

Estimated Impact of the SBI return of 15.1% for FY 2017

These charts show the actuarial status of each plan at July 1, 2016, and July 1, 2017.

Actuarial status at July 1, 2017, is determined using the current statutory investment return assumption (8.0% for all plans, except 8.5% for TRA) and using a 7.5% investment return assumption.

The last row of the chart for each plan answers the question of whether the favorable FY 2017 investment returns caused the date on which the COLA will automatically increase, under the trigger provisions, to advance so that the trigger date is anticipated to occur within the plan's amortization period.

MSRS General

	July 1, 2016	July 1, 2017 (estimated)	
	8.0%	8.0%	7.5%
<i>\$ in billions, contributions as % of pay</i>			
Actuarial Accrued Liability	\$14.3	\$14.4	\$15.2
Market Value of Assets	<u>\$11.2</u>	<u>\$12.4</u>	<u>\$12.4</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$3.1	\$2.0	\$2.8
Funded Ratio	78.4%	85.9%	81.5%
Normal Cost (with expenses)	8.6%	8.5%	9.2%
Amortization of UAAL	<u>5.9%</u>	<u>4.5%</u>	<u>6.1%</u>
Total Required Contributions	14.5%	13.0%	15.3%
Member Contributions		5.5%	
Employer Contributions		5.5%	
Supplemental Employer Contributions		<u>n/a</u>	
Total Contributions		11.0%	
Contribution Surplus/(Deficiency)	(3.5%)	(2.0%)	(4.3%)
Year of automatic COLA increase due to reaching the required funded ratio ("trigger")	None	None	None

MSRS Correctional

	July 1, 2016	July 1, 2017 (estimated)	
	8.0%	8.0%	7.5%
<i>\$ in millions, contributions as % of pay</i>			
Actuarial Accrued Liability	\$1,313.5	\$1,414.4	\$1,500.3
Market Value of Assets	<u>\$937</u>	<u>\$1,021.7</u>	<u>\$1,021.7</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$376.5	\$392.7	478.6
Funded Ratio	71.3%	72.2%	68.1%
Normal Cost (with expenses)	16.7%	17.2%	18.7%
Amortization of UAAL	<u>10.8%</u>	<u>11.1%</u>	<u>13.4%</u>
Total Required Contributions	27.5%	28.3%	32.1%

	July 1, 2016	July 1, 2017 (estimated)	
	8.0%	8.0%	7.5%
Member Contributions		9.1%	
Employer Contributions		12.85%	
Supplemental Employer Contributions		<u>n/a</u>	
Total Contributions		21.95%	
Contribution Surplus/(Deficiency)	(5.6%)	(6.4%)	(10.15%)
Year of automatic COLA increase due to reaching the required funded ratio ("trigger")	None	None	None

MSRS State Patrol

	July 1, 2016	July 1, 2017 (estimated)	
	8.0%	8.0%	7.5%
<i>\$ in millions, contributions as % of pay</i>			
Actuarial Accrued Liability	\$833.9	\$885.5	\$902.2
Market Value of Assets	<u>\$630.0</u>	<u>\$691.0</u>	<u>\$691.0</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$203.9	\$194.5	\$218.2
Funded Ratio	75.6%	78.0%	76.0%
Normal Cost (with expenses)	23.0%	24.3%	24.9%
Amortization of UAAL	<u>19.9%</u>	<u>19.2%</u>	<u>21.1%</u>
Total Required Contributions	42.9%	43.5%	46.0%
Member Contributions		14.4%	
Employer Contributions		21.6%	
State Contributions		<u>1.4%</u>	
Total Contributions		37.4%	
Contribution Surplus/(Deficiency)	(5.5%)	(6.2%)	(8.6%)
Year of automatic COLA increase due to reaching the required funded ratio ("trigger")	1% until 2045, 1.5% until 2062, 2.5% thereafter	1% until 2035, 1.5% until 2054, 2.5% thereafter	None

PERA General

	July 1, 2016	July 1, 2017 (estimated)	
	8.0%	8.0%	7.5%
	<i>\$ in billions, contributions as % of pay</i>		
Actuarial Accrued Liability	\$24.8	\$25.4	\$26.4
Market Value of Assets	<u>\$18.0</u>	<u>\$20.1</u>	<u>\$20.1</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$6.8	\$5.3	\$6.3
Funded Ratio	74.2%	78.9%	76.1%
Normal Cost (with expenses)	7.8%	8.1%	8.4%
Amortization of UAAL	<u>9.8%</u>	<u>7.7%</u>	<u>8.9%</u>
Total Required Contributions	17.6%	15.8%	17.3%
Member Contributions		6.5%	
Employer Contributions		7.5%	
Supplemental Employer Contributions		<u>0.6%</u>	
Total Contributions		14.6%	
Contribution Surplus/(Deficiency)	(3.0%)	(1.2%)	(2.7%)
Year of automatic COLA increase due to reaching the required funded ratio ("trigger")	2053	2037	2048

PERA Correctional

	July 1, 2016	July 1, 2017 (estimated)	
	8.0%	8.0%	7.5%
	<i>\$ in millions, contributions as % of pay</i>		
Actuarial Accrued Liability	\$553.8	\$640.1	\$688.4
Market Value of Assets	<u>\$507.8</u>	<u>\$601.1</u>	<u>\$601.1</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$46.0	\$39.0	\$87.3
Funded Ratio	91.7%	93.9%	87.3%
Normal Cost (with expenses)	13.4%	14.2%	15.5%
Amortization of UAAL	<u>2.1%</u>	<u>1.5%</u>	<u>3.2%</u>
Total Required Contributions	<u>15.5%</u>	<u>15.7%</u>	<u>18.7%</u>
Member Contributions		5.8%	
Employer Contributions		8.8%	
Supplemental Employer Contributions		<u>n/a</u>	
Total Contributions		14.6%	
Contribution Surplus/(Deficiency)	(0.9%)	(1.1%)	(4.1%)
Year of automatic COLA increase due to reaching the required funded ratio ("trigger")	COLA increase already triggered: 2.5% COLA in effect		

PERA P&F

	July 1, 2016	July 1, 2017 (estimated)	
	8.0%	8.0%	7.5%
	<i>\$ in billions, contributions as % of pay</i>		
Actuarial Accrued Liability	\$8.4	\$9.1	\$9.2
Market Value of Assets	<u>\$7.1</u>	<u>\$7.9</u>	<u>\$7.9</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$1.3	\$1.2	\$1.3
Funded Ratio	84.3%	86.2%	85.6%
Normal Cost (with expenses)	20.8%	21.3%	21.3%
Amortization of UAAL	<u>9.6%</u>	<u>8.9%</u>	<u>9.1%</u>
Total Required Contributions	30.4%	30.2%	30.4%
Member Contributions		10.8%	
Employer Contributions		16.2%	
Supplemental Employer Contributions	<u>2.5%</u>	<u>2.4%</u>	<u>2.4%</u>
Total Contributions	29.5%	29.4%	29.4%
Contribution Surplus/(Deficiency)	(0.9%)	(0.8%)	(1.0%)
Year of automatic COLA increase due to reaching the required funded ratio ("trigger")	2051	2034	2066

TRA

	July 1, 2016	July 1, 2017 (estimated)	
	8.5%*	8.5%*	7.5%
	<i>\$ in billions, contributions as % of pay</i>		
Actuarial Accrued Liability	\$26.7	\$27.5	\$30.7
Market Value of Assets	<u>\$19.4</u>	<u>\$21.2</u>	<u>\$21.2</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$7.3	\$6.3	\$9.5
Funded Ratio	72.7%	77.1%	69.1%
Normal Cost (with expenses)	9.02%	8.99%	11.55%
Amortization of UAAL	<u>10.85%</u>	<u>9.34%</u>	<u>12.92%</u>
Total Required Contributions	19.87%	18.33%	24.47%
Member Contributions		7.5%	
Employer Contributions		7.5%	
Supplemental Employer Contributions		<u>0.94%</u>	
Total Contributions		15.94%	
Contribution Surplus/(Deficiency)	(3.93%)	(2.39%)	(8.53%)
Year of automatic COLA increase due to reaching the required funded ratio ("trigger")	None	2045	None

**Note: The amounts in the first and second columns assume an 8.5% investment rate of return because that is the rate currently in effect in the statute for TRA. All the other plans are currently at 8%. TRA's funded ratio would decrease and contribution deficiency would increase if the liabilities were re-run using an 8% assumption.*

SPTRFA

	July 1, 2016	July 1, 2017 (estimated)	
	8.0%	8.0% *	7.5% **
	<i>\$ in billions, contributions as % of pay</i>		
Actuarial Accrued Liability	\$1.593	\$1.61	\$1.73
Market Value of Assets	<u>\$0.960</u>	<u>\$1.03</u>	<u>\$1.03</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$0.633	\$0.582	\$0.697
Funded Ratio	60.3%	64.3%	60.0%
Normal Cost (with expenses)	9.1%	9.1%	9.3%
Amortization of UAAL	<u>14.4%</u>	<u>13%</u>	<u>16.1%</u>
Total Required Contributions	23.5%	22.0%	25.4%
Member Contributions	7.5%	7.5%	7.5%
Employer Contributions	6.25%	6.5%	6.5%
Supplemental Employer Contributions	3.84%	3.84%	3.84%
State Aids (\$10M)	<u>3.76%</u>	<u>3.76%</u>	<u>3.76%</u>
Total Contributions	21.35%	21.6%	21.6%
Contribution Surplus/(Deficiency)	(2.0%)	(0.5%)	(4.2%)
Year of automatic COLA increase due to reaching the required funded ratio ("trigger")	1% until 2055, 1.5% until 2066, 2.5% thereafter	1% until 2042, 1.5% until 2051, 2.5% thereafter	1% indefinitely; COLA increase not triggered

**Does not reflect added cost of mortality assumption changes*

***Reflects added cost of both 7.5% and mortality assumption changes*