



November 11, 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: Tri-County Ambulance District Public Safety Department Split (#5800)

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 the Tri-County Ambulance District. 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	2	2	4
Payroll	\$103,361	\$90,323	\$193,684
Average Pay	51,681	45,162	48,421
Accumulated Contributions (Actives)	-	-	-
Number Deferred	0	12	12
<u>Actuarial Accrued Liabilities (AAL)</u>			
Active AAL	\$168,217	\$3,244	\$171,461
Deferred AAL	0	149,290	149,290
Increase AAL - Police Provisions and Assumptions	25,409	0	0
Total AAL	\$193,626	\$152,534	\$320,751
<u>Actuarial Value of Assets</u>			
Members Deposit Fund (MDF)	\$ 0	\$ 16,724	\$ 16,724
Employer Accumulation Fund (EAF)*	191,112	156,570	347,682
Total Assets	\$191,112	\$173,294	\$364,406
Funded Ratio	98.7%	113.6%	113.6%
Unfunded Actuarial Accrued Liability (UAAL)	\$2,514	(\$20,760)	(\$43,655)
<u>Computed Employer Contribution Rate</u>			
Current Service Cost	8.30%	6.70%	6.60%
Disability Cost	0.50	0.30	0.30
Prior Service Cost	(0.20)	(2.00)	(2.00)
Total Employer Contribution Rate (Uncapped)	8.60%	5.00%	4.90%

* 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 \$25,409 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 the Tri-County Ambulance District. 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 \$191,284 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	\$ 103,361	4.70%	\$ 4,858	(\$ 22,895)	8.60%	\$ 8,889	\$ 2,514	3.90%	\$ 4,031	\$ 25,409
2020	106,720	4.80%	5,123	(22,447)	8.70%	9,285	2,895	3.90%	4,162	25,342
2021	110,188	4.90%	5,399	(22,008)	8.80%	9,697	3,200	3.90%	4,298	25,208
2022	113,769	5.00%	5,688	(21,578)	8.90%	10,125	3,423	3.90%	4,437	25,001
2023	117,466	5.10%	5,991	(21,156)	9.00%	10,572	3,556	3.90%	4,581	24,712
2024	121,284	5.20%	6,307	(20,742)	9.10%	11,037	3,592	3.90%	4,730	24,334
2025	125,226	5.30%	6,637	(20,337)	9.20%	11,521	3,521	3.90%	4,884	23,858
2026	129,296	5.30%	6,853	(19,939)	9.20%	11,895	3,336	3.90%	5,042	23,275
2027	133,498	5.40%	7,209	(19,549)	9.30%	12,415	3,026	3.90%	5,206	22,575
2028	137,837	5.50%	7,581	(19,167)	9.40%	12,957	2,579	3.90%	5,376	21,746

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 shown on previous pages were the same as each employer's benefit provisions as of February 28, 2019. A summary follows:

Provisions	ER #5800
Benefit Program:	L-3
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.

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

Provisions	ER #5800
Benefit Program:	L-6
Final Average Salary:	5 Years
Member Contributions:	Non-Contributory
Retirement Eligibility:	Regular

Computed Employer Contribution Rate	Public Safety Subdepartment	Other General Subdepartments
Current Service Cost	13.00%	10.50%
Disability Cost	0.80	0.50
Prior Service Cost	<u>8.00</u>	<u>(1.90)</u>
Total Employer Contribution Rate (Uncapped)	21.80%	9.10%
Change in Computed Employer Contribution Rate	17.10%	4.10%

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	\$ 103,361	4.70%	\$ 4,858	(\$ 22,895)	21.80%	\$ 22,533	\$ 118,689	17.10%	\$ 17,675	\$ 141,584
2020	106,720	4.80%	5,123	(22,447)	21.90%	23,372	118,765	17.10%	18,249	141,212
2021	110,188	4.90%	5,399	(22,008)	22.00%	24,241	118,459	17.10%	18,842	140,467
2022	113,769	5.00%	5,688	(21,578)	22.10%	25,143	117,733	17.10%	19,455	139,311
2023	117,466	5.10%	5,991	(21,156)	22.20%	26,077	116,547	17.10%	20,086	137,703
2024	121,284	5.20%	6,307	(20,742)	22.30%	27,046	114,856	17.10%	20,739	135,598
2025	125,226	5.30%	6,637	(20,337)	22.40%	28,051	112,610	17.10%	21,414	132,947
2026	129,296	5.30%	6,853	(19,939)	22.40%	28,962	109,759	17.10%	22,109	129,698
2027	133,498	5.40%	7,209	(19,549)	22.50%	30,037	106,246	17.10%	22,828	125,795
2028	137,837	5.50%	7,581	(19,167)	22.60%	31,151	102,010	17.10%	23,570	121,177

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	\$ 90,323	5.00%	\$ 4,516	(\$ 20,760)	9.10%	\$ 8,219	(\$ 18,800)	4.10%	\$ 3,703	\$ 1,960
2020	93,258	5.10%	4,756	(20,354)	9.20%	8,580	(18,399)	4.10%	3,824	1,955
2021	96,289	5.20%	5,007	(19,956)	9.30%	8,955	(18,011)	4.10%	3,948	1,945
2022	99,418	5.30%	5,269	(19,566)	9.40%	9,345	(17,637)	4.10%	4,076	1,929
2023	102,649	5.30%	5,440	(19,184)	9.40%	9,649	(17,277)	4.10%	4,209	1,907
2024	105,985	5.40%	5,723	(18,809)	9.50%	10,069	(16,931)	4.10%	4,346	1,878
2025	109,430	5.50%	6,019	(18,441)	9.60%	10,505	(16,600)	4.10%	4,486	1,841
2026	112,986	5.60%	6,327	(18,081)	9.70%	10,960	(16,285)	4.10%	4,633	1,796
2027	116,658	5.60%	6,533	(17,728)	9.70%	11,316	(15,986)	4.10%	4,783	1,742
2028	120,449	5.70%	6,866	(17,381)	9.80%	11,804	(15,703)	4.10%	4,938	1,678



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

Provisions	ER #5800
Benefit Program:	L-6
Final Average Salary:	5 Years
Member Contributions:	Contributory
Retirement Eligibility:	Regular

Computed Employer Contribution Rate	Public Safety Subdepartment	Other General Subdepartments
Current Service Cost	9.40%	6.70%
Disability Cost	0.80	0.50
Prior Service Cost	<u>7.70</u>	<u>(2.00)</u>
Total Employer Contribution Rate (Uncapped)	17.90%	5.20%
Change in Computed Employer Contribution Rate	13.20%	0.20%

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	\$ 103,361	4.70%	\$ 4,858	(\$ 22,895)	17.90%	\$ 18,502	\$ 115,045	13.20%	\$ 13,644	\$ 137,940
2020	106,720	4.80%	5,123	(22,447)	18.00%	19,210	115,130	13.20%	14,087	137,577
2021	110,188	4.90%	5,399	(22,008)	18.10%	19,944	114,843	13.20%	14,545	136,851
2022	113,769	5.00%	5,688	(21,578)	18.20%	20,706	114,147	13.20%	15,018	135,725
2023	117,466	5.10%	5,991	(21,156)	18.30%	21,496	113,002	13.20%	15,505	134,158
2024	121,284	5.20%	6,307	(20,742)	18.40%	22,316	111,365	13.20%	16,009	132,107
2025	125,226	5.30%	6,637	(20,337)	18.50%	23,167	109,188	13.20%	16,530	129,525
2026	129,296	5.30%	6,853	(19,939)	18.50%	23,920	106,421	13.20%	17,067	126,360
2027	133,498	5.40%	7,209	(19,549)	18.60%	24,831	103,009	13.20%	17,622	122,558
2028	137,837	5.50%	7,581	(19,167)	18.70%	25,776	98,892	13.20%	18,195	118,059

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	\$ 90,323	5.00%	\$ 4,516	(\$ 20,760)	5.20%	\$ 4,697	(\$ 20,103)	0.20%	\$ 181	\$ 657
2020	93,258	5.10%	4,756	(20,354)	5.30%	4,943	(19,699)	0.20%	187	655
2021	96,289	5.20%	5,007	(19,956)	5.40%	5,200	(19,304)	0.20%	193	652
2022	99,418	5.30%	5,269	(19,566)	5.50%	5,468	(18,919)	0.20%	199	647
2023	102,649	5.30%	5,440	(19,184)	5.50%	5,646	(18,544)	0.20%	206	640
2024	105,985	5.40%	5,723	(18,809)	5.60%	5,935	(18,179)	0.20%	212	630
2025	109,430	5.50%	6,019	(18,441)	5.70%	6,238	(17,823)	0.20%	219	618
2026	112,986	5.60%	6,327	(18,081)	5.80%	6,553	(17,478)	0.20%	226	603
2027	116,658	5.60%	6,533	(17,728)	5.80%	6,766	(17,143)	0.20%	233	585
2028	120,449	5.70%	6,866	(17,381)	5.90%	7,106	(16,817)	0.20%	240	564



Mr. Jeff Pabst
November 11, 2019 E-Mail
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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)

