# ST. CLAIR COUNTY EMPLOYEES RETIREMENT SYSTEM TWENTY-SECOND ANNUAL ACTUARIAL VALUATION OF THE RETIREE HEALTH BENEFITS **DECEMBER 31, 2006**

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October 15, 2007

The Retirement Board
St. Clair County Employees
Retirement System
St. Clair County
Port Huron, Michigan

Dear Board Members:

Submitted in this report are the results of the Twenty-Second Annual Actuarial Valuation of the assets, benefit values and contribution requirements associated with the retiree health benefits provided by St. Clair County. The results of the valuation of the basic retirement benefits provided by the Retirement System and the County are the subject of a separate report.

*The actuarial calculations* were prepared at the request of the Retirement Board and the County. This valuation was prepared for the purpose of calculating a contribution rate that would fund the program on an actuarial basis. In addition, we calculated the Annual Required Contribution (ARC) as required by GASB Statements No. 43 and No. 45.

*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 consistency, but was not otherwise audited. This information 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 plans. The valuation uses generally accepted actuarial principles and is in accordance with the 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.

Respectfully submitted,

Cathy Nagy, FSA, MAAA

W. James Koss, ASA, MAAA

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CN/WJK/HZ:lr

# SECTION A EXECUTIVE SUMMARY

### 1. Computed Contributions - Fiscal Year Beginning January 1, 2008

The following table shows a comparison of the computed contribution rates from last year to this year.

		December 2006				
Division	December 2005	7.5% 23 year amortization	5.3% 23 year amortization	5.3% 30 year amortization		
General	17.11%	17.91%	25.75%	22.02%		
Mental Health	11.68	13.45	20.73	18.34		
<b>Road Commission</b>	26.69	32.43	44.30	38.25		
Sheriff	16.21	18.88	29.34	26.46		
Total	17.11	19.02	27.81	24.24		

### 2. 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 or methods used to predict future occurrences. The third is the difference during the year between the plan's actual experience and what the assumptions predicted.

There were some changes in plan provisions. Certain bargaining units have employee contributions. There were changes in the interest rate used in this valuation as a result of discussions with the County and the auditors. The interest rate was lowered from 7.5% to 5.3%. The interest rate was used in calculating the Annual Required Contribution as required by GASB Statements No. 43 and 45.

In addition, during the 2006 plan year, the retiree health plan received lower contributions than the recommended amount. When the plan receives less than the recommended amount in contributions during a given year, it increases the need for the future contributions, resulting in a higher future contribution rate.

### 3. Year 2006 Experience Gain (Loss)

One way the plan's experience influences costs is the effect it has on the unfunded accrued liability. This is referred to as the experience gain or loss for the year. There was a loss from all causes of \$9,204,722 during 2006. This represents 7.5% of the 2005 accrued liabilities. The gain (loss) development is shown on page B-5.

Gain (Loss) on Investment Income	\$ 481,263
Remaining Gains (Losses)	(9,685,985)
Total Gain (Loss)	\$(9,204,722)

### 4. Effect of County Contributions

A computed contribution rate will remain level from year to year if experience matches the assumptions and if the plan receives contributions in accordance with the computed contribution rate from the prior valuation. This year the plan received less in contributions than developed in the 2004 valuation.

12/2004 Computed Contribution Rate	17.84%
Actual 2006 Payroll	\$44,015,666
Implied Contributions	7,852,395
Actual Contributions	1,453,862
Shortfall	\$ 6,398,533

#### 5. 2006 Funding Position

Funding for retiree health benefits began 21 years ago. This year, valuation assets represent 19.9% of accrued liabilities; last year the ratio was 30.8%. The decrease in the funding ratio is attributable to the change in the interest rate assumption and because the County does not contribute the actuarially determined amount. The funded ratio would be 27.8% using the 7.5% interest rate assumption.

#### 6. Context

Contributing on the basis of valuation results allows the County to level out somewhat the cost of retiree health benefits. However, due to the volatility of health care inflation, the results of the retiree health valuation are likely to fluctuate more from year to year than the results of the basic benefits valuation. The Sensitivity Tests in Section D demonstrate how these costs may vary depending upon future experience.

#### 7. Conclusions

As long as contributions are made at the recommended level, experience matches the assumptions and there are no changes in benefits, the contribution rate should remain close to the percent of payroll shown in this report. The key assumption is the future rate of increase in per capita health expenditures. If the rate of increase does not moderate from recent levels, it will place all health benefit plans in jeopardy, whether funded or unfunded.

#### 8. Recommendation

For several years we have discussed with the Board the regulatory issues involved in funding retiree health benefits in a qualified pension plan. We believe these issues to be very important and of current concern. The Internal Revenue Code limits the dollar amounts that can be contributed to a 401(h) account on behalf of retiree health benefits. Gabriel, Roeder, Smith & Company has not been retained to do an analysis if the 401(h) rules are met. It is our understanding that the Board and the County has been working with legal counsel to address this issue and as a result a new trust fund has been established separate from the Retirement System. All future employer and employee contributions will be made to this trust fund.

#### 9. GASB Statements No. 43 and No. 45

The Governmental Accounting Standards Board (GASB) issued Statement No. 43, Financial Reporting for Post-Employment Benefit Plans Other than Pension Plans. Statement No. 43 sets the accounting standards applicable to plans providing "other post employment benefits" (OPEB), including retiree health care. GASB also issued Statement No. 45, setting the accounting standards applicable to the employers sponsoring OPEB plans.

Government entities will have to comply with the new GASB standards according to the following schedule:

<b>Total Annual Revenue in</b>	<b>Effective for Fiscal Ye</b>	ars Beginning After:
Fiscal Year Ending June 15, 1999	OPEB Sponsor	OPEB Plan
\$100 MM or more	12/15/2006	12/15/2005
\$10 MM - \$100 MM	12/15/2007	12/15/2006
Less than \$10 MM	12/15/2008	12/15/2007

Please note that Statements No. 43 and No. 45 are accounting standards, not funding requirements. However, to the extent that St. Clair County contributes less than the Annual Required Contribution (ARC) as required by the GASB standard, an accrued liability will be shown on the County's financial statement. In addition, if the County contributes less than the ARC, a lower interest rate will be used in the calculations, significantly increasing the reported liability and ARC.

As requested by the County we calculated the Annual Required Contribution using a 5.3% interest rate assumption.

# SECTION B VALUATION RESULTS AND COMMENTS

### FINANCIAL OBJECTIVE

The financial objective of the Retiree Health Care Plan is to establish and receive contributions, expressed as a percentage of active member payroll, which will permit the accumulation of assets to pay for these retirement benefit promises.

Your annual retiree health benefit valuations determine how well the objective is being met.

### **CONTRIBUTION RATES**

The retiree health benefits are supported by contributions from the County, some of the members and by the investment income earned on assets.

County 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 costs allocated to the current year by the valuation method described in Section F. The unfunded accrued liability is the portion of costs not covered by present assets and future normal costs.

The contribution requirements for retiree health benefits for the fiscal year beginning January 1, 2008 are presented on page B-2. We have developed and shown in a separate report the costs of basic retirement benefits.

### CONTRIBUTIONS TO PROVIDE RETIREE HEALTH BENEFITS DECEMBER 31, 2006 VALUATION

% of Active Payroll

		Mental	Road		
<b>Contributions for</b>	General	Health	Commission	Sheriff	<b>Total</b>
Normal cost of benefits:					
Age & service	9.67%	9.54%	16.51%	15.86%	11.77%
Disability	0.33%	0.34%	0.58%	0.39%	0.38%
Death before retirement	0.27%	0.25%	0.43%	0.31%	0.29%
Total	10.27%	10.13%	17.52%	16.56%	12.44%
Member contributions:					
Total	1.27%	0.00%	0.00%	0.00%	0.55%
Future refunds	0.25%	0.00%	0.00%	0.00%	0.12%
Available	1.02%	0.00%	0.00%	0.00%	0.43%
<b>Employer normal cost</b>	9.25%	10.13%	17.52%	16.56%	12.01%
23 year amortization					
Unfunded accrued liability	16.50%	10.60%	26.78%	12.78%	15.80%
Computed Employer Rate	25.75%	20.73%	44.30%	29.34%	27.81%
30 year amortization					
Unfunded accrued liability	12.77%	8.21%	20.73%	9.90%	12.23%
Computed Employer Rate	22.02%	18.34%	38.25%	26.46%	24.24%

Unfunded actuarial accrued liabilities were financed as a level percent of member payroll.

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

Page B-4 displays the unfunded accrued liabilities that are amortized by the contribution rate shown above.

### CONVERTING CONTRIBUTION RATES TO DOLLAR AMOUNTS

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

Contribute dollar amounts for a period which are equal to the computed percent-of-payroll contribution requirement multiplied by the covered active member payroll for the period. Since pay data used is submitted for the retirement system valuation, the contribution percentages developed refer to payroll as defined for Retirement System benefits.

### 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 RETIREE HEALTH BENEFITS DECEMBER 31, 2006 VALUATION

		General	Mental Health	Road Commission	Sheriff	Total
A.	Accrued Liability					
	1. For retirees and beneficiaries	\$42,778,821	\$ 6,780,417	\$23,021,911	\$14,323,821	\$ 86,904,970
	2. For vested terminated members	13,635,410	7,680,632	1,870,442	1,407,361	24,593,845
	3. For present active members					
	a. Value of expected future benefit payments	64,097,376	25,806,884	27,732,657	38,823,249	156,460,166
	b. Value of future normal costs	26,993,224	13,123,604	11,691,223	22,928,937	74,736,988
	c. Active member liability: (a) - (b)	37,104,152	12,683,280	16,041,434	15,894,312	81,723,178
	4. Total	93,518,383	27,144,329	40,933,787	31,625,494	193,221,993
В.	Valuation Assets	18,599,508	5,398,630	8,141,162	6,289,872	38,429,172
C.	Unfunded Accrued Liability: (A.4) - (B)	74,918,875	21,745,699	32,792,625	25,335,622	154,792,821

### DEVELOPMENT OF 2006 EXPERIENCE GAIN (LOSS) RETIREE HEALTH BENEFITS

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 experience gain (loss) is shown below.

	2005	2006
(1) UAAL* at start of year	\$84,925,857	\$84,500,203
(2) Normal cost from last year	2,621,310	2,772,987
(3) Actual employer contributions	2,648,857	1,453,862
(4) Net interest accrual on (1), (2) and (3)	6,368,419	6,386,386
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	91,266,729	92,205,714
(6) Changes from amendments	0	(1,697,842)
(7) Change from revised assumptions/methods	(3,628,794)	55,080,227
(8) Expected UAAL after changes: $(5) + (6) + (7)$	87,637,935	145,588,099
(9) Actual UAAL at end of year	84,500,203	154,792,821
(10) Gain (Loss) (8) - (9)	3,137,732	(9,204,722)
(11) Gain (Loss) as percent of actuarial accrued liabilities at start of year	2.60 %	(7.54)%

<sup>\*</sup> Unfunded actuarial accrued liabilities.

### DEVELOPMENT OF VALUATION INVESTMENT GAIN (LOSS) YEAR ENDED DECEMBER 31, 2006

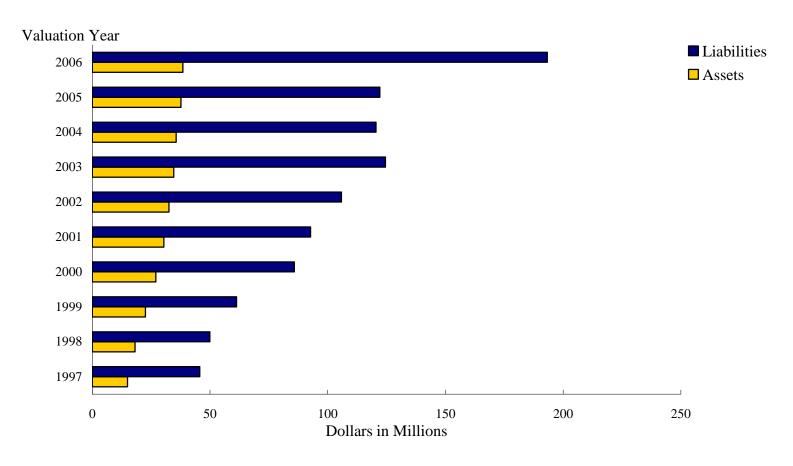
The 2006 valuation assumed an average 7.5% return on valuation assets. Net investment return in excess of 7.5% represents a gain. If net investment return falls short of 7.5%, the difference between an income of 7.5% and the net return represents a loss.

(1) Total 2006 valuation investment income:	\$ 16,662,003
(2) Average Valuation Assets (Pension & Health)	188,618,304
(3) Expected investment income: (.075) x (2)	14,146,373
(4) Gain (Loss): (1) - (3)	2,515,630
(5) Portion of System assets for retiree health benefits	0.191309
(6) Gain (loss) attributable to retiree health benefit assets: (4) x (5)	481,263
(7) Valuation rate of return for 2006: (1) / (2)	8.83%

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

During 2006 the approximate market value rate of return was 14.27%.

### **Assets & Accrued Liabilities Retiree Health Benefits**



1997 assets equaled 32.7% of accrued liabilities.

2006 assets equaled 19.9% of accrued liabilities.

# COMPUTED EMPLOYER CONTRIBUTIONS RETIREE HEALTH BENEFITS COMPARATIVE STATEMENT

### **Computed Employer Contributions as**

_	Covered Active Members			Covered		Percen	t of Covered Pay	roll^		
Valuation		Valua	tion Payroll		Retirees &		Mental	Road		
Date	No.	Total	Average	% Incr.	Beneficiaries	General	Health	Commission	Sheriff	Total
12/31/1992	723*	\$22,118,037	\$30,592	6.8	325					15.03 %
12/31/1993	732	23,711,156	32,392	5.9	335					12.17
12/31/1994	747	24,769,097	33,158	2.4	347					10.97
12/31/1995#	766	25,861,302	33,761	1.8	361					10.61
12/31/1996#	783	27,934,157	35,676	5.7	375					11.77
35795	791	28,402,628	35,907	0.6	376					12.59
12/31/1998	798	29,161,115	36,543	1.8	394					13.41
12/31/1999	827	31,051,406	37,547	2.7	406					16.14
12/31/2000@	825	32,044,333	38,842	3.4	410					24.39
12/31/2001	833	32,744,255	39,309	1.2	426					26.49
12/31/2002	883	35,716,619	40,449	2.9	435					28.96
12/31/2003**	914	38,047,803	41,628	3.0	455					19.24
12/31/2004	924	39,609,752	42,868	3.0	462					17.84
12/31/2005@^	996	42,622,922	42,794	(0.2)	462	17.11 %	11.68	% 26.69 %	16.21 %	17.11
12/31/2006	985	44,015,666	44,686	4.4	507	17.91	13.45	32.43	18.88	19.02
12/31/2006@	985	44,015,666	44,686	4.4	507	25.75	20.73	44.30	29.34	27.81
12/31/2006@**	985	44,015,666	44,686	4.4	507	22.02	18.34	38.25	26.46	24.24

<sup>@</sup> Revised actuarial assumptions.

<sup>^</sup> Separated by division from 2005 forward.

<sup>#</sup> Retirement System Amended.

<sup>\*</sup> Medical Care Facility closed.

<sup>\*\*</sup> Amortization period changed.

### RETIREE PREMIUM RATE DEVELOPMENT

The retired employees of St. Clair County are provided medical and prescription drug benefits through the County's self-insured program administered by BCBS. Age graded and sex distinct premiums are utilized by this valuation and developed for two classes of retirees (pre-65 and post-65). The initial premiums developed 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 combination. The age/sex specific costs more accurately reflect the health care utilization and cost at that age.

The initial premiums are calculated based on the group's own experience. Historical claim experience for calendar years 2004, 2005, and 2006 were projected to the valuation period (i.e., January 1, 2007 to December 31, 2007) on an incurred claim basis and adjusted for plan design changes, trend, and loaded for administrative expenses. Since the claims provided was combined for the pre-65 and post-65 participants, the data was split to appropriately reflect the impact of the Medicare on post-65 participants and the different utilization level between the two groups. A per member weighted average cost based on the projected experience was developed as the initial medical premium to be used in the valuation.

The following are the monthly one-person premiums used in this valuation at select ages:

NOT ELIGIBLE FOR MEDICARE					
AGE	MALE	FEMALE			
40	\$ 194.98	\$ 305.49			
50	358.41	406.10			
60	588.49	565.67			
64	684.98	634.91			

ELIGIBLE FOR MEDICARE					
AGE	MALE	FEMALE			
65	\$ 385.08	\$ 354.61			
75	493.12	437.64			
85	549.87	482.76			

### RETIREE HEALTH BENEFITS COMMENTS

Comment A: As requested by the Board and the County beginning with the December 31, 2005 actuarial valuation, we calculated the contribution rates separately for the following divisions: General, Mental Health, Road Commission and Sheriff. Our calculations were based on the demographics of each group and the benefit provisions of each group. The assets were allocated in proportion to the liabilities so each division has the same funded ratio as of December 31, 2006. In future years, we suggest segregating the assets for purposes of calculating the contributions so that each division's assets properly reflect the contributions and benefits for that division. The assets remain commingled for investment purposes.

**Comment B:** Providing health care benefits to retired employees involves significant additional risks when compared to providing pensions to retired employees. The additional risks include the rate at which current medical costs will increase, or decrease in the future, changes in utilization and changes in Medicare. As a result, contributions for a retiree health plan are more volatile. This volatility is shown in Section D of this report.

**Comment C:** This valuation allows the County to level out the cost of retiree health benefits somewhat. Even though the contribution rate may not remain as level as pension contribution rates, this program of pre-funding will help the County avoid much of the increasing cost that results from a pay-as-you-go approach. This valuation also helps in understanding the very substantial value of retiree health benefits.

**Comment D:** In order for a contribution requirement to remain level from one valuation to the next, experience must be similar to the valuation assumptions, and the plan must receive contributions at the rate computed in the valuation. If the plan receives contributions at a lower level, (i) funding will be slowed down and (ii) the need for future contributions will increase. Moreover, the valuations anticipate that contributions, as they are received, will be available for investment. While budgetary constraints may argue for a reduced level of current funding, it should be understood that the "cost" of reducing contributions is not only an increased need for County contributions in the future to make up

### RETIREE HEALTH BENEFITS COMMENTS (CONTINUED)

for the contributions that the plan is not receiving currently, but also an increased need for County contributions in the future to make up for the investment return the plan would have realized on these missed contributions.

In addition, the new accounting standards, GASB Statements No. 43 and 45 require the use of a lower interest rate in calculating the Annual Required Contribution (ARC) if the County is not contributing the actuarially determined amount. As a result, the calculations in this report were based on a 5.3% interest rate assumption as requested by the County.

# SECTION C CASH FLOW PROJECTIONS

### **BACKGROUND**

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 St. Clair County Retiree Health Program, it is reasonable to expect that the amount of the System's annual health disbursements will increase for years to come.

We have projected the retiree health disbursements over the next 20 years. The projections are based upon the same assumptions as were used in the actuarial calculations. The schedule on the next page displays the anticipated disbursements.

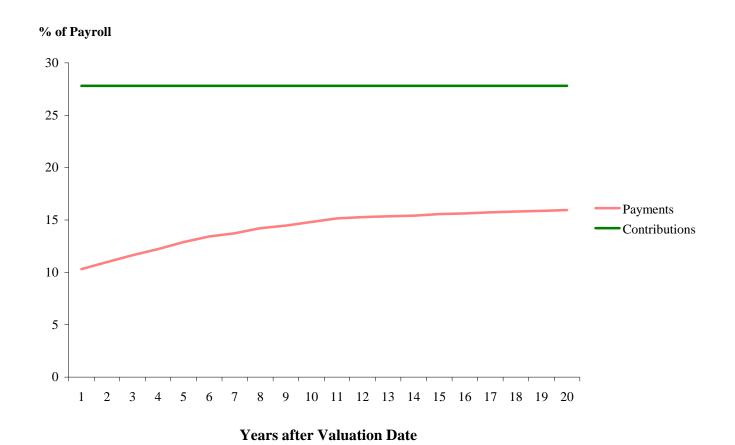
Please note that these projections anticipate that the retiree health plan will receive contribution income equal to the computed cost requirements.

### 20 YEAR PROJECTION OF BENEFIT DISBURSEMENTS

	Patiraa l	Health Paymen	ts on Robalf of	Procent	Benefit Disbursements
Year	Retirees	Employees	Inactives	Total	As a % of Payroll
2007	\$4,385,300	\$ 77,500	\$ 79,700	\$ 4,542,500	10.32%
2008	4,653,600	259,100	167,800	5,080,500	10.99%
2009	4,908,900	488,200	253,000	5,650,100	11.64%
2010	5,122,400	770,200	332,100	6,224,700	12.22%
2011	5,357,900	1,099,800	436,100	6,893,800	12.89%
2012	5,542,900	1,453,000	549,200	7,545,100	13.43%
2013	5,687,900	1,841,100	574,700	8,103,700	13.74%
2014	5,829,700	2,267,900	710,500	8,808,100	14.22%
2015	5,925,900	2,733,200	744,000	9,403,100	14.46%
2016	5,984,500	3,237,600	900,100	10,122,200	14.82%
2017	5,990,500	3,732,900	1,142,200	10,865,600	15.15%
2018	5,991,800	4,218,500	1,289,300	11,499,600	15.28%
2019	5,958,500	4,734,800	1,439,300	12,132,600	15.35%
2020	5,943,100	5,308,300	1,541,800	12,793,200	15.41%
2021	5,938,200	5,938,800	1,686,600	13,563,600	15.56%
2022	5,919,700	6,586,300	1,798,400	14,304,400	15.63%
2023	5,884,100	7,328,700	1,909,300	15,122,100	15.74%
2024	5,835,800	8,176,000	1,939,500	15,951,300	15.81%
2025	5,762,800	8,998,300	2,053,500	16,814,600	15.87%
2026	5,674,900	9,916,800	2,154,200	17,745,900	15.95%

This is a closed group projection assuming no new entrants into the plan over the projection period. Benefit payments are projected based on the per-person health care costs developed as a result of our claims analysis, and will be different from the actual benefits paid from the plan.

### RETIREE HEALTH BENEFITS PROJECTED PAYMENTS AND CONTRIBUTIONS (PERCENTS OF PAYROLL)



# SECTION D SENSITIVITY TESTS

### BACKGROUND

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 goods and services being promised. This is projected using the current cost of the health benefits and assumed rates of future health cost increases. The final cost of providing retiree health benefits will depend upon how the charges for medical services actually increase in the future.

In order to demonstrate how the computed cost of these benefits can 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 cost of the 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 cost increase assumption than was used for the valuation. The other valuation is based upon a pessimistic health cost increase assumption.

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

# RETIREE HEALTH BENEFITS SENSITIVITY TESTS - MEDICAL INFLATION GENERAL

**Future Medical Inflation** 

	i didi e Medicai initation				
<b>Computed Cost</b>	Valuation Assumption	Optimistic Assumption	Pessimistic Assumption		
Normal cost	9.25%	8.15%	10.87%		
Accrued liability	\$93,518,383	\$84,677,543	\$106,620,292		
Valuation assets	18,599,508	18,599,508	18,599,508		
Unfunded liability	74,918,875	66,078,035	88,020,784		
Amortization payment*	16.50%	14.55%	19.38%		
Contribution rate	25.75%	22.70%	30.25%		

<sup>\*</sup> Unfunded actuarial accrued liabilities were financed as a level percent of member payroll over a period of 23 years.

<sup>%&#</sup>x27;s refer to costs as a percentage of covered member payroll.

# RETIREE HEALTH BENEFITS SENSITIVITY TESTS - MEDICAL INFLATION MENTAL HEALTH

**Future Medical Inflation** Valuation **Optimistic Pessimistic Computed Cost** Assumption **Assumption** Assumption Normal cost 9.04% 10.13% 11.74% Accrued liability \$24,436,110 \$27,144,329 \$31,160,754 Valuation assets 5,398,630 5,398,630 5,398,630 Unfunded liability 21,745,699 19,037,480 25,762,124 Amortization payment\* 10.60% 9.28% 12.56% Contribution rate 20.73% 18.32% 24.30%

<sup>\*</sup> Unfunded actuarial accrued liabilities were financed as a level percent of member payroll over a period of 23 years.

<sup>%&#</sup>x27;s refer to costs as a percentage of covered member payroll.

# RETIREE HEALTH BENEFITS SENSITIVITY TESTS - MEDICAL INFLATION ROAD COMMISSION

	<b>Future Medical Inflation</b>			
<b>Computed Cost</b>	Valuation Assumption	Optimistic Assumption	Pessimistic Assumption	
Normal cost	17.52%	15.64%	20.30%	
Accrued liability	\$40,933,787	\$37,192,349	\$46,476,703	
Valuation assets	8,141,162	8,141,162	8,141,162	
Unfunded liability	32,792,625	29,051,187	38,335,541	
Amortization payment*	26.78%	23.72%	31.30%	
Contribution rate	44.30%	39.36%	51.60%	

<sup>\*</sup> Unfunded actuarial accrued liabilities were financed as a level percent of member payroll over a period of 23 years.

<sup>%&#</sup>x27;s refer to costs as a percentage of covered member payroll.

# RETIREE HEALTH BENEFITS SENSITIVITY TESTS - MEDICAL INFLATION SHERIFF'S DEPARTMENT

	Future Medical Inflation			
<b>Computed Cost</b>	Valuation Assumption	Optimistic Assumption	Pessimistic Assumption	
Normal cost	16.56%	14.80%	19.20%	
Accrued liability	\$31,625,494	\$28,561,045	\$36,169,472	
Valuation assets	6,289,872	6,289,872	6,289,872	
Unfunded liability	25,335,622	22,271,173	29,879,600	
Amortization payment*	12.78%	11.24%	15.08%	
Contribution rate	29.34%	26.04%	34.28%	

<sup>\*</sup> Unfunded actuarial accrued liabilities were financed as a level percent of member payroll over a period of 23 years.

<sup>%&#</sup>x27;s refer to costs as a percentage of covered member payroll.

### RETIREE HEALTH BENEFITS SENSITIVITY TESTS - HEALTH COST INCREASE ASSUMPTION

### **Assumed Rate of Medical Inflation**

Year	Valuation	Optimistic	Pessimistic	Dental
2007	10.00 %	8.00 %	13.00 %	6.00 %
2008	9.50	7.67	12.00	5.67
2009	9.00	7.33	11.00	5.33
2010	8.50	7.00	10.50	5.00
2011	8.00	6.67	10.00	5.00
2012	7.50	6.33	9.00	5.00
2013	7.00	6.00	8.00	5.00
2014	6.50	5.67	7.50	5.00
2015	6.00	5.33	7.00	5.00
2016	5.50	5.00	6.00	5.00
2017 & after	5.00	5.00	5.00	5.00

### **SECTION E**

### SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

### BRIEF SUMMARY OF RETIREE HEALTH ELIGIBILITY DECEMBER 31, 2006

Covered Person	Group	Eligibility Conditions
Retired Member	Modified plan member	Age 55 (age 50 for Sheriff's Dept.) with 25 years of service or age 60 with 20 years of service. After 25 years when age plus service equals 80.
	Original plan member	Age 55 (age 50 for Sheriff's Dept.) with 25 years of service or age 60 with 8 years of service. After 25 years when age plus service equals 80.
Spouse of Retiree	Any	Retiree alive and covered, or spouse receiving continuation of deceased retiree's pension.
Spouse of Deceased Employee	Any	Spouse receives a survivor pension.

All new hires are expected to be covered by the modified plan. Members are not currently required to contribute to the health care plan except for the following units:

- Public Service Employees and Prosecuting Attorney Clerical Employees:
  - Member contributions for employees hired before July 1, 2006:
    - July 1, 2006 0.83%
    - July 1, 2007 1.50%
    - July 1, 2008 2.17%
  - Member contributions for employees hired after July 1, 2006:
    - July 1, 2006 1.25%
    - July 1, 2007 2.25%
    - July 1, 2008 3.25%

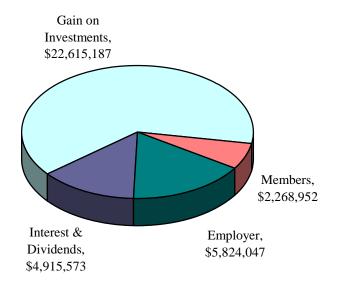
### BRIEF SUMMARY OF RETIREE HEALTH ELIGIBILITY DECEMBER 31, 2006

- Probate Court and Circuit Court Family Division Clerical Employees
  - Member contributions
    - July 1, 2006 0.65%
    - July 1, 2007 1.30%
    - July 1, 2008 1.95%
    - July 1, 2009 2.60%
    - July 1, 2010 3.25%

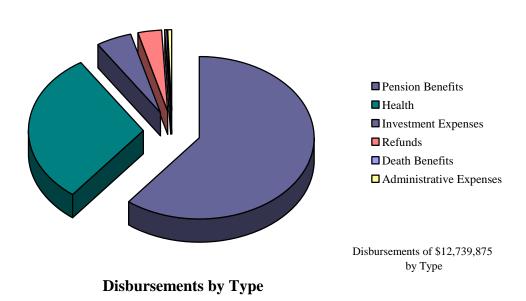
Members of the Sheriff's Department, who retire prior to age 50, pay the cost of coverage until attainment of age 50.

Members who retire as a result of a disability, terminated vested members and survivors of members who die while actively employed receive health care coverage.

# INCOME AND DISBURSEMENTS During Year Ended December 31, 2006 (Total System – Market Value)



### Source of \$35,623,759 in Income



### REPORTED FINANCIAL INFORMATION AT MARKET VALUE YEAR ENDED DECEMBER 31, 2006 TOTAL SYSTEM ASSETS

### **Revenues and Disbursements**

#### **Revenues:**

a. Member contributions	\$ 2,268,952
b. Employer contributions	5,824,047
c. Interest and dividends	4,915,573
d. Gain on investments	22,615,187
e. Total	\$35,623,759

### **Disbursements:**

a. Refunds of member contributions	\$ 417,268
b. Pensions paid	7,717,444
c. Death benefits paid	66,500
d. Health benefits	3,843,765
e. Investment expenses	640,814
f. Administrative expenses	54,084
	\$12,739,875

#### **Reserve Increase:**

Total revenues minus total disbursements \$ 22,883,884

### **Assets**

a.	Cash and equivalents*	\$ 4,206,416
b.	Stocks	156,299,857
c.	Corporate Bonds	24,505,418
d.	U.S. Government Securities	28,361,189
To	tal	\$213,372,880

<sup>\*</sup> Adjusted for accruals and receivables, net of payables.

# REPORTED FINANCIAL INFORMATION AT MARKET VALUE YEAR ENDED DECEMBER 31, 2006 TOTAL SYSTEM ASSETS

Year Ended December 31:	2005	2006	2007	2008	2009
A. Funding Value Beginning of Year	\$179,987,308	\$190,621,335			
B. Market Value End of Year	190,488,996	213,372,880			
C. Market Value Beginning of Year	185,370,510	190,488,996			
D. Non-Investment Net Cash Flow	(2,729,577)	(4,006,062)			
E. Investment Income					
E1. Market Total: B - C - D	7,848,063	26,889,946			
E2. Amount for Immediate Recognition (7.5%)	13,396,689	14,146,373			
E3. Amount for Phased-In Recognition E1-E2	(5,548,626)	12,743,573			
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.2 x E3	(1,109,725)	2,548,715			
F2. First Prior Year		(1,109,725)	\$ 2,548,715		
F3. Second Prior Year			(1,109,725)	\$ 2,548,715	
F4. Third Prior Year				(1,109,725)	\$ 2,548,715
F5. Fourth Prior Year					(1,109,726
F6. Start-up Phase-In	1,076,640	1,076,640	1,076,640	1,076,640	1,076,642
G. Total	(33,085)	2,515,630	2,515,630	2,515,630	2,515,631
H. Funding Value End of Year: A + D + E2 + G	190,621,335	203,277,276			
I. Difference between Market & Funding Value	(132,339)	10,095,604	7,579,974	5,064,344	2,548,713
J. Recognized Rate of Return - Funding Value Basis	7.48%	8.83%			
K. Recognized Rate of Return - Market Value Basis	4.27%	14.27%			

# ASSETS AVAILABLE FOR RETIREE HEALTH BENEFITS AS OF DECEMBER 31, 2006

A. Portion of Retirement System Assets Attributable to Retiree Health Benefits (Funding Value) as of December 31, 2006

\$ 37,751,367

B. Market value of Assets in Retiree Health Care Trust Fund as of December 31, 2006

677,805

C. Total (A. + B.)

\$ 38,429,172

# RETIREE HEALTH BENEFITS RETIREES AND BENEFICIARIES - DECEMBER 31, 2006 TABULATED BY ATTAINED AGE

	Ge	eneral	Ment	al Health	Road C	Commission	Sheri	ff'S Dept.		Γotal
Attained	No. of	No. Covered								
Ages	Retirees*	Per Retiree								
40-44	2	3							2	3
45-49							1	1	1	1
50-54	9	16			3	5	7	8	19	29
55-59	30	50	7	11	12	21	14	20	63	102
60-64	47	73	12	14	23	39	21	36	103	162
65-69	44	58	10	15	18	29	4	6	76	108
70-74	36	54	5	8	17	25	6	10	64	97
75-79	36	48	2	1	26	39	4	6	68	94
80	8	9			5	6	2	4	15	19
81	6	6			7	13	1	2	14	21
82	4	3			6	9			10	12
83	7	9			3	4	1	1	11	14
84	5	6			5	7			10	13
85	4	5			5	5			9	10
86	5	6			1	1			6	7
87	5	6							5	6
88	4	6			3	4			7	10
89	2	3			1	1			3	4
90 and Over	17	18			4	3			21	21
Totals	271	379	36	49	139	211	61	94	507	733
Average		1.4		1.4		1.5		1.5		1.4

<sup>\*</sup> Actual number of retirees, including those that do not have retiree health care coverage.

# RETIREE HEALTH BENEFITS RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS COMPARATIVE STATEMENT

Year Ended	Added to	Removed from	Rolls End	Present Value of
December 31	Rolls@	Rolls	of Year	Health Benefits
1987	26	12	286	\$ 3,444,302
1988	21	9	298	4,907,357
1989	17	10	305	6,316,089
1990	17	10	312	9,630,842
1991	18	13	317	11,724,732
1992	18	10	325	12,872,407
1993	20	10	335	11,984,980
1994	24	12	347	11,361,828
1995	33	19	361	12,523,024
1996	15	1	375	14,524,383
1997	30	29	376	16,413,460
1998	30	12	394	19,258,663
1999	28	16	406	25,109,990
2000	22	18	410	33,481,392
2001	34	18	426	38,921,495
2002	33	24	435	45,665,396
2003	36	16	455	55,715,393
2004	37	30	462	55,663,190
2005	51	16	497	58,087,415
2006	44	34	507	86,904,970

<sup>@</sup> Includes survivors of deceased retirees.

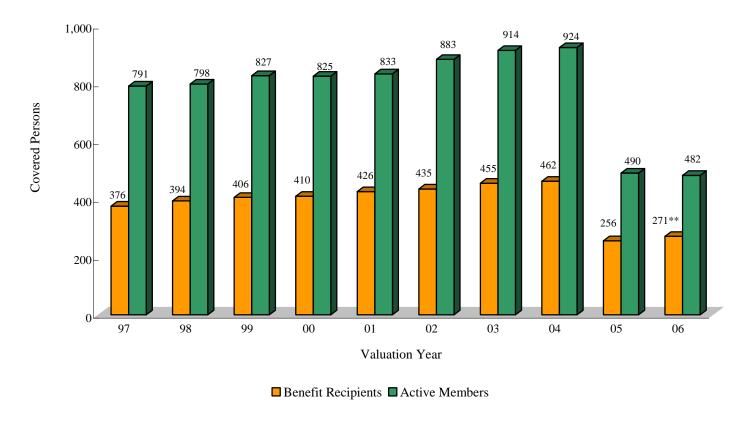
#### **INACTIVE MEMBER DATA**

There were 93 inactive members as of December 31, 2006. An inactive member is a person who has left County employment with entitlement to a benefit after attainment of his voluntary retirement age.

Inactive Members December 31, 2006 Tabulated by Attained Age

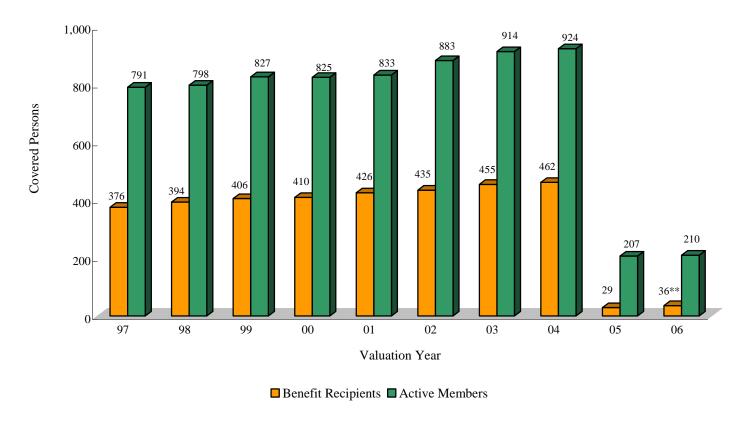
Attained Ages	General County No.	Mental Health No.	Road Comission No.	Sheriff's Dept. No.	Total No.
29	1				1
33	1				1
34	1				1
35	1				1
38	1	1			2
40	1				1
41	2				2
42	1				1
43		1			1
44	1	3			4
45	3	1			4
46	3	2			5
47	4				4
48	2	1	1	1	5
49	2	1	1		4
50	5	3		2	10
51	3	1	1	1	6
52	1				1
53	2	3	1		6
54		1	1		2
55	1	4			5
56	3	2		1	6
57	3	1			4
58	6	1			7
59	3	3			6
60			1		1
65	1				1
68	1				1
Totals	53	29	6	5	93

### GENERAL ACTIVE MEMBERS & BENEFIT RECIPIENTS\*



- \* For years prior to 2005, the numbers include all active and retired members for all divisions.
- \*\* Includes retirees who do not receive health care benefits.

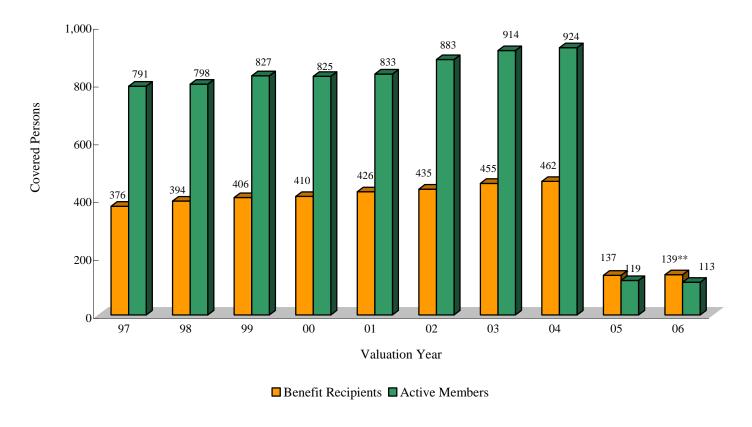
# MENTAL HEALTH ACTIVE MEMBERS & BENEFIT RECIPIENTS\*



<sup>\*</sup> For years prior to 2005, the numbers include all active and retired members for all divisions.

<sup>\*\*</sup> Includes retirees who do not receive health care benefits.

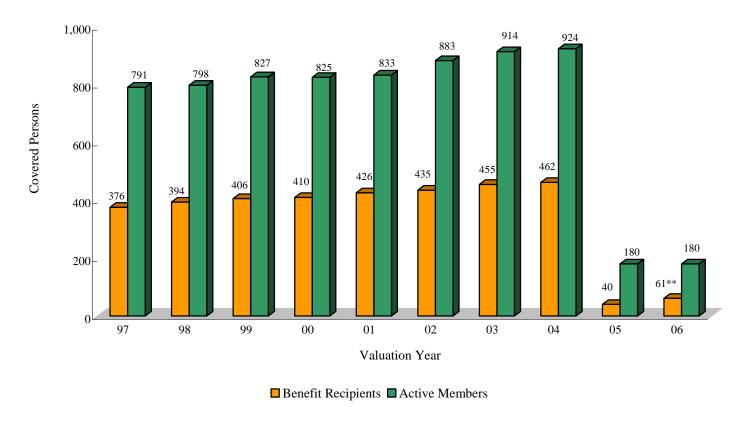
# ROAD COMMISSION ACTIVE MEMBERS & BENEFIT RECIPIENTS\*



<sup>\*</sup> For years prior to 2005, the numbers include all active and retired members for all divisions.

<sup>\*\*</sup> Includes retirees who do not receive health care benefits.

# SHERIFF'S DEPT. ACTIVE MEMBERS & BENEFIT RECIPIENTS\*



<sup>\*</sup> For years prior to 2005, the numbers include all active and retired members for all divisions.

<sup>\*\*</sup> Includes retirees who do not receive health care benefits.

# ACTIVE MEMBERS COMPARATIVE SCHEDULE

Valuation						
Date	Active	Valuation		Av	erage	
December 31	Members	Payroll	Age	Service	Pay	% Inc.
1992	723	\$22,118,037	43.5	10.8	\$30,592	6.8 %
1993	732	23,711,156	43.5	11.3	32,392	5.9
1994	747	24,769,097	43.6	11.4	33,158	2.4
1995	766	25,861,302	43.6	11.2	33,761	1.8
1996	783	27,934,157 *	43.6	11.5	35,676	5.7
1997	791	28,402,628	43.7	11.5	35,907	0.6
1998	798	29,161,115	43.9	11.4	36,543	1.8
1999	827	31,051,406	44.1	11.2	37,547	2.7
2000	825	32,044,333	44.3	11.5	38,842	3.4
2001	833	32,744,255	44.6	11.4	39,309	1.2
2002	883	35,716,619	44.6	11.0	40,449	2.9
2003	914	38,047,803	44.5	10.7	41,628	2.9
2004	924	39,609,752	44.6	10.8	42,868	3.0
2005	996	42,622,922	44.1	10.0	42,794	(0.2)
2006	985	44,015,666	44.1	10.2	44,686	4.4

<sup>\*</sup> Reduced for effect of retroactive pay during 1996.

#### ACTIVE MEMBERS ADDED TO AND REMOVED FROM ROLLS

	Number						Active
Year	Added			nations Durin			_ Members
Ended	During	Normal	Disability	Died-in	Vested		End of
December 31	Year	Retirement	Retirement	Service	Term.	Other	Year
1992	40	11	1		10	58	723
1993	51	14	1	2	9	16	732
1994	59	15	1		9	19	747
1995	72	21	3	1	5	23	766
1996	62	13		1	12	19	783
1997	62	23	1	2	5	23	791
1998	77	20	1	1	15	33	798
1999	91	18		2	12	30	827
2000	52	11	1		11	31	825
2001	78	21	1		11	37	833
2002	94	16		2	10	16	883
2003	96	25			12	28	914
2004	71	21	1		6	33	924
2005	134	29	1		7	25	996
2006	67	28		1	8	41	985

# GENERAL ACTIVE MEMBERS AS OF DECEMBER 31, 2006 BY ATTAINED AGE AND YEARS OF SERVICE

_		Yes	ars of Serv	vice to Va	luation D	ate			Totals
Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	8							8	\$ 281,404
25-29	35	1						36	1,346,110
30-34	26	11	1					38	1,496,542
35-39	24	23	12	4				63	2,817,170
40-44	22	18	9	9	5	1		64	2,738,851
45-49	23	16	4	7	9	11		70	2,819,031
50-54	18	20	16	11	9	12	4	90	3,896,464
55-59	13	8	13	14	12	6	10	76	3,398,859
60	2	4			2	1	1	10	361,138
61		3	2		1	1	1	8	406,910
62		1	1	1	1	1		5	231,929
63		2	1				1	4	196,227
64		1		1				2	62,968
65		1						1	35,478
66	1		2					3	64,714
67				2				2	145,168
70			1					1	45,724
79							1	1	55,184
Totals	172	109	62	49	39	33	18	482	\$20,399,871

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

Age: 45.7 years
Service: 10.7 years

Annual Pay: \$42,323

# MENTAL HEALTH ACTIVE MEMBERS AS OF DECEMBER 31, 2006 BY ATTAINED AGE AND YEARS OF SERVICE

_		Ye		Totals					
Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	2							2	\$ 57,177
25-29	18	1						19	743,426
30-34	18	6						24	975,606
35-39	14	10	11					35	1,640,882
40-44	10	9	7	1	2			29	1,315,291
45-49	13	7	5	4	5	3		37	1,678,724
50-54	7	5	3	2	4	3		24	1,016,104
55-59	7	7	5	3	4	3		29	1,315,929
60			2					2	77,962
61		1	1				1	3	139,610
62	1			1				2	65,586
63		1	1					2	94,062
64		1	1					2	94,043
Totals	90	48	36	11	15	9	1	210	\$9,214,402

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

Age: 43.7 years Service: 8.6 years Annual Pay: \$43,878

# ROAD COMMISSION ACTIVE MEMBERS AS OF DECEMBER 31, 2006 BY ATTAINED AGE AND YEARS OF SERVICE

_		Ye	ears of Ser	vice to Va	aluation D	ate			Totals
Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	1							1	\$ 32,837
25-29	3							3	132,723
30-34	4	5	1					10	442,480
35-39	2	7	4	2				15	701,594
40-44	3	5	6	4	1			19	1,020,681
45-49	4	5	3	7	1			20	944,591
50-54		5	2	3	6	2		18	908,116
55-59		2	1	8	2	4	1	18	895,603
60			1					1	9,101
61		1			1		1	3	211,516
62					1		1	2	94,205
63							1	1	59,568
64				1				1	40,512
66		1						1	6,751
Totals	17	31	18	25	12	6	4	113	\$5,500,278

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

Age: 46.4 years Service: 13.6 years

Annual Pay: \$48,675

# SHERIFF'S DEPT. ACTIVE MEMBERS AS OF DECEMBER 31, 2006 BY ATTAINED AGE AND YEARS OF SERVICE

		Ye	ars of Serv	vice to Va	luation D	ate			Totals
Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	9							9	\$ 338,120
25-29	26	3						29	1,203,320
30-34	14	15	2					31	1,520,538
35-39	16	9	4	2				31	1,534,520
40-44	7	4	7	6	4			28	1,498,375
45-49	2	5	3	3	1	5		19	1,047,759
50-54	4	4	1	6		2	2	19	1,061,578
55-59	4		1	3	2	2		12	590,880
60						1		1	68,097
62				1				1	37,928
Totals	82	40	18	21	7	10	2	180	\$8,901,115

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

Age: 38.9 years Service: 8.4 years

Annual Pay: \$49,451

# **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 a member's health care benefits was computed so that each contribution in the series, from date of hire to retirement, was a constant percentage of the member's year by year projected covered compensation. This is referred to as the individual entry age actuarial cost method.

#### The accrued liability was computed and financed as follows:

Retirees and Beneficiaries: The discounted value of health benefits likely to be paid to eligible retirees and beneficiaries was computed using the investment return, health cost increase and mortality assumptions. This amount was financed by applicable accrued assets, to the extent available.

Active and Inactive Members. The discounted value of health benefits likely to be paid eligible active and inactive members 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. The actuarial value equals:

- (a) Actuarial value of assets from the previous valuation, plus
- (b) employer and member contributions since the last valuation, plus
- (c) benefit payments and refunds since the last valuation, plus
- (d) estimated investment income at the assumed investment return, plus
- (e) portion of gain/(loss) recognized in the current year.

For the above purposes, gain/(loss) is defined as the excess during the period of the investment return on the market value of assets over the expected investment income. 20% of the difference is recognized over a 5 year period in the actuarial value of assets. This method was first adopted for the December 31, 2005 actuarial valuation.

*Financing of Unfunded Actuarial Accrued Liabilities*. Unfunded actuarial accrued liabilities were amortized by level (principal & interest combined) percent-of-payroll contributions over 23 years and alternatively over 30 years. Active member payroll was assumed to increase 5% a year for the purpose of determining the level percent contributions.

#### ECONOMIC AND RISK ASSUMPTIONS USED FOR THE VALUATION

The actuary calculates the contribution requirements and benefit values of the plan by applying economic and risk assumptions to the benefit provisions and people information furnished, using the valuation methods described on page F-1.

The principal areas of economic and risk assumptions are:

- (i) long-term rates of investment income likely to be generated by the assets of the Retirement System
- (ii) patterns of salary increases to be experienced by members
- (iii) rate of mortality among members, retirees and beneficiaries
- (iv) rates of withdrawal of active members
- (v) rates of disability among members and their subsequent rates of recovery
- (vi) probabilities of retirement at various ages after benefit eligibility

In making a valuation the actuary must project the monetary effect of each assumption, for each distinct experience group, for the next year and for each year over the next half-century or longer.

Once actual experience has occurred and been observed it will not coincide exactly with assumed experience, regardless of the skill of the actuary and the completeness of the data. Each valuation provides a complete recalculation of system costs based upon assumptions regarding future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of small adjustments of the computed contribution rate.

From time to time it becomes necessary to adjust the package of assumptions to reflect basic experience trends -- but not random year to year fluctuations. We will recommend changes whenever we feel they are appropriate.

#### ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

*Investment Return* (net of investment expenses). We calculated the results using a 5.3% investment return assumption as requested by the County.

This assumption is used to equate the value of payments due at different points in time and was first used for the December 31, 2006 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.

		5 Year				
	2006	2005	^ 2004	2003	2002	Average*
Rate of Investment Return	8.8 %	1.5 %	0.6 %	1.1 %	0.8 %	2.5 %
Average Increase in Pay	5.9 %	3.0 %	4.9 %	4.7 %	5.6 %	4.8 %
Real Rate of Return	2.9 %	(1.5)%	(4.3)%	(3.6)%	(4.8)%	(2.3)%

<sup>^</sup> Before change in asset valuation method.

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.

**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, 2005 valuation.

**Annual Rate of Pay Increase for Sample Ages** 

Sample		Mer	rit & Longe	vity		Total				
Service	Base	General*	Road	Sheriff	General	Road	Sheriff			
1	5.00%	3.50%	5.00%	6.00%	8.50%	10.00%	11.00%			
2	5.00%	3.50%	5.00%	6.00%	8.50%	10.00%	11.00%			
3	5.00%	3.00%	5.00%	6.00%	8.00%	10.00%	11.00%			
4	5.00%	3.00%	5.00%	6.00%	8.00%	10.00%	11.00%			
5	5.00%	1.00%	0.50%	6.00%	6.00%	5.50%	11.00%			
6-19	5.00%	1.00%	0.50%	0.50%	6.00%	5.50%	5.50%			
20 and over	5.00%	0.50%	0.50%	0.50%	5.50%	5.50%	5.50%			

<sup>\*</sup> Includes Mental Health Authority.

<sup>\*</sup> Compound rate of increase.

If the number of active members remains constant, the total active member payroll is expected to increase 5.0% annually, the base portion of the individual pay increase assumptions. This increasing payroll was recognized in amortizing unfunded actuarial accrued liabilities.

Average changes actually experienced in pay have been as follows:

	Year Ended December 31				
2006	2005	2004	2003	2002	Average*
5.9 %	3.0 %	4.9 %	4.7 %	5.6 %	4.8 %

<sup>\*</sup> Compound rate of increase.

Active Member Group Size: The number of active members was assumed to remain constant.

*Mortality*. The 1994 Group Annuity Mortality Table was first used for the December 31, 2005 valuation. Sample values follow:

		Single Life Ret	irement Value	S			
Sample	Present	Value of \$1	Futu	re Life			
Attained	Monthl	y for Life@	Expectar	ncy (years)			
Ages	Men	Women	Men	Women			
50	\$342.60	\$387.44	30.69	34.89			
55	293.70	337.18	26.15	30.17			
60	246.58	287.71	21.83	25.59			
65	202.71	240.68	17.84	21.28			
70	163.25	196.90	14.29	17.30			
75	127.66	155.57	11.12	13.60			

<sup>@</sup> These values include 5% annual increases, but do not include the effect of temporarily high health inflation.

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement.

Future disabled lives were valued using the above table set forward seven years.

**Rates of separation from active membership**. The rates do not apply to members eligible to retire and do not include separation on account of death or disability. This assumption measures the probabilities of members remaining in employment.

	% of Active Members Separating within Next Year		
Years of			
Service	General*	Road	Sheriff
0	10.00%	3.00%	5.00%
1	9.00%	3.00%	5.00%
2	7.00%	3.00%	5.00%
3	6.00%	3.00%	5.00%
4	6.00%	3.00%	5.00%
5 & Over	6.00%	3.00%	5.00%
	6.00%	3.00%	5.00%
	6.00%	3.00%	4.40%
	4.80%	2.40%	2.80%
	3.40%	1.40%	1.70%
	3.00%	1.00%	1.20%
	3.00%	1.00%	0.70%
	3.00%	1.00%	0.50%
	2.40%	1.00%	0.50%
	2.00%	1.00%	0.50%
	0 1 2 3 4	Years of Service         Separati General*           0         10.00%           1         9.00%           2         7.00%           3         6.00%           4         6.00%           5 & Over         6.00%           6.00%         4.80%           3.40%         3.00%           3.00%         3.00%           2.40%	Years of Service         Separating within New Road           0         10.00%         3.00%           1         9.00%         3.00%           2         7.00%         3.00%           3         6.00%         3.00%           4         6.00%         3.00%           5 & Over         6.00%         3.00%           6.00%         3.00%         4.80%           4.80%         2.40%           3.40%         1.40%           3.00%         1.00%           3.00%         1.00%           2.40%         1.00%           2.40%         1.00%

<sup>\*</sup> Includes Mental Health Authority.

The rates were first used for the December 31, 2005 valuation.

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

Percent Becoming Disabled within Next Year
0.08%
0.08%
0.08%
0.08%
0.20%
0.26%
0.49%
0.89%
1.41%

These rates were first used for the December 31, 1985 valuation. For the Sheriff's Department, the disability assumption is split to reflect 75% as non-duty disability and 25% as duty disability.

**Rates of Retirement**. These rates are used to measure the probability of eligible members retiring during the next year.

Percent of Active Members Retiring within Next Year

	within Next Tear					
Retirement	General	General				
Ages	Original*	Modified*	Road	Sheriff	Service	Sheriff
50	5.0%	10.0%	25.0%		25	20.0%
51	5.0%	10.0%	25.0%		26	20.0%
52	5.0%	10.0%	25.0%		27	20.0%
53	5.0%	10.0%	25.0%		28	20.0%
54	5.0%	10.0%	25.0%		29	20.0%
55	5.0%	10.0%	25.0%		30	20.0%
56	10.0%	5.0%	25.0%		31	20.0%
57	10.0%	5.0%	25.0%		32	20.0%
58	10.0%	5.0%	25.0%		33	20.0%
59	10.0%	5.0%	25.0%		34	20.0%
60	20.0%	20.0%	25.0%	25.0%	35+	100.0%
61	20.0%	20.0%	10.0%	25.0%		
62	20.0%	20.0%	30.0%	25.0%		
63	20.0%	20.0%	20.0%	25.0%		
64	20.0%	20.0%	20.0%	25.0%		
65	40.0%	40.0%	100.0%	100.0%		
66	40.0%	40.0%	100.0%	100.0%		
67	40.0%	40.0%	100.0%	100.0%		
68	40.0%	40.0%	100.0%	100.0%		
69	40.0%	40.0%	100.0%	100.0%		
70+	100.0%	100.0%	100.0%	100.0%		

<sup>\*</sup> Includes Mental Health Authority.

A member of the General, Mental Health or Road Commission Divisions was understood to be eligible for retirement after attaining age 55 with 25 or more years of service or age 60 with 8 years of service. A member of the Sheriff's Dept. was understood to be eligible for retirement upon completion of 25 years of service or at age 60 with 8 years of service. Members of groups with "Rule of 80" were understood to be eligible if the sum of their age plus years of service was greater than or equal to 80 and their years of service equaled 25 or more.

*The assumed rate of increase for health care costs* is the assumption used to predict the amount of benefit payments in future years. The assumed rates are shown in the table below:

	Health Care	Health Care Trend		
	Medical and			
Year	<b>Prescription Drug</b>	Dental		
2007	10.00 %	6.00 %		
2008	9.50	5.67		
2009	9.00	5.33		
2010	8.50	5.00		
2011	8.00	5.00		
2012	7.50	5.00		
2013	7.00	5.00		
2014	6.50	5.00		
2015	6.00	5.00		
2016	5.50	5.00		
2017 & after	5.00	5.00		

#### *Marital status* at retirement:

	2 Person Coverage	Continuation Percentage	
Males	80%	100%	
Females	50%	100%	

*Medicare coverage* was assumed to be available for all covered members on attainment of age 65, or immediately if retired for disability.

Non-investment administration expenses - none.

#### **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."

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, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

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

**Actuarial Equivalent.** A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

**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 payments of interest and principal, as opposed to paying it off with a lump sum payment.

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

**Normal Cost.** The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

**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. Generally based on book value plus a portion of unrealized appreciation or depreciation.

October 15, 2007

Ms. Jacquelyn Meldrum
St. Clair County Employees
Retirement System
200 Grand River, Suite 203 – County Building
Port Huron, Michigan 48060

Dear Jackie:

Please find enclosed 20 copies of the report of the Twenty-Second Annual Actuarial Valuation of the retiree health care benefits paid by the St. Clair County Employees Retirement System as of December 31, 2006. The basic retirement benefits are the subject of a separate report.

Sincerely,

Cathy Nagy

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CN:lr Enclosures