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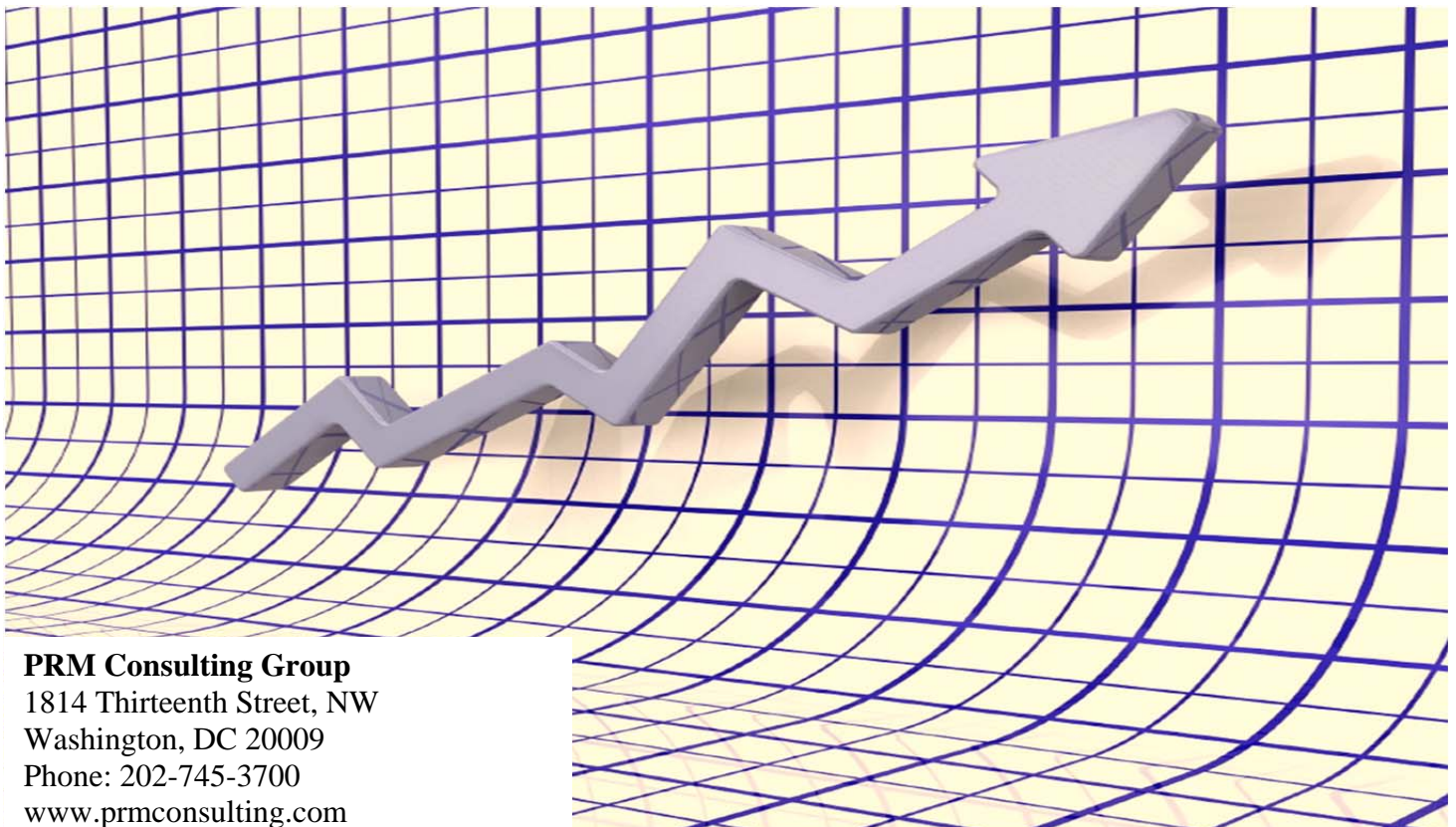
# ACTUARIAL VALUATION OF POSTRETIREMENT LIFE & HEALTH PLANS

District of Columbia  
Office of the Chief Financial Officer  
Contract #: CFOPD-13-C-017

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September 2013

**prm** CONSULTING  
GROUP



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**All actuarial terms used in this report have been defined in Section 8 – *Glossary of Actuarial Terms* for your reference. The first instance of these terms have been bolded.**

# Executive Summary

## SECTION 1 - Executive Summary

PRM Consulting Group (“PRM”) has been retained by the District of Columbia (the “District”) to perform an actuarial valuation of the District of Columbia Annuitants’ Health and Life Insurance Employer Contribution Plan (the “Plan”) as of September 30, 2012. The purpose of the valuation is to provide an estimate of the actuarial accrued liabilities of the Plan and the Annual Required Contribution in accordance with the Statements of the Governmental Accounting Standards Board (GASB) numbered 43 and 45. Use of the valuation results for other purposes may not be appropriate.

The immediate prior valuation undertaken for the Plan was performed by another actuarial firm. A copy of the prior valuation reports was provided to us by the District, and for convenience, entries based on the prior actuarial valuation results are included in this report.

A summary of key valuation results for the current and prior year are shown as follows:

Valuation Date	September 30, 2012	September 30, 2011
Number of Active Employees Included in valuation	21,017	22,420
Number of Retired Employees Included in valuation	555	521
Actuarial Accrued Liability (\$000s)	\$919,700	\$866,600
Value of Plan Assets (\$000s)	\$693,300	\$511,500
Unfunded Actuarial Accrued Liability (\$000s)	\$226,400	\$355,100
Annual Required Contribution (ARC) (\$000s)	\$ 85,200	\$ 95,500
Net OPEB Obligation (\$000s)	\$ 32,206	\$ 45,606

Our valuation report provides further detail regarding the valuation results and describes the models and actuarial assumptions used to determine the valuation results. Specifically, the following information is provided:

- A description of the requirements of the Statement of the GASB No. 45, including a discussion of the components of Plan costs and liabilities that must be reflected in the District’s Consolidated Annual Financial Report (CAFR);
- A presentation of detailed valuation results, shown separately for the four component groups (Fire, Police, Teachers and General Employees), as well as in total for all groups.
- A summary of actuarial assumptions used in the valuation, including assumptions regarding general inflation, medical inflation, mortality, retirement, disability, termination of service, salary increase, plan participation, etc. PRM reviewed this assumption set and received its approval by representatives of the District Office of the Chief Financial Officer as part of the valuation project;

## Executive Summary

- A presentation of Plan CAFR disclosure information, including the development of the ARC, Schedule of Funding Progress, Schedule of Employer Contributions and the development of the Annual OPEB Cost (AOC) and Net OPEB Obligation, and other disclosure items;
- A summary of the principal Plan Provisions that were valued as part of the valuation. Prior to completion of the valuation, this Summary was shared with and approved by the District Human Resources office to ensure that the Plan features had been identified correctly.
- A summary of the participant data used in the valuation. Data was received from a number of sources, including the District Human Resources Department and the District of Columbia Retirement Board. We did not perform a detailed audit or reconciliation of participant data. We did, however, review the data to ensure that it was reasonable and appropriate for use in the valuation.

It should be noted that, following the production of valuation results, it was determined that data was missing for some covered employees of the University of the District of Columbia (UDC). It was later determined that 400 employees had been excluded, and it is unclear whether these UDC employees had been included in prior valuations. Given the fact that actuarial valuations are necessarily broad estimates of future Plan costs and liabilities, along with the relatively small number of UDC employees found to be missing from initial 2012 valuation results, the valuation results were not re-computed including the UDC employee group. The impact of this exclusion is not significant. Rather, the knowledge gained through this exercise will ensure that UDC employees will be included in subsequent valuations for the Plan.

### *Comparison of Results to Prior Valuation*

The active Plan participant count is down approximately 6% from that of the prior valuation. Also, the value of Plan assets is up significantly from the prior valuation, reflecting the fact that the District made a contribution that exceeded the ARC for FYE 2012, and the fact that the Plan assets returned in excess of the assumed 7% rate for FYE 2012. Both of these factors have served to decrease the components of the ARC, namely the Normal Cost and the amortization of the Unfunded **Actuarial Accrued Liability** (AAL). Thus, a lower ARC has resulted for FYE 2013, versus that for FYE 2012.

While the aforementioned changes to the participant count and plan assets are the major drivers of the change in valuation results since the prior valuation, there have been some changes in plan provisions and **actuarial assumptions** since the prior valuation also. A full description of the current plan provisions is contained in Section 6 of this report, and a full description of the actuarial assumptions used in the 2012 valuation is contained in Section 4 of this report.

## Executive Summary

### *Cadillac Tax*

The Patient Protection and Affordable Care Act (the ACA), which made sweeping reforms to health care coverage access, includes a 40 percent per year excise tax (“Cadillac Tax”) on health coverage providers beginning in 2018 to the extent that the aggregate value of employer-sponsored health coverage for an employee exceeds a threshold amount. The Cadillac Tax applies to all employer-sponsored group health plans, including governmental plans. Regulatory or other official guidance regarding the calculation and application of the Cadillac Tax has not yet been issued, and thus future guidance could significantly alter the conclusions discussed herein. The threshold dollar limits for 2018 are:

- \$10,200 for an employee with self-only coverage, and
- \$27,500 for all other coverages (e.g., employee and spouse, family)

Certain adjustments are allowed for these thresholds, including inflation adjustments that can occur if inflation exceeds expected levels prior to 2018, and adjustments are allowed for retirees as well as high-risk occupations such as fire and police.

As part of our 2012 valuation, we performed a quantitative analysis to assess if or when the Cadillac tax might apply to the Plan. To make this analysis, we projected both age-based and age-blended Plan costs into the future using the valuation medical inflation assumptions. The results of this analysis were that the Cadillac tax could apply as early as 2018 for some age groups with single coverage, and could apply as late as 2048 for other groups with family coverage.

Due to the lack of specific guidance as to how the Cadillac tax is to be applied, particularly with respect to plans covering retirees, no specific provision was made in our 2012 valuation regarding Plan liabilities for the Cadillac tax. Obviously, if the Cadillac tax were to apply, the costs associated with the Plan would be inefficient from the perspective of both the District and the retiree, and Plan participation rates would be significantly be affected. Thus, it is likely that the actuarial liability associated with any increases in future Plan costs due to the application of the Cadillac tax would be more than offset by decreases in such liabilities due to decreases in the future Plan participation rates.

As guidance is forthcoming over the next several years regarding specifics the Cadillac tax application, the design of the Plan and future valuations of Plan liabilities will be need to be adjusted to reflect such guidance. In the meantime, we have included this discussion of our current analysis regarding the Cadillac tax in an effort to highlight the risk to the Plan and the District of this provision of the ACA.

## Executive Summary

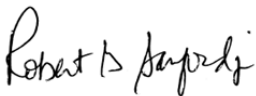
### *Actuarial Certification*

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. They are available to answer questions or to provide further information regarding the contents of this report.

Respectfully submitted,



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## Description of GASB 45

### SECTION 2 - DESCRIPTION OF GASB 45

#### Governmental Accounting Standards Board (GASB)

In June, 2004, the Governmental Accounting Standards Board (GASB) issued its long awaited standard on *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions* (OPEBs).

The standard covers both post-retirement and post-employment benefits. The types of benefits covered include:

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

However, if any of these benefits are provided through a pension plan they would be accounted for under GASB 67 — otherwise they will be accounted for under GASB 45.

The effective date for the standard depended on the size of the employer. For entities with revenues in FY 2000 over \$100 million, the effective date was the fiscal year beginning after December 15, 2006. The District adopted the standard with the FY 2008 financial reporting year beginning October 1, 2007.

The purpose of the standard is to treat post-retirement 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 appropriate accrual accounting for OPEBs 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 governmental employers to adopt accrual accounting, the standard sets out a broad range of options for employers. These options include the ability to choose, within limits, the:

- **Actuarial cost method;**
- Period for amortizing the **unfunded actuarial accrued liability;**
- Measurement date; and
- Frequency of valuations.



## Description of GASB 45

The most common and most expensive of the OPEBs are retiree medical benefits, which provide a valuable component in employees' retirement benefits program. Most governmental employers fund their retiree medical plans on a pay-as-you-go (PAYG) basis. The GASB standard does not require employers to advance fund these benefits. However, certain aspects of the measurement do provide benefits for employers that choose to advance fund the OPEB liability.

### Actuarial Cost Method

A fundamental principle in financing the liabilities of any retirement program is that the cost of the benefits should be related to the period during which benefits are earned, rather than to the period of benefit distribution. There are several acceptable actuarial methods prescribed by the GASB standard as acceptable. The District has selected the Entry Age Normal (EAN) method.

The Entry Age Normal actuarial cost method was used to value the plan's actuarial liability and to set the **normal cost**. Under this method, the normal cost rate is the level percentage of pay contribution which would be sufficient to fund the plan benefit if it were paid from each member's date of hire until termination or retirement.

### Actuarial Accrued Liability

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

The difference between the actuarial accrued liability and the funds accumulated as of the valuation date is referred to as the unfunded actuarial accrued liability. Unfunded actuarial accrued 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 inadequate because of losses, changes in assumptions, changes in the funding method, or benefit improvements. The unfunded actuarial accrued liability equals the actuarial accrued liability less the value of the fund.



## Description of GASB 45

### Development of the Normal Cost

The normal cost represents the benefits earned during the current reporting period. As stated in the previous section, the Entry Age Normal actuarial cost method is used in determining the normal cost.

### Funding Policy

With adoption of GASB 45, the District established a restricted trust and began making payments to the trust. Since adoption of GASB 45 the District has contributed 99% of the Annual Required Contribution, including the contribution made for FYE 2013. The District government intends to fully fund the ARC with annual appropriations.

### Discount Rate

The valuation results are dependent on the discount rate. GASB 45 specifies that the assumed discount rate should be based on the rate of return expected to be earned by the assets used to pay the benefits. As the District has established a trust, annual funding to the trust far exceeds benefit payments made from the trust, with assets now close to \$700 million invested in a diversified portfolio, the District expects the assets to be used to pay all benefits so the valuation discount rate used is 7 percent, the same rate as was used in the prior year valuation.

## The Valuation Results

### SECTION 3 - The Valuation Results

Table 3.1 shows the AAL for actives and retirees, the normal cost, the allocated assets and the resulting unfunded actuarial accrued liability (UAAL) as of September 30, 2012 (valuation date) at a 7.0% discount rate.

The table shows the results for four separate populations:

- Firefighters
- Police
- Teachers, and
- General Employees

<b>Table 3.1</b>					
<b>Actuarial Accrued Liabilities &amp; Plan Assets</b>					
<b>(in dollars)</b>					
<b>AAL</b>	<b>Fire</b>	<b>Police</b>	<b>General</b>	<b>Teachers</b>	<b>Total</b>
Active Employees	\$ 126,125,605	\$ 320,595,299	\$ 314,119,159	\$ 79,104,713	\$ 839,944,776
Retired Employees	4,215,752	24,873,333	18,602,865	32,068,804	79,760,754
Total AAL	130,341,357	345,468,632	332,722,024	111,173,517	919,705,530
Plan Assets*	98,261,231	260,440,538	250,831,175	83,811,056	693,344,000
UAAL	32,080,126	85,028,094	81,890,849	27,362,461	226,361,530

\* Allocated to employee subgroups (i.e. Fire, Police, etc.) in proportion to each subgroup's AAL

Table 3.2 shows the computation of the Annual Required Contribution (ARC) for the fiscal year ending September 30, 2013. The first component of the ARC is the Normal Cost, which is the annual plan cost attributable to participant's service rendered during the current fiscal year. The second component of the ARC is the amortization of the UAAL. The District has elected to amortize the UAAL over an open, 30-year period, utilizing an amortization method whereby the annual **amortization payment** is designed to be a level percentage of anticipated payroll.

<b>Table 3.2</b>					
<b>Annual Required Contribution</b>					
<b>(in dollars)</b>					
	<b>Fire</b>	<b>Police</b>	<b>General</b>	<b>Teachers</b>	<b>Total</b>
Normal Cost	\$ 8,596,949	\$ 20,538,711	\$ 37,599,660	\$ 5,126,726	\$ 71,862,046
Amortization of UAAL	1,883,915	4,993,300	4,809,064	1,606,869	13,293,148
Total	10,480,864	25,532,011	42,408,724	6,733,595	85,155,194

## Actuarial Assumptions

### SECTION 4 - Actuarial Assumptions

The selection of all actuarial assumptions used in valuing a post-retirement health care plan, including the health care cost trend rate, 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 each other assumption, and the combined impact of all the assumptions.

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

#### Economic Assumptions

The two economic assumptions used in the 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 payments of benefits. These investments 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.

The discount rate chosen for the September 30, 2012 valuation is 7%, which is unchanged from the prior valuation.

##### *Health Care Cost Trend Rates*

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.

## Actuarial Assumptions

The following assumptions were used as input variables into this model:

Actuarial Assumptions	
Variable	Rate
Rate of Inflation	3.0%
Rate of Growth in Real Income / GDP per capita	1.0%
Income Multiplier for Health Spending	1.0
Extra Trend due to Technology	
2016 to 2025	1.1%
2026 to 2035	1.0%
2036 & later	0.9%
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 long-run baseline projection and input variables have been developed under the guidance of the SOA Project Oversight Group.

Table 4.1 shows the medical cost trends used in the valuation and are an output of the SOA Long-Run Medical Cost Trend Model, version 12.2. The set of health care trend rates has an initial health care cost trend rate of 8.0 percent for cost prior to Medicare eligibility and 6.5 percent for costs after Medicare eligibility. The rates decline gradually, over 70 years, to an ultimate rate of 4.0 percent.

Table 4.1 Health Care Cost Trend Rate		
FYE	Annual Trend PreMedicare	Annual Trend PostMedicare
2013	8.0%	6.5%
2014	7.5%	6.0%
2015	7.0%	6.0%
2020	5.1%	5.1%
2030	4.9%	4.9%
2040	4.8%	4.8%
2050	4.7%	4.7%
2075	4.4%	4.4%

## Actuarial Assumptions

### *Salary Increases and Inflation*

The base inflation rate used in the valuation was 3.00%. Merit increases are additional and are shown in Table 4.2 below.

<b>Table 4.2</b>			
<b>Salary Increases</b>			
<b>Service</b>	<b>Teachers</b>	<b>Police</b>	<b>Fire</b>
0	4.00	5.00	2.50
5	4.00	3.56	2.50
10	3.00	2.58	2.50
15	0.50	2.31	2.50
20	0.20	2.50	2.50
30	0.20	0.50	2.50

## HEALTHCARE COST ASSUMPTIONS

Table 4.3 shows the valuation assumptions used in the September 30, 2012 valuation. The table shows the total monthly health care cost by age, before taking into account any retiree premiums paid by the participants.

The medical cost reduces substantially at age 65 when retirees become eligible for Medicare and Medicare is primary for their hospital and physician visit services.

<b>Table 4.3</b>										
<b>Valuation Assumptions</b>										
<b>Actives &amp; Retirees &lt;65</b>	<b>Aetna HMO</b>		<b>Aetna PPO</b>		<b>Kaiser</b>		<b>UHC POS</b>		<b>Aetna CDHP</b>	
	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>
<b>&lt;30</b>	362	362	366	366	331	331	328	328	313	313
<b>30-39</b>	379	379	384	384	347	347	344	344	329	329
<b>40-44</b>	428	428	434	434	393	393	388	388	371	371
<b>45-49</b>	495	495	502	502	454	454	449	449	429	429
<b>50-54</b>	590	590	598	598	541	541	534	534	511	511
<b>55-59</b>	716	716	726	726	656	656	649	649	621	621
<b>60-64</b>	895	895	907	907	820	820	811	811	776	776
<b>65+</b>	1036	1036	1049	1049	949	949	938	938	898	898
<b>Retirees &gt;65</b>										
<b>65-69</b>	439	439	444	444	402	402	397	397	380	380
<b>70-74</b>	484	484	490	490	444	444	439	439	420	420
<b>75-79</b>	529	529	536	536	485	485	480	480	459	459
<b>80-84</b>	544	544	552	552	499	499	493	493	472	472
<b>85+</b>	544	544	552	552	499	499	493	493	472	472

# Actuarial Assumptions

## Demographic Assumptions

The demographic assumptions include the rate of mortality, the rate of withdrawal, the rate of retirement, and the rate of disability. Ancillary demographic assumptions include the age of female spouses, coverage rates, and participation rates. The complete set of demographic assumptions is shown below.

### *Mortality Rates*

The RP-2000 Mortality Table with Projection Scale AA projected to 2015 was used for the valuation, with a setback of 3 years for female General and Teacher participants and a set forward of 1 year for female Police and Fire participants.

### *Withdrawal Rates*

The withdrawal rates for participants in each group vary by age and service with the District. Sample rates are shown in the tables below.

<b>Table 4.4a</b>			
<b>Teachers/General</b>			
<b>Age</b>	<b>Years of Service</b>		
	<b>&lt;4</b>	<b>4-9</b>	<b>10+</b>
20	25.00%	0.00%	0.00%
25	23.50%	20.00%	0.00%
30	22.00%	16.00%	3.75%
35	20.50%	14.00%	3.75%
40	19.00%	12.00%	3.75%
45	17.50%	10.00%	3.75%
50	16.00%	10.00%	3.75%
55	14.50%	10.00%	3.75%
60	13.00%	10.00%	3.75%
65+	0.00%	0.00%	0.00%

## Actuarial Assumptions

Table 4.4b Police				
Age	Male		Female	
	<3 years of service	3+ years of service	<3 years of service	3+ years of service
20	10.00%	0.00%	10.00%	0.00%
25	10.00%	6.00%	10.00%	2.50%
30	10.00%	4.25%	10.00%	3.50%
35	10.00%	2.50%	10.00%	2.00%
40	10.00%	1.75%	10.00%	1.50%
45	10.00%	1.25%	10.00%	1.25%
50	10.00%	1.25%	10.00%	1.25%
55	10.00%	1.25%	10.00%	1.25%
60+	0.00%	0.00%	0.00%	0.00%

Table 4.4c Fire Fighters		
Age	< 2 years of service	2+ years of service
20	9.00%	3.50%
25	9.00%	3.50%
30	9.00%	2.00%
35	9.00%	1.00%
40	9.00%	1.00%
45	9.00%	1.50%
50	9.00%	1.50%
55	9.00%	0.00%



## Actuarial Assumptions

### Disability Rates

The disability rates for each group vary by age. Sample rates are shown in the table below:

Table 4.5 Disability Rates				
	Teachers/ General	Police		Fire Fighters
Age	Unisex	Male	Female	Unisex
20	0.03%	0.02%	0.04%	0.01%
25	0.03%	0.05%	0.08%	0.02%
30	0.05%	0.10%	0.12%	0.15%
35	0.07%	0.22%	0.28%	0.20%
40	0.09%	0.25%	0.40%	0.35%
45	0.15%	0.30%	0.62%	0.45%
50	0.22%	0.40%	0.70%	0.52%
55	0.32%	0.60%	0.75%	0.60%
60	0.40%	0.80%	0.90%	0.70%
65	0.00%	0.00%	0.00%	0.00%

### Retirement Rates

The retirement rates for each group vary by age and service with the District. Sample rates are shown in the tables below.

Table 4.6a General	
Age	Rate
62	50.0%
65	100.0%

Table 4.6b Teachers		
	<30 years of service	30+ years of service
50	2.50%	2.50%
55	6.00%	33.00%
60	27.00%	25.00%
65	20.00%	25.00%
70	30.00%	30.00%
75	100.00%	100.00%

## Actuarial Assumptions

<b>Table 4.6c Police</b>					
<b>Hired Prior to February 15, 1980</b>		<b>Hired Prior to November 10, 1996</b>		<b>Hired on or after November 10, 1996</b>	
<b>Service</b>	<b>Rate</b>	<b>Service</b>	<b>Rate</b>	<b>Service</b>	<b>Rate</b>
20-24	12.5%	20-24	0.0%	20-24	0.0%
25	22.0%	25	22.0%	25	22.0%
30	15.0%	30	15.0%	30	15.0%
35+	20.0%	35+	20.0%	35+	20.0%
		<b>Minimum Retirement Age = 50</b>			
<b>100% of Police are assumed to retire at Age 65</b>					

<b>Table 4.6d Fire Fighters</b>					
<b>Hired Prior to February 15,1980</b>		<b>Hired Prior to November 10,1996</b>		<b>Hired After November 10, 1996</b>	
<b>Service</b>	<b>Rate</b>	<b>Service</b>	<b>Rate</b>	<b>Service</b>	<b>Rate</b>
20-29	12.5%	25-29	12.5%	25-29	12.5%
30	20.0%	30	20.0%	30	20.0%
31	30.0%	31	30.0%	31	30.0%
32+	40.0%	32+	40.0%	32+	40.0%
		<b>Minimum Retirement age = 50</b>			
<b>100% of Firefighters are assumed to retire at Age 60</b>					

### *Participation Rates for the Healthcare Benefit Plan--Participants*

95 percent of Police and Fire participants, 80 percent of General participants, and 75 percent of Teacher participants are assumed to elect the Healthcare Benefit Plan.

### *Participation Rates for the Healthcare Benefit Plan--Spouses*

70 percent of Police and Fire participant's spouses, 50 percent of male General participant's spouses, 25 percent of female General participant's spouses, 45 percent of male Teacher participant's spouses and 30 percent of female Teacher participant's spouses are assumed to elect the Healthcare Benefit Plan.

### *Spousal Age Assumption*

Husbands are assumed to be 3 years older than wives.

## Financial Accounting Information

### SECTION 5 - Financial Accounting Information

In addition to establishing the Annual Required Contribution (ARC), this report shows the progress toward funding of the plan benefits. This section includes a schedule of the funding progress, which is a statement of disclosure to report the Required Supplementary Information in compliance with Governmental Accounting Standards Board (GASB) Statement No. 43.

Also included is a schedule of employer contributions. This schedule compares the expected contribution to the plan with the Annual Required Contribution. Since there is a lag-period between the determination of the ARC and the determination of the amounts actually funded, the tables show estimated amounts based on the funding policy as of the measurement date.

GASB 45 accounting standard sets out the requirements for governmental employers to determine the Annual Required Contribution for the postretirement benefit plan costs. GASB 43 sets out the required disclosures for the plans.

The following tables have been prepared as of the measurement date and include historical information from the District's financial reports.

#### GASB 43 Disclosures

Table 5.1 shows the schedule of funding progress for the District. The District has made substantial progress in funding the obligation with the funded ratio increasing from 59% as of September 30, 2012 to 75.4% as of September 30, 2013.

<b>Table 5.1</b> <b>Schedule of Funding Progress for Fiscal Year Ending September 30, 2013</b> (dollars in millions)						
Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Liability	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
	(a)	(b)	(c) = (b-a)	(d) = (a)/(b)	(e)	(f) = (c) / (e)
2007	\$164.2	\$600.1	\$435.9	27.4%	\$1,090.9	39.96%
2008	\$219.7	\$745.2	\$525.5	29.5%	\$1,107.1	47.47%
2009	\$309.1	\$625.9	\$316.8	49.4%	\$1,579.9	20.05%
2010	\$424.3	\$784.9	\$360.6	54.1%	\$1,544.5	23.35%
2011	\$511.5	\$866.6	\$355.1	59.0%	\$1,559.8	22.77%
2012	\$693.3	\$919.7	\$226.4	75.4%	\$1,399.1	16.18%

## Financial Accounting Information

Table 5.2 shows the calculation Annual Required Contribution (ARC). FYE 2012 amounts are based on information provided to us by the District and valuations performed by the prior actuary.

<b>Table 5.2</b>		
<b>Development of the ARC</b>		
<b>(\$millions)</b>		
	<b>FYE 2012</b>	<b>FYE 2013</b>
Normal Cost	\$78,100	\$71,900
Amortization of Unfunded Actuarial Accrued Liability	\$17,400	\$13,300
<b>Total</b>	<b>\$95,500</b>	<b>\$85,200</b>

Table 5.3 shows the Schedule of Employer Contributions, which compares the annual ARC with the actual District contributions to the plan.

<b>Table 5.3</b>			
<b>Schedule of Employer Contributions</b>			
<b>(dollars in millions)</b>			
<b>Fiscal Year Ending Sep 30</b>	<b>Annual Required Contribution</b>	<b>Employer Contribution</b>	<b>Percentage Contributed</b>
	<b>(a)</b>	<b>(b)</b>	<b>(c) = (b) / (a)</b>
2008	\$103.40	\$110.80	107.2%
2009	130.90	81.10	62.0%
2010	92.19	90.70	98.4%
2011	94.17	94.20	100.0%
2012	95.50	109.84	115.0%
2013	85.20	107.80	126.5%

## Financial Accounting Information

Table 5.4 provides the development of the Net OPEB Obligation that has occurred since the adoption of the GASB standards for FYE 2008. Table 5.4 provides the actuarial information that will be included in the District's CAFR. The table can be completed only after the actual employer contribution has been made.

<b>Table 5.4</b> <b>Development of Net OPEB Obligation (Asset)</b> <b>(dollars in millions)</b>							
Actuarial Valuation Date	ARC	Interest on Unfunded ARC	Adjustment of the ARC	Annual OPEB Cost	Actual Contribution	Increase (decrease) in OPEB obligation	Net OPEB obligation (asset) at end of year
	(a)	(b)	(c)	(d) = (a) + (b) + (c)	(e)	(f) = (d) - (e)	(g) = prior year (g) + (f)
9/30/2007	\$103.4	\$0.0	\$0.0	\$103.4	\$110.8	(\$7.4)	(\$7.4)
9/30/2008	\$130.9	(\$0.5)	\$0.2	\$130.6	\$81.1	\$48.7	\$42.1
9/30/2009	\$92.2	\$3.1	(\$1.9)	\$93.3	\$90.7	\$2.6	\$44.7
9/30/2010	\$94.2	\$3.1	(\$2.2)	\$95.1	\$94.2	\$0.9	\$45.6
9/30/2011	\$95.5	\$3.2	(\$2.3)	\$96.4	\$109.8	(\$13.4)	\$32.2
9/30/2012	\$85.2	\$2.2	(\$1.9)	\$85.5	\$107.8	(\$22.3)	\$9.9

Finally, the following table 5.5 includes a description of the primary assumptions and methods that were used in the valuation, to be included as part of the Required Supplementary Information in the District's CAFR:

<b>Table 5.5</b> <b>Summary of Principal Assumptions</b>	
Valuation Date:	September 30, 2012
Actuarial Cost Method:	Entry Age Normal, Level Percentage of Pay
Amortization Method:	Level percentage of pay, open
Amortization Period:	30 years
Asset Valuation Method:	Market Value
<i>Actuarial Assumptions:</i>	
Investment Return/Discount Rate:	7% per annum
Rate of Salary Increase:	3.75% (plus merit scale)
Rate of Medical Inflation:	Pre-Medicare: 8.0%, grading down to 4.0% Post-Medicare: 6.5%, grading down to 4.0% Both assumptions utilize the Society of Actuaries Getzen Medical Trend Model, and reach the ultimate medical inflation rate in 2099.

## Summary of Plan Provisions

### SECTION 6 - Summary of Plan Provisions

**Eligibility:** Employees hired after September 30, 1987 are eligible for post-retirement health and life insurance coverage if they have been continuously enrolled in a District health benefit plan for at least 5 years and they:

1. Have at least 10 years of creditable District service and retire under the District Retirement Benefit Program, the Teachers' Retirement System, the Judges' Retirement System or the Teachers' Insurance and Annuity Association program; or
2. Retire under the Police Officers' & Firefighters' Retirement Plan with at least 10 years of creditable District service (5 years if hired before 11/10/1996)

Teachers, Police Officers and Firefighters become eligible for retirement in accordance with the following:

Eligibility				
Plan	Criteria to qualify for retirement			
	Unreduced		Reduced	
	Age	Service	Age	Service
Teachers (note: service must include 5 years of school service)	55*	30	50	20
	60	20	Any	25
	62	5		
Police & Firefighters – hired before 11/10/1996**	50	25	NA	NA
	60	5	NA	NA
Police & Firefighters – hired on or after 11/10/1996	Any	25	NA	NA
	60	None	NA	NA

\*If hired on or after 11/1/1996, there is no age requirement if have 30 years of service

\*\*If hired prior to 2/15/1980, retirement available after 20 year of service, regardless of age

Surviving spouses may continue healthcare coverage upon the retiree's death.

## Summary of Plan Provisions

**Plan of Benefits:** Medical coverage is provided through one of five Plans, offered by either Aetna, Kaiser Permanente or United Healthcare. The plans that are available for active employees are available to retirees. There is no change in the plans available once a retiree reaches Medicare eligibility, although Medicare becomes primary once Medicare eligibility is reached. The principal benefit provisions of the available plans are summarized as follows:

	Plan of Benefits				
	Aetna CDHP	Aetna PPO	Aetna HMO	Kaiser Permanente HMO	United Healthcare Choice
Copay – Office Visits	NA	\$15 Non-specialist; \$30 Specialist (deductible waived)	\$10 PCP; \$20 Specialist	\$10 PCP; \$20 Specialist	\$10 PCP; \$20 Specialist
100% Coverage for Routine Physicals, Gynecology Exams and Child Well Exams?	Yes	Yes	Yes	No	No
Deductible	\$1,250 individual/\$2,500 family in-network	\$750 individual/ \$1,500 family in-network	None	None	None
Coinsurance	15%	15%	NA	NA	NA
Annual Maximum Out-of-Pocket	\$6,050 individual/\$12,100 Family	\$1,500 individual/ \$3,000 Family	\$3,500 individual/ \$9,400 Family	\$3,500 individual/ \$9,400 Family	\$3,500 individual/ \$9,400 Family
Out-of-Network Benefit	Deductibles are doubled; 40% coinsurance	Deductibles, out-of-pockets are doubled; 25% coinsurance	None, other than ER	None, other than ER	None, other than ER
Hospital Inpatient Copay/Coinsurance	15% after deductible	0% after deductible	\$100 Copay	\$100 Copay	\$100 Copay
Outpatient Surgery Copay/Coinsurance	15% after deductible	0% after deductible	\$50 Copay	\$50 Copay	\$50 Copay
Emergency Room	15% after deductible	\$100 Copay (waived if admitted)	\$50 Copay	\$50 Copay	\$50 Copay
Outpatient Mental Health and Substance Abuse Copay	15% after deductible	0% after deductible (inpatient); \$15 copy with deductible waived (outpatient)	\$10 Visit	\$10 Visit/ \$5 Group visit	\$10 Visit
Pharmacy copay (30-day supply)	Generic: \$5; Formulary: \$10 Non-formulary: \$25 (in-network, after deductible) Out-of-network 50% of cost after in-network copay and after deductible	Generic: \$10; Formulary: \$20 Non-formulary: \$40 No out-of-network pharmacy benefit is provided	Generic: \$8-\$20; Formulary: \$18-\$40 Non-formulary: \$33-\$55	Generic: \$8-\$20; Preferred: \$18-\$40 Non-preferred: \$33-\$55	Tier 1: \$16-\$20; Tier 2: \$36-\$40 Tier 3: \$55-\$66



## Summary of Plan Provisions

### Retiree Contributions:

#### General

Retirees under the age of 62 pay the full aggregate active-life rate for coverage. Thus, prior to age 62, the retiree healthcare plan is an access-only plan. Once a retiree attains age 62, the retiree pays a portion of the aggregate, active-life rate, as determined under the following schedule:

General		
Annuitant's Years of Service	Percentage of Plan Aggregate Cost Rate Paid By Retiree for:	
	Retiree Coverage	Dependent/Survivor's Coverage
Less than 10	100%	100%
10-25	75% minus 2.5% for each year of service in excess of 10	80% minus 2.5% for each year of service in excess of 10
26-29	75% minus 2.5% for each year of service in excess of 10	40%
30 or more	25%	40%

#### Teachers

For annuitants who are injured in the line of duty, the retiree contributes 25% of the plan aggregate, active-life rate for both retiree and dependent coverage, regardless of years of service.

Teachers		
Annuitant's Years of Service	Percentage of Plan Aggregate Cost Rate Paid By Retiree for:	
	Retiree Coverage	Dependent/Survivor's Coverage
Less than 10	100%	100%
10-25	75% minus 2.5% for each year of service in excess of 10	80% minus 2.5% for each year of service in excess of 10
26-29	75% minus 2.5% for each year of service in excess of 10	40%
30 or more	25%	40%

## Summary of Plan Provisions

### Police & Fire

For annuitants who are injured in the line of duty, the retiree contributes 25% of the plan aggregate, active-life rate for both retiree and dependent coverage, regardless of years of service.

<b>Police &amp; Fire</b>		
<b>Annuitant's Years of Service</b>	<b>Percentage of Plan Aggregate Cost Rate Paid By Retiree for:</b>	
	<b>Retiree Coverage</b>	<b>Dependent/Survivor's Coverage</b>
<i>Hired before 11/10/1996</i>		
Less than 5	100%	100%
5 or more	25%	40%
<i>Hired on or after 11/10/1996</i>		
Less than 10	100%	100%
10-21	70% minus 3.0% for each year of service in excess of 10	75% minus 3.0% for each year of service in excess of 10
22-24	70% minus 3.0% for each year of service in excess of 10	40%
25 or more	25%	40%

For annuitants who are injured in the line of duty, the retiree contributes 25% of the plan aggregate, active-life rate for both retiree and dependent coverage, regardless of years of service.

For all groups, there is no change in the cost of the plans once a retiree reaches Medicare eligibility, although Medicare becomes primary once Medicare eligibility is reached.

**Total Plan Costs:** The total, aggregate plan cost rates applicable to the medical plans for 2012 are set forth as follows:

<b>Total Plan Costs</b>		
<b>Healthcare Plan</b>	<b>Aggregate Cost Rate</b>	
	<b>Employee Only</b>	<b>Employee and Spouse</b>
Aetna Healthcare CDHP	\$ 442.14	\$ 869.13
Aetna PPO	516.89	1,016.05
Aetna HMO	510.08	1,002.67
Kaiser Permanente HMO	467.55	935.09
United Healthcare Choice Nationwide	462.27	882.93

## Summary of Plan Provisions

**Post-retirement Life Insurance Benefit:** A post-retirement life insurance benefit is available for retirees. Participants may elect to continue the amount of the basic preretirement group life insurance amount in retirement, which is one times earnings, plus \$2,000. Under the 75% reduction option, participant biweekly premiums of \$0.0455 per \$1,000 of insurance are required until age 65, with no participant contributions thereafter. Under the 75% reduction option, coverage reduces 2% per year after age 65 until the coverage amount reaches 25% of the original insurance amount and then is level thereafter.

Retirees may also elect a 50% or a 0% reduction option, which require additional retiree contributions. Retirees may also purchase additional life insurance coverage beyond the basic coverage, on a retiree-pay-all basis.

## Participant Data

### SECTION 7 - Participant Data

The following tables show the current retired participants, and the potential participants who are currently active.

<b>Table 7.1 Participant Data</b>					
	<b>Fire</b>	<b>Police</b>	<b>General</b>	<b>Teachers</b>	<b>Total</b>
Active Employees	1,800	3,745	12,690	2,782	21,017
Average Age	41	43	40	41	41
Average Service	15	16	11	10	12
Average Salary	68,771	73,083	64,039	67,913	66,569
Retirees	23	149	137	246	555

All current employees hired on or before September 30, 2012. Only retirees who are currently participating were included in this analysis.

## SECTION 8 – Glossary of Actuarial Terms

**Actuarial Accrued Liability:** The portion of the Actuarial Present Value which is allocated to periods of service ending prior to the current valuation year. This also represents the portion of the Actuarial Present Value that will not be provided for by future Normal Costs.

**Actuarial Assumptions:** Assumptions used in the determination of the Actuarial Present Value regarding the occurrence of future events, such as mortality, withdrawal, retirement, inflation, investment earnings, etc.

**Actuarial Cost Method:** A method for allocating the Actuarial Present Value associated with a particular plan of benefits over the time period during which the benefits are earned by employees.

**Actuarial Gain or Loss:** The difference in the *actual* Actuarial Present Value measured as of a given date from that *expected* based on a set of Actuarial Assumptions.

**Actuarial Present Value:** The value of a payment or series of payments made at various points in time, each of which is adjusted for (1) the financial effect of intervening events (e.g. compensation changes or medical inflation), (2) the probability that such payment will be made based on the factors on which the payment is conditioned (e.g. continued employment until retirement age or becoming disabled), and (3) discounted to the current date to reflect the time value of money.

**Actuarial Value of Assets or Valuation Assets:** The value of plan investments that is dedicated to or “belongs” to a plan and is used as the value of assets in applying the Actuarial Cost Method.

**Amortization Payment:** The portion of the annual plan cost that consists of a principal and interest payment and is designed to pay down the Unfunded Actuarial Accrued Liability over a fixed number of years.

**Level Dollar Amortization Method:** A funding policy whereby the annual amortization payment is an equal dollar amount for a fixed number of years.

## Glossary of Actuarial Terms

**Level Percentage of Payroll Amortization Method:** A funding policy whereby the annual amortization payments are computed to be a constant percentage of anticipated payroll for the group of employees covered under the plan. Since payroll amounts are expected to increase over time, the *dollar amount* of the amortization payment will also increase.

**Normal Cost:** The portion of the Actuarial Present Value that is allocated to the current valuation year under the Actuarial Cost Method being used.

**Present Value of Total Projected Benefits:** The Actuarial Present Value, measured at a specific date, of all benefits projected to be paid under the plan, based on the current population of active and retired employees.

**Pay-As-You-Go:** The practice of financing a benefit plan by making contributions to a plan only as and when benefits are due to plan participants.

**Unfunded Actuarial Accrued Liability:** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.