

**MONROE COUNTY EMPLOYEES RETIREMENT SYSTEM**  
**BASIC RETIREMENT BENEFITS**  
ACTUARIAL VALUATION REPORT  
DECEMBER 31, 2009

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August 5, 2010

The Board of Trustees  
Monroe County Employees  
Retirement System  
Monroe, Michigan

Dear Board Members:

**Submitted in this report** are the results of the Forty-Second Annual Actuarial Valuation of the assets, benefit values, reserves and contribution requirements associated with benefits provided by the Monroe County Employees Retirement System.

**This report covers the basic retirement benefits provided by the Retirement System. The retiree health benefits provided by the County are not considered in this valuation.**

**The date of the valuation** was December 31, 2009.

**An Executive Summary** is included as Section A.

**Valuation results and comments** are contained in Section B.

**The valuation was based upon information**, furnished by your Secretary, concerning Retirement System benefits, financial transactions, and individual members, terminated members, retirees and beneficiaries. Data was checked for internal and year-to-year consistency, but was not otherwise audited. This information is summarized in Section C.

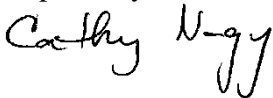
**Valuation methods**, economic assumptions and risk assumptions are summarized in Section D.

**Financial disclosure required by Statement No. 25 of the Governmental Accounting Standards Board** is provided in Section E.

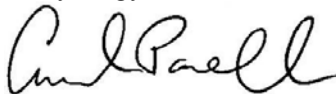
The valuation was performed by or under the supervision of a Member of the American Academy of Actuaries with substantial experience valuing public employee retirement benefit plans. The valuation uses generally accepted actuarial principles and is in accordance with standards of practice prescribed by the Actuarial Standards Board. To the best of our knowledge, this report is complete and accurate and the methods and assumptions employed produce results that are reasonable.

The actuaries signing this report are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Cathy Nagy, FSA, EA, MAAA



Curtis Powell, EA, MAAA

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## **SECTION A**

### **EXECUTIVE SUMMARY**

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## 1. Required Employer Contributions - Fiscal Year Beginning January 1, 2011

The computed employer contribution rates for basic retirement benefits are as follows:

Division	Computed Employer Contribution Rates	
	% of Payroll	\$ Based on 12/31/09 Payroll
General County	17.29 %	\$2,780,443
County Agency	17.39	318,962
Sheriff's Office	20.50	2,192,433
County Library	10.76	537,411
Road Commission	17.21	848,408
Mental Health	8.67	594,447
Central Dispatch	19.09	191,496

For detail please see page B-2.

**Please note that these costs include the 13<sup>th</sup> checks for the year 2010.**

The pensions provided by the Retirement System are valuable benefits. As covered members earn additional credit toward pensions and move closer to retirement, the System's liabilities grow. Employer contributions are required to pay for the increases in liabilities. All groups now have employer contribution requirements as the overfunding is being eliminated.

## 2. Contribution Rate Comparison

Required contribution rates have changed from the last valuation as follows:

Division	Computed Contributions	
	Actual 12/31/08	Actual 12/31/09
General County	14.92 %	17.29 %
County Agency	17.63	17.39
Sheriff's Office	19.43	20.50
County Library	9.60	10.76
Road Commission	17.17	17.21
Mental Health	7.12	8.67
Central Dispatch	19.45	19.09

### 3. Reasons for Change

There are three general reasons why contribution rates change from one valuation to the next. The first is a change in the benefits or eligibility conditions of the plan. The second is a change in the valuation assumptions used to predict future occurrences. The third is the effect of differences during the year between the Plan's actual experience and what the assumptions predicted.

There were no changes in actuarial assumptions or methods since the last actuarial valuation.

An Early Retirement Incentive Program was offered to the General Employees during 2009. Certain active members retired as a result of the program. The impact of the 2009 program is reflected in the liabilities and contribution rates.

The rate changes are also due to plan experience during the year as discussed below.

### 4. 2009 Plan Experience

Plan experience during the year was unfavorable for most groups with an overall experience gain/(loss) of (\$6,627,454). The gain/loss development is shown on page B-7 separately for each division.

All groups experienced unfavorable investment experience. Investment experience on the smoothed market basis was 4.46% compared to the 7% return assumed in the valuation.

Investment Gain/(Loss)	\$(4,651,501)
Non-Investment Gain/(Loss)	<u>(1,975,953)</u>
Gain/(Loss) from all causes	\$(6,627,454)

### 5. 2009 Funding Position

This year the actuarial value of assets represents 89% of accrued liabilities; last year the ratio was 93%. The System's funding level remains healthy despite the unfavorable experience.

As of December 31, 2009 valuation assets exceed the market value of assets by \$23,133,033. This is the amount of past asset losses not yet realized in the valuation. It will be fully recognized over the next six years putting upward pressure on the contribution rates. On a market value basis the funding position of the plan is 78%.

## **6. Retiree Reserve Balance**

For all divisions except the County Agency, the Road Commission, and Central Dispatch, the accrued liabilities for members who have already retired and their beneficiaries are larger than the reported balance of the retiree reserve accounts. Transfers will be necessary to balance the retiree reserves with the retiree liabilities. Details regarding the transfers are shown in Comment A of Section B.

## **7. Recommendations**

We recommend that the Board authorize the transfers described in Comment A of Section B of this report.

## **8. Conclusion**

In the short-term, employer contributions are expected to increase as the unfavorable investment returns are working through the asset smoothing. If the markets do not fully rebound, employer contributions will continue to rise.

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## **SECTION B**

### VALUATION RESULTS, COMMENTS AND COMPARABLE SCHEDULES

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## **Financial Objective**

The financial objective of the Retirement System is to establish and receive contributions, expressed as a percentage of active member payroll, which will remain approximately level from year to year and will not have to be increased for future generations of citizens. This objective is stated in the Retirement System Resolution.

Your annual actuarial valuations determine how well the objective is being met.

The Board of Trustees of the Monroe County Employees Retirement System confirms that the System provides for payment of the required employer contribution as described in Section 20m of Michigan Public Act No. 728.

## **Contribution Rates**

The Retirement System is supported by contributions from the participating employers and from some of the members and by the investment income earned on System assets. The employers provide an actuarially determined contribution, the amount needed to meet the financial objective.

Contributions cover both (i) normal cost, and (ii) the financing of the unfunded accrued liability, if any, over a period of future years. The normal cost is the portion of System costs allocated to the current year by the valuation method described in Section D. The unfunded accrued liability is the portion of System costs not covered by present System assets and future normal costs.

The contribution requirements for the fiscal year beginning January 1, 2011 are presented on pages B-2 and B-3.

**Contributions to Provide Benefits  
December 31, 2009 Valuation**

Contributions	% of Active Payroll						
	General County	County Agency	Sheriff's Office	County Library	Road Comm.	Mental Health	Central Dispatch
Normal cost of benefits:							
Age & service	11.17 %	9.13 %	13.91 %	9.27 %	11.23 %	10.95 %	13.87 %
Disability	0.73	0.93	0.88	0.45	1.10	0.58	0.88
Death in service	0.40	0.40	0.37	0.25	0.28	0.35	0.38
Administrative expenses	0.65	0.65	0.65	0.65	0.65	0.65	0.65
Totals	12.95	11.11	15.81	10.62	13.26	12.53	15.78
Member contributions: Total*	0.00	0.00	0.22	0.00	3.10	0.00	1.41
Future refunds	0.00	0.00	0.02	0.00	0.37	0.00	0.10
Available for pensions	0.00	0.00	0.20	0.00	2.73	0.00	1.31
Employer normal cost	12.95	11.11	15.61	10.62	10.53	12.53	14.47
Amortization of UAL	4.34	6.28	4.89	0.14	6.68	(3.86)	4.62
Computed Employer Rate	17.29	17.39	20.50	10.76	17.21	8.67	19.09

\* Weighted average of different rates.

Effective for the 12/31/2008 valuation, the unfunded liability for the Mental Health division is amortized over an open 10 year period, as this group is over 100% funded on a funding valuation basis. Unfunded liabilities for all other divisions are amortized over an open 20 year period, per the 6/26/2006 Board Meeting. Should the Mental Health division fall below 100% funding, unfunded liabilities will be amortized over an open 20 year period.

*The procedure for determining dollar contribution amounts* is shown on page B-3.

Page B-4 displays the unfunded accrued liabilities or asset surpluses that are amortized by the contribution rates shown above.

## **Converting Contribution Rates to Dollar Amounts**

For any period of time, the percent-of-payroll contribution rates must be converted to dollar amounts. We recommend one of the following procedures.

- (1) Contribute dollar amounts for a period, which are equal to the employer's percent-of-payroll contribution requirement multiplied by the covered active member payroll for the period. Adjustments should be made as necessary to exclude items of pay that are not covered compensation for Retirement System benefits and to include non-payroll payments that are covered compensation.
  
- (2) Contribute the dollar amounts recommended for each valuation group.

## **Timing of Contribution Payments**

The contributions in this report anticipate regular payments throughout the year. Examples would be at each payroll date or in 12 monthly installments. If the employer contribution pattern is significantly different, an adjustment to the costs may be appropriate. For example, a lump sum contribution at the beginning of the year is available for investment throughout the year and, therefore, ought to be somewhat smaller than 12 monthly payments. Similarly, a lump sum contribution at the end of the year will not generate any investment income that year and so must be greater than 12 monthly payments.

## Determination of Unfunded Accrued Liability

	General County	County Agency	Sheriff's Office	County Library	Road Comm.	Mental Health	Central Dispatch
A. Accrued Liability							
1. For retirees and beneficiaries							
a. Monthly Pension	\$ 42,694,298	\$ 3,655,364	\$ 24,524,522	\$ 4,045,697	\$ 14,065,207	\$ 8,249,636	\$ 1,549,703
b. 2009 13 <sup>th</sup> Check Payments	61,325	4,931	31,796	23,800	62,800	0	1,948
2. For vested terminated members	4,754,656	0	462,497	393,401	323,539	3,192,275	0
3. For present active members							
a. Value of expected future benefit payments	55,455,471	6,751,937	43,705,485	13,548,104	18,145,191	15,934,254	3,645,629
b. Value of future normal costs	16,103,723	1,707,926	17,488,533	4,097,557	5,637,923	7,161,905	1,752,402
c. Active member liability: (a) - (b)	39,351,748	5,044,011	26,216,952	9,450,547	12,507,268	8,772,349	1,893,227
4. Total	86,862,027	8,704,306	51,235,767	13,913,445	26,958,814	20,214,260	3,444,878
B. Valuation Assets	76,820,788	7,047,695	43,712,504	13,812,739	22,220,475	22,386,700	2,778,377
C. Unfunded Accrued Liability: (A.4) - (B)	10,041,239	1,656,611	7,523,263	100,706	4,738,339	(2,172,440)	666,501
D. Funded percentage: (B)/(A.4)	88.4%	81.0%	85.3%	99.3%	82.4%	110.7%	80.7%

## Comments

**Comment A:** We developed the value of anticipated future benefit payments to retired members and their beneficiaries. We then compared this accrued liability to the reported value of the retirement reserve account. The figures below compare the retired liabilities and reserves for each division.

Division	Accrued Liability	Retiree Reserve	Unfunded Retiree Liability
General County	\$42,694,298	\$29,492,716	\$ 13,201,582
County Agency	3,655,364	3,829,091	(173,727)
Sheriff's Office	24,524,522	21,816,001	2,708,521
County Library	4,045,697	3,926,568	119,129
Road Commission	14,065,207	14,575,672	(510,465)
Mental Health	8,249,636	7,786,869	462,767
Central Dispatch	1,549,703	1,571,163	(21,460)

Amounts should be transferred from the employer reserves to the retiree reserves to cover the unfunded amount for each division except for the County Agency, the Road Commission, and Central Dispatch.

**Comment B:** Overall experience during 2009 was unfavorable. The gain/(loss) determination by division is on page B-7. The determination of the investment gain/loss is shown on page B-8.

**Comment C:** This valuation considers only the basic retirement benefits provided by the Retirement System. The retiree health benefits provided to County employees are not considered in this valuation.

**Comment D:** We are aware that certain amounts have been authorized or are under consideration for special payments as a result of the various 13<sup>th</sup> check programs. This valuation includes \$186,600 in liabilities for estimated special payments.

As payments of these amounts during 2010 are already included in this valuation, these payments will not increase the costs shown in this report.

**Comment E:** On December 30, 2002 Michigan Public Act 728 became effective. This act sets new standards for all Michigan State and Local government retirement systems. In particular, the Act requires that supplemental actuarial analysis be performed by the System's actuary (including an analysis of the long term costs associated with any proposed pension benefit change) and provided to the Retirement Board and the decision-making body that will approve the proposed pension benefit change. This analysis is required at least 7 days before a proposed pension benefit change is adopted. There are additional requirements related to the confirmation of receipt by the System of the required employer contributions.

**Development of Experience Gain/(Loss)  
Year Ended December 31, 2009**

Actual experience will never (except by coincidence) exactly match assumed experience. It is hoped that gains and losses will cancel each other over a period of years but sizable year-to-year fluctuations are common. Detail on the derivation of the actuarial gain (loss) is shown below.

	Gain/Loss for 2009						
	General County	County Agency	Sheriff's Office	County Library	Road Commission	Mental Health	Central Dispatch
(1) UAAL* at start of year	\$5,130,761	\$1,658,366	\$ 6,047,795	\$(377,236)	\$4,662,791	\$(2,927,720)	\$ 697,837
(2) Normal cost	1,923,918	191,624	1,563,283	490,864	618,952	799,994	146,814
(3) Actual contributions	2,077,568	240,208	1,892,083	228,027	806,139	310,041	189,416
(4) Interest accrual	353,837	114,405	411,969	(17,312)	319,919	(187,988)	47,375
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	5,330,948	1,724,187	6,130,964	(131,711)	4,795,523	(2,625,755)	702,610
(6) Change from benefit changes	0	0	0	0	0	0	0
(7) Change from revised assumptions	0	0	0	0	0	0	0
(8) Change from revised asset method	0	0	0	0	0	0	0
(9) Expected UAAL after changes: (5)+(6)+(7)-(8)	5,330,948	1,724,187	6,130,964	(131,711)	4,795,523	(2,625,755)	702,610
(10) Actual UAAL at end of year	10,041,239	1,656,611	7,523,263	100,706	4,738,339	(2,172,440)	666,501
(11) Gain/(loss): (9) - (10)	(4,710,291)	67,576	(1,392,299)	(232,417)	57,184	(453,315)	36,109
(12) Gain/(loss) as percent of actuarial accrued liability at start of year	(5.83)%	0.79%	(2.86)%	(1.78)%	0.22%	(2.39)%	1.09%

\* *Unfunded actuarial accrued liability*

**Development of Valuation Investment Gain/(Loss)**  
**Year Ended December 31, 2009**  
**(Total System Assets)**

The valuation assumes a 7.0% return on valuation assets. Net investment return in excess of 7.0% represents a gain. If net investment return falls short of 7.0%, the difference between an income of 7.0% and the net return represents a loss.

(1) Net 2009 Valuation Investment Income	\$ 8,144,588
(2) Average Valuation Assets	182,801,267
(3) Expected Investment Income: (.07) x (2)	12,796,089
(4) Effect of Revised Asset Method	0
(5) Gain (loss): (1) - (3) - (4)	(4,651,501)
(6) 2009 Rate of Return on Valuation Assets	4.46%

Please note that this analysis uses asset values and investment income as defined for the actuarial valuation. It may not, therefore, be appropriate as a measure of manager performance.



## Financial Objective Tests

Testing how well the financial objective is being met can be done in many ways. There is no single all-encompassing test.

Contribution rates designed to remain level will do so, as long as:

- (1) the indicated contributions are paid on a timely basis, and
- (2) experience, as it develops, is in accord with the assumptions used in the calculations.

Of course changes in benefits or assumptions will cause discontinuities. But, if these two conditions are satisfied, and the system continues indefinitely, the ultimate test will be met -- the system will be able to meet all promised benefit payments when due.

Since nothing continues in its projected pattern indefinitely, short-term tests of achievement are appropriate. One such test is a comparison of the System's present assets to:

- (1) benefit values attributable to present retired members and beneficiaries;
- (2) benefit values attributable to vested terminated members;
- (3) benefit values allocated to present active members on account of service already rendered (the value of benefits that would be incurred by the System if future service was honored solely for the purpose of qualifying for a benefit and determining final average compensation).

In a system that has been using level percent-of-payroll financing discipline, items (1) and (2) will be fully covered by present assets except in unusual demographic or benefit development circumstances. Item (3) will only be fully covered if the plans liabilities are at least 100% funded.

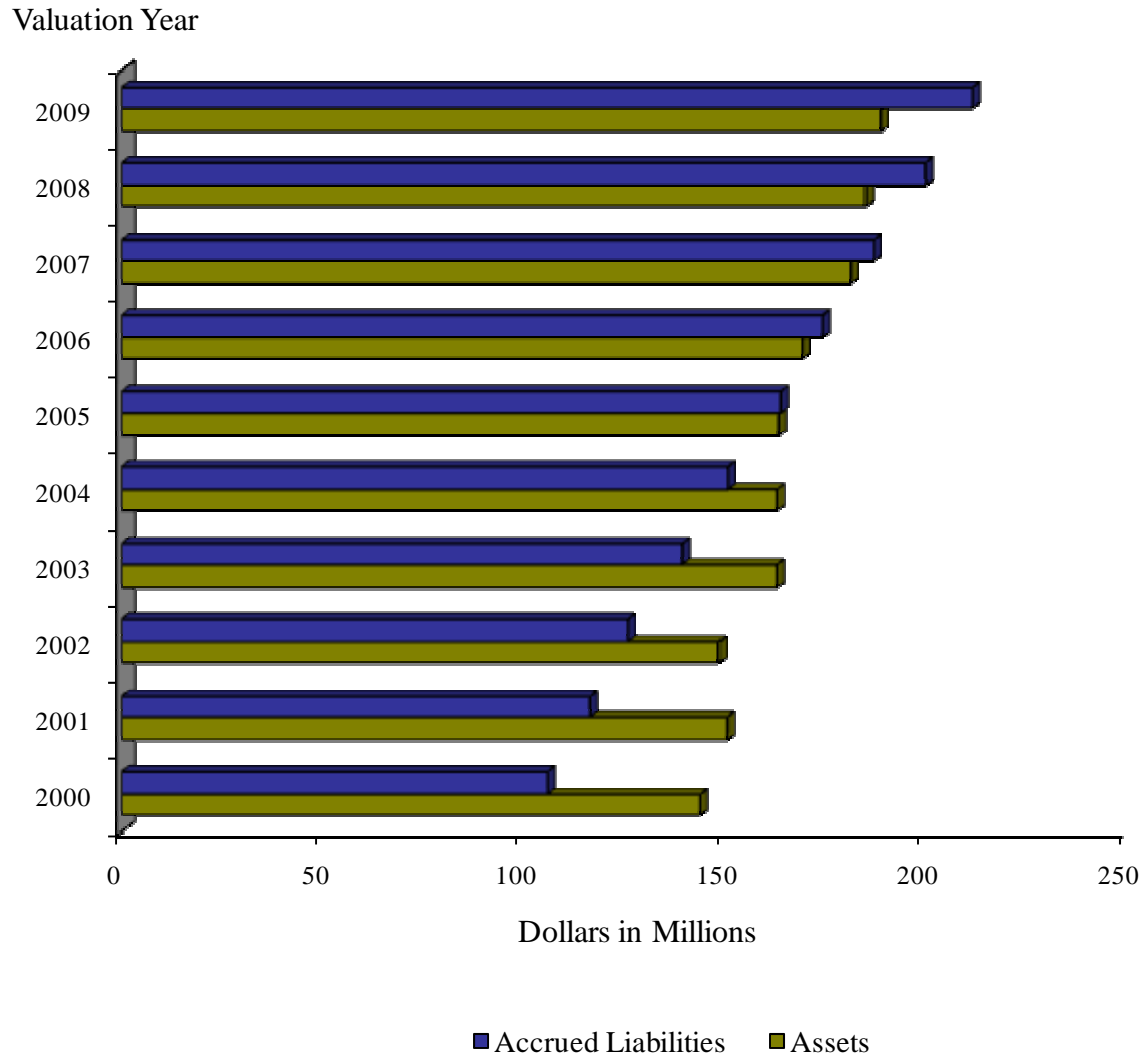
## Liabilities, Assets and Funded Percents

Valuation Date	Dollar Amounts in Thousands				Percent Covered			
	Item (1)	Item (2)	Item (3)	Total	Assets	Items (1)+(2)	Item (3)	Total
12-31-95 *	\$33,544	\$1,523	\$47,136	\$ 82,203	\$ 83,546	100.0%	102.8 %	101.6 %
12-31-96 *	26,059	1,925	50,466	78,450	93,062	100.0	129.0	118.6
12-31-97 *	28,700	2,242	56,157	87,099	105,789	100.0	133.3	121.5
12-31-98 *	31,463	3,145	56,528	91,136	117,699	100.0	147.0	129.1
12-31-99 *	32,247	3,378	62,026	97,651	132,837	100.0	156.7	136.0
12-31-00 *	35,797	4,082	65,949	105,825	143,765	100.0	157.5	135.9
12-31-01 *	37,296	4,764	74,300	116,360	150,305	100.0	145.7	129.2
12-31-02 *#	45,207	5,585	74,861	125,653	148,405	100.0	130.4	118.1
12-31-03 *#	49,666	6,005	83,471	139,142	162,683	100.0	128.2	116.9
12-31-04 *	55,011	6,781	88,718	150,510	162,726	100.0	113.8	108.1
12-31-05	65,187	7,371	91,084	163,642	163,152	100.0	99.5	99.7
12-31-06	74,012	7,925	92,064	174,001	169,284	100.0	94.9	97.3
12-31-07 *	80,000	9,052	97,789	186,841	181,320	100.0	94.4	97.0
12-31-08 *#	82,998	9,360	107,503	199,861	184,968	100.0	86.1	92.5
12-31-09	98,784	9,126	103,423	211,333	188,779	100.0	78.2	89.3

\* Retirement System amended.

# Actuarial assumptions and methods were revised.

## Assets & Accrued Liabilities



2000 assets equaled 136% of accrued liabilities.  
 2009 assets equaled 89% of accrued liabilities.

## Computed Employer Contributions Comparative Schedule

Valuation Date December 31	Active Members	Valuation Payroll	Employer Contributions As Payroll Percents						
			General	County Agency	Sheriff's Office	County Library	Road Commission	Mental Health	Central Dispatch
1995 #	892	26,408,334	5.55%	\$%	^%	1.59%	18.52%	¢%	+%
1996 #	870	26,643,235	2.79	\$	0.00	0.00	16.18	3.16	+
1997 #	890	28,814,126	0.00	\$	0.00	0.00	11.34	3.00	0.00
1998 #	874	29,309,641	0.00	\$	0.00	0.00	3.08	0.86	2.24
1999 #	918	31,064,894	0.21	\$	0.00	0.00	0.00	0.00	0.00
2000 #	953	35,059,040	0.00	\$	0.00	0.00	0.00	0.00	2.52
2001 #	961	35,250,392	0.00	0.00	0.00	0.00	0.00	0.00	4.92
2002 #*	942	35,895,185	1.60	0.00	8.54	0.00	6.72	0.00	14.62
2003 *	958	37,862,618	3.42	0.00	9.06	0.00	10.73	0.00	15.50
2004 *	950	38,712,508	7.11	3.54	12.72	0.00	15.03	0.05	19.43
2005	974	41,047,874	12.17	12.12	14.78	4.77	15.01	3.41	18.67
2006	981	41,821,305	13.05	12.87	15.33	4.94	15.37	6.14	20.16
2007 #	961	43,152,156	13.26	14.79	17.58	5.44	14.80	4.89	18.79
2008 #*	955	43,961,798	14.92	17.63	19.43	9.60	17.17	7.12	19.45
2009	912	42,893,801	17.29	17.39	20.50	10.76	17.21	8.67	19.09

# Retirement System amended.

\* Revised actuarial assumptions or method.

¢ Prior to 1996 the Mental Health group was included with General group.

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\$ Prior to 2001 the County Agency group was included with the General group.

^ Prior to 1996, the Sheriff's Office group was included with the General group.

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## **SECTION C**

### **SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA**

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**Brief Summary of Benefit Provisions  
(December 31, 2009)**

<b>Eligibility</b>	<b>Amount</b>
<b>REGULAR RETIREMENT</b>	
<b>General, Library, Road Commission and Mental Health:</b> Age 55 with 30 or more years of service or age 60 with 8 or more years of service.	General County: Service multiplied by 2.5% of final average earnings. Multiplier is 2.0% for Library and 2.25% for Mental Health and Road Commission (certain Road Commission members have a 2.0% multiplier).
<b>Sheriff's Office and Central Dispatch:</b> Age 50 with 25 years of service or age 60 with 8 or more years of service.	Service multiplied by 2.5% of final average earnings (2.75% for Sheriff Command Officers).  Highest 3 consecutive years out of last 10 for all groups.  Maximum Benefit: 75% of final average earnings.
<b>DEFERRED RETIREMENT</b>	
8 or more years of service.	Computed as a regular retirement but based upon service and final average earnings at termination date.
<b>NON-DUTY DEATH IN SERVICE</b>	
15 years of service or age 60 with 10 years of service.	Computed as a regular retirement but actuarially reduced in accordance with a 100% joint and survivor election.
<b>DUTY DEATH IN SERVICE</b>	
No age or service requirements.	Computed as regular retirement but computed as if the member had at least 15 years of service. Must be in receipt of worker's compensation.
<b>NON-DUTY DISABILITY</b>	
10 or more years of service.	Computed as a regular retirement.

**Brief Summary of Benefit Provisions  
(December 31, 2009)**

<b>Eligibility</b>	<b>Amount</b>
<b>DUTY DISABILITY</b>	
No age or service requirements.	Computed as a regular retirement benefit but computed as if the member had at least 10 years of service.
<b>POST-RETIREMENT INCREASES</b>	
	Beginning January 1, 1994 for the Road Commission Local 543 members, a program of discretionary annual increases was begun.
	Other Payments
	The System may from year to year pay a “13 <sup>th</sup> check”. The 13 <sup>th</sup> check will be based upon investment earnings that are in excess of the assumed level on assets to cover retiree liabilities.
<b>MEMBER CONTRIBUTIONS</b>	
Central Dispatch Supervisors:	3.00% of the first \$7,800 and 5.00% of excess.
Road Commission:	3.10%.
Sheriff Command Officers:	1.53%.
All Others:	None.

## Retiree and Beneficiary Comparative Schedule

Valuation Date December 31	Added#@		Removed		End of Year		% Incr. in	Ratio of Number	Annual Pensions
	No.	Annual Pensions	No.	Annual Pensions	No.	Annual Pensions	Annual Pensions	Active Members to Number Retired	as a % of Active Payroll
1986	12	\$ 98,696	3	\$ 9,279	114	\$ 429,119	26.3 %	6	2.7 %
1987	13	95,181	7	17,543	120	506,757	18.1	6	2.9
1988	25	185,464	5	27,285	140	664,936	31.2	6	3.5
1989	9	77,128	3	3,742	146	738,322	11.1	6	3.7
1990	23	212,335	3	10,063	166	940,594	27.4	5	4.3
1991	22	215,357	4	7,603	184	1,148,348	21.5	5	4.9
1992	13	353,438	1	15,774	196	1,486,012	29.4	4	5.3
1993	57	871,050	4	11,283	249	2,345,779	57.9	3	9.8
1994	11	127,455	5	33,167	255	2,440,067	4.0	3	9.8
1995	15	128,773	8	45,620	262	2,523,220	3.4	3	9.6
1996	15	155,424	13	101,327	264	2,577,317	2.1	3	9.7
1997 <sup>¢</sup>	32 <sup>¢</sup>	349,817	7	84,785	289	2,842,351	10.3	3	9.9
1998	29	356,408	13	94,770	305	3,103,989	9.2	3	10.6
1999	20	245,927	19	108,557	306	3,241,359	4.4	3	10.4
2000	27	471,307	12	97,495	321	3,615,170	11.5	3	11.0
2001	18	303,760	12	126,214	327	3,792,716	4.9	3	10.8
2002	37	851,345	14	129,016	350	4,515,045	19.0	3	12.6
2003	24	367,108	10	81,849	364	4,800,304	6.3	3	12.7
2004	50	808,337	32	410,843	382	5,197,798	8.3	2	13.4
2005	64	1,196,093	12	161,273	434	6,232,617	19.9	2	15.2
2006	41	897,712	11	103,828	464	7,026,501	12.7	2	16.8
2007	51	772,282	18	147,009	497	7,651,774	8.9	2	17.7
2008	20	390,306	12	122,465	505	7,919,615	3.5	2	18.0
2009	76	1,691,456	25	289,107	556	9,321,964	17.7	2	21.7

# Includes beneficiaries of deceased retirees.

@ Includes post-retirement adjustments.

¢ Includes 8 1998 Library retirees and 6 pre 1997 retirees not previously reported.



**Retirees and Beneficiaries December 31, 2009**  
**Tabulated by Attained Age**  
**General County**

Attained Age	Age & Service		Disability		Survivor		Totals	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 35					1	\$ 7,196	1	\$ 7,196
35-39								
40-44								
45-49			2	\$ 10,133			2	10,133
50-54	11	\$ 266,618	4	61,931			15	328,549
55-59	27	672,259	1	16,407	1	23,058	29	711,724
60-64	57	1,109,157	7	73,200			64	1,182,357
65-69	49	784,556	2	18,871	1	9,012	52	812,439
70-74	31	348,261	2	11,527	1	13,812	34	373,600
75-79	28	360,531	1	2,779			29	363,310
80-84	19	176,712	1	7,232			20	183,944
85-89	15	119,186					15	119,186
90+	10	81,819					10	81,819
<b>Total</b>	<b>247</b>	<b>\$ 3,919,099</b>	<b>20</b>	<b>\$ 202,080</b>	<b>4</b>	<b>\$ 53,078</b>	<b>271</b>	<b>\$ 4,174,257</b>

Average Age at Retirement: 60.4 years.

Average Age Now: 68.9 years.

**Retirees and Beneficiaries December 31, 2009**  
**Tabulated by Attained Age**  
**County Agency**

Attained Age	Age & Service		Disability		Survivor		Totals	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 35								
35-39								
40-44			1	\$ 24,158			1	\$ 24,158
45-49								
50-54								
55-59	2	\$ 75,438					2	75,438
60-64	5	131,410			1	\$ 12,454	6	143,864
65-69	1	24,742					1	24,742
70-74	3	26,201					3	26,201
75-79	2	17,776					2	17,776
80-84	1	5,875			1	5,337	2	11,212
85-89	2	12,259					2	12,259
90+								
<b>Total</b>	<b>16</b>	<b>\$ 293,701</b>	<b>1</b>	<b>\$ 24,158</b>	<b>2</b>	<b>\$ 17,791</b>	<b>19</b>	<b>\$ 335,650</b>

Average Age at Retirement: 58.9 years.

Average Age Now: 69.3 years.

**Retirees and Beneficiaries December 31, 2009**  
**Tabulated by Attained Age**  
**Sheriff's Office**

Attained Age	Age & Service		Disability		Survivor		Totals	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 35								
35-39								
40-44								
45-49			4	\$ 82,466			4	\$ 82,466
50-54	6	\$ 264,546	3	42,675			9	307,221
55-59	20	711,634	3	59,809	1	\$ 15,035	24	786,478
60-64	18	446,909	3	26,652	1	11,126	22	484,687
65-69	5	106,841	2	9,904			7	116,745
70-74	12	221,676	3	26,428			15	248,104
75-79	4	71,312					4	71,312
80-84	4	34,373			1	21,815	5	56,188
85-89	2	11,138					2	11,138
90+								
<b>Total</b>	<b>71</b>	<b>\$ 1,868,429</b>	<b>18</b>	<b>\$ 247,934</b>	<b>3</b>	<b>\$ 47,976</b>	<b>92</b>	<b>\$ 2,164,339</b>

Average Age at Retirement: 53.7 years.

Average Age Now: 63.8 years.

**Retirees and Beneficiaries December 31, 2009**  
**Tabulated by Attained Age**  
**Library**

Attained Age	Age & Service		Disability		Survivor		Totals	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 35								
35-39								
40-44								
45-49								
50-54								
55-59								
60-64	10	\$ 161,651					10	\$ 161,651
65-69	6	78,132					6	78,132
70-74	6	61,696					6	61,696
75-79	6	94,057					6	94,057
80-84	3	27,171					3	27,171
85-89	3	9,798					3	9,798
90+								
<b>Total</b>	<b>34</b>	<b>\$ 432,505</b>					<b>34</b>	<b>\$ 432,505</b>

Average Age at Retirement: 60.4 years.

Average Age Now: 71.9 years.

**Retirees and Beneficiaries December 31, 2009**  
**Tabulated by Attained Age**  
**Road Commission**

Attained Age	Age & Service		Disability		Survivor		Totals	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 35								
35-39								
40-44								
45-49								
50-54			1	\$ 13,741			1	\$ 13,741
55-59	4	\$ 104,660	2	22,233			6	126,893
60-64	15	315,507	2	30,672			17	346,179
65-69	13	238,013					13	238,013
70-74	10	226,666	1	6,673			11	233,339
75-79	13	193,057			2	\$ 20,240	15	213,297
80-84	13	130,675					13	130,675
85-89	1	11,250					1	11,250
90+								
<b>Total</b>	<b>69</b>	<b>\$ 1,219,828</b>	<b>6</b>	<b>\$ 73,319</b>	<b>2</b>	<b>\$ 20,240</b>	<b>77</b>	<b>\$ 1,313,387</b>

Average Age at Retirement: 58.3 years.

Average Age Now: 70.8 years.

**Retirees and Beneficiaries December 31, 2009**  
**Tabulated by Attained Age**  
**Mental Health Authority**

Attained Age	Age & Service		Disability		Survivor		Totals	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 35								
35-39								
40-44								
45-49								
50-54	4	\$ 49,680					4	\$ 49,680
55-59	11	156,804			2	\$ 35,849	13	192,653
60-64	14	244,741					14	244,741
65-69	14	168,033					14	168,033
70-74	5	64,169					5	64,169
75-79	4	46,046					4	46,046
80-84								
85-89	1	3,889					1	3,889
90+								
<b>Total</b>	<b>53</b>	<b>\$ 733,362</b>			<b>2</b>	<b>\$ 35,849</b>	<b>55</b>	<b>\$ 769,211</b>

Average Age at Retirement: 59.5 years.

Average Age Now: 64.1 years.

**Retirees and Beneficiaries December 31, 2009**  
**Tabulated by Attained Age**  
**Central Dispatchers**

Attained Age	Age & Service		Disability		Survivor		Totals	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 35								
35-39								
40-44			1	\$ 16,739			1	\$ 16,739
45-49								
50-54								
55-59	2	\$ 52,817	2	27,512			4	80,329
60-64								
65-69	3	35,547					3	35,547
70-74								
75-79								
80-84								
85-89								
90+								
<b>Total</b>	<b>5</b>	<b>\$ 88,364</b>	<b>3</b>	<b>\$ 44,251</b>			<b>8</b>	<b>\$ 132,615</b>

Average Age at Retirement: 54.8 years.

Average Age Now: 59.9 years.

**Inactive Vested Members December 31, 2009**  
**Tabulated by Attained Age**

Attained Age	Age & Service	
	No.	Annual Benefits
33	1	\$ 10,535
35	1	8,496
36	3	26,345
37	1	7,071
38	2	16,431
39	2	26,461
40	1	6,088
41	5	44,402
42	4	30,367
43	5	40,455
44	7	43,874
45	6	56,231
46	6	78,704
47	8	61,695
48	8	79,459
49	5	70,660
50	3	26,282
51	6	73,350
52	4	32,373
53	9	127,591
54	6	81,315
55	11	140,537
56	5	51,338
57	7	60,041
58	14	134,916
59	5	65,720
60	1	9,957

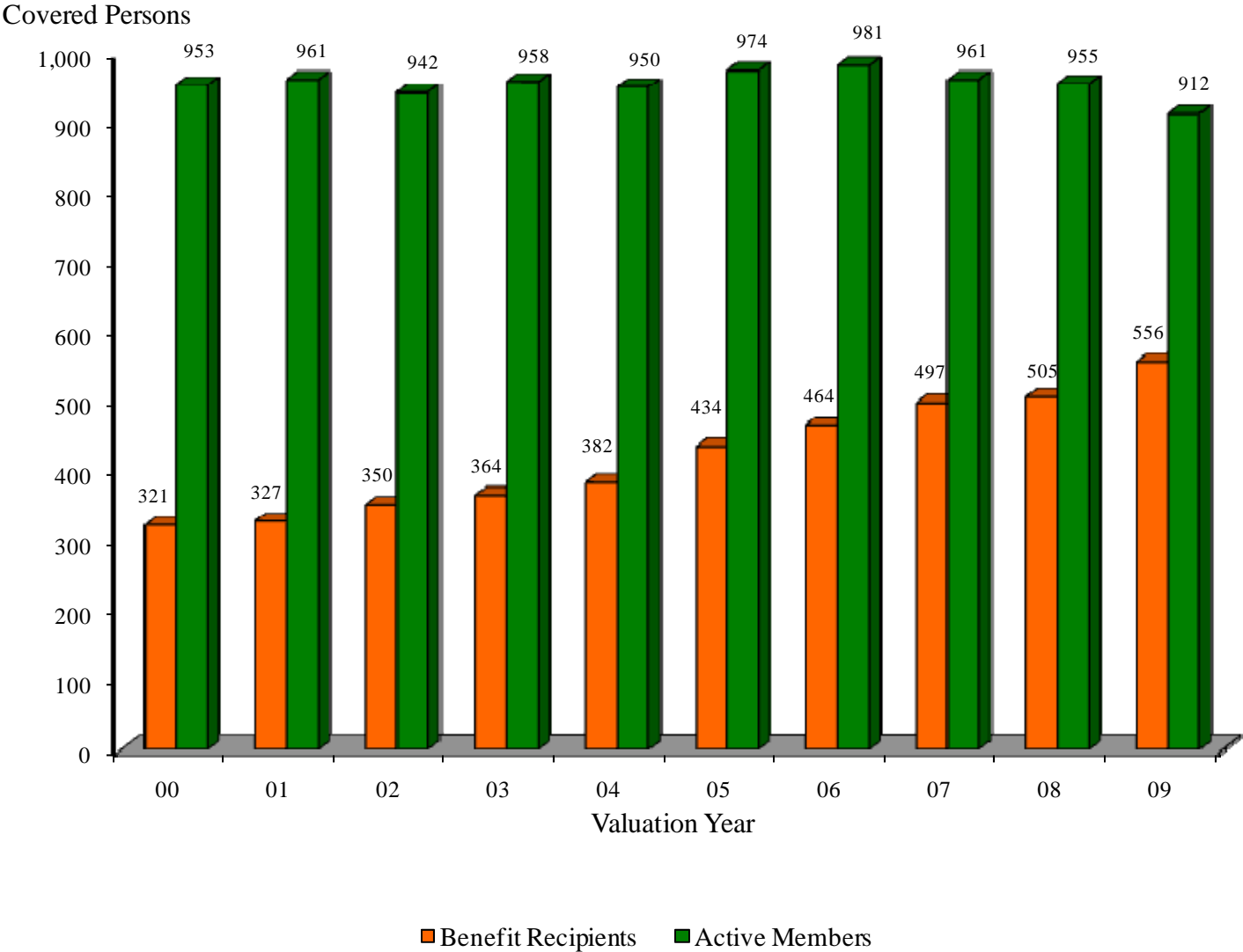
<b>Total</b>	<b>136</b>	<b>\$1,410,694</b>
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Average Age at Termination: 40.9 years.

Average Age Now: 50.3 years.



# Active Members & Benefit Recipients



## Active Members December 31, 2009

Division	Total	
	No.	Annual Pays
General County	339	\$14,867,993
County Agency	34	1,695,790
Sheriff's Office	172	9,887,938
County Library	119	4,617,724
Road Commission	91	4,557,818
Mental Health	137	6,339,095
Central Dispatchers	20	927,443
<b>Total</b>	<b>912</b>	<b>\$42,893,801</b>

## Comparative Schedule

Valuation Date December 31	Active Members	Valuation Payroll	Average			% Increase
			Age	Service	Pay	
1985	714	\$14,933,754	40.6	8.9	\$20,916	4.6 %
1986	727	15,848,530	40.8	9.0	21,800	4.2
1987	765	17,550,003	41.4	9.4	22,941	5.2
1988	796	19,142,880	41.1	9.4	24,049	4.8
1989	817	20,190,049	41.5	9.7	24,712	2.8
1990	836	21,801,469	41.3	9.6	26,078	5.5
1991	873	23,521,982	41.4	9.6	26,944	3.3
1992	861	24,393,164	41.9	10.1	28,331	5.1
1993	867	23,999,619	41.1	9.3	27,681	(2.3)
1994	862	24,966,463	41.7	9.9	28,963	(4.6)
1995	892	26,408,333	41.8	10.1	29,606	(2.2)
1996	870	26,643,235	42.3	10.8	30,624	3.4
1997	890	28,814,126	42.6	10.9	32,375	5.7
1998	874	29,309,641	42.5	10.8	33,335	3.6
1999	918	31,064,894	42.8	10.7	33,840	1.5
2000	953	32,749,688	42.8	10.5	34,365	1.6
2001	961	35,250,392	42.8	10.5	36,681	6.7
2002	942	35,895,185	43.3	10.8	38,105	3.9
2003	958	37,862,618	43.9	11.1	39,523	3.7
2004	950	38,712,508	44.0	11.2	40,750	3.1
2005	974	41,047,874	44.1	10.8	42,144	3.4
2006	981	41,821,305	44.1	10.8	42,631	1.2
2007	961	43,152,156	44.4	11.0	44,903	5.3
2008	955	43,961,798	45.1	11.4	46,033	2.5
2009	912	42,893,801	44.9	11.2	47,033	2.2

Certain Road Commission employees were included in this schedule for the first time in 1984. Certain other Road Commission employees were included in this schedule for the first time in 1987.

**Active General County Members December 31, 2009  
by Attained Age and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	6							6	\$ 189,633
25-29	12	1	2					15	446,448
30-34	15	13	4	1				33	1,327,012
35-39	14	7	8	1	1			31	1,273,199
40-44	4	8	11	8	6			37	1,710,976
45-49	9	13	13	9	14	1	1	60	2,602,085
50-54	9	9	9	8	8	13	4	60	2,721,418
55-59	12	8	14	8	9	6	2	59	2,674,174
60			2	1	3		1	7	374,296
61	2	4	2	1	3		1	13	630,313
62	2	1		1			1	5	244,272
63			1	1				2	185,643
64			1	1				2	132,045
65		1			1			2	144,793
66	1							1	14,853
67							1	1	85,179
68	1				1			2	67,095
69	1							1	14,853
70 & Up	1		1					2	29,706
<b>Totals</b>	<b>89</b>	<b>65</b>	<b>68</b>	<b>40</b>	<b>46</b>	<b>20</b>	<b>11</b>	<b>339</b>	<b>\$14,867,993</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 47.1 years.

Service: 12.2 years.

Annual Pay: \$43,858.

**Active County Agency Members December 31, 2009  
by Attained Age and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	1							1	\$ 50,792
25-29	2							2	91,639
30-34	2	1	1					4	190,136
35-39	2							2	93,436
40-44			1		1			2	94,422
45-49	2	1	2	1	5	1	1	13	654,213
50-54	1		1		4		1	7	370,935
55-59				1				1	46,485
60						1		1	60,713
70 & Up				1				1	43,019
<b>Totals</b>	<b>10</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>10</b>	<b>2</b>	<b>2</b>	<b>34</b>	<b>\$1,695,790</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 44.9 years.  
 Service: 14.8 years.  
 Annual Pay: \$49,876.

**Active Sheriff's Office Members December 31, 2009**  
**by Attained Age and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
25-29	10	8						18	\$ 982,966
30-34	10	20	4					34	1,823,064
35-39	6	14	18					38	2,139,585
40-44	3	7	8	9				27	1,612,289
45-49		4	6	8	4	2		24	1,418,218
50-54		3	2	5	1	3	2	16	1,040,361
55-59		1	4		1	1	1	8	488,854
60					1	1	1	3	190,980
61	1							1	33,547
63			2					2	114,506
69				1				1	43,568
70 & Up									
<b>Totals</b>	<b>30</b>	<b>57</b>	<b>44</b>	<b>23</b>	<b>7</b>	<b>7</b>	<b>4</b>	<b>172</b>	<b>\$9,887,938</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 40.4 years.

Service: 11.5 years.

Annual Pay: \$57,488.

**Active County Library Members December 31, 2009**  
**by Attained Age and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	7							7	\$ 251,142
25-29	10							10	360,350
30-34	1	3						4	180,990
35-39	5	1						6	192,114
40-44	10	4	2	2				18	686,065
45-49	6	1		1	3	2	2	15	606,200
50-54	12	9		1	1	2	1	26	982,716
55-59	4	1	2	3	2		3	15	654,460
60	2	1	2				1	6	248,762
61	2				1			3	118,677
62						1		1	43,568
63	1	1						2	63,148
64	1						1	2	69,145
66	1			1			1	3	127,687
70 & Up	1							1	32,700
<b>Totals</b>	<b>63</b>	<b>21</b>	<b>6</b>	<b>8</b>	<b>7</b>	<b>5</b>	<b>9</b>	<b>119</b>	<b>\$4,617,724</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 46.9 years.

Service: 9.3 years.

Annual Pay: \$38,804.

**Active Road Commission Members December 31, 2009  
by Attained Age and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
25-29		1						1	\$ 47,914
30-34		5						5	231,758
35-39	2	8	4	1				15	774,215
40-44	1	2	3	7	5			18	893,922
45-49	1	7	5	3	5	1		22	1,064,746
50-54	1	5	2	4	4	1		17	879,225
55-59		2	1	2	3	2		10	477,933
62	1							1	73,248
63					1			1	45,536
70 & Up		1						1	69,321
<b>Totals</b>	<b>6</b>	<b>31</b>	<b>15</b>	<b>17</b>	<b>18</b>	<b>4</b>		<b>91</b>	<b>\$4,557,818</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 45.9 years.

Service: 13.7 years.

Annual Pay: \$50,086.

**Active Mental Health Members December 31, 2009  
by Attained Age and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	2							2	\$ 73,997
25-29	15							15	584,426
30-34	8	5	2					15	624,879
35-39	4	12	3	1				20	783,193
40-44	9	6	3	3	1			22	1,091,495
45-49	4	2	3	6	5			20	826,210
50-54	7	5		4	1			17	829,997
55-59	2	6	3	1	1			13	767,620
60		3						3	116,691
61	2							2	143,459
62	1		1					2	96,644
63	2							2	206,976
65	1	1		1				3	145,897
66	1							1	47,611
<b>Totals</b>	<b>58</b>	<b>40</b>	<b>15</b>	<b>16</b>	<b>8</b>			<b>137</b>	<b>\$6,339,095</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 43.8 years.  
 Service: 8.0 years.  
 Annual Pay: \$46,271.



**Active Central Dispatch Members December 31, 2009**  
**by Attained Age and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	2							2	\$ 79,374
25-29	2	1						3	130,679
30-34	2		1					3	122,886
35-39	1	1	1					3	146,654
40-44	1	1	2					4	182,690
45-49			1					1	48,447
50-54			1			1		2	111,966
55-59				1				1	60,430
60				1				1	44,317
<b>Totals</b>	<b>8</b>	<b>3</b>	<b>6</b>	<b>2</b>		<b>1</b>		<b>20</b>	<b>\$927,443</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 38.3 years.

Service: 8.6 years.

Annual Pay: \$46,372.

# Summary of Financial Information Furnished for Valuation (System Totals)

## Market Value

### Revenues and Expenditures

#### REVENUES:

a. Member contributions	\$ 196,112
b. Employer contributions	5,547,370
c. Interest and Dividends	5,626,428
d. Realized and unrealized gain (loss)	<u>16,491,181</u>
e. Total revenues	27,861,091

#### EXPENDITURES:

a. Refunds of member contributions	740,391
b. Retirement benefits paid	9,136,991
c. Administrative expense	199,253
d. Investment expense	<u>901,329</u>
e. Total expenditures	<u>10,977,964</u>

#### RESERVE INCREASE:

Total revenues minus total expenditures	<u><u>\$ 16,883,127</u></u>
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### Market Value Assets

Cash and cash equivalents*	\$ 627,485
Other short-term investments	9,376,568
Bonds - U.S. Guaranteed	23,642,613
- Other	62,536,940
Stocks	67,799,054
Real Estate	<u>1,663,585</u>
Total Assets	<u><u>\$165,646,245</u></u>

\* Net of payables, if any.

## Development of Pension Valuation Assets

Valuation Date December 31:	2005	2006	2007	2008	2009
1. Beginning of Year Assets					
a) Market Value	\$155,536,633	\$163,292,118	\$177,532,251	\$187,790,674	\$148,763,118
b) Valuation Assets	162,725,639	163,151,579	169,283,765	181,320,182	184,967,843
2. End of Year Market Value Assets	163,292,118	177,532,251	187,790,674	148,763,118	165,646,245
3. Net Additions to Market Value					
a) Net Contributions	2,363,369	3,529,751	5,269,167	5,609,406	5,743,482
b) Net Investment Income = (3d) - (3a) - (3c)	12,611,576	18,315,996	13,707,764	(35,945,076)	21,216,280
c) Benefit Payments, Refunds, and Admin Expenses	(7,219,460)	(7,605,614)	(8,718,508)	(8,691,886)	(10,076,635)
d) Total Additions to Market Value = (2) - (1a)	7,755,485	14,240,133	10,258,423	(39,027,556)	16,883,127
4. Average Valuation Assets =					
(1b) + .5 x [(3a) + (3c)]	160,297,594	161,113,648	167,559,095	179,778,942	182,801,267
5. Expected Income at Valuation Rate = 7% x (4)	11,220,832	11,277,955	11,729,137	12,584,526	12,796,089
6. Gain (Loss) = (3b) - (5)	1,390,744	7,038,041	1,978,627	(48,529,602)	8,420,191
7. Phased-In Recognition of Investment Return					
a) Current Year: 1/7 x (6) [20% prior to 2008]	278,149	1,407,608	395,725	(6,932,800)	1,202,884
b) First Prior Year	108,470	278,149	1,407,608	1,078,415	(6,932,800)
c) Second Prior Year	1,566,667	108,470	278,149	0	1,078,415
d) Third Prior Year	(4,430,802)	1,566,667	108,470	0	0
e) Fourth Prior Year	(3,461,285)	(4,430,800)	1,566,669	0	0
f) Fifth Prior Year			0	0	0
g) Sixth Prior Year			0	0	0
h) Total Recognized Investment Gain	(5,938,801)	(1,069,906)	3,756,621	(5,854,385)	(4,651,501)
8. Change in Valuation Assets					
(3a) + (3c) + (5) + (7h)	425,940	6,132,186	12,036,417	3,647,661	3,811,435
9. Preliminary Valuation Assets = (1b) + (8)	163,151,579	169,283,765	181,320,182	184,967,843	188,779,278
10. Corridor					
a) Lower Limit: 72% x (2) [80% prior to 2008]	130,633,694	142,025,801	150,232,539	104,134,183	119,265,296
b) Upper Limit: 128% x (2) [120% prior to 2008]	195,950,542	213,038,701	225,348,809	193,392,053	212,027,194
c) Adjustment to (9) to fit Limits	0	0	0	0	0
11. End of Year Assets					
a) Market Value = (2)	163,292,118	177,532,251	187,790,674	148,763,118	165,646,245
b) Valuation Assets = (9) + (10c)	163,151,579	169,283,765	181,320,182	184,967,843	188,779,278
c) Difference Between Market & Valuation Assets	140,539	8,248,486	6,470,492	(36,204,725)	(23,133,033)
d) Investment Return = (5) + (7h) + (10c)	5,282,031	10,208,049	15,485,758	6,730,141	8,144,588
12. Recognized Rate of Return = (11d) / (4)	3.30%	6.34%	9.24%	3.74%	4.46%
11. Market Rate of Return = 2 x (3b) / [(1a) + (2) - (3b)]	8.24%	11.36%	7.80%	(19.30%)	14.47%

## Allocation of Pension Valuation Assets December 31, 2009 Valuation

	Allocation of Retirement Systems Assets for 2009						
	General County	County Agency	Sheriff's Office	County Library	Road Commission	Mental Health	Central Dispatch
(1) Valuation assets at start of year	\$75,642,018	\$6,864,555	\$42,610,151	\$13,460,599	\$21,884,239	\$21,889,717	\$2,616,564
(2) Employee contributions	20,955	0	19,809	0	139,610	0	15,738
(3) Employer contributions	2,056,613	240,208	1,872,274	228,027	666,529	310,041	173,678
(4) Benefits paid	3,921,042	352,845	2,151,350	455,720	1,374,565	739,120	142,349
(5) Refund of contributions	218,696	0	473,597	0	32,881	15,217	0
(6) Administrative expense Allocated on BOY asset value	81,484	7,395	45,901	14,500	23,574	23,580	2,819
(7) Average valuation assets [(1) + 0.5*(2) + (3) - (4) - (5) - (6)]	74,570,190	6,804,539	42,220,769	13,339,503	21,571,799	21,655,779	2,638,688
(8) Investment income Allocated on average valuation assets	3,322,424	303,172	1,881,118	594,333	961,117	964,859	117,565
(9) Transfer In	0	0	0	0	0	0	0
Transfer Out	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net Transfer of Assets	0	0	0	0	0	0	0
(10) Valuation assets at end of year [(1) + (2) + (3) - (4) - (5) - (6) + (8) + (9)]	76,820,788	7,047,695	43,712,504	13,812,739	22,220,475	22,386,700	2,778,377
(11) Total revenues [(2) + (3) + (8)]	5,399,992	543,380	3,773,201	822,360	1,767,256	1,274,900	306,981
Percentage of revenue attributable to:							
Employee contributions	0.4%	0.0%	0.5%	0.0%	7.9%	0.0%	5.1%
Employer contributions	38.1%	44.2%	49.6%	27.7%	37.7%	24.3%	56.6%
Investment income	61.5%	55.8%	49.9%	72.3%	54.4%	75.7%	38.3%
(12) Total expenditures [(4) + (5) + (6)]	4,221,222	360,240	2,670,848	470,220	1,431,020	777,917	145,168
Percentage of expenditure attributable to:							
Benefits paid	92.9%	97.9%	80.6%	96.9%	96.1%	95.0%	98.1%
Refund of contributions	5.2%	0.0%	17.7%	0.0%	2.3%	2.0%	0.0%
Administrative expenses	1.9%	2.1%	1.7%	3.1%	1.6%	3.0%	1.9%

Note: Revenues and expenditures exclude transfers in/out of assets.

**Monroe County**  
**General County, County Agency, Sheriff's and Dispatchers**  
**13<sup>th</sup> Check Excess Reserve Fund**

Year	(a)	(b)	(c)	(d)	(e)	(f)	(g)	Fund Balance EOY 1/	
	Return on AVA	Assumed Return on AVA	Net Rate of Return (a)-(b)	Retiree Liabilities as of 12/31	Annual Transfer Amount Before Limit (c) * (d)	Fund Balance BOY	Distributions During Year	(h) Before Limit (e) + (f) + (g)	(i) After Limit
1999	15.34%	7.00%	8.34%	\$20,011,926	\$ 1,668,995	\$ 1,000,000	\$ (101,767)	\$2,567,228	\$1,000,000
2000	10.90%	7.00%	3.90%	22,335,226	871,074	1,000,000	(100,000)	1,771,074	1,000,000
2001	7.02%	7.00%	0.02%	22,261,453	4,452	1,000,000	(106,087)	898,365	898,365
2002	1.92%	7.00%	0.00%	29,537,898	-	898,365	(100,000)	798,365	798,365
2003	2.97%	7.00%	0.00%	32,530,519	-	798,365	(100,000)	698,365	698,365
2004	2.68%	7.00%	0.00%	37,200,540	-	698,365	(100,000)	598,365	598,365
2005	3.30%	7.00%	0.00%	45,437,890	-	598,365	(100,000)	498,365	498,365
2006	6.34%	7.00%	0.00%	53,127,878	-	498,365	(100,000)	398,365	398,365
2007	9.24%	7.00%	2.24%	55,057,742	1,233,293	398,365	(100,000)	1,531,658	1,000,000
2008	3.74%	7.00%	0.00%	56,708,971	-	1,000,000	(100,000)	900,000	900,000
2009	4.46%	7.00%	0.00%	72,423,887	-	900,000	(100,000)	800,000	800,000

*1/ Based on the 13<sup>th</sup> Check provisions of crediting 0% to Excess Reserve Fund.*

**Monroe County  
Road Commission  
13<sup>th</sup> Check Excess Reserve Fund**

Year	(a)	(b)	(c)	1/	(d)	(e)	(f)	(g)	Fund Balance EOY 2/	
	Return on AVA	Assumed Return on AVA	Net Rate of Return (a)-(b)		Mean Value of Retiree Liabilities as of 12/31	Annual Transfer Amount Before Limit (c) * (d)	Fund Balance BOY	Distributions During Year	(h) Before Limit (e) + (f) + (g)	(i) After Limit
2001	7.02%	7.00%	0.02%		10,006,405	\$ 2,001	\$ 300,000	\$ (30,000)	\$ 272,001	\$ 272,001
2002	1.92%	7.00%	0.00%		11,008,526	-	272,001	(45,005)	226,996	226,996
2003	2.97%	7.00%	0.00%		11,728,123	-	226,996	(39,618)	187,378	187,378
2004	2.68%	7.00%	0.00%		12,200,993	-	187,378	(44,227)	143,151	143,151
2005	3.30%	7.00%	0.00%		12,726,404	-	143,151	(46,959)	96,192	96,192
2006	6.34%	7.00%	0.00%		13,526,748	-	96,192	(54,213)	41,979	41,979
2007	9.24%	7.00%	2.24%		13,827,789	309,742	41,979	(58,500)	293,221	293,221
2008	3.74%	7.00%	0.00%		14,150,636	-	293,221	(64,900)	228,321	228,321
2009	4.46%	7.00%	0.00%		14,320,440	-	228,321	(62,800)	165,521	165,521

1/ Average of retiree liabilities as of beginning and end of year.

2/ Includes initial transfer amount of \$300,000 made on 12/6/2000.

3/ Based on the 13th check provision of crediting 0% to the Excess Reserve Fund.

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## **SECTION D**

**FINANCIAL PRINCIPLES, ACTUARIAL VALUATION  
PROCESS, ACTUARIAL COST METHODS, AND  
ACTUARIAL ASSUMPTIONS**

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## Valuation Methods

**Actuarial Cost Method.** Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an individual entry-age actuarial cost method having the following characteristics:

- i) the annual normal costs for each individual active member, payable from the hire date to the date of retirement, are sufficient to accumulate to the value of the member's benefit earned.
- ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

**Asset Valuation Method.** Last year's valuation assets are increased by contributions and regular investment income and reduced by refunds, benefit payments and expenses. The difference between the actual investment return and the expected return is phased in over a 7 year period. The result must be no more than 30% from the market value of assets for the December 31, 2008 valuation. The percentage that the valuation assets can differ from the market value of assets will decrease each subsequent year by 2% until a 20% corridor is reached. In the December 31, 2009 valuation the corridor is 28%.

**Financing of Unfunded Actuarial Accrued Liabilities.** Unfunded actuarial accrued liabilities were amortized by level (principal & interest combined) percent-of-payroll contributions as follows:

Divisions that are underfunded – 20 year open amortization

Divisions that are over-funded – 10 year open amortization



## Actuarial Assumptions Used for the Valuation

**Investment Return** (net of investment expenses).

3.0% per year in excess of pay inflation. If pay inflation matches the assumption of 4.0%, this implies a 7% rate of return.

This assumption is used to equate the value of payments due at different points in time and was first used for the December 31, 2002 valuation and re-evaluated for the December 31, 2008 valuation. Approximate rates of investment return, for the purpose of comparisons with assumed rates, are shown below. Actual increases in average active member pay are also shown for comparative purposes.

	Year Ended December 31					5 Year Average*
	2009	2008	2007	2006	2005	
Rate of Investment Return	4.5%	3.7%	9.2%	6.3%	3.3%	5.4%
Increase in Average Pay	2.2	2.5	5.3	1.2	3.4	2.9%
Real Rate of Return	2.3	1.2	3.9	5.1	(0.1)	2.5

\* Compound rate of increase.

The nominal rate of return was computed using the approximate formula  $i = I$  divided by  $1/2 (A + B - I)$ , where  $I$  is actual investment income net of expenses,  $A$  is the beginning of year asset value, and  $B$  is the end of year asset value.

These rates of return should not be used for measurement of an investment advisor's performance or for comparisons with other systems. The rate of return on member contribution was assumed to be 5.0%.

**Pay Projections.** These assumptions are used to project current pays to those upon which benefits will be based. The assumptions were first used for the December 31, 2008 valuation.

Annual Rate of Pay Increases for Sample Ages							
Years of Service	Base (Economic)	Merit and Longevity			Total		
		General, Library, County Agency, Sheriff's Office, Cent. Dispatch	Road Commission	Mental Health	General, Library, County Agency, Sheriff's Office, Cent. Dispatch	Road Commission	Mental Health
1	4.0%	2.8%	2.0%	7.0%	6.8%	6.0%	11.0%
2	4.0	2.8	2.0	4.0	6.8	6.0	8.0
3	4.0	2.8	2.0	4.0	6.8	6.0	8.0
4	4.0	2.8	2.0	4.0	6.8	6.0	8.0
5	4.0	2.8	0.5	4.0	6.8	4.5	8.0
6	4.0	2.8	0.5	4.0	6.8	4.5	8.0
7	4.0	2.8	0.5	0.5	6.8	4.5	4.5
8	4.0	2.8	0.5	0.5	6.8	4.5	4.5
9+	4.0	0.5	0.5	0.5	4.5	4.5	4.5

Actual average pay has increased at the following rates.

Year Ended December 31					5 Year
2009	2008	2007	2006	2005	Average
2.2%	2.5%	5.3%	1.2%	3.4%	2.9%

\* Compound rate of increase.

*The mortality table (a risk assumption)* used was the RP-2000 Mortality Table for males and females, projected 20 years. The assumptions were first used for the December 31, 2008 valuation.

Sample Ages	Single Life Retirement Values			
	Value at Retirement of \$1 Monthly for Life		Future Life Expectancy (Years)	
	Men	Women	Men	Women
50	\$152.58	\$154.61	32.77	34.63
55	144.15	146.80	28.04	29.88
60	133.48	137.08	23.47	25.31
65	120.71	125.53	19.17	21.02
70	106.09	112.39	15.22	17.06
75	89.18	97.66	11.58	13.47
80	71.11	81.35	8.42	10.23

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each pension payment being made after retirement. For disability retirements, the RP-2000 Mortality Table was used with a 3-year set forward.

The ***Rates of Retirement***. (A risk assumption) used to measure the probabilities of an eligible member retiring during the next year were as follows:

Retirement Ages	Percent of Active Members Retiring within Next Year		
	General County, County Agency Mental Health and County Library	Sheriff's Office & Central Dispatch	Road Commission
50		18.8 %	
51		18.8	
52		18.8	
53		25.0	
54		25.0	
55	37.5 %	25.0	12.5 %
56	12.5	25.0	12.5
57	12.5	12.5	25.0
58	12.5	6.3	25.0
59	12.5	6.3	25.0
60	18.8	6.3	50.0
61	18.8	6.3	50.0
62	18.8	6.3	50.0
63	18.8	6.3	50.0
64	6.3	6.3	50.0
65	6.3	100.0	100.0
66	6.3		
67	6.3		
68	6.3		
69	6.3		
70	100.0		

These rates were first used for the December 31, 2008 valuation for all groups.

***Administrative Expenses.*** 0.65% of payroll.

***Active Member Group Size.*** The number of active members was assumed to remain constant. This assumption is unchanged from previous valuations.

*Rates of separation from active membership (a risk assumption)* were as follows:

(Rates do not apply to members eligible for regular retirement and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment. These rates were first used for the December 31, 2008 valuation for all groups.

**Sample Rates of Separation from Active Employment  
Before Retirement, Death or Disability**

Sample Ages	% of Active Members Separating within Next Year			
	Years of Service	General County, County Agency, Mental Health and County Library	Sheriff's Office & Central Dispatch	Road Commission
ALL	0	15.00%	15.00%	15.00%
	1	13.00	9.00	12.00
	2	12.00	7.00	10.50
	3	8.00	7.00	9.00
	4	8.00	7.00	9.00
25	5 & Over	7.65	3.00	6.00
30		7.65	3.00	3.00
35		6.80	2.00	3.00
40		5.10	2.00	3.00
45		3.40	1.75	2.00
50		3.40	1.00	2.00
55	0.85	0.50	1.00	
60	0.85	0.00	1.00	

*Rates of Disability.* These rates represent the probabilities of active members becoming disabled.

Sample Ages	Number of Disabilities Per 100 Eligible Members	
	Men	Women
20	0.09%	0.08%
25	0.09	0.08
30	0.09	0.08
35	0.09	0.08
40	0.24	0.28
45	0.32	0.32
50	0.59	0.45
55	1.07	0.61
60	1.70	0.81

85% of the disabilities were assumed to be non-duty related. For the Sheriff's Office and Road Commission employees, 50% of the disabilities are assumed to be duty related.

## Miscellaneous and Technical Assumptions

<b>Marriage Assumption:</b>	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses.
<b>Pay Increase Timing</b>	On the valuation date.
<b>Decrement Timing:</b>	Decrements of all types are assumed to occur mid-year.
<b>Eligibility Testing:</b>	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
<b>Benefit Service:</b>	Exact fractional service is used to determine the amount of benefit payable.
<b>Decrement Relativity:</b>	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
<b>Decrement Operation:</b>	Disability and death-in-service decrements do not operate during the first 5 years of service. Disability and withdrawal do not operate during retirement eligibility.
<b>Normal Form of Benefit:</b>	The assumed normal form of benefit is straight life form.
<b>Loads:</b>	None.
<b>Incidence of Contributions:</b>	Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits.

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## **SECTION E**

### **FINANCIAL DISCLOSURE IN CONFORMANCE WITH STATEMENT NO. 25 OF THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD**

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**This information is presented in draft form for review by the System's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the System's financial statements.**

# Monroe County Employees Retirement System

## Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll (b-a)/c
12/31/00*	\$143,765,352	\$ 105,824,598	\$ 37,940,754	135.9	\$32,749,688	(115.9) %
12/31/01*	150,304,504	116,359,159	(33,945,345)	129.2	35,250,392	(96.3)
12/31/02*#	148,404,995	125,652,447	(22,752,548)	118.1	35,895,185	(63.4)
12/31/03#	162,683,115	139,141,015	(23,542,100)	116.9	37,862,618	(62.2)
12/31/04*	162,725,639	150,510,011	(12,215,628)	108.1	38,712,508	(31.6)
12/31/05	163,151,579	163,641,875	490,296	99.7	41,047,874	1.2
12/31/06	169,283,765	174,001,978	4,718,213	97.3	41,821,305	11.3
12/31/07*	181,320,182	186,841,313	5,521,131	97.0	43,152,156	12.8
12/31/08*#	184,967,843	199,860,437	14,892,594	92.5	43,961,798	33.9
12/31/09	188,779,278	211,333,497	22,554,219	89.3	42,893,801	52.6

\* Plan amended.

# Assumptions revised.

Notes: Values take account of all System benefits except retiree health benefits. 13<sup>th</sup> checks to retirees that were paid from System assets before the valuation date and as scheduled to be paid during 2010 are reflected in the valuation. No additional 13<sup>th</sup> checks have been considered.

Actuarial Cost Method

Individual Entry Age Normal Cost

Asset Valuation

Market value with 7-year smoothing

Amortization Method

Level percent of payroll

Equivalent single amortization period

Mental Health 10 years, open

All Others 20 years, open

Principal actuarial assumptions (last revised for the 12/31/08 valuation):

- Net Investment Return\*

7.0%

- Projected Salary Increases\*

4.5% to 11.0%

- Cost-of-Living Adjustments

4.5%, certain Road Commission members only.

\* Includes pay inflation at 4.0%.