

# **Employees' Retirement System of the County of Milwaukee**

Actuarial Valuation Report as of January 1, 2002 for  
the Plan Year and Taxable Year Ending  
December 31, 2002

**May 2002**

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## Highlights

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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 tax fiscal year ending December 31, 2002;
- Present the results of a valuation of the Plan as of January 1, 2002; and
- Review experience under the Plan for the year ended December 31, 2001.

The following table summarizes important contribution information.

Contributions	Plan Year Ending	
	December 31, 2002	December 31, 2001
Funding Calculation	\$ 8,528,477	\$ 8,586,443

The total funding calculation for the year is \$8,528,477. It is estimated that \$548,625 will be contributed on a biweekly basis (including interest on the contributions). The actual amount contributed for the 2001 plan year was \$2,646,523, representing 1.1% of membership payroll.

### Following Year's Budget Contribution

The 2003 budget contribution is \$20,500,216. It is estimated that \$496,375 will be contributed on a biweekly basis and the lump sum due is \$20,003,841.

## 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, 2002	January 1, 2001
<b>Funding Valuation</b>		
Actuarial Accrued Liability	\$ 1,492,071,562	\$ 1,499,260,769
<i>Funded Ratio</i>	108.58%	111.43%
Actuarial Value of Assets	1,620,157,072	1,670,600,679
Unfunded Actuarial Accrued Liability	(128,085,510)	(171,339,910)
<i>Percentage of Membership Payroll</i>	(53.73)%	(71.9)%
Normal Cost	\$ 17,982,218	\$ 18,232,202

<b>Participant Data</b>		
Number of Participants in Valuation		
Active Participants	6,077	6,318
Participants with Deferred Benefits	1,348	1,342
Participants Receiving Benefits	6,511	6,515
<b>Total</b>	<b>13,936</b>	<b>14,175</b>
Membership Payroll*	\$ 238,387,178	\$ 238,195,006

The liability measures shown above are developed throughout the report.

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

## Changes

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### Plan Amendment

- This year's valuation reflects a required plan change increasing the maximum annual benefit from \$140,000 to \$160,000.

### Actuarial Assumptions

The pension Board adopted the following changes effective January 1, 2002.

- The period of amortization for all plan changes, assumption changes and actuarial experience was changed to 20 years. All such future bases are amortized over 20 years from the date established.
- The investment return assumption was changed from 8.5% to 9.0%.

## Certification

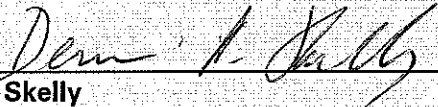

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We have prepared an actuarial valuation of the Employees' Retirement System for the County of Milwaukee as of January 1, 2002 for the plan year ending December 31, 2002. The results of the valuation are set forth in this report, which reflects the provisions of the Plan effective December 24, 1967, incorporating amendments through January 1, 2002.

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.

 Dennis A. Skelly Associate, Society of Actuaries Enrolled Actuary No. 02-3209	<u>5/23/2002</u> Date
 Glenn W. Soderstrom Fellow, Society of Actuaries Enrolled Actuary No. 02-2873	<u>5/23/2002</u> Date
Mercer Human Resource Consulting 411 E. Wisconsin Avenue, Suite 800 Milwaukee, Wisconsin 53202-4417 (414) 223 4200	

## **Section 1: Funding Results**

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- 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.

## 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, 2002	January 1, 2001
1. Actuarial Accrued Liability		
a. Active Participants		
Retirement Benefits	\$ 537,686,828	\$ 551,058,430
Withdrawal Benefits	8,693,210	11,940,927
Disability Benefits	30,759,304	32,672,953
Death Benefits	3,049,862	3,243,293
Total	580,189,204	598,915,603
b. Participants with Deferred Benefits	48,359,493	47,209,402
c. Participants Receiving Benefits	863,522,865	853,135,764
d. Actuarial Accrued Liability (a. + b. + c.)	1,492,071,562	1,499,260,769
2. Actuarial Value of Assets	1,620,157,072	1,670,600,679
<b>3. Unfunded Actuarial Accrued Liability</b> (1.d. - 2.)	<b>\$ (128,085,510)</b>	<b>\$ (171,339,910)</b>



## 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, 2001.

1. Expected Actuarial Accrued Liability	
a. Actuarial Accrued Liability at January 1, 2001	\$ 1,499,260,769
b. Normal Cost at January 1, 2001	18,232,202
c. Interest on <i>a. + b.</i> to End of Year	128,986,903
d. Benefit Payments for Plan Year Ending December 31, 2001, with Interest to End of Year	99,116,701
e. Expected Actuarial Accrued Liability Before Change ( <i>a. + b. + c. - d.</i> )	1,547,363,173
f. Change in Actuarial Accrued Liability at January 1, 2002, Due to Change in Plan Provisions and Actuarial Assumptions	(71,619,398)
g. Expected Actuarial Accrued Liability at January 1, 2002 ( <i>e. + f.</i> )	1,475,743,775
2. Actuarial Accrued Liability at January 1, 2002	1,492,071,562
3. Liability Gain/(Loss) ( <i>1.g. - 2.</i> )*	(16,327,787)
4. Expected Actuarial Value of Assets	
a. Actuarial Value of Assets at January 1, 2001	1,670,600,679
b. Interest on <i>a.</i> to End of Year	142,001,058
c. Contributions Made for Plan Year Ending December 31, 2001	2,646,523
d. Interest on <i>c.</i> to End of Year	1,831
e. Benefit Payments for Plan Year Ending December 31, 2002 with Interest to End of Year	99,116,701
f. Expense Reimbursed from Trust to the County	780,362
g. Expected Actuarial Value of Assets January 1, 2002 ( <i>a. + b. + c. + d. - e - f.</i> )	1,715,353,028
5. Actuarial Value of Assets as of January 1, 2002	1,620,157,072
6. Actuarial Asset Gain/(Loss) ( <i>5. - 4.g.</i> )	(95,195,956)
7. Actuarial Gain/(Loss) ( <i>3. + 6.</i> )	\$ (111,523,743)

\* The \$16,327,787 liability loss is comprised of a loss of \$10,516,557 due to salary increases higher than expected and a loss of \$5,811,230 due to the net population change.

## Normal Cost

	January 1, 2002	January 1, 2001
1. Present Value of Projected Benefits		
a. Active Participants		
Retirement Benefits	\$ 655,665,074	\$ 675,918,144
Withdrawal Benefits	26,498,376	31,580,686
Disability Benefits	40,255,211	42,725,794
Death Benefits	4,995,181	5,417,854
Total	727,413,842	755,642,478
b. Participants with Deferred Benefits	48,359,493	47,209,402
c. Participants Receiving Benefits	863,522,865	853,135,764
d. Total	1,639,296,200	1,655,987,644
2. Actuarial Value of Assets	1,620,157,072	1,670,600,679
3. Unfunded Actuarial Accrued Liability	(128,085,510)	(171,339,910)
4. Present Value of Future Normal Costs (1.d. - 2. - 3.)	147,224,638	156,726,875
5. Present Value of Future Salaries	1,946,462,476	2,041,241,480
6. Normal Cost Rate (4. ÷ 5.)	7.564%	7.678%
7. Expected Salaries	237,734,236	237,460,296
8. Normal Cost (6. × 7.)	\$ 17,982,218	\$ 18,232,202

## 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, 2002 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> )	\$ (11,072,141)
2. a. Normal Cost	17,982,218
b. Interest to December 31, 2002	1,618,400
c. Normal Cost with Interest	19,600,618
3. Total Funding Calculation, End-of-Year Basis (1. + 2c., not less than zero)	\$ 8,528,477

### B. Funding Budget Policy

	Plan Year Ending	
	December 31, 2003	December 31, 2002
1. Net Annual Amortizations	\$ 245,307	\$ (19,135,525)
2. a. Normal Cost	18,582,485	17,057,949
b. Interest	1,672,424	1,535,215
c. Normal Cost with Interest	20,254,909	18,593,164
3. Total Funding Budget Policy, End-of-Year Basis (1. + 2.c., not less than zero)	\$ 20,500,216	\$ 0

### C. Projected Lump-Sum Contribution For Year

	Plan Year Ending	
	December 31, 2003	December 31, 2002
1. Total Funding Policy Budget	\$ 20,500,216	\$ 0
2. a. Estimated Biweekly Contribution	475,000	525,000
b. Interest	21,375	22,313
c. Biweekly Contribution with Interest	496,375	547,313
3. Net Funding Policy Budget (1. - 2.c., not less than zero)	\$ 20,003,841	\$ 0

**D. Amortization Schedule for Funding Calculation (continued)**

Annual amortizations 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 contribution for the year and the contribution for the year to maintain the funding schedule is amortized on a level dollar basis over 5 years.

Charges	Amortization Period			Balances		Payment
	Date Created	Initial Years	Last Payment	Initial	Outstanding	
Expense	1/1/1997	10	2006	\$ 689,121	\$ 413,878	\$ 106,405
Expense	1/1/1998	10	2007	739,537	513,241	114,412
Expense	1/1/1999	10	2008	710,319	554,120	110,098
Expense	1/1/2000	10	2009	655,908	563,724	101,850
Expense	1/1/2001	10	2010	799,202	745,329	124,320
Expense	1/1/2002	10	2011	780,362	780,362	121,596
Variance	1/1/2002	5	2006	5,938,089	5,938,089	1,526,638
<b>Total</b>					<b>\$ 9,508,743</b>	<b>\$ 2,205,319</b>
Credits	Date Created	Initial Years	Last Payment	Initial	Outstanding	Payment
Variance	1/1/1998	5	2002	2,370,494	554,425	604,323
Variance	1/1/1999	5	2003	6,507,384	2,924,733	1,662,620
Variance	1/1/2000	5	2004	5,061,294	3,280,343	1,295,915
Variance	1/1/2001	5	2005	828,375	688,574	212,541
Reestablished Unfunded	1/1/2002	20	2021	130,146,178	130,146,178	9,502,061
<b>Total</b>					<b>\$ 137,594,253</b>	<b>\$ 13,277,460</b>
<b>Net Amount</b>					<b>\$ (128,085,510)</b>	<b>\$ (11,072,141)</b>

**E. Summary of Reconciliation of Budget Contributions**

<b>I. 2002 Funding Budget (Calculated in 2001)</b>		<b>\$ (542,361)</b>
<b>a. Impact of Investment Return</b>		
i. 2001 Asset Loss	\$ 4,309,538	
ii. Recognition of Losses Over Previous 5 Years	5,208,257	
iii. 2002 Contribution Variance	1,499,582	
iv. Subtotal		11,017,377
<b>b. Impact of Plan Changes</b>		
i. 3-year Final Average Salary	1,080,936	
ii. Recognition of 2002 Retirees	879,151	
iii. Backdrop Utilization Assumption	2,019,411	
iv. IRS Law Change	464,613	
v. 2001 Contribution Variance	1,404,929	
vi. Resetting Normal Cost Multiplier at 2%	1,138,213	
vii. Subtotal		6,987,253
<b>c. Other Factors</b>		
i. Projected Growth Due to Level Percentage	1,284,402	
ii. New Entrants	910,707	
iii. Demographic Experience	842,838	
iv. Subtotal		3,037,947
<b>II. 2003 Funding Budget</b>		<b>\$ 20,500,216</b>

## 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, 2002	January 1, 2001
1. Covered Payroll	\$ 238,387,178	\$ 238,195,006
2. Unfunded Amount	(128,085,510)	(171,339,910)
3. Amortization Payment	(11,072,141)	(11,195,496)
4. Payment as a Level Percentage of payroll (3 ÷ 1)	(4.64%)	(4.70%)
5. Weighted Average Amortization Factor (2 ÷ 3)	11.57	15.3
6. Equivalent Single Amortization Period (Nearest Whole Year)	16	22

## **Section 2: Plan Assets**

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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.

## Summary of Assets

Asset Category	Market Value as of December 31, 2001
1. Cash and Equivalents	\$ 13,929,450
2. General Investments	
▪ Common Stock (Domestic)	549,986,363
▪ International Common and Preferred Stock	199,677,824
▪ Federal Agency Mortgages/Loans	94,016,805
▪ U.S. Government Obligations	23,097,464
▪ Corporate Bonds	495,879,424
▪ International Fixed Income	60,746,039
▪ Real Estate Investment Trusts	33,159,319
▪ SBA Loan Backed Securities	134,786
▪ Investment in Partnerships	16,673,617
▪ Total Investments	1,473,371,641
3. Securities Lending - Collateral	91,605,927
4. Receivables	
▪ Accounts Receivable	26,945,581
▪ Investment Income	8,582,093
5. Payables	
▪ Payable to OBRA Pension Plan	662,409
▪ Accounts Payable	134,359,725
6. Net Assets in the Trust (1. + 2. + 3. + 4. - 5.)	1,479,412,558
7. Contributions Receivable	2,370,618
<b>8. Net Assets Available for Benefits (6. + 7.)</b>	<b>\$ 1,481,783,176</b>



## Reconciliation of Assets

Transactions	January 1, 2001 to January 1, 2002
<b>Income</b>	
1. Contributions Received or Receivable	
▪ County of Milwaukee	\$ 2,646,523
▪ Plan Participants	265,567
2. Investment Earnings	
▪ Unrealized Gains/(Losses)	(107,408,692)
▪ Realized Gains/(Losses)	22,635,949
▪ Interest and Dividends	55,555,759
▪ Security Lending Income	3,478,739
▪ Unclassified Income	532,883
▪ Security Lending Rebates & Fees	(3,103,672)
▪ Investment Expense	(4,195,202)
3. Other Income	0
<b>4. Total Income</b>	<b>\$ (29,592,146)</b>
<b>Disbursements</b>	
5. Benefit Payments	\$ 95,075,972
6. Administrative Expenses	1,193,862
<b>7. Total Disbursements</b>	<b>96,269,834</b>
<b>8. Net Income (4. - 7.)</b>	<b>(125,861,980)</b>
9. Net Assets at Beginning of Year	1,607,645,156
<b>10. Net Assets at End of Year (8. + 9.)</b>	<b>\$ 1,481,783,176</b>

### Actuarial Value of Assets

1. Market Value of Assets, December 31, 2001	\$	1,481,783,176
2. Less 80% of Unrealized Gains and Losses in 2001: \$ (107,408,692)		(85,926,954)
3. Less 60% of Unrealized Gains and Losses in 2000: \$ (163,597,647)		(98,158,588)
4. Less 40% of Unrealized Gains and Losses in 1999: \$ 151,693,413		60,677,365
5. Less 20% of Unrealized Gains and Losses in 1998: \$ (74,828,595)		(14,965,719)
6. Actuarial Value of Assets, December 31, 2001 (1. - 2. - 3. - 4. - 5.)	\$	<b>1,620,157,072</b>

As of	Market Value	Actuarial Asset Value	Estimated Rate of Return		Assumed Rate of Return
			Market	Actuarial	
12/31/1997	\$ 1,506,074,230	\$ 1,442,015,740	19.8%	19.6%	8.5%
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
Compound Rate of Return (5 years):			7.7%	10.5%	

**Contributions for Prior Plan Year**

	Amount		Interest	Total
	Employer	Employee		
Bi-weekly	\$ 2,646,543	\$ 265,567	\$ 1,831	\$ 2,913,921
<b>Total</b>	<b>\$ 2,646,523</b>	<b>\$ 265,567</b>	<b>\$ 1,831</b>	<b>\$ 2,913,921</b>

## **Section 3: Basis of Valuation**

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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.

## Plan Participants

### A. Participant Data Reconciliation

	Active Participants	Inactive Participants		Total
		With Deferred Benefits	Receiving Benefits	
<b>Total at January 1, 2001</b>	<b>6,318</b>	<b>1,342</b>	<b>6,515</b>	<b>14,175</b>
Vested Terminations	(50)	50	N/A	0
Nonvested Terminations	(508)	N/A	N/A	(508)
Retirements	(128)	(37)	165	0
Deaths, Expiration of Benefits, and Incorrectly Reported	(4)	(2)	(169)	(175)
Rehires	98	(5)	0	93
New Entrants	351	N/A	N/A	351
Net Change	(241)	6	(4)	(239)
<b>Total at January 1, 2002</b>	<b>6,077</b>	<b>1,348</b>	<b>6,511</b>	<b>13,936</b>

## B. Count of Active Participants at January 1, 2002

## 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	95									95
25 - 29	259	10								269
30 - 34	286	78	30	5						399
35 - 39	213	137	168	40	4					562
40 - 44	211	133	249	140	60	1				794
45 - 49	161	153	285	210	194	63	1			1,067
50 - 54	107	127	248	164	216	220	57	1		1,140
55 - 59	66	75	140	118	86	94	100	9		688
60 - 64	26	35	87	42	40	20	21	14		285
65 - 69	4	12	23	13	15	5	3	1		76
70 - 74		2	1	2	1	2				8
75+		1	2	1		1				5
<b>Total</b>	<b>1,428</b>	<b>763</b>	<b>1,233</b>	<b>735</b>	<b>616</b>	<b>406</b>	<b>182</b>	<b>25</b>	<b>0</b>	<b>5,388</b>

## B. Count of Active Participants at January 1, 2002 (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	21									21
25 - 29	69	20								89
30 - 34	75	90	5							170
35 - 39	18	57	39	5						119
40 - 44	10	21	29	15	4					79
45 - 49	1	10	27	22	27	7				94
50 - 54	1	7	8	13	20	12	1			62
55 - 59			2	4	6	9	2			23
60 - 64							1			1
65 - 69										0
70 - 74										0
75+										0
<b>Total</b>	<b>195</b>	<b>205</b>	<b>110</b>	<b>59</b>	<b>57</b>	<b>28</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>658</b>

## B. Count of Active Participants at January 1, 2002 (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										0
30 - 34										0
35 - 39	1	3								4
40 - 44		2	1							3
45 - 49		5	1		1	1				8
50 - 54		2	1			1	1			5
55 - 59	2	2		1	2					7
60 - 64					1		2			3
65 - 69								1		1
70 - 74										0
75+										0
<b>Total</b>	<b>3</b>	<b>14</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>31</b>



## C. Participant Statistics

Inactive Participants as of January 1, 2002	Number	Amount of Monthly Benefit
Participants Receiving Benefits	6,511	\$ 7,475,117
Participants with Deferred Benefits	1,348	\$ 774,207

Statistics for Active Participants	Number	Average		
		Age	Service	Compensation*
<b>As of January 1, 2001</b>				
Total	6,318	44.6	12.1	\$ 37,701
<b>As of January 1, 2002</b>				
Total	6,077	45.3	12.7	\$ 39,228

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

## 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.

## 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	
Investment Return	<ul style="list-style-type: none"> <li>▪ 9.0% per year compounded annually.</li> </ul> Investment return is assumed to be net of investment management expense.
Salary Increases	Averages 5.5% per year compounded annually. See table on following page for sample values.
Mortality	a. Active participants and nondisabled pensioners: The sex-distinct 1994 Uninsured Pensioner Table. b. Disabled pensioners: 1985 Unisex Pension Disability Mortality Table.
Disability	Graduated rates. See table on following page for sample values.
Withdrawal	Graduated rates. Select and ultimate based on duration of service. See tables on following pages for sample values.
Retirement Age	See table on following page.
Percentage Married	<ul style="list-style-type: none"> <li>▪ Males 80%</li> <li>▪ Females 80%</li> </ul>
Age Difference	Beneficiaries are assumed to be the same age as the participant.
Backdrop	25% of retirees are assumed to elect a Backdrop of 3 years but not earlier than participant's earliest full retirement date.

## D. Actuarial Assumptions (continued)

Table of Sample Rates							
Percentage							
Attained Age	Mortality				Withdrawal - Ultimate		
	Healthy		Disabled		General	Elected*	Deputy Sheriffs
	Males	Females	Males	Females			
20	0.05	0.03	.02	.02	9.81	4.50	4.50
25	0.07	0.03	.03	.03	9.58	4.48	4.48
30	0.09	0.04	.07	.07	9.01	4.23	4.23
35	0.09	0.05	.12	.12	7.15	3.00	3.00
40	0.12	0.08	.18	.18	5.15	1.24	1.24
45	0.17	0.10	.20	.28	3.72	0.55	0.55
50	0.28	0.15	.48	.48	2.73	0.22	0.22
55	0.48	0.25	.87	.87	1.84	0.00	0.00
60	0.86	0.48	1.38	1.38	0.00	0.00	0.00
65	1.56	0.93	0.00	0.00	0.00	0.00	0.00

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

Sample Annual Rates per 100 Participants					
Employment Age	Separation - Select Rates General Employees				
	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
60	0.0	0.0	0.0	0.0	0.0

## D. Actuarial Assumptions (continued)

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

**D. Actuarial Assumptions (continued)**

<b>Earnings Progression</b>			
<b>Age</b>	<b>General</b>	<b>Deputy Sheriffs</b>	<b>Elected</b>
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

## Summary of Plan Provisions

<b>Plan Name</b>	Employees' Retirement System of the County of Milwaukee.												
<b>Effective Date</b>	December 24, 1967.												
<b>Type of Plan</b>	Municipal retirement system administered by the Pension Board.												
<b>Employer</b>	County of Milwaukee.												
<b>Employees Included</b>	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.												
<b>Service Considered</b>	<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 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												
<b>Benefit Service</b>	Used in determining the amount of benefits. Same as Vesting Service except service prior to becoming a Participant does not count.												

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**Summary of Plan Provisions (continued)**

<b>Earnings Considered</b>	<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 \$150,000 in the pension calculation as indexed for changes in the cost of living.</p> <p>For members hired before January 1, 1982, 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%. For members whose continuous membership began after January 1, 1982, the average annual earnable compensation shall be the highest five (5) consecutive calendar years.</p>
<b>County Contributions</b>	<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>
<b>Voluntary Employee Contributions</b>	<p>Up to 10% of earnings, providing the employee was contributing on January 1, 1971.</p>



### Summary of Plan Provisions (continued)

<p><b>Normal Pension</b></p>	<p>Payable upon request of any member who has attained the minimum service and retirement age.</p> <p>a. The minimum age and service requirements:</p> <ul style="list-style-type: none"> <li>(1) For general employees and elected officials: Age 60 and any service.</li> <li>(2) For non-union general employees and certain union general employees: The combination of age and service adding up to 75.</li> <li>(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.</li> <li>(4) For all members: Age 55 and 30 years of service.</li> </ul> <p>b. The benefit is the sum of:</p> <ul style="list-style-type: none"> <li>(1) Pension portion, plus</li> <li>(2) Any voluntary contribution.</li> </ul> <p>c. The pension portion retirement allowance is:</p> <ul style="list-style-type: none"> <li>(1) (a) For general employees whose continuous membership began prior to January 1, 1982 – 2% of final average salary per year of service.</li> <li>(b) For those general employees whose membership began on or after January 1, 1982– 1.5% of final average salary per year of service.</li> <li>(c) For firefighters whose membership began prior to January 1, 1999 – 1.5% of final average salary per year of service.</li> <li>(d) For DA investigators and non-represented deputy sheriffs whose membership began on or after January 1, 1982 and prior to July 1, 1995 – 2 ½% of final average salary per year of service.</li> <li>(e) For the elected officials and deputy sheriffs whose membership began prior to January 1, 1982 – 2-1/2% of final average salary per year of service.</li> <li>(f) For elected officials whose membership began on or after January 1, 1982 – 2% of final average salary per year of service.</li> <li>(g) For those deputy sheriffs whose membership</li> </ul>
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## Summary of Plan Provisions (continued)

	<p>began on or after January 1, 1982 but before July 1, 1995 – 2-1/2% of final average salary per year of service.</p> <p>(h) For those deputy sheriffs whose membership began on or after July 1, 1995 – 2% of final average salary per year of service.</p> <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>
<b>Early Pension</b>	Age 55 and 15 years of service reduced by 5/12 of 1% for each month payment starts preceding normal retirement age.
<b>Ordinary Disability Pension</b>	After 15 years of creditable service. Benefit computed as for normal retirement benefits. Minimum benefit 25% of final salary.
<b>Accidental Disability Pension</b>	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.
<b>Ordinary Death Benefit</b>	<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 is limited to \$2,000.</p>

### Summary of Plan Provisions (*continued*)

<p><b>Accidental Death Benefit</b></p>	<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>
<p><b>Deferred Vested Pension</b></p>	<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"> <li>a. The accrued pension at age 60 is at least \$10 per month.</li> <li>b. He has at least 5 years of service.</li> </ol> <p>The benefit is computed the same as for a normal pension considering earnings and service prior to date of termination.</p>
<p><b>Survivor Benefit</b></p>	<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>

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**Summary of Plan Provisions (continued)**

<b>Optional Benefits</b>	<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>
<b>Other Benefits</b>	<ul style="list-style-type: none"> <li>a. Provide 2% of initial benefit automatic increase per year to retired employees.</li> <li>b. Refund of employee voluntary contribution upon severance.</li> <li>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.</li> </ul>
<b>Expenses</b>	Paid by County.
<b>Minimum Benefit</b>	Not less than under previous system.

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

Actuarial Valuation Report as of January 1, 2002  
for the Plan Year and Taxable Year Ending  
December 31, 2002

**May 2002**

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## Highlights

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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, 2002;
- Present the results of a valuation of the Plan as of January 1, 2002; and
- Review experience under the Plan for the year ended December 31, 2001.

The following table summarizes important contribution information.

Contributions	Plan Year Ending	
	December 31, 2002	December 31, 2001
Funding calculation	\$ 263,691	\$ 251,706
<i>Change between years</i>	\$ 11,985	N/A

The 2003 budget contribution is \$279,727.

## 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, 2002	January 1, 2001
<b>Funding Valuation</b>		
Actuarial Accrued Liability	\$ 1,890,289	\$ 1,845,671
<i>Funded Ratio</i>	35.04%	33.19%
Actuarial Value of Assets	662,409	612,583
Unfunded Actuarial Accrued Liability	1,227,880	1,233,088
Normal Cost	\$ 94,065	\$ 107,224
<i>Percentage of Compensation</i>	1.08%	1.22%

<b>Participant Data</b>		
Number of Participants in Valuation		
Active Participants	1,822	1,833
Participants with Deferred Benefits	6,139	5,721
<b>Total</b>	<b>7,961</b>	<b>7,554</b>
Total Compensation*	\$ 8,712,677	\$ 8,782,583

The liability measures shown above are developed throughout the report.

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



## Changes

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### Plan Amendment

- A required plan change increasing the maximum annual benefit from \$140,000 to \$160,000 was recognized.

### Assumption Changes

The Pension Board adopted the following assumption changes effective January 1, 2002:

- The investment return assumption was changed from 8.5% to 9%.
- The period of amortization for all plan changes, assumption changes, and actuarial experience was changed to 20 years. All future changes are amortized over 20 years from the date established.

## Certification

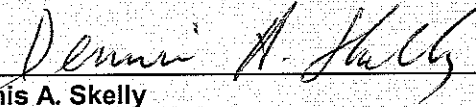

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We have prepared an actuarial valuation of the OBRA 1990 Retirement System for the County of Milwaukee as of January 1, 2002 for the plan year ending December 31, 2002. The results of the valuation are set forth in this report, which reflects the provisions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

The valuation is based on employee and financial data which were provided by the County of Milwaukee.

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.

 Dennis A. Skelly Associate, Society of Actuaries Enrolled Actuary No. 02-3209	 Glenn W. Soderstrom, FSA, MAAA, FCA Enrolled Actuary No. 02-2873
	Date 5/23/2002
Mercer Human Resource Consulting 411 E. Wisconsin Avenue, Suite 800 Milwaukee, Wisconsin 53202-4417 (414) 223-4200	

## **Section 1: Funding Results**

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- 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.

## 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, 2002	January 1, 2001
1. Actuarial Accrued Liability		
a. Active Participants	\$ 791,033	\$ 729,306
b. Participants with Deferred Benefits	1,099,256	1,116,365
c. Participants Receiving Benefits	0	0
d. Actuarial Accrued Liability (a. + b. + c.)	1,890,289	1,845,671
2. Actuarial Value of Assets	662,409	612,583
<b>3. Unfunded Actuarial Accrued Liability</b> (1.d. - 2., not less than \$0)	<b>\$ 1,227,880</b>	<b>\$ 1,233,088</b>

## 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, 2001	\$ 1,845,671
b. Normal Cost at January 1, 2001	107,224
c. Interest on <i>a.</i> + <i>b.</i> to End of Year	165,996
d. Benefit Payments for Plan Year Ending December 31, 2001, with Interest to End of Year	91,126
e. Expected Actuarial Accrued Liability Before Change ( <i>a.</i> + <i>b.</i> + <i>c.</i> - <i>d.</i> )	2,027,765
f. Change in Actuarial Accrued Liability at January 1, 2002 Due to Change in Plan Provisions and Actuarial Assumptions	(185,689)
g. Expected Actuarial Liability at January 1, 2002 ( <i>e.</i> + <i>f.</i> )	1,842,076
2. Actuarial Accrued Liability at January 1, 2002	1,890,289
3. Liability Gain/(Loss) ( <i>1.g.</i> - <i>2.</i> )	(48,213)
4. Expected Actuarial Value of Assets	
a. Actuarial Value of Assets at January 1, 2001	612,583
b. Interest on <i>a.</i> to End of Year	52,070
c. Contributions Made for Plan Year Ending December 31, 2001	250,094
d. Interest on <i>c.</i> to End of Year	0
e. Benefit Payments for Plan Year Ending December 31, 2001, with Interest to End of Year	91,126
f. Expense Paid by Plan During 2001	109,857
g. Expected Actuarial Value of Assets January 1, 2002 ( <i>a.</i> + <i>b.</i> + <i>c.</i> + <i>d.</i> - <i>e.</i> - <i>f.</i> )	713,764
5. Actuarial Value of Assets as of January 1, 2002	662,409
6. Actuarial Asset Gain/(Loss) ( <i>5.</i> - <i>4.g.</i> )	(51,355)
7. Actuarial Gain/(Loss) ( <i>3.</i> + <i>6.</i> )	\$ (99,568)

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**Normal Cost**

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

	January 1, 2002	January 1, 2001
Retirement Benefits	\$ 68,371	\$ 76,707
Withdrawal Benefits	25,694	30,517
Expenses	0	0
<b>Total Normal Cost</b>	<b>\$ 94,065</b>	<b>\$ 107,224</b>

## 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, 2002 are shown below.

### A. Actual 2002 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> )	\$	161,160
2. a. Normal Cost		94,065
b. Interest		8,466
c. Normal Cost with Interest		102,531
3. Total Funding Calculation, End-of-Year Basis ( <i>1. + 2.c.</i> )	\$	263,691

### B. Estimated 2003 Budget

	Plan Year Ending	
	December 31, 2003	December 31, 2002
1. Net Annual Amortizations	\$ 167,968	\$ 148,745
2. Normal Cost with Interest	111,759	126,227
3. Total Funding Policy Budget, End-of-Year Basis ( <i>1. + 2.</i> )	\$ 279,727	\$ 274,972

### C. Amortization Schedule for Funding Calculation

Annual amortizations 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 contribution for the year and the contribution for the year to maintain the funding schedule is amortized over 5 years.

Charges	Amortization Period			Balances		Payment
	Date Created	Initial Years	Last Payment	Initial	Outstanding	
1993-1996 Expenses	1/1/1997	10	2006	243,729	146,381	37,633
Contribution Variance	1/1/1998	5	2002	20,972	4,905	5,347
Expenses	1/1/1998	10	2007	96,137	66,720	14,873
Expenses	1/1/1999	10	2008	81,673	63,711	12,659
Expenses	1/1/2000	10	2009	85,685	73,642	13,305
Expenses	1/1/2001	10	2010	100,656	93,871	15,658
Reestablished Unfunded	1/1/2002	20	2021	\$ 681,555	\$ 681,555	\$ 51,773
Variance	1/1/2002	5	2006	1,612	1,612	414
Expenses	1/1/2002	10	2011	109,857	109,857	17,118
<b>Total</b>					<b>\$ 1,242,254</b>	<b>\$ 168,780</b>
<b>Credits</b>						
Variance	1/1/1999	5	2003	25,619	11,515	6,546
Variance	1/1/2000	5	2004	3,421	2,218	876
Variance	1/1/2001	5	2005	771	641	198
<b>Total</b>					<b>\$ 14,374</b>	<b>\$ 7,620</b>
<b>Net Amount</b>					<b>\$ 1,227,880</b>	<b>\$ 161,160</b>



**D. Reconciliation**

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

1. 2002 Funding Policy Budget ( <i>based on January 1, 2001 valuation results</i> )	\$	274,972
2. Expected Increase in Normal Cost and Amortization Payment Before Recognition of 2002 Experience		15,812
3. Plan and Assumption Changes		(12,790)
4. 2001 Experience Different than Expected		
a. Asset Gain (Loss)		(4,096)
b. Other		(3,737)
c. Total ( <i>a. + b.</i> )		(7,833)
5. Recognition of Anticipated 2002 Expenses and Contribution Variance		9,566
6. 2003 Funding Policy Budget	\$	279,727

## **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	\$ 8,712,677	\$ 8,782,583
2. Unfunded Amount	1,227,880	1,233,088
3. Amortization Payment	161,160	135,368
4. Payment as a Level Percentage of Payroll ( $3 \div 1$ )	1.85%	1.54%
5. Weighted Average Amortization Factor ( $2 \div 3$ )	7.62	9.11
6. Equivalent Single Amortization Period (Nearest Whole Year)	10	12

## **Section 2: Plan Assets**

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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.

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**Summary of Assets**

<b>Asset Category</b>	<b>Market Value as of December 31, 2001</b>
1. Cash and Equivalents	\$ 176
2. Assets Held by ERS Pension Plan	412,139
3. Contributions Receivable	250,094
4. Net Assets Available for Benefits (1. + 2. + 3.)	\$ 662,409

## Reconciliation of Assets

Transactions	January 1, 2001 to January 1, 2002
<b>Income</b>	
1. Contributions Received or Receivable	\$ 250,094
2. Investment Income	(3,000)
<b>3. Total Income</b>	<b>\$ 247,094</b>
<b>Disbursements</b>	
4. Benefit Payments	\$ 87,411
5. Investment and Administrative Expenses	109,857
<b>6. Total Disbursements</b>	<b>197,268</b>
<b>7. Net Income (3. - 6.)</b>	<b>49,826</b>
8. Net Assets at Beginning of Year	612,583
<b>9. Net Assets at End of Year (7. + 8.)</b>	<b>\$ 662,409</b>

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## Actuarial Value of Assets

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

	January 1, 2002	January 1, 2001
Actuarial Asset Value	\$ 662,409	\$ 612,583

**Contributions for Prior Plan Year**

	Amount		Interest	Total
	Employer	Employee		
Contribution	\$ 250,094	\$ 0	\$ 0	\$ 250,094
<b>Total</b>	<b>\$ 250,094</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 250,094</b>

## **Section 3: Basis of Valuation**

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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.



## Plan Participants

### A. Participant Data Reconciliation

	Active Participants	Inactive Participants	Total
<b>Total at January 1, 2001</b>	<b>1,833</b>	<b>5,721</b>	<b>7,554</b>
Did Not Accrue Benefit in 2001	(734)	734	0
Lump-Sum Payouts	(1)	(255)	(256)
Deaths	(2)	(1)	(3)
New Participants	660	0	660
Inactives -- Began Accruing Benefit in 2001	78	(78)	0
Data Correction	(12)	18	6
<b>Total at January 1, 2002</b>	<b>1,822</b>	<b>6,139</b>	<b>7,961</b>

## B. Count of Active Participants at January 1, 2002

Age	Years of Service									Total
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	
Under 20	551									551
20 - 24	652	130								782
25 - 29	76	57	2							135
30 - 34	41	9	2							52
35 - 39	37	12	4							53
40 - 44	28	15	6							49
45 - 49	22	14	1							37
50 - 54	21	14	2							37
55 - 59	16	20	3							39
60 - 64	14	6	2							22
65 - 69	12	12	3							27
70 - 74	5	11	3							19
75+	5	8	6							19
<b>Total</b>	<b>1,480</b>	<b>308</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,822</b>

## C. Participant Statistics

Inactive Participants as of January 1, 2002	Number	Amount of Monthly Benefit
Participants Receiving Benefits	0	\$ 0
Participants with Deferred Benefits	6,139	90,693

Statistics for Active Participants	Number	Average		
		Age	Service	Compensation*
<b>As of January 1, 2001</b>				
Total	1,833	25.7	1.0	\$ 4,791
<b>As of January 1, 2002</b>				
Total	1,822	25.8	1.0	\$ 4,782

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

## 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, difference 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.

## D. Actuarial Assumptions

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

Sample Annual Decrement Rates per 100 Participants								
Employment	Mortality		Separation - Select Rates General Employees					
Age	Male	Female	0	1	2	3	4	5
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

## Summary of Plan Provisions

<b>Plan Name</b>	OBRA 1990 Retirement System of the County of Milwaukee.
<b>Effective Date</b>	January 1, 1992.
<b>Type of Plan</b>	Municipal retirement system administered by the Pension Board.
<b>Employer</b>	County of Milwaukee.
<b>Employees Included</b>	<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"> <li>▪ hired to relieve him from unemployment</li> <li>▪ of a hospital, home, or institution where he is an inmate</li> <li>▪ who is a temporary employee to handle fire, storm, snow, earthquake or similar emergencies</li> <li>▪ paid on a fee basis as self-employed, or</li> <li>▪ who is a member of the collective bargaining unit covered by an agreement which does not provide for his inclusion.</li> </ul>
<b>Service Considered</b>	<p>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.</p>
<b>Earnings Considered</b>	<p>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.</p>
<b>Average Compensation</b>	<p>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.</p>
<b>Normal Retirement Pension</b>	<p>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).</p>
<b>Deferred Vested Pension</b>	<p>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.</p>

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