

**MONROE COUNTY RETIREE HEALTH PLAN**  
**NINETEENTH ANNUAL ACTUARIAL VALUATION**  
**DECEMBER 31, 2009**

October 12, 2010

The County of Monroe  
Monroe, Michigan

**Submitted in this report** are the results of the Nineteenth Annual Actuarial Valuation of the assets, benefit values and contribution requirements associated with the retiree health benefits provided by the County of Monroe Retiree Health Plan.

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

**The valuation was based upon information**, furnished by the County, concerning retiree health benefits, financial transactions, and individual members, terminated members, retirees and beneficiaries. Data was checked for internal consistency, but was not otherwise audited.

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

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

**Cash Flow Projection** results are displayed in Section C.

**Sensitivity Test** results are presented in Section D.

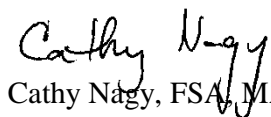
**Valuation data** is summarized in Section E.

**Valuation methods and assumptions** are summarized in Section F.

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 which are reasonable.

The undersigned are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Cathy Nagy, FSA, MAAA  
Actuary



Curtis Powell, EA, MAAA  
Actuary



Brian Morris, FSA, MAAA  
Health Actuary

CN/CP/BM:sc

# Contents

<u>Section</u>	<u>Page</u>	
A	1-4	Executive Summary
B	1	Financial Objective
	2	Computed Contributions
	3	Determination of Unfunded Accrued Liability
	4-6	Retiree Premium Rate Development
	7-8	Assets and Accrued Liabilities
	9	Computed Contributions Historical Schedule
C	1	Cash Flow Projections - Explanation
	2	20-Year Projection of Benefit Disbursements
D	1	Sensitivity Tests - Explanation
	2-6	Effect of Alternative Assumptions on Fund Costs
E	1-2	Summary of Benefits
	3-4	Financial Information
	5	Active and Retired Historical Schedule
	6	Retired Life Data
	7-12	Active Member Data
F	1	Valuation Methods
	2-6	Actuarial Assumptions
	7-8	Glossary

---

**SECTION A**

**EXECUTIVE SUMMARY**

---

## 1. Computed Total Contributions and Estimated Pay-as-you-go Costs - Fiscal Year Beginning January 1, 2011

The computed total contributions for each division are shown below:

Division	Computed Total Contributions
General County - Billable	\$1,044,781
General County - Non-Billable	2,678,405
County Agency	468,331
Sheriff's Office - Billable	647,703
Sheriff's Office - Non-Billable	1,706,831
Dispatchers	206,662
All Combined	\$6,752,713

**Please note these are the total contributions before adjustment for member contributions. The member contributions need to be subtracted to obtain the net employer contribution. Based on information provided by the County, the expected member contributions will be \$279,271 for the fiscal year beginning January 1, 2011.**

The estimated pay-as-you-go costs for the fiscal year beginning January 1, 2011 are \$4,472,000.

## 2. Contribution Comparison

The contribution amounts for retiree health benefits from this valuation are compared below to the contributions from the 2008 valuation.

Division	Computed Total Contributions	
	12/08	12/09*
General County - Billable	\$3,808,955	\$1,044,781
General County - Non-Billable		2,678,405
County Agency	523,476	468,331
Sheriff's Office - Billable	2,393,160	647,703
Sheriff's Office - Non-Billable		1,706,831
Dispatchers	225,220	206,662

*\* Starting with the 12/09 valuation, the General County and Sheriff's Office groups' contributions are calculated separately for Billable and Non-Billable groups. Prior to 12/09, contributions for these groups were in total.*

### 3. Reasons for Change

There are three general reasons why contributions 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 difference during 2009 between the Plan's actual experience and what the assumptions predicted.

There were no changes in benefits since the last actuarial valuation.

The health care trend rates were updated to better reflect future anticipated experience. There were no other changes in assumptions.

This report shows all results as dollar amounts, and not as a percent-of-payroll because retiree health benefits are not pay related benefits.

### 4. 2009 Plan Experience

The effect of Plan experience on the unfunded accrued liability was favorable, with a net experience gain of \$1,272,471.

Investment gain/(loss)	\$ (1,155,171)
Other gain/(loss)	<u>2,427,642</u>
Gain (Loss) from all causes	\$ 1,272,471

The investment loss of \$1,155,171 is attributable to continued recognition of prior year unfavorable investment performance. The return on the smoothed value of assets for the 2009 calendar year was 2.67%, compared to the long term expected return of 7.0%.

The other (non-investment) gain of \$2,427,642 during calendar year 2009 was attributable to the following:

- Lower than expected increases in the per person health care cost.
- Demographic gains such as more retiree deaths than expected.

## 5. Context

Contributing on the basis of valuation results allows the employers to level out somewhat the cost of retiree health benefits. In addition, it provided benefit security to plan members. *However, due to the volatility of health care inflation and utilization, the results of the retiree health valuation are likely to fluctuate more from year to year than the results of the Retirement System valuation.*

Currently there is no federal or state law that requires pre-funding the retiree health benefits. If the County chooses to contribute amounts less than those recommended by the actuarial valuation, absent any favorable experience, future County contributions will increase to make up for the shortfall. If the County contributes less than the recommended amounts over an extended period of time, the long term investment return assumption of 7.0% may no longer be reasonable. According to GASB Statements No. 45 and No. 43, a long term investment return assumption can be used if the plan sponsor contributes the recommended amounts to an irrevocable trust, and the trust has an investment policy that could generate this long term return. This is because the trust is expected to pay the retiree health benefits. If the plan sponsor contributes less than the recommended amount, the following two situations can arise:

- If the plan sponsor contributes less than the full amount, but more than the pay-as-you-go cost, the benefits will be paid from both the trust and the plan sponsor's general assets. In that case GASB requires the use of a blended interest rate.
- If the plan sponsor contributes the pay-as-you-go cost, and there are no assets in a trust, the retiree health benefits will be paid from the plan sponsor's general assets. In that case, GASB requires the use of an interest rate that is representative of the return that can be earned by the plan sponsor's general assets.

We suggest that the County discuss this issue with the auditors.

## 6. Comments

**Comment A:** The results shown in this report comply with the requirements of GASB Statements No. 43 and No. 45. Please note that Statements No. 43 and No. 45 are accounting standards, not funding requirements.

**Comment B:** Employees of the Road Commission, the Library, and the Mental Health Authority have been excluded from this valuation as they do not participate in the County's Retiree Health Plan.

**Comment C:** At the County's request, the contribution rates for the General County and Sheriff's Office groups have been calculated separately for the Billable and Non-Billable groups. The County provided the billable/non-billable status for each active and retired member in the valuation. Assets between the Billable and Non-billable groups were allocated based on the 12/31/2009 actuarial accrued liabilities. Prospectively, assets will be tracked separately, based on actual contributions made by the County and the members as well as benefit payments being paid to the retirees of each group.

**Comment D:** The General County (Billable and Non-Billable), County Agency and Dispatch groups are closed to new hires (closure dates described in section E). The Sheriff's Office (Billable and Non-Billable) is still open to new hires. The Annual Required Contributions were calculated based on methods that are appropriate for the closed and the open groups. The methods are described below:

- For the closed groups, the normal cost is expected to decrease as active members retire. The unfunded accrued liability (UAL) is amortized as a level dollar over 22 years. This means if all assumptions are met, the annual dollar payment is expected to remain level. If the current policy of decreasing the amortization period by one year each year continues, the UAL is expected to be paid off in 22 years. Thereafter, if there are active members in these groups, the employer contribution will be the employer normal cost only.
- For the open group, the UAL payment and the Normal Cost are expected to increase with payroll (currently 4.0%). If the current policy of decreasing the amortization period by one each year continues, the UAL is expected to be paid off in 22 years. Thereafter, the employer contribution will be the employer normal cost only.

If the Sheriff's group becomes closed to new hires, we would use the financing method that is appropriate for closed groups. In that case, the employer contribution would increase. To illustrate the impact we calculated the contribution for the 2011 fiscal year using this method. The employer contribution would increase from \$2.4 million to \$2.9 million.

---

## **SECTION B**

### **VALUATION RESULTS**

---

## **Financial Objective**

The financial objective of the Retiree Health Plan is to establish and receive contributions, and to accumulate enough assets to pay the benefits when due.

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

## **Contribution Amounts**

The retiree health benefits are supported by contributions from the County and the members and by the investment income earned on Plan assets. The County provides an actuarially determined contribution needed to meet the financial objective.

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

The contribution requirements for retiree health benefits for the fiscal year beginning January 1, 2011 are presented on page B-2.

**Total Contributions to Provide Retiree Health Benefits  
Fiscal Year Beginning January 1, 2011**

Contributions for	General County		County Agency	Sheriff's Office		Dispatchers
	Billable	Non-Billable		Billable	Non-Billable	
Normal cost of benefits:						
Total	\$ 223,861	\$ 391,386	\$ 82,027	\$ 347,966	\$ 571,926	\$ 70,478
Member contributions:						
Total	0	0	0	0	0	0
Future refunds	0	0	0	0	0	0
Usable for health premiums	0	0	0	0	0	0
Employer normal cost	\$ 223,861	\$ 391,386	\$ 82,027	\$ 347,966	\$ 571,926	\$ 70,478
Unfunded Accrued Liability	\$ 820,920	\$ 2,287,019	\$ 386,304	\$ 299,737	\$ 1,134,905	\$ 136,184
<b>Computed Employer Contribution</b>	<b><u>\$1,044,781</u></b>	<b><u>\$2,678,405</u></b>	<b><u>\$468,331</u></b>	<b><u>\$647,703</u></b>	<b><u>\$1,706,831</u></b>	<b><u>\$206,662</u></b>

Unfunded actuarial accrued liabilities were financed as a level dollar amount over a period of 22 years for the General County, County Agency and Dispatch, and a level percent of payroll over a period of 22 years for the Sheriff's Office.

Page B-3 displays the unfunded accrued liabilities that are amortized by the contribution rates shown above.

**Note: These are the total contributions before adjustment for member contributions. The member contributions need to be subtracted to obtain the net employer contribution. Based on information provided by the County, the expected member contributions will be \$279,271 for the fiscal year beginning January 1, 2011.**

**Determination of Unfunded Accrued Liability**  
**December 31, 2009**

	<u>General County</u>		<u>County Agency</u>	<u>Sheriff's Office</u>		<u>Dispatchers</u>	<u>Combined</u>
	<u>Billable</u>	<u>Non-Billable</u>		<u>Billable</u>	<u>Non-Billable</u>		
A. Accrued Liability							
1. For retirees and beneficiaries							
a. Health benefits	\$5,768,917	\$24,874,190	\$2,506,361	\$1,764,545	\$17,618,614	\$1,644,389	\$54,177,016
b. Reserves	--	--	--	--	--	--	--
c. Totals	<u>5,768,917</u>	<u>24,874,190</u>	<u>2,506,361</u>	<u>1,764,545</u>	<u>17,618,614</u>	<u>1,644,389</u>	<u>54,177,016</u>
2. For vested terminated members	0	0	0	0	0	0	0
3. For present active members							
a. Value of expected future benefit payments	8,578,930	12,845,231	3,349,963	8,884,528	14,770,600	1,919,053	50,348,305
b. Value of future normal costs	<u>1,937,837</u>	<u>3,144,187</u>	<u>815,525</u>	<u>3,690,257</u>	<u>6,039,183</u>	<u>798,640</u>	<u>16,425,629</u>
c. Active member liability: (a) - (b)	<u>6,641,093</u>	<u>9,701,044</u>	<u>2,534,438</u>	<u>5,194,271</u>	<u>8,731,417</u>	<u>1,120,413</u>	<u>33,922,676</u>
4. Total	<u>12,410,010</u>	<u>34,575,234</u>	<u>5,040,799</u>	<u>6,958,816</u>	<u>26,350,031</u>	<u>2,764,802</u>	<u>88,099,692</u>
B. Valuation Assets	<u>3,629,993</u>	<u>10,114,773</u>	<u>909,138</u>	<u>2,465,826</u>	<u>9,338,032</u>	<u>1,308,268</u>	<u>27,766,030</u>
C. Unfunded Accrued Liability: (A.4) - (B)	<u>8,780,017</u>	<u>24,460,461</u>	<u>4,131,661</u>	<u>4,492,990</u>	<u>17,011,999</u>	<u>1,456,534</u>	<u>60,333,662</u>
D. Funded Ratio: (B) ÷ (A.4)	<u>29.3%</u>	<u>29.3%</u>	<u>18.0%</u>	<u>35.4%</u>	<u>35.4%</u>	<u>47.3%</u>	<u>31.5%</u>

## **Retiree Premium Rate Development**

Premium rates for Monroe County were developed separately for the self-insured and the fully-insured portions and then blended to create one premium rate.

Initial self-insured premium rates were developed separately for each class (pre-65 and post-65). The rates were calculated by using claims and exposure data for the period from January 2007 to December 2009 adjusted for catastrophic claims, plus the load for administration, network access fee, and stop loss premiums. The self-insured Medical and prescription drug data were provided by the County. The Medical data was analyzed for the pre-65 and post-65 participants separately since Medicare is available for the post-65 participants and has a significant impact on the claim experience. Furthermore, since the prescription drug claims and the medical claims exhibit different trends and claim payment patterns, we analyzed these claims separately as well.

Initial premium rates were developed for the two classes of retirees (pre-65 and post-65). The fully-insured rates provided by the County were utilized to determine the appropriate premium rates. For the pre-65 and post-65 retirees, the fully-insured premium rate is used as the basis of the initial per capita cost without adjustments since the rate reflects the demographics of each group.

Age graded and sex distinct premiums are utilized in this valuation. The premiums developed by the preceding process are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process “distributes” the average premium over all age/sex combinations and assigns a unique premium for each specific age/sex combination. The age/sex specific premiums more accurately reflect the health care utilization and cost at that age.

For the current active employees, different retiree health benefit options are available upon retirement. We have developed separate premium rates for future retirees to reflect the benefit differences.

The dental and vision claims premiums were not “age graded” for this valuation, since neither dental nor vision claims vary significantly by age. The monthly dental premiums used for this valuation were \$25.69 for the first person and \$20.83 for the second person. The monthly vision premiums used for this valuation were \$2.88 for the first person and \$3.60 for the second person.

The tables below show the combined self-insured and fully-insured medical, and prescription drug one-person monthly premiums at select ages. The premium (or per capita costs) rates shown below reflect the use of age grading.

## Future Retirees

### For Retirees Not Eligible For Medicare

<u>Age</u>	<u>Male</u>	<u>Female</u>
40	\$ 322.31	\$ 504.98
60	972.80	935.07
64	1,132.29	1,049.52

### For Retirees Eligible For Medicare

<u>Age</u>	<u>Male</u>	<u>Female</u>
65	\$ 316.58	\$ 291.53
75	405.41	359.79
85	452.06	396.89

## Retiree Premium Rate Development

### Current Retirees

#### For Retirees Not Eligible For Medicare

<u>Age</u>	<u>Male</u>	<u>Female</u>
40	\$ 343.61	\$ 538.34
60	1,037.07	996.85
64	1,207.10	1,118.86

#### For Retirees Eligible For Medicare

<u>Age</u>	<u>Male</u>	<u>Female</u>
65	\$ 373.94	\$ 344.35
75	478.86	424.98
85	533.97	468.80

The premium rates used for determining the spouse contributions are:

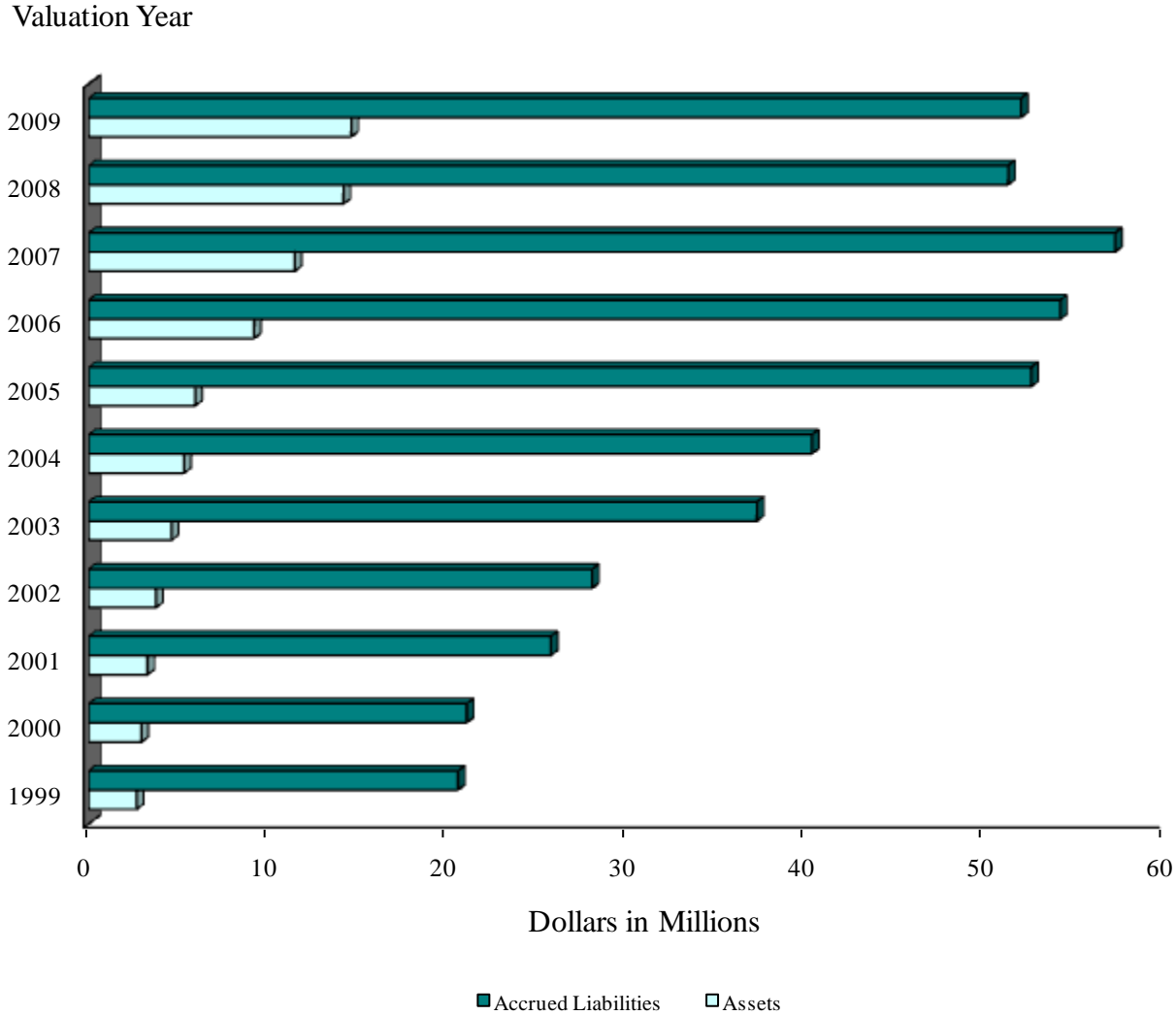
### **Future Retirees**

<u>Age</u>	<u>Spouse</u>
Pre-65	\$ 692.87
Post-65	366.00

### **Current Retirees**

<u>Age</u>	<u>Spouse</u>
Pre-65	\$ 783.24
Post-65	431.45

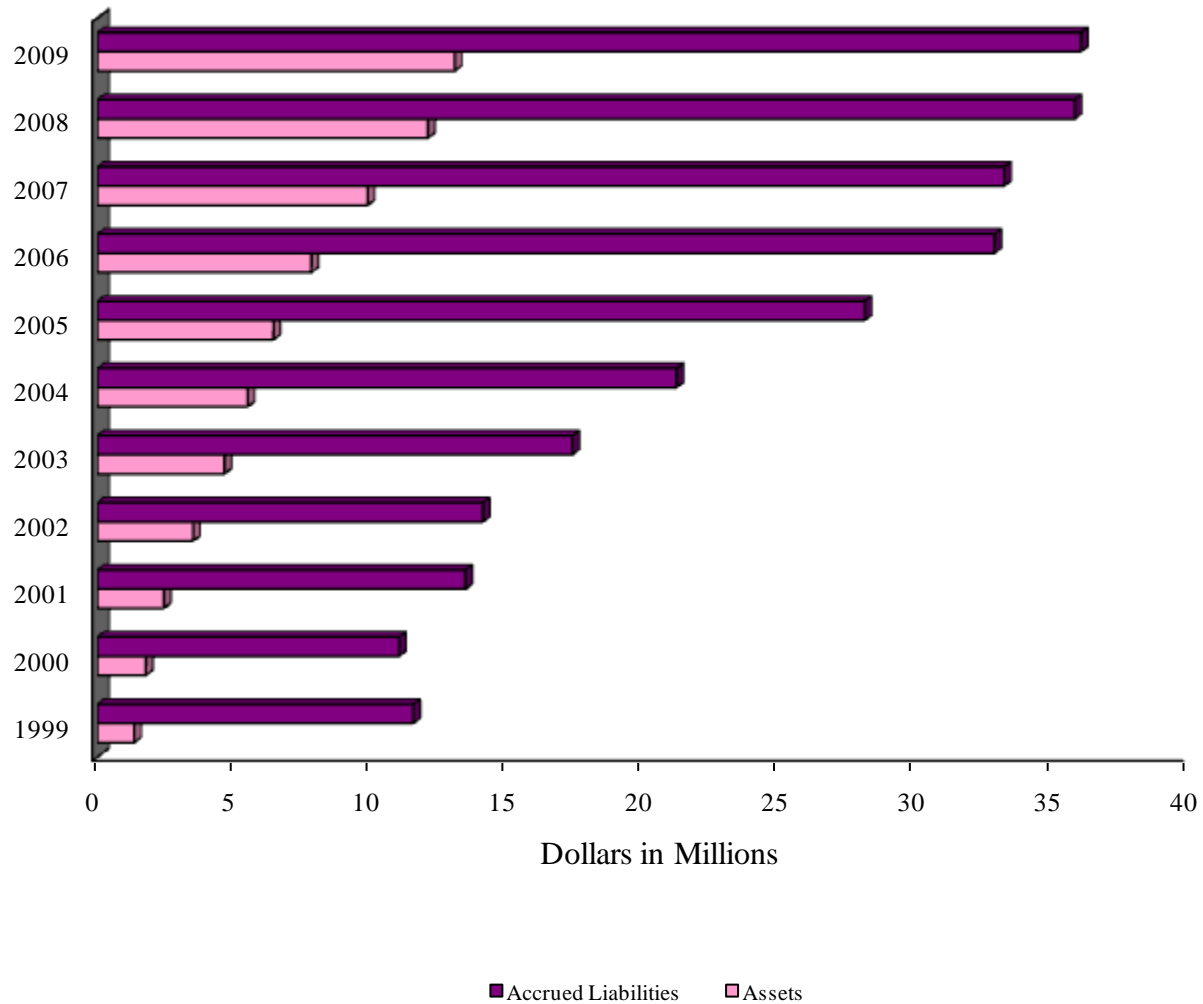
# Assets & Accrued Liabilities General & County Agency



1999 assets equaled 13.0% of accrued liabilities.  
 2009 assets equaled 28.2% of accrued liabilities.

## Assets & Accrued Liabilities Sheriff's Office & Dispatchers

Valuation Year



1999 assets equaled 11.7% of accrued liabilities.

2009 assets equaled 36.3% of accrued liabilities.

## Computed Contributions Historical Schedule

Valuation Date December 31,	Active Members	Valuation Payroll	Employer Contributions					
			General		County Agency^	Sheriff's Office		Central Dispatch
			Billable	Non-Billable		Billable	Non-Billable	
2000	648	\$22,535,505	\$ 1,363,981			\$ 872,034		\$ 64,918
2001	651	24,514,507	1,383,144		\$ 127,623	1,010,279		57,543
2002*	626	24,653,113	1,949,884		155,435	1,036,036		107,665
2003*	636	25,430,961	2,583,857		189,194	1,313,195		120,657
2004*	615	25,379,284	2,745,801		234,236	1,515,359		121,243
2005*	598	25,441,192	3,810,929		288,074	2,027,592		185,301
2006*	580	25,270,126	4,684,870		330,761	2,333,636		278,372
2007*	560	26,237,483	4,744,783		456,908	2,343,474		242,990
2008*	546	26,551,067	3,808,955		523,476	2,393,160		225,220
2009*#	464	23,660,370	1,044,781	\$ 2,678,405	468,331	647,703	\$ 1,706,831	206,662

\* The split between the member and employer contribution will be determined by the County.

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

# Beginning with the 2009 valuation, the results for General County and Sheriff's Office were split between "Billable" and "Non-Billable" groups.

---

**SECTION C**

**CASH FLOW PROJECTIONS**

---

## **Cash Flow Projections - Explanation**

Until a retirement program reaches a mature state, the number of members receiving benefits will continue to increase, with commensurate increases in the amount of benefit disbursements. When the retirement benefits being paid are health benefits, health costs can be expected to increase as the result of medical care inflation, changes in utilization and Medicare cost shifting. When both of these reasons for increased disbursements apply, as they do for the Monroe County Retiree Health Plan, it is reasonable to expect that the amount of the Plan's annual disbursements for retiree health care will increase for years to come.

We have projected the Plan's disbursements over the next 20 years. These are closed group projections, assuming no new entrants. The projections are based upon the same assumptions as were used for the valuation of health costs. The schedule on the following page displays the anticipated health disbursements in total only.

The computed contribution rate remains higher than disbursements during the projection period because the contribution rate is funding the accrued liability. Once the liability has been funded, the contribution requirements decrease to the level of the normal cost.

**20-Year Projection of Benefit Disbursements  
In Total**

<b>Year</b>	<b>Retiree Health Payments on Behalf of Present</b>		
	<b>Retirees</b>	<b>Employees</b>	<b>Total</b>
2010	\$3,989,800	\$ 72,700	\$4,062,500
2011	4,237,800	234,200	4,472,000
2012	4,367,800	440,900	4,808,700
2013	4,518,200	664,200	5,182,400
2014	4,627,000	878,400	5,505,400
2015	4,695,600	1,167,100	5,862,700
2016	4,736,800	1,483,000	6,219,800
2017	4,624,700	1,781,300	6,406,000
2018	4,445,600	2,063,300	6,508,900
2019	4,350,100	2,347,500	6,697,600
2020	4,259,500	2,768,100	7,027,600
2021	4,196,300	3,201,700	7,398,000
2022	4,008,600	3,552,200	7,560,800
2023	3,942,700	3,922,300	7,865,000
2024	3,859,300	4,249,300	8,108,600
2025	3,846,800	4,582,400	8,429,200
2026	3,782,900	5,015,800	8,798,700
2027	3,722,400	5,443,500	9,165,900
2028	3,652,300	5,798,800	9,451,100
2029	3,581,900	6,198,200	9,780,100

---

**SECTION D**  
**SENSITIVITY TESTS**

---

## **Sensitivity Tests - Explanation**

Actuarial valuations deal with the cost of benefits to be paid in the future. The payments considered will range from one month in the future to decades from the valuation date (for a young, newly hired employee who may retire many years from now and live many years after that). In order to establish a present day cost for these future benefit obligations, the actuary bases the valuation on a number of assumptions about future occurrences. The occurrences that must be considered include employee turnover, pay increases, disablements, retirements, deaths and investment income on Plan assets.

When the benefits being valued are health benefits, a key factor is the future cost of the benefits being promised. This is projected using the anticipated per capita payments for the coming year and assumed rates of future health cost increases. The actual Plan disbursements for retiree health will depend upon how the charges for health benefits actually increase in the future.

In order to demonstrate how the computed contribution rate for these benefits will vary depending upon future health care inflation, we have performed additional valuations based upon alternative health care inflation assumptions. The schedules on pages D-2 through D-5 compare (i) the computed contribution for retiree health benefits using the valuation assumptions to (ii) results of alternate valuations. One of the alternate valuations is based upon a more optimistic health care inflation assumption than was used for the valuation. The other is based upon a more pessimistic health care inflation assumption than was used for the valuation.

It should be clear that the pessimistic assumption is not a worst-case scenario. It does not anticipate 15% per year increases in the cost of benefits each year. (It is doubtful whether any employer, no matter how generous, would continue a plan subject to annual cost increases of this magnitude.)

The schedule on page D-6 shows the health cost increase assumptions used in each of the valuations.

**Sensitivity Tests - Future Medical Inflation  
General County  
Computed Contribution Requirements**

<u>Computed Cost</u>	<u>Future Medical Inflation</u>		
	<u>Optimistic Assumption</u>	<u>Valuation Assumption</u>	<u>Pessimistic Assumption</u>
Normal cost	\$ 546,955	\$ 615,247	\$ 679,663
Accrued liability	41,769,881	46,985,244	51,904,599
Valuation assets	<u>13,744,766</u>	<u>13,744,766</u>	<u>13,744,766</u>
Unfunded liability	28,025,115	33,240,478	38,159,833
Amortization payment*	2,620,310	3,107,939	3,567,891
Contribution	\$ 3,167,265	\$ 3,723,186	\$ 4,247,554

\* 22-year amortization as a level dollar amount.

**Sensitivity Tests - Future Medical Inflation**  
**County Agency**  
**Computed Contribution Requirements**

<u>Computed Cost</u>	<u>Future Medical Inflation</u>		
	<u>Optimistic Assumption</u>	<u>Valuation Assumption</u>	<u>Pessimistic Assumption</u>
Normal cost	\$ 72,922	\$ 82,027	\$ 90,615
Accrued liability	4,481,270	5,040,799	5,568,571
Valuation assets	<u>909,138</u>	<u>909,138</u>	<u>909,138</u>
Unfunded liability	3,572,132	4,131,661	4,659,433
Amortization payment*	333,990	386,304	435,651
Contribution	\$ 406,912	\$ 468,331	\$ 526,266

\* 22-year amortization as a level dollar amount.

**Sensitivity Tests - Future Medical Inflation**  
**Sheriff's Office**  
**Computed Contribution Requirements**

<u>Computed Cost</u>	<u>Future Medical Inflation</u>		
	<u>Optimistic Assumption</u>	<u>Valuation Assumption</u>	<u>Pessimistic Assumption</u>
Normal cost	\$ 817,783	\$ 919,892	\$ 1,016,206
Accrued liability	29,611,566	33,308,847	36,796,283
Valuation assets	<u>11,803,858</u>	<u>11,803,858</u>	<u>11,803,858</u>
Unfunded liability	17,807,708	21,504,989	24,992,425
Amortization payment*	1,187,989	1,434,642	1,667,296
Contribution	\$ 2,005,772	\$ 2,354,534	\$ 2,683,502

\* 22-year amortization as a level percent of payroll.

**Sensitivity Tests - Future Medical Inflation  
Dispatchers  
Computed Contribution Requirements**

<u>Computed Cost</u>	<u>Future Medical Inflation</u>		
	<u>Optimistic Assumption</u>	<u>Valuation Assumption</u>	<u>Pessimistic Assumption</u>
Normal cost	\$ 62,655	\$ 70,478	\$ 77,857
Accrued liability	2,457,909	2,764,802	3,054,277
Valuation assets	<u>1,308,268</u>	<u>1,308,268</u>	<u>1,308,268</u>
Unfunded liability	1,149,641	1,456,534	1,746,009
Amortization payment*	107,490	136,184	163,250
Contribution	\$ 170,145	\$ 206,662	\$ 241,107

\* 22-year amortization as a level dollar amount.

## Sensitivity Tests - Medical Inflation Assumptions

Year	Assumed Rate of Medical Inflation		
	Optimistic	Valuation	Pessimistic
2011	7.00 %	9.00 %	11.00 %
2012	6.50	8.25	10.00
2013	6.00	7.50	9.25
2014	5.50	7.00	8.50
2015	5.00	6.50	7.75
2016	4.50	6.00	7.00
2017	4.25	5.50	6.25
2018	4.00	5.00	5.50
2019	4.00	4.50	4.75
2020 & After	4.00	4.00	4.00

---

**SECTION E**

**SUMMARY OF BENEFIT PROVISIONS AND  
VALUATION DATA**

---

## Summary of Benefits December 31, 2009

Group	Eligibility Condition <sup>1</sup>	Medical Benefits <sup>2,7</sup>	Prescription Drug	Spouse Coverage	Cost Sharing
General County <sup>6</sup>	Age 55 with 30 years or age 60 with 8 years of service. New hires are no longer eligible for County – paid retiree health care (the effective dates vary by unit).	Yes	Yes	County pays 50% plus 2.27% for each year in excess of 8 years at retirement. <sup>4</sup>	<sup>3</sup>
County Agency	Age 55 with 30 years or age 60 with 8 years of service. Effective 1/1/2008, new hires are no longer eligible for retiree health care.	Yes	Yes	County pays 50% plus 2.27% for each year in excess of 8 years at retirement. <sup>4</sup>	<sup>3</sup>
Sheriff's Office	Age 50 with 25 years or age 60 with 8 years of service.	Yes	Yes	County pays 50% plus 2.94% for each year in excess of 8 years at retirement. <sup>5</sup>	<sup>3</sup>
Dispatchers <sup>6</sup>	Age 50 with 25 years or age 60 with 8 years of service. Effective 10/1/2007, new hires are no longer eligible for County paid retiree health care.	Yes	Yes	County pays 50% plus 2.94% for each year in excess of 8 years at retirement. <sup>5</sup>	<sup>3</sup>

<sup>1</sup> Disabled retirees and survivors of deceased employees receive coverage. Deferred vested members do not receive retiree health care coverage.

<sup>2</sup> Retirees are covered by various plans with different deductibles and co-pays.

<sup>3</sup> Different groups contribute as defined in the various union contracts based on date of hire.

<sup>4</sup> For members who retire on or after 12/31/1996. Coverage to the spouse continues upon the retiree's death, provided the spouse is receiving the deceased retiree's retirement allowance.

<sup>5</sup> For members who retire on or after 1/1/2001. Coverage to the spouse continues upon the retiree's death, provided the spouse is receiving the deceased retiree's retirement allowance.

<sup>6</sup> General County & Dispatch employees who retired prior to a date defined in their CBA will receive retiree health care benefits upon attainment of the age and service requirements listed.

<sup>7</sup> Retirees are also provided Life Insurance in the amount of \$10,000 for Department Heads, and \$4,000 for all other Retirees.

## Summary of Benefits December 31, 2009

Valuation Group	Union Name	No Retiree Health Care Available if Hired on or After	No Retiree Life Insurance Available if Hired on or After
<b>General County</b>	Non-Union Other	10/28/2003	1/1/2003
	Non-Union Management	10/28/2003	1/1/2003
	Elected Officials - Non-Union	10/28/2003	1/1/2003
	Michigan Nurses Association Unit I	10/28/2003	8/28/2007
	UAW/Friend of the Court	10/28/2003	3/23/2004
	UAW/Probate Court	10/28/2003	8/24/2004
	United Steelworkers/Youth Center	6/14/2005	Available
	POAM/District Court Unit I	9/2/2005	Available
	POAM/District Court Unit II	9/2/2005	Available
	POAM/Assistant Prosecutor's	9/13/2005	9/13/2005
	AFSCME General	7/25/2006	7/25/2006
	AFSCME District Court	7/25/2006	7/25/2006
	AFSCME Youth Center	7/25/2006	7/25/2006
	UAW/Youth Center	8/28/2007	8/28/2007
	County (Non-Union) Part-time	n/a	n/a
<b>County Agency</b>	Utility Workers of America/County Agency	1/1/2008	Available
	Non-Union/County Agency	1/1/2008	Available
<b>Sheriff's Office</b>	POAM/Sheriff Deputies	Available	Available
	POLC/Command Officers	Available	Available
	POAM/Correctional Officers Unit I	Available	12/11/2007
	POAM/Correctional Officers Unit II	Available	2/12/2008
<b>Dispatchers</b>	POLC/Communication Officers	10/1/2007	10/1/2007
	POLC/Communication Supervisors	10/1/2007	10/1/2007

## Reported Financial Information at Market Value Year Ended December 31, 2009

### REVENUES AND DISBURSEMENTS

#### Revenues:

a. Employer contributions	\$4,803,872
b. Member contributions	290,770
c. Medicare Part D Reimbursements	180,620
c. Interest and Dividends	681,950
d. Investment Gain	<u>2,292,975</u>
e. Total	8,250,187

#### Disbursements:

a. Health care benefits	4,488,744
b. Refunds of member contributions	39,297
c. Administrative expenses	45,785
d. Investment expenses	<u>159,683</u>
e. Total	4,733,509

#### Reserve Increase:

Total revenues minus total disbursements	<u><u>\$3,516,678</u></u>
--	---------------------------

### REPORTED ASSETS

#### Securities:

a. Cash and short term investments	\$ 2,217,418
b. Bonds	13,763,779
c. Stocks	8,567,784
d. Less: Accounts payables	<u>0</u>
e. Net assets	<u><u>\$24,548,981</u></u>

## Development of Valuation Assets

Valuation Date December 31:	2005	2006	2007	2008	2009
1. Beginning of Year Assets					
a) Market Value	\$ 10,790,511	\$ 12,144,296	\$ 17,628,805	\$ 21,221,477	\$ 21,032,303
b) Valuation Assets	10,846,138	12,404,997	17,080,952	21,413,565	26,350,668
2. End of Year Market Value Assets	12,144,296	17,628,805	21,221,477	21,032,303	24,548,981
3. Net Additions to Market Value					
a) Net Contributions (includes Medicare D Reimbursement)	3,302,383	5,823,891	6,281,837	7,652,921	5,275,262
b) Net Investment Income = (3d) - (3a) - (3c)	343,795	1,859,981	626,123	(4,802,212)	2,815,242
c) Benefit Payments, Refunds, and Admin. Expenses	(2,292,393)	(2,199,363)	(3,315,288)	(3,039,883)	(4,573,826)
d) Total Additions to Market Value = (2) - (1a)	1,353,785	5,484,509	3,592,672	(189,174)	3,516,678
4. Average Valuation Assets = (1b) + .5 x [(3a) + (3c)]	11,351,133	14,217,261	18,564,227	23,720,084	26,701,386
5. Expected Income at Valuation Rate = 7% x (4)	794,579	995,208	1,299,496	1,660,406	1,869,097
6. Gain (Loss) = (3b) - (5)	(450,784)	864,773	(673,373)	(6,462,618)	946,145
7. Phased-In Recognition of Investment Return					
a) Current Year: 0.2 x (6)	(90,157)	172,955	(134,675)	(1,292,524)	189,229
b) First Prior Year	8,061	(90,157)	172,955	(134,675)	(1,292,524)
c) Second Prior Year	110,386	8,061	(90,157)	172,955	(134,675)
d) Third Prior Year	(145,024)	110,386	8,061	(90,157)	172,955
e) Fourth Prior Year	(128,976)	(145,026)	110,384	8,060	(90,156)
f) Total Recognized Investment Gain	(245,710)	56,219	66,568	(1,336,341)	(1,155,171)
8. Change in Valuation Assets (3a) + (3c) + (5) + (7f)	1,558,859	4,675,955	4,332,613	4,937,103	1,415,362
9. End of Year Assets					
a) Market Value = (2)	12,144,296	17,628,805	21,221,477	21,032,303	24,548,981
b) Valuation Assets = (1b) + (8)	12,404,997	17,080,952	21,413,565	26,350,668	27,766,030
c) Difference Between Market & Valuation Assets	(260,701)	547,853	(192,088)	(5,318,365)	(3,217,049)
10. Recognized Rate of Return = [(5) + (7f)] / (4)	4.84%	7.40%	7.36%	1.37%	2.67%
11. Market Rate of Return = 2 x (3b) / [(1a) + (2) - (3b)]	3.04%	13.33%	3.28%	(20.41%)	13.17%

## Schedule of Active and Retiree Population

Valuation Date December 31,	Active		Retiree	
	Active Members	Valuation Payroll	Number Retired	Number Covered
2000	648	\$22,535,505	168	264
2001	651	24,514,507	178	266
2002	626	24,653,113	190	294
2003	636	25,430,961	204	317
2004	615	25,379,284	227	356
2005	598	25,441,192	256	374
2006	580	25,270,126	271	398
2007	560	26,237,483	277	405
2008	546	26,551,067	275	408
2009	464	23,660,370	322	486

**Retirees Eligible for Health Benefits - December 31, 2009**  
**Tabulated by Attained Age**

<b>Attained Age</b>	<b>Number Retired</b>	<b>Number Covered</b>
40 - 44	2	3
45 - 49	6	11
50 - 54	22	39
55 - 59	56	97
60 - 64	73	110
65 - 69	53	70
70	12	18
71	6	9
72	7	11
73	9	11
74	5	6
75	7	11
76	3	5
77	4	6
78	7	10
79	5	8
80	2	4
81	8	8
82	3	5
83	2	3
84	5	7
85	1	2
86	5	6
87	4	5
88	5	7
89	1	1
90	2	3
91	3	5
92	1	2
93	1	1
94	2	2
<b>Totals</b>	<b>322</b>	<b>486</b>

**Active Billable General 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					2	\$ 68,390
30-34		3	2	1				6	239,311
35-39		3	6					9	431,048
40-44		1	6	3	4			14	582,969
45-49	1	4	6	6	8			25	1,139,632
50-54	2	4	3	3	2	9	1	24	1,091,349
55-59	1	1	1	3	4	4	1	15	713,521
60			1	1				2	92,098
61			1		1			2	67,080
62									
63									
64			1					1	38,850
65		1			1			2	144,793
<b>Totals</b>	<b>5</b>	<b>17</b>	<b>28</b>	<b>17</b>	<b>20</b>	<b>13</b>	<b>2</b>	<b>102</b>	<b>\$4,609,041</b>

\* New hires after various dates are excluded as they are no longer eligible for County paid retiree health care coverage.

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

Age: 47.9 years

Service: 16.2 years

Annual Pay: \$45,187

**Active Non-Billable General 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	\$ 28,928
25-29	1		1					2	67,087
30-34		8	2					10	447,156
35-39		4	2	1	1			8	306,105
40-44	1	4	5	5	2			17	838,897
45-49		7	7	2	6	1	1	24	1,106,435
50-54	2	4	6	4	6	4	3	29	1,402,529
55-59	1	3	13	5	5	2	1	30	1,367,207
60			1		3		1	5	282,197
61		2	1	1	1		1	6	284,373
62				1			1	2	125,213
63			1	1				2	185,643
64				1				1	93,195
67							1	1	85,179
68					1			1	52,242
74			1					1	14,853
<b>Totals</b>	<b>6</b>	<b>32</b>	<b>40</b>	<b>21</b>	<b>25</b>	<b>7</b>	<b>9</b>	<b>140</b>	<b>\$6,687,239</b>

\* New hires after various dates are excluded as they are no longer eligible for County paid retiree health care coverage.

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

Age: 49.7 years

Service: 15.5 years

Annual Pay: \$47,766

**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				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>

\* New hires after January 1, 2008 are excluded as they are no longer eligible for County paid retiree health care coverage.

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 Billable 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									
25-29	4	2						6	\$ 338,136
30-34	2	8	3					13	725,068
35-39	2	6	8					16	925,124
40-44		5	4	1				10	588,458
45-49		2	3	2	2	1		10	600,978
50-54		2		1		1	1	5	311,914
55-59							1	1	66,329
63			2					2	114,506
69				1				1	43,568
<b>Totals</b>	<b>8</b>	<b>25</b>	<b>20</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>64</b>	<b>\$3,714,081</b>

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

Age: 40.1 years

Service: 11.3 years

Annual Pay: \$58,033

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

<b>Attained Age</b>	<b>Years of Service to Valuation Date</b>							<b>Totals</b>	
	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30 Plus</b>	<b>No.</b>	<b>Valuation Payroll</b>
25-29	6	6						12	\$ 644,830
30-34	8	12	1					21	1,097,996
35-39	4	8	10					22	1,214,461
40-44	3	2	4	8				17	1,023,831
45-49		2	3	6	2	1		14	817,240
50-54		1	2	4	1	2	1	11	728,447
55-59		1	4		1	1		7	422,525
60					1	1	1	3	190,980
61	1							1	33,547
<b>Totals</b>	<b>22</b>	<b>32</b>	<b>24</b>	<b>18</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>108</b>	<b>\$6,173,857</b>

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

Age: 40.6 years

Service: 11.6 years

Annual Pay: \$57,165

**Active Dispatcher\* 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	No.	Valuation Payroll
20-24	1						1	\$ 42,092
25-29	1	1					2	96,149
30-34	1		1				2	86,773
35-39		1	1				2	107,498
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>4</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>16</b>	<b>\$ 780,362</b>

\* New hires after October 1, 2007 are excluded as they are no longer eligible for County paid retiree health care coverage.

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

Age: 40.7 years

Service: 10.5 years

Annual Pay: \$48,773

---

**SECTION F**

**ACTUARIAL COST METHODS, ACTUARIAL  
ASSUMPTIONS AND GLOSSARY**

---

## Valuation Methods

***The normal cost*** was computed as follows:

The series of contributions necessary to accumulate the present value at time of retirement of an employee's post-retirement health benefits was computed so that each contribution in the series, from entry age to retirement, was a constant percentage of the employee's year-by-year projected covered compensation. This is referred to as the individual entry-age actuarial cost method.

***The accrued liability*** was computed as follows:

**Retirees and Beneficiaries:** The discounted value of health benefits likely to be paid for retirees and beneficiaries was computed using the investment return, health cost increase and mortality assumptions.

**Active Employees:** The discounted value of health benefits likely to be paid after retirement for active employees was computed using the assumptions outlined on the following pages and was reduced by the value of normal costs to be paid for service after the valuation date.

***Asset Valuation Method:*** Last year's valuation assets are increased by contributions and investment income and reduced by refunds, and benefit payments. The difference between the actual investment return and the expected return is phased in over a 5-year period.

***Financing of Unfunded Actuarial Accrued Liabilities:*** Unfunded actuarial accrued liabilities were amortized by level (principal & interest combined) percent-of-payroll contributions over 22 years for the Sheriff group and by level (principal & interest combined) dollar contributions over 22 years for the General County, County Agency and Dispatch groups.

## Actuarial Assumptions Used for the Valuation

**Investment return** (net of investment expenses):

7.0% per year compounded annually. This rate consists of a real rate of return of 3.0% a year plus a long-term rate of inflation of 4.0% a year. This assumption is used to equate the value of payments due at different points in time.

**Pay Projections:** These assumptions are used to project current pays to those upon which future contributions will be paid.

<b>Annual Rate of Pay Increases for Sample Ages</b>			
		<b>Merit and Longevity</b>	<b>Total</b>
<b>Years of Service</b>	<b>Base (Economic)</b>	<b>General County, County Agency, Sheriff's Office, and Dispatchers</b>	<b>General County, County Agency, Sheriff's Office, and Dispatchers</b>
1	4.0 %	2.8 %	6.8 %
2	4.0	2.8	6.8
3	4.0	2.8	6.8
4	4.0	2.8	6.8
5	4.0	2.8	6.8
6	4.0	2.8	6.8
7	4.0	2.8	6.8
8	4.0	2.8	6.8
9+	4.0	0.5	4.5

If the number of active members remains constant, the total active member payroll will increase 4.0% annually, the base portion of the individual pay increase assumptions. This increasing payroll was recognized in amortizing unfunded actuarial accrued liabilities for the open groups.

**Health cost increases:** 4.0% is the assumed rate of inflation, the base of all the economic assumptions. The rate of increase is used to predict the amount of health benefits payable in future years.

<b>Year</b>	<b>Medical, Prescription Drug and Dental</b>
2011	9.00 %
2012	8.25
2013	7.50
2014	7.00
2015	6.50
2016	6.00
2017	5.50
2018	5.00
2019	4.50
2020 & After	4.00

**Mortality:** The RP-2000 Mortality Table for males and females projected, 20 years. Sample values follow:

<b>Sample Ages</b>	<b>Actuarial Present Value of \$1 Monthly for Life with 4.0% Compound Annual Increases*</b>		<b>Future Life Expectancy (Years)</b>	
	<b>Men</b>	<b>Women</b>	<b>Men</b>	<b>Women</b>
	50	\$244.13	\$251.75	32.77
55	220.41	228.95	28.04	29.88
60	194.54	204.31	23.47	25.31
65	167.37	178.49	19.17	21.02
70	139.78	152.27	15.22	17.06
75	111.64	126.00	11.58	13.47

\* These values do not take into account the temporary period when increases are assumed to exceed 4.0% or the continuation of benefits after death to a beneficiary.

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of participants surviving after retirement to require health coverage.

Disabled lives were valued using the RP-2000 Mortality Table for males and females, projected 20 years, set forward three years for both males and females.

**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.

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

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

**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 employees, 50% of the disabilities are assumed to be duty related.

*The rates of retirement (a risk assumption)* used to measure the probability of eligible members retiring during the next year were as follows:

Age	Percent of Active Members Retiring Within Next Year	
	General County & County Agency	Sheriff's Office & Dispatchers
50		18.8 %
51		18.8
52		18.8
53		25.0
54		25.0
55	37.5 %	25.0
56	12.5	25.0
57	12.5	12.5
58	12.5	6.3
59	12.5	6.3
60	18.8	6.3
61	18.8	6.3
62	18.8	6.3
63	18.8	6.3
64	6.3	6.3
65	6.3	100.0
66	6.3	
67	6.3	
68	6.3	
69	6.3	
70	100.0	

**Health care coverage at retirement:** 85% of male and 30% of female General and County Agency employees and 90% of male and 50% of female Sheriff's Office employees and Dispatchers were assumed to have 2 person coverage at retirement.

**Medicare Coverage** was assumed to be available for all covered members on attainment of age 65.

**Medicare benefits:** Medicare benefits are assumed to cover the same percentage of health expenses as they do currently. Reductions in the benefits provided by Medicare will result in cost shifting that will increase the cost of this Plan and also the employer's obligation. Due to the unpredictability of such an event, any future changes in Medicare have not been reflected in this valuation.

**Continuation percentage to spouse:** 80% married retirees are assumed to continue coverage to the surviving spouse.

**Non-investment administration expenses:** none.

**Active member group size:** The number of active members was assumed to remain constant for the Sheriff's Office group. For the General County, County Agency and Dispatcher groups, the valuation was based on a closed active member group size.

## Glossary

**Actuarial Accrued Liability** - The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability." Under the actuarial cost method used the "AAL" differs somewhat from the value of future payments based on benefits earned as of the valuation date.

**Accrued Service** - The service credited under the plan which was rendered before the date of the actuarial valuation.

**Actuarial Assumptions** - Estimates of future plan experience with respect to rates of mortality, disability, retirement, investment income and salary increases. Decrement assumptions (rates of mortality, separation 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 appropriate in an inflation-free environment plus a provision for a long-term average rate of inflation.

**Actuarial Cost Method** - A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the normal costs to be paid in the future and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

**Actuarial Equivalent** - Benefits whose actuarial present values are equal.

**Actuarial Present Value** - The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Amortization** - Paying off an interest-bearing liability by means of periodic contributions of interest and principal, as opposed to a lump sum payment.

**Experience Gain (Loss)** - A measure of the difference between actual experience and experience anticipated by a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

**Implicit Rate Subsidy** - It is common practice for employers to allow retirees to continue in the employer's group health insurance plan (which also covers active employees), often charging the retiree some portion of the premium charged for active employees. Under the theory that retirees have higher utilization of services, the difference between the true cost of providing retiree coverage and what the retiree is being charged is known as the implicit rate subsidy.

**Normal Cost** - The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost". An amortization payment toward the unfunded actuarial accrued liability is in addition to the normal cost.

**Other Postemployment Benefits (OPEB)** - OPEB are postemployment benefits other than pensions. OPEB generally takes the form of health insurance, dental, vision, prescription drugs, life insurance or other health care benefits.

**Plan Termination Liability** - The actuarial present value of future plan benefits based on the assumption that there will be no further accruals for the future service and salary. The termination liability will generally be less than the liabilities computed on a "going concern" basis and is not normally determined in a routine actuarial valuation.

**Reserve Account** - An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

**Unfunded Actuarial Accrued Liability** - The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

**Valuation Assets** - The value of current plan assets recognized for valuation purposes.

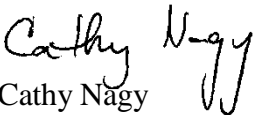
October 12, 2010

The County of Monroe  
125 E. Second Street  
Monroe, Michigan 48161

Attention: Mr. Mike Bosanac

Enclosed please find 15 copies of the report of the Nineteenth Annual Actuarial Valuation of the retiree health benefits provided for County employees (General and Sheriff's Office). We would be pleased to meet with you to discuss the report.

Sincerely,

  
Cathy Nagy

CN:sc  
Enclosures