THE ANNE ARUNDEL COUNTY
POLICE SERVICE
RETIREMENT PLAN

ACTUARIAL VALUATION
AS OF
JANUARY 1, 2012

Bolton Partners, Inc.
100 Light Street, 9th Floor
Baltimore, MD 21202

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BOLTON PARTNERS

April 12, 2012

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

Re: Police Service Retirement Plan Valuation

Dear Andrea:

The following report sets forth the actuarial valuation as of January 1, 2012 of the Anne Arundel County Police Service Retirement Plan, for the plan year beginning on that date. The valuation is based on participant data submitted by the personnel department of Anne Arundel County, Aetna and Prudential and unaudited asset data submitted by the County.

INVESTMENT PERFORMANCE

The market value of plan assets as of December 31, 2011 was $391,467,842. The average investment return for the fund on a market basis for the year ended December 31, 2011 was 1.8% and 0.5% 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, 2011, the actuarial value of assets was $430,342,941. Details of the development of the actuarial value of assets are set forth later in this report.

PRINCIPAL RESULTS

The principal purpose of the valuation is to set forth the County's contributions for the fiscal year ending June 30, 2013. 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, 2013 increased from $14,502,900 to $16,557,738. This is in addition to employee contributions of 5% of pay for PSL and 7.25% for PO1. The increase can be broken down to the following factors:

January 1, 2011 valuation	34.2%
Investment Loss	4.8%
Pay Increases	(0.2%)
New Entrants/Change in Normal Cost	0.8%
Expenses	0.0%
COLA	(0.7%)
Demographics and Other Changes	1.2%
January 1, 2012 valuation	40.1%

The overall funded ratio for the plan based on the actuarial value of assets decreased from 86.8% to 81.8%.

The Normal Cost was adjusted upward to reflect Bill 74-09 which increased the FY10 pensionable pay and has a temporary effect. Pay amounts shown in this report (and employer contributions as a percentage of payroll) are based on cash payroll amounts that exclude the extra pay used for pension purposes.

There are changes in pension accounting rules that are expected to be published in June 2012. These changes are not expected to impact this report or the County's FY13 accounting expense. However, we should discuss the likely changes and related discussions.

There are also proposed changes in actuarial standards that may impact future valuations. These changes focus largely on increased disclosure including more disclosure about risk. We should also discuss the likely changes in actuarial standards.

There have been no changes in the plan provisions since the last valuation. The only assumption update is a one year change in the mortality table that we have been doing every year. The assumption change is not material.

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/mmg

Trust Fund Asset Statement

TRUST FUND ASSET STATEMENT FOR YEAR ENDED DECEMBER 31, 2011

Original Market Value 1/1/2011	$ 390,308,952
Audit Adjustment	$ 0
Market Value 1/1/2011	$ 390,308,952
Receipts:	
Employer Contributions	$ 13,794,958
Employee Contributions	2,644,169
Interest and Dividends	6,922,305
Realized and Unrealized Gain/(Loss)	1,608,916
Other	644,076
Total Receipts:	$ 25,614,424
Disbursements:	
Benefit Payments	$ 23,479,545
Administrative Expenses	398,781
Investment Expenses	2,088,538
Total Disbursements	$ 25,966,864
Net Increase/(Decrease)	$ (352,440)
Preliminary Ending Value 12/31/2011	$ 389,956,512
Contribution Receivable	$ 1,511,330
Ending Value 12/31/2011	$ 391,467,842

(Note: There may be some dollar rounding differences.)

Development of Actuarial Value of Assets

ACTUARIAL VALUE OF ASSETS

		2010	2011
1.	**MVA Beginning of Year**	**$347,382,328**	**$390,308,952**
2.	Contributions	16,186,298	14,919,759
3.	Benefit Payments	21,446,647	23,479,545
4.	Administrative Expenses	399,090	398,781
5.	Expected 8% Return	27,564,209	30,866,373
6.	**Expected Asset Value** (1. + 2. – 3. – 4. + 5.)	**$369,287,097**	**$412,216,758**
7.	Market Value End of Year	$390,308,952	$389,956,512
8.	**Asset Gain/(Loss)** (7. – 6.)	**$21,021,855**	**($22,260,246)**
9.	80% of 2010 Gain/(Loss) of 21,021,855	$16,817,484	
10.	60% of 2009 Gain/(Loss) of ($6,646,261)	($3,987,757)	
11.	40% of 2008 Gain/(Loss) of ($155,107,554)	($62,043,022)	
12.	20% of 2007 Gain/(Loss) of $25,752,449	$5,150,490	
13.	**Initial Actuarial Value of Assets 1/1/2011**	**$434,371,757**	
14.	Contribution Receivable	$1,519,368	
15.	Audit Adjustment	$0	
16.	**Final Actuarial Value of Assets 1/1/2011**	**$435,891,125**	
17.	80% of 2011 Gain/(Loss) of ($22,260,246)		($17,808,197)
18.	60% of 2010 Gain/(Loss) of $21,021,855		$12,613,113
19.	40% of 2009 Gain/(Loss) of ($6,646,261)		($2,658,504)
20.	20% of 2008 Gain/(Loss) of ($155,107,554)		($31,021,511)
21.	**Initial Actuarial Value of Assets 1/1/2012**		**$428,831,611**
22.	Contribution Receivable		$1,511,330
23.	Audit Adjustment		$0
24.	**Final Actuarial Value of Assets 1/1/2012**		**$430,342,941**
	Rate of Return on Actuarial Value of Assets *(net of investment expenses)*	**2.0%**	**0.5%**

Participant Summary

PARTICIPANT SUMMARY

			Inactive Participants		
	Active Participants	DROP	With Deferred Benefits	Receiving Benefits	Total
Participants as of January 1, 2011	563	57	0	583	1,203
Retired	(8)	(10)	0	18	0
Terminated Non-Vested	(7)	0	0	0	(7)
Disabled	(2)	(1)	0	3	0
Deceased	0	0	0	(14)	(14)
Payment to Beneficiary	0	0	0	6	6
QDRO Put in Pay	0	0	0	4	4
Transfers Out	0	0	0	0	0
Transfers In	0	0	0	0	0
New Hires	44	0	0	0	44
Entered DROP	(14)	14	0	0	0
Data Adjustment	0	0	0	0	0
Net Change	13	3	0	17	33
Participants as of January 1, 2012	576	60	0	600	1,236

Service - Age Distribution

AGE, SERVICE AND AVERAGE SALARY DISTRIBUTION

Age as of 1/1/2012	Under 1	01-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40 +	Total
Under 25	23 41,621	11 43,439	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	34 42,209
25-29	12 42,556	57 45,920	33 51,448	0 0	0 0	0 0	0 0	0 0	0 0	0 0	102 47,313
30-34	4 41,621	20 54,038	48 54,931	19 61,183	0 0	0 0	0 0	0 0	0 0	0 0	91 55,455
35-39	1 41,621	8 54,852	24 57,969	56 67,685	12 77,681	0 0	0 0	0 0	0 0	0 0	101 65,289
40-44	0 0	4 54,068	10 58,106	45 69,523	65 80,941	18 87,229	0 0	0 0	0 0	0 0	142 75,755
45-49	1 56,187	5 58,787	5 60,124	15 71,986	26 79,074	24 87,421	4 93,734	0 0	0 0	0 0	80 78,244
50-54	1 41,621	1 56,187	0 0	2 66,498	7 82,643	1 97,810	2 91,449	2 87,305	0 0	0 0	16 79,039
55-59	0 0	1 67,288	0 0	3 73,017	4 80,679	1 84,864	1 84,864	0 0	0 0	0 0	10 77,878
60-64	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
65-69	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
70 & Up	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Total	42 42,235	107 49,052	120 55,062	140 67,951	114 80,267	44 87,520	7 91,814	2 87,305	0 0	0 0	576 64,170

Excludes DROP participants

Average Age: 37.44

Average Service: 10.92

Average Salary: $64,170

Actuarial Costs

ACTUARIAL COSTS

	As of 01/01/2011	As of 01/01/2012
Participants		
Active excluding DROP	563	576
Active DROP	57	60
Retirees and Beneficiaries	583	600
Total	1,203	1,236
Active Payroll (Rate at January 1st including DROP)	$ 42,449,204	$ 41,334,580
1. Actuarial Liability		
Active Participants	$191,789,491	$200,163,178
Participants Receiving Benefits	310,212,178	325,991,800
Total	$502,001,669	$526,154,978
2. Actuarial Value of Assets	$435,891,125	$430,342,941
3. Unfunded Actuarial Liability (1-2)	$ 66,110,544	$ 95,812,037
4. County's Normal Cost	$ 8,994,810	$ 9,092,644
5. Amortization Payment	$ 4,035,801	$ 5,839,594
6. Estimated Expenses	$ 398,000	$ 399,000
7. Total Recommended Contributions as of January 1st (4 + 5 + 6)	$ 13,428,611	$ 15,331,238
8. Total Recommended Contribution as of December 31st (7 x 1.08)	$ 14,502,900	$ 16,557,738
9. Contribution as a % of total payroll	34.2%	40.1%

UNFUNDED LIABILITY AMORTIZATION SCHEDULE

	Amortization Period			Balances		
Charge	Date Created	Initial Years	Years Left	Initial	Outstanding	2012 Payment
Unfunded Accrued Liability	01/01/2004	30	22	$14,184,341	$15,747,378	$ 1,079,304
Actuarial Loss	01/01/2006	30	24	$ 7,107,916	$ 7,754,154	$ 504,889
Actuarial Loss	01/01/2008	30	26	$ 3,994,073	$ 4,254,250	$ 264,844
Assumption Change	01/01/2008	30	26	$ 413,838	$ 440,793	$ 27,442
Actuarial Loss	01/01/2009	30	27	$38,806,776	$40,759,095	$ 2,486,227
Asset Method Change	01/01/2011	30	29	$23,432,153	$23,844,386	$ 1,401,409
Actuarial Loss	01/01/2012	30	30	$28,771,315	$28,771,315	$ 1,662,540
Credits						
Actuarial Gain	01/01/2005	30	23	$ 5,392,880	$ 5,940,117	$ 396,476
Actuarial Gain	01/01/2007	30	25	$ 4,732,240	$ 5,104,847	$ 324,774
Actuarial Gain	01/01/2010	30	28	$ 906,991	$ 938,199	$ 56,143
Actuarial Gain	01/01/2011	30	29	$13,538,002	$13,776,171	$ 809,668
Net Total					$95,812,037	$ 5,839,594

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% (costs are shown using the Projected Unit Credit Method).
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 3.5% of the current 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.
Mortality:	*Healthy:* RP-2000 Blue Collar Mortality table for males and females projected to 2012 using scale AA. Pre-Termination Mortality uses 70% of these rates. *Disabled:* RP-2000 Blue Collar Mortality table for males and females set forward five years and then projected to 2012 using scale AA. 100% of pre-retirement deaths are assumed to be non-duty-related. The mortality rates are as of the measurement date without adjustment for future mortality improvements.

ASSUMPTIONS AND METHODS
(continued)

Salary Increases: The following graded schedule is used:

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

Disability: Sample rates are:

Age	Rate
30	0.2448%
35	0.3621%
40	0.7472%
45	1.2495%
50	1.8386%
55	0.0000%

75% of disablement is assumed to be duty-related.

Turnover: Sample rates are:

Age	Rate
20	5.31%
25	4.25%
30	3.19%
35	2.13%
40	1.28%
45	0.64%
50	0.00%

ASSUMPTIONS AND METHODS
(continued)

Retirement:

Sample Rates

	Service				
Age	20	22	24	27	30
40	26.40%	10.00%	18.33%	10%	10%
45	18.34%	10.00%	18.33%	10%	10%
50	36.66%	50.00%	58.33%	50%	100%
55	100.00%	100.00%	100.00%	100%	100%

DROP load:

To reflect the cost of the more valuable benefits provided from the deferred retirement option program the following loads were applied:

Sample Load Rates

	Service			
Age	23	27	30	35
44	0.4%	1.4%	2.3%	12.0%
50	2.0%	3.7%	4.5%	14.6%
55	2.7%	4.6%	5.4%	15.6%
60	3.2%	5.3%	6.1%	16.4%

Disability Leave:

Active liabilities (which depend on credit service) are loaded by 1.75% to account for future crediting of disability service.

Military Service:

Active liabilities (which depend on credit service) are loaded by 3.25% to account for future crediting of military service.

Marriage:

It is assumed that 85% of employees who die are married.

Other Methods and Assumptions:

Administrative Expenses are $398,000 for FY2012 and $399,000 for FY2013 (average of actual expenses for the two years preceding the valuation date).

Males are assumed to be four years older than their spouses.

ASSUMPTIONS AND METHODS
(continued)

Valuation Procedures: Generally, the plan provides a 100% survivor benefit to the spouse at the time of the retiree's death. This allows for post retirement marriages. We have valued the forms of payment originally coded in the data or based this on marital status at time of retirement (generally a 100% survivor benefit but not always). Starting with the 2008 valuation, all new retirements are valued with a 100% Joint and Survivor form of payment. We suggest monitoring this form of payment to see if this reasonably models the combination of single retirees and future remarriages.

CIGNA Benefit: Our calculations reflect that some benefits have already been purchased.

Plan Provisions

PLAN PROVISIONS

Normal Retirement:	For those hired prior to February 25, 2002: 20 years of service or age 50. For those hired on or after February 25, 2002: 20 years of service, or age 50 with 5 years of service.
Normal Form of Benefit:	For single participants, monthly life annuities with payments guaranteed for 5 years. For married participants, unreduced 100% Joint & Survivor Annuity with payments guaranteed for 5 years.
Cost of Living Increase (for benefits accrued as of 1/31/97):	Retiree benefits are adjusted each year. The revised benefit amount is the lesser of: a. Base benefit multiplied by ratio of current 12 month average CPI to 12 month average CPI at retirement. b. Prior year benefit increased by 4%.
Cost of Living Increase (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. Prior year benefit increased by 2.5%.
Employee Contributions:	5% of compensation for PSL and 7.25% for PO1.
Compensation:	Regular annual rate of pay, exclusive of extra compensation of any kind such as overtime pay, bonuses, and commissions. Some members receive a special FY10 increase for pension purposes.
Final Earnings:	The average of the highest 3 years of the last 5 years of compensation.

PLAN PROVISIONS
(continued)

<u>Benefit Formula</u>:	2 ½% of final earnings for each year of service up to 20 years plus 2% of final earnings for each year of service after 20 years (maximum 70% plus 2% times unused disability credit and pre-employment military service credit).
<u>Termination Prior to Retirement</u>:	At less than 20 years of service, return of employee contributions with 3% interest.
<u>Disability</u>:	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:	The greater of the accrued benefit or 20% of final earnings, payable immediately, unreduced.
<u>Pre-Retirement Spouse's Benefit</u>:	
Line of Duty Death Benefit:	Greater of accrued benefit or 66 2/3% of final earnings.
Non-Line of Duty Death Benefit:	Accrued benefit.
<u>Other Pre-Retirement Death Benefits</u>:	Return of employee contributions with 3% interest.
<u>Deferred Retirement Option Program</u> (DROP):	Allows accumulation of pension after 20 years of County service. DROP period must be between 3 and 5 years.

Summary of Legislative Changes

SUMMARY OF MAJOR LEGISLATIVE CHANGES

County Council Bill No. 48-89:	Effective 9/13/89. The previously combined Police and Fire plan was separated into distinct plans for each group. The reduction for retirement prior to age 50 was changed to 0.2% per month from 0.3% per month.
County Council Bill No. 34-92:	Effective 6/1/92 through 8/31/92. Participants age 50 or with at least 20 years of service could elect to retire with an additional pension equal to 1/12 of 2.5% of final earnings for the first 20 years of service, plus 1/12 of 2% of final earnings for each additional year of 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.
County Council Bill No. 66-92:	Effective 7/2/92. The plan was amended to allow normal, unreduced retirement after 20 years of service. Employee contributions were increased to 6% from 5%. Participants under age 50 were not allowed to retire and receive retirement incentives (under Bill No. 34-92) in addition to unreduced retirement. They could either retire early with the incentives, or normally without the incentives.
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 State of Maryland (or a political subdivision of the State).

SUMMARY OF MAJOR LEGISLATIVE CHANGES
(continued)

County Council Bill 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. 80-00/
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 20 years of service or age 50 with 5 years of service. Elimination of Tier 2 benefits implemented a Deferred Retirement Option Program (DROP), a voluntary program that provides an alternative way to earn and receive retirement benefits.

County Council Bill 66-05: Effective 10/10/2005.

Reduced the contribution percentage for Category II participants from 6% to 5%.

County Council Bill 58-07: Effective 10/11/2007.

Reduced the contribution percentage for Category I participants from 6% to 5%.

SUMMARY OF MAJOR LEGISLATIVE CHANGES

(continued)

County Council Bill 74-09: Effective 12/11/2009.

For non-represented members, FY2010 annual pay shall be determined by increasing FY2009 annual pay by an assumed 3% for determining the average basic pay. Clarified the limits on those entering DROP. The effective annual interest rate for the DROP account changed from 8% to 4.25% for those entering DROP on or after July 1, 2009.

County Council Bill 6-10: Effective 4/18/2010.

Provides for a disability benefit for those participants who are totally and permanently disabled as a result of qualified military service.

County Council Bill 41-10: Effective 7/1/2010.

Increased the contribution rate for Police Officers, Police Officer First Class, Police Corporals, and Police Sergeants to 7.25%.

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)
01/01/2002	$268,703,856	$36,293,986	$304,997,842	88.1%	$31,105,473	116.7%
01/01/2003	$281,967,318	$36,668,475	$318,635,793	88.5%	$33,459,024	109.6%
01/01/2004	$311,371,499	$14,184,341	$325,555,840	95.6%	$31,915,536	44.4%
01/01/2005	$337,113,153	$ 9,041,000	$346,154,153	97.4%	$33,530,370	27.0%
01/01/2006	$360,268,341	$16,292,562	$376,560,903	95.7%	$36,694,307	44.4%
01/01/2007	$389,877,885	$11,820,220	$401,698,105	97.1%	$37,805,038	31.3%
01/01/2008[1]	$417,278,055	$15,975,209	$433,253,264	96.3%	$41,011,366	39.0%
01/01/2008[2]	$417,278,055	$16,389,047	$433,667,102	96.2%	$41,011,366	40.0%
01/01/2009	$408,261,502	$55,419,694	$463,681,196	88.0%	$41,508,547	133.5%
01/01/2010	$432,176,036	$55,393,143	$487,575,178	88.6%	$42,499,380	130.4%
01/01/2011[3]	$459,323,278	$42,678,391	$502,001,669	91.5%	$42,449,204	100.5%
01/01/2011[4]	$435,891,125	$66,110,544	$502,001,669	86.8%	$42,449,204	155.7%
01/01/2012	$430,342,941	$95,812,037	$526,154,978	81.8%	$41,334,580	231.8%

Schedules of County's Contributions

Year Ended December 31	*Annual Required Contribution*	*Actual Contribution*	*Percentage Contributed*
2011	$14,153,185	$13,793,256[5]	97.5%

[1] Prior to Assumption Changes
[2] After Assumption Changes
[3] Prior to Asset Method Change
[4] After Asset Method Change
[5] 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 22 to 30 years with an average of 27 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	3.5% for pre 2/97 accruals 2.1% for post 2/97 accruals

ACTUARIAL CERTIFICATION

This actuarial valuation sets forth our calculation of an estimate of the liabilities of the pension plan, together with a comparison of these liabilities with the value of the plan assets, as submitted by the County. This calculation and comparison with assets is applicable for the valuation date only. The future is uncertain, and the plan may become better funded or more poorly funded in the future. This valuation does not provide any guarantee that the plan will be able to provide the promised benefits in the future.

This is a deterministic valuation in that it is based on a single set of assumptions. This set of assumptions is one possible basis for our calculations. Other assumptions may be equally valid. We may consider that some factors are not material to the valuation of the plan and may not provide a specific assumption for those factors. We may have used other assumptions in the past. We will likely consider changes in assumptions at a future date.

A change in assumptions does not indicate that the prior assumptions were invalid. At the time the prior assumptions were chosen, they represented our best estimate of the future experience of the plan. If we change assumptions in the future, it would be to align the assumptions with our then-current best estimate.

The County could reasonably ask how the valuation would change if we used a different assumption set or if plan experience exhibited variations from our assumptions. This report does not contain such an analysis. This type of analysis would be a separate assignment.

In addition, decisions regarding benefit improvements, benefit changes, the trust's investment policy, and similar issues should not be based on this valuation. These are complex issues and other factors should be considered when making such decisions. These other factors might include the anticipated vitality of the local economy and future growth expectations, as well as other economic and financial factors.

The cost of this plan is determined by the benefits promised by the plan, the plan's participant population, the investment experience of the plan and many other factors. An actuarial valuation is a budgeting tool for the County. It does not affect the cost of the plan. Different funding methods provide for different timing of contributions to the plan. As the experience of the plan evolves, it is normal for the level of contributions to the plan to change. If a contribution is not made for a particular year, either by deliberate choice or because of an error in a calculation, that contribution can be made in later years. We will not be responsible for contributions that are made at a future time rather than an earlier time. The plan sponsor is responsible for funding the cost of the plan.

Actuarial Certification

(Continuation)

We make every effort to ensure that our calculations are accurately performed. These calculations are complex. Despite our best efforts, we may make a mistake. We reserve the right to correct any potential errors by amending the results of this report or by including the corrections in a future valuation report.

This report is based on plan provisions, census data, and asset data submitted by the personnel department of Anne Arundel County. We have relied on this information for purposes of preparing this report, but have not performed an audit. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information. The plan sponsor is solely responsible for the validity and completeness of this information.

The information in this report was prepared for the internal use of the County and its auditors in connection with our actuarial valuations of the pension plan. It is neither intended nor necessarily suitable for other purposes. Bolton Partners is not responsible for the consequences of any other use.

This report provides certain financial calculations for use by the auditor. These values have been computed in accordance with our understanding of generally accepted actuarial principles and practices and fairly reflect the actuarial position of the Plan. The various actuarial assumptions and methods which have been used are, in our opinion, appropriate for the purposes of this report.

The report is conditioned on the assumption of an ongoing plan and is not meant to present the actuarial position of the Plan in the case of Plan termination. Future actuarial measurements may differ significantly from the current measurements 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.

The undersigned credentialed actuary meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. He is currently compliant with the Continuing Professional Development Requirement of the Society of Actuaries. We are not aware of any direct or material indirect financial interest or relationship, including investments or other services that could create a conflict of interest that would impair the objectivity of our work.

BOLTON PARTNERS, INC.

Thomas B. Lowman, FSA, EA