



December 9, 2019 E-Mail

Mr. Jeff Pabst
 Education and Outreach Coordinator
 Missouri Local Government
 Employees Retirement System
 P.O. Box 1665
 Jefferson City, Missouri 65102

Re: Marion County E-911 Communications Public Safety Department Split (#5967)

Dear Jeff:

As you requested, we have performed actuarial valuations as of February 28, 2019 for the active members reported as Public Safety members and the remaining active members of the General department of Marion County E-911 Communications. The results of the actuarial valuations follow (contribution rates shown below are uncapped employer contribution rates):

	Public Safety Subdepartment	Other General Subdepartments	Combined
<u>Member Statistics</u>			
Number Active	13	1	14
Payroll	\$674,350	\$21,132	\$695,482
Average Pay	51,873	21,132	49,677
Accumulated Contributions (Actives)	-	-	-
Number Deferred	0	7	7
<u>Actuarial Accrued Liabilities (AAL)</u>			
Active AAL	\$925,839	\$4,736	\$930,575
Deferred AAL	0	90,552	90,552
Increase AAL - Police Provisions and Assumptions	230,565	0	0
Total AAL	\$1,156,404	\$95,288	\$1,021,127
<u>Actuarial Value of Assets</u>			
Members Deposit Fund (MDF)	\$ 0	\$ 0	\$ 0
Employer Accumulation Fund (EAF)*	900,526	92,683	993,209
Total Assets	\$900,526	\$92,683	\$993,209
Funded Ratio	77.9%	97.3%	97.3%
Unfunded Actuarial Accrued Liability (UAAL)	\$255,878	\$2,605	\$27,918
<u>Computed Employer Contribution Rate</u>			
Current Service Cost	8.70%	4.60%	6.60%
Disability Cost	0.50	0.30	0.30
Prior Service Cost	2.80	1.20	0.40
Total Employer Contribution Rate (Uncapped)	12.00%	6.10%	7.30%

* Assets allocated to each division are estimated.

The Public Safety subdepartment is valued using police benefit provisions (normal retirement and deferred age equal to 55). In addition, the actuarial assumptions for police members were used in accordance with direction from LAGERS staff. For members proposed to be covered in the Public Safety subdepartment, the actuarial accrued liability increased by \$230,565 and is amortized over 20 years based on the funding policy for benefit changes.

Please note that the results for the 'Combined' department are the same as those reported for the General department in the February 28, 2019 annual actuarial valuation report for Marion County E-911 Communications. However, adding the results for the subdepartments shown on the previous page will not match the combined results due to valuing the Public Safety members alone as Police members and combined as General members.

Per LAGERS staff, EAF assets were split between the two subdepartments so that each subdepartment's funded percent would be the same as the combined General department based upon the General benefit provisions and assumptions as of February 28, 2019. This would require an accounting transfer based on market value, as of February 28, 2019, of \$901,337 of EAF assets to the Public Safety department. The remainder of the EAF assets would be allocated to the remaining General department.

Deferred members as of February 28, 2019 for each employer were valued with the General subdepartment.

Below are projections needed to comply with Missouri state disclosure requirements (Section 105.665 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision. Under the Present Plan, members eligible to be considered Public Safety members are valued using General plan provisions and assumptions. Under the Alternate Plan, these members are valued using Police plan provisions and assumptions. The projections below only include members eligible for the Public Safety subdepartment.

Valuation Date	Estimated Projected Payroll	Present Plan			Alternate Plan			Change due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA
2019	\$ 674,350	7.30%	\$ 49,228	\$ 25,313	12.00%	\$ 80,922	\$ 255,878	4.70%	\$ 31,694	\$ 230,565
2020	696,266	7.30%	50,827	24,598	12.00%	83,552	254,557	4.70%	32,725	229,959
2021	718,895	7.30%	52,479	23,749	12.00%	86,267	252,495	4.70%	33,788	228,746
2022	742,259	7.30%	54,185	22,752	12.00%	89,071	249,616	4.70%	34,886	226,864
2023	766,382	7.30%	55,946	21,595	12.00%	91,966	245,840	4.70%	36,020	224,245
2024	791,289	7.30%	57,764	20,262	12.00%	94,955	241,079	4.70%	37,191	220,817
2025	817,006	7.30%	59,641	18,739	12.00%	98,041	235,239	4.70%	38,400	216,500
2026	843,559	7.30%	61,580	17,008	12.00%	101,227	228,218	4.70%	39,647	211,210
2027	870,975	7.30%	63,581	15,051	12.00%	104,517	219,905	4.70%	40,936	204,854
2028	899,282	7.30%	65,648	12,848	12.00%	107,914	210,181	4.70%	42,266	197,333

The results shown for each employer only include active members reported to LAGERS as of the valuation date, February 28, 2019. The methods and assumptions used in the actuarial valuations were the same as those used in the annual actuarial valuations as of February 28, 2019. In particular, the assumed rate of investment return was 7.25% and the assumed rate of payroll growth was 3.25%.



The benefit provisions used in the actuarial valuations were the same as each employer's benefit provisions as of February 28, 2019. A summary follows:

Provisions	ER #5967
Benefit Program:	LT-5(65)
Final Average Salary:	5 Years
Member Contributions:	Non-Contributory
Retirement Eligibility:	Regular

The long term cost (C) of providing retirement benefits depends only on the benefits (B) that are paid to participants, the expenses (E) of administering the plan, and the investment return (I) generated on invested assets: $C = B + E - I$. For a given level of benefits, the cost of providing those benefits is lowered if administrative expenses are lowered or investment income is increased.

The long term costs are financed by a series of employer and member contributions. The series of contributions is flexible. If more is contributed in early years, less has to be contributed in later years, and vice-versa. Over time the series of contributions has to have the same value as benefits and expenses. The actuary determines each year's contribution based on a funding method and a set of actuarial assumptions. The chosen funding method and assumptions do not affect the long term cost of providing retirement benefits, but have a strong impact on the series of contributions made to fund the benefits.

It is our understanding that the political subdivision is also considering upgrading to the Rule of 80 retirement eligibility provision. Results for that benefit upgrade, after incorporation of the Public Safety department split, are presented on the following pages. Please note that for this proposed benefit change, it was assumed that the asset transfer to the Public Safety subdepartment would first occur under the current benefit provisions (i.e., Regular Retirement).

The computed contribution rate for Marion County E-911 Communications including the changes associated with the Public Safety split with the following benefit provisions as of February 28, 2019 is shown below:

Provisions	ER #5967
Benefit Program:	LT-5(65)
Final Average Salary:	5 Years
Member Contributions:	Non-Contributory
Retirement Eligibility:	Rule of 80

Computed Employer Contribution Rate	Public Safety Subdepartment	Other General Subdepartments
Current Service Cost	9.40%	6.10%
Disability Cost	0.50	0.30
Prior Service Cost	<u>3.70</u>	<u>1.80</u>
Total Employer Contribution Rate (Uncapped)	13.60%	8.20%
Change in Computed Employer Contribution Rate	6.30%	2.10%

Below are projections under the proposed benefit provisions needed to comply with Missouri state disclosure requirements (Section 105.665 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision.

Public Safety Subdepartment:

Valuation Date	Estimated Projected Payroll	Present Plan			Alternate Plan			Change due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA
2019	\$ 674,350	7.30%	\$ 49,228	\$ 25,313	13.60%	\$ 91,712	\$ 340,765	6.30%	\$ 42,484	\$ 315,452
2020	696,266	7.30%	50,827	24,598	13.60%	94,692	339,221	6.30%	43,865	314,623
2021	718,895	7.30%	52,479	23,749	13.60%	97,770	336,712	6.30%	45,291	312,963
2022	742,259	7.30%	54,185	22,752	13.60%	100,947	333,140	6.30%	46,762	310,388
2023	766,382	7.30%	55,946	21,595	13.60%	104,228	328,400	6.30%	48,282	306,805
2024	791,289	7.30%	57,764	20,262	13.60%	107,615	322,377	6.30%	49,851	302,115
2025	817,006	7.30%	59,641	18,739	13.60%	111,113	314,948	6.30%	51,472	296,209
2026	843,559	7.30%	61,580	17,008	13.60%	114,724	305,979	6.30%	53,144	288,971
2027	870,975	7.30%	63,581	15,051	13.60%	118,453	295,326	6.30%	54,872	280,275
2028	899,282	7.30%	65,648	12,848	13.60%	122,302	282,833	6.30%	56,654	269,985

Other General Subdepartments:

Valuation Date	Estimated Projected Payroll	Present Plan			Alternate Plan			Change due to Proposed Provisions		
		Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference	Estimated Employer Contribution		Estimated Difference
		As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA	As a % of Payroll	Annual Dollars	Between AAL and AVA
2019	\$ 21,132	6.10%	\$ 1,289	\$ 2,605	8.20%	\$ 1,733	\$ 4,460	2.10%	\$ 444	\$ 1,855
2020	21,819	6.10%	1,331	2,531	8.20%	1,789	4,381	2.10%	458	1,850
2021	22,528	6.10%	1,374	2,443	8.20%	1,847	4,283	2.10%	473	1,840
2022	23,260	6.10%	1,419	2,341	8.20%	1,907	4,166	2.10%	488	1,825
2023	24,016	6.10%	1,465	2,220	8.20%	1,969	4,024	2.10%	504	1,804
2024	24,797	6.10%	1,513	2,083	8.20%	2,033	3,859	2.10%	520	1,776
2025	25,603	6.10%	1,562	1,926	8.20%	2,099	3,667	2.10%	537	1,741
2026	26,435	6.10%	1,613	1,748	8.20%	2,168	3,446	2.10%	555	1,698
2027	27,294	6.10%	1,665	1,547	8.20%	2,238	3,194	2.10%	573	1,647
2028	28,181	6.10%	1,719	1,320	8.20%	2,311	2,907	2.10%	592	1,587



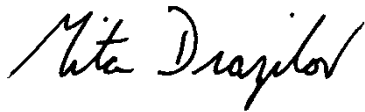
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The cost for the Rule of 80 provision is very dependent upon the age at hire of the employees. If hiring practices in the future differ from those of the past, the cost for this provision could increase or decrease. The cost shown is based on the age and service characteristics of the present group.

Mita Drazilov is a Member of the American Academy of Actuaries, and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Please call if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Mita Drazilov". The signature is written in a cursive, flowing style.

Mita D. Drazilov, ASA, FCA, MAAA

cc: Judith Kermans (GRS)
Michael Gano (GRS)

