THE ANNE ARUNDEL COUNTY EMPLOYEES' RETIREMENT PLAN

ACTUARIAL VALUATION AS OF JANUARY 1, 2008

Bolton Partners, Inc.
575 South Charles Street
Suite 500
Baltimore, Maryland 21201

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April 10, 2008

PERSONAL & CONFIDENTIAL
Andrea Fulton
Personnel Officer
Anne Arundel County Government
P.O. Box 6675
Annapolis, MD 21401

Re: Employees' Retirement Plan Valuation

Dear Andrea:

The following report sets forth the actuarial valuation as of January 1, 2008 of the Anne Arundel County Employees' Retirement Plan, for the plan year beginning on that date. The valuation is based on participant data as submitted by the personnel department of Anne Arundel County, Aetna and CIGNA and unaudited asset data submitted by the County.

INVESTMENT PERFORMANCE

The market value of plan assets as of December 31, 2007 was $530,658,024. The average investment return for the fund on a market basis for the year ended December 31, 2007 was 10.8% and 9.3% on an actuarial basis.

The plan utilizes an actuarial averaging method to smooth out swings in investment performance and thus in asset values from year to year. Under the method, investment gains or losses above or below the 8% actuarial assumption are phased in over a five year period. As of December 31, 2007, the actuarial value of assets was $492,788,674. Details of the development of the actuarial value of assets are set forth later in this report.

ASSUMPTION CHANGES

The following assumptions were changed pursuant to the recently completed Experience Study:

- Increased retirement rates below age 60.
- Increased termination rates above age 40.
- Increased disability rates.
- Adopted the RP-2000 Blue Collar Mortality Table projected to 2008 (using male scale AA).

PRINCIPAL RESULTS

The principal purpose of the valuation is to set forth the County's contributions for the fiscal year ending June 30, 2009. In addition, the report sets forth the information on the plan for the County's financial statements and for the plan's own financial statements.

The total recommended employer contribution for the plan year and fiscal year ending June 30, 2009 increased from $12,399,040 to $13,414,470. This is in addition to employee contributions of 4% of pay from the employees in Tier 1. The increase can be broken down to the following material factors:

- On an actuarial basis the investment return was 9.3% and generated an investment gain. On a market value basis the return was 10.8%. The difference between 9.3% and 10.8% is a deferred gain. The amount of the deferred gain increased from $27.8 million to $37.9 million.
- Salary increases were above the assumption.
- Actuarial assumptions were changed.

The above material factors had the following effect on the County's contribution (as a percentage of payroll) since last year's valuation.

January 1, 2007 valuation	10.6%
Investment Gain	(0.5%)
Pay Increases	0.0%
New Entrants/Change in Normal Cost	0.0%
Assumption Changes	0.8%
Demographics and Other Changes	0.5%
January 1, 2008 valuation	11.4%

The overall funded ratio for the plan decreased from 94.7% to 93.6% (due to the assumption changes).

The balance of this report sets forth details of changes in participation in the plan and the results of the valuation. A statement of funding progress under GASB 25 is also included.

Sincerely,

BOLTON PARTNERS, INC.

Thomas B. Lowman, FSA

David W. Ballard, CEBS

TBL/DWB/mlg

Trust Fund Asset Statement

TRUST FUND ASSET STATEMENT FOR YEAR ENDED DECEMBER 31, 2007

Original Market Value 1/1/2007	$484,393,340
Audit Adjustment	$ 0
Market Value 1/1/2007	$484,393,340
Receipts:	
Employer Contributions	$ 11,675,600
Employee Contributions	4,413,568
Interest and Dividends	19,228,785
Realized and Unrealized Gain/(Loss)	34,434,704
Other	578,809
Total Receipts:	$ 70,331,467
Disbursements:	
Benefit Payments	$ 22,800,104
Administrative Expenses	600,305
Investment Expenses	2,041,023
Total Disbursements	$ 25,441,433
Net Increase/(Decrease)	$ 44,890,035
Preliminary Ending Value	$529,283,374
Contribution Receivable	$ 1,374,650
Ending Value 12/31/2007	$530,658,024

Development of Actuarial Value of Assets

ACTUARIAL VALUE OF ASSETS

		2006	2007
1.	**Actuarial Value of Assets Beginning of Year**	**$422,234,496**	**$456,656,849**
2.	Contributions	15,068,920	16,089,168
3.	Benefit Payments	19,734,829	22,800,104
4.	Administrative Expenses	499,068	600,305
5.	Expected 8% Return	33,572,161	36,240,098
6.	**Expected Asset Value** (1. + 2. - 3. - 4. + 5.)	**$450,641,680**	**$485,585,706**
7.	Market Value End of Year	$484,393,340	$529,283,374
8.	Prior Deferred Gain/(Loss)	$ 10,039,865	$ 14,556,077
9.	**Asset Gain/(Loss)** (7. - 8. - 6.)	**$ 23,711,795**	**$ 29,141,591**
10.	80% of 2006 Gain/(Loss) of $23,711,795	$ 18,969,436	
11.	60% of 2005 Gain/(Loss) of $(2,562,937)	(1,537,762)	
12.	40% of 2004 Gain/(Loss) of $6,770,873	2,708,349	
13.	20% of 2003 Gain/(Loss) of $44,346,392	8,869,278	
14.	**Actuarial Value of Assets 1/1/2007**	**$455,384,039**	
15.	Contribution Receivable	$ 1,272,810	
16.	**Final Actuarial Value of Assets 1/1/2007**	**$456,656,849**	
17.	80% of 2007 Gain/(Loss) of $29,141,591		$ 23,313,273
18.	60% of 2006 Gain/(Loss) of $23,711,795		14,227,077
19.	40% of 2005 Gain/(Loss) of $(2,562,937)		(1,025,175)
20.	20% of 2004 Gain/(Loss) of $6,770,873		1,354,175
21.	**Actuarial Value of Assets 1/1/2008**		**$491,414,024**
22.	Contribution Receivable		$ 1,374,650
23.	Final Actuarial Value of Assets 1/1/2008		**$492,788,674**
	Rate of Return on Actuarial Value of Assets *(net of investment expenses)*	**9.1%**	**9.3%**

Participant Schedules

PARTICIPANT SUMMARY

		Inactive Participants		
	Active Participants	With Deferred Benefits	Receiving Benefits	Total
Participants as of January 1, 2007	2,338	240	1,069	3,647
Retired	(80)	(8)	88	0
Terminated Vested	(41)	41	0	0
Terminated Non-Vested/Paid Lump Sum	(149)	(10)	0	(159)
Disabled	(4)	0	4	0
Deceased/Payments Expired	(2)	0	(26)	(28)
Payment to Beneficiary	0	0	6	6
Rehired	0	0	(1)	(1)
QDRO	0	1	2	3
Transfers In	0	0	0	0
Transfers Out	(2)	0	0	(2)
New Hires/Rehired	225	(4)	0	221
Data Adjustment	(1)	0	1	0
Net Change	(54)	20	74	40
Participants as of January 1, 2008	2,284	260	1,143	3,687

Service - Age Distribution

AGE, SERVICE AND AVERAGE SALARY DISTRIBUTION

Age as of 1/1/2008	Under 1	01-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40 +	Total
Under 25	26	30	1	0	0	0	0	0	0	0	57
	29,965	32,645	40,548	0	0	0	0	0	0	0	31,561
25-29	40	76	30	1	0	0	0	0	0	0	147
	36,842	37,487	39,271	27,745	0	0	0	0	0	0	37,609
30-34	25	79	54	13	1	0	0	0	0	0	172
	38,105	42,127	44,339	46,851	51,463	0	0	0	0	0	42,648
35-39	30	73	66	31	26	2	0	0	0	0	228
	36,913	43,775	48,168	50,423	50,426	51,920	0	0	0	0	45,878
40-44	26	65	84	54	61	40	3	0	0	0	333
	40,734	43,410	48,777	57,602	57,204	52,457	56,106	0	0	0	50,584
45-49	28	85	79	54	72	60	54	4	0	0	436
	39,315	43,968	49,347	56,320	61,433	58,551	55,519	62,419	0	0	52,665
50-54	23	50	61	50	61	59	61	42	1	0	408
	41,529	41,117	55,908	56,281	57,669	62,895	62,666	59,134	45,448	0	55,921
55-59	14	45	55	43	48	44	29	14	11	0	303
	49,979	59,542	54,634	59,905	61,324	64,892	61,747	67,513	59,986	0	59,915
60-64	9	18	24	23	26	17	18	10	6	0	151
	50,914	55,745	48,292	49,661	58,650	63,824	69,515	63,652	63,629	98,487	57,234
65-69	1	3	9	11	10	3	2	0	1	0	40
	16,848	25,844	60,411	64,054	50,166	50,535	75,711	0	77,339	0	55,617
70 & Up	0	1	2	3	2	0	0	1	0	0	9
	0	91,033	54,373	43,178	42,650	0	0	41,434	0	0	50,672
Total	222	525	465	283	307	225	167	71	19	0	2,284
	38,751	43,463	49,493	55,541	58,138	60,079	60,972	61,358	61,285	0	51,323

Average Age: 46.39

Average Service: 11.59

Average Salary: $51,323

Actuarial Costs

ACTUARIAL COSTS

	As of 01/01/2007	As of 01/01/2008
Participants		
Active	2,338	2,284
Terminated Vested	240	260
Disabled	71	72
Retirees	939	1,007
Beneficiaries	59	64
Total	3,647	3,687
Active Payroll (Rate at January 1st)	$116,709,102	$117,222,681
1. Actuarial Liability		
Active Participants	$224,851,315	$236,757,291
Terminated Vested Participants	12,765,521	15,245,911
Participants Receiving Benefits	244,354,794	274,338,280
Total	$481,971,630	$526,341,482
2. Actuarial Value of Assets	$456,656,849	$492,788,674
3. Unfunded Actuarial Liability (1-2)	$ 25,314,781	$ 33,552,808
4. County's Normal Cost	$ 9,441,275	$ 9,876,313
5. Amortization Payment	$ 1,490,318	$ 1,994,493
6. Estimated Expenses	$ 549,000	$ 550,000
7. Total Recommended Contributions as of January 1st (4 + 5 + 6)	$ 11,480,593	$ 12,420,806
8. Total Recommended Contribution as of December 31st (7 x 1.08)	$ 12,399,040	$ 13,414,470
9. Contribution as a % of total payroll	10.62%	11.44%

UNFUNDED LIABILITY AMORTIZATION SCHEDULE

	Amortization Period			Balances		
Charge	Date Created	Initial Years	Years Left	Initial	Outstanding	2008 Payment
Actuarial Loss	01/01/2005	30	27	$9,888,883	$10,386,381	$633,549
Actuarial Loss	01/01/2006	30	28	$7,157,528	$ 7,403,807	$443,053
Actuarial Loss	01/01/2007	30	29	$8,028,164	$ 8,169,400	$480,142
Assumption Change	01/01/2008	30	30	$13,407,985	$13,407,985	$774,776
Credit						
Unfunded Accrued Liability	01/01/2004	30	26	$215,150	$ 229,167	$ 14,265
Actuarial Gain	01/01/2008	30	30	$5,585,598	$ 5,585,598	$322,762
Net Total					$33,552,808	$1,994,493

Note: Bases are amortized as an equal percent of payroll each year. Total payroll is assumed to increase 3.5% annually.

Assumptions and Methods

ASSUMPTIONS AND METHODS

Funding Method:	Projected Unit Credit Actuarial Cost Method. The contribution equals the sum of the normal cost and the amount necessary to amortize the frozen unfunded actuarial liabilities and any actuarial gains or losses over a period of years. Amortization payments increase 3.5%.
Asset Method:	Asset smoothing method. Spreading the investment gains or losses in excess of the assumed return over a 5-year period. Actuarial Value of Assets recognizes adjustments resulting from an audit.
Interest:	8% compounded annually.
COLA Increases:	Benefits accrued before Bill 88-96 are assumed to increase by 3.0% of the original benefit each year from retirement. Benefits accrued after Bill 88-96 are assumed to increase by 2.1% of the current benefit each year from retirement.
Salary Increases:	The following graded schedule is used:

Attained Age	% Increase at Attained Age
20	7.0%
25	6.5%
30	6.0%
35	5.5%
40	5.0%
45	4.5%
50	4.0%
55	4.0%

Mortality:	*Healthy:* RP-2000 Blue Collar Mortality table projected to 2008 (using Male Scale AA). *Disabled:* RP-2000 Blue Collar Mortality table projected to 2008 (using Male Scale AA), set forward nine years.

ASSUMPTIONS AND METHODS
(continued)

Disability:

Sample rates are:

Age	Rate
30	.0264%
35	.0396%
40	.0809%
45	.1337%
50	.2162%
55	.3548%
60	.5297%
64	.7211%

10% of disablement is assumed to be duty-related.

Turnover[1]:

Sample rates are:

	Rate	
Age	Males	Females
20	12.47%	21.57%
25	9.97%	18.12%
30	6.78%	13.34%
35	4.37%	9.05%
40	3.48%	7.48%
45	2.40%	5.95%
50	0.45%	1.11%

Retirement[2]:

Sample Rates

	Service		
Age	20	30	31
50	5%	40%	40%
55	7%	30%	5%
60	20%	20%	20%
65	50%	50%	50%
68	100%	100%	100%

[1] Tier 1 terminations prior to age 40 are assumed to elect a refund
[2] 100% at age 68

ASSUMPTIONS AND METHODS
(continued)

Disability Leave:	Active liabilities (which depend on credit service) are loaded by 1.5% to account for future crediting of disability service.
Military Service:	Active liabilities (which depend on credit service) are loaded by 1% to account for future crediting of military service.
Other Methods and Assumptions:	Administrative Expenses are \$550,000 for FY2009 and \$549,000 for FY2008 (average of actual expenses for the two years preceding the valuation date). Males are assumed to be four years older than their spouses. The Tier 1 service cap of 60% is valued as 62% to account for Disability and Military service credit not being limited by the 30-year cap on service. Actual military service information for actives is not available. Members are assumed to stay in their current tier. Since cost of living adjustments are effective as of July 1, the retired liabilities of the plan determined as of January 1 for benefits accrued before Bill 88-96 were increased by 1.75% to account for the mid-year increase. Liabilities for benefits accrued after Bill 82-96 were increased by 1.05% to account for the mid-year increase.

Plan Provisions

PLAN PROVISIONS
(for Members in Tier 1)

Normal Retirement Age:	Age 60, or if earlier, when the participant has reached 30 years of service.
Early Retirement Age:	Age 50 and the completion of 20 years of service.
Normal Form of Benefit:	Monthly life annuity with modified cash refund.
Cost of Living Increase (simple, for benefits accrued as of 1/31/97):	Retiree benefits are adjusted each year. The revised benefit amount is the lesser of: a. Prior year benefit plus base benefit multiplied by increase in the current March CPI from March CPI for prior year, or b. Benefit increased by 3% of original benefit.
Cost of Living Increase (compound, for benefits accrued after1/31/97):	Retiree benefits are adjusted each year. The revised benefit amount is the lesser of: a. Prior year benefit multiplied by 60% of the increase in the current March CPI from March CPI for prior year, or b. Benefit increased by 2.5%.
Employee Contributions:	4% of compensation.
Compensation:	Regular annual rate of pay, exclusive of extra compensation of any kind such as overtime pay, bonuses, and commissions.
Final Earnings:	The average of the highest 3 years of the last 5 annual basic pays.
Normal Retirement Benefit Formula:	2% of final earnings for each year of service, maximum 60%.
Early Retirement Benefit Formula:	Same as normal retirement, but reduced by the following factors:

PLAN PROVISIONS
(for Members in Tier 1)
(continued)

Years Early	Reduction Factor
1	2%
2	5%
3	9%
4	14%
5	20%
6	28%
7	36%
8	44%
9	52%
10	60%

Termination Prior to Retirement:

Less than 5 years of service: Return of employee contributions with 4.25% interest.

5 years of service or more: At the discretion of the employee, either a return of contributions with interest or the accrued normal retirement benefit taking into account final earnings and service at date of termination, payable at normal retirement date.

Disability: Must be totally and permanently disabled (except as the result of activities specified in the County code) regardless of length of service.

Line of Duty Disability: The greater of the accrued benefit or 66 2/3% of final earnings, payable immediately, unreduced.

Non-Line of Duty Disability: Five years of service are required to receive non-duty benefits. The greater of the accrued benefit or 25% of final earnings, payable immediately, unreduced.

PLAN PROVISIONS
(for Members in Tier 1)
(continued)

Pre-Retirement Spouse's Benefit:

Married and eligible for early retirement: The greatest of.

- $10 per month
- 50% of the accrued benefit
- The accrued benefit, reduced actuarially for early commencement and the joint and 100% survivor form.

Other Pre-Retirement Death Benefits: Return of employee contributions with 4.25% interest plus a lump sum of 50% of final earnings.

PLAN PROVISIONS
(for Members in Tier 2)

Normal Retirement Age: Age 60, or if earlier, when the participant has reached 30 years of service.

Early Retirement Age: Age 50 and the completion of 20 years of service.

Normal Form of Benefit: Monthly life annuity.

Cost of Living Increase (compound, for benefits accrued after1/31/97): Retiree benefits are adjusted each year. The revised benefit amount is the lesser of:

a. Prior year benefit multiplied by 60% of the increase in the current March CPI from March CPI for prior year, or
b. Benefit increased by 2.5%.

Employee Contributions: No employee contributions required or allowed.

Compensation: Regular annual rate of pay, exclusive of extra compensation of any kind such as overtime pay, bonuses, and commissions.

Final Earnings: The average of the highest 3 years of the last 5 years of annual basic pays.

Normal Retirement Benefit Formula: 1.0% of final earnings for each year of service.

Early Retirement Benefit Formula: Same as normal retirement, but reduced for early commencement (using the same factors as Tier 1).

Termination Prior to Retirement:

Less than 5 years of service: No benefit is payable.

5 years of service or more: The accrued normal retirement benefit taking into account final earnings and service at date of termination, payable at normal retirement date.

Disability: Must be totally and permanently disabled (except as the result of activities specified in the County code) regardless of length of service.

PLAN PROVISIONS
(for Members in Tier 2)
(continued)

Line of Duty Disability:	The greater of the accrued benefit or 66 2/3% of final earnings, payable immediately, unreduced.
Non-Line of Duty Disability:	Five years of service are required to receive non-duty benefits. The greater of the accrued benefit or 25% of final earnings, payable immediately, unreduced.

Pre-Retirement Spouse's Benefit:

Married and eligible for early retirement:

The greatest of:

- $10 per month
- 50% of the accrued benefit
- The accrued benefit, reduced actuarially for early commencement and the joint and 100% survivor form.

Unmarried or not eligible for early retirement:

A lump sum of 50% of final earnings.

Summary of Legislative Changes

SUMMARY OF MAJOR LEGISLATIVE CHANGES

County Council Bill No. 36-89:

Effective 7/1/89.

Pension benefits and vesting provisions were improved. The accrual percentage per year of service was increased from 1.8% to 2.0%, permitting accrual of the maximum 60% benefit in 30 years instead of 33-1/3.

Full vesting was granted after 5 years of service. The old provisions used a graded scale granting 75% vesting after 10 years, climbing to 100% vesting after 15 years.

County Council Bill No. 34-92:

Effective 6/1/92 through 8/31/92.

Participants age 50 or older with at least 20 years of service could elect to retire with an additional pension equal to 1/12 of 2% for each year of credited service. The additional amount could be taken as a pension increase, a lump sum, or as a temporary supplement to age 62. Appropriate actuarial adjustments apply.

State House Bill No. 687:

Effective 7/1/90.

County employees were given the opportunity to apply for credit under the County's plan for previous service with the Sate of Maryland (or a political subdivision of the State).

County Council Bill 90-93:

Effective 12/22/93.

Plan participants are required to pay the full actuarial value for service purchases. Purchases can only be made at retirement. To be eligible, an employee must have 60 months of County service. Existing plan participants must be notified of their right to purchase service under existing law.

SUMMARY OF MAJOR LEGISLATIVE CHANGES
(continued)

County Council Bill No. 82-94: Effective 10/31/94.

Transfers assets from general employees plan to A&E plan for participants who have transferred between these two plans.

County Council Bill No. 88-96: Effective 12/4/96.

The previous method of calculating cost of living increases will only apply to benefits accrued as of 1/31/97. The cost of living increase for future benefits is a compound increase equal to 60% of the annual change in the CPI, not to exceed 2.5%. Employees hired, or rehired, on or after 12/4/96 will be Tier Two employees and will have different benefits than current employees.

County Council Bill No. 41-99: Effective 6/15/99.

Employees paid under the deputy sheriff employees pay schedule become Tier Two members of the Detention Center Plan effective as of January 1, 1999. Service credited under the Employees' Plan will count as credited service in the Detention Center Plan and no future benefit will be paid from the Employees' Plan. Assets are transferred from the Employees' Plan to the Detention Center Plan in an amount equal to the projected unit credit accrued liability in the Employees' Plan.

Recodification: Effective 2/25/2002.

Allows a benefit based on disability leave service and pre-plan military service to be paid over the 70% cap. Normal Retirement was changed to the earlier of 30 years of service or age 60.

Statement No. 25 of the GASB

STATEMENT NO. 25 OF THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

Schedules of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Unfunded AAL (UAAL) (b-a)	Actuarial Accrued Liability (AAL) (b)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a)/c)
01/01/1994	$146,310,144	$26,804,749	$173,114,893	84.5%	$67,987,153	39.4%
01/01/1995	$158,437,212	$18,728,958	$177,166,170	89.4%	$72,811,217	25.7%
01/01/1996	$176,801,858	$23,788,900	$200,590,758	88.1%	$73,841,336	32.2%
01/01/1997	$214,676,343	$24,353,891	$239,030,234	89.8%	$78,200,977	31.1%
01/01/1998	$235,935,651	$16,452,008	$252,387,659	93.5%	$82,842,730	19.9%
01/01/1999	$258,183,198	$16,182,891	$274,366,089	94.1%	$87,089,448	18.6%
01/01/2000	$282,462,621	$15,746,760	$298,209,381	94.7%	$89,714,539	17.6%
01/01/2001	$302,805,427	$36,506,591	$339,312,018	89.2%	$88,927,130	41.1%
01/01/2002	$321,443,897	$36,352,728	$357,796,625	89.8%	$100,417,059	36.2%
01/01/2003	$335,539,414	$36,932,955	$372,472,369	90.1%	$101,172,221	36.5%
01/01/2004	$367,756,502	$ (215,150)	$367,541,352	100.1%	$100,944,238	(0.2)%
01/01/2005	$395,501,876	$ 9,669,948	$405,171,824	97.6%	$103,105,736	9.4%
01/01/2006	$422,234,496	$16,997,830	$439,232,326	96.1%	$107,290,189	15.8%
01/01/2007	$456,656,849	$25,314,781	$481,971,630	94.7%	$116,709,102	21.7%
01/01/2008[1]	$492,788,674	$20,144,823	$512,933,497	96.1%	$117,222,681	17.2%
01/01/2008[2]	$492,788,674	$33,552,808	$526,341,482	93.6%	$117,222,681	28.6%

Schedules of County's Contributions

Year Ended December 31	*Annual Required Contribution*	*Actual Contribution*	*Percentage Contributed*
2007	$11,778,952	$11,778,948[3]	100.0%

[1] *Prior to Assumption Changes*
[2] *After Assumption Changes*
[3] *On an accrual basis. Subject to verification.*

STATEMENT NO. 25 OF THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

(continued)

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows.

Actuarial cost method	Projected Unit Credit
Amortization method	Level percent of pay
Remaining amortization period	Remaining Amortization periods range from 26 to 30 years with an average of 28 years.
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return	8.0%
Projected salary increases	Varies by age
Post Retirement Cost-of-living adjustments	3.0% for pre 2/97 accruals
	2.1% for post 2/97 accruals