

League of California Cities[®] Retirement System Sustainability Study and Findings

JANUARY 2018





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Executive Summary



The League of California Cities® supports and continues to advocate for secure defined benefit pension plans and the reforms that will allow them to flourish through the next century of public service. Defined benefit plans have proven to be an effective vehicle to provide pension benefits to employees and support California’s public servants throughout their lifetimes. Local governments wish to continue to use these pension plans to attract and retain a highly skilled workforce.

The California Public Employee Retirement System (CalPERS), however, is underfunded. As of January 2018, CalPERS had only 68 percent of the funds required to pay estimated retirement benefits — in other words, only 68 cents for every dollar needed to fund retiree pension commitments. **Several factors** have contributed to unsustainability of the CalPERS system — and as a result, the contributions paid by all public employers to CalPERS are dramatically increasing. California cities are feeling the effects of growing budgetary pressure more than other public employers.

To better understand the cost drivers behind increasing local employer contribution rates and impacts on cities, the League commissioned Bartel Associates, LLC, a leading California actuarial firm serving only public sector agencies to:

- » Analyze anticipated pension contribution rates for cities as a percentage of payroll; and
- » Determine how those future contribution rates would impact cities’ General Funds.

This study was limited only to pension liability.

It does not reflect costs to cities associated with active or other post-employment benefits such as health care. Bartel Associates based its analysis on CalPERS’ June 30, 2016, public agency actuarial valuation data and results of the League’s October 18, 2017, City Survey^{1,2}

The findings of this study reveal the following:

1. Rising pension costs will require cities over the next seven years to nearly double the percentage of their General Fund dollars they pay to CalPERS;
2. For many cities, pension costs will dramatically increase to unsustainable levels; and
3. The impacts of increasing pension costs as a percentage of General Fund spending will affect cities even more than the state. Employee costs, including police, fire and other municipal services, are a larger proportion of spending for cities.

The results of this study provide additional evidence that pension costs for cities are approaching unsustainable levels. While the state budget has recovered significantly since the Great Recession with the assistance of substantial voter-approved tax increases, some cities have yet to recover. With local pension costs outstripping revenue growth, many cities face difficult choices that will be compounded in the next recession. Under current law, cities have two choices — attempt to increase revenue or reduce services. Given that police and fire services comprise a large percentage of city General Fund budgets, public safety, including response time, will likely be impacted.

Cities are looking for sustainable solutions that provide near-term relief while broader impacts from pension

1 A more detailed summary of methodology can be found at the conclusion of this report.

2 Bartel Associates used the existing CalPERS’ discount rate and projections for local revenue growth. To the extent CalPERS market return performance and local revenue growth do not achieve those estimates, impacts to local agencies will increase. Additionally, the data does not take into account action pending before the CalPERS Board of Administration (Board) to prospectively reduce the [employer amortization schedule from its current 30 year term to a 20 year term](#). Should the Board adopt staff’s recommendation, employer contributions are likely to increase.

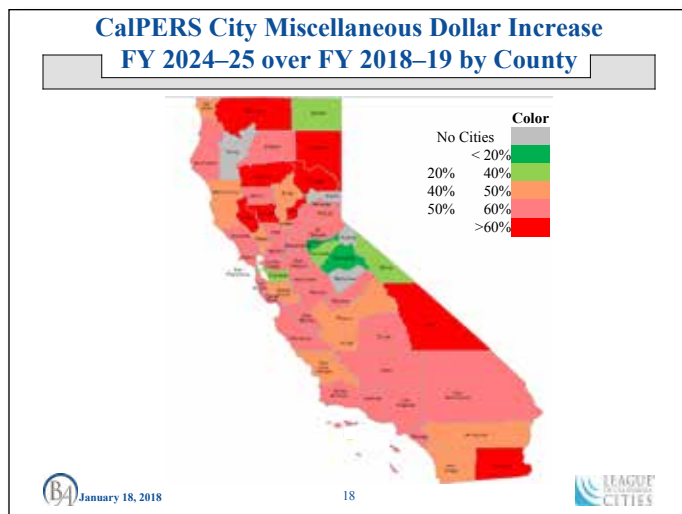
reform enacted by the Legislature in the Public Employees’ Pension Reform Act (PEPRA) [applying to employees hired after January 1, 2013] materialize. However, tangible savings resulting from PEPRA will not have a substantial effect on city budgets for decades.

The League has created an online resource (www.cacities.org/pensions) to provide additional background and information for cities on this issue. Consistent with its adopted [Pension Sustainability Principles](#), the League looks forward to working with employees, CalPERS, the Legislature and the Governor to achieve meaningful options for cities to address growing unfunded pension liabilities that will ensure cities remain solvent and able to provide services to residents while continuing to offer employees sustainable pension and health benefits.

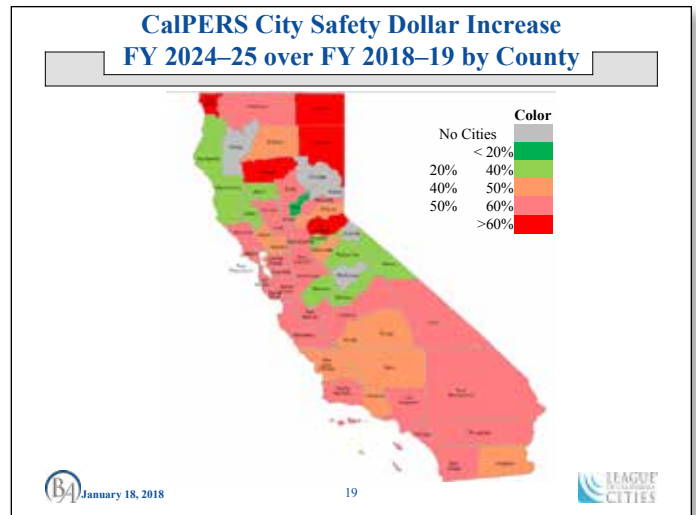
Key Findings³

1. City pension costs will dramatically increase to unsustainable levels.

Between FY 2018–19 and FY 2024–25, cities’ dollar contributions will increase by more than 50 percent. For example, if a city is required to pay \$5 million in FY 2018–19, the League expects that it will pay more than \$7.5 million in FY 2024–25.



**In figures 9, 17, 18, and 19 the grey color representing “No Cities” displays that there are no cities in that specific county with CalPERS as their public retirement system.*



FY 2024–25 Contribution Rates¹

| Percentile | Cities/Towns | |
|------------|---------------|--------|
| | Miscellaneous | Safety |
| 90th | 18.8% | 35.2% |
| 75th | 25.2 | 44.8 |
| 50th | 30.8 | 54.0 |
| 25th | 37.7 | 63.8 |
| 10th | 43.0 | 76.0 |

¹ CalPERS projected rates adjusted for June 30, 2017 actual investment return and PEPRA.

Percentile means x% of cities have results that are higher than shown

BA January 18, 2018 20 LEAGUE OF CALIFORNIA CITIES

Miscellaneous Employees: In FY 2024–25, half of cities are anticipated to pay over 30.8 percent of their payroll towards miscellaneous employee pension costs, with 25 percent of cities anticipated to pay over 37.7 percent of payroll. This means that for every \$100 in pensionable wages (generally base salary), the majority of cities would pay an additional \$31 or more to CalPERS for pensions alone. This amount does not include active or retiree healthcare.

³ Complete findings can be found at the conclusion of this summary.

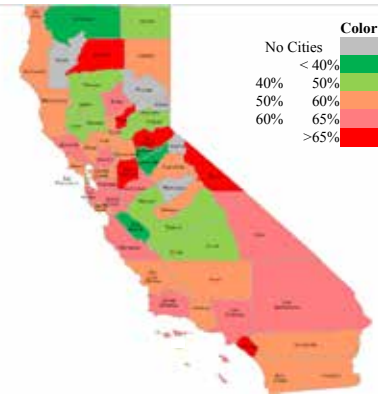
FY 2024–25 Contribution Rates¹

| Mature Cities/Towns | | |
|---------------------|---------------|--------|
| Percentile | Miscellaneous | Safety |
| 90th | 26.5% | 49.0% |
| 75th | 31.2 | 54.1 |
| 50th | 37.9 | 62.3 |
| 25th | 42.9 | 72.8 |
| 10th | 48.4 | 78.7 |

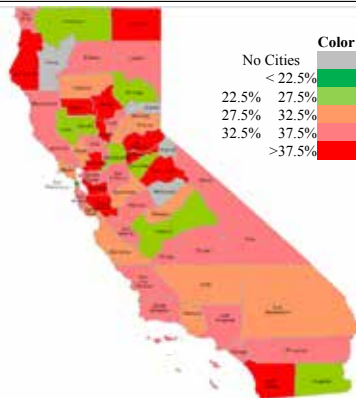
¹ CalPERS projected rates adjusted for June 30, 2017 actual investment return and PEPRAs.
Mature means retirees comprise 60% or more of the Miscellaneous and 65% or more of the Safety plan Actuarial Accrued Liability.

Percentile means x% of cities have results that are higher than shown.

CalPERS City Safety FY 2024–25 Projected Rates by County



CalPERS City Miscellaneous FY 2024–25 Projected Rates by County



FY 2024–25 Contribution Rates¹

| Cities/Towns | | |
|--------------|---------------|--------|
| Percentile | Miscellaneous | Safety |
| 90th | 18.8% | 35.2% |
| 75th | 25.2 | 44.8 |
| 50th | 30.8 | 54.0 |
| 25th | 37.7 | 63.8 |
| 10th | 43.0 | 76.0 |

¹ CalPERS projected rates adjusted for June 30, 2017 actual investment return and PEPRAs.

Percentile means x% of cities have results that are higher than shown

For “mature cities” with larger numbers of retirees, the percentages are even higher. Half of those cities are anticipated to pay 37.9 percent or more of payroll and 25 percent are anticipated to pay 42.9 percent or more of payroll. These findings are not specific to one region of the state. The data shows that cities throughout California are dealing with these challenges.

Public Safety Employees: Contributions are projected to be much higher for cities that employ safety personnel (police officers and firefighters). By FY 2024–25, a majority of these cities are anticipated to pay 54 percent or more of payroll, with 25 percent of cities anticipated to pay over 63.8 percent of payroll. In other words, for every \$100 in salary, the majority of cities would pay an additional \$54 or more to CalPERS for pensions alone. As with miscellaneous employees, for cities with a large number of retirees, these percentages are even higher. The cities paying the highest percentages of payroll are spread throughout the state.

Unsustainable Costs: For FY 2024–25, the average projected contribution rate as a percentage of payroll is 34.6 percent for miscellaneous employees and 60.2 percent for safety employees. For cities with a large percentage of retirees, the averages are 39.4 percent and 67.5 percent.

FY 2024–25 Contribution Rates¹

CalPERS Average Projected Rates – Cities/Towns

| Fiscal Year | Miscellaneous | Safety |
|---------------------------|---------------|--------|
| FY 2018–19 | 27.3% | 47.3% |
| FY 2024–25: | | |
| All Cities/Towns | 34.6 | 60.2 |
| Mature Cities/Towns | 39.4 | 67.5 |
| Enhanced Classic Formulas | 36.7 | 60.3 |

¹ CalPERS projected rates adjusted for June 30, 2017 actual investment return and PEPRAs.

Mature means retirees comprise 60% or more of the Miscellaneous and 65% or more of the Safety plan Actuarial Accrued Liability.

Contribution % GF Budgets

| Percentile | Cities/Towns | | |
|------------|--------------|---------|---------|
| | 2006/07 | 2017/18 | 2024/25 |
| 90th | 2.0% | 2.5% | 6.1% |
| 75th | 3.8 | 4.6 | 8.5 |
| 50th | 7.6 | 9.1 | 13.7 |
| 25th | 9.8 | 13.2 | 18.2 |
| 10th | 12.8 | 15.5 | 21.5 |
| Average | 8.3% | 11.2% | 15.8% |

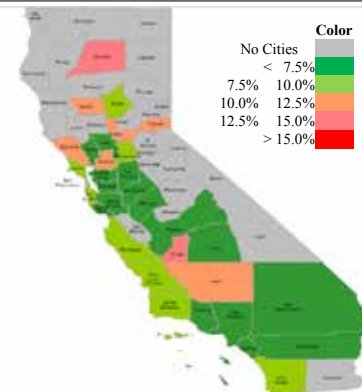
Percentile means x% of cities have results that are higher than shown.

2. Rising pension costs will require cities to nearly double the percentage of their General Fund dollars they pay to CalPERS.

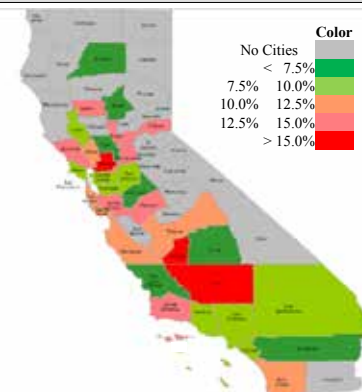
The League surveyed its members regarding the proportion of their General Fund budget devoted to paying pension costs to CalPERS. These percentages are for CalPERS costs only, over and above the cost of salaries and do not include the cost of active and retiree health care.

On average, from FY 2006–07 to FY 2024–25, cities will nearly double the percentage of the General Fund dollars that goes to CalPERS. In FY 2006–07, the average city spent 8.3 percent of its General Fund budget on CalPERS pension costs. That average increased to 11.2 percent in FY 2017–18 and it is anticipated to increase to 15.8 percent in FY 2024–25. In FY 2024–25, 25 percent of cities are anticipated to spend more than 18 percent of their General Fund on CalPERS pension costs with 10 percent anticipated to spend 21.5 percent or more. These cities are located throughout the state.

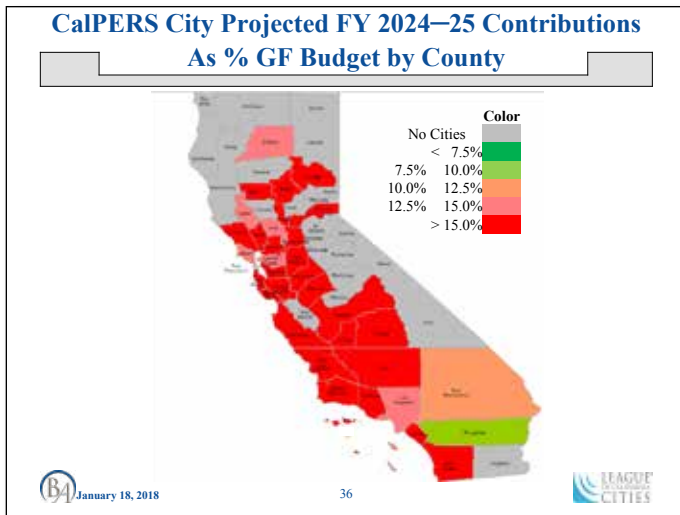
CalPERS City FY 2006–07 Contributions as % GF Budget by County



CalPERS City FY 2017–18 Contributions as % GF Budget by County



*In figures 34, 35, and 36 the grey color representing “No Cities” displays either that there are no cities in that specific county with CalPERS as their public retirement system or there was not valid survey data from the cities in those counties.



The state also faces increasing pension costs. According to [Governor Brown’s proposed FY 2018–19 budget](#)⁴ introduced in January, \$3.2 billion of the state’s General Fund will be allocated to pay down CalPERS pension liabilities. This is approximately 2.75 percent of the total \$131 billion proposed General Fund budget. Furthermore, when all state-related retiree costs, including teachers in CalSTRS and state contributions for retiree health care are taken into account, that number increases to 8 percent of the state’s General Fund. While these amounts are significant and affect the state’s ability to fund other priorities, cities’ pension cost impacts alone — without considering any obligations for active and retiree health care — are significantly higher as a percentage of cities’ General Funds.

3. Cities have few options to address growing pension liabilities

Under the California Constitution, a city’s options for revenue raising are strictly limited. Any increase in local taxes requires voter approval and voter tolerance for tax increases is waning. Much of a city’s budget is dedicated to employee salaries and benefits to provide fire protection, law enforcement, parks services and other municipal services. If new revenues are unavailable, as contributions rise, local agencies are forced to significantly reduce or eliminate critical programs.

Despite the significant changes made through PEPPRA, local governments will continue to face the financial conundrum of meeting their pension obligations. PEPPRA, with all of its positive changes, does little to address the more immediate and near-term pension funding problems facing local governments. The anticipated benefits of PEPPRA reforms are applicable only to new CalPERS employee members, and therefore it will take decades for these savings to be reflected in city budgets.

Under current law, there are only two sources to address the growing unfunded liability at CalPERS that cities face: higher than expected investment returns or increased employer contributions. Although CalPERS recently reduced its discount rate to 7 percent, [the Fund](#) projects a 6.1 percent return over the next 10 years.⁵ It is highly probable that public agencies will be expected to pay more to make up the difference — this is unsustainable.


What Cities Can Do Today

Many cities have already exercised their limited options under current law to address the fiscal challenges attributed to growing pension liabilities, which include:

- 1. Develop and implement a plan to pay down the city’s Unfunded Actuarial Liability (UAL):** Possible methods include shorter amortization periods and pre-payment of cities UAL. This option may only work for cities in a better financial condition.
- 2. Consider local ballot measures to enhance revenues:** Some cities have been successful in passing a measure to increase revenues. Others have been unsuccessful. Given that these are voter approved measures, success varies depending on location.

⁴ See page 16 Figure SWE-01 State retirement and Health Care Contributions

⁵ See page 5, expected compound return (1–10 years) candidate portfolio C.

- 
- 3. Create a Pension Rate Stabilization Program (PRSP):** Establishing and funding a local Section 115 Trust Fund can help offset unanticipated spikes in employer contributions. Initial funds still must be identified. Again, this is an option that may work for cities that are in a better financial condition.
 - 4. Change service delivery methods and levels of certain public services:** Many cities have already consolidated and cut local services during the Great Recession and have not been able to restore those service levels. Often, revenue growth from the improved economy has been absorbed by pension costs. The next round of service cuts will be even harder.
 - 5. Use procedures and transparent bargaining to increase employee pension contributions:** Many local agencies and their employee organizations have already entered into such agreements.
 - 6. Issue a pension obligation bond (POB):** However, financial experts including the Government Finance Officers Association (GFOA) [strongly discourage local agencies from issuing POBs](#). Moreover, this approach only delays and compounds the inevitable financial impacts.

Methodology and League Member Survey

This section summarizes the methodology Bartel Associates used to prepare our analysis of CalPERS' June 30, 2016, public agency actuarial valuation data and results of the League of California Cities' October 18, 2017, City Survey.

The CalPERS June 30, 2016 data included, separated by rate plan (miscellaneous, safety and further by benefit level for those in a risk pool):

- » Basic demographic information
- » FY 2018–19 required contributions detail
- » Present value of projected benefits, separated by member category (active, transferred, terminated, receiving benefits)
- » Entry age normal accrued liability, separated by member category (active, transferred, terminated, receiving benefits)
- » Market value of assets, including the plan's share of the risk pool's market value of assets for those in a risk pool
- » Projected employer contributions for fiscal years FY 2019–20 through FY 2024–25, with normal cost and UAL payment separated
- » Discount rate sensitivity under 6 percent, 7 percent and 8 percent discount rates
- » Schedule of amortization bases
- » Scheduled payment for FY 2018–19 by amortization base

Summary of the major benefit options:

- » Benefit Formula
- » Social Security Coverage Full/Modified
- » Employee Contribution Rate
- » Final Average Compensation Period
- » Sick Leave Credit
- » Non-Industrial Disability
- » Industrial Disability
- » Pre-Retirement Death Benefits
 - Optional Settlement 2W
 - 1959 Survivor Benefit Level
 - Special
 - Alternate (firefighters)
- » Post-Retirement Death Benefits
 - Lump Sum
 - Survivor Allowance (PRSA)
- » COLA

Inactive plans were excluded from the analysis. Once the CalPERS data was reviewed for completeness, CalPERS contribution projections were adjusted by accounting for:

- » New hires going into Tier 2 Classic and/or PEPPRA formulas
- » June 30, 2017 CalPERS' actual investment return (11.2 percent)

The adjustments slightly lowered the projected contribution rates provided by CalPERS. However, it is important to note that contribution rates were not adjusted for two issues:

- » CalPERS' Board has established a risk mitigation strategy. This policy is designed to reduce investment return volatility by changing the investment mix over time to a more conservative mix.
- » CalPERS' outside investment advisors along with CalPERS' internal investment staff have said they believe investment returns over the next decade will be below 7 percent (6.1 percent in the latest Wilshire projections).

Slides 27–36 provide city results using combined CalPERS and League survey data. The League survey data was reviewed for consistency with the CalPERS-provided data and, with few exceptions, was found to be consistent. To ensure consistency not all survey cities were included in the analysis due to incomplete data. Out of 229 total survey respondents, the following numbers were included in the General Fund budget analysis:

- » FY 2006–07: 159
- » FY 2017–18: 175
- » FY 2024–25: 194

For purposes of projected future General Fund budgets, the following assumptions were applied:

- » Projected provided FY 2017–18 budgets forward assuming 3 percent annual growth.
- » Assumed 100 percent of Safety contributions were paid from the General Fund.
- » Assumed the portion of miscellaneous General Fund contributions remained constant after FY 2017–18.

League of California Cities 2017 Pension Survey

The City Managers' Department of the League of California Cities has established the Pension Stability Working Group to inform the development of League policy related to growing pension liabilities facing municipalities. The League of Cities in conjunction with Bartel Associates developed this survey to gather historic and projected financial information related to pension obligations and city budgets. This survey was used in conjunction with CalPERS June 30, 2016 public agency actuarial valuation data in order to detail the magnitude of the issue. Responses were submitted through the Qualtrics platform and aggregated by Bartel Associates. City Managers, Assistant City Managers, Finance Directors and/or Human Resources Directors were instructed to respond.

Note: Questions that were not used for purposes of this study have been omitted.

The information required for this survey can be found in each jurisdiction's:

- » Most recent CalPERS Actuarial Valuation (Most information on Page 5 of reports).
- » Annual Budget Documents.
- » Comprehensive Annual Financial Report (CAFR) for the most recently complete fiscal year.

Survey Questions

1. CalPERS Employer ID Number
2. City name and County Location
3. City Population (persons)
 - a. 0-25K
 - b. 25-50K
 - c. 50-100K
 - d. 100-250K
 - e. 250K+
4. Please Provide the following information regarding pension Information Re General Fund: (*Employer contributions only. Exclude employee share. Exclude healthcare costs*).
 - a. General Fund Budget: FY 07-08,09-10,14-15,17-18
 - b. General Fund Payroll: FY 07-08,09-10,14-15,17-18
 - c. Public Safety General Fund Budget: FY 07-08,09-10,14-15,17-18
 - d. Public Safety General Fund Payroll: FY 07-08,09-10,14-15,17-18
 - e. General Fund Full Time Employees (FTE): FY 07-08,09-10,14-15,17-18
 - f. Percentage of General Fund Public Safety Employees: FY 07-08,09-10,14-15,17-18
 - g. General Fund PERS Contribution (dollars) Safety Employees: FY 07-08,09-10,14-15,17-18
 - h. General Fund PERS Contribution (dollars) Misc. Employees: FY 07-08,09-10,14-15,17-18
 - i. Total Budget Funds (dollars) All Funds: FY 07-08,09-10,14-15,17-18
 - j. Payroll (dollars) all Funds: FY 07-08,09-10,14-15,17-18
 - k. Public Safety all Funds Payroll: FY 07-08,09-10,14-15,17-18
 - l. All Funds Full Time Employees (FTE): FY 07-08,09-10,14-15,17-18
 - m. Percentage of all fund public safety employees: FY 07-08,09-10,14-15,17-18
 - n. All Funds PERS Contribution Safety Employees: FY 07-08,09-10,14-15,17-18
 - o. All Funds PERS Contribution Misc. Employees: FY 07-08,09-10,14-15,17-18



5. City’s Projected Payroll—General Fund and All Fund *(For years not budgeted yet, use 3% annual increases to align with CalPERS Payroll Assumptions)*

- a. Total Misc. Payroll (dollars) General Fund: FY 19-20,21-22,23-24,24-25
- b. Total Safety Payroll (dollars) General Fund: FY 19-20,21-22,23-24,24-25
- c. Total Misc. Payroll (dollars) All Funds: FY 19-20,21-22,23-24,24-25
- d. Total Safety Payroll (dollars) All Funds: FY 19-20,21-22,23-24,24-25

6. Which benefit tiers are established in Your City? *(Check all that apply)*

- » Misc. PEPRA 2% @ 62
- » Misc. 1.5% @ 65
- » Misc. 2% @ 60
- » Misc. 2% @ 55
- » Misc. 2.5% @ 55
- » Misc. 2.7% @ 55
- » Misc. 3% @ 60
- » Safety PEPRA 2% @ 57
- » Safety PEPRA 2.5% @ 57
- » Safety PEPRA 2.7% @ 57
- » Safety 2% @ 55
- » Safety 2% @ 50
- » Safety 3% @ 55
- » Safety 3% @ 50
- » Other _____

7. Does your city require employees to cover their statutory “EMPLOYEE” CalPERS contribution?

- a. Yes, 100 %
- b. Yes, partially (less than 100%)
- c. No, City covers entire employee contribution

8. If so, what percentage and for which employees?

9. Does your city require employees to contribute toward any of the “EMPLOYER” CalPERS contribution *(i.e. Has your city negotiated employee cost sharing in addition to the required CalPERS member contribution)?*

- a. Yes
- b. No

10. Does your city pay any portion of the required member contribution for Classic employees (EPMC)?

- a. Yes
- b. No

11. If so, has the city negotiated a reduction or end to the Employer Paid Member Contribution (EPMC) or intend to make any changes in EPMC?

- a. Yes
- b. No

12. Does your city anticipate budget and/or service cuts as a result of growing pension obligations?

- a. Yes
- b. No

13. Is your city making additional payments towards unfunded pension liability? *(Check all that apply)*

- a. No
- b. Pension Stabilization Fund/Section 115 Trust
- c. Additional payments to CalPERS beyond Annual Required Contributions (ARC)
- d. Other _____

End of Document



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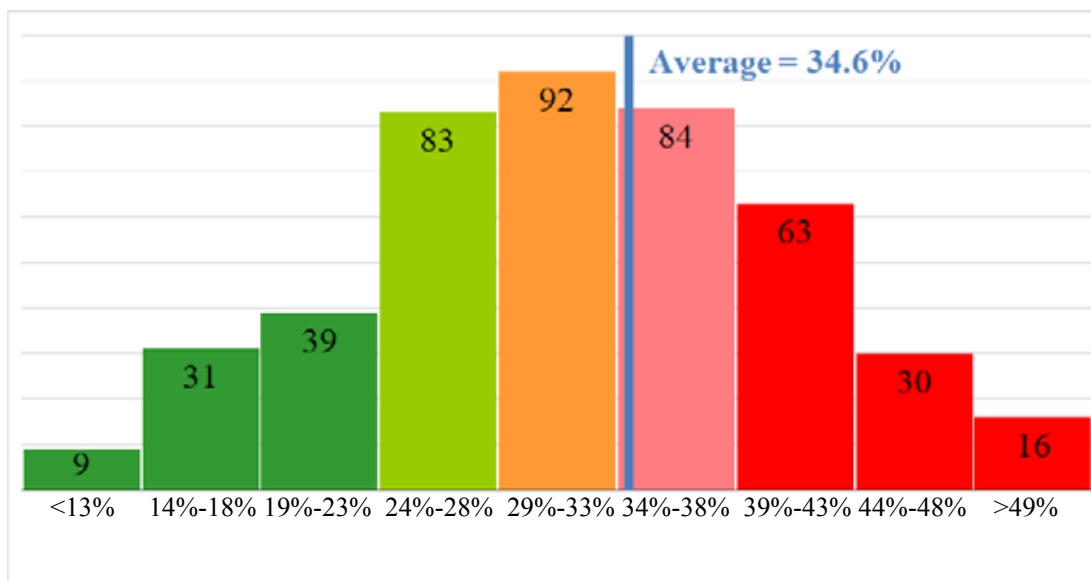
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CalPERS Projected Rates

- Generally higher if:
 - Mature City with large retiree liability
 - Enhanced formulas for Classic employees
- Generally lower if:
 - Younger City with small retiree liability
 - No enhanced formulas for Classic employees
- Implementation of an unenhanced 2nd benefit tier before PEPRRA has very little impact on projected rates

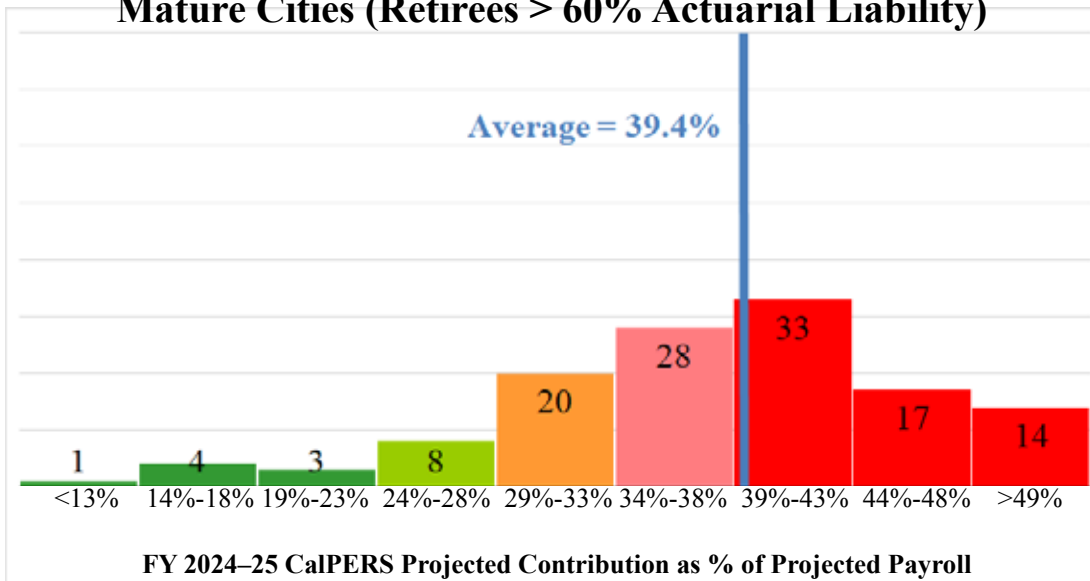
CalPERS City Miscellaneous FY 2024–25 Projected Rates



FY 2024–25 CalPERS Projected Contribution as % of Projected Payroll

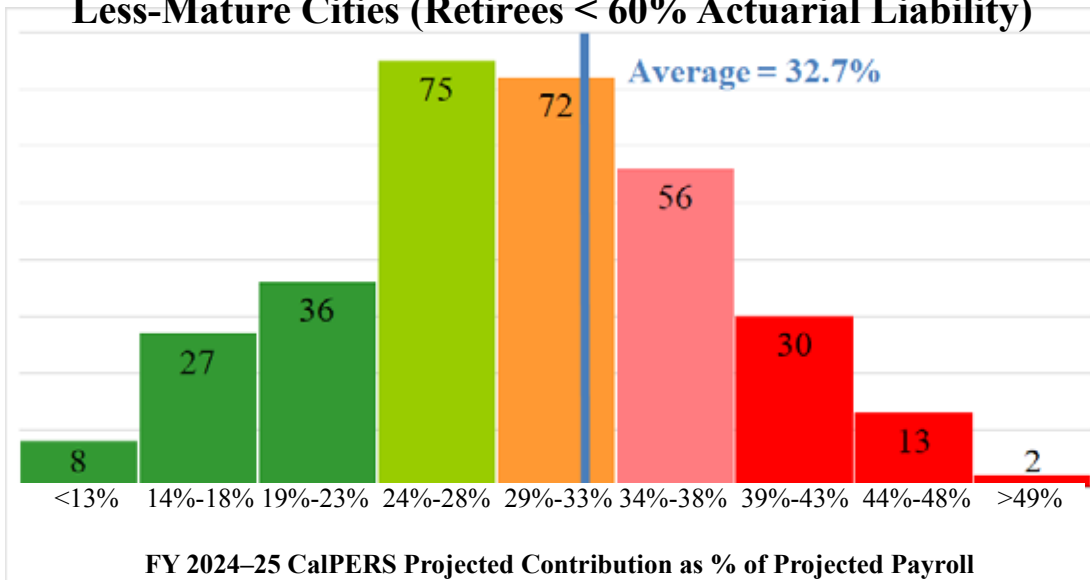
CalPERS City Miscellaneous FY 2024–25 Projected Rates

Mature Cities (Retirees > 60% Actuarial Liability)



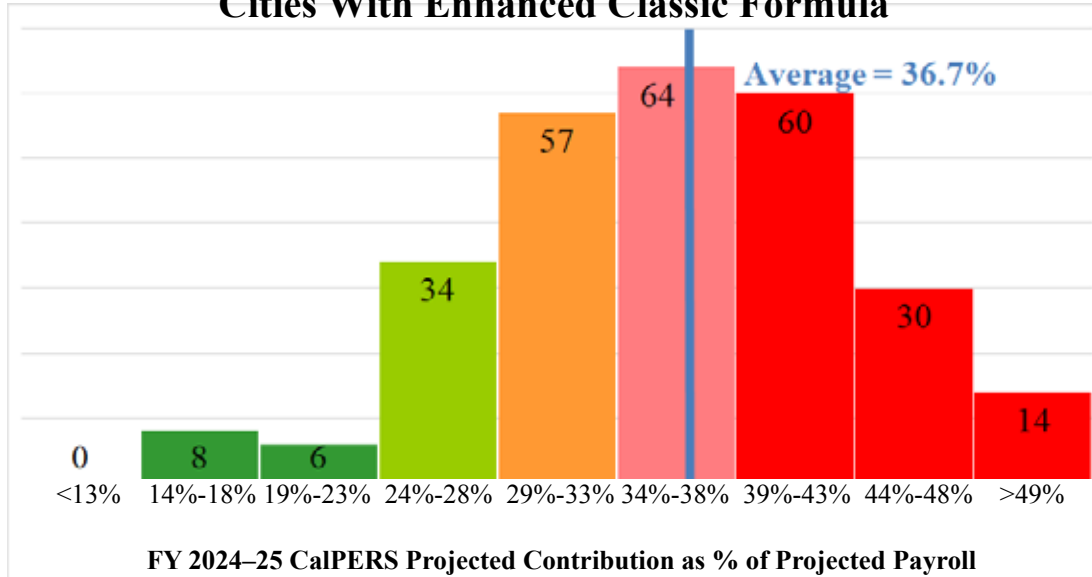
CalPERS City Miscellaneous FY 2024–25 Projected Rates

Less-Mature Cities (Retirees < 60% Actuarial Liability)



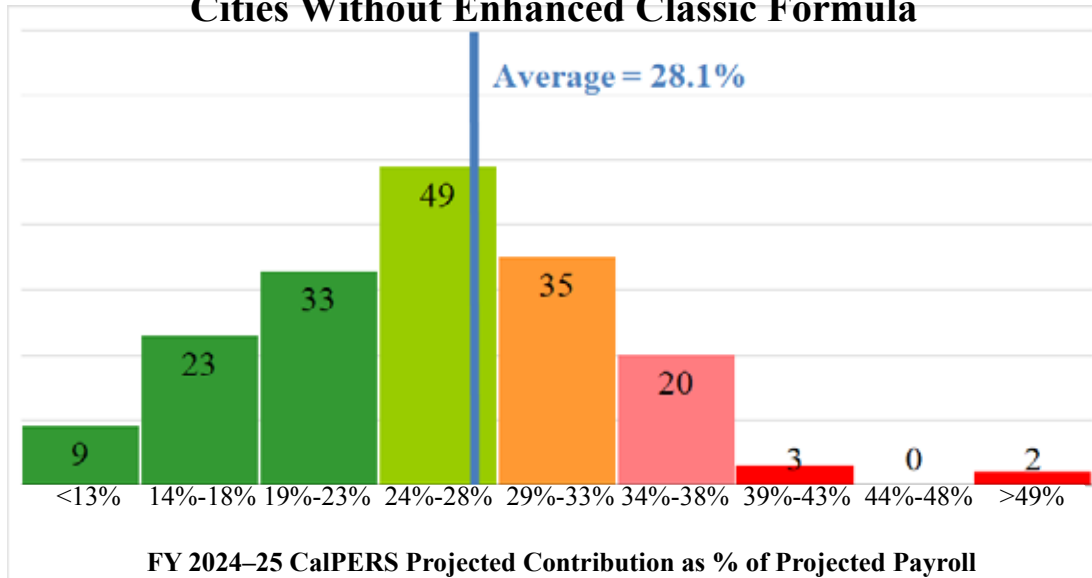
CalPERS City Miscellaneous FY 2024–25 Projected Rates

Cities With Enhanced Classic Formula



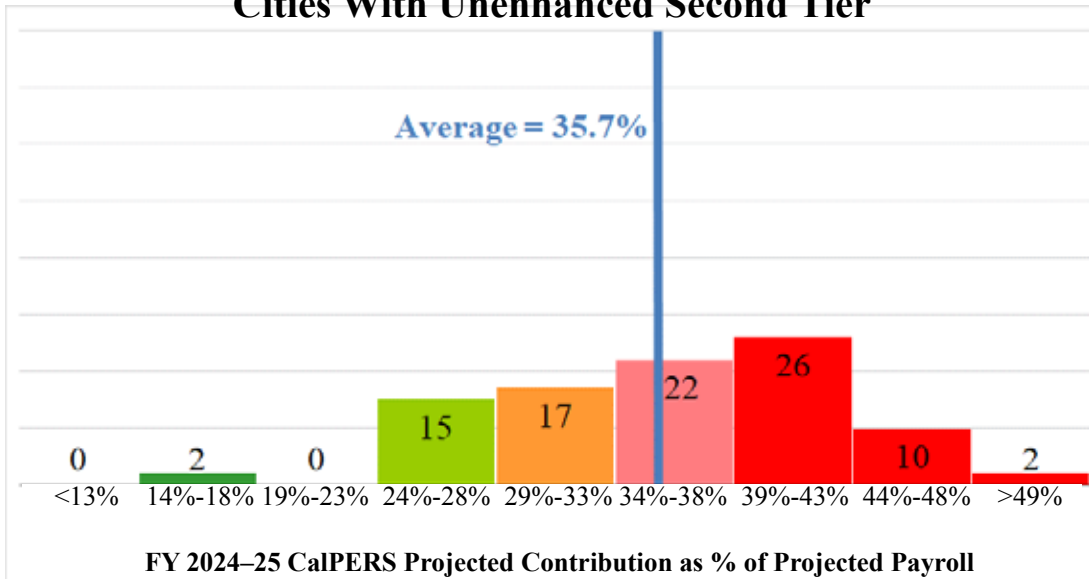
CalPERS City Miscellaneous FY 2024–25 Projected Rates

Cities Without Enhanced Classic Formula



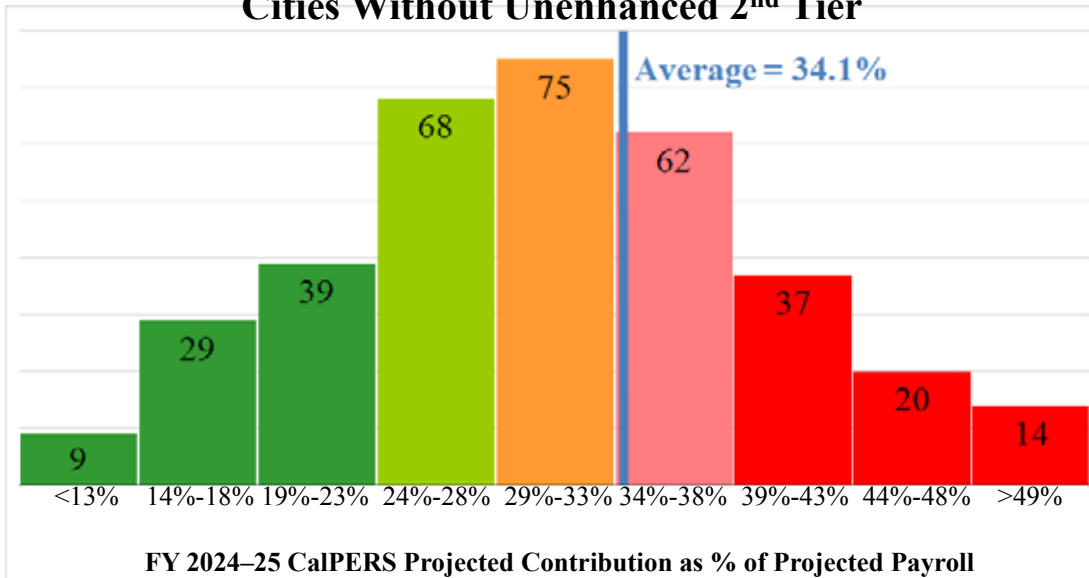
CalPERS City Miscellaneous FY 2024–25 Projected Rates

Cities With Unenhanced Second Tier

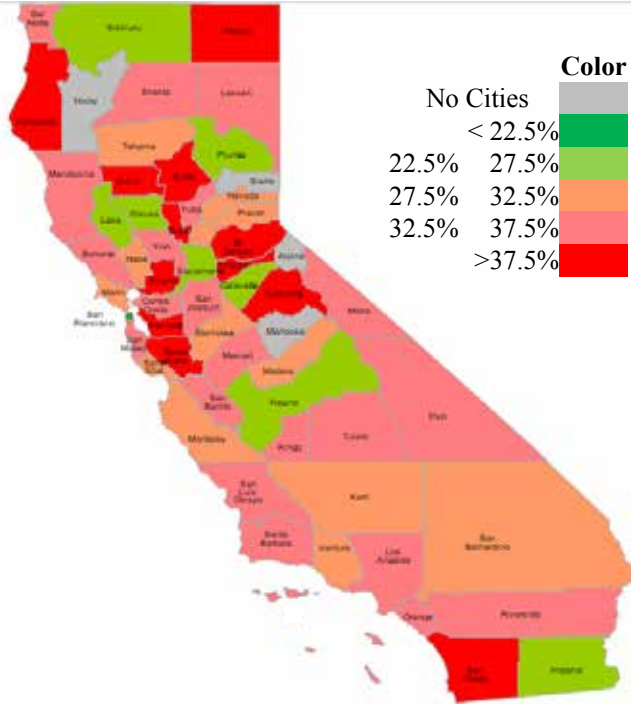


CalPERS City Miscellaneous FY 2024–25 Projected Rates

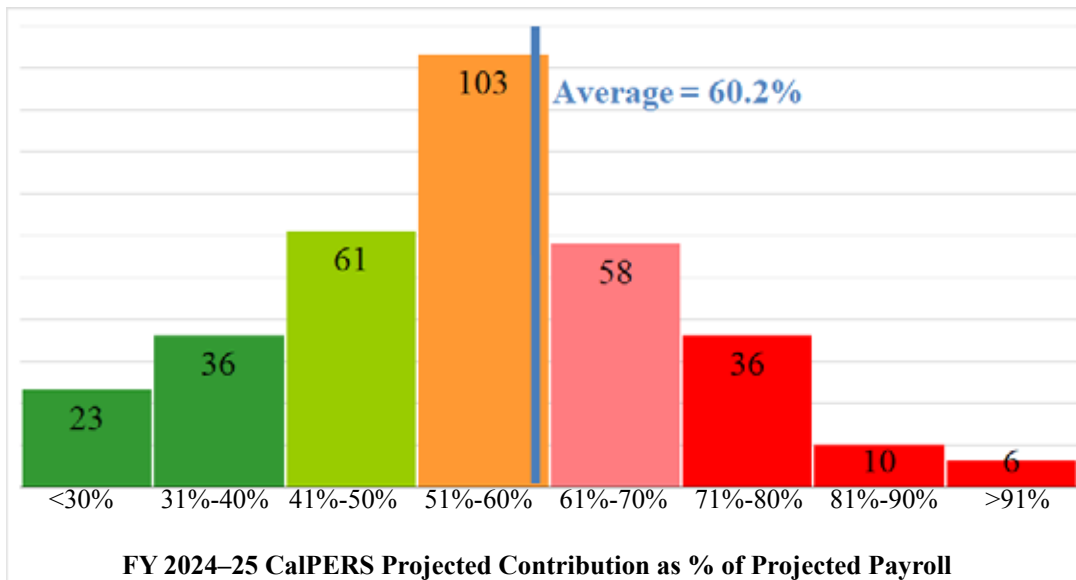
Cities Without Unenhanced 2nd Tier



CalPERS City Miscellaneous FY 2024–25 Projected Rates by County

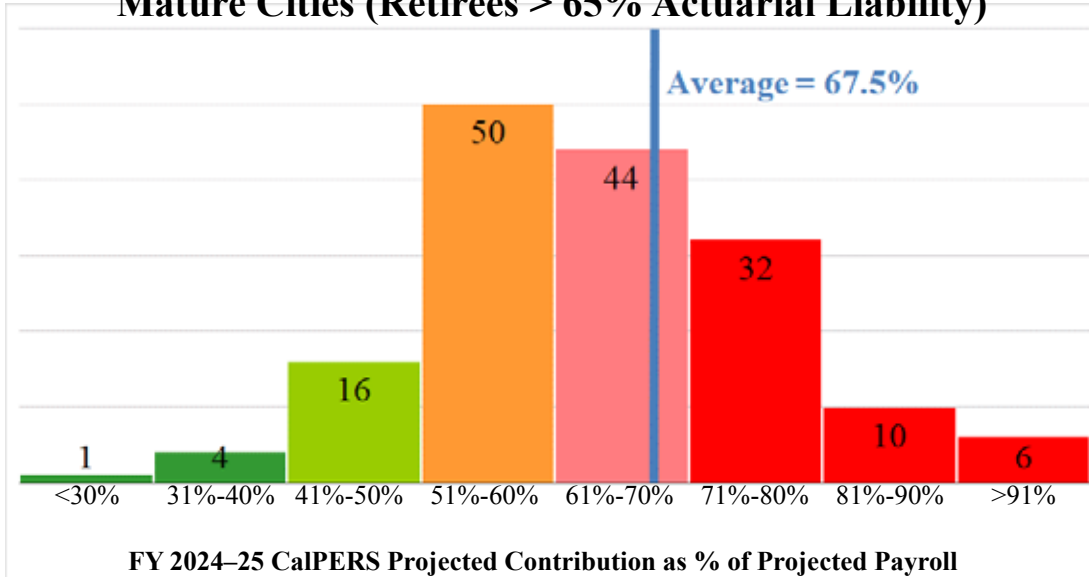


CalPERS City Safety FY 2024–25 Projected Rates



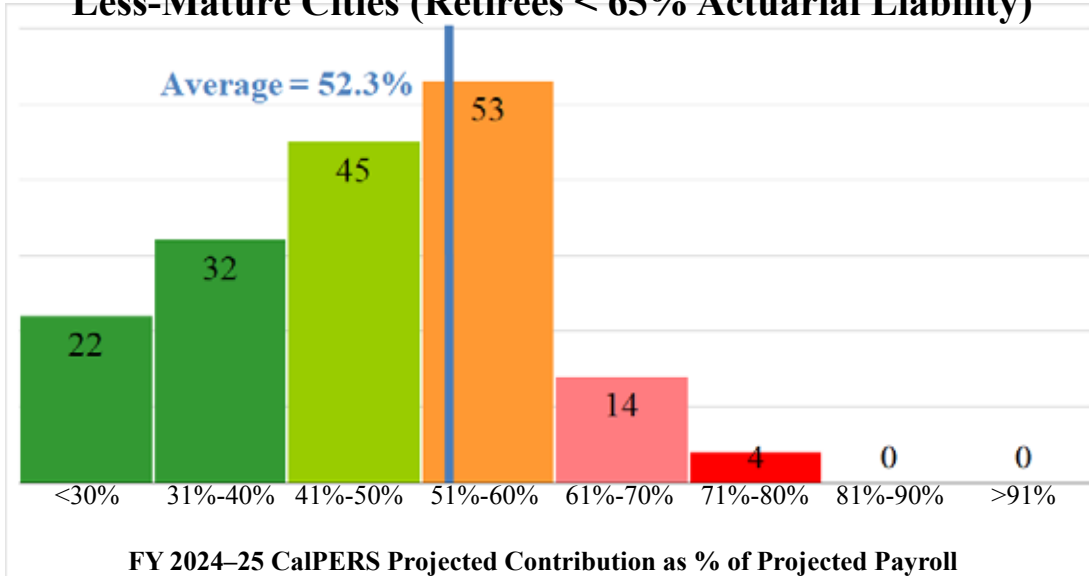
CalPERS City Safety FY 2024–25 Projected Rates

Mature Cities (Retirees > 65% Actuarial Liability)



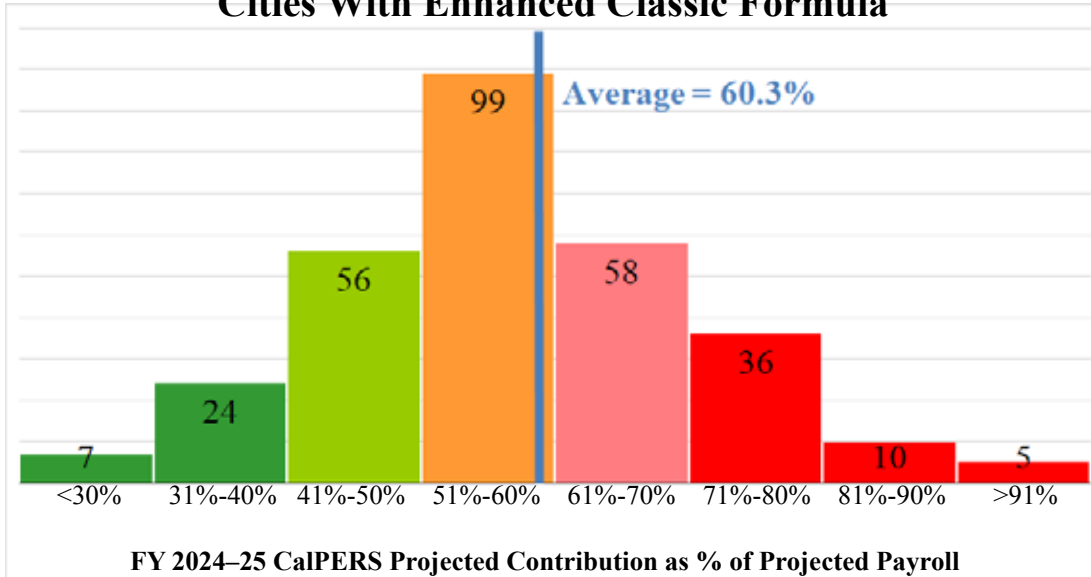
CalPERS City Safety FY 2024–25 Projected Rates

Less-Mature Cities (Retirees < 65% Actuarial Liability)



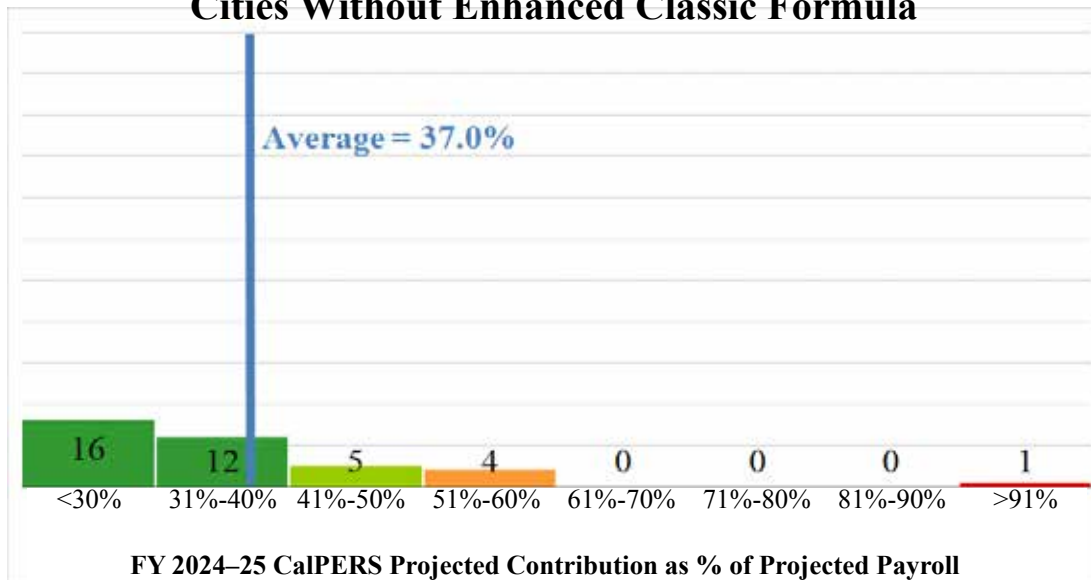
CalPERS City Safety FY 2024–25 Projected Rates

Cities With Enhanced Classic Formula



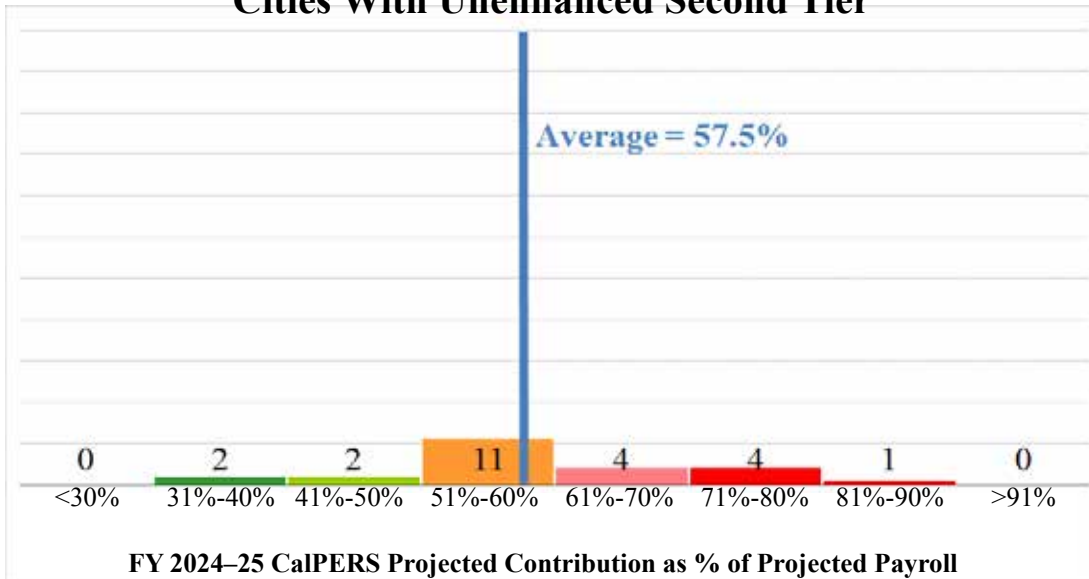
CalPERS City Safety FY 2024–25 Projected Rates

Cities Without Enhanced Classic Formula



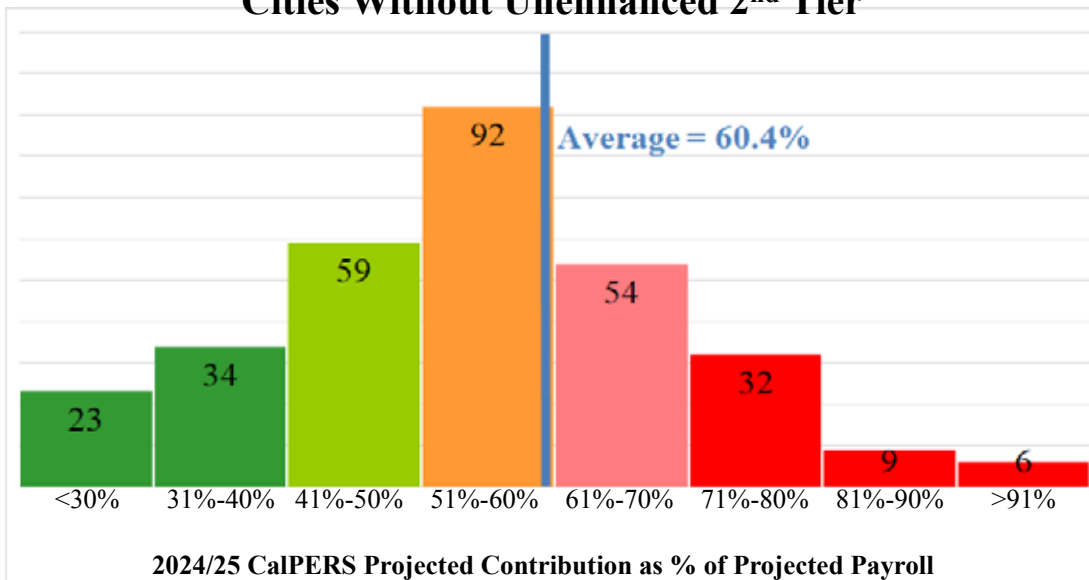
CalPERS City Safety FY 2024–25 Projected Rates

Cities With Unenhanced Second Tier

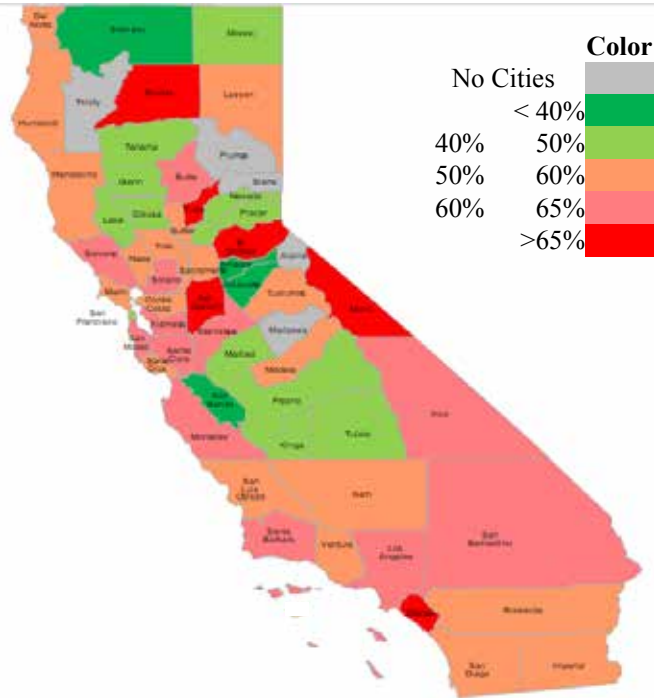


CalPERS City Safety FY 2024–25 Projected Rates

Cities Without Unenhanced 2nd Tier



CalPERS City Safety FY 2024–25 Projected Rates by County

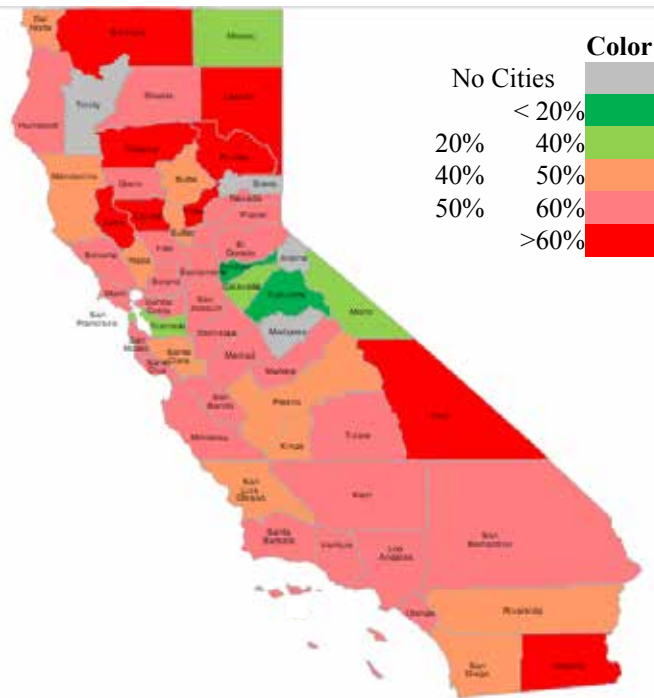


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CalPERS City Miscellaneous Dollar Increase FY 2024–25 over FY 2018–19 by County

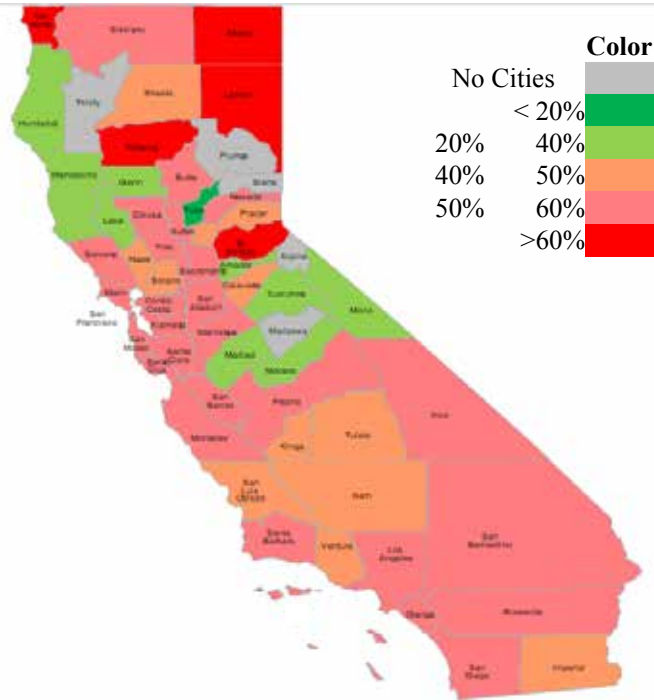


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CalPERS City Safety Dollar Increase FY 2024–25 over FY 2018–19 by County



FY 2024–25 Contribution Rates¹

| Cities/Towns | | |
|--------------|---------------|--------|
| Percentile | Miscellaneous | Safety |
| 90th | 18.8% | 35.2% |
| 75th | 25.2 | 44.8 |
| 50th | 30.8 | 54.0 |
| 25th | 37.7 | 63.8 |
| 10th | 43.0 | 76.0 |

¹ CalPERS projected rates adjusted for June 30, 2017 actual investment return and PEPR.

Percentile means x% of cities have results that are higher than shown

FY 2024–25 Contribution Rates¹

| Mature Cities/Towns | | |
|---------------------|---------------|--------|
| Percentile | Miscellaneous | Safety |
| 90th | 26.5% | 49.0% |
| 75th | 31.2 | 54.1 |
| 50th | 37.9 | 62.3 |
| 25th | 42.9 | 72.8 |
| 10th | 48.4 | 78.7 |

¹ CalPERS projected rates adjusted for June 30, 2017 actual investment return and PEPRAs.

Mature means retirees comprise 60% or more of the Miscellaneous and 65% or more of the Safety plan Actuarial Accrued Liability.

Percentile means x% of cities have results that are higher than shown.

FY 2024–25 Contribution Rates¹

| Cities/Towns with Enhanced Formulas | | |
|-------------------------------------|---------------|--------|
| Percentile | Miscellaneous | Safety |
| 90th | 25.4% | 39.9% |
| 75th | 29.4 | 48.1 |
| 50th | 35.0 | 56.0 |
| 25th | 40.5 | 65.9 |
| 10th | 45.3 | 76.2 |

¹ CalPERS projected rates adjusted for June 30, 2017 actual investment return and PEPRAs.

Percentile means x% of cities have results that are higher than shown.

FY 2024–25 Contribution Rates¹

CalPERS Average Projected Rates – Cities/Towns

| Fiscal Year | Miscellaneous | Safety |
|---------------------------|---------------|--------|
| FY 2018–19 | 27.3% | 47.3% |
| FY 2024–25: | | |
| All Cities/Towns | 34.6 | 60.2 |
| Mature Cities/Towns | 39.4 | 67.5 |
| Enhanced Classic Formulas | 36.7 | 60.3 |

¹ CalPERS projected rates adjusted for June 30, 2017 actual investment return and PEPRAs.

Mature means retirees comprise 60% or more of the Miscellaneous and 65% or more of the Safety plan Actuarial Accrued Liability.

FY 2024–25 Contribution Rates¹

Special Purpose Districts

| Percentile | Miscellaneous | Safety |
|------------|---------------|--------|
| 90th | 12.4% | 22.7% |
| 75th | 16.1 | 30.3 |
| 50th | 21.5 | 40.6 |
| 25th | 28.0 | 48.7 |
| 10th | 35.0 | 56.3 |

¹ CalPERS projected rates adjusted for June 30, 2017 actual investment return and PEPRAs.

Percentile means x% of districts have results higher than shown.

FY 2024–25 Contribution Rates¹

| Counties | | |
|------------|---------------|--------|
| Percentile | Miscellaneous | Safety |
| 90th | 24.0% | 40.7% |
| 75th | 26.2 | 42.2 |
| 50th | 28.7 | 48.1 |
| 25th | 32.4 | 54.5 |
| 10th | 36.4 | 58.4 |

¹ CalPERS projected rates adjusted for June 30, 2017 actual investment return and PEPRAs.

Percentile means x% of counties have results higher than shown.

FY 2024–25 Contribution Rates¹

| All Public Agencies | | |
|---------------------|---------------|--------|
| Percentile | Miscellaneous | Safety |
| 90th | 13.5% | 28.7% |
| 75th | 18.1 | 39.7 |
| 50th | 24.8 | 50.2 |
| 25th | 31.9 | 59.3 |
| 10th | 39.3 | 70.5 |

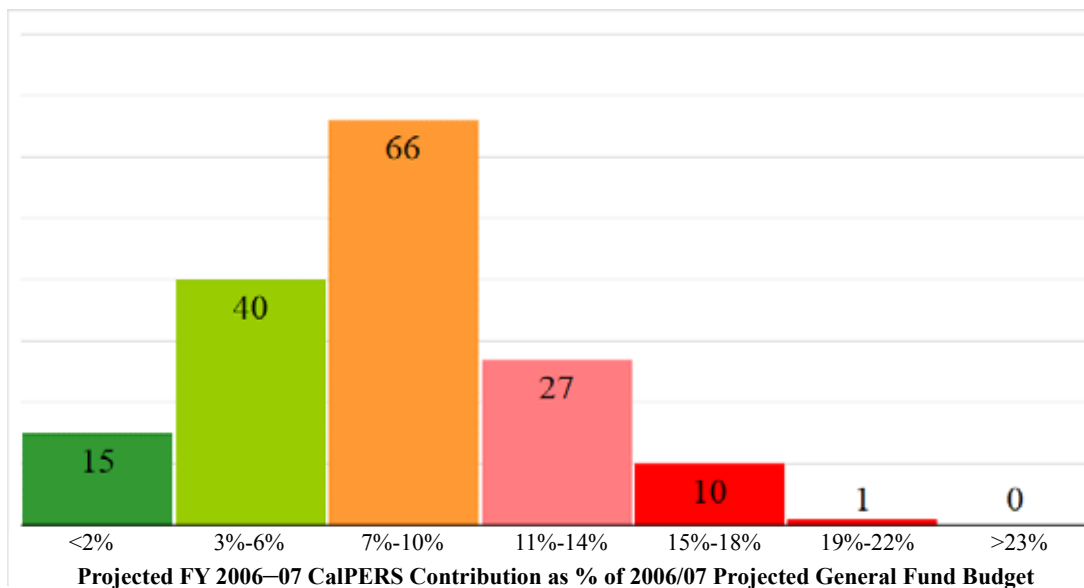
¹ CalPERS projected rates adjusted for June 30, 2017 actual investment return and PEPRAs.

Percentile means x% of Agencies have results higher than shown.

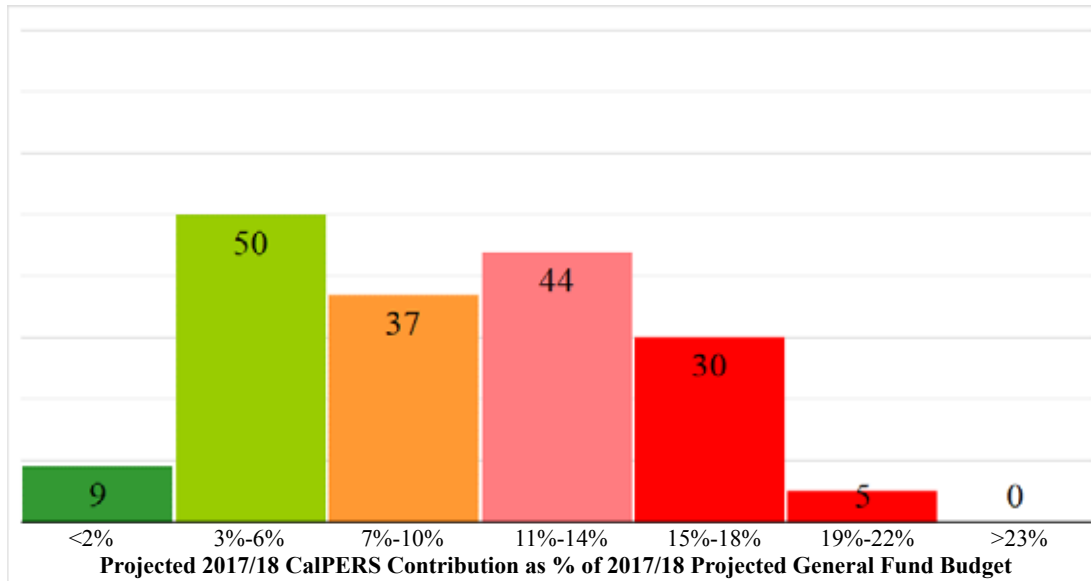
City General Fund Projection Assumptions

- FY 2006–07 and FY 2017–18:
 - General Fund (GF) budgets and CalPERS contributions from League survey data
- FY 2024–25 Projection:
 - GF budgets projected from 2017–18 assuming 3% annual growth
 - CalPERS contributions from CalPERS data adjusted for new tiers and FY 2016–17 investment gain
 - Assumes 100% of Safety contributions paid from GF
 - Misc GF contributions allocated on Misc % of GF payroll x projected positions/actual positions

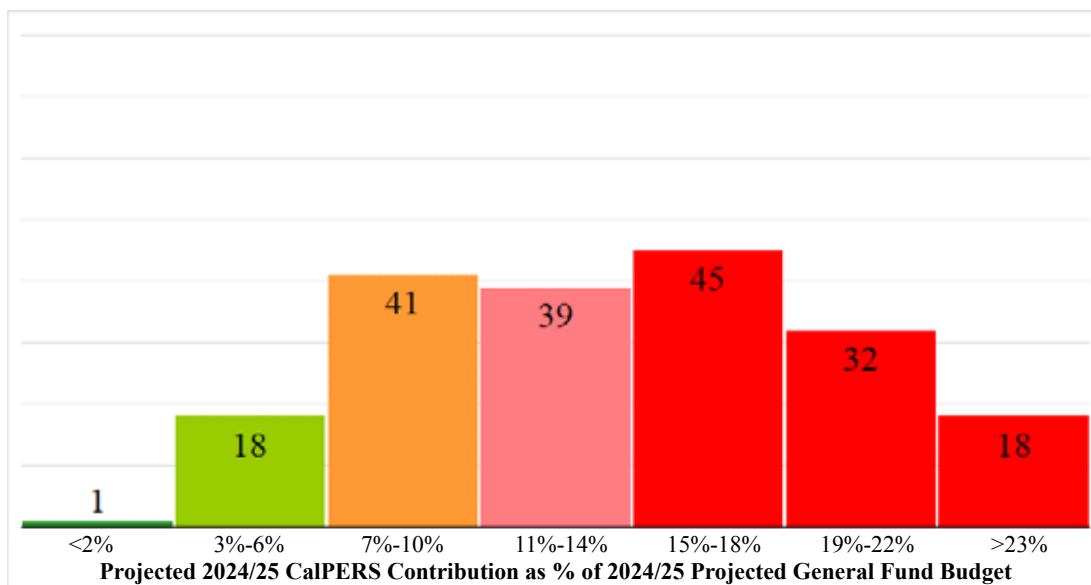
CalPERS Total City FY 2006–07 Contribution % GF Budget



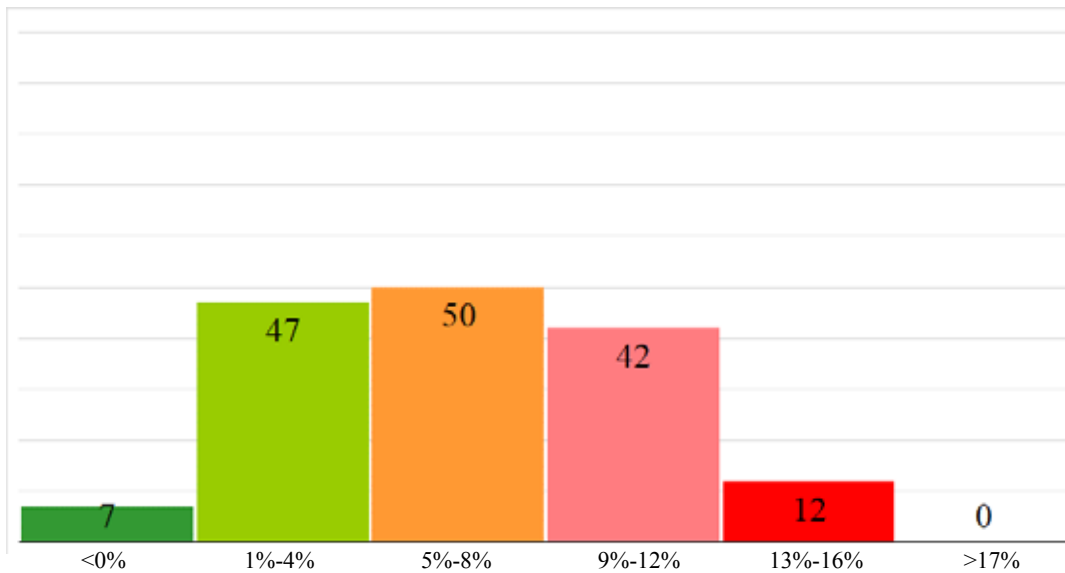
CalPERS Total City 2017/18 Contribution % GF Budget



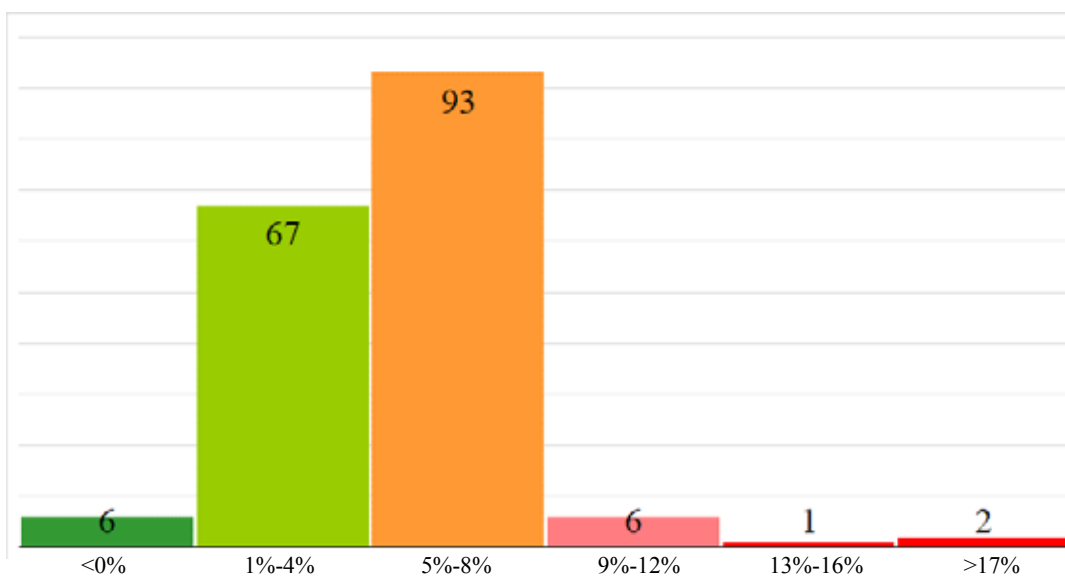
CalPERS Total City FY 2024-25 Contribution % GF Budget



Percentage Point Increase in CalPERS Contribution as % of GF Budget from FY 2006–07 to FY 2024–25



Percentage Point Increase in CalPERS Contribution as % of GF Budget from FY 2017–18 to FY 2024–25

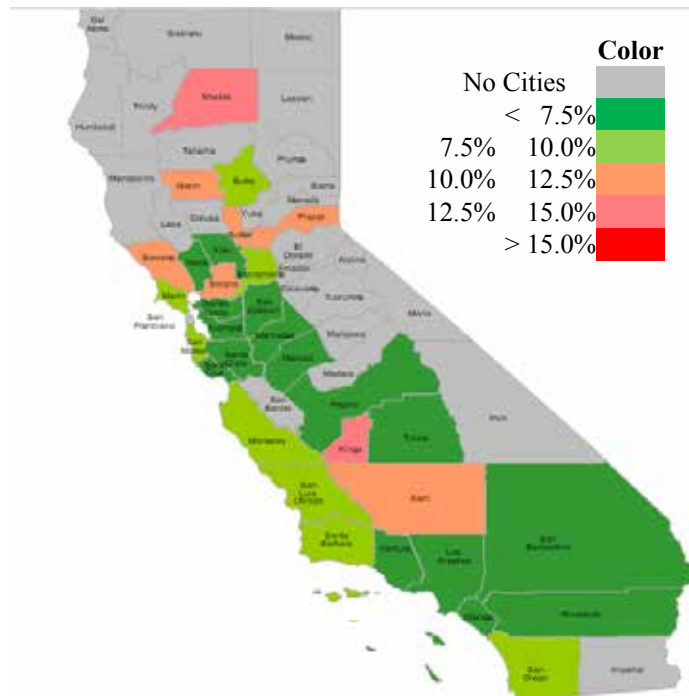


Contribution % GF Budgets

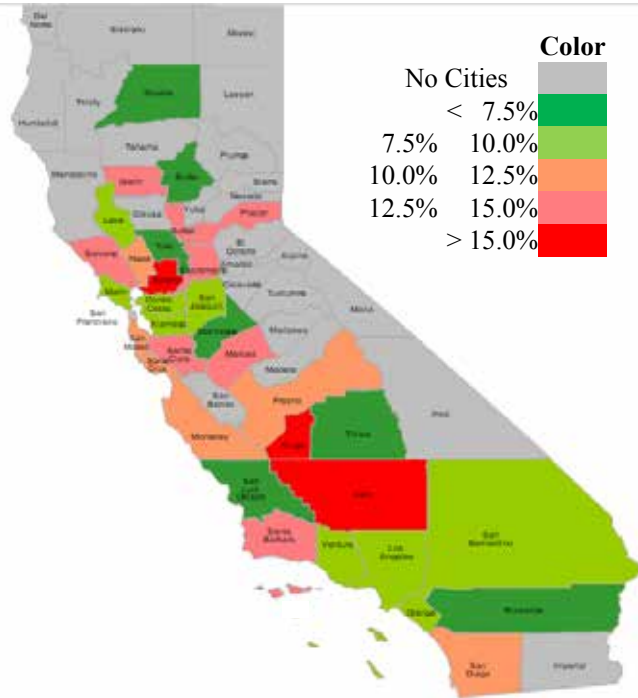
| Cities/Towns | | | |
|--------------|---------|---------|---------|
| Percentile | 2006/07 | 2017/18 | 2024/25 |
| 90th | 2.0% | 2.5% | 6.1% |
| 75th | 3.8 | 4.6 | 8.5 |
| 50th | 7.6 | 9.1 | 13.7 |
| 25th | 9.8 | 13.2 | 18.2 |
| 10th | 12.8 | 15.5 | 21.5 |
| Average | 8.3% | 11.2% | 15.8% |

Percentile means x% of cities have results that are higher than shown.

CalPERS City FY 2006–07 Contributions as % GF Budget by County



CalPERS City FY 2017–18 Contributions as % GF Budget by County

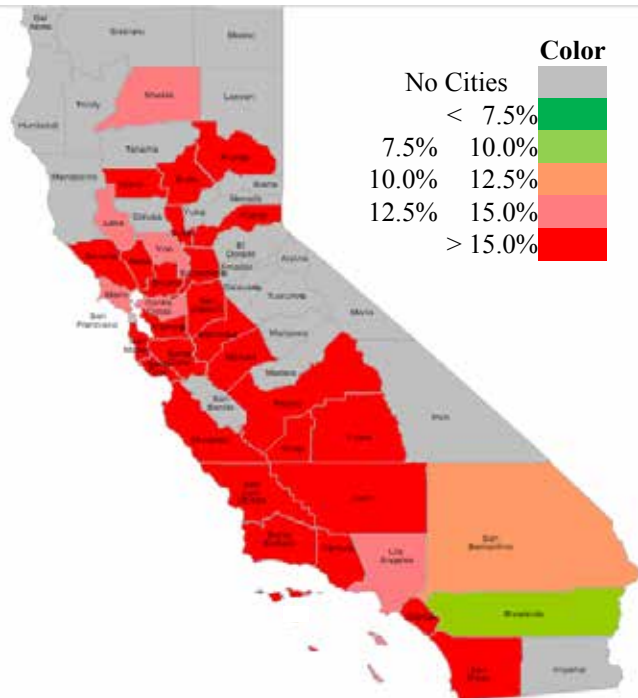


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CalPERS City Projected FY 2024–25 Contributions As % GF Budget by County



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Primary Factors Contributing to CalPERS Funded Status



Several factors have contributed to unsustainability of the CalPERS system. While such factors should be acknowledged, it remains far more important that all stakeholders work collaboratively to craft a path forward to ensure a sustainable public pension system that also recognizes the public's need for reliable and adequate services. Based on the League of California Cities® Retirement Sustainability Study Findings, anecdotal evidence, and in consultation with Bartel Associates, the League has identified five primary factors.

- 1. Enhanced Benefits:** The most prominent source of the pension system's cost escalation began with enhanced pension benefits granted by state and local government employers following the passage of SB 400 and AB 616 in 1999 and 2000. Cities throughout California followed the state's lead in providing enhanced benefits and, when negotiated, statute required those enhanced benefits apply to both prior and future service. These enhanced benefits have caused a ripple effect that have fundamentally altered the way in which local agencies can retain employees and provide basic and critical services to the public.
- 2. Investment Losses:** Fallout from the Great Recession played a pivotal role in CalPERS' lackluster investment returns. In 2008, CalPERS suffered a negative 27 percent return on investment — factoring in the 2008 discount rate (7.75 percent) results in a gross 34.75 percent impact to the fund. Moreover, CalPERS' outside investment advisors expect returns over the next decade will also be below anticipated returns. CalPERS projects that the projected market rate assumptions will yield a 6.1 percent return for the fund over the next decade. While it is widely known that CalPERS determines its discount rate, using a 60-year blended return to calculate its discount rate — 6.1 percent is well below the 7 percent assumption. Under the current statutory paradigm, public employers will assume the liability associated with this shortfall.
- 3. Cost of Living Adjustments:** Automatic Cost of living adjustments (COLA) have continued to hamper CalPERS' ability to compound investment earnings, hampering growth. ***A Sept. 27, 2017 Sacramento Bee article*** states "CalPERS in the past has looked at how suspending COLA's would affect the pension fund. Freezing them would improve pension plans for public safety employees by up to 18 percent and for other employees by up to 15 percent, according to CalPERS." This potentially significant gain in funded status should not be overlooked.
- 4. CalPERS Contribution Policy:** CalPERS contribution policy, most notably after the Great Recession, did not require agencies pay interest on accrued unfunded liability. While this shift in policy was an attempt to ease the burden on employers, the policy resulted in pushing unfunded liability payments to future taxpayers.
- 5. Demographics:** The liability for retirees at most cities significantly exceeds that of actives. This creates more volatility and led to having a much bigger impact funded status (and ultimately contributions) than any prior downturn.

Retirement System Sustainability

A SECURE FUTURE FOR CALIFORNIA CITIES



Pension Sustainability Principles

(As Adopted by the League of California Cities Board of Directors, June 30, 2017)

- » Public compensation systems programs should be sustainable, fair to taxpayers and employees, and provide long-term financial stability *[Existing Policy placed in new section]*.
- » The League believes that solutions towards realizing pension system sustainability should be the result of inclusive stakeholder collaboration at both the local and state level (*retirees, employees, employers, CalPERS*).
- » The League supports legal or legislative remedies that facilitate options to restore sustainability to CalPERS benefit plans. As appropriate to each city, such actions could include one or more of the following:
 - A single benefit level for every employee.
 - Converting all currently deemed “Classic” employees to the same provisions (benefits and employee contributions) currently in place for “PEPRA” employees for all future years of service.
 - Temporary modifications to retiree Cost of Living Adjustments (COLA) that are automatically added to a retiree’s pension benefit payment regardless of compensation level or CPI.
- » The League supports expanded flexibility for cities regarding their contract agreements with CalPERS, which could include additional mechanisms for exiting CalPERS and renegotiating UAL amortization terms.

Existing General Pension Principles *(Modified)*

(As Adopted by the League of California Cities Board of Directors, June 30, 2017)

- » The League supports a change in state law or judicial precedent to allow employers to negotiate plan changes with classic CalPERS members.
- » This League supports legislative solutions to address increasing costs associated with Industrial Disability Retirement (IDR).

STATEWIDE ISSUES AND VARIOUS DEPARTMENTS

Figure SWE-01
State Retirement and Health Care Contributions ^{1/}
(Dollars in Millions)

| | CalPERS ^{2/} | CSU CalPERS | CalSTRS | JRS | JRS II | LRS | Active Health & Dental ^{3/} | Retiree Health & Dental | CSU Retiree Health | Employer OPEB Prefunding ^{4/} |
|-----------------------|-----------------------|---------------------|---------|-------|--------|-----|--|-------------------------------|--------------------------|--|
| 2008-09 | \$3,063 | | \$1,133 | \$189 | \$40 | | \$2,146 | \$1,183 | | |
| 2009-10 | 2,861 | | 1,191 | 184 | 32 | | 2,120 | 1,182 | | \$3 |
| 2010-11 | 3,230 | | 1,200 | 166 | 54 | | 2,277 | 1,387 | | 2 |
| 2011-12 | 3,174 | | 1,259 | 195 | 58 | | 2,439 | 1,505 | | 0 |
| 2012-13 | 2,948 ^{5/} | \$449 ^{5/} | 1,303 | 160 | 51 | | 2,567 | 1,365 ^{5/} | \$222 ^{5/} | 0 |
| 2013-14 | 3,269 | 474 | 1,360 | 188 | 52 | \$1 | 2,697 | 1,383 | 225 | 22 |
| 2014-15 | 4,042 | 543 | 1,486 | 179 | 63 | 1 | 2,797 | 1,462 | 256 | 38 |
| 2015-16 | 4,338 | 585 | 1,935 | 190 | 67 | 1 | 2,968 | 1,556 | 263 | 63 |
| 2016-17 | 4,754 | 621 | 2,473 | 202 | 68 | 1 | 3,104 | 1,623 | 272 | 342 ^{7/} |
| 2017-18 | 5,188 | 661 | 2,790 | 197 | 76 | 1 | 3,252 | 1,771 | 291 | 189 |
| 2018-19 ^{6/} | 5,522 | 686 | 3,077 | 195 | 80 | 1 | 3,435 | 1,891 | 311 | 373 |

^{1/} The chart does not include contributions for University of California pension or retiree health care costs, and does not reflect the \$6 billion supplemental pension payment in 2017-18 authorized by Chapter 50, Statutes of 2017 (SB 84).

^{2/} In addition to the Executive Branch, this includes Judicial and Legislative Branch employees. Contributions for judges and elected officials are included in JRS, JRS II, and LRS.

^{3/} These amounts include health, dental, and vision contributions for employees within state civil service, the Judicial and Legislative Branches, and California State University (CSU).

^{4/} Amount reflects the employer contribution to pay down the Other Post-Employment Benefits (OPEB) unfunded liability.

^{5/} Beginning in 2012-13, CSU pension and health care costs are displayed separately.

^{6/} Estimated as of the 2018-19 Governor's Budget. 2018-19 General Fund costs are estimated to be \$2,901 million for CalPERS, \$686 million for CSU CalPERS, \$2,198 million for Retiree Health & Dental, \$1,613 million for Active Health and Dental, and \$194 million for OPEB Prefunding. The remaining totals are all General Fund.

^{7/} Amount includes a one-time prefunding contribution of \$240 million pursuant to Chapter 2, Statutes of 2016 (AB 133).

Candidate Portfolios

| Asset Class Component | Asset Allocation of Preliminary Candidate Portfolios | | | | Allocation 9/30/2017 <input type="checkbox"/> | Interim Policy 9/30/2016 <input type="checkbox"/> | ALM Policy 2013 <input type="checkbox"/> |
|--|--|--------------------------------------|--|--------------------------------------|---|---|--|
| | Candidate A <input type="radio"/> | Candidate B <input type="radio"/> | Candidate C <input type="triangle-up"/> | Candidate D <input type="radio"/> | | | |
| Global Equity | 34% | 42% | 50% | 59% | 50% | 46% | 47% |
| Private Equity | 8% | 8% | 8% | 8% | 8% | 8% | 12% |
| Fixed Income | 44% | 36% | 28% | 19% | 19% | 20% | 19% |
| Real Assets | 13% | 13% | 13% | 13% | - | - | - |
| Real Estate | - | - | - | - | 9% | 11% | 11% |
| Infrastructure/Foreland | - | - | - | - | 2% | 2% | 3% |
| Inflation Assets | 0% | 0% | 0% | 0% | 8% | 9% | 6% |
| Liquidity | 1% | 1% | 1% | 1% | 4% | 4% | 2% |
| Expected Compound Return (1-10 yrs.) | 5.6% | 5.8% | 6.1% | 6.4% | 6.0% | 5.9% | 6.2% |
| Long Term Expected Return (11-60 yrs.) | 7.8% | 8.0% | 8.3% | 8.5% | 8.1% | 8.0% | 8.3% |
| Blended Return (1-60 yrs.) | 6.50% | 6.75% | 7.00% | 7.25% | 6.85% | 6.77% | 7.09% |
| Expected Volatility | 9.1% | 10.2% | 11.4% | 12.8% | 11.5% | 11.0% | 12.0% |
| Cash Yield: | 3.1% | 3.0% | 2.9% | 2.7% | - | - | - |

- With the 2013 Capital Market Assumptions, the ALM Policy Portfolio had an expected compound return of 7.15% for years 1 through 10, expected compound return of 8.39% for the long term (i.e., years greater than 10), blended return of 7.56%, and expected volatility of 11.76%.
- Blended Return is the weighted expected compound rate of return of years 1 through 10 and the long term, minus 15 bps for admin fees.
- Circles correspond to Candidate Portfolios A, B, and D. Squares correspond to Current Allocation, Interim Policy, and ALM policy portfolios. Triangle corresponds to Candidate Portfolio C which is most similar to Current Allocation. Symbols illustrated on pages 6 and 7.





Pension Obligation Bonds

Advisory:

GFOA Advisories identify specific policies and procedures necessary to minimize a government's exposure to potential loss in connection with its financial management activities. It is not to be interpreted as GFOA sanctioning the underlying activity that gives rise to the exposure.

BACKGROUND:

Pension obligation bonds (POBs) are taxable bonds¹ that some state and local governments have issued as part of an overall strategy to fund the unfunded portion of their pension liabilities by creating debt. The use of POBs rests on the assumption that the bond proceeds, when invested with pension assets in higher-yielding asset classes, will be able to achieve a rate of return that is greater than the interest rate owed over the term of the bonds. However, POBs involve considerable investment risk, making this goal very speculative.² Failing to achieve the targeted rate of return burdens the issuer with both the debt service requirements of the taxable bonds and the unfunded pension liabilities that remain unmet because the investment portfolio did not perform as anticipated. In recent years, local jurisdictions across the country have faced increased financial stress as a result of their reliance on POBs, demonstrating the significant risks associated with these instruments for both small and large governments.

RECOMMENDATION:

The Government Finance Officers Association (GFOA) recommends that state and local governments do not issue POBs for the following reasons:

1. The invested POB proceeds might fail to earn more than the interest rate owed over the term of the bonds, leading to increased overall liabilities for the government.
2. POBs are complex instruments that carry considerable risk. POB structures may incorporate the use of guaranteed investment contracts, swaps, or derivatives, which must be intensively scrutinized as these embedded products can introduce counterparty risk, credit risk and interest rate risk.³
3. Issuing taxable debt to fund the pension liability increases the jurisdiction's bonded debt burden and potentially uses up debt capacity that could be used for other purposes. In addition, taxable debt is typically issued without call options or with "make-whole" calls, which can make it more difficult and costly to refund or restructure than traditional tax-exempt debt.
4. POBs are frequently structured in a manner that defers the principal payments or extends repayment over a period longer than the actuarial amortization period, thereby increasing the sponsor's overall costs.
5. Rating agencies may not view the proposed issuance of POBs as credit positive, particularly if the issuance is not part of a more comprehensive plan to address pension funding shortfalls.

Notes:

1 The Tax Reform Act of 1986 eliminated the tax exemption for pension obligation bonds.

2 Alicia H. Munnell, Jean-Pierre Aubry, and Mark Cafarelli, “An Update on Pension Obligation Bonds,” Center for Retirement Research at Boston College, July 2014.

3 See GFOA Advisory – *Using Debt-Related Derivatives and Developing a Derivatives Policy (2015)*

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