

June 13, 2017

Franklin County SB40 Resource Board Union, Missouri

Ladies and Gentlemen:

This report contains projections needed to comply with Missouri state disclosure requirements (Section 105.660 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision. This report is intended to be a supplement to the April 30, 2017 Initial Valuation for the Franklin County SB40 Resource Board dated June 13, 2017.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix II of the Initial Valuation Report. In our opinion, they do produce results which, in the aggregate, are reasonable. Additional miscellaneous and technical assumptions as well as disclosures required by the actuarial standards of practice may be found in the LAGERS Compiled Annual Actuarial Valuation report as of February 29, 2016.

Mita Drazilov is a member of the American Academy of Actuaries and meets the Qualification Standards of the Academy of Actuaries to render the actuarial opinion herein.

Respectfully submitted,

Mita D. Drazilov, ASA, MAAA

Employer Contribution Rates (Contributory Plan - 5 Year FAS)

(4% member contributions are additional)

Regular Retirement Eligibility

		L-1	Benefit Prog	gram	L-3	Benefit Prog	gram	LT-4(65) Benefit P	rogram
			l Employer	Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contr	ibution	Actuarial	Contr	ibution	Actuarial	Contr	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2017	\$ 925,108	3.6%	\$33,304	\$ 83,362	5.1%	\$47,181	\$ 112,587	4.2%	\$38,855	\$ 94,965
2018	955,174	3.6	34,386	84,504	5.1	48,714	114,129	4.2	40,117	96,266
2019	986,217	3.6	35,504	85,570	5.1	50,297	115,568	4.2	41,421	97,480
2020	1,018,269	3.6	36,658	86,548	5.1	51,932	116,889	4.2	42,767	98,594
2021	1,051,363	3.6	37,849	87,427	5.1	53,620	118,077	4.2	44,157	99,596
2022	1,085,532	3.6	39,079	88,195	5.1	55,362	119,114	4.2	45,592	100,471
2023	1,120,812	3.6	40,349	88,837	5.1	57,161	119,982	4.2	47,074	101,203
2024	1,157,238	3.6	41,661	89,339	5.1	59,019	120,660	4.2	48,604	101,775
2025	1,194,848	3.6	43,015	89,684	5.1	60,937	121,127	4.2	50,184	102,169
2026	1.233.681	3.6	44.413	89,855	5.1	62,918	121.358	4.2	51.815	102,364

		LT-5(65) Benefit P	rogram	L-7	Benefit Prog	gram	LT-8(fit Program	
	Estimated 1		Contribution Actua		Unfunded Estimated Emplo Actuarial Contribution		Unfunded Actuarial		Employer bution	Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 925,108	5.5%	\$50,881	\$ 121,285	6.5%	\$60,132	\$ 141,632	6.7%	\$61,982	\$ 147,408
2018	955,174	5.5	52,535	122,947	6.5	62,086	143,572	6.7	63,997	149,427
2019	986,217	5.5	54,242	124,497	6.5	64,104	145,382	6.7	66,077	151,311
2020	1,018,269	5.5	56,005	125,920	6.5	66,187	147,044	6.7	68,224	153,041
2021	1,051,363	5.5	57,825	127,199	6.5	68,339	148,538	6.7	70,441	154,596
2022	1,085,532	5.5	59,704	128,316	6.5	70,560	149,843	6.7	72,731	155,954
2023	1,120,812	5.5	61,645	129,251	6.5	72,853	150,935	6.7	75,094	157,090
2024	1,157,238	5.5	63,648	129,981	6.5	75,220	151,788	6.7	77,535	157,978
2025	1,194,848	5.5	65,717	130,484	6.5	77,665	152,375	6.7	80,055	158,589
2026	1,233,681	5.5	67,852	130,733	6.5	80,189	152,666	6.7	82,657	158,892

		L-12	2 Benefit Pro	gram	LT-14(65) Benefit P	Program	L-6 Benefit Program			
	E-dimensional		Estimated Employer Contribution		Estimated	1 -0	Unfunded	Estimated	1 - 3 -	Unfunded	
Volumetian	Estimated			Actuarial	Contri As a % of		Actuarial	Contri As a % of		Actuarial	
Valuation Year	Projected Pavroll	As a % of Payroll	Annual Dollars	Accrued Liability	As a % or Payroll	Annual Dollars	Accrued Liability	As a % or Payroll	Annual Dollars	Accrued Liability	
2017	\$ 925,108	7.9%	\$73,084	\$ 170,709	8.2%	\$75,859	\$ 173,602	9.6%	\$88,810	\$ 199,822	
2018	955,174	7.9	75,459	173,048	8.2	78,324	175,980	9.6	91,697	202,560	
2019	986,217	7.9	77,911	175,230	8.2	80,870	178,199	9.6	94,677	205,114	
2020	1,018,269	7.9	80,443	177,233	8.2	83,498	180,236	9.6	97,754	207,459	
2021	1,051,363	7.9	83,058	179,034	8.2	86,212	182,067	9.6	100,931	209,567	
2022	1,085,532	7.9	85,757	180,606	8.2	89,014	183,666	9.6	104,211	211,407	
2023	1,120,812	7.9	88,544	181,922	8.2	91,907	185,004	9.6	107,598	212,947	
2024	1,157,238	7.9	91,422	182,950	8.2	94,894	186,050	9.6	111,095	214,151	
2025	1,194,848	7.9	94,393	183,657	8.2	97,978	186,769	9.6	114,705	214,979	
2026	1,233,681	7.9	97,461	184,008	8.2	101,162	187,126	9.6	118,433	215,389	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Employer Contribution Rates (Contributory Plan - 3 Year FAS)

(4% member contributions are additional)

Regular Retirement Eligibility

		L-1	Benefit Prog	gram	L-3	Benefit Prog	gram	LT-4(rogram	
		Estimated Employer		Unfunded	Estimated	l Employer	Unfunded	Estimated	l Employer	Unfunded
	Estimated	Contr	ibution	Actuarial	Contribution		Actuarial	Contri	ibution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2017	\$ 925,108	3.7%	\$34,229	\$ 87,343	5.3%	\$49,031	\$ 117,464	4.3%	\$39,780	\$ 99,278
2018	955,174	3.7	35,341	88,540	5.3	50,624	119,073	4.3	41,072	100,638
2019	986,217	3.7	36,490	89,656	5.3	52,270	120,574	4.3	42,407	101,907
2020	1,018,269	3.7	37,676	90,681	5.3	53,968	121,953	4.3	43,786	103,072
2021	1,051,363	3.7	38,900	91,602	5.3	55,722	123,192	4.3	45,209	104,119
2022	1,085,532	3.7	40,165	92,406	5.3	57,533	124,274	4.3	46,678	105,033
2023	1,120,812	3.7	41,470	93,079	5.3	59,403	125,179	4.3	48,195	105,798
2024	1,157,238	3.7	42,818	93,605	5.3	61,334	125,886	4.3	49,761	106,396
2025	1,194,848	3.7	44,209	93,967	5.3	63,327	126,373	4.3	51,378	106,807
2026	1,233,681	3.7	45,646	94,146	5.3	65,385	126,614	4.3	53,048	107,011

		LT-5(65) Benefit P	rogram	L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated Employ Estimated Contribution		1	Unfunded Actuarial	Estimated Employer Contribution		Unfunded Actuarial			Unfunded Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 925,108	5.8%	\$53,656	\$ 126,490	6.8%	\$62,907	\$ 147,434	7.0%	\$64,758	\$ 153,456	
2018	955,174	5.8	55,400	128,223	6.8	64,952	149,454	7.0	66,862	155,558	
2019	986,217	5.8	57,201	129,840	6.8	67,063	151,339	7.0	69,035	157,519	
2020	1,018,269	5.8	59,060	131,324	6.8	69,242	153,069	7.0	71,279	159,320	
2021	1,051,363	5.8	60,979	132,658	6.8	71,493	154,624	7.0	73,595	160,939	
2022	1,085,532	5.8	62,961	133,823	6.8	73,816	155,982	7.0	75,987	162,352	
2023	1,120,812	5.8	65,007	134,798	6.8	76,215	157,118	7.0	78,457	163,535	
2024	1,157,238	5.8	67,120	135,560	6.8	78,692	158,006	7.0	81,007	164,459	
2025	1,194,848	5.8	69,301	136,084	6.8	81,250	158,617	7.0	83,639	165,095	
2026	1,233,681	5.8	71,553	136,344	6.8	83,890	158,920	7.0	86,358	165,410	

		L-12 Benefit Program Estimated Employer Unfunded			LT-14(65) Benefit Program			L-6 Benefit Program			
	E-44-1		Estimated Employer Contribution		Estimated	1 -0	Unfunded		Employer	Unfunded	
Valuation	Estimated Projected	As a % of	Annual	Actuarial Accrued	Contri As a % of	Annual	Actuarial Accrued	Contri As a % of	Annual	Actuarial Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 925,108	8.4%	\$77,709	\$ 177,537	8.5%	\$78,634	\$ 180,506	10.1%	\$93,436	\$ 207,698	
2018	955,174	8.4	80,235	179,969	8.5	81,190	182,979	10.1	96,473	210,543	
2019	986,217	8.4	82,842	182,238	8.5	83,828	185,286	10.1	99,608	213,198	
2020	1,018,269	8.4	85,535	184,322	8.5	86,553	187,404	10.1	102,845	215,635	
2021	1,051,363	8.4	88,314	186,195	8.5	89,366	189,308	10.1	106,188	217,826	
2022	1,085,532	8.4	91,185	187,830	8.5	92,270	190,971	10.1	109,639	219,739	
2023	1,120,812	8.4	94,148	189,198	8.5	95,269	192,362	10.1	113,202	221,340	
2024	1,157,238	8.4	97,208	190,267	8.5	98,365	193,449	10.1	116,881	222,591	
2025	1,194,848	8.4	100,367	191,003	8.5	101,562	194,197	10.1	120,680	223,452	
2026	1,233,681	8.4	103,629	191,368	8.5	104,863	194,568	10.1	124,602	223,879	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS)

(0% member contributions are additional)

Regular Retirement Eligibility

		L-1	Benefit Prog	gram	L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated	Estimated Employer		Estimated	l Employer	Unfunded	Estimated Employer		Unfunded
	Estimated	Contri	bution	Actuarial	Contri	ibution	Actuarial	Contri	bution	Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2017	\$ 925,108	7.1%	\$65,683	\$ 115,477	8.8%	\$81,410	\$ 144,358	7.7%	\$71,233	\$ 127,020
2018	955,174	7.1	67,817	117,059	8.8	84,055	146,336	7.7	73,548	128,760
2019	986,217	7.1	70,021	118,535	8.8	86,787	148,181	7.7	75,939	130,384
2020	1,018,269	7.1	72,297	119,890	8.8	89,608	149,875	7.7	78,407	131,875
2021	1,051,363	7.1	74,647	121,108	8.8	92,520	151,398	7.7	80,955	133,215
2022	1,085,532	7.1	77,073	122,172	8.8	95,527	152,728	7.7	83,586	134,385
2023	1,120,812	7.1	79,578	123,062	8.8	98,631	153,841	7.7	86,303	135,364
2024	1,157,238	7.1	82,164	123,758	8.8	101,837	154,710	7.7	89,107	136,129
2025	1,194,848	7.1	84,834	124,237	8.8	105,147	155,308	7.7	92,003	136,655
2026	1,233,681	7.1	87,591	124,474	8.8	108,564	155,605	7.7	94,993	136,916

		LT-5(65) Benefit P	rogram	L-7 Benefit Program			LT-8(65) Benefit Program			
	Estimated	Estimated Employer Contribution		1 - J		Estimated Employer Unfunded Contribution Actuarial		Estimated Employer Contribution		Unfunded Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 925,108	9.1%	\$84,185	\$ 153,044	10.3%	\$95,286	\$ 173,291	10.6%	\$98,061	\$ 179,063	
2018	955,174	9.1	86,921	155,141	10.3	98,383	175,665	10.6	101,248	181,516	
2019	986,217	9.1	89,746	157,097	10.3	101,580	177,880	10.6	104,539	183,805	
2020	1,018,269	9.1	92,662	158,893	10.3	104,882	179,914	10.6	107,937	185,906	
2021	1,051,363	9.1	95,674	160,507	10.3	108,290	181,742	10.6	111,444	187,795	
2022	1,085,532	9.1	98,783	161,917	10.3	111,810	183,338	10.6	115,066	189,444	
2023	1,120,812	9.1	101,994	163,096	10.3	115,444	184,673	10.6	118,806	190,824	
2024	1,157,238	9.1	105,309	164,018	10.3	119,196	185,717	10.6	122,667	191,902	
2025	1,194,848	9.1	108,731	164,652	10.3	123,069	186,435	10.6	126,654	192,644	
2026	1,233,681	9.1	112,265	164,966	10.3	127,069	186,791	10.6	130,770	193,012	

		L-12 Benefit Program			LT-14(65) Benefit F	rogram	L-6 Benefit Program			
		Estimated Employer		Unfunded	Estimated	Employer	Unfunded	Estimated	Employer	Unfunded	
	Estimated	Contri	bution	Actuarial	Contri	bution	Actuarial	Contri	bution	Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 925,108	11.8%	\$109,163	\$ 202,160	12.1%	\$111,938	\$ 205,044	13.5%	\$124,890	\$ 230,988	
2018	955,174	11.8	112,711	204,930	12.1	115,576	207,853	13.5	128,948	234,153	
2019	986,217	11.8	116,374	207,514	12.1	119,332	210,474	13.5	133,139	237,106	
2020	1,018,269	11.8	120,156	209,886	12.1	123,211	212,880	13.5	137,466	239,817	
2021	1,051,363	11.8	124,061	212,019	12.1	127,215	215,043	13.5	141,934	242,254	
2022	1,085,532	11.8	128,093	213,881	12.1	131,349	216,932	13.5	146,547	244,382	
2023	1,120,812	11.8	132,256	215,439	12.1	135,618	218,512	13.5	151,310	246,162	
2024	1,157,238	11.8	136,554	216,657	12.1	140,026	219,747	13.5	156,227	247,553	
2025	1,194,848	11.8	140,992	217,495	12.1	144,577	220,597	13.5	161,304	248,510	
2026	1,233,681	11.8	145,574	217,910	12.1	149,275	221,018	13.5	166,547	248,985	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS)

(0% member contributions are additional)

Regular Retirement Eligibility

		L-1	Benefit Prog	gram	L-3 Benefit Program			LT-4(65) Benefit Program		
		Estimated Employer		Unfunded	Estimated	l Employer	Unfunded	Estimated	Employer	Unfunded
	Estimated	Contri	ibution	Actuarial	Contr	ibution	Actuarial	Contribution		Actuarial
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability
2017	\$ 925,108	7.3%	\$67,533	\$ 119,377	9.0%	\$83,260	\$ 149,196	8.0%	\$74,009	\$ 131,340
2018	955,174	7.3	69,728	121,012	9.0	85,966	151,240	8.0	76,414	133,139
2019	986,217	7.3	71,994	122,538	9.0	88,760	153,147	8.0	78,897	134,818
2020	1,018,269	7.3	74,334	123,939	9.0	91,644	154,898	8.0	81,462	136,359
2021	1,051,363	7.3	76,749	125,198	9.0	94,623	156,472	8.0	84,109	137,745
2022	1,085,532	7.3	79,244	126,298	9.0	97,698	157,846	8.0	86,843	138,955
2023	1,120,812	7.3	81,819	127,218	9.0	100,873	158,996	8.0	89,665	139,967
2024	1,157,238	7.3	84,478	127,937	9.0	104,151	159,895	8.0	92,579	140,758
2025	1,194,848	7.3	87,224	128,432	9.0	107,536	160,513	8.0	95,588	141,302
2026	1,233,681	7.3	90,059	128,677	9.0	111,031	160,819	8.0	98,694	141,572

		LT-5(65) Benefit P	rogram	L-7 Benefit Program			LT-8(65) Benefit Program		
	Estimated Es		Employer ibution	Unfunded Actuarial		Employer bution	Unfunded Actuarial		Employer bution	Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 925,108	9.5%	\$87,885	\$ 158,163	10.6%	\$98,061	\$ 179,071	10.9%	\$100,837	\$ 185,081
2018	955,174	9.5	90,742	160,330	10.6	101,248	181,524	10.9	104,114	187,617
2019	986,217	9.5	93,691	162,352	10.6	104,539	183,813	10.9	107,498	189,983
2020	1,018,269	9.5	96,736	164,208	10.6	107,937	185,915	10.9	110,991	192,155
2021	1,051,363	9.5	99,879	165,877	10.6	111,444	187,804	10.9	114,599	194,107
2022	1,085,532	9.5	103,126	167,334	10.6	115,066	189,453	10.9	118,323	195,812
2023	1,120,812	9.5	106,477	168,553	10.6	118,806	190,833	10.9	122,169	197,238
2024	1,157,238	9.5	109,938	169,506	10.6	122,667	191,912	10.9	126,139	198,353
2025	1,194,848	9.5	113,511	170,161	10.6	126,654	192,654	10.9	130,238	199,120
2026	1,233,681	9.5	117,200	170,486	10.6	130,770	193,022	10.9	134,471	199,500

		L-12	2 Benefit Pro	gram	LT-14(65) Benefit Program			L-6 Benefit Program			
		Estimated Employer		Unfunded Actuarial		Employer	Unfunded		Employer	Unfunded	
	Estimated	Contri	Contribution		Contri	bution	Actuarial Contributi		bution	Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 925,108	12.3%	\$113,788	\$ 208,913	12.4%	\$114,713	\$ 211,871	14.0%	\$129,515	\$ 238,725	
2018	955,174	12.3	117,486	211,775	12.4	118,442	214,774	14.0	133,724	241,995	
2019	986,217	12.3	121,305	214,445	12.4	122,291	217,482	14.0	138,070	245,046	
2020	1,018,269	12.3	125,247	216,897	12.4	126,265	219,968	14.0	142,558	247,848	
2021	1,051,363	12.3	129,318	219,101	12.4	130,369	222,203	14.0	147,191	250,366	
2022	1,085,532	12.3	133,520	221,025	12.4	134,606	224,154	14.0	151,974	252,565	
2023	1,120,812	12.3	137,860	222,635	12.4	138,981	225,787	14.0	156,914	254,405	
2024	1,157,238	12.3	142,340	223,893	12.4	143,498	227,063	14.0	162,013	255,843	
2025	1,194,848	12.3	146,966	224,759	12.4	148,161	227,941	14.0	167,279	256,832	
2026	1,233,681	12.3	151,743	225,188	12.4	152,976	228,376	14.0	172,715	257,322	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Employer Contribution Rates (Contributory Plan - 5 Year FAS)

(4% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program Estimated Employer Unfunde			L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	Estimated Employer		Estimated	Employer	Unfunded Estimate		l Employer	Unfunded	
	Estimated	Contribution		Actuarial	Contribution		Actuarial	Contri	ibution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2017	\$ 925,108	4.0%	\$37,004	\$ 89,851	5.5%	\$50,881	\$ 120,462	5.1%	\$47,181	\$ 111,624	
2018	955,174	4.0	38,207	91,082	5.5	52,535	122,112	5.1	48,714	113,153	
2019	986,217	4.0	39,449	92,230	5.5	54,242	123,652	5.1	50,297	114,580	
2020	1,018,269	4.0	40,731	93,284	5.5	56,005	125,066	5.1	51,932	115,890	
2021	1,051,363	4.0	42,055	94,232	5.5	57,825	126,337	5.1	53,620	117,068	
2022	1,085,532	4.0	43,421	95,060	5.5	59,704	127,447	5.1	55,362	118,096	
2023	1,120,812	4.0	44,832	95,752	5.5	61,645	128,375	5.1	57,161	118,956	
2024	1,157,238	4.0	46,290	96,293	5.5	63,648	129,101	5.1	59,019	119,628	
2025	1,194,848	4.0	47,794	96,665	5.5	65,717	129,600	5.1	60,937	120,091	
2026	1,233,681	4.0	49,347	96,850	5.5	67,852	129,847	5.1	62,918	120,320	

		LT-5(65) Benefit P	rogram	L-7	Benefit Prog	gram	LT-8(fit Program	
		Estimated Employer		Unfunded	Estimated Employer		Unfunded	Estimated Employer		Unfunded
	Estimated	Contri	bution	Actuarial	Contribution		Actuarial	Contribution		Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 925,108	6.4%	\$59,207	\$ 136,754	7.1%	\$65,683	\$ 150,828	7.7%	\$71,233	\$ 161,671
2018	955,174	6.4	61,131	138,628	7.1	67,817	152,894	7.7	73,548	163,886
2019	986,217	6.4	63,118	140,376	7.1	70,021	154,822	7.7	75,939	165,952
2020	1,018,269	6.4	65,169	141,981	7.1	72,297	156,592	7.7	78,407	167,849
2021	1,051,363	6.4	67,287	143,424	7.1	74,647	158,183	7.7	80,955	169,554
2022	1,085,532	6.4	69,474	144,684	7.1	77,073	159,572	7.7	83,586	171,043
2023	1,120,812	6.4	71,732	145,738	7.1	79,578	160,734	7.7	86,303	172,289
2024	1,157,238	6.4	74,063	146,562	7.1	82,164	161,642	7.7	89,107	173,263
2025	1,194,848	6.4	76,470	147,129	7.1	84,834	162,267	7.7	92,003	173,933
2026	1.233.681	6.4	78.956	147.410	7.1	87.591	162,577	7.7	94.993	174.265

		L-12	2 Benefit Pro	gram	LT-14((65) Benefit F	Program	L-6	gram	
	E-44-1	Estimated Employer Contribution		Unfunded	Estimated	1 - 3 -	Unfunded		Employer	Unfunded
Valuation	Estimated Projected	As a % of	Annual	Actuarial Accrued	Contri As a % of	Annual	Actuarial Accrued	As a % of	bution Annual	Actuarial Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 925,108	8.7%	\$80,484	\$ 181,308	8.9%	\$82,335	\$ 186,724	10.4%	\$96,211	\$ 211,834
2018	955,174	8.7	83,100	183,792	8.9	85,010	189,282	10.4	99,338	214,736
2019	986,217	8.7	85,801	186,110	8.9	87,773	191,669	10.4	102,567	217,444
2020	1,018,269	8.7	88,589	188,238	8.9	90,626	193,860	10.4	105,900	219,930
2021	1,051,363	8.7	91,469	190,151	8.9	93,571	195,830	10.4	109,342	222,165
2022	1,085,532	8.7	94,441	191,821	8.9	96,612	197,550	10.4	112,895	224,116
2023	1,120,812	8.7	97,511	193,218	8.9	99,752	198,989	10.4	116,564	225,749
2024	1,157,238	8.7	100,680	194,310	8.9	102,994	200,114	10.4	120,353	227,025
2025	1,194,848	8.7	103,952	195,061	8.9	106,341	200,888	10.4	124,264	227,903
2026	1,233,681	8.7	107,330	195,433	8.9	109,798	201,272	10.4	128,303	228,338

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Employer Contribution Rates (Contributory Plan - 3 Year FAS)

(4% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program Estimated Employer Unfund			L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	Estimated Employer		Estimated	l Employer	Unfunded	Estimated	Employer	Unfunded	
	Estimated	Contribution		Actuarial	Contri	ibution	Actuarial	Contri	bution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2017	\$ 925,108	4.2%	\$38,855	\$ 94,076	5.9%	\$54,581	\$ 125,652	5.3%	\$49,031	\$ 116,570	
2018	955,174	4.2	40,117	95,365	5.9	56,355	127,373	5.3	50,624	118,167	
2019	986,217	4.2	41,421	96,567	5.9	58,187	128,979	5.3	52,270	119,657	
2020	1,018,269	4.2	42,767	97,671	5.9	60,078	130,454	5.3	53,968	121,025	
2021	1,051,363	4.2	44,157	98,663	5.9	62,030	131,780	5.3	55,722	122,255	
2022	1,085,532	4.2	45,592	99,529	5.9	64,046	132,937	5.3	57,533	123,329	
2023	1,120,812	4.2	47,074	100,254	5.9	66,128	133,905	5.3	59,403	124,227	
2024	1,157,238	4.2	48,604	100,821	5.9	68,277	134,662	5.3	61,334	124,929	
2025	1,194,848	4.2	50,184	101,211	5.9	70,496	135,183	5.3	63,327	125,412	
2026	1,233,681	4.2	51,815	101,404	5.9	72,787	135,441	5.3	65,385	125,651	

		LT-5(65) Benefit Program			L-7	Benefit Prog	gram	LT-8(65) Benefit Program			
		Estimated Employer		Unfunded Estimated		Employer	Unfunded	Estimated	Employer	Unfunded	
	Estimated	Contri	Contribution		Contri	bution	Actuarial	Contri	bution	Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 925,108	6.7%	\$61,982	\$ 142,549	7.4%	\$68,458	\$ 157,029	8.0%	\$74,009	\$ 168,305	
2018	955,174	6.7	63,997	144,502	7.4	70,683	159,180	8.0	76,414	170,611	
2019	986,217	6.7	66,077	146,324	7.4	72,980	161,187	8.0	78,897	172,762	
2020	1,018,269	6.7	68,224	147,997	7.4	75,352	163,030	8.0	81,462	174,737	
2021	1,051,363	6.7	70,441	149,501	7.4	77,801	164,687	8.0	84,109	176,512	
2022	1,085,532	6.7	72,731	150,814	7.4	80,329	166,133	8.0	86,843	178,062	
2023	1,120,812	6.7	75,094	151,913	7.4	82,940	167,343	8.0	89,665	179,359	
2024	1,157,238	6.7	77,535	152,772	7.4	85,636	168,289	8.0	92,579	180,373	
2025	1,194,848	6.7	80,055	153,363	7.4	88,419	168,940	8.0	95,588	181,071	
2026	1,233,681	6.7	82,657	153,656	7.4	91,292	169,263	8.0	98,694	181,417	

		L-12 Benefit Program			LT-14(65) Benefit Program			L-6 Benefit Program			
		Estimated Employer		Unfunded		Employer	Unfunded		Employer	Unfunded	
	Estimated	Contribution		Actuarial		bution	Actuarial		bution	Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 925,108	9.1%	\$84,185	\$ 188,603	9.4%	\$86,960	\$ 194,258	10.8%	\$99,912	\$ 220,178	
2018	955,174	9.1	86,921	191,187	9.4	89,786	196,919	10.8	103,159	223,194	
2019	986,217	9.1	89,746	193,598	9.4	92,704	199,402	10.8	106,511	226,008	
2020	1,018,269	9.1	92,662	195,811	9.4	95,717	201,682	10.8	109,973	228,592	
2021	1,051,363	9.1	95,674	197,801	9.4	98,828	203,731	10.8	113,547	230,915	
2022	1,085,532	9.1	98,783	199,538	9.4	102,040	205,520	10.8	117,237	232,943	
2023	1,120,812	9.1	101,994	200,992	9.4	105,356	207,017	10.8	121,048	234,640	
2024	1,157,238	9.1	105,309	202,128	9.4	108,780	208,187	10.8	124,982	235,966	
2025	1,194,848	9.1	108,731	202,910	9.4	112,316	208,992	10.8	129,044	236,878	
2026	1,233,681	9.1	112,265	203,297	9.4	115,966	209,391	10.8	133,238	237,330	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Employer Contribution Rates (Non-Contributory Plan - 5 Year FAS)

(0% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1	Benefit Prog	gram	L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	Estimated Employer		Estimated	Employer	Unfunded Estimate		l Employer	Unfunded	
	Estimated	Contribution		Actuarial	Contri	bution	Actuarial	Contri	ibution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2017	\$ 925,108	7.5%	\$69,383	\$ 121,623	9.2%	\$85,110	\$ 151,998	8.7%	\$80,484	\$ 143,330	
2018	955,174	7.5	71,638	123,289	9.2	87,876	154,080	8.7	83,100	145,294	
2019	986,217	7.5	73,966	124,844	9.2	90,732	156,023	8.7	85,801	147,126	
2020	1,018,269	7.5	76,370	126,271	9.2	93,681	157,807	8.7	88,589	148,808	
2021	1,051,363	7.5	78,852	127,554	9.2	96,725	159,410	8.7	91,469	150,320	
2022	1,085,532	7.5	81,415	128,674	9.2	99,869	160,810	8.7	94,441	151,640	
2023	1,120,812	7.5	84,061	129,611	9.2	103,115	161,981	8.7	97,511	152,745	
2024	1,157,238	7.5	86,793	130,344	9.2	106,466	162,896	8.7	100,680	153,608	
2025	1,194,848	7.5	89,614	130,848	9.2	109,926	163,526	8.7	103,952	154,202	
2026	1,233,681	7.5	92,526	131,098	9.2	113,499	163,838	8.7	107,330	154,496	

		LT-5(65) Benefit P	rogram			gram	LT-8(65) Benefit Program		
	Estimated		Employer bution	Unfunded Actuarial		Employer bution	Unfunded Actuarial		Employer bution	Unfunded Actuarial
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability
2017	\$ 925,108	10.1%	\$93,436	\$ 168,295	10.8%	\$99,912	\$ 182,430	11.4%	\$105,462	\$ 193,269
2018	955,174	10.1	96,473	170,601	10.8	103,159	184,929	11.4	108,890	195,917
2019	986,217	10.1	99,608	172,752	10.8	106,511	187,261	11.4	112,429	198,387
2020	1,018,269	10.1	102,845	174,727	10.8	109,973	189,402	11.4	116,083	200,655
2021	1,051,363	10.1	106,188	176,502	10.8	113,547	191,326	11.4	119,855	202,694
2022	1,085,532	10.1	109,639	178,052	10.8	117,237	193,006	11.4	123,751	204,474
2023	1,120,812	10.1	113,202	179,349	10.8	121,048	194,412	11.4	127,773	205,963
2024	1,157,238	10.1	116,881	180,363	10.8	124,982	195,511	11.4	131,925	207,127
2025	1,194,848	10.1	120,680	181,060	10.8	129,044	196,267	11.4	136,213	207,928
2026	1,233,681	10.1	124,602	181,406	10.8	133,238	196,642	11.4	140,640	208,325

		L-12 Benefit Program			LT-14(65) Benefit F	Program	L-6 Benefit Program			
		Estimated Employer ted Contribution		Unfunded		Employer	Unfunded		Employer	Unfunded	
	Estimated			Actuarial		bution	Actuarial		bution	Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 925,108	12.6%	\$116,564	\$ 212,881	12.8%	\$118,414	\$ 218,274	14.3%	\$132,290	\$ 243,202	
2018	955,174	12.6	120,352	215,797	12.8	122,262	221,264	14.3	136,590	246,534	
2019	986,217	12.6	124,263	218,518	12.8	126,236	224,054	14.3	141,029	249,643	
2020	1,018,269	12.6	128,302	221,016	12.8	130,338	226,616	14.3	145,612	252,497	
2021	1,051,363	12.6	132,472	223,262	12.8	134,574	228,919	14.3	150,345	255,063	
2022	1,085,532	12.6	136,777	225,223	12.8	138,948	230,929	14.3	155,231	257,303	
2023	1,120,812	12.6	141,222	226,864	12.8	143,464	232,611	14.3	160,276	259,177	
2024	1,157,238	12.6	145,812	228,146	12.8	148,126	233,926	14.3	165,485	260,642	
2025	1,194,848	12.6	150,551	229,028	12.8	152,941	234,831	14.3	170,863	261,650	
2026	1,233,681	12.6	155,444	229,465	12.8	157,911	235,279	14.3	176,416	262,150	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Employer Contribution Rates (Non-Contributory Plan - 3 Year FAS)

(0% member contributions are additional)

Rule of 80 Retirement Eligibility

		L-1 Benefit Program Estimated Employer Unfunde			L-3	Benefit Prog	gram	LT-4(65) Benefit Program			
		Estimated	Estimated Employer		Estimated	Employer	Unfunded	Estimated	Employer	Unfunded	
	Estimated	Contribution		Actuarial	Contribution		Actuarial	Contri	bution	Actuarial	
Valuation	Projected	As a %	Annual	Accrued	As a %	Annual	Accrued	As a %	Annual	Accrued	
Year	Payroll	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	of Payroll	Dollars	Liability	
2017	\$ 925,108	7.8%	\$72,158	\$ 125,779	9.6%	\$88,810	\$ 157,240	8.9%	\$82,335	\$ 148,221	
2018	955,174	7.8	74,504	127,502	9.6	91,697	159,394	8.9	85,010	150,252	
2019	986,217	7.8	76,925	129,110	9.6	94,677	161,404	8.9	87,773	152,147	
2020	1,018,269	7.8	79,425	130,586	9.6	97,754	163,249	8.9	90,626	153,886	
2021	1,051,363	7.8	82,006	131,913	9.6	100,931	164,908	8.9	93,571	155,450	
2022	1,085,532	7.8	84,671	133,072	9.6	104,211	166,356	8.9	96,612	156,815	
2023	1,120,812	7.8	87,423	134,041	9.6	107,598	167,568	8.9	99,752	157,957	
2024	1,157,238	7.8	90,265	134,799	9.6	111,095	168,515	8.9	102,994	158,850	
2025	1,194,848	7.8	93,198	135,320	9.6	114,705	169,167	8.9	106,341	159,464	
2026	1,233,681	7.8	96,227	135,578	9.6	118,433	169,490	8.9	109,798	159,768	

		LT-5(65) Benefit P	rogram	L-7	Benefit Prog	gram	LT-8(65) Benefit Program			
		Estimated Employer		Unfunded	Estimated	Employer	Unfunded	Estimated	Employer	Unfunded	
	Estimated	Contri	Contribution		Contri	bution	Actuarial	Contri	bution	Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 925,108	10.4%	\$96,211	\$ 174,062	11.3%	\$104,537	\$ 188,684	11.8%	\$109,163	\$ 199,887	
2018	955,174	10.4	99,338	176,447	11.3	107,935	191,269	11.8	112,711	202,625	
2019	986,217	10.4	102,567	178,672	11.3	111,443	193,681	11.8	116,374	205,180	
2020	1,018,269	10.4	105,900	180,715	11.3	115,064	195,895	11.8	120,156	207,526	
2021	1,051,363	10.4	109,342	182,551	11.3	118,804	197,885	11.8	124,061	209,635	
2022	1,085,532	10.4	112,895	184,154	11.3	122,665	199,623	11.8	128,093	211,476	
2023	1,120,812	10.4	116,564	185,495	11.3	126,652	201,077	11.8	132,256	213,016	
2024	1,157,238	10.4	120,353	186,543	11.3	130,768	202,213	11.8	136,554	214,220	
2025	1,194,848	10.4	124,264	187,264	11.3	135,018	202,995	11.8	140,992	215,048	
2026	1,233,681	10.4	128,303	187,622	11.3	139,406	203,383	11.8	145,574	215,459	

		L-12 Benefit Program			LT-14((65) Benefit I	Program	L-6 Benefit Program			
		Estimated Employer		Unfunded	Estimated	Employer	Unfunded	Unfunded Estimated		Unfunded	
	Estimated	Contri	bution	Actuarial	Contribution		Actuarial Contribution		bution	Actuarial	
Valuation	Projected	As a % of	Annual	Accrued	As a % of	Annual	Accrued	As a % of	Annual	Accrued	
Year	Payroll	Payroll	Dollars	Liability	Payroll	Dollars	Liability	Payroll	Dollars	Liability	
2017	\$ 925,108	13.0%	\$120,264	\$ 220,075	13.3%	\$123,039	\$ 225,698	14.7%	\$135,991	\$ 251,533	
2018	955,174	13.0	124,173	223,090	13.3	127,038	228,790	14.7	140,411	254,979	
2019	986,217	13.0	128,208	225,903	13.3	131,167	231,675	14.7	144,974	258,194	
2020	1,018,269	13.0	132,375	228,486	13.3	135,430	234,324	14.7	149,686	261,146	
2021	1,051,363	13.0	136,677	230,808	13.3	139,831	236,705	14.7	154,550	263,799	
2022	1,085,532	13.0	141,119	232,835	13.3	144,376	238,784	14.7	159,573	266,116	
2023	1,120,812	13.0	145,706	234,531	13.3	149,068	240,523	14.7	164,759	268,054	
2024	1,157,238	13.0	150,441	235,856	13.3	153,913	241,882	14.7	170,114	269,569	
2025	1,194,848	13.0	155,330	236,768	13.3	158,915	242,817	14.7	175,643	270,611	
2026	1,233,681	13.0	160,379	237,220	13.3	164,080	243,281	14.7	181,351	271,128	

- 1) The purpose of the above projections is to comply with the requirements of Section 105.660 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.25%.
- 3) Due to the estimated nature of the above projections, certain but not all aspects of the Missouri LAGERS funding policy have been incorporated in the above projections.
- 4) Differences between the date of the initial valuation and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 5) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.