

Missouri State Employees' Retirement System

Investment Performance Summary (net of all fees and expenses)

As of December 31, 2018

	Month	Qtr.	Fiscal YTD	Calendar YTD	1 Year	3 Year	5 Year	10 Year	15 Year	20 Year
Total Fund	-0.6%	-5.0%	-5.8%	-6.8%	-6.8%	4.8%	2.6%	7.1%	6.0%	5.9%
<i>Total Fund policy benchmark</i>	-1.3%	-7.1%	-8.4%	-12.1%	-12.1%	2.6%	2.5%	6.9%	5.2%	4.5%
Total Beta Balanced Equities	-5.1%	-10.0%	-8.2%	-7.9%	-7.9%	6.3%	5.1%	10.0%	8.1%	N/A
<i>Total Beta Balanced Equities policy benchmark</i>	-7.1%	-11.6%	-8.4%	-8.1%	-8.1%	6.6%	6.2%	10.9%	7.6%	N/A
Beta Balanced Nominal Bonds	5.0%	3.4%	0.2%	-3.5%	-3.5%	1.8%	5.2%	N/A	N/A	N/A
<i>Beta Balanced Nominal Bonds policy benchmark</i>	5.4%	3.8%	0.5%	-3.2%	-3.2%	1.7%	5.3%	N/A	N/A	N/A
Beta Balanced Commodities	-6.4%	-13.1%	-14.9%	-12.1%	-12.1%	-0.9%	-15.8%	-4.0%	-3.4%	1.7%
<i>Beta Balanced Commodities policy benchmark</i>	-7.2%	-13.0%	-14.3%	-11.3%	-11.3%	0.1%	-14.8%	-5.9%	-4.7%	0.4%
Beta Balanced Inflation Indexed Bonds	0.2%	-0.6%	-1.5%	-2.1%	-2.1%	0.7%	0.4%	3.3%	3.6%	5.7%
<i>Beta Balanced Inflation Indexed Bonds policy benchmark</i>	0.3%	-0.4%	-1.2%	-1.5%	-1.5%	1.1%	0.7%	3.3%	3.6%	5.6%
Beta Balanced Alternative Beta	1.3%	-0.2%	0.3%	-0.3%	-0.3%	3.0%	4.1%	N/A	N/A	N/A
<i>Beta Balanced Alternative Beta policy benchmark</i>	1.1%	-5.0%	-7.4%	-16.9%	-16.9%	-4.7%	0.5%	N/A	N/A	N/A
External Risk Parity Portfolio	-1.8%	-5.7%	-5.9%	-7.3%	-7.3%	6.6%	3.7%	N/A	N/A	N/A
<i>Total Beta Balanced Portfolio policy benchmark</i>	-1.3%	-7.1%	-8.4%	-12.1%	-12.1%	2.9%	2.0%	N/A	N/A	N/A