

*OBRA 1990 Retirement System of the  
County of Milwaukee*

*Actuarial Valuation Report*

*January 1, 2011*

*May, 2011*

May 17, 2011

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 OBRA 1990 Retirement System of the County of Milwaukee as of January 1, 2011. The valuation takes into account all of the promised benefits to which members are entitled as of January 1, 2011; and as required by the Retirement Code is the basis for the Budget Contribution for fiscal year 2012.

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. Effective with the 2007 valuation, the Board adopted a new mortality table assumption to better reflect actual and expected experience.

### **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 2011 we received the data in multiple files. We received the counts of members to include in the January 1, 2011 valuation separately from the 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.

### **Funding Adequacy**

The 2010 valuation performed last year resulted in an Actual Funding Contribution of \$716,439 against which \$786,000 was actually contributed.

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The Actual Funding Contribution for 2011, based on the results of this valuation, is \$807,028. It is expected that \$772,000 will be contributed during 2012 on behalf of the 2011 plan year. The shortfall of \$35,028 will be amortized over five years.

### **Budget Contribution**

The 2012 Budget Contribution, expected to be contributed in 2013, is \$880,000.

It is anticipated that cash outs of roughly \$2,000,000 are to be made over the next year from the OBRA plan. The cash outs are composed of both the lump sum due to participants plus and interest component. The liability in this valuation later in the next year of \$5,519,524 includes the amount of this cash out and interest. The trust of the OBRA Retirement System, even with the inclusion of the contributions recommended in this report, does not currently contain sufficient funds to pay this cash out. We recommend that the amount of cash out be paid in addition to the contribution requirements contained in this report, with an adjustment to reflect the overlap in the contribution to the unfunded liability and the \$2,000,000 cash out. We will work with staff to determine the amount of overlap once final cash outs are determined.

### **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



Marco Ruffini  
Senior Consultant

LL/MR/LL:pl

**EMPLOYEES' RETIREMENT SYSTEM OF THE COUNTY OF MILWAUKEE**  
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## **Executive Summary**

This report presents the actuarial valuation as of January 1, 2011 for the OBRA 1990 Retirement System of the County of Milwaukee. The principal valuation results include:

- The Actual Funding Contribution for fiscal year 2011, which is \$807,028.
- The Annual Required Contribution for fiscal year 2011 in accordance with GASB requirements, which is \$807,028.
- The Budget Contribution for fiscal year 2012, which is \$880,000.
- The total funded ratio of the plan determined as of January 1, 2011, which is 25.4% based on the accrued liability and the actuarial value of assets.
- The determination of the actuarial gain or loss as of January 1, 2011, which is a gain of \$103,867.
- Annual disclosure as of January 1, 2011 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**

There were no legislative or administrative changes since the prior valuation.

The benefit provisions and contribution provisions are summarized in Table 15.

### **Actuarial Assumptions and Methods**

Effective with the 2007 valuation, the Board adopted a new mortality table assumption to better reflect actual and expected experience. There were no legislative or administrative changes since the prior valuation.

The actuarial assumptions and methods are outlined in Table 14.

## Contribution Amounts

The results of the valuation as of January 1, 2011 determine the Actual Funding Contribution and Annual Required Contribution for fiscal year 2011 and the Budget Contribution for fiscal year 2012. The Actual Funding Contribution and the Annual Required Contribution for GASB 25 disclosure for fiscal year 2011 are both \$807,028. The Budget Contribution for fiscal year 2012 is \$880,000.

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

The Budget Contribution calculated by the actuary increased from \$772,000 for fiscal year 2011 to \$880,000 for fiscal year 2012. A reconciliation of the increase of \$108,000 is shown in the following table:

Item	Amount
1. 2011 Budget Contribution	\$ 772,000
2. Increase / (Decrease) during 2010 due to	
a. Unanticipated liability loss (gain)	\$ 38,000
b. Asset loss (gain) other than expected	(1,000)
c. 2010 reimbursable expenses other than assumed	(2,000)
d. 2010 contribution variance other than assumed	-
e. Full recognition of bases other than assumed	-
f. Other	-
g. Total	<u>35,000</u>
3. 2011 Actual Contribution (1 + 2)	\$ 807,000
4. Expected Increase / (Decrease) during 2011 due to	
a. Normal cost and existing amortization schedule	\$ 19,000
b. Phase-in of deferred asset (gains) losses	-
c. Amortization of 2011 reimbursable expenses	67,000
d. Expected contribution variance for 2011	8,000
e. Full recognition of certain amortization bases	(21,000)
f. Increase due to assumption changes	-
g. Total	<u>73,000</u>
5. 2012 Budget Contribution (3 + 4)	\$ 880,000

## Summary of Principal Results

Summarized below are the principal financial results for the OBRA 1990 Retirement System of the County of Milwaukee based upon the actuarial valuation as of January 1, 2011. Comparable results from the January 1, 2010 valuation are also shown.

Item	January 1, 2011	January 1, 2010
<b>Demographics</b>		
<u>Active Members</u>		
• Number	1,540	1,173
• Average Annual Pay	\$ 5,803	\$ 5,883
<u>Inactive Members</u>		
• Members Receiving Benefits		
• Number	2	2
• Average Annual Benefit Payment	\$ 1,923	\$ 1,923
• Members With Deferred Benefits		
• Number	9,997	10,134
• Average Annual Benefit Payment	\$ 215	\$ 230
<b>Actual Funding Contribution</b>		
	<b>(Fiscal Year 2011)</b>	<b>(Fiscal Year 2010)</b>
• Normal Cost with Interest	\$ 189,829	\$ 135,517
• Net Amortization Payments	<u>617,199</u>	<u>580,922</u>
• Total Contribution	\$ 807,028	\$ 716,439
<b>Actuarial Funded Status</b>		
• Accrued Liability	\$ 5,519,524	\$ 5,068,513
• Actuarial Value of Assets	<u>1,402,225</u>	<u>1,038,607</u>
• Unfunded Accrued Liability	\$ 4,117,299	\$ 4,029,906
• Funded Ratio	25.4 %	20.5 %

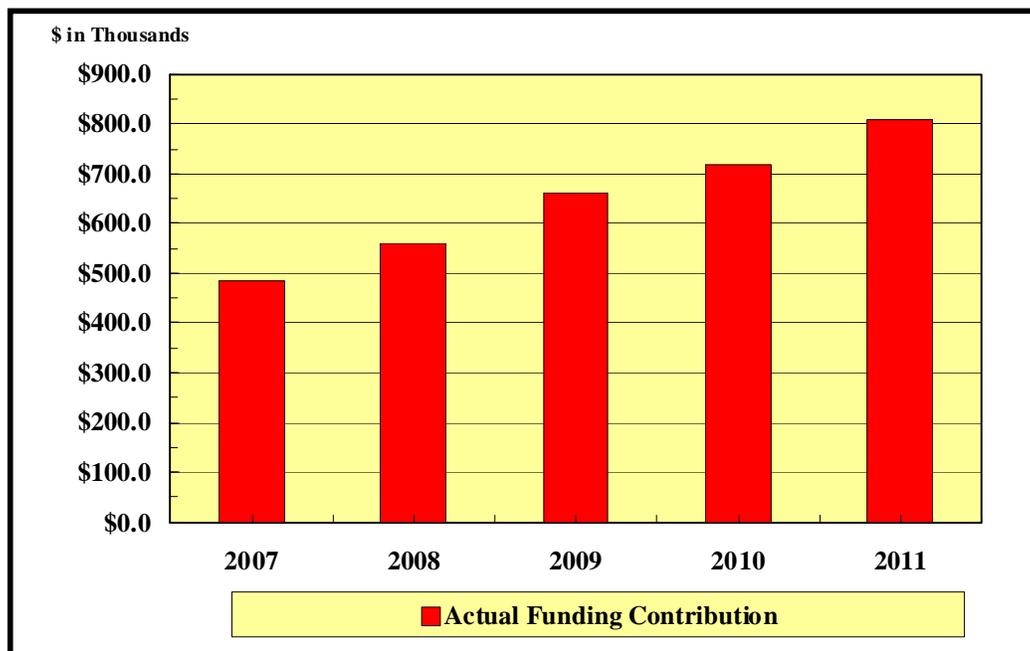
## Five-Year History of Principal Financial Results

### Five-Year History of Contribution Amounts

Valuation as of January 1	Actual Funding Contributions		
	Normal Cost with Interest	Net Amortization Payments	Total
2011	\$ 189,829	\$ 617,199	\$ 807,028
2010	135,517	580,922	716,439
2009	167,791	493,134	660,925
2008	176,532	381,281	557,813
2007	142,902	342,651	485,553

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 \$807,028 when taken together with any contributions payable by members and asset returns, is the amount sufficient to achieve the financing objective for 2011.

The System's total funded ratio on the funding basis is measured by comparing the actuarial value of assets (same as 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.

On this basis, the System's funded ratio is 25.4% as of January 1, 2011. This funded ratio is based on an actuarial value of assets of \$1,402,225 and an accrued liability of \$5,519,524.

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

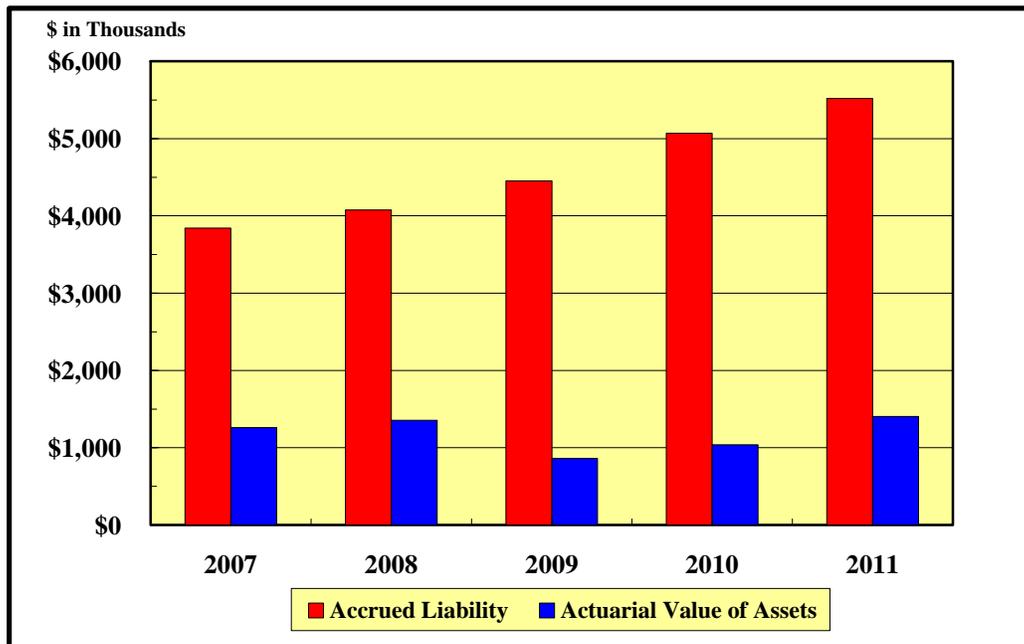
The total funded ratio increased from 20.5% as of January 1, 2010 to 25.4% as of January 1, 2011. The increase is primarily due to experience gains and losses and to contributions made to the fund.

### Five-Year History of Total Funded Ratio

Valuation as of January 1	Accrued Liability	Actuarial Value of Assets	Unfunded Accrued Liability	Funded Ratio
2011	\$ 5,519,524	\$ 1,402,225	\$ 3,617,299	25.4%
2010	5,068,513	1,038,607	\$ 4,029,906	20.5
2009	4,451,626	859,923	3,591,703	19.3
2008	4,076,739	1,354,805	2,721,934	33.2
2007	3,842,625	1,260,931	2,581,694	32.8

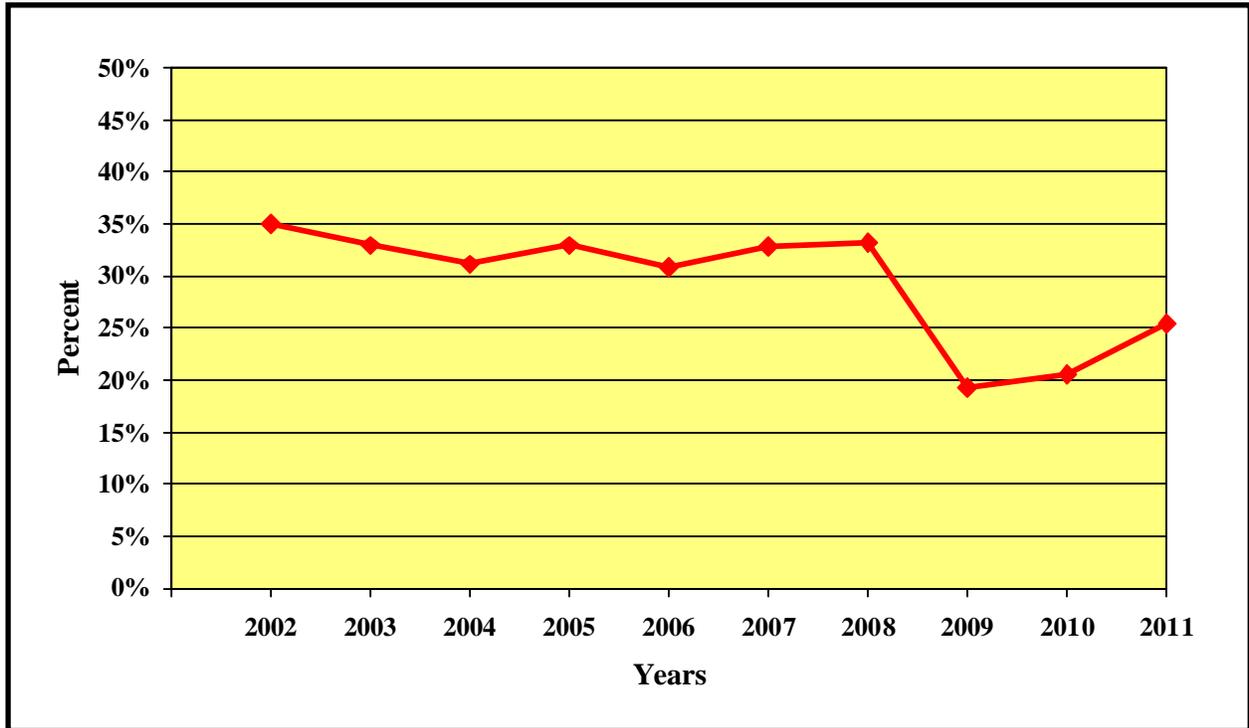
The following chart shows a five-year history of the accrued liability and the actuarial value of assets:

### Five-Year History of Accrued Liability and Actuarial Value of Assets



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

**Ten-Year History of Total Funded Ratio**  
(2002 - 2011)



## **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 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 25.4% as of January 1, 2011. This funded ratio is based on an actuarial value of assets of \$1,402,225 and an accrued liability of \$5,519,524.

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. The ARC and the actual employer percentage contributed for the five fiscal years ending December 31, 2011 are shown in Table 13.

## Rate of Return

The estimated investment return of the fund (i.e. total return including both realized and unrealized gains and losses) for fiscal years 2006 through 2010 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 the same as market value for purposes of this valuation.. 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.

### Five Year History of Assets and Returns

As of 12/31	Asset Values		Rates of Return		
	Market	Actuarial	Market	Actuarial	Assumed
2010	\$ 1,402,225	\$ 1,402,225	9.7%	9.7%	8.0%
2009	1,038,607	1,038,607	20.5%	20.5%	8.0%
2008	859,923	859,923	(23.2%)	(23.2%)	8.0%
2007	1,354,805	1,354,805	5.6%	5.6%	8.0%
2006	1,260,931	1,260,931	11.3%	11.3%	8.0%

Compound Rate of Return (five years):      3.6%      3.6%

**TABLE 1****SUMMARY OF RESULTS OF ACTUARIAL VALUATION**

Item	January 1, 2010	January 1, 2009
<b>Participant Data</b>		
1. Number of Participants		
a) Active Participants	1,540	1,173
b) Participants with Deferred Benefits	9,997	10,134
c) Participants Receiving Benefits	<u>2</u>	<u>2</u>
d) Total	11,539	11,309
2. Total Compensation	\$ 8,936,146	\$ 6,901,021
3. Annual Annuities	\$ 3,846	\$ 3,846
<b>Valuation Results</b>		
4. Actuarial Accrued Liability		
a) Active Participants	\$ 1,530,630	\$ 1,009,809
b) Participants with Deferred Benefits	3,958,059	4,027,035
c) Participants Receiving Benefits	<u>30,835</u>	<u>31,669</u>
d) Total	\$ 5,519,524	\$ 5,068,513
5. Actuarial Value of Assets	\$ 1,402,225	\$ 1,038,607
6. Funded Status: (5 / 4)	25.4 %	20.5 %
7. Unfunded Actuarial Accrued Liability: (4 - 5)	\$ 4,117,299	\$ 4,029,906
8. Normal Cost for the Plan Year	\$ 175,768	\$ 125,479
<b>Employer Actual Funding Contribution and Annual Required Contribution for Fiscal 2011</b>		
9. Actual Funding Contribution Calculated by Actuary		
a) Normal Cost with Interest	\$ 189,829	\$ 135,517
b) Net Annual Amortization Payments	<u>617,199</u>	<u>580,922</u>
c) Total Contribution: ((a + b), not less than zero)	\$ 807,028	\$ 716,439

Anticipated cash outs of \$2,000,000 will be paid over the next year from the OBRA Retirement System. We recommend that the amount of cash out be paid in addition to the contribution requirements shown above, with an adjustment to reflect the overlap in the contribution to the unfunded liability and the \$2,000,000 cash out. We will work with staff to determine the amount of overlap once final cash outs are determined.

**TABLE 2**

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

Item	January 1, 2011	January 1, 2010
1. Actuarial Accrued Liability		
a. Active Participants		
Retirement Benefits	\$ 1,306,551	\$ 870,934
Withdrawal Benefits	224,079	138,875
Total Active	1,530,630	1,009,809
b. Participants with Deferred Benefits	3,958,059	4,027,035
c. Participants Receiving Benefits	30,835	31,669
d. Total All Participants	\$ 5,519,524	\$ 5,068,513
2. Actuarial Value of Assets	1,402,225	1,038,607
3. Unfunded Actuarial Accrued Liability (1d - 2)	\$ 4,117,299	\$ 4,029,906
4. Funded Status: (2 / 1d)	25.4%	20.5%

Both valuations were based on the same methods and plan provisions.

The interest rate used as of January 1, 2011 and January 1, 2010 was 8.00%.

**TABLE 3**  
**ACTUARIAL GAIN/(LOSS) FOR PLAN YEAR ENDING**

Item	December 31, 2010	December 31, 2009
1. Actuarial Accrued Liability at the Beginning of the Year	\$ 5,068,513	\$ 4,451,626
2. Increases/(Decreases) During the Year		
a. Normal Cost for the Year	125,479	155,362
b. Member Contributions	-	-
c. Benefit Payments and Refunds	(3,846)	(27,833)
d. Assumed Interest to End of Year*	415,368	367,467
e. Plan and Assumption Changes	-	-
f. Total: (a + b + c + d + e)	<u>537,001</u>	<u>494,996</u>
3. Expected Liability at the End of the Year: (1 + 2)	5,605,514	4,946,622
4. Actuarial Accrued Liability at the End of the Year	5,519,524	5,068,513
<b>5. Liability Gain/(Loss): (3 - 4)</b>	<b>\$ 85,990</b>	<b>\$ (121,891)</b>
6. Actuarial Value of Assets at the Beginning of the Year	\$ 1,038,607	\$ 859,923
7. Increases/(Decreases) During the Year		
a. County Contributions	786,000	660,925
b. Member Contributions	-	-
c. Benefit Payments and Refunds	(3,846)	(27,833)
d. Administrative Expenses	(519,351)	(627,953)
e. Assumed Interest to End of Year*	82,938	67,702
f. Total: (a + b + c + d + e)	<u>345,741</u>	<u>72,841</u>
8. Expected Actuarial Assets at the End of the Year (6 + 7)	1,384,348	932,764
9. Actuarial Value of Assets at the End of the Year	1,402,225	1,038,607
<b>10. Actuarial Asset Gain/(Loss): (9 - 8)</b>	<b>\$ 17,877</b>	<b>\$ 105,843</b>
<b>11. Total Gain/(Loss): (5 + 10)</b>	<b>\$ 103,867</b>	<b>\$ (16,048)</b>

\* 8.00% per annum interest rate assumed for 2010 and 2009 plan years

**TABLE 4**

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

Type of Payment	Amortization Period				Balances		Payment
	Date Created	Initial Years	Remaining Years	Last Payment	Initial	Outstanding	
<b>1. Charges</b>							
Expense	1/1/2002	10	1	2011	\$ 109,857	\$ 15,324	16,550
Expense	1/1/2003	10	2	2012	141,818	37,956	21,286
Expense	1/1/2004	10	3	2013	178,462	68,785	26,690
Reestablished unfunded	1/1/2004	30	23	2033	1,009,474	1,132,917	85,327
Expense	1/1/2005	10	4	2014	238,648	118,001	35,628
Loss	1/1/2005	30	24	2034	19,357	21,274	1,566
Expense	1/1/2006	10	5	2015	276,403	164,469	41,192
Assumption Change	1/1/2006	30	25	2035	318,945	342,749	24,684
Expense	1/1/2007	10	6	2016	307,150	211,612	45,774
Variance	1/1/2007	5	1	2011	18,896	4,381	4,731
Assumption Change	1/1/2007	30	26	2036	67,011	70,416	4,970
Expense	1/1/2008	10	7	2017	449,781	348,985	67,031
Expense	1/1/2009	10	8	2018	590,678	505,868	88,028
Variance	1/1/2009	5	3	2013	35,813	23,115	8,970
Loss	1/1/2009	30	28	2038	406,803	417,934	28,438
Expense	1/1/2010	10	9	2019	627,953	584,605	93,584
Loss	1/1/2010	30	29	2039	16,048	16,275	1,089
Expense	1/1/2011	10	10	2020	519,351	519,351	77,399
<b>Total Charges</b>						<b>4,604,017</b>	<b>672,937</b>
<b>2. Credits</b>							
Gain	1/1/2006	30	25	2035	\$ 16,036	\$ 17,232	\$ 1,241
Gain	1/1/2007	30	26	2036	134,681	141,524	9,989
Variance	1/1/2008	5	2	2012	43,447	19,403	10,882
Gain	1/1/2008	30	27	2037	129,979	135,131	9,360
Variance	1/1/2011	5	5	2015	69,561	69,561	17,422
Gain	1/1/2011	30	30	2040	103,867	103,867	6,844
<b>Total</b>						<b>\$ 486,718</b>	<b>\$ 55,738</b>
<b>3. Net Amount (1 - 2)</b>						<b>\$ 4,117,299</b>	<b>\$ 617,199</b>

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% 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.

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.

**TABLE 5**

**STATEMENT OF NORMAL COST  
FOR CURRENT AND PRIOR PLAN YEAR ACTUAL FUNDING CALCULATIONS**

<b>Item</b>	<b>January 1, 2011</b>	<b>January 1, 2010</b>
1. Unit Credit Normal Cost		
a. Active Participants		
Retirement Benefits	\$ 126,113	\$ 90,752
Withdrawal Benefits	49,655	34,727
Total	<u>175,768</u>	<u>125,479</u>
2. Interest to the End of the Plan Year	14,061	10,038
<b>3. Normal Cost for the Plan Year: (1 + 2)</b>	<b>189,829</b>	<b>135,517</b>

**TABLE 6**

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

Item	2012 Budget	2011	
		Actual	Budget
1. Normal Cost with Interest	\$ 205,000	\$ 189,829	\$ 146,000
2. Net Annual Amortizations	<u>675,000</u>	<u>617,199</u>	<u>626,000</u>
3. Total Contribution ((1 + 2), not less than zero)	\$ 880,000	\$ 807,028	\$ 772,000

The budgeted contributions shown above for the 2012 and 2011 plan years were estimated based on participant data as of January 1, 2011, and January 1, 2010, respectively.

The actual contribution for the 2011 plan year was determined based on participant data as of January 1, 2011, and satisfies the pension accounting requirements of GASB Statement Nos. 25 and 27.

There have been no changes in assumptions, methodology, and plan provisions since the prior valuation.

Anticipated cash outs of \$2,000,000 will be paid over the next year from the OBRA Retirement System. We recommend that the amount of cash out be paid in addition to the contribution requirements shown above, with an adjustment to reflect the overlap in the contribution to the unfunded liability and the \$2,000,000 cash out. We will work with staff to determine the amount of overlap once final cash outs are determined.

**TABLE 7****SUMMARY STATEMENT OF MARKET VALUE OF PLAN ASSETS**

<b>Asset Category</b>	<b>December 31, 2010</b>	<b>December 31, 2009</b>
1. Cash and Cash Equivalents	\$ 763	\$ 327
2. Investments at Fair Value	615,462	377,355
3. Contributions Receivable	<u>786,000</u>	<u>660,925</u>
4. Net Assets Available for Benefits (1 + 2 + 3)	\$ 1,402,225	\$ 1,038,607

**TABLE 8****SUMMARY RECONCILIATION OF MARKET VALUE OF PLAN ASSETS**

Item	For Year Ending December 31, 2010	For Year Ending December 31, 2009
1. Market Value of Assets at the Beginning of the Year	\$ 1,038,607	\$ 859,923
2. Contributions for Plan Year		
a. County	\$ 786,000	\$ 660,925
b. Member	-	-
c. Total	<u>786,000</u>	<u>660,925</u>
3. Disbursements for Plan Year		
a. Benefit payments and refunds	\$ 3,846	\$ 27,833
b. Administrative expenses payable to County	519,351	627,953
c. Total	<u>523,197</u>	<u>655,786</u>
4. Market Value of Assets at the End of the Year	1,402,225	1,038,607
5. Net Investment Income* (4 - 1 - 2c + 3c)	100,815	173,545
6. Expected Net Investment Income (8.00% per annum)	82,938	67,702
7. Gain (Loss) on Market Value of Assets (5 - 6)	17,877	105,843
8. Estimated Rate of Return	9.7%	20.5%

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

**TABLE 9****ACTUARIAL VALUE OF PLAN ASSETS**

<b>Item</b>	<b>January 1, 2011</b>	<b>January 1, 2010</b>
1. Actuarial Value of Assets	\$ 1,402,225	\$ 1,038,607

The actuarial value of plan assets is equal to the market value of plan assets.

**TABLE 10**

**EMPLOYER CONTRIBUTIONS FOR 2010 PLAN YEAR  
AND VARIANCE FROM THE FUNDING CALCULATION CONTRIBUTION**

Item					Amount
1.	Total Funding Calculation, End-of-Year Basis, for 2010 Plan Year (from January 1, 2010 actuarial valuation report)				\$ 716,439
2.	Total Employer Contributions Made, End-of-Year Basis				End of Year Amount
	Contribution Made	Fraction of a Year Invested	Contribution Amount	Interest to Year End*	
	Bi-weekly	50.0%	\$ -	\$ -	\$ -
	2/1/2011	0.0%	-	-	-
	3/1/2011	0.0%	-	-	-
	4/15/2011	0.0%	786,000	-	786,000
	5/1/2011	0.0%	-	-	-
	6/1/2011	0.0%	-	-	-
	Total		\$ 786,000	\$ -	\$ 786,000
3.	Variance from Funding Calculation Amount** (2 - 1)				\$ 69,561

\* Interest to 12/31/2010 at 8.00% per annum

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

**TABLE 11****GASB NOS. 25 AND 27 DISCLOSURE INFORMATION  
FOR CURRENT AND PRIOR PLAN YEAR****Equivalent Single Amortization Period**

<b>Item</b>	<b>January 1, 2011</b>	<b>January 1, 2010</b>
1. Covered Payroll	\$ 8,936,146	\$ 6,901,021
2. Unfunded Amount	4,117,299	4,029,906
3. Amortization Payment	617,199	580,922
4. Payment as a Level Percentage of Payroll (3 / 1)	6.91%	8.42%
5. Weighted Average Amortization Period (2 / 3)	6.67	6.94
6. Equivalent Single Amortization Period (Nearest Whole Year)	9	9

**Net Pension Obligation**

<b>Item</b>	<b>January 1, 2011</b>	<b>January 1, 2010</b>
1. Annual Required Contribution (ARC)	\$ 807,028	\$ 716,439
2. Interest on Net Pension Obligation	(3,774)	2,159
3. Adjustment to ARC	<u>11,814</u>	<u>(6,760)</u>
4. Annual Pension Cost (APC)	815,068	711,838
5. Contributions made*	<u>(772,000)</u>	<u>(786,000)</u>
6. Increase (Decrease) in Net Pension Obligation	43,068	(74,162)
7. Net Pension Obligation at Beginning of Year	<u>(47,170)</u>	<u>26,992</u>
8. Net Pension Obligation at End of Year**	(4,102)	(47,170)
9. Percent of APC Contributed	94.72%	110.42%

\* Contributions for 2011 are estimated based on the County budget

\*\* NPO at December 31, 2011 is estimated based on expected contributions to be made for the year

**TABLE 12**

**REQUIRED SUPPLEMENTARY INFORMATION  
SCHEDULE OF FUNDING PROGRESS**

(\$ Amounts in Thousands)

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (b)</b>	<b>Funded Ratio (a / b)</b>	<b>Unfunded Actuarial Accrued Liability (b - a)</b>	<b>Covered Payroll (c)</b>	<b>Unfunded as a Percentage of Covered Payroll [(b - a) / c]</b>
12/31/2010	\$ 1,402	\$ 5,520	25.4%	\$ 4,117	\$ 8,936	46.1%
12/31/2009	1,039	5,069	20.5%	4,030	6,901	58.4%
12/31/2008	860	4,452	19.3%	3,592	8,498	42.3%
12/31/2007	1,355	4,077	33.2%	2,722	8,284	32.9%
12/31/2006	1,261	3,843	32.8%	2,582	7,057	36.6%

**TABLE 13**

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

<b>Fiscal Year Ended December 31</b>	<b>Annual Required Contribution</b>	<b>Percentage Contributed</b>
2011	\$ 807,028	95.7 *
2010	716,439	109.7
2009	660,925	100.0
2008	557,813	93.6
2007	485,553	108.9

\* Contributions for 2011 are estimated based on the County budget.

The information presented above was determined as part of the actuarial valuation as of the dates indicated.

Additional information as of the latest actuarial valuation follows:

Valuation Date:	January 1, 2011
Actuarial Cost Method:	Unit Credit
Amortization Method:	
- Administrative Expense	Level dollar closed
- Contribution Variance	Level dollar closed
- All other	Level percent of payroll closed
Remaining Amortization Period:	
- Administrative Expense	10 years
- Contribution Variance	5 years
- All other	30 years
Asset Valuation Method:	Market
Actuarial Assumptions:	
- Investment Rate of Return	8.00%
- Payroll Growth	3.00%

**TABLE 14****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.

**Salary Increase:** 5% per annum, compounded annually.

**Payroll Growth:** 3% per annum.

**Separation From Service:** Retirement age is assumed to be age 65. Illustrative rates of assumed separation from service (mortality and turnover) are shown in the following tables.

**Annual Rates per 100 Participants**

<b>Attained Age</b>	<b>Mortality</b>	
	<b>Males</b>	<b>Females</b>
45	0.13	0.11
50	0.19	0.19
55	0.31	0.38
60	0.59	0.76
65	1.11	1.26
70	1.86	1.96
75	2.87	3.40
80	5.03	5.86
85	8.61	10.72

\* 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.

Active members: 70% of the rates applicable to healthy pensioners.

**TABLE 14**

**DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS**  
(Continued)

**Annual Rates per 100 Participants**

<b>Withdrawal</b>						
<b>Attained Age</b>	<b>Select Rates by Year of Employment + Ultimate</b>					
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Ult.</b>
20	33.75	31.50	28.50	24.00	19.05	15.00
25	31.35	29.46	26.88	22.86	18.54	14.25
30	27.30	25.47	22.92	18.99	15.36	12.00
35	22.35	20.64	18.03	14.01	10.17	6.00
40	17.85	16.26	13.80	10.26	7.23	3.90
45	17.25	14.85	11.94	8.43	5.37	2.52
50	16.50	13.38	10.98	7.89	4.47	1.07
55	14.85	12.45	9.78	6.93	3.63	0.23

**TABLE 14****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 Unit Credit 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.

**Asset Valuation Method:** The actuarial asset value is the market value of assets plus any receivable contributions.

**DATA**

**Census and Assets:** The valuation was based on members of the System as of January 1, 2011 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.

**TABLE 15****SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS****MEMBERSHIP**

Any person employed by the County for whom the County is not obligated to collect and withhold FICA taxes. However, such persons shall not include: 1) an employee hired to relieve him from unemployment; 2) an employee of a hospital, home, or institution where he is an inmate; 3) an employees who is a temporary employee to handle fire, storm, snow, earthquake or similar emergencies; 4) an employee paid on a fee basis as self-employed; or 5) an employee who is a member of a collective bargaining unit covered by an agreement which does not provide for his inclusion.

**VESTING SERVICE**

One year of service is credited on and after January 1, 1992 for each plan year during which the employee is employed at any time. However, the employee shall not receive credit for any plan year in which the County is obligated to collect and withhold FICA taxes. If, during such plan year, FICA taxes are withheld for only a portion of the year, the employee shall receive a pro rata credit for the portion of the year worked when no FICA taxes were withheld.

**BENEFIT SERVICE**

Same as vesting service.

**EARNINGS**

Earnable compensation shall include the compensation earned during the period for which no FICA tax was withheld, exclusive of any amounts reimbursed for moving expenses. However, such compensation shall be limited to the Social Security taxable wage base for the plan year.

Average compensation is the average of the total earnings accumulated during the plan years of employment with the County, with the exception of years prior to January 1, 1992.

**TABLE 15****SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS**  
(Continued)**BENEFITS**Normal Retirement

Eligibility	Age 65.
Amount	2% of the member's average compensation multiplied by years of service (not in excess of 30).

Deferred Vested Benefit

Upon termination of employment, a member is eligible for a deferred vested pension commencing at age 65. Such benefit shall be calculated the same as for normal retirement, considering average compensation and service at termination.

**TABLE 16****SUMMARY OF MEMBERSHIP DATA  
AS OF JANUARY 1, 2011****Active Participants**

<b>Item</b>	<b>Total</b>
Number of Participants	1,540
Average Annual Salaries *	\$ 5,803
Average Age	28.8
Average Service	3.3

\* The salaries shown in the table above represent total annual pay increased by the salary assumption.

**Inactive Participants**

<b>Item</b>	<b>Number</b>	<b>Annual Annuities</b>	<b>Average Annuities</b>
Participants with Deferred Benefits	9,997	\$ 2,147,811	\$ 215
Participants receiving the benefits	<u>2</u>	<u>3,846</u>	<u>1,923</u>
Total	9,999	\$ 2,151,657	\$ 215

**EXHIBIT I****ACTIVE MEMBERSHIP DATA****NUMBER AND AVERAGE ANNUAL SALARY\*  
AS OF JANUARY 1, 2011**

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<b>Under 25</b>	831 \$3,822	112 \$8,453								943 \$4,372
<b>25-29</b>	76 \$8,699	51 \$10,491	26 \$10,944							153 \$9,678
<b>30-34</b>	46 \$8,973	18	11	1						76 \$8,615
<b>35-39</b>	34 \$7,144	28 \$8,074	3	3						68 \$7,718
<b>40-44</b>	56 \$7,159	14		2						72 \$7,275
<b>45-49</b>	38 \$6,785	12	6	4						60 \$7,937
<b>50-54</b>	36 \$5,639	10	1	5						52 \$6,539
<b>55-59</b>	25 \$6,506	8	1							34 \$8,746
<b>60-64</b>	22 \$4,530	12	3	4						41 \$6,503
<b>Over 64</b>	23 \$ 4,932	13	3	2						41 \$ 6,075
<b>Total</b>	1,187 \$4,828	278 \$8,863	54 \$9,664	21 \$10,473						1,540 \$5,803

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

**EXHIBIT II****5-YEAR HISTORY OF MEMBERSHIP DATA****Active Participants**

<b>Valuation as of January 1</b>	<b>Number of Active Participants</b>	<b>Percentage Change in Membership</b>	<b>Total Annual Payroll</b>	<b>Percentage Change in Payroll</b>
2011	1,540	31.29%	\$ 8,936,147	29.49%
2010	1,173	(32.04%)	6,901,021	(18.80%)
2009	1,726	23.20%	8,498,484	2.59%
2008	1,401	8.02%	8,284,312	17.39%
2007	1,297	(7.95%)	7,057,342	(15.51%)

**Retired Participants**

<b>Valuation as of January 1</b>	<b>Number on roll</b>	<b>Additions</b>	<b>Deletions</b>	<b>Percentage Change in Membership</b>	<b>Annual Annuities</b>	<b>Percentage Change in Annuities</b>
2011	2	-	-	0.00%	\$ 3,846	0.00%
2010	2	-	-	0.00%	3,846	0.00%
2009	2	1	-	100.00%	3,846	180.53%
2008	1	-	-	0.00%	1,371	0.00%
2007	1	-	-		1,371	

**EXHIBIT III**

**DETAILED TABULATIONS OF THE DATA**

TABLE III-A

**THE NUMBER AND ANNUAL SALARIES  
OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY  
AGE AS OF JANUARY 1, 2011**

(Compensation in cells with fewer than 20 records has been suppressed)

Age	Men		Women	
	Number	Compensation	Number	Compensation
16	13		19	
17	56	\$ 134,830	39	\$ 80,362
18	87	259,553	65	163,112
19	110	453,369	82	277,409
20	88	421,146	60	248,304
21	70	397,499	57	271,331
22	47	298,392	38	186,939
23	40	284,874	17	
24	37	335,959	18	
25	25	176,019	13	
26	12		18	
27	17		11	
28	20	199,920	16	
29	14		7	
30	13		5	
31	13		5	
32	6		7	
33	5		6	
34	11		5	
35	18		4	
36	10		5	
37	6		8	
38	4		3	
39	5		5	
40	12		5	
41	11		3	
42	12		6	
43	6		4	
44	9		4	
45	8		4	
46	5		4	
47	16		3	
48	5		5	
49	5		5	
50	6		7	
51	9		7	
52	7		2	
53	3		1	
54	7		3	
55	8		1	

TABLE III-A

**THE NUMBER AND ANNUAL SALARIES  
OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY  
AGE AS OF JANUARY 1, 2011**

(Compensation in cells with fewer than 20 records has been suppressed)

Age	Men		Women	
	Number	Compensation	Number	Compensation
56	5			
57	6		4	
58	5		3	
59	2			
60	6		1	
61	3		1	
62	7			
63	8		3	
64	8		4	
65	2		1	
66	2		1	
67	5			
68	6		1	
69	3		2	
70	5			
71	2			
73			1	
74	1		1	
75	3			
76	1			
79	1			
81	1			
82	1			
84			1	
<b>Total</b>	939	\$ 5,607,938	601	\$ 3,328,209

TABLE III-B

**THE NUMBER AND ANNUAL SALARIES  
OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY  
YEARS OF CREDITED SERVICE AS OF JANUARY 1, 2011**  
(Compensation in cells with fewer than 20 records has been suppressed)

Years of Service	Men		Women	
	Number	Compensation	Number	Compensation
0	9		7	
1	315	\$ 1,130,997	211	\$ 742,692
2	180	897,093	116	526,530
3	128	823,320	93	527,758
4	76	539,179	52	354,076
5	56	430,253	31	191,035
6	58	535,697	20	193,784
7	25	207,595	17	
8	37	438,516	14	
9	13		7	
10	8		11	
11	8		5	
12	9		5	
13	3		3	
14	1		1	
15	3		2	
16	4		2	
17			2	
18	5		1	
19	1		1	
<b>Total</b>	939	\$ 5,607,938	601	\$ 3,328,209

TABLE III-C

**THE NUMBER AND ANNUAL BENEFITS PAID TO  
ALL INACTIVE MEMBERS  
AS OF JANUARY 1, 2011**

Age	Men		Women	
	Number	Annuity	Number	Annuity
16	1	\$ 203		
17	4	512	5	106
18	49	1,358	46	1,636
19	96	4,637	81	4,074
20	126	7,631	103	6,913
21	150	14,896	125	11,666
22	136	14,827	120	12,629
23	151	21,268	134	17,732
24	189	38,057	148	25,047
25	234	39,183	197	30,816
26	259	47,894	235	43,776
27	241	48,885	218	36,488
28	306	59,082	304	56,213
29	273	61,495	246	57,362
30	280	67,937	273	60,971
31	268	62,297	230	44,232
32	277	58,172	232	43,337
33	253	54,588	231	46,683
34	234	62,381	179	31,237
35	213	41,729	174	30,113
36	197	46,361	147	28,090
37	151	32,575	140	27,025
38	117	32,799	94	21,858
39	98	26,439	83	17,319
40	104	24,836	88	14,479
41	72	16,601	84	23,753
42	56	13,925	61	18,236
43	49	13,917	58	14,559
44	47	12,537	38	9,338
45	51	14,553	50	11,034
46	36	6,693	45	11,763
47	35	11,783	56	20,562
48	48	21,581	20	7,127
49	36	16,499	38	6,913
50	44	15,015	34	8,059
51	34	11,661	25	9,020
52	38	20,269	30	4,896
53	34	11,114	23	7,825
54	28	8,460	27	10,931
55	25	7,027	25	10,705
56	37	16,891	21	6,788

TABLE III-C

**THE NUMBER AND ANNUAL BENEFITS PAID TO  
ALL INACTIVE MEMBERS  
AS OF JANUARY 1, 2011**

Age	Men		Women	
	Number	Annuity	Number	Annuity
57	23	11,934	17	5,789
58	26	12,986	25	6,900
59	26	6,928	17	8,547
60	22	12,231	12	3,446
61	25	12,005	11	9,155
62	18	9,159	17	7,691
63	14	7,504	12	6,635
64	11	5,962	5	2,267
65	14	7,919	6	1,380
66	11	6,916	7	3,964
67	11	4,785	6	5,396
68	6	1,670	5	1,922
69	5	2,058	2	102
70	3	1,237	1	395
71	5	2,013	2	806
72	5	810	3	207
73	4	3,356	2	984
74	7	1,354		
75	6	4,752	3	1,543
76	5	2,595	1	1,416
77	2	124	1	285
78	2	118	1	504
79				
80	6	2,969	2	1,042
81	3	482	1	920
82	3	1,166	3	3,236
83	5	1,836	2	1,385
84	4	1,670		
85	1	141		
86	2	2,718		
87	6	1,328	2	82
88	2	253		
90			1	4
91	1	2,325		
92	1	460		
93	1	879	1	1,138
<b>Total</b>	5,363	\$ 1,223,206	4,636	\$ 928,451

**EXHIBIT IV****GLOSSARY**

<b>Accrued Liability</b>	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.”
<b>Accrued Service</b>	The service credited under the plan which was rendered before the date of the actuarial valuation.
<b>Actual Funding Contribution</b>	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.
<b>Actuarial Assumptions</b>	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.
<b>Actuarial Cost Method</b>	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.”
<b>Actuarial Equivalent</b>	A series of payments is called an actuarial equivalent of another series of payments if the two series have the same actuarial present value.
<b>Actuarial Value of Assets</b>	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.
<b>Amortization</b>	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 IV****GLOSSARY**

(Continued)

<b>Annual Required Contribution</b>	The Annual Required Contribution, or ARC, is the amount determined in accordance with Governmental Accounting Standards Board Statements Nos. 25 and 27.
<b>Budget Contribution</b>	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 2012 is based on census and asset information as of January 1, 2011, rolled forward to January 1, 2012.
<b>Contribution Variance</b>	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.
<b>Experience Gain (Loss)</b>	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.
<b>Normal Cost</b>	The annual cost assumed, under the actuarial funding method, for current and subsequent plan years. Sometimes referred to as “current service cost.”
<b>Present Value</b>	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.
<b>Unfunded Accrued Liability</b>	The difference between the actuarial accrued liability and valuation assets.