

Pension Spotlight: California

July 13, 2021

Key Takeaways

- CalPERS's recent modification of plan and methodologies assumptions for city, county, and state employees could result in faster funding of liabilities and higher funded ratios at the expense of higher contribution costs for municipalities in the near-term.
- Pension plans are moderately funded for most cities and counties that participate under CalPERS' statewide pension plans.
- While we expect pension costs will rise for almost all local governments, issuers' ability to absorb these costs varies across the state.
- Escalating pension costs in the medium term may spur demand for pension obligation bond issuances with a goal of reducing pension costs overall and smoothing pension cost payments over the long-term.

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Pension Overview: California

	 Funded ratio	 Assumed rate of return	 Funding plan	 Minimum funding progress last year
CalPERS - PERF A	N/A			N/A
CalPERS - PERF B				
CalPERS - PERF C	N/A			N/A
CalSTRS				

Exposure greatest ←  → least

Note: State-specific relative risk of pension attributes with red indicating greatest exposure and green indicating least exposure. Funded ratio and minimum funding progress for CalPERS. PERF A and PERF C are evaluated at the issuer level.

Source: S&P Global Ratings.

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Credit Fundamentals By Sector

- State of California: We view California's pension liabilities as moderately high, with combined net pension liabilities as a percent of state personal income at 3.3% for fiscal year end 2019. Recent changes to state law will boost contributions to CalSTRS, although the state delayed the scheduled increase for one year in its pandemic-influenced fiscal 2021 budget. The state has also in recent years made modest extra contributions beyond previous requirements as the result of a directive (Proposition 2) to set aside certain excess revenues toward long term liability paydowns.
- Local governments: On average, pension plans for most municipalities in the state are moderately funded and stable. Pension costs are projected to rise for most municipalities in the future and the ability to absorb rising costs vary. Cities that already have high pension costs and large unfunded liabilities may face an increasingly difficult budgetary environment as pension costs become a larger portion of fixed costs in city budgets and may turn to pension obligation bonds in an effort to provide short-term relief.
- School districts and community colleges: Pension costs for school districts and community colleges have generally faced rising pension costs in recent years due to increasing salaries and aging population and have changed their assumptions to address weaker market conditions. So far, rated districts have been able to absorb increased pension costs, with additional assistance from supplementary contributions made by the state. The state is responsible for about a third of the districts' unfunded pension liabilities and we expect it to absorb the brunt of future rate increases post-fiscal 2022 given statutory caps on rate increases. We note certain rated community colleges maintain irrevocable pension stabilization funds (Section 115 Trust) that partly mitigate pension-related risks in our view.
- Higher education: Colleges and universities have generally been facing increasing pension costs similar to school districts and community colleges. There are two large public university systems in the state: the University of California (UC), which operates its own underfunded pension plan, and California State University, which participates in CalPERS. The legislature has provided for supplemental funding for both CalPERS and UC's pension program. In our opinion, the likely continued growth in pension costs are manageable for these systems given their balance sheet positions however market performance and changing assumptions could lead to accelerating costs and potential pressure.

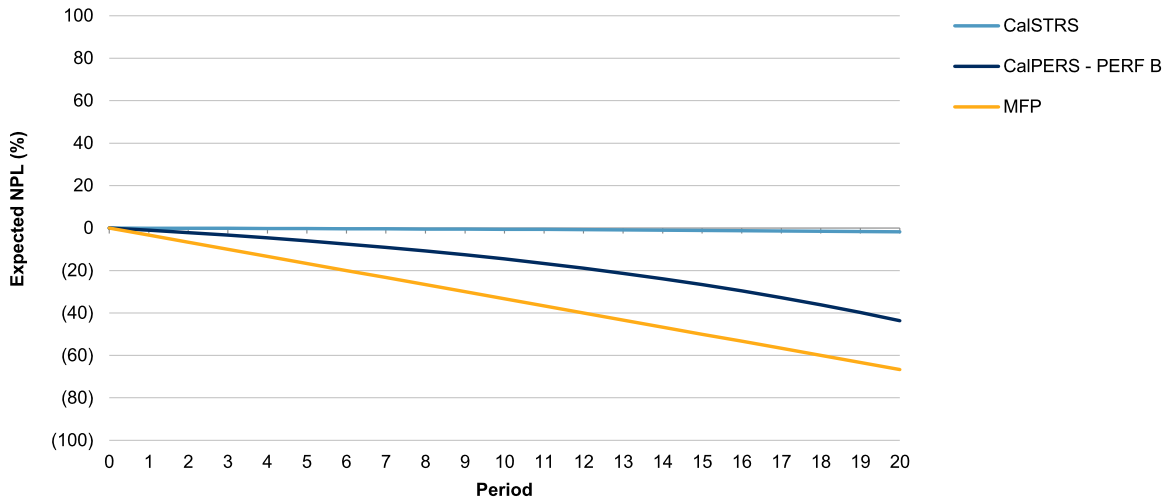
Pension Costs Likely To Continue To Rise For Most Municipalities

Pension costs have risen for most municipalities in recent years and costs are projected to continue to increase going into fiscal 2022 and beyond. While CalPERS has made efforts to improve its funding discipline starting in fiscal 2019 with a goal of funding unfunded pension liabilities faster, as noted below in chart 1 with last year's contributions making positive, albeit slower than our minimum funding progress metric, forward progress toward full funding. This has resulted in higher pension costs in the near term for most issuers. Rising pension costs have also prompted a resurgence of pension obligation bond issuances among cities and even certain special districts within the state.

Chart 1

Illustration Of Contribution Sufficiency

Expected NPL based on most recent contributions as of June 30, 2020



Not a projection of real-world expectations.

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The ability of issuers to absorb the increasing pension costs vary, with those issuers whose pension costs comprise a larger portion of their budgets faring poorer than others. Rising pension costs have, in part, prompted a resurgence of pension obligation bond issuances among cities and even certain special districts within the state. Overall, pension costs will likely remain a major item for most issuer's budgets. Notably, CalPERS' investment returns in both fiscal 2019 and fiscal 2020 fell below its 7% discount rate target, which, as indicated by CalPERS management in fiscal 2021, could necessitate the use of more aggressive investment products such as private equity.

Plan Summaries

California maintains several major pension plans that are administered by two agencies: California Public Employees' Retirement System (CalPERS), and the California State Teachers' Retirement System (CalSTRS), both of which are component units of the state. Both agencies are subject to oversight from their respective boards, which are made up of several members, including but not limited to members elected by plan constituents and those appointed by the governor and legislature. The board ultimately determines funding levels, assumptions, and methodologies.

Most local governments, school districts, state universities, and public utility providers participate in the following defined benefit plans:

- CalPERS – PERF A (agent multiple-employer): for state employees and public agencies with more than 100 active members;
- CalPERS – PERF B (cost-sharing multiple-employer): for non-teaching and non-certified employees of school districts;

Pension Spotlight: California

- CalPERS – PERF C (cost-sharing multiple-employer): for employees of public agencies with fewer than 100 active members; and
- CalSTRS (cost-sharing multiple-employer): for certificated employees of school districts.

CalPERS

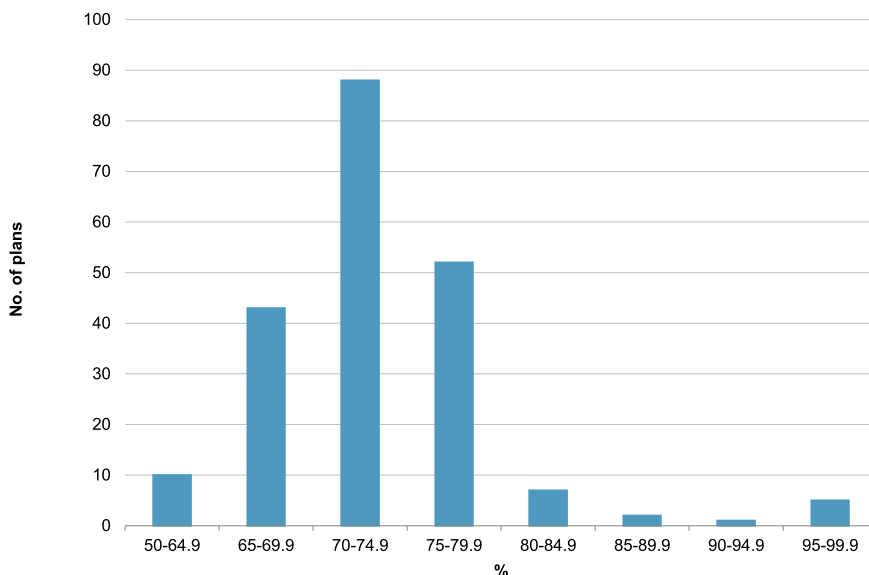
CalPERS, the nation's largest pension manager, with assets of about \$450 billion, serves as the common investment and administrative agency for PERF A, PERF B, and PERF C plans. The funded ratio and the size of pension liabilities for members that participate under PERF A, an agent multiple-employer plan, and PERF C, a cost-sharing multiple-employer plan, vary based on each specific member's plan assets and liabilities. Municipalities voluntarily participate in PERF A and PERF C, and plan provisions might vary from member to member. Membership in PERF B is required for all non-teaching and non-certified employees of school districts within the state. Members under all CalPERS plans are required to pay 100% of their actuarially determined contribution.

PERF C differs from most cost-sharing multiple-employer plans in that it offers a buffet of plan options that municipalities can choose from. As a result, each participating municipality under PERF C will have its own plan assets and liabilities and subsequent funded ratios. The funded ratios for the majority of plan members are moderately funded in our view. While plan provisions may vary from member to member, assumptions and methods are common across all CalPERS plans.

Recent POB issuance has resulted in very high funded ratios at the expense of higher debt.

Chart 2

PERF A And PERF C Funded Ratio Distribution S&P Global Ratings' rated universe



Measurement date: June 30, 2019

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While the majority of the plans have funded ratios that fall between 70% and 74.9%, we note that

Pension Spotlight: California

several plans have begun to report very high funded ratios between 95% and 99.9%. These plans are highly funded primarily due to the issuance of pension obligation bonds in recent years, resulting in very high funded ratios at the expense of higher debt levels.

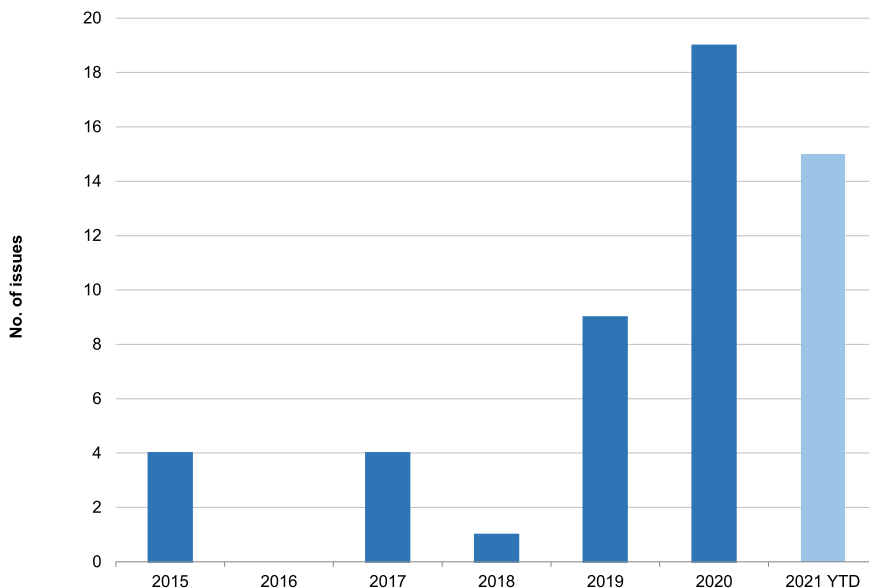
The funded ratio for PERF B has been on a modestly declining trend during the past seven years with a high of 83.5% in fiscal 2014 before stabilizing at approximately 70% in fiscal 2020.

POB Issuances

With the projected rise in pension contributions for most cities and counties in the state, pension obligation bonds (POBs) have become increasingly popular among municipalities that wish to recognize savings through lower pension costs during the life of the bonds. Another benefit that some issuers of POBs seek is the option to smooth out future pension cost payments in order to provide more predictability from a budgeting perspective. Since the start of 2018, S&P Global Ratings has rated 26 pension obligation bonds with an approximate par amount of \$4.3 billion combined to date. For more on our view of POBs, please see our report "Pension Obligation Bonds' Credit Impact On U.S. State And Local Government Issuers," Dec. 6, 2017 and our report "Pension Brief: POBs See Increasing Activity In Low-Interest-Rate Environment," Oct 14, 2020.

Chart 3

POB Issuances In California S&P Global Ratings' rated universe



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Reforms Improve Funding Discipline For CalPERS

Over the past several years, CalPERS implemented several reforms to its pension plan assumptions and methodologies. For fiscal 2019, CalPERS adopted a new amortization policy that shortens the amortization for new actuarial gains and losses are shortened to 20 years from 30

Pension Spotlight: California

years on a level-dollar basis. Overall, we view this change as favorable to participating members' credit profiles in the long term, in that contribution increases from a shorter amortization period will provide faster growth to plan funding. While this change will increase pension contribution costs for participating members in the near term, we believe members will benefit in the medium term through higher funded ratios from a credit perspective.

While the reported discount rate for CalPERS is 7.15% and has decreased from prior years, the assumed return used in the contribution calculation is 7.0% for fiscal 2020, which is above our guideline of 6.0%. This implies a risky target asset portfolio which could result in higher volatility of plan asset values and pension contributions in our view.

Additionally, CalPERS will no longer use a five-year ramp-up or ramp-down methodology for any changes to unfunded actuarial liabilities (UAL) bases established after June 30, 2019, that result from changes to pension plan assumptions or any gains or losses from investments. We believe this change increases transparency while also increasing volatility of pension contributions from a credit perspective by immediately factoring in the effects from policy or assumption changes on plan asset values and liabilities for member participants.

The reforms that CalPERS has taken in recent years are viewed positively from a credit perspective, although we note that several factors still remain as a credit risk in our view. We note that the large majority of existing UAL bases are still amortized on a 30-year declining timeframe given that the shortened amortization reform only applies to new UAL bases after June 30, 2019. Coupled with a discount rate that is still materially higher than our guidance, we believe pension costs will likely continue to increase for the large majority of local governments in the State.

CalPERS: Aggressive Investments Required

CalPERS investment returns have varied throughout the past several years with annualized investment returns as high as 21.7% reported in 2011 down to a low of only 0.6% return reported in 2016. Notably, investment returns in both 2019 and 2020 fell below CalPERS' target investment return of 7%, which has led to discussions by CalPERS management about investing in higher risk-higher reward types of investments such as private equity. Should CalPERS shift its investment strategy to riskier investments out of a need to reach its target rate of return, we believe this could add increased volatility in investment returns and in turn could result in higher required pension contributions.

CalSTRS

California public school educators from prekindergarten through community college participate in the CalSTRS pension plan, which serves 976,045 employees and beneficiaries and maintains approximately \$233.25 billion in net assets as of June 30, 2020, making it the second largest pension fund in the country. The plan administers a hybrid retirement system, including a defined benefit plan, two defined contribution plans, a postemployment benefit plan, and an account for ancillary activities associated with deferred compensation.

Pursuant to Assembly Bill 1469 and the CalSTRS Funding Plan enacted in 2014, employer contribution increases were phased in over a seven-year period through fiscal 2021, and, beginning in fiscal 2022, gave the board limited rate-setting authority to adjust the employer contribution rate, if necessary, to achieve full funding by 2046. The statutory funding plan gives the board limited authority to raise the state's contribution rate by no more than 0.5% per year. In light of the pandemic, the state's contribution rate for fiscal 2021 was frozen at the fiscal 2020

CalSTRS does not expect the retirements to have a material impact on funding levels.

Pension Spotlight: California

level; however, CalSTRS was made whole by the state's transfer of \$297 million from its Rainy Day Budget Stabilization Fund Act funds. The infusion of state funds provided districts with short-term relief, as the adopted employer contribution rates for fiscals 2020 through 2022 were reduced from the originally projected rates under the funding plan.

Due in part to the health and safety concerns stemming from the pandemic and challenges related to remote learning, there has been an uptick in retirements and resignations by teachers in fiscal years 2020 and 2021. A materially lower number of active employees paying into the plan could slow progress on meeting funding targets. However, we understand that CalSTRS does not expect the retirements to have a material impact on funding levels.

Other Post-Employment Benefits

OPEB costs and their related unfunded liabilities generally reflect a much smaller portion of issuer budgets. The majority of issuers in the state fund their OPEB costs on a pay-as-you-go basis which generally results in growing unfunded OPEB liabilities which could become a greater issuer should these costs grow to unsustainable levels. Contrary to CalPERS or CalSTRS, issuers have the legal ability to alter their OPEB benefits and offers to employees with certain changes subject to negotiations with bargaining units which provides more flexibility than pension liabilities in our view.

Appendix

Plan Details As Of June 30, 2020, Plan CAFRs

Metric	CalPERS - PERF A	CalPERS - PERF B	CalPERS - PERF C	CalSTRS	S&P Global Ratings' view
Funded ratio (%)	N.A.	70.0	75.1	66.0	Poorly funded plans increase the risk of rising contributions for employers.
Assumed return	7.00	7.00	7.00	7.00	An assumed return higher than our 6.0% guideline indicates higher market-driven contribution volatility than what we view as within typical tolerance levels around the country.
GASB discount rate (%)	7.15	7.15	7.15	7.10	This is the rate used in the calculation of the funded ratio.
Total plan ADC (mil. \$)	N.A.	2,760	1,597	10,849	Total contributions to the plan recommended by the actuary.
Total actual contribution (mil. \$)	N.A.	3,664	1,972	10,512	Total employee and employer contributions to the plan that were made last year.
Actual contribution as % ADC	N.A.	132.8	123.5	96.9	CalPERS exceeded ADC in fiscal 2020, while CalSTRS met only the legally required contributions for employers and the state
Actual contribution as % MFP	N/A	90.0	N/A	84.0	Under 100% indicates funding slower than what we view as minimal progress
Actual contribution as % SF	N/A	100.0	N/A	102.5	Under 100% indicates negative funding progress.
Amortization Method:					
Contribution smoothing	Direct rate	Direct rate	Direct rate	Asset	For CalPERS, recommended contributions are smoothed over 5 years. This was chosen as an alternate to asset smoothing. For CalSTRS, assets are smoothed over three years.

Plan Details As Of June 30, 2020, Plan CAFRs (cont.)

Metric	CalPERS - PERF A	CalPERS - PERF B	CalPERS - PERF C	CalSTRS	S&P Global Ratings' view
Period	Layered	Layered	Layered	Layered	A layered approach is closed and tracks annual bases separately. A closed amortization period ensures the obligor plans to fully fund the obligation during the amortization period.
Length (years)	20	20	20	30	Length greater than 20 years generally correlates to slow funding progress and increased risk of escalation due to adversity. There is risk not only of market or other adversity causing unforeseen escalations to contributions, but of hiring practices not keeping up with. CalPERS recently adjusted its assumptions and decreased the length of amortization to 20 years for UAL bases created in fiscal 2019 or later. However, we note the majority of the existing CalPERS UAL bases are still amortized on declining 30 year bases with increasing wage growth at a rate of 2.75% wage growth.
Basis	Level dollar	Level dollar	Level dollar	Level % of payroll	Level % explicitly defers costs, resulting in slow or even negative near-term funding progress. Escalating future contributions may stress affordability, particularly if payroll growth is less than then assumption.
Payroll growth assumption (%)	0.00	0.00	0.00	3.50	The higher this is, the more contribution deferrals are incorporated in the level percent funding methodology. There is risk not only of market or other adversity causing unforeseen escalations to contributions, but of hiring practices not keeping up with assumed payroll growth leading to contribution shortfalls. This wage growth assumptions only applies to bases created prior to June 30, 2019.
Longevity	Static	Static	Static	Generational	A generational assumption reduces risks of contribution "jumps" due to periodic updates from experience studies. In contrast, static projections incorporate a set number of years into today's valuations and become quickly outdated, and when revised, frequently result in increased liabilities and costs.

N.A.--Not available. ADC--Actuarially determined contribution. MFP--Minimum funding progress. SF--Static funding.

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