# EMPLOYEES' RETIREMENT SYSTEM OF THE COUNTY OF MILWAUKEE

ACTUARIAL VALUATION JANUARY 1, 2010

# buckconsultants<sup>-</sup>

May 14, 2010

The Retirement Board Employees' Retirement System of the County of Milwaukee 901 N. 9<sup>th</sup> St. Milwaukee, WI 53233

Ladies and Gentlemen:

This report presents the results of the annual actuarial valuation of the Employees' Retirement System of the County of Milwaukee as of January 1, 2010. The valuation takes into account all of the promised benefits to which members are entitled as of January 1, 2010, including pension and survivor benefits; and as required by the Retirement Code is the basis for the Budget Contribution for fiscal year 2011.

The valuation was based on the actuarial assumptions and methods as adopted by the Board of Trustees, including a valuation interest rate of 8% per annum compounded annually. Based on our recommendations in May 2007, the Board adopted revised actuarial assumptions effective with the January 1, 2007 valuation. Minor adjustments in the assumptions and methods were adopted by the Board in 2008 and 2009 as well. The assumptions and methods used in this January 1, 2010 valuation report remain unchanged from the January 1, 2009 valuation report. Plan amendments have been reflected in the valuation since the January 1, 2009 valuation report. Effective January 1, 2010 for non-represented employees (excluding Elected Officials and Deputy Sheriffs), the multiplier was reduced from 2.0% to 1.6% for current members' future service & future hires' total service and the normal retirement age was increased to 64 for future hires only. In addition, the elimination of various provisions previously available for deputy sheriffs promoted to non-represented deputy sheriff positions are reflected but the impact of this change will be reflected as future promotions occur.

## **Assets and Membership Data**

The Retirement System reported the individual data for members of the System as of the valuation date to the actuary. For 2010 we received the data in multiple files. We received the counts of members to include in the January 1, 2010 valuation separately from members' benefit information. Missing information was updated with either supplemental information sent or by using assumptions based on the prior year's data. While we did not verify the data at their source, we did perform tests for internal consistency and reasonableness. The amount of assets in the trust fund taken into account in the valuation was based on statements prepared for us by the Retirement System.

The Retirement Board Employees' Retirement System of the County of Milwaukee May 14, 2010 Page 2

#### **Funding Adequacy**

The 2009 valuation performed last year resulted in an Actual Funding Contribution of \$30,355,535, against which \$61,139,613 (adjusted for interest shown on Table 11) was actually contributed. The excess of \$30,784,078 will be amortized over five years. Most of the excess (\$29,000,000) represents the Mercer litigation, which was reflected for this valuation.

The Actual Funding Contribution for 2010, based on the results of this valuation, is \$27,549,990. It is expected that \$31,291,102 (\$31,290,863 in expected contribution plus \$239 interest) will be contributed during 2011 on behalf of the 2010 plan year. The excess contribution of \$3,741,112 will be amortized over five years.

## **Budget Contribution**

The 2011 Budget Contribution, expected to be contributed in 2012, is \$31,602,000.

#### **Financial Results and Membership Data**

Detailed summaries of the financial results of the valuation and membership data used in preparing the valuation are shown in the valuation report. The actuary prepared supporting schedules and required supplementary information included in the County of Milwaukee Annual Report of the Pension Board.

Qualified actuaries completed the valuation in accordance with accepted actuarial procedures as prescribed by the Actuarial Standards Board. The qualified actuaries are members of the American Academy of Actuaries and are experienced in performing actuarial valuations of public employee retirement systems. To the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and practice. The undersigned with actuarial designations are qualified to render the opinions contained in this report.

Respectfully submitted,

Larry Langer, ASA, EA, MAAA Principal, Consulting Actuary

LL/MR/LL:pl

Marco Ruffini Senior Consultant

Lawrence Lin, ASA Consultant, Actuary

# EMPLOYEES' RETIREMENT SYSTEM OF THE COUNTY OF MILWAUKEE TABLE OF CONTENTS

#### Table / Exhibit

# **Page**

Executive Su	ımmar	у
Table 1		Summary of Results of Actuarial Valuation
Table 2	—	Security of Promised Benefits, Unfunded Actuarial Accrued Liability, Funded Status
Table 3		Actuarial Gain/(Loss) for Plan Year Ending
Table 4		Amortization Schedule for Actual Funding Contribution
Table 5		Development of Normal Cost
Table 6	—	Contribution Requirements – End of Year Basis; Actual and Budget Amounts for Current Plan Year, Budget Amount for Next Plan Year
Table 7		Summary Statement of Market Value of Plan Assets
Table 8		Summary Reconciliation of Market Value of Plan Assets
Table 9		Derivation of Actuarial Value of Assets
Table 10		Summary Reconciliation of Actuarial Value of Plan Assets
Table 11	—	Employer Contributions and Variance from the Funding Calculation Contributions
Table 12		GASB Nos. 25 and 27 Disclosure Information
Table 13		Required Supplementary Information; Schedule of Funding Progress
Table 14		Schedule of Employer Contributions
Table 15		Description of Actuarial Assumptions and Methods
Table 16		Summary of Benefit and Contribution Provisions
Table 17		Summary of Membership Data
Table 18		Membership Reconciliation
Exhibit I		Active Membership Data: All Employees – Number and Average Annual Salary
Exhibit II	—	Active Membership Data: General Employees – Number and Average Annual Salary
Exhibit III	—	Active Membership Data: Deputy Sheriffs – Number and Average Annual Salary
Exhibit IV	—	Active Membership Data: Elected Officials – Number and Average Annual Salary
Exhibit V		Active and Deferred Vested Members Obtaining Retirement Eligibility
Exhibit VI	—	Retiree and Beneficiary Membership Data – Number and Average Annual Benefit
Exhibit VII		5-Year History of Membership Data
Exhibit VIII		Detailed Tabulations of the Data
Exhibit IX		Glossary

# **Executive Summary**

This report presents the actuarial valuation as of January 1, 2010 for the Employees' Retirement System of the County of Milwaukee. The principal valuation results include:

- The Actual Funding Contribution for fiscal year 2010, which is \$27,549,990.
- The Annual Required Contribution for fiscal year 2010 in accordance with GASB requirements, which is \$29,529,322. GASB requires that the unfunded liability be amortized over a period of not more than thirty years. Typically the Annual Required Contribution and the Actual Funding Contribution are the same. Because the effective amortization period of the Actual Funding Contribution is over thirty years, the Annual Required Contribution can not be the same as the Actual Funding Contribution. We have independently calculated the Annual Required Contribution as the normal cost plus interest plus a thirty year amortization of the unfunded liability.
- The Budget Contribution for fiscal year 2011, which is \$31,602,000.
- The total funded ratio of the plan determined as of January 1, 2010, which is 93.3% based on the accrued liability and the actuarial value of assets. On a market value basis, the plan is 86.9% funded.
- The determination of the actuarial gain or loss as of January 1, 2010, which is a loss of \$84,943,001.
- Annual disclosure as of January 1, 2010 as required by Statement No. 25 of the Governmental Accounting Standards Board.

The valuation was based on membership and financial data submitted by the Retirement System.

# **Changes Since Last Year**

## Legislative and Administrative Changes

No administrative changes have been adopted since the previous valuation.

The following legislative changes have been adopted since the previous valuation. The benefit provisions and contribution provisions are summarized in Table 16. Plan amendments have been reflected in the valuation since the January 1, 2009 valuation report. Effective January 1, 2010 for non-represented employees (excluding Elected Officials and Deputy Sheriffs), the multiplier was reduced from 2.0% to 1.6% for current members' future service & future hires' total service and the normal retirement age was increased to 64 for future hires only. In addition, the elimination of various provisions previously available for deputy sheriffs promoted to non-represented deputy sheriff positions are reflected but the impact of this change will be reflected as future promotions occur.

## Actuarial Assumptions and Methods

The results of this January 1, 2010 actuarial valuation report are based on the same actuarial assumptions and methods as the January 1, 2009 actuarial valuation. The actuarial assumptions and methods are outlined in Table 15.

# **Contribution Amounts**

The results of the valuation as of January 1, 2010 determine the Actual Funding Contribution and Annual Required Contribution for fiscal year 2010 and the Budget Contribution for fiscal year 2011. The Actual Funding Contribution for fiscal year 2010 is \$27,549,990. The Annual Required Contribution for GASB 25 disclosure for fiscal year 2010 is \$29,529,322. The Budget Contribution for fiscal year 2011 is \$31,602,000. The actual 2010 contribution and budgeted 2011 contribution were based on assumptions and methods as adopted by the Board and participant data as of January 1, 2010.

## **Reasons for Change in Budget Contribution Calculated by the Actuary**

The Budget Contribution calculated by the actuary decreased from \$38,548,000 for fiscal year 2010 to \$31,602,000 for fiscal year 2011. A reconciliation of the decrease of \$6,946,000 is shown in the following table:

Item	Amount
<ol> <li>2010 Budget Contribution</li> <li>Increase / (Decrease) during 2009 due to         <ul> <li>a. Unanticipated liability loss (gain)</li> <li>b. Asset experience other than expected</li> <li>c. 2009 reimbursable expenses other than assumed</li> <li>d. 2009 contribution variance other than assumed</li> </ul> </li> </ol>	\$ 38,548,000 \$ (287,000) (2,376,000) 32,000 (7,551,000)
<ul> <li>e. Full recognition of bases other than assumed</li> <li>f. Increase due to assumption changes</li> <li>g. Total</li> <li>3. 2010 Actual Contribution (1 + 2)</li> </ul>	- (816,000) (10,998,000) \$ 27,550,000
<ul> <li>4. Expected Increase / (Decrease) during 2010 due to <ul> <li>a. Normal cost and existing amortization schedule</li> <li>b. Phase-in of deferred asset (gains) losses</li> <li>c. Amortization of 2010 reimbursable expenses</li> <li>d. Expected contribution variance for 2010</li> <li>e. Full recognition of 2001 reimbursable expenses</li> <li>f. Increase due to assumption changes</li> </ul> </li> </ul>	\$ 1,183,000 3,674,000 253,000 (937,000) (121,000)
g. Total	4,052,000
5. 2011 Budget Contribution (3 + 4)	\$ 31,602,000

# **Summary of Principal Results**

Summarized below are the principal financial results for the Employees' Retirement System of the County of Milwaukee based upon the actuarial valuation as of January 1, 2010. Comparable results from the January 1, 2009 valuation are also shown.

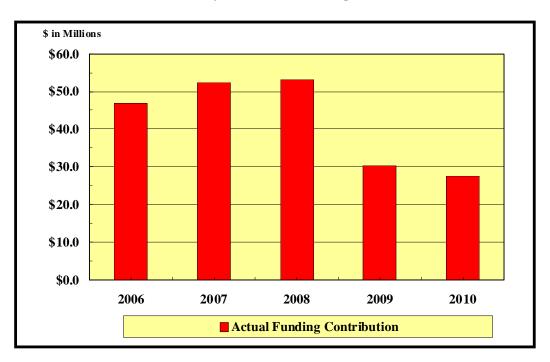
Item	January 1, 2010	January 1, 2009
Demographics		
Active Members		
• Number	4,808	4,837
Average Annual Pay	\$ 49,301	\$ 48,340
Inactive Members		
Members Receiving Benefits		
• Number	7,292	7,308
Average Annual Benefit Payment	\$ 18,839	\$ 18,386
• Members With Deferred Benefits		
• Number	1,659	1,397
Average Annual Benefit Payment	\$ 7,087	\$ 7,329
Actual Funding Contribution	(Fiscal Year 2010)	(Fiscal Year 2009)
Normal Cost with Interest	\$ 20,736,844	\$ 21,395,539
Net Amortization Payments	6,813,146	8,959,996
Total Contribution	\$ 27,549,990	\$ 30,355,535
Actuarial Funded Status		
Accrued Liability	\$ 2,097,332,110	\$ 2,057,376,988
Actuarial Value of Assets	1,956,443,729	1,968,518,479
• Unfunded Accrued Liability	\$ 140,888,381	\$ 88,858,509
Funded Ratio	93.3 %	95.7 %

# **Five-Year History of Principal Financial Results**

	Actual Funding Contributions						
Valuation as of January 1	Normal Cost with Interest	Net Amortization Payments	Total				
2010	\$ 20,736,844	\$ 6,813,146	\$ 27,549,990				
2009	21,395,539	8,959,996	30,355,535				
2008	21,012,737	32,050,873	53,063,610				
2007	21,189,240	31,206,023	52,395,263				
2006	22,622,593	24,306,754	46,929,347				

# **Five-Year History of Contribution Amounts**

The following chart shows a five-year history of employer contribution amounts:



**Five-Year History of Actual Funding Contributions** 

# **Funded Ratio**

The financing objective of the System is to:

- Fully fund all current costs based on the normal contribution rate determined under the funding method; and
- Liquidate the unfunded accrued liability based on the amortization schedules as required by the retirement code, i.e., a schedule of 5, 10, or 30 years for each change in the unfunded accrued liability according to Section 3.1.

The total Actual Funding Contribution of \$27,549,990, when taken together with the contributions payable by the members and asset returns, is the amount sufficient to achieve the financing objective for 2010.

The System's total funded ratio on the funding basis is measured by comparing the actuarial value of assets (based on a 5-year moving average market value) with the accrued liability. The accrued liability for pensions is the present value of benefits accumulated to date under the System's funding method and reflects future pay increases for active employees.

On this basis, the System's funded ratio is 93.3% as of January 1, 2010. This funded ratio is based on an actuarial value of assets of \$1,956,443,729 and an accrued liability of \$2,097,332,110.

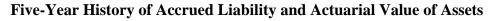
## **Reasons for Change in the Total Funded Ratio**

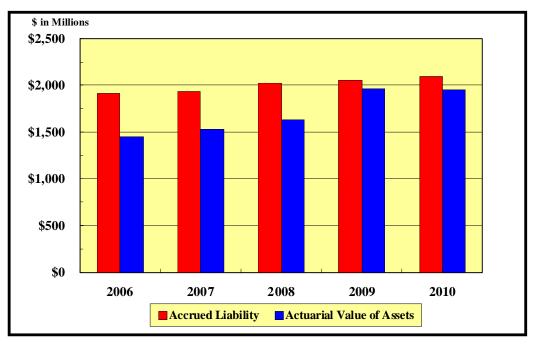
The total funded ratio decreased from 95.7% as of January 1, 2009 to 93.3% as of January 1, 2010. The decrease is due to net recognition of asset losses from calendar years 2008 and 2007. While returns from 2009 were substantially better than the expected return assumption of 8.0%, they were not sufficient to offset losses from these two years. Overall liability experience was generally on target with that expected, resulting in a small decrease in funded ratio.

(\$ Amounts in Thousands)							
Valuation as of January 1	Accrued Liability	Actuarial Value of Assets	Unfunded Accrued Liability	Funded Ratio			
2010	\$ 2,097,332	\$ 1,956,444	\$ 140,888	93.3%			
2009	2,057,377	1,968,518	88,859	95.7			
2008	2,024,923	1,627,288	397,635	80.4			
2007	1,931,220	1,525,532	405,688	79.0			
2006	1,909,321	1,454,302	455,020	76.2			

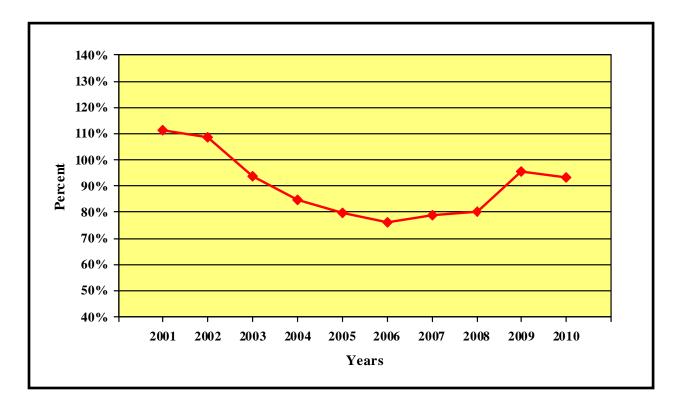
# **Five-Year History of Total Funded Ratio** (\$ Amounts in Thousands)

The following chart shows a five-year history of the accrued liability and the actuarial value of assets:





The following chart shows a ten-year history of the total funded ratio:



# Ten-Year History of Total Funded Ratio (2001 - 2010)

## **GASB No. 25 Disclosure**

Statement No. 25 of the Governmental Accounting Standards Board established reporting standards for the annual financial reports of defined benefit pension plans. The System complied with Statement No. 25 beginning with the January 1, 1997 valuation. The statement requires disclosure of the "schedule of funding progress" and the "schedule of employer contributions" in the System's financial statements.

The "schedule of funding progress" shows historical trend information about the System's actuarial value of assets, the actuarial accrued liability and the unfunded actuarial accrued liability. The actuarial funded ratio is measured by comparing the actuarial value of assets (based on a 5-year moving average market value) with the accrued liability. The accrued liability is the present value of benefits accumulated to date under the System's funding method and reflects future pay increases for active employees. On this basis, the System's funded ratio is 93.3% as of January 1, 2010. This funded ratio is based on an actuarial value of assets of \$1,956,443,729 and an accrued liability of \$2,097,332,110.

The "schedule of employer contributions" shows historical trend information about the annual required contribution (ARC) for pensions of the employer and the percentage of the ARC contributed to the System. The ARC is equal to the normal cost for pensions plus amortization of the unfunded actuarial accrued liability for pensions. The maximum period of amortizing the unfunded actuarial accrued liability permitted by GASB No. 25 is 30 years. The maximum amortization period decreased from 40 years to 30 years in 2007. The employer contributions to the System are equal to the normal cost plus a payment towards each change in the unfunded accrued liability, which are amortized over 5, 10 or 30-year periods, depending on the source of the changes. In 2010, the ARC was set at the normal cost plus interest plus a thirty year amortization of the unfunded liability. Please refer to page one of this report for more details. The ARC and the actual employer percentage contributed for the six fiscal years ending December 31, 2010 are shown in Table 14.

# **Rate of Return**

The investment return of the trust fund (i.e. total return including both realized and unrealized gains and losses) for fiscal years 2005 through 2009 is shown in the table below. The return based on the actuarial value of assets used for determining annual contribution rates is also shown.

The rate of return on market value reflects the investment earnings on the market value of assets from the beginning of the fiscal year to the end of the fiscal year. The actuarial assets are the assets recognized for valuation purposes. Actuarial assets are based on a smoothed market value that spreads the difference between the actual and expected return over a period of five years. The rate of return on the actuarial value of assets is a measure of the increase in the actuarial value of assets from the beginning of the fiscal year to the end of the fiscal year. The rates of return shown below have been developed by the actuary for illustrative purposes only. They are based on simplifying assumptions and as such, likely will not exactly match the returns presented by your investment consultants. The reader is encouraged to use the returns developed by the investment consultants.

As of	Asset	Estima	ted Rates of 1	Return	
12/31	Market	Actuarial	Market	Actuarial	Assumed
2009	\$ 1,822,539,885	\$ 1,956,443,729	20.4%	3.9%	8.0%
2008	1,595,610,970	1,968,518,479	(22.5%)	3.4%	8.0%
2007	1,666,511,165	1,627,287,632	6.3%	13.2%	8.0%
2006	1,658,195,799	1,525,531,519	13.5%	12.6%	8.0%
2005	1,559,777,489	1,454,301,600	8.3%	10.6%	8.5%
	Compound Rate	of Return (five years):	4.0%	8.7%	

<b>Five Year</b>	History	of Asset	Returns
------------------	---------	----------	---------

Compound Rate of Return (five years):

# Page 11

# TABLE 1

# SUMMARY OF RESULTS OF ACTUARIAL VALUATION

Item	Ja	January 1, 2010			January 1, 2009		
<ul> <li>Participant Data</li> <li>1. Number of Participants <ul> <li>a) Active Participants</li> <li>b) Participants with Deferred Benefits</li> <li>c) Participants Receiving Benefits</li> <li>d) Total</li> </ul> </li> </ul>		4,808 1,659 7,292 13,759	-		4,837 1,397 7,308 13,542	_	
2. Annualized Salaries	\$	237,040,117		\$	233,820,179		
3. Annual Annuities	\$	137,374,794		\$	134,363,234		
<ul> <li>Valuation Results</li> <li>4. Present Value of Future Benefits <ul> <li>a) Active Participants</li> <li>b) Participants with Deferred Benefits</li> <li>c) Participants Receiving Benefits</li> <li>d) Total</li> </ul> </li> </ul>	\$	815,159,772 83,526,610 1,334,975,449 2,233,661,831	-	\$	812,317,967 72,648,595 1,313,759,117 2,198,725,679	_	
5. Present Value of Future Normal Cost	\$	136,329,721		\$	141,348,691		
6. Actuarial Accrued Liability: (4 - 5)	\$	2,097,332,110		\$	2,057,376,988		
7. Actuarial Value of Assets	\$	1,956,443,729		\$	1,968,518,479		
8. Funded Status: (7 / 6)		93.3	%		95.7	%	
9. Unfunded Actuarial Accrued Liability: (6 - 7)	\$	140,888,381		\$	88,858,509		
10. Normal Cost Rate		8.418	%		8.805	%	
11. Normal Cost for the Plan Year	\$	19,954,037		\$	20,587,867		
<b>Employer Actual Funding Contribution and</b> <b>Annual Required Contribution for Fiscal Year</b> 12. Actual Funding Contribution Calculated by Actuary							
a) Normal Cost with Interest	\$	20,736,844		\$	21,395,539		
<ul><li>b) Net Annual Amortization Payments</li><li>c) Total Contribution: ((a + b), not less than zero)</li></ul>	\$	6,813,146 27,549,990	-	\$	8,959,996 30,355,535	-	

## SECURITY OF PROMISED BENEFITS UNFUNDED ACTUARIAL ACCRUED LIABILITY FUNDED STATUS

Item	January 1, 2010	January 1, 2009
1. Actuarial Accrued Liability		
a. Active Participants		
Retirement Benefits	\$ 635,099,070	\$ 626,532,429
Withdrawal Benefits	30,640,234	31,253,335
Disability Benefits	5,345,006	5,591,189
Death Benefits	7,745,741	7,592,323
Total Active	678,830,051	670,969,276
b. Participants with Deferred Benefits	83,526,610	72,648,595
c. Participants Receiving Benefits	1,334,975,449	1,313,759,117
d. Total All Participants	\$ 2,097,332,110	\$ 2,057,376,988
2. Actuarial Value of Assets	1,956,443,729	1,968,518,479
3. Unfunded Actuarial Accrued Liability (1d - 2)	\$ 140,888,381	\$ 88,858,509
4. Funded Status: (2 / 1d)	93.3%	95.7%

The interest rate used as of January 1, 2010 and January 1, 2009 was 8.00%

## Page 13

## TABLE 3

Item		December 31, 2009		cember 31, 2008
1. Actuarial Accrued Liability at the Beginning of the Year	\$	2,057,376,988	\$	2,024,922,619
2. Increases/(Decreases) During the Year				
a. Normal Cost for the Year		20,587,867		20,219,516
b. Member Contributions		131,766		140,209
c. Benefit Payments and Refunds		(145,345,520)		(144,184,222)
d. Assumed Interest to End of Year		159,701,025		157,136,114
e. Plan and Assumption Changes*		(1,589,892)		-
f. Total: $(a + b + c + d + e)$		33,485,246		33,311,617
3. Expected Liability at the End of the Year: $(1 + 2)$		2,090,862,234		2,058,234,236
4. Actuarial Accrued Liability at the End of the Year		2,097,332,110		2,057,376,988
5. Liability Gain/(Loss): (3 - 4)	\$	(6,469,876)	\$	857,248
6. Actuarial Value of Assets at the Beginning of the Year	\$	1,968,518,479	\$	1,627,287,632
7. Increases/(Decreases) During the Year				
a. County Contributions		59,992,154		34,840,886
b. Member Contributions		131,766		140,209
c. Pension Obligation Bond Proceeds		-		397,797,000
d. Benefit Payments and Refunds		(145,345,520)		(144,184,222)
e. Administrative Expenses payable to the County		(1,312,156)		(1,031,291)
f. Assumed Interest to End of Year		152,932,131		124,532,608
g. Total: $(a + b + c + d + e + f)$		66,398,375		412,095,190
8. Expected Actuarial Assets at the End of the Year		2,034,916,854		2,039,382,822
9. Actuarial Value of Assets at the End of the Year		1,956,443,729		1,968,518,479
10. Actuarial Asset Gain/(Loss): (9 - 8)	\$	(78,473,125)	\$	(70,864,343)
11. Total Gain/(Loss): (5 + 10)	\$	(84,943,001)	\$	(70,007,095)

## ACTUARIAL GAIN/(LOSS) FOR PLAN YEAR ENDING

For year ending December 31, 2009, the multiplier was decreased from 2.0% to 1.6% for current members' future service and future hires' total service and normal retirement age was revised to 64 for future hires. These changes would apply only to non-represented employees, excluding Elected Officials and Deputy Sheriffs.

## AMORTIZATION SCHEDULE FOR ACTUAL FUNDING CONTRIBUTION FOR 2010 PLAN YEAR

	A		tion Period		Bala		
	Date	Initial	Remaining	Last			
Type of Payment	Created	Years	Years	Payment	Initial	Outstanding	Payment
1. Charges							
Expense	1/1/2001	10	1	2010	\$ 799,202	\$ 111,713	\$ 120,650
Expense	1/1/2002	10	2	2011	780,362	209,633	117,557
Expense	1/1/2003	10	3	2012	1,017,500	393,565	152,718
Expense	1/1/2004	10	4	2013	1,052,422	521,324	157,398
Reestablished unfunded	1/1/2004	30	24	2033	257,960,162	293,167,446	20,615,893
Expense	1/1/2005	10	5	2014	1,053,714	628,085	157,308
Loss	1/1/2005	30	25	2034	88,729,863	98,314,687	6,755,229
Expense	1/1/2006	10	6	2015	972,805	670,207	144,977
Assumption Change	1/1/2006	30	26	2035	95,861,177	103,397,449	6,951,847
Expense	1/1/2007	10	7	2016	988,048	766,631	147,248
Expense	1/1/2008	10	8	2017	915,868	784,367	136,491
Method Change	1/1/2008	30	28	2037	48,020,858	49,673,177	3,210,308
Expense	1/1/2009	10	9	2018	1,031,291	960,101	153,693
Loss	1/1/2009	30	29	2038	70,007,095	71,238,702	4,521,875
Expense	1/1/2010	10	10	2019	1,312,156	1,312,156	195,550
Loss	1/1/2010	30	30	2039	84,943,001	84,943,001	5,301,072
Total Charges						\$ 707,092,244	\$ 48,839,814
2. Credits							
Gain	1/1/2006	30	26	2035	\$ 12,975,497	\$ 13,995,584	\$ 940,983
Gain	1/1/2007	30	27	2036	55,348,557	58,133,067	3,829,689
Assumption Change	1/1/2007	30	27	2036	26,558,457	27,894,577	1,837,638
Gain	1/1/2008	30	28	2037	61,342,303	63,452,990	4,100,878
Pension Obligation Bond Proceeds	1/1/2009	30	29	2038	363,950,833	370,353,675	23,508,188
Variance	1/1/2010	5	5	2014	30,784,078	30,784,078	7,710,071
Plan Change	1/1/2010	30	30	2039	1,589,892	1,589,892	99,221
Total Credits						\$ 566,203,863	\$ 42,026,668
3. Net Amount						\$ 140,888,381	\$ 6,813,146
(1 - 2)							

Annual amortization payments of the reestablished unfunded actuarial accrued liability (UAAL), and changes to the UAAL arising from plan changes, assumption changes, and actuarial gains/losses are amortized as a level percentage of payroll, assuming payroll growth of 3.5% per year over a 30-year period.

Administrative expenses incurred by the County related to the System are payable by the System to the County. The County then reimburses the System for this payment on a level dollar basis over 10 years.

The variance between the amount contributed to the System for a plan year, and the actual contribution requirement for that year is amortized on a level dollar basis over 5 years. Per Ordinance approved in 2009, the Pension Obligation Bond proceeds were used to offset all existing bases at January 1, 2009 arising from variances between amounts contributed to the System and actual contribution requirements. This reduced the net outstanding balance of amortizations by \$33,846,167. The remaining amount of \$363,950,833 has been amortized as a level percent of payroll over a period of 30 years.

# DEVELOPMENT OF NORMAL COST FOR CURRENT AND PRIOR PLAN YEAR ACTUAL FUNDING CALCULATIONS

Item	January 1, 2010	January 1, 2009
1. Present Value of Projected Benefits		
a. Active Participants		
Retirement Benefits	\$ 740,734,535	\$ 737,262,177
Withdrawal Benefits	46,450,860	47,081,762
Disability Benefits	17,743,590	17,908,145
Death Benefits	10,230,787	10,065,883
Total Active	815,159,772	812,317,967
b. Participants with Deferred Benefits	83,526,610	72,648,595
c. Participants Receiving Benefits	1,334,975,449	1,313,759,117
d. Total All Participants	2,233,661,831	2,198,725,679
2. Actuarial Value of Assets	1,956,443,729	1,968,518,479
3. Unfunded Actuarial Accrued Liability	140,888,381	88,858,509
4. Present Value of Future Normal Costs (1d - 2 - 3)	136,329,721	141,348,691
5. Present Value of Future Salaries	1,619,552,320	1,605,334,354
6. Normal Cost Rate: (4 / 5)	8.418%	8.805%
7. Expected Salaries for the Plan Year*	237,040,117	233,820,179
8. Normal Cost for the Plan Year: (6 x 7)	19,954,037	20,587,867

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

## CONTRIBUTION REQUIREMENTS – END-OF-YEAR BASIS ACTUAL AND BUDGET AMOUNTS FOR CURRENT PLAN YEAR BUDGET AMOUNT FOR NEXT PLAN YEAR

Item		2011		2010			
Item	Budget			Actual		Budget	
1. Normal Cost with Interest	\$	21,463,000	\$	20,736,844	\$	22,144,000	
2. Net Annual Amortizations		10,139,000		6,813,146		16,404,000	
3. Total Contribution ((1 + 2), not less than zero)	\$	31,602,000	\$	27,549,990	\$	38,548,000	

The budgeted contributions shown above for the 2011 and 2010 plan years were estimated based on participant data as of January 1, 2010, and January 1, 2009, respectively.

The actual contribution for the 2010 plan year was determined based on participant data and funding method as of January 1, 2010. A contribution of \$29,529,322 satisfies the pension accounting requirements of GASB Statement Nos. 25 and 27.

Changes in assumptions, methodology, and plan provisions since the prior valuation:

Effective January 1, 2010, the multiplier was decreased from 2.0% to 1.6% for current members' future service and future hires' total service and normal retirement age was revised to 64 for future hires. These changes would apply only to non-represented employees, excluding Elected Officials and Deputy Sheriffs.

# Page 17

# TABLE 7

# SUMMARY STATEMENT OF MARKET VALUE OF PLAN ASSETS

Asset Category		December 31, 2009		cember 31, 2008
1. Cash and Cash Equivalents	\$	327,962,071	\$	17,885,705
2. Investments at Fair Value				
a. Domestic common and preferred stocks	\$	397,736,153	\$	310,135,553
b. Futures Contracts		(102,047)		-
c. Corporate bonds		514,876,896		513,170,471
d. International common and preferred stocks		345,155,240		168,794,648
e. Federal agency and mortgage-backed certificates		68,791,936		53,468,718
f. International fixed income		24,433,194		23,777,543
g. U.S. Government and state obligations		53,047,974		19,440,788
h. Real estate investment trusts		42,241,529		31,828,295
i. Venture capital		22,205,660		18,074,439
j. Total Investments		1,468,386,535		1,138,690,455
3. Contributions Receivable for OBRA and ERS		31,646,905		35,349,788
4. (Payable) to OBRA Pension Plan		(1,038,607)		(861,293)
5. Pension Obligation Bond Receipts Receivable		-		397,797,000
6. Net All Other Receivables (Liabilities)		(4,417,019)		6,749,315
7. Net Assets Held in Trust for ERS Pension Benefits	\$	1,822,539,885	\$	1,595,610,970
(1+2j+3+4+5+6)				

# SUMMARY RECONCILIATION OF MARKET VALUE OF PLAN ASSETS

Item		For Year Ending December 31, 2009		or Year Ending cember 31, 2008
1. Market Value of Assets at the Beginning of the Year	\$	1,595,610,970	\$	1,666,511,165
<ul> <li>2. Contributions for Plan Year</li> <li>a. County *</li> <li>b. Member</li> <li>c. Total</li> </ul>	\$	59,992,154 131,766 60,123,920	\$	34,840,886 140,209 34,981,095
<ol> <li>Disbursements for Plan Year         <ul> <li>Benefit payments and refunds</li> <li>Administrative expenses payable to County</li> <li>Total</li> </ul> </li> <li>Proceeds of Pension Obligation Bonds</li> </ol>	\$	145,345,520 1,312,156 146,657,676	\$	144,184,222 1,031,291 145,215,513 397,797,000
<ul> <li>5. Market Value of Assets at the End of the Year</li> <li>6. Net Investment Income ** <ul> <li>(5 - 1 - 2c + 3c - 4)</li> </ul> </li> </ul>		1,822,539,885 313,462,671		1,595,610,970 (358,462,777)
<ul> <li>7. Expected Net Investment Income (8.00% per annum)</li> <li>8. Gain (Loss) on Market Value of Assets (6 - 7)</li> </ul>		123,099,531 190,363,140		127,670,490 (486,133,267)
9. Estimated Rate of Return		20.4%		(22.5%)

\* County contributions include Mercer settlement of \$29,000,000.

\*\* Net Investment Income is the change in the value of assets for reasons other than contributions and disbursements.

٦

# TABLE 9

# DERIVATION OF ACTUARIAL VALUE OF PLAN ASSETS AS OF DECEMBER 31, 2009

Year	Gain/(Loss)	Percentage Deferred	Amount Deferred	
2009	\$ 190,363,140	80%	\$ 152,290,512	
2008	(486,133,267)	60%	(291,679,960)	
2007	(27,533,110)	40%	(11,013,244)	
2006	82,494,242	20%	16,498,848	
2005	(2,393,630)	0%	 	
Total				(133,903,844
Actuaria	l Value of Assets			\$ 1,956,443,729

## SUMMARY RECONCILIATION OF ACTUARIAL VALUE OF PLAN ASSETS AS OF DECEMBER 31, 2009

Item		For Year Ending December 31, 2009		or Year Ending cember 31, 2008
1. Actuarial Value of Assets at the Beginning of the year	\$	1,968,518,479	\$	1,627,287,632
<ul> <li>2. Contributions for Plan Year</li> <li>a. County *</li> <li>b. Member</li> <li>c. Total</li> </ul>	\$	59,992,154 131,766 60,123,920	\$	34,840,886 140,209 34,981,095
<ul> <li>3. Disbursements for Plan Year <ul> <li>a. Benefit payments and refunds</li> <li>b. Administrative expenses payable to County</li> <li>c. Total</li> </ul> </li> <li>4. Proceeds of Pension Obligation Bonds</li> </ul>	\$	145,345,520 1,312,156 146,657,676	\$	144,184,222 1,031,291 145,215,513 397,797,000
<ul> <li>5. Actuarial Value of Assets at the End of the Year</li> <li>6. Net Investment Income ** <ul> <li>(5 - 1 - 2c + 3c - 4)</li> </ul> </li> </ul>		1,956,443,729 74,459,006		1,968,518,479 53,668,265
<ul> <li>7. Expected Net Investment Income (8.00% per annum)</li> <li>8. Gain (Loss) on Actuarial Value of Assets (6 - 7)</li> </ul>		152,932,131 (78,473,125)		124,532,608 (70,864,343)
9. Estimated Rate of Return		3.9%		3.4%

\* County contributions include Mercer settlement of \$29,000,000.

\*\* Net Investment Income is the change in the value of assets for reasons other than contributions and disbursements.

# EMPLOYER CONTRIBUTIONS FOR 2009 PLAN YEAR AND VARIANCE FROM THE FUNDING CALCULATION CONTRIBUTION

	Item							Amount
1.	1. Total Funding Calculation, End-of-Year Basis, for 2009 Plan Year (from January 1, 2009 actuarial valuation report)							30,355,535
2.	· ·	r Contributions Made		•	s			
	Contribution	Fraction of a Year		ontribution		rest to	E	nd of Year
	Made	Invested	Amount Year End*		Amount			
	Bi-weekly	50.0%	\$	6,174	\$	242	\$	6,416
	7/1/2009	50.4%		29,000,000	1,1	47,217		30,147,217
	2/15/2010	0.0%		5,660,925		-		5,660,925
	3/15/2010	0.0%		5,000,000		-		5,000,000
	4/15/2010	0.0%		4,339,075		-		4,339,075
	5/17/2010	0.0%		5,548,100		-		5,548,100
	6/15/2010	0.0%		9,437,880		-		9,437,880
	7/15/2010	0.0%		1,000,000		-		1,000,000
	Total		\$	59,992,154	\$1,1	47,459	\$	61,139,613
3.	Variance from	Actual Funding Contr	ribut	ion Amount**	:		\$	30,784,078
	(2 - 1)							

\* Interest to 12/31/2009 at 8.00% per annum

\*\* Variance will be amortized on a level dollar basis over five years.

# Page 22

# TABLE 12

# GASB NOS. 25 AND 27 DISCLOSURE INFORMATION FOR CURRENT AND PRIOR PLAN YEAR

Item		January 1, 2010		nuary 1, 2009
1. Covered Payroll	\$	237,040,117	\$	233,820,179
2. Unfunded Amount		140,888,381		88,858,509
3. Amortization Payment		6,813,146		8,959,996
<ul><li>4. Payment as a Level Percentage of Payroll (3 / 1)</li></ul>		2.87%		3.83%
<ol> <li>Weighted Average Amortization Period (2 / 3)</li> </ol>		20.68		9.92
6. Equivalent Single Amortization Period (Nearest Whole Year)		63		14

## **Equivalent Single Amortization Period**

## **Net Pension Obligation**

Item	January 1, 2010	January 1, 2009	
1. Annual Required Contribution (ARC)	\$ 29,529,322	\$ 30,355,535	
2. Interest on Net Pension Obligation	(31,648,580)	3,069,290	
3. Adjustment to ARC	24,688,821	(9,609,043)	
4. Annual Pension Cost (APC)	22,569,563	23,815,782	
5. Contributions made*	(31,290,863)	(457,789,154)	
6. Increase (Decrease) in Net Pension Obligation	(8,721,300)	(433,973,372)	
7. Net Pension Obligation at Beginning of Year	(395,607,251)	38,366,121	
8. Net Pension Obligation at End of Year**	(404,328,551)	(395,607,251)	
9. Percent of APC Contributed	138.64%	1922.21%	

\* Contributions for 2010 are estimated based on the County budget

\*\* NPO at December 31, 2010 is estimated based on expected contributions to be made for the year

# **REQUIRED SUPPLEMENTARY INFORMATION** SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Funded Ratio (a / b)	(Overfunded) Unfunded Actuarial Accrued Liability (b - a)	Covered Payroll (c)	(Overfunded) Unfunded as a Percentage of Covered Payoll [(b - a) / c]
1/1/2010	\$ 1,956,444	\$ 2,097,332	93.3%	\$ 140,888	\$ 237,040	59.4%
1/1/2009	1,968,518	2,057,377	95.7%	88,859	233,820	38.0%
1/1/2008	1,627,288	2,024,923	80.4%	397,635	227,364	174.9%
1/1/2007	1,525,532	1,931,220	79.0%	405,688	223,005	181.9%
1/1/2006	1,454,302	1,909,321	76.2%	455,020	225,722	201.6%

(\$ Amounts in Thousands)

## SCHEDULE OF EMPLOYER CONTRIBUTIONS GASB STATEMENT NO. 25 DISCLOSURE

Fiscal Year Ended December 31	Annual Required Contribution	Percentage Contributed
2010	\$ 29,529,322	106.0 % *
2009	30,355,535	1508.1
2008	53,063,610	65.7
2007	52,395,263	94.1
2006	52,638,196	52.1

The information presented above was determined as part of the actuarial valuation as of the dates indicated (i.e., the contribution determined by the valuation completed as of January 1, 2009 was contributed in the fiscal year ending December 31, 2009).

Additional information as of the latest actuarial valuation follows:

Valuation Date:	1/1/2010
Actuarial Cost Method:	Aggregate Entry Age Normal
Amortization Method:	
- Contribution Variance and	
Administrative Expenses	Level dollar, closed
- All Other Unfunded Liability	Level percent of payroll, closed
Remaining Amortization Period:	
- Contribution Variance**	5 Years
- Administrative Expenses	10 Years
- All Other Unfunded Liability	30 Years
Asset Valuation Method:	5-year smoothed market
Actuarial Assumptions:	
- Investment Rate of Return	8.00%

- Payroll Growth

\* Contributions for 2010 are estimated based on the County budget

\*\* POB proceeds not subject to contribution variance. Outstanding contribution variances as of January 1, 2009 were offset against POB proceeds.

3.50%

### DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS

#### ASSUMPTIONS

**Interest Rate:** 8.0% per annum, compounded annually. The components are 3.0% for inflation and 5.0% for the real rate of return.

**Separation From Service:** Illustrative rates of assumed separation from service are shown in the following tables.

	Mortality*						
Attained	Healthy Pensioners		Disabled 1	Pensioners			
Age	Males	Females	Males	Females			
45	0.13	0.11	2.26	0.75			
50	0.19	0.19	2.90	1.15			
55	0.31	0.38	3.54	1.65			
60	0.59	0.76	4.20	2.18			
65	1.11	1.26	5.02	2.80			
70	1.86	1.96	6.26	3.76			
75	2.87	3.40	8.21	5.22			
80	5.03	5.86	10.94	7.23			
85	8.61	10.72	14.16	10.02			

#### **Annual Rates per 100 Participants**

\* Healthy pensioners:

The sex-distinct UP-1994 Mortality Table projected to 2010, set back 1 year for males and set forward 4 years for females.

70% of the rates applicable to healthy pensioners.

Active members:

Disabled pensioners:

RP2000 Disabled Mortality Table.

## DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS (Continued)

	Withdrawal – Ultimate			
Attained Age	General Employees	Elected Officials*	Deputy Sheriffs	Disability
20	10.00	2.00	13.50	0.00
25	9.40	2.00	11.70	0.04
30	9.00	2.00	6.90	0.07
35	6.60	2.00	3.60	0.12
40	4.70	2.00	2.40	0.19
45	3.75	2.00	2.00	0.22
50	2.95	2.00	2.00	0.22
55	2.30	2.00	2.00	0.22
60	0.00	0.00	0.00	0.22
65	0.00	0.00	0.00	0.22

## Annual Rates per 100 Participants

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

# **Annual Rates per 100 Participants**

Withdrawal – Select Rates by Year of Employment					
Attained Age	General Employees				
	0	1	2	3	4
20	36.0	25.0	25.0	15.0	12.5
25	31.2	23.4	20.4	15.0	11.9
30	27.1	22.4	16.8	13.2	9.1
35	24.7	21.4	14.8	11.4	7.2
40	22.3	19.2	14.0	10.4	6.7
45	21.5	16.8	14.0	10.0	5.9
50	21.5	14.8	14.0	10.0	7.6
55	21.5	14.0	14.0	10.0	9.0

# DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS (Continued)

Retirement Rates				
Attained Age	General Employees (backdrop eligible)	General Employees ( <u>not</u> backdrop eligible)	Elected Officials	Deputy Sheriffs
45-49	19.8	0.0	0.0	26.0
50-54	19.8	7.0	0.0	31.0
55	19.8	15.0	19.8	16.0
56	19.8	15.0	19.8	40.0
57	23.0	15.0	23.0	40.0
58	20.4	15.0	20.4	40.0
59	24.8	15.0	24.8	40.0
60	19.4	20.0	19.4	40.0
61	22.5	20.0	22.5	75.0
62	28.4	20.0	28.4	80.0
63	26.6	20.0	26.6	50.0
64	24.3	25.0	24.3	50.0
65	30.4	30.0	30.4	100.0
66	22.5	30.0	22.5	100.0
67	25.7	30.0	25.7	100.0
68	34.2	30.0	34.2	100.0
69	36.0	30.0	36.0	100.0
70	100.0	100.0	100.0	100.0

# **Annual Rates per 100 Participants**

## DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS (Continued)

**Salary Increase:** Effective average of 4.5% per annum, compounded annually. Representative values are as follows:

Age	General Employees	Elected Officials	Deputy Sheriffs
20	10.0%	3.5%	9.5%
25	8.2	3.5	9.2
30	5.8	3.5	8.4
35	5.0	3.5	7.4
40	4.6	3.5	5.7
45	4.0	3.5	4.3
50	3.3	3.5	3.4
55	3.0	3.5	3.0
60	3.0	3.5	3.0
Average	3.9	3.5	6.1

## **Annual Rate of Salary Increase**

Payroll Growth: 3.5% per annum.

## MISCELLANEOUS

**Percentage Married/Age Difference:** Male 80%, female 80%. Beneficiaries are assumed to be the same age as the participant.

**Percentage Married with at Least One Dependent Child:** 21.6% for General Employees, 43.2% for Deputy Sheriffs and Elected Officials. 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.

**Backdrop Rate:** 75% of eligible retirees are assumed to elect a backdrop. Of those electing, 75% are assumed to take the maximum period available to them and 25% take half the maximum period available based on eligibility for an unreduced retirement benefit.

**Assumed Type of Disability:** For represented employees the assumption is 10% Ordinary and 90% Accidental and for non-represented employees, the assumption is 95% Ordinary and 5% Accidental.

# DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS (Continued)

#### METHODS

**Calculations:** The actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system, and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Actuarial Cost Method: Liabilities and contributions shown in this report are computed using the Aggregate Entry Age Normal Cost Method. The outstanding balance of the unfunded actuarial accrued liability (UAAL) as of January 1, 2004 and any changes to the UAAL arising from plan changes, assumption changes, and actuarial gains/losses are amortized as a level percentage of payroll over a 30-year period.

Administrative expenses incurred by the County related to the System are payable by the System to the County. The County then reimburses the System for this payment on a level dollar basis over 10 years.

The variance between the amount contributed to the System for a plan year, and the actual contribution requirement for that year is amortized on a level dollar basis over 5 years. POB proceeds were not subject to the contribution variance requirements.

**Asset Valuation Method:** A five-year moving market average value of assets that recognizes the actuarial expected investment return immediately and spreads the difference between the actual and expected return over a period of five years.

## DATA

**Census and Assets:** The valuation was based on members of the System as of January 1, 2010 and does not take into account future members. All census data was supplied by the System and was subject to reasonable consistency checks. Asset data was supplied by the System.

#### SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

#### **MEMBERSHIP**

Any person regularly employed by the County at an annual wage or salary, including any person employed by the State of Wisconsin, but receiving part of his compensation from the County.

#### **VESTING SERVICE**

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.

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:

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

#### **BENEFIT SERVICE**

Same as vesting service except service prior to becoming a participant does not count.

#### EARNINGS

Earnable compensation is the full rate of compensation payable to 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

#### SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS (Continued)

money. Compensation shall not exceed \$220,000 in the pension calculation as indexed for changes in the cost of living.

For all members except certain deputy sheriffs hired on or after January 1, 1982, the final average salary means the average annual salary for the highest three (3) consecutive years of service. For deputy sheriffs hired on or after January 1, 1982, excluding DA Investigators and non-represented deputy sheriffs, the final average salary means the average annual salary for the highest five (5) consecutive years of service. For DA Investigators and non-represented deputy sheriffs hired before July 1, 1995 and all non-deputy 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%.

## VOLUNTARY EMPLOYEE CONTRIBUTION

Up to 10% of earnings, provided that the employee was contributing on January 1, 1971.

## BENEFITS

Normal Retirement

Eligibility

#### Elected Officials:

Age 60, or age 55 with 30 years of service. For elected officials hired before January 1, 2006, the combination of age and service adding up to 75 (Rule of 75) also applies.

#### General Employees:

For firefighters, Federated Nurses, and Machinists:

Age 60 with 5 years of service, or age 55 with 30 years of service. For firefighters hired before December 1, 1996, Federated Nurses hired before January 1, 1997, and Machinists hired before January 1, 1994, Rule of 75 also applies.

#### SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS (Continued)

For Attorneys, Skilled Trades, non-represented employees, DC48, and Teamco:

Age 60, or age 55 with 30 years of service. For attorneys, Skilled Trades, and non-represented employees hired before January 1, 2006 and DC48 and Teamco hired before January 1, 1994, Rule of 75 also applies.

For non-represented employees (excluding Elected Officials and Deputy Sheriffs) hired after January 1, 2010, retirement age is 64.

**Deputy Sheriffs:** 

Age 57, or age 55 with 15 years of service. For deputy sheriffs, DA Investigators, and non-represented deputy sheriffs hired before January 1, 1994, Rule of 75 also applies.

#### Elected Officials

For elected officials hired before March 15, 2002, 2.5% of final average salary per year of service, not greater than 80%. For elected officials hired on or after March 15, 2002, 2.0% of final average salary per year of service, not greater than 80%.

#### **General Employees**

2.0% of final average salary per year of service, not greater than 80%. For non-represented employees (excluding Elected Officials and Deputy Sheriffs), 1.6% of final average salary per year of service from January 1, 2010.

#### Deputy Sheriffs

For deputy sheriffs hired before July 1, 1995 and DA Investigators and non-represented deputy sheriffs, 2.5% of final average salary per year of service, not greater than 80%. For deputy sheriffs hired on or after July 1, 1995, 2.0% of final average salary per year of service, not greater than 80%.

For all members, 1.6% of final average salary per year of service after 80% of final average salary has been reached.

Amount

# SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS (Continued)

	In addition to the pension portion, the benefit includes any voluntary contribution balance. Benefits should not be less
Early Retirement	than under previous system.
Eligibility	Age 55 with 15 years of service.
Amount	Benefits reduced by 5/12 of 1% for each month by which commencement of payments precedes Normal Retirement Age. For deputy sheriffs, DA Investigators, and non-represented deputy sheriffs, benefit reduction does not apply.
Ordinary Disability Benefit	
Eligibility	After 15 years of service.
Amount	Benefits calculated as for normal retirement benefits. Minimum benefit is 25% of final average salary.
Accidental Disability Benefit	
Eligibility	Immediate.
Amount	Benefits are the same as normal retirement benefits if the employee has attained the minimum Normal Retirement Age. If less than Normal Retirement Age at time of disability, the benefit is computed the same as for normal retirement but is not less than 75% or 60% of final average salary.
	Elected Officials
	For elected officials hired before February 19, 1987, the benefit is not less than 75% of final average salary. For all other elected officials, the benefit is not less than 60% of final average salary.
	General Employees
	For non-represented employees hired before February 19, 1987, attorneys hired on or after January 1, 1987, Skilled Trades hired before October 30, 1987, Federated Nurses hired
EMPLOYEES' RETIREMENT SYSTEM OF THE	BUCK CONSULTANTS

# SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS (Continued)

	before January 1, 1987, Machinists hired before May 18, 1988, DC48 hired before July 24, 1987, and Teamco hired before January 12, 1988, the benefit is not less than 75% of final average salary. For all other general employees, the benefit is not less than 60% of final average salary.
	Deputy Sheriffs
	For all deputy sheriffs, the benefit is not less than 75% of final average salary. For DA Investigators and non-represented deputy sheriffs hired on or after February 19, 1987, the benefit is not less than 60% of final average salary.
Ordinary Death Benefit	Upon the death of a deputy sheriff in active service for any cause other than accidental, the surviving spouse or child shall be entitled to receive the benefit under the provision of survivor benefits if the deceased member has completed at least one (1) year of service and is not eligible for normal retirement.
Accidental Death Benefit	
	<ul> <li>Upon the death of a deputy sheriff caused by an accident in active duty, a survivorship benefit equal to fifty (50) percent of final average salary shall be granted to the following members:</li> <li>1) A surviving spouse for life or until remarriage, or</li> <li>2) If there is no spouse or spouse dies or remarries before the youngest child has attained age 18, the benefit is payable to his child(ren) under age 18 until the youngest child attains said age, or</li> <li>3) If there is no spouse or child(ren) under age 18, the benefit is payable to his dependent father or mother to continue for life.</li> </ul>
	The monthly benefit aforementioned shall not be less than the benefit under ordinary death benefit section if death had not occurred in performance of duty.
Lump Sum Benefit Upon Death	

Upon a death of members, a lump sum benefit of one-half the final average salary of the deceased member, not greater than two thousand dollars (\$2,000) shall be paid to designated

# **TABLE 16**

# SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS (Continued)

Deformed Vested Penefit	beneficiary if such member has completed one (1) year of service and no survivors' benefits payable under any other survivorship benefits.
Deferred Vested Benefit	<ul> <li>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 benefit if:</li> <li>1) The accrued benefit at age 60 is at least \$10 per month</li> <li>2) 5 years of service</li> </ul>
	The benefit is computed the same as for a normal retirement benefit considering earnings and service prior to date of termination.
Survivor Benefit	
	Upon the death of a member prior to age 60 and after completing at least one (1) year of service, a monthly benefit equal to 40% of the member's salary for the year of his death less monthly survivor benefits payable under the Social Security law shall be payable to his surviving spouse if she has at least one dependent child and was married to the member at least one (1) year prior to his death. Upon attainment of age 60 the dependent spouse shall be paid a benefit equal to 50% of the normal pension which the member would have received assuming service had continued to accrue to age 60 and the final average salary determined at death. In addition, a monthly benefit equal to 10% of the member's monthly salary less the benefits payable to child under Social Security law shall be payable to each eligible children until he attains age 18 or marries, or until attainment of age 22 if he is a student and not married.
	Any member eligible for normal retirement may elect the protective survivorship option by selecting option 2 or 3 under the Optional Benefit section. This survivorship option shall become effective at the death of the member. If any member eligible to elect an option shall die in active service, without selecting an option, his surviving spouse shall be paid a survivorship benefit equal to the amount that would have been payable if such member had retired under option 3 immediately prior to his death.

# SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS (Continued)

Optional Benefit	
	In lieu of the full retirement benefit, any member at retirement may elect to receive an actuarial equivalent reduced retirement benefit in accordance with the following options:
	<ul> <li>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</li> <li>Option 2. At the death of the member, one-half of the reduced benefit shall be continued throughout the life of designated beneficiary; or</li> <li>Option 3. At the death of the member, the same reduced benefit shall be continued throughout the life of designated benefi</li></ul>
Other Benefits	
Simple COLA	2% of original benefit increase per year to retired employees (surviving beneficiary receives proportionate amount based on survivorship percentage).
Contribution Refund	Refund of employee voluntary contribution upon severance.
Backdrop Benefit	Employee may opt to receive a monthly benefit earned as of a specific date in the past (backdrop date). The backdrop date may not be prior to the earliest date that the member was eligible to retire and shall not be less than one (1) year prior to the date the member leaves active County service. Employee receives a cash payment equal to monthly benefits that would have been paid between backdrop date and actual retirement date plus interested earned.

#### SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS (Continued)

Members not eligible for backdrop benefits are Elected Officials, non-represented employees and deputy sheriffs hired on or after March 15, 2002, Machinists and Teamco hired on or after November 4, 2005, Attorneys hired on or after January 1, 2006, Federated Nurses hired on or after December 15, 2005, Firefighters hired on or after June 19, 2007 and DC48 hired on or after February 1, 2007.

# SUMMARY OF MEMBERSHIP DATA AS OF JANUARY 1, 2010

#### **Active Participants**

Item	General Employees	Deputy Sheriffs *	Elected Officials	Total
Number of Participants	4,331	452	25	4,808
Average Annual Salaries **	\$ 47,891	\$ 61,918	\$ 65,541	\$ 49,301
Average Age	46.7	43.0	50.5	46.4
Average Service	12.1	15.3	11.0	12.4

\* Includes 18 non-represented deputy sheriffs.

\*\* The salaries shown in the table above represent a rate of pay increased by the salary assumption.

#### **Inactive Participants**

Item	Number	Annual Annuities	Average Annuities	Average Age
Participants with Deferred Benefits *	1,659	\$ 11,757,999	\$ 7,087	52.6
Retired Participants	6,246	122,529,737	19,617	71.1
Beneficiaries	793	10,025,397	12,642	76.2
Disability Retirees	253	4,819,660	19,050	<u> </u>
Total	8,951	\$ 149,132,793	\$ 16,661	67.9

\* Includes 1,651 deferred vested participants and 8 beneficiaries in deferred status.

Members as of Janu Changes during t	•	<b>2009</b> 6,234 *
New enroll	ments	320
Rehires		46
Nonvested	terminations	(139)
Retirement	S	(266)
Deaths in a	ctive service	(15)
New deferr	ed beneficiaries	0
Data Adjus	tment	287
Members as of Dece	ember 31	6,467 *
*This total	includes vested inactive r	nembers.

### **ACTIVE MEMBERSHIP STATISTICS (UNAUDITED)**

### **RETIREMENTS AND SURVIVORS (UNAUDITED)**

	Maxi-				ements gr Options	anted			Survivors &	
	mum Pension	Refund	100%	75%	50%	25%	10-yr	Other	Benefi- ciaries	Total
January 1, 2009	2,800	566	1,234	190	1,128	307	127	39	917	7,308
Changes during the year:										
Adjustments (actuary) *	84	(5)	13	2	4	-	(1)	16	(99)	14
Retirements	161	-	47	7	16	23	12	-	52	318
Pensioner deaths	(108)	(47)	(50)	(2)	(60)	(2)	(1)	(1)	(77)	(348)
December 31, 2009	2,937	514	1,244	197	1,088	328	137	54	793	7,292

\* Adjustments as a result of reclassifications made to beginning balances by the actuary:

(1) 6 people who retired before January 1, 2009 were not reported to the actuary last year.

(2) Changes from Maximum Pension last year: 9 are now 100%; 1 is now 50%; 1 is now 25%; 15 are now Other;

(3) Additional Changes from last year: 1 data correction added to 100%; 2 data correction added to 75%

# EXHIBIT I

# **ACTIVE MEMBERSHIP DATA – ALL EMPLOYEES**

	Years of Service										
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total	
Under 25	77 \$30,542									77 \$30,542	
25-29	213 \$37,646	20 \$45,560								233 \$38,325	
30-34	257 \$38,995	133 \$45,661	43 \$49,562							433 \$42,092	
35-39	196 \$44,195	160 \$46,298	161 \$51,836	30 \$59,726	1 -					548 \$47,917	
40-44	157 \$42,231	159 \$45,929	161 \$51,104	154 \$55,236	40 \$53,650	2				673 \$48,958	
45-49	132 \$48,631	131 \$48,715	111 \$51,183	199 \$50,546	171 \$54,615	35 \$49,635	2			781 \$50,871	
50-54	125 \$44,673	119 \$47,190	109 \$49,900	186 \$50,580	241 \$56,753	92 \$56,397	22 \$58,437			894 \$51,676	
55-59	78 \$44,715	71 \$45,154	84 \$52,122	\$49,686	164 \$54,254	\$62,207	47 \$66,510	8 -		705 \$52,653	
60-64	56 \$45,951	54 \$51,413	50 \$48,929	\$54,376	75 \$56,640	\$64,980	26 \$69,979	15 -		382 \$54,822	
Over 64	7-	12	16 -	22 \$ 46,436	18 -	4-	2	1 -		82 \$ 52,858	
Total	1,298 \$41,695	859 \$46,784	735 \$50,914	842 \$51,798	710 \$55,747	241 \$58,339	99 \$65,209	24 \$ 66,711		4,808 \$49,301	

# NUMBER AND AVERAGE ANNUAL SALARY\* AS OF JANUARY 1, 2010

### EXHIBIT II

# **ACTIVE MEMBERSHIP DATA – GENERAL EMPLOYEES**

	Years of Service										
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total	
Under 25	77 \$30,542									77 \$30,542	
25-29	212 \$37,576	18 -								230 \$38,152	
30-34	254 \$38,908	102 \$42,292	27 \$43,826							383 \$40,156	
35-39	196 \$44,195	134 \$44,149	99 \$45,308	10 -	1 -					440 \$44,443	
40-44	156 \$42,165	141 \$44,314	117 \$48,206	99 \$49,977	33 \$50,765	2				548 \$46,030	
45-49	131 \$48,602	126 \$48,446	98 \$49,981	154 \$47,235	144 \$52,283	35 \$49,635	2			690 \$49,308	
50-54	125 \$44,673	117 \$46,379	101 \$48,685	171 \$49,969	214 \$55,702	87 \$55,508	19 -			834 \$50,630	
55-59	77 \$44,791	69 \$45,350	83 \$52,006	168 \$49,169	154 \$53,667	72 \$62,153	45 \$66,256	8 -		676 \$52,299	
60-64	55 \$45,833	53 \$50,747	48 \$48,588	73 \$53,909		30 \$64,980	26 \$69,979	15 -		372 \$54,423	
Over 64	7	11 -	16 -	22 \$ 46,436	18 -	4	2	1 -		81 \$ 52,863	
Total	1,290 \$41,653	771 \$45,522	589 \$48,464	697 \$49,389	636 \$54,502		94 \$64,140	24 \$ 66,711		4,331 \$47,891	

# NUMBER AND AVERAGE ANNUAL SALARY\* AS OF JANUARY 1, 2010

\* Compensation in cells with fewer than 20 records has been suppressed. Nineteen non-represented deputy sheriffs are included with Deputy Sheriffs exhibit.

# EXHIBIT III

# **ACTIVE MEMBERSHIP DATA – DEPUTY SHERIFFS**

		Years of Service										
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total		
Under 25												
25-29		1 -										
30-34	2	31 \$56,748	16 -							4 \$57,010		
35-39		25 \$57,568	62 \$62,259	20 \$67,589						107 \$62,160		
40-44		15	44 \$58,809	55 \$64,704	7					121 \$61,430		
45-49		5	13	45 \$61,876	27 \$67,051					90 \$62,839		
50-54			7 -	12	26 \$65,568	5-	3-			53 \$65,323		
55-59	1-	1 -	1 -	7 -	9 -	6 -	1 -			20 \$61,425		
60-64			1 -	2	2					-		
Over 64												
Total	3	78 \$55,973	144 \$60,503	141 \$63,537	71 \$66,562	11	4			452 \$61,918		

# NUMBER AND AVERAGE ANNUAL SALARY\* AS OF JANUARY 1, 2010

\* Compensation in cells with fewer than 20 records has been suppressed. Includes 19 non-represented deputy sheriffs.

# EXHIBIT IV

### **ACTIVE MEMBERSHIP DATA – ELECTED OFFICIALS**

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	<b>40</b> +	Total
Under 25										
25-29	1 -	1 -								2
30-34	1									1
35-39	-	1								- 1 -
40-44	1	3								4
45-49	- 1	-								- 1 -
50-54		2	1	3	1					7
55-59		1 -			1		1 -			3 -
60-64	1	1	1	1	1					5
Over 64	-	- 1	-	_	_					- 1
Total	5	10	2	4	3		1			25 \$65,541

# NUMBER AND AVERAGE ANNUAL SALARY\* AS OF JANUARY 1, 2010

### EXHIBIT V

# ACTIVE AND DEFERRED VESTED MEMBERS OBTAINING RETIREMENT ELIGIBILITY OVER NEXT FIVE CALENDAR YEARS

Year	General Employees	Elected Officials	Deputy Sheriffs	Total
Eligible at Valuation Date	877	6	24	907
2010	207	1	12	220
2011	180	2	15	197
2012	197	2	10	209
2013	177	1	12	190
2014	164	0	24	188
Total Over Next 5 Years	925	6	73	1,004
Grand Total Eligible	1,802	12	97	1,911

# **Actives Reaching Retirement Eligibility**

# **Deferred Vesteds Reaching Retirement Age**

Year	Total
2010	332
2011	87
2012	123
2013	112
2014	94
Total Over Next 5 Years	748

# EXHIBIT VI

# RETIREE AND BENEFICIARY MEMBERSHIP DATA AS OF JANUARY 1, 2010

Age Last Birthday	Number	Annual Benefit	Average Annual Benefit
<b>Retired Participants</b>			
Under 60	754	\$ 21,063,833	\$ 27,936
60 - 64	1,330	29,799,588	22,406
65 - 69	1,019	21,115,759	20,722
70 - 74	875	16,617,371	18,991
75 - 79	794	14,697,865	18,511
Over 79	1,474	19,235,320	13,050
Total	6,246	\$ 122,529,737	\$ 19,617
<b>Beneficiary Participants</b>			
Under 60	75	\$ 1,109,730	\$ 14,796
60 - 64	58	996,107	17,174
65 - 69	58	820,218	14,142
70 - 74	93	1,309,416	14,080
75 - 79	121	1,747,563	14,443
Over 79	388	4,042,362	10,418
Total	793	\$ 10,025,397	\$ 12,642
<b>Disabled Participants</b>			
Under 60	102	\$ 2,269,497	\$ 22,250
60 - 64	33	624,582	18,927
65 - 69	43	747,890	17,393
70 - 74	22	407,953	18,543
75 - 79	28	449,390	16,050
Over 79	25	320,349	12,814
Total	253	\$ 4,819,660	\$ 19,050
Grand Total			
Average Annual Benefit	7,292	\$ 137,374,794	\$ 18,839

# NUMBER AND AVERAGE ANNUAL BENEFIT

# EXHIBIT VII

# **5-YEAR HISTORY OF MEMBERSHIP DATA**

Valuation as of January 1	Number of Active Participants	Percentage Change in Membership	Total Annual Payroll	Percentage Change in Payroll
2010	4,808	(0.60)%	\$ 237,040,117	1.38 %
2009	4,837	0.48 %	233,820,179	2.84 %
2008	4,814	(1.71)%	227,364,398	1.95 %
2007	4,898	(3.13)%	223,005,093	(1.20)%
2006	5,056	1.53 %	225,721,691	7.59 %

# **Active Participants**

# **Retired, Disabled, and Beneficiary Participants**

Valuation as of January 1	Number on roll	Additions	Deletions	Percentage Change in Membership	Annual Annuities	Percentage Change in Annuities
2010	7,292	283	299	(0.22)%	\$ 137,374,794	2.24 %
2009	7,308	222	235	(0.18)%	134,363,234	2.09 %
2008	7,321	325	303	0.30 %	131,611,251	2.81 %
2007	7,299	259	235	0.33 %	128,010,105	3.17 %
2006	7,275	212	236		124,082,027	

# EXHIBIT VIII

# DETAILED TABULATIONS OF THE DATA

#### TABLE VIII-A

#### THE NUMBER AND ANNUAL SALARIES OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY AGE AS OF JANUARY 1, 2010 ALL EMPLOYEES

		Men		Women
Age	Number	Compensation	Number	Compensation
19	1			
20	1		2	
21	3		5	
22	9		3	
23	16		10	
24	18		9	
25	15		24	\$ 859,799
26	24	\$ 869,215	12	
27	26	1,001,054	30	1,275,184
28	29	1,092,508	21	709,414
29	31	1,358,353	21	820,808
30	40	1,522,186	40	1,433,355
31	32	1,471,422	53	2,179,998
32	41	1,827,821	44	1,838,648
33	34	1,513,265	54	2,147,894
34	49	2,377,100	46	1,914,187
35	52	2,831,618	52	2,258,705
36	33	1,418,427	50	2,045,366
37	58	2,923,876	44	2,016,234
38	54	2,784,366	69	2,953,420
39	70	4,017,478	66	3,009,130
40	71	3,608,982	70	3,342,911
41	47	2,451,597	68	3,215,850
42	61	3,264,667	86	3,749,413
43	59	3,216,597	81	3,706,204
44	59	3,026,650	71	3,365,702
45	52	3,156,502	78	3,564,148
46	62	4,096,342	87	4,129,806
47	73	3,625,156	97	4,692,354
48	59	2,989,504	81	3,547,226
49	82	4,455,171	110	5,474,034
50	69	3,752,498	108	5,191,661
51	79	4,078,871	105	4,809,984
52	69	4,014,525	105	5,451,367
53	77	4,297,968	110	5,247,954
54	88	5,372,798	84	3,980,792
55	80	4,546,232	97	4,436,791
56	76	4,095,389	74	3,793,382
57	53	2,671,521	84	4,307,173

#### TABLE VIII-A

#### THE NUMBER AND ANNUAL SALARIES OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY AGE AS OF JANUARY 1, 2010 ALL EMPLOYEES

	Men		Women	
Age	Number	Compensation	Number	Compensation
58	63	\$ 3,982,283	69	\$ 3,087,369
59	56	3,585,074	53	2,615,239
60	50	3,090,004	74	3,679,037
61	52	3,219,881	43	2,229,145
62	29	1,649,475	43	1,991,985
63	30	1,966,462	38	1,917,737
64	9		14	
65	8		19	
66	5		8	
67	4		8	
68	6		4	
69	3		4	
70	1		1	
71			5	
72	1		2	
73	1			
75			1	
86	1			
Total	2,171	\$ 115,731,353	2,637	\$ 121,308,764

#### TABLE VIII-B

#### THE NUMBER AND ANNUAL SALARIES OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY YEARS OF CREDITED SERVICE AS OF JANUARY 1, 2010 ALL EMPLOYEES

Years of		Men		Women
Service	Number	Compensation	Number	Compensation
0	151	\$ 5,028,118	187	\$ 6,449,890
1	170	7,427,598	196	7,825,012
2	85	4,318,298	102	4,452,750
3	74	3,471,664	93	4,046,271
4	93	4,553,875	147	6,546,310
5	54	2,984,515	74	3,380,369
6	57	2,732,407	79	3,623,149
7	84	4,495,371	63	2,506,458
8	106	5,416,114	92	3,661,994
9	100	4,947,007	150	6,440,210
10	97	4,677,441	124	5,547,032
11	81	4,235,472	75	3,332,283
12	66	3,838,950	67	3,295,479
13	64	3,814,607	59	3,044,970
14	64	3,790,738	38	1,845,129
15	71	4,011,307	87	4,130,085
16	57	3,101,111	83	4,050,376
17	95	5,738,102	117	5,719,083
18	77	4,377,647	104	4,956,667
19	68	3,741,647	83	3,787,744
20	76	4,255,984	149	7,608,893
21	74	4,303,718	108	5,642,516
22	46	3,321,069	58	3,081,460
23	36	2,399,410	56	3,030,002
24	49	2,939,254	58	2,998,180
25 26	30	1,660,930	57	3,148,367
26 27	29	1,826,765	19 15	
27 28	16 12		15 26	1,301,059
28 29	12		20	1,200,554
29 30	14		23 10	1,200,554
30	11		10	
31	18		13 9	
32	12		5	
33	10		4	
35	8			
36	4		2	
37	3		-	
38	1		2	
39	1		-	
Total	2,171	\$ 115,731,353	2,637	\$ 121,308,764

#### TABLE VIII-C

#### THE NUMBER AND ANNUAL SALARIES OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY AGE AS OF JANUARY 1, 2010 GENERAL EMPLOYEES

		Men		Women
Age	Number	Compensation	Number	Compensation
19	1			
20	1		2	
21	3		5	
22	9		3	
23	16		10	
24	18		9	
25	15		24	\$ 859,799
26	24	\$ 869,215	12	
27	26	1,001,054	30	1,275,184
28	29	1,092,508	21	709,414
29	29	1,256,107	20	768,355
30	37	1,354,205	40	1,433,355
31	21	841,672	49	1,978,462
32	35	1,492,312	41	1,668,310
33	31	1,339,723	52	2,034,542
34	35	1,566,865	42	1,670,174
35	38	1,968,823	48	1,994,907
36	28	1,186,914	48	1,914,607
37	41	1,879,220	43	1,955,034
38	33	1,520,200	61	2,451,838
39	40	2,074,615	60	2,608,942
40	47	2,183,429	66	3,117,349
41	25	1,100,044	60	2,723,438
42	44	2,101,109	79	3,323,855
43	40	2,094,785	79	3,581,782
44	44	2,076,904	64	2,921,906
45	40	2,452,882	71	3,143,177
46	47	3,167,952	82	3,805,459
47	56	2,550,448	92	4,373,796
48	51	2,465,202	80	3,484,860
49	69	3,638,915	102	4,939,599
50	61	3,246,354	104	4,884,788
51	70	3,458,953	104	4,738,202
52	59	3,308,828	101	5,266,331
53	68	3,625,936	106	4,996,372
54	82	5,019,759	79	3,679,805
55	72	4,045,290	93	4,190,735
56	70	3,723,660	72	3,680,094
57	51	2,529,945	83	4,240,168

#### TABLE VIII-C

#### THE NUMBER AND ANNUAL SALARIES OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY AGE AS OF JANUARY 1, 2010 GENERAL EMPLOYEES

	Men		Women	
Age	Number	Compensation	Number	Compensation
58	60	\$ 3,833,260	69	\$ 3,087,369
59	53	3,408,053	53	2,615,239
60	49	3,003,296	73	3,617,272
61	49	3,016,836	43	2,229,145
62	29	1,649,475	42	1,939,532
63	27	1,753,390	38	1,917,737
64	8		14	
65	8		19	
66	4		8	
67	4		8	
68	6		4	
69	3		4	
70	1		1	
71			5	
72	1		2	
73	1			
75			1	
86	1			
Total	1,810	\$ 93,274,448	2,521	\$ 114,140,292

#### TABLE VIII-D

### THE NUMBER AND ANNUAL SALARIES OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY YEARS OF CREDITED SERVICE AS OF JANUARY 1, 2010 GENERAL EMPLOYEES

Years of		Men		Women
Service	Number	Compensation	Number	Compensation
0	151	\$ 5,028,118	186	\$ 6,412,633
1	166	7,217,786	196	7,825,012
2	85	4,318,298	101	4,400,297
3	74	3,471,664	92	4,007,373
4	92	4,504,357	147	6,546,310
5	51	2,834,514	72	3,275,463
6	49	2,262,405	77	3,518,074
7	68	3,458,894	59	2,290,003
8	86	4,272,474	89	3,496,598
9	79	3,766,980	141	5,921,864
10	71	3,229,201	119	5,260,501
11	64	3,288,546	66	2,783,512
12	42	2,342,345	61	2,911,984
13	43	2,451,317	54	2,732,663
14	40	2,264,369	29	1,281,020
15	42	2,125,692	80	3,692,016
16	38	1,923,586	77	3,673,869
17	56	3,252,584	104	4,904,867
18	60	3,303,998	101	4,776,904
19	57	3,045,180	82	3,725,109
20	64	3,512,518	142	7,155,501
21	55	3,105,772	100	5,164,051
22	40	2,889,630	55	2,831,660
23	30	1,979,073	54	2,883,235
24	41	2,371,872	55	2,769,643
25	28	1,529,329	55	3,020,417
26	26	1,617,502	18	
27	15		15	
28	11		26	1,301,059
29	14		22	1,133,549
30	11		9	
31	17		13	
32	10		8	
33	7		5	
34	10		4	
35	8		3 2	
36 37	4 3		2	
37	3 1		2	
38 39	1		2	
Total	1,810	\$ 93,274,448	2,521	\$ 114,140,292

#### TABLE VIII-E

#### THE NUMBER AND ANNUAL SALARIES OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY AGE AS OF JANUARY 1, 2010 DEPUTY SHERIFFS

	Men			Women		
Age	Number	Compensatio	on 1	Number	Compens	ation
29	1					
30	3					
31	11			4		
32	6			3		
33	3			2		
34	13			4		
35	14			4		
36	5			2		
37	17			1		
38	21	\$ 1,264,10		8		
39	30	1,942,80		5		
40	24	1,425,55		4		
41	21	1,299,10	00	7		
42	16			7		
43	18			2 7		
44	15					
45	12			7		
46	14			5		
47	17			5		
48	8			1		
49 50	13			8		
50	8			4		
51	9			1		
52 52	9 7			4		
53 54	4			2 5		
55 5	4 7			3		
55 56	6			5 2		
57	2			2 1		
58	3			1		
59	2					
60	2			1		
61	3			1		
64	1					
Total	343	\$ 21,197,79	94	109	\$ 6,78	9,061

#### TABLE VIII-F

#### THE NUMBER AND ANNUAL SALARIES OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY YEARS OF CREDITED SERVICE AS OF JANUARY 1, 2010 DEPUTY SHERIFFS

Years of		Men		Women
Service	Number	Compensation	Number	Compensation
0			1	
3			1	
4	1			
5	2			
6	7		1	
7	12		4	
8	20	\$ 1,143,640	3	
9	20	1,127,574	9	
10	26	1,448,240	5	
11	16		9	
12	24	1,496,604	6	
13	21	1,363,291	5	
14	23	1,414,576	9	
15	29	1,885,615	7	
16	19	0.004.501	6	
17	36	2,306,701	12	
18	17		3	
19 20	11 12		1 7	
20 21	12 19		7	
21 22	4		3	
22 23	4 6		2	
23 24	8		3	
25	2		2	
26	3		1	
27	1		1	
28	1			
29	-		1	
30			1	
31	1			
32	2			
Total	343	\$ 21,197,794	109	\$ 6,789,061

#### TABLE VIII-G

#### THE NUMBER AND ANNUAL SALARIES OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY AGE AS OF JANUARY 1, 2010 ELECTED OFFICIALS

		Men		Women
Age	Number	Compensation	Number	Compensation
29	1		1	
34	1			
39			1	
41	1		1	
42	1			
43	1			
46	1			
52	1			
53	2		2	
54	2			
55	1		1	
59	1			
60	1			
62			1	
63	3			
66	1			
Total	18		7	

#### TABLE VIII-H

### THE NUMBER AND ANNUAL SALARIES OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY YEARS OF CREDITED SERVICE AS OF JANUARY 1, 2010 ELECTED OFFICIALS

Years of		Men		Women
Service	Number	Compensation	Number	Compensation
1	4			
2			1	
2 5	1		2	
6	1		1	
7	4			
9	1			
11	1			
14	1			
17	3		1	
21			1	
22	2			
32			1	
Total	18		7	

#### TABLE VIII-I

#### THE NUMBER AND ANNUAL BENEFITS PAYABLE TO ALL MEMBERS RECEIVING BENEFITS AS OF JANUARY 1, 2010

		Men		Women
Age	Number	Annuities	Number	Annuities
16	1	\$ 7,737		
17			1	\$ 4,064
19			1	14,356
20	1	2,703		
21	1	15,145		
22	1	2,945	1	6,339
24			1	5,666
27	1	19,809		
29			1	4,459
32	1	31,178		
34			1	33,036
35	1	7,167		
36	1	9,710		
39	2	32,052	1	29,661
40	2	56,414		
41	3	58,548		
43	1	31,972		
44	1	34,938	2	15,924
45	2	30,681	7	90,352
46			3	56,158
47	1	7,425	5	135,994
48	2	37,206	5	117,552
49			5	134,858
50	4	162,547	7	167,120
51	10	301,298	13	327,235
52	16	463,031	16	393,512
53	18	489,498	32	770,206
54	31	948,074	32	890,574
55	28	843,683	34	852,283
56	49	1,477,941	63	1,502,725
57	74	2,264,315	74	1,751,755
58	81	2,395,079	85	2,094,678
59	98	2,898,424	110	2,415,030
60	117	2,848,446	101	2,139,651
61	137	3,896,210	165	2,805,298
62	142	3,424,566	164	2,959,870
63	167	4,296,674	179	3,400,241
64	112	2,867,579	137	2,781,742

#### TABLE VIII-I

#### THE NUMBER AND ANNUAL BENEFITS PAYABLE TO ALL MEMBERS RECEIVING BENEFITS AS OF JANUARY 1, 2010

		Men		Women
Age	Number	Annuities	Number	Annuities
65	121	\$ 2,764,849	120	\$ 2,227,131
66	94	2,296,040	131	2,193,913
67	98	2,442,062	141	2,260,357
68	94	2,432,280	127	2,095,975
69	88	2,125,677	106	1,845,584
70	85	1,885,406	114	1,777,489
71	81	1,865,419	119	1,957,397
72	73	1,877,682	117	1,783,521
73	85	1,769,875	114	1,596,595
74	78	1,813,197	124	2,008,158
75	63	1,573,927	122	1,844,279
76	72	1,881,510	111	1,611,851
77	77	1,692,375	116	1,702,826
78	79	1,843,171	96	1,331,697
79	75	1,411,936	132	2,001,246
80	62	1,292,651	138	1,780,090
81	56	1,076,112	127	1,623,755
82	57	1,174,607	123	1,524,941
83	51	1,069,399	130	1,381,819
84	48	978,242	102	1,294,320
85	44	736,133	94	954,917
86	44	762,096	97	1,066,771
87	40	602,579	90	855,692
88	41	678,816	77	810,657
89	25	416,331	76	621,659
90	22	218,262	58	434,998
91	15	252,371	57	464,286
92	6	58,659	49	335,335
93	6	122,951	38	251,996
94	6	56,533	26	204,951
95	4	27,971	30	166,956
96	5	48,678	11	71,057
97	3	19,916	8	35,967
98			6	21,057
99	2	33,959	3	14,601
100			4	20,154
101			3	26,492
102			2	8,328
104	1	964		
Total	2,907	\$ 69,265,639	4,385	\$ 68,109,155

#### TABLE VIII-J

#### THE NUMBER AND ANNUAL BENEFITS PAYABLE TO RETIRED MEMBERS AS OF JANUARY 1, 2010

		Men		Women
Age	Number	Annuities	Number	Annuities
47			1	\$ 31,762
48			2	81,868
49			2	71,938
50	3	\$ 120,886	4	109,592
51	4	169,898	11	292,287
52	13	419,296	10	339,681
53	10	324,185	22	598,711
54	27	869,023	25	756,976
55	25	801,491	26	732,148
56	40	1,292,857	51	1,262,878
57	66	1,907,840	65	1,599,596
58	74	2,271,484	78	1,922,709
59	97	2,884,636	98	2,202,092
60	111	2,744,556	86	1,830,679
61	129	3,771,916	153	2,608,109
62	138	3,357,843	151	2,765,669
63	163	4,213,827	163	3,112,307
64	110	2,829,375	126	2,565,306
65	111	2,639,211	106	1,962,798
66	89	2,221,720	116	1,985,513
67	93	2,359,705	123	2,046,346
68	90	2,347,428	115	1,875,434
69	86	2,090,785	90	1,586,819
70	80	1,786,295	102	1,609,140
71	79	1,841,478	103	1,655,392
72	69	1,825,334	104	1,584,736
73	71	1,600,703	92	1,314,126
74	70	1,717,910	105	1,682,256
75	62	1,566,113	106	1,640,716
76	69	1,829,803	81	1,231,801
77	74	1,671,688	91	1,291,106
78	72	1,777,545	68	799,499
79	67	1,325,146	104	1,564,448
80	59	1,270,537	101	1,356,112
81	53	1,061,125	91	1,141,959
82	55	1,155,639	88	1,063,512
83	50	1,056,183	84	888,562
84	46	944,277	65	809,632
85	41	723,760	60	532,343
86	38	713,241	69	765,563

#### TABLE VIII-J

#### THE NUMBER AND ANNUAL BENEFITS PAYABLE TO RETIRED MEMBERS AS OF JANUARY 1, 2010

		Μ	len		Wo	omen
Age	Number		Annuities	Number		Annuities
87	37	\$	570,751	71	\$	652,080
88	37		642,758	54		573,078
89	22		405,478	58		451,238
90	20		207,913	44		333,539
91	15		252,371	50		403,371
92	5		52,490	31		204,312
93	6		122,951	32		206,197
94	6		56,533	22		188,661
95	2		18,597	26		154,998
96	5		48,678	7		52,998
97	2		16,410	5		20,406
98				5		20,514
99	2		33,959	3		14,601
100				3		15,257
101				3		26,492
102				1		6,244
Total	2,693	\$	65,933,632	3,553	\$	56,596,105

#### **TABLE VIII-K**

#### THE NUMBER AND ANNUAL BENEFITS PAYABLE TO BENEFICIARY MEMBERS AS OF JANUARY 1, 2010

	Men			Women
Age	Number	Annuities	Number	Annuities
16	1	\$ 7,737		
17			1	\$ 4,064
19			1	14,356
20	1	2,703		
21	1	15,145		
22	1	2,945	1	6,339
24			1	5,666
27	1	19,809		
29			1	4,459
34			1	33,036
35	1	7,167		
36	1	9,710		
39	1	1,983		
41	2	19,501		
44			2	15,924
45			3	13,103
47	1	7,425	1	50,067
49			1	24,312
50			2	29,520
51			1	9,974
52			5	45,267
53	2	56,496	2	34,231
54			4	76,954
55			6	81,845
56	1	5,084	10	210,173
57			7	101,988
58			4	92,776
59			7	99,969
60	2	9,785	10	232,161
61	3	19,647	7	110,679
62	2	12,916	10	148,718
63	2	26,010	11	219,755
64			11	216,436
65	3	33,324	7	130,608
66	3	28,444	10	128,854
67	2	17,785	14	159,095

#### TABLE VIII-K

#### THE NUMBER AND ANNUAL BENEFITS PAYABLE TO BENEFICIARY MEMBERS AS OF JANUARY 1, 2010

		Men		Women
Age	Number	Annuities	Number	Annuities
68	1	\$ 16,221	6	\$ 128,052
69			12	177,835
70			10	129,929
71	1	7,486	16	302,005
72	2	5,898	11	165,824
73	10	91,684	19	243,015
74	6	58,445	18	305,129
75			14	179,637
76	1	9,423	24	297,996
77	2	4,109	21	358,246
78	5	22,653	23	450,715
79	7	48,952	24	375,831
80	2	6,638	36	414,493
81	3	14,987	30	404,932
82	2	18,968	33	434,813
83	1	13,216	42	445,193
84	1	13,118	36	472,117
85	3	12,373	32	392,911
86	4	21,936	26	275,024
87	2	17,987	19	203,613
88	4	36,057	22	229,381
89	3	10,853	18	170,421
90	2	10,349	14	101,459
91			7	60,914
92	1	6,169	18	131,022
93			6	45,799
94			3	10,670
95	2	9,374	4	11,958
96			4	18,059
97	1	3,507	3	15,561
98			1	544
100			1	4,897
102			1	2,083
104	1	964		
Total	98	\$ 764,987	695	\$ 9,260,410

#### TABLE VIII-L

#### THE NUMBER AND ANNUAL BENEFITS PAYABLE TO DISABLED MEMBERS AS OF JANUARY 1, 2010

		Men		Women
Age	Number	Annuities	Number	Annuities
32	1	\$ 31,178		
39	1	30,070	1	\$ 29,661
40	2	56,414		
41	1	39,047		
43	1	31,972		
44	1	34,938		
45	2	30,681	4	77,249
46			3	56,158
47			3	54,165
48	2	37,206	3	35,684
49			2	38,608
50	1	41,661	1	28,008
51	6	131,401	1	24,975
52	3	43,735	1	8,563
53	6	108,816	8	137,264
54	4	79,051	3	56,644
55	3	42,192	2	38,291
56	8	180,000	2	29,674
57	8	356,475	2	50,171
58	7	123,595	3	79,193
59	1	13,788	5	112,970
60	4	94,105	5	76,810
61	5	104,648	5	86,511
62	2	53,807	3	45,482
63	2	56,837	5	68,179
64	2	38,203		
65	7	92,314	7	133,725
66	2	45,876	5	79,546
67	3	64,572	4	54,915
68	3	68,631	6	92,488
69	2	34,892	4	80,930
70	5	99,110	2	38,419
71	1	16,455		
72	2	46,450	2	32,961
73	4	77,488	3	39,454
74	2	36,843	1	20,773
75	1	7,814	2	23,926

#### TABLE VIII-L

#### THE NUMBER AND ANNUAL BENEFITS PAYABLE TO DISABLED MEMBERS AS OF JANUARY 1, 2010

		Men		Women
Age	Number	Annuities	Number	Annuities
76	2	\$ 42,283	6	\$ 82,053
77	1	16,578	4	53,474
78	2	42,973	5	81,484
79	1	37,838	4	60,967
80	1	15,476	1	9,484
81			6	76,864
82			2	26,617
83			4	48,064
84	1	20,847	1	12,572
85			2	29,663
86	2	26,919	2	26,184
87	1	13,841		
88			1	8,198
94			1	5,620
Total	116	\$ 2,567,020	137	\$ 2,252,640

#### EXHIBIT IX

# GLOSSARY

Accrued Liability	The difference between (a) the present value of future plan benefits, and (b) the present value of future normal cost. It is the portion of the present value of future plan benefits attributable to service accrued as of the valuation date. Sometimes referred to as "actuarial accrued liability."
Accrued Service	The service credited under the plan, which was rendered before the date of the actuarial valuation.
Actual Funding Contribution	The Actual Funding Contribution for a plan year is calculated using census and asset information as of the first day of the plan year, and includes Normal Cost, with interest to the end of the plan year, and a net amortization payment.
Actuarial Assumptions	Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.
Actuarial Cost Method	A mathematical budgeting procedure for allocating the dollar amount of the "present value of future plan benefits" between the present value of future normal cost and the accrued liability. Sometimes referred to as the "actuarial funding method."
Actuarial Equivalent	A series of payments is called an actuarial equivalent of another series of payments if the two series have the same actuarial present value.
Actuarial Value of Assets	The value of current plan assets recognized for valuation purposes. Based on a smoothed market value that recognizes investment gains and losses over a period of three years.
Amortization	Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

# EXHIBIT IX

# GLOSSARY

(Continued)

Annual Required Contribution	The Annual Required Contribution, or ARC, is the amount determined in accordance with Governmental Accounting Standards Board Statements Nos. 25 and 27.
Budget Contribution	The Budget Contribution for a year is based on census and asset information as of the first day of the PRIOR plan year, rolled forward to the next plan year based on all actuarial assumptions being met. For example, the Budget Contribution for 2011 is based on census and asset information as of January 1, 2010, rolled forward to January 1, 2011.
Contribution Variance	The difference between the Actual Contribution and the Budget Contribution for a plan year is referred to as the Contribution Variance. A Contribution Variance resulting from an overpayment is amortized over 5 years as a level dollar credit. A Contribution Variance resulting from an underpayment is amortized over 5 years as a level dollar charge.
Experience Gain (Loss)	A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.
Normal Cost	The annual cost assumed, under the actuarial funding method, for current and subsequent plan years. Sometimes referred to as "current service cost."
Present Value	The amount of funds presently required to provide a payment or series of payments in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.
Unfunded Accrued Liability	The difference between the actuarial accrued liability and valuation assets.