Policemen's \& Firefighters' Retirement Fund


Report on the Valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Retirement Fund

Prepared as of July 1, 2006

# Cavanaugh Macdonald 

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## September 29, 2006

Board of Trustees<br>Lexington Fayette Urban County Government<br>Policemen's and Firefighters' Retirement Fund<br>200 East Main Street<br>Lexington, KY 40507

Dear Members of the Board:
We are pleased to submit herewith the results of the bi-annual actuarial valuation of the Lexington Fayette Urban County Government Policemen's and Firefighters' Retirement Fund prepared as of July 1, 2006. The purpose of this report is to provide a summary of the funded status of the Plan as of July 1, 2006, to recommend rates of contribution 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 of the Plan are included in the actuarially calculated contribution rates which are developed using the entry age cost method. Actuarial value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions that are equal to regular interest on the unfunded accrued liability in perpetuity. The annual required employer contribution rate is $46.75 \%$ of payroll for the plan years ending July 1, 2007 and July 1, 2008. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

The valuation has been prepared in accordance with the parameters set forth in Statement Nos. 25 and 27 of the Governmental Accounting Standards Board. The annual required contribution (ARC) of the Government under GASB for the fiscal year ending June 30, 2008 is $46.75 \%$ of payroll, which will liquidate the unfunded accrued liability over a 23 year period on the assumption that payroll will increase $3 \%$ annually.

This is to certify that the independent consulting actuary is a Member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Plan.

Respectfully submitted,


Thomas Cavanaug(, FSA, EA, FCA, MAAA
Chief Executive Officer
TJC: sh

S:LLexington Fayette Urban County Government Police and Firefighters Pension PlanIValuationlValuation Template L.EX 20060701. doc

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## LEXINGTON FATYETTE URBAN COUNTY GOVERNMENT POLICEMEN'S AND FIREFIGHTERS' RETIREMENT FUND REPORT OF ACTUARY <br> ON THE VALUATION <br> PREPARED AS OF JULY 1, 2006

## SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

| Valuation Date | July 1, 2006 |  | July 1, 2004* |  |
| :---: | :---: | :---: | :---: | :---: |
| Active members: |  |  |  |  |
| Number |  | 1,065 |  | 933 |
| Annualized compensation | \$ | 57,192,876 | \$ | 40,316,319 |
| Retired members and beneficiaries: |  |  |  |  |
| Number |  | 825 |  | 796 |
| Annual benefits | \$ | 27,469,773 | \$ | 24,564,480 |
| Assets: |  |  |  |  |
| Market Value | \$ | 370,945,480 | \$ | 329,683,295 |
| Actuarial Value |  | 373,314,278 |  | 329,683,295 |
| Unfunded actuarial accrued liability | \$ | 221,490,170 | \$ | 91,225,548 |
| Amortization Period |  | 23 years |  | N/A |
| Fiscal Year Ending |  | June 30, 2008 |  | June 30, 2006 |
| Government annual required contribution rate (ARC): |  |  |  |  |
| Normal |  | 18.06\% |  | 13.91\% |
| Accrued liability |  | $\underline{28.69}$ |  | 16.76 |
| Total |  | 46.75\% |  | 30.67\% |
| Member contribution rate |  | 11.00\% |  | 11.00\% |

*Reported by prior actuarial firm.
2. The major benefit and contribution provisions of the Plan as reflected in the valuation are summarized in Schedule G. Since the previous valuation, the minimum monthly annuity payable to retirees and surviving spouses has been increased to $\$ 1,250$. In addition, the actual cost-ofliving allowances granted under Section 67A. 690 through July 1, 2006 were reflected in the valuation.
3. Since the previous valuation, the method of determining assets for valuation purposes has been changed from market value to a smoothed market value. The development of the actuarial value of assets is shown in Schedule C. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the valuation.
4. The entry age actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method.
5. Comments on the valuation results as of July 1, 2006 are given in Section IV and further discussion of the contributions is set out in Section V. The valuation has been prepared with a future cost-of-living assumption of $3 \%$ per year, since historical cost-of-living increases have averaged $3 \%$ per year. The employer contribution rate on this basis is $46.75 \%$ of payroll. The contribution rate based on $2 \%$ assumed annual future cost-of-living increases is $35.98 \%$ of payroll and the contribution rates based on 5\% assumed annual future cost-of-living increases is $75.61 \%$ of payroll.

## SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the Plan for use as a basis of the valuation were furnished by the Lexington Fayette Urban County Government. The valuation included 1,065 active members with annualized compensation totaling $\$ 57,192,876$.
2. The following table shows the number of retired members and beneficiaries as of July 1, 2006 together with the amount of their annual retirement benefits payable under the Plan as of that date.

THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF JULY 1, 2006

| GROUP |  | ANNUAL <br> RETIREMENT <br> BENEFITS* |
| :--- | :---: | :---: |
| Service Retirements | NUMBER* | ( |
| Disability Retirements | 427 | $\$ 15,828,836$ |
| Beneficiaries of Deceased Members | 304 | $9,740,670$ |
| Total | $\underline{94}$ | $1,900,267$ |

*Does not reflect 5\% COLA granted effective July 1, 2006. The results of the valuation have been adjusted to include this COLA.
3. Table 1 of Schedule $H$ shows the distribution by age and years of membership service of the number of active members included in the valuation, while Table 2 shows the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age.

## SECTION III - ASSETS

As of July 1, 2006, the total market value of assets amounted to $\$ 370,945,480$, including a contribution receivable for member service purchases of $\$ 186,920$. The actuarial value of assets used for the current valuation was $\$ 373,314,278$. Schedule $C$ shows the development of the actuarial value of assets as of July 1, 2006. Schedule D shows the Summary of Receipts and Disbursements.

## SECTION IV - COMMENTS ON VALUATION

1. Schedule B of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the Plan as of July 1, 2006. The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule E and the actuarial cost method which is described in Schedule F.
2. The valuation balance sheet shows that the Plan has total prospective liabilities of $\$ 723,770,338$ of which $\$ 398,398,341$ is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and $\$ 325,371,997$ is for the prospective benefits payable on account of present active members. Against these liabilities, the Plan has a total present actuarial value of assets of $\$ 373,314,278$ as of July 1, 2006. The difference of $\$ 350,456,060$ between the total liabilities and the total present assets represents the present value of future contributions.
3. The contributions to the Plan consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of $29.06 \%$ of payroll are required under the entry age method. Of this amount, $11.00 \%$ is paid by the members and the remaining $18.06 \%$ is required by the Government.
4. Prospective normal contributions at the rate of $29.06 \%$ have a present value of $\$ 128,965,890$. When this amount is subtracted from $\$ 350,456,060$, which is the present value of the total future contributions to be made, there remains $\$ 221,490,170$ as the amount of unfunded accrued liability contributions. The development of the unfunded accrued liability is shown in Schedule A.

## SECTION V - CONTRIBUTIONS PAYABLE

1. Under Section 67A. 520 of the law governing the Fund, the Government shall make current contributions to the Fund on an actuarially funded basis. The contributions shall be equal to an amount resulting from the application of a rate percent of salaries of active members determined by the entry age normal cost funding method (normal contribution). In addition, the Government shall contribute an amount resulting from the application of a rate percent of the salaries of active members which will provide each year regular interest on the remaining liability for prior service (accrued liability contribution). In any event the total contribution of the Government shall be at least seventeen percent of salaries of the active members participating in the fund.
2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be $29.06 \%$.
3. Each member shall contribute an amount equal to $11.00 \%$ of current salary each year.
4. The Government normal contribution rate is equal to the difference between the normal contribution rate of $29.06 \%$ and the member contribution rate of $11.00 \%$, or $18.06 \%$ of payroll.
5. The annual accrued liability contribution rate is determined to be $28.69 \%$ of payroll. This amount is equal to the regular interest on the prior service liability in perpetuity. Contributions at this level would be sufficient to amortize the unfunded accrued liability over a 23 year period on the assumption that payroll will increase $3 \%$ annually.
6. The required employer contribution rate for the plan years ending June 30, 2008 and June 30, 2009 is, therefore, $46.75 \%$ of payroll.
7. The following table summarizes the employer contributions which were determined by the July 1, 2006 valuation and are recommended for use.

|  | PERCENTAGE OF |
| :---: | :---: |
| CONTRIBUTION | ACTIVE MEMBERS' |
|  | COMPENSATION |
| Normal |  |
| Accrued Liability | $18.06 \%$ |
| Total | $\underline{28.69}$ |

## 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 the Plan and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED PARTICIPANTS AS OF JULY 1, 2006

| GROUP | NUMBER |
| :--- | :---: |
| Retired participants and beneficiaries currently <br> receiving benefits | 825 |
| Terminated participants and beneficiaries entitled to <br> benefits but not yet receiving benefits <br> Active Participants | 0 |
| $\quad$ Total |  |

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

SCHEDULE OF FUNDING PROGRESS


All figures prior to July 1, 2006 were reported by a prior actuarial firm and were based on a future annual COLA of $2 \%$. The July 1, 2006 results are based on a future annual COLA of $3 \%$.
3. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2006.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2006

| (a) | Employer annual required contribution | \$ | 12,691,844 |
| :---: | :---: | :---: | :---: |
| (b) | Interest on net pension obligation |  | 1,369,055 |
| (c) | Adjustment to annual required contribution |  | 1,435,115 |
| (d) | Annual pension cost (a) + (b) - (c) | \$ | 12,625,784 |
| (e) | Employer contributions made for fiscal year ending June 30, 2006 |  | 14,114,178 |
| (f) | Increase (decrease) in net pension obligation (d) - (e) | \$ | $(1,488,394)$ |
| (g) | Net pension obligation beginning of fiscal year |  | 17,113,189 |
| (h) | Net pension obligation end of fiscal year (f) $+(\mathrm{g})$ | \$ | 15,624,795 |

## TREND INFORMATION

| Year Ending | Annual Pension Cost <br> (APC) | Percentage of <br> APC Contributed | Net Pension <br> Obligation (NPO) |
| :--- | :---: | :---: | :---: |
| June 30, 2004* | $\$ 10,619,518$ |  |  |
| June 30,2005** | $12,629,414$ | $96.5 \%$ | $\$ 16,172,843$ |
| June 30, 2006 | $12,625,784$ | $92.6 \%$ | $17,113,189$ |
|  |  | $111.8 \%$ | $15,624,795$ |

*Reported by a prior actuarial firm.
4. The annual required contribution (ARC) as a percentage of payroll, determined in accordance with the parameters of GASB 25/27, is shown below.

> EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)

| EMPLOYER ANNUAL REQUIRED | FISCAL YEAR ENDING |
| :--- | :---: |
| CONTRIBUTION (ARC) | JUNE 30, 2008 |
| Normal (including expenses) | $18.06 \%$ |
| Accrued liability | $\underline{28.69}$ |
| Total | $46.75 \%$ |

5. Additional information as of July 1,2006 follows:

|  |  |
| :--- | :--- |
| Valuation date | $7 / 01 / 2006$ |
| Actuarial cost method | Entry age |
| Amortization period | Level percent of payroll |
| Remaining amortization period | 23 years |
| Asset valuation method | Market Related Value |
| Actuarial assumptions: |  |
| Investment rate of return (includes inflation) | $8.00 \%$ |
| Projected salary increases (includes inflation) | $5.00 \%$ |
| Inflation | $3.00 \%$ |
| Cost-of-living adjustments | $3.00 \%$ |

## SECTION VII - EXPERIENCE

1.. The following table shows the estimated change in the unfunded accrued liability from various factors that resulted in an increase of $\$ 130,264,622$ in the unfunded accrued liability from $\$ 91,225,548$ as of July 1, 2004 to $\$ 221,490,170$ as of July 1, 2006.

ANALYSIS OF FINANCIAL EXPERIENCE CHANGE IN UNFUNDED ACCRUED LIABILITY

| ITEM | AMOUNT OF |
| :--- | :---: |
| Interest (8.00\%) added to previous unfunded | INCREASE/(DECREASE) |
| accrued liability |  |
| Accrued Liability Contributions | $\$ 15,179,931$ |
| Recognized Asset Gains | $(14,637,667)$ |
| COLA Loss | $(9,473,578)$ |
| Liability (Gain)/Loss | $27,091,087$ |
| Increase in Unfunded Accrued Liability | $112,104,849$ |

## SCHEDULE A

## DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

(1) Present value of prospective benefits:
(a) Present active members
\$ 325,371,997
(b) Present retired members, beneficiaries and former members entitled to deferred vested benefits

398,398,341
(c) Total
(2) Present value of future Government and member normal contributions before expenses

128,965,890
(3) Actuarial accrued liabilities 1(c) - (2)
\$ 594,804,448
(4) Actuarial value of assets 373,314,278
(5) Unfunded actuarial accrued liability (3) - (4)
\$ 221,490,170

## SCHEDULE B

## VALUATION BALANCE SHEET



## SCHEDULE C

## DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

(1) Actuarial Value of Assets on July 1, 2005 (Market Value)
(2) Market Value of Assets on July 1, 2006 (excluding receivable)
(3) Market Value of Assets on July 1, 2005
(4) Net Cash Flow During the Fiscal Year
a. Contributions
b. Benefit Payments
c. Administrative Expenses
d. Investment Expenses
e. Net Cash Flow (a. - b. - c. - d.)
(5) Actual Investment Return ((2) - (3) - (4)e.)
(6) Assumed Rate of Return on Assets
(7) Expected Investment Return
$((1)$ * (6)) + ((4)a. - (4)b. -(4)c.) *. 5 * (6)) + (4)d.
(8) Investment Gain/(Loss) for the Fiscal Year ((5) - (7))
(9) Phased-In Recognition of Investment Gain/(Loss)
a. Current Fiscal Year (. $\left.2^{*}(8)\right)$
b. Prior Fiscal Year
c. Second Prior Fiscal Year
d. Third Prior Fiscal Year
e. Fourth Prior Fiscal Year
f. Total Recognized Investment Gain/(Loss) for Fiscal Year
(10) Contribution Receivable
(11) Actuarial Value of Assets on July 1, 2006
((1) + (4)e. + (7) + (9)f.) + (10)
(12) Rate of Return on Actuarial Value of Assets
$(592,199)$
186,920
\$ $355,468,906$
370,758,560
355,468,906

19,848,095
29,542,642
100,512
1,603,203
$(11,398,262)$
26,687,916
8.00\%

29,648,913
$(2,960,997)$
$(592,199)$
0
0
0
0
\$ $373,314,278$

## SCHEDULE D

## SUMMARY OF RECIEPTS AND DISBURSEMENTS

| Receipts for the Period |  |  |
| :---: | :---: | :---: |
| Contributions: | \$ | 5,694,280 |
| Members |  | 14,153,815 |
| Total |  | 19,848,095 |
| Investment Income |  | 25,084,713 |
| TOTAL | \$ | 44,932,808 |
| Disbursements for the Period |  |  |
| Benefit Payments |  | 29,408,486 |
| Refunds to Members |  | 134,156 |
| Administrative Expense |  | 100,512 |
| TOTAL | \$ | 29,643,154 |
| Excess of Receipts over Disbursements | \$ | 15,289,654 |
| Reconciliation of Asset Balances |  |  |
| Market Value of Assets as of July 1, 2005 | \$ | 355,468,906 |
| Excess of Receipts over Disbursements |  | 15,289,654 |
| Market Value of Assets as of July 1, 2006 | \$ | 370,758,560 |
| Contribution Receivable |  | 186,920 |
| Market Value of Assets as of July 1, 2006 including Receivable |  | 370,945,480 |
| Rate of Return on Market Value of Assets |  | 7.21\% |

## SCHEDULEE

## OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 8.00\% per year, compounded annually.
SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

| $\frac{\text { Age }}{}$ | $\underline{\text { Rate }}$ |
| :--- | :--- |
| 20 | $5.00 \%$ |
| 25 | 5.00 |
| 30 | 5.00 |
| 35 | 5.00 |
| 40 | 5.00 |
| 45 | 5.00 |
| 50 | 5.00 |
| 55 | 5.00 |

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the UP 1994 Mortality Table projected to 2002 set forward three years was used. Representative values of the assumed annual rates of separation from active service are as follows:

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Withdrawal | Annual Rate of <br> Disability | Death |  |
| Age |  |  | Male | Female |
|  |  |  |  |  |
| 20 | $6.58 \%$ | $1.00 \%$ | $0.05 \%$ | $0.03 \%$ |
| 25 | 5.27 | 1.00 | 0.07 | 0.03 |
| 30 | 4.83 | 1.40 | 0.09 | 0.04 |
| 35 | 4.47 | 1.40 | 0.10 | 0.06 |
| 40 | 3.84 | 2.00 | 0.14 | 0.08 |
| 45 | 3.21 | 2.50 | 0.20 | 0.11 |
| 50 | 1.52 | 3.00 | 0.33 | 0.18 |
| 55 | 0.33 | 3.00 | 0.58 | 0.34 |

SERVICE RETIREMENT: Representative annual rates of assumed service retirement are as follows:

| Service |  |
| :---: | :---: |
| 20 | Rate |
| 21 | $25.0 \%$ |
| 22 | 10.0 |
| 23 | 11.1 |
| 24 | 12.5 |
| 25 | 14.3 |
| 26 | 16.7 |
| 27 | 20.0 |
| 28 | 25.0 |
| 29 | 33.3 |
| 30 | 50.0 |
|  | 100.0 |

DEATHS AFTER RETIREMENT: The UP 1994 Mortality Table projected to 2002 is used for the period following service retirement and for beneficiaries of deceased members. For disabled lives, mortality was assumed to be consistent with rates issued by the IRS in Revenue Ruling 96-7 for use in determining current liability for disabled lives prior to January 1, 1995.

OCCUPATIONAL VS. NON OCCUPATIONAL DEATH: $20 \%$ of all deaths are assumed to be due to occupational causes.

OCCUPATIONAL VS. NON OCCUPATIONAL DISABILITY: $75 \%$ of disabilities are assumed to be due to occupational causes. For occupational disabilities the average benefit percentage is assumed to be $67.5 \%$.

PERCENT MARRIED: $75 \%$ of employees who die before retirement are assumed to be married with the husband 3 years older than the wife. $85 \%$ of employees who die after retirement are assumed to be married with the husband 3 years older than the wife.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is $20 \%$ of the difference between market value and expected actuarial value.

VALUATION METHOD: Entry age actuarial cost method. See Schedule F for a brief description of this method.

## SCHEDULE F

## ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently $8.00 \%$ ), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the Plan are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the entry age actuarial cost method. Under this method, a calculation is made to determine the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the Plan.

## SCHEDULE G

## SUMMARY OF MAIN PLAN PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

Member
Membership Service

Total Service

Average Salary

## Retirement Annuity

Eligibility

Benefit

Any member of the police and fire department who is included in the membership of the fund.

Service rendered on or after the date of establishment of the fund or the fund of a city existing within the boundaries of the government immediately prior to the establishment of the urban-county government.

Prior service, membership service, and service credit purchased by a member as provided in KRS 67A. 402.

The highest average salary of the member for any three consecutive years of service.

Anytime after completion of 20 years of Total Service (including service purchased up to 4 years).

Annuity is $2 \frac{1}{2} \%$ of Average Salary multiplied by years of Total Service. The minimum monthly benefit is $\$ 1,250$.

Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to $60 \%$ of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and $75 \%$ or and joint and $100 \%$ survivor payment form.

## Occupational Disability Benefit

Eligibility
Benefit

No requirements.
Annuity equal to a minimum of $60 \%$ of member's last rate of salary, increased above the $60 \%$ minimum by $1 / 2$ the amount by which the member's percentage of disability exceeds $20 \%$, but not greater than $75 \%$. The member's percentage of disability shall be the average of the impairment rating determined by two physicians selected by the Board using the American Medical Association "Guide to the Evaluation of Permanent Impairment". If a member is eligible for a service retirement annuity and the amount of the service retirement annuity exceeds the amount of the disability benefit, then the member may elect to receive an additional service retirement annuity equal to this difference.

Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to $60 \%$ of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and $75 \%$ or and joint and 100\% survivor payment form.

In addition, any minor children will receive benefits as provided under the occupational death benefit provisions.

Non-Occupational Disability Benefit
Eligibility
Benefit

Termination Benefit

## Occupational Death Benefit

Eligibility
Benefit

5 years of Total Service.
$21 / 2 \%$ of Average Salary times years of Total Service subject to a minimum payment of $25 \%$ of Average Salary and a maximum payment of $75 \%$ of Average Salary.

Upon the death of a retired member whose marriage was in effect at least six months before retirement or one year prior to death, the surviving spouse shall receive an annuity equal to $60 \%$ of the member's final annuity or final rate of pay, whichever is greater, unless the retired member elected an alternative actuarial equivalent form at the time of retirement of either a joint and $75 \%$ or and joint and $100 \%$ survivor payment form.

In addition, any minor children will receive benefits provided under the non-occupational death benefit provisions.

If a member is terminated with less than 20 years of total service credit, he is entitled to a return of his accumulated contributions, without interest.

No requirements.
Surviving Spouse receives immediate annuity equal to $60 \%$ of the member's last rate of salary until death or remarriage.

In addition, $10 \%$ of the member's last rate of salary is payable for each minor child until each child attains age 18 (age 23 if involved in educational activities). Maximum total income is $75 \%$ of final rate of salary.

If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule:

| One minor child | $50 \%$ of Salary |
| :--- | :--- |
| Two minor children | $65 \%$ of Salary |
| Three of more minor children | $75 \%$ of Salary |

## Non-Occupational Death Benefit

Eligibility

Benefit

Member Contributions
Employer Contributions

Post Retirement Cost-Of-Living Increases

5 Years of Total Service, married 6 months prior to death.

Surviving spouse received immediate annuity equal to $11 / 2 \%$ of the Average Salary multiplied by years of Total Service, until death or remarriage. The minimum benefit is $15 \%$ of Average Salary. In addition, this annuity is increased by $1 / 2$ for the first minor child and by $1 / 4$ for each additional child. Maximum total income is $75 \%$ of Average Salary.

If no surviving spouse or upon remarriage, then minor children will receive a benefit based on the following schedule:

| One minor child | $50 \%$ of Salary |
| :--- | :--- |
| Two minor children | $65 \%$ of Salary |
| Three of more minor children | $75 \%$ of Salary |

Each active member contributes $11 \%$ of current salary.
The government shall make current contributions to the fund on an actuarially funded basis. Such contributions shall be equal to the sum of:
(1) An amount resulting from the application of a rate percent of salaries of active members determined under the entry age normal cost funding method (fixed by the board every two years), and
(2) An amount resulting from the application of a rate percent of salaries of active members which will provide each year regular interest on any remaining liability for prior service.

In any event, the total contribution of the government shall be at least $17 \%$ of salaries of active members participating in the fund.

Each retired member will have his pension increased each year by an amount, to be determined by the board, of not less than $2.00 \%$ nor more than $5.00 \%$, compounded annually. This increase shall also apply to beneficiaries of deceased members.

## SCHEDULE H

TABLE 1
distribution of active members by age and service groups AS OF JULY 1, 2006

| Attained | Completed Years of Service |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 1 | 1 to 4 | 5 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30 to 34 | 35 to 39 | $\geq 40$ | Total |
| Under 25 <br> Avg. Pay | $\begin{array}{r} 12 \\ 35,173 \\ \hline \end{array}$ | $\begin{array}{r} 19 \\ 38,655 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  | $\begin{array}{r} 31 \\ 37,307 \\ \hline \end{array}$ |
| $25 \text { to } 29$ <br> Avg. Pay | $\begin{array}{r} 27 \\ 34,556 \\ \hline \end{array}$ | $\begin{array}{r} 113 \\ 40,224 \\ \hline \end{array}$ | $\begin{array}{r} 21 \\ 46,733 \\ \hline \end{array}$ |  |  |  |  |  |  |  | $\begin{array}{r} 161 \\ 40,122 \\ \hline \end{array}$ |
| $30 \text { to } 34$ <br> Avg. Pay | $\begin{array}{r} 16 \\ 35,782 \\ \hline \end{array}$ | $\begin{array}{r} 92 \\ 40,535 \\ \hline \end{array}$ | $\begin{array}{r} 129 \\ 48,090 \\ \hline \end{array}$ | $\begin{array}{r} 26 \\ 55,710 \\ \hline \end{array}$ | $\begin{array}{r} 1 \\ 52,764 \\ \hline \end{array}$ |  |  |  |  |  | $\begin{array}{r} 264 \\ 45,480 \\ \hline \end{array}$ |
| $35 \text { to } 39$ <br> Avg. Pay | $\begin{array}{r} 6 \\ 34,958 \\ \hline \end{array}$ | $\begin{array}{r} 41 \\ 41,011 \\ \hline \end{array}$ | $\begin{array}{r} 60 \\ 48,797 \\ \hline \end{array}$ | $\begin{array}{r} 94 \\ 57,218 \\ \hline \end{array}$ | $\begin{array}{r} 39 \\ 63,029 \\ \hline \end{array}$ | $\begin{array}{r} 1 \\ 52,440 \\ \hline \end{array}$ |  |  |  |  | $\begin{array}{r} 241 \\ 52,731 \\ \hline \end{array}$ |
| 40 to 44 <br> Avg. Pay | $\begin{array}{r} 4 \\ 36,066 \\ \hline \end{array}$ | $\begin{array}{r} 16 \\ 41,045 \\ \hline \end{array}$ | $\begin{array}{r} 24 \\ 47,948 \\ \hline \end{array}$ | $\begin{array}{r} 51 \\ 57,133 \\ \hline \end{array}$ | $\begin{array}{r} 80 \\ 66,868 \\ \hline \end{array}$ | $\begin{array}{r} 22 \\ 79,559 \\ \hline \end{array}$ |  |  |  |  | $\begin{array}{r} 197 \\ 60,737 \\ \hline \end{array}$ |
| $45 \text { to } 49$ <br> Avg. Pay |  | $\begin{array}{r} 2 \\ 40,038 \\ \hline \end{array}$ | $\begin{array}{r} 1 \\ 50,568 \\ \hline \end{array}$ | $\begin{array}{r} 15 \\ 63,324 \\ \hline \end{array}$ | $\begin{array}{r} 37 \\ 67,307 \\ \hline \end{array}$ | $\begin{array}{r} 40 \\ 82,184 \\ \hline \end{array}$ | $\begin{array}{r} 2 \\ 95,592 \\ \hline \end{array}$ |  |  |  | $\begin{array}{r} 97 \\ 72,674 \\ \hline \end{array}$ |
| 50 to 54 <br> Avg. Pay |  | $\begin{array}{r} 2 \\ 88,176 \\ \hline \end{array}$ | $\begin{array}{r} 2 \\ 65,082 \\ \hline \end{array}$ | $\begin{array}{r} 2 \\ 52,584 \\ \hline \end{array}$ | $\begin{array}{r} 8 \\ 80,652 \\ \hline \end{array}$ | $\begin{array}{r} 23 \\ 80,990 \\ \hline \end{array}$ | $\begin{array}{r} 17 \\ 81,043 \\ \hline \end{array}$ | $\begin{array}{r} 3 \\ 77,024 \\ \hline \end{array}$ |  |  | $\begin{array}{r} 57 \\ 79,447 \\ \hline \end{array}$ |
| $55 \text { to } 59$ <br> Avg. Pay |  | $\begin{array}{r} 1 \\ 38,640 \\ \hline \end{array}$ | $\begin{array}{r} 1 \\ 45,756 \\ \hline \end{array}$ | $\begin{array}{r} 1 \\ 48,660 \\ \hline \end{array}$ |  | $\begin{array}{r} 2 \\ 84,510 \\ \hline \end{array}$ | $\begin{array}{r} 6 \\ 74,800 \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ 88,649 \\ \hline \end{array}$ |  |  | $\begin{array}{r} 16 \\ 74,633 \\ \hline \end{array}$ |
| $60 \text { to } 64$ <br> Avg. Pay |  |  |  |  |  |  |  |  | $\begin{array}{r} 1 \\ 124,704 \end{array}$ |  | $\begin{array}{r} 1 \\ 124,704 \\ \hline \end{array}$ |
| 65 to 69 <br> Avg. Pay |  |  |  |  |  |  |  |  |  |  |  |
| $70 \& u p$ <br> Avg. Pay |  |  |  |  |  |  |  |  |  |  |  |
| Total Avg. Pay | $\begin{array}{r} 65 \\ 35,102 \\ \hline \end{array}$ | $\begin{array}{r} 286 \\ 40,707 \\ \hline \end{array}$ | $\begin{array}{r} 238 \\ 48,278 \\ \hline \end{array}$ | $\begin{array}{r} 189 \\ 57,378 \\ \hline \end{array}$ | $\begin{array}{r} 165 \\ 66,642 \\ \hline \end{array}$ | $\begin{array}{r} 88 \\ 80,930 \\ \hline \end{array}$ | $\begin{array}{r} 25 \\ 80,709 \\ \hline \end{array}$ | $\begin{array}{r} 8 \\ 84,290 \\ \hline \end{array}$ | $\begin{array}{r} 1 \\ 124,704 \\ \hline \end{array}$ | 0 | $\begin{array}{r} 1,065 \\ 53,702 \\ \hline \end{array}$ |

TABLE 2

## NUMBER OF RETIRED MEMBERS AND BENEFICIARIES AND THEIR BENEFITS BY AGE

| Attained Age | Number of Members | Total Annual Benefits | Average Annual Benefit |
| :---: | :---: | :---: | :---: |
| 50 \& Under | 131 | \$ 3,811,672 | \$ 29,097 |
| 51-55 | 109 | 3,734,430 | 34,261 |
| 56-60 | 184 | 6,672,293 | 36,262 |
| 61-65 | 146 | 5,274,063 | 26,124 |
| 66-70 | 116 | 3,929,900 | 33,878 |
| 71-75 | 66 | 2,131,653 | 32,298 |
| 76-80 | 33 | 989,238 | 29,977 |
| Over 80 | 40 | 926,524 | 23,163 |
| Total | 825 | \$ 27,469,773 | \$ 33,297 |

