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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, 2014





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

December 10, 2014

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, 2014.

The purpose of this report is to provide a summary of the funded status of each Plan as of October 1, 2014, to recommend rates of contribution to be paid by the District in the 2016 fiscal year. The information needed for this Plan under the new Governmental Accounting Standards Board Statement No. 67 was provided in a separate report. However, for informational purposes only, we have also provided accounting information under GASB 25 and 27 in Section VII of the report. 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.

The funding policy adopted by the Board in 2012 includes the following funding goals:

- 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 or the current active member contribution rate.

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December 10, 2014
The Board of Trustees
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The funding policy not only states the overall funding goals and benchmarks for the Plan, but sets the methods and assumptions. The level dollar amortization period was set to 20 years in 2012 and will decline one year each year until a funded ratio of 100 percent is reached. Therefore, the amortization period this year is 18 years.

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 that reads 'Thomas J. Cavanaugh'.

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

A handwritten signature in blue ink that reads 'Edward J. Koebel'.

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

A handwritten signature in blue ink that reads '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, 2014**

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.

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

VALUATION DATE	October 1, 2014	October 1, 2013
Number of Active Members	4,499	4,379
Annual Covered Payroll	\$378,926	\$369,071
Number of Retired Members and Survivors	3,601	3,448
Annual Retirement Benefits	\$58,687	\$52,966
Assets:		
Actuarial Value	\$1,638,583	\$1,585,775
Market Value	\$1,746,030	\$1,622,376
Liabilities:		
Accrued Liability	\$1,849,230	\$1,759,043
Unfunded Accrued Liability (UAL)	\$210,647	\$173,268
Funding Ratios:		
Based on Actuarial Value	88.61%	90.15 %
Based on Market Value	94.42%	92.23 %
Amortization Period:	18 years	19 years
CONTRIBUTION FOR FISCAL YEAR ENDING	09/30/2016	09/30/2015
Employer Normal Cost Rate*	6.63%	6.29%
Amortization of UAL Rate	5.00	4.11
Annual Required Contribution Rate (ARC)	11.63%	10.40%
Estimated Fiscal Year End Covered Payroll	\$395,031	\$384,757
Fiscal Year District Payment before 1-907.02(c)	\$45,942	\$40,015
Shortfall/Overpayment	(1,473)	(502)
Fiscal Year District Payment	\$44,469	\$39,513

*The normal cost rate includes the administrative expense rate of 1.20%.



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

VALUATION DATE	October 1, 2014	October 1, 2013
Total Number of Active Members	3,902	3,846
Total Annual Covered Payroll	\$305,765	\$292,494
Number of Retired Members and Survivors	1,707	1,584
Annual Retirement Benefits	\$40,271	\$34,392
Total Assets:		
Actuarial Value	\$3,061,936	\$2,869,122
Market Value	\$3,272,733	\$2,978,529
Liabilities:		
Accrued Liability	\$2,750,014	\$2,552,979
Unfunded Accrued Liability (UAL)	(\$311,922)	(\$316,143)
Funding Ratios:		
Based on Actuarial Value	111.34%	112.38 %
Based on Market Value	119.01%	116.67 %
Amortization Period:	18 years	19 years
CONTRIBUTION FOR FISCAL YEAR ENDING	09/30/2016	09/30/2015
Employer Normal Cost Rate*	33.33%	32.21 %
Amortization of UAL Rate	(9.18)	(9.45)
Annual Required Contribution Rate (ARC)	24.15%	22.76 %
Estimated Fiscal Year End Covered Payroll	\$318,760	\$304,925
Fiscal Year District Payment before 1-907.02(c)	\$76,981	\$69,401
Shortfall/Overpayment	(487)	(34)
Fiscal Year District Payment	\$76,494	\$69,367

*The normal cost rate includes the administrative expense rate of 1.20%.



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

VALUATION DATE	October 1, 2014	October 1, 2013
Total Number of Active Members	1,649	1,664
Total Annual Covered Payroll	\$132,650	\$120,886
Number of Retired Members and Survivors	658	599
Annual Retirement Benefits	\$18,179	\$15,138
Total Assets:		
Actuarial Value	\$1,226,791	\$1,144,412
Market Value	\$1,315,586	\$1,189,928
Liabilities:		
Accrued Liability	\$1,248,524	\$1,091,106
Unfunded Accrued Liability (UAL)	\$21,733	(\$53,306)
Funding Ratios:		
Based on Actuarial Value	98.26%	104.89 %
Based on Market Value	105.37%	109.06 %
Amortization Period:	18 years	19 years
CONTRIBUTION FOR FISCAL YEAR ENDING	09/30/2016	09/30/2015
Employer Normal Cost Rate*	38.18%	37.28%
Amortization of UAL Rate	1.47	(3.86)
Annual Required Contribution Rate (ARC)	39.65%	33.42%
Estimated Fiscal Year End Covered Payroll	\$138,288	\$126,024
Fiscal Year District Payment before 1-907.02(c)	\$54,831	\$42,117
Shortfall/Overpayment	4,790	(8,054)
Fiscal Year District Payment	\$59,621	\$34,063

*The normal cost rate includes the administrative expense rate of 1.20%.



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

VALUATION DATE	October 1, 2014	October 1, 2013
Number of Active Police Officers	3,902	3,846
Annual Covered Payroll	\$305,765	\$292,494
Number of Active Firefighters	1,649	1,664
Annual Covered Payroll	\$132,650	\$120,886
Total Number of Active Members	5,551	5,510
Total Annual Covered Payroll	\$438,415	\$413,380
Number of Retired Members and Survivors	2,365	2,183
Annual Retirement Benefits	\$58,450	\$49,530
Assets:		
Actuarial Value	\$4,288,727	\$4,013,534
Market Value	\$4,588,319	\$4,168,457
Liabilities:		
Accrued Liability	\$3,998,537	\$3,644,085
Unfunded Accrued Liability (UAL)	(\$290,190)	(\$369,449)
Funding Ratios:		
Based on Actuarial Value	107.26%	110.14 %
Based on Market Value	114.75%	114.39 %
Amortization Period:	18 years	19 years
CONTRIBUTIONS FOR FISCAL YEAR ENDING	09/30/2016	09/30/2015
Employer Normal Cost Rate*	34.80%	33.69 %
Amortization of UAL Rate	(5.96)	(7.82)
Annual Required Contribution Rate (ARC)	28.84%	25.87 %
Estimated Fiscal Year End Covered Payroll	\$457,048	\$430,949
Fiscal Year District Payment before 1-907.02(c)	\$131,812	\$111,518
Shortfall/Overpayment	4,303	(8,088)
Fiscal Year District Payment	\$136,115	\$103,430

*The normal cost rate includes the administrative expense rate of 1.20%.



2. The valuation balance sheet showing the results is given in Schedule A.
3. Comments on the valuation results as of October 1, 2014 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.
5. The funding policy adopted by the Board in 2012 includes the following funding goals:
 - 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 level dollar amortization period was set to 20 years in 2012 and will decline one year each year until a funded ratio of 100 percent is reached. The amortization period this year is 18 years.

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. Firefighter data was adjusted to reflect the impact of pay increases due to arbitration award.
7. Firefighter salary and annuity data was adjusted to reflect the impact of retroactive pay increases awarded to members for 2012, 2013, and 2014. These increases were approved after July 1, 2014 and were therefore not reflected in the valuation data. However, since they will impact the cost of the plan as of the valuation date, the pay increases were added to the data supplied by DCRB.
8. All membership data was collected as of July 1, 2014 but for valuation purposes (e.g. age, service) all members were treated as if remaining in the System as of October 1, 2014.



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, 2014 on the basis of which the valuation was prepared.

TABLE 1

THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF OCTOBER 1, 2014 (\$ IN THOUSANDS)

GROUP	NUMBER	COMPENSATION
Teachers	4,499	\$378,926
Police Officers	3,902	305,765
Firefighters	<u>1,649</u>	<u>132,650</u>
Total	10,050	\$817,341

- 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
10/01/2014	10,050	\$ 817,341	\$ 81,327	2.79 %
10/01/2013	9,889	782,451	79,123	(0.56)
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)



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, 2014
(\$ IN THOUSANDS)

DISTRICT ONLY

TYPE OF RETIREMENT	GROUP			
	TEACHERS	POLICE OFFICERS	FIREFIGHTERS	TOTAL
Service:				
Number	3,378	1,106	465	4,949
Annual Benefits	\$55,636	\$27,377	\$14,435	\$97,448
Disability:				
Number	98	279	64	441
Annual Benefits	\$2,164	\$8,159	\$1,440	\$11,763
Survivors:				
Number	125	322	129	576
Annual Benefits	\$887	\$4,735	\$2,304	\$7,926
Total:				
Number	3,601	1,707	658	5,966
Annual Benefits	\$58,687	\$40,271	\$18,179	\$117,137

*In addition, there are 1,226 deferred vested participants with annual deferred benefits of \$16,205,880.



TABLE 4

THE NUMBER AND ANNUAL RETIREMENT BENEFITS
OF RETIRED MEMBERS AND SURVIVORS OF DECEASED MEMBERS
ON THE ROLL AS OF OCTOBER 1, 2014
(\$ IN THOUSANDS)

FEDERAL PLUS DISTRICT

TYPE OF RETIREMENT	GROUP			
	TEACHERS	POLICE OFFICERS	FIREFIIGHTERS	TOTAL
Service:				
Number	5,423	3,318	1,085	9,826
Annual Benefits	\$250,145	\$192,632	\$74,391	\$517,168
Disability:				
Number	331	1,044	379	1,754
Annual Benefits	\$10,297	\$44,091	\$18,350	\$72,738
Survivors:				
Number	435	1,355	562	2,352
Annual Benefits	\$9,248	\$39,093	\$17,259	\$65,600
Total:				
Number	6,189	5,717	2,026	13,932
Annual Benefits	\$269,690	\$275,816	\$110,000	\$655,506

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, 2014, 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, 2014 AND OCTOBER 1, 2013
(\$ IN THOUSANDS)

FUND	OCTOBER 1, 2014 MARKET VALUE	OCTOBER 1, 2013 MARKET VALUE
Teachers	\$1,746,030	\$1,622,376
Police Officers and Firefighters	<u>4,588,319</u>	<u>4,168,457</u>
Total Market Value of Assets	\$6,334,349	\$5,790,833

- The seven-year market related actuarial value of assets used for the current valuation was \$5,927,309,790. Schedule B shows the development of the actuarial value of assets as of October 1, 2014. The following table shows the actuarial value of assets allocated among each plan.

TABLE 6
COMPARISON OF ACTUARIAL VALUE OF ASSETS AT
OCTOBER 1, 2014 AND OCTOBER 1, 2013
(\$ IN THOUSANDS)

FUND	OCTOBER 1, 2014 ACTUARIAL VALUE	OCTOBER 1, 2013 ACTUARIAL VALUE
Teachers	\$1,638,583	\$1,585,775
Police Officers and Firefighters	<u>4,288,727</u>	<u>4,013,534</u>
Total Actuarial Value of Assets	\$5,927,310	\$5,599,309



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 \$2,284,585,344, of which \$864,833,746 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$103,611,915 is for the prospective benefits payable on account of present inactive members, and \$1,316,139,683 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 \$1,638,583,095 as of October 1, 2014. The difference of \$646,002,249 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 13.21% of payroll are required under the entry age method. Of this amount 7.78% 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 2016 and the remaining 5.43% 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, 2016 are estimated to be 1.20% of payroll.
4. Prospective normal cost contributions (excluding administrative expenses) at the rate of 13.21% have a present value of \$435,354,804. When this amount is subtracted from \$646,002,249, which is the present value of total future contributions to be made, there remains \$210,647,445 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 \$6,207,736,915, of which \$1,087,689,328 is for the prospective benefits payable on account of present retired members and survivors of deceased members, \$61,826,029 is for the prospective benefits payable on account of present inactive members, and \$5,058,221,558 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 \$4,288,726,695 as of October 1, 2014. The difference of \$1,919,010,220 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 41.15% of payroll are required under the entry age method. Of this amount 7.55% 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 2016 and the remaining 33.60% 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, 2016 are estimated to be 1.20% of payroll.
4. Prospective normal cost contributions (excluding administrative expenses) at the rate of 41.15% have a present value of \$2,209,199,851. When this amount is subtracted from \$1,919,010,220, which is the present value of total future contributions to be made, there remains (\$290,189,631) 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 2016 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 2016 District payment is calculated by taking the actual fiscal year 2014 covered payroll for each employee class (which is provided by the District) and multiplying by the corresponding fiscal year 2014 contribution rates, which were determined as of October 1, 2012. This result is the fiscal year 2014 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, 2014
(\$ IN THOUSANDS)**

	Teachers	Police	Fire
(1) Actual FY 2014 Covered Payroll	\$378,926	\$305,765	\$132,650
(2) FY 2014 Contribution Rate	7.96%	23.59%	32.37%
(3) Actual FY 2014 Contribution Required	\$30,163	\$72,130	\$42,939
(4) Actual FY 2014 Contribution Paid	\$31,636	\$72,617	\$38,149
(5) Preliminary D.C. Code §1-907.02(c) Adjustment to FY 2016 Payment [(3) - (4)]	(\$1,473)	(\$487)	\$4,790
(6) FY 2015 Unrecognized Amount	\$0	\$0	\$0
(7) Final D.C. Code §1-907.02(c) Adjustment to FY 2016 Payment [(5) + (6) if applicable]	(\$1,473)	(\$487)	\$4,790
(8) Applicable Adjustment	(\$1,473)	(\$487)	\$4,790
(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, 2014 valuation and recommended for use for the fiscal year ending September 30, 2016.

**TEACHERS’ RETIREMENT PLAN
ACTUARIAL DETERMINED CONTRIBUTIONS (ADC)
FOR FISCAL YEAR ENDING SEPTEMBER 30, 2016**

	PERCENTAGE OF ACTIVE MEMBERS’ COMPENSATION	EMPLOYER ACTUARIAL DETERMINED CONTRIBUTION (ADC)
Normal Cost	5.43%	\$21,450,000
Expense Load	1.20	4,740,000
Accrued Liability	<u>5.00</u>	<u>19,752,000</u>
Sub-Total	11.63%	\$45,942,000
DC Code Adjustment		<u>(1,473,000)</u>
Total		\$44,469,000

**POLICE OFFICERS’ AND FIREFIGHTERS’ RETIREMENT PLAN
ACTUARIAL DETERMINED CONTRIBUTIONS (ADC)
FOR FISCAL YEAR ENDING SEPTEMBER 30, 2016**

	PERCENTAGE OF ACTIVE MEMBERS’ COMPENSATION	EMPLOYER ACTUARIAL DETERMINED CONTRIBUTION (ADC)
Normal Cost	33.60%	\$153,568,000
Expense Load	1.20	5,485,000
Accrued Liability	<u>(5.96)</u>	<u>(27,241,000)</u>
Sub-Total	28.84%	\$131,812,000
DC Code Adjustment		<u>4,303,000</u>
Total		\$136,115,000



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, 2014**

GROUP	RETIREMENT PLAN			
	Teachers	Police Officers	Firefighters	Total
Retirees and survivors currently receiving benefits	3,601	1,707	658	5,966
Terminated employees entitled to benefits but not yet receiving benefits	969	173	84	1,226
Inactive Members	1,634	75	42	1,751
Active Members				
Vested	2,255	3,224	1,463	6,942
Non-vested	<u>2,244</u>	<u>678</u>	<u>186</u>	<u>3,108</u>
Total Active Members	4,499	3,902	1,649	10,050
Totals	10,703	5,857	2,433	18,993



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						
10/1/2010	\$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 %
10/1/2013	1,585,775	1,759,043	173,268	90.1 %	369,071	46.9 %
10/1/2014	1,638,583	1,849,230	210,647	88.6 %	378,926	55.6 %
POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT PLAN						
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)%
10/1/2013	4,013,534	3,644,085	(369,449)	110.1 %	413,380	(89.4)%
10/1/2014	4,288,727	3,998,537	(290,190)	107.3 %	438,415	(66.2)%
TOTAL						
10/1/2010	\$4,989,764	\$4,495,129	(\$494,635)	111.0 %	\$761,370	(65.0)%
10/1/2011	5,167,370	4,854,689	(312,681)	106.4 %	805,676	(38.8)%
10/1/2012	5,390,479	5,137,524	(252,955)	104.9 %	796,112	(31.8)%
10/1/2013	5,599,309	5,403,128	(196,181)	103.6 %	782,451	(25.1)%
10/1/2014	5,927,310	5,847,767	(79,543)	101.4 %	817,341	(9.7)%



3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at October 1, 2014.

	Teachers	Police Officers & Firefighters
Valuation Date	10/1/2014	10/1/2014
Actuarial cost method	Entry Age Normal	Entry Age Normal
Amortization method	Level Dollar Closed	Level Dollar Closed
Remaining amortization period	18 years	18 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%	4.25 – 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	Actuarial Determined Contribution in Dollars (\$ in millions)	Actuarial Determined Contribution as a Percent of Total Payroll	Percent of ADC Contributed
Teachers' Retirement Plan			
9/30/2010	\$0.0	0.00 %	100 %
9/30/2011	0.0	0.00 %	100 %
9/30/2012	0.0	0.00 %	100 %
9/30/2013	6.4	1.59 %	100 %
9/30/2014	31.6	7.96 %	100 %
Police Officers' & Firefighters' Retirement Plan			
9/30/2010	\$132.3	31.21 %	100 %
9/30/2011	127.2	30.20 %	100 %
9/30/2012	116.7	28.13 %	100 %
9/30/2013	96.3	22.06 %	100 %
9/30/2014	110.8	26.19 %	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, 2014 is shown below.

Teachers’ Retirement Plan

		<u>\$ Thousands</u>
(1)	UAAL* as of October 1, 2013	\$ 173,268
(2)	Total normal cost from last valuation	47,332
(3)	Total actual contributions	60,387
(4)	Interest accrual: (1) x .065 + [(2) – (3)] x .0325	<u>10,838</u>
(5)	Expected UAAL before changes: (1) + (2) – (3) + (4)	\$ 171,051
(6)	Change due to transfer to U.S. Treasury	0
(7)	Change due to actuarial assumptions or methods	<u>0</u>
(8)	Expected UAAL after changes: (5) + (6) + (7)	\$ 171,051
(9)	Actual UAAL as of October 1, 2014	\$ 210,647
(10)	Gain/(loss): (8) – (9)	\$ (39,596)
(11)	Gain/(loss) as percent of actuarial accrued liabilities at start of year (\$1,759,043)	(2.3)%

*Unfunded actuarial accrued liability.

Valuation Date September 30	Actuarial Gain/(Loss) as a % of Beginning Accrued Liabilities
2012	(6.5)%
2013	(2.2)
2014	(2.3)



Police Officers' and Firefighters' Retirement Plan

		<u>\$ Thousands</u>
(1)	UAAL* as of October 1, 2013	\$ (369,449)
(2)	Total normal cost from last valuation	165,354
(3)	Total actual contributions	143,587
(4)	Interest accrual: $(1) \times .065 + [(2) - (3)] \times .0325$	<u>(23,307)</u>
(5)	Expected UAAL before changes: $(1) + (2) - (3) + (4)$	\$ (370,989)
(6)	Change due to transfer to U.S. Treasury	0
(7)	Change due to actuarial assumptions or methods	<u>0</u>
(8)	Expected UAAL after changes: $(5) + (6) + (7)$	\$ (370,989)
(9)	Actual UAAL as of October 1, 2014	\$ (290,190)
(10)	Gain/(loss): $(8) - (9)$	\$ (80,799)
(11)	Gain/(loss) as percent of actuarial accrued liabilities at start of year (\$3,644,085)	(2.2)%

*Unfunded actuarial accrued liability.

Valuation Date September 30	Actuarial Gain/(Loss) as a % of Beginning Accrued Liabilities
2012	1.3%
2013	1.4
2014	(2.2)



SCHEDULE A

**VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF
THE DISTRICT OF COLUMBIA RETIREMENT BOARD
AS OF OCTOBER 1, 2014**

TEACHERS' RETIREMENT PLAN

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		1,638,583,095
Present value of future members' contributions		251,355,008
Present value of future employer contributions		
Normal contributions	\$183,999,796	
Unfunded accrued liability contributions	<u>210,647,445</u>	
Total prospective employer contributions		<u>394,647,241</u>
Total Present and Prospective Assets		<u>\$2,284,585,344</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$864,833,746
Present value of prospective benefits payable on account of inactive members		103,611,915
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$1,155,652,875	
Disability retirement benefits	32,186,195	
Survivor benefits	15,820,829	
Separation benefits	<u>112,479,784</u>	
Total		<u>1,316,139,683</u>
Total Actuarial Liabilities		<u>\$2,284,585,344</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, 2014**

POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

PRESENT AND PROSPECTIVE ASSETS		
Actuarial Value of Present Assets		4,288,726,695
Present value of future members' contributions		368,513,935
Present value of future employer contributions		
Normal contributions	\$1,840,685,916	
Unfunded accrued liability contributions	<u>(290,189,631)</u>	
Total prospective employer contributions		<u>1,550,496,285</u>
Total Present and Prospective Assets		<u>\$6,207,736,915</u>
ACTUARIAL LIABILITIES		
Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits		\$1,087,689,328
Present value of prospective benefits payable on account of inactive members		61,826,029
Present value of prospective benefits payable on account of present active members:		
Service retirement benefits	\$4,599,015,175	
Disability retirement benefits	303,766,757	
Survivor benefits	84,945,669	
Separation benefits	<u>70,493,957</u>	
Total		<u>5,058,221,558</u>
Total Actuarial Liabilities		<u>\$6,207,736,915</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							
10/1/2010	\$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%
10/1/2013	141,792	883,495	733,756	1,622,376	100%	100.0%	81.4%
10/1/2014	141,943	968,446	738,841	1,746,030	100%	100.0%	86.0%
POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT PLAN							
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%
10/1/2013	247,202	966,862	2,430,021	4,168,457	100%	100.0%	100.0%
10/1/2014	255,735	1,149,515	2,593,287	4,588,319	100%	100.0%	100.0%



SCHEDULE B

**DEVELOPMENT OF THE OCTOBER 1, 2014
ACTUARIAL VALUE OF ASSETS**

TEACHERS' RETIREMENT PLAN

(1)	Actuarial Value Beginning of Year*	\$	1,585,774,613
(2)	Market Value End of Year	\$	1,746,030,000
(3)	Market Value Beginning of Year	\$	1,622,375,617
(4)	Cash Flow		
	a. Contributions	\$	60,387,000
	b. Benefit Payments, Refunds, and Transfers		(65,622,000)
	c. Administrative Expenses		(3,558,000)
	d. Net Cash Flow: [(4)a + (4)b + (4)c]	\$	(8,793,000)
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)d	\$	132,447,383
	b. Assumed Rate		6.50%
	c. Amount of Immediate Recognition	\$	105,168,643
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	27,278,740
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: (1/7) x (5)d	\$	3,896,963
	b. First Prior Year		10,404,433
	c. Second Prior Year		13,523,532
	d. Third Prior Year		(6,589,080)
	e. Fourth Prior Year		5,834,740
	f. Fifth Prior Year		(17,509,865)
	g. Sixth Prior Year		(51,242,786)
	h. Total Recognized Investment Gain	\$	(41,682,063)
(7)	Preliminary Actuarial Value End of Year: (1) + (4)d + (5)c + (6)h	\$	1,640,468,193
(8)	Actuarial Value End of Year with 20% Corridor Applied:	\$	1,640,468,193
(9)	Present Value of DC Code Adjustment	\$	(1,885,099)
(10)	Final Actuarial Value End of Year: (8) + (9)	\$	1,638,583,095
(11)	Rate of Return on Actuarial Value of Assets		3.90%

*Prior to any corridor restraints.



SCHEDULE B

(Continued)

**DEVELOPMENT OF THE OCTOBER 1, 2014
ACTUARIAL VALUE OF ASSETS**

POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

(1)	Actuarial Value Beginning of Year*	\$	4,013,534,269
(2)	Market Value End of Year	\$	4,588,319,000
(3)	Market Value Beginning of Year	\$	4,168,456,920
(4)	Cash Flow		
	a. Contributions	\$	143,587,000
	b. Benefit Payments, Refunds, and Transfers		(54,421,000)
	c. Administrative Expenses		(9,143,000)
	d. Net Cash Flow: [(4)a + (4)b + (4)c]	\$	80,023,000
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)d	\$	339,839,080
	b. Assumed Rate		6.50%
	c. Amount of Immediate Recognition	\$	273,550,447
	d. Amount for Phased-in Recognition: (5)a – (5)c	\$	66,288,633
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: (1/7) x (5)d	\$	9,469,805
	b. First Prior Year		26,331,813
	c. Second Prior Year		32,104,476
	d. Third Prior Year		(18,159,945)
	e. Fourth Prior Year		12,440,209
	f. Fifth Prior Year		(34,598,041)
	g. Sixth Prior Year		(101,921,714)
	h. Total Recognized Investment Gain	\$	(74,333,397)
(7)	Preliminary Actuarial Value End of Year: (1) + (4)d + (5)c + (6)h	\$	4,292,774,319
(8)	Actuarial Value End of Year with 20% Corridor Applied:	\$	4,292,774,319
(9)	Present Value of DC Code Adjustment	\$	(4,047,624)
(10)	Final Actuarial Value End of Year: (8) + (9)	\$	4,288,726,695
(11)	Rate of Return on Actuarial Value of Assets		4.81%

*Prior to any corridor restraints.



SCHEDULE C

**SUMMARY OF CHANGES IN NET ASSETS
FOR THE YEAR ENDING OCTOBER 1, 2014**

TEACHERS' RETIREMENT PLAN

Additions for the Year

Contributions:

Members (including purchased service)	\$	28,751,000
Employers		<u>31,636,000</u>

Total \$ 60,387,000

Net Investment Income 132,447,383

TOTAL \$ 192,834,383

Deductions for the Year

Benefit Payments (including refunds and transfers)	\$	(65,622,000)
Administrative Expenses		<u>(3,558,000)</u>

TOTAL \$ (69,180,000)

Excess of Additions Over Deductions \$ 123,654,383

Reconciliation of Asset Balances

Market Value of Assets as of 9/30/2013	\$	1,622,375,617
Excess of Additions over Deductions		<u>123,654,383</u>
Market Value of Assets as of 9/30/2014*	\$	<u>1,746,030,000</u>

Rate of Return on Market Value of Assets 8.19%

* 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, 2014**

POLICE OFFICERS' & FIREFIGHTERS' RETIREMENT PLAN

<u>Additions for the Year</u>		
Contributions:		
Members (including purchased service)	\$	32,821,000
Employers		<u>110,766,000</u>
Total	\$	143,587,000
Net Investment Income		<u>339,839,080</u>
TOTAL	\$	483,426,080
 <u>Deductions for the Year</u>		
Benefit Payments (including refunds and transfers)	\$	(54,421,000)
Administrative Expenses		<u>(9,143,000)</u>
TOTAL	\$	<u>(63,564,000)</u>
<u>Excess of Additions Over Deductions</u>	\$	<u><u>419,862,080</u></u>
 <u>Reconciliation of Asset Balances</u>		
Market Value of Assets as of 9/30/2013	\$	4,168,456,920
Excess of Additions over Deductions		<u>419,862,080</u>
Market Value of Assets as of 9/30/2014*	\$	<u><u>4,588,319,000</u></u>
Rate of Return on Market Value of Assets		8.08%

* 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, 2014. Demographic information was collected as of June 30, 2014.

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 (3 years of service & up) ¹		Disability Retirement ²		Years of Service	Service Retirement ³
	Males	Females	Males	Females		
	20	6.00%	2.50%	0.02%		
25	6.00	2.50	0.05	0.08	25	22.0
30	4.25	3.50	0.10	0.12	30	15.0
35	2.50	2.00	0.22	0.28	35	20.0
40	1.75	1.50	0.25	0.40	40	20.0
45	1.25	1.25	0.30	0.62		
50	1.25	1.25	0.40	0.70		
55	1.25	1.25	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	0.59%	0.37%
30	0.59	0.37
40	0.59	0.37
50	0.59	0.37
60	0.85	0.54
70	1.72	1.13
80	4.22	2.75
90	10.19	7.94
100	37.60	36.47

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, 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. 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 proceeding 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, 2014**

TEACHERS' RETIREMENT PLAN

	Actives	Retirees	Disabled	Beneficiaries	Vested Terms	Total
1. Headcounts as of October 1, 2013	4,379	3,215	119	114	912	8,739
2. Change in status during the year:						
a. Death	(3)	(46)	(12)	(3)	(1)	(65)
b. Disabled			7		(7)	
c. Retired	(156)	189			(33)	
d. Vested Termination	(125)				125	
e. Nonvested Termination	(310)					(310)
f. Benefits Expired/Refund	(119)			(2)	(2)	(123)
3. New member due to:						
a. New Hire	770					770
b. Rehire	63				(24)	39
c. Death of Participant				17		17
d. Adjustments		20	(16)	(1)	(1)	2
4. Headcounts as of October 1, 2014	4,499	3,378	98	125	969	9,069



SCHEDULE F

SCHEDULES OF MEMBER DATA

TABLE 2

**RECONCILIATION OF MEMBER DATA
AS OF OCTOBER 1, 2014**

POLICE OFFICERS' RETIREMENT PLAN

	Actives	Retirees	Disabled	Beneficiaries	Vested Terms	Total
1. Headcounts as of October 1, 2013	3,846	973	283	328	140	5,570
2. Change in status during the year:						
a. Death	(2)	(3)	(6)	(10)	(3)	(24)
b. Disabled			3		(3)	
c. Retired	(109)	130			(21)	
d. Vested Termination	(71)				71	
e. Nonvested Termination	(19)					(19)
f. Benefits Expired/Refund	(35)			(12)	(1)	(48)
3. New member due to:						
a. New Hire	250					250
b. Rehire	42				(10)	32
c. Death of Participant				18		18
d. Adjustments		6	(1)	(2)		3
4. Headcounts as of October 1, 2014	3,902	1,106	279	322	173	5,782



SCHEDULE F

SCHEDULES OF MEMBER DATA

TABLE 3

**RECONCILIATION OF MEMBER DATA
AS OF OCTOBER 1, 2014**

FIREFIGHTERS' RETIREMENT PLAN

	Actives	Retirees	Disabled	Beneficiaries	Vested Terms	Total
1. Headcounts as of October 1, 2013	1,664	414	68	117	86	2,349
2. Change in status during the year:						
a. Death	(2)	(8)	(4)	(2)		(16)
b. Disabled			2		(2)	
c. Retired	(42)	57			(15)	
d. Vested Termination	(24)				24	
e. Nonvested Termination	(4)					(4)
f. Benefits Expired/Refund	(8)			(7)		(15)
3. New member due to:						
a. New Hire	54					54
b. Rehire	11				(9)	2
c. Death of Participant				21		21
d. Adjustments		2	(2)			0
4. Headcounts as of October 1, 2014	1,649	465	64	129	84	2,391



SCHEDULE F

TABLE 4

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF OCTOBER 1, 2014**

TEACHERS' 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	122	0	0	0	0	0	0	122	\$ 6,718,111
25 to 29	696	60	1	0	0	0	0	757	\$ 46,590,773
30 to 34	531	182	16	0	0	0	0	729	\$ 53,549,974
35 to 39	356	178	89	12	0	0	0	635	\$ 53,833,068
40 to 44	233	112	124	103	14	0	0	586	\$ 52,917,903
45 to 49	119	86	69	63	54	11	0	402	\$ 38,293,807
50 to 54	83	55	53	52	44	87	3	377	\$ 36,830,082
55 to 59	55	45	56	57	56	110	35	414	\$ 41,446,485
60 to 64	42	33	50	43	44	61	44	317	\$ 32,016,523
65 to 69	6	17	16	24	14	26	27	130	\$ 13,536,092
70 & Over	1	3	4	3	3	6	10	30	\$ 3,193,514
Total	2,244	771	478	357	229	301	119	4,499	\$ 378,926,332

Average Age: 41.59

Average Service: 9.11



SCHEDULE F

TABLE 5

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF OCTOBER 1, 2014**

POLICE OFFICERS' 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	1	0	0	0	0	0	0	1	\$ 60,675
20 to 24	111	0	0	0	0	0	0	111	\$ 6,012,611
25 to 29	335	87	1	0	0	0	0	423	\$ 24,821,390
30 to 34	158	349	83	0	0	0	0	590	\$ 39,431,598
35 to 39	42	162	220	53	0	0	0	477	\$ 34,850,497
40 to 44	17	75	202	175	141	0	0	610	\$ 49,370,722
45 to 49	10	53	118	81	498	182	0	942	\$ 83,588,155
50 to 54	3	25	59	22	251	210	19	589	\$ 52,935,825
55 to 59	1	4	9	15	46	38	19	132	\$ 12,193,563
60 to 64	0	0	5	3	1	0	10	19	\$ 1,744,581
65 to 69	0	0	0	1	0	0	4	5	\$ 458,662
70 & Over	0	0	0	0	0	0	3	3	\$ 297,136
Total	678	755	697	350	937	430	55	3,902	\$ 305,765,415

Average Age: 41.05

Average Service: 14.87



SCHEDULE F

TABLE 6

**SCHEDULE OF ACTIVE MEMBER DATA
AS OF OCTOBER 1, 2014**

FIREFIGHTERS' 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	51	0	0	0	0	0	0	51	\$ 2,595,237
25 to 29	67	118	3	0	0	0	0	188	\$ 11,549,247
30 to 34	44	200	66	0	0	0	0	310	\$ 20,472,035
35 to 39	18	98	144	3	1	0	0	264	\$ 19,298,740
40 to 44	4	15	147	41	71	5	0	283	\$ 24,215,605
45 to 49	2	7	49	67	110	42	0	277	\$ 25,720,380
50 to 54	0	2	1	39	52	98	3	195	\$ 19,868,838
55 to 59	0	4	1	0	1	49	22	77	\$ 8,448,907
60 to 64	0	0	0	0	1	0	3	4	\$ 481,286
65 & Over	0	0	0	0	0	0	0	0	\$ 0
Total	186	444	411	150	236	194	28	1,649	\$ 132,650,275

Average Age: 39.69

Average Service: 14.41



SCHEDULE F

TABLE 7

**SCHEDULE OF RETIREE MEMBER DATA
AS OF OCTOBER 1, 2014**

**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	8	\$31,911	8	\$31,911
20 to 24	0	\$0	0	\$0	1	\$6,348	1	\$6,348
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	1	\$12,708	1	\$12,708
35 to 39	0	\$0	0	\$0	2	\$15,798	2	\$15,798
40 to 44	1	\$36,696	1	\$33,072	0	\$0	2	\$69,768
45 to 49	3	\$96,714	1	\$24,528	2	\$13,872	6	\$135,114
50 to 54	9	\$255,893	9	\$319,464	3	\$21,455	21	\$596,812
55 to 59	115	\$3,429,779	20	\$661,392	10	\$104,981	145	\$4,196,152
60 to 64	566	\$13,648,134	18	\$417,380	21	\$174,872	605	\$14,240,386
65 to 69	1,285	\$21,150,183	42	\$661,700	37	\$234,190	1,364	\$22,046,073
70 to 74	964	\$12,192,673	5	\$40,947	24	\$128,994	993	\$12,362,614
75 to 79	329	\$3,732,944	2	\$5,177	9	\$73,492	340	\$3,811,613
80 to 84	85	\$874,754	0	\$0	6	\$45,704	91	\$920,458
85 to 89	18	\$183,805	0	\$0	0	\$0	18	\$183,805
90 to 94	3	\$35,140	0	\$0	1	\$22,428	4	\$57,568
95 & Over	0	\$0	0	\$0	0	\$0	0	\$0
Total	3,378	\$55,636,715	98	\$2,163,660	125	\$886,753	3,601	\$58,687,128

Average Age: 68.76



SCHEDULE F

TABLE 8

**SCHEDULE OF RETIREE MEMBER DATA
AS OF OCTOBER 1, 2014**

**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	9	\$58,248	9	\$58,248
20 to 24	0	\$0	0	\$0	1	\$6,348	1	\$6,348
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	1	\$12,708	1	\$12,708
35 to 39	0	\$0	0	\$0	2	\$22,416	2	\$22,416
40 to 44	1	\$36,696	1	\$33,072	2	\$13,524	4	\$83,292
45 to 49	3	\$125,316	1	\$24,528	4	\$37,452	8	\$187,296
50 to 54	9	\$353,412	13	\$411,756	4	\$81,972	26	\$847,140
55 to 59	116	\$5,740,104	23	\$720,240	16	\$318,756	155	\$6,779,100
60 to 64	573	\$28,251,605	23	\$713,028	29	\$502,188	625	\$29,466,821
65 to 69	1,349	\$62,786,604	81	\$2,397,096	63	\$1,157,208	1,493	\$66,340,908
70 to 74	1,215	\$55,380,456	39	\$1,161,420	74	\$1,758,704	1,328	\$58,300,580
75 to 79	821	\$38,343,424	45	\$1,328,172	58	\$1,257,960	924	\$40,929,556
80 to 84	671	\$30,249,768	33	\$995,928	65	\$1,338,108	769	\$32,583,804
85 to 89	393	\$16,770,578	38	\$1,259,280	56	\$1,361,532	487	\$19,391,390
90 to 94	209	\$9,128,784	26	\$1,022,400	40	\$1,028,100	275	\$11,179,284
95 & Over	63	\$2,978,556	8	\$230,052	11	\$292,752	82	\$3,501,360
Total	5,423	\$250,145,303	331	\$10,296,972	435	\$9,247,976	6,189	\$269,690,251

Average Age: 74.05



SCHEDULE F

TABLE 9

**SCHEDULE OF RETIREE MEMBER DATA
AS OF OCTOBER 1, 2014**

**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	44	\$323,150	44	\$323,150
20 to 24	0	\$0	0	\$0	12	\$81,022	12	\$81,022
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	3	\$181,814	3	\$95,688	1	\$27,132	7	\$304,634
35 to 39	1	\$19,248	7	\$185,748	2	\$82,704	10	\$287,700
40 to 44	2	\$57,960	33	\$1,068,276	17	\$267,504	52	\$1,393,740
45 to 49	4	\$142,823	81	\$2,859,636	18	\$347,642	103	\$3,350,101
50 to 54	235	\$9,543,056	71	\$2,529,624	22	\$504,906	328	\$12,577,586
55 to 59	340	\$9,885,671	48	\$1,079,132	38	\$454,920	426	\$11,419,723
60 to 64	334	\$5,850,122	28	\$260,614	60	\$970,091	422	\$7,080,827
65 to 69	161	\$1,458,403	5	\$57,356	65	\$981,567	231	\$2,497,326
70 to 74	24	\$226,054	3	\$23,463	24	\$391,144	51	\$640,661
75 to 79	2	\$12,055	0	\$0	14	\$235,665	16	\$247,720
80 to 84	0	\$0	0	\$0	2	\$45,600	2	\$45,600
85 to 89	0	\$0	0	\$0	2	\$21,562	2	\$21,562
90 to 94	0	\$0	0	\$0	0	\$0	0	\$0
95 & Over	0	\$0	0	\$0	0	\$0	0	\$0
Total	1,106	\$27,377,206	279	\$8,159,537	321	\$4,734,609	1,706	\$40,271,352

Average Age: 57.17



SCHEDULE F

TABLE 10

**SCHEDULE OF RETIREE MEMBER DATA
AS OF OCTOBER 1, 2014**

**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	52	\$531,180	52	\$531,180
20 to 24	0	\$0	0	\$0	15	\$179,484	15	\$179,484
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	3	\$181,814	3	\$95,688	1	\$27,132	7	\$304,634
35 to 39	1	\$19,248	7	\$185,748	2	\$82,704	10	\$287,700
40 to 44	2	\$57,960	34	\$1,088,472	18	\$443,184	54	\$1,589,616
45 to 49	4	\$155,628	85	\$2,941,908	25	\$737,065	114	\$3,834,601
50 to 54	235	\$16,646,542	91	\$3,047,568	36	\$1,350,300	362	\$21,044,410
55 to 59	363	\$24,670,087	87	\$3,350,244	78	\$2,161,752	528	\$30,182,083
60 to 64	698	\$40,215,681	142	\$6,007,740	170	\$4,721,129	1,010	\$50,944,550
65 to 69	998	\$53,808,790	172	\$7,154,928	223	\$6,082,388	1,393	\$67,046,106
70 to 74	537	\$29,412,348	149	\$6,451,740	191	\$5,596,394	877	\$41,460,482
75 to 79	319	\$16,943,484	107	\$4,945,176	202	\$6,298,131	628	\$28,186,791
80 to 84	100	\$6,217,908	74	\$3,723,180	127	\$4,178,965	301	\$14,120,053
85 to 89	45	\$3,310,200	68	\$3,549,258	122	\$3,729,036	235	\$10,588,494
90 to 94	11	\$805,968	17	\$1,037,664	74	\$2,369,687	102	\$4,213,319
95 & Over	2	\$185,844	8	\$511,692	19	\$604,260	29	\$1,301,796
Total	3,318	\$192,631,502	1,044	\$44,091,006	1,355	\$39,092,791	5,717	\$275,815,299

Average Age: 67.51



SCHEDULE F

TABLE 11

**SCHEDULE OF RETIREE MEMBER DATA
AS OF OCTOBER 1, 2014**

**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	22	\$203,780	22	\$203,780
20 to 24	0	\$0	0	\$0	4	\$45,961	4	\$45,961
25 to 29	0	\$0	1	\$22,167	1	\$1,587	2	\$23,754
30 to 34	2	\$42,207	1	\$38,911	1	\$2,810	4	\$83,928
35 to 39	2	\$38,391	3	\$96,269	1	\$26,292	6	\$160,952
40 to 44	1	\$50,784	6	\$212,556	5	\$161,207	12	\$424,547
45 to 49	1	\$46,884	7	\$161,244	6	\$95,843	14	\$303,971
50 to 54	70	\$3,189,813	9	\$372,960	11	\$213,613	90	\$3,776,386
55 to 59	185	\$7,017,565	10	\$218,294	12	\$243,363	207	\$7,479,222
60 to 64	128	\$2,965,469	23	\$311,421	24	\$481,487	175	\$3,758,376
65 to 69	61	\$955,599	4	\$6,012	16	\$283,791	81	\$1,245,403
70 to 74	15	\$128,965	0	\$0	15	\$287,804	30	\$416,769
75 to 79	0	\$0	0	\$0	11	\$256,275	11	\$256,275
80 to 84	0	\$0	0	\$0	0	\$0	0	\$0
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	465	\$14,435,677	64	\$1,439,834	129	\$2,303,813	658	\$18,179,324

Average Age: 57.85



SCHEDULE F

TABLE 12

**SCHEDULE OF RETIREE MEMBER DATA
AS OF OCTOBER 1, 2014**

**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	22	\$312,840	22	\$312,840
20 to 24	0	\$0	0	\$0	4	\$49,452	4	\$49,452
25 to 29	0	\$0	1	\$22,167	1	\$3,936	2	\$26,103
30 to 34	2	\$42,207	1	\$38,911	1	\$3,924	4	\$85,042
35 to 39	2	\$38,391	3	\$96,269	1	\$26,292	6	\$160,952
40 to 44	1	\$50,784	6	\$212,556	5	\$185,820	12	\$449,160
45 to 49	1	\$46,884	7	\$161,244	8	\$215,208	16	\$423,336
50 to 54	70	\$5,538,832	11	\$411,708	17	\$403,812	98	\$6,354,352
55 to 59	185	\$14,214,398	23	\$926,724	25	\$703,680	233	\$15,844,802
60 to 64	158	\$11,254,444	52	\$2,516,124	42	\$1,206,396	252	\$14,976,964
65 to 69	197	\$13,289,057	50	\$2,429,779	64	\$2,199,993	311	\$17,918,828
70 to 74	223	\$14,337,756	78	\$4,021,787	98	\$2,846,302	399	\$21,205,845
75 to 79	143	\$8,746,176	60	\$2,913,216	76	\$2,339,136	279	\$13,998,528
80 to 84	68	\$4,315,464	35	\$1,722,168	72	\$2,423,772	175	\$8,461,404
85 to 89	31	\$2,287,440	34	\$1,899,120	76	\$2,563,080	141	\$6,749,640
90 to 94	4	\$229,428	12	\$616,836	37	\$1,356,816	53	\$2,203,080
95 & Over	0	\$0	6	\$360,979	13	\$419,004	19	\$779,983
Total	1,085	\$74,391,262	379	\$18,349,587	562	\$17,259,462	2,026	\$110,000,311

Average Age: 69.86





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, 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
September 30, 2013	Teachers	202	\$5,289	39	\$436	\$706	3,448	\$52,966	11.7%	\$15
	Police	110	\$3,746	24	\$248	\$302	1,584	\$34,392	12.4%	\$22
	Fire	64	\$2,308	6	\$50	\$42	599	\$15,138	17.9%	\$25
September 30, 2014	Teachers	218	\$6,079	65	\$955	\$597	3,601	\$58,687	10.8%	\$16
	Police	157	\$6,139	34	\$399	\$139	1,707	\$40,271	17.1%	\$24
	Fire	80	\$3,326	21	\$496	\$211	658	\$18,179	20.1%	\$28



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, 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
September 30, 2013	Teachers	390	\$7,883	348	\$6,676	\$5,448	6,172	\$263,691	2.6%	\$43
	Police	164	\$8,218	172	\$7,493	\$3,572	5,695	\$267,499	1.6%	\$47
	Fire	80	\$4,327	60	\$2,896	\$1,322	1,994	\$105,520	2.7%	\$53
September 30, 2014	Teachers	245	\$10,540	228	\$8,792	\$4,251	6,189	\$269,690	2.3%	\$44
	Police	240	\$13,009	218	\$8,382	\$3,689	5,717	\$275,815	3.1%	\$48
	Fire	121	\$6,969	89	\$3,880	\$1,391	2,026	\$110,000	4.2%	\$54





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 10/1/2014	\$ Gain (or Loss) For Year Ending 10/1/2013
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (4.3)	\$ (7.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.1)	(2.2)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.7)	(0.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	2.5	8.1
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	30.7	40.1
New Members. Additional unfunded accrued liability will produce a loss.	(25.4)	(16.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(41.2)	(51.4)
Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	4.0	0.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>(5.1)</u>	<u>(8.2)</u>
Gain (or Loss) During Year From Financial Experience	\$ (39.6)	\$ (37.7)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or asset transfer to U.S. Treasury.	<u>(0.0)</u>	<u>(21.5)</u>
Composite Gain (or Loss) During Year	<u>\$ (39.6)</u>	<u>\$ (59.2)</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 10/1/2014	\$ Gain (or Loss) For Year Ending 10/1/2013
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (23.9)	\$ (7.2)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	10.1	5.2
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	1.4	1.5
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(6.0)	(2.8)
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	24.0	161.4
New Members. Additional unfunded accrued liability will produce a loss.	(19.8)	(13.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(68.3)	(101.9)
Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	(1.1)	(0.4)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>2.8</u>	<u>4.8</u>
Gain (or Loss) During Year From Financial Experience	\$ (80.8)	\$ 47.1
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes or asset transfer to U.S. Treasury.	<u>0.0</u>	<u>(9.4)</u>
Composite Gain (or Loss) During Year	<u>\$ (80.8)</u>	<u>\$ 37.7</u>