



## Cavanaugh Macdonald

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February 27, 2009

Ms. Alison Morgan  
Finance Officer  
McDowell County  
60 East Court Street  
Marion, NC 28752

**December 31, 2007 Actuarial Valuation of the Health Care Plan of McDowell County**

Dear Ms. Morgan:

Enclosed are the results of the December 31, 2007 Actuarial Valuation of the Health Care Plan of McDowell County. In preparing the valuation, the actuary relied on data provided by the employer and the Local Governmental Employees' Retirement System. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The assumptions used by the actuary are in the aggregate reasonably related to the experience under the program and the reasonable expectations of anticipated experience under the program.

The valuation was based on an assumed interest rate of 4.00%. Schedule A summarizes the valuation results, including membership data, the valuation balance sheet and the actuarially determined contribution rates. Schedule C outlines the full set of actuarial assumptions and methods employed. Schedule D provides a summary of the benefit and contribution provisions taken into account.

The annual required contribution was determined in accordance with the accounting requirements under GASB Statement No. 43 and GASB Statement No. 45. We have presented the required GASB disclosure information in Schedule B.

This is to certify that the independent consulting actuary is a Member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the System and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

If you have any questions about this information, please call us at 678.388.1700.

Respectfully submitted,

Todd B. Green  
Principal and Senior Consultant

Alisa Bennett, FSA, EA, FCA, MAAA  
Principal and Senior Actuary

TBG/AB:kmh  
Enclosure

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Phone (678) 388-1700 • Fax (678) 388-1730

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SCHEDULE A  
(continued)

ANNUAL REQUIRED CONTRIBUTION (ARC)  
(for fiscal years ending June 30, 2010)

	<i>Rate as % of Compensation</i>	<i>Annual Amount</i>
Normal Cost	2.22%	\$ 199,711
Accrued Liability	<u>1.08%</u>	<u>96,905</u>
Total	3.30%	\$ 296,616

TDA 1954.00  
County 295762

**SCHEDULE A**  
(continued)

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at December 31, 2007. Additional information as of the latest actuarial valuation follows.

Valuation date	12/31/2007
Actuarial cost method	Projected unit credit
Amortization method	Level Percentage of Pay, open
Remaining amortization period	30 years
Asset valuation method	Market Value of Assets
Actuarial assumptions:	
Investment Rate of Return*	4.00%
Medical cost trend rate	11.00% - 5.00%
Year of Ultimate trend rate	2016
*Includes inflation at	3.75%

The assumed investment rate of return reflects the fact that no assets are set aside within McDowell County that are legally held exclusively for retiree health benefits. If a trust or equivalent arrangement were set up for this purpose, the investment rate of return can be increased.

SCHEDULE B

THE HEALTH CARE PLAN OF MCDOWELL COUNTY

ACCOUNTING INFORMATION IN ACCORDANCE WITH  
GOVERNMENTAL ACCOUNTING STANDARDS BOARD  
STATEMENT NO. 43 AND 45

Governmental Accounting Standards Board Statements 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the Plan and the employer.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
12/31/2006	\$ 0	\$2,457,846	\$2,457,846	0.0%	\$8,453,413	29.1%
12/31/2007	\$ 0	\$2,808,052	\$2,808,052	0.0%	\$8,985,503	31.3%

## SCHEDULE C

### THE HEALTH CARE PLAN OF MCDOWELL COUNTY OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

**INTEREST RATE:** 4.00% per annum, compounded annually.

**SEPARATION FROM SERVICE:** Representative values of the annual rates of separation are as follows:

**General Employees**

Age	ANNUAL RATE OF										
	Withdrawal						Death*		Disability		Service Retirement**
	0-4 Yrs Svc		5-9 Yrs Svc		10+ Yrs Svc		Male	Female	Male	Female	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
20	19.5%	19.5%	8.0%	10.0%	4.0%	3.5%	0.048%	0.028%	0.040%	0.050%	
25	16.0	16.0	6.5	8.0	4.0	3.5	0.062	0.029	0.040	0.050	
30	14.5	14.5	5.5	7.0	3.5	4.0	0.078	0.033	0.100	0.090	
35	13.0	13.0	5.5	7.0	3.0	3.5	0.085	0.045	0.300	0.150	
40	12.0	12.0	5.5	6.0	2.5	3.5	0.100	0.065	0.500	0.300	
45	12.0	12.0	5.5	6.0	2.5	3.0	0.146	0.092	0.800	0.400	
50	11.0	11.0	4.0	5.5	2.5	3.0	0.233	0.131	1.000	0.800	25%
55	9.0	9.0	4.0	5.5	2.5	3.0	0.398	0.208	2.000	1.000	25
60	9.0	9.0					0.709	0.386	2.400	1.300	8
65	9.0	9.0					1.294	0.762			30
70							2.173	1.271			20
75							3.405	2.038			100

\*Scale AA mortality improvement factors are applied.

\*\*An additional 15% are assumed to retire when first eligible for unreduced service retirement.

**SCHEDULE C**  
(continued)

*Law Enforcement Officers*

ANNUAL RATE OF							
Age	Withdrawal			Death*		Disability	Service Retirement **
	0-4 Yrs Svc	5-9 Yrs Svc	10+ Yrs Svc	Male	Female		
20	9.0%	4.0%	2.5%	0.048%	0.028%	0.217%	
25	9.0	4.0	2.5	0.062	0.029	0.247	
30	10.0	5.0	2.5	0.078	0.033	0.323	
35	10.0	6.0	2.5	0.085	0.045	0.450	
40	9.0	6.0	2.5	0.100	0.065	0.592	
45	9.0	5.0	2.0	0.146	0.092	0.825	
50	9.0	4.0	2.0	0.233	0.131	1.320	30%
55				0.398	0.208	2.303	15
60				0.709	0.386	4.507	20
65				1.294	0.762		40
70				2.173	1.271		30
75				3.405	2.038		100

\*Scale AA mortality improvement factors are applied

\*\*An additional 35% are assumed to retire when first eligible for unreduced service retirement.



**SCHEDULE C**  
(continued)

**DEATHS AFTER RETIREMENT:** According to the 1994 Group Annuity Mortality table with Projection Scale AA set forward three years for males and set forward two years for females.

**ASSET VALUATION METHOD:** Market value.

**HEALTH CARE COST TREND RATES:** Following is a chart detailing trend assumptions.

<b>Year</b>	<b>Trend</b>
2008	11.00%
2009	10.00%
2010	9.00%
2011	8.00%
2012	7.00%
2013	6.50%
2014	6.00%
2015	5.50%
2016 and beyond	5.00%

**DENTAL CARE COST TREND RATES:** 5.00%

## SCHEDULE D

### THE HEALTH CARE PLAN OF MCDOWELL COUNTY SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

#### Benefits

##### *Eligibility and Allowance*

Retiring employees and their dependents will be allowed to continue major medical coverage on McDowell County's group health plan if the following conditions exist:

1. Five (5) years of consecutive service must have been served with McDowell County immediately prior to retirement or one year of service immediately prior to retirement with a cumulative total of ten (10) years of McDowell County service. Except employees hired or rehired after June 30, 2005 must serve fifteen (15) years with McDowell County with a minimum of five (5) years service immediately prior to retirement.
2. Retirement must be in accordance with one of the following guidelines established by the North Carolina Local Governmental Employee's Retirement System:
  - a. 65 years of age with 5 years of creditable service
  - b. 60 years of age with 25 years of creditable service
  - c. 30 years of creditable service
  - d. 55 years of age with 5 years of creditable service (law enforcement officers only)
  - e. 50 years of age with 20 years of creditable service
  - f. 60 years of age with 5 years creditable service
  - g. 50 years of age with 15 years of creditable service (law enforcement officers only)
  - h. Total and permanent disability with 5 years of creditable service

**SCHEDULE D**

(continued)

3. The retiree/dependent is responsible for all dental and dependent premiums but will have a percentage of their health premium paid based on their cumulative years of service with McDowell County. The Percentages are as follows:

Years of Service	Percentage
15 to 20	25%
20 to 25	50%
25 to 30	75%
30 or more	100%

4. Coverage terminates when the retiree or dependent attains 65 years of age and one month or otherwise becomes eligible for Medicare.

***Other Post Employment Benefits***

Health care, prescription drugs, and dental benefits are provided by the County.