

**California 2023 Funding Assumption Survey**  
Updated April 25, 2023

RANK														PLAN SPONSOR	Assumed Investment Return	Base Wage Growth	Assumed "Excess" Return	Amortization Period	Valuation Asset Corridor	Asset Smoothing (years)	Trailing Returns (market percents)				
2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2011	2010	2009		(a)	(b)	(a) - (b)			5 Year	10 Year	15 Year	20 Year		
1	4	2	3	2	2	6	6	6	5	3	4	5	5	CalPERS - Judges System II <sup>1,3</sup>	6.00%	2.80%	3.20%	G/L 20 layered with some ramping; level \$\$: FR=122%	N/A (market)	N/A					
2	1	3	4	4	3	4	3	3	3	2	9	9	10	San Mateo County	6.25%	3.00%	3.25%	1 - declining; G/L 14 layered	Y: 80-120	5 with offsets	5.9	7.6			
3	2	1	2	3	4	5	5	5	4	7	10	11	15	City of San Diego <sup>5</sup>	6.50%	3.05%	3.45%	5-declining and part layered ;G/L layered 15. most level \$\$	Y: 80-120	4	7.4	8.4			
4	7	6	6	8	8	7	8	8	8	5	6	8	7	LA Department of Water & Power	6.50%	3.00%	3.50%	G/L 15 - layered Level \$\$	N	5	7.32	8.01			
5	16	11	10	9	19	18	17	22	22	31	30	29	30	San Diego County	6.50%	3.00%	3.50%	3-rolling; G/L 20 layered but not less than 3	N	5 <sup>10</sup>	5.45	6.26			
6	3	13	12	11	9	8	11	11	10	22	20	22	24	Fresno County	6.50%	3.00%	3.50%	11-declining; G/L 15 layered	Y: 70-130	5	5.36	6.45			
7	5	4	5	5	5	2	4	4	23	17	3	7	13	City of San Jose (Safety) <sup>9</sup>	6.625%	3.00%	3.625%	most G/L 15 layered	Y: 80-120	5	6.6				
8	6	5	9	7	7	16	12	12	31	29	33	34	40	City of San Jose (General) <sup>9</sup>	6.625%	3.00%	3.625%	most 17 - declining; most G/L layered 20	N	5	7.0	6.3			
9	12	10	8	6	6	3	2	2	2	4	5	4	4	Contra Costa County	6.75%	3.00%	3.75%	1- declining; G/L 18 layered	N	5	9.60	9.16			
10	8	7	18	16	15	29	29	30	32	30	36	27	8	Mendocino County	6.75%	3.25%	3.50%	14-declining; G/L 18 layered	Y: 75-125	5 <sup>11</sup>	6.71	8.1			
11	9	17	16	26	24	13	7	7	6	8	11	37	36	Alameda-Contra Costa Transit <sup>4</sup>	6.75%	3.00%	3.75%	6-declining; G/L 20 layered	Y: 80-120	5	2.6	5.3		(as of September 30, 2022)	
12	18	14	13	14	13	11	15	15	13	33	32	31	32	City of Fresno (Safety)	6.75%	3.00%	3.75%	if FR<100%, G/L 15 layered; if FR over 110%-30	N	5	6.9	8.15			
13	19	15	14	15	14	12	16	16	14	34	31	32	33	City of Fresno (General) <sup>6</sup>	6.75%	3.00%	3.75%	if FR<100%, G/L 15 layered; if FR over 110%-30	N	5	6.9	8.14			
14	10	8	17	13	12	31	30	28	29	25	25	24	29	Sacramento County	6.75%	3.00%	3.75%	Most 13 - declining; G/L 20 layered	Y: 70-130	7	8.07	8.26			
15	17	12	11	10	11	10	14	14	12	13	14	13	11	Sonoma County	6.75%	3.00%	3.75%	6-declining; G/L 20 layered	N	5	10.35	9.92			
16	11	9	7	30	30	30	21	26	20	14	15	6	6	University of California <sup>8</sup>	6.75%	3.25%	3.50%	18-declining, Most G/L 20 layered, some 30 layered Level \$\$	N	5	6.23	7.56			
17	15	26	29	27	27	25	27	25	27	21	35	35	28	San Luis Obispo County	6.75%	3.00%	3.75%	18- declining; G/L 20 layered	N	5	9.8	8.3	6.1		
18	30	30	33	33	34	32	34	34	35	36	40	40	39	East Bay Municipal Utility	6.75%	3.00%	3.75%	Pre-2012 layered 30; Otherwise G/L-20 layered	Y: 70-130	5	7.8	8.32			
19	33	33	35	35	37	26	26	23	19	28	28	25	23	San Joaquin County <sup>7</sup>	6.75%	3.00%	3.75%	11-declining; G/L 15 layered	Y: 80-120	5	9.3	7.6	4.6	5.9	
20	13	27	28	29	29	23	31	31	21	15	16	14	9	Merced County	6.75%	2.75%	4.00%	11- declining; G/L 24 layered Both with ramping	N/A(market)	N/A	7.6	8.1	5.3	6.4	
21	14	25	27	25	26	22	22	36	36	37	39	39	38	Stanislaus County	6.75%	2.75%	4.00%	14 - declining; G/L 20 layered	Y: 80-120	5	6.0	7.7	5.5	6.4	
22	20	16	15	12	10	9	20	20	16	18	18	30	31	Santa Barbara County	7.00%	3.00%	4.00%	most 8-declining; G/L 19 layered and ramped	N/A(market)	N/A	7.7	7.3	5.2	6.7	
23	21	19	20	18	17	21	24	19	15	9	21	21	14	Marin County <sup>4</sup>	6.75%	2.75%	4.00%	8-declining; G/L 24 layered and ramped	N/A (Market)	N/A	7.4	8.7	5.8		
24	26	21	23	21	21	20	19	18	18	23	22	15	17	Imperial County	7.00%	3.25%	3.75%	9- declining; G/L 15 layered	Y: 70-130	5 with offsets	6.81	7.45			
25	22	24	24	22	25	14	9	9	7	11	13	10	12	Ventura County	7.00%	3.00%	4.00%	most G/L 15 - layered	N	5	7.9	8.55			
26	23	29	32	32	32	37	37	29	24	19	19	19	21	Tulare County	7.00%	3.00%	4.00%	12-declining; G/L 19 layered	Y: 70-130	10	5.8	6.6			
27	24	18	19	17	16	19	18	17	17	12	34	33	35	Orange County	7.00%	3.00%	4.00%	12-declining; G/L 20 layered	N	5	11.13	9.04			
28	27	22	22	20	20	24	23	21	25	16	17	16	19	Los Angeles Fire & Police	7.00%	3.25%	3.75%	most 15-declining; most G/L 20 layered;	Y: 60-140	7	8.02	8.86			
29	28	23	25	23	22	28	28	27	28	24	23	17	20	Alameda County	7.00%	3.25%	3.75%	11- declining ; G/L 20 layered	Y: 60-140	5	11.54	10.05			
30	29	28	31	31	31	33	32	32	30	26	26	20	22	City of Los Angeles	7.00%	3.25%	3.75%	most 20-declining ; G/L 15-layered	Y: 60-140	most 7	7.63	7.48			
31	31	31	26	24	23	27	25	24	26	20	24	23	25	Kern County	7.25%	3.25%	4.00%	13.5 - declining; G/L 18 layered	Y: 50-150	5	6.52	7.21			
32	34	34	36	37	36	35	35	35	34	27	27	26	27	Los Angeles County	7.00%	3.25%	3.75%	not greater then 19-declining; G/L 20 layered	N	5	8.1	8.6			
33	36	35	37	36	35	34	33	33	33	32	37	38	37	CalPERS <sup>3</sup>	6.80%	2.80%	4.00%	pre-2019 G/L 30; G/L 20 level \$\$ with certain ramping	N/A(market)	N/A	6.7	7.7		6.9	
34	25	20	21	19	18	15	10	10	9	6	12	12	16	San Bernardino County	7.25%	3.25%	4.00%	most G/L layered 20	N	5	7.48	7.92			
35	32	32	34	34	33	36	36	37	37	35	29	28	26	CalSTRS	7.00%	3.50%	3.50%	24 years with some laddered increases of 0.5% annually	N	3	8.7	9.4		7.80	
36	35	36	30	28	28	17	13	13	11	10	8	3	3	City & County of San Francisco	7.20%	3.25%	3.95%	most 4-declining; G/L 20 layered; rolling 20-year if FR > 100%	N	5					

**NOTES:**

**Bold indicates change from previous survey.**

- This does not reflect the Judges I system closed in 1994: features include pay-as-you-go funding and a 3% assumed investment return
- Legal agreement determines contribution level -- pegged to specified funded ratios
- Ramping up applies only to the investment portion of the gain/loss for first 5 years; not to the non-investment component
- 50% of "extraordinary" 2008/09 losses amortized over 30 years
- System has been reopened for non-Police pursuant to overturn of Proposition B
- Amortization will revert to average future working lifetime, roughly 10 years, in event FR becomes > 100%
- Extraordinary 2008 actuarial loss amortized over 30 years. Equivalent overall amortization period of all UAL is 14 years.
- Post-7/1/16 hires have option to elect to be in defined contribution ("DC") plan; to date, roughly 35% have elected DC 6% contribution now. eventually increasing to 9% over time, will be made toward UAL for those in DC plan. Additional state contributions may be required as phased employer rate increases to 17%
- Amortization payments increase at less than wage inflation; for San Jose General-2.75%; for San Jose Safety-2.5%
- Unrecognized losses as of June 30, 2019 combined into one layer of amortization over 4.5 years
- Net deferred gains as of June 30, 2019 amortized over 4 years

[Survey and related text will be posted on roederfinancial.com](#) We can be contacted at (619) 300-8500

FR = Funded ratio G/L = actuarial gains/actuarial losses  
POB = Pension Obligation Bond

"Layered" means a new amortization base is created each year.  
DC = Defined Contribution

Effective with the 2013 survey, the number of entities was reduced from 40 to 37, eliminating three small closed systems. Effective with the 2021 survey, the number of entities reduced to 36 to reflect omission of another closed system. The amortization periods for assumption changes are often longer than for G/L and are not shown here. Often, there is a separate amortization policy applicable to benefit changes.