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City of Rockville

Actuarial Valuation of the Post Retirement
Medical Plan as of July 1, 2011

HayGroup®



Prepared by:

Hay Group, Inc.
4301 N. Fairfax Drive, Suite 600
Arlington, VA 22203
P: 703.841.3100
F: 703.841.3108





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I. Executive Summary

This actuarial valuation report (Report) of the post-retirement medical benefits plan (Plan), is prepared as of July 1, 2011 and provides the City of Rockville (the City) with FY2012 and FY2013 reporting and disclosure information in conformity with City requirements and with applicable Governmental Accounting Standards Board (GASB).

The City sponsors a medical plan. Eligible City retirees and their dependents may continue health care coverage through the City; upon reaching age 65 retirees generally become eligible for Medicare, at which point the City ceases to subsidize the cost, however retirees can continue coverage upon paying the full Medicare retiree cost. The plan covers eligible retirees who elect to participate and pay required contributions.

Recommended Fiscal Year 2012 Contribution

The recommended Annual Required Contribution (ARC) for Fiscal Year (FY) 2012 is \$733,319 and the Annual OPEB cost for Fiscal Year (FY) 2012 is \$746,872. The Annual OPEB Cost is the sum of the ARC, interest on the unfunded ARC, and the ARC adjustment. Of the Annual OPEB Cost (AOC), a portion is funded through payment of premiums for current retirees. We expect this PAYGO amount to be \$266,000 for FY 2012, including costs for (a) current retirees and their dependents, (b) current disabled employees and their dependents, and (c) retirement eligible employees who retire during the year. The excess of the Annual OPEB Cost over the expected PAYGO amount is \$480,000 for FY2012.

The City expects to fund 60 percent of the \$480,000 gap between PAYGO and fully funding the AOC. Therefore, the City will contribute a payment of \$288,000 to the trust. Combined with the \$266,000 in expected premiums, the City expects to contribute a total of \$554,000 for FY 2012.

The ARC consists of the normal cost being the value of one year's benefit accrual (approximately \$485,000), plus the annual amortization over 27 years of the unfunded liability, using a level percentage of payroll (approximately \$249,000), plus interest and credit on unfunded ARC of approximately \$14,000.

The calculations were made as of July 1, 2011 using census data as of that date and recent health care premium and claim information.

OPEB (Accounting) Cost

For OPEB accounting purposes the FY2012 Annual Required Contribution is \$733,319 and the Annual OPEB Cost is \$746,872.



Demographics

Based on the information provided to us by the City, and for purposes of this Report, as of July 1, 2011, the City had 37 retirees receiving retiree medical coverage and 396 active employees receiving medical coverage. Of the 37 retirees 18 were pre-65 retirees.

Health Care Cost and Trend

Based on claims information, we have assumed for purposes of this Report, that the City's FY2012 monthly costs for retiree health coverage, on a per employee basis, are: \$352 for single coverage, and \$1,050 for family coverage.

A critical component of our actuarial valuation is the health care trend assumption and the discount rate (i.e., the assumed rate of investment earnings on trust assets). For the health care trend we use industry standard tables that assume health care costs will increase by 6.54 percent in 2011, and trend down over 70 years to 4.20 percent. The discount rate used is 7.22 percent.

Additional Financial Information about the Plan

As of July 1, 2011, the trust is approximately 34 percent funded, based on assets (valued at market value) of \$2.39 million and actuarial accrued liabilities of \$7.03 million. Compared to last year, this represents a 16 percentage point increase in the funding percentage, and a 52 percent increase in assets and a 20 percent decrease in the actuarial liabilities.



II. Background, Report Overview, and Key Findings

The City of Rockville sponsors a medical plan for certain active employees and eligible retirees. Eligible City retirees and their dependents may continue health care coverage through the City, upon reaching age 65 retirees generally become eligible for Medicare, at which point the City ceases to contribute and the retiree can continue coverage upon paying the full Medicare retiree cost. The plan covers eligible retirees who elect to participate and pay required contributions.

For purposes of this report the calculations were made as of July 1, 2011 using census data as of that date and the most recent health care premium and claims information.

GASB 45

Before the fiscal year which began on July 1, 2008, the City accounted for its retiree medical benefits only on a cash basis. Beginning in FY 2009, the City implemented the GASB standard on “Accounting and Financial Reporting by Employers for Post-employment Benefits Other Than Pensions” (GASB 45). This standard requires the City to account for these benefits on an accrual basis. A description of the GASB standard can be found in Section III.

Amortization Methods

The GASB 45 standard requires that the initial unfunded actuarial accrued liability be amortized, but allows the employer the choice of actuarial cost methods using either Level Dollar or Level Percent of Pay amortization. The Level Dollar approach sets up an amortization schedule for the unfunded actuarial accrued liability with equal dollar amounts for each year over the amortization period. The Level Percent of Pay approach sets up an amortization schedule where the amount increases each year in line with expected pay increases. As both methods amortize the same initial amount, the Level Dollar amortization amount in the first year is larger than the Level Percent of Pay amount.

The City chose to amortize the initial unfunded actuarial accrued liability over a closed 30-year period beginning in FY 2009. Therefore for FY2012, the remaining term of the amortization period is 27-years. The amortization payment is determined using the level Percent of Pay payments method.

Health Care Trend Rates

GASB 45 requires employers to anticipate future health care costs by adjusting today’s healthcare costs with projected health care trend rates. As shown in Appendix A, health care costs have outpaced general inflation and the annual rate of change has fluctuated significantly over time. It is difficult to accurately predict



health care cost increases even one or two years into the future. The medical trend assumptions used in this valuation were developed using the Society of Actuaries (SOA) Long-Run Medical Cost Trend Model. A description of the model can be found in section IV of the report.

The assumed increase in health care premiums anticipates that health care costs will increase by 6.54 percent in 2011, with annual rate increases declining gradually over 70 years to 4.20 percent. Thereafter, health care costs are projected to increase by 4.20 percent per year.

Key Valuation Results

We have calculated the post-retirement medical liabilities for the current retirees and employees covered under the City health plan as of July 1, 2011. The liabilities were calculated using a discount rate of 7.22 percent. Table 1 below shows the baseline FY2012 valuation results and provides a projection of the results for FY 2013.

We have shown three measures of the liability: the present value of future benefits, the actuarial accrued liability, and the normal cost. The present value of future benefits is the discounted present value of all future employer-paid health premiums for both current and future retirees. The actuarial accrued liability is the portion of the present value of future benefits attributable to employee service rendered prior to July 1, 2011. The normal cost is the portion of the present value of benefits attributable to employee service rendered in FY 2012.

The City began funding of the benefit in FY 2008. As of July 1, 2011, the fund had accumulated trust assets of \$2.39 million. The Unfunded Actuarial Accrued Liability as of July 1, 2011 was \$7.03 million and the Normal Cost as of July 1, 2011 was \$485,000.

For retirees under age 65, the City pays an amount equal to 80 percent of the total health care coverage costs of the lowest cost plan. The remaining 20 percent is paid by the retired employees. For retirees over age 65, the City does not contribute toward the cost of coverage. In FY 2012 these net employer costs are expected to be \$266,000, and are projected to grow rapidly due to the combination of a growing retiree population and high short-term increases in health care costs.

The actuarial assumptions relied upon for this valuation are described in Section IV, and shown in Appendix B.

Annual Required Contribution and Annual OPEB Cost

The ARC is the sum of the Normal Cost and the amortization payment on the Unfunded Actuarial Accrued Liability.

The Annual OPEB accounting cost is the ARC for an organization that funds the ARC each year. Where the amount funded in a prior year (or years) was not equal to the ARC, the Annual OPEB cost includes two additional elements:



- (i.) Interest on the unfunded ARC (or overfunded ARC), and
- (ii.) Adjustment to the ARC to prevent double accrual of principal payments on the unfunded actuarial accrued liability

In the case of the City, the cost of retiree medical coverage is funded through contributions made by the City. For FY 2012, the City will contribute to the fund 60 percent of the FY 2012 ARC less the Pay-Go-Cost. For FY 2013, the City will contribute 80 percent of the difference. Thereafter, the City will contribute 100 percent of the difference.

Table 1 shows the valuation results and the derivation of the ARC to be paid in FY 2012, on account of the 2011 plan year, and the Annual OPEB Cost. Table 1 also shows a projection of the FY 2013.

Table 1
Annual Required Contribution
(Amounts in \$thousands)

Valuation Date	7/1/2011	7/1/2012
Fiscal Year	2012	2013
Assumptions		
Discount rate	7.22%	7.22%
Healthcare trend rate		
• Initial rate	6.54%	6.54%
• Ultimate rate	4.20%	4.20%
Valuation Results		
1. Present Value of Future Benefits	\$12,433.66	\$13,055.84
2. Actuarial Accrued Liability	7,031.32	7,783.06
3. Assets in the Fund	2,385.35	2,885.85
4. Unfunded Actuarial Accrued Liability (2.) – (3.) (actuarial accrued liability less assets in the Fund)	4,645.97	4,897.21
5. Normal Cost	\$484.61	\$504.96
Annual Required Contribution (ARC)		
1. Normal Cost	\$484.61	\$504.96
2. Amortization Cost	248.70	268.66
3. Annual Required Contribution (1.) + (2.)	733.32	773.62
4. Interest on unfunded (overfunded) ARC	52.41	66.29
5. ARC adjustment	(38.85)	(50.36)
6. Annual OPEB Cost (3.) + (4.) + (5.)	746.87	789.55
7. Amount funded		
Paid in premiums	266.49*	361.07*
Paid to trust	288.23*	342.78*
Total amount funded	554.72*	703.85*
8. Unfunded (Overfunded) ARC	\$ 918.15	\$1,003.85
* Estimated		



Actuarial Certification

The City retained Hay Group to perform an actuarial valuation of the plan's post-retirement medical benefits to provide a determination of the actuarial accrued liability and the ARC under the GASB 45 standard. Use of the valuation results for other purposes may not be appropriate.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices.

The results shown in this report are reasonable actuarial results. However, a different set of results could also be considered reasonable actuarial results. The reason for this is that actuarial standards of practice describe a "best-estimate range" for each assumption, rather than a single best-estimate value. Thus, reasonable results differing from those presented in this report could have been developed by selecting different points within the best-estimate ranges for various assumptions.

The actuaries certifying to this valuation are members of the Society of Actuaries and other professional actuarial organizations, and meet the General Qualification Standards of the American Academy of Actuaries for purposes of issuing Statements of Actuarial Opinion.

Adam J. Reese
 Fellow of the Society of Actuaries
 Member of the American Academy
 of Actuaries
 Fellow of the Conference of
 Consulting Actuaries
 Enrolled Actuary # 11-4303

Sanjit Puri
 Associate of the Society of Actuaries
 Member of the American Academy of
 Actuaries

Hay Group
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III. Actuarial Cost Method

This section explains the actuarial methodology used for the valuation of the post-retirement medical benefits program for the current City population.

Governmental Accounting Standards Board (GASB)

In June 2004, the Governmental Accounting Standards Board issued GASB 45, which covers non-pension post-retirement benefits and other post-employment benefits (OPEB), excluding pension plans. The types of benefits covered include:

- Medical
- Dental
- Vision
- Hearing
- Life insurance
- Long-term disability
- Long-term care

The City adopted the standard beginning with the 2009 financial reporting year.

The purpose of the standard is to treat post-employment benefits in a manner similar to pensions. Governmental employers should recognize that OPEBs constitute compensation for employee service and they should recognize the cost of benefits during the periods when employee service is rendered. By accounting for OPEBs, GASB believes that the accounting statement will improve the relevance and usefulness of financial reporting, provide information about the size of the liabilities and the extent to which they are funded, and ensure systematic accrual-basis measurement over employee service.

While the standard requires that governmental employers adopt accrual accounting, the standard sets out a broad range of options for employers. These options include:

- Timing of adoption
- Actuarial cost method
- Period for amortizing the unfunded liability
- Measurement date and
- Frequency of valuations

The most common and most expensive of the OPEBs are retiree medical benefits, which provide a valuable component in employees' retirement benefits programs. Most governmental employers fund their retiree medical plans on a pay-as-you-go basis (sometimes referred to as "paygo"). The GASB standard does not require employers to advance fund these benefits; however certain aspects of the measurements provide benefits for employers that do fund the OPEB.



Actuarial Cost Method

A fundamental principle in financing the liabilities of any retirement program is that the cost of benefits should be attributed to the period in which benefits are earned, rather than to the period when benefit are distributed. There are several acceptable actuarial methods given in the GASB standard, including the one used for this valuation, the “projected unit credit cost method.” Under this method, the actuary develops an annual “normal cost” which is expected to fund projected benefits at retirement for a new entrant into the plan. This cost method determines the normal cost as a dollar amount.

Actuarial Liability

The actuarial liability is that portion of the present value of projected benefits which has accrued during the employee’s working life, from date of hire to the valuation date. Another way of viewing this liability is that it is the portion of the present value of projected benefits that will not be funded by future normal costs. Therefore, as long as participants enter the system with no past service credit (as is assumed in this case), there is no actuarial liability for a new entrant, and the full present value of benefits is accrued by the end of each employee’s working life by annual payments of the normal cost.

The difference between the actuarial liability and the funds accumulated in the trust (if any) as of the valuation date is referred to as the unfunded actuarial liability. Unfunded actuarial liabilities generally exist when (1) the liabilities are not funded, (2) benefits have been earned for periods in which no normal cost has been paid, or (3) the amounts that have been funded were diminished because of losses, changes in assumptions, changes in the funding method, or benefit improvements. In the City’s case, the unfunded actuarial liability equals the actuarial accrued liability less the value of the trust fund.

The City chose to amortize the initial unfunded actuarial accrued liability over a closed 30-year period starting in FY 2009, the period reduced to 29-years for fiscal year 2010, 28-years for FY 2011, and 27-years for FY 2012. The amortization is done using a level Percent of Pay payment method.

Development of the Normal Cost

The normal cost represents the amount charged for service earned during the current reporting period. As stated in the previous section, the projected unit credit cost method is used in determining the normal cost.

The normal cost is calculated by dividing the present value of projected benefits for an employee by the expected future working life of the employee, weighted by the assumed health care trend rate. Therefore, all other things being unchanged, the normal cost amount is expected to increase at the long-term health care cost trend rate, currently 4.20 percent.



The City's Annual Required Contribution consists of two principal components: (1) a normal cost, which pays for benefits being earned in the current reporting period, and (2) amortization of the unfunded actuarial liability, which pays for a portion of benefits previously earned but unfunded. Adjustments are made to the ARC for prior unfunded or overfunded ARC amounts, and to prevent double accrual of principal payments on the unfunded accrued liability.

Valuation Results

Table 2 shows the present value of benefits, actuarial accrued liability, market value of assets, unfunded actuarial accrued liability and normal cost. The table shows the amortization of this unfunded actuarial accrued liability and the development of the Annual Required Contribution and Annual OPEB Cost. The increase in health care costs is based on the assumption that the health care trend rate begins at 6.54 percent in 2011 (the assumption that 2011 premiums will increase 6.54 percent in 2012).

The table on the following page shows the combined results for three separate populations: retired employees and their dependents, current disabled employees, and active employees who are expected to receive benefits and their dependents, and projects these results to the subsequent year.



Table 2
Post-Retirement Medical Valuation
As of July 1, 2011
(Amounts in \$thousands)

Valuation Date	7/1/2011	7/1/2012
Fiscal year	2012	2013
1. Present Value of Future Benefits		
a Active	\$10,717.66	\$11,426.86
b Disabled	860.75	861.44
c Retired	855.25	767.54
d Total	12,433.66	13,055.84
2. Actuarial Accrued Liability		
a Active	5,315.32	6,154.08
b Disabled	860.75	861.44
c Retired	855.25	767.54
d Total	7,031.32	7,783.06
3. Assets	2,385.35	2,885.85
4. Unfunded Actuarial Accrued Liability (2.d) – (3.)	4,645.97	4,897.21
5. Amortization Payment (30-year level payments)	248.70	268.66
6. Normal Cost	484.61	504.96
7. Total Annual Required Contribution (5.) + (6.)	\$733.32	\$773.62
8. Annual OPEB Cost	\$746.87	\$789.55
9. Employer Funding		
Paid in Benefits	\$266.49*	\$361.07*
Paid to Trust	288.23*	342.78*
Total	554.72*	703.85*
* Estimated		



IV. Actuarial Assumptions

In accordance with GASB 45, selection of all actuarial assumptions, including the health care cost trend rate in valuations of post-employment health care plans, should be guided by Actuarial Standard of Practice No. 6, Measuring Retiree Group Benefit Obligations, as revised from time to time by the Actuarial Standards Board. Accordingly, actuarial assumptions should be based on the actual experience of the covered group, to the extent that creditable experience data are available, but should emphasize expected long-term future trends rather than give undue weight to recent past experience. The reasonableness of each actuarial assumption should be considered independently based on its own merits, its consistency with each other assumption, and the combined impact of all assumptions.

The actuarial assumptions used to value the post-retirement medical liabilities can be categorized into three groups: economic assumptions, medical assumptions, and demographic assumptions.

Economic Assumptions

The two economic assumptions used in this valuation are the discount rate and the health care cost trend rates. The economic assumptions are used to account for changes in the cost of benefits over time and to discount future benefit payments for the time value of money.

Discount Rate

The investment return assumption (discount rate) should be the estimated long-term investment yield on the investments that are expected to be used to finance the payment of benefits. The investments expected to be used to finance the payments of benefits would be plan assets for funded plans, assets of the employer for pay-as-you-go plans, or a proportionate combination of the two for plans that are being partially funded.

Given that the City will be partially funding the post-retirement medical benefits, we recommend using a combination of the fully funded discount rate of 7.75 percent, and the unfunded discount rate of 4 percent. The discount rate assumption used for the valuation is 7.22 percent.

Health Care Cost Trend Rates

Table 3 below shows the health care cost trend rates that were used for this actuarial valuation. The set of health care trend rates has an initial health care cost trend rate of 6.54 percent and declines gradually, over 70 years, to an ultimate rate of 4.20 percent. Under these assumptions, a cost of \$1,000 in 2011 will be a cost of \$2,674 in 2030.



The medical trend assumptions used in the valuation were developed using the Society of Actuaries (SOA) Long-Run Medical Cost Trend Model baseline assumptions. The SOA model was released in December 2007. The following assumptions were used as input variables into this model:

Rate of Inflation	3.2%
Rate of Growth in Real Income/ GDP per capita	0.9%
Income Multiplier for Health Spending	1.4%
Extra Trend due to Technology and other factors	1.2%
Health Share of GDP Resistance Point	25.0%
Year for Limiting Cost Growth to GDP Growth	2075

The SOA Long-Run Medical Cost Trend Model and its baseline projection are based on an econometric analysis of historical U.S. medical expenditures and the judgments of experts in the field. The rate of growth in Real Income was reduced from the baseline assumption of 1.9 percent to 0.9 percent to be consistent with the payroll growth assumption. The long-run baseline projection and input variables have been developed under the guidance of the SOA Project Oversight Group.

The following table shows the medical cost trends used in the valuation and are an output of the SOA Long-Run Medical Cost Trend Model.

Table 3
Health Care Cost Trend Rate Assumptions

Year	Annual Trend Rate
2011	6.54%
2012	5.80%
2013	5.70%
2014	5.70%
2015	5.70%
2020	5.60%
2025	5.50%
2030	5.40%
2040	5.20%
2050	4.90%
2060	4.70%
2070	4.60%
Ultimate	4.20%



Appendix A contains a chart showing the historical increases in health care premiums from two sources: the Hay Benefits Report and the Federal Employees Health Benefit Plan for the period 1982 through 2011.

Medical Assumptions

The valuation projects the medical costs for employees who remain in the City medical plan after retirement. The data provided to us included the monthly retired premium for each of the medical and dental plans. Based on the data provided, we calculated a per capita cost for the retired group under 65. Upon reaching age 65 retirees generally become eligible for Medicare, at which point the City ceases to contribute and the retiree can continue coverage upon paying the full Medicare retiree cost.

Health care benefits are constantly changing and employers seek to provide the best coverage at the lowest cost. For the current valuation, the City had contracted with CareFirst and Kaiser to provide HMO and POS plans. Effective January 1, 2012, the City will provide coverage through CIGNA and terminate the contract with CareFirst.

Each year, the City contributes a flat dollar amount towards retiree medical costs for each retiree. The flat dollar amount is 80 percent of the lowest cost plan for each tier (single, family). If the retiree does not choose the lowest cost plan, the retiree pays the full difference between the elected plan and the lowest cost plan.

Since the plan population is relatively small, we have combined the Employee + 1 coverage category with the family coverage category. Table 4 below shows the monthly per capita City contribution assumption.

**Table 4
2011 Monthly Per Capita City Contribution**

	Pre-65 Retirees	
	Single	Family
Medical	\$339.26	\$1,017.73
Dental	12.80	32.00
Total	352.06	1,049.73

To determine the assumed City cost, we weighted the 2011 City contribution by the current enrollment.

The following table shows the monthly age-adjusted assumed costs used for the development of the results as of July 1, 2011. The values in Table 5, when averaged across the covered group of retirees, equal the values shown in Table 4.



Table 5
2011 Age-Adjusted Valuation Costs

Age	Medical		Dental	
	Single	Family	Single	Family
<50	\$284	\$831	\$13	\$32
50-54	284	831	13	32
55-59	317	925	13	32
60-64	364	1,064	13	32
65+	-	-	-	-

Surviving spouses do not receive any explicit subsidy; however, they are permitted to remain in the plan provided that they pay 100 percent of the plan cost.

Demographic Assumptions

The demographic assumptions used for valuing the liabilities of the post-retirement medical plan are the same as those used for the actuarial valuation of the City of Rockville Pension Plan, with the exception of the retirement rates. The retirement rates were developed from an analysis of the City’s experience over the last five years and include rates of retirement by age. The previous retirement assumption assumed all employees retire when first eligible to do so.

The demographic assumptions include the rates of mortality, withdrawal, retirement, and disability. Ancillary demographic assumptions include the age of female spouses, coverage rates, and participation rates. The complete set of demographic assumptions is included in Appendix B.



V. Financial Accounting Information

In addition to establishing the ARC and the AOC, this report shows the projected progress toward funding of the cost of all retiree health benefits. This section includes a schedule of the funding progress, which is a statement of disclosure required by GASB Statement No. 43.

Also included is a schedule of employer contributions. This schedule shows the actual contributions to the trust as compared to the ARC.



GASB No. 43 Disclosures

**Schedule of Funding Progress
(Amounts in \$thousands)**

Actuarial Valuation Date	Fiscal Year	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Accrued Liability (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
7/1/2011	2012	\$2,385.35	\$7,031.32	\$4,645.97	33.92%	\$33,385	13.91%
7/1/2012	2013	\$2,885.85	\$7,783.06	\$4,897.21	37.07%	\$34,720	14.10%

**Schedule of Employer Contributions
(Amounts in \$thousands)**

Fiscal Year	Annual OPEB Cost	Actual Contribution 1/	Percentage Contributed
2012	\$746.87	\$554.72	74.27%
2013	\$789.55	\$703.85	89.15%

1/ Expected amount.



GASB No. 43 Disclosures

**Development of the Net OPEB Obligation
(Amounts in \$thousands)**

Actuarial Valuation Date	Fiscal Year	Annual Required Contribution (a)	Interest on Unfunded ARC (b)	Adjustment of the ARC (c)	Annual OPEB Cost (d) = (a) + (b) + (c)	Actual 1/ Contribution (e)	Increase in net OPEB obligation (f) = (d) – (e)	Net OPEB liability at end of year (g) = prior year (g) + (f)
7/1/2011	2012	\$733.32	\$52.41	(\$38.85)	\$746.87	\$554.72	\$192.15	\$918.15
7/1/2012	2013	\$773.62	\$66.29	(\$50.36)	\$789.55	\$703.85	\$85.60	\$1,003.85

1/ Expected amount.



VI. Summary of Plan Provisions

All employees who retire (early and normal retirement) from the City are eligible for post-retirement healthcare coverage from the plan, except deferred vested retirees. Spouses and dependent children of retirees are also eligible for health care coverage sponsored by the City.

The majority of the health care premium cost is subsidized by the City. The City pays, for each retiree, an amount equal to 80 percent of the published rate for the lowest cost plan. Retirees pay the balance of the premium cost.

Eligible retirees have three plan options:

- Point of Service (POS) Program,
- Health Maintenance Organization, or
- Elect not to enroll in a retiree medical plan.

The following table summarizes the plan provisions under the CareFirst HMO and the Kaiser POS (In-network) programs as of January 1, 2011.

Plan Provisions	CareFirst Blue Choice HMO	Kaiser POS (In-Network)
<i>General Plan Provisions</i>		
Maximum Lifetime Benefit	Unlimited	Unlimited
Annual Deductible	Individual: \$0 Family: \$0	Individual: \$0 Family: \$0
Copayments/ Coinsurance	None	100% after deductible
Maximum Out-of-Pocket Expenses for Covered Service per Calendar Year	Individual: \$2,000 Individual & Adult \$3,800 Family: \$6,000	Individual: \$3,500 Family: \$9,400
<i>Inpatient Hospital Expenses</i>		
Medical/Surgical/Maternity	100 Percent of Covered Services	100 Percent of Covered Services
Mental Health	100 Percent of Covered Services	100 Percent of Covered Services
Urgent Care Center	\$40 per visit	\$20 per visit (PCP) / \$30 per visit (Specialty)
Emergency Room Services	\$50 per visit, waived if admitted.	\$50 per visit



Plan Provisions	CareFirst Blue Choice HMO	Kaiser POS (In-Network)
Surgery	100 Percent of Covered Services	\$50 per procedure
Diagnostic Services (e.g. x-rays)	100 Percent of Covered Services	No Charge
Chemotherapy/ Radiation/Dialysis	100 Percent of Covered Services	No Charge
Physician Expenses		
Office Visit	\$30 PCP/\$40 Specialist per visit	50% of Allowable Charge
Surgery/Anesthesia	100 Percent of Covered Services	50% of Allowable Charge
Maternity Care	\$30 PCP/\$40 Specialist per visit (not to exceed 10 times the copay per pregnancy)	No Charge
Laboratory Tests	No Charge	\$50 per test
Radiation/ Chemotherapy/Dialysis	100 Percent of Covered Services	
Mental Health (MH) and Substance Abuse (SA)		
Inpatient Services	No Charge	No Charge
Outpatient Services (MH)	\$30 per visit	Individual therapy: \$20 per visit Group therapy: \$10 per visit
Outpatient Services (SA)	\$30 per visit	Individual therapy: \$20 per visit Group therapy: \$10 per visit
Hospice Services		
Hospice Care (available during last 6 months of life)	No Charge	No Charge
Preventive Services		
Well Child Care	Covered in full	Covered in full
Adult Physical Examination	No Charge	No Charge
Routine GYN Visit	No Charge	No Charge
Mammogram	No Charge	No Charge
Cancer Screening (PAP, Prostate, Colorectal)	No Charge	No Charge



Plan Provisions	CareFirst Blue Choice HMO	Kaiser POS (In-Network)
<i>Prescription Drug Program</i>		
Deductible	None	None
Family Deductible Maximum	None	None
Generic Drugs (Tier 1)	\$10	\$10
Preferred Brand Drugs (Tier 2)	\$20	\$20
Non-Preferred Brand Drugs (Tier 3)	\$35	\$35
Annual Maximum	N/A	N/A
Maintenance Copays	Generic: \$20 Preferred: \$40 Non-Preferred: \$70	Generic: \$20 Preferred: \$40 Non-Preferred: \$55
Prior Authorization	Required for some prescriptions	None



VII. Participant Data

The following table shows the current retired participants as of the valuation date.

Table 6
Current Retired Population

Age Group	Females	Males	Total
<50	1	0	1
50-54	0	1	1
55-59	1	3	4
60-64	5	7	12
Total Pre 65 Retirees	7	11	18
65-69	3	4	7
70-74	1	4	5
75-79	2	1	3
79+	2	2	4
Total	15	22	37

The following table shows the active participants who are currently receiving medical and dental benefits from the City, as of the valuation date, by age and gender.

Table 7
Active Population by Age and Gender

Age Group	Females	Males	Total
<25	1	2	3
25-29	10	21	31
30-34	27	41	68
35-39	11	27	38
40-44	21	46	67
45-49	17	56	73
50-54	16	37	53
55-59	13	28	41
60-64	5	14	19
65-69	0	2	2
70+	1	0	1
Total	122	274	396

Table 8 shows the counts of active participants who are currently receiving medical and dental benefits from the City, as of the valuation date, by years of service and age.



Table 8
Active Population by Age and Service

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
20-24	2	1	0	0	0	0	0	3
25-29	24	5	2	0	0	0	0	31
30-34	34	28	5	1	0	0	0	68
35-39	20	11	6	1	0	0	0	38
40-44	23	27	9	8	0	0	0	67
45-49	22	9	21	5	16	0	0	73
50-54	4	15	15	5	13	1	0	53
55-59	5	7	8	12	8	0	1	41
60-64	1	3	8	1	5	1	0	19
65+	0	0	2	1	0	0	0	3
Total	135	106	76	34	42	2	1	396



VIII. Annual Required Contribution Projection

The discount rate assumption used for the valuation is 7.22 percent. This rate is a partially funded discount rate. The partial funding level was determined based on the fully funded discount rate of 7.75 percent and the unfunded discount rate of 4 percent.

Fully funding the post-retirement medical benefits affects the projection in three ways. First, the liabilities are measured using a discount rate of 7.75 percent rather than the much lower discount rate of 4.0 percent, which would be appropriate if the City were not funding the ARC. Second, the assets in the fund will be used as an offset to the actuarial accrued liabilities, therefore lowering the unfunded actuarial accrued liability to be disclosed. And third, decreasing the unfunded actuarial accrued liability will decrease the annual required contribution. As shown in the forecast projections, funding the post-retirement medical benefits will decrease the increase in operational expenses due to implementation of GASB Statement 45. Table 10 shows the forecast of liabilities and expenses through FY 2017.

The GASB 45 implementation guide provides direction on the selection of the discount rate for employers that contribute more than pay-as-you-go (PAYG) but less than the ARC.

The blended discount rate was selected using the following approach consistent with the GASB implementation guide:

Table 9
Determination of the Blended Discount Rate
(dollars in thousands)

1.	Discount Rate if City funded PAYG only	4.00%
2.	Total of ARCs FY 2012 - 2016 based on 1.	\$6,714.1
3.	Total PAYG FY 2012 – 2016	\$2,034.9
4.	Funded discount rate	7.75%
5.	Total of ARCs FY 2011 - 2015 based on 4.	\$3,808.2
6.	Gap between PAYG (3.) and ARC (5.) (5. – 3.)	\$1,773.3
7.	Proposed Funding	\$3,557.2
8.	Additional funding above PAYG (7. – 3.)	\$1,522.3
9.	Percent of Gap funded (8./6.)	86%
10.	Difference in discount rates (4. – 1.)	3.75%
11.	Increase in discount rate (9. x 10.)	3.22%
12.	Interpolated discount rate (1. + 11.)	7.22%



Table 10
Forecast of Liabilities and Expenses
(Amounts in \$thousands)

	FY 2012	FY2013	FY 2014	FY 2015	FY 2016	FY 2017
1 Actuarial Accrued Liability	\$7,031.3	\$7,783.1	\$8,103.0	\$8,778.6	\$9,480.0	\$10,189.7
a Assets	2,385.4	2,885.9	3,487.8	4,151.4	4,848.3	5,562.1
b Unfunded Actuarial Accrued Liability	4,646.0	4,897.2	4,615.2	4,627.1	4,631.7	4,627.6
2 Normal Cost	484.6	505.0	488.6	509.1	530.5	552.7
3 Annual Required Contribution (ARC)						
a Normal Cost	484.6	505.0	488.6	509.1	530.5	552.7
b Amortization Cost	248.7	268.7	273.4	281.2	289.3	297.5
c Interest on Unfunded ARC	52.4	66.3	72.5	72.5	72.5	72.5
d Adjustment to the ARC	(38.9)	(50.4)	(59.5)	(61.0)	(62.7)	(64.5)
e Total	746.9	789.6	775.0	801.8	829.5	858.2
4 Funding						
a Assets at start of year	2,385.4	2,885.9	3,487.8	4,151.4	4,848.3	5,562.1
b Paid to trust fund	554.7	703.9	775.0	801.8	829.5	858.2
c Paid from trust fund	266.5	361.1	419.1	462.5	525.7	622.6
d Investment earnings	212.3	259.2	307.8	357.6	409.9	463.5
e Assets at end of year	2,885.9	3,487.8	4,151.4	4,848.3	5,562.1	6,261.3
5 Unfunded ARC						
a ARC	746.9	789.6	775.0	801.8	829.5	858.2
b Employer Contribution						
Paid to trust for last year GASB Increase	288.2	342.8	355.8	339.2	303.8	235.7
Paid for premiums	266.5	361.1	419.1	462.5	525.7	622.6
Total	554.7	703.9	775.0	801.8	829.5	858.2
c Unfunded ARC	918.2	1,003.8	1,003.8	1,003.8	1,003.8	1,003.8
6 Increase in Operational Expenses Due to GASB						
a Accrual Cost under GASB (ARC)	746.9	789.6	775.0	801.8	829.5	858.2
b Current Cost under Pay-as-you-go	266.5	361.1	419.1	462.5	525.7	622.6
c Increase due to GASB #45	480.4	428.5	355.8	339.2	303.8	235.7



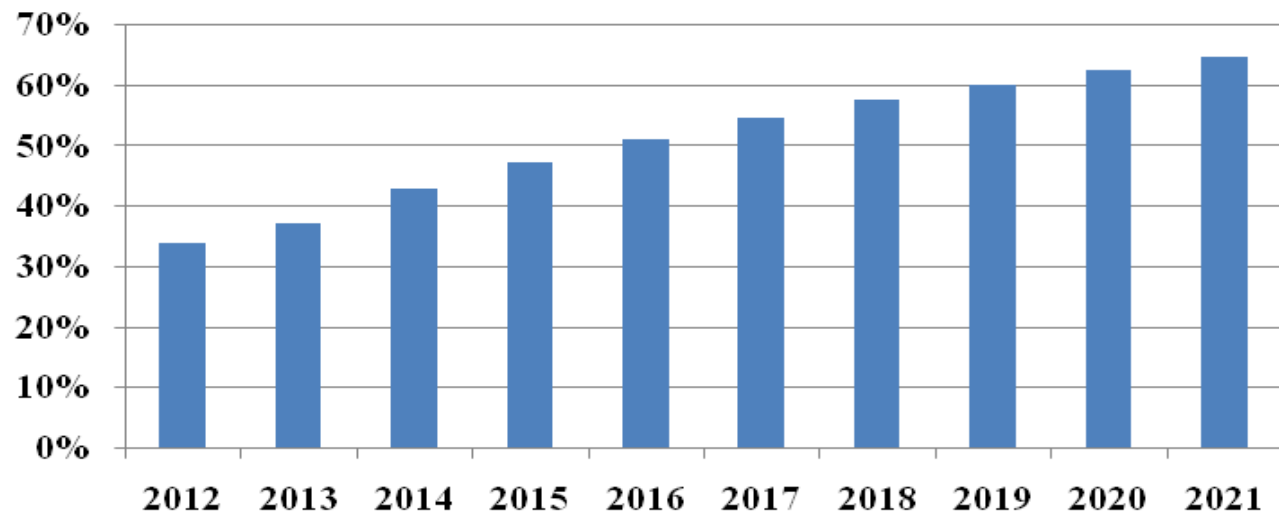
The total employer contribution is the amount that is paid to the trust plus any amount that is paid toward medical premiums. The unfunded ARC is the difference between the ARC and the total employer contribution, plus any amounts that were over-funded or under-funded in the prior year.

The retiree payments (the current cost under PAYG) are an estimate based on the current enrollment and retiree coverage.

Chart 1 shows the funding progress of the Actuarial Accrued Liability.



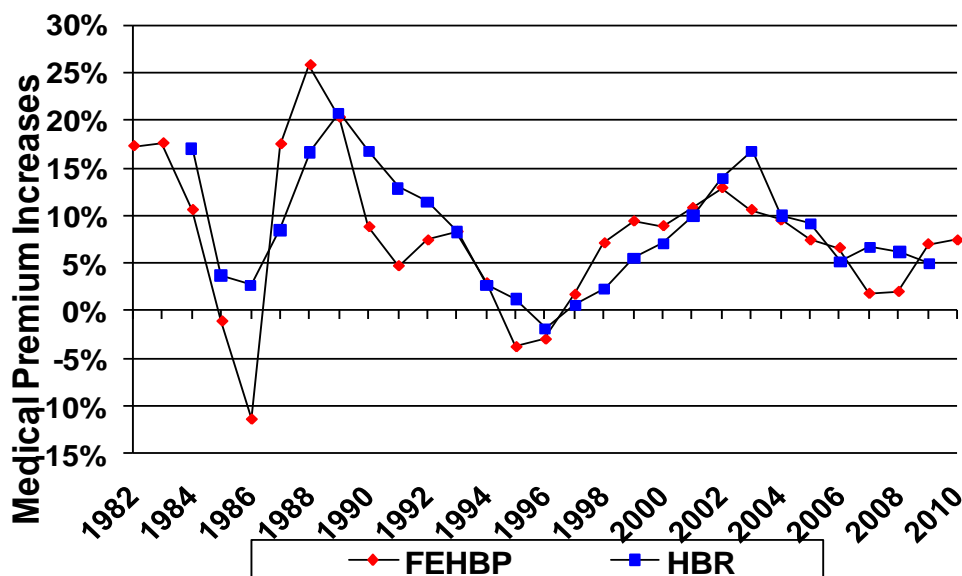
Chart 1 Funded Ratio





Appendix A - Hay Benefits Report Survey and Federal Employees Health Benefit Program

Medical Premium Increases



The above chart shows the annual percentage change in the premiums for the Federal Employees Health Benefit Program as well as the annual change in the average premiums among the Hay Benefits Report participants.

The chart shows the cyclical nature of annual premium rate increases (and decreases).

Since 2003 we saw the gradual decline in the rate of premium increases. The FEHBP appears to be a leading indicator of price changes.



Appendix B – Actuarial Assumptions

General Assumptions

Valuation Date	July 1, 2011
Discount Rate	7.22%
Salary Growth	4.00%

Eligibility Rules:

Disability Benefit Eligibility:

- Eligibility for disability benefit is attained at age 50 with 10 years of service

Retirement Benefit Eligibility:

- Admin and Union Employees: Normal Retirement Eligibility is attained at age 60 with 10 years of service or 85 points.
- Police Employees: Normal Retirement Eligibility is attained at age 50 with 25 years of service or age 60 regardless of service.



Demographic Assumptions

**Post- Retirement, Pre-Retirement, Post- Disability
Mortality
(Annual Number Per 1,000 Participants)**

Age	Male	Female
20	.345	.191
25	.376	.207
30	.444	.264
35	.773	.475
40	1.079	.706
45	1.508	1.124
50	2.138	1.676
55	3.624	2.717
60	6.747	5.055
65	12.737	9.706
70	22.206	16.742
75	37.834	28.106
80	64.368	45.879

The rates in the table above are from the RP2000 mortality table.



**Withdrawal
(Annual Number per 1,000 Participants)**

Service	Adm. TP & DB*	Union. TP*	Police
0	120.00	120.00	80.00
1	112.00	112.00	72.00
2	104.00	104.00	64.00
3	96.00	96.00	48.00
4	88.00	88.00	40.00
5	80.00	80.00	32.00

The above rates were used for employees with less than six years of service.

**Withdrawal
(Annual Number per 1,000 Participants)**

Age	Adm. TP & DB*	Union. TP*	Police
20	167.40	46.50	46.50
25	122.40	34.00	34.00
30	90.90	25.30	25.30
35	71.10	19.80	19.80
40	58.50	16.30	16.30
45	49.50	13.80	13.80
50	40.50	11.30	11.30
55	0.00	0.00	0.00

The above rates were used for employees with six or more years of service.

* Thrift Plan (TP), Defined Benefit Plan (DB)



Incidence of Disability
(Annual Number per 1,000 Participants)

Age	All Groups	
	Males	Females
25	0.85	1.07
30	0.77	1.36
35	1.21	2.00
40	1.69	2.70
45	2.80	3.87
50	5.15	6.10
55	9.69	9.40
60	14.82	11.98

Number of Retirements
(Annual Number per 1,000 Participants*)

Age	Admin and Union Employees	Police Employees
50	-	100
51	-	100
52	25	100
53	25	100
54	25	100
55	25	200
56	25	200
57	30	200
58	40	300
59	50	400
60	120	500
61	200	1,000
62	200	
63	200	
64	300	
65	250	
66	250	
67	250	
68	250	
69	250	
70	1,000	

*The above rates are based on the actual retirement experience observed during the period January 1, 2006 through December 31, 2010 for the City of Rockville Retirement Plan.



Ancillary Demographic Assumptions

Participation Rates

Based on an analysis of the data provided, we have assumed that 100 percent of eligible participants will continue the same coverage levels upon retirement

Coverage Level Election Rates

For current retirees actual coverage status is used.

For future retirees; 60 percent of retirees are assumed to elect family coverage. This assumption was developed from the analysis of the coverage election rates of the current retired population

The table below shows the percentage of current retirees by coverage level. As in the calculation of the medical costs, we have combined the Employee + 1 coverage category with the family coverage category.

Plan Coverage Levels

	Retiree Only			Retiree Plus One or More		
	Males	Females	Total	Males	Females	Total
Rate	41%	67%	51%	59%	33%	49%

Spouse Age Difference

Female spouses are assumed to be 3 years younger than males.



Healthcare Assumptions

Health Care Cost Trend Rate Assumptions for Selected Years

Year	Annual Trend Rate
2011	6.54%
2012	5.80%
2013	5.70%
2014	5.70%
2015	5.70%
2020	5.60%
2025	5.50%
2030	5.40%
2040	5.20%
2050	4.90%
2060	4.70%
2070	4.60%
Ultimate	4.20%

2011 Monthly Per Capita City Contribution

Age	Medical		Dental		Total	
	Single	Family	Single	Family	Single	Family
<50	\$284	\$831	\$13	\$32	\$297	\$863
50-54	284	831	13	32	297	863
55-59	317	925	13	32	330	957
60-64	364	1,064	13	32	377	1,096
65+	-	-	-	-	-	-



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 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 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



Level Percentage of Projected Payroll Amortization Method:

Amortization payments are calculated so that they are a constant percentage of the 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 cannot 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-employee Benefits:

Post-employment benefits other than pensions 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 coverage 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.

**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 2012, 7.5% for 2013, and 7% for 2014 and thereafter, then 8% and 7.5% are select rates, and 7% is the ultimate rate.