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**Report on the Actuarial Valuations of the
District of Columbia
Retirement Board**

**Teachers' Retirement Plan and
Police Officers' & Firefighters'
Retirement Plan**

Prepared as of October 1, 2012





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

December 17, 2012

The Board of Trustees
District of Columbia Retirement Board
900 7th Street, NW, 2nd Floor
Washington, DC 20001

Dear Trustees:

We are pleased to submit the results of the annual actuarial valuations of the District of Columbia Retirement Board Teachers' Retirement Plan and Police Officers' & Firefighters' Retirement Plan, prepared as of October 1, 2012.

The purpose of this report is to provide a summary of the funded status of each Plan as of October 1, 2012, to recommend rates of contribution to be paid by the District in the 2014 fiscal year and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The promised benefits are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. Seven-year smoothed market value of assets is used for actuarial valuation purposes. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the Fund and to reasonable expectations of anticipated experience under the Fund and meet the parameters for the disclosures under GASB 25 and 27.

Since the previous valuation, several changes were made to the actuarial assumptions and methods. The actuarial cost method was changed from the Aggregate method to the Entry Age Normal method. In addition, the following changes were made in the assumptions:

- The long-term investment rate of return assumption was changed from 7.00% to 6.50%.
- The price inflation assumption was changed from 4.25% to 3.50%.
- The payroll growth assumption was lowered from 4.75% to 4.25%.

In addition, the Board adopted a new funding policy on November 15, 2012. Two of the main funding goals for the new funding policy are as follows:

- To maintain an increasing or stable ratio of Plan assets to accrued liabilities and reach a 100 percent minimum funded ratio;
- To develop a pattern of stable or declining contribution rates when expressed as a percentage of member payroll as measured by valuations prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, with a minimum employer contribution equal to the lesser of the normal cost determined under the Entry Age Normal funding method and the current active member contribution rate.

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December 17, 2012
The Board of Trustees
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The new funding policy not only states the overall funding goals and benchmarks for the Plan, but sets the methods and assumptions. The amortization period will be set to 20 years in 2012 and decline one year each year until a funded ratio of 100 percent is reached. In addition, the amortization of the unfunded accrued liability will be developed using the level dollar approach

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Thomas J. Cavanaugh'.

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

A handwritten signature in blue ink, appearing to read 'Edward J. Koebel'.

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

A handwritten signature in blue ink, appearing to read 'Jonathan T. Craven'.

Jonathan T. Craven, ASA, FCA, EA, MAAA
Senior Actuary

TJC/EJK/JTC:kc



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**REPORT ON THE ACTUARIAL VALUATION OF
THE DISTRICT OF COLUMBIA RETIREMENT BOARD
PREPARED AS OF OCTOBER 1, 2012**

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results for the Teachers' Retirement Plan and Police Officers' and Firefighters' Retirement Plan are summarized below in the tables that follow. Please note that the October 1, 2011 numbers are the results using the Entry Age Normal Cost Method. The actual 2013 fiscal year contribution amounts were based on the Aggregate Cost Method.

**SUMMARY OF PRINCIPAL RESULTS FOR TEACHERS' RETIREMENT PLAN
(\$ IN THOUSANDS)**

VALUATION DATE	October 1, 2012	October 1, 2011
Number of Active Members	4,495	4,747
Annual Covered Payroll	\$381,235	\$384,455
Number of Retired Members and Survivors	3,285	3,130
Annual Retirement Benefits	\$47,407	\$41,996
Assets:		
Actuarial Value	\$1,585,626	\$1,573,654
Market Value	\$1,503,346	\$1,340,725
Liabilities:		
Accrued Liability	\$1,680,548	\$1,544,864
Unfunded Accrued Liability (UAL)	\$94,922	(\$28,790)
Funding Ratios:		
Based on Actuarial Value	94.35%	101.86 %
Based on Market Value	89.46%	86.79 %
CONTRIBUTION FOR FISCAL YEAR ENDING	09/30/2014	09/30/2013
Employer Normal Cost Rate*	5.84%	2.26 %
Amortization of UAL Rate	2.12	(0.66)
Annual Required Contribution Rate (ARC)	7.96%	1.60 %
Estimated Fiscal Year End Covered Payroll	\$397,437	\$421,846
Fiscal Year District Payment before 1-907.02(c)	\$31,636	\$6,750
Shortfall/Overpayment	0	(300)
Fiscal Year District Payment	\$31,636	\$6,450

* Beginning with the October 1, 2012 valuation, estimated budgeted administrative expenses are included in the normal cost rate.



**SUMMARY OF PRINCIPAL RESULTS FOR POLICE OFFICERS'
RETIREMENT PLAN
(\$ IN THOUSANDS)**

VALUATION DATE	October 1, 2012	October 1, 2011
Total Number of Active Members	3,810	3,775
Total Annual Covered Payroll	\$291,780	\$292,785
Number of Retired Members and Survivors	1,498	1,385
Annual Retirement Benefits	\$30,592	\$25,572
Total Assets:		
Actuarial Value	\$2,719,839	\$2,576,153
Market Value	\$2,637,960	\$2,248,044
Liabilities:		
Accrued Liability	\$2,434,513	\$2,364,457
Unfunded Accrued Liability (UAL)	(\$285,326)	(\$211,696)
Funding Ratios:		
Based on Actuarial Value	111.72%	108.95 %
Based on Market Value	108.36%	95.08 %
CONTRIBUTION FOR FISCAL YEAR ENDING	09/30/2014	09/30/2013
Employer Normal Cost Rate*	31.92%	26.62 %
Amortization of UAL Rate	(8.33)	(6.38)
Annual Required Contribution Rate (ARC)	23.59%	20.24 %
Estimated Fiscal Year End Covered Payroll	\$304,181	\$321,260
Fiscal Year District Payment before 1-907.02(c)	\$71,756	\$65,023
Shortfall/Overpayment	861	(6,720)
Fiscal Year District Payment	\$72,617	\$58,303

* Beginning with the October 1, 2012 valuation, estimated budgeted administrative expenses are included in the normal cost rate.



**SUMMARY OF PRINCIPAL RESULTS FOR FIREFIGHTERS'
RETIREMENT PLAN
(\$ IN THOUSANDS)**

VALUATION DATE	October 1, 2012	October 1, 2011
Total Number of Active Members	1,700	1,786
Total Annual Covered Payroll	\$123,097	\$128,436
Number of Retired Members and Survivors	541	471
Annual Retirement Benefits	\$12,838	\$9,958
Total Assets:		
Actuarial Value	\$1,085,014	\$1,017,563
Market Value	\$1,043,565	\$879,452
Liabilities:		
Accrued Liability	\$1,022,464	\$945,368
Unfunded Accrued Liability (UAL)	(\$62,550)	(\$72,195)
Funding Ratios:		
Based on Actuarial Value	106.12%	107.64 %
Based on Market Value	102.06%	93.03 %
CONTRIBUTION FOR FISCAL YEAR ENDING	09/30/2014	09/30/2013
Employer Normal Cost Rate*	36.70%	28.97%
Amortization of UAL Rate	(4.33)	(4.96)
Annual Required Contribution Rate (ARC)	32.37%	24.01%
Estimated Fiscal Year End Covered Payroll	\$128,328	\$140,927
Fiscal Year District Payment before 1-907.02(c)	\$41,540	\$33,837
Shortfall/Overpayment	(3,391)	1,058
Fiscal Year District Payment	\$38,149	\$34,895

* Beginning with the October 1, 2012 valuation, estimated budgeted administrative expenses are included in the normal cost rate.



**SUMMARY OF PRINCIPAL RESULTS FOR POLICE OFFICERS' & FIREFIGHTERS'
RETIREMENT PLAN
(\$ IN THOUSANDS)**

VALUATION DATE	October 1, 2012	October 1, 2011
Number of Active Police Officers	3,810	3,775
Annual Covered Payroll	\$291,780	\$292,785
Number of Active Firefighters	1,700	1,786
Annual Covered Payroll	\$123,097	\$128,436
Total Number of Active Members	5,510	5,561
Total Annual Covered Payroll	\$414,877	\$421,221
Number of Retired Members and Survivors	2,039	1,856
Annual Retirement Benefits	\$43,430	\$35,530
Assets:		
Actuarial Value	\$3,804,853	\$3,593,716
Market Value	\$3,681,526	\$3,127,496
Liabilities:		
Accrued Liability	\$3,456,977	\$3,309,825
Unfunded Accrued Liability (UAL)	(\$347,876)	(\$283,891)
Funding Ratios:		
Based on Actuarial Value	110.06%	108.58 %
Based on Market Value	106.50%	94.49 %
CONTRIBUTIONS FOR FISCAL YEAR ENDING	09/30/2014	09/30/2013
Employer Normal Cost Rate*	33.34%	27.33 %
Amortization of UAL Rate	(7.15)	(5.95)
Annual Required Contribution Rate (ARC)	26.19%	21.38 %
Estimated Fiscal Year End Covered Payroll	\$432,509	\$462,187
Fiscal Year District Payment before 1-907.02(c)	\$113,296	\$98,860
Shortfall/Overpayment	(2,530)	(5,662)
Fiscal Year District Payment	\$110,766	\$93,198

* Beginning with the October 1, 2012 valuation, estimated budgeted administrative expenses are included in the normal cost rate.



2. The valuation balance sheet showing the results is given in Schedule A.
3. Comments on the valuation results as of October 1, 2012 are given in Section IV and further adjustments of the contribution amounts are set out in Section V.
4. Schedule B of this report shows the development of the actuarial value of assets. Schedule D outlines the full set of actuarial assumptions and methods employed. The following changes have been made to the actuarial assumptions and methods since the previous valuation:
 - The actuarial cost method was changed from the Aggregate Method to the Entry Age Normal Cost Method.
 - The long-term investment rate of return assumption was changed from 7.00% to 6.50%.
 - The price inflation assumption was changed from 4.25% to 3.50%.
 - The payroll growth assumption was lowered from 4.75% to 4.25%.
5. In addition, the Board adopted a new funding policy on November 15, 2012. Two of the main funding goals for the new funding policy are as follows:
 - To maintain an increasing or stable ratio of Plan assets to accrued liabilities and reach a 100 percent minimum funded ratio;
 - To develop a pattern of stable or declining contribution rates when expressed as a percentage of member payroll as measured by valuations prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, with a minimum employer contribution equal to the lesser of the normal cost determined under the Entry Age Normal funding method and the current active member contribution rate.

The new funding policy not only states the overall funding goals and benchmarks for the Plan, but sets the methods and assumptions. The amortization period will be set to 20 years in 2012 and set to decline one year each year until a funded ratio of 100 percent is reached. In addition, the amortization of the unfunded accrued liability will be developed using the level dollar approach.
6. The valuation takes into account the effect of amendments to DCRB through the valuation date. The Main Provisions of DCRB, as summarized in Schedule E, were taken into account in the current valuation. No changes were made to the main provisions since the previous valuation.



7. All membership data was collected as of July 1, 2012 but for valuation purposes (e.g. age, service) all members were treated as if remaining in the System as of October 1, 2012.

8. All amounts shown prior to October 1, 2010 were developed and/or reported by the prior actuarial firm.



SECTION II – MEMBERSHIP DATA

- Data regarding the membership of DCRB for use as a basis of the valuation were furnished by the District Government. The following table shows the number of active members and their annual compensation as of October 1, 2012 on the basis of which the valuation was prepared.

TABLE 1

THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF OCTOBER 1, 2012 (\$ IN THOUSANDS)

GROUP	NUMBER	COMPENSATION
Teachers	4,495	\$381,235
Police Officers	3,810	291,780
Firefighters	<u>1,700</u>	<u>123,097</u>
Total	10,005	\$796,112

- The following table shows a five-year history of active member valuation data.

TABLE 2

SCHEDULE OF TOTAL ACTIVE MEMBER VALUATION DATA

VALUATION DATE	NUMBER	ANNUAL PAYROLL (\$ IN THOUSANDS)	ANNUAL AVERAGE PAY	% CHANGE IN AVERAGE PAY
10/01/2012	10,005	\$ 796,112	\$ 79,571	1.81 %
10/01/2011	10,308	805,676	78,160	7.35
10/01/2010	10,457	761,370	72,810	(2.11)
10/01/2009	10,389	772,700	74,377	(0.18)
10/01/2008	10,482	781,000	74,509	2.19



3. The following table shows the number and annual retirement benefits payable to retired members and survivors on the roll of DCRB as of the valuation date.

TABLE 3
THE NUMBER AND ANNUAL RETIREMENT BENEFITS
OF RETIRED MEMBERS AND SURVIVORS OF DECEASED MEMBERS
ON THE ROLL AS OF OCTOBER 1, 2012
(\$ IN THOUSANDS)

DISTRICT ONLY

TYPE OF RETIREMENT	GROUP			
	TEACHERS	POLICE OFFICERS	FIREFIGHTERS	TOTAL
Service:				
Number	3,055	897	367	4,319
Annual Benefits	\$44,206	\$18,073	\$9,514	\$71,793
Disability:				
Number	114	279	64	457
Annual Benefits	\$2,468	\$8,244	\$1,391	\$12,103
Survivors:				
Number	116	322	110	548
Annual Benefits	\$733	\$4,275	\$1,933	\$6,941
Total:				
Number	3,285	1,498	541	5,324
Annual Benefits	\$47,407	\$30,592	\$12,838	\$90,837

*In addition, there are 1,105 deferred vested participants with annual deferred benefits of \$13,624,751.



TABLE 4
THE NUMBER AND ANNUAL RETIREMENT BENEFITS
OF RETIRED MEMBERS AND SURVIVORS OF DECEASED MEMBERS
ON THE ROLL AS OF OCTOBER 1, 2012
(\$ IN THOUSANDS)

FEDERAL PLUS DISTRICT

TYPE OF RETIREMENT	GROUP			
	TEACHERS	POLICE OFFICERS	FIREFIIGHTERS	TOTAL
Service:				
Number	5,331	3,222	1,023	9,576
Annual Benefits	\$237,608	\$179,401	\$67,388	\$484,397
Disability:				
Number	371	1,111	415	1,897
Annual Benefits	\$11,079	\$46,239	\$19,761	\$77,079
Survivors:				
Number	428	1,370	536	2,334
Annual Benefits	\$8,349	\$37,562	\$15,618	\$61,529
Total:				
Number	6,130	5,703	1,974	13,807
Annual Benefits	\$257,036	\$263,202	\$102,767	\$623,005

4. Tables 4 through 6 of Schedule F show the distribution by age and service of the number and annual compensation of active members for each plan included in the valuation. Tables 7 through 12 of Schedule F show the distribution by age of the number and annual benefits of retired members for each plan included in the valuation.



SECTION III - ASSETS

- Schedule C shows the additions and deductions of DCRB for the year preceding the valuation date and a reconciliation of the fund balances at market value. As of October 1, 2012, the market value of assets used to determine the actuarial value of assets for each plan is shown below:

**TABLE 5
COMPARISON OF MARKET VALUE OF ASSETS AT
OCTOBER 1, 2012 AND OCTOBER 1, 2011
(\$ IN THOUSANDS)**

FUND	OCTOBER 1, 2012 MARKET VALUE	OCTOBER 1, 2011 MARKET VALUE
Teachers	\$1,503,346	\$1,340,725
Police Officers and Firefighters	<u>3,681,526</u>	<u>3,127,496</u>
Total Market Value of Assets	\$5,184,872	\$4,468,221

- The seven-year market related actuarial value of assets used for the current valuation was \$5,390,479,434. Schedule B shows the development of the actuarial value of assets as of October 1, 2012. The following table shows the actuarial value of assets allocated among each plan.

**TABLE 6
COMPARISON OF ACTUARIAL VALUE OF ASSETS AT
OCTOBER 1, 2012 AND OCTOBER 1, 2011
(\$ IN THOUSANDS)**

FUND	OCTOBER 1, 2012 MARKET VALUE	OCTOBER 1, 2011 MARKET VALUE
Teachers	\$1,585,626	\$1,573,654
Police Officers and Firefighters	<u>3,804,853</u>	<u>3,593,716</u>
Total Actuarial Value of Assets	\$5,390,479	\$5,167,370



SECTION IV - COMMENTS ON VALUATION

Teachers' Retirement Plan

1. The total valuation balance sheet on account of benefits shows that the Teachers' Retirement Plan has total prospective benefit liabilities of \$2,081,959,218, of which \$714,763,506 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$105,078,823 is for the prospective benefits payable on account of present inactive members, and \$1,262,116,889 is for the prospective benefits payable on account of present active members. Against these benefit liabilities the Teachers' Retirement Plan has a total present actuarial value of assets of \$1,585,626,043 as of October 1, 2012. The difference of \$496,333,175 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of benefits.
2. The contributions to the Plan consist of normal cost contributions and accrued liability contributions. The valuation indicates the normal contributions at a rate of 12.35% of payroll are required under the entry age method. Of this amount 7.71% will be paid by the members (at the rate of 7.0% of salary for members hired before November 1, 1996 and 8.0% of salary for members hired on or after November 1, 1996), in 2014 and the remaining 4.64% is payable by the District.
3. Beginning with the October 1, 2012 valuation, estimated budgeted administrative expenses are included in the normal rates. The expenses for the fiscal year ending September 30, 2014 are estimated to be 1.20% of payroll.
4. Prospective normal cost contributions (excluding administrative expenses) at the rate of 12.35% have a present value of \$401,410,907. When this amount is subtracted from \$496,333,175, which is the present value of total future contributions to be made, there remains \$94,922,268 as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.



Police Officers' and Firefighters' Retirement Plan

1. The total valuation balance sheet on account of benefits shows that the combined Police Officers' and Firefighters' Retirement Plan has total prospective benefit liabilities of \$5,542,596,398, of which \$808,891,647 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$41,090,804 is for the prospective benefits payable on account of present inactive members, and \$4,692,613,947 is for the prospective benefits payable on account of present active members. Against these benefit liabilities the Police Officers' and Firefighters' Retirement Plan has a total present actuarial value of assets of \$3,804,853,391 as of October 1, 2012. The difference of \$1,737,743,007 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of benefits.
2. The contributions to the Plan consist of normal cost contributions and accrued liability contributions. The valuation indicates the normal contributions at a rate of 39.62% of payroll are required under the entry age method. Of this amount 7.48% will be paid by the members (at the rate of 7.0% of salary for members hired before November 1, 1996 and 8.0% of salary for members hired on or after November 1, 1996), in 2014 and the remaining 32.14% is payable by the District.
3. Beginning with the October 1, 2012 valuation, estimated budgeted administrative expenses are included in the normal rates. The expenses for the fiscal year ending September 30, 2014 are estimated to be 1.20% of payroll.
4. Prospective normal cost contributions (excluding administrative expenses) at the rate of 39.62% have a present value of \$2,085,619,743. When this amount is subtracted from \$1,737,743,007, which is the present value of total future contributions to be made, there remains (\$347,876,736) as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.



SECTION V - §1-907.02(c) ADJUSTMENT TO FISCAL YEAR 2014 DISTRICT PAYMENT

1. Beginning in fiscal year 2001, the District payment was adjusted pursuant to D.C. Code §1-907.02(c). This section stipulates that "...the enrolled actuary shall determine whether the amount appropriated for the applicable fiscal year resulted in an overpayment or a shortfall based upon the actual covered payroll."

2. The D.C. Code §1-907.02(c) adjustment to the fiscal year 2014 District payment is calculated by taking the actual fiscal year 2012 covered payroll for each employee class (which is provided by the District) and multiplying by the corresponding fiscal year 2012 contribution rates, which were determined as of October 1, 2010. This result is the fiscal year 2012 contribution that was required to be made by the District, based on actual payroll. The required contribution is then compared to the actual contribution that was paid by the District based on projected payroll. The difference between the required and actual contributions is the D.C. Code §1-907.02(c) adjustment. Any adjustment amount that cannot be used in a given year is carried forward to the next fiscal year.

**ADJUSTMENT TO DISTRICT PAYMENT
AS OF OCTOBER 1, 2012
(\$ IN THOUSANDS)**

	Teachers	Police	Fire
(1) Actual FY 2012 Covered Payroll	\$381,235	\$291,780	\$123,097
(2) FY 2012 Contribution Rate	0.00%	26.35%	30.29%
(3) Actual FY 2012 Contribution Required	\$0	\$76,884	\$37,286
(4) Actual FY 2012 Contribution Paid	\$0	\$76,023	\$40,677
(5) Preliminary D.C. Code §1-907.02(c) Adjustment to FY 2014 Payment [(3) - (4)]	\$0	\$861	(\$3,391)
(6) FY 2013 Unrecognized Amount	\$0	\$0	\$0
(7) Final D.C. Code §1-907.02(c) Adjustment to FY 2014 Payment [(5) + (6) if applicable]	\$0	\$861	(\$3,391)
(8) Applicable Adjustment	\$0	\$861	(\$3,391)
(9) Carryover Adjustment [(7) - (8)]	\$0	\$0	\$0



SECTION VI – CONTRIBUTIONS PAYABLE

1. The following tables summarize the employer contribution rates, which were determined by the October 1, 2012 valuation and recommended for use for the fiscal year ending September 30, 2014.

**TEACHERS' RETIREMENT PLAN
ANNUAL REQUIRED CONTRIBUTIONS (ARC)
FOR FISCAL YEAR ENDING SEPTEMBER 30, 2014**

	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION	EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)
Normal Cost	4.64%	\$18,441,000
Expense Load	1.20	4,769,000
Accrued Liability	<u>2.12</u>	<u>8,426,000</u>
Sub-Total	7.96%	\$31,636,000
DC Code Adjustment		<u>0</u>
Total		\$31,636,000

**POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT PLAN
ANNUAL REQUIRED CONTRIBUTIONS (ARC)
FOR FISCAL YEAR ENDING SEPTEMBER 30, 2014**

	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION	EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)
Normal Cost	32.14%	\$139,001,000
Expense Load	1.20	5,190,000
Accrued Liability	<u>(7.15)</u>	<u>(30,895,000)</u>
Sub-Total	26.19%	\$113,296,000
DC Code Adjustment		<u>(2,530,000)</u>
Total		\$110,766,000



SECTION VII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of DCRB and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

**NUMBER OF ALL MEMBERS
AS OF OCTOBER 1, 2012**

GROUP	RETIREMENT PLAN			
	Teachers	Police Officers	Firefighters	Total
Retirees and survivors currently receiving benefits	3,285	1,498	541	5,324
Terminated employees entitled to benefits but not yet receiving benefits	920	127	58	1,105
Inactive Members	1,031	47	34	1,112
Active Members				
Vested	2,404	3,213	1,468	7,085
Non-vested	<u>2,091</u>	<u>597</u>	<u>232</u>	<u>2,920</u>
Total Active Members	4,495	3,810	1,700	10,005
Totals	9,731	5,482	2,333	17,546



2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS*
(\$ IN THOUSANDS)

Actuarial Valuation Date	Actuarial Value of Plan Assets (a)	Actuarial Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
TEACHERS' RETIREMENT PLAN*						
10/1/2008	\$1,447,600	\$1,338,000	(\$109,600)	108.2 %	\$359,100	(30.5)%
10/1/2009	1,445,000	1,304,500	(140,500)	110.8 %	336,600	(41.7)%
10/1/2010	1,570,968	1,328,299	(242,669)	118.3 %	337,516	(71.9)%
10/1/2011	1,573,654	1,544,864	(28,790)	101.9 %	384,455	(7.5)%
10/1/2012	1,585,626	1,680,548	94,922	94.4 %	381,235	24.9 %
POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT PLAN*						
10/1/2008	\$2,932,100	\$2,938,800	\$6,700	99.8 %	\$421,800	1.6 %
10/1/2009	3,048,400	3,027,900	(20,500)	100.7 %	436,100	(4.7)%
10/1/2010	3,418,796	3,166,830	(251,966)	108.0 %	423,854	(59.4)%
10/1/2011	3,593,716	3,309,825	(283,891)	108.6 %	421,221	(67.4)%
10/1/2012	3,804,853	3,456,976	(347,877)	110.1 %	414,877	(83.9)%

* Results prior to 10/1/2010 were reported by the prior actuary.



3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at October 1, 2012.

	Teachers	Police Officers & Firefighters
Valuation Date	10/1/2012	10/1/2012
Actuarial cost method	Entry Age Normal	Entry Age Normal
Amortization method	Level Dollar Closed	Level Dollar Closed
Remaining amortization period	20 years	20 years
Asset valuation method	7 year smoothed Market	7 year smoothed Market
Actuarial assumptions:		
Investment rate of return*	6.50%	6.50%
Projected salary increases**	4.45 – 8.25%	4.75 – 9.25%
Cost of living adjustments:	3.50% (COLA limited to 3.00% for those hired after 11/1/1996)	3.50% (COLA limited to 3.00% for those hired after 11/10/1996)

* Includes inflation of 3.50%.

** Includes wage inflation of 4.25%.



SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending	Annual Required Contribution in Dollars (\$ in millions)	Annual Required Contribution as a Percent of Total Payroll	Percent of ARC Contributed
Teachers' Retirement Plan			
9/30/2008	\$6.0	1.67 %	100 %
9/30/2009	0.0	0.00 %	100 %
9/30/2010	0.0	0.00 %	100 %
9/30/2011	0.0	0.00 %	100 %
9/30/2012	0.0	0.00 %	100 %
Police Officers' & Firefighters' Retirement Plan			
9/30/2008	\$137.0	32.48 %	100 %
9/30/2009	106.0	24.31 %	100 %
9/30/2010	132.3	31.21 %	100 %
9/30/2011	127.2	30.20 %	100 %
9/30/2012	116.7	28.13 %	100 %



SECTION VIII – EXPERIENCE

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain/(loss) for the year ended September 30, 2012 is shown below.

Teachers' Retirement Plan

		<u>\$ Thousands</u>
(1)	UAAL* as of October 1, 2011	\$ (28,790)
(2)	Total normal cost from last valuation	38,381
(3)	Total actual contributions	28,639
(4)	Interest accrual: $(1) \times .07 + [(2) - (3)] \times .035$	<u>(1,674)</u>
(5)	Expected UAAL before changes: $(1) + (2) - (3) + (4)$	\$ (20,722)
(6)	Change due to plan amendments	0
(7)	Change due to actuarial assumptions or methods	<u>15,429</u>
(8)	Expected UAAL after changes: $(5) + (6) + (7)$	\$ (5,293)
(9)	Actual UAAL as of October 1, 2012	\$ 94,922
(10)	Gain/(loss): $(8) - (9)$	\$ (100,215)
(11)	Gain/(loss) as percent of actuarial accrued liabilities at start of year (\$1,544,864)	(6.5)%

*Unfunded actuarial accrued liability.

Valuation Date September 30	Actuarial Gain/(Loss) as a % of Beginning Accrued Liabilities
2012	(6.5)%





Police Officers' and Firefighters' Retirement Plan

		<u>\$ Thousands</u>
(1)	UAAL* as of October 1, 2011	\$ (283,891)
(2)	Total normal cost from last valuation	146,843
(3)	Total actual contributions	147,098
(4)	Interest accrual: $(1) \times .07 + [(2) - (3)] \times .035$	<u>(19,881)</u>
(5)	Expected UAAL before changes: $(1) + (2) - (3) + (4)$	\$ (304,027)
(6)	Change due to plan amendments	0
(7)	Change due to actuarial assumptions or methods	<u>(97)</u>
(8)	Expected UAAL after changes: $(5) + (6) + (7)$	\$ (304,124)
(9)	Actual UAAL as of October 1, 2012	\$ (347,877)
(10)	Gain/(loss): $(8) - (9)$	\$ 43,753
(11)	Gain/(loss) as percent of actuarial accrued liabilities at start of year (\$3,309,825)	1.3%

*Unfunded actuarial accrued liability.

Valuation Date September 30	Actuarial Gain/(Loss) as a % of Beginning Accrued Liabilities
2012	1.3%



SCHEDULE A

**VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF
THE DISTRICT OF COLUMBIA RETIREMENT BOARD
AS OF OCTOBER 1, 2012**

TEACHERS' RETIREMENT PLAN

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		1,585,626,043
Present value of future members' contributions		242,390,248
Present value of future employer contributions		
Normal contributions	\$159,020,659	
Unfunded accrued liability contributions	<u>94,922,268</u>	
Total prospective employer contributions		<u>253,942,927</u>
Total Present and Prospective Assets		<u>\$2,081,959,218</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$714,763,506
Present value of prospective benefits payable on account of inactive members		105,078,823
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$1,113,660,955	
Disability retirement benefits	30,262,069	
Survivor benefits	16,571,521	
Separation benefits	<u>101,622,344</u>	
Total		<u>1,262,116,889</u>
Total Actuarial Liabilities		<u>\$2,081,959,218</u>





SCHEDULE A

(Continued)

**VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF
THE DISTRICT OF COLUMBIA RETIREMENT BOARD
AS OF OCTOBER 1, 2012**

POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		3,804,853,391
Present value of future members' contributions		353,149,221
Present value of future employer contributions		
Normal contributions	\$1,732,470,522	
Unfunded accrued liability contributions	<u>(347,876,736)</u>	
Total prospective employer contributions		<u>1,384,593,786</u>
Total Present and Prospective Assets		<u>\$5,542,596,398</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$808,891,647
Present value of prospective benefits payable on account of inactive members		41,090,804
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$4,244,540,739	
Disability retirement benefits	297,549,773	
Survivor benefits	82,380,518	
Separation benefits	<u>68,142,917</u>	
Total		<u>4,692,613,947</u>
Total Actuarial Liabilities		<u>\$5,542,596,398</u>





SCHEDULE A
(continued)

SOLVENCY TEST
(\$ IN THOUSANDS)

Valuation Date	Aggregate Accrued Liabilities For*				Portion of Accrued Liabilities Covered by Reported Asset		
	(1)	(2)	(3)	Reported Assets	(1)	(2)	(3)
	Active Member Contributions	Retirees, Survivors and Inactive Members	Active Members (Employer Financed Portion)				
TEACHERS' RETIREMENT PLAN							
10/1/2008	\$332,834	\$851,489	\$3,092,491	\$3,734,700	100%	100.0%	82.5%
10/1/2009	335,481	995,361	3,001,587	3,743,000	100%	100.0%	80.4%
10/1/2010	136,055	622,253	569,991	1,314,357	100%	100.0%	97.6%
10/1/2011	138,874	718,884	687,107	1,340,725	100%	100.0%	70.3%
10/1/2012	137,698	819,842	723,008	1,503,346	100%	100.0%	75.5%
POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT PLAN							
10/1/2008	\$332,834	\$851,489	\$3,092,491	\$3,734,700	100%	100.0%	82.5%
10/1/2009	335,481	995,361	3,001,587	3,743,000	100%	100.0%	80.4%
10/1/2010	211,961	583,338	2,371,531	2,920,790	100%	100.0%	89.6%
10/1/2011	224,928	708,364	2,376,533	3,127,496	100%	100.0%	92.3%
10/1/2012	235,924	849,982	2,371,070	3,681,526	100%	100.0%	100.0%

*Prior to 10/1/2010, the results are shown in aggregate and were reported by the prior actuary.



SCHEDULE B

**DEVELOPMENT OF THE OCTOBER 1, 2012
ACTUARIAL VALUE OF ASSETS**

TEACHERS' RETIREMENT PLAN

(1)	Actuarial Value Beginning of Year*	\$	1,573,653,598
(2)	Market Value End of Year	\$	1,503,345,631
(3)	Market Value Beginning of Year	\$	1,340,725,000
(4)	Cash Flow		
	a. Contributions	\$	28,639,022
	b. Benefit Payments and Refunds		(53,658,197)
	c. Administrative Expenses		(2,875,167)
	d. Net Cash Flow: [(4)a + (4)b + (4)c]	\$	(27,894,342)
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)d	\$	190,514,973
	b. Assumed Rate		7.00%
	c. Amount of Immediate Recognition	\$	95,850,246
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	94,664,727
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: (1/7) x (5)d	\$	13,523,532
	b. First Prior Year		(6,589,080)
	c. Second Prior Year		5,834,740
	d. Third Prior Year		(17,509,865)
	e. Fourth Prior Year		(51,242,786)
	f. Fifth Prior Year		0
	g. Sixth Prior Year		0
	h. Total Recognized Investment Gain	\$	(55,983,459)
(7)	Preliminary Actuarial Value End of Year: (1) + (4)d + (5)c + (6)h	\$	1,585,626,043
(8)	Actuarial Value End of Year with 20% Corridor Applied:	\$	1,585,626,043
(9)	Present Value of DC Code Adjustment	\$	0
(10)	Final Actuarial Value End of Year: (8) + (9)	\$	1,585,626,043

*Prior to any corridor restraints.



SCHEDULE B

(Continued)

**DEVELOPMENT OF THE OCTOBER 1, 2012
ACTUARIAL VALUE OF ASSETS**

POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

(1)	Actuarial Value Beginning of Year*	\$	3,593,716,439
(2)	Market Value End of Year	\$	3,681,525,782
(3)	Market Value Beginning of Year	\$	3,127,496,000
(4)	Cash Flow		
	a. Contributions	\$	147,098,488
	b. Benefit Payments and Refunds		(40,457,200)
	c. Administrative Expenses		(6,706,862)
	d. Net Cash Flow: [(4)a + (4)b + (4)c]	\$	99,934,426
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)d	\$	454,095,356
	b. Assumed Rate		7.00%
	c. Amount of Immediate Recognition	\$	229,364,027
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	224,731,329
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: (1/7) x (5)d	\$	32,104,476
	b. First Prior Year		(18,159,945)
	c. Second Prior Year		12,440,209
	d. Third Prior Year		(34,598,041)
	e. Fourth Prior Year		(101,921,714)
	f. Fifth Prior Year		0
	g. Sixth Prior Year		0
	h. Total Recognized Investment Gain	\$	(110,135,015)
(7)	Preliminary Actuarial Value End of Year: (1) + (4)d + (5)c + (6)h	\$	3,812,879,877
(8)	Actuarial Value End of Year with 20% Corridor Applied:	\$	3,812,879,877
(9)	Present Value of DC Code Adjustment	\$	(8,026,486)
(10)	Final Actuarial Value End of Year: (8) + (9)	\$	3,804,853,391

*Prior to any corridor restraints.





SCHEDULE C

**SUMMARY OF CHANGES IN NET ASSETS
FOR THE YEAR ENDING OCTOBER 1, 2012**

TEACHERS' RETIREMENT PLAN

Additions for the Year

Contributions:

Members (including purchased service)	\$	28,639,022	
Employers		<u>0</u>	
Total	\$		28,639,022

Net Investment Income			<u>190,514,973</u>
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TOTAL	\$		<u>219,153,995</u>
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Deductions for the Year

Benefit Payments (including refunds)	\$	(53,658,197)	
Administrative Expenses		<u>(2,875,167)</u>	
TOTAL	\$		<u>(56,533,364)</u>

<u>Excess of Additions Over Deductions</u>	\$		<u><u>162,620,631</u></u>
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Reconciliation of Asset Balances

Market Value of Assets as of 9/30/2011	\$	1,340,725,000	
Excess of Additions over Deductions			<u>162,620,631</u>
Market Value of Assets as of 9/30/2012*	\$		<u><u>1,503,345,631</u></u>

* The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B).





SCHEDULE C
(Continued)

**SUMMARY OF CHANGES IN NET ASSETS
FOR THE YEAR ENDING OCTOBER 1, 2012**

POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

Additions for the Year

Contributions:

Members (including purchased service)	\$	30,398,488	
Employers		<u>116,700,000</u>	
Total	\$		147,098,488

Net Investment Income 454,095,356

TOTAL \$ 601,193,844

Deductions for the Year

Benefit Payments (including refunds)	\$	(40,457,200)	
Administrative Expenses		<u>(6,706,862)</u>	
TOTAL	\$		<u>(47,164,062)</u>

Excess of Additions Over Deductions \$ 554,029,782

Reconciliation of Asset Balances

Market Value of Assets as of 9/30/2011	\$	3,127,496,000	
Excess of Additions over Deductions		<u>554,029,782</u>	
Market Value of Assets as of 9/30/2012*	\$	<u>3,681,525,782</u>	

* The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B).



SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS (DEMOGRAPHIC ASSUMPTIONS ADOPTED ON OCTOBER 20, 2011) (ECONOMIC ASSUMPTIONS ADOPTED ON NOVEMBER 15, 2012)

VALUATION DATE: All assets and liabilities are computed as of October 1, 2012. Demographic information was collected as of June 30, 2012.

INVESTMENT RATE OF RETURN: 6.50% per annum, compounded annually (net of investment expenses).

INFLATION ASSUMPTION: 3.50% per annum.

PAYROLL GROWTH ASSUMPTION: 4.25% per annum.

PERCENT MARRIED: 64% of Teachers are assumed to be married and 80% of Police Officers and Firefighters are assumed to be married, with the wife 3 years younger than the husband. Active members are assumed to have one dependent child aged 10.

ACTUARIAL METHOD: Entry Age Normal Cost Method.

ASSETS: The method of valuing assets is intended to recognize a “smoothed” market value of assets. Under this method, the difference between actual return on market value from investment experience and the expected return on market value is recognized over a seven-year period. The actuarial value of assets is constrained to an 80% to 120% corridor around market value of assets. In addition, there is an adjustment made for the effect of the adjustment pursuant to D.C. Code §1-907.02(c).

WITHDRAWAL ASSUMPTION: For Teachers, it was assumed that 35% of the vested members who terminate elect to withdraw their contributions while the remaining 65% elect to leave their contributions in the plan in order to be eligible for a benefit at their retirement date. For Police Officers and Firefighters, it was assumed that 80% of the vested members who terminate elect to withdraw their contributions while the remaining 20% elect to leave their contributions in the plan.

OTHER ASSUMPTIONS: To value the pre-retirement death benefit for Police Officers and Firefighters, the benefit form for all retirements (normal or disabled) is assumed to be a 67.8% Joint and Survivor annuity for all participants (based on 40% of average pay survivor benefits). One-fourth of all Police Officer and Firefighter active deaths are assumed to occur in the line of duty.

COST OF LIVING ADJUSTMENT: The cost of living as measured by the Consumer Price Index (CPI) will increase at the rate of 3.5% per year.

MILITARY SERVICE: All Police and Fire members assumed to have 0.40 years of military service at retirement.

ADMINISTRATIVE EXPENSES: Budgeted administrative expenses of 1.20% of payroll are added to the normal cost rate.



SCHEDULE D
(Continued)

TEACHERS

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.25% per annum:

Pay Increase Assumptions for an Individual Member			
Years of Service	Merit & Seniority	Inflation & Productivity (Economy)	Total Increase (Next Year)
5	4.00%	4.25%	8.25%
10	3.00	4.25	7.25
15	0.50	4.25	4.75
20	0.20	4.25	4.45
25	0.20	4.25	4.45
30	0.20	4.25	4.45
35	0.20	4.25	4.45

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal, service retirement, and disability are shown in the following tables:

Sample Ages	Percent of Members Separating Within the Next Year					
	Withdrawal			Service Retirement		Disability Retirement
	0 to 3 yrs of service	4 to 9 yrs of service	10 & up yrs of service	Under 30 yrs service	30 & up yrs service	
20	25.0%	20.0%	0.00%			0.03%
25	23.5	20.0	0.00			0.03
30	22.0	16.0	3.75			0.05
35	20.5	14.0	3.75			0.07
40	19.0	12.0	3.75			0.09
45	17.5	10.0	3.75			0.15
50	16.0	10.0	3.75	2.5%	2.5%	0.22
55	14.5	10.0	3.75	6.0	33.0	0.32
60	13.0	10.0	3.75	27.0	25.0	0.40
62	0.0	0.0	0.00	25.0	25.0	
65				20.0	25.0	
70				30.0	30.0	
71				25.0	40.0	
75				100.0	100.0	

MORTALITY: The RP-2000 Combined Mortality Table projected with Scale AA to 2015, set back 3 years for females is used for healthy active members, retirees, and beneficiaries. The RP-2000 Disabled Mortality Table set back 1 year for males and set back 5 years for females is used for disabled retirees. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 7-8% greater for healthy lives and 9% greater for disabled lives than expected under the selected tables.





SCHEDULE D
(Continued)

POLICE OFFICERS

SALARY INCREASES: Police Officers are assumed to receive a longevity increase of 5%, 10%, 15%, and 20% applied to individual base pay after 15, 20, 25, and 30 years of service. These are approximated by increases of 3.5% to final average salary. Representative values of the assumed annual rates of future salary increases before longevity increases are as follows and include inflation at 4.25% per annum:

Pay Increase Assumptions for an Individual Member			
Years of Service	Merit & Seniority	Inflation & Productivity (Economy)	Total Increase (Next Year)
5	3.56%	4.25%	7.81%
10	2.58	4.25	6.83
15	2.31	4.25	6.56
20	2.50	4.25	6.75
25	1.10	4.25	5.35
30	0.50	4.25	4.75
35	0.00	4.25	4.25

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal, service retirement, and disability are shown in the following tables:

Percent of Members Separating Within the Next Year						
Sample Ages	Withdrawal				Years of Service	Service Retirement ³
	(3 years of service & up) ¹		Disability Retirement ²			
	Males	Females	Males	Females		
20	6.00%	2.50%	0.02%	0.04%	20	12.5%
25	6.00	2.50	0.05	0.08	25	22.0
30	4.30	3.50	0.10	0.12	30	15.0
35	2.50	2.00	0.22	0.28	35	20.0
40	1.80	1.50	0.25	0.40	40	20.0
45	1.30	1.30	0.30	0.62		
50	1.30	1.30	0.40	0.70		
55	1.30	1.30	0.60	0.75		
60	0.00	0.00	0.80	0.90		

¹ Members of any age with less than 3 years of service have a 10% withdrawal assumption.

² It is assumed that 75% of the disabilities are due to accidents in the line of duty and the "percent of disability" is assumed to be 100%.

³ 100% of active members are assumed to retire at age 65, regardless of service.



MORTALITY: The RP-2000 Combined Mortality Table projected with Scale AA to 2015 set forward 1 year for females is used for healthy active members, retirees and beneficiaries. The following disability mortality table is used for disabled retirees.

Disabled Retiree Mortality		
Sample Ages	Males	Females
20	0.80%	0.50%
30	0.80	0.50
40	0.80	0.50
50	0.80	0.50
60	1.16	0.74
70	2.35	1.55
80	5.78	3.76
90	13.95	10.87
100	51.48	49.93

Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 7% greater for healthy lives and 6% greater for disabled lives than expected under the selected tables.



SCHEDULE D
(Continued)

FIREFIGHTERS

SALARY INCREASES: Firefighters are assumed to receive a longevity increase of 5%, 10%, 15%, and 20% applied to individual base pay after 15, 20, 25, and 30 years of service. These are approximated by increases of 3.5% to final average salary. Representative values of the assumed annual rates of future salary increases before longevity increases are as follows and include inflation at 4.25% per annum:

Pay Increase Assumptions for an Individual Member			
Years of Service	Merit & Seniority	Inflation & Productivity (Economy)	Total Increase (Next Year)
5	2.50%	4.25%	6.75%
10	2.50	4.25	6.75
15	2.50	4.25	6.75
20	2.50	4.25	6.75
25	2.50	4.25	6.75
30	2.50	4.25	6.75
35	2.50	4.25	6.75

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal, service retirement, and disability are shown in the following tables:

Percent of Members Separating Within the Next Year				
Sample Ages	Withdrawal			
	(2 years of service & up) ¹	Disability Retirement ²	Years of Service	Service Retirement ³
20	3.50%	0.01%	20	12.5%
25	3.50	0.02	25	12.5
30	2.00	0.15	30	20.0
35	1.00	0.20	35	40.0
40	1.00	0.35	40	40.0
45	1.50	0.45		
50	1.50	0.52		
55	0.00	0.60		
60	0.00	0.70		

¹Members of any age with less than 2 years of service have a 9% withdrawal assumption.

²It is assumed that 75% of the disabilities are due to accidents in the line of duty and the "percent of disability" is assumed to be 100%.

³100% of active members are assumed to retire at age 60, regardless of service.





MORTALITY: The RP-2000 Combined Mortality Table projected with Scale AA to 2015 set forward 1 year for females is used for healthy active members, retirees and beneficiaries. The following disability mortality table is used for disabled retirees.

Disabled Retiree Mortality		
Sample Ages	Males	Females
20	0.80%	0.50%
30	0.80	0.50
40	0.80	0.50
50	0.80	0.50
60	1.16	0.74
70	2.35	1.55
80	5.78	3.76
90	13.95	10.87
100	51.48	49.93

Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 7% greater for male and 1% greater for female healthy lives and 8% greater for disabled lives than expected under the selected tables. Police and Fire are combined in the valuation results and the female healthy life population is much greater for Police than Fire so the smaller margin under Fire is not an issue at this time.



SCHEDULE E

SUMMARY OF DISTRICT OF COLUMBIA TEACHERS' RETIREMENT PLAN PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

Effective Date Established on July 1, 1997. The Treasury Department is responsible for paying all benefits accrued before this date.

DEFINITIONS

Affiliated Employers District of Columbia Public Schools, Public Charter Schools

Covered Members Permanent, temporary, part-time and probationary teachers for the District of Columbia public day schools become members automatically on their date of employment. Other employees covered by the Retirement of Public School Teachers Act – including librarians, principals, and counselors – also become members on their date of employment. Substitute teachers and employees of the Department of School Attendance and Work Permits are not covered. Some former D.C teachers working at charter schools are eligible to remain in the Program.

Service Credit One year of school service is given for each year of employment with DCPS. After five years of service are accrued, additional service may be purchased or credited for service outside of DCPS.

Average Salary Highest 36 consecutive months of pay, divided by three.

Vested Members who accrue five or more years of Service Credit are vested for benefits. If these members leave service they may leave their Member Contribution Accounts with the Plan for a future benefit when reaching eligibility (deferred vested in this report).

CONTRIBUTIONS

Member Contributions Members hired before November 1, 1996 are required to contribute 7% of annual pay. Members hired on or after November 1, 1996 contribute 8% of annual pay. Members can also make voluntary post-tax contributions of up to 10% of annual pay towards an annuity in addition to any vested pension. Interest is not credited to each Member's accumulated contributions.

Refund of Member Contributions In the event a member leaves service for a reason other than death or retirement, member contribution accounts are refunded upon request.





SERVICE RETIREMENT

Eligibility

The Age and Service Credit requirements to be eligible for a full Service Retirement are listed below:

- **Members hired before November 1, 1996**

Age	Service Credit
55	30, including 5 years school service
60	20, including 5 years school service
62	5 years school service

- **Members hired on and after November 1, 1996**

Age	Service Credit
Any Age	30, including 5 years school service
60	20, including 5 years school service
62	5 years school service

Benefit

For members hired before November 1, 1996:

- 1.5% of Average Salary times service up to 5 years, plus
- 1.75% of Average Salary times service between 5 and 10 years, plus
- 2.0% of Average Salary times service over 10 years.

For members hired on or after November 1, 1996:

- 2.0% of Average Salary times service.

All members receive a minimum benefit of 1.0% of Average Salary plus \$25 for each year of service.

INVOLUNTARY SERVICE RETIREMENT

Eligibility

The Age and Service Credit requirements to be eligible for a Reduced Service Retirement are listed below:

- **All Members, regardless of date of hire**

Age	Service Credit
Any Age	25, including 5 years school service
50	20, including 5 years school service

Benefit

Service Retirement Benefit reduced by 1/6% per month (or 2% per year) that date of retirement precedes age 55.





DISABILITY RETIREMENT

- Eligibility** Active members with five or more years of school service credit are covered (vested) for disability retirement. To be eligible, the member must be found to be totally and permanently disabled (mentally or physically) from regular and gainful employment.
- Benefit** Equal to Service Retirement benefit. Minimum benefit is the lesser of a) or b):
- a) 40% of Average Salary
 - b) Calculated benefit amount by projecting service to age 60.

SURVIVOR BENEFITS

- LUMP SUM Eligibility** Death before completion of 18 months of school service or death without an eligible spouse, child or parent.

- Benefit** Refund of member contributions.

- SPOUSE ONLY Eligibility** Death before retirement and married for at least two years, or have a child by the marriage.

- Benefit** 55% of Service Retirement benefit. Minimum benefit is the lesser of a) or b):
- a) 55% of 40% of Average Salary
 - b) 55% of the calculated benefit amount by projecting service to age 60.

SPOUSE & DEPENDENT CHILDREN

- Eligibility** Death before retirement and married for at least two years, or have a child by the marriage. Children must be unmarried and under age 18, or 22 if full-time student. Also, any dependent child because of a disability incurred before age 18. Death does not have to occur before retirement for the children's benefit.

- Spouse Benefit** 55% of Service Retirement benefit. Minimum benefit is the lesser of a) or b):
- a) 55% of 40% of Average Salary
 - b) 55% of the calculated benefit amount by projecting service to age 60.

- Child Benefit** A benefit per child equal to the smallest of a) or b) or c):
- a) 60% of Average Salary divided by the number of eligible children
 - b) \$6,024* (if hired before 1/1/1980), \$5,820* (if hired between 1/1/1980 and 10/31/1996), or \$5,700* (if hired on or after 11/1/1996) per child



- c) \$18,072* (if hired before 1/1/1980), \$17,460* (if hired between 1/1/1980 and 10/31/1996), or \$17,460* (if hired on or after 11/1/1996) divided by the number of children.

DEPENDENT CHILDREN ONLY

Eligibility

Children must be unmarried and under age 18, or 22 if full-time student. Also, any dependent child because of a disability incurred before age 18. Death does not have to occur before retirement for the children's benefit.

Benefit

A benefit per child equal to the smallest of a) or b) or c):

- d) 75% of Average Salary divided by the number of eligible children
- e) \$7,356* (if hired before 1/1/1980), \$7,092* (if hired between 1/1/1980 and 10/31/1996), or \$6,912* (if hired on or after 11/1/1996) per child
- f) \$22,068* (if hired before 1/1/1980), \$21,276* (if hired between 1/1/1980 and 10/31/1996), or \$20,736* (if hired on or after 11/1/1996) divided by the number of children.

PARENTS ONLY

Eligibility

Death before retirement and no eligible spouse or children, and parents must receive at least one-half of their total income from member.

Benefit

55% of Service Retirement benefit. Minimum benefit is the lesser of a) or b):

- a) 55% of 40% of Average Salary
- b) 55% of the calculated benefit amount by projecting service to age 60.

*Survivor benefit amounts are as of March 2009, and are subject to annual inflation adjustments.

DEFERRED VESTED RETIREMENT

Eligibility

Active members with five or more years of school service credit .

Benefit

Benefit is calculated in the same manner as Service Retirement benefit and may be collected starting at age 62.

OPTIONS

Retirement and disability benefits are payable for the life of the retired member. Optional reduced benefits may be elected at the time of retirement to provide for continuation of a reduced benefit amount to a designated beneficiary. Optional forms include:

a) Reduced Annuity with a Maximum Survivor Annuity (to Spouse)

Reduced benefit paid to member so that upon member's death, the spouse will receive 55% of the unreduced normal life annuity. Member's benefit is reduced by 2.5% of retirement benefit, up to \$3,600, plus 10% of any retirement benefit over \$3,600.





b) Reduced Annuity with a Partial Survivor Annuity (to Spouse)

Reduced benefit paid to member so that upon member's death, the spouse will receive a partial annuity that can range from \$1 up to 55% of the unreduced normal life annuity amount. Member's benefit is reduced by the same amount as option a, multiplied by the ratio of the chosen benefit percent to the maximum benefit percent (55%).

c) Reduced Annuity with a Life Insurance Benefit

Member elects a life insurance amount, payable in a lump sum to designated beneficiary upon member's death.

d) Reduced Annuity with a Survivor Annuity to a Person with an Insurable Interest

A 55% joint and survivor annuity where the original benefit is reduced by 10% plus an additional 5% for each full 5 years, up to 25 years, that the designated beneficiary is younger than the member. Maximum reduction is 40% for any beneficiary who is 25 or more years younger than the member.

COST OF LIVING ADJUSTMENTS

Each year on March 1st, benefits which have been paid for at least twelve months preceding March 1st are increased. The increase is equal to the annual CPI. COLA's are included in benefit payments on and after April 1st.

For members hired on or after November 1, 1996, the cost of living increase is limited to 3% per year. In addition, cost of living adjustments do not apply to retirement benefit payments resulting from voluntary contributions.



SCHEDULE E

(Continued)

SUMMARY OF DISTRICT OF COLUMBIA POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

Effective Date Established on July 1, 1997. The Treasury Department is responsible for paying all benefits accrued before this date.

DEFINITIONS

Affiliated Employers District of Columbia Police Officers and Firefighters, except Police cadets.

Covered Members All employees of DC Police Department and Fire Department become members on their first day of active duty. Membership is not automatic for uniformed EMT Firefighters.

Service Credit One year of service is given for each year of employment with DCPD or DCFD. Additional service may be purchased or credited for lateral transfer service, EMT service, prior military service, and certain civilian service.

Average Salary For members hired before February 15, 1980, the highest 12 consecutive months of pay. For members hired on or after February 15, 1980, the highest 36 consecutive months of pay, divided by 3.

Vested Members who accrue five or more years of Service Credit are vested for benefits. If these members leave service they may leave their Member Contribution Accounts with the Plan for a future benefit when reaching eligibility (deferred vested in this report).

CONTRIBUTIONS

Member Contributions Members hired before November 10, 1996 contribute 7.0% of salary. Members hired on or after November 10, 1996 contribute 8.0% of salary. Member contributions, together with any purchased service credit payments, are credited to individual Member Contribution Accounts. No interest is accrued on contributions.

Refund of Member Contributions In the event a member leaves service for a reason other than death or retirement, member contribution accounts are refunded upon request.





SERVICE RETIREMENT

Eligibility

The Age and Service Credit requirements to be eligible for a full Service Retirement are listed below:

- **Members hired before November 10, 1996**

Age	Service Credit
Any age	20 (only if hired before 2/15/1980)
50	25 years departmental service
60	5 years departmental service

- **Members hired on and after November 10, 1996**

Age	Service Credit
Any Age	25 years departmental service
60	

Benefit

For members hired before November 10, 1996:

- 2.5% of Average Salary times departmental service up to 25 years (20 years if hired before 2/15/1980), plus
- 3.0% of Average Salary times departmental service over 25 years (or 20), plus
- 2.5% of Average Salary times purchased or credited service.

For members hired on or after November 10, 1996:

- 2.5% of Average Salary times total service.

All members are subject to a maximum benefit of 80% of Average Salary.

SERVICE-RELATED DISABILITY RETIREMENT

Eligibility

Disabled as a result of an illness or injury in the line of duty.

Benefit

For members hired before February 15, 1980:

2.5% of Average Salary times total years of service, subject to a minimum of 66-2/3% of Average Salary and a maximum of 70% of Average Salary.

For members hired on or after February 15, 1980:

70% of final pay times percentage of disability, subject to a minimum of 40% of final pay.





NONSERVICE-RELATED DISABILITY RETIREMENT

Eligibility Active members with five or more years of departmental service are covered (vested) for disability retirement. To be eligible, the member must be found to be totally and permanently disabled (mentally or physically) from regular and gainful employment.

Benefit **For members hired before February 15, 1980:**
2.0% of Average Salary times total years of service, subject to a minimum of 40% of Average Salary and a maximum of 70% of Average Salary.
For members hired on or after February 15, 1980:
70% of final pay times percentage of disability, subject to a minimum of 30% of final pay.

SURVIVOR BENEFITS

LUMP SUM

Eligibility Death before retirement without an eligible spouse or child.

Benefit Refund of member contributions according to plan order of precedence.

LUMP SUM – DEATH IN LINE OF DUTY

Eligibility Death occurring in the line of duty, not resulting from willful misconduct.

Benefit \$50,000

SPOUSE ONLY – DEATH IN LINE OF DUTY

Eligibility Member killed in line of duty, after December 29, 1993.

Benefit 100% of final pay.

SPOUSE ONLY – DEATH NOT IN LINE OF DUTY

Eligibility Member death, not in line of duty, after December 29, 1993. If retired, must be married for at least one year or have a child by the marriage.

Benefit 40% of the greater of a) or b):

- a) Average Salary
- b) Salary for step 6 salary class 1 of the DC Police and Fireman's Salary Act in effect, adjusted for cost-of-living increases if death occurs after retirement.

Benefit cannot be higher than rate of pay at death (or retirement if death occurs after retirement).





SPOUSE & DEPENDENT CHILDREN

Eligibility

Member death, not in line of duty, after December 29, 1993. If retired, must be married for at least one year or have a child by the marriage. Children must be unmarried and under age 18, or 22 if full-time student. Also, any dependent child because of a disability incurred before age 18. Death does not have to occur before retirement for the children's benefit.

Spouse Benefit

40% of the greater of a) or b):

- a) Average Salary
- b) Salary for step 6 salary class 1 of the DC Police and Fireman's Salary Act in effect, adjusted for cost-of-living increases if death occurs after retirement.

Benefit cannot be higher than rate of pay at death (or retirement if death occurs after retirement).

Child Benefit

A benefit per child equal to the smallest of a) or b) or c):

- a) 60% of Average Salary divided by the number of eligible children
- b) \$3,552* (if hired before 11/1/1996) or \$3,480* (if hired on or after 11/1/1996) per child
- c) \$10,656* (if hired before 11/1/1996) or \$10,490* (if hired on or after 11/1/1996) divided by the number of children.

DEPENDENT CHILDREN ONLY

Eligibility

Children must be unmarried and under age 18, or 22 if full-time student. Also, any dependent child because of a disability incurred before age 18. Death does not have to occur before retirement for the children's benefit.

Benefit

75% of Average Salary divided by the number of eligible children, adjusted for cost-of-living increases.

*Survivor benefit amounts are as of March 2009, and are subject to annual inflation adjustments.

DEFERRED VESTED RETIREMENT

Eligibility

Active members with five or more years of departmental service.

Benefit

Benefit is calculated in the same manner as Service Retirement benefit and may be collected starting at age 55.





OPTIONS

Retirement and disability benefits are payable for the life of the retired member. This includes an unreduced joint and survivor annuity as defined above in the "Survivor Benefits – Spouse and Dependent Children" section.

An optional reduced benefit may be elected at the time of retirement to provide for an additional survivor benefit to a designated beneficiary. Member's original annuity is reduced by 10% and that amount is added to the survivor's benefit. If the designated beneficiary is more than five years younger than the member, the additional amount will be reduced by 5% for each full five years that the beneficiary is younger than the member, subject to a maximum of 40%.

COST OF LIVING ADJUSTMENTS

Each year on March 1st, benefits which have been paid for at least twelve months preceding March 1st are increased. The increase is equal to the annual CPI. COLA's are included in benefit payments on and after April 1st.

For members hired on or after November 10, 1996, the cost of living increase is limited to 3% per year. Members (not beneficiaries) hired before February 15, 1980, will receive equalization pay, which is defined as the percentage increase as active employees' salary increases.



SCHEDULE F

SCHEDULES OF MEMBER DATA

TABLE 1

**RECONCILIATION OF MEMBER DATA
AS OF OCTOBER 1, 2012**

TEACHERS' RETIREMENT PLAN

	Actives	Retirees	Disabled	Beneficiaries	Vested Terms	Total
1. Headcounts as of October 1, 2011	4,747	2,909	114	107	794	8,671
2. Change in status during the year:						
a. Death		(34)	(3)	(4)		(41)
b. Disabled	(2)		3		(1)	
c. Retired	(154)	180			(26)	
d. Vested Termination	(272)				272	
e. Nonvested Termination	(474)					(474)
f. Benefits Expired/Refund	(190)	(4)		(2)	(71)	(267)
3. New member due to:						
a. New Hire	760					760
b. Rehire	80				(43)	37
c. Death of Participant				17		17
d. Adjustments		4		(2)	(5)	(3)
4. Headcounts as of October 1, 2012	4,495	3,055	114	116	920	8,700



SCHEDULE F

SCHEDULES OF MEMBER DATA

TABLE 2

**RECONCILIATION OF MEMBER DATA
AS OF OCTOBER 1, 2012**

POLICE OFFICERS' RETIREMENT PLAN

	Actives	Retirees	Disabled	Beneficiaries	Vested Terms	Total
1. Headcounts as of October 1, 2011	3,775	795	265	325	139	5,299
2. Change in status during the year:						
a. Death		(9)	(2)	(9)		(20)
b. Disabled	(12)		18		(6)	
c. Retired	(103)	111			(8)	
d. Vested Termination	(62)				62	
e. Nonvested Termination	(7)					(7)
f. Benefits Expired/Refund	(32)			(21)	(17)	(70)
3. New member due to:						
a. New Hire	208					208
b. Rehire	43		(2)		(26)	15
c. Death of Participant				10		10
d. Adjustments				17	(17)	0
4. Headcounts as of October 1, 2012	3,810	897	279	322	127	5,435



SCHEDULE F

SCHEDULES OF MEMBER DATA

TABLE 3

**RECONCILIATION OF MEMBER DATA
AS OF OCTOBER 1, 2012**

FIREFIGHTERS' RETIREMENT PLAN

	Actives	Retirees	Disabled	Beneficiaries	Vested Terms	Total
1. Headcounts as of October 1, 2011	1,786	307	62	102	49	2,306
2. Change in status during the year:						
a. Death		(1)		(2)		(3)
b. Disabled	(2)		3		(1)	
c. Retired	(56)	60			(4)	
d. Vested Termination	(20)				20	
e. Nonvested Termination	(10)					(10)
f. Benefits Expired/Refund	(11)			(4)	(2)	(17)
3. New member due to:						
a. New Hire	2					2
b. Rehire	11				(5)	6
c. Death of Participant				7		7
d. Adjustments		1	(1)	7	1	8
4. Headcounts as of October 1, 2012	1,700	367	64	110	58	2,299



SCHEDULE F

TABLE 4

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF OCTOBER 1, 2012**

TEACHERS' RETIREMENT PLAN

Attained Age	Completed Years of Service								Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+	Total	
Under 20	0	0	0	0	0	0	0	0	\$ 0
20 to 24	206	0	0	0	0	0	0	206	\$ 11,360,081
25 to 29	664	71	1	0	0	0	0	736	\$ 45,602,105
30 to 34	442	160	19	0	0	0	0	621	\$ 46,436,834
35 to 39	294	152	117	13	0	0	0	576	\$ 49,156,433
40 to 44	192	104	146	65	14	0	0	521	\$ 48,053,962
45 to 49	110	68	66	46	56	23	0	369	\$ 34,349,178
50 to 54	72	70	76	47	70	78	7	420	\$ 40,855,659
55 to 59	52	58	81	53	92	127	50	513	\$ 51,052,172
60 to 64	43	41	65	42	63	68	61	383	\$ 39,173,412
65 to 69	14	16	22	13	16	17	24	122	\$ 12,361,085
70 & Over	2	3	3	1	5	5	9	28	\$ 2,833,862
Total	2,091	743	596	280	316	318	151	4,495	\$ 381,234,784

Average Age: 42.25

Average Service: 9.91





SCHEDULE F

TABLE 5

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF OCTOBER 1, 2012**

POLICE OFFICERS' RETIREMENT PLAN

Attained Age	Completed Years of Service							Total	Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+		
Under 20	1	0	0	0	0	0	0	1	\$ 50,785
20 to 24	42	0	0	0	0	0	0	42	\$ 2,438,079
25 to 29	294	116	0	0	0	0	0	410	\$ 23,929,608
30 to 34	147	320	52	0	0	0	0	519	\$ 33,694,560
35 to 39	47	163	215	82	0	0	0	507	\$ 36,214,972
40 to 44	36	116	183	159	260	0	0	754	\$ 59,442,492
45 to 49	19	51	90	90	652	79	0	981	\$ 84,155,045
50 to 54	8	19	37	26	245	137	11	483	\$ 41,915,907
55 to 59	3	2	13	7	25	26	18	94	\$ 8,231,214
60 to 64	0	0	2	1	0	1	5	9	\$ 792,945
65 to 69	0	0	0	0	0	0	7	7	\$ 628,807
70 & Over	0	0	0	0	0	0	3	3	\$ 285,709
Total	597	787	592	365	1,182	243	44	3,810	\$ 291,780,122

Average Age: 41.17

Average Service: 15.12





SCHEDULE F

TABLE 6

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF OCTOBER 1, 2012**

FIREFIGHTERS' RETIREMENT PLAN

Attained Age	Completed Years of Service							Total	Payroll
	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+		
Under 20	0	0	0	0	0	0	0	0	\$ 0
20 to 24	23	0	0	0	0	0	0	23	\$ 1,165,697
25 to 29	115	176	3	0	0	0	0	294	\$ 16,428,349
30 to 34	75	192	20	1	0	0	0	288	\$ 16,856,137
35 to 39	15	126	77	18	9	0	0	245	\$ 16,204,707
40 to 44	1	49	94	53	133	1	0	331	\$ 25,487,250
45 to 49	1	14	21	62	99	50	0	247	\$ 21,544,329
50 to 54	1	2	6	19	69	100	10	207	\$ 18,875,067
55 to 59	1	2	0	0	2	37	19	61	\$ 6,127,121
60 to 64	0	1	0	0	1	0	2	4	\$ 407,947
65 & Over	0	0	0	0	0	0	0	0	\$ 0
Total	232	562	221	153	313	188	31	1,700	\$ 123,096,603

Average Age: 39.29

Average Service: 13.98





SCHEDULE F

TABLE 7

**SCHEDULE OF RETIREE MEMBER DATA
AS OF OCTOBER 1, 2012**

**TEACHERS' RETIREMENT PLAN
DISTRICT ONLY**

Attained Age	Service Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 20	0	\$0	0	\$0	9	\$31,993	9	\$31,993
20 to 24	0	\$0	0	\$0	2	\$9,070	2	\$9,070
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	1	\$12,312	1	\$12,312
35 to 39	0	\$0	0	\$0	2	\$15,316	2	\$15,316
40 to 44	0	\$0	3	\$81,228	0	\$0	3	\$81,228
45 to 49	0	\$0	1	\$23,820	1	\$11,099	2	\$34,919
50 to 54	10	\$222,463	8	\$266,700	8	\$81,299	26	\$570,462
55 to 59	92	\$2,305,143	25	\$785,508	10	\$83,248	127	\$3,173,899
60 to 64	701	\$13,395,050	46	\$934,869	29	\$149,733	776	\$14,479,652
65 to 69	1,303	\$17,528,369	25	\$342,830	27	\$191,023	1,355	\$18,062,222
70 to 74	650	\$7,599,077	6	\$33,350	13	\$40,580	669	\$7,673,007
75 to 79	230	\$2,369,501	0	\$0	10	\$68,462	240	\$2,437,963
80 to 84	55	\$633,526	0	\$0	4	\$39,230	59	\$672,756
85 to 89	13	\$146,889	0	\$0	0	\$0	13	\$146,889
90 to 94	1	\$5,636	0	\$0	0	\$0	1	\$5,636
95 & Over	0	\$0	0	\$0	0	\$0	0	\$0
Total	3,055	\$44,205,654	114	\$2,468,305	116	\$733,365	3,285	\$47,407,324

Average Age: 67.69





SCHEDULE F

TABLE 8

**SCHEDULE OF RETIREE MEMBER DATA
AS OF OCTOBER 1, 2012**

**TEACHERS' RETIREMENT PLAN
FEDERAL PLUS DISTRICT**

Attained Age	Service Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 20	0	\$0	0	\$0	10	\$62,964	10	\$62,964
20 to 24	0	\$0	0	\$0	4	\$25,068	4	\$25,068
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	1	\$12,312	1	\$12,312
35 to 39	0	\$0	0	\$0	3	\$28,308	3	\$28,308
40 to 44	0	\$0	3	\$81,228	2	\$14,532	5	\$95,760
45 to 49	0	\$0	1	\$23,820	2	\$17,928	3	\$41,748
50 to 54	10	\$334,788	13	\$376,344	11	\$191,736	34	\$902,868
55 to 59	93	\$4,646,443	27	\$822,276	15	\$317,472	135	\$5,786,191
60 to 64	708	\$33,685,956	57	\$1,652,688	41	\$657,924	806	\$35,996,568
65 to 69	1,420	\$64,476,024	69	\$1,957,572	63	\$1,135,680	1,552	\$67,569,276
70 to 74	1,010	\$44,480,496	48	\$1,327,860	59	\$1,012,896	1,117	\$46,821,252
75 to 79	821	\$36,721,020	45	\$1,309,756	62	\$1,257,444	928	\$39,288,220
80 to 84	616	\$26,101,728	39	\$1,148,088	58	\$1,348,212	713	\$28,598,028
85 to 89	373	\$15,074,196	39	\$1,305,792	55	\$1,210,296	467	\$17,590,284
90 to 94	196	\$8,345,848	20	\$779,784	27	\$689,242	243	\$9,814,874
95 & Over	84	\$3,741,348	10	\$293,880	15	\$366,612	109	\$4,401,840
Total	5,331	\$237,607,847	371	\$11,079,088	428	\$8,348,626	6,130	\$257,035,561

Average Age: 73.59





SCHEDULE F

TABLE 9

**SCHEDULE OF RETIREE MEMBER DATA
AS OF OCTOBER 1, 2012**

**POLICE OFFICERS' RETIREMENT PLAN
DISTRICT ONLY**

Attained Age	Service Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 20	0	\$0	0	\$0	53	\$290,177	53	\$290,177
20 to 24	0	\$0	0	\$0	14	\$69,035	14	\$69,035
25 to 29	0	\$0	1	\$24,240	1	\$26,292	2	\$50,532
30 to 34	0	\$0	2	\$68,460	0	\$0	2	\$68,460
35 to 39	0	\$0	13	\$404,244	2	\$80,136	15	\$484,380
40 to 44	1	\$17,604	47	\$1,523,724	20	\$350,269	68	\$1,891,597
45 to 49	2	\$43,790	84	\$2,765,640	15	\$214,651	101	\$3,024,081
50 to 54	158	\$5,589,622	66	\$2,389,992	24	\$311,909	248	\$8,291,523
55 to 59	351	\$7,869,895	47	\$918,058	41	\$508,537	439	\$9,296,490
60 to 64	280	\$3,855,567	15	\$107,562	55	\$893,972	350	\$4,857,101
65 to 69	93	\$598,857	4	\$42,336	54	\$772,842	151	\$1,414,035
70 to 74	12	\$97,437	0	\$0	26	\$474,338	38	\$571,775
75 to 79	0	\$0	0	\$0	9	\$149,282	9	\$149,282
80 to 84	0	\$0	0	\$0	7	\$112,648	7	\$112,648
85 to 89	0	\$0	0	\$0	0	\$0	0	\$0
90 to 94	0	\$0	0	\$0	1	\$20,952	1	\$20,952
95 & Over	0	\$0	0	\$0	0	\$0	0	\$0
Total	897	\$18,072,772	279	\$8,244,256	322	\$4,275,040	1,498	\$30,592,068

Average Age: 56.01





SCHEDULE F

TABLE 10

**SCHEDULE OF RETIREE MEMBER DATA
AS OF OCTOBER 1, 2012**

**POLICE OFFICERS' RETIREMENT PLAN
FEDERAL PLUS DISTRICT**

Attained Age	Service Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 20	0	\$0	0	\$0	57	\$540,732	57	\$540,732
20 to 24	0	\$0	0	\$0	17	\$188,652	17	\$188,652
25 to 29	0	\$0	1	\$24,240	1	\$26,292	2	\$50,532
30 to 34	0	\$0	2	\$68,460	1	\$34,740	3	\$103,200
35 to 39	0	\$0	13	\$404,244	3	\$107,580	16	\$511,824
40 to 44	1	\$17,604	51	\$1,601,412	23	\$645,108	75	\$2,264,124
45 to 49	2	\$56,196	89	\$2,865,516	20	\$535,500	111	\$3,457,212
50 to 54	158	\$11,202,648	93	\$2,993,664	48	\$1,442,784	299	\$15,639,096
55 to 59	419	\$26,589,828	101	\$4,022,292	99	\$2,486,587	619	\$33,098,707
60 to 64	858	\$45,581,820	160	\$6,629,688	178	\$4,654,491	1,196	\$56,865,999
65 to 69	906	\$47,431,132	191	\$7,831,056	212	\$5,784,716	1,309	\$61,046,904
70 to 74	483	\$25,339,692	124	\$5,416,572	179	\$4,962,672	786	\$35,718,936
75 to 79	250	\$13,299,396	104	\$4,909,488	183	\$5,538,312	537	\$23,747,196
80 to 84	98	\$6,310,608	97	\$4,742,058	138	\$4,198,104	333	\$15,250,770
85 to 89	34	\$2,438,808	59	\$3,267,456	117	\$3,481,296	210	\$9,187,560
90 to 94	13	\$1,133,040	18	\$984,199	65	\$2,027,304	96	\$4,144,543
95 & Over	0	\$0	8	\$478,776	29	\$907,404	37	\$1,386,180
Total	3,222	\$179,400,772	1,111	\$46,239,121	1,370	\$37,562,274	5,703	\$263,202,167

Average Age: 66.91





SCHEDULE F

TABLE 11

**SCHEDULE OF RETIREE MEMBER DATA
AS OF OCTOBER 1, 2012**

**FIREFIGHTERS' RETIREMENT PLAN
DISTRICT ONLY**

Attained Age	Service Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 20	0	\$0	0	\$0	25	\$209,714	25	\$209,714
20 to 24	0	\$0	0	\$0	2	\$47,886	2	\$47,886
25 to 29	0	\$0	0	\$0	2	\$4,002	2	\$4,002
30 to 34	0	\$0	1	\$17,460	0	\$0	1	\$17,460
35 to 39	0	\$0	2	\$46,044	1	\$23,244	3	\$69,288
40 to 44	0	\$0	7	\$228,192	5	\$127,936	12	\$356,128
45 to 49	0	\$0	11	\$334,092	3	\$52,326	14	\$386,418
50 to 54	47	\$1,799,547	8	\$294,180	6	\$94,384	61	\$2,188,111
55 to 59	167	\$5,090,057	18	\$360,549	11	\$217,839	196	\$5,668,445
60 to 64	109	\$2,073,489	15	\$108,656	17	\$340,793	141	\$2,522,938
65 to 69	40	\$504,848	2	\$1,515	16	\$279,713	58	\$786,076
70 to 74	4	\$45,568	0	\$0	9	\$216,057	13	\$261,625
75 to 79	0	\$0	0	\$0	9	\$216,677	9	\$216,677
80 to 84	0	\$0	0	\$0	4	\$102,864	4	\$102,864
85 to 89	0	\$0	0	\$0	0	\$0	0	\$0
90 to 94	0	\$0	0	\$0	0	\$0	0	\$0
95 & Over	0	\$0	0	\$0	0	\$0	0	\$0
Total	367	\$9,513,509	64	\$1,390,688	110	\$1,933,435	541	\$12,837,632

Average Age: 57.22





SCHEDULE F

TABLE 12

**SCHEDULE OF RETIREE MEMBER DATA
AS OF OCTOBER 1, 2012**

**FIREFIGHTERS' RETIREMENT PLAN
FEDERAL PLUS DISTRICT**

Attained Age	Service Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 20	0	\$0	0	\$0	25	\$301,668	25	\$301,668
20 to 24	0	\$0	0	\$0	2	\$48,624	2	\$48,624
25 to 29	0	\$0	0	\$0	2	\$7,356	2	\$7,356
30 to 34	0	\$0	1	\$17,460	0	\$0	1	\$17,460
35 to 39	0	\$0	2	\$46,044	1	\$23,244	3	\$69,288
40 to 44	0	\$0	7	\$228,192	6	\$198,000	13	\$426,192
45 to 49	0	\$0	11	\$334,092	6	\$153,540	17	\$487,632
50 to 54	48	\$3,625,176	13	\$398,316	12	\$272,772	73	\$4,296,264
55 to 59	175	\$12,525,096	38	\$1,576,776	23	\$641,088	236	\$14,742,960
60 to 64	156	\$10,890,276	44	\$2,122,476	39	\$1,097,040	239	\$14,109,792
65 to 69	220	\$13,836,132	62	\$2,952,631	62	\$1,728,198	344	\$18,516,961
70 to 74	223	\$13,749,288	89	\$4,597,403	89	\$2,555,241	401	\$20,901,932
75 to 79	113	\$6,810,996	53	\$2,415,924	58	\$1,752,732	224	\$10,979,652
80 to 84	58	\$3,851,376	49	\$2,449,872	84	\$2,632,908	191	\$8,934,156
85 to 89	26	\$1,827,432	24	\$1,364,184	76	\$2,509,920	126	\$5,701,536
90 to 94	4	\$271,944	19	\$1,050,823	36	\$1,233,732	59	\$2,556,499
95 & Over	0	\$0	3	\$206,964	15	\$462,168	18	\$669,132
Total	1,023	\$67,387,716	415	\$19,761,157	536	\$15,618,231	1,974	\$102,767,104

Average Age: 69.90





SCHEDULE G

SCHEDULE OF RETIREES ADDED TO AND REMOVED FROM ROLLS

**DISTRICT BENEFIT ONLY
(\$ IN THOUSANDS)**

Fiscal Year Ended	Plan	Added		Removed		Increase Due to Plan Amendments	Rolls at End of Year		Percentage Increase in Annual Allowances	Average Annual Allowances
		Number	Annual Allowances	Number	Annual Allowances		Number	Annual Allowances		
September 30, 2009	Teachers						2,770	\$31,877		\$12
	Police						1,086	\$15,990		\$15
	Fire						363	\$6,421		\$18
September 30, 2010	Teachers	203	\$4,225	32	\$337	\$1,489	2,941	\$37,254	16.9%	\$13
	Police	100	\$2,799	14	\$76	\$2,533	1,172	\$21,246	32.9%	\$18
	Fire	27	\$712	10	\$132	\$470	380	\$7,471	16.4%	\$20
September 30, 2011	Teachers	226	\$4,734	37	\$490	\$497	3,130	\$41,996	12.7%	\$13
	Police	228	\$4,291	15	\$152	\$187	1,385	\$25,572	20.4%	\$18
	Fire	98	\$2,556	7	\$86	\$18	471	\$9,958	33.3%	\$21
September 30, 2012	Teachers	204	\$4,807	49	\$594	\$1,198	3,285	\$47,407	12.9%	\$14
	Police	156	\$5,153	43	\$476	\$343	1,498	\$30,592	19.6%	\$20
	Fire	78	\$2,881	8	\$81	\$80	541	\$12,838	28.9%	\$24

SCHEDULE G





SCHEDULE OF RETIREES ADDED TO AND REMOVED FROM ROLLS

**FEDERAL PLUS DISTRICT BENEFIT
(\$ IN THOUSANDS)**

Fiscal Year Ended	Plan	Added		Removed		Increase Due to Plan Amendments	Rolls at End of Year		Percentage Increase in Annual Allowances	Average Annual Allowances
		Number	Annual Allowances	Number	Annual Allowances		Number	Annual Allowances		
September 30, 2009	Teachers						6,006	\$232,909		\$39
	Police						5,521	\$243,698		\$44
	Fire						1,900	\$94,682		\$50
September 30, 2010	Teachers	216	\$8,146	185	\$6,969	\$7,468	6,037	\$241,554	3.7%	\$40
	Police	161	\$7,790	162	\$6,336	\$2,762	5,520	\$247,914	1.7%	\$45
	Fire	56	\$2,128	89	\$3,805	\$1,150	1,867	\$94,155	-0.6%	\$50
September 30, 2011	Teachers	239	\$8,626	163	\$6,168	\$4,092	6,113	\$248,104	2.7%	\$41
	Police	285	\$7,181	146	\$5,846	\$3,190	5,659	\$252,439	1.8%	\$45
	Fire	119	\$4,716	51	\$2,267	\$1,131	1,935	\$97,735	3.8%	\$51
September 30, 2012	Teachers	218	\$8,632	201	\$7,421	\$7,721	6,130	\$257,036	3.6%	\$42
	Police	218	\$11,195	174	\$6,844	\$6,412	5,703	\$263,202	4.3%	\$46
	Fire	106	\$5,780	67	\$3,087	\$2,339	1,974	\$102,767	5.1%	\$52





SCHEDULE H

**TEACHERS' RETIREMENT PLAN
ANALYSIS OF FINANCIAL EXPERIENCE**

**Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
(\$ Millions)**

Type of Activity	\$ Gain (or Loss) For Year Ending 10/1/2012
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (11.0)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.4)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	9.9
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	(6.2)
New Members. Additional unfunded accrued liability will produce a loss.	(13.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(72.6)
Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	6.3
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>(12.8)</u>
Gain (or Loss) During Year From Financial Experience	\$ (100.5)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, or method changes.	<u>(15.4)</u>
Composite Gain (or Loss) During Year	<u><u>\$ (115.9)</u></u>

SCHEDULE H





**POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT PLAN
ANALYSIS OF FINANCIAL EXPERIENCE**

**Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
(\$ Millions)**

Type of Activity	\$ Gain (or Loss) For Year Ending 10/1/2012
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ 5.3
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	7.8
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	1.4
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(5.2)
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	168.6
New Members. Additional unfunded accrued liability will produce a loss.	(9.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(150.8)
Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	(0.6)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>27.0</u>
Gain (or Loss) During Year From Financial Experience	\$ 43.8
Non-Recurring Items. Adjustments for plan amendments, assumption changes, or method changes.	<u>0.1</u>
Composite Gain (or Loss) During Year	\$ <u>43.9</u>