

The experience and dedication you deserve





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

Prepared as of July 1, 2015



www.CavMacConsulting.com



December 2, 2015

Board of Trustees Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan Lexington-Fayette Urban County Government 200 East Main Street Lexington, KY 40507

Dear Members of the Board:

We are pleased to submit herewith the results of the actuarial valuation of the Lexington-Fayette Urban County Government Policemen's and Firefighters' Pension Plan prepared as of July 1, 2015. The purpose of this report is to provide a summary of the funded status of the Plan as of July 1, 2015, to recommend rates of contribution. A separate report will be issued for reporting accounting information under GASB 67. The Lexington-Fayette County Government is solely responsible for the accuracy and comprehensiveness of the data.

The promised benefits of the Plan reflecting the changes in HB 430 are included in the actuarially calculated contribution rates which are developed using the entry age normal 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 over a closed period on a level dollar basis. The annual required employer contribution rate is 34.93% of payroll for the plan year ending June 30, 2016. 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.

This is to certify 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.

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 (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); 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.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144 Phone (678) 388-1700 • Fax (678) 388-1730 www.CavMacConsulting.com Offices in Englewood, CO • Kennesaw, GA • Bellevue, NE



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

Respectfully submitted,

Todel B. C-

Todd B. Green ASA, FCA, MAAA Principal & Consulting Actuary

TBG:jmy

S:Lexington Fayette Urban County Government Police and Firefighters Pension Plan/Valuation/7-1-2015/Valuation Template LEX 20150701.doc



# TABLE OF CONTENTS

Section	ltem	Page No.
I	Summary of Principal Results	1
II	Membership Data	3
III	Assets	3
IV	Comments on Valuation	4
V	Contributions Payable	5
VI	Accounting Information	6
VII	Experience	8

# <u>Schedule</u>

A	Development of the Unfunded Actuarial Accrued Liability	9
В	Valuation Balance Sheet	10
С	Development of the Actuarial Value of Assets	11
D	Summary of Receipts and Disbursements	12
E	Outline of Actuarial Assumptions and Methods	13
F	Actuarial Cost Method	16
G	Summary of Main Plan Provisions as Interpreted for Valuation Purposes	17
н	Tables of Membership Data	23



#### LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT POLICEMEN'S AND FIREFIGHTERS' RETIREMENT FUND REPORT OF ACTUARY ON THE VALUATION PREPARED AS OF JULY 1, 2015

### 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, 2015		July 1, 2014	
Active members:					
Number		1,111		1,097	
Annualized compensation	\$	62,102,632	\$	63,248,485	
Retired members and beneficiaries:					
Number		1,116		1,070	
Annual benefits	\$	51,066,810	\$	47,747,052	
Assets: Market Value	\$	634 715 718	\$	636 280 881	
Actuarial Value	Ψ	623 184 562	Ψ	579 749 633	
		020,101,002		010,110,000	
Unfunded actuarial accrued liability	\$	171,198,912	\$	180,634,396	
Americanian Deviad	20				
Amortization Period		28		29	
Fiscal Years Ending		2016		2015	
Government annual required contribution rate (ARC).					
Normal		12.77%		11.07%	
Accrued liability		22.16		22.71	
Total		34.93%		33.78%	
Member contribution rate		12.00%		12.00%	



- The major benefit and contribution provisions of the Plan as reflected in the valuation are summarized in Schedule G. The actual cost-of-living allowances granted through July 1, 2015 were reflected in the valuation.
- 3. 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 normal actuarial cost method was used to prepare the valuation. Schedule F contains a brief description of the actuarial cost method. The cost method produces a contribution rate equal to the sum of the normal contribution rate and the actuarially accrued liability contribution rate which is sufficient to amortize the unfunded actuarially accrued liability over 30 years beginning July 1, 2013 on a level dollar basis. Effective July 1, 2013, and for each fiscal year thereafter, the Government contribution shall not be less than \$20 million unless the Plan is 100% funded.
- 5. Any member who has at least five years of service as a member of the fund my purchase up to four years of service. The amount required to purchase service is based on an actuarial formula. Prior to the July 1, 2015 actuarial valuation, service purchases were not reported by Fund Staff. Service purchases were first reported by Fund Staff in the July 1, 2015 valuation.
- 6. Since the previous valuation a software update was released for Proval, the actuarial valuation software we license, which allows us to directly value the cost-of-living adjustment.
- Comments on the valuation results as of July 1, 2015 are given in Section IV and further discussion of the contributions is set out in Section V.



### SECTION II – MEMBERSHIP DATA

- Data regarding the membership of the Plan for use as a basis of the valuation were furnished by the Government. The valuation included 1,111 active members with annualized compensation totaling \$62,102,632.
- 2. The following table shows the number of retired members and beneficiaries as of July 1, 2015 together with the amount of their annual retirement benefits payable under the Plan as of that date.

GROUP	NUMBER	ANNUAL RETIREMENT BENEFITS
Service Retirements	577	\$ 30,381,941
Disability Retirements	382	16,460,572
Beneficiaries of Deceased Members	<u>    157  </u>	4,224,297
Total	1,116	\$ 51,066,810

#### THE NUMBER AND ANNUAL BENEFITS OF RETIRED MEMBERS AND BENEFICIARIES AS OF JULY 1, 2015

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, 2015, the total market value of assets amounted to \$634,715,718. The actuarial value of assets used for the current valuation was \$623,184,562. Schedule C shows the development of the actuarial value of assets as of July 1, 2015. 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, 2015. 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 \$942,942,434 of which \$594,160,436 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and \$348,781,998 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 \$623,184,562 as of July 1, 2015. The difference of \$319,757,872 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 24.77% of payroll are required under the entry age normal method. Of this amount, 12.00% is paid by the members and the remaining 12.77% is required by the Government.
- 4. Prospective normal contributions at the rate of 24.77% have a present value of \$148,558,960. When this amount is subtracted from \$319,757,872, which is the present value of the total future contributions to be made, there remains \$171,198,912 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 equal to the sum of the normal contribution rate and the actuarially accrued contribution rate that will be sufficient to amortize the total unfunded actuarial accrued liability over a period of thirty years beginning July 1, 2013 using the level-dollar amortization method.
- 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 24.77%.
- 3. Each member shall contribute an amount equal to 12.00% of current salary.
- 4. The Government's normal contribution rate is equal to the difference between the normal contribution rate of 24.77% and the member contribution rate of 12.00%, or 12.77% of payroll.
- 5. The annual accrued liability contribution rate is determined to be 22.16% of payroll. Contributions at this level would be sufficient to amortize the unfunded accrued liability over a 28 year period on a level dollar basis.
- The required employer contribution rate for the plan years ending June 30, 2016 is, therefore, 34.93% of payroll.
- 7. The following table on the following page summarizes the employer contributions which were determined by the July 1, 2015 valuation and are recommended for use.



### ANNUAL REQUIRED CONTRIBUTION RATE FOR PLAN YEARS ENDING JUNE 30, 2016

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION		
Normal	12.77%		
Accrued Liability	<u>_22.16</u>		
Total	34.93%		

### SECTION VI – ACCOUNTING INFORMATION

The information required under the Governmental Accounting Standards (GASB) Statements No.
67 and 68 for the Plan and the City will be issued in separate reports. We are providing the following information for informational purposes only.

### NUMBER OF ACTIVE AND RETIRED PARTICIPANTS AS OF JULY 1, 2015

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	1,116
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Active Participants	1,111
Total	2,227



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 <u>(b)</u>	Unfunded AAL (UAAL) <u>(b – a)</u>	Funded Ratio <u>( a / b )</u>	Covered Payroll <u>(c)</u>	UAAL as a Percentage of Covered Payroll (( b – a ) / c )
7/01/2010	\$502,259,967	\$724,140,738	\$221,880,771	63.1%	\$60,512,412	366.7%
7/01/2011	501,069,884	758,851,546	257,781,662	69.4	64,258,162	401.2
7/01/2012	525,849,582	687,673,831	161,824,250	66.0	54,595,799	296.4
7/01/2013	533,892,554	738,343,325	204,450,771	76.5	62,455,725	327.4
7/01/2014	579,749,633	760,384,029	180,634,396	72.3	63,248,485	285.6
7/01/2015	623,184,562	794,383,474	171,198,912	78.4	62,102,632	275.7

# 3. Additional information as of July 1, 2015 follows:

Valuation date	July 1, 2015
Actuarial cost method	Entry age normal
Amortization period	Level dollar, closed
Remaining amortization period	28 years
Asset valuation method	Actuarial Related Value
Actuarial assumptions:	
Investment rate of return (includes inflation)	7.50%
Projected salary increases (includes inflation)	10.50% to 4.00%
Inflation	3.00%
Cost-of-living adjustments	Refer to Schedule G



### **SECTION VII – EXPERIENCE**

 The following table shows the change in the unfunded accrued liability from various factors that resulted in a decrease of \$9,435,484 in the unfunded accrued liability from \$180,634,396 as of July 1, 2014 to \$171,198,912 as of July 1, 2015.

ITEM	AMOUNT OF INCREASE/(DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	\$ 13,441,833
Accrued Liability Contributions	(17,997,704)
Recognized Asset (Gain)/Loss	(18,334,450)
Assumption and Method Changes	14,275,399
Plan Changes	0
Salary (Gain)/Loss	(12,178,051)
Liability (Gain)/Loss	<u>11,357,489</u>
Decrease in Unfunded Accrued Liability	\$ (9,435,484)

#### ANALYSIS OF FINANCIAL EXPERIENCE CHANGE IN UNFUNDED ACCRUED LIABILITY



# SCHEDULE A

### DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

			July 1, 2015
(1)	Preser	t value of prospective benefits:	
	(a)	Present active members	\$ 348,781,998
	(b)	Present retired members, beneficiaries and former members entitled to deferred vested benefits	 594,160,436
	(c)	Total	\$ 942,942,434
(2)	Preser before	t value of future Government and member normal contributions expenses	 148,558,960
(3)	Actuari	al accrued liabilities $1(c) - (2)$	\$ 794,383,474
(4)	Actuari	al value of assets	 623,184,562
(5)	Unfunc	led actuarial accrued liability (3) – (4)	\$ 171,198,912



# 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		\$ 594,160,436
Present value of prospective benefits payable on account of present active members		<u>\$ 348,781,998</u>
Total liabilities		<u>\$ 942,942,434</u>
PRESENT AND PROSPECTIVE ASSETS		
Actuarial value of assets		\$ 623,184,562
Present value of future contributions		
Government and member normal contributions	148,558,960	
Unfunded accrued liability contributions	171,198,912	
Total prospective contributions		\$ 319,757,872
Total assets		<u>\$ 942,942,434</u>



### SCHEDULE C Development of Actuarial Value of Assets

	Valuation date June 30:		2014		2015		2016		2017		2018		2019
А. В. С. D.	Actuarial Value Beginning of Year Market Value End of Year Market Value Beginning of Year Cash Flow	\$	533,892,554 636,280,881 556,723,810	\$	579,749,633 634,715,718 636,280,881								
Β.	D1. Contributions	\$	37,242,307	\$	32,505,019								
	D2. Other Revenue		124,281		81,355								
	D3. Beginning of Year Market Value Adjustment		0		0								
	D4. Benefit Payments		(53,597,352)		(50,314,337)								
	D5. Administrative Expenses		(598,923)		(665,175)								
	D6. Investment Expenses		(3,315,350)		(2,973,017)								
	D7. Net	\$	(20,145,037)	\$	(21,366,155)								
E.	Investment Income												
	E1. Market Total: BCD7.	\$	99,702,108	\$	19,800,992								
	E2. Assumed Rate (Net of Expenses)		7.50%		7.50%								
	E3. Amount for Immediate Recognition		45,059,905		50,694,459								
	E4. Amount for Phased-In Recognition		54,642,203		(30,893,467)								
F	Phased-In Recognition of Investment Income												
•••	F1 Current Year: 0.20 * F4	\$	10 928 441	\$	(6 178 693)	\$	-	\$	_	\$	_	\$	_
	F2 First Prior Year	Ψ	5.036.776	Ψ	10,928,441	Ψ	(6,178,693)	Ψ	-	Ψ	-	Ψ	-
	F3. Second Prior Year		(6,612,941)		5.036.776		10.928.441		(6,178,693)		-		-
	F4. Third Prior Year		10.933.042		(6.612.941)		5.036.776		10.928.441		(6.178.693)		-
	F5. Fourth Prior Year		656.893		10.933.042		(6.612.941)		5.036.776		10.928.441		(6.178.693)
	F6. Total Recognized Investment Gain	\$	20,942,211	\$	14,106,625	\$	3,173,583	\$	9,786,524	\$	4,749,748	\$	(6,178,693)
G.	Preliminary Actuarial Value End of Year												
	A.+D7.+E3.+F6.	\$	579,749,633	\$	623,184,562								
H.	Corridor												
	I1. 80% of Market Value	\$	509,024,705	\$	507,772,574								
	I2. 120% of Market Value	\$	763,537,057	\$	761,658,862								
I.	Actuarial Value End of Year												
	H. Not Less than I1. or Greater than I2	\$	579,749,633	\$	623,184,562								
J.	Difference Between Market & Actuarial Values	\$	56,531,248	\$	11,531,156	\$	8,357,579	\$	(1,428,945)	\$	(6,178,693)	\$	-

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 5 consecutive years, actuarial value will become equal to market value.



# SCHEDULE D

### SUMMARY OF RECIEPTS AND DISBURSEMENTS

Receipts for the Period	
Contributions: Members Employer /Other	\$ 9,881,338 22,705,036
Total	32,586,373
Investment Income	 16,827,976
TOTAL	\$ 49,414,350
Disbursements for the Period	
Benefit Payments	50,314,337
Refunds to Members Administrative Expense	0 665,175
TOTAL	\$ 50,979,512
Excess of Receipts over Disbursements	\$ (1,565,163)
Reconciliation of Asset Balances	
Market Value of Assets as of July 1, 2014	\$ 636,280,881
Excess of Receipts over Disbursements	 <u>(1,565,163)</u>
Market Value of Assets as of July 1, 2015	\$ 634,715,718
Beginning of Year Market Value Adjustment	0
Market Value of Assets as of July 1, 2015 including Adjustment	\$ 634,715,718
Rate of Return on Market Value of Assets	2.58%



### SCHEDULE E

#### OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 7.50% per year, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

<u>Service</u>	Wage Inflation	Merit Component	Total Rate
0	4.00%	6.50%	10.76%
1	4.00	5.50	9.72
2	4.00	3.50	7.64
3-5	4.00	3.00	7.12
6-8	4.00	2.50	6.60
9-12	4.00	2.00	6.08
13-16	4.00	1.50	5.56
16-19	4.00	1.00	5.04
20 or more	4.00	0.00	4.00

SEPARATIONS FROM ACTIVE SERVICE: For death rates, the RP-2000 Combined Table projected to 2015 with scale AA was used. Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rate of						
	<u>Disability</u>	<u>Death</u>					
<u>Age</u>		<u>Male</u>	<u>Female</u>				
20	0.30%	0.03%	0.02%				
25	0.30	0.03	0.02				
30	0.30	0.04	0.02				
35	0.60	0.07	0.04				
40	1.00	0.10	0.06				
45	2.00	0.12	0.09				
50	4.00	0.16	0.13				
55	5.00	0.27	0.24				



	Annual Rate	Annual Rate of Termination						
<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>					
0	1.91%	10	1.29%					
1	1.85	11	1.23					
2	1.79	12	1.17					
3	1.73	13	1.08					
4	1.67	14	1.00					
5	1.61	15	0.94					
6	1.55	16	0.88					
7	1.47	17	0.82					
8	1.41	18	0.76					
9	1.35	19	0.70					

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

Hired Prior to	July 1, 2013	Hired on or after July 1, 2013				
<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>			
20	5.0%					
21	6.0					
22	7.0					
23	8.0					
24	9.0					
25	10.0	25	25.0%			
26	12.0	26	12.0			
27	14.0	27	14.0			
28	15.0	28	15.0			
29	20.0	29	20.0			
30	100.0	30	100.0			



DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2015 using scale AA, with male mortality set forward 0 years and female mortality set forward 3 years is used for the period following service retirement and for beneficiaries of deceased members. For disabled lives, male mortality was assumed to be the RP-2000 table not projected with male mortality set forward 4 years. Female 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. The assumed rates of mortality provide a margin for future mortality improvements.

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 50.0%.

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

ASSETS: Actuarial value, as developed in Schedule C. 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. The actuarial value of assets cannot be more than 120% or less than 80% of the market value of assets.

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

AVERAGE DISABILITY IMPAIRMENT PERCENTAGE: 12.50%



### 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 7.50%), 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 normal 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	Sworn members of the Lexington-Fayette Urban County Government Division of Police and Division of Fire and Emergency Services.
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	
Hired prior to July 1, 2013 and for retirements co	ommencing prior to July 1, 2013
Eligibility	Anytime after completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% 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.

Hired prior to July 1, 2013 and for retirements commencing on or after July 1, 2013

Eligibility	Anytime after obtaining age 41 and the completion of 20 years of Total Service (including service purchased up to 4 years).
Benefit	Annuity is 2½% 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.

Hired on or after July 1, 2013

Eligibility Anytime after obtaining age 50 and the completion of 25 years of Total Service. Benefit Annuity is 2.25% 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** 

No requirements.

Eligibility

Occur Prior to July 1, 2013

Benefit

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

Occur on or after July 1, 2013

Benefit

Annuity equal to a minimum of 50% of member's last rate of salary. If the member's percentage of disability exceeds 20% then the amount is equal to 60% of the member's last rate of salary plus 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 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

Hired prior to July 1, 2013

Eligibility

Benefit

5 years of Total Service.

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.

Hired on or after July 1, 2013 Eligibility 5 years of Total Service. Benefit 2.25% of Average Salary times years of Total Service subject to a minimum payment of 22.5% of Average Salary and a maximum payment of 67.5% 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 75% of the member's last rate of salary until death or remarriage. schedule:

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 100% of final rate of salary.

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

One minor child 50% of Salary 65% of Salary Two minor children Three of more minor children 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 child50% of SalaryTwo minor children65% of SalaryThree of more minor children75% of Salary			
Member Contributions	Prior to July 1, 2013, active members contribute 11% of current salary. Effective July 1, 2013 active member contributions will increase from 11% to 12%.			
Employer Contributions	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, and			
	(2) An amount sufficient to amortize the total unfunded liability actuarial accrued liability for the fund over a period of thirty years, using the level dollar amortization method, for a period beginning July 1, 2013 and ending June 30, 2043.			
	The total contribution of the government shall be at least \$20,000,000 until the actuarial funding level is at least 100%.			



Post Retirement Cost-of-Living Increases

COLAs will be granted on the following schedule for both current and future retirees commencing upon the earlier of a member turning age 50 or being retired for five years until the Plan, utilizing the <u>current</u> COLA provisions, is 85% funded. At that time, COLA's will be granted each year by an amount, determined by the Board, of not less than 2.00% nor more than 5.00% compounded annually. In addition, those receiving a pension over \$100,000 will not be eligible to receive a COLA until the later of the proposed conditions or January 1, 2016.

Above \$100,000	1.0%
\$75,000 to \$99,000	1.0%
\$50,000 to \$74,999	1.5%
\$40,000 to \$49,999	1.5%
\$35,000 to \$39,999	2.0%
\$30,000 to \$34,999	2.0%
Under \$30,000	2.0%



# SCHEDULE H

### TABLE 1

# DISTRIBUTION OF ACTIVE MEMBERS BY AGE AND SERVICE GROUPS

### AS OF JULY 1, 2015

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	16	7									23
Avg. Pay	36,687	40,032									37,705
25 to 29	42	102	7								151
Avg. Pav	34.626	41.000	47.359								39.522
	- ,	,	,								, -
30 to 34	12	93	73	42							220
Avg. Pay	35,834	41,565	50,768	56,269							47,113
35 to 39	4	36	64	104	22						230
Avg. Pay	35,119	42,693	49,430	58,725	67,697						54,077
10 to 11			25	05	02	10					225
Avg Pav			50 662	90 58 069	93 68 578	81 842					62 339
/wg.r ay			00,002	00,000	00,070	01,042					02,000
45 to 49			13	36	62	43	7				161
Avg. Pay			49,437	60,151	68,015	78,825	95,530				68,840
50 to 54			5	11	21	19	16				72
Avg. Pay			50,587	60,099	67,612	85,830	89,397				74,930
					_						
55 to 59				1	3	5	2	1	1		13
Avg. Pay				56,784	62,137	80,698	75,073	117,373	57,526		74,749
60 to 64				2	2						4
Avg. Pay				50,058	69,001						59,529
65 to 69				1					1		2
Avg. Pay				52,902					74,427		63,665
70 & up											
Avg. Pay											
Total	74	229	107	202	202	70	2F	4	0		1 1 1 1
Avg. Pav	35,294	41,449	50,101	58,300	68,120	81.086	89.968	117.373	2 65,976		55,898



### TABLE 2

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

Attained Age	<u>Number of Members</u>	<u>Total Annual Benefits</u>	Average Annual Benefit
50 & Under 51 – 55 56 – 60 61 – 65 66 – 70	168 136 149 152 202	\$ 6,683,962 6,768,062 8,460,338 7,537,316 9,180,391 5,874,055	\$ 39,785 49,765 56,781 49,588 45,447
71 – 75 76 – 80 Over 80 Total	134 95 <u>80</u> 1.116	5,871,955 3,880,010 <u>2,684,776</u> \$ 51,066,809	43,821 40,842 <u>33,560</u> \$ 45,759