



LEO, Fire, and Medics

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December 27, 2018

Kadira Coley  
Retirement Administrator  
City of Alexandria  
301 King St., Room 1900  
Alexandria, VA 22314

**City of Alexandria (55200) - Cost Study for Enhanced Benefits for Hazardous Duty Positions with 1.70% Multiplier with Proposed Effective Dates of October 1, 2018 and July 1, 2019**

Dear Ms. Coley:

As requested, we have evaluated the impact of providing benefits to full-time Deputy Sheriffs participating in the Virginia Retirement System under the enhanced hazardous duty benefit provisions of Subsection G of § 51.1-138 of the Code of Virginia with a 1.70% benefit multiplier. The proposed effective date for enhanced benefits is October 1, 2018. In addition, we have evaluated the impact of providing the same benefits to the City's Medics and Fire Marshals in addition to its Deputy Sheriffs. The proposed effective date in this scenario is July 1, 2019. As noted in the your request letter, the present language in § 51.1-138 (G) does not provide this benefit to emergency medical technicians (EMTs) and firefighters, so this is offered as a hypothetical scenario that assumes a change to the Code language to provide this benefit to those employees.

In the attached exhibit, we present a summary comparing the current benefits.

Our study is based on the data and actuarial assumptions and methods used in the June 30, 2017 actuarial valuation for the City of Alexandria. VRS provided us with data identifying 215 employees eligible for the proposed benefits. 23 of these employees were not included in the City's 2017 valuation data and three were inactive in the 2017 valuation. These 26 employees were included as active in the study based on the study data provided by VRS. The Deputy Sheriffs who terminated since the 2017 valuation were included in the study as vacant positions with a salary of \$50,545.56. In the table below, we present a summary of the data used to estimate the impact of providing enhanced hazardous duty benefits:



	Data Summary 6/30/2017 Valuation	Data Summary with Enhanced Benefits to Deputy Sheriffs	Data Summary with Enhanced Benefits to Deputy Sheriffs, Medics and Fire Marshals
Active Members			
Plan 1 General Members	921	843	809
Plan 2 General Members	301	300	299
Hybrid General Members	428	428	428
Plan 1 Hazardous Duty Members	1	80	114
Plan 2 Hazardous Duty Members	0	96	112
Plan 2 Alternate Option Members	85	15	0
Total	1,736	1,762	1,762

In the table below we present the estimated cost to provide the proposed benefits outlined on the previous page for all eligible employees. The Estimated First Year Employer Cost in column (2) represents the total cost of adding 26 active employees. The Estimated First Year Employer Cost in columns (3) and (4) represents the total cost of granting enhanced benefits with a 1.70% multiplier to eligible Deputy Sheriffs and granting enhanced benefits with a 1.70% multiplier to eligible Deputy Sheriffs, Medics, and Fire Marshals, respectively. The increases in contribution rates and estimated dollar contribution amounts in columns (3) and (4) are in comparison to the cost in column (2) of the current plan, including the additional members.



	(1)	(2)	(3)	(4)
	6/30/2017 Valuation Results	Estimated 6/30/2017 Valuation Results Adding New Hires & Rehires	Estimated 6/30/2017 Valuation Results with Enhanced Benefits to Deputy Sheriffs	Estimated 6/30/2017 Valuation Results with Enhanced Benefits to Deputy Sheriffs, Medics and Fire Marshals
Number of Actives	1,736	1,762	1,762	1,762
Total Payroll	\$131,605,713	\$132,967,431	\$132,967,431	\$132,967,431
Actuarial Accrued Liability	\$576,760,007	\$576,743,655	\$582,279,765	\$584,546,410
Actuarial Value of Assets	\$500,324,777	\$500,324,777	\$500,324,777	\$500,324,777
Unfunded Actuarial Accrued Liability	\$76,435,230	\$76,418,878	\$81,954,988	\$84,221,633
Gross Normal Cost Rate	8.77%	8.77%	9.52%	9.77%
Less Member Contribution Rate	(4.66%)	(4.66%)	(4.68%)	(4.69%)
Unfunded Accrued Liability Rate	2.84%	2.81%	3.10%	3.23%
Administrative Expenses	0.25%	0.25%	0.25%	0.25%
DC Match for Hybrid Members	<u>0.54%</u>	<u>0.54%</u>	<u>0.51%</u>	<u>0.50%</u>
Employer Estimated Cost Rate	7.74%	7.71%	8.70%	9.06%
Employer Estimated Cost Rate <i>Change</i>		(0.03%)	0.99%	1.35%
Estimated First Year Employer Cost <i>Increase</i> Based on Total Payroll		\$65,507	\$1,316,378	\$1,795,060
Funded Status	86.75%	86.75%	85.93%	85.59%

The contribution rates presented in the table above are a percentage of the payroll for active members in the plan. The DC match for Hybrid members shown above is an estimate. The actual voluntary elections made by the City's eligible employees to the defined contribution portion of the Hybrid plan will dictate the amount of employer match to the DC plan. The employer is responsible for funding the full employer contribution for the defined contribution portion of the Hybrid Retirement Plan, which includes your match of employees' voluntary contributions. The defined benefit contributions will be offset by your contributions to the defined contribution portion of the Hybrid Retirement Plan. However, the defined benefit contributions cannot be reduced below zero. Please note, that the defined contribution rate provided in the employer rate is an estimate of the expected employer match based on prior member elections. If the actual employer match for your employees to the defined contribution component of the Hybrid Retirement Plan exceeds the estimated rate, you are still responsible for making all required contributions to the DC plan.

The estimated costs shown above are based on the City of Alexandria plan census data and estimated financial position as of June 30, 2017. Please note that the costs will fluctuate in the future as the plan's data and financial conditions change. If the calculation is redone in the future with different data, plan assets and/or measurement date, the results will change. It is important to keep in mind that future plan experience



Kadira Coley  
December 27, 2018  
Page 4

LEO, Fire, and Medics

(e.g., pay increases, turnover and retirement patterns, and the addition of new members) will not match the actuarial assumptions exactly. The deviations of actual from expected plan experience will produce actuarial experience gains and losses which will impact the total employer contribution rate and the cost estimate presented above.

The undersigned is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Please let us know if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'LL' with a stylized flourish.

Larry Langer, ASA, EA, FCA, MAAA  
Principal and Consulting Actuary

Copies to:     ZaeAnne Allen (VRS)  
                     Rory Badura (VRS)  
                     Cynthia Wilkinson (VRS)  
                     Andrew Feagans (VRS)

**VIRGINIA RETIREMENT SYSTEM**  
**SUMMARY OF BENEFIT PROVISIONS**



	Non-Hazardous Duty Employees (Non LEO, Fire and/or EMT)			Hazardous Duty Employees (LEO, Fire and/or EMT)	
	Plan 1 (Vested as of 1/1/2013)	Plan 2 (Non-Vested as of 1/1/2013 and new members after that date until 1/1/2014)	Hybrid (Hired on or after 1/1/2014 or by member election)	Plan 1 (Vested as of 1/1/2013)	Plan 2 (Non-Vested as of 1/1/2013 and new members after that date)
Normal retirement eligibility	Age 65 with at least 5 years of service	Normal Social Security Retirement Age with at least 5 years of service	Normal Social Security Retirement Age with at least 5 years of service	Age 60 with at least 5 years of service	Age 60 with at least 5 years of service
Early retirement eligibility	Age 50 with at least 10 years of service, or age 55 with at least 5 years of service	Age 60 with at least 5 years of service	Age 60 with at least 5 years of service	Age 50 with at least 5 years of service	Age 50 with at least 5 years of service
Early retirement reduction	Benefit reduced for each year retirement age is before age 65 or for each year service at retirement is less than 30, whichever provides greater benefit	Benefit reduced for each year retirement age is before Normal Social Security Retirement Age	Benefit reduced for each year retirement age is before Normal Social Security Retirement Age	Benefit reduced for each year retirement age is before age 60 or for each year service at retirement is less than 25, whichever provides greater benefit	Benefit reduced for each year retirement age is before age 60 or for each year service at retirement is less than 25, whichever provides greater benefit
Unreduced Early Retirement	Age 50 with at least 30 years of service	Age plus service equals 90 points	Age plus service equals 90 points	Age 50 with at least 25 years of service	Age 50 with at least 25 years of service
Final Average Compensation	Average of the employee's 36 highest consecutive months of creditable compensation	Average of the employee's 60 highest consecutive months of creditable compensation	Average of the employee's 60 highest consecutive months of creditable compensation	Average of the employee's 36 highest consecutive months of creditable compensation	Average of the employee's 60 highest consecutive months of creditable compensation
Benefit Multiplier	1.70%	1.65% (1.70% for service before 1/1/2013)	1.00%	1.70% or 1.85%	1.70% or 1.85%
Cost-of-Living-Adjustment (COLA)	COLA increase on July 1 of the second calendar year after retirement. Automatic COLA increase is calculated as the first 3% of the CPI plus half of each percent from 3% to 7%, maximum COLA of 5%	COLA increase on July 1 of the second calendar year after retirement. Automatic COLA increase is calculated as the first 2% of the CPI plus half of each percent from 2% to 10%, maximum COLA of 6%	COLA increase on July 1 of the second calendar year after retirement. Automatic COLA increase is calculated as the first 2% of the CPI plus half of each percent from 2% to 10%, maximum COLA of 6%	COLA increase on July 1 of the second calendar year after retirement. Automatic COLA increase is calculated as the first 3% of the CPI plus half of each percent from 3% to 7%, maximum COLA of 5%	COLA increase on July 1 of the second calendar year after retirement. Automatic COLA increase is calculated as the first 2% of the CPI plus half of each percent from 2% to 10%, maximum COLA of 6%
Employee Contributions	5% to DB plan	5% to DB plan	4% to DB plan and 1% to DC plan. Can contribute up to 5% to DC plan.	5% to DB plan	5% to DB plan
Annual supplement from date of retirement to Social Security normal retirement age	No	No	No	No	No