City of Carpinteria

COUNCIL AGENDA STAFF REPORT
March 26, 2018

ITEM FOR COUNCIL CONSIDERATION

Report on City pension obligations and establishment of a Pension Stabilization Trust Fund.

STAFF RECOMMENDATION

Action Item _x_; Non-Action Item ___

1. Receive and file the report.

2. Authorize City Manager to engage consultant services as appropriate for the establishment and administration of the Pension Trust Fund.

3. Direct staff to work with the Finance Committee to create the Pension Stabilization Trust funding plan for consideration by the Council.

Sample Motion: I move a motion to; A) receive and file the Executive Summary of the CalPERS Actuarial Issues Report March 2018; B) authorize City Manager to engage consultant services as appropriate for the establishment and administration of the Pension Stabilization Trust Fund; C) direct staff to work with the Finance Committee to create the Pension Stabilization Trust funding plan.

BACKGROUND

The City retained Bartel Associates to provide CalPERS-related actuarial consulting services. The Executive Summary analyzes the City's CalPERS Miscellaneous and Safety pension plans to assist the City in evaluating the current funding situation.

On November 27, 2017, the Council approved various actions to implement the City's Five-Year Financial Plan, 2017-22. Actions included pursuing the establishment of a Section 115 Irrevocable Pension Stabilization Trust to protect and improve the City's long-term financial position and ability to continue to deliver necessary and desired services.

The purpose of this agenda matter is to allow the Council to consider actions necessary to stabilize future pension expenses. The Pension Stabilization Trust Fund is designed for setting assigned funds (prefunding) to address future pension contribution rate increases in response to actions by CalPERS resulting in increased rates, such as lower discount rates and changing to amortization policies. The trust allows the City to maintain local control over trust assets, has the potential for greater returns than currently being realized, and to strategically pay pension obligations. This matter is consistent with the City's fiduciary responsibilities and goal to deliver services that meet community needs in an efficient and effective manner.

DISCUSSION

The California Public Employee Retirement System (CalPERS) is underfunded and as of January 2018, only had 68% of the funds required to pay estimated retirement benefits. It's now commonly understood that the current CalPERS system is unsustainable (see Attachment B) changes will continue in order to ensure that the system moves towards long-term sustainability. The result of these changes includes increased cost for cities and employees. The primary factors contributing to unsustainability of the CalPERS system are as follows:

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. 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 it suffered a negative 27% return on investment.

3. Cost of Living Adjustments – Automatic Cost of living adjustments for retirees (COLA), have continued to hamper CalPERS ability to compound investment earnings, hampering growth.

4. CalPERS Contribution Policy – CalPERS contribution policy did not require agencies to pay interest on accrued unfunded liability. While this shift in policy attempted to ease the burden on employers, the policy resulted in pushing unfunded liability payments to future taxpayers.

5. Demographics – The liability of retirees at most cities significantly exceeds that of actives. This creates more volatility and led to having a much bigger impact funded status than any prior downturn.

The City's pension issues are not as severe as many cities. For example, it did not enhance benefits, does not have active public safety members, and employees cost share to the maximum allowed, i.e. 8% of salary. The result is the City's overall total normal cost rate is less than 18% for next fiscal year, this is far less than the CalPERS average projected rates of over 27%. The City's current funding situation has two primary issues to address with respect to the CalPERS pension plans. The first is the Unfunded Actuarial Accrued Liability. The City's June 30, 2016 Unfunded Actuarial Liability is $4.3 million with a funded ratio of 74.7% for the Miscellaneous Plan and $2.9 million with a funded ratio of 68.1% for the Safety Plan. As a result, the City has to make additional annual contributions to the CalPERS pension plans. As the table below describes the current employer payment of the Unfunded Liability and the proposed future years:

MISCELLANEOUS PLAN OF THE CITY OF CARPINTERIA
Annual Valuation Report as of June 30, 2016

Fiscal Year	Employer Normal Cost Rate	Employer Payment of Unfunded Liability
2018-19	10.411%	$225,815
2019-20*	10.900%	$289,000
2020-21*	11.800%	$337,000

PEPPRA MISCELLANEOUS PLAN OF THE CITY OF CARPINTERIA
Annual Valuation Report as of June 30, 2016

Fiscal Year	Employer Normal Cost Rate	Employer Payment of Unfunded Liability
2018-19	7.383%	$1,079
2019-20*	7.400%	$1,400
2020-21*	7.500%	$1,900

SAFETY PLAN OF THE CITY OF CARPINTERIA
Annual Valuation Report as of June 30, 2016

Fiscal Year	Employer Normal Cost Rate	Employer Payment of Unfunded Liability
2018-19	0.000%	$204,738
2019-20*	0.000%	$249,000
2020-21*	0.000%	$274,000

* Projected Results

The second issue is future contributions. Primarily due to CalPERS actuarial assumptions and methods changes over the last 5 years that will result to increased contributions from $474 thousand in current fiscal year to $1 million by FY 2028/29. As you can see from the table above, the Employer Normal Cost Rate will continue to increase over the years.

As Attachment B discusses, there are limited options under current law to address the fiscal challenges attributed to the City's issues. The Finance Committee provided City Council the recommendation to establish a Section 115 Irrevocable Pension Stabilization Trust to assist in ensuring long-term sustainability of pension benefits.

The Bartel Executive Summary of the CalPERS Actuarial Issues Report (Attachment A) recommends the City consider establishing a Pension Stabilization Trust Fund. The Finance Committee has discussed and recommends Scenario 1 of the report, with a $1M contribution to establish the trust and subsequent annual payment contribution of 2% of payroll, approximately $58K.

FINANCIAL CONSIDERATIONS

The subject actions are a part of the City's implementation of the Five-Year Financial Plan and will help improve the City's long-term financial position.

LEGAL AND RISK MANAGEMENT CONSIDERATIONS

The establishment of the Pension Stabilization Trust Fund is being developed consistent with Section 115 of the Internal Revenue Code. Establishment of the Irrevocable Pension Stabilization Trust Fund mitigates financial risk associated with expected increases in CalPERS pension rates over the next decade.

PRINCIPAL PARTIES EXPECTED AT MEETING

Doug Pryor, Consultant with Bartell Associates, LLC

ATTACHMENTS

Attachment A: Executive Summary by Bartel Associates, LLC
Attachment B: League of California Cities Retirement System Sustainability Study and Findings

Staff contact: Licette Maldonado
(805) 755-4448, LicetteM@ci.carpinterial.ca.us

Signature

Reviewed by: Dave Durflinger, City Manager
(805) 755-4400, daved@ci.carpinteria.ca.us

Signature

ATTACHMENT A

EXECUTIVE SUMMARY

BY

BARTEL ASSOCIATES, LLC

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City of Carpinteria

Executive Summary
CalPERS Actuarial Issues
June 30, 2016 Valuation

March 2018

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City of Carpinteria
CalPERS Actuarial Issues – June 30, 2016 Valuation
Overview

The City of Carpinteria retained Bartel Associates to provide CalPERS-related actuarial consulting services. This Executive Summary analyzes the City's CalPERS Miscellaneous and Safety pension plans to assist the City in evaluating the current funding situation. Note the Safety plan consists of only former City Police employees.

We believe there are 2 primary issues the City should evaluate and address with respect to the CalPERS pension plan, the Unfunded Actuarial Accrued Liability (unfunded liability) and future contributions. The unfunded liability provides an estimated value at a single point in time of additional contributions needed to pay off past accrued liabilities. Projected future contributions provide the agency future cash outlay required to defease the unfunded liability. Therefore, both need to be considered:

- Unfunded Liability
  The City's June 30, 2016 Unfunded Actuarial Liability (UAL) is $4.3 million for the Miscellaneous plan and $2.9 million for the Safety plan. This is measured by CalPERS based on a 7.375% discount rate. As described in more detail later in this summary, due to expected further discount rate changes, we think a better measurement of the unfunded liability would use a 7.00% discount rate, resulting in unfunded liabilities of $5.1 million for the Miscellaneous plan and $3.3 million for the Safety plan.
- Future Contributions
  Due primarily to CalPERS actuarial assumption and methods changes over the last 5 years, City contributions are expected to gradually increase from $474 thousand in 2017/18 to $1.052 million in fiscal year 2028/29 for the Miscellaneous plan and from $164 thousand to $354 thousand for the Safety plan. For both plans, significantly higher contributions should be expected for many years to come.

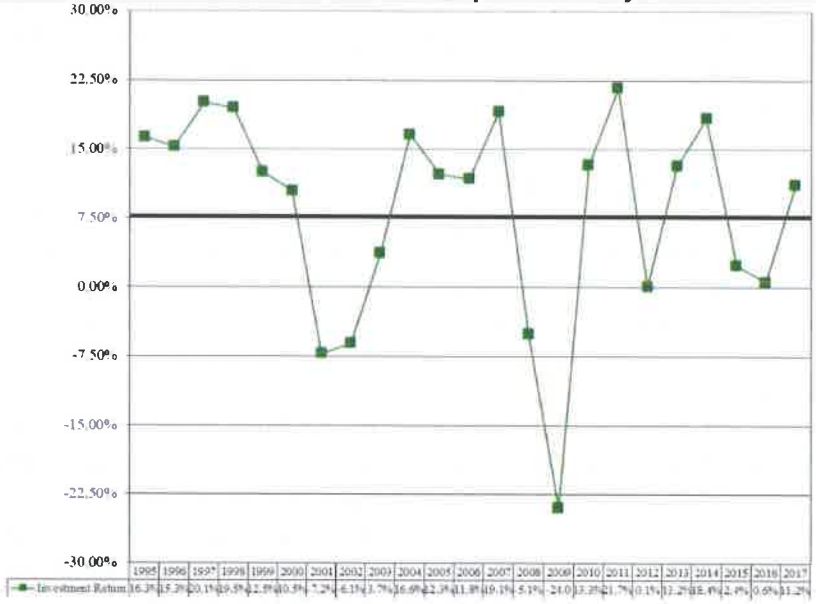
Of course, future unfunded liabilities and contributions will vary significantly depending on investment returns. Our analysis provides measurements of this variability to help the City understand the impact of investment volatility. Our projections show that under most investment return scenarios, contributions are expected to remain significantly above current levels for 15 years or more.

We believe agencies should strongly consider funding amounts above the contributions CalPERS currently requires, with the level of funding being an individual agency budgetary decision. Additional funding could be paid directly to CalPERS, or to a supplemental pension trust.

We understand the City's primary objectives are to control long term costs and volatility. We believe these objectives are better achieved through additional contributions to a supplemental trust. The supplemental trust provides more flexibility for the City to both level out contributions and mitigate year-to-year contribution volatility.

Historical Returns

Following are CalPERS investment returns over the past several years:



The 2017 investment return was 11.2%, based on CalPERS July 14, 2017 CalPERS press release. Average annual returns were 4.3% for the last 10 years (July 1, 2007 through June 30, 2017) and 6.6% for the last 20 years (July 1, 1997 through June 30, 2017)[1]. Returns averaged over longer terms tend to be higher.

[1] Averages are geometric averages, which represent a better measurement of returns when compared to the discount rate

CALPERS RECENT CHANGES

New Contribution Policy (Adopted April 17, 2013)

CalPERS Board adopted the new *direct rate smoothing* contribution policy to:

- Mitigate volatility generated by the asset corridor (under the old smoothing policy) when extreme events happen
- Improve progress toward increased funded status
- Enhance transparency over the current method
- Recognize GASBS 68 encourages more rapid funding by requiring a lower discount rate when funding progress is too slow.

The new contribution policy:

- Smoothes employer contribution rates directly, rather than smoothing asset values and hoping that will produce smooth contribution rates
- Uses market assets values to determine the unfunded liability and set contribution rates, rather than using a smoother (actuarial) asset value
- Sets fixed amortization periods for future gains and losses – 5-year ramp up plus 20 years full payment plus 5-year ramp down (including the difference between market and actuarial asset values at June 30, 2013)
- Sets fixed amortization periods for future assumption changes – 5-year ramp up plus 10 years full payment plus 5-year ramp down
- Converts all existing contribution rate amortization bases that use rolling amortization periods to fixed periods.

Under the new contribution policy:

- Year-to-year rate changes will be somewhat higher in most years, but lower in years with extreme market events
- Funded status will improve faster – all gains/losses will be fully amortized and paid for 30 years after they occur
- Employer rates will go up, beginning in 2015/16.

New Actuarial Assumptions (Adopted February 19, 2014)

CalPERS Board adopted the new assumptions based on their asset liability management study and new experience study.

- No change to the discount rate assumption of 7.5%
- The most significant change for demographic assumptions is anticipated future mortality improvement; for example, a person age 70 today having a shorter life expectancy than someone age 70 in 30 years.

Under the new actuarial assumptions:

- Since retirees will be projected to live longer and collect their pensions longer, employer contribution rates increase
- The new assumptions first impact 2016/17 rates, with the resulting liability increase calculated in the 2014 valuation and amortized over 20 years (5-year ramp up and ramp down).

New Risk Mitigation Policy (Adopted November 18, 2015)
CalPERS Board adopted the new risk mitigation policy to:
- Reduce expected volatility of investment returns to 8% (as measured by the standard deviation of expected returns) in 21 years
- Improve progress toward increased funded status
- Minimize increases above projected employer contribution rates.

The new risk mitigation policy:
- Lowers the discount rate by 0.05% - 0.25% in years when investment returns exceed the discount rate by 4% or more
- Uses investment gains to pay for future cost increases.

Under the new risk mitigation policy:
- The 4% threshold would offset increases to employer rates that would otherwise increase when the discount rate is lowered
- Funded status will improve faster – investment gains will be used to reduce future investment volatility.

Because of the reduction in discount rate (see the next paragraph), on February 14, 2017 CalPERS Board suspended the implementation of the risk mitigation policy until 2020/2021 and revised the threshold investment return in order to trigger a discount rate reduction from 4% to 2%.

New Discount Rate Assumption (Adopted December 21, 2016)
CalPERS Board approved lowering the discount rate assumption based on the mid cycle review of their asset liability management study and changing market conditions to:
- Strengthen the long-term sustainability of the fund
- Increase the likelihood CalPERS investments earn the assumed rate of return
- Reduce negative cash flows caused by more retirees
- Reduce the probability of funded ratios falling below undesirable levels
- Reduce the risk of employer rate increases due to the volatility of investment markets.

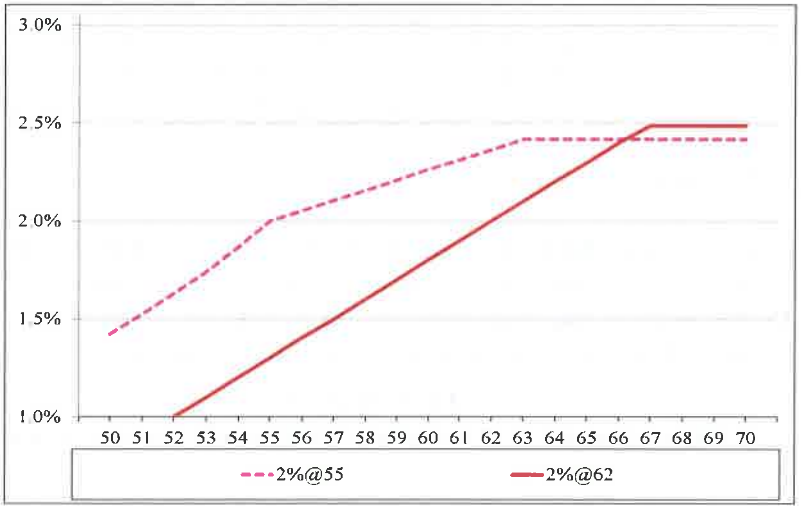
Under the new discount rate assumption:
- The lowered discount rate of 7.375% was used in the June 30, 2016 valuation, 7.25% will be used in the June 30, 2017 valuation, and 7.00% will be used in the June 30, 2018 valuation and onward
- Employer rates will increase, beginning in 2018/19 fiscal year
- Risk mitigation suspended until the June 30, 2018 valuation.

Benefits

Current Miscellaneous employees have one of 2 formulas:

- 2% @ 55 for those hired before January 1, 2013
- 2% @ 62 PEPRA for new members hired on or after January 1, 2013.

Following are the benefit factors for these formulas:



Funded Status

Following is the plan funded status. CalPERS used a 7.375% discount rate in the June 30, 2016 actuarial valuation, but is scheduled to lower the rate, reaching 7% in the June 30, 2018 valuation. We believe 7% represents a better measure of the liability because it provides a better estimate of the long term return on plan assets.

(in $ millions)

	Discount Rate	
	7.375%	**7.0%**
■ June 30, 2016		
● Actuarial Accrued Liability	$ 17.2	$18.0
● Assets	12.9	12.9
● Unfunded Liability	4.3	5.1

Projected Contributions and Funded Status

Our projections[2] incorporate the following:

- Discount rate reduction to 7% by June 30, 2018 and further reductions due to risk mitigation,
- The 11.2% investment return reported by CalPERS for 16/17, and subsequent lower (6.5%) investment returns over the next 10 years

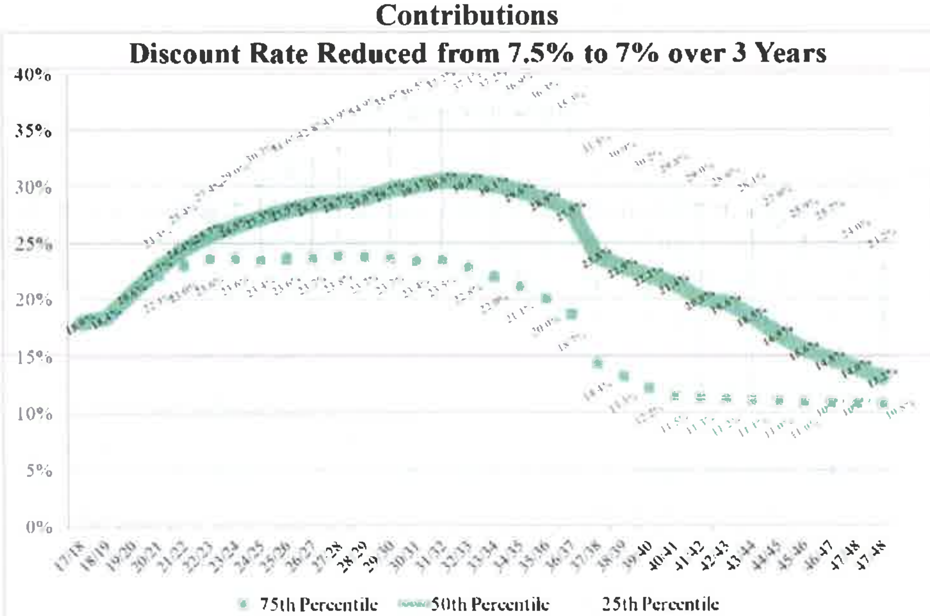
[2] Our projections are on a combined basis; CalPERS provides separate actuarial reports for each benefit tier.

- The impact of new hires coming in with PEPRA benefits assuming:
  - 50% of 2013 new hires will be classic members (laterals).
  - 50% of 2013 new hires will be new members with PEPRA benefits.
  - Classic members will decrease from 50% to 0% of new hires over 20 years.

CalPERS actual investment return will significantly affect City contribution rates. The following graphs show the City's projected contribution rates, assuming future (beyond June 30, 2017 and for the first 10 years) investment returns, will average 0.8%, 6.0%, and 11.4% for the 25th, 50th and 75th confidence levels[3] respectively, with CalPERS' current investment allocation, and 1.3%, 7.0%, and 14.8% (25th, 50th, and 75th percentiles, respectively) after the first 10 years.

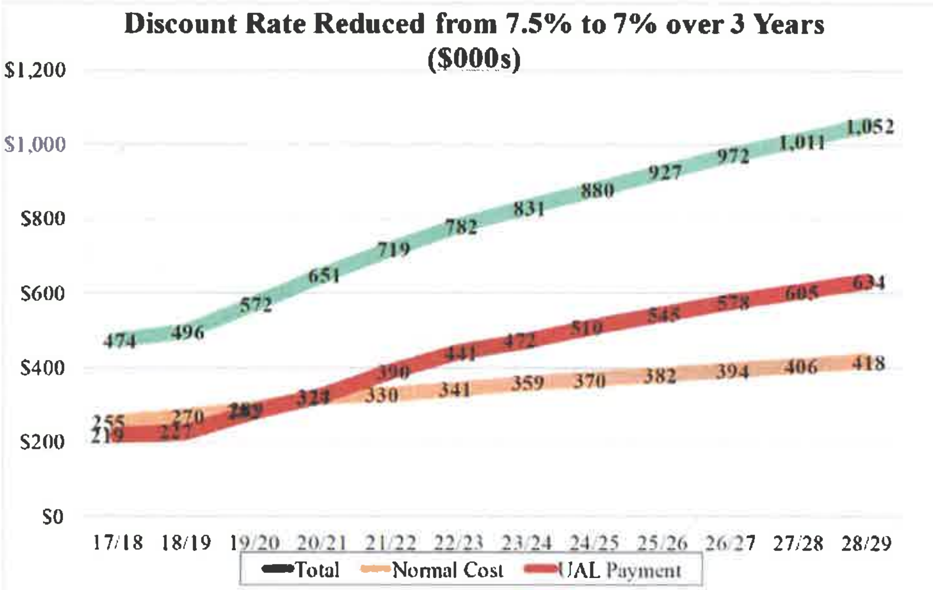
Below are contribution rate projections and the Plan's projected funded status. In each chart, the thick line in the middle represents the expectation (50th percentile), with the width of the lines above and below each data point representing a range over which the result is expected to vary to capture ½ of all outcomes (based on investment volatility).

Contributions

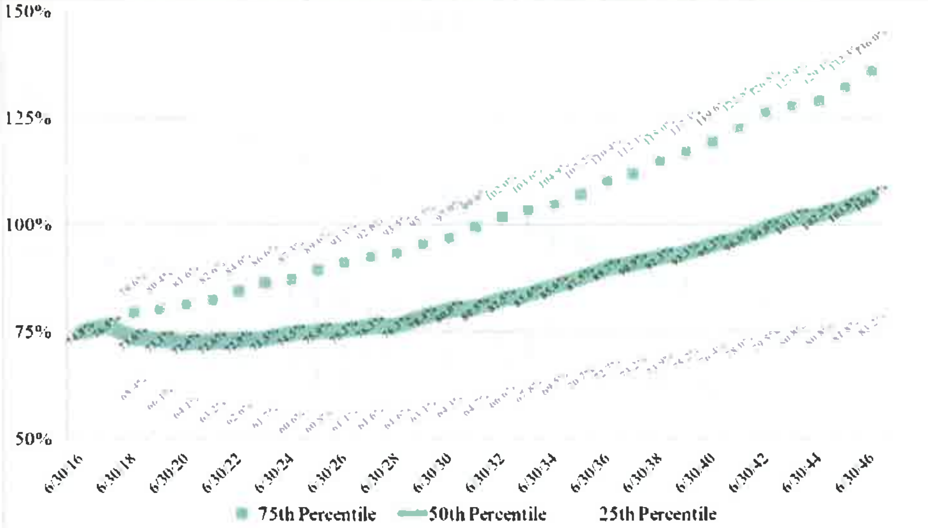


[3] Reflects the likelihood actual investment return will exceed confidence level.

Contributions

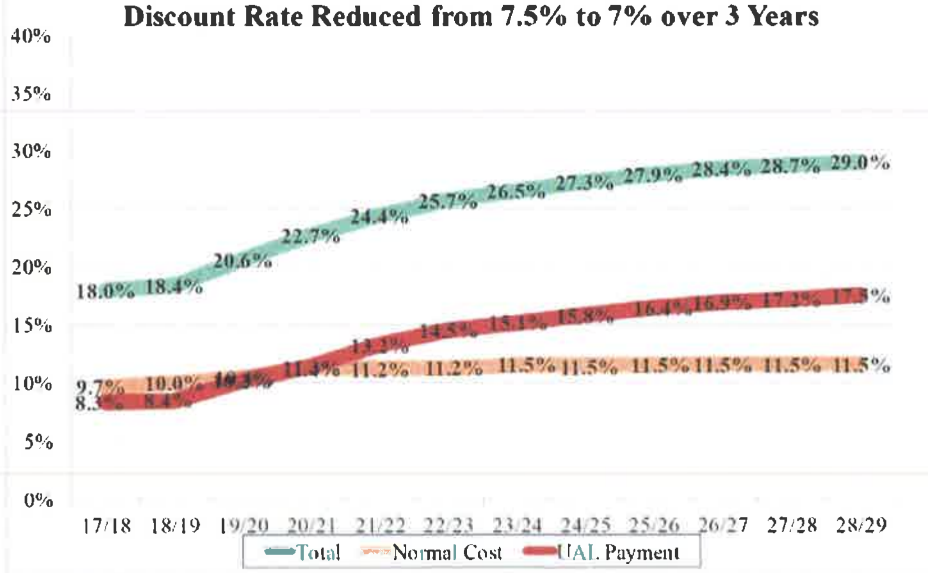


Funded Status
Discount Rate Reduced from 7.5% to 7% over 3 Years



Projected contributions (using the "expected" 50th percentile results above) as a percentage of projected payroll, and as dollar amounts, are provided below. The contribution is provided for both the Normal Cost and Unfunded Actuarial Liability (UAL) components.

Contributions
Discount Rate Reduced from 7.5% to 7% over 3 Years



Benefits
The Safety plan does not have any active employees and City benefits for this plan are for the 2%@50 formula (no PEPRA benefits under this plan).

Funded Status
Following is the plan funded status. CalPERS used a 7.375% discount rate in the June 30, 2016 actuarial valuation, but is scheduled to lower the rate, reaching 7% in the June 30, 2018 valuation. We believe 7% represents a better measure of the liability because it provides a better estimate of the long term return on plan assets.

(in $ millions)

	Discount Rate	
	7.375%	**7.0%**
■ June 30, 2016		
● Actuarial Accrued Liability	$ 9.3	$ 9.7
● Assets	6.4	6.4
● Unfunded Liability	2.9	3.3

Projected Contribution Rates
Our projections incorporate:

- Discount rate reduction to 7% by June 30, 2018 and further reductions due to risk mitigation,
- The 11.2% investment return reported by CalPERS for 16/17, and subsequent lower (6.5%) investment returns over the next 10 years

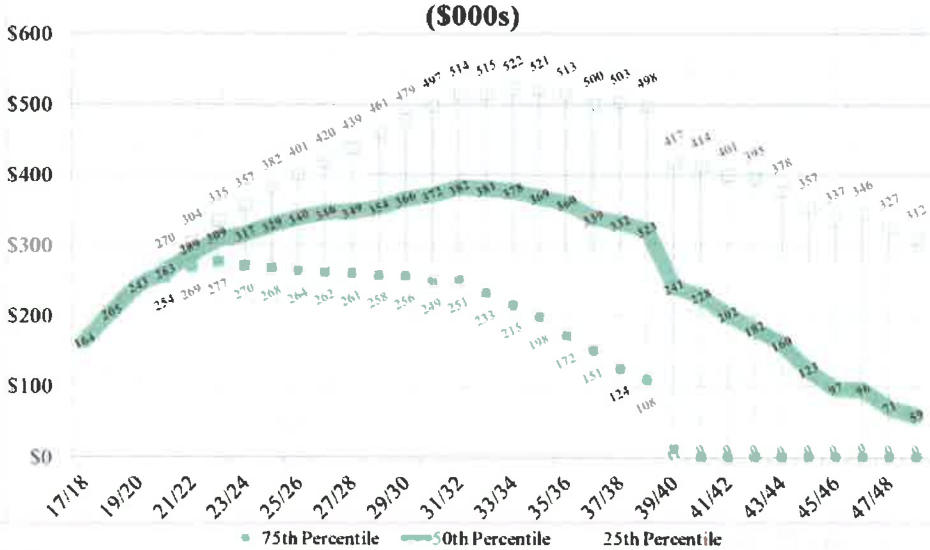
CalPERS actual investment return will significantly affect City contribution rates. The following graphs show the City's projected contribution rates, assuming future (beyond June 30, 2017 and for the first 10 years) investment returns, will average 0.8%, 6.0%, and 11.4% for the 25th, 50th and 75th confidence levels[4] respectively, with CalPERS' current investment allocation, and 1.3%, 7.0%, and 14.8% (25th, 50th, and 75th percentiles, respectively) after the first 10 years.

Since there are no actives, unfunded liabilities are amortized as a level dollar amounts.

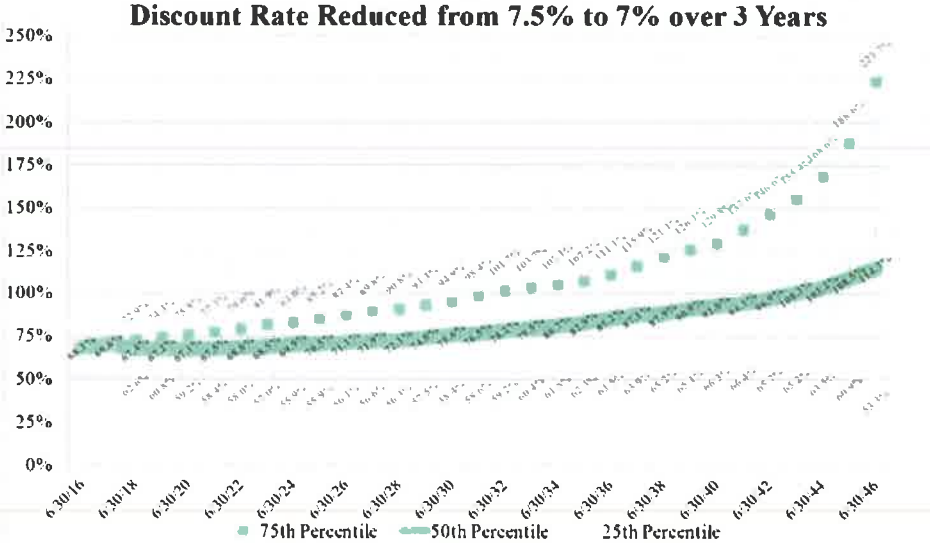
[4] Reflects the likelihood actual investment return will exceed confidence level.

The graphs below show contribution rate projections and the Plan's projected funded status.

Contributions
Discount Rate Reduced from 7.5% to 7% over 3 Years
($000s)



Funded Status
Discount Rate Reduced from 7.5% to 7% over 3 Years



SUPPLEMENTAL PENSION TRUST

The City has many options available to facilitate reducing the CalPERS unfunded liability and/or to mitigate expected volatility of future CalPERS contribution rates.

We recommend the City consider establishing a Supplemental Pension Trust, qualified under Section 115 of the Internal Revenue Code.

The Trust has the following characteristics:

- Funds deposited into the trust are irrevocable
- Trust funds can be used only to pay CalPERS directly or to reimburse the City for CalPERS contributions
- Assets are not restricted in the same way as the City's funds. Prudent investments could be expected to earn 5% to 6% or more in the long run.
- Funds can be deposited into the trust at the City's option; contributions are not required or mandated in any year
- We do not believe trust assets will be able to offset the net pension liability in the City's financial statements. However, the funds will be a City asset and can be disclosed in the financial statement notes.

We modeled a Supplemental Pension Trust for the Miscellaneous and Safety plan under 2 scenarios:

- Scenario 1

  City budgets a $1 million contribution on 6/30/18 with $0.6 million to the Miscellaneous Plan and $0.4 million to the Safety Plan.

  For the Miscellaneous Plan, the City would contribute 2% of pay for each of 18/19 and 19/20 in addition to the amount billed by CalPERS. Then, the City would pay the total budgeted amount of 23% of pay starting in 20/21, with any excess over the actual amount billed by CalPERS being deposited to the supplemental trust, and any shortfall (if the required CalPERS contribution is higher than the budgeted amount) being paid from the trust.

  For Safety Plan, the City would contribute $20,000 for 18/19 in addition to the amount billed by CalPERS. Then, the City would pay the total budgeted amount of $264,000 starting in 19/20, with any excess over the actual amount billed by CalPERS being deposited to the supplemental trust, and any shortfall (if the required CalPERS contribution is higher than the budgeted amount) being paid from the trust.

- Scenario 2

  Under the second scenarios modeled, the City would budget a $2 million contribution on 6/30/18, with $1.2 million to the Miscellaneous Plan and $0.8 million to the Safety Plan.

  For the Miscellaneous Plan, the City would contribute 2% of pay for 18/19 in addition to the amount billed by CalPERS. Then, the City would pay the total budgeted amount of 21% starting from 19/20, with any excess over the actual amount billed by CalPERS being deposited to the supplemental trust, and any shortfall (if the required CalPERS contribution is higher than the budgeted amount) being paid from the trust.

For Safety Plan, City would pay the total budgeted amount of $200,000 starting in 18/19, with any excess over the actual amount billed by CalPERS being deposited to the supplemental trust, and any shortfall (if the required CalPERS contribution is higher than the budgeted amount) being paid from the trust.

The top chart shows the projected balance in the supplemental trust, assuming assets earn 5% per year. The 25th and 75th percentile markers indicate the potential variation in fund balance caused by CalPERS required contributions being higher or lower than the estimated amounts.

Since the supplemental trust balance is expected to remain positive at the 50th percentile, this indicates that the City is likely to keep total contributions at the budgeted level and in addition, to set aside funds that reduce the City's total pension liability.

Scenario 1:

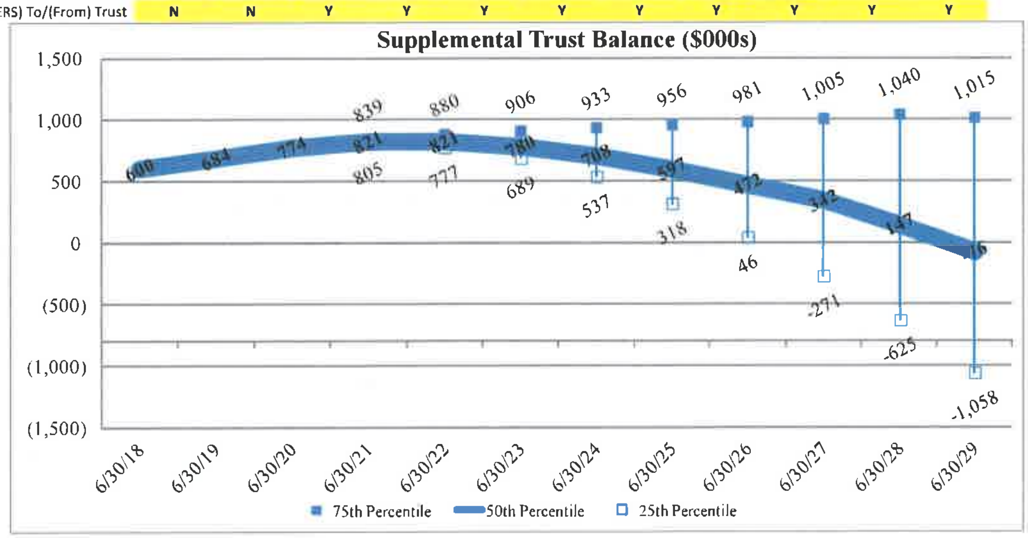
Miscellaneous:

Initial 6/30/18 Fund Balance ($000)	600
Stabilization Fund - Rate of Return	5.0%
Target Rate	23.0%

Miscellaneous Plan Rate Stabilization Fund Balance Scenario 1

Calculate

	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
(A) Add'l Contribution $ ($000)	-	-	-	-	-	-	-	-	-	-	-
(B) Add'l Contribution - % of pay	2.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(A) + (B) as % of Pay	2.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Budget - CalPERS Rate	20.4%	22.6%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%
Pay (Budget-CalPERS) To/(From) Trust	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y



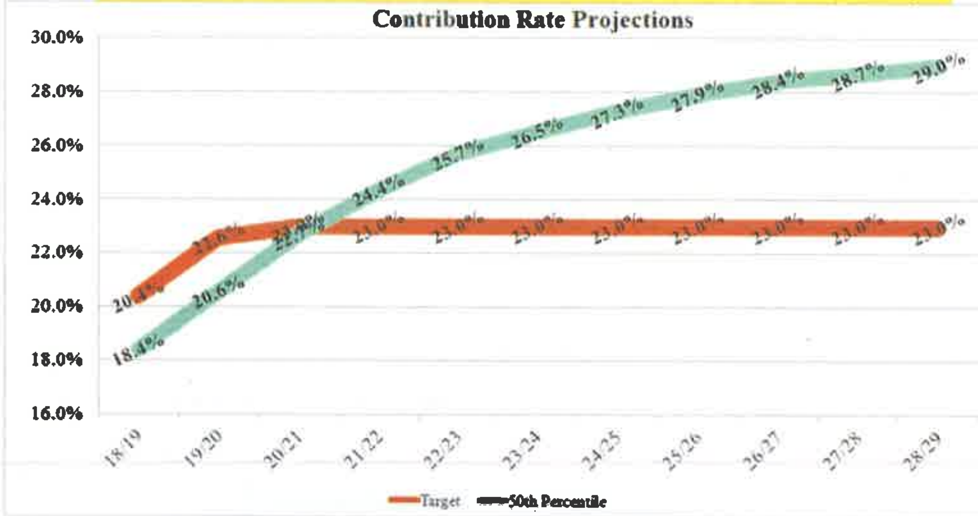
City of Carpinteria
CalPERS Actuarial Issues – June 30, 2016 Valuation
Supplemental Pension Trust

Initial 6/30/18 Fund Balance ($000)	600
Stabilization Fund - Rate of Return	5.0%
Target Rate	23.0%

Miscellaneous Plan Rate Stabilization Fund Balance Scenario 1

Calculate

	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
(A) Add'l Contribution $ ($000)	-	-	-	-	-	-	-	-	-	-	-
(B) Add'l Contribution - % of pay	2.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(A) + (B) as % of Pay	2.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Budget - CalPERS Rate	20.4%	22.6%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%
Pay (Budget-CalPERS) To/(From) Trust	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y

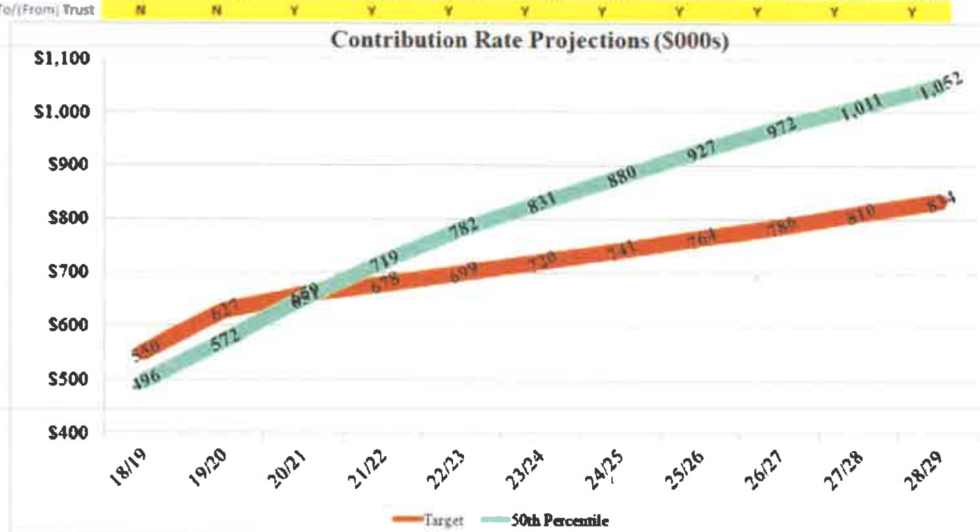


Initial 6/30/18 Fund Balance ($000)	600
Stabilization Fund - Rate of Return	5.0%
Target Rate	23.0%

Miscellaneous Plan Rate Stabilization Fund Balance Scenario 1

Calculate

	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
(A) Add'l Contribution $ ($000)	-	-	-	-	-	-	-	-	-	-	-
(B) Add'l Contribution - % of pay	2.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(A) + (B) as % of Pay	2.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Budget - CalPERS Rate	20.4%	22.6%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%
Pay (Budget-CalPERS) To/(From) Trust	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y



City of Carpinteria
CalPERS Actuarial Issues – June 30, 2016 Valuation
Supplemental Pension Trust

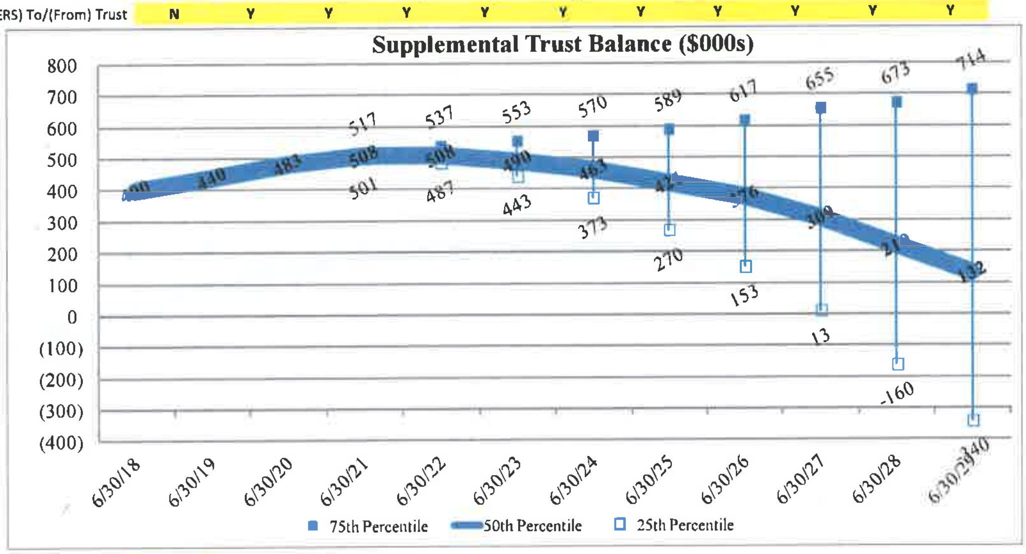
Safety:

Safety Plan Rate Stabilization Fund Balance Scenario 1

Calculate

Initial 6/30/18 Fund Balance ($000)	400
Stabilization Fund - Rate of Return	5.0%
Target Contribution	264

	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
Add'l Contribution $ ($000)	20	-	-	-	-	-	-	-	-	-	-
Budget - CalPERS Contribution	224.74	264.00	264.00	264.00	264.00	264.00	264.00	264.00	264.00	264.00	264.00
Pay (Budget-CalPERS) To/(From) Trust	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

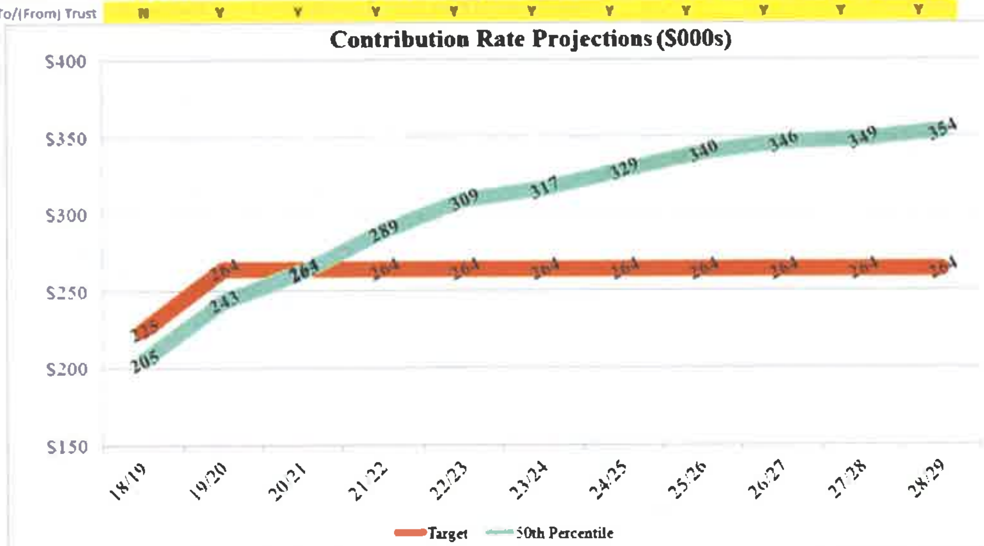


Safety Plan Rate Stabilization Fund Balance Scenario 1

Calculate

Initial 6/30/18 Fund Balance ($000)	400
Stabilization Fund - Rate of Return	5.0%
Target Contribution	264

	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
Add'l Contribution $ ($000)	20	-	-	-	-	-	-	-	-	-	-
Budget - CalPERS Contribution	224.74	264.00	264.00	264.00	264.00	264.00	264.00	264 00	264.00	264.00	264.00
Pay (Budget-CalPERS) To/(From) Trust	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y



Scenario 2:

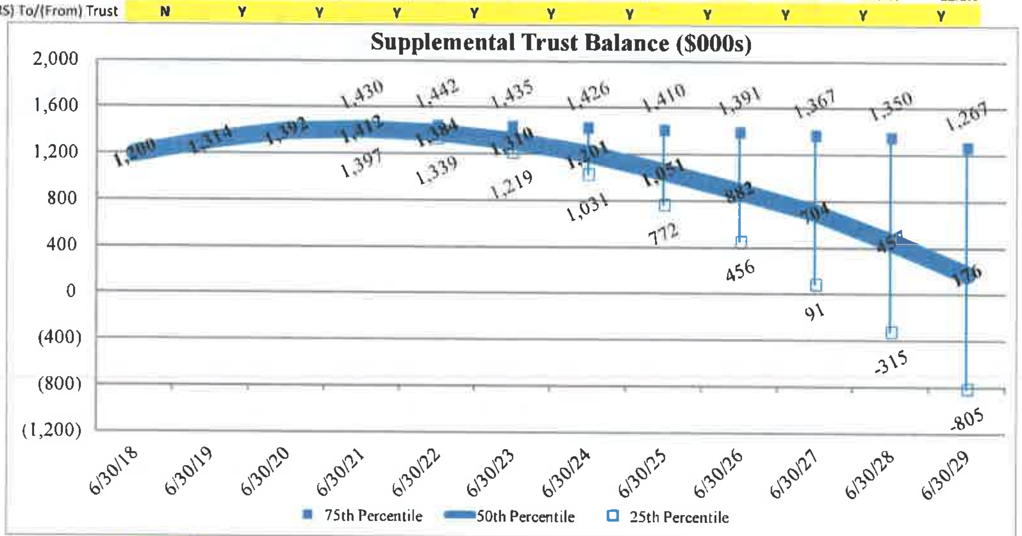
Miscellaneous:

Initial 6/30/18 Fund Balance ($000)	1,200
Stabilization Fund - Rate of Return	5.0%
Target Rate	21.0%

Miscellaneous Plan Rate Stabilization Fund Balance Scenario 2

Calculate

	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
(A) Add'l Contribution $ ($000)	-	-	-	-	-	-	-	-	-	-	-
(B) Add'l Contribution - % of pay	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(A) + (B) as % of Pay	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Budget - CalPERS Rate	20.4%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
Pay (Budget-CalPERS) To/(From) Trust	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

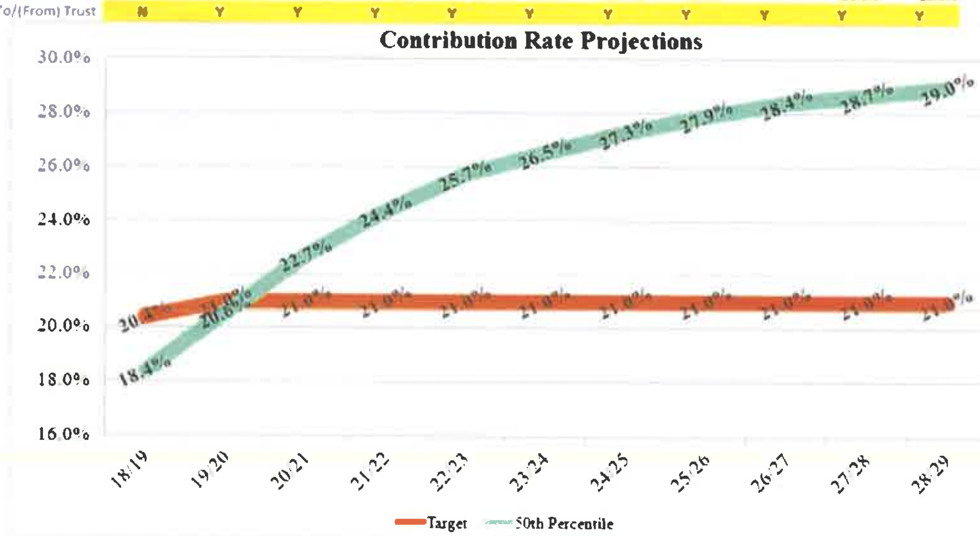


Initial 6/30/18 Fund Balance ($000)	1,200
Stabilization Fund - Rate of Return	5.0%
Target Rate	21.0%

Miscellaneous Plan Rate Stabilization Fund Balance Scenario 2

Calculate

	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
(A) Add'l Contribution $ ($000)	-	-	-	-	-	-	-	-	-	-	-
(B) Add'l Contribution - % of pay	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(A) + (B) as % of Pay	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Budget - CalPERS Rate	20.4%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
Pay (Budget-CalPERS) To/(From) Trust	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y



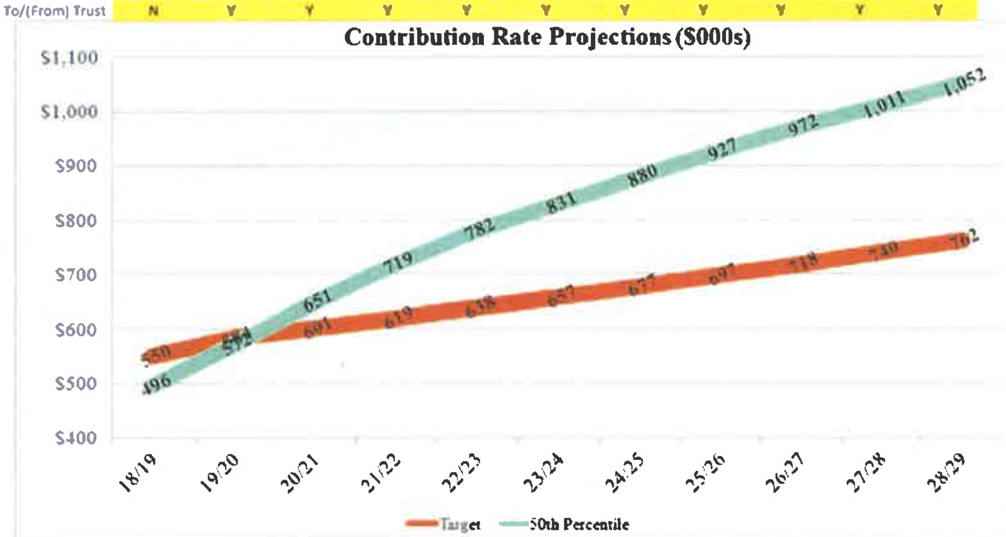
CITY OF CARPINTERIA
CALPERS ACTUARIAL ISSUES – JUNE 30, 2016 VALUATION
SUPPLEMENTAL PENSION TRUST

Initial 6/30/18 Fund Balance ($000)	1,200
Stabilization Fund - Rate of Return	5.0%
Target Rate	21.0%

Miscellaneous Plan Rate Stabilization Fund Balance Scenario 2

Calculate

	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
(A) Add'l Contribution $ ($000)	-	-	-	-	-	-	-	-	-	-	-
(B) Add'l Contribution - % of pay	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(A) + (B) as % of Pay	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Budget - CalPERS Rate	20.4%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
Pay (Budget-CalPERS) To/(From) Trust	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y



CITY OF CARPINTERIA
CALPERS ACTUARIAL ISSUES – JUNE 30, 2016 VALUATION
SUPPLEMENTAL PENSION TRUST

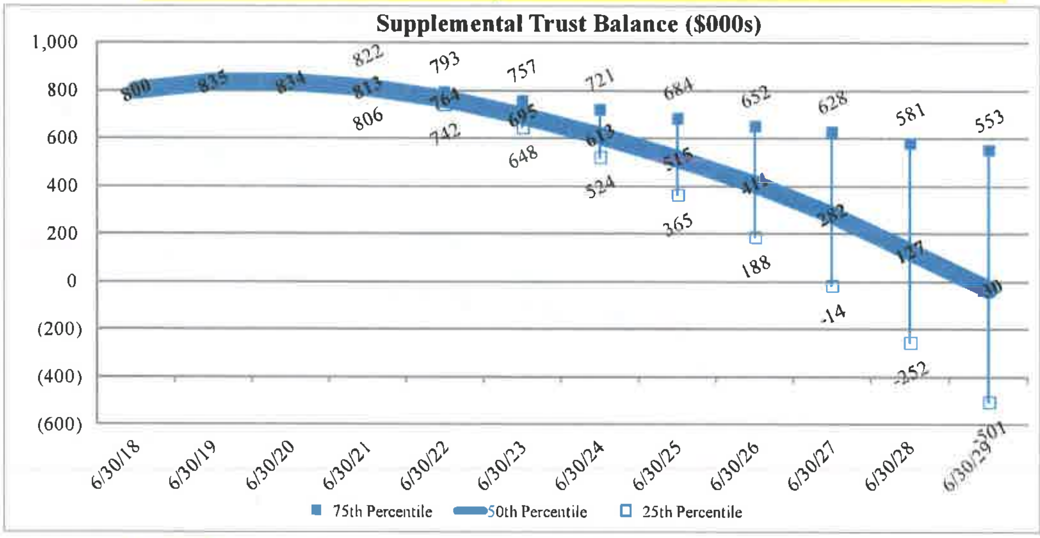
Safety:

Initial 6/30/18 Fund Balance ($000)	800
Stabilization Fund - Rate of Return	5.0%
Target Contribution	200

Safety Plan Rate Stabilization Fund Balance Scenario 2

Calculate

	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
Add'l Contribution $ ($000)	-	-	-	-	-	-	-	-	-	-	-
Budget - CalPERS Contribution	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00
Pay (Budget-CalPERS) To/(From) Trust	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

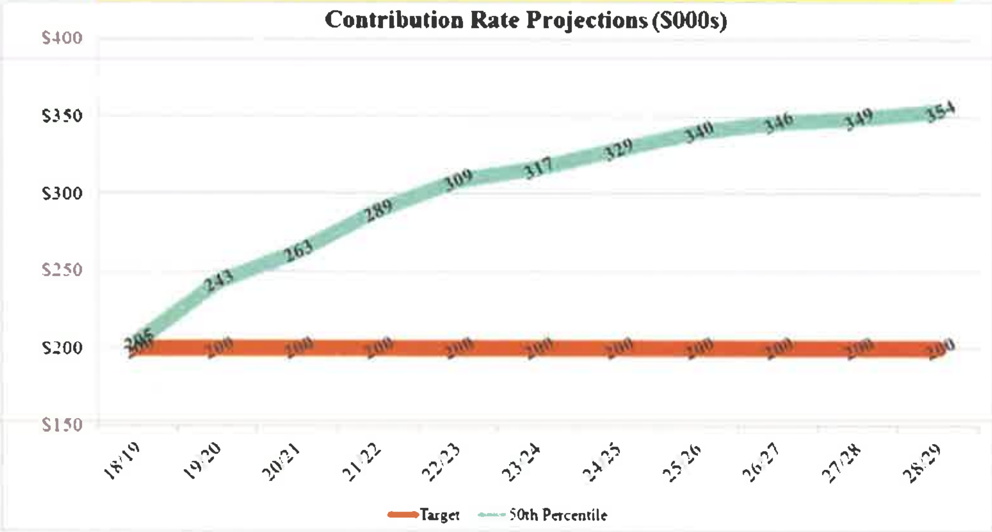


Initial 6/30/18 Fund Balance ($000)	800
Stabilization Fund - Rate of Return	5.0%
Target Contribution	200

Safety Plan Rate Stabilization Fund Balance Scenario 2

Calculate

	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
Add'l Contribution $ ($000)	-	-	-	-	-	-	-	-	-	-	-
Budget - CalPERS Contribution	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00
Pay (Budget-CalPERS) To/(From) Trust	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y



PEPRA Summary

The California Legislature passed and the Governor signed AB 340 in 2012 – commonly called the California Public Employees' Pension Reform Act of 2013. Highlights of PEPRA follow:

- **New Members** – Generally, employees hired after January 1, 2013 who did not previously participate in a reciprocal retirement system.
- **Pension Formulas for New Members**
  - Miscellaneous – 2% @ 62; earliest service retirement age 52
  - Safety – 2% @ 57, 2.5% @ 57 and 2.7% @ 57; earliest service retirement age 50.
- **Plan Compensation Limit for New Members**
  - $113,700 (100% of 2013 Social Security Wage Base, $118,775 for 2017)
  - $136,440 (120% for members not in Social Security for 2013, $142,530 for 2017)
  - Increasing annually with CPI
  - Employers can provide a defined contribution plan for pay above the limit.
- **Final Compensation for New Members**
  - Highest average plan compensation over 36 consecutive months
  - Plan compensation is the normal monthly rate of pay or base pay.
- **Benefit Enhancements**
  - Benefit enhancements after January 1, 2013 apply only to future service
  - No limits on COLAs.
- **Safety Industrial Disability**
  - Increase in benefit for those under 50 with long service
  - Trial period ending January 1, 2018.
- **Supplemental Defined Benefit Pension Plans**
  - Employer cannot adopt a supplemental defined benefit pension plan after January 1, 2013
  - New employees cannot participate in existing plan.
- **Pension Holidays**
  - Total employer and employee contributions cannot be less than the normal cost.
- **Air Time Service Purchase**
  - Eliminated for all members January 1, 2013.
- **Other Postemployment Employee Benefits**
  - An employer cannot provide better vesting schedule to unrepresented employees than to represented employees
  - Law is unclear whether it applies:
    - Only to vesting schedule or also to the amount of benefit provided
    - To new members, existing members, and/or current retirees.

- **Cost Sharing**
  - Target of 50% of total normal cost sharing for all employees
  - New members must pay greatest of 50% of total normal cost, amount paid by similar current members or bargained amount if higher
  - Employers cannot pay any part of new member required employee contributions
  - Employer may impose Classic employees pay 50% of total normal cost (limited to 8% Miscellaneous, 12% Safety) if not agreed through collective bargaining by January 1, 2018.

- **Miscellaneous Plan Total Normal Cost:**

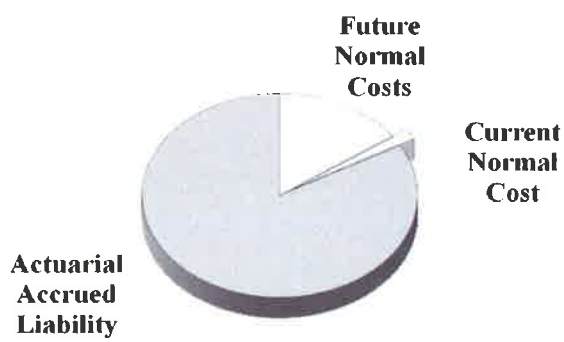
	Classic Members Tier 1 2%@55 FAE1	New Members PEPRA 2%@62 FAE3
Employer Normal Cost	10.41%	7.38%
Member Normal Cost	7.00%	6.50%
Total Normal Cost	17.41%	13.88%
50% Target	8.71%	6.94%

Present Value of Benefits (PVB): When CalPERS (or any actuary) prepares a pension valuation, they first gather participant data (active employees, former employees not in payment status, participants and beneficiaries in payment status) at the valuation date (for example June 30, 2016). Using this data and actuarial assumptions, they project benefit payments. (The assumptions predict, among other things, when people will retire, terminate, die or become disabled, as well as what salary increases, inflation and investment return might be.) Those future benefit payments are discounted, using expected investment return, back to the valuation date. This discounted present value is the plan's PVB. It represents the amount the plan needs as of the valuation date to pay all future benefits – if all assumptions are met and no future contributions (employee or employer) are made.

Actuarial Accrued Liability (AAL): This represents the portion of the PVB that participants have earned (on an actuarial, not actual, basis) through the valuation date.

Current Employer Normal Cost: The total normal cost represents the portion of the PVB expected to be earned (on an actuarial, not actual, basis) in the coming year. Current Employer Normal Cost represents the employer's portion of total normal cost – that is, the total normal cost offset by employee contributions.

Present Value of Benefits



The above graph shows PVB as the sum of AAL, Current Employer Normal Cost, and future normal costs. Once these amounts are calculated, the actuary compares actuarial assets to the AAL. When assets equal liabilities, a plan is considered on track for funding. When assets are greater than liabilities, the plan has excess assets; when assets are less than liabilities, the plan has an unfunded liability.

Contribution Rate: CalPERS does not require a city to make up any shortfall (unfunded liability) immediately, nor do they allow an immediate credit for any excess assets. Instead, the difference is amortized over time. A city's contribution rate is the Current Employer Normal Cost, plus the amortized unfunded liability or less the amortized excess assets. In other words, it's the value of employer benefits earned during the year plus something to move the plan toward being on track for funding. There is a 2-year delay from the valuation date to contribution effective date. For example, the June 30, 2016 valuation generates a city's fiscal year 2018/19 contribution. CalPERS instituted this delay a few years ago to ensure public agencies would have contribution rates as they begin their budgeting process for each fiscal year.

Market Value of Assets (MVA): The actual value of plan assets based on their price if sold.

Unfunded Actuarial Liability (UAL): The difference between the AAL and the MVA. This difference is the portion of the AAL that has not yet been funded.

ATTACHMENT B

LEAGUE OF CALIFORNIA CITIES

RETIREMENT SYSTEM SUSTAINABILITY STUDY AND FINDINGS

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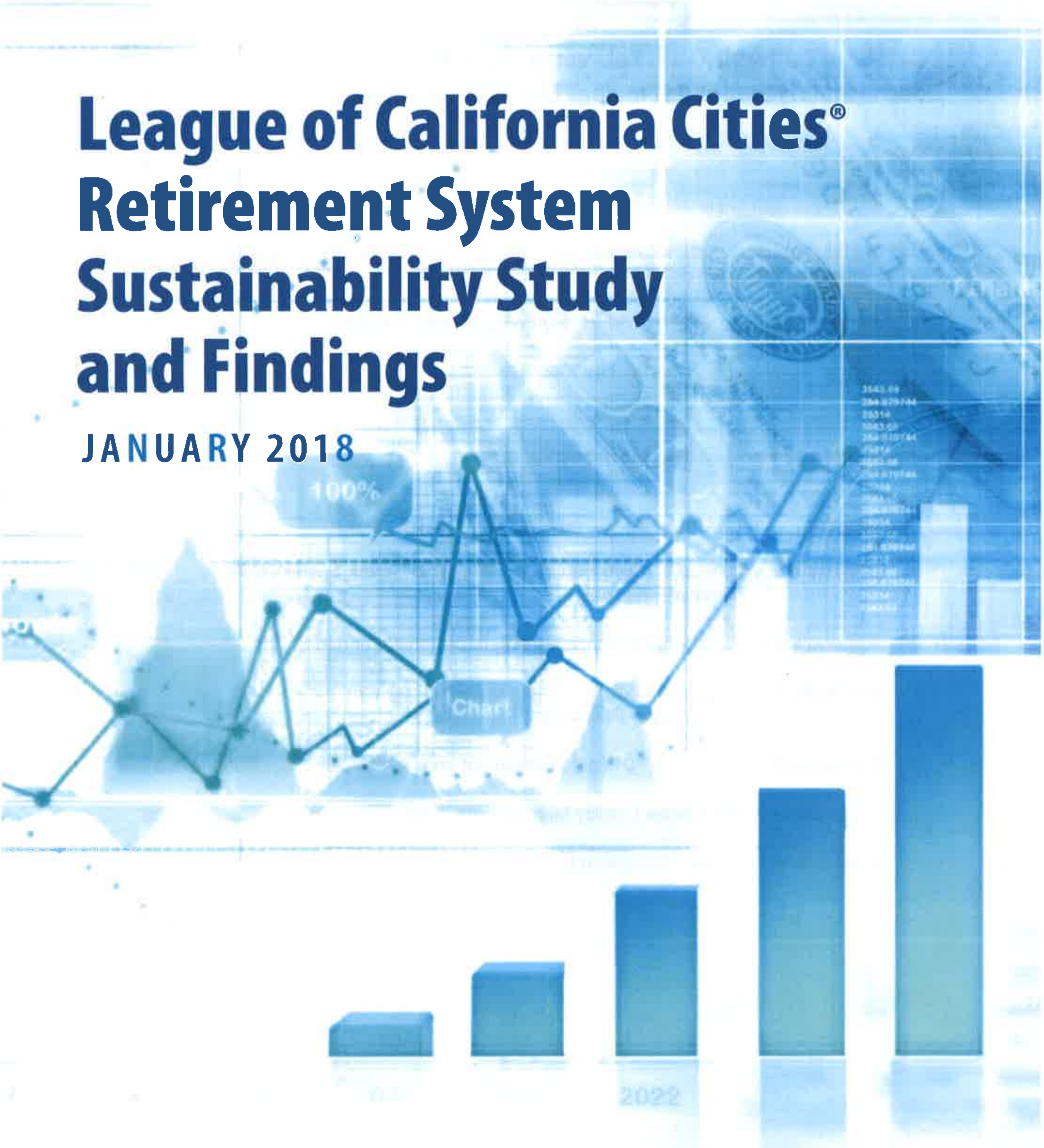
LEAGUE® OF CALIFORNIA CITIES

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 cites 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.

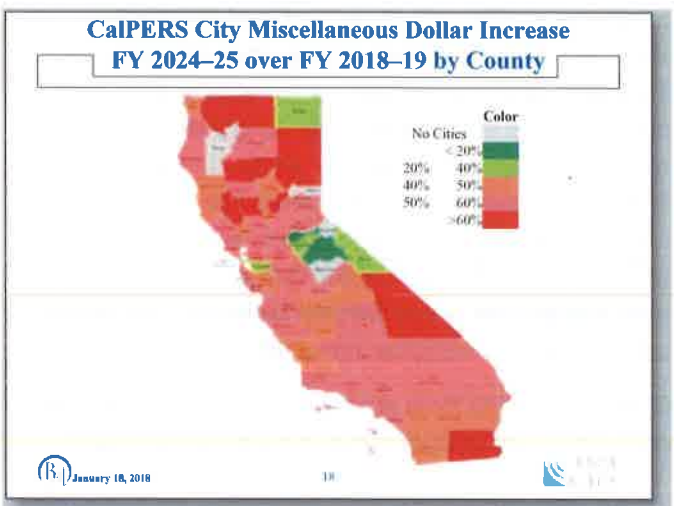
reform enacted by the Legislature in the Public Employees' Pension Reform Act (PEPRA) [applying to employees hired after January 1, 2013] materialize. However, tangible savings resulting from PEPRA will not have a substantial effect on city budgets for decades.

The League has created an online resource (www.cacities.org/pensions) to provide additional background and information for cities on this issue. Consistent with it's 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.

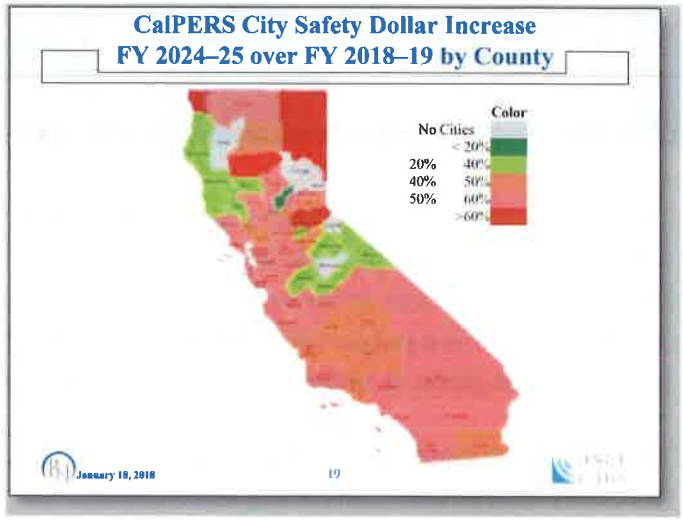
Key Findings[3]

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 Rates[1]

	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 PEPRA.

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

January 18, 2018 20

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 Rates[1]

	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 PEPRA.
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.

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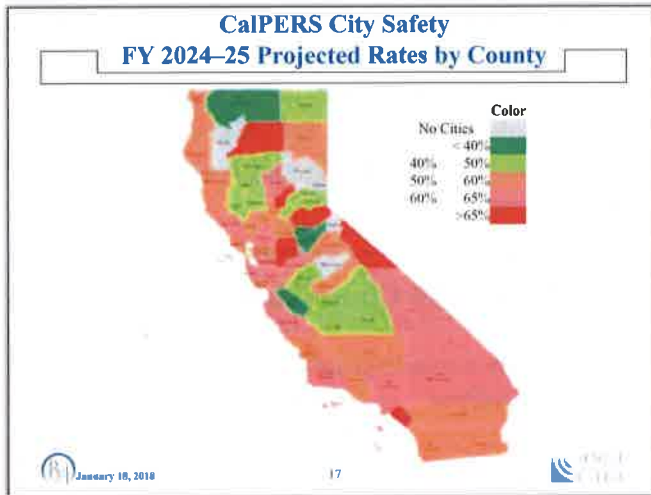

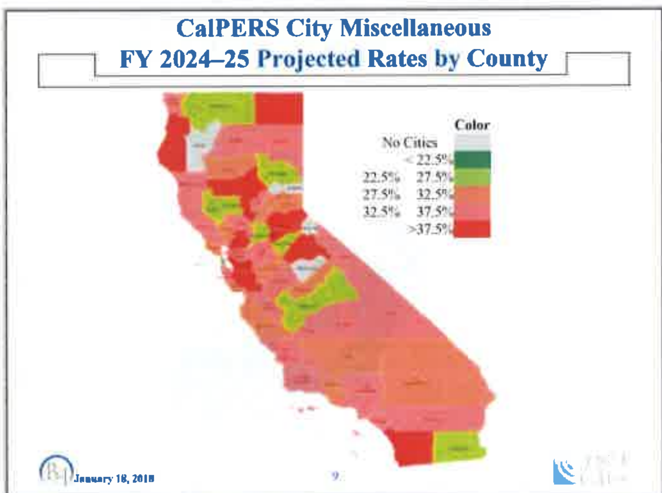

FY 2024–25 Contribution Rates[1]

	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 PEPRA.

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

January 18, 2018 20

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 Rates[1]

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 PEPRA.

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

January 18, 2018 23

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.

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.

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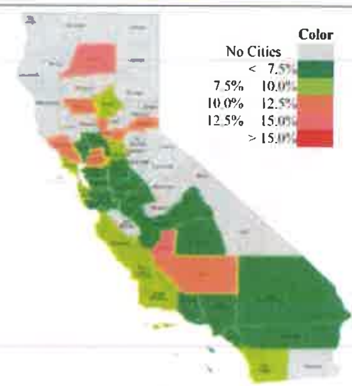
CalPERS City FY 2006—07 Contributions as % GF Budget by County



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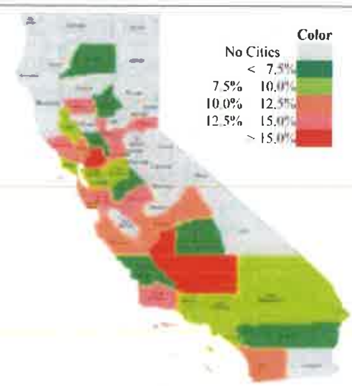
CalPERS City FY 2017—18 Contributions as % GF Budget by County



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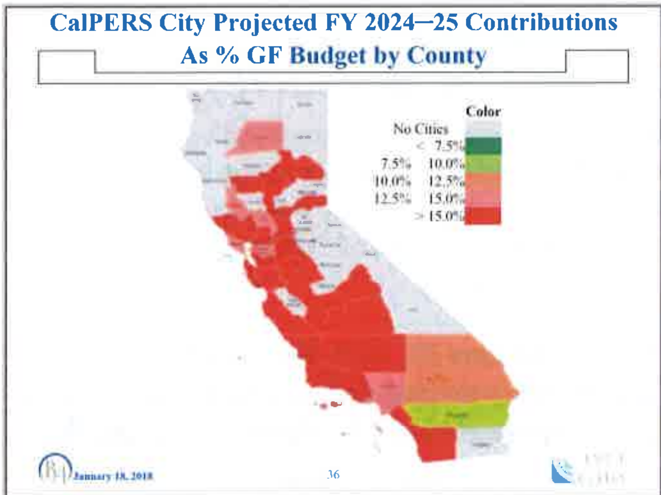
**In figures 34, 35, and 36 the grey color representing "No Cities" displays either that there are no cities in that specific county with CalPERS as their public retirement system or there was not valid survey data from the cities in those counties.*



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 PEPRA, local governments will continue to face the financial conundrum of meeting their pension obligations. PEPRA, 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 PEPRA 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.

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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 PEPRA 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

Appendices

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 PEPRA has very little impact on projected rates

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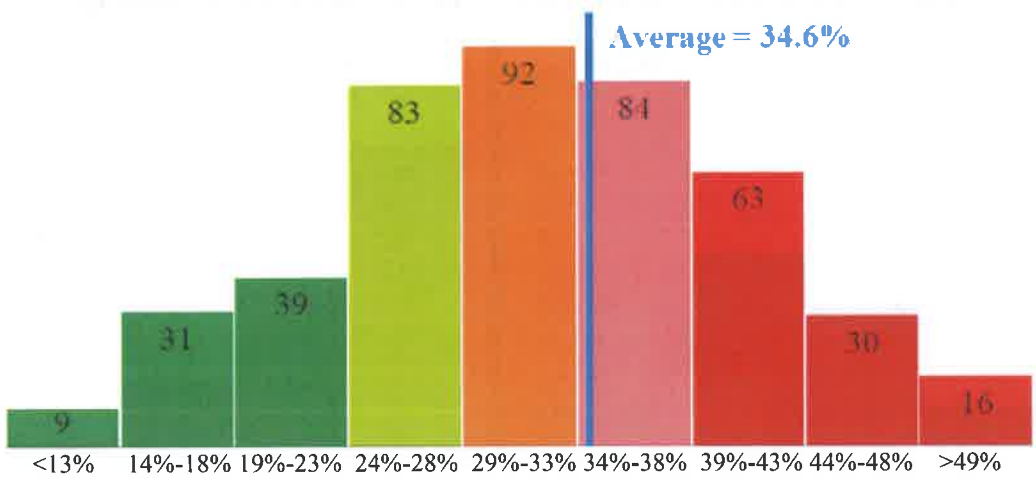
CalPERS City Miscellaneous FY 2024–25 Projected Rates



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

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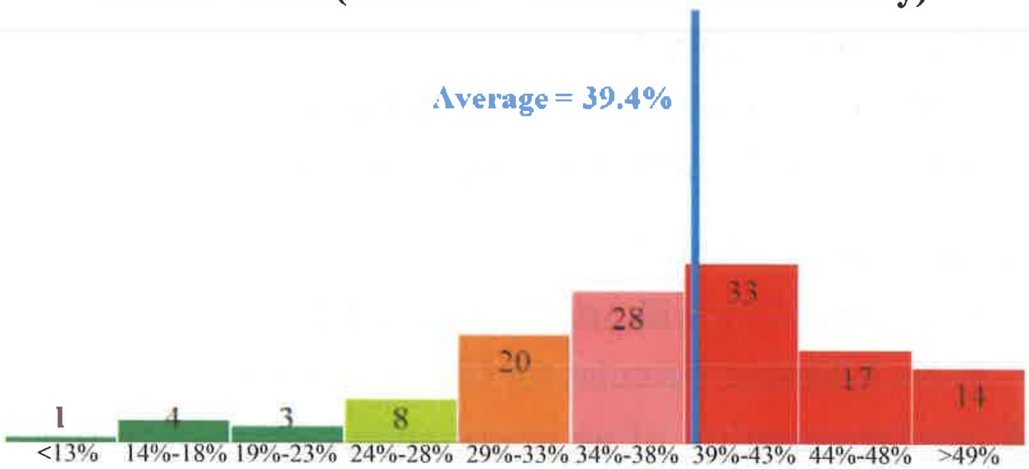
CalPERS City Miscellaneous
FY 2024–25 Projected Rates

Mature Cities (Retirees > 60% Actuarial Liability)

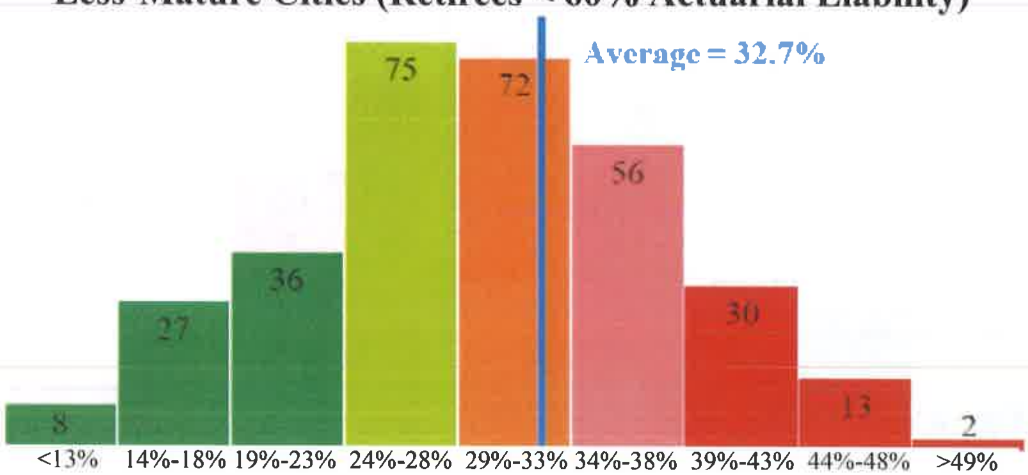


FY 2024–25 CalPERS Projected Contribution as % of Projected Payroll

January 18, 2018 3

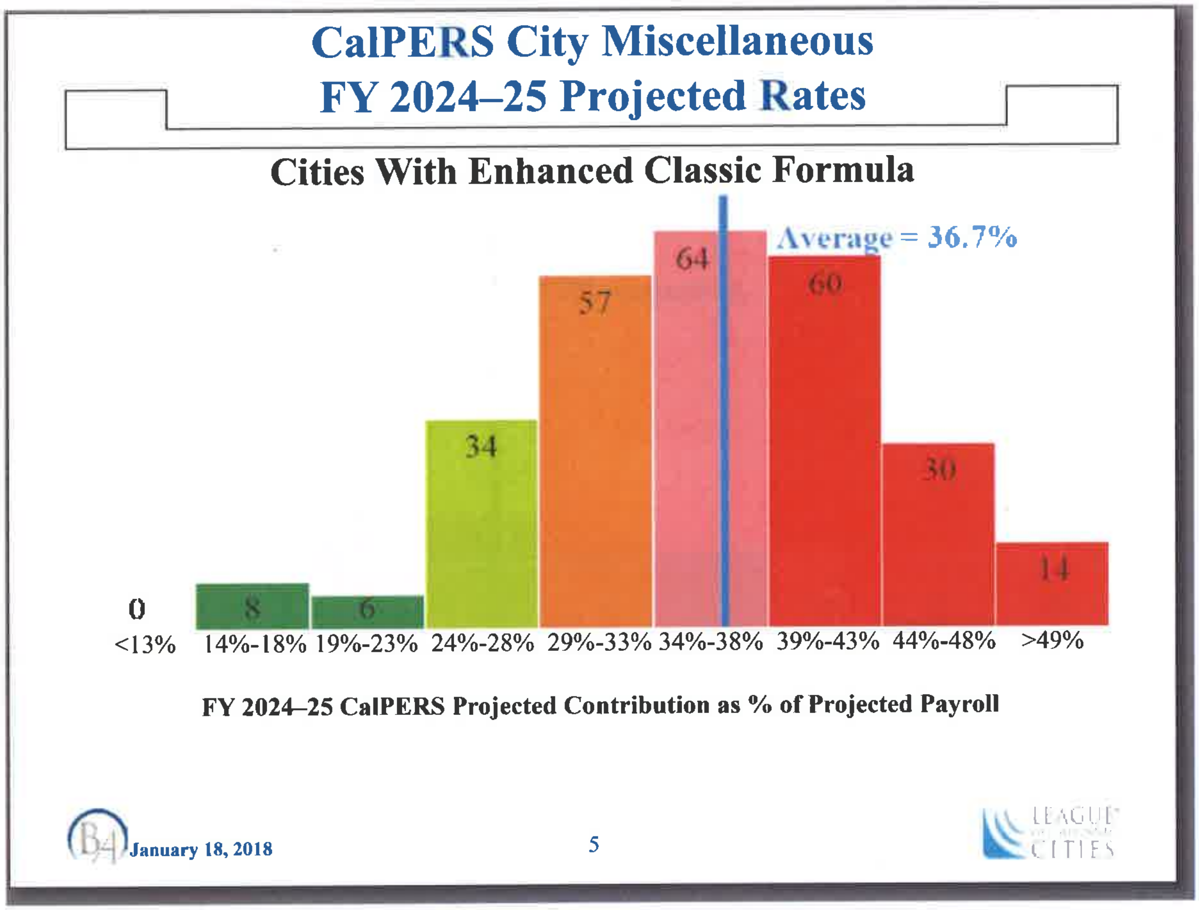
CalPERS City Miscellaneous
FY 2024–25 Projected Rates

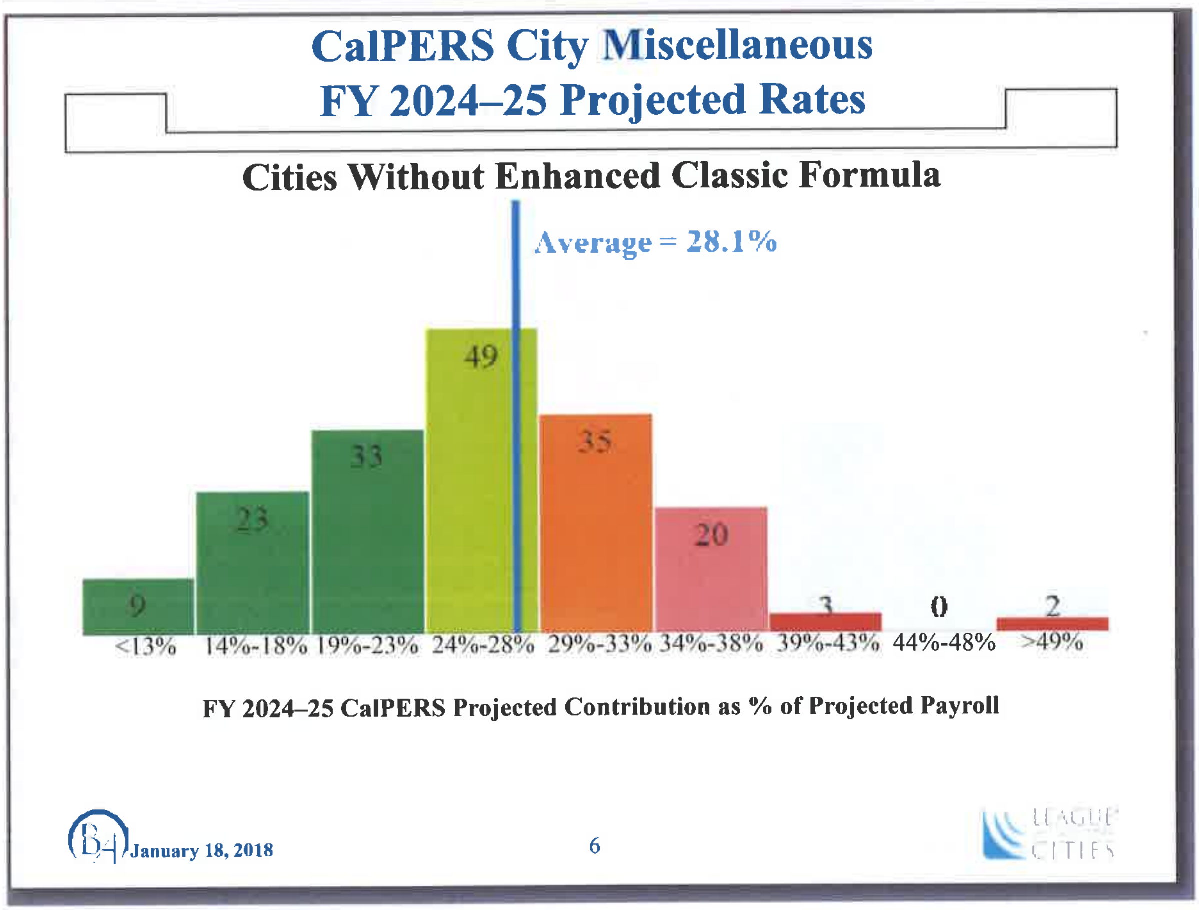
Less-Mature Cities (Retirees < 60% Actuarial Liability)



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

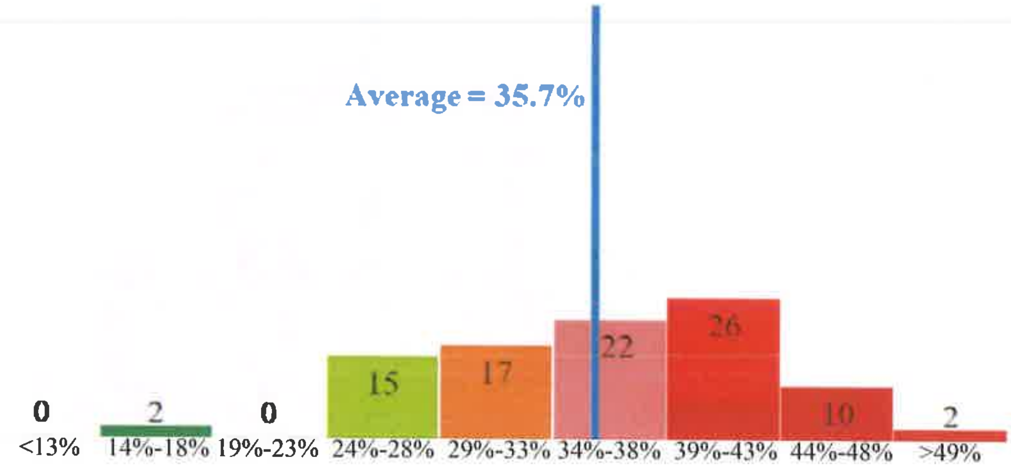
January 18, 2018 4


CalPERS City Miscellaneous
FY 2024–25 Projected Rates
Cities With Enhanced Classic Formula
Average = 36.7%
0
8
6
34
57
64
60
30
14
<13%
14%-18%
19%-23%
24%-28%
29%-33%
34%-38%
39%-43%
44%-48%
>49%
FY 2024–25 CalPERS Projected Contribution as % of Projected Payroll
January 18, 2018
5
LEAGUE
CITIES


CalPERS City Miscellaneous
FY 2024–25 Projected Rates
Cities Without Enhanced Classic Formula
Average = 28.1%
9
23
33
49
35
20
3
0
2
<13%
14%-18%
19%-23%
24%-28%
29%-33%
34%-38%
39%-43%
44%-48%
>49%
FY 2024–25 CalPERS Projected Contribution as % of Projected Payroll
January 18, 2018
6
LEAGUE
CITIES

CalPERS City Miscellaneous FY 2024–25 Projected Rates

Cities With Unenhanced Second Tier

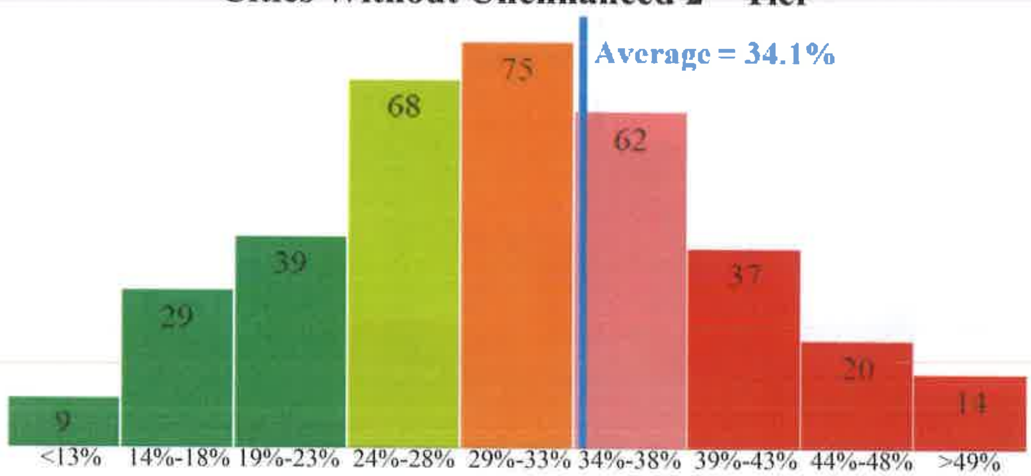


FY 2024–25 CalPERS Projected Contribution as % of Projected Payroll

January 18, 2018 7

CalPERS City Miscellaneous FY 2024–25 Projected Rates

Cities Without Unenhanced 2nd Tier



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

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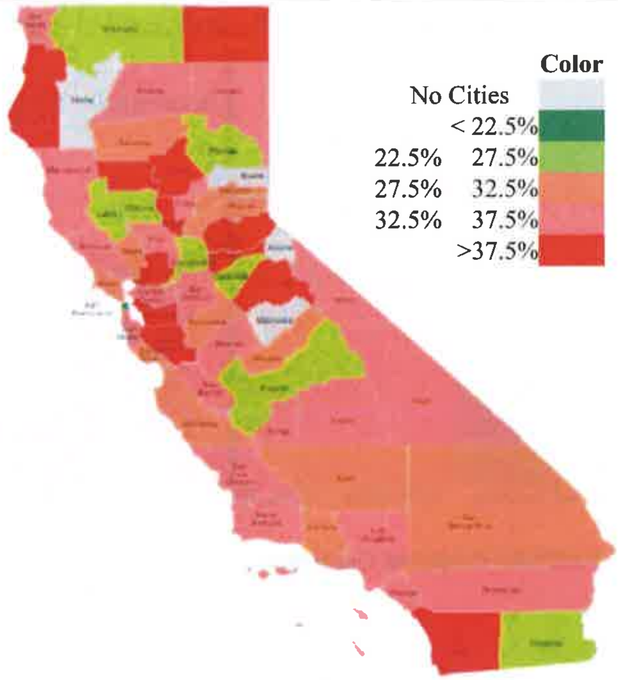
CalPERS City Miscellaneous
FY 2024–25 Projected Rates by County



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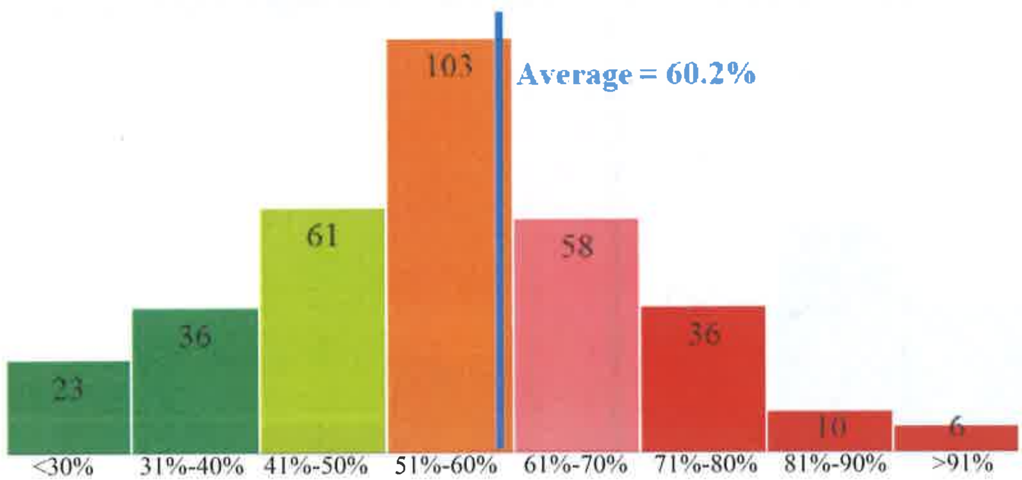
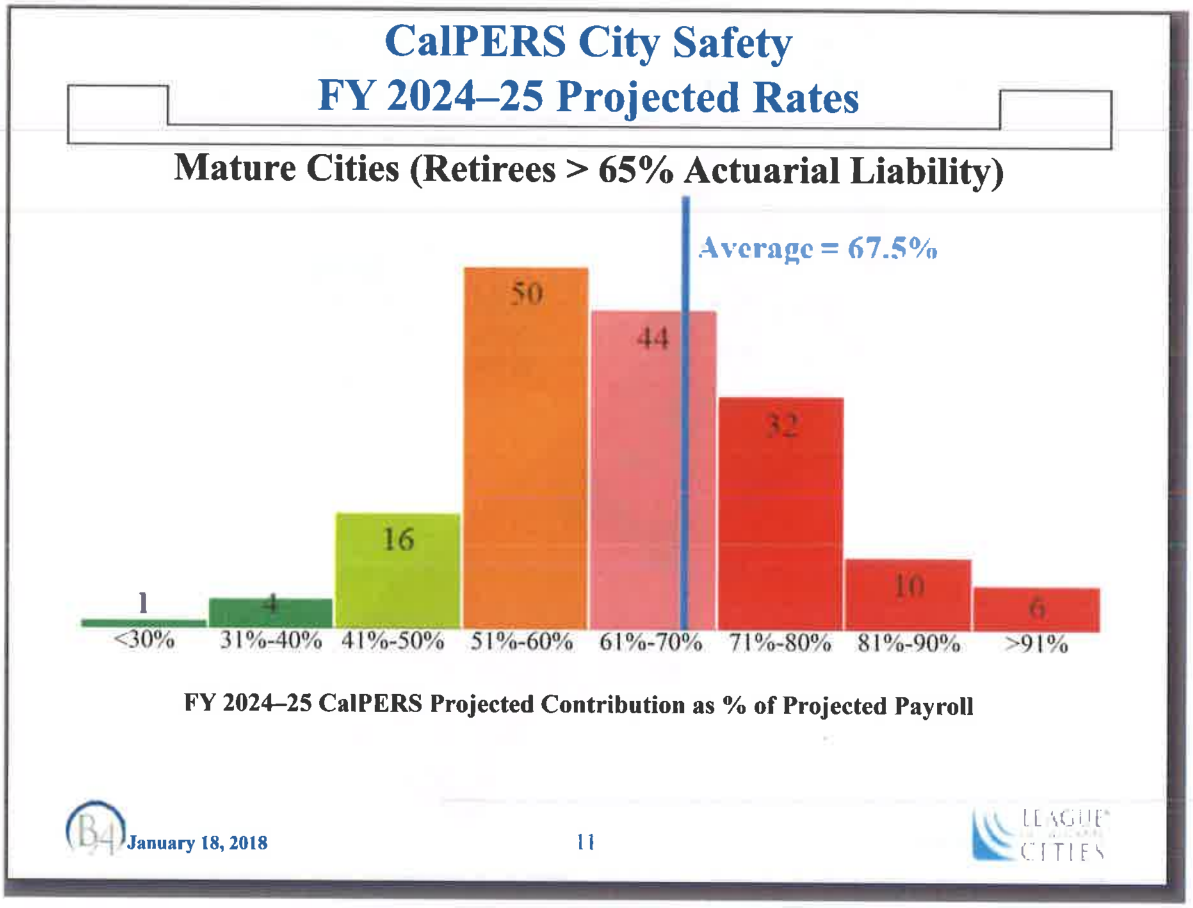
CalPERS City Safety
FY 2024–25 Projected Rates

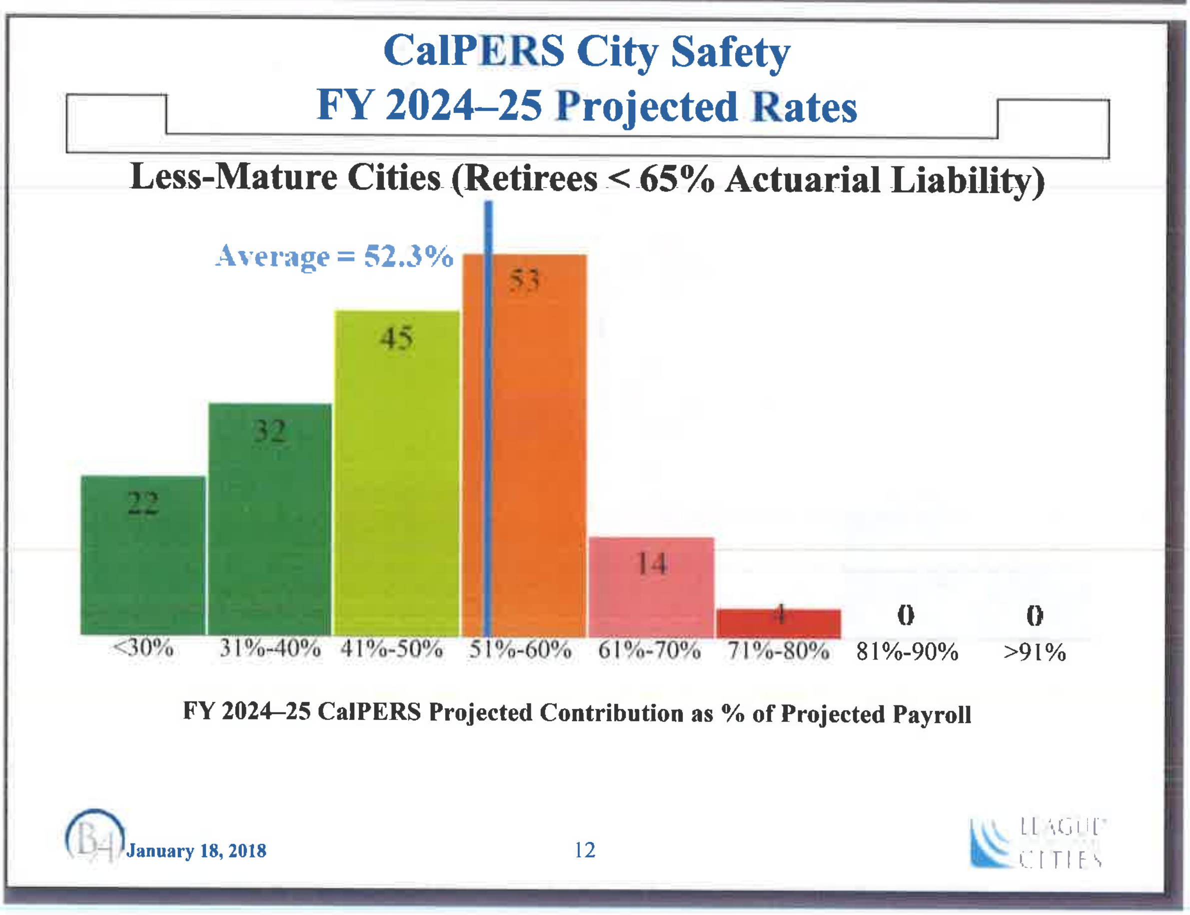


FY 2024–25 CalPERS Projected Contribution as % of Projected Payroll

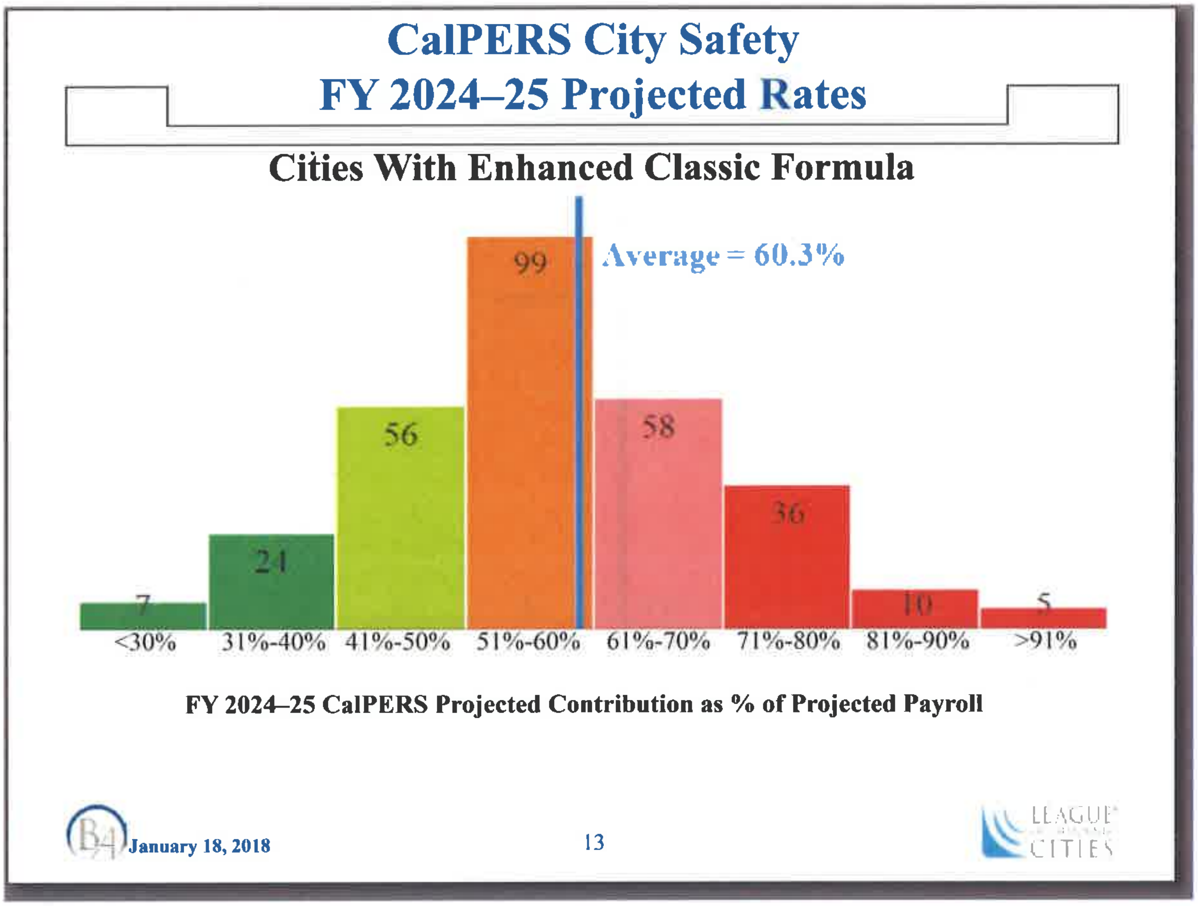
January 18, 2018

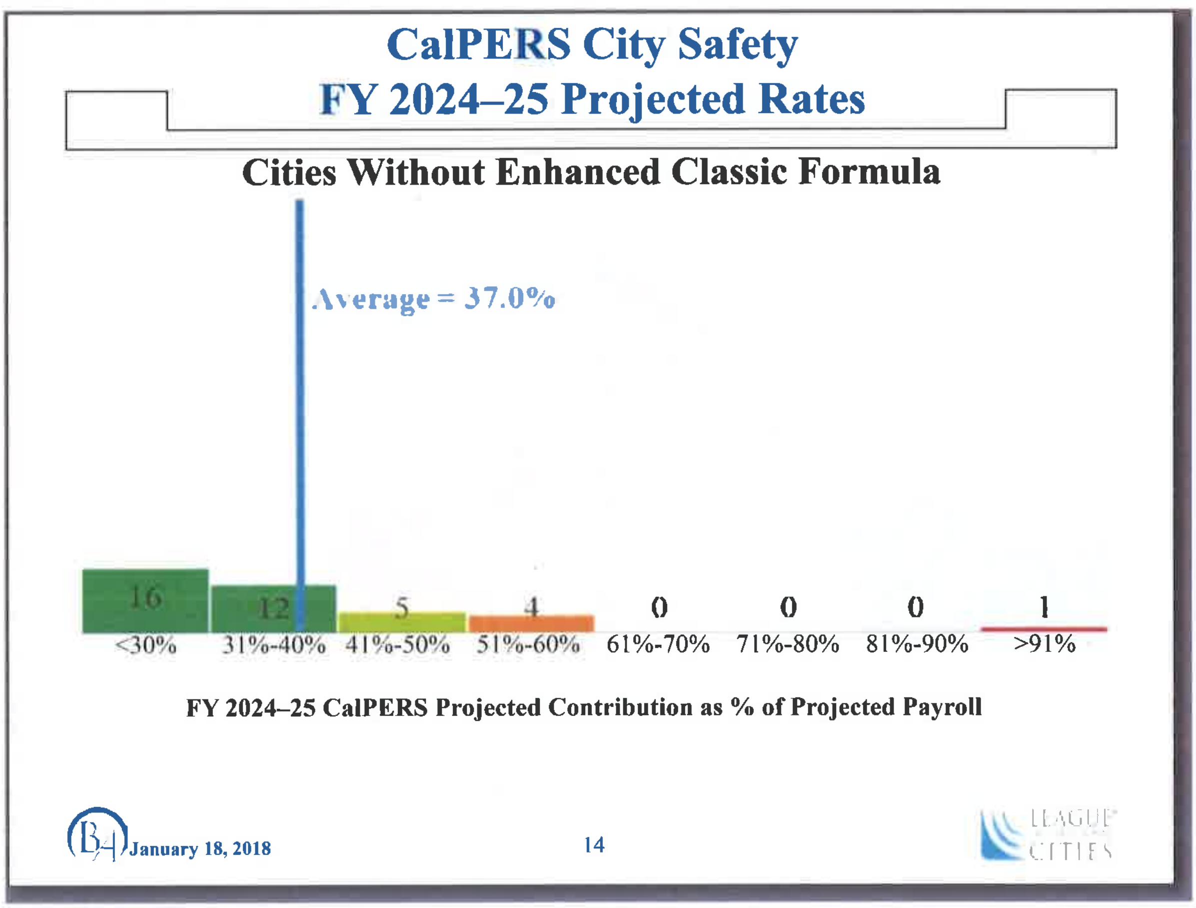


CalPERS City Safety
FY 2024–25 Projected Rates
Mature Cities (Retirees > 65% Actuarial Liability)
Average = 67.5%
1
4
16
50
44
32
10
6
<30%
31%-40%
41%-50%
51%-60%
61%-70%
71%-80%
81%-90%
>91%
FY 2024–25 CalPERS Projected Contribution as % of Projected Payroll
January 18, 2018
11
LEAGUE CITIES



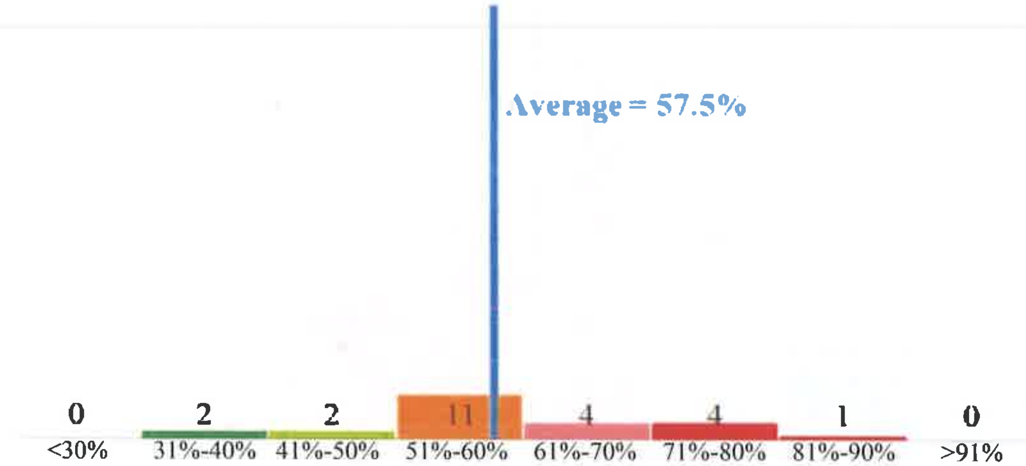
CalPERS City Safety
FY 2024–25 Projected Rates
Less-Mature Cities (Retirees < 65% Actuarial Liability)
Average = 52.3%
22
32
45
53
14
4
0
0
<30%
31%-40%
41%-50%
51%-60%
61%-70%
71%-80%
81%-90%
>91%
FY 2024–25 CalPERS Projected Contribution as % of Projected Payroll
January 18, 2018
12
LEAGUE CITIES


CalPERS City Safety
FY 2024–25 Projected Rates
Cities With Enhanced Classic Formula
Average = 60.3%
7
24
56
99
58
36
10
5
<30%
31%-40%
41%-50%
51%-60%
61%-70%
71%-80%
81%-90%
>91%
FY 2024–25 CalPERS Projected Contribution as % of Projected Payroll
January 18, 2018
13


CalPERS City Safety
FY 2024–25 Projected Rates
Cities Without Enhanced Classic Formula
Average = 37.0%
16
12
5
4
0
0
0
1
<30%
31%-40%
41%-50%
51%-60%
61%-70%
71%-80%
81%-90%
>91%
FY 2024–25 CalPERS Projected Contribution as % of Projected Payroll
January 18, 2018
14

CalPERS City Safety
FY 2024–25 Projected Rates

Cities With Unenhanced Second Tier



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

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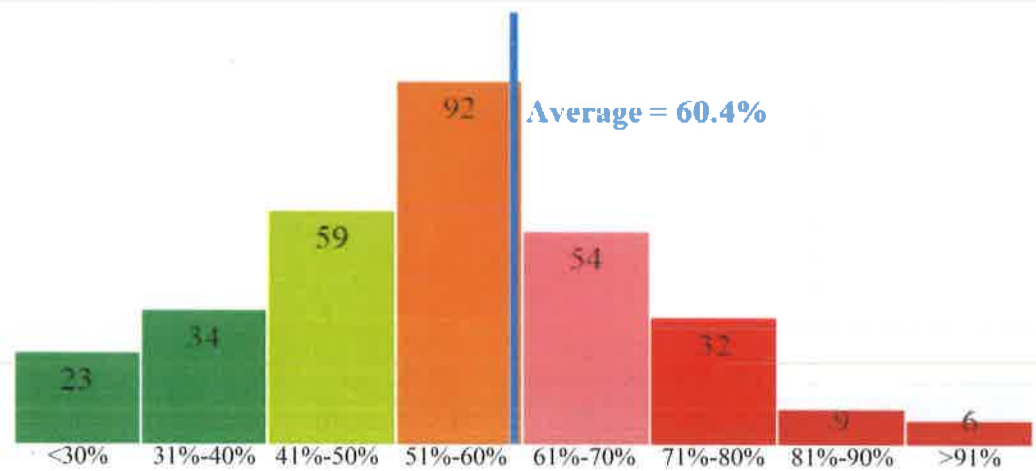
CalPERS City Safety
FY 2024–25 Projected Rates

Cities Without Unenhanced 2nd Tier



2024/25 CalPERS Projected Contribution as % of Projected Payroll

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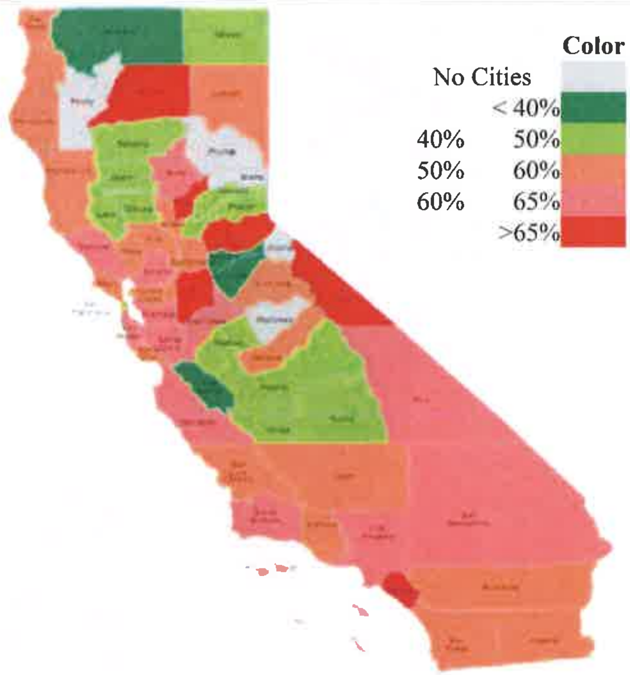
CalPERS City Safety
FY 2024–25 Projected Rates by County



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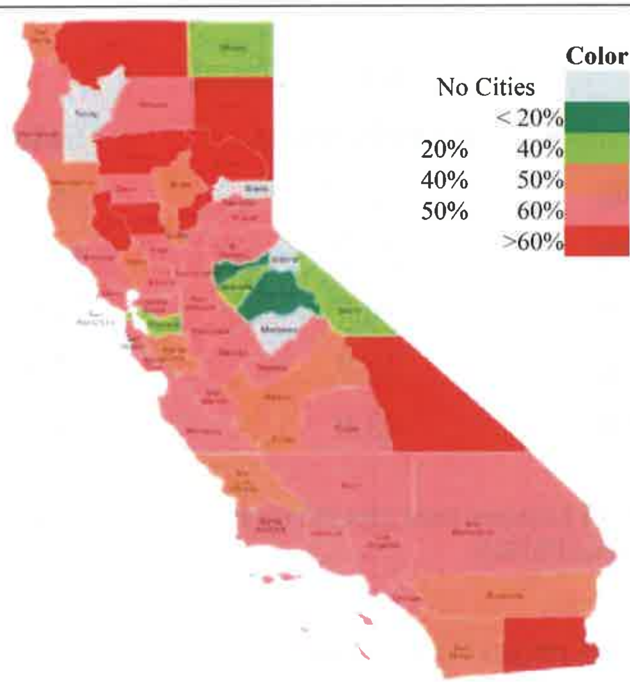
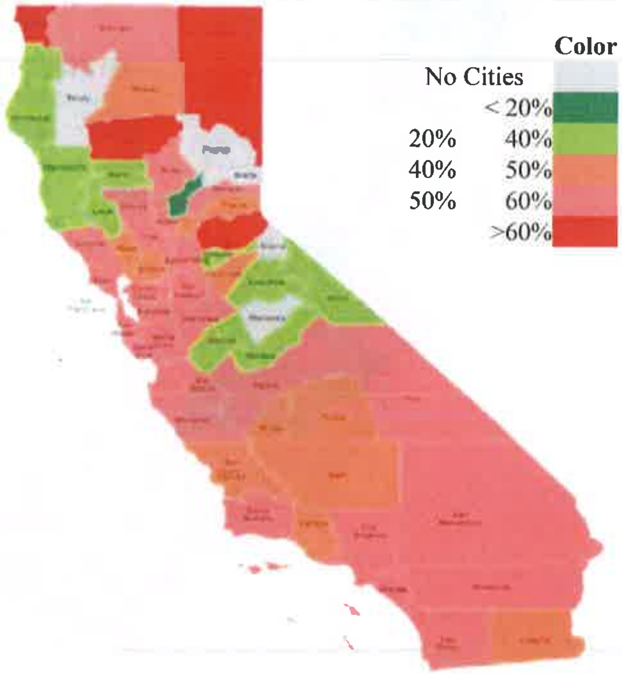
CalPERS City Miscellaneous Dollar Increase
FY 2024–25 over FY 2018–19 by County



January 18, 2018

18

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



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FY 2024–25 Contribution Rates[1]

	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 PEPRA.

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

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FY 2024–25 Contribution Rates[1]

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 PEPRA.

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.

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FY 2024–25 Contribution Rates[1]

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 PEPRA.

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

B4 January 18, 2018 22 LEAGUE CITIES

FY 2024–25 Contribution Rates[1]

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 PEPRA.

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 Rates[1]

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 PEPRA.

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

FY 2024–25 Contribution Rates[1]

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 PEPRA.

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

FY 2024–25 Contribution Rates[1]

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 PEPRA.

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

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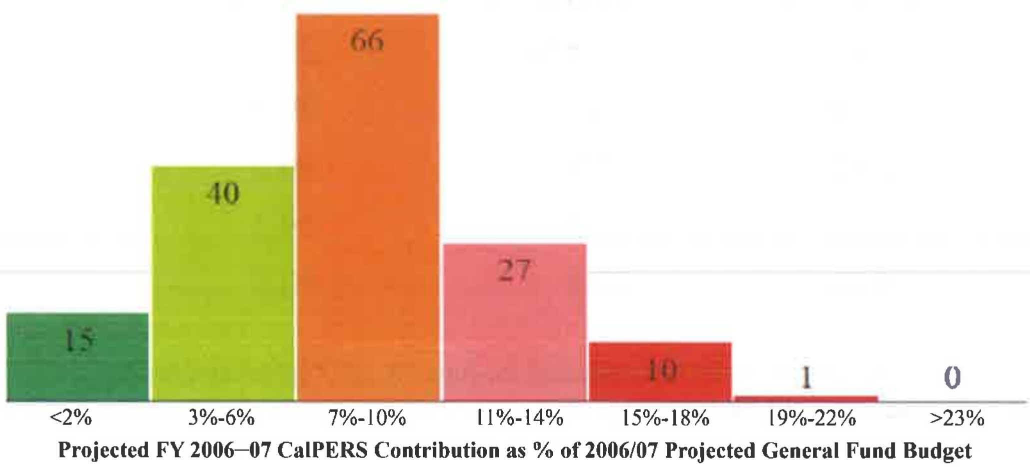
LEAGUE CITIES

CalPERS Total City FY 2006—07 Contribution % GF Budget



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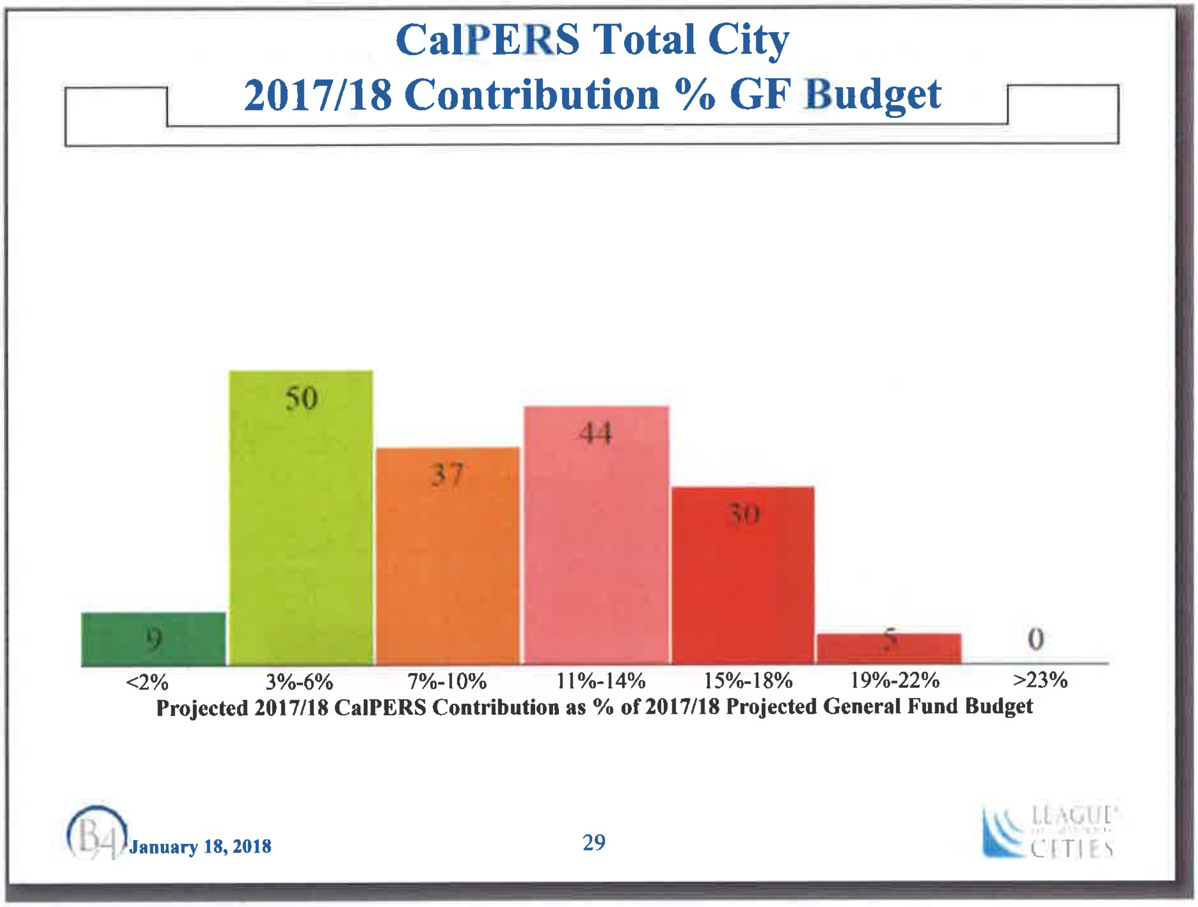
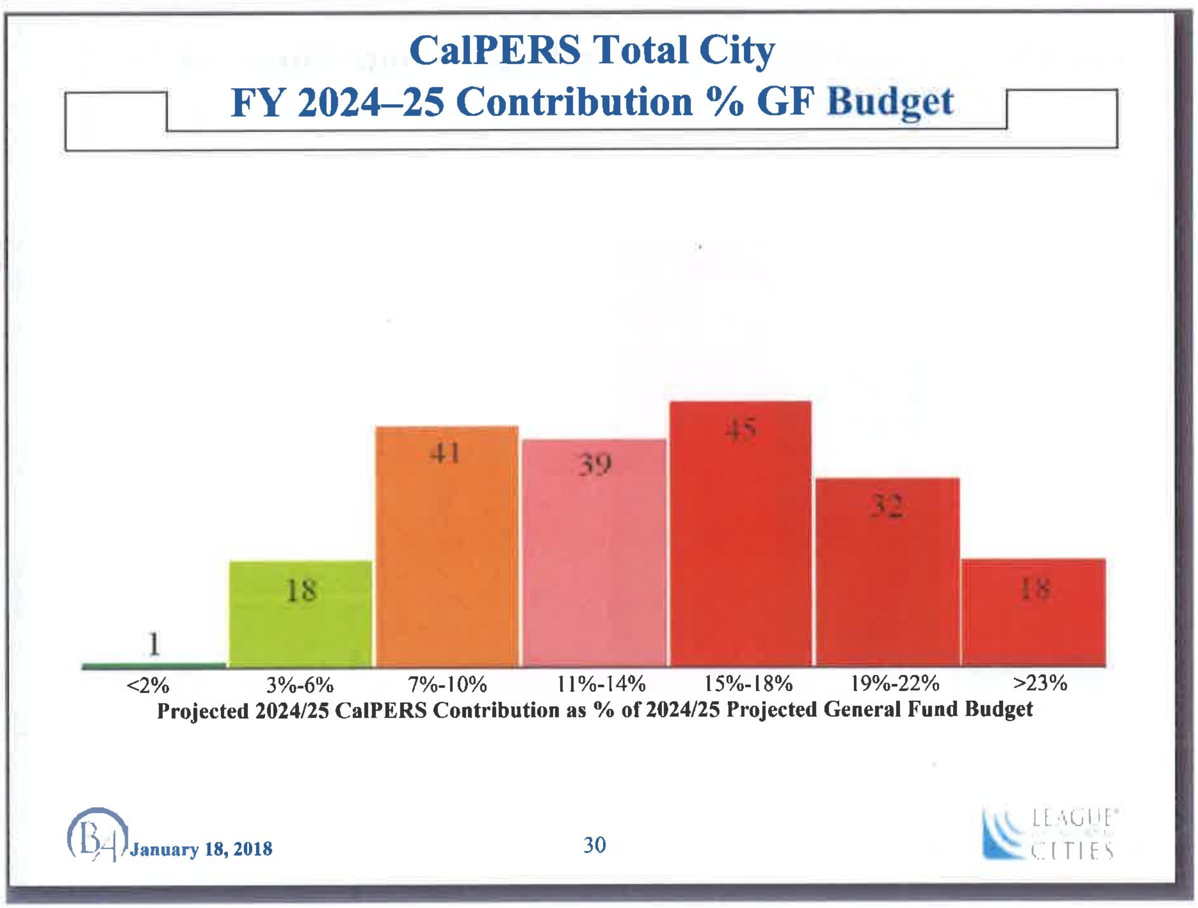
LEAGUE CITIES

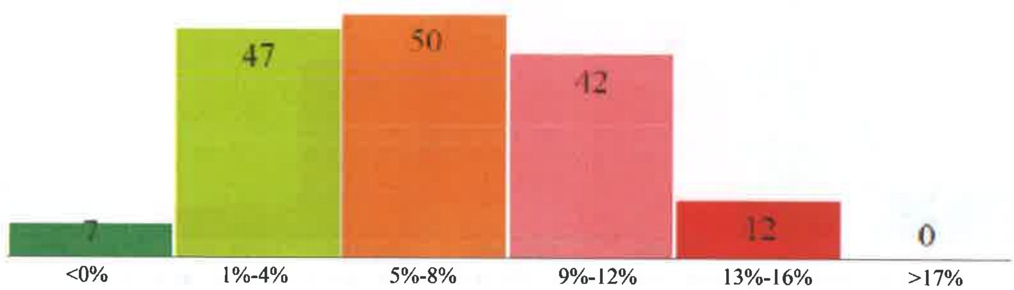


CalPERS Total City
2017/18 Contribution % GF Budget
9
50
37
44
30
5
0
<2%
3%-6%
7%-10%
11%-14%
15%-18%
19%-22%
>23%
Projected 2017/18 CalPERS Contribution as % of 2017/18 Projected General Fund Budget
January 18, 2018
29
LEAGUE
CITIES



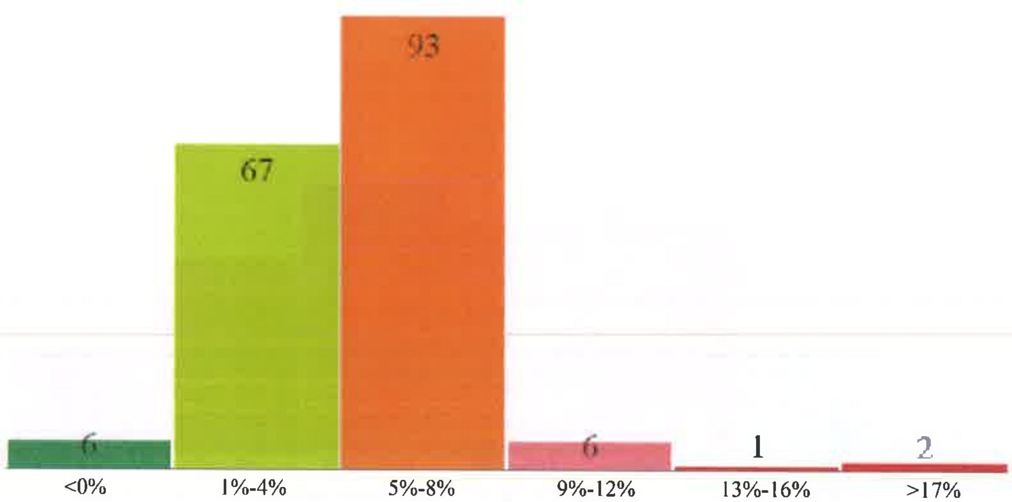
CalPERS Total City
FY 2024–25 Contribution % GF Budget
1
18
41
39
45
32
18
<2%
3%-6%
7%-10%
11%-14%
15%-18%
19%-22%
>23%
Projected 2024/25 CalPERS Contribution as % of 2024/25 Projected General Fund Budget
January 18, 2018
30
LEAGUE
CITIES

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



January 18, 2018 31

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



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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.

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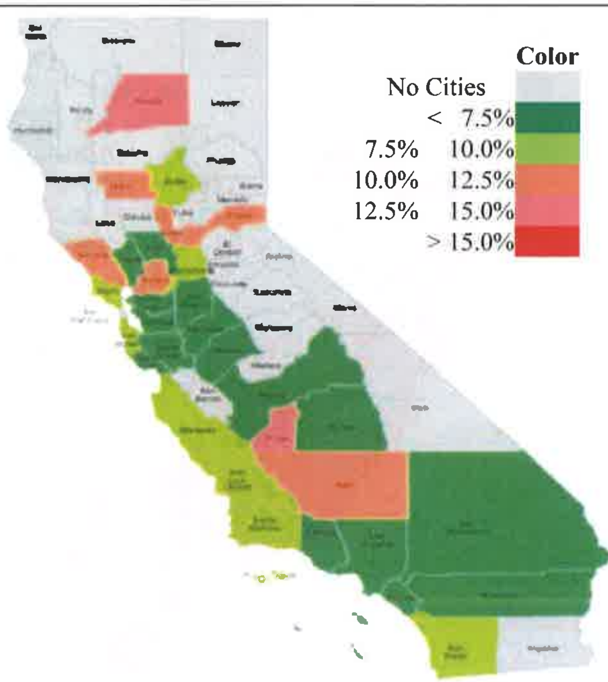
CalPERS City FY 2006—07 Contributions as % GF Budget by County



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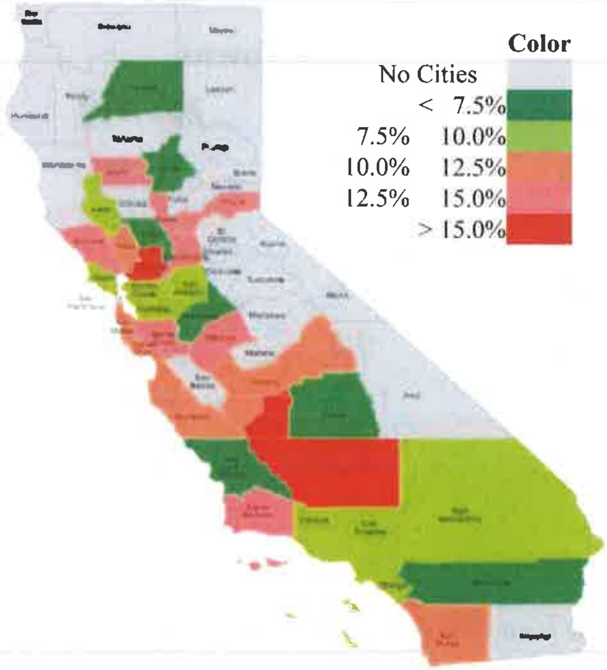
CalPERS City FY 2017–18 Contributions as % GF Budget by County



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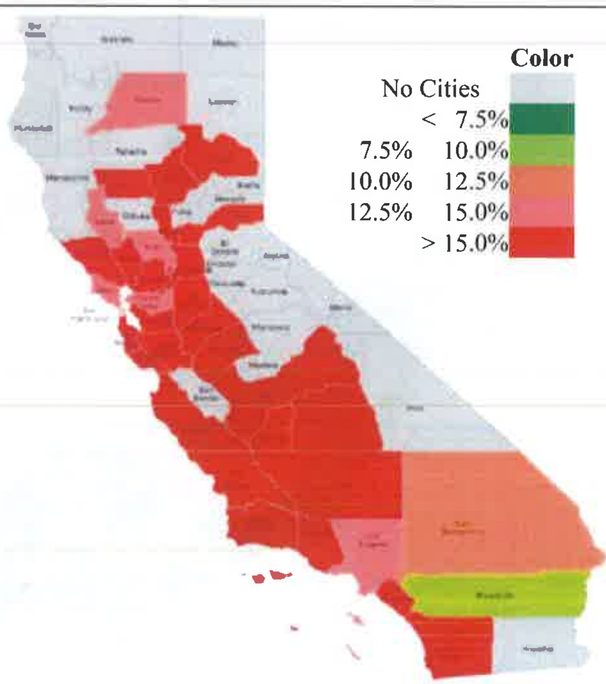
CalPERS City Projected FY 2024–25 Contributions As % GF Budget by County



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Primary Factors Contributing to CalPERS Funded Status

LEAGUE® OF CALIFORNIA CITIES

CalPERS 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 consulatation 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.

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).

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 Allocation of Preliminary Candidate Portfolios					Allocation 9/30/2017	Interim Policy 9/30/2016	ALM Policy 2013
Asset Class Component	Candidate A ○	Candidate B ○	Candidate C △	Candidate D ○	□	□	□
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/Forestland	-	-	-	-	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%	-	-	-

CalPERS

- 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 though 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.

Government Finance Officers Association

ADVISORY

Pension Obligation Bonds

Advisory:

GFOA Advisories identify specific policies and procedures necessary to minimize a governments 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 bonds[1] 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)*