

July 2005

Actuarial Valuation Reports

County of Milwaukee

MERCER
Human Resource Consulting

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July 2005

Employees' Retirement System of the County of Milwaukee

Actuarial Valuation Report as of January 1, 2005 for the
Plan Year and Fiscal Year Ending December 31, 2005

MERCER

Human Resource Consulting

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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, 2005;
- Present the results of a valuation of the Plan as of January 1, 2005; and
- Review experience under the Plan for the year ended December 31, 2004.

The following table summarizes important contribution information.

Contributions	Plan Year Ending	
	December 31, 2005	December 31, 2004
Funding Calculation	\$ 37,607,940	\$ 33,248,204
Percentage of Payroll	15.85%	14.24%

The funding calculation is the amount required to pay the normal cost for the year and amortize the unfunded accrued actuarial liability as a level percentage of pay over the next 30 years.

Following Year's Budget Contribution

The 2006 budget contribution is \$45,933,000.

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, 2005	January 1, 2004
Funding Valuation		
Market Value of Assets	\$ 1,550,112,389	\$ 1,493,450,359
Actuarial Value of Assets	1,424,917,604	1,446,725,776
Actuarial Accrued Liability	1,782,883,932	1,707,998,621
<i>Funded Ratio</i>	79.92%	84.70%
Unfunded Actuarial Accrued Liability	357,966,328	261,272,845
Normal Cost	\$ 16,760,182	\$ 18,568,117
<i>Percentage of Payroll</i>	8.01%	7.97%
Participant Data		
Number of Participants in Valuation		
Active Participants	4,980	5,465
Participants with Deferred Benefits	1,430	1,559
Participants Receiving Benefits	7,299	6,695
Total	13,709	13,719
Membership Payroll*	\$ 209,795,776	\$ 233,477,631

The liability measures shown above are developed throughout the report.

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

Changes

There were no changes for the January 1, 2005 plan year.

For 2006 budget purposes, the following assumption changes were recognized:

- The investment return assumption was lowered from 8.5% to 8.0%
- The backdrop utilization assumption was changed from 50% to 70%

Certification

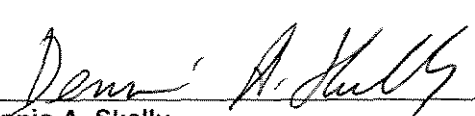
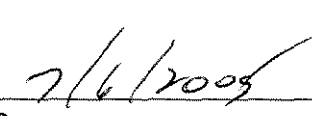

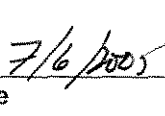
We have prepared an actuarial valuation of the Employees' Retirement System for the County of Milwaukee as of January 1, 2005 for the plan year ending December 31, 2005. The results of the valuation are set forth in this report, which reflects the provisions of the Plan effective December 24, 1967, incorporating 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.

This report has been prepared exclusively for the County of Milwaukee to determine a contribution budget for the Employees' Retirement System of the County of Milwaukee and to provide the plan's accountants with the funded status of the plan. Mercer Human Resource Consulting is not responsible for any consequences arising from the use of this report for any other purpose.

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. 05-3209	 Date
 Glenn W. Soderstrom Fellow, Society of Actuaries Enrolled Actuary No. 05-2873	 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, 2005	January 1, 2004
1. Actuarial Accrued Liability		
a. Active Participants		
Retirement Benefits	\$ 451,306,892	\$ 596,083,376
Withdrawal Benefits	12,984,850	12,412,951
Disability Benefits	29,314,145	36,342,560
Death Benefits	1,862,161	2,441,486
Total	495,468,048	647,280,373
b. Participants with Deferred Benefits	60,991,275	61,467,997
c. Participants Receiving Benefits	1,226,424,609	999,250,251
d. Actuarial Accrued Liability (a. + b. + c.)	1,782,883,932	1,707,998,621
2. Actuarial Value of Assets	1,424,917,604	1,446,725,776
3. Unfunded Actuarial Accrued Liability (1.d. - 2.)	\$ 357,966,328	\$ 261,272,845

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, 2005.

1. Expected Actuarial Accrued Liability		
a. Actuarial Accrued Liability at January 1, 2004	\$	1,707,998,621
b. Normal Cost at January 1, 2004		18,568,117
c. Interest on <i>a. + b.</i> to End of Year		146,758,173
d. Benefit Payments for Plan Year Ending December 31, 2004, with Interest to End of Year		168,226,870
e. Expected Actuarial Accrued Liability Before Change (<i>a. + b. + c. - d.</i>)		1,705,098,041
f. Change in Actuarial Accrued Liability at January 1, 2005, Due to Change in Plan Provisions and Actuarial Assumptions		0
g. Expected Actuarial Accrued Liability at January 1, 2005 (<i>e. + f.</i>)		1,705,098,041
2. Actuarial Accrued Liability at January 1, 2005		1,782,883,932
3. Liability Gain/(Loss) (<i>1.g. - 2.</i>)		(77,785,891)
4. Expected Actuarial Value of Assets		
a. Actuarial Value of Assets at January 1, 2004		1,446,725,776
b. Interest on <i>a.</i> to End of Year		122,971,691
c. Contributions Made for Plan Year Ending December 31, 2004		35,134,271
d. Interest on <i>c.</i> to End of Year		310,422
e. Benefit Payments for Plan Year Ending December 31, 2004 with Interest to End of Year		168,226,870
f. Expense Reimbursed from Trust to the County		1,053,714
g. Expected Actuarial Value of Assets January 1, 2005 (<i>a. + b. + c. + d. - e - f.</i>)		1,435,861,576
5. Actuarial Value of Assets as of January 1, 2005		1,424,917,604
6. Actuarial Asset Gain/(Loss) (<i>5. - 4.g.</i>)		(10,943,972)
7. Actuarial Gain/(Loss) (<i>3. + 6.</i>)	\$	(88,729,863)

Section 1.3

Normal Cost

	January 1, 2005	January 1, 2004
1. Present Value of Projected Benefits		
a. Active Participants		
Retirement Benefits	\$ 558,935,329	\$ 710,539,607
Withdrawal Benefits	30,296,568	31,152,675
Disability Benefits	38,870,033	46,536,052
Death Benefits	3,264,375	3,955,415
Total	631,366,305	792,183,749
b. Participants with Deferred Benefits	60,991,275	61,467,997
c. Participants Receiving Benefits	1,226,424,609	999,250,251
d. Total	1,918,782,189	1,852,901,997
2. Actuarial Value of Assets	1,424,917,604	1,446,725,776
3. Unfunded Actuarial Accrued Liability	357,966,328	261,272,845
4. Present Value of Future Normal Costs <i>(1.d. - 2. - 3.)</i>	135,898,257	144,903,376
5. Present Value of Future Salaries	1,697,371,757	1,818,939,516
6. Normal Cost Rate <i>(4. ÷ 5.)</i>	8.006%	7.966%
7. Expected Salaries*	209,345,260	233,092,107
8. Normal Cost <i>(6. × 7.)</i>	\$ 16,760,182	\$ 18,568,117

* 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 purposes and abides the requirements of GASB Nos. 25 and 27 for pension expenses. The County's policy and the amounts required for the plan year ending December 31, 2005 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>)	\$	19,423,143
2. a. Normal Cost		16,760,182
b. Interest to December 31, 2005		1,424,615
c. Normal Cost with Interest		18,184,797
3. Net Pension Obligation, End-of-Year Basis (<i>1. + 2c., not less than zero</i>)	\$	37,607,940

B. Funding Budget Policy

	Plan Year Ending	
	December 31, 2006	December 31, 2005
1. Net Annual Amortizations	\$ 24,444,000	\$ 16,529,000
2. a. Normal Cost	19,897,000	19,589,000
b. Interest	1,592,000	1,665,000
c. Normal Cost with Interest	21,489,000	21,254,000
3. Total Funding Budget Policy, End-of-Year Basis (<i>1. + 2.c., not less than zero</i>)	\$ 45,933,000	\$ 37,783,000

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, assumption changes and actuarial gains/losses are amortized as a level percentage of payroll, assuming payroll growth of 5.5% per year over a 30-year period. Expenses paid by the Trust and reimbursed by the County 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	\$ 186,778	\$ 105,458
Expense	1/1/1998	10	2007	739,537	289,009	113,158
Expense	1/1/1999	10	2008	710,319	355,971	108,674
Expense	1/1/2000	10	2009	655,908	395,392	100,337
Expense	1/1/2001	10	2010	799,202	556,638	122,242
Expense	1/1/2002	10	2011	780,362	610,872	119,346
Expense	1/1/2003	10	2012	1,017,500	875,984	155,339
Expense	1/1/2004	10	2013	1,052,422	981,481	160,397
Variance	1/1/2004	5	2008	48,682	40,466	12,354
Reestablished unfunded	1/1/2004	30	2033	257,960,162	266,281,212	14,353,870
Expense	1/1/2005	10	2014	1,053,714	1,053,714	160,594
Loss	1/1/2005	30	2034	88,729,863	88,729,863	4,679,869
Total					\$ 360,357,380	\$ 20,191,638

Credits	Amortization Period			Balances		
	Date Created	Initial Years	Last Payment	Initial	Outstanding	Payment
Variance	1/1/2001	5	2005	\$ 828,375	\$ 194,563	\$ 211,101
Variance	1/1/2005	5	2009	2,196,489	2,196,489	557,394
Total					\$ 2,391,052	\$ 768,495
Net Amount					\$ 357,966,328	\$ 19,423,143

Section 1.4

D. Reconciliation of Budget Contributions

1. 2005 Funding Budget	\$ 37,783,000
a. Liability loss (gain) during 2004	1,031,000
b. Asset gain	(672,000)
c. Reimbursable expenses higher than assumed	23,000
d. Excess 2004 contributions	(557,000)
2. 2005 Actual Funding Calculation	\$ 37,608,000
a. Expected increase in normal cost and amortization payment	2,049,000
b. Phase-in of prior year asset gains	(1,480,000)
c. Amortization of 2005 reimbursable expenses	152,000
d. Full recognition of 2000 contribution variance	211,000
e. Excess 2005 contributions	(58,000)
f. Assumption changes	7,451,000
3. 2006 Funding Budget	\$ 45,933,000

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, 2005	January 1, 2004
1. Covered Payroll	\$ 209,795,776	\$ 233,477,631
2. Unfunded Amount	357,966,328	261,272,845
3. Amortization Payment	19,423,143	13,101,797
4. Payment as a Level Percentage of payroll (3 ÷ 1)	9.26%	5.61%
5. Weighted Average Amortization Factor (2 ÷ 3)	18.43	19.94
6. Equivalent Single Amortization Period (Nearest Whole Year)	29	33

B. Net Pension Obligation

The Net Pension Obligation is derived as detailed in Section 1.4A.

	January 1, 2005	January 1, 2004
1. Net Pension Obligation at End-of-Year	\$ 37,607,940	\$ 33,248,204

C. History of Liability and Assets

Shown below is the supplemental schedule required by government accounting standards.

Schedule of Funding Progress (in thousands of dollars)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Funded Ratio (a/b)	Unfunded Actuarial Accrued Liability (b - a)	Covered Payroll (c)	Unfunded as a Percentage of Covered Payroll ((b-a)/c)
12/31/2004	\$ 1,424,918	\$ 1,782,884	79.9%	\$ 357,966	\$ 209,796	170.6%
12/31/2003	1,446,726	\$ 1,707,999	84.7%	\$ 261,273	\$ 233,478	111.9%
12/31/2002	1,446,860	1,542,045	93.8%	95,185	234,679	40.6%
12/31/2001	1,620,157	1,492,072	108.6%	(128,085)	238,387	(53.7)%
12/31/2000	1,670,601	1,499,261	111.4%	(171,340)	238,195	(71.9)%
12/31/1999	1,622,710	1,336,574	121.4%	(286,136)	230,324	(124.2)%

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, 2004
1. Cash and Equivalents	\$ 7,813,683
2. General Investments	
▪ Domestic Common and Preferred Stock	582,860,033
▪ International Common and Preferred Stock	252,654,565
▪ Federal Agency and Mortgage – Backed Certificates	57,105,842
▪ U.S. Government and State Obligations	26,517,994
▪ Corporate Bonds	492,912,398
▪ International Fixed Income	42,389,765
▪ Real Estate Investment Trusts	53,745,674
▪ Venture Capital	17,132,189
3. Net Receivables (Payables)	(7,333,781)
4. Payable to OBRA Pension Plan	943,973
5. Net Assets in the Trust (1. + 2. + 3. – 4.)	1,524,854,389
6. Contributions Receivable	25,258,000
7. Net Assets Available for Benefits (5. + 6.)	\$ 1,550,112,389

Section 2.2

Reconciliation of Assets

Transactions	December 31, 2003 to December 31, 2004
Income	
1. Contributions Received or Receivable	
▪ County of Milwaukee	\$ 35,143,178
▪ Plan Participants	711,322
2. Investment Earnings	
▪ Net appreciation	244,387,710
▪ Interest and Dividends	40,888,887
▪ Security Lending Income	1,621,222
▪ Security Lending Rebates & Fees	(1,330,435)
▪ Investment Expense	(4,112,409)
3. Other Income	706,730
4. Total Income	\$ 220,375,794
Disbursements	
5. Benefit Payments	\$ 161,523,222
6. Administrative Expenses	2,190,542
7. Total Disbursements	163,713,764
8. Net Income (4. - 7.)	56,662,030
9. Net Assets at Beginning of Year	1,493,450,359
10. Net Assets at End of Year (8. + 9.)	\$ 1,550,112,389

Section 2.3

Actuarial Value of Assets

1. Market Value of Assets, December 31, 2004		\$	1,550,112,389
2. Less 80% of total Gains and Losses in 2004:	\$	63,554,640	50,843,712
3. Less 60% of Unrealized Gains and Losses in 2003:	\$	213,416,041	128,049,625
4. Less 40% of Unrealized Gains and Losses in 2002:	\$	(80,542,034)	(32,216,814)
5. Less 20% of Unrealized Gains and Losses in 2001:	\$	(107,408,692)	(21,481,738)
6. Actuarial Value of Assets, December 31, 2004 (1. - 2. - 3. - 4. - 5.)		\$	1,424,917,604

As of	Market Value	Actuarial Asset Value	Estimated Rate of Return		Assumed Rate of Return
			Market	Actuarial	
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	(5.8)	(3.7)	9.0
12/31/2003	1,493,450,359	1,446,725,776	23.3	5.6	9.0
12/31/2004	1,550,112,389	1,424,917,604	14.0%	8.0%	8.5%
Compound Rate of Return (five years):			5.0%	4.1%	

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 2.4

Contributions for Prior Plan Year

	Employer		Interest		Total	
Bi-weekly	\$	233,178	\$	9,708	\$	242,886
8/20/2004		10,000,000		291,807		10,291,807
1/15/2005		5,258,000		0		5,258,000
2/15/2005		5,000,000		0		5,000,000
3/15/2005		4,652,000		0		4,652,000
4/15/2005		5,000,000		0		5,000,000
5/15/2005		5,000,000		0		5,000,000
Total	\$	35,143,178	\$	301,515	\$	35,444,693

Section 3.1

Plan Participants

A. Participant Data Reconciliation

	Active Participants	Inactive Participants		Total
		With Deferred Benefits	Receiving Benefits	
Total at January 1, 2004	5,465	1,559	6,695	13,719
Vested Terminations	(76)	76	N/A	0
Nonvested Terminations	(125)	N/A	N/A	(125)
Retirements	(701)	(128)	829	0
Deaths With a Beneficiary	(3)	3	(50)	(50)
Deaths Without a Beneficiary	(1)	(12)	(253)	(266)
New Beneficiaries	N/A	N/A	50	50
Incorrectly Reported	3	8	28	39
Rehires	161	(76)	0	85
New Entrants	<u>257</u>	<u>N/A</u>	<u>N/A</u>	<u>257</u>
Net Change	(485)	(129)	604	(10)
Total at January 1, 2005	4,980	1,430	7,299	13,709

Section 3.1

B. Count of Active Participants at January 1, 2005

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	1 *									1
20 - 24	41 20,861									41
25 - 29	174 24,461	40 34,496								214
30 - 34	199 26,978	127 34,901	10 *	1 *						337
35 - 39	186 28,638	152 35,617	98 39,876	39 41,252						475
40 - 44	168 29,749	117 37,207	172 38,206	164 42,605	38 42,886	2 *				661
45 - 49	157 30,474	118 37,889	198 40,381	247 45,855	151 45,137	43 45,766				914
50 - 54	111 33,359	109 42,361	185 41,955	229 46,357	144 50,190	65 56,387	16 *			859
55 - 59	87 34,100	57 38,073	141 41,512	158 47,114	59 55,546	47 59,009	31 57,610	2 *		582
60 - 64	25 38,929	29 36,216	66 36,714	65 49,070	10 *	4 *	9 *	3 *		211
65 - 69	7 *	7 *	24 46,284	1 *	4 *	2 *	1 *			46
70 - 74	1 *		3 *	3 *				1 *		8
75+			1 *	1 *			1 *			3
Total	1,157	756	898	908	406	163	58	6	0	4,352

* Compensation in cells with fewer than 20 members has been suppressed.

Section 3.1

B. Count of Active Participants at January 1, 2005 (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	5 *									5
25 - 29	45 36,834	20 39,419								65
30 - 34	33 35,800	79 41,160	22 48,301							134
35 - 39	21 35,336	55 41,456	64 49,577	7 *						147
40 - 44	5 *	17 *	50 51,019	29 55,881	1 *					102
45 - 49		7 *	12 *	29 55,064	14 *	7 *				69
50 - 54	1 *	1 *	15 *	19 *	15 *	7 *	3 *			61
55 - 59		1 *	4 *	5 *	3 *	4 *	1 *			18
60 - 64										0
65 - 69										0
70 - 74										0
75+										0
Total	110	180	167	89	33	18	4	0	0	601

* Cells with fewer than 20 members are suppressed.

Section 3.1

B. Count of Active Participants at January 1, 2005 (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	1									1
25 - 29										0
30 - 34	3									3
35 - 39	3									3
40 - 44			1							1
45 - 49	2	1	3	1	1					8
50 - 54	1			1		1				3
55 - 59	1	1	2	1		1				6
60 - 64	1									1
65 - 69								1		1
70 - 74										0
75+										0
Total	12	2	6	3	1	2	0	1	0	27

Section 3.1

C. Participant Statistics

Inactive Participants as of January 1, 2005	Number	Amount of Monthly Benefit
Participants Receiving Benefits	7,299	\$ 10,091,476
Participants with Deferred Benefits	1,430	\$ 901,854

Statistics for Active Participants	Number	Average		
		Age	Service	Compensation*
As of January 1, 2004				
Total	5,465	46.1	13.2	\$ 42,722
As of January 1, 2005				
Total	4,980	45.2	11.8	\$ 42,128

* 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 that 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 that represents the contributions that 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) that 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. Prior to January 1, 2005, 20% of the prior four years' unrealized gains/losses are annually recognized. After January 1, 2005, asset returns above or below the expected return are recognized at a rate of 20% per year.

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>	8.5% per year compounded annually. Investment return is assumed to be net of investment management expense.
<i>Salary Increases</i>	Averages 4.5% per year compounded annually. See table on following page for sample values.
<i>Mortality</i>	a. Active participants and nondisabled pensioners: The sex-distinct RP2000 Combined Mortality Table. b. Disabled pensioners: RP2000 Disabled Mortality Table.
<i>Disability</i>	Graduated rates. See table on following page for sample values. 100% of disabilities are assumed ordinary.
<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>Percentage Married With at Least One Dependent Child</i>	<ul style="list-style-type: none"> ▪ Generals 21.6% ▪ Sheriffs and Elected 43.2% <p>For those who die prior to age 60, it is assumed at least one child will remain a dependent until the member would have turned age 60.</p>
<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	0.03	0.02	2.26	0.75	9.81	11.00	11.00	0.02
25	0.04	0.02	2.26	0.75	8.91	8.00	8.00	0.03
30	0.04	0.03	2.26	0.75	8.00	5.00	5.00	0.07
35	0.08	0.05	2.26	0.75	6.57	3.00	3.00	0.12
40	0.11	0.07	2.26	0.75	5.15	1.24	1.24	0.18
45	0.15	0.11	2.26	0.75	3.72	1.00	1.00	0.28
50	0.21	0.17	2.90	1.15	2.73	0.75	0.75	0.48
55	0.36	0.27	3.54	1.65	1.84	0.05	0.05	0.87
60	0.67	0.51	4.20	2.18	0.00	0.00	0.00	1.38
65	1.27	0.97	5.02	2.80	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	21.4	15.1	13.9	12.0	11.0
25	20.9	12.7	11.0	10.6	9.9
30	19.5	12.1	10.6	9.4	8.7
35	18.3	11.1	10.6	8.7	7.3
40	17.5	11.1	10.2	8.0	6.1
45	16.6	11.1	10.2	7.3	5.3
50	15.8	11.1	9.6	6.5	4.1
55	14.9	10.5	8.1	5.2	3.0

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	7	10	0
51	7	10	0
52	7	10	0
53	7	10	0
54	7	10	0
55	15	15	7
56	15	15	7
57	15	15	7
58	15	15	7
59	15	15	7
60	20	75	20
61	20	75	20
62	20	80	45
63	20	50	30
64	25	50	30
65	30	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	6.9%	8.0%	4.5%
25	5.9	5.8	4.5
30	5.5	5.5	4.5
35	5.1	5.1	4.5
40	4.7	4.7	4.5
45	4.5	4.5	4.5
50	4.2	4.1	4.5
55	3.9	3.9	4.5
60	3.8	3.8	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)

<i>Earnings Considered</i>	<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 \$205,000 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>
<i>County Contributions</i>	<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>
<i>Voluntary Employee Contributions</i>	<p>Up to 10% of earnings, providing the employee was contributing on January 1, 1971.</p>

Section 3.3

Summary of Plan Provisions (continued)

<p><i>Normal Pension</i></p>	<p>Payable upon request of any member who has attained the minimum service and retirement age.</p> <ul style="list-style-type: none"> a. The minimum age and service requirements: <ul 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: <ul style="list-style-type: none"> 1.) Pension portion, plus 2.) Any voluntary contribution. c. The pension portion retirement allowance is: <ul 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)

<p><i>Accidental Death Benefit</i></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><i>Deferred Vested Pension</i></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> <ul style="list-style-type: none"> a. The accrued pension at age 60 is at least \$10 per month. b. He has at least five 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>
<p><i>Survivor Benefit</i></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>

Section 3.3

Summary of Plan Provisions (continued)

<p><i>Optional Benefits</i></p>	<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>
<p><i>Other Benefits</i></p>	<p>a. Provide 2% of initial benefit automatic increase per year to retired employees (surviving beneficiary receives proportionate amount based on survivorship percentage).</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. Non-represented, general employees and elected officials hired after March 15, 2002 are not eligible for the Backdrop benefit.</p>
<p><i>Minimum Benefit</i></p>	<p>Not less than under previous system.</p>