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City of Rockville

Actuarial Valuation of the Post-Retirement Medical Plan as of July 1, 2015

HayGroup®

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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, 2015 and provides the City of Rockville (the City) with FY 2016 and FY 2017 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 healthcare 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 premium, with no liability for the City. The plan covers eligible retirees who elect to participate and pay required contributions.

Recommended Fiscal Year 2016 and Fiscal Year 2017 Contribution

The recommended Annual Required Contribution (ARC) for Fiscal Year 2016 is $607,387 and the Annual OPEB cost (AOC) for Fiscal Year 2016 is $618,168. The recommended ARC for FY 2017 is $629,700 and the AOC for FY 2017 is $639,042.

The AOC is the sum of the ARC, interest on the unfunded ARC, and the ARC adjustment. A portion of the AOC is funded through the payment of premiums for current retirees. We expect this premium amount to be $225,283 for FY 2016 and $266,936 for FY 2017, 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 AOC consists of the normal cost, which is the value of one year's benefit accrual ($456,424 for FY 2016 and $473,928 for FY 2017): plus the annual amortization of the unfunded liability, using a level percentage of payroll (approximately $150,963 for FY 2016 and $155,772 for FY 2017); plus interest – offset by an amortization credit – on the unfunded AOC including carryovers ($10,290 for FY 2014 and $9,360 for FY 2015).

We recommend that the City contributes the AOC each year.

The calculations were made as of July 1, 2015 using census data as of that date and recent healthcare premium and claim information.

OPEB (Accounting) Cost

For OPEB accounting purposes, the FY 2016 Annual Required Contribution is $607,387 and the Annual OPEB Cost is $618,168.

For OPEB accounting purposes, the FY 2017 Annual Required Contribution is $629,700 and the Annual OPEB Cost is $639,042.

Demographics

Based on the information provided to us by the City, and for purposes of this Report, as of July 1, 2015, the City had 46 retirees receiving retiree medical coverage and 484 active employees eligible for post-retirement medical coverage. Of the 46 retirees, 34 were pre-65 retirees.

Healthcare Cost and Trend

Based on claims information, we have assumed for purposes of this Report that the City's FY 2015 monthly costs for retiree health coverage, on a per employee basis, are: $414 for single coverage, and $1,241 for family coverage.

A critical component of our actuarial valuation is the healthcare trend assumption and the discount rate. For the healthcare trend we use the Society of Actuaries (SOA) Long Term Healthcare Cost Trend Model, under which the increase in healthcare costs is projected to be 5.0 percent in 2015 and trend down to 3.84 percent per year over the next 70 years. The discount rate used for the valuation is the expected long term return on trust assets, which is projected to be 7.50 percent per year.

Additional Financial Information about the Plan

As of July 1, 2014, the trust is approximately 64.9 percent funded, based on assets (valued at market value) of $5.33 million and actuarial accrued liabilities of $8.22 million. Compared to the previous year, this represents a 9.7 percentage point increase in the funding percentage. As of July 1, 2015 the trust is approximately 69.7 percent funded based on assets of $5.70 million and actuarial accrued liabilities of $8.17 million.

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 healthcare coverage through the City; upon reaching age 65 retirees generally become eligible for Medicare, at which point the City ceases to contribute. However, a 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, 2015 using census data as of that date and the most recent healthcare premium and claims information.

GASB 45

Before the fiscal year that 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 FY 2016, the remaining term of the amortization period is 23 years, and it is 22 years for FY 2017. The amortization payment is determined using the level Percent of Pay method.

Healthcare Trend Rates

GASB 45 requires employers to anticipate future healthcare costs by adjusting today's healthcare costs with projected healthcare trend rates. As shown in Appendix A, healthcare costs have outpaced general inflation and the annual rate of change has fluctuated significantly over time. It is difficult to accurately predict healthcare 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 Term Healthcare Cost Trend Model. A description of the model can be found in section IV of the report.

The assumed increase in healthcare premiums anticipates that healthcare costs will increase by 5.0 percent in 2015, with annual rate increases declining gradually to 3.84 percent in 2074. Thereafter, healthcare costs are projected to increase by 3.84 percent per year.

Key Valuation Results

We have calculated the post-retirement medical liabilities for the current retirees and eligible active employees covered under the City health plan as of July 1, 2015. The liabilities were calculated using a discount rate of 7.50 percent. The liabilities as of July 1, 2014 are based on a discount rate of 7.50 percent. Table 1 below shows the baseline valuation results for FY 2015, FY 2016, and FY 2017.

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 valuation date. The normal cost is the portion of the present value of benefits attributable to employee service rendered during the indicated fiscal year.

The City began funding of the benefit in FY 2009. As of July 1, 2014, the fund had accumulated trust assets of $5.33 million. The Unfunded Actuarial Accrued Liability as of July 1, 2014 was $2.89 million and the Normal Cost as of July 1, 2014 was $444,000. The Unfunded Actuarial Accrued Liability as of July 1, 2015 is $2.47 million and the Normal Cost as of July 1, 2015 is $456,000.

For retirees under age 65, the City pays an amount equal to 80 percent of the total healthcare 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 2015 the net employer cost for current retirees was $225,504. In FY 2016, it is expected to be $225,283 and in FY 2017 it is expected to be $266,936 and it is projected to grow substantially in the coming years due to the combination of a growing retiree population and high short-term increases in healthcare costs.

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

Annual Required Contribution and Annual OPEB Cost

The Annual Required Contribution (ARC) is the sum of the Normal Cost and the amortization payment on the Unfunded Actuarial Accrued Liability.

The Annual OPEB Cost (AOC) is the accounting cost for an organization that funds the ARC each year. If the amount funded in a prior year (or years) was not equal to the ARC, the AOC 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.

Table 1 shows the derivation of the AOC to be paid in FY 2015, FY 2016, and FY 2017.

Table 1
Annual Required Contribution
(Amounts in $thousands)

Valuation Date	**7/1/2014**	**7/1/2015**	**7/1/2016**
Fiscal Year	**2015**	**2016**	**2017**
Assumptions			
Discount rate	**7.50%**	**7.50%**	**7.50%**
Healthcare trend rate			
Initial rate	**4.80%**	**5.00%**	**5.30%**
Ultimate rate	**3.78%**	**3.84%**	**3.84%**
Valuation Results			
1 Present Value of Future Benefits	$13,421.1	$14,038.5	$14,858.2
2 Actuarial Accrued Liability	$8,220.3	$8,168.0	$9,038.0
3 Assets in the Fund	$5,331.4	$5,696.9	$6,563.4*
4 Unfunded Actuarial Accrued Liability (2.) – (3.) (actuarial accrued liability less assets in the Fund)	$2,888.9	$2,471,1	$2,474.6
5 Normal Cost	$444.0	$456.4	$473.9
Annual Required Contribution (ARC)			
1 Normal Cost	$444.0	$456.4	$473.9
2 Amortization Cost	$198.3	$151.0	$155.8
3 Annual Required Contribution (1.) + (2.)	$642.3	$607.4	$629.7
4 Interest on unfunded (overfunded) ARC	$45.0	$58.1	$58.1
5 ARC adjustment	($35.6)	($47.4)	($48.8)
6 **Annual OPEB Cost (3.) + (4.) + (5.)**	$651.6	$618.2	$639.0
7 Amount funded			
Paid for premiums	$225.5	$225.3*	$266.9*
Paid to trust	$416.8	$392.9*	$372.1*
Total amount funded	$642.3	$618.2*	$639.0*
8 Unfunded (Overfunded) OPEB Obligation	$775.1	$775.1*	$755.1*

* 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.

The assumptions used for financial accounting purposes were chosen by the plan sponsor. The undersigned actuaries worked with the plan sponsor on assumption selection and the actuaries believe that the assumptions used in this valuation are reasonable for the purposes stated. Given the economic assumptions selected, the costs and actuarial exhibits presented in this report have been prepared in accordance with Generally Accepted Accounting Practices and the requirements of GASB 45.

While the actuaries believe that the assumptions are reasonable for financial reporting purposes, it should be understood that there is a range of assumptions that could be deemed reasonable that would yield different results. Moreover, while the actuaries consider the assumption set to be reasonable based on prior plan experience, it should be understood that future plan experience may differ considerably from what has been assumed due to such factors as the following: retiree group benefits program experience differing from that anticipated by the assumptions; changes in 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); and changes in retiree group benefits program provisions or applicable law. Retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements.

The actuaries certifying this valuation are members of the American Academy of Actuaries and 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.

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

Hay Group
December 10, 2015

III. Actuarial Cost Method

This section explains the actuarial methodology used for the valuation of the post-retirement medical benefits program for the City's current employee and retiree 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. GASB believes that by reflecting OPEBs, governmental employers will improve the relevance and usefulness of their financial reporting, provide important 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 also 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
- 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 Accrued Liability

The actuarial accrued 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 accrued 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 remaining amortization period is 24 years for FY 2015, 23 years for FY 2016 and 22 years for FY 2017. 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 benefits 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 in this Report.

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 healthcare trend rate. Therefore, all other things being unchanged, the normal cost amount is expected to increase at the long-term healthcare cost trend rate, currently 3.84 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 actuarial liability.

Valuation Results

Table 2 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 for themselves and their dependents.

Table 2
Post-Retirement Medical Valuation

Valuation Date	7/1/2014	7/1/2015	7/1/2016
Fiscal year	**2015**	**2016**	**2017**
1. Present Value of Future Benefits			
a. Active	$11,666.1	$12,231.3	$13,041.3
b. Disabled	$899.2	$425.7	$415.0
c. Retired	$855.8	$1,381.5	$1,401.9
d. Total	$13,421.1	$14,038.5	$14,858.2
2. Actuarial Accrued Liability			
a. Active	$6,465.3	$6,360.8	$7,221.1
b. Disabled	$899.2	$425.7	$415.0
c. Retired	$855.8	$1,381.5	$1,401.9
d. Total	$8,220.3	$8,168.0	$9,038.0
3. Assets	$5,331.4	$5,696.9	$6,563.4*
4. Unfunded Actuarial Accrued Liability (2.d.) – (3.)	$2,888.9	$2,471.1	$2,474.6
5. Amortization Payment (30-year level payments)	$198.3	$151.0	$155.8
6. Normal Cost	$444.0	$456.4	$473.9
7. Total Annual Required Contribution (5.) + (6.)	**$642.3**	**$607.4**	**$629.7**
8. Annual OPEB Cost	**$651.6**	**$618.2**	**$639.0**
9. Employer Funding			
Paid for Premiums	$225.5	$225.3*	$266.9*
Paid to Trust	$416.8	$392.9*	$372.1*
Total	$642.3	$618.2*	$639.0*
* Projected			

IV. Actuarial Assumptions

In accordance with GASB 45, selection of all actuarial assumptions, including the healthcare cost trend rate in valuations of post-employment healthcare 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 credible 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 other assumptions, and the combined impact of all assumptions.

The actuarial assumptions used to value 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 healthcare 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 is fully funding the post-retirement medical benefits, we recommend using a discount rate of 7.50 percent, which is the expected long term return on plan assets.

Healthcare Cost Trend Rates

Table 3 below shows the healthcare cost trend rates that were used for this actuarial valuation. The set of healthcare trend rates has an initial healthcare cost trend rate of 5.0 percent and declines gradually to an ultimate rate of 3.84

percent first achieved in 2074. Under these assumptions, a cost of $1,000 in 2015 will increase to a cost of $2,818 in 2035.

The medical trend assumptions used in the valuation were developed using the Society of Actuaries (SOA) Long Term Healthcare 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	2.2%
Rate of Growth in Real Income / GDP per capita	1.6%
Extra Trend due to Technology and other factors	1.4%
Health Share of GDP Resistance Point	25.0%
Year for Limiting Cost Growth to GDP Growth	2075

The SOA Long Term Healthcare 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 increased from the baseline assumption of 1.3 percent to 1.6 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 for the development of this model.

The following table shows the medical cost trends resulting from this model and used in the valuation.

Table 3
Healthcare Cost Trend Rate Assumptions

Year	Annual Trend Rate
2015	5.00%
2016	5.30%
2020	5.43%
2025	5.29%
2030	5.29%
2035	5.29%
2040	5.10%
2050	4.77%
2060	4.60%
2070	4.10%
Ultimate (2074+)	3.84%

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 retiree premium for each of the medical and dental plans. Based on the data provided, we calculated a per capita cost for retirees under 65. Upon reaching age 65 retirees generally become eligible for Medicare, at which point the City ceases to contribute (although the retiree can continue coverage upon paying the full Medicare retiree cost).

Healthcare 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 CIGNA and Kaiser Permanente to provide HMO and POS plans and an HRA plan.

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
2015 Monthly Per Capita City Contribution

	Pre-65 Retirees	
Coverage	**Single**	**Family**
Medical	$413.60	$1,240.80
Dental	14.86	44.33
Total	428.46	1,285.13

To determine the assumed City cost, we weighted the 2015 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, 2015. The values in Table 5, when averaged across the covered group of retirees, equal the values shown in Table 4.

Table 5
2015 Age-Adjusted Valuation Costs

Age	Medical		Dental	
	Single	Family	Single	Family
<50	$348	$1,016	$15	$44
50-54	348	1,016	15	44
55-59	388	1,131	15	44
60-64	446	1,300	15	44
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.

The city contributes slightly less to the HRA plan cost than for the CIGNA or Kaiser plans. The valuation costs to the city for retirees choosing HRA are reduced by 8 to 10 percent.

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 spouses, coverage rates, and participation rates. The complete set of demographic assumptions is included in the Appendix.

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	$2,385.4	$7,031.3	$4,646.0	33.9%	$33,385	13.9%
7/1/2012	2013	$3,152.6	$7,914.1	$4,761.5	39.8%	$33,212	14.3%
7/1/2013	2014	$4,070.5	$7,383.8	$3,313.3	55.1%	$34,517	9.6%
7/1/2014	2015	$5,331.4	$8,220.3	$2,888.9	64.9%	$34,720	8.3%
7/1/2015	2016	$5,696.9	$8,168.0	$2,471.1	69.7%	$36,703	6.7%
7/1/2016	2017	$6,563.4*	$9,038.0	$2,474.6	72.6%	$37,804*	6.5%

Schedule of Employer Contributions
(Amounts in $thousands)

Fiscal Year	Annual OPEB Cost	Actual Contribution	Percentage Contributed
2012	$746.9	$733.3	98.19%
2013	$789.6	$773.6	97.98%
2014	$629.8	$619.5	98.37%
2015	$651.6	$642.3	98.56%
2016	$618.2	$618.2*	100.00%
2017	$639.0	$639.0*	100.00%

*Projected

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 to the ARC (c)	Annual OPEB Cost (d) = (a) + (b) + (c)	Actual Contribution (e)	Increase in net OPEB obligation (f) = (d) – (e)	Net OPEB obligation at end of year (g) = prior year (g) + (f)
7/1/2011	2012	$733.3	$52.4	$(38.9)	$746.9	$733.3	$13.6	$739.6
7/1/2012	2013	$773.6	$66.3	$(50.4)	$789.6	$773.6	$15.9	$755.5
7/1/2013	2014	$619.5	$45.0	$(34.7)	$629.8	$619.5	$10.3	$765.8
7/1/2014	2015	$642.3	$45.0	$(35.6)	$651.6	$642.3	$9.4	$775.1
7/1/2015	2016	$607.4	$58.1	$(47.4)	$618.2	$618.2*	$0	$775.1
7/1/2016	2017	$629.7	$58.1**	$(48.8)**	$639.0**	$639.0**	$0	$775.1

*Projected
**To be revised based on actual contribution for the prior year

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 healthcare coverage sponsored by the City.

The majority of the healthcare 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
- Health Reimbursement Account (HRA).

The following table summarizes the plan provisions under the Cigna HMO and the Kaiser POS (In-network) programs as of January 1, 2015.

Plan Provisions	Cigna	Kaiser POS (In-Network)
General Plan Provisions		
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 Family: $6,000	Individual: $3,500 Family: $9,400
Inpatient Hospital Expenses		
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	Cigna	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	Cigna	Kaiser POS (In-Network)
Prescription Drug Program		
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

The Cigna HRA plan is a self-insured plan. The HRA portion of the deductible is fully funded by the City for employees/families and under-65 retirees (an amount up to $900, $1800, $2700 of the $1350, $2700, $4050 deductible, based on coverage level). The plan is insured through Cigna, with only the HRA portion being funded by the City.

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	2	2
55-59	4	6	10
60-64	8	13	21
Total Pre 65 Retirees	**13**	**21**	**34**
65-69	1	1	2
70-74	0	5	5
75-79	0	1	1
80+	0	4	4
Total	**14**	**32**	**46**

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	4	10	14
25-29	13	22	35
30-34	20	42	62
35-39	22	45	67
40-44	12	38	50
45-49	23	53	76
50-54	32	57	89
55-59	19	39	58
60-64	13	10	23
65-69	5	3	8
70+	1	1	2
Total	**164**	**320**	**484**

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							
	0-4	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30+**	**Total**
<25	10	4	0	0	0	0	0	**14**
25-29	25	7	3	0	0	0	0	**35**
30-34	28	26	5	3	0	0	0	**62**
35-39	30	17	13	4	3	0	0	**67**
40-44	11	12	12	11	4	0	0	**50**
45-49	12	17	21	11	12	3	0	**76**
50-54	18	17	16	10	9	15	4	**89**
55-59	9	11	7	6	10	9	6	**58**
60-64	2	4	2	3	4	4	4	**23**
65+	1	1	3	1	0	1	3	**8**
Total	**146**	**116**	**82**	**49**	**42**	**32**	**17**	**484**

VIII. Annual Required Contribution Projection

The City implemented the Governmental Accounting Standards Board Statement 45 (GASB #45) beginning in fiscal year 2009. GASB #45 requires that the Other Post-employment Benefits (OPEB) be expensed over the employee's working career; the expense in this case is the Annual Required Contribution (ARC). The City started to disclose the total liability for post-retirement medical benefits in their annual financial statements, beginning in FY 2009.

The Annual Required Contribution is the sum of:

- the normal cost, and
- the amortization cost.

For an employer that funds the ARC, the Annual OPEB Cost is equal to the ARC. If, in a previous year, the ARC was not fully funded, or if the ARC was overfunded, the Annual OPEB Cost includes two additional adjustments:

- the interest cost on any funding deficiency / (surplus), and
- an adjustment to reflect amortization of prior unfunded / (overfunded) amounts.

The normal cost is the portion of the post-retirement benefits liability that is attributable to service during the following fiscal year. The amortization cost is the level amount of money, including principal and interest, required to amortize the unfunded liability. GASB limits the amortization period to no more than 30 years. The interest cost is the interest on the unfunded ARC.

If an employer funds the ARC, GASB #45 requires the investment return assumption (discount rate) to be equal to the estimated long-term investment yield on the investments that are expected to be used to finance the payment of benefits.

Funding the post-retirement medical benefits affects the projection in three ways. First, the liabilities are measured using a discount rate of 7.5 percent rather than a much lower discount rate, which would be appropriate if the City were <u>not</u> funding the Annual Required Contribution.

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 and annual OPEB cost. As shown in the forecast projections, funding the post-retirement medical benefits will lessen the increase in operational expenses due to implementation of GASB #45. Table 9 shows the forecast of liabilities and expenses through 2021.

Table 9
Forecast of Liabilities and Expenses

		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
1	**Actuarial Accrued Liability**	$8,168.0	$9,038.0	$9,949.0	$10,916.8	$11,938.5	$13,035.8
a	Assets	5,696.9	6,563.4	7,475.7	8,449.5	9,482.8	10,597.0
b	Unfunded Actuarial Accrued Liability	2,471.1	2,474.6	2,473.3	2,467.2	2,455.7	2,438.8
2	**Normal Cost**	456.4	473.9	492.1	511.0	530.6	550.9
3	**Annual Req.'d Contrib. & OPEB Cost**						
a	Normal Cost	456.4	473.9	492.1	511.0	530.6	550.9
b	Amortization Cost	151.0	155.8	160.7	165.9	171.3	176.9
c	Interest on OPEB Obligation	58.1	58.1	58.1	58.1	58.1	58.1
d	Adjustment to Amortization Cost	(47.4)	(48.8)	(50.4)	(52.1)	(54.1)	(56.2)
e	Total Annual OPEB Cost (AOC)	618.2	639.0	660.6	682.9	705.9	729.7
4	**Funding**						
a	Assets at start of year	5,696.9	6,563.4	7,475.7	8,449.5	9,482.8	10,597.0
b	Paid to trust fund	618.2	639.0	660.6	682.9	705.9	729.7
c	Paid from trust fund	225.3	266.9	297.0	334.5	355.9	417.1
d	Investment earnings	473.6	540.2	610.2	684.9	764.2	849.5
e	Assets at end of year	6,563.4	7,475.7	8,449.5	9,482.8	10,597.0	11,759.1
5	**Unfunded OPEB Obligation**						
a	AOC	618.2	639.0	660.6	682.9	705.9	729.7
b	Employer Contribution						
	Paid to trust for last year GASB Increase	392.9	372.1	363.6	348.4	350.0	312.6
	Paid for premiums	225.3	266.9	297.0	334.5	355.9	417.1
	Total	618.2	639.0	660.6	682.9	705.9	729.7
c	Net OPEB Obligation	775.1	775.1	775.1	775.1	775.1	775.1
6	**Increase in Operational Expenses Due to GASB**						
a	Accrual Cost under GASB (ARC)	618.2	639.0	660.6	682.9	705.9	729.7
b	Paid for Premiums	225.3	266.9	297.0	334.5	355.9	417.1
c	Increase due to GASB #45	392.9	372.1	363.6	348.4	350.0	312.6

(Amounts in $thousands)

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 PAYGO) are an estimate based on the current enrollment and retiree coverage.

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

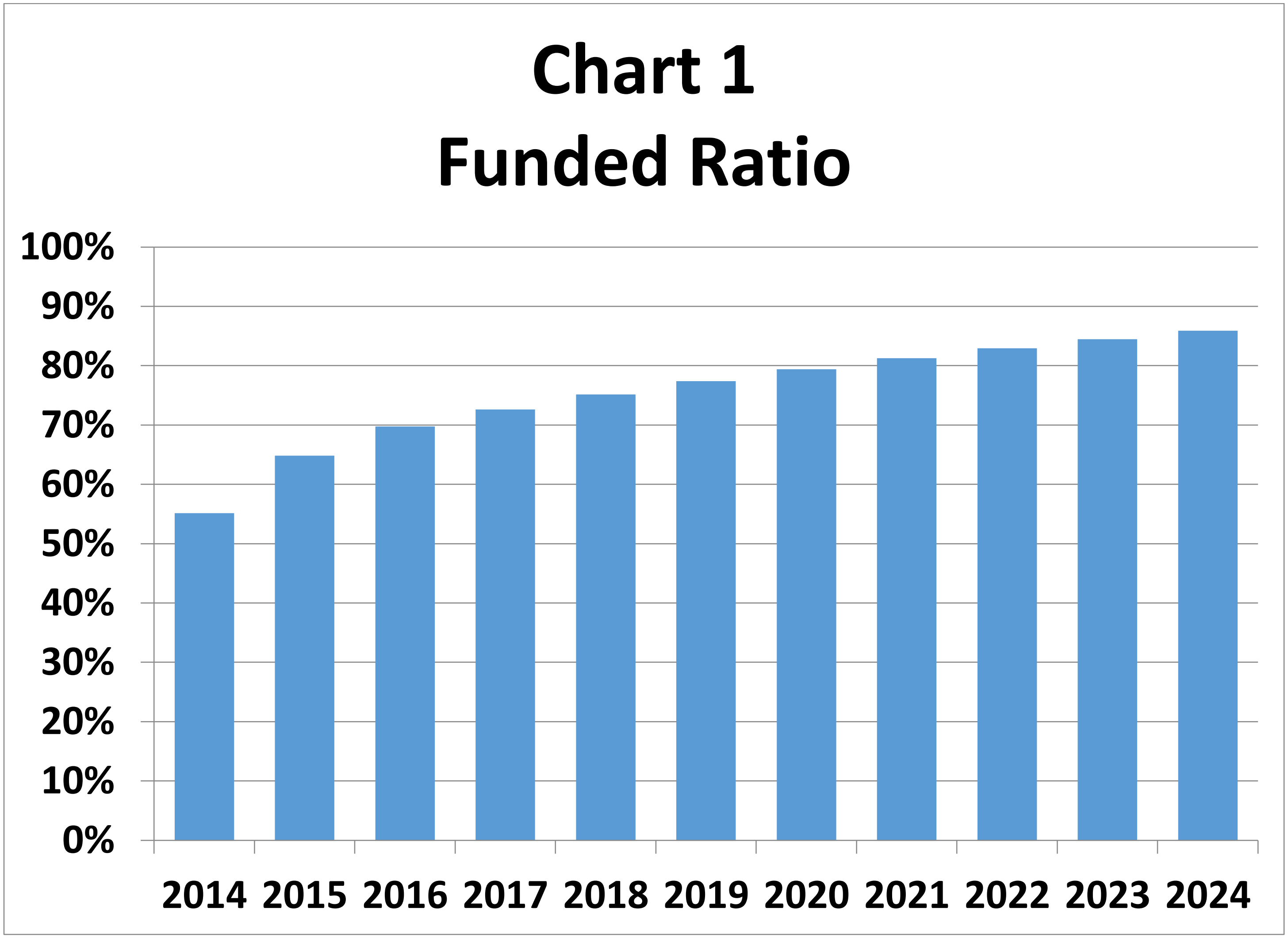
Chart 1
Funded Ratio
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024

Appendix – Actuarial Assumptions

General Assumptions

Valuation Date	July 1, 2015
Discount Rate	7.50%
Salary Growth	4.00%

Eligibility Rules:

Disability Benefit Eligibility:

- Eligibility for retiree medical benefits for disabled employees is attained at Normal Retirement Age. In accordance with GASB 45, the liabilities and costs shown in this report include those associated with all disabled former employees who are receiving medical benefits, regardless of whether the benefits are considered to be provided under the medical program for active employees or the medical program for retired employees.

Retirement Benefit Eligibility:

- Admin and Union Employees: Normal Retirement Eligibility is attained at age 60 with 10 years of service or 85 points for employees hired prior to July 1, 2011. For employees hired on or after July 1, 2011, Normal Retirement Eligibility is attained at age 65 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	0.235	0.138
25	0.308	0.156
30	0.402	0.216
35	0.699	0.381
40	0.919	0.522
45	1.161	0.814
50	1.487	1.189
55	2.469	2.314
60	4.887	4.573
65	9.607	8.78
70	16.413	15.145
75	28.538	23.935
80	52.647	39.866

The rates in the table above are from the RP2000 mortality table, projected to 2020 using Scale AA. The table below shows the mortality rates used in the prior valuation (based on un-projected RP2000 rates).

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

Withdrawal
(Annual Number per 1,000 Participants)

Years of Service	Thrift & Defined Benefit Plan	Police Plan
0	120	200
1	110	200
2	100	100
3	95	60
4	90	50
5	80	40
10	40	10
15	35	10
20	35	10
25	25	0
30	0	0

The above rates are based on the actual withdrawal experience observed during the period January 1, 2006 through December 31, 2010 for the Retirement Plan for Admin employees, Union employees, and Police employees. The tables below show the withdrawal rates used in the prior valuation.

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	All Groups 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
2011 Actual Election	41%	67%	51%	59%	33%	49%
2013 Actual Election	38%	71%	50%	62%	29%	50%
2015 Actual Election	47%	50%	48%	53%	50%	52%

Spouse Age Difference

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

Healthcare Assumptions

Healthcare Cost Trend Rate Assumptions for Selected Years

Year	Annual Trend Rate
2015	5.00%
2016	5.30%
2020	5.43%
2025	5.29%
2030	5.29%
2035	5.29%
2040	5.10%
2050	4.77%
2060	4.60%
2070	4.10%
Ultimate (2074+)	3.84%

2015 Monthly Per Capita City Contribution

Age	Medical		Dental		Total	
	Single	**Family**	**Single**	**Family**	**Single**	**Family**
<50	$348	$1,016	$15	$44	$363	$1,060
50-54	348	1,016	15	44	363	1,060
55-59	388	1,131	15	44	403	1,175
60-64	446	1,300	15	44	461	1,345
65+	-	-	-	-	-	-

City contributions for retirees electing HRA coverage are 10 percent less than the contributions for the HMO and POS plans shown in the table above for single coverage and are 8 percent less for family coverage.

Changes in Actuarial Assumptions Since Prior Valuation

Claims Costs
Updated using actual 2015 Medical and Dental costs

Medical Trends
Updated using the Society of Actuaries Long Term Healthcare Cost Trend Model

Glossary

Annual OPEB Cost (AOC): An accrual-basis measure of the periodic cost of an employer's sponsorship of (or 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 of the valuation.

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 drug costs or a percentage of healthcare premiums).

Employer's Contributions: Contributions made in relation to the annual OPEB Cost (AOC). An employer has made a contribution in relation to the AOC 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 The rate used to adjust a series of future payments to reflect the time value of money

(Discount Rate):

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 the total 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 under the Actuarial Cost Method.

Other Post-employee 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 (PAYGO): 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.