

The employer contribution rate is calculated by MOSERS' external actuary and is certified by the MOSERS Board of Trustees. Employer contributions are combined with investment returns and employee contributions (from those first employed on or after January 1, 2011) in order for MOSERS to pay all current and future benefits.

### What has the Board done to strengthen the system?

The MOSERS Board developed a funding policy that systematically reduced the assumed rate of return on investments (ARR).

- The ARR has been reduced from 7.5% in 2017 to 6.95%, as of June 30, 2020.
- The above action caused the employer contribution rate to increase in the short term but works to ensure MOSERS' sustainability over the long term.



### What would the valuation results be under alternate investment return assumptions?

Investment Return Assumption	5.95%	6.45%	6.95%	7.45%	7.95%
Total Employer Contribution	33.18%	30.13%	27.26%	24.54%	21.96%
Total Employer Contribution (\$ in millions)	\$701.4	\$637.0	\$576.3	\$518.8	\$464.2
Actuarial Accrued Liability (\$ in millions)	\$17,205.3	\$16,265.8	\$15,409.0	\$14,625.8	\$13,908.3
Actuarial Value of Assets (\$ in millions)	\$8,894.3	\$8,894.3	\$8,894.3	\$8,894.3	\$8,894.3
Unfunded Actuarial Accrued Liability (\$ in millions)	\$8,310.9	\$7,371.5	\$6,514.7	\$5,731.5	\$5,014.0
Funded ratio	51.7%	54.7%	57.7%	60.8%	63.9%

Note: All other assumptions are unchanged for the purposes of this sensitivity analysis.

### Where does MOSERS funding come from?

Over 20-Year Period Ending June 30, 2022





### What percentage of the state budget goes to MOSERS?

1.5%

MOSERS' appropriation has remained less than 1.5% of the total state budget for decades.

# What are the components of the employer contribution rate?

		MSEP/ MSEP 2000	MSEP 2011	Weighted Average	
1	Normal Cost - What it costs to pay for one year of service credit				
2	Employee Contributions - Those employed in a benefit eligible position for the first time on or after January 1, 2011, or who elected a buyout and returned to state service, contribute 4% of pay toward their retirement benefit.	Normal Cost as a percentage of payroll	9.14%	8.50%	8.81%
		Less Employee Contributions	0.00	4.00%	2.04%
3	Employer Normal Cost - What the employer pays (normal cost minus employee contributions) toward one year of service credit	Employer Normal Cost	9.14%	4.50%	6.77%
		Unfunded Actuarial Accrued Liability (UAAL) (level percent-of-payroll amortization with layered bases)		+	20.49%
4	Unfunded Actuarial Accrued Liability (UAAL) payment - The amount due, based on the amortization schedule, to make up the difference between assets and liabilities	 Through pension reform enacted in 2010 by the Missouri General Assembly, the employer's normal cost to MOSERS has reduced, and will continue to reduce, over time.		27.26%	Total Employer Contribution Rate
5	Total Employer Contribution Rate - The total of the normal cost payment and the UAAL payment	What are some of the assumptions the actuaries use to calculate the contribution rate?			

**What are some of the assumptions the actuaries use to calculate the contribution rate?**



## Economic Assumptions

- Investment Return
- Inflation
- Salary Increases & Payroll Growth
- Cost of Living Adjustments (COLAs)
- Other

## Demographic Assumptions

- Life Expectancy
- Retirement  
(normal vs. early)
- Termination from Active Employment
- Other (such as form of payment, marital status, member contributions, plan election, forfeitures, etc.)



**Do employers contribute the full amount the external actuaries recommend to fully fund the system over the long term?**

Yes. MOSERS has historically received the **full** annual amount recommended by the external actuaries from the MOSERS-covered employers.

For Fiscal Year	Dollar Amount	Percent of Payroll	Percentage Contribution
FY19	394.1	20.21	100
FY20	436.9	21.77	100
FY21	463.3	22.88	100
FY22	471.3	23.51	100
FY23	552.7 <sup>e</sup>	26.33	Not yet available
FY24	576.3 <sup>e</sup>	27.26	Not yet available