

**City of Rockville
Post-Retirement Medical and Life Insurance Benefits
Actuarial Valuation
As Required by GASB 45**



**Initial
Implementation
Year:** July 1, 2008 - June 30, 2009

Date of Report: April 30, 2007

Prepared By: Bolton Partners, Inc.
575 South Charles Street
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April 30, 2007

Gavin Cohen
Director of Finance
City of Rockville
111 Maryland Avenue
Rockville, MD 20850-2364

Dear Mr. Cohen:

The following sets forth GASB 45 Annual Expense for the City of Rockville for the fiscal year ending June 30, 2009.

The report is based on July 1, 2006 census data, which is less than 24 months before the first day of fiscal year 2009. Accordingly, provided that there are no significant changes in plan design or employee demographics, these results could be relied upon to comply with GASB 45 in FYE2009.

The report is based on data submitted by the City and medical claims reported by the carriers. We have not performed an audit of the data and have relied on this information for purposes of preparing this report.

The report set forth information that will be required in accordance with the Governmental Accounting Standards Board No. 45.

These values have been computed in accordance with generally accepted actuarial principles and practices. The various actuarial assumptions and methods are, in our opinion, appropriate for the purposes of this report.

Respectfully submitted,

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1. Executive Summary

Background

In June 2004 the Government Accounting Standards Board (GASB) released Statement 45, which revised the GAAP accounting standards for post employment benefits other than pensions (OPEB). This standard will be applied to post-retirement medical benefits that are provided to the City of Rockville retirees. Prior to the new standard these benefits were accounted for on a pay as you go basis. The new standard requires that these benefits be accounted for on an accrual basis.

This report determines the initial expense under the new standard for the City of Rockville.

The new standard is effective for periods starting after December 15, 2007 for Phase 2 governments. Phase 2 Governments are those with total annual revenues of at least \$10 million but less than \$100 million as of FY2000. Since the City of Rockville is a Phase 2 Government the standard is required to be used for the July 1, 2008 to June 30, 2009 period, but early implementation is encouraged.

GASB 45 does not require pre-funding of OPEB liabilities. However, the difference between the GASB (OPEB) annual expense and cash payments for OPEB benefits will be treated as a balance sheet liability. OPEB payments include payments made to a trust as long as the trust assets cannot be used for other purposes. In addition, GASB 45 requires footnote disclosure of OPEB liabilities.

GASB 45 provides another incentive to pre-fund OPEB liabilities by requiring that OPEB liabilities be measured using a discount rate based on the underlying investment return of the assets used to provide these benefits. Since general government assets are typically held in conservative short-term accounts earning relatively low investment returns, a decision not to pre-fund these benefits will result in a much lower discount rate and an annual expense which is much higher than the expense determined using a discount rate typically assumed for a pension plan. Accordingly, we have provided two sets of results (funded and unfunded) depending upon whether the City decides to pre-fund these benefits.

The Annual Expense (ARC)

The annual cost of OPEB benefits under GASB 45 is called the annual required contribution or ARC. The City of Rockville's ARC is shown in Section 2. If the City of Rockville decides to pre-fund OPEB liabilities by establishing a trust, the ARC for the FYE June 30, 2009 is \$1.307 million. This amount is as of the end of the fiscal year. The estimated pay as you go cost for OPEB benefits during the same period is \$408,000. The pay as you go cost is comprised of \$141,900 of hidden cost and \$266,100 of assumed cost.

1. Executive Summary (cont.)

If the City of Rockville decides not to pre-fund OPEB liabilities the FYE 2009 ARC increases from \$1.307 million to \$1.808 million. The end of year balance sheet liability is estimated to be \$1.40 million, which is equal to the unfunded ARC minus pay as you go payments plus interest to the end of the year. If the plan is not pre-funded, the actual final balance sheet liability cannot be determined until the pay as you go costs are known.

It is important to note that, even if all the assumptions we use materialize, the ARC is expected to increase by between 4% and 5% per year, since the cost of annual accruals will increase with healthcare inflation and given the amortization method used for the Unfunded Accrued Liability (i.e., benefits earned to date). In addition, an increase in the work force will also increase the ARC in future years.

Plan Provisions

Retirees can continue the same medical coverage they had (including family coverage) as active employees. Retirees receive an explicit subsidy for their post-retirement medical insurance. Employees must attain retirement eligibility in their respective pension plan. Disabilities must have attained age 50 with 10 years of service to be eligible.

There is no subsidy after age 64.

Deferred retirements are not allowed to elect coverage at the time of retirement.

Demographic Data

Demographic data as of July 1, 2006 was provided to us by the City of Rockville. This data included current medical coverage for current employees and retirees.

Because the census data is less than 24 months before the first day of fiscal year 2009, it can be relied on to comply with GASB 45 for FYE 2009.

Although we have not audited this data we have no reason to believe that it is inaccurate.

Claims Data

Monthly paid claims, administrative expenses and enrollment for retirees from January 2006 through December 2006 were supplied by the carrier. Although we have not audited the claims data we have no reason to believe that it is inaccurate.

1. Executive Summary (cont.)

Implicit Subsidy

The published insurance rates for persons prior to Medicare eligibility are based primarily on the healthcare usage of active employees. Since retirees use healthcare at a rate much higher than employees, using these blended rates creates an implicit subsidy for the retiree group. GASB 45 requires that the claims assumption we use for this valuation be based on the actual per-capita retiree cost. The difference between the actual usage of healthcare by retirees and the assumption built into the published rates is identified as the implicit subsidy amount. There is no implicit subsidy for the Medicare-eligible retirees. The impact on rates can be seen in Section 6.

Medicare Part D

This report has not incorporated the Medicare Part D Federal Subsidy Amount for this program. GASB issued Staff Technical Bulletin No. 2006-1 on June 30, 2006, providing guidance that would not allow for plans or employers to reduce Annual OPEB Cost for anticipated Medicare Part D reimbursements. GASB deems the payments from the federal government to the City to be a *voluntary non-exchange transaction* as discussed in paragraph 7 of statement 33.

Demographic Assumptions

Demographic assumptions mirror those used for the City of Rockville Pension Plan. An indicator was provided by the City to determine which division employees are in.

Section 5 details the assumptions for electing coverage.

1. Executive Summary (cont.)

Economic Assumptions

The discount rate assumption is tied to the return expected on the funds used to pay these benefits. The discount assumption will be materially tied to the decision of whether or not to pre-fund these benefits. Our funded results are based on a 7.75% annual return, which assumes that the City will pre-fund these benefits starting at the beginning of the fiscal year July 1, 2008. Results using an alternate assumption of 4% are also provided. This assumes that benefits continue to be funded on a pay-as-you-go basis and that general fund investments can earn 4% over the long term.

Medical claims are assumed to increase 9.5% from 2006 to 2007, decreasing 1% per year to an ultimate rate of 5.5%. While medical costs have increased by a rate well in excess of 5.5% in recent years, prevailing practice is to assume that these increases will slow in the future. This is based on the macroeconomic assumption that if they do not moderate, medical expenses will consume an unacceptable percentage of the gross national product. The long-term assumption selected is consistent with the centers for Medicare and Medicaid Services office of the actuary's assumption for per-capita increases in medical costs.

Payroll is assumed to increase at 4.0% per annum. This assumption is used to determine the level percentage of payroll amortization factor.

Actuarial Certification

In preparing the valuation we relied on demographic and claims data provided by the City of Rockville. We reviewed the data for reasonableness, but did not audit the data. The actuarial methods and assumptions used in this report comply with GASB 45 and the actuarial standards of practice promulgated by the American Academy of Actuaries.

The healthcare cost trend rate selected is consistent with prevalent practices. The 2005 to 2006 increase is consistent with recent experience. As discussed above, increases of this magnitude cannot be sustained indefinitely. Accordingly, standard actuarial practice (and GASB 43 Paragraph 34.g.) is to assume an "ultimate trend" which is consistent with the best estimate of GNP growth. However, the number of years until the ultimate trend is attained and the rate of decrease are not known. There is a significant probability, that between now and the next actuarial valuation we will not observe the anticipated amelioration of medical trends. If this is the case, typical practice is to reset the initial trend and to defer the year that the ultimate trend rate is attained. If this occurs annual actuarial losses of 5% to 15% of liabilities due to the revised trend rate can be expected.

Kevin Binder is a Member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

2. Plan Expense

Expense – FYE 2009 Adoption

Below is a summary of the calculation of the Plan’s Expense under the current provisions the City of Rockville elects to adopt GASB45 for FYE 2009. This is the year in which the City of Rockville is required to apply the provisions of GASB45. These amounts are calculated as of the end of the year.

	Funded 07/01/2008	Not Funded 07/01/2008
(1) Interest Rate	7.75%	4.00%
(2) Amortization of Unfunded Accrued Liability		
(a) Unfunded Accrued Liability	\$10,136,000	\$15,257,000
(b) Amortization Factor (Rounded)	17	29
(c) Amortization Amount	\$581,000	\$529,000
(3) Annual Required Contribution of Employer (ARC) – As of End of Fiscal Year		
(a) Normal Cost	\$726,000	\$1,279,000
(b) Amortization of Unfunded Accrued Liability	\$581,000	\$529,000
(c) Total ARC	\$1,307,000	\$1,808,000
(4) Annual OPEB Cost (AOC)		
(a) ARC	\$1,307,000	\$1,808,000
(b) Less NOO Amortization	\$0	\$0
(c) Plus Interest on NOO	\$0	\$0
(d) Total Cost	\$1,307,000	\$1,808,000
(5) 1% Sensitivity (AOC)	\$1,507,000	\$2,150,000
(6) Net OPEB Obligation (NOO)		
(a) Beginning of Year NOO	\$0	\$0
(b) Current ARC	\$1,307,000	\$1,808,000
(c) Expected Cash Payment	\$1,307,000	\$408,000
(d) Projected End of Year NOO (a + b – c)	\$0	\$1,400,000

3. Liabilities

Liabilities as of Valuation Date – FYE 2009 Adoption

Below is a summary of the Plan’s Liabilities under the current provisions as of 7/1/2008.
 Item (4) shows the impact of a 1% increase in medical cost trend.

	Funded 07/01/2008	Not Funded 07/01/2008
(1) Discount Rate	7.75%	4.00%
(2) Actuarial Accrued Liability		
(a) Actives	\$9,897,000	\$14,991,000
(b) Retirees in Pay Status	\$239,000	\$266,000
(c) Total	\$10,136,000	\$15,257,000
(3) Normal Cost (End of Year)		
(a) Normal Cost for Benefits	\$726,000	\$1,279,000
(b) Expense Load	\$0	\$0
(c) Total Normal Cost	\$726,000	\$1,279,000
(4) Trend Sensitivity		
(a) Actuarial Accrued Liability	\$11,377,000	\$17,447,000
(b) Total Normal Cost (End of Year)	\$855,000	\$1,545,000

4. Summary of Principal Plan Provisions

The following summary describes principal plan provisions assumed in calculating the cost of your post-retirement medical plan.

General Eligibility Rules

Eligible participants are assumed to be employees, former employees or beneficiaries of the City of Rockville who had health coverage as an active employee.

Eligibility for a disability benefit is attained age 50 with 10 years of service. No distinction has been made between ordinary disability and line of duty disability for purposes of this valuation.

Police normal retirement eligibility is age 51 with 25 years of service or age 60 regardless of service. All other employees have a normal retirement eligibility of age 60 with 10 years of service or 85 points. The points are determined by adding a participants' age and accrued service together.

Underlying Plan Description

Pre-Medicare retirees may choose between several medical plans including a PPO plan, an HMO plan, and a POS plan, all of which are packaged with prescription benefits.

Retiree Contribution

Retirees and their families pay 80% of the published rates. Surviving spouses receive no explicit subsidy, but are permitted to remain in the plan and pay 100% of the published costs.

5. Valuation Data

Counts

The following table summarizes the counts, ages and coverage as of 7/1/2006, for those currently enrolled in Medical/Drug coverage:

	General	Police	Total
(1) Number of Participants			
(a) Active Employees	361	43	404
(b) Retirees (Pre- Medicare)	N/A	N/A	11
(2) Active Statistics			
(a) Average Age	43.48	37.38	42.83
(b) Average Service	8.65	10.25	10.09
(3) Inactive Statistics			
(a) Average Age (Pre-Medicare)	N/A	N/A	61.74

5. Valuation Data (cont.)

Active Age - Service Distribution

Shown below is a distribution based on age and service of active participants who are currently receiving medical and drug benefits from the City as of the valuation date.

Age	Years of Service as of 07/01/2006							Total
	Under 1	01-04	05-09	10-14	15-19	20-24	25+	
Under 25	11	8	1	0	0	0	0	20
25 - 29	14	20	6	1	0	0	0	41
30 - 34	8	17	15	1	0	0	0	41
35 - 39	15	16	13	7	0	0	0	51
40 - 44	8	7	24	5	22	2	0	68
45 - 49	10	15	18	5	18	8	5	79
50 - 54	7	3	7	7	10	6	6	46
55 - 59	7	4	7	4	11	2	10	45
60 - 64	2	1	1	0	2	1	3	10
65 & Up	0	0	2	1	0	0	0	3
Totals	82	91	94	31	63	19	24	404

The following table shows averages in total for the above participants.

Averages	
Age:	42.83
Service:	10.09

6. Valuation Methods and Assumptions

Cost Method

This valuation uses the Projected Unit Credit method, with linear pro-ration to assumed benefit commencement.

Amortization Method

Liabilities are amortized over a 30 year period as a level of percentage of payroll.

Coverage Status and Age of Spouse

Actual coverage status is used; females are assumed to be 3 years younger than their male spouse. Employees with individual coverage are assumed to elect individual coverage in retirement, and those with spouse/family coverage are assumed to continue this coverage upon retirement.

This valuation assumes that 100% of eligible participants will continue the same coverage levels upon retirement.

Interest Assumptions

	Funded	Not Funded
Discount Rate	7.75%	4.00%
Payroll Growth	4.00%	4.00%

Trend Assumptions

	Base	Sensitivity
Medical and Drug		
06/30/2007	9.50%	10.50%
06/30/2008	8.50%	9.50%
06/30/2009	7.50%	8.50%
06/30/2010	6.50%	7.50%
06/30/2011	5.50%	6.50%
Ultimate	5.50%	6.50%

6. Valuation Methods and Assumptions (cont.)

Decrement Assumptions

Below is a summary of decrements used in this valuation. Sample Disability and Termination rates are illustrated in the tables below.

Mortality Decrements	Description
(1) Healthy	RP 2000 Combined Healthy Table
(2) Disabled	RP 2000 Combined Disabled Table

Retirement Age	Police: 100% at Normal Retirement.
	Non-Police: The latter of attained age 60 or 10 years of credited service.

Disability		
Selected rates of disablement are shown below:		
Age	Male	Female
25	.00085	.00107
30	.00077	.00136
35	.00121	.00200
40	.00169	.00270
45	.00280	.00387
50	.00515	.00610
55	.00969	.00940
60	.01482	.01198

6. Valuation Methods and Assumptions (cont.)

Decrement Assumptions (Cont.)

Withdrawal

The following illustrative rates were used.
 For employees with less than six years of service
 (excluding those in the Adm. And Union DB):

Service	Adm. TP	Union TP	Police
0	.1200	.1200	.0800
1	.1120	.1120	.0720
2	.1040	.1040	.0640
3	.0960	.0960	.0480
4	.0880	.0880	.0400
5	.0800	.0800	.0320

Withdrawal

The following illustrative rates were used.
 For employees with six or more years of service:
 Selected rates of withdrawal are shown below

Age	Adm. TP & Union TP	Adm. DB	Police
20	16.74%	4.65%	4.65%
25	12.24%	3.40%	3.40%
30	9.09%	2.53%	2.53%
35	7.11%	1.98%	1.98%
40	5.85%	1.63%	1.63%
45	4.95%	1.38%	1.38%
50	4.05%	1.13%	1.13%
55	0.00%	0.00%	0.00%

No withdrawal is assumed for the Union DB

6. Valuation Methods and Assumptions (cont.)

Claims Assumption

The plan is fully insured. To determine the assumed cost and the retiree contributions, we weighted the 2006 premium rates by the current enrollment.

Gross claims are equal to the age adjusted assumed cost. The resulting average pre age 65 claims were age adjusted.

6. Valuation Methods and Assumptions (cont.)

The following chart shows the total costs including both medical and prescription drug as well as the assumed costs.

	July 1, 2006 to June 30, 2007	
	Single	Family
1. Total Costs		
a. Under 50	4,403	9,810
b. Age 50-54	5,364	11,954
c. Age 55-59	6,289	14,014
d. Age 60-64	7,584	16,900
e. Age 65 and Older	N/A	N/A
2. Assumed Costs	4,737	10,555

7. Glossary

Annual OPEB Cost (AOC):	An accrual-basis measure of the periodic cost of an employer's participation in a defined benefit OPEB plan.
Annual Required Contributions of the Employer(s) (ARC):	The employer's periodic required contributions to a defined benefit OPEB plan, calculated in accordance with the parameters.
Covered Group:	Plan members included in an actuarial valuation.
Defined Benefit OPEB Plan:	An OPEB plan having terms that specify the amount of benefits to be provided at or after separation from employment. The benefits may be specified in dollars (for example, a flat dollar payment or an amount based on one or more factors such as age, years of service, and compensation), or as a type or level of coverage (for example, prescription drugs or a percentage of healthcare insurance premiums).
Employer's Contributions:	Contributions made in relation to the annual required contributions of the employer (ARC). An employer has made a contribution in relation to the ARC if the employer has (a) made payments of benefits directly to or on behalf of a retiree or beneficiary, (b) made premium payments to an insurer, or (c) irrevocably transferred assets to a trust, or an equivalent arrangement, in which plan assets are dedicated to providing benefits to retirees and their beneficiaries in accordance with the terms of the plan and are legally protected from creditors of the employer(s) or plan administrator.
Funded Ratio:	The actuarial value of assets expressed as a percentage of the actuarial accrued liability.
Healthcare Cost Trend Rate:	The rate of change in per capita health claim costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.
Investment Return Assumption (Discount Rate):	The rate used to adjust a series of future payments to reflect the time value of money.

7. Glossary (cont.)

Level Percentage of Projected
Payroll Amortization Method:

Amortization payments are calculated so that they are a constant percentage of the projected payroll of active plan members over a given number of years. The dollar amount of the payments generally will increase over time as payroll increases due to inflation; in dollars adjusted for inflation, the payments can be expected to remain level. This method can not be used if the plan is closed to new entrants.

Net OPEB Obligation:

The cumulative difference since the effective date of this Statement between annual OPEB cost and the employer's contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

Normal Cost or Normal Actuarial
Cost:

That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

Other Post-employment Benefits:

Post-employment benefits other than pension benefits. Other post-employment benefits (OPEB) include post-employment healthcare benefits, regardless of the type of plan that provides them, and all post-employment benefits provided separately from a pension plan, excluding benefits defined as termination offers and benefits.

Pay-as-you-go (PAYG):

A method of financing a pension plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

Payroll Growth Rate:

An actuarial assumption with respect to future increases in total covered payroll attributable to inflation; used in applying the level percentage of projected payroll amortization method.

Plan Liabilities:

Obligations payable by the plan at the reporting date, including, primarily, benefits and refunds due and payable to plan members and beneficiaries, and accrued investment and administrative expenses. Plan liabilities do not include actuarial accrued liabilities for benefits that are not due and payable at the reporting date.

7. Glossary (cont.)

Plan Members:	The individuals covered by the terms of an OPEB plan. The plan membership generally includes employees in active service, terminated employees who have accumulated benefits but are not yet receiving them, and retired employees and beneficiaries currently receiving benefits.
Post-employment:	The period between termination of employment and retirement as well as the period after retirement.
Post-employment Healthcare Benefits:	Medical, dental, vision, and other health-related benefits provided to terminated or retired employees and their dependents and beneficiaries.
Select and Ultimate Rates:	Actuarial assumptions that contemplate different rates for successive years. Instead of a single assumed rate with respect to, for example, the investment return assumption, the actuary may apply different rates for the early years of a projection and a single rate for all subsequent years. For example, if an actuary applies an assumed investment return of 8% for year 20W0, 7.5% for 20W1, and 7% for 20W2 and thereafter, then 8% and 7.5% are select rates, and 7% is the ultimate rate.