



THE CITY OF CAPE GIRARDEAU
SUPPLEMENTAL ACTUARIAL VALUATION OF ALTERNATE LAGERS BENEFITS
FEBRUARY 28, 2015

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February 26, 2016

The City of Cape Girardeau
Cape Girardeau, Missouri

Ladies and Gentlemen:

Submitted in this report are the results of an actuarial valuation prepared to determine the employer contribution rates required to support, for your employees, certain benefits provided by the Missouri Local Government Employees Retirement System (LAGERS). This report contains the information needed to comply with Missouri state disclosure requirements regarding changes in LAGERS benefits by a political subdivision (Sections 105.660 - 105.685 RSMo).

The contribution requirement for benefits likely to accrue as a result of the future service of your employees is described in this report as the current cost plus the disability cost. This contribution rate, expressed as a percent of active employee payroll, will depend on the benefit plan adopted.

The contribution requirement to pay for benefits likely to result from service rendered by your employees prior to the valuation date, the liability for which is not covered by present employer account balances, is described in this report as the prior service cost. The prior service cost is the rate of contribution designed to pay for any unfunded actuarial accrued liability.

Section 70.730 of the Revised Statutes of Missouri requires participating employers to contribute the current cost, disability cost, and prior service cost for the benefit plan in effect. These contributions are mandatory.

The actuarial assumptions and methods used to determine the stated costs are described in Appendix I of this 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 28, 2015. Annual actuarial valuation results for the political subdivision and information pertaining to those results may be found in the political subdivision's annual actuarial valuation report as of February 28, 2015.

The computed contribution rates will permit the System to continue to operate in accordance with the actuarial principles of level cost financing and the state law which governs LAGERS. Summary provisions of the law as well as benefit illustrations can be found in Appendices II and III.

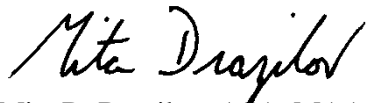
The City of Cape Girardeau
February 26, 2016
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In accordance with 105.675 RSMo, note that this entire report must be available as public information for at least 45 calendar days prior to the date final official action is taken by your governing body to adopt an alternate benefit plan. You may wish to make notice of this report in the official minutes of the next meeting of your governing body. This action would not be binding on your subdivision, yet would establish the beginning date of the 45 day waiting period. The statement of cost must also be provided to the Joint Committee on Public Employee Retirement. The statement can be mailed to the State Capitol, Room 219-A, Jefferson City, MO 65101 or e-mailed to jcpers@senate.mo.gov.

The valuation was based on the same data as was used in your February 28, 2015 annual actuarial valuation. If you have any questions concerning this report or LAGERS in general, please contact the LAGERS office in Jefferson City.

Mita D. 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.

Respectfully submitted,

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

Mita D. Drazilov, ASA, MAAA

Alternate Plan Provisions Affecting Employer Contribution Rates

The law governing LAGERS provides for either a contributory plan or a non-contributory plan, with benefits based on either a 5 year or 3 year Final Average Salary (FAS).

Contributory Plan. Under the contributory plan, each covered member contributes 4% of compensation to LAGERS. If an employee terminates before being eligible for an immediate benefit, the member's contributions, plus any interest credited to the member's individual account, are refunded upon request.

Non-Contributory Plan. Under the non-contributory plan, there is no individual employee contribution to the plan, no individual account maintained for each employee, and no refund paid to employees who terminate before being eligible for a benefit.

The law further provides for nine different benefit programs (benefit formula factors) and allows an employer to elect "rule of 80" eligibility for benefits. Under the rule of 80, employees are eligible for unreduced benefits at the earlier of (i) attainment of their minimum service retirement age or (ii) such time as their years of age plus years of LAGERS credited service equals 80.

In total this allows for 72 different combinations of benefit plans, giving employers considerable latitude in designing the retirement program that best suits their particular situation.

The applicable combinations of these items may be changed from time to time, however, there are limitations on the frequency of changes. A more detailed description of plan provisions may be found in Appendix II of this report.

The City of Cape Girardeau
Computed Employer Contribution Rates - General Employees
As of February 28, 2015

<u>Benefit Plans</u>	<u>Present</u>	<u>Alternate</u>
# Benefit Program:	LT-8(65)	LT-14(65)
Final Average Salary:	3 year	3 year
Member Contributions:	Non-Contributory	Non-Contributory
Retirement Eligibility:	Regular	Regular

<u>Present Plan</u>	<u>Rates</u>
Current Service Cost	8.6%
Disability Cost	0.2
Prior Service Cost	<u>(0.1)</u>
Total	8.7%

<u>Alternate Plan</u>	
Current Service Cost	9.8%
Disability Cost	0.3
Prior Service Cost*	<u>1.7</u>
Total	11.8%

**INCREASE IN CONTRIBUTION
RATE FOR ALTERNATE PLAN** 3.1%

Employer contribution rates shown above are for the fiscal year beginning in 2016. If the alternate plan is adopted prior to the fiscal year beginning in 2016, 3.1% would be added to the employer contribution rate currently in effect.

Change in provisions from present plan.

* Adoption of the alternate plan would increase the actuarial accrued liability by \$2,253,230 which was amortized over a 20 year period to compute the increase in the Prior Service Cost.

The City of Cape Girardeau
Projected Estimated Employer Contribution Rates - General Employees
As of February 28, 2015

Valuation Date Feb. 28	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
2015	\$8,987,241	8.7%	\$781,890	\$(139,103)	11.8%	\$1,060,494	\$2,114,127	3.1%	\$278,604	\$2,253,230
2016	9,301,794	8.7	809,256	(141,470)	11.8	1,097,612	2,109,196	3.1	288,356	2,250,666
2017	9,627,357	8.7	837,580	(143,738)	11.8	1,136,028	2,098,371	3.1	298,448	2,242,109
2018	9,964,314	8.7	866,895	(145,890)	11.8	1,175,789	2,081,031	3.1	308,894	2,226,921
2019	10,313,065	8.7	897,237	(147,910)	11.8	1,216,942	2,056,502	3.1	319,705	2,204,412
2020	10,674,022	8.7	928,640	(149,777)	11.8	1,259,535	2,024,054	3.1	330,895	2,173,831
2021	11,047,613	8.7	961,142	(151,469)	11.8	1,303,618	1,982,900	3.1	342,476	2,134,369
2022	11,434,279	8.7	994,782	(152,963)	11.8	1,349,245	1,932,187	3.1	354,463	2,085,150
2023	11,834,479	8.7	1,029,600	(154,233)	11.8	1,396,469	1,870,990	3.1	366,869	2,025,223
2024	12,248,686	8.7	1,065,636	(155,251)	11.8	1,445,345	1,798,311	3.1	379,709	1,953,562

AAL = Actuarial Accrued Liability

AVA = Actuarial Value of Assets

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) For purposes of the above projections, it was assumed that all actuarial assumptions would be realized. In particular, it was assumed that the actuarial value of assets would earn 7.25% in each year.
- 3) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.50%.
- 4) 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.
- 5) Differences between fiscal end dates of the employer and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 6) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Other disclosures required by Section 105.665 of the Revised Statutes of Missouri (RSMo):

- 1) As of February 28, 2015, the actuarial value of assets is \$19,265,363; the estimated market value of assets is \$20,560,686; the actuarial accrued liability is \$19,126,260; and the funded ratio is 100.7%. These results are based on the assets and liabilities associated with the Employer Accumulation Fund and the Member Deposit Fund for this division.
- 2) Under Section 70.730 of the Revised Statutes of Missouri, the computed employer contribution rate shall not exceed the contribution rate for the immediately preceding fiscal year by more than one percent (not including the effects of any benefit changes). As of February 28, 2015, there is no difference between the capped and uncapped employer contribution rate.

The City of Cape Girardeau
Projected Estimated Employer Contribution Rates - Police Employees
As of February 28, 2015

Valuation Date Feb. 28	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	
2015	\$3,223,790	11.5%	\$370,736	\$729,926	14.4%	\$464,226	\$1,484,127	2.9%	\$93,490	\$754,201
2016	3,336,623	11.5	383,712	713,401	14.4	480,474	1,466,744	2.9	96,762	753,343
2017	3,453,405	11.5	397,142	693,249	14.4	497,290	1,443,728	2.9	100,148	750,479
2018	3,574,274	11.5	411,042	669,119	14.4	514,695	1,414,514	2.9	103,653	745,395
2019	3,699,374	11.5	425,428	640,636	14.4	532,710	1,378,496	2.9	107,282	737,860
2020	3,828,852	11.5	440,318	607,394	14.4	551,355	1,335,019	2.9	111,037	727,625
2021	3,962,862	11.5	455,729	568,952	14.4	570,652	1,283,368	2.9	114,923	714,416
2022	4,101,562	11.5	471,680	524,836	14.4	590,625	1,222,777	2.9	118,945	697,941
2023	4,245,117	11.5	488,188	474,535	14.4	611,297	1,152,417	2.9	123,109	677,882
2024	4,393,696	11.5	505,275	417,494	14.4	632,692	1,071,390	2.9	127,417	653,896

AAL = Actuarial Accrued Liability
AVA = Actuarial Value of Assets

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) For purposes of the above projections, it was assumed that all actuarial assumptions would be realized. In particular, it was assumed that the actuarial value of assets would earn 7.25% in each year.
- 3) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.50%.
- 4) 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.
- 5) Differences between fiscal end dates of the employer and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 6) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Other disclosures required by Section 105.665 of the Revised Statutes of Missouri (RSMo):

- 1) As of February 28, 2015, the actuarial value of assets is \$7,171,751; the estimated market value of assets is \$7,653,950; the actuarial accrued liability is \$7,901,677; and the funded ratio is 90.8%. These results are based on the assets and liabilities associated with the Employer Accumulation Fund and the Member Deposit Fund for this division.
- 2) Under Section 70.730 of the Revised Statutes of Missouri, the computed employer contribution rate shall not exceed the contribution rate for the immediately preceding fiscal year by more than one percent (not including the effects of any benefit changes). As of February 28, 2015, there is no difference between the capped and uncapped employer contribution rate.

The City of Cape Girardeau
Computed Employer Contribution Rates - Fire Employees
As of February 28, 2015

<u>Benefit Plans</u>	<u>Present</u>	<u>Alternate</u>
# Benefit Program:	LT-8(65)	LT-14(65)
Final Average Salary:	3 year	3 year
Member Contributions:	Non-Contributory	Non-Contributory
Retirement Eligibility:	Regular	Regular

<u>Present Plan</u>	<u>Rates</u>
Current Service Cost	11.8%
Disability Cost	0.2
Prior Service Cost	<u>(1.1)</u>
Total	10.9%
<u>Alternate Plan</u>	
Current Service Cost	13.0%
Disability Cost	0.3
Prior Service Cost*	<u>0.8</u>
Total	14.1%
INCREASE IN CONTRIBUTION RATE FOR ALTERNATE PLAN	<u><u>3.2%</u></u>

Employer contribution rates shown above are for the fiscal year beginning in 2016. If the alternate plan is adopted prior to the fiscal year beginning in 2016, 3.2% would be added to the employer contribution rate currently in effect.

Change in provisions from present plan.

* Adoption of the alternate plan would increase the actuarial accrued liability by \$809,639 which was amortized over a 20 year period to compute the increase in the Prior Service Cost.

The City of Cape Girardeau
Projected Estimated Employer Contribution Rates - Fire Employees
As of February 28, 2015

Valuation Date Feb. 28	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
2015	\$3,017,659	10.9%	\$328,925	\$(406,018)	14.1%	\$425,490	\$403,621	3.2%	\$96,565	\$809,639
2016	3,123,277	10.9	340,437	(400,219)	14.1	440,382	408,499	3.2	99,945	808,718
2017	3,232,592	10.9	352,353	(392,767)	14.1	455,795	412,876	3.2	103,442	805,643
2018	3,345,733	10.9	364,685	(383,498)	14.1	471,748	416,688	3.2	107,063	800,186
2019	3,462,834	10.9	377,449	(372,236)	14.1	488,260	419,861	3.2	110,811	792,097
2020	3,584,033	10.9	390,660	(358,789)	14.1	505,349	422,320	3.2	114,689	781,109
2021	3,709,474	10.9	404,333	(342,954)	14.1	523,036	423,976	3.2	118,703	766,930
2022	3,839,306	10.9	418,484	(324,505)	14.1	541,342	424,739	3.2	122,858	749,244
2023	3,973,682	10.9	433,131	(303,203)	14.1	560,289	424,508	3.2	127,158	727,711
2024	4,112,761	10.9	448,291	(278,788)	14.1	579,899	423,173	3.2	131,608	701,961

AAL = Actuarial Accrued Liability
AVA = Actuarial Value of Assets

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) For purposes of the above projections, it was assumed that all actuarial assumptions would be realized. In particular, it was assumed that the actuarial value of assets would earn 7.25% in each year.
- 3) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.50%.
- 4) 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.
- 5) Differences between fiscal end dates of the employer and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 6) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Other disclosures required by Section 105.665 of the Revised Statutes of Missouri (RSMo):

- 1) As of February 28, 2015, the actuarial value of assets is \$9,029,142; the estimated market value of assets is \$9,636,224; the actuarial accrued liability is \$8,623,124; and the funded ratio is 104.7%. These results are based on the assets and liabilities associated with the Employer Accumulation Fund and the Member Deposit Fund for this division.
- 2) Under Section 70.730 of the Revised Statutes of Missouri, the computed employer contribution rate shall not exceed the contribution rate for the immediately preceding fiscal year by more than one percent (not including the effects of any benefit changes). As of February 28, 2015, there is no difference between the capped and uncapped employer contribution rate.

The City of Cape Girardeau
Computed Employer Contribution Rates - General Employees
As of February 28, 2015

<u>Benefit Plans</u>	<u>Present</u>	<u>Alternate</u>
# Benefit Program:	LT-8(65)	L-6
Final Average Salary:	3 year	3 year
Member Contributions:	Non-Contributory	Non-Contributory
Retirement Eligibility:	Regular	Regular

<u>Present Plan</u>	<u>Rates</u>
Current Service Cost	8.6%
Disability Cost	0.2
Prior Service Cost	<u>(0.1)</u>
Total	8.7%
<u>Alternate Plan</u>	
Current Service Cost	11.0%
Disability Cost	0.3
Prior Service Cost*	<u>3.5</u>
Total	14.8%
INCREASE IN CONTRIBUTION RATE FOR ALTERNATE PLAN	<u>6.1%</u>

Employer contribution rates shown above are for the fiscal year beginning in 2016. If the alternate plan is adopted prior to the fiscal year beginning in 2016, 6.1% would be added to the employer contribution rate currently in effect.

Change in provisions from present plan.

* Adoption of the alternate plan would increase the actuarial accrued liability by \$4,504,839 which was amortized over a 20 year period to compute the increase in the Prior Service Cost.

The City of Cape Girardeau
Projected Estimated Employer Contribution Rates - General Employees
As of February 28, 2015

Valuation Date Feb. 28	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
2015	\$8,987,241	8.7%	\$781,890	\$(139,103)	14.8%	\$1,330,112	\$4,365,736	6.1%	\$548,222	\$4,504,839
2016	9,301,794	8.7	809,256	(141,470)	14.8	1,376,666	4,358,243	6.1	567,410	4,499,713
2017	9,627,357	8.7	837,580	(143,738)	14.8	1,424,849	4,338,868	6.1	587,269	4,482,606
2018	9,964,314	8.7	866,895	(145,890)	14.8	1,474,718	4,306,351	6.1	607,823	4,452,241
2019	10,313,065	8.7	897,237	(147,910)	14.8	1,526,334	4,259,327	6.1	629,097	4,407,237
2020	10,674,022	8.7	928,640	(149,777)	14.8	1,579,755	4,196,321	6.1	651,115	4,346,098
2021	11,047,613	8.7	961,142	(151,469)	14.8	1,635,047	4,115,734	6.1	673,905	4,267,203
2022	11,434,279	8.7	994,782	(152,963)	14.8	1,692,273	4,015,836	6.1	697,491	4,168,799
2023	11,834,479	8.7	1,029,600	(154,233)	14.8	1,751,503	3,894,755	6.1	721,903	4,048,988
2024	12,248,686	8.7	1,065,636	(155,251)	14.8	1,812,806	3,750,468	6.1	747,170	3,905,719

AAL = Actuarial Accrued Liability
AVA = Actuarial Value of Assets

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) For purposes of the above projections, it was assumed that all actuarial assumptions would be realized. In particular, it was assumed that the actuarial value of assets would earn 7.25% in each year.
- 3) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.50%.
- 4) 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.
- 5) Differences between fiscal end dates of the employer and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 6) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Other disclosures required by Section 105.665 of the Revised Statutes of Missouri (RSMo):

- 1) As of February 28, 2015, the actuarial value of assets is \$19,265,363; the estimated market value of assets is \$20,560,686; the actuarial accrued liability is \$19,126,260; and the funded ratio is 100.7%. These results are based on the assets and liabilities associated with the Employer Accumulation Fund and the Member Deposit Fund for this division.
- 2) Under Section 70.730 of the Revised Statutes of Missouri, the computed employer contribution rate shall not exceed the contribution rate for the immediately preceding fiscal year by more than one percent (not including the effects of any benefit changes). As of February 28, 2015, there is no difference between the capped and uncapped employer contribution rate.

The City of Cape Girardeau
Computed Employer Contribution Rates - Police Employees
As of February 28, 2015

<u>Benefit Plans</u>	<u>Present</u>	<u>Alternate</u>
# Benefit Program:	LT-8(65)	L-6
Final Average Salary:	3 year	3 year
Member Contributions:	Non-Contributory	Non-Contributory
Retirement Eligibility:	Regular	Regular

<u>Present Plan</u>	<u>Rates</u>
Current Service Cost	9.2%
Disability Cost	0.2
Prior Service Cost	<u>2.1</u>
Total	11.5%

<u>Alternate Plan</u>	
Current Service Cost	11.3%
Disability Cost	0.3
Prior Service Cost*	<u>5.4</u>
Total	17.0%

**INCREASE IN CONTRIBUTION
RATE FOR ALTERNATE PLAN** 5.5%

Employer contribution rates shown above are for the fiscal year beginning in 2016. If the alternate plan is adopted prior to the fiscal year beginning in 2016, 5.5% would be added to the employer contribution rate currently in effect.

Change in provisions from present plan.

* Adoption of the alternate plan would increase the actuarial accrued liability by \$1,508,409 which was amortized over a 20 year period to compute the increase in the Prior Service Cost.

The City of Cape Girardeau
Projected Estimated Employer Contribution Rates - Police Employees
As of February 28, 2015

Valuation Date Feb. 28	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	
2015	\$3,223,790	11.5%	\$370,736	\$729,926	17.0%	\$548,044	\$2,238,335	5.5%	\$177,308	\$1,508,409
2016	3,336,623	11.5	383,712	713,401	17.0	567,226	2,220,094	5.5	183,514	1,506,693
2017	3,453,405	11.5	397,142	693,249	17.0	587,079	2,194,213	5.5	189,937	1,500,964
2018	3,574,274	11.5	411,042	669,119	17.0	607,627	2,159,916	5.5	196,585	1,490,797
2019	3,699,374	11.5	425,428	640,636	17.0	628,894	2,116,364	5.5	203,466	1,475,728
2020	3,828,852	11.5	440,318	607,394	17.0	650,905	2,062,650	5.5	210,587	1,455,256
2021	3,962,862	11.5	455,729	568,952	17.0	673,687	1,997,791	5.5	217,958	1,428,839
2022	4,101,562	11.5	471,680	524,836	17.0	697,266	1,920,725	5.5	225,586	1,395,889
2023	4,245,117	11.5	488,188	474,535	17.0	721,670	1,830,306	5.5	233,482	1,355,771
2024	4,393,696	11.5	505,275	417,494	17.0	746,928	1,725,293	5.5	241,653	1,307,799

AAL = Actuarial Accrued Liability
AVA = Actuarial Value of Assets

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) For purposes of the above projections, it was assumed that all actuarial assumptions would be realized. In particular, it was assumed that the actuarial value of assets would earn 7.25% in each year.
- 3) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.50%.
- 4) 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.
- 5) Differences between fiscal end dates of the employer and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 6) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Other disclosures required by Section 105.665 of the Revised Statutes of Missouri (RSMo):

- 1) As of February 28, 2015, the actuarial value of assets is \$7,171,751; the estimated market value of assets is \$7,653,950; the actuarial accrued liability is \$7,901,677; and the funded ratio is 90.8%. These results are based on the assets and liabilities associated with the Employer Accumulation Fund and the Member Deposit Fund for this division.
- 2) Under Section 70.730 of the Revised Statutes of Missouri, the computed employer contribution rate shall not exceed the contribution rate for the immediately preceding fiscal year by more than one percent (not including the effects of any benefit changes). As of February 28, 2015, there is no difference between the capped and uncapped employer contribution rate.

The City of Cape Girardeau
Computed Employer Contribution Rates - Fire Employees
As of February 28, 2015

<u>Benefit Plans</u>	<u>Present</u>	<u>Alternate</u>
# Benefit Program:	LT-8(65)	L-6
Final Average Salary:	3 year	3 year
Member Contributions:	Non-Contributory	Non-Contributory
Retirement Eligibility:	Regular	Regular

<u>Present Plan</u>	<u>Rates</u>
Current Service Cost	11.8%
Disability Cost	0.2
Prior Service Cost	<u>(1.1)</u>
Total	10.9%

<u>Alternate Plan</u>	
Current Service Cost	14.2%
Disability Cost	0.3
Prior Service Cost*	<u>2.7</u>
Total	17.2%

**INCREASE IN CONTRIBUTION
RATE FOR ALTERNATE PLAN** 6.3%

Employer contribution rates shown above are for the fiscal year beginning in 2016. If the alternate plan is adopted prior to the fiscal year beginning in 2016, 6.3% would be added to the employer contribution rate currently in effect.

Change in provisions from present plan.

* Adoption of the alternate plan would increase the actuarial accrued liability by \$1,619,240 which was amortized over a 20 year period to compute the increase in the Prior Service Cost.

The City of Cape Girardeau
Projected Estimated Employer Contribution Rates - Fire Employees
As of February 28, 2015

Valuation Date Feb. 28	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
2015	\$3,017,659	10.9%	\$328,925	\$(406,018)	17.2%	\$519,037	\$1,213,222	6.3%	\$190,112	\$1,619,240
2016	3,123,277	10.9	340,437	(400,219)	17.2	537,204	1,217,179	6.3	196,767	1,617,398
2017	3,232,592	10.9	352,353	(392,767)	17.2	556,006	1,218,481	6.3	203,653	1,611,248
2018	3,345,733	10.9	364,685	(383,498)	17.2	575,466	1,216,836	6.3	210,781	1,600,334
2019	3,462,834	10.9	377,449	(372,236)	17.2	595,607	1,211,922	6.3	218,158	1,584,158
2020	3,584,033	10.9	390,660	(358,789)	17.2	616,454	1,203,392	6.3	225,794	1,562,181
2021	3,709,474	10.9	404,333	(342,954)	17.2	638,030	1,190,869	6.3	233,697	1,533,823
2022	3,839,306	10.9	418,484	(324,505)	17.2	660,361	1,173,947	6.3	241,877	1,498,452
2023	3,973,682	10.9	433,131	(303,203)	17.2	683,473	1,152,184	6.3	250,342	1,455,387
2024	4,112,761	10.9	448,291	(278,788)	17.2	707,395	1,125,102	6.3	259,104	1,403,890

AAL = Actuarial Accrued Liability
AVA = Actuarial Value of Assets

Notes regarding the above projections:

- 1) The purpose of the above projections is to comply with the requirements of Section 105.665 of the Revised Statutes of Missouri (RSMo). The projection results may not be applicable for other purposes.
- 2) For purposes of the above projections, it was assumed that all actuarial assumptions would be realized. In particular, it was assumed that the actuarial value of assets would earn 7.25% in each year.
- 3) Estimated projected payroll is based upon the valuation payroll, increased each future year by 3.50%.
- 4) 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.
- 5) Differences between fiscal end dates of the employer and the actuarial valuation date of February 28th have not been incorporated in the above results.
- 6) The actual employer contribution rates for future valuation dates will be based upon actual data as of the future valuation date.

Other disclosures required by Section 105.665 of the Revised Statutes of Missouri (RSMo):

- 1) As of February 28, 2015, the actuarial value of assets is \$9,029,142; the estimated market value of assets is \$9,636,224; the actuarial accrued liability is \$8,623,124; and the funded ratio is 104.7%. These results are based on the assets and liabilities associated with the Employer Accumulation Fund and the Member Deposit Fund for this division.
- 2) Under Section 70.730 of the Revised Statutes of Missouri, the computed employer contribution rate shall not exceed the contribution rate for the immediately preceding fiscal year by more than one percent (not including the effects of any benefit changes). As of February 28, 2015, there is no difference between the capped and uncapped employer contribution rate.

APPENDIX I

SUMMARY OF FINANCIAL ASSUMPTIONS

Summary of Assumptions Used in Actuarial Valuations

Assumptions Adopted by Board of Trustees After Consulting With Actuary

1. The investment return rate used in making the valuations was 7.25% per year, compounded annually. This rate of return is not the assumed real rate of return. The real rate of return is the rate of investment return in excess of the inflation rate. Considering other financial assumptions, the 7.25% investment return rate translates to an assumed real rate of return of 3.75%. Adopted 2011.
2. The mortality table used to evaluate mortality among active members was 75% of the RP-2000 Combined Healthy Table set back 0 years for men and 0 years for women. It was assumed that 50% of pre-retirement deaths would be duty related. Adopted 2011.
3. The mortality table used in evaluating allowances to be paid was 105% of the 1994 Group Annuity Mortality (GAM) Table set back 0 years for men and 0 years for women. The disability post-retirement rates were equal to the standard rates set forward 10 years. Adopted 2011.
4. The probabilities of withdrawal from service, together with individual pay increase assumptions, are shown in Schedule 1. Adopted 2011.
5. The probabilities of retirement with an age and service allowance are shown in Schedule 2. Adopted 2011.
6. Total active member payroll is assumed to increase 3.50% a year, which is the portion of the individual pay increase assumptions attributable to wage inflation. In effect, this assumes no change in the number of active members per employer. Adopted 2011.
7. An individual entry-age actuarial cost method of valuation was used in determining age and service allowance actuarial liabilities and normal cost. Adopted 1986.
8. The data about persons now covered was furnished by the political subdivision. Although examined for general reasonableness, the data was not audited by us.

Schedule 1.

**Withdrawal From Active Employment Before Age & Service Retirement
and Individual Pay Increase Assumptions**

Sample Ages	Years of Service	Percent of Active Members Separating Within Next Year				Percent Increase in Individual's Pay During Next Year Excluding Fire
		General Members		Police	Fire	
		Men	Women			
All	0	18.00%	21.00%	18.00%	8.00%	
	1	16.00	20.00	17.00	7.00	
	2	14.00	16.00	16.00	6.00	
	3	11.00	13.00	13.00	6.00	
	4	9.00	12.00	12.00	5.00	
25	5 & Over	7.50	10.70	10.10	5.00	6.8%
30		6.50	9.40	8.00	4.00	6.0
35		5.10	7.20	6.10	2.80	5.5
40		3.80	5.50	4.70	2.20	5.0
45		3.00	4.20	3.60	1.80	4.5
50		2.40	3.40	1.80	1.00	4.1
55		1.80	2.50	1.00	0.50	3.9
60	1.00	1.20	0.00	0.00	3.8	
65	0.00	0.00	0.00	0.00	3.5	

Sample Ages	Percent Increase in Individual's Pay During Next Year Fire
	Fire
25	8.6%
30	6.7
35	5.4
40	4.7
45	4.4
50	4.1
55	3.9
60	3.8
65	3.5

Schedule 2.

Percent of Eligible Active Members Retiring Within Next Year Without Rule of 80 Eligibility

Early Retirement

Retirement Ages	General Members		Retirement Ages	Police	Fire
	Men	Women			
55	2.50%	3.00%	50	3.00%	2.50%
56	2.50%	3.00%	51	3.00%	2.50%
57	2.50%	3.00%	52	3.00%	2.50%
58	2.50%	3.00%	53	3.00%	2.50%
59	2.50%	3.00%	54	3.00%	2.50%

Normal Retirement

Retirement Ages	General Members		Retirement Ages	Police	Fire
	Men	Women			
60	10%	10%	55	10%	15%
61	10	10	56	10	15
62	25	15	57	10	10
63	25	15	58	10	15
64	20	15	59	10	15
65	25	20	60	10	20
66	25	25	61	10	10
67	20	20	62	25	30
68	20	20	63	20	30
69	20	15	64	20	25
70	100	100	65	100	100

Schedule 2. (Continued)

**Percent of Eligible Active Members Retiring Within Next Year
With Rule of 80 Eligibility**

Retirement Ages	General Members		Police	Fire
	Men	Women		
50	15%	15%	25%	25%
51	15	15	25	15
52	15	15	15	15
53	15	15	15	15
54	15	15	15	15
55	15	15	15	15
56	15	15	15	15
57	15	15	15	15
58	15	15	15	15
59	15	15	15	20
60	15	15	15	30
61	15	15	25	30
62	30	15	30	45
63	30	15	30	45
64	30	20	30	45
65	30	25	100	100
66	30	25		
67	30	25		
68	30	25		
69	30	25		
70	100	100		

APPENDIX II

SUMMARY OF LAGERS PROVISIONS

Missouri Local Government Employees Retirement System
Brief Summary of LAGERS
Benefits and Conditions Evaluated and/or Considered
as of February 28, 2015
(Section References are to RSMo)

Voluntary Retirement. Sections 70.645 & 70.600. A member may retire with an age & service allowance after both (i) completing 5 years of credited service, and (ii) attaining the minimum service retirement age.

The minimum service retirement age is age 60 for a general employee and age 55 for a police or fire employee. Optionally, employers may also elect to provide for unreduced benefits for employees whose combination of years of age and years of service equals 80 or more.

Final Average Salary. Section 70.600. The average of a member's monthly compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) of credited service producing the highest monthly average, which period is contained within the 120 consecutive months of credited service immediately preceding retirement.

Age & Service Allowance. Section 70.655. The allowance, payable monthly for life, equals a specified percent of a member's final average salary multiplied by the number of years of credited service. Each employer elects the percent applicable to its members, from the following programs:

L-1 Benefit Program:	1.00% for life
L-3 Benefit Program:	1.25% for life
L-7 Benefit Program:	1.50% for life
L-9 Benefit Program:	1.60% for life
L-12 Benefit Program:	1.75% for life
L-6 Benefit Program:	2.00% for life
LT-4(65) Benefit Program:	1.00% for life, plus 1.00% to age 65
LT-5(65) Benefit Program:	1.25% for life, plus 0.75% to age 65
LT-8(65) Benefit Program:	1.50% for life, plus 0.50% to age 65
LT-10(65) Benefit Program:	1.60% for life, plus 0.40% to age 65
LT-14(65) Benefit Program:	1.75% for life, plus 0.25% to age 65

The only LT benefit programs available for adoption after August 1, 1994 are the LT(65) programs.

Benefit programs L-9 and LT-10(65) are unavailable for adoption after August 1, 2005.

Benefit program L-11, available only to groups not covered by social security, provides for 2.5% for life.

Subsequent to joining the System the governing body can elect to change benefit programs for the employees, but not more often than once every 2 years.

Early Allowance. Section 70.670. A member may retire with an early allowance after both (i) completing 5 years of credited service, and (ii) attaining age 55 if a general employee or age 50 if a police or fire employee. The early allowance amount, payable monthly for life, is computed in the same manner as an age & service allowance, based upon the service and earnings record to time of early retirement, but reduced to reflect the fact that the age when payments begin is younger than the minimum service retirement age. The amount of the reduction is 1/2 of 1% (.005) for each month the age at retirement is younger than the minimum service retirement age.

Deferred Allowance. Section 70.675. If a member leaves LAGERS-covered employment (i) before attaining the early retirement age, and (ii) after completing 5 years of credited service, the member becomes eligible for a deferred allowance; provided the former member lives to the minimum service retirement age and does not withdraw the accumulated contributions.

The deferred allowance amount, payable monthly for life from the minimum service retirement age, is computed in the same manner as an age & service allowance, based upon the service and earnings record to time of leaving LAGERS coverage.

Deferred allowances are also payable any time after reaching the early retirement age, with the reduction for early retirement noted on the previous page.

Non-Duty Disability Allowance. Section 70.680. A member with 5 or more years of credited service who becomes totally and permanently disabled from other than duty-connected causes becomes eligible to receive a non-duty disability allowance computed in the same manner as an age & service allowance, based upon the service & earnings record to time of disability.

Duty Disability Allowance. Section 70.680. A member regardless of credited service who becomes totally and permanently disabled from duty-connected causes becomes eligible to receive a duty disability allowance computed in the same manner as an age & service allowance, based upon the earnings record to time of disability but based upon the years of credited service the member would have completed had the member continued in LAGERS-covered employment to age 60.

Death-in-Service. Section 70.661. Upon the death of a member who had completed 5 years of credited service, the eligible surviving dependents receive the following benefits:

- (a) The surviving spouse receives an allowance equal to the Option A allowance (joint and 75% survivor benefit) computed based upon the deceased members' service & earnings record to time of death.
- (b) When no spouse benefit is payable, the dependent children under age 18 (age 23 if they are full time students) each receive an equal share of 60% of an age & service allowance computed based upon the deceased member's service & earnings record to time of death.
- (c) If the death is determined to be duty related, the 5 year service requirement is waived and the benefit is based on years of credited service the member would have completed had the member continued in LAGERS-covered employment to age 60.

Benefit Changes After Retirement. Section 70.655. For retirements effective after September 28, 1975, there is an annual redetermination of monthly benefit amount, beginning the October first following 12 months of retirement. As of each October first the amount of each eligible benefit is redetermined as follows:

- (a) Subject to the maximum in (b), the redetermined amount is the amount otherwise payable multiplied by: 100% plus up to 4%, as determined by the LAGERS Board of Trustees, for each full year of retirement.
- (b) The redetermined amount may not exceed the amount otherwise payable multiplied by the ratio of the Consumer Price Index for the immediately preceding month of June to the Consumer Price Index for the month of June immediately preceding retirement.

Member Contributions. Sections 70.690 & 70.705. Each member contributes 4% of compensation beginning after completion of sufficient employment for 6 months of credited service.

If a member leaves LAGERS-covered employment before an allowance is payable, the accumulated contributions are refunded to the member. If the member dies, his accumulated contributions are refunded to a designated beneficiary.

The law governing LAGERS also has a provision for the adoption of a non-contributory plan in which the full cost of LAGERS participation is paid by the employer. Adoption of the non-contributory provisions may be done at the time of membership or a later date; however, a change from contributory to non-contributory or vice-versa may not be made more frequently than every 2 years. Under the non-contributory provisions there is no individual account maintained for each employee and no refund of contributions if an employee terminates before being eligible for a benefit.

Employer Contributions. Section 70.730. Each employer contributes the remainder amounts necessary to finance the employees' participation in LAGERS. Contributions to LAGERS are determined based upon level-percent-of-payroll principles, so that contribution rates do not have to increase over decades of time.

APPENDIX III

BENEFIT ILLUSTRATIONS

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(L-1 Benefit Program is Years of Credited Service
times: 1.00% of FAS ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 525	\$ 875	\$1,400	93%
2,000	700	1,020	1,720	86%
2,500	875	1,165	2,040	82%
3,000	1,050	1,312	2,362	79%
3,500	1,225	1,457	2,682	77%
4,000	1,400	1,602	3,002	75%
25 Years of Service:				
\$1,500	\$ 375	\$ 875	\$1,250	83%
2,000	500	1,020	1,520	76%
2,500	625	1,165	1,790	72%
3,000	750	1,312	2,062	69%
3,500	875	1,457	2,332	67%
4,000	1,000	1,602	2,602	65%
15 Years of Service:				
\$1,500	\$225	\$ 875	\$1,100	73%
2,000	300	1,020	1,320	66%
2,500	375	1,165	1,540	62%
3,000	450	1,312	1,762	59%
3,500	525	1,457	1,982	57%
4,000	600	1,602	2,202	55%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(L-3 Benefit Program is Years of Credited Service
times: 1.25% of FAS ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 656	\$ 875	\$1,531	102%
2,000	875	1,020	1,895	95%
2,500	1,094	1,165	2,259	90%
3,000	1,313	1,312	2,625	88%
3,500	1,531	1,457	2,988	85%
4,000	1,750	1,602	3,352	84%
25 Years of Service:				
\$1,500	\$ 469	\$ 875	\$1,344	90%
2,000	625	1,020	1,645	82%
2,500	781	1,165	1,946	78%
3,000	938	1,312	2,250	75%
3,500	1,094	1,457	2,551	73%
4,000	1,250	1,602	2,852	71%
15 Years of Service:				
\$1,500	\$281	\$ 875	\$1,156	77%
2,000	375	1,020	1,395	70%
2,500	469	1,165	1,634	65%
3,000	563	1,312	1,875	63%
3,500	656	1,457	2,113	60%
4,000	750	1,602	2,352	59%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(L-7 Benefit Program is Years of Credited Service
times: 1.50% of FAS ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 788	\$ 875	\$1,663	111%
2,000	1,050	1,020	2,070	104%
2,500	1,313	1,165	2,478	99%
3,000	1,575	1,312	2,887	96%
3,500	1,838	1,457	3,295	94%
4,000	2,100	1,602	3,702	93%
25 Years of Service:				
\$1,500	\$ 563	\$ 875	\$1,438	96%
2,000	750	1,020	1,770	89%
2,500	938	1,165	2,103	84%
3,000	1,125	1,312	2,437	81%
3,500	1,313	1,457	2,770	79%
4,000	1,500	1,602	3,102	78%
15 Years of Service:				
\$1,500	\$338	\$ 875	\$1,213	81%
2,000	450	1,020	1,470	74%
2,500	563	1,165	1,728	69%
3,000	675	1,312	1,987	66%
3,500	788	1,457	2,245	64%
4,000	900	1,602	2,502	63%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(L-9 Benefit Program is Years of Credited Service
times: 1.60% of FAS ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 840	\$ 875	\$1,715	114%
2,000	1,120	1,020	2,140	107%
2,500	1,400	1,165	2,565	103%
3,000	1,680	1,312	2,992	100%
3,500	1,960	1,457	3,417	98%
4,000	2,240	1,602	3,842	96%
25 Years of Service:				
\$1,500	\$ 600	\$ 875	\$1,475	98%
2,000	800	1,020	1,820	91%
2,500	1,000	1,165	2,165	87%
3,000	1,200	1,312	2,512	84%
3,500	1,400	1,457	2,857	82%
4,000	1,600	1,602	3,202	80%
15 Years of Service:				
\$1,500	\$360	\$ 875	\$1,235	82%
2,000	480	1,020	1,500	75%
2,500	600	1,165	1,765	71%
3,000	720	1,312	2,032	68%
3,500	840	1,457	2,297	66%
4,000	960	1,602	2,562	64%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(L-12 Benefit Program is Years of Credited Service
times: 1.75% of FAS ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$ 919	\$ 875	\$1,794	120%
2,000	1,225	1,020	2,245	112%
2,500	1,531	1,165	2,696	108%
3,000	1,838	1,312	3,150	105%
3,500	2,144	1,457	3,601	103%
4,000	2,450	1,602	4,052	101%
25 Years of Service:				
\$1,500	\$ 656	\$ 875	\$1,531	102%
2,000	875	1,020	1,895	95%
2,500	1,094	1,165	2,259	90%
3,000	1,313	1,312	2,625	88%
3,500	1,531	1,457	2,988	85%
4,000	1,750	1,602	3,352	84%
15 Years of Service:				
\$1,500	\$ 394	\$ 875	\$1,269	85%
2,000	525	1,020	1,545	77%
2,500	656	1,165	1,821	73%
3,000	788	1,312	2,100	70%
3,500	919	1,457	2,376	68%
4,000	1,050	1,602	2,652	66%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(L-6 Benefit Program is Years of Credited Service
times: 2.00% of FAS ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$1,050	\$ 875	\$1,925	128%
2,000	1,400	1,020	2,420	121%
2,500	1,750	1,165	2,915	117%
3,000	2,100	1,312	3,412	114%
3,500	2,450	1,457	3,907	112%
4,000	2,800	1,602	4,402	110%
25 Years of Service:				
\$1,500	\$ 750	\$ 875	\$1,625	108%
2,000	1,000	1,020	2,020	101%
2,500	1,250	1,165	2,415	97%
3,000	1,500	1,312	2,812	94%
3,500	1,750	1,457	3,207	92%
4,000	2,000	1,602	3,602	90%
15 Years of Service:				
\$1,500	\$ 450	\$ 875	\$1,325	88%
2,000	600	1,020	1,620	81%
2,500	750	1,165	1,915	77%
3,000	900	1,312	2,212	74%
3,500	1,050	1,457	2,507	72%
4,000	1,200	1,602	2,802	70%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(L-11 Benefit Program is Years of Credited Service
times: 2.50% of FAS ¹)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³	Estimated Social Security ²	Estimated Monthly Total	
			\$	% of FAS
35 Years of Service:				
\$1,500	\$1,313		\$1,313	88%
2,000	1,750		1,750	88%
2,500	2,188		2,188	88%
3,000	2,625		2,625	88%
3,500	3,063		3,063	88%
4,000	3,500		3,500	88%
25 Years of Service:				
\$1,500	\$ 938		\$ 938	63%
2,000	1,250		1,250	63%
2,500	1,563		1,563	63%
3,000	1,875		1,875	63%
3,500	2,188		2,188	63%
4,000	2,500		2,500	63%
15 Years of Service:				
\$1,500	\$ 563		\$ 563	38%
2,000	750		750	38%
2,500	938		938	38%
3,000	1,125		1,125	38%
3,500	1,313		1,313	38%
4,000	1,500		1,500	38%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-4(62) Benefit Program is Years of Credited Service
times: 2.00% of FAS¹ to age 62)
1.00% of FAS¹ at age 62)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 62	At 62		To 62	At 62	To 62	At 62
35 Years of Service:							
\$1,500	\$1,050	\$ 525	\$ 718	\$1,050	\$1,243	70%	83%
2,000	1,400	700	837	1,400	1,537	70%	77%
2,500	1,750	875	955	1,750	1,830	70%	73%
3,000	2,100	1,050	1,076	2,100	2,126	70%	71%
3,500	2,450	1,225	1,194	2,450	2,419	70%	69%
4,000	2,800	1,400	1,313	2,800	2,713	70%	68%
25 Years of Service:							
\$1,500	\$ 750	\$ 375	\$ 718	\$ 750	\$1,093	50%	73%
2,000	1,000	500	837	1,000	1,337	50%	67%
2,500	1,250	625	955	1,250	1,580	50%	63%
3,000	1,500	750	1,076	1,500	1,826	50%	61%
3,500	1,750	875	1,194	1,750	2,069	50%	59%
4,000	2,000	1,000	1,313	2,000	2,313	50%	58%
15 Years of Service:							
\$1,500	\$ 450	\$225	\$ 718	\$ 450	\$ 943	30%	63%
2,000	600	300	837	600	1,137	30%	57%
2,500	750	375	955	750	1,330	30%	53%
3,000	900	450	1,076	900	1,526	30%	51%
3,500	1,050	525	1,194	1,050	1,719	30%	49%
4,000	1,200	600	1,313	1,200	1,913	30%	48%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 62 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-4(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS¹ to age 65)
1.00% of FAS¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 525	\$ 875	\$1,050	\$1,400	70%	93%
2,000	1,400	700	1,020	1,400	1,720	70%	86%
2,500	1,750	875	1,165	1,750	2,040	70%	82%
3,000	2,100	1,050	1,312	2,100	2,362	70%	79%
3,500	2,450	1,225	1,457	2,450	2,682	70%	77%
4,000	2,800	1,400	1,602	2,800	3,002	70%	75%
25 Years of Service:							
\$1,500	\$ 750	\$ 375	\$ 875	\$ 750	\$1,250	50%	83%
2,000	1,000	500	1,020	1,000	1,520	50%	76%
2,500	1,250	625	1,165	1,250	1,790	50%	72%
3,000	1,500	750	1,312	1,500	2,062	50%	69%
3,500	1,750	875	1,457	1,750	2,332	50%	67%
4,000	2,000	1,000	1,602	2,000	2,602	50%	65%
15 Years of Service:							
\$1,500	\$ 450	\$225	\$ 875	\$ 450	\$1,100	30%	73%
2,000	600	300	1,020	600	1,320	30%	66%
2,500	750	375	1,165	750	1,540	30%	62%
3,000	900	450	1,312	900	1,762	30%	59%
3,500	1,050	525	1,457	1,050	1,982	30%	57%
4,000	1,200	600	1,602	1,200	2,202	30%	55%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-5(62) Benefit Program is Years of Credited Service
times: 2.00% of FAS¹ to age 62)
1.25% of FAS¹ at age 62)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 62	At 62		To 62	At 62	To 62	At 62
35 Years of Service:							
\$1,500	\$1,050	\$ 656	\$ 718	\$1,050	\$1,374	70%	92%
2,000	1,400	875	837	1,400	1,712	70%	86%
2,500	1,750	1,094	955	1,750	2,049	70%	82%
3,000	2,100	1,313	1,076	2,100	2,389	70%	80%
3,500	2,450	1,531	1,194	2,450	2,725	70%	78%
4,000	2,800	1,750	1,313	2,800	3,063	70%	77%
25 Years of Service:							
\$1,500	\$ 750	\$ 469	\$ 718	\$ 750	\$1,187	50%	79%
2,000	1,000	625	837	1,000	1,462	50%	73%
2,500	1,250	781	955	1,250	1,736	50%	69%
3,000	1,500	938	1,076	1,500	2,014	50%	67%
3,500	1,750	1,094	1,194	1,750	2,288	50%	65%
4,000	2,000	1,250	1,313	2,000	2,563	50%	64%
15 Years of Service:							
\$1,500	\$ 450	\$281	\$ 718	\$ 450	\$999	30%	67%
2,000	600	375	837	600	1,212	30%	61%
2,500	750	469	955	750	1,424	30%	57%
3,000	900	563	1,076	900	1,639	30%	55%
3,500	1,050	656	1,194	1,050	1,850	30%	53%
4,000	1,200	750	1,313	1,200	2,063	30%	52%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 62 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-5(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS¹ to age 65)
1.25% of FAS¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 656	\$ 875	\$1,050	\$1,531	70%	102%
2,000	1,400	875	1,020	1,400	1,895	70%	95%
2,500	1,750	1,094	1,165	1,750	2,259	70%	90%
3,000	2,100	1,313	1,312	2,100	2,625	70%	88%
3,500	2,450	1,531	1,457	2,450	2,988	70%	85%
4,000	2,800	1,750	1,602	2,800	3,352	70%	84%
25 Years of Service:							
\$1,500	\$ 750	\$ 469	\$ 875	\$ 750	\$1,344	50%	90%
2,000	1,000	625	1,020	1,000	1,645	50%	82%
2,500	1,250	781	1,165	1,250	1,946	50%	78%
3,000	1,500	938	1,312	1,500	2,250	50%	75%
3,500	1,750	1,094	1,457	1,750	2,551	50%	73%
4,000	2,000	1,250	1,602	2,000	2,852	50%	71%
15 Years of Service:							
\$1,500	\$ 450	\$281	\$ 875	\$ 450	\$1,156	30%	77%
2,000	600	375	1,020	600	1,395	30%	70%
2,500	750	469	1,165	750	1,634	30%	65%
3,000	900	563	1,312	900	1,875	30%	63%
3,500	1,050	656	1,457	1,050	2,113	30%	60%
4,000	1,200	750	1,602	1,200	2,352	30%	59%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-8(62) Benefit Program is Years of Credited Service
times: 2.00% of FAS¹ to age 62)
1.50% of FAS¹ at age 62)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 62	At 62		To 62	At 62	To 62	At 62
35 Years of Service:							
\$1,500	\$1,050	\$ 788	\$ 718	\$1,050	\$1,506	70%	100%
2,000	1,400	1,050	837	1,400	1,887	70%	94%
2,500	1,750	1,313	955	1,750	2,268	70%	91%
3,000	2,100	1,575	1,076	2,100	2,651	70%	88%
3,500	2,450	1,838	1,194	2,450	3,032	70%	87%
4,000	2,800	2,100	1,313	2,800	3,413	70%	85%
25 Years of Service:							
\$1,500	\$ 750	\$ 563	\$ 718	\$ 750	\$1,281	50%	85%
2,000	1,000	750	837	1,000	1,587	50%	79%
2,500	1,250	938	955	1,250	1,893	50%	76%
3,000	1,500	1,125	1,076	1,500	2,201	50%	73%
3,500	1,750	1,313	1,194	1,750	2,507	50%	72%
4,000	2,000	1,500	1,313	2,000	2,813	50%	70%
15 Years of Service:							
\$1,500	\$ 450	\$338	\$ 718	\$ 450	\$1,056	30%	70%
2,000	600	450	837	600	1,287	30%	64%
2,500	750	563	955	750	1,518	30%	61%
3,000	900	675	1,076	900	1,751	30%	58%
3,500	1,050	788	1,194	1,050	1,982	30%	57%
4,000	1,200	900	1,313	1,200	2,213	30%	55%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 62 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-8(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS¹ to age 65)
1.50% of FAS¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 788	\$ 875	\$1,050	\$1,663	70%	111%
2,000	1,400	1,050	1,020	1,400	2,070	70%	104%
2,500	1,750	1,313	1,165	1,750	2,478	70%	99%
3,000	2,100	1,575	1,312	2,100	2,887	70%	96%
3,500	2,450	1,838	1,457	2,450	3,295	70%	94%
4,000	2,800	2,100	1,602	2,800	3,702	70%	93%
25 Years of Service:							
\$1,500	\$ 750	\$ 563	\$ 875	\$ 750	\$1,438	50%	96%
2,000	1,000	750	1,020	1,000	1,770	50%	89%
2,500	1,250	938	1,165	1,250	2,103	50%	84%
3,000	1,500	1,125	1,312	1,500	2,437	50%	81%
3,500	1,750	1,313	1,457	1,750	2,770	50%	79%
4,000	2,000	1,500	1,602	2,000	3,102	50%	78%
15 Years of Service:							
\$1,500	\$ 450	\$338	\$ 875	\$ 450	\$1,213	30%	81%
2,000	600	450	1,020	600	1,470	30%	74%
2,500	750	563	1,165	750	1,728	30%	69%
3,000	900	675	1,312	900	1,987	30%	66%
3,500	1,050	788	1,457	1,050	2,245	30%	64%
4,000	1,200	900	1,602	1,200	2,502	30%	63%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-10(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS¹ to age 65)
1.60% of FAS¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 840	\$ 875	\$1,050	\$1,715	70%	114%
2,000	1,400	1,120	1,020	1,400	2,140	70%	107%
2,500	1,750	1,400	1,165	1,750	2,565	70%	103%
3,000	2,100	1,680	1,312	2,100	2,992	70%	100%
3,500	2,450	1,960	1,457	2,450	3,417	70%	98%
4,000	2,800	2,240	1,602	2,800	3,842	70%	96%
25 Years of Service:							
\$1,500	\$750	\$ 600	\$ 875	\$ 750	\$1,475	50%	98%
2,000	1,000	800	1,020	1,000	1,820	50%	91%
2,500	1,250	1,000	1,165	1,250	2,165	50%	87%
3,000	1,500	1,200	1,312	1,500	2,512	50%	84%
3,500	1,750	1,400	1,457	1,750	2,857	50%	82%
4,000	2,000	1,600	1,602	2,000	3,202	50%	80%
15 Years of Service:							
\$1,500	\$ 450	\$360	\$ 875	\$ 450	\$1,235	30%	82%
2,000	600	480	1,020	600	1,500	30%	75%
2,500	750	600	1,165	750	1,765	30%	71%
3,000	900	720	1,312	900	2,032	30%	68%
3,500	1,050	840	1,457	1,050	2,297	30%	66%
4,000	1,200	960	1,602	1,200	2,562	30%	64%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

Missouri LAGERS
Illustrations of Age and Service Allowance Amounts
For Sample Combinations of Service & Salary
(LT-14(65) Benefit Program is Years of Credited Service
times: 2.00% of FAS¹ to age 65)
1.75% of FAS¹ at age 65)

Final Average Salary (FAS) ¹	LAGERS BENEFIT ³		Estimated Social Security ²	Estimated Monthly Total		Percent of FAS	
	To 65	At 65		To 65	At 65	To 65	At 65
35 Years of Service:							
\$1,500	\$1,050	\$ 919	\$ 875	\$1,050	\$1,794	70%	120%
2,000	1,400	1,225	1,020	1,400	2,245	70%	112%
2,500	1,750	1,531	1,165	1,750	2,696	70%	108%
3,000	2,100	1,838	1,312	2,100	3,150	70%	105%
3,500	2,450	2,144	1,457	2,450	3,601	70%	103%
4,000	2,800	2,450	1,602	2,800	4,052	70%	101%
25 Years of Service:							
\$1,500	\$ 750	\$ 656	\$ 875	\$ 750	\$1,531	50%	102%
2,000	1,000	875	1,020	1,000	1,895	50%	95%
2,500	1,250	1,094	1,165	1,250	2,259	50%	90%
3,000	1,500	1,313	1,312	1,500	2,625	50%	88%
3,500	1,750	1,531	1,457	1,750	2,988	50%	85%
4,000	2,000	1,750	1,602	2,000	3,352	50%	84%
15 Years of Service:							
\$1,500	\$ 450	\$ 394	\$ 875	\$ 450	\$1,269	30%	85%
2,000	600	525	1,020	600	1,545	30%	77%
2,500	750	656	1,165	750	1,821	30%	73%
3,000	900	788	1,312	900	2,100	30%	70%
3,500	1,050	919	1,457	1,050	2,376	30%	68%
4,000	1,200	1,050	1,602	1,200	2,652	30%	66%

¹ "Final Average Salary" means the monthly average of an employee's compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) when they were highest, contained within the last 120 months of Credited Service.

² "Estimated Social Security" means, for an employee covered by Social Security, an employee's estimated OASDI retirement benefit. The benefit is based upon an estimated "average indexed monthly earnings" for an employee retiring at age 65 in 2015 - it does not include any amounts which might be payable to an eligible spouse or children.

³ Amounts are shown to nearest \$1, for simplicity; actual amounts are to nearest 1¢.

February 26, 2016 E-mail

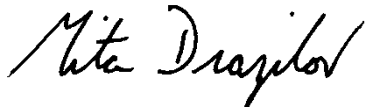
Mr. Keith Hughes
Executive Secretary
Missouri Local Government
Employees Retirement System
P.O. Box 1665
Jefferson City, Missouri 65102

Dear Keith:

Enclosed is the report of the February 28, 2015 Supplemental Actuarial Valuation of LAGERS benefits for the employees of:

The City of Cape Girardeau

Sincerely,



Mita D. Drazilov, ASA, MAAA

MDD:rmg
Enclosure