

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



The experience and dedication you deserve

September 29, 2006

Board of Trustees Lexington Fayette Urban County Government Policemen's and Firefighters' Retirement Fund 200 East Main Street 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 J. Cavanaugh, FSA, EA, FCA, MAAA

Chief Executive Officer

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

SECTION I - SUMMARY OF PRINCIPAL RESULTS

 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%	1	13.91%	
Accrued liability		28.69		<u>16.76</u>	
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-of-living 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.
- 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

 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.



 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	NUMBER*	ANNUAL RETIREMENT BENEFITS*
Service Retirements	427	\$ 15,828,836
Disability Retirements	304	9,740,670
Beneficiaries of Deceased Members	94	1,900,267
		1 1 1 1
Total	825	\$ 27,469,773

^{*}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

- 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.
- The following table summarizes the employer contributions which were determined by the July 1, 2006 valuation and are recommended for use.



ANNUAL REQUIRED CONTRIBUTION RATE FOR PLAN YEAR ENDING JUNE 30, 2008

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal	18.06%
Accrued Liability	<u>28.69</u>
Total	46.75%

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 receiving benefits	825
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Active Participants	1,065
Total	1,890



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

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation <u>Date</u>	Actuarial Value of Assets <u>(a)</u>	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a / b)	Covered Payroll <u>(c)</u>	UAAL as a Percentage of Covered Payroll ((b-a)/c)
7/01/2001	\$294,632,299	\$379,910,000	\$85,277,701	77.6%	\$41,017,120	207.9%
7/01/2002	292,510,573	400,184,454	107,673,881	73.1	41,309,602	260.7
7/01/2003	288,541,052	436,508,177	147,967,125	66.1	40,622,159	364.3
7/01/2004	329,683,295	467,385,573	137,702,278	70.5	40,316,319	341.6
7/01/2005	355,459,416	520,683,849	165,224,433	68.3	51,726,085	319.4
7/01/2006	373,314,278	594,804,448	221,490,170	62.8	57,192,876	387.3

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%.

 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	Q 	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) + (g)	\$	15,624,795



TREND INFORMATION

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

^{*}Reported by a prior actuarial firm.

 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 CONTRIBUTION (ARC)	FISCAL YEAR ENDING JUNE 30, 2008
Normal (including expenses)	18.06%
Accrued liability	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 INCREASE/(DECREASE)
Interest (8.00%) added to previous unfunded accrued liability	\$ 15,179,931
Accrued Liability Contributions	(14,637,667)
Recognized Asset Gains	(9,473,578)
COLA Loss	27,091,087
Liability (Gain)/Loss	<u>112,104,849</u>
Increase in Unfunded Accrued Liability	\$130,264,622



SCHEDULE A

DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

(1)	Presei	nt 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	\$	723,770,338
(2)		nt value of future Government and member normal contributions expenses		128,965,890
(3)	Actuar	rial accrued liabilities 1(c) - (2)	\$	594,804,448
(4)	Actuar	ial value of assets	_	373,314,278
(5)	Unfund	ded actuarial accrued liability (3) – (4)	\$	221,490,170



SCHEDULE B

VALUATION BALANCE SHEET

ACTUARIAL LIABILITIES	
Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and terminated members entitled to deferred benefits	\$ 398,398,341
Present value of prospective benefits payable on account of present active members	<u>\$ 325,371,997</u>
Total liabilities	\$ 723,770,338
PRESENT AND PROSPECTIVE ASSETS	
Actuarial value of assets	\$ 373,314,278
Present value of future contributions	
Government and member normal contributions 128,965,890	
Unfunded accrued liability contributions	
Total prospective contributions	\$ 350,456,060
Total assets	<u>\$ 723,770,338</u>



SCHEDULE C

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

(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 (.2 * (8)) b. Prior Fiscal Year c. Second Prior Fiscal Year d. Third Prior Fiscal Year e. Fourth Prior Fiscal Year 0 0 190					
(2) Market Value of Assets on July 1, 2006 (excluding receivable) 370,758,560 (3) Market Value of Assets on July 1, 2005 355,468,906 (4) Net Cash Flow During the Fiscal Year					
(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 c. Second Prior Fiscal Year d. Third Prior Fiscal Year e. Fourth Prior Fiscal Year f. Total Recognized Investment Gain/(Loss) for Fiscal Year (592,199 (592,199 (592,199 (592,199 (592,199	(1)	Actuarial Value of Assets on July 1, 2005 (Market Value)	\$	355,468,906	
(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 (.2 * (8)) 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 (592,199 (592,199 (592,199	(2)	Market Value of Assets on July 1, 2006 (excluding receivable)		370,758,560	
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 c. Second Prior Fiscal Year d. Third Prior Fiscal Year e. Fourth Prior Fiscal Year f. Total Recognized Investment Gain/(Loss) for Fiscal Year (592,199 (592,199 (592,199 (592,199 (592,199 (592,199 (592,199 (592,199 (592,199 (592,199 (592,199 (592,199)	(3)	Market Value of Assets on July 1, 2005		355,468,906	
(6) Assumed Rate of Return on Assets 8.00% (7) Expected Investment Return 29,648,913 ((1) * (6)) + (((4)a (4)b(4)c.) * .5 * (6)) + (4)d. (8) Investment Gain/(Loss) for the Fiscal Year ((5) - (7)) (2,960,997) (9) Phased-In Recognition of Investment Gain/(Loss) a. Current Fiscal Year (.2 * (8)) (592,199) b. Prior Fiscal Year 0 c. Second Prior Fiscal Year 0 d. Third Prior Fiscal Year 0 f. Total Recognized Investment Gain/(Loss) for Fiscal Year (592,199)	(4)	a. Contributionsb. Benefit Paymentsc. Administrative Expensesd. Investment Expenses		19,848,095 29,542,642 100,512 1,603,203 (11,398,262)	
(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 (.2 * (8)) 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 (592,199)	(5)	Actual Investment Return ((2) - (3) - (4)e.)		26,687,916	
((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 (.2 * (8)) 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 (592,199)	(6)	Assumed Rate of Return on Assets	8.00%		
(9) Phased-In Recognition of Investment Gain/(Loss) a. Current Fiscal Year (.2 * (8)) 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 (592,199)	(7)			29,648,913	
a. Current Fiscal Year (.2 * (8)) 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 (592,199)	(8)	Investment Gain/(Loss) for the Fiscal Year ((5) - (7))		(2,960,997)	
(10) Contribution Receivable 186,920	(9)	 a. Current Fiscal Year (.2 * (8)) b. Prior Fiscal Year c. Second Prior Fiscal Year d. Third Prior Fiscal Year e. Fourth Prior Fiscal Year 			
	(10)	Contribution Receivable		186,920	
(11) Actuarial Value of Assets on July 1, 2006 \$ 373,314,278 ((1) + (4)e. + (7) + (9)f.) + (10)	(11)		\$	373,314,278	
(12) Rate of Return on Actuarial Value of Assets 7.83%	(12)	Rate of Return on Actuarial Value of Assets		7.83%	



SCHEDULE D

SUMMARY OF RECIEPTS AND DISBURSEMENTS

Receipts for the Period		
Contributions: Members Employer	\$	5,694,280 14,153,81 <u>5</u>
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%



SCHEDULE E

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:

<u>Age</u>	<u>Rate</u>		
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:

		Annual Rate	e of	
	Withdrawal	Disability	De	eath
<u>Age</u>			Male	<u>Female</u>
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:

<u>Service</u>	Rate
20	25.0%
21	10.0
22	11.1
23	12.5
24	14.3
25	16.7
26	20.0
27	25.0
28	33.3
29	50.0
30	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

- 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.
- 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 Any member of the police and fire department who is

included in the membership of the fund.

Membership Service 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.

Total Service Prior service, membership service, and service credit

purchased by a member as provided in KRS 67A.402.

Average Salary The highest average salary of the member for any three

consecutive years of service.

Retirement Annuity

Eligibility Anytime after completion of 20 years of Total Service

(including service purchased up to 4 years).

Benefit Annuity is 21/2% 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 No requirements.

Benefit Annuity equal to a minimum of 60% of member's last

difference.

rate of salary, increased above the 60% minimum by ½ 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



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

5 years of Total Service.

Benefit

2½% 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.

Termination Benefit

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.

Occupational Death Benefit

Eligibility

No requirements.

Benefit

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
Three of more minor children

65% of Salary 75% of Salary

Non-Occupational Death Benefit

Eligibility

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

Benefit

Surviving spouse received immediate annuity equal to 1½% 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 ½ for the first minor child and by ¼ 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 Two minor children 50% of Salary

Three of more minor children

65% of Salary 75% of Salary

Three of more minor children

Member Contributions

Employer Contributions

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.

Post Retirement Cost-Of-Living Increases

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 Age	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	≥ 40	Total
Under 25	12	19									31
Avg. Pay	35,173	38,655									37,307
100	30,110	00,000									5. 16.5
25 to 29	27	113	21								161
Avg. Pay	34,556	40,224	46,733	NACE THE PARTY NAMED IN							40,122
12121N 121N											
30 to 34	16	92	129	26	1						264
Avg. Pay	35,782	40,535	48,090	55,710	52,764						45,480
35 to 39	c	44	60	94	39	4					241
Avg. Pay	6 34,958	41 41,011	48,797	57,218	63,029	1 52,440					52,731
	04,000	41,011	40,707	07,210	00,020	02,110					02,701
40 to 44	4	16	24	51	80	22					197
Avg. Pay	36,066	41,045	47,948	57,133	66,868	79,559			2000		60,737
45 to 49		2	1	15	37	40	2				97
Avg. Pay		40,038	50,568	63,324	67,307	82,184	95,592				72,674
50 to 54		5-50	20000				mos	le de			
Avg. Pay		2	2	2	8	23	17	3			57
7 (rg. r u)		88,176	65,082	52,584	80,652	80,990	81,043	77,024			79,447
55 to 59		1	1	1		2	6	5			16
Avg. Pay		38,640	45,756	48,660		84,510	74,800	88,649			74,633
60 to 64									1		1
Avg. Pay					<u> </u>				124,704		124,704
65 to 69											
Avg. Pay											
,											
70 & up											
Avg. Pay											
Total	65	286	238	189	165	88	25	8	1	0	1,065
Avg. Pay	35,102	40,707	48,278	57,378	66,642	80,930	80,709	84,290	124,704	0	53,702



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	<u>40</u>	926,524	23,163
Total	825	\$ 27,469,773	\$ 33,297