



History of CalSTRS Funding and Presentation of Additional Scenarios

Assembly Committee on Public Employees, Retirement and Social Security and Senate
Committee on Public Employment and Retirement Joint Informational Hearing

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California State Teachers' Retirement System
100 Waterfront Place
West Sacramento, CA 95605

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History of Defined Benefit Program Funding

The funding of the DB Program has changed substantially in the 100 years since CalSTRS was established by the State of California in 1913. This is summarized in the time line shown on the next page.

In 1913, what is now the DB Program had only two sources of contributions—a \$12 per year contribution from each member and a state contribution equal to 5 percent of the revenue generated by the state’s inheritance tax. The employer did not make a contribution until 1935, when it began to make a \$12 per member annual contribution. The member’s contribution increased to \$24 per year at the same time. Members who were first hired in 1935 or afterward contributed a total of 4 percent of salary, of which only the first \$24 was credited to the monthly benefit, with the balance credited to the member’s annuity account, similar to the current DBS account.

The next significant change in program funding occurred nine years later in 1944, when the member’s contribution changed from a flat dollar amount to a percentage of compensation that depended on the age and gender of the member. In addition, the state’s contribution changed from a percentage of inheritance tax revenue to a pay-as-you-go payment, in which the state paid the difference between the resources available and the cost of benefits in a given year.

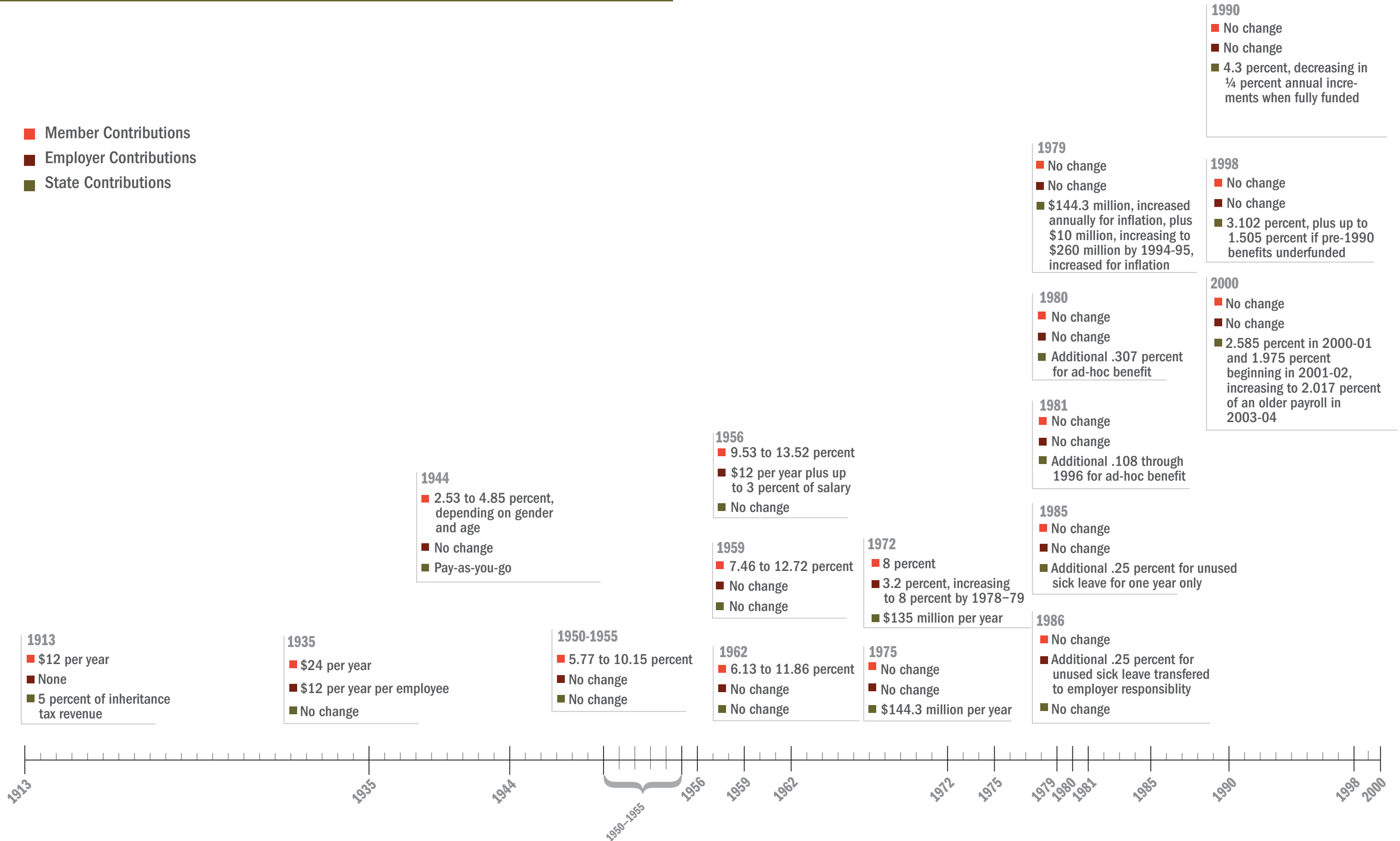
The contribution rate charged to members, still based on the member’s age and gender, varied for 28 years, from 1944 until 1972, when it became a flat 8 percent for all members. The payment made by the state also changed in 1972, when it shifted from a pay-as-you-go contribution to a flat dollar amount of \$135 million. This flat dollar amount was modified a few times throughout the 1970’s. It reached about \$400 million by 1990 and increased each year thereafter. Additional state contributions, based on a percentage of pay, were enacted in the 1980’s to fund specific benefit enhancements. The employer contribution was changed in 1972 to a flat 3.2 percent of earnings, and that contribution rate increased gradually over the balance of the decade until it reached 8 percent in 1978-79.

The next significant change in program funding occurred eight years later, in 1986. The employer’s contribution was increased from 8 percent to 8.25 percent when the financial responsibility for funding the conversion of unused sick leave to service credit at retirement was shifted from the state to the employer. In addition, the flat dollar contribution by the state was replaced with a contribution rate equal to 4.3 percent of the member’s compensation, in addition to the other contributions levied for previously authorized benefit enhancements, for a total of 4.607 percent in 1997. The 4.3 percent contribution would gradually be eliminated if and when the DB Program became fully funded, which at the time was anticipated to be in 40 years.

As a result of the superior investment returns in the 1990’s, however, the DB Program became fully funded in 1998. In 1998 and in 2000, the state’s contribution was reduced but made permanent in legislation that also provided additional benefit enhancements to members, most of which will not apply to CalSTRS 2% at 62 members. The enhancements were primarily intended to encourage educators to continue to work rather than retire. The 1998 legislation also provided for a limited increase in the state’s contribution if there was a normal cost deficit or unfunded liability associated with the benefit program in place on July 1, 1990. Because there currently is an unfunded liability associated with the July 1, 1990, benefit program, the state’s contribution has been increasing annually, and will continue to do so under current law until it reaches its maximum statutory rate of 3.522 percent in 2015-16. For the 10 years beginning in 2001, the member’s contribution to the DB Program was reduced to 6 percent, with the remaining 2 percent of compensation the member contributed to CalSTRS being credited to the member’s DBS Program account. In 2011, the member’s contribution to the DB Program was returned to the prior rate of 8 percent.

Contribution Rate History Time Line

- Member Contributions
- Employer Contributions
- State Contributions



Full Funding Over 20 Years - State Contribution 4.607%

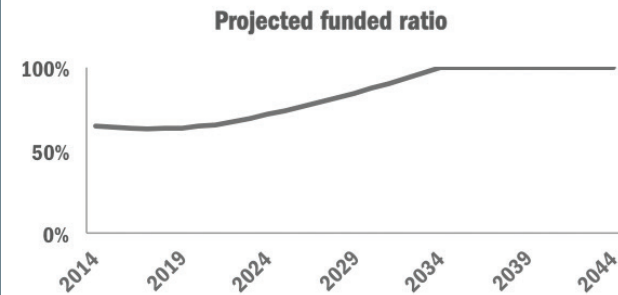
Rate of Increase	Target Funding	Timeframe	Start Date
Incremental	100%	20 years	2014-15

Full funding projected	Probabilities	
June 30, 2034	Overfunded (110% funded in 30 years)	Run out of money in 75 years
	60%	1%

Total Cost (billions): \$181.7

Notes:

The annual state contribution increases to 4.607 percent in October 2014-15. For 2014-15, the increase will be from the statutory rate of 3.291 percent for three payments, for a total of 0.987 percent. For 2015-16, the increase will be one payment from the statutory rate of 3.291 percent and three payments from the statutory rate of 3.522 percent, for a total of 1.142 percent. For all other years, the increase will be from the statutory rate of 3.522 percent, for a total of 1.085 percent. All other increases begin July 2015.



Full Funding Over 20 Years - State Contribution 4.065%

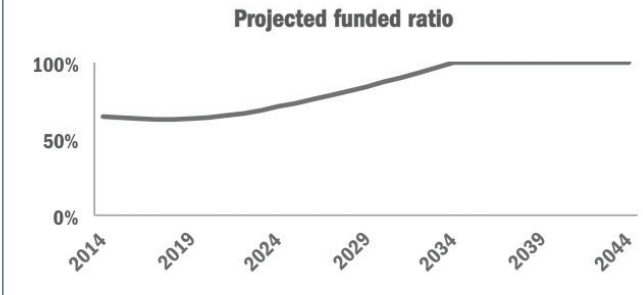
Rate of Increase	Target Funding	Timeframe	Start Date
Incremental	100%	20 years	2014-15

Full funding projected	Probabilities	
June 30, 2034	Overfunded (110% funded in 30 years)	Run out of money in 75 years
	61%	0%

Total Cost (billions): \$183.4

Notes:

The annual state contribution increases to 4.065 percent in October 2014-15. For 2014-15, the increase will be from the statutory rate of 3.291 percent for three payments, for a total of 0.581 percent. For 2015-16, the increase will be one payment from the statutory rate of 3.291 percent and three payments from the statutory rate of 3.522 percent, for a total of 0.602 percent. For all other years, the increase will be from the statutory rate of 3.522 percent, for a total of 0.543 percent. All other increases begin July 2015.



Fiscal year	Employer: 23.09%		State: 1.085%		2% at 60: 2.83%		2% at 62: 2.39%		Projected funded ratio
	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	
2014	0.00%	\$0	0.987%	\$263	0.00%	\$0	0.00%	\$0	64%
2015	1.00%	\$298	1.142%	\$316	1.00%	\$271	1.00%	\$26	63%
2016	3.00%	\$926	1.085%	\$311	2.00%	\$545	2.00%	\$72	63%
2017	6.00%	\$1,922	1.085%	\$323	2.83%	\$774	2.39%	\$111	63%
2018	9.00%	\$2,990	1.085%	\$335	2.83%	\$776	2.39%	\$138	63%
2019	12.00%	\$4,135	1.085%	\$347	2.83%	\$777	2.39%	\$167	64%
2020	15.00%	\$5,361	1.085%	\$360	2.83%	\$776	2.39%	\$199	66%
2021	18.00%	\$6,673	1.085%	\$374	2.83%	\$774	2.39%	\$232	67%
2022	21.00%	\$8,075	1.085%	\$388	2.83%	\$770	2.39%	\$269	69%
2023	23.09%	\$9,210	1.085%	\$402	2.83%	\$764	2.39%	\$308	72%
2024	23.09%	\$9,554	1.085%	\$417	2.83%	\$757	2.39%	\$349	74%
2025	23.09%	\$9,909	1.085%	\$433	2.83%	\$748	2.39%	\$394	76%
2026	23.09%	\$10,279	1.085%	\$449	2.83%	\$737	2.39%	\$441	79%
2027	23.09%	\$10,661	1.085%	\$466	2.83%	\$723	2.39%	\$493	82%
2028	23.09%	\$11,058	1.085%	\$483	2.83%	\$705	2.39%	\$549	84%
2029	23.09%	\$11,470	1.085%	\$501	2.83%	\$684	2.39%	\$610	87%
2030	23.09%	\$11,897	1.085%	\$520	2.83%	\$658	2.39%	\$676	90%
2031	23.09%	\$12,340	1.085%	\$539	2.83%	\$628	2.39%	\$747	93%
2032	23.09%	\$12,799	1.085%	\$559	2.83%	\$595	2.39%	\$822	97%
2033	23.09%	\$13,275	1.085%	\$580	2.83%	\$559	2.39%	\$902	100%
Totals:		\$152,832		\$8,366		\$13,023		\$7,506	

Fiscal year	Employer: 24.20%		State: 0.543%		2% at 60: 2.83%		2% at 62: 2.39%		Projected funded ratio
	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	
2014	0.00%	\$0	0.581%	\$155	0.00%	\$0	0.00%	\$0	64%
2015	1.00%	\$298	0.602%	\$167	1.00%	\$271	1.00%	\$26	63%
2016	3.00%	\$926	0.543%	\$156	2.00%	\$545	2.00%	\$72	63%
2017	6.00%	\$1,922	0.543%	\$162	2.83%	\$774	2.39%	\$111	63%
2018	9.00%	\$2,990	0.543%	\$168	2.83%	\$776	2.39%	\$138	63%
2019	12.00%	\$4,135	0.543%	\$174	2.83%	\$777	2.39%	\$167	64%
2020	15.00%	\$5,361	0.543%	\$180	2.83%	\$776	2.39%	\$199	65%
2021	18.00%	\$6,673	0.543%	\$187	2.83%	\$774	2.39%	\$232	67%
2022	21.00%	\$8,075	0.543%	\$194	2.83%	\$770	2.39%	\$269	69%
2023	24.00%	\$9,573	0.543%	\$201	2.83%	\$764	2.39%	\$308	71%
2024	24.20%	\$10,012	0.543%	\$209	2.83%	\$757	2.39%	\$349	73%
2025	24.20%	\$10,385	0.543%	\$217	2.83%	\$748	2.39%	\$394	76%
2026	24.20%	\$10,772	0.543%	\$225	2.83%	\$737	2.39%	\$441	79%
2027	24.20%	\$11,173	0.543%	\$233	2.83%	\$723	2.39%	\$493	81%
2028	24.20%	\$11,589	0.543%	\$242	2.83%	\$705	2.39%	\$549	84%
2029	24.20%	\$12,021	0.543%	\$251	2.83%	\$684	2.39%	\$610	87%
2030	24.20%	\$12,468	0.543%	\$260	2.83%	\$658	2.39%	\$676	90%
2031	24.20%	\$12,932	0.543%	\$270	2.83%	\$628	2.39%	\$747	93%
2032	24.20%	\$13,413	0.543%	\$280	2.83%	\$595	2.39%	\$822	97%
2033	24.20%	\$13,912	0.543%	\$290	2.83%	\$559	2.39%	\$902	100%
Totals:		\$158,629		\$4,218		\$13,023		\$7,506	

Full Funding Over 30 Years - State Contribution 4.607%

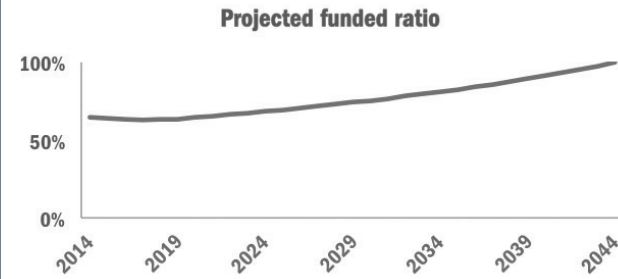
Rate of Increase	Target Funding	Timeframe	Start Date
Incremental	100%	30 years	2014-15

Full funding projected	Probabilities	
June 30, 2044	Overfunded (110% funded in 30 years)	Run out of money in 75 years
	42%	26%

Total Cost (billions): \$236.3

Notes:

The annual state contribution increases to 4.607 percent in October 2014-15. For 2014-15, the increase will be from the statutory rate of 3.291 percent for three payments, for a total of 0.987 percent. For 2015-16, the increase will be one payment from the statutory rate of 3.291 percent and three payments from the statutory rate of 3.522 percent, for a total of 1.142 percent. For all other years, the increase will be from the statutory rate of 3.522 percent, for a total of 1.085 percent. All other increases begin July 2015.



Full Funding Over 40 Years - State Contribution 4.607%

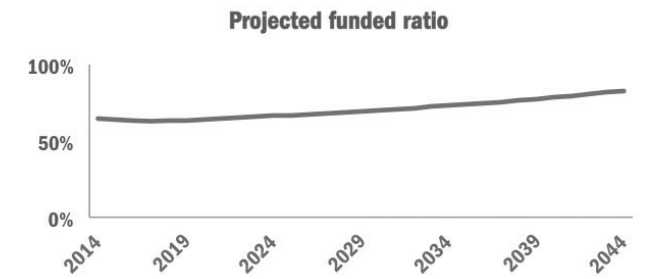
Rate of Increase	Target Funding	Timeframe	Start Date
Incremental	100%	40 years	2014-15

Full funding projected	Probabilities	
June 30, 2054	Overfunded (110% funded in 30 years)	Run out of money in 75 years
	36%	36%

Total Cost (billions): \$319.5

Notes:

The annual state contribution increases to 4.607 percent in October 2014-15. For 2014-15, the increase will be from the statutory rate of 3.291 percent for three payments, for a total of 0.987 percent. For 2015-16, the increase will be one payment from the statutory rate of 3.291 percent and three payments from the statutory rate of 3.522 percent, for a total of 1.142 percent. For all other years, the increase will be from the statutory rate of 3.522 percent, for a total of 1.085 percent. All other increases begin July 2015.



Fiscal year	Employer: 12.80%		State: 1.085%		2% at 60: 2.83%		2% at 62: 2.39%		Projected funded ratio
	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Average cost per member		
2014	0.00%	\$0	1.142%	\$263	0.00%	\$0	\$0	64%	
2015	1.00%	\$298	1.085%	\$316	1.00%	\$271	\$706	63%	
2016	3.00%	\$926	1.085%	\$311	2.00%	\$545	\$1,465	63%	
2017	6.00%	\$1,922	1.085%	\$323	2.83%	\$774	\$2,150	63%	
2018	9.00%	\$2,990	1.085%	\$335	2.83%	\$776	\$2,230	63%	
2019	12.00%	\$4,135	1.085%	\$347	2.83%	\$777	\$2,313	64%	
2020	12.80%	\$4,576	1.085%	\$360	2.83%	\$776	\$2,400	65%	
2021	12.80%	\$4,746	1.085%	\$374	2.83%	\$774	\$2,489	66%	
2022	12.80%	\$4,923	1.085%	\$388	2.83%	\$770	\$2,582	67%	
2023	12.80%	\$5,106	1.085%	\$402	2.83%	\$764	\$2,678	68%	
2024	12.80%	\$5,297	1.085%	\$417	2.83%	\$757	\$2,778	69%	
2025	12.80%	\$5,494	1.085%	\$433	2.83%	\$748	\$2,881	71%	
2026	12.80%	\$5,699	1.085%	\$449	2.83%	\$737	\$2,989	72%	
2027	12.80%	\$5,911	1.085%	\$466	2.83%	\$723	\$3,100	73%	
2028	12.80%	\$6,131	1.085%	\$483	2.83%	\$705	\$3,215	74%	
2029	12.80%	\$6,359	1.085%	\$501	2.83%	\$684	\$3,335	75%	
2030	12.80%	\$6,596	1.085%	\$520	2.83%	\$658	\$3,459	77%	
2031	12.80%	\$6,841	1.085%	\$539	2.83%	\$628	\$3,588	78%	
2032	12.80%	\$7,096	1.085%	\$559	2.83%	\$595	\$3,721	79%	
2033	12.80%	\$7,360	1.085%	\$580	2.83%	\$559	\$3,860	81%	
2034	12.80%	\$7,634	1.085%	\$601	2.83%	\$521	\$4,004	82%	
2035	12.80%	\$7,918	1.085%	\$624	2.83%	\$481	\$4,153	84%	
2036	12.80%	\$8,213	1.085%	\$647	2.83%	\$439	\$4,307	86%	
2037	12.80%	\$8,519	1.085%	\$671	2.83%	\$396	\$4,468	87%	
2038	12.80%	\$8,836	1.085%	\$696	2.83%	\$352	\$4,634	89%	
2039	12.80%	\$9,166	1.085%	\$722	2.83%	\$309	\$4,807	91%	
2040	12.80%	\$9,507	1.085%	\$749	2.83%	\$266	\$4,986	93%	
2041	12.80%	\$9,862	1.085%	\$777	2.83%	\$225	\$5,172	95%	
2042	12.80%	\$10,230	1.085%	\$806	2.83%	\$185	\$5,365	98%	
2043	12.80%	\$10,613	1.085%	\$836	2.83%	\$150	\$5,566	100%	
Totals:		\$182,900		\$15,479		\$16,347		\$21,594	

Fiscal year	Employer: 9.37%		State: 1.085%		2% at 60: 2.83%		2% at 62: 2.39%		Projected funded ratio
	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Average cost per member		
2014	0.00%	\$0	0.987%	\$263	0.00%	\$0	\$0	64%	
2015	1.00%	\$298	1.142%	\$316	1.00%	\$271	\$706	63%	
2016	3.00%	\$926	1.085%	\$311	2.00%	\$545	\$1,465	63%	
2017	6.00%	\$1,922	1.085%	\$323	2.83%	\$774	\$2,150	63%	
2018	9.00%	\$2,990	1.085%	\$335	2.83%	\$776	\$2,230	63%	
2019	9.37%	\$3,229	1.085%	\$347	2.83%	\$777	\$2,313	64%	
2020	9.37%	\$3,349	1.085%	\$360	2.83%	\$776	\$2,400	65%	
2021	9.37%	\$3,474	1.085%	\$374	2.83%	\$774	\$2,489	65%	
2022	9.37%	\$3,603	1.085%	\$388	2.83%	\$770	\$2,582	66%	
2023	9.37%	\$3,738	1.085%	\$402	2.83%	\$764	\$2,678	66%	
2024	9.37%	\$3,877	1.085%	\$417	2.83%	\$757	\$2,778	67%	
2025	9.37%	\$4,021	1.085%	\$433	2.83%	\$748	\$2,881	68%	
2026	9.37%	\$4,171	1.085%	\$449	2.83%	\$737	\$2,989	68%	
2027	9.37%	\$4,327	1.085%	\$466	2.83%	\$723	\$3,100	69%	
2028	9.37%	\$4,488	1.085%	\$483	2.83%	\$705	\$3,215	69%	
2029	9.37%	\$4,655	1.085%	\$501	2.83%	\$684	\$3,335	70%	
2030	9.37%	\$4,828	1.085%	\$520	2.83%	\$658	\$3,459	71%	
2031	9.37%	\$5,008	1.085%	\$539	2.83%	\$628	\$3,588	72%	
2032	9.37%	\$5,194	1.085%	\$559	2.83%	\$595	\$3,721	72%	
2033	9.37%	\$5,387	1.085%	\$580	2.83%	\$559	\$3,860	73%	
2034	9.37%	\$5,588	1.085%	\$601	2.83%	\$521	\$4,004	74%	
2035	9.37%	\$5,796	1.085%	\$624	2.83%	\$481	\$4,153	75%	
2036	9.37%	\$6,012	1.085%	\$647	2.83%	\$439	\$4,307	76%	
2037	9.37%	\$6,236	1.085%	\$671	2.83%	\$396	\$4,468	76%	
2038	9.37%	\$6,468	1.085%	\$696	2.83%	\$352	\$4,634	77%	
2039	9.37%	\$6,709	1.085%	\$722	2.83%	\$309	\$4,807	78%	
2040	9.37%	\$6,959	1.085%	\$749	2.83%	\$266	\$4,986	79%	
2041	9.37%	\$7,219	1.085%	\$777	2.83%	\$225	\$5,172	81%	
2042	9.37%	\$7,488	1.085%	\$806	2.83%	\$185	\$5,365	82%	
...									
2053	9.37%	\$11,220	1.085%	\$1,207	2.83%	\$9	\$8,039	100%	
Totals:		\$231,338		\$25,780		\$16,806		\$45,591	

Full Funding Over 50 Years - State Contribution 4.607%

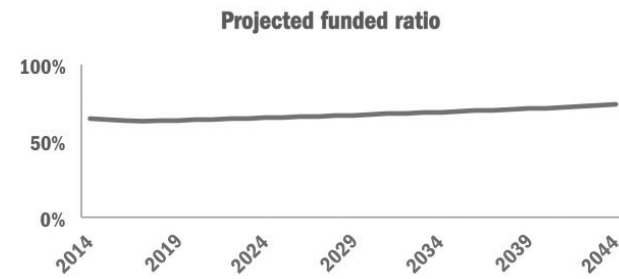
Rate of Increase	Target Funding	Timeframe	Start Date
Incremental	100%	50 years	2014-15

Full funding projected	Probabilities	
June 30, 2064	Overfunded (110% funded in 30 years)	Run out of money in 75 years
	34%	44%

Total Cost (billions): \$441.6

Notes:

The annual state contribution increases to 4.607 percent in October 2014-15. For 2014-15, the increase will be from the statutory rate of 3.291 percent for three payments, for a total of 0.987 percent. For 2015-16, the increase will be one payment from the statutory rate of 3.291 percent and three payments from the statutory rate of 3.522 percent, for a total of 1.142 percent. For all other years, the increase will be from the statutory rate of 3.522 percent, for a total of 1.085 percent. All other increases begin July 2015.



Full Funding Over 60 Years - State Contribution 4.607%

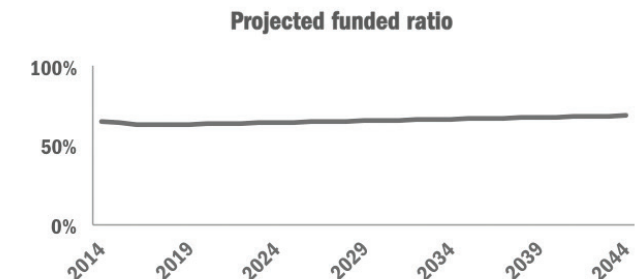
Rate of Increase	Target Funding	Timeframe	Start Date
Incremental	100%	60 years	2014-15

Full funding projected	Probabilities	
June 30, 2074	Overfunded (110% funded in 30 years)	Run out of money in 75 years
	31%	47%

Total Cost (billions): \$618.0

Notes:

The annual state contribution increases to 4.607 percent in October 2014-15. For 2014-15, the increase will be from the statutory rate of 3.291 percent for three payments, for a total of 0.987 percent. For 2015-16, the increase will be one payment from the statutory rate of 3.291 percent and three payments from the statutory rate of 3.522 percent, for a total of 1.142 percent. For all other years, the increase will be from the statutory rate of 3.522 percent, for a total of 1.085 percent. All other increases begin July 2015.



Fiscal year	Employer: 7.68%		State: 1.085%		2% at 60: 2.83%		2% at 62: 2.39%		Projected funded ratio
	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	
2014	0.00%	\$0	0.987%	\$263	0.00%	\$0	0.00%	\$0	64%
2015	1.00%	\$298	1.142%	\$316	1.00%	\$271	1.00%	\$26	63%
2016	3.00%	\$926	1.085%	\$311	2.00%	\$545	2.00%	\$72	63%
2017	6.00%	\$1,922	1.085%	\$323	2.83%	\$774	2.39%	\$111	63%
2018	7.68%	\$2,549	1.085%	\$335	2.83%	\$776	2.39%	\$138	63%
2019	7.68%	\$2,644	1.085%	\$347	2.83%	\$777	2.39%	\$167	64%
2020	7.68%	\$2,743	1.085%	\$360	2.83%	\$776	2.39%	\$199	64%
2021	7.68%	\$2,845	1.085%	\$374	2.83%	\$774	2.39%	\$232	64%
2022	7.68%	\$2,951	1.085%	\$388	2.83%	\$770	2.39%	\$269	65%
2023	7.68%	\$3,061	1.085%	\$402	2.83%	\$764	2.39%	\$308	65%
2024	7.68%	\$3,175	1.085%	\$417	2.83%	\$757	2.39%	\$349	65%
2025	7.68%	\$3,294	1.085%	\$433	2.83%	\$748	2.39%	\$394	66%
2026	7.68%	\$3,416	1.085%	\$449	2.83%	\$737	2.39%	\$441	66%
2027	7.68%	\$3,544	1.085%	\$466	2.83%	\$723	2.39%	\$493	67%
2028	7.68%	\$3,675	1.085%	\$483	2.83%	\$705	2.39%	\$549	67%
2029	7.68%	\$3,812	1.085%	\$501	2.83%	\$684	2.39%	\$610	67%
2030	7.68%	\$3,954	1.085%	\$520	2.83%	\$658	2.39%	\$676	68%
2031	7.68%	\$4,101	1.085%	\$539	2.83%	\$628	2.39%	\$747	68%
2032	7.68%	\$4,254	1.085%	\$559	2.83%	\$595	2.39%	\$822	68%
2033	7.68%	\$4,412	1.085%	\$580	2.83%	\$559	2.39%	\$902	69%
2034	7.68%	\$4,577	1.085%	\$601	2.83%	\$521	2.39%	\$985	69%
2035	7.68%	\$4,747	1.085%	\$624	2.83%	\$481	2.39%	\$1,072	70%
2036	7.68%	\$4,924	1.085%	\$647	2.83%	\$439	2.39%	\$1,162	70%
2037	7.68%	\$5,107	1.085%	\$671	2.83%	\$396	2.39%	\$1,256	71%
2038	7.68%	\$5,297	1.085%	\$696	2.83%	\$352	2.39%	\$1,352	71%
2039	7.68%	\$5,495	1.085%	\$722	2.83%	\$309	2.39%	\$1,451	72%
2040	7.68%	\$5,700	1.085%	\$749	2.83%	\$266	2.39%	\$1,550	72%
2041	7.68%	\$5,912	1.085%	\$777	2.83%	\$225	2.39%	\$1,652	73%
2042	7.68%	\$6,133	1.085%	\$806	2.83%	\$185	2.39%	\$1,753	73%
...									
2063	7.68%	\$13,279	1.085%	\$1,744	2.83%	\$0	2.39%	\$4,135	100%
Totals:		\$303,289		\$40,640		\$16,832		\$80,803	

Fiscal year	Employer: 6.69%		State: 1.085%		2% at 60: 2.83%		2% at 62: 2.39%		Projected funded ratio
	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	
2014	0.00%	\$0	0.987%	\$263	0.00%	\$0	0.00%	\$0	64%
2015	1.00%	\$298	1.142%	\$316	1.00%	\$271	1.00%	\$26	63%
2016	3.00%	\$926	1.085%	\$311	2.00%	\$545	2.00%	\$72	63%
2017	6.00%	\$1,922	1.085%	\$323	2.83%	\$774	2.39%	\$111	63%
2018	6.69%	\$2,223	1.085%	\$335	2.83%	\$776	2.39%	\$138	63%
2019	6.69%	\$2,306	1.085%	\$347	2.83%	\$777	2.39%	\$167	64%
2020	6.69%	\$2,391	1.085%	\$360	2.83%	\$776	2.39%	\$199	64%
2021	6.69%	\$2,481	1.085%	\$374	2.83%	\$774	2.39%	\$232	64%
2022	6.69%	\$2,573	1.085%	\$388	2.83%	\$770	2.39%	\$269	64%
2023	6.69%	\$2,669	1.085%	\$402	2.83%	\$764	2.39%	\$308	64%
2024	6.69%	\$2,768	1.085%	\$417	2.83%	\$757	2.39%	\$349	64%
2025	6.69%	\$2,871	1.085%	\$433	2.83%	\$748	2.39%	\$394	65%
2026	6.69%	\$2,978	1.085%	\$449	2.83%	\$737	2.39%	\$441	65%
2027	6.69%	\$3,089	1.085%	\$466	2.83%	\$723	2.39%	\$493	65%
2028	6.69%	\$3,204	1.085%	\$483	2.83%	\$705	2.39%	\$549	65%
2029	6.69%	\$3,324	1.085%	\$501	2.83%	\$684	2.39%	\$610	66%
2030	6.69%	\$3,447	1.085%	\$520	2.83%	\$658	2.39%	\$676	66%
2031	6.69%	\$3,576	1.085%	\$539	2.83%	\$628	2.39%	\$747	66%
2032	6.69%	\$3,709	1.085%	\$559	2.83%	\$595	2.39%	\$822	66%
2033	6.69%	\$3,847	1.085%	\$580	2.83%	\$559	2.39%	\$902	66%
2034	6.69%	\$3,990	1.085%	\$601	2.83%	\$521	2.39%	\$985	67%
2035	6.69%	\$4,139	1.085%	\$624	2.83%	\$481	2.39%	\$1,072	67%
2036	6.69%	\$4,293	1.085%	\$647	2.83%	\$439	2.39%	\$1,162	67%
2037	6.69%	\$4,453	1.085%	\$671	2.83%	\$396	2.39%	\$1,256	67%
2038	6.69%	\$4,618	1.085%	\$696	2.83%	\$352	2.39%	\$1,352	67%
2039	6.69%	\$4,791	1.085%	\$722	2.83%	\$309	2.39%	\$1,451	68%
2040	6.69%	\$4,969	1.085%	\$749	2.83%	\$266	2.39%	\$1,550	68%
2041	6.69%	\$5,155	1.085%	\$777	2.83%	\$225	2.39%	\$1,652	68%
2042	6.69%	\$5,347	1.085%	\$806	2.83%	\$185	2.39%	\$1,753	68%
...									
2073	6.69%	\$16,729	1.085%	\$2,520	2.83%	\$0	2.39%	\$5,975	100%
Totals:		\$407,369		\$62,113		\$16,832		\$131,718	

Full Funding Over 30 Years - State Contribution 4.065%

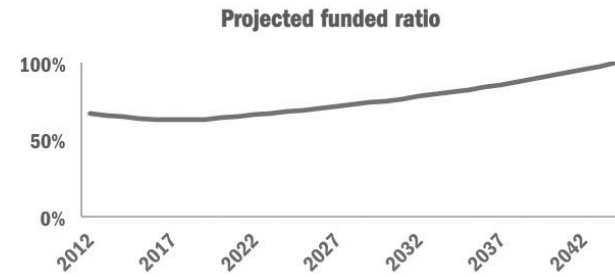
Rate of Increase	Target Funding	Timeframe	Start Date
Incremental	100%	30 years	2014-15

Full funding projected	Probabilities	
June 30, 2044	Overfunded (110% funded in 30 years)	Run out of money in 75 years
	42%	25%

Total Cost (billions): \$238.3

Notes:

The annual state contribution increases to 4.065 percent in October 2014-15. For 2014-15, the increase will be from the statutory rate of 3.291 percent for three payments, for a total of 0.581 percent. For 2015-16, the increase will be one payment from the statutory rate of 3.291 percent and three payments from the statutory rate of 3.522 percent, for a total of 0.602 percent. For all other years, the increase will be from the statutory rate of 3.522 percent, for a total of 0.543 percent. All other increases begin July 2015.



Full Funding Over 40 Years - State Contribution 4.065%

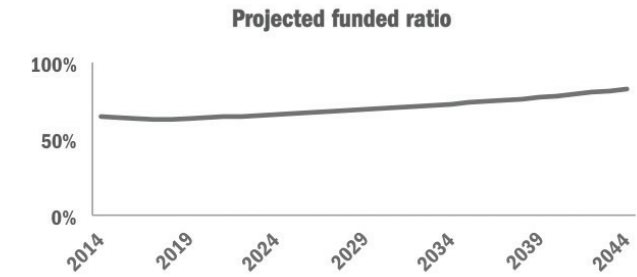
Rate of Increase	Target Funding	Timeframe	Start Date
Incremental	100%	40 years	2014-15

Full funding projected	Probabilities	
June 30, 2054	Overfunded (110% funded in 30 years)	Run out of money in 75 years
	36%	36%

Total Cost (billions): \$322.0

Notes:

The annual state contribution increases to 4.065 percent in October 2014-15. For 2014-15, the increase will be from the statutory rate of 3.291 percent for three payments, for a total of 0.581 percent. For 2015-16, the increase will be one payment from the statutory rate of 3.291 percent and three payments from the statutory rate of 3.522 percent, for a total of 0.602 percent. For all other years, the increase will be from the statutory rate of 3.522 percent, for a total of 0.543 percent. All other increases begin July 2015.



Fiscal year	Employer: 13.52%		State: 0.543%		2% at 60: 2.83%		2% at 62: 2.39%		Projected funded ratio
	Contribution increase	Annual cost (\$Millions)	Contribution increase	Annual cost (\$Millions)	Contribution increase	Annual cost (\$Millions)	Contribution increase	Annual cost (\$Millions)	
2014	0.00%	\$0	0.581%	\$155	0.00%	\$0	0.00%	\$0	64%
2015	1.00%	\$298	0.602%	\$167	1.00%	\$271	1.00%	\$26	63%
2016	3.00%	\$926	0.543%	\$156	2.00%	\$545	2.00%	\$72	63%
2017	6.00%	\$1,922	0.543%	\$162	2.83%	\$774	2.39%	\$111	63%
2018	9.00%	\$2,990	0.543%	\$168	2.83%	\$776	2.39%	\$138	63%
2019	12.00%	\$4,135	0.543%	\$174	2.83%	\$777	2.39%	\$167	64%
2020	13.52%	\$4,832	0.543%	\$180	2.83%	\$776	2.39%	\$199	65%
2021	13.52%	\$5,012	0.543%	\$187	2.83%	\$774	2.39%	\$232	66%
2022	13.52%	\$5,199	0.543%	\$194	2.83%	\$770	2.39%	\$269	67%
2023	13.52%	\$5,392	0.543%	\$201	2.83%	\$764	2.39%	\$308	68%
2024	13.52%	\$5,593	0.543%	\$209	2.83%	\$757	2.39%	\$349	69%
2025	13.52%	\$5,802	0.543%	\$217	2.83%	\$748	2.39%	\$394	70%
2026	13.52%	\$6,018	0.543%	\$225	2.83%	\$737	2.39%	\$441	71%
2027	13.52%	\$6,242	0.543%	\$233	2.83%	\$723	2.39%	\$493	73%
2028	13.52%	\$6,474	0.543%	\$242	2.83%	\$705	2.39%	\$549	74%
2029	13.52%	\$6,715	0.543%	\$251	2.83%	\$684	2.39%	\$610	75%
2030	13.52%	\$6,965	0.543%	\$260	2.83%	\$658	2.39%	\$676	76%
2031	13.52%	\$7,224	0.543%	\$270	2.83%	\$628	2.39%	\$747	78%
2032	13.52%	\$7,493	0.543%	\$280	2.83%	\$595	2.39%	\$822	79%
2033	13.52%	\$7,772	0.543%	\$290	2.83%	\$559	2.39%	\$902	81%
2034	13.52%	\$8,061	0.543%	\$301	2.83%	\$521	2.39%	\$985	82%
2035	13.52%	\$8,362	0.543%	\$312	2.83%	\$481	2.39%	\$1,072	84%
2036	13.52%	\$8,673	0.543%	\$324	2.83%	\$439	2.39%	\$1,162	86%
2037	13.52%	\$8,996	0.543%	\$336	2.83%	\$396	2.39%	\$1,256	87%
2038	13.52%	\$9,331	0.543%	\$348	2.83%	\$352	2.39%	\$1,352	89%
2039	13.52%	\$9,679	0.543%	\$361	2.83%	\$309	2.39%	\$1,451	91%
2040	13.52%	\$10,040	0.543%	\$375	2.83%	\$266	2.39%	\$1,550	93%
2041	13.52%	\$10,415	0.543%	\$389	2.83%	\$225	2.39%	\$1,652	95%
2042	13.52%	\$10,803	0.543%	\$403	2.83%	\$185	2.39%	\$1,753	98%
2043	13.52%	\$11,207	0.543%	\$418	2.83%	\$150	2.39%	\$1,855	100%
Totals:		\$192,570		\$7,786		\$16,347		\$21,594	

Fiscal year	Employer: 10.01%		State: 0.543%		2% at 60: 2.83%		2% at 62: 2.39%		Projected funded ratio
	Contribution increase	Annual cost (\$Millions)	Contribution increase	Annual cost (\$Millions)	Contribution increase	Annual cost (\$Millions)	Contribution increase	Annual cost (\$Millions)	
2014	0.00%	\$0	0.581%	\$155	0.00%	\$0	0.00%	\$0	64%
2015	1.00%	\$298	0.602%	\$167	1.00%	\$271	1.00%	\$26	63%
2016	3.00%	\$926	0.543%	\$156	2.00%	\$545	2.00%	\$72	63%
2017	6.00%	\$1,922	0.543%	\$162	2.83%	\$774	2.39%	\$111	63%
2018	9.00%	\$2,990	0.543%	\$168	2.83%	\$776	2.39%	\$138	63%
2019	10.01%	\$3,449	0.543%	\$174	2.83%	\$777	2.39%	\$167	64%
2020	10.01%	\$3,577	0.543%	\$180	2.83%	\$776	2.39%	\$199	64%
2021	10.01%	\$3,711	0.543%	\$187	2.83%	\$774	2.39%	\$232	65%
2022	10.01%	\$3,849	0.543%	\$194	2.83%	\$770	2.39%	\$269	65%
2023	10.01%	\$3,992	0.543%	\$201	2.83%	\$764	2.39%	\$308	66%
2024	10.01%	\$4,141	0.543%	\$209	2.83%	\$757	2.39%	\$349	67%
2025	10.01%	\$4,295	0.543%	\$217	2.83%	\$748	2.39%	\$394	67%
2026	10.01%	\$4,455	0.543%	\$225	2.83%	\$737	2.39%	\$441	68%
2027	10.01%	\$4,621	0.543%	\$233	2.83%	\$723	2.39%	\$493	69%
2028	10.01%	\$4,793	0.543%	\$242	2.83%	\$705	2.39%	\$549	69%
2029	10.01%	\$4,972	0.543%	\$251	2.83%	\$684	2.39%	\$610	70%
2030	10.01%	\$5,157	0.543%	\$260	2.83%	\$658	2.39%	\$676	71%
2031	10.01%	\$5,349	0.543%	\$270	2.83%	\$628	2.39%	\$747	71%
2032	10.01%	\$5,548	0.543%	\$280	2.83%	\$595	2.39%	\$822	72%
2033	10.01%	\$5,754	0.543%	\$290	2.83%	\$559	2.39%	\$902	73%
2034	10.01%	\$5,968	0.543%	\$301	2.83%	\$521	2.39%	\$985	74%
2035	10.01%	\$6,191	0.543%	\$312	2.83%	\$481	2.39%	\$1,072	74%
2036	10.01%	\$6,421	0.543%	\$324	2.83%	\$439	2.39%	\$1,162	75%
2037	10.01%	\$6,660	0.543%	\$336	2.83%	\$396	2.39%	\$1,256	76%
2038	10.01%	\$6,909	0.543%	\$348	2.83%	\$352	2.39%	\$1,352	77%
2039	10.01%	\$7,166	0.543%	\$361	2.83%	\$309	2.39%	\$1,451	78%
2040	10.01%	\$7,433	0.543%	\$375	2.83%	\$266	2.39%	\$1,550	79%
2041	10.01%	\$7,711	0.543%	\$389	2.83%	\$225	2.39%	\$1,652	80%
2042	10.01%	\$7,999	0.543%	\$403	2.83%	\$185	2.39%	\$1,753	82%
...									
2053	10.01%	\$11,985	0.543%	\$604	2.83%	\$9	2.39%	\$8,039	100%
Totals:		\$246,682		\$12,934		\$16,806		\$45,591	

Full Funding Over 50 Years - State Contribution 4.065%

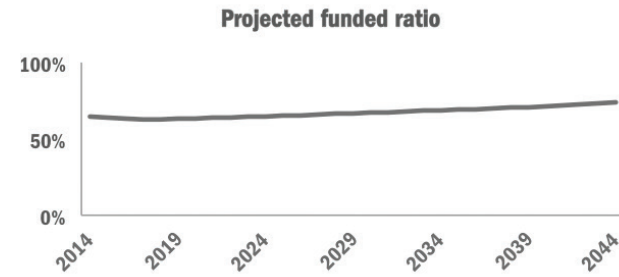
Rate of Increase	Target Funding	Timeframe	Start Date
Incremental	100%	50 years	2014-15

Full funding projected	Probabilities	
June 30, 2064	Overfunded (110% funded in 30 years)	Run out of money in 75 years
	34%	43%

Total Cost (billions): \$444.7

Notes:

The annual state contribution increases to 4.065 percent in October 2014-15. For 2014-15, the increase will be from the statutory rate of 3.291 percent for three payments, for a total of 0.581 percent. For 2015-16, the increase will be one payment from the statutory rate of 3.291 percent and three payments from the statutory rate of 3.522 percent, for a total of 0.602 percent. For all other years, the increase will be from the statutory rate of 3.522 percent, for a total of 0.543 percent. All other increases begin July 2015.



Full Funding Over 60 Years - State Contribution 4.065%

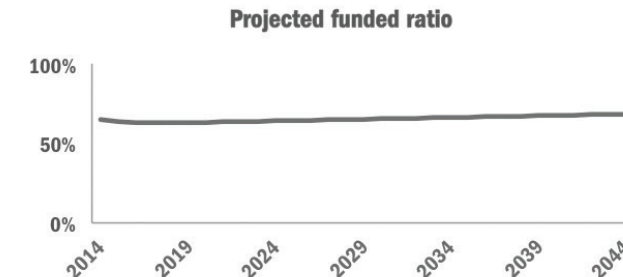
Rate of Increase	Target Funding	Timeframe	Start Date
Incremental	100%	60 years	2014-15

Full funding projected	75-year probabilities	
June 30, 2074	Overfunded (110% funded in 30 years)	Run out of money in 75 years
	31%	47%

Total Cost (billions): \$622.8

Notes:

The annual state contribution increases to 4.065 percent in October 2014-15. For 2014-15, the increase will be from the statutory rate of 3.291 percent for three payments, for a total of 0.581 percent. For 2015-16, the increase will be one payment from the statutory rate of 3.291 percent and three payments from the statutory rate of 3.522 percent, for a total of 0.602 percent. For all other years, the increase will be from the statutory rate of 3.522 percent, for a total of 0.543 percent. All other increases begin July 2015.



Fiscal year	Employer: 8.27%		State: 0.543%		2% at 60: 2.83%		2% at 62: 2.39%		Projected funded ratio
	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	
2014	0.00%	\$0	0.581%	\$155	0.00%	\$0	0.00%	\$0	64%
2015	1.00%	\$298	0.602%	\$167	1.00%	\$271	1.00%	\$26	63%
2016	3.00%	\$926	0.543%	\$156	2.00%	\$545	2.00%	\$72	63%
2017	6.00%	\$1,922	0.543%	\$162	2.83%	\$774	2.39%	\$111	63%
2018	8.27%	\$2,748	0.543%	\$168	2.83%	\$776	2.39%	\$138	63%
2019	8.27%	\$2,850	0.543%	\$174	2.83%	\$777	2.39%	\$167	63%
2020	8.27%	\$2,957	0.543%	\$180	2.83%	\$776	2.39%	\$199	64%
2021	8.27%	\$3,067	0.543%	\$187	2.83%	\$774	2.39%	\$232	64%
2022	8.27%	\$3,181	0.543%	\$194	2.83%	\$770	2.39%	\$269	64%
2023	8.27%	\$3,300	0.543%	\$201	2.83%	\$764	2.39%	\$308	65%
2024	8.27%	\$3,423	0.543%	\$209	2.83%	\$757	2.39%	\$349	65%
2025	8.27%	\$3,550	0.543%	\$217	2.83%	\$748	2.39%	\$394	66%
2026	8.27%	\$3,682	0.543%	\$225	2.83%	\$737	2.39%	\$441	66%
2027	8.27%	\$3,820	0.543%	\$233	2.83%	\$723	2.39%	\$493	66%
2028	8.27%	\$3,962	0.543%	\$242	2.83%	\$705	2.39%	\$549	67%
2029	8.27%	\$4,109	0.543%	\$251	2.83%	\$684	2.39%	\$610	67%
2030	8.27%	\$4,262	0.543%	\$260	2.83%	\$658	2.39%	\$676	67%
2031	8.27%	\$4,421	0.543%	\$270	2.83%	\$628	2.39%	\$747	68%
2032	8.27%	\$4,585	0.543%	\$280	2.83%	\$595	2.39%	\$822	68%
2033	8.27%	\$4,756	0.543%	\$290	2.83%	\$559	2.39%	\$902	69%
2034	8.27%	\$4,933	0.543%	\$301	2.83%	\$521	2.39%	\$985	69%
2035	8.27%	\$5,117	0.543%	\$312	2.83%	\$481	2.39%	\$1,072	70%
2036	8.27%	\$5,307	0.543%	\$324	2.83%	\$439	2.39%	\$1,162	70%
2037	8.27%	\$5,505	0.543%	\$336	2.83%	\$396	2.39%	\$1,256	70%
2038	8.27%	\$5,710	0.543%	\$348	2.83%	\$352	2.39%	\$1,352	71%
2039	8.27%	\$5,923	0.543%	\$361	2.83%	\$309	2.39%	\$1,451	71%
2040	8.27%	\$6,144	0.543%	\$375	2.83%	\$266	2.39%	\$1,550	72%
2041	8.27%	\$6,373	0.543%	\$389	2.83%	\$225	2.39%	\$1,652	73%
2042	8.27%	\$6,611	0.543%	\$403	2.83%	\$185	2.39%	\$1,753	73%
...									
2063	8.27%	\$14,313	0.543%	\$873	2.83%	\$0	2.39%	\$4,135	100%
Totals:		\$326,666		\$20,370		\$16,832		\$80,803	

Fiscal year	Employer: 7.28%		State: 0.543%		2% at 60: 2.83%		2% at 62: 2.39%		Projected funded ratio
	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	Contribution increase	Annual cost (\$millions)	
2014	0.00%	\$0	0.581%	\$155	0.00%	\$0	0.00%	\$0	64%
2015	1.00%	\$298	0.602%	\$167	1.00%	\$271	1.00%	\$26	63%
2016	3.00%	\$926	0.543%	\$156	2.00%	\$545	2.00%	\$72	63%
2017	6.00%	\$1,922	0.543%	\$162	2.83%	\$774	2.39%	\$111	63%
2018	7.28%	\$2,419	0.543%	\$168	2.83%	\$776	2.39%	\$138	63%
2019	7.28%	\$2,509	0.543%	\$174	2.83%	\$777	2.39%	\$167	63%
2020	7.28%	\$2,603	0.543%	\$180	2.83%	\$776	2.39%	\$199	63%
2021	7.28%	\$2,700	0.543%	\$187	2.83%	\$774	2.39%	\$232	64%
2022	7.28%	\$2,801	0.543%	\$194	2.83%	\$770	2.39%	\$269	64%
2023	7.28%	\$2,905	0.543%	\$201	2.83%	\$764	2.39%	\$308	64%
2024	7.28%	\$3,013	0.543%	\$209	2.83%	\$757	2.39%	\$349	64%
2025	7.28%	\$3,125	0.543%	\$217	2.83%	\$748	2.39%	\$394	64%
2026	7.28%	\$3,242	0.543%	\$225	2.83%	\$737	2.39%	\$441	65%
2027	7.28%	\$3,363	0.543%	\$233	2.83%	\$723	2.39%	\$493	65%
2028	7.28%	\$3,488	0.543%	\$242	2.83%	\$705	2.39%	\$549	65%
2029	7.28%	\$3,618	0.543%	\$251	2.83%	\$684	2.39%	\$610	65%
2030	7.28%	\$3,752	0.543%	\$260	2.83%	\$658	2.39%	\$676	66%
2031	7.28%	\$3,892	0.543%	\$270	2.83%	\$628	2.39%	\$747	66%
2032	7.28%	\$4,037	0.543%	\$280	2.83%	\$595	2.39%	\$822	66%
2033	7.28%	\$4,187	0.543%	\$290	2.83%	\$559	2.39%	\$902	66%
2034	7.28%	\$4,343	0.543%	\$301	2.83%	\$521	2.39%	\$985	66%
2035	7.28%	\$4,505	0.543%	\$312	2.83%	\$481	2.39%	\$1,072	67%
2036	7.28%	\$4,672	0.543%	\$324	2.83%	\$439	2.39%	\$1,162	67%
2037	7.28%	\$4,846	0.543%	\$336	2.83%	\$396	2.39%	\$1,256	67%
2038	7.28%	\$5,027	0.543%	\$348	2.83%	\$352	2.39%	\$1,352	67%
2039	7.28%	\$5,214	0.543%	\$361	2.83%	\$309	2.39%	\$1,451	67%
2040	7.28%	\$5,409	0.543%	\$375	2.83%	\$266	2.39%	\$1,550	68%
2041	7.28%	\$5,611	0.543%	\$389	2.83%	\$225	2.39%	\$1,652	68%
2042	7.28%	\$5,820	0.543%	\$403	2.83%	\$185	2.39%	\$1,753	68%
...									
2073	7.28%	\$18,209	0.543%	\$1,261	2.83%	\$0	2.39%	\$5,975	100%
Totals:		\$443,116		\$31,117		\$16,832		\$131,718	



California State Teachers' Retirement System
100 Waterfront Place
West Sacramento, CA 95605

916-414-2200

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