# Cavanaugh Macdonald 

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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, 2011


# Cavanaugh Macdonald <br> C O N SULTIN G, LLC <br> The experience and dedication you deserve 

December 06, 2011

The Board of Trustees
District of Columbia Retirement Board $9007^{\text {th }}$ Street, NW, $2^{\text {nd }}$ 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, 2011.

The purpose of this report is to provide a summary of the funded status of each Plan as of October 1, 2011, to recommend rates of contribution to be paid by the District in the 2013 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 aggregate 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.

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,


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


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

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## REPORT ON THE ACTUARIAL VALUATION OF THE DISTRICT OF COLUMBIA RETIREMENT BOARD PREPARED AS OF OCTOBER 1, 2011

## 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:

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

| VALUATION DATE | October 1, 2011 | October 1, 2010 |
| :---: | :---: | :---: |
| Number of Active Members | 4,747 | 4,749 |
| Annual Covered Payroll | \$384,455 | \$337,516 |
| Number of Retired Members and Survivors | 3,130 | 2,941 |
| Annual Retirement Benefits | \$41,996 | \$37,254 |
| Assets: |  |  |
| Actuarial Value | \$1,573,654 | \$1,570,968 |
| Market Value | \$1,340,725 | \$1,314,357 |
| Liabilities: |  |  |
| Present Value of Future Benefits | \$1,838,600 | \$1,671,184 |
| Present Value of Future Employee Contributions | \$219,649 | \$214,146 |
| Present Value of Future District Contributions | \$45,297 | \$0 |
| Present Value of Future Salaries | \$2,845,195 | \$2,784,739 |
| Funding Ratios: |  |  |
| Based on Actuarial Value | 101.86\% | 118.27 \% |
| Based on Market Value | 86.79\% | 98.95 \% |
| CONTRIBUTION FOR FISCAL YEAR ENDING | 09/30/2013 | 09/30/2012 |
| Normal Contribution Rate | 1.59 \% | 0.00 \% |
| Estimated Fiscal Year End Covered Payroll | \$421,846 | \$405,020 |
| Fiscal Year District Payment before 1-907.02(c) | \$6,707 | \$0 |
| Shortfall/Overpayment | (\$300) | \$0 |
| Fiscal Year District Payment | \$6,407 | \$0 |
| Additional Payment for Teachers Data Corrections | \$0 | \$2,983 |
| Total Payment for Fiscal Year | \$6,407 | \$2,983 |


| VALUATION DATE | October 1, 2011 | October 1, 2010 |
| :--- | ---: | ---: |
|  |  |  |
| Total Number of Active Members | 3,775 | 3,915 |
| Total Annual Covered Payroll | $\$ 292,785$ | $\$ 296,837$ |
|  |  |  |
| Number of Retired Members and Survivors | 1,385 | 1,172 |
| Annual Retirement Benefits | $\$ 25,572$ | $\$ 21,246$ |
| Total Assets: |  |  |
| Actuarial Value | $\$ 2,576,153$ | $\$ 2,457,752$ |
| Market Value | $\$ 2,248,044$ | $\$ 2,102,969$ |
|  |  |  |
| Liabilities: | $\$ 3,472,606$ | $\$ 3,525,122$ |
| Present Value of Future Benefits | $\$ 239,845$ | $\$ 236,472$ |
| Present Value of Future Employee Contributions | $\$ 656,608$ | $\$ 83,898$ |
| Present Value of Future District Contributions | $\$ 3,197,931$ | $\$ 3,152,957$ |
| Present Value of Future Salaries |  |  |
| Funding Ratios: | $108.95 \%$ | $108.24 \%$ |
| Based on Actuarial Value | $95.08 \%$ | $92.62 \%$ |
| Based on Market Value | $09 / 30 / 2013$ | $09 / 30 / 2012$ |
| CONTRIBUTION FOR FISCAL YEAR ENDING | $20.53 \%$ | $26.35 \%$ |
| Normal Contribution Rate | $\$ 321,260$ | $\$ 325,706$ |
| Estimated Fiscal Year End Covered Payroll | $\$ 65,955$ | $\$ 85,824$ |
| Fiscal Year District Payment before 1-907.02(c) | $(\$ 6,720)$ | $(\$ 9,801)$ |
| Shortfall/Overpayment | $\$ 59,235$ | $\$ 76,023$ |
| Fiscal Year District Payment |  |  |

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

| VALUATION DATE | October 1, 2011 | October 1, 2010 |
| :---: | :---: | :---: |
| Total Number of Active Members | 1,786 | 1,793 |
| Total Annual Covered Payroll | \$128,436 | \$127,017 |
| Number of Retired Members and Survivors | 471 | 380 |
| Annual Retirement Benefits | \$9,958 | \$7,472 |
| Total Assets: |  |  |
| Actuarial Value | \$1,017,563 | \$961,044 |
| Market Value | \$879,452 | \$817,821 |
| Liabilities: |  |  |
| Present Value of Future Benefits | \$1,569,053 | \$1,612,286 |
| Present Value of Future Employee Contributions | \$126,279 | \$130,219 |
| Present Value of Future District Contributions | \$425,211 | \$521,023 |
| Present Value of Future Salaries | \$1,663,748 | \$1,720,204 |
| Funding Ratios: |  |  |
| Based on Actuarial Value | 107.64\% | 107.24 \% |
| Based on Market Value | 93.03\% | 91.25 \% |
| CONTRIBUTION FOR FISCAL YEAR ENDING | 09/30/2013 | 09/30/2012 |
| Normal Contribution Rate | 25.56\% | 30.29 \% |
| Estimated Fiscal Year End Covered Payroll | \$140,927 | \$139,371 |
| Fiscal Year District Payment before 1-907.02(c) | \$36,021 | \$42,215 |
| Shortfall/Overpayment | \$1,058 | $(\$ 1,573)$ |
| Fiscal Year District Payment | \$37,079 | \$40,642 |

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

| VALUATION DATE | October 1, 2011 | October 1, 2010 |
| :--- | ---: | :---: |
| Number of Active Police Officers |  |  |
| Annual Covered Payroll | 3,775 | 3,915 |
| Number of Active Firefighters | $\$ 292,785$ | $\$ 296,837$ |
| Annual Covered Payroll | 1,786 | 1,793 |
| Total Number of Active Members | $\$ 128,436$ | $\$ 127,017$ |
| Total Annual Covered Payroll | 5,561 | 5,708 |
| Number of Retired Members and Survivors | $\$ 421,221$ | $\$ 423,854$ |
| Annual Retirement Benefits | 1,856 | 1,552 |
|  | $\$ 35,530$ | $\$ 28,718$ |
| Assets: |  |  |
| Actuarial Value | $\$ 3,593,716$ | $\$ 3,418,796$ |
| Market Value | $\$ 3,127,496$ | $\$ 2,920,790$ |
| Liabilities: |  |  |
| Present Value of Future Benefits | $\$ 5,041,659$ | $\$ 5,137,409$ |
| Present Value of Future Employee Contributions | $\$ 366,124$ | $\$ 366,691$ |
| Present Value of Future District Contributions | $\$ 1,081,819$ | $\$ 1,352,151$ |
| Present Value of Future Salaries | $\$ 4,861,679$ | $\$ 4,873,161$ |
| Funding Ratios: |  |  |
| Based on Actuarial Value | $108.58 \%$ | $107.96 \%$ |
| Based on Market Value | $94.49 \%$ | $9,23 \%$ |
| CONTRIBUTIONS FOR FISCAL YEAR ENDING | $\mathbf{0 9 / 3 0 / 2 0 1 3}$ | $\mathbf{0 9 / 3 0 / 2 0 1 2}$ |
| Normal Contribution Rate | $22.06 \%$ | $27.53 \%$ |
| Estimated Fiscal Year End Covered Payroll | $\$ 462,187$ | $\$ 465,077$ |
| Fiscal Year District Payment before 1-907.02(c) | $\$ 101,976$ | $\$ 128,039$ |
| Shortfall/Overpayment | $\$ 5,662)$ | $(\$ 11,375)$ |
| Fiscal Year District Payment | $\$ 96,314$ | $\$ 116,664$ |

2. The valuation balance sheet showing the results is given in Schedule A.
3. Comments on the valuation results as of October 1, 2011 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 since the previous valuation:

- For Teachers, changes to the rates for withdrawal, disability retirement, service retirement and mortality were revised to more closely reflect the experience of the System.
- For Police and Fire, changes to the rates for withdrawal, disability retirement, service retirement and mortality were revised to more closely reflect the experience of the System.

5. 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.
6. All membership data was collected as of July 1, 2011 but for valuation purposes (e.g. age, service) all members were treated as if remaining in the System as of October 1, 2011.
7. All amounts shown prior to October 1, 2010 were developed and/or reported by the prior actuarial firm.

## SECTION II - MEMBERSHIP DATA

1. 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, 2011 on the basis of which the valuation was prepared.

## TABLE 1

THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF OCTOBER 1, 2011 (\$ IN THOUSANDS)

| GROUP | NUMBER | COMPENSATION |
| :--- | ---: | ---: |
| Teachers | 4,747 | $\$ 384,455$ |
| Police Officers | 3,775 | 292,785 |
| Firefighters | 1,786 | 128,436 |
| Total | 10,308 | $\$ 805,676$ |

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

TABLE 2
SCHEDULE OF TOTAL ACTIVE MEMBER VALUATION DATA

| VALUATION <br> DATE | NUMBER | ANNUAL <br> PAYROLL <br> (\$ IN THOUSANDS) | ANNUAL <br> AVERAGE PAY | \% CHANGE IN <br> AVERAGE PAY |
| :---: | :---: | :---: | :---: | :---: |
| $10 / 01 / 2011$ | 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 | $2.19 \%$ |
| $10 / 01 / 2007$ | 10,577 | 771,200 | 72,913 | $12.00 \%$ |

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, 2011 (\$ IN THOUSANDS)

## DISTRICT ONLY

| TYPE OF RETIREMENT | GROUP |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | TEACHERS | POLICE OFFICERS | FIREFIGHTERS | TOTAL |
| Service: |  |  |  |  |
| Number | 2,909 | 795 | 307 | 4,011 |
| Annual Benefits | \$38,941 | \$14,231 | \$7,079 | \$60,251 |
| Disability: |  |  |  |  |
| Number | 114 | 265 | 62 | 441 |
| Annual Benefits | \$2,416 | \$7,452 | \$1,328 | \$11,196 |
| Survivors: |  |  |  |  |
| Number | 107 | 325 | 102 | 534 |
| Annual Benefits | \$639 | \$3,889 | \$1,551 | \$6,079 |
| Total: |  |  |  |  |
| Number | 3,130 | 1,385 | 471 | 4,986 |
| Annual Benefits | \$41,996 | \$25,572 | \$9,958 | \$77,526 |

*In addition, there are 982 deferred vested participants with annual deferred benefits of $\$ 9,811,959$.

TABLE 4
THE NUMBER AND ANNUAL RETIREMENT BENEFITS OF RETIRED MEMBERS AND SURVIVORS OF DECEASED MEMBERS ON THE ROLL AS OF OCTOBER 1, 2011 (\$ IN THOUSANDS)

FEDERAL PLUS DISTRICT

| TYPE OF RETIREMENT | GROUP |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | TEACHERS | POLICE OFFICERS | FIREFIGHTERS | TOTAL |
| Service: |  |  |  |  |
| Number | 5,294 | 3,170 | 982 | 9,446 |
| Annual Benefits | \$228,618 | \$170,349 | \$62,646 | \$461,613 |
| Disability: |  |  |  |  |
| Number | 387 | 1,125 | 432 | 1,944 |
| Annual Benefits | \$11,295 | \$46,475 | \$20,479 | \$78,249 |
| Survivors: |  |  |  |  |
| Number | 432 | 1,364 | 521 | 2,317 |
| Annual Benefits | \$8,191 | \$35,615 | \$14,612 | \$58,418 |
| Total: |  |  |  |  |
| Number | 6,113 | 5,659 | 1,935 | 13,707 |
| Annual Benefits | \$248,104 | \$252,439 | \$97,737 | \$598,280 |

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

1. 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, 2011, 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, 2011 AND OCTOBER 1, 2010
(\$ IN THOUSANDS)

| FUND | OCTOBER 1, 2011 <br> MARKET VALUE | OCTOBER 1, 2010 <br> MARKET VALUE |
| :---: | :---: | :---: |
| Teachers | $\$ 1,340,725$ | $\$ 1,314,357$ |
| Police Officers and Firefighters | $3,127,496$ | $2,920,790$ |
| Total Market Value of Assets | $\$ 4,468,221$ | $\$ 4,235,147$ |

2. The seven-year market related actuarial value of assets used for the current valuation was $\$ 5,167,370,037$. Schedule B shows the development of the actuarial value of assets as of October 1, 2011. The following table shows the actuarial value of assets allocated among each plan.

TABLE 6
COMPARISON OF ACTUARIAL VALUE OF ASSETS AT
OCTOBER 1, 2011 AND OCTOBER 1, 2010
(\$ IN THOUSANDS)

| FUND | OCTOBER 1, 2011 <br> ACTUARIAL VALUE | OCTOBER 1, 2010 <br> ACTUARIAL VALUE |
| :--- | :---: | :---: |
| Teachers | $\$ 1,573,654$ | $\$ 1,570,968$ |
| Police Officers and Firefighters | $\frac{3,593,716}{}$ | $3,418,796$ <br> Total Actuarial Value of Assets |

## 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 $\$ 1,838,600,108$, of which $\$ 657,455,684$ is for the prospective benefits payable on account of present retired members and survivors of deceased members, $\$ 61,428,503$ is for the prospective benefits payable on account of present inactive members, and $\$ 1,119,715,921$ 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 $\$ 1,573,653,598$ as of October 1, 2011. The difference of $\$ 264,946,510$ 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. Of this amount, $\$ 219,649,026$ is the present value of future contributions expected to be made by 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), and the balance of $\$ 45,297,484$ represents the present value of future contributions payable by the District.
2. Therefore, the District's contributions for the 2013 fiscal year to the Teachers' Retirement Plan on account of benefits consist of $1.59 \%$ of salary for all members.
3. The projected 2013 covered payroll is $\$ 421,846,000$ resulting in a preliminary fiscal year district payment of $\$ 6,707,000$.
4. However, since there is a carryover contribution made that was more than the required amount, according to Section §1-907.02(c) the 2013 fiscal year payment can be reduced by this overpayment of $\$ 300,000$.
5. Therefore, the final 2013 fiscal year required contribution amount is $\$ 6,407,000$.

## 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 $\$ 5,041,658,920$, of which $\$ 676,543,197$ is for the prospective benefits payable on account of present retired members and survivors of deceased members, $\$ 31,821,218$ is for the prospective benefits payable on account of present inactive members, and $\$ 4,333,294,505$ 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 $\$ 3,593,716,436$ as of October 1, 2011. The difference of $\$ 1,447,942,484$ 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. Of this amount, $\$ 366,123,313$ is the present value of future contributions expected to be made by members (at the rate of $7.0 \%$ of salary for members hired before November 10, 1996 and $8.0 \%$ of salary for members hired on or after November 10, 1996), and the balance of $\$ 1,081,819,171$ represents the present value of future contributions payable by the District.
2. Therefore, the District's contributions for the 2013 fiscal year to the Police Officers' and Firefighters' Retirement Plan on account of benefits consist of $22.06 \%$ of salary for all members.
3. The projected 2013 covered payroll is $\$ 462,187,000$ resulting in a preliminary fiscal year district payment of $\$ 101,976,000$.
4. However, since the 2011 actual contributions made were more than the required amount, according to Section §1-907.02(c) the 2013 fiscal year payment can be reduced by this overpayment of \$5,662,000.
5. Therefore, the final 2013 fiscal year required contribution amount is $\$ 96,314,000$.

## SECTION V - §1-907.02(c) ADJUSTMENT TO FISCAL YEAR 2013 DISTRICT PAYMENT

1. Beginning in fiscal year 2001, the District payment was adjusted pursuant to D.C. Code §1907.02(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 2013 District payment is calculated by taking the actual fiscal year 2011 covered payroll for each employee class (which is provided by the District) and multiplying by the corresponding fiscal year 2011 normal contribution rates, which were determined as of October 1, 2009 by the prior actuary. This result is the fiscal year 2011 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 §1907.02(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 <br> AS OF OCTOBER 1, 2011 (\$ IN THOUSANDS)

|  | Teachers | Police | Fire |
| :--- | ---: | ---: | ---: |
| (1) Actual FY 2011 Covered Payroll | $\$ 384,455$ | $\$ 292,785$ | $\$ 128,436$ |
| (2) FY 2011 Normal Contribution Rate | $0.00 \%$ | $28.00 \%$ | $30.80 \%$ |
| (3) Actual FY 2011 Contribution Required | $\$ 0$ | $\$ 81,980$ | $\$ 39,558$ |
| (4) Actual FY 2011 Contribution Paid | $\$ 0$ | $\$ 88,700$ | $\$ 38,500$ |
| (5) Preliminary D.C. Code §1-907.02(c) |  |  |  |
| Adjustment to FY 2013 Payment |  |  |  |
| [(3) - (4)] | $(\$ 300)$ |  |  |
| (6) FY 2012 Unrecognized Amount | $\$ 0$ | $(\$ 6,720)$ | $\$ 1,058$ |
| (7) Final D.C. Code §1-907.02(c) |  |  |  |
| Adjustment to FY 2013 Payment |  |  |  |
| [(5) + (6) if applicable] | $(\$ 300)$ | $(\$ 6,720)$ | $\$ 0$ |
| (8) Applicable Adjustment | $(\$ 300)$ | $(\$ 6,720)$ | $\$ 1,058$ |
| (9) Carryover Adjustment [(7) - (8)] | $\$ 0$ | $\$ 0$ | $\$ 0$ |

## SECTION VI - 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, 2011

| GROUP | RETIREMENT PLAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Teachers | Police Officers | Firefighters | Total |
| Retirees and survivors currently receiving benefits | 3,130 | 1,385 | 471 | 4,986 |
| Terminated employees entitled to benefits but not yet receiving benefits | 794 | 139 | 49 | 982 |
| Inactive Members | 640 | 47 | 34 | 721 |
| Active Members |  |  |  |  |
| Vested | 2,601 | 3,173 | 1,343 | 7,117 |
| Non-vested | 2,146 | 602 | 443 | 3,191 |
| Total Active Members | 4,747 | 3,775 | 1,786 | 10,308 |
| Totals | 9,311 | 5,346 | 2,340 | 16,997 |

2. Statement No. 50 of the Governmental Accounting Standards Board (GASB) requires that plan sponsors that use the aggregate actuarial cost method disclose the funded status and present a multiyear schedule of funding progress using the entry age normal actuarial cost method as a surrogate. This is because the Aggregate method does not explicitly define an actuarial accrued liability.
3. The table below shows the present value of the future District benefits, as well as the value of the District benefits accrued based on past service computed under the Entry Age Normal method, which assigns total liabilities to past service (accrued liabilities), current service (normal cost), and future service (future normal costs). The actuarial assumptions (demographic and economic) used for the calculations in the table below are the same as were used to determine the required contributions. These assumptions are described in detail in Schedule D and summarized in Section VI of this report.

## PRESENT VALUE OF FUTURE DISTRICT BENEFITS AS OF OCTOBER 1, 2011 (\$ IN THOUSANDS)

|  | Teachers | Police | Fire | Total |
| :--- | ---: | ---: | ---: | ---: |
| Active Present Value of Future Benefits | $\$ 1,119,716$ | $\$ 2,957,002$ | $\$ 1,376,292$ | $\$ 5,453,010$ |
| Inactive Present Value of Future Benefits |  |  |  |  |
| Senvice Retirees | $\$ 613,989$ | $\$ 277,638$ | $\$ 137,398$ | $\$ 1,029,025$ |
| Disabled Retirees | 34,834 | 161,583 | 29,194 | 225,611 |
| Beneficiaries | 8,633 | 52,686 | 18,045 | 79,364 |
| Terminations | $\underline{61,428}$ | $\underline{23,697}$ | $\underline{8,124}$ | $\underline{93,249}$ |
| Total Inactives | $\$ 718,884$ | $\$ 515,604$ | $\$ 192,761$ | $\$ 1,427,249$ |
| Total Present Value of Future Benefits | $\$ 1,838,600$ | $\$ 3,472,606$ | $\$ 1,569,053$ | $\$ 6,880,259$ |

## ACCRUED LIABILITIES FOR DISTRICT BENEFITS <br> AS OF OCTOBER 1, 2011 <br> (\$ IN THOUSANDS)

|  | Teachers | Police | Fire | Total |
| :--- | ---: | ---: | ---: | ---: |
| Actuarial Accrued Liability (AAL) | $\$ 1,544,864$ | $\$ 2,364,457$ | $\$ 945,368$ | $\$ 4,854,689$ |
| Actuarial Value of Assets (AVA) | $\$ 1,573,654$ | $\$ 2,576,153$ | $\$ 1,017,563$ | $\$ 5,167,370$ |
| Market Value of Assets (MVA) | $\$ 1,340,725$ | $\$ 2,248,044$ | $\$ 879,452$ | $\$ 4,468,221$ |
| AVA Funding Ratio (AVA/AAL) | $101.86 \%$ | $108.95 \%$ | $107.64 \%$ | $106.44 \%$ |
| MVA Funding Ratio (MVA/AAL) | $86.79 \%$ | $95.08 \%$ | $93.03 \%$ | $92.04 \%$ |

4. 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 Accrued Liability (AAL) Entry Age (b) | Unfunded AAL <br> (UAAL) $(b-a)$ |  | Covered <br> Payroll <br> ( c ) | UAAL as a <br> Percentage of Covered Payroll $((b-a) / c)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TEACHERS' RETIREMENT PLAN* |  |  |  |  |  |  |
| 10/1/2007 | \$1,396,000 | \$1,251,300 | (\$144,700) | 111.6 \% | \$349,900 | (41.4)\% |
| 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)\% |
| POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT PLAN* |  |  |  |  |  |  |
| 10/1/2007 | \$2,672,900 | \$2,647,300 | $(\$ 25,600)$ | 101.0 \% | \$371,300 | (6.9)\% |
| 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)\% |

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

5. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at October 1, 2011.

|  | Teachers | Police Officers \& Firefighters |
| :---: | :---: | :---: |
| Valuation Date | 10/01/2011 | 10/01/2011 |
| Actuarial cost method for Contributions | Aggregate | Aggregate |
| Actuarial cost method for Accrued Liabilities | Entry Age Normal | Entry Age Normal |
| Amortization method | N/A | N/A |
| Remaining amortization period | N/A | N/A |
| Asset valuation method | 7 year smoothed Market | 7 year smoothed Market |
| Actuarial assumptions: |  |  |
| Investment rate of return* | 7.00\% | 7.00\% |
| Projected salary increases** | 4.95-8.75\% | $5.25-9.75 \%$ |
| Cost of living adjustments: | $4.25 \%$ | $4.25 \%$ |
|  | $3.00 \%$ for those hired after 11/1/1996) | $3.00 \%$ for those hired after 11/10/1996) |

* Includes inflation of $4.25 \%$.
** Includes wage inflation of 4.75\%.


## 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 |  |  |  |
| $\begin{aligned} & 9 / 30 / 2007 \\ & 9 / 30 / 2008 \\ & 9 / 30 / 2009 \\ & 9 / 30 / 2010 \\ & 9 / 30 / 2011 \end{aligned}$ | $\begin{array}{r} \$ 15.7 \\ 6.0 \\ 0.0 \\ 0.0 \\ 0.0 \end{array}$ | $\begin{aligned} & 4.49 \% \\ & 1.67 \% \\ & 0.00 \% \\ & 0.00 \% \\ & 0.00 \% \end{aligned}$ | $\begin{aligned} & 100 \% \\ & 100 \% \\ & 100 \% \\ & 100 \% \\ & 100 \% \end{aligned}$ |
| Police Officers' \& Firefighters' Retirement Plan |  |  |  |
| $\begin{aligned} & 9 / 30 / 2007 \\ & 9 / 30 / 2008 \\ & 9 / 30 / 2009 \\ & 9 / 30 / 2010 \\ & 9 / 30 / 2011 \end{aligned}$ | $\begin{array}{r} \$ 130.3 \\ 137.0 \\ 106.0 \\ 132.3 \\ 127.2 \end{array}$ | $\begin{aligned} & 35.09 \% \\ & 32.48 \% \\ & 24.31 \% \\ & 31.21 \% \\ & 30.20 \% \end{aligned}$ | $\begin{aligned} & 100 \% \\ & 100 \% \\ & 100 \% \\ & 100 \% \\ & 100 \% \end{aligned}$ |

6. The following table is for informational purposes only. The table below represents the contributions for fiscal year 2013 using the Entry Age Normal Cost Method.

| (\$ in millions) | Teachers | Police | Fire |
| :--- | ---: | ---: | ---: |
| Employer Normal Rate (\% of pay) | $2.26 \%$ | $26.62 \%$ | $28.97 \%$ |
| Total Accrued Liability | $\$ 1,544.9$ | $\$ 2,364.5$ | $\$ 945.4$ |
| Actuarial Value of Assets | $\$ 1,573.7$ | $\$ 2,576.2$ | $\$ 1,017.6$ |
| Unfunded Accrued Liability (UAL) | $\$(28.8)$ | $\$(211.7)$ | $\$(72.2)$ |
| Amortization of UAL | $\$(2.5)$ | $\$(18.7)$ | $\$(6.4)$ |
| (level \$, 20 years) |  |  |  |
| Amortization Rate (\% of pay) | $(0.66) \%$ | $(6.38) \%$ | $(4.96) \%$ |
| Total Employer Contribution Rate | $1.60 \%$ | $20.24 \%$ | $24.01 \%$ |
| (not less than 0\%) | $\$ 421.8$ | $\$ 321.3$ | $\$ 140.9$ |
| Estimated FY Payroll | $\$ 6.8$ | $\$ 65.0$ | 33.8 |
| Employer Contribution in Dollars | $\$(0.3)$ | $\$(6.7)$ | $\$ 1.1$ |
| Shortfall/Overpayment | $\$ 6.5$ | $\$ 58.3$ | $\$ 34.9$ |
| Total Employer Contribution in Dollars |  |  |  |

## SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE DISTRICT OF COLUMBIA RETIREMENT BOARD

AS OF OCTOBER 1, 2011

## TEACHERS' RETIREMENT PLAN

| PRESENT AND PROSPECTIVE ASSETS |  |  |
| :---: | :---: | :---: |
| Actuarial Value of Present Assets |  | \$1,573,653,598 |
| Present value of future members' contributions |  | 219,649,026 |
| Present value of future employer contributions |  |  |
| Normal contributions | \$74,086,646 |  |
| Unfunded accrued liability contributions | (28,789, 162) |  |
| Total prospective employer contributions |  | 45,297,484 |
| Total Present and Prospective Assets |  | \$1,838,600,108 |
| ACTUARIAL LIABILITIES |  |  |
| Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits$\$ 657,455,684$ |  |  |
| Present value of prospective benefits payable on account of inactive members |  | 61,428,503 |
| Present value of prospective benefits payable on account of present active members: |  |  |
| Service retirement benefits | \$984,371,124 |  |
| Disability retirement benefits | 25,241,503 |  |
| Survivor benefits | 15,606,653 |  |
| Separation benefits | 94,496,641 |  |
| Total |  | 1,119,715,921 |
| Total Actuarial Liabilities |  | \$1,838,600,108 |

## 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, 2011

## POLICE OFFICERS' \& FIREFIGHTERS' RETIREMENT PLAN

| PRESENT AND PROSPECTIVE ASSETS |  |  |
| :---: | :---: | :---: |
| Actuarial Value of Present Assets |  | \$3,593,716,436 |
| Present value of future members' contributions |  | 366,123,313 |
| Present value of future employer contributions |  |  |
| Normal contributions | \$1,365,710,803 |  |
| Unfunded accrued liability contributions | (283,891,632) |  |
| Total prospective employer contributions |  | 1,081,819,171 |
| Total Present and Prospective Assets |  | \$5,041,658,920 |
| ACTUARIAL LIABILITIES |  |  |
| Present value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits |  |  |
| Present value of prospective benefits payable on account of inactive members |  | 31,821,218 |
| Present value of prospective benefits payable on account of present active members: |  |  |
| Service retirement benefits | \$3,922,792,108 |  |
| Disability retirement benefits | 273,457,677 |  |
| Survivor benefits | 73,539,950 |  |
| Separation benefits | 63,504,770 |  |
| Total |  | 4,333,294,505 |
| Total Actuarial Liabilities |  | \$5,041,658,920 |

## SCHEDULE A

(continued)
SOLVENCY TEST (\$ IN THOUSANDS)

| Valuation Date | Aggregate Accrued Liabilities For* |  |  |  | Portion of Accrued Liabilities Covered by Reported Asset |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) <br> Active <br> Member Contributions | Retirees, Survivors and Inactive Members | (3) <br> Active Members (Employer Financed Portion) | Reported Assets | (1) | (2) | (3) |
| TEACHERS' RETIREMENT PLAN |  |  |  |  |  |  |  |
| 10/1/2007 | \$303,059 | \$805,475 | \$2,790,093 | \$4,405,200 | 100\% | 100.0\% | 100.0\% |
| 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\% |
| POLICE OFFCERS' AND FREFGHTERS' RETIREMENT PLAN |  |  |  |  |  |  |  |
| 10/1/2007 | \$303,059 | \$805,475 | \$2,790,093 | \$4,405,200 | 100\% | 100.0\% | 100.0\% |
| 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\% |

*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, 2011

 ACTUARIAL VALUE OF ASSETSTEACHERS' RETIREMENT PLAN

|  | Actuarial Value Beginning of Year* | \$ | 1,570,968,492 |
| :---: | :---: | :---: | :---: |
| (2) | Market Value End of Year | \$ | 1,340,725,000 |
|  | Market Value Beginning of Year | \$ | 1,314,356,461 |
| (4) | Cash Flow |  |  |
|  | a. Contributions | \$ | 27,739,000 |
|  | b. Benefit Payments and Refunds |  | $(46,592,000)$ |
|  | c. Administrative Expenses |  | $(2,871,000)$ |
|  | d. Net Cash Flow: [(4)a + (4)b + (4)c] | \$ | $(21,724,000)$ |
| (5) | Investment Income |  |  |
|  | a. Market total: $(2)-(3)-(4) d$ | \$ | 48,092,539 |
|  | b. Assumed Rate |  | 7.00\% |
|  | c. Amount of Immediate Recognition | \$ | 94,216,097 |
|  | d. Amount for Phased-in Recognition: (5)a - (5)c | \$ | $(46,123,558)$ |
| (6) | Phased-In Recognition of Investment Income |  |  |
|  | a. Current Year: $(1 / 7) \times(5) \mathrm{d}$ | \$ | $(6,589,080)$ |
|  | b. First Prior Year |  | 5,834,740 |
|  | c. Second Prior Year |  | $(17,509,865)$ |
|  | d. Third Prior Year |  | $(51,242,786)$ |
|  | e. Fourth Prior Year |  | 0 |
|  | f. Fitth Prior Year |  | 0 |
|  | g. Sixth Prior Year |  | 0 |
|  | h. Total Recognized Investment Gain | \$ | $(69,506,991)$ |
|  | Preliminary Actuarial Value End of Year: $(1)+(4) d+(5) c+(6) h$ | \$ | 1,573,953,598 |
| (8) | Actuarial Value End of Year with 20\% Corridor Applied: | \$ | 1,573,953,598 |
|  | Present Value of DC Code Adjustment | \$ | $(300,000)$ |
| (10) | Final Actuarial Value End of Year: (8) + (9) | \$ | 1,573,653,598 |

*Prior to any corridor restraints.

## SCHEDULE B

(Continued)

## DEVELOPMENT OF THE OCTOBER 1, 2011

 ACTUARIAL VALUE OF ASSETS
## POLICE OFFICERS' \& FIREFIGHTERS' RETIREMENT PLAN

|  | Actuarial Value Beginning of Year* | \$ | 3,418,796,361 |
| :---: | :---: | :---: | :---: |
| (2) | Market Value End of Year | \$ | 3,127,496,000 |
| (3) | Market Value Beginning of Year | \$ | 2,920,790,455 |
| (4) | Cash Flow |  |  |
|  | a. Contributions | \$ | 157,674,000 |
|  | b. Benefit Payments and Refunds |  | $(32,679,000)$ |
|  | c. Administrative Expenses |  | $(6,646,000)$ |
|  | d. Net Cash Flow: [(4)a + (4)b + (4)c] | \$ | 118,349,000 |
| (5) | Investment Income |  |  |
|  | a. Market total: $(2)-(3)-(4) d$ | \$ | 88,356,545 |
|  | b. Assumed Rate |  | 7.00\% |
|  | c. Amount of Immediate Recognition | \$ | 215,476,157 |
|  | d. Amount for Phased-in Recognition: (5)a - (5)c | \$ | $(127,119,612)$ |
| (6) | Phased-In Recognition of Investment Income |  |  |
|  | a. Current Year: $(1 / 7) \times(5) \mathrm{d}$ | \$ | $(18,159,945)$ |
|  | b. First Prior Year |  | 12,440,209 |
|  | c. Second Prior Year |  | $(34,598,041)$ |
|  | d. Third Prior Year |  | $(101,921,714)$ |
|  | e. Fourth Prior Year |  | 0 |
|  | f. Fifth Prior Year |  | 0 |
|  | g. Sixth Prior Year |  | 0 |
|  | h. Total Recognized Investment Gain | \$ | $(142,239,491)$ |
|  | Preliminary Actuarial Value End of Year: $(1)+(4) d+(5) c+(6) h$ | \$ | 3,610,382,027 |
| (8) | Actuarial Value End of Year with 20\% Corridor Applied: | \$ | 3,610,382,027 |
|  | Present Value of DC Code Adjustment | \$ | $(16,665,589)$ |
| (10) | Final Actuarial Value End of Year: (8) + (9) | \$ | 3,593,716,439 |

*Prior to any corridor restraints.

## SCHEDULE C

## SUMMARY OF CHANGES IN NET ASSETS FOR THE YEAR ENDING OCTOBER 1, 2011 <br> TEACHERS' RETIREMENT PLAN

| Additions for the Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Contributions: |  |  |  |  |
| Members (including purchased service) | \$ | 27,739,000 |  |  |
| Employers |  | 0 |  |  |
| Total |  |  | \$ | 27,739,000 |
| Net Investment Income |  |  |  | 48,092,539 |
| TOTAL |  |  | \$ | 75,831,539 |
| Deductions for the Year |  |  |  |  |
| Benefit Payments (including refunds) | \$ | $(46,592,000)$ |  |  |
| Administrative Expenses |  | $(2,871,000)$ |  |  |
| TOTAL |  |  | \$ | $(49,463,000)$ |
| Excess of Additions Over Deductions |  |  | \$ | 26,368,539 |
| Reconciliation of Asset Balances |  |  |  |  |
| Market Value of Assets as of 9/30/2010 |  |  | \$ | 1,314,356,461 |
| Excess of Additions over Deductions |  |  |  | 26,368,539 |
| Market Value of Assets as of 9/30/2011* |  |  | \$ | 1,340,725,000 |

[^0]
## SCHEDULE C

(Continued)

## SUMMARY OF CHANGES IN NET ASSETS

FOR THE YEAR ENDING OCTOBER 1, 2011

## POLICE OFFICERS' \& FIREFIGHTERS' RETIREMENT PLAN

Additions for the Year
Contributions:

| Members (including purchased senvice) | $\$ 30,474,000$ |  |
| :--- | ---: | ---: |
| Employers |  | $127,200,000$ |

Total

Net Investment Income
TOTAL

Deductions for the Year

Benefit Payments (including refunds)
Administrative Expenses

TOTAL

Excess of Additions Over Deductions

Reconciliation of Asset Balances
Market Value of Assets as of 9/30/2010
Excess of Additions over Deductions
Market Value of Assets as of $9 / 30 / 2011^{*}$
\$ 2,920,790,455
206,705,545
\$ 3,127,496,000

* 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

VALUATION DATE: All assets and liabilities are computed as of October 1, 2011. Demographic information was collected as of June 30, 2011.

INVESTMENT RATE OF RETURN: 7.00\% per annum, compounded annually (net of administrative expenses).

INFLATION ASSUMPTION: $4.25 \%$ per year.
PAYROLL GROWTH ASSUMPTION: 4.75\% per year.
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 FOR CONTRIBUTIONS: Aggregate Cost Method.
ACTUARIAL METHOD FOR ACCRUED LIABILITIES: 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 $4.25 \%$ per year.

## SCHEDULE D

(Continued)

## TEACHERS

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at $4.75 \%$ per annum:

|  | Pay Increase Assumptions <br> for an Individual Member |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Years of <br> Service |  <br> Seniority |  <br> Productivity <br> (Economy) | Total <br> Increase <br> (Next Year) |  |
| 5 | $4.00 \%$ | $4.75 \%$ | $8.75 \%$ |  |
| 10 | 3.00 | 4.75 | 7.75 |  |
| 15 | 0.50 | 4.75 | 5.25 |  |
| 20 | 0.20 | 4.75 | 4.95 |  |
| 25 | 0.20 | 4.75 | 4.95 |  |
| 30 | 0.20 | 4.75 | 4.95 |  |
| 35 | 0.20 | 4.75 | 4.95 |  |

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 | 0 to 3 yrs of service | Percent of Members Separating Within the Next Year |  |  |  | Disability Retirement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Withdrawal |  | Service Retirement |  |  |
|  |  | 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 are as follows and include inflation at $4.75 \%$ per annum:

|  | Pay Increase Assumptions <br> for an Individual Member |  |  |
| :---: | :---: | :---: | :---: |
| Years of |  <br>  | Total <br> Pervice <br> Seniority <br> (Economy) | Increase <br> (Next Year) |
| 5 | $3.56 \%$ | $4.75 \%$ | $8.31 \%$ |
| 10 | 2.58 | 4.75 | 7.33 |
| 15 | 2.31 | 4.75 | 7.06 |
| 20 | 2.50 | 4.75 | 7.25 |
| 25 | 1.10 | 4.75 | 5.85 |
| 30 | 0.50 | 4.75 | 5.25 |
| 35 | 0.00 | 4.75 | 4.75 |

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 |  | Disability Retirement ${ }^{2}$ |  | Years of Service | Service Retirement ${ }^{3}$ |
|  | (3 years of service \& up) |  |  |  |  |  |
|  | 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]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 <br> 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: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at $4.75 \%$ per annum:

|  | Pay Increase Assumptions <br> for an Individual Member <br>  |  |  |  | Total <br> Years of <br> Service |  <br> Seniority | Increase <br> (Economy) <br> (Next Year) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | $2.50 \%$ | $4.75 \%$ | $7.25 \%$ |  |  |  |  |
| 10 | 2.50 | 4.75 | 7.25 |  |  |  |  |
| 15 | 2.50 | 4.75 | 7.25 |  |  |  |  |
| 20 | 2.50 | 4.75 | 7.25 |  |  |  |  |
| 25 | 2.50 | 4.75 | 7.25 |  |  |  |  |
| 30 | 2.50 | 4.75 | 7.25 |  |  |  |  |
| 35 | 2.50 | 4.75 | 7.25 |  |  |  |  |

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 <br> Separating Within the Next Year <br> Withdrawal <br> Sample <br> (2 years of <br> service \& up) $)^{1}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Disability <br> Retirement |  |  |  |
| 20 | $3.50 \%$ | $0.01 \%$ | Years of <br> Service | Service <br> Retirement $^{3}$ |
| 25 | 3.50 | 0.02 | 20 | $12.5 \%$ |
| 30 | 2.00 | 0.15 | 30 | 12.5 |
| 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 |  |  |

${ }^{1}$ Members of any age with less than 2 years of service have a $9 \%$ 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 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 <br> 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

## Affiliated Employers

Covered Members

## Service Credit

Average Salary

Vested

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

## DEFINITIONS

## District of Columbia Public Schools, Public Charter Schools

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.

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.

Highest 36 consecutive months of pay, divided by three.

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

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

## Benefit

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 | 5years school service |

For members hired before November 1, 1996:

- $\quad 1.5 \%$ 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

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 <br> (vested) for disability retirement. To be eligible, the member must be found to <br> be totally and permanently disabled (mentally or physically) from regular and <br> 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

Benefit
Death before completion of 18 months of school service or death without an eligible spouse, child or parent.

SPOUSE ONLY
Eligibility

Benefit
Refund of member contributions.

Death before retirement and married for at least two years, or have a child by the marriage.
$55 \%$ 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

Spouse Benefit
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.
$55 \%$ 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 .

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) $\$ 6,024^{\star}$ (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):
a) $75 \%$ of Average Salary divided by the number of eligible children
b) $\$ 7,356^{*}$ (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
c) $\$ 22,068^{*}$ (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 reduce 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 $1^{\text {st }}$, benefits which have been paid for at least twelve months proceeding March $1^{\text {st }}$ are increased. The increase is equal to the annual CPI. COLA's are included in benefit payments on and after April $1^{\text {st }}$.

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
Covered Members

Service Credit

Average Salary

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

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.

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 .

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.

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

## Benefit

Eligibility
Benefit

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 | 5 years |

For members hired before November 10, 1996:

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

Disabled as a result of an illness or injury in the line of duty.
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 <br> $100 \%$ 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

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

Child 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).

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 $1^{\text {st }}$, benefits which have been paid for at least twelve months proceeding March $1^{\text {st }}$ are increased. The increase is equal to the annual CPI. COLA's are included in benefit payments on and after April $1^{\text {st }}$.

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, 2011

TEACHERS' RETIREMENT PLAN

|  | Actives | Retirees | Disabled | Beneficiaries | Vested Terms | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Headcounts as of October 1, 2010 | 4,749 | 2,737 | 114 | 90 | 720 | 8,410 |
| 2. Change in status during the year: <br> a. Death |  | (25) | (6) | (6) |  | (37) |
| b. Disabled | (4) |  | 4 |  |  |  |
| c. Retired | (157) | 187 |  |  | (30) |  |
| d. Vested Termination | (136) |  |  |  | 136 |  |
| e. Nonvested Termination | (439) |  |  |  |  | (439) |
| f. Benefits Expired/Refund |  |  |  |  | (38) | (38) |
| 3. New member due to: |  |  |  |  |  |  |
| a. New Hire | 706 |  |  |  |  | 706 |
| b. Rehire | 28 |  |  |  | (1) | 27 |
| c. Death of Participant |  |  |  | 11 |  | 11 |
| d. Adjustments |  | 10 | 2 | 12 | 7 | 31 |
| 4. Headcounts as of October 1, 2011 | 4,747 | 2,909 | 114 | 107 | 794 | 8,671 |

## SCHEDULE F

## SCHEDULES OF MEMBER DATA

TABLE 2
RECONCILIATION OF MEMBER DATA AS OF OCTOBER 1, 2011

POLICE OFFICERS' RETIREMENT PLAN

|  | Actives | Retirees | Disabled | Beneficiaries | Vested Terms | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Headcounts as of October 1, 2010 | 3,915 | 767 | 247 | 158 | 90 | 5,177 |
| 2. Change in status during the year: <br> a. Death |  | (4) | (2) | (5) |  | (11) |
| b. Disabled | (18) |  | 20 |  | (2) |  |
| c. Retired | (27) | 32 |  |  | (5) |  |
| d. Vested Termination | (54) |  |  |  | 54 |  |
| e. Nonvested Termination | (67) |  |  |  |  | (67) |
| f. Benefits Expired/Refund |  |  |  | (4) | (6) | (10) |
| 3. New member due to: |  |  |  |  |  |  |
| a. New Hire | 14 |  |  |  |  | 14 |
| b. Rehire | 12 |  |  |  |  | 12 |
| c. Death of Participant |  |  |  | 17 |  | 17 |
| d. Adjustments |  |  |  | 159 | 8 | 167 |
| 4. Headcounts as of October 1, 2011 | 3,775 | 795 | 265 | 325 | 139 | 5,299 |

## SCHEDULE F

## SCHEDULES OF MEMBER DATA

TABLE 3

## RECONCILIATION OF MEMBER DATA

 AS OF OCTOBER 1, 2011FIREFIGHTERS' RETIREMENT PLAN

|  | Actives | Retirees | Disabled | Beneficiaries | Vested Terms | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Headcounts as of October 1, 2010 | 1,793 | 272 | 57 | 51 | 35 | 2,208 |
| 2. Change in status during the year: <br> a. Death |  | (1) | (2) | (3) |  | (6) |
| b. Disabled | (6) |  | 6 |  |  |  |
| c. Retired | (34) | 35 |  |  | (1) |  |
| d. Vested Termination | (13) |  |  |  | 13 |  |
| e. Nonvested Termination | (29) |  |  |  |  | (29) |
| f. Benefits Expired/Refund |  |  |  | (1) | (2) | (3) |
| 3. New member due to: |  |  |  |  |  |  |
| a. New Hire | 73 |  |  |  |  | 73 |
| b. Rehire | 2 |  |  |  |  | 2 |
| c. Death of Participant |  |  |  | 4 |  | 4 |
| d. Adjustments |  | 1 | 1 | 51 | 4 | 57 |
| 4. Headcounts as of October 1, 2011 | 1,786 | 307 | 62 | 102 | 49 | 2,306 |

## SCHEDULE F

TABLE 4

## SCHEDULE OF ACTIVE MEMBER DATA

AS OF OCTOBER 1, 2011
TEACHERS' RETIREMENT PLAN

| Attained Age | Completed Years of Service |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 5 | 5 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30+ | Total |  | Payroll |
| Under 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$ | 0 |
| 20 to 24 | 242 | 1 | 0 | 0 | 0 | 0 | 0 | 243 | \$ | 12,235,625 |
| 25 to 29 | 681 | 48 | 1 | 0 | 0 | 0 | 0 | 730 | \$ | 40,830,018 |
| 30 to 34 | 426 | 145 | 25 | 0 | 0 | 0 | 0 | 596 | \$ | 40,054,614 |
| 35 to 39 | 280 | 145 | 136 | 11 | 0 | 0 | 0 | 572 | \$ | 44,530,301 |
| 40 to 44 | 189 | 109 | 142 | 63 | 10 | 0 | 0 | 513 | \$ | 42,505,228 |
| 45 to 49 | 130 | 61 | 80 | 47 | 79 | 13 | 0 | 410 | \$ | 34,570,276 |
| 50 to 54 | 75 | 79 | 86 | 61 | 95 | 72 | 9 | 477 | \$ | 41,766,922 |
| 55 to 59 | 62 | 65 | 86 | 51 | 126 | 109 | 62 | 561 | \$ | 50,897,568 |
| 60 to 64 | 48 | 58 | 65 | 56 | 89 | 71 | 81 | 468 | \$ | 43,124,183 |
| 65 to 69 | 12 | 16 | 17 | 10 | 30 | 17 | 35 | 137 | \$ | 12,773,997 |
| 70 \& Over | 1 | 5 | 5 | 4 | 7 | 4 | 14 | 40 | \$ | 3,733,081 |
| Total | 2,146 | 732 | 643 | 303 | 436 | 286 | 201 | 4,747 | \$ | 367,021,813 |

Average Age: $\quad 42.95$
Average Service: 10.39

## SCHEDULE F

TABLE 5

## SCHEDULE OF ACTIVE MEMBER DATA

 AS OF OCTOBER 1, 2011
## POLICE OFFICERS' RETIREMENT PLAN

| Attained Age | Completed Years of Service |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 5 | 5 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30+ | Total |  | Payroll |
| Under 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$ | 0 |
| 20 to 24 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | \$ | 1,557,877 |
| 25 to 29 | 296 | 96 | 0 | 0 | 0 | 0 | 0 | 392 | \$ | 22,666,740 |
| 30 to 34 | 151 | 290 | 47 | 0 | 0 | 0 | 0 | 488 | \$ | 30,518,698 |
| 35 to 39 | 60 | 164 | 233 | 67 | 0 | 0 | 0 | 524 | \$ | 36,045,763 |
| 40 to 44 | 39 | 122 | 191 | 157 | 349 | 0 | 0 | 858 | \$ | 65,797,369 |
| 45 to 49 | 21 | 50 | 77 | 87 | 615 | 91 | 0 | 941 | \$ | 77,234,729 |
| 50 to 54 | 5 | 12 | 38 | 23 | 209 | 161 | 1 | 449 | \$ | 37,821,322 |
| 55 to 59 | 2 | 5 | 9 | 1 | 15 | 29 | 14 | 75 | \$ | 6,239,020 |
| 60 to 64 | 0 | 0 | 2 | 0 | 0 | 2 | 6 | 10 | \$ | 816,314 |
| 65 to 69 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | \$ | 522,929 |
| 70 \& Over | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 4 | \$ | 287,637 |
| Total | 602 | 739 | 597 | 336 | 1,188 | 283 | 30 | 3,775 | \$ | 279,508,398 |

Average Age: 41.18
Average Service: 15.31

## SCHEDULE F

TABLE 6

## SCHEDULE OF ACTIVE MEMBER DATA

 AS OF OCTOBER 1, 2011FIREFIGHTERS' RETIREMENT PLAN

| Attained Age | Completed Years of Service |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 5 | 5 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30+ | Total |  | Payroll |
| Under 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$ | 0 |
| 20 to 24 | 50 | 5 | 0 | 0 | 0 | 0 | 0 | 55 | \$ | 2,658,497 |
| 25 to 29 | 223 | 107 | 0 | 0 | 0 | 0 | 0 | 330 | \$ | 17,241,022 |
| 30 to 34 | 137 | 127 | 31 | 1 | 0 | 0 | 0 | 296 | \$ | 16,496,256 |
| 35 to 39 | 28 | 96 | 74 | 43 | 0 | 0 | 0 | 241 | \$ | 15,204,374 |
| 40 to 44 | 1 | 52 | 93 | 82 | 95 | 0 | 0 | 323 | \$ | 23,702,723 |
| 45 to 49 | 1 | 8 | 26 | 83 | 84 | 52 | 0 | 254 | \$ | 21,143,870 |
| 50 to 54 | 2 | 3 | 11 | 9 | 66 | 124 | 7 | 222 | \$ | 19,907,535 |
| 55 to 59 | 1 | 0 | 0 | 0 | 3 | 38 | 15 | 57 | \$ | 5,546,295 |
| 60 to 64 | 0 | 2 | 0 | 0 | 1 | 1 | 4 | 8 | \$ | 710,981 |
| 65 \& Over | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$ | 0 |
| Total | 443 | 400 | 235 | 218 | 249 | 215 | 26 | 1,786 | \$ | 122,611,553 |

Average Age: $\quad 38.81$
Average Service: 13.50

## SCHEDULE F

TABLE 7
SCHEDULE OF RETIREE MEMBER DATA AS OF OCTOBER 1, 2011

## TEACHERS' RETIREMENT PLAN

 DISTRICT ONLY| Attained Age | Service Retirement |  | Disability Retirement |  | Survivors and Beneficiaries |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Annual <br> Benefits | No. | Annual Benefits | No. | Annual Benefits | No. | Annual <br> Benefits |
| Under 20 | 0 | \$0 | 0 | \$0 | 8 | \$24,227 | 8 | \$24,227 |
| 20 to 24 | 0 | \$0 | 0 | \$0 | 4 | \$14,316 | 4 | \$14,316 |
| 25 to 29 | 0 | \$0 | 0 | \$0 | 0 | \$0 | 0 | \$0 |
| 30 to 34 | 0 | \$0 | 0 | \$0 | 0 | \$0 | 0 | \$0 |
| 35 to 39 | 0 | \$0 | 0 | \$0 | 2 | \$14,870 | 2 | \$14,870 |
| 40 to 44 | 0 | \$0 | 3 | \$78,708 | 0 | \$0 | 3 | \$78,708 |
| 45 to 49 | 0 | \$0 | 4 | \$112,752 | 1 | \$10,758 | 5 | \$123,510 |
| 50 to 54 | 10 | \$207,572 | 8 | \$251,017 | 8 | \$71,832 | 26 | \$530,421 |
| 55 to 59 | 117 | \$2,707,515 | 26 | \$775,380 | 14 | \$80,836 | 157 | \$3,563,731 |
| 60 to 64 | 849 | \$13,946,905 | 50 | \$964,813 | 27 | \$146,368 | 926 | \$15,058,086 |
| 65 to 69 | 1,168 | \$13,816,820 | 19 | \$219,628 | 23 | \$125,488 | 1,210 | \$14,161,936 |
| 70 to 74 | 537 | \$5,919,991 | 4 | \$13,886 | 9 | \$52,500 | 550 | \$5,986,377 |
| 75 to 79 | 174 | \$1,800,053 | 0 | \$0 | 10 | \$93,130 | 184 | \$1,893,183 |
| 80 to 84 | 47 | \$456,289 | 0 | \$0 | 1 | \$4,719 | 48 | \$461,008 |
| 85 to 89 | 7 | \$85,654 | 0 | \$0 | 0 | \$0 | 7 | \$85,654 |
| 90 to 94 | 0 | \$0 | 0 | \$0 | 0 | \$0 | 0 | \$0 |
| 95 \& Over | 0 | \$0 | 0 | \$0 | 0 | \$0 | 0 | \$0 |
| Total | 2,909 | \$38,940,799 | 114 | \$2,416,184 | 107 | \$639,044 | 3,130 | \$41,996,027 |

Average Age:
66.97

## SCHEDULE F

TABLE 8

## SCHEDULE OF RETIREE MEMBER DATA AS OF OCTOBER 1, 2011

## 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 | \$61,548 | 10 | \$61,548 |
| 20 to 24 | 0 | \$0 | 0 | \$0 | 8 | \$50,760 | 8 | \$50,760 |
| 25 to 29 | 0 | \$0 | 0 | \$0 | 0 | \$0 | 0 | \$0 |
| 30 to 34 | 0 | \$0 | 0 | \$0 | 0 | \$0 | 0 | \$0 |
| 35 to 39 | 0 | \$0 | 0 | \$0 | 3 | \$27,456 | 3 | \$27,456 |
| 40 to 44 | 1 | \$54,900 | 3 | \$78,708 | 3 | \$20,412 | 7 | \$154,020 |
| 45 to 49 | 0 | \$0 | 4 | \$112,752 | 2 | \$17,376 | 6 | \$130,128 |
| 50 to 54 | 10 | \$321,132 | 14 | \$375,096 | 11 | \$220,692 | 35 | \$916,920 |
| 55 to 59 | 117 | \$5,802,624 | 28 | \$819,120 | 19 | \$293,280 | 164 | \$6,915,024 |
| 60 to 64 | 865 | \$40,211,124 | 71 | \$2,037,732 | 45 | \$714,576 | 981 | \$42,963,432 |
| 65 to 69 | 1,323 | \$57,098,966 | 55 | \$1,470,900 | 57 | \$924,288 | 1,435 | \$59,494,154 |
| 70 to 74 | 953 | \$40,959,654 | 53 | \$1,455,972 | 53 | \$1,049,370 | 1,059 | \$43,464,996 |
| 75 to 79 | 811 | \$34,798,380 | 43 | \$1,209,889 | 70 | \$1,346,568 | 924 | \$37,354,837 |
| 80 to 84 | 608 | \$24,851,028 | 53 | \$1,552,668 | 65 | \$1,517,520 | 726 | \$27,921,216 |
| 85 to 89 | 356 | \$13,964,448 | 38 | \$1,238,388 | 48 | \$988,584 | 442 | \$16,191,420 |
| 90 to 94 | 170 | \$7,172,125 | 18 | \$726,156 | 22 | \$531,600 | 210 | \$8,429,881 |
| 95 \& Over | 80 | \$3,383,436 | 7 | \$217,176 | 16 | \$427,337 | 103 | \$4,027,949 |
| Total | 5,294 | \$228,617,817 | 387 | \$11,294,557 | 432 | \$8,191,367 | 6,113 | \$248,103,741 |

Average Age:
73.17

## SCHEDULE F

TABLE 9

## SCHEDULE OF RETIREE MEMBER DATA AS OF OCTOBER 1, 2011

## POLICE OFFICERS' RETIREMENT PLAN

 DISTRICT ONLY| Attained Age | Service Retirement |  | Disability Retirement |  | Survivors and Beneficiaries |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Annual <br> Benefits | No. | Annual Benefits | No. | Annual Benefits | No. | Annual Benefits |
| Under 20 | 0 | \$0 | 0 | \$0 | 69 | \$327,849 | 69 | \$327,849 |
| 20 to 24 | 0 | \$0 | 0 | \$0 | 14 | \$25,211 | 14 | \$25,211 |
| 25 to 29 | 0 | \$0 | 0 | \$0 | 1 | \$1,511 | 1 | \$1,511 |
| 30 to 34 | 0 | \$0 | 2 | \$70,956 | 1 | \$51,468 | 3 | \$122,424 |
| 35 to 39 | 0 | \$0 | 12 | \$347,916 | 3 | \$42,833 | 15 | \$390,749 |
| 40 to 44 | 0 | \$0 | 63 | \$1,912,548 | 22 | \$381,826 | 85 | \$2,294,374 |
| 45 to 49 | 2 | \$42,520 | 77 | \$2,462,436 | 16 | \$184,961 | 95 | \$2,689,917 |
| 50 to 54 | 135 | \$3,974,355 | 51 | \$1,808,869 | 36 | \$474,372 | 222 | \$6,257,596 |
| 55 to 59 | 339 | \$6,548,730 | 45 | \$721,883 | 53 | \$725,784 | 437 | \$7,996,397 |
| 60 to 64 | 250 | \$3,123,922 | 11 | \$81,138 | 58 | \$877,905 | 319 | \$4,082,965 |
| 65 to 69 | 65 | \$507,560 | 4 | \$45,800 | 33 | \$472,174 | 102 | \$1,025,534 |
| 70 to 74 | 4 | \$33,926 | 0 | \$0 | 10 | \$187,510 | 14 | \$221,436 |
| 75 to 79 | 0 | \$0 | 0 | \$0 | 3 | \$47,076 | 3 | \$47,076 |
| 80 to 84 | 0 | \$0 | 0 | \$0 | 6 | \$88,848 | 6 | \$88,848 |
| 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 | 795 | \$14,231,013 | 265 | \$7,451,546 | 325 | \$3,889,328 | 1,385 | \$25,571,887 |

Average Age: $\quad 54.49$

## SCHEDULE F

TABLE 10
SCHEDULE OF RETIREE MEMBER DATA
AS OF OCTOBER 1,2011 AS OF OCTOBER 1, 2011

## POLICE OFFICERS' RETIREMENT PLAN

 FEDERAL PLUS DISTRICT| Attained Age | Service Retirement |  | Disability Retirement |  | Survivors and Beneficiaries |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Annual <br> Benefits | No. | Annual <br> Benefits | No. | Annual <br> Benefits | No. | Annual <br> Benefits |
| Under 20 | 0 | \$0 | 0 | \$0 | 72 | \$592,296 | 72 | \$592,296 |
| 20 to 24 | 0 | \$0 | 0 | \$0 | 20 | \$197,940 | 20 | \$197,940 |
| 25 to 29 | 0 | \$0 | 0 | \$0 | 1 | \$3,708 | 1 | \$3,708 |
| 30 to 34 | 0 | \$0 | 2 | \$70,956 | 3 | \$112,200 | 5 | \$183,156 |
| 35 to 39 | 0 | \$0 | 12 | \$347,916 | 5 | \$78,180 | 17 | \$426,096 |
| 40 to 44 | 0 | \$0 | 69 | \$2,026,992 | 24 | \$656,256 | 93 | \$2,683,248 |
| 45 to 49 | 2 | \$54,564 | 86 | \$2,638,764 | 24 | \$596,052 | 112 | \$3,289,380 |
| 50 to 54 | 135 | \$9,118,429 | 77 | \$2,480,880 | 64 | \$1,556,480 | 276 | \$13,155,789 |
| 55 to 59 | 489 | \$28,423,502 | 119 | \$4,659,444 | 118 | \$2,790,899 | 726 | \$35,873,845 |
| 60 to 64 | 998 | \$51,104,964 | 175 | \$7,047,804 | 194 | \$4,915,460 | 1,367 | \$63,068,228 |
| 65 to 69 | 752 | \$38,190,528 | 174 | \$7,059,324 | 179 | \$4,922,722 | 1,105 | \$50,172,574 |
| 70 to 74 | 437 | \$22,251,384 | 126 | \$5,640,012 | 180 | \$5,065,944 | 743 | \$32,957,340 |
| 75 to 79 | 223 | \$11,898,324 | 94 | \$4,411,200 | 148 | \$4,368,120 | 465 | \$20,677,644 |
| 80 to 84 | 93 | \$6,231,024 | 112 | \$5,706,366 | 136 | \$3,959,916 | 341 | \$15,897,306 |
| 85 to 89 | 32 | \$2,231,628 | 54 | \$2,962,452 | 102 | \$2,913,408 | 188 | \$8,107,488 |
| 90 to 94 | 8 | \$799,560 | 15 | \$771,235 | 70 | \$2,104,740 | 93 | \$3,675,535 |
| 95 \& Over | 1 | \$45,300 | 10 | \$651,216 | 24 | \$780,468 | 35 | \$1,476,984 |
| Total | 3,170 | \$170,349,207 | 1,125 | \$46,474,561 | 1,364 | \$35,614,789 | 5,659 | \$252,438,557 |

Average Age:
66.34

## SCHEDULE F

TABLE 11

## SCHEDULE OF RETIREE MEMBER DATA AS OF OCTOBER 1, 2011

FIREFIGHTERS' RETIREMENT PLAN DISTRICT ONLY

| Attained Age | Service Retirement |  | Disability Retirement |  | Survivors and Beneficiaries |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Annual <br> Benefits | No. | Annual Benefits | No. | Annual Benefits | No. | Annual Benefits |
| Under 20 | 0 | \$0 | 0 | \$0 | 25 | \$231,293 | 25 | \$231,293 |
| 20 to 24 | 0 | \$0 | 0 | \$0 | 3 | \$5,672 | 3 | \$5,672 |
| 25 to 29 | 0 | \$0 | 0 | \$0 | 3 | \$4,371 | 3 | \$4,371 |
| 30 to 34 | 0 | \$0 | 1 | \$16,956 | 0 | \$0 | 1 | \$16,956 |
| 35 to 39 | 0 | \$0 | 4 | \$107,808 | 0 | \$0 | 4 | \$107,808 |
| 40 to 44 | 0 | \$0 | 6 | \$175,440 | 4 | \$107,966 | 10 | \$283,406 |
| 45 to 49 | 0 | \$0 | 9 | \$306,048 | 3 | \$53,305 | 12 | \$359,353 |
| 50 to 54 | 39 | \$1,280,741 | 10 | \$352,632 | 8 | \$104,061 | 57 | \$1,737,434 |
| 55 to 59 | 145 | \$3,865,977 | 19 | \$307,063 | 15 | \$255,313 | 179 | \$4,428,353 |
| 60 to 64 | 88 | \$1,517,199 | 11 | \$60,240 | 15 | \$215,737 | 114 | \$1,793,176 |
| 65 to 69 | 33 | \$396,266 | 2 | \$1,471 | 12 | \$256,539 | 47 | \$654,276 |
| 70 to 74 | 2 | \$19,041 | 0 | \$0 | 9 | \$186,558 | 11 | \$205,599 |
| 75 to 79 | 0 | \$0 | 0 | \$0 | 5 | \$130,248 | 5 | \$130,248 |
| 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 | 307 | \$7,079,224 | 62 | \$1,327,658 | 102 | \$1,551,063 | 471 | \$9,957,945 |

Average Age: $\quad 56.07$

## SCHEDULE F

TABLE 12

## SCHEDULE OF RETIREE MEMBER DATA AS OF OCTOBER 1, 2011

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 | \$361,428 | 25 | \$361,428 |
| 20 to 24 | 0 | \$0 | 0 | \$0 | 4 | \$14,592 | 4 | \$14,592 |
| 25 to 29 | 0 | \$0 | 0 | \$0 | 3 | \$10,260 | 3 | \$10,260 |
| 30 to 34 | 0 | \$0 | 1 | \$16,956 | 1 | \$30,792 | 2 | \$47,748 |
| 35 to 39 | 0 | \$0 | 4 | \$107,808 | 0 | \$0 | 4 | \$107,808 |
| 40 to 44 | 0 | \$0 | 6 | \$175,440 | 5 | \$160,320 | 11 | \$335,760 |
| 45 to 49 | 0 | \$0 | 9 | \$306,048 | 8 | \$204,000 | 17 | \$510,048 |
| 50 to 54 | 39 | \$2,925,024 | 18 | \$511,428 | 14 | \$277,608 | 71 | \$3,714,060 |
| 55 to 59 | 158 | \$11,088,288 | 45 | \$1,934,400 | 28 | \$754,212 | 231 | \$13,776,900 |
| 60 to 64 | 158 | \$10,573,428 | 38 | \$1,820,280 | 44 | \$1,176,444 | 240 | \$13,570,152 |
| 65 to 69 | 228 | \$13,608,840 | 70 | \$3,318,750 | 58 | \$1,605,375 | 356 | \$18,532,965 |
| 70 to 74 | 216 | \$12,846,948 | 86 | \$4,251,924 | 80 | \$2,225,112 | 382 | \$19,323,984 |
| 75 to 79 | 101 | \$6,001,056 | 53 | \$2,398,476 | 51 | \$1,549,200 | 205 | \$9,948,732 |
| 80 to 84 | 60 | \$4,073,988 | 50 | \$2,596,992 | 89 | \$2,742,924 | 199 | \$9,413,904 |
| 85 to 89 | 17 | \$1,192,536 | 29 | \$1,664,154 | 59 | \$1,866,912 | 105 | \$4,723,602 |
| 90 to 94 | 5 | \$335,580 | 22 | \$1,278,763 | 39 | \$1,234,392 | 66 | \$2,848,735 |
| 95 \& Over | 0 | \$0 | 1 | \$97,404 | 13 | \$398,316 | 14 | \$495,720 |
| Total | 982 | \$62,645,688 | 432 | \$20,478,823 | 521 | \$14,611,887 | 1,935 | \$97,736,398 |

Average Age: $\quad 69.76$

## SCHEDULE G

## SCHEDULE OF RETIREES ADDED TO AND REMOVED FROM ROLLS

## DISTRICT BENEFIT ONLY

(\$ IN THOUSANDS)

|  |  | Added |  | Removed |  | Rolls at End of Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year Ended | Plan | Number | Annual <br> Allowances | Number | Annual <br> Allowances | Increase Due to Plan <br> Amendments | Number | Annual Allowances | Percentage Increase in Annual Allowances | Average <br> Annual <br> Allowances |
| September 30, 2009 | Teachers |  |  |  |  |  | 2,770 | \$31,877 |  | \$39 |
|  | Police |  |  |  |  |  | 1,086 | \$15,990 |  | \$44 |
|  | Fire |  |  |  |  |  | 363 | \$6,421 |  | \$50 |
| September 30, 2010 | Teachers | 203 | \$4,225 | 32 | \$337 | \$1,489 | 2,941 | \$37,254 | 16.9\% | \$40 |
|  | Police | 100 | \$2,799 | 14 | \$76 | \$2,533 | 1,172 | \$21,246 | 32.9\% | \$45 |
|  | Fire | 27 | \$712 | 10 | \$132 | \$470 | 380 | \$7,471 | 16.4\% | \$50 |
| September 30, 2011 | Teachers | 226 | \$4,734 | 37 | \$490 | \$497 | 3,130 | \$41,996 | 12.7\% | \$41 |
|  | Police | 228 | \$4,291 | 15 | \$152 | \$187 | 1,385 | \$25,572 | 20.4\% | \$45 |
|  | Fire | 98 | \$2,556 | 7 | \$86 | \$18 | 471 | \$9,958 | 33.3\% | \$51 |

## SCHEDULE G

SCHEDULE OF RETIREES ADDED TO AND REMOVED FROM ROLLS
FEDERAL PLUS DISTRICT BENEFIT
(\$ IN THOUSANDS)


| 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 |

## 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 <br> Year Ending 10/01/2011

Age \& Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.
\$ 22.6
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.

Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.

Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.

Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.

New Members. Additional unfunded accrued liability will produce a loss.

Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.

Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.

Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.

Gain (or Loss) During Year From Financial Experience

Non-Recurring Items. Adjustments for plan amendments, assumption changes, or method changes.

Composite Gain (or Loss) During Year
\$
(23.2) (218.6)

## 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 <br> Year Ending 10/01/2011

Age \& Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.
\$ 38.7
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.

Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.

Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.

Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.

New Members. Additional unfunded accrued liability will produce a loss.

Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.

Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.

Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.

Gain (or Loss) During Year From Financial Experience \$

Non-Recurring Items. Adjustments for plan amendments, assumption changes, or method changes.69.5

Composite Gain (or Loss) During Year
$\$ \quad 25.8$


[^0]:    * The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B).

[^1]:    ${ }^{1}$ 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.

