

Title 16-RETIREMENT SYSTEMS
Division 20-Missouri Local Government Employees' Retirement System (LAGERS)
Chapter 4-Actuarial Assumptions

PROPOSED AMENDMENT

16 CSR 20-4.010 Actuarial Assumptions. The Retirement System amending the rule by updating the actuarial assumptions stated in sections (1), (2), (3), (4), and (5) as well as updating Tables 1 and 2 and adding Table 3.

PURPOSE: The proposed amendments updates the actuarial assumptions used by the Retirement System.

(1) **Beginning with the Retirement System's July 2021-June 2022 fiscal year, [T]the investment return rate used in making the valuations is seven [and twenty-five hundredths] percent (7.[25]00%) 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 wage inflation rate. Considering other financial assumptions, the seven [and twenty-five hundredths] percent (7.[25]00%) investment return rate translates to an assumed real rate of return of four and twenty-five hundredths percent (4.[00]25%). [Adopted 2016.]**

(2) **Beginning with the Retirement System's July 2021-June 2022 fiscal year, [T]the mortality table used in evaluating allowances to be paid is [RP-2014 Healthy Annuitant Table (adjusted backward to 2006) with base year of 2017 for males and 2006 for females] PubG-2010 Retiree Mortality Tables, increased by fifteen percent (15%). Future mortality improvements are assumed each year based on the two- (2-) dimensional sex-distinct mortality improvement scale MP-[2015]2020. [Adopted 2016.]**

(3) **Beginning with the Retirement System's July 2021-June 2022 fiscal year, [T]the probabilities of general members' retirement with an age and service allowance are shown in Table 1, included herein and the probabilities of firefighters, police officers and public safety personnel (as defined in section 70.631 RSMo.) members' retirement with an age and service allowance are shown in Table 2, included herein. [Adopted 2016.]**

(4) **Beginning with the Retirement System's July 2021-June 2022 fiscal year, [T]the probabilities of withdrawal from service together with individual pay increase assumptions are shown in Table [2] 3, included herein. [Adopted 2016.]**

(5) **Beginning with the Retirement System's July 2021-June 2022 fiscal year, [T]total active member payroll is assumed to increase [three and twenty-five] two and seventy-five hundredths percent ([3.25]2.75%) per year, which is the portion of the individual pay increase assumptions attributable to inflation. In effect, this assumes no change in the number of active members per employer. [Adopted 2016.]**

Table 1

PERCENT OF ELIGIBLE ACTIVE GENERAL MEMBERS RETIRING WITHIN NEXT
YEAR

Age	Male			Female		
	Normal	Early	Rule of 80	Normal	Early	Rule of 80
50			20.00%			15.00%
51			20.00			15.00
52			15.00			15.00
53			15.00			15.00
54			15.00			15.00
55		3.00%	15.00		3.00%	15.00
56		3.00	15.00		3.00	15.00
57		3.00	15.00		3.00	15.00
58		3.00	15.00		3.00	15.00
59		3.00	15.00		3.00	15.00
60	10.00%		15.00	10.00%		15.00
61	10.00		15.00	10.00		15.00
62	25.00		25.00	15.00		15.00
63	20.00		25.00	15.00		15.00
64	20.00		25.00	15.00		20.00
65	25.00		30.00	25.00		25.00
66	25.00		30.00	30.00		25.00
67	20.00		20.00	25.00		25.00
68	20.00		20.00	25.00		25.00
69	20.00		20.00	20.00		25.00
70 & Over	100.00		100.00	100.00		100.00

Table 2

PERCENT OF ELIGIBLE ACTIVE PUBLIC SAFETY MEMBERS RETIRING WITHIN
NEXT YEAR

Age	Police and Public Safety			Fire		
	Normal	Early	Rule of 80	Normal	Early	Rule of 80
50		2.50%	25.00%		2.25%	25.00%
51		2.50	25.00		2.25	20.00
52		3.00	15.00		2.25	20.00
53		3.00	15.00		2.25	20.00
54		3.50	15.00		2.25	20.00
55	11.00%		15.00	13.00%		20.00
56	11.00		15.00	13.00		20.00
57	11.00		15.00	13.00		25.00
58	11.00		15.00	13.00		25.00
59	11.00		15.00	13.00		25.00
60	11.00		15.00	15.00		35.00
61	11.00		25.00	20.00		35.00
62	22.00		20.00	20.00		45.00
63	18.00		20.00	20.00		45.00
64	18.00		20.00	20.00		45.00
65 & Over	100.00		100.00	100.00		100.00

Table 3

All Divisions
Separations from Active Employment Before Age & Service Retirement
& Individual Pay Increase Assumptions

Percent of
Active Members Separating
within the Next Year

Sample Ages	Years of Service	Death ¹												Pay Increase Assumptions for an Individual Employee		
		Police, Fire and Public Safety				Disability ²				Other				Police	Fire	Others ³
		General		Public Safety		Others ³		Police		Fire						
Men	Women	Men	Women	Men	Women	Police	Fire	Men	Women	Police	Fire	Police	Fire	Others ³		
ALL	0									20.00%	23.00%	18.00%	12.00%			
	1									18.00	21.00	17.00	10.00			
	2									16.00	18.00	16.00	8.00			
	3									13.00	15.00	14.00	8.00			
	4									12.00	13.00	13.00	7.00			
25	5 & Over	0.02%	0.01%	0.03%	0.02%	0.07%	0.02%	0.10%	0.07%	8.80	12.40	10.80	6.00	6.55%	7.15%	6.75%
30		0.04	0.02	0.04	0.03	0.10	0.03	0.11	0.11	7.10	10.20	8.50	4.50	5.75	6.05	5.95
35		0.05	0.02	0.05	0.04	0.13	0.06	0.16	0.25	5.60	7.80	6.30	3.20	5.25	5.15	5.35
40		0.06	0.03	0.06	0.04	0.18	0.09	0.22	0.39	4.10	5.80	4.60	2.40	4.75	4.45	4.85
45		0.08	0.04	0.06	0.05	0.25	0.15	0.34	0.62	3.10	4.40	3.40	1.90	4.25	4.05	4.25
50		0.11	0.06	0.08	0.06	0.37	0.22	0.53	0.95	2.40	3.50	2.10	1.30	3.85	3.85	3.85
55		0.16	0.10	0.13	0.10	0.57	0.32			1.70	2.50	1.10	0.70	3.65	3.45	3.65
60		0.25	0.15	0.21	0.13					1.10	1.40	0.00	0.00	3.45	2.75	3.45
65		0.36	0.21	0.31	0.16					0.00	0.00	0.00	0.00	3.15	2.75	3.15

- 1 Mortality rates for calendar year 2020. Future calendar year mortality rates incorporate mortality improvement factors from the 2-dimensional sex-distinct mortality improvement scale MP-2020.
- 2 General and Public Safety disabilities are assumed to be 75% non-duty related and 25% duty related. Police disabilities are assumed to be 40% non-duty related and 60% duty related. Fire disabilities are assumed to be 25% non-duty related and 75% duty related.
- 3 General, Public Safety

AUTHORITY: section 70.605.14, RSMo2016. Original rule filed Dec. 29, 1975, effective Jan. 8, 1976. Amended: Filed July1, 1977, effective Oct. 13, 1977. Amended: Filed Oct. 31, 1979, effective Feb. 11, 1980. Amended: Filed Sept. 9, 1985, effective Dec.15, 1985. Rescinded and readopted: Filed Aug. 3, 1987, effective Nov. 23, 1987. Amended: Filed Feb. 16, 1999, effective July 30, 1999. Amended: Filed Sept. 26, 2011, effective March 30, 2012. Amended: Filed July 29, 2016, effective Feb. 28, 2017. Amended: Filed June ___, 2021.*

PUBLIC COST: This proposed amendment will not cost state agencies more than five hundred dollars (\$500) in the aggregate. This proposed rule may result in a cost in an undetermined amount to a political subdivision that participates in the retirement system pursuant to section 70.600-70.755, RSMo.

PRIVATE COST: This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Any interested person or entity may submit written comments in support of or in opposition to the proposed rule. Comments should be directed to the Missouri Local Government Employees Retirement System (LAGERS), Attn: Jason A. Paulsmeyer, Chief Counsel, P.O. Box 1665, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.

FISCAL NOTE

PUBLIC COST

- I. Department Title: 16-RETIREMENT SYSTEMS**
Division Title: 20- Missouri Local Government Employees' Retirement System (LAGERS)
Chapter Title: 4- Actuarial Assumptions

Rule Number and Name:	16 CSR 20-4.010 Actuarial Assumptions
Type of Rulemaking:	Proposed Amendment

II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
Political subdivisions participating in the retirement system pursuant to section 70.600-70.755, RSMo.	<p>This proposed rule will not cost state agencies more than five hundred dollars (\$500) in the aggregate.</p> <p>This proposed rule may result in a cost in an undetermined amount to a political subdivision that participates in the system pursuant to section 70.600-70.755, RSMo.</p>

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III. WORKSHEET

IV. ASSUMPTIONS

It is assumed that all political subdivisions participating the retirement system remit contributions to the system pursuant to 70.730 RSMo.

It is further assumed that pursuant to 70.730 RSMo, employer contribution rates are recalculated annually based upon financial assumptions adopted by the LAGERS board and the economic and demographic experience of each employer as evaluated by LAGERS' actuary.

It is assumed there are a variety of compounding factors relating to the annual recalculation of employer contribution rates that can produce any number of fiscal impacts to an employer in a valuation cycle.

It is assumed that while ceteris paribus the proposed assumptions are expected to produce very slight upward pressure on *most* employer contribution rates, the proposed assumptions are not the exclusive factors in the calculation of annual cost, and further because experience and subsequently cost is unique to each political subdivision in the system, the estimated aggregate impact is not determinable.