combination of age and service adding up to 75. 3.) For deputy sheriffs: Age 57 and any service or age 55 and 15 years of service or the combination of age and service adding up to 75. For deputy sheriffs hired after February 28, 1991, the combination of age and service adding up to 75 does not apply. 4.) For all members: Age 55 and 30 years of service. b. The benefit is the sum of: <ol style="list-style-type: none"> 1.) Pension portion, plus 2.) Any voluntary contribution. c. The pension portion retirement allowance is: <ol style="list-style-type: none"> 1. a.) For general employees whose continuous membership began prior to January 1, 1982 – 2% of final average salary per year of service. b.) For those general employees whose membership began on or after January 1, 1982– 1.5% of final average salary per year of service. c.) For firefighters whose membership began on or after January 1, 1982 and prior to January 1, 1999 – 2.0% of final average salary per year of service accrued on or after January 1, 1999, 1½% of final average salary per year of service prior to January 1, 1999. d.) For DA investigators and non-represented deputy sheriffs whose membership began on or after January 1, 1982 and prior to July 1, 1995 – 2½% of final average salary per year of service. e.) For the elected officials and deputy sheriffs whose membership began prior to January 1, 1982 – 2½% of final average salary per year of service.
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Section 3.3

Summary of Plan Provisions (continued)

<p><i>Normal Pension (continued)</i></p>	<ul style="list-style-type: none"> f.) For elected officials whose membership began on or after January 1, 1982 – 2% of final average salary per year of service. g.) For those deputy sheriffs whose membership began on or after January 1, 1982 but before July 1, 1995 – 2½% of final average salary per year of service. h.) For those deputy sheriffs whose membership began on or after July 1, 1995 – 2% of final average salary per year of service. <p>2. For non-sheriff employees whose membership began on or after January 1, 1982, the benefit multiplier is increased 0.5% per year of service accrued after January 1, 2001 and per eight years of pre-2001 service for each year worked after January 1, 2001 (prorated for fractional years).</p> <p>d. The maximum pension shall be 80% of final average salary plus any adjustment for automatic increase to retired employees.</p>
<p><i>Early Pension</i></p>	<p>Age 55 and 15 years of service reduced by 5/12 of 1% for each month payment starts preceding normal retirement age.</p>
<p><i>Ordinary Disability Pension</i></p>	<p>After 15 years of creditable service. Benefit computed as for normal retirement benefits. Minimum benefit 25% of final average salary.</p>
<p><i>Accidental Disability Pension</i></p>	<p>Same as normal retirement benefit if the employee has attained the minimum service retirement age. If less than normal retirement age at time of disability, the benefit is computed as for normal retirement but is not less than 60% of final average salary.</p>
<p><i>Ordinary Death Benefit</i></p>	<p>A death benefit is payable to the estate of designated beneficiary of an active member who dies due to any cause other than an accident in the actual performance of duty, provided no other survivor benefits are payable.</p> <p>Benefit is equal to the member's accumulated mandatory contribution account, plus a lump-sum payment of 50% of final average salary limited to \$2,000.</p>

Section 3.3

Summary of Plan Provisions (continued)

<i>Accidental Death Benefit</i>	<p>Upon the death of a deputy sheriff resulting from an accident in the actual performance of duty, a pension is payable to his widow to continue during her widowhood; or if there is no widow or if his widow dies or remarries before his youngest child has attained age 18, then the pension is payable to his child or children under age 18 until the youngest child attains said age; or if neither widow nor children survive, it is payable to his dependent father or mother to continue for life.</p> <p>In the event of the accidental death of a deputy sheriff, his accumulated contributions are returned to his estate or designated beneficiary, and, in addition, a pension of one-half of his final average salary is payable to his beneficiary as described above.</p> <p>Any benefit payable on account of such accidental death under any state workers' compensation law or any law of the United States is offset against the pensions allowable under the provisions of the Retirement System.</p>
<i>Deferred Vested Pension</i>	<p>Upon termination of employment, a member who does not elect to withdraw any part of his membership account shall be eligible for a deferred vested pension if:</p> <ol style="list-style-type: none"> a. The accrued pension at age 60 is at least \$10 per month. b. He has at least 5 years of service. <p>The benefit is computed the same as for a normal pension considering earnings and service prior to date of termination.</p>
<i>Survivor Benefit</i>	<p>Upon the death of a member prior to age 60 and after the completion of one year of service, a monthly pension equal to 40% of the member's monthly salary less the survivor's benefits payable under the Social Security law shall be payable to his surviving dependent spouse for as long as there is at least one dependent child. Upon attainment of age 60 the dependent spouse shall receive 50% of the normal pension which the member would have received considering service to age 60 and the final average earnings determined at death.</p> <p>In addition, each child of the deceased member shall be eligible for a monthly pension equal to 10% of the member's monthly salary until he attains age 18 or marries; or if he is a student and not married, until he attains age 22.</p> <p>The total survivor's pension may not exceed 90% of the member's monthly salary less the survivor's benefits payable under the Social Security law.</p>

Section 3.3

Summary of Plan Provisions (continued)

<i>Optional Benefits</i>	<p>In lieu of the full retirement allowance, any member at retirement may elect to receive an equivalent reduced retirement allowance with the provision that:</p> <p>Option 1. In case of death before benefits attributable to his mandatory account have equaled the amount of his membership account at the date of retirement, the balance shall be paid to a designated beneficiary or to his estate, or</p> <p>Option 2. At the death of the member, one-half of his allowance shall be continued throughout the life of such other person as the member shall have designated at the time of his retirement, or</p> <p>Option 3. At the death of the member the same allowance shall be continued throughout the life of such other person as the member shall have designated at the time of his retirement.</p>
<i>Other Benefits</i>	<p>a. Provide 2% of initial benefit automatic increase per year to retired employees.</p> <p>b. Refund of employee voluntary contribution upon severance.</p> <p>c. Backdrop pension benefit. Employee may opt to receive a monthly benefit earned as of chosen date in the past (Backdrop date). Employee receives cash payment equal to monthly benefits that would have been paid between backdrop date and actual retirement date plus interest.</p>
<i>Expenses</i>	Paid by County.
<i>Minimum Benefit</i>	Not less than under previous system.

May 2003

**OBRA 1990 Retirement System of
the County of Milwaukee**

Actuarial Valuation Report as of January 1, 2003 for the
Plan Year and Fiscal Year Ending December 31, 2003

MERCER

Human Resource Consulting

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Highlights

This report has been prepared by Mercer Human Resource Consulting on behalf of plan participants of the County of Milwaukee (the “Plan Sponsor”) to:

- Determine the funding calculation under the OBRA 1990 Retirement System of the County of Milwaukee (the “Plan”) for the plan and tax fiscal year ending December 31, 2003;
- Present the results of a valuation of the Plan as of January 1, 2003; and
- Review experience under the Plan for the year ended December 31, 2002.

The following table summarizes important contribution information.

Contributions	Plan Year Ending	
	December 31, 2003	December 31, 2002
Funding Calculation	\$ 288,487	\$ 263,691
Percentage of Payroll	3.36%	3.03%

This amount will pay the normal cost for the year and amortize the unfunded actuarial accrued liability as a level percentage of pay over the next 20 years.

Following Year’s Budget Contribution

The 2004 budget contribution is \$348,000. This amount incorporates the following changes as Mercer understands was adopted by the Pension Board:

Assumption	Change	Impact on 2004 Budget Contribution
Investment Return Assumption	Lowered from 9% to 8.5%	\$ 22,000

Summary of Principal Valuation Assumptions

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods, or plan provisions between the two valuations are described after the summary.

	Actuarial Valuation as of	
	January 1, 2003	January 1, 2002
Funding Valuation		
Market Value of Assets	\$ 674,132	\$ 662,409
Actuarial Value of Assets	674,132	662,409
Actuarial Accrued Liability	2,049,981	1,890,289
<i>Funded Ratio</i>	32.88%	35.04%
Unfunded Actuarial Accrued Liability	1,375,849	1,227,880
Normal Cost	\$ 96,986	\$ 94,065
<i>Percentage of Compensation</i>	1.13%	1.08%
Participant Data		
Number of Participants in Valuation		
Active Participants	1,640	1,822
Participants with Deferred Benefits	6,653	6,139
Participants Receiving Benefits	1	0
Total	8,294	7,961
Total Compensation*	\$ 8,595,969	\$ 8,712,677

The liability measures shown above are developed throughout the report.

* *Prior-year earnings projected with one-year salary scale.*

Changes

None.

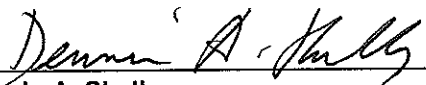
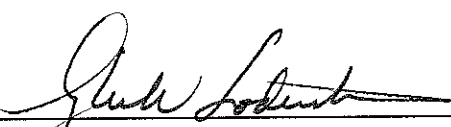
Certification

We have prepared an actuarial valuation of the OBRA 1990 Retirement System for the County of Milwaukee as of January 1, 2003 for the plan year ending December 31, 2002. The results of the valuation are set forth in this report, which reflects the provisions of the Plan effective January 1, 1992, and incorporating subsequent amendments.

The valuation is based on employee and financial data which were provided by the County of Milwaukee and which are summarized in this report.

All costs, liabilities and other factors under the Plan were determined in accordance with generally accepted actuarial principles and procedures. In our opinion, the actuarial assumptions selected by the Pension Board are reasonable estimates of the anticipated experience under the Plan. This report fully and fairly discloses the actuarial position of the Plan on an ongoing basis.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained within this report.

	<u>May 30, 2003</u> Date
Dennis A. Skelly Associate, Society of Actuaries Enrolled Actuary No. 02-3209	
	<u>5/30/2003</u> Date
Glenn W. Soderstrom Fellow, Society of Actuaries Enrolled Actuary No. 02-2873	
Mercer Human Resource Consulting 411 E. Wisconsin Ave., Suite 1500 Milwaukee, WI 53202-4417 (414) 223-4200	

Section 1: Funding Results

- Section 1.1** The unfunded actuarial accrued liability as of the valuation date.
- Section 1.2** A development of the actuarial gain or loss during the year.
- Section 1.3** The normal cost as of the valuation date.
- Section 1.4** The determination of the contribution recommendations, including the actual and budgeted contributions.

Section 1.1

Unfunded Actuarial Accrued Liability

The actuarial accrued liability is the present value of projected plan benefits allocated to past service by the actuarial funding method being used.

	January 1, 2003	January 1, 2002
1. Actuarial Accrued Liability		
a. Active Participants	\$ 786,650	\$ 791,033
b. Participants with Deferred Benefits	1,252,750	1,099,256
c. Participants Receiving Benefits	10,581	0
d. Actuarial Accrued Liability (a. + b. + c.)	2,049,981	1,890,289
2. Actuarial Value of Assets	674,132	662,409
3. Unfunded Actuarial Accrued Liability <i>(1.d. - 2., not less than \$0)</i>	\$ 1,375,849	\$ 1,227,880

Section 1.2

Actuarial Gain/(Loss)

The actuarial gain/(loss) is comprised of both the liability gain/(loss) and the actuarial asset gain/(loss). Each of these represents the difference between the expected and actual values as of January 1, 2003.

1. Expected Actuarial Accrued Liability		
a. Actuarial Accrued Liability at January 1, 2002	\$	1,890,289
b. Normal Cost at January 1, 2002		94,065
c. Interest on <i>a.</i> + <i>b.</i> to End of Year		178,592
d. Benefit Payments for Plan Year Ending December 31, 2002, with Interest to End of Year		81,960
e. Expected Actuarial Accrued Liability Before Change (<i>a.</i> + <i>b.</i> + <i>c.</i> - <i>d.</i>)		2,080,986
f. Change in Actuarial Accrued Liability at January 1, 2003 Due to Change in Plan Provisions and Actuarial Assumptions		0
g. Expected Actuarial Liability at January 1, 2003 (<i>e.</i> + <i>f.</i>)		2,080,986
2. Actuarial Accrued Liability at January 1, 2003		2,049,981
3. Liability Gain/(Loss) (<i>1.g.</i> - <i>2.</i>)		31,005
4. Expected Actuarial Value of Assets		
a. Actuarial Value of Assets at January 1, 2002		662,409
b. Interest on <i>a.</i> to End of Year		59,617
c. Contributions Made for Plan Year Ending December 31, 2002		274,972
d. Interest on <i>c.</i> to End of Year		0
e. Benefit Payments for Plan Year Ending December 31, 2002, with Interest to End of Year		81,960
f. Expense Paid by Plan During 2002		141,818
g. Expected Actuarial Value of Assets January 1, 2003 (<i>a.</i> + <i>b.</i> + <i>c.</i> + <i>d.</i> - <i>e.</i> - <i>f.</i>)		773,220
5. Actuarial Value of Assets as of January 1, 2003		674,132
6. Actuarial Asset Gain/(Loss) (<i>5.</i> - <i>4.g.</i>)		(99,088)
7. Actuarial Gain/(Loss) (<i>3.</i> + <i>6.</i>)	\$	(68,083)

Section 1.3

Normal Cost

The components of normal cost under the Plan's funding method are:

	January 1, 2003	January 1, 2002
Retirement Benefits	\$ 71,340	\$ 68,371
Withdrawal Benefits	25,646	25,694
Expenses	0	0
Total Normal Cost	\$ 96,986	\$ 94,065

Section 1.4

Contributions

The County of Milwaukee has adopted the policy developed below for funding and accounting for pension expenses. The County's policy and the amounts required for the plan year ending December 31, 2003 are shown below.

A. Actual 2003 Funding Calculation

The actual funding calculation consists of the amortization of the unfunded actuarial liability plus the normal cost.

1. Net Annual Amortizations (<i>Section 1.4C</i>)	\$	182,772
2. a. Normal Cost		96,986
b. Interest		8,729
c. Normal Cost with Interest		105,715
3. Total Funding Calculation, End-of-Year Basis (<i>1. + 2.c.</i>)	\$	288,487

B. Funding Budget Policy

	Plan Year Ending	
	December 31, 2004	December 31, 2003
1. Net Annual Amortizations	\$ 220,000	\$ 167,968
2. Normal Cost with Interest	128,000	111,759
3. Total Funding Budget Policy, End-of-Year Basis (<i>1. + 2.</i>)	\$ 348,000	\$ 279,727

Section 1.4

C. Amortization Schedule for Funding Calculation

Annual amortization payments of the reestablished unfunded actuarial accrued liability and changes to the unfunded actuarial accrued liability arising from plan changes and actuarial gains/losses are amortized as a level percentage of payroll, assuming payroll growth of 5% per year over a period of 20 years. Expenses paid by the County and reimbursed by the Trust are amortized over 10 years. The variance between the actual amount contributed for the year and the contribution for the year to maintain the funding schedule is amortized over five years.

Charges	Amortization Period			Balances		
	Date Created	Initial Years	Last Payment	Initial	Outstanding	Payment
1993-1996 Expenses	1/1/1997	10	2006	243,729	121,922	37,633
Expenses	1/1/1998	10	2007	96,137	57,852	14,873
Expenses	1/1/1999	10	2008	81,673	56,786	12,659
Expenses	1/1/2000	10	2009	85,685	66,965	13,305
Expenses	1/1/2001	10	2010	100,656	86,661	15,658
Reestablished Unfunded	1/1/2002	20	2021	\$ 681,555	\$ 691,121	\$ 54,362
Variance	1/1/2002	5	2006	1,612	1,343	414
Expenses	1/1/2002	10	2011	109,857	102,626	17,118
Actuarial Loss	1/1/2003	20	2022	68,083	68,083	5,172
Expenses	1/1/2003	10	2012	141,818	141,818	22,098
Total					\$ 1,395,177	\$ 193,292

Credits	Amortization Period			Balances		
	Date Created	Initial Years	Last Payment	Initial	Outstanding	Payment
Variance	1/1/1999	5	2003	25,619	6,006	6,546
Variance	1/1/2000	5	2004	3,421	1,541	876
Variance	1/1/2001	5	2005	771	501	198
Variance	1/1/2003	5	2007	11,281	11,281	2,900
Total					\$ 19,329	\$ 10,520
Net Amount					\$ 1,375,849	\$ 182,772

Section 1.4

D. Reconciliation

The following year budgeted contribution calculation changed from last year as follows:

1. 2003 Actual Funding Calculation		\$ 288,000
a. Impact of Assumption Changes		
i. Funding Interest Rate	\$ 22,000	
ii. Subtotal		22,000
b. Other Factors		
i. Projected Growth	13,000	
ii. 2003 Contribution Variance	2,000	
iii. Amortization of 2003 Expenses	16,000	
iv. Full Recognition of 1998 Contribution Variance	7,000	
v. Subtotal		38,000
2. 2004 Funding Budget		\$ 348,000

Section 1.5

GASB Nos. 25 and 27 Disclosure**A. Equivalent Single Amortization Period**

Shown below is the derivation of the equivalent single amortization period of the unfunded calculation in accordance with GASB statement Nos. 25 and 27. The maximum allowable amortization period is 40 years (30 years effective January 1, 2007).

	January 1, 2002	January 1, 2001
1. Covered Payroll	\$ 8,595,969	\$ 8,712,677
2. Unfunded Amount	1,375,849	1,227,880
3. Amortization Payment	182,772	161,160
4. Payment as a Level Percentage of Payroll ($3 \div 1$)	2.13%	1.85%
5. Weighted Average Amortization Factor ($2 \div 3$)	7.52	7.62
6. Equivalent Single Amortization Period (Nearest Whole Year)	10	10

Section 2: Plan Assets

This section presents information regarding plan assets as reported by the plan administrator. The plan assets represent the portion of total plan liabilities which have been funded as of the valuation date.

Section 2.1 Summary of Assets.

Section 2.2 Reconciliation of Assets.

Section 2.3 Actuarial Value of Assets.

Section 2.4 Contributions for Prior Plan Year.

Section 2.1

Summary of Assets

Asset Category	Market Value as of December 31, 2002
1. Cash and Equivalents	\$ (53)
2. Assets Held by ERS Pension Plan	399,213
3. Contributions Receivable	274,972
4. Net Assets Available for Benefits (1. + 2. + 3.)	\$ 674,132

Section 2.2

Reconciliation of Assets

Transactions	January 1, 2002 to January 1, 2003
Income	
1. Contributions Received or Receivable	\$ 274,972
2. Investment Income	(43,000)
3. Total Income	\$ 231,972
Disbursements	
4. Benefit Payments	\$ 78,431
5. Investment and Administrative Expenses	141,818
6. Total Disbursements	220,249
7. Net Income (3. - 6.)	11,723
8. Net Assets at Beginning of Year	662,409
9. Net Assets at End of Year (7. + 8.)	\$ 674,132

Section 2.3

Actuarial Value of Assets

The actuarial asset value is set equal to the market value of assets plus any receivable contributions.

	January 1, 2003	January 1, 2002
Actuarial Asset Value	\$ 674,132	\$ 662,409

Section 2.4

Contributions for Prior Plan Year

	Amount			Interest	Total
	Employer	Employee			
3/5/2003	\$ 274,972	\$ 0	\$ 0	\$ 274,972	
Total	\$ 274,972	\$ 0	\$ 0	\$ 274,972	

Section 3: Basis of Valuation

This section presents and describes the basis of the valuation. The census of participants, actuarial basis and provisions of the Plan are the foundation of the valuation, since these are the present facts on which the projection of benefit payments will depend. The valuation is based on the premise that the Plan will continue in existence.

Section 3.1 The participant data used for the actuarial valuation.

Section 3.2 The actuarial funding method, procedures and actuarial assumptions.

Section 3.3 The plan provisions valued in the actuarial valuation.

Section 3.1

Plan Participants

A. Participant Data Reconciliation

	Active Participants	Inactive Participants	Total
Total at January 1, 2002	1,822	6,139	7,961
Did Not Accrue Benefit in 2002	(798)	798	0
Lump-Sum Payouts	0	(138)	(138)
Deaths	0	(2)	(2)
New Participants	553	10	563
Inactives – Began Accruing Benefit in 2002	71	(71)	0
Data Correction	(8)	(82)	(90)
Total at January 1, 2003	1,640	6,654*	8,294

* One of these is currently in payment status.

Section 3.1

B. Count of Active Participants at January 1, 2003

Age	Years of Service									Total
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	
Under 20	593									593
20 - 24	495	143								638
25 - 29	58	46	7							111
30 - 34	30	7	4							41
35 - 39	24	7	3							34
40 - 44	33	9	11							53
45 - 49	17	10	1							28
50 - 54	18	10	3							31
55 - 59	14	14	9							37
60 - 64	11	6	3							20
65 - 69	11	11	4							26
70 - 74	4	5	5							14
75+	2	6	6							14
Total	1,310	274	56	0	0	0	0	0	0	1,640

Section 3.1

C. Participant Statistics

Inactive Participants as of January 1, 2003	Number	Amount of Monthly Benefit
Participants Receiving Benefits	1	\$ 114
Participants with Deferred Benefits	6,653	102,643

Statistics for Active Participants	Number	Average		
		Age	Service	Compensation*
As of January 1, 2002				
Total	1,822	25.8	1.0	\$ 4,782
As of January 1, 2003				
Total	1,640	25.8	1.0	\$ 5,499

* Prior-year earnings increased by the salary assumption.

Section 3.2**Actuarial Basis****A. Unit Credit Method**

Liabilities and contributions shown in this report are computed using the unit credit method of funding.

The objective under this method is to fund each participant's benefit under the plan as they accrue. Thus, the total pension to which each participant is expected to become entitled at retirement is broken down into units, each associated with a year of past service. The principle underlying the method is that each unit is funded in the year for which it is credited. Typically, when the method is introduced there will be an initial liability for benefits credited for service prior to that date. To the extent that this liability is not covered by assets of the plan, there is an unfunded liability to be funded over a chosen period in accordance with an amortization schedule.

A detailed description of the calculation follows:

- The **normal cost** is the present value of those benefits, which are expected to be credited with respect to service during the year beginning on the valuation.
- The **accrued liability** is calculated at the valuation date as the present value of benefits credited with respect to service to that date.
- The **unfunded accrued liability** is the excess of the accrued liability over the assets of the Plan at the valuation date. The level annual payment to be made over a stipulated number of years to amortize the unfunded liability is the past service cost.

Under this method, differences between the actual experience and the assumed in the determination of costs and liabilities will emerge as adjustments in the unfunded liability, subject to amortization.

B. Valuation of Assets

The actuarial asset value is the market value of assets plus any receivable contributions.

C. Valuation Procedures

- **Financial and Census Data:** We used financial data and participant data as submitted by the Plan Sponsor without further audit. This information would customarily not be verified by a plan's actuary. We have reviewed the information for internal consistency and we have no reason to doubt its substantial accuracy.
- No benefits are projected to be greater than the limitation currently imposed by Section 415(b)(1) of the Internal Revenue Code as applied to governmental plans.
- All participants are considered active employees for valuation purposes until they incur a break in service covering one full plan year.

Section 3.2

D. Actuarial Assumptions

Economic	
<i>Investment Return</i>	▪ 9.0% per year compounded annually. Investment return is assumed to be net of investment management expense.
<i>Salary Increases</i>	5% per year compounded annually.
<i>Mortality</i>	The sex-distinct 1994 Uninsured Pensioners Table. See table below for sample values.
<i>Withdrawal</i>	Graduated rates. See table below for sample values.
<i>Retirement Age</i>	Age 65.

Sample Annual Decrement Rates per 100 Participants

Employment	Mortality		Withdrawal					Ultimate
			Select Rates					
	Age	Male	Female	0	1	2	3	
20	0.05	0.03	33.75	31.50	28.50	24.00	19.05	15.00
25	0.07	0.03	31.35	29.46	26.88	22.86	18.54	14.25
30	0.09	0.04	27.30	25.47	22.92	18.99	15.36	12.00
35	0.09	0.05	22.35	20.64	18.03	14.01	10.17	6.00
40	0.12	0.08	17.85	16.26	13.80	10.26	7.23	3.90
45	0.17	0.10	17.25	14.85	11.94	8.43	5.37	2.52
50	0.28	0.15	16.50	13.38	10.98	7.89	4.47	1.07
55	0.48	0.25	14.85	12.45	9.78	6.93	3.63	0.23
60	0.86	0.48	0.00	0.00	0.00	0.00	0.00	0.00
65	1.56	0.93	0.00	0.00	0.00	0.00	0.00	0.00

Section 3.3

Summary of Plan Provisions

<i>Plan Name</i>	OBRA 1990 Retirement System of the County of Milwaukee.
<i>Effective Date</i>	January 1, 1992.
<i>Type of Plan</i>	Municipal retirement system administered by the Pension Board.
<i>Employer</i>	County of Milwaukee.
<i>Employees Included</i>	<p>Any person employed by the County for whom the County is not obligated to collect and withhold FICA taxes. However, such persons shall exclude an employee:</p> <ul style="list-style-type: none"> ▪ hired to relieve him from unemployment ▪ of a hospital, home, or institution where he is an inmate ▪ who is a temporary employee to handle fire, storm, snow, earthquake or similar emergencies ▪ paid on a fee basis as self-employed, or ▪ who is a member of the collective bargaining unit covered by an agreement which does not provide for his inclusion.
<i>Service Considered</i>	One year shall be credited on and after January 1, 1992 for each Plan Year during which the employee is employed at any time. However, the employee shall not receive credit for any Plan Year in which the County is obligated to collect and withhold FICA taxes. If, during such Plan Year, FICA taxes are withheld for only a portion of the year, the employee shall receive a pro rata credit for the portion of year worked when no FICA taxes were withheld.
<i>Earnings Considered</i>	Total wages shall include the compensation earned during the period for which no FICA tax was withheld, exclusive of any amounts reimbursed for moving expenses. However, such wages shall be limited to the Social Security taxable wage base for the Plan Year.
<i>Average Compensation</i>	The average of the total Earnings accumulated during the Plan Years of employment with the County, except that years prior to January 1, 1992 shall be disregarded.
<i>Normal Retirement Pension</i>	Payable upon request of any member who has attained age 65. Such pension shall equal one-twelfth of 2% of the member's Average Compensation multiplied by years of service (not in excess of 30).

Section 3.3

Summary of Plan Provisions *(continued)*

<i>Deferred Vested Pension</i>	Upon termination of employment, a member shall be eligible for a deferred vested pension commencing at age 65. Such benefit shall be calculated as for normal retirement, considering Average Compensation and Service at termination.
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