



February 8, 2021 E-Mail

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

**Re: Gasconade County 911 Board Public Safety Department Split (#7102)**

Dear Jeff:

As you requested, we have performed actuarial valuations as of February 29, 2020 for the active members reported as Public Safety members and the remaining active members of the General department of the Gasconade County 911 Board. 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	11	1	12
Payroll	\$430,185	\$40,157	\$470,342
Average Pay	39,108	40,157	39,195
Accumulated Contributions (Actives)	-	-	-
Number Deferred	0	4	4
<u>Actuarial Accrued Liabilities (AAL)</u>			
Active AAL	\$384,108	\$16,654	\$400,762
Deferred AAL	0	62,881	62,881
Increase AAL - Police Provisions and Assumptions	57,899	0	0
Total AAL	\$442,007	\$79,535	\$463,643
<u>Actuarial Value of Assets</u>			
Members Deposit Fund (MDF)	\$ 0	\$ 0	\$ 0
Employer Accumulation Fund (EAF)*	405,348	83,933	489,281
Total Assets	\$405,348	\$83,933	\$489,281
Funded Ratio	91.7%	105.5%	105.5%
Unfunded Actuarial Accrued Liability (UAAL)	\$36,659	\$(4,398)	\$(25,638)
<u>Computed Employer Contribution Rate</u>			
Normal Cost Rate	6.70%	6.60%	5.50%
Casualty Rate	0.40	0.20	0.20
Prior Service Cost Rate	<u>0.50</u>	<u>(1.00)</u>	<u>(0.50)</u>
Total Employer Contribution Rate (Uncapped)	7.60%	5.80%	5.20%

\* 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 \$57,899 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 29, 2020 annual actuarial valuation report for the Gasconade County 911 Board. 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 29, 2020. This would require an accounting transfer based on market value, as of February 29, 2020, of \$84,126 of EAF assets staying in the General department with the remainder being transferred to the Public Safety department.

Deferred members as of February 29, 2020 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 Between AAL and AVA	Estimated Employer Contribution		Estimated Difference Between AAL and AVA	Estimated Employer Contribution		Estimated Difference Between AAL and AVA
		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars		As a % of Payroll	Annual Dollars	
2020	\$ 430,185	5.20%	\$ 22,370	(\$ 21,240)	7.60%	\$ 32,694	\$ 36,659	2.40%	\$ 10,324	\$ 57,899
2021	444,166	5.20%	23,097	(20,825)	7.60%	33,757	37,352	2.40%	10,660	58,177
2022	458,601	5.20%	23,847	(20,418)	7.60%	34,854	37,446	2.40%	11,007	57,864
2023	473,506	5.20%	24,622	(20,019)	7.60%	35,986	37,364	2.40%	11,364	57,383
2024	488,895	5.20%	25,423	(19,628)	7.60%	37,156	37,089	2.40%	11,733	56,717
2025	504,784	5.30%	26,754	(19,244)	7.70%	38,868	36,604	2.40%	12,114	55,848
2026	521,189	5.30%	27,623	(18,868)	7.70%	40,132	35,888	2.40%	12,509	54,756
2027	538,128	5.30%	28,521	(18,499)	7.70%	41,436	34,921	2.40%	12,915	53,420
2028	555,617	5.30%	29,448	(18,137)	7.70%	42,783	33,680	2.40%	13,335	51,817
2029	573,675	5.30%	30,405	(17,782)	7.70%	44,173	32,139	2.40%	13,768	49,921

The results shown for each employer only include active members reported to LAGERS as of the valuation date, February 29, 2020. The methods and assumptions used in the actuarial valuations were the same as those used in the annual actuarial valuations as of February 29, 2020. In particular, the assumed rate of investment return was 7.25% and the assumed rate of payroll growth was 3.25%.



The actuarial valuation results presented on the previous pages are based upon the employer's benefit provisions as of February 29, 2020. A summary follows:

<b>Provisions</b>	<b>ER #7102</b>
Benefit Program	L-1
Final Average Salary	5 Years
Member Contribution Rate	0%
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.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.



The computed employer contribution rates for the Gasconade County 911 Board including the changes associated with the Public Safety split with the following benefit provisions as of February 29, 2020 are shown below:

Provisions	ER #7102
Benefit Program	L-7
Final Average Salary	5 Years
Member Contribution Rate	0%
Retirement Eligibility	Regular

Computed Employer Contribution Rate	Public Safety Subdepartment	Other General Subdepartments
Normal Cost Rate	9.90%	9.70%
Casualty Rate	0.60	0.30
Prior Service Cost Rate	<u>4.30</u>	<u>0.50</u>
Total Employer Contribution Rate (Uncapped)	14.80%	10.50%
Change in Computed Employer Contribution Rate	9.60%	4.70%

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
2020	\$ 430,185	5.20%	\$ 22,370	\$(21,240)	14.80%	\$ 63,667	\$ 257,741	9.60%	\$ 41,297	\$ 278,981
2021	444,166	5.20%	23,097	(20,825)	14.80%	65,737	257,423	9.60%	42,640	278,248
2022	458,601	5.20%	23,847	(20,418)	14.80%	67,873	256,362	9.60%	44,026	276,780
2023	473,506	5.20%	24,622	(20,019)	14.80%	70,079	254,484	9.60%	45,457	274,503
2024	488,895	5.20%	25,423	(19,628)	14.80%	72,356	251,706	9.60%	46,933	271,334
2025	504,784	5.30%	26,754	(19,244)	14.90%	75,213	247,942	9.60%	48,459	267,186
2026	521,189	5.30%	27,623	(18,868)	14.90%	77,657	243,095	9.60%	50,034	261,963
2027	538,128	5.30%	28,521	(18,499)	14.90%	80,181	237,063	9.60%	51,660	255,562
2028	555,617	5.30%	29,448	(18,137)	14.90%	82,787	229,735	9.60%	53,339	247,872
2029	573,675	5.30%	30,405	(17,782)	14.90%	85,478	220,990	9.60%	55,073	238,772

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
2020	\$ 40,157	5.80%	\$ 2,329	\$(4,398)	10.50%	\$ 4,216	\$ 3,945	4.70%	\$ 1,887	\$ 8,343
2021	41,462	5.90%	2,446	(4,312)	10.60%	4,395	4,009	4.70%	1,949	8,321
2022	42,810	5.90%	2,526	(4,228)	10.60%	4,538	4,049	4.70%	2,012	8,277
2023	44,201	6.00%	2,652	(4,145)	10.70%	4,730	4,064	4.70%	2,078	8,209
2024	45,638	6.00%	2,738	(4,064)	10.70%	4,883	4,050	4.70%	2,145	8,114
2025	47,121	6.00%	2,827	(3,985)	10.70%	5,042	4,005	4.70%	2,215	7,990
2026	48,652	6.10%	2,968	(3,907)	10.80%	5,254	3,927	4.70%	2,286	7,834
2027	50,233	6.10%	3,064	(3,831)	10.80%	5,425	3,812	4.70%	2,361	7,643
2028	51,866	6.20%	3,216	(3,756)	10.90%	5,653	3,657	4.70%	2,437	7,413
2029	53,552	6.20%	3,320	(3,683)	10.90%	5,837	3,458	4.70%	2,517	7,141



The computed employer contribution rates for the Gasconade County 911 Board including the changes associated with the Public Safety split with the following benefit provisions as of February 29, 2020 are shown below:

Provisions	ER #7102
Benefit Program	L-6
Final Average Salary	5 Years
Member Contribution Rate	0%
Retirement Eligibility	Regular

Computed Employer Contribution Rate	Public Safety Subdepartment	Other General Subdepartments
Normal Cost Rate	13.00%	12.70%
Casualty Rate	0.80	0.50
Prior Service Cost Rate	<u>8.00</u>	<u>2.00</u>
Total Employer Contribution Rate (Uncapped)	21.80%	15.20%
Change in Computed Employer Contribution Rate	16.60%	9.40%

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
2020	\$ 430,185	5.20%	\$ 22,370	\$(21,240)	21.80%	\$ 93,780	\$ 478,774	16.60%	\$ 71,410	\$ 500,014
2021	444,166	5.20%	23,097	(20,825)	21.80%	96,828	477,875	16.60%	73,731	498,700
2022	458,601	5.20%	23,847	(20,418)	21.80%	99,975	475,652	16.60%	76,128	496,070
2023	473,506	5.20%	24,622	(20,019)	21.80%	103,224	471,969	16.60%	78,602	491,988
2024	488,895	5.20%	25,423	(19,628)	21.80%	106,579	466,681	16.60%	81,156	486,309
2025	504,784	5.30%	26,754	(19,244)	21.90%	110,548	459,630	16.60%	83,794	478,874
2026	521,189	5.30%	27,623	(18,868)	21.90%	114,140	450,645	16.60%	86,517	469,513
2027	538,128	5.30%	28,521	(18,499)	21.90%	117,850	439,541	16.60%	89,329	458,040
2028	555,617	5.30%	29,448	(18,137)	21.90%	121,680	426,120	16.60%	92,232	444,257
2029	573,675	5.30%	30,405	(17,782)	21.90%	125,635	410,165	16.60%	95,230	427,947

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
2020	\$ 40,157	5.80%	\$ 2,329	\$(4,398)	15.20%	\$ 6,104	\$ 12,272	9.40%	\$ 3,775	\$ 16,670
2021	41,462	5.90%	2,446	(4,312)	15.30%	6,344	12,314	9.40%	3,898	16,626
2022	42,810	5.90%	2,526	(4,228)	15.30%	6,550	12,310	9.40%	4,024	16,538
2023	44,201	6.00%	2,652	(4,145)	15.40%	6,807	12,257	9.40%	4,155	16,402
2024	45,638	6.00%	2,738	(4,064)	15.40%	7,028	12,149	9.40%	4,290	16,213
2025	47,121	6.00%	2,827	(3,985)	15.40%	7,257	11,980	9.40%	4,430	15,965
2026	48,652	6.10%	2,968	(3,907)	15.50%	7,541	11,746	9.40%	4,573	15,653
2027	50,233	6.10%	3,064	(3,831)	15.50%	7,786	11,440	9.40%	4,722	15,271
2028	51,866	6.20%	3,216	(3,756)	15.60%	8,091	11,055	9.40%	4,875	14,811
2029	53,552	6.20%	3,320	(3,683)	15.60%	8,354	10,584	9.40%	5,034	14,267

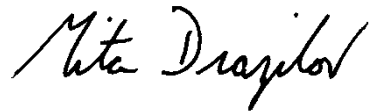


Mr. Jeff Pabst  
February 8, 2021 E-Mail  
Page 6

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 style with a large initial "M".

Mita D. Drazilov, ASA, FCA, MAAA

MDD:dj

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

