

## BLAST Strategy – Addressing Pension Costs without POBs

City Staff has taken several steps to study and address its rising pension costs and its unfunded accrued liabilities (UAL) with the California Public Employees' Retirement System ("CalPERS").

**UAL** - The unfunded accrued liability (UAL) is measure of the funding shortfall of each agency's pension liability. The UAL is equal to the difference between:

1. Estimated value of benefits earned and expected to be paid to current employees and retirees in the future in today's dollars; and
2. Market value of investment held by CalPERS.

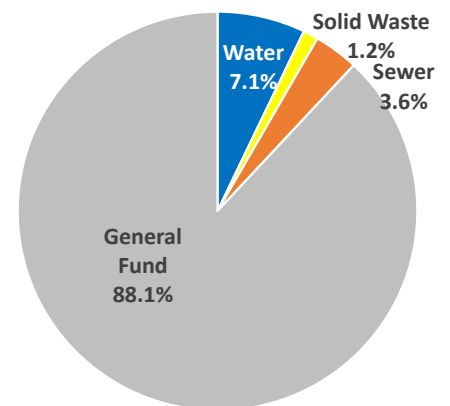
The City's UAL as of its most recent actuarial report (June 30, 2020) is equal to \$127 Million. The City is required to make annual fixed dollar payment to pay down its UAL. UAL payment are calculated based on CalPERS Discount rate of 7.0%, which total over \$228 million over the next 22 years.

The City Council has taken several steps to address its UAL.

- 2016 established a 115 Trust (PARS) to set aside for pension & OPEB liability
- City made subsequent deposits into 115 Trust totaling \$10 Million
- January 2021 City Council hired Julio Morales to provide pension advisory services to assist the Finance Committee with evaluating POBs and other options.
- City Council held numerous public workshops, meetings, and study sessions to understand its liability and evaluate its options.

Due to legal constraints and concerns about market timing risk, the City decided to pursue alternative to POBs. Working with its financial advisor, it developed multiple strategies to address its UAL.

The key to the BLAST Strategy is tapping into underutilized resources. primarily excess reserves in the City's Water, Sewer & Solid Waste funds, which have a 12% share of the UAL (\$15.3 million).

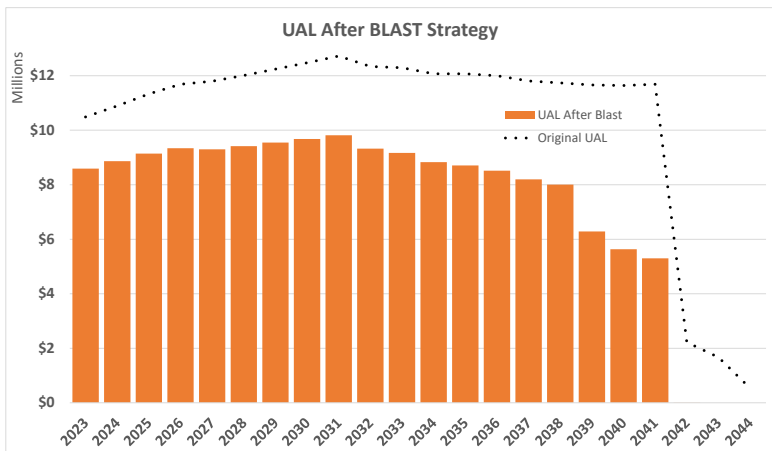


There are 5 component parts to the BLAST strategy:

1. **Bonds** – Issue tax-exempt bonds to finance “pay-go” capital projects. Issuing bonds finance the UAL at tax-exempt bond rates much lower than the CalPERS Discount Rate (2.0% vs. 7.0%). The Water Fund issued \$15.75 million 20-year bonds @ 1.92%.

*Issuing bonds for capital projects enable the Water Fund to utilize its previously designated reserves to make investment or internal loan to the General Fund.*

2. **Lease Investment** – The Water Fund used available reserves to make an internal loan to the General Fund to pay a portion of its UAL. The loan, which took the form of an investment, matched the terms of the water bonds (\$15.75 million / 20-years @ 1.92%). The Sewer Fund also similar \$5 million investment with the General Fund from its available reserves.
3. **ADP** – The City made an Additional Discretionary Payment (ADP) from monies held in the 115 Trust to “pre-pay” \$10 million portion of its UAL – saving \$19.6 million in total UAL payments.
4. **Savings** – The City Council adopted a formal Pension Funding Policy, which requires that 50% of the savings realized from the BLAST strategy should be deposited into the 115 Trust, which will help address future changes in the UAL.
5. **Transfer** – The Water, Sewer & Solid Waste fund reserves transferred \$15.3 million from its reserves to CalPERS to pay off their share (12.9%) UAL.



**\$15.26 Million Enterprise Fund Reserves**

- \$9.1 Million Water Fund
- \$4.6 Million Sewer Fund
- \$1.6 Million Solid Waste Fund

**\$10.0 Million General Fund ADP**

**\$20.75 Million General Fund Lease**

**\$46.01 Million**

**Net UAL Savings**

**\$32,340,972**

**\$19,535,177**

**\$14,924,287**

**\$66,800,436**

After City Council approval, implementation of the strategy commenced in December 2021 and was complete by the Spring of 2022 - taking 120 days to completion. The BLAST Strategy will save the City \$66.8 million in UAL payments over the next 22 years, lowering its Annual UAL payment \$3-\$4 million, without the use of taxable Pension Obligation Bonds (POBs).

For more information about the BLAST Strategy, contact:



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# ***CALPERS***

**A PENSION PRIMER**

  
**kosmont**  
financial services  
Julio Morales

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## BACKGROUND & TERMINOLOGY

### Defined Benefit Plan

The public sector has traditionally provided its employees a “Defined Benefit” retirement plan. Social Security, for example, is a defined benefit retirement program.

CalPERS provides its participants a defined benefit, which is derived from a formula based on the number of years of service. The formula that an employee receives is usually based whether they are a regular (Miscellaneous) or Safety/ sworn employee, and their hire date.

Once an employee retires, the annual amount they will receive, once they retire at age 50, is based on: 1) the highest salary earned over a 1- year period during their career and 2) the number of years of service credit.

If we assume an employee is under the “Classic” formula for Miscellaneous employees 2.0% @ 55, then their annual retirement compensation is equal to:

- 1) highest salary earned over a 1-year period = \$50,000, and
- 2) 20 service credit. The employee would receive 40% of their highest year’s salary or \$20,000 per year ( $2.0\% \times 20 \text{ years} = 40\% \times \$50,000 = \$20,000$ ).

There are a variety of benefit plans available:

**Miscellaneous** - 2.0% @ 60 / 2.0% @ 55 / 2.5% @ 55 / 2.7% @ 57 / 3.0% @ 60 / 2.0% @ 62 (PEPRA)

**Safety** - 2.0% @ 57 / 2.5% @ 57 / 2.7% @ 57 / 2.0% @ 55 / 3.0% @ 50 / 3.0% @ 50 / 2.7% @ 57 (PEPRA)

Benefit Tiers – An agency typically has two benefit tiers: 1<sup>st</sup> Tier (Classic), and PEPRA.

2<sup>nd</sup> tier which some agencies have for new hires *prior* to January 1, 2013, when PEPRA took effect. *You cannot combine or merge liabilities between plans or tiers (e.g., Police and Miscellaneous or 1<sup>st</sup> Tier and PEPRA). Each remains a distinct liability.*

California Public Employees’ Pension Reform Act (PEPRA) – PEPRA changed the benefit formula for new employees hired after January 1, 2013 or 6 months break from service: 2.0% @ 60 for

### DEFINED CONTRIBUTION

*The majority of the private sector participates in some type of “defined contribution” retirement program, commonly referred to a 401K. There are many derivatives plans (Roth, 403B, SEP, IRA, etc.), which often provide some type of tax-advantage to facilitate long-term savings.*

*The payout from a Defined Contribution Plans are directly tied to the two key factors:*

1. *the amount contributed (and matched)*
2. *the investment performance of the plan.*

*The plan participants determine the amount of contributions and typically assume the responsibility investment decisions.*

*The most important distinction is that the employee assumes the attendant risks of investment shortfalls.*

Miscellaneous employees and 2.7% @ 57 for Safety employees. PEPRA also required employees to pay 50% of their annual contributions or Normal Costs; and placed a cap on annual retirement compensation (~\$150,000).

*Actuarial Reports* - Actuarial reports are generated at the end of each fiscal year – June 30, based on the financial results experience during the prior fiscal year. CalPERS release the June 30, 2021 actuarial report in September 2022, which provides the required payment for the next following fiscal year FY 22-23. Actuarial reports therefore reflect an effective 2-year delay.

CalPERS provides a separate actuarial report for each Tier and type of employee. The majority of an agency's UAL is concentrated in the classic plan (as opposed to PEPRA).

*Risk Pools* – CalPERS groups all plans with less than 100 employees into a shared risk pool plan. Member agencies are placed into the plan to minimize the impact of individual benefit events – the retirement/death of a single employee in a 20-member agency is more financially significant than for a larger city with 500 employees. Actuarial calculations are made collectively, but the UAL for each agency is determined individually based on their percentage share of the plan.

*Some agencies assume that if they pay-off their UAL or make an additional discretionary payment (ADP) that this payment will be applied toward the pool and for the benefit of other agencies. All payments are tracked and credited to each agency's respective account percentage allocations (of the risk pool UAL) are rebalanced after such payments are taken into account.*

## **ANNUAL PENSION COSTS**

An agency's annual pension costs are comprised of two components:

1. Normal Costs represents the benefits earned by current employees this year. This amount is calculated based on a percentage of payroll.
2. Unfunded Accrued Liability (UAL) Payment. This amount represents the funding shortfall of benefits earned in prior years, by both current employees and retirees. The annual UAL payment is a fixed dollar amount, which should be viewed as a “payment plan for past due bill”.

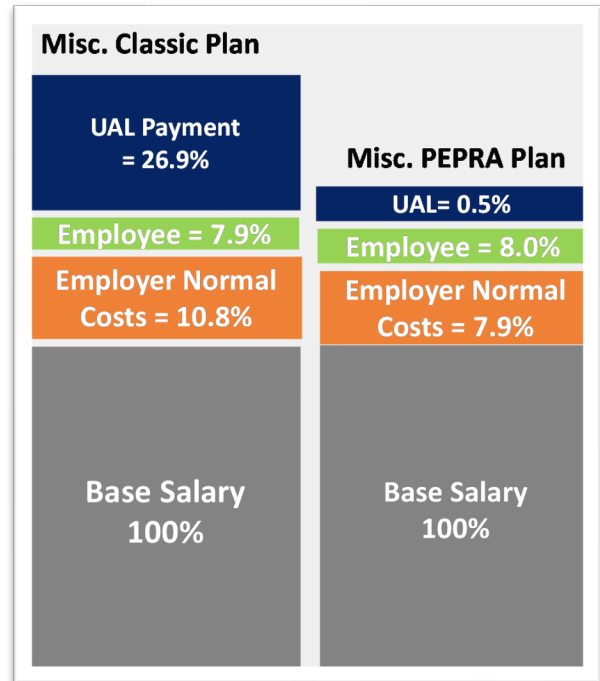
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**Normal Costs**

Normal costs are calculated based on a percentage of payroll. CalPERS provides your Normal Costs each year as a percentage of payroll, broken down between the Employer’s Share and the Employee’s Share. Each Tier/Plan requires a different percentage.

PEPRA legislation required that new hires pay 50% of the annual Normal Costs; Classic employees are not subject to this provision. Due to their lower benefit formula, PEPRA employees have lower annual Normal Costs.

The accompanying chart compares the annual pension costs for a Classic employee compared to a PEPRA employee, as a percentage of payroll. Note only are Normal Cost 3.0% lower, but there is a minimal UAL payment, resulting in a 30% differential.



Given the current pension law, there is very little an agency can do to change its annual normal costs until the majority of its workforce are PEPRA employees (which may take another 10-15 years), except to adjust the size of its workforce and/or negotiate for employees to pay greater share of pension costs.

Our focus will be on understanding the UAL, which is a fixed dollar payment toward the past service credit or past due balance.

**Unfunded Accrued Liability “UAL”.**

- 1) Each agency’s UAL is determined based on two variables: Accrued Value of Pension Benefits earned to date
- 2) Market Value of Assets held and invested by CalPERS.

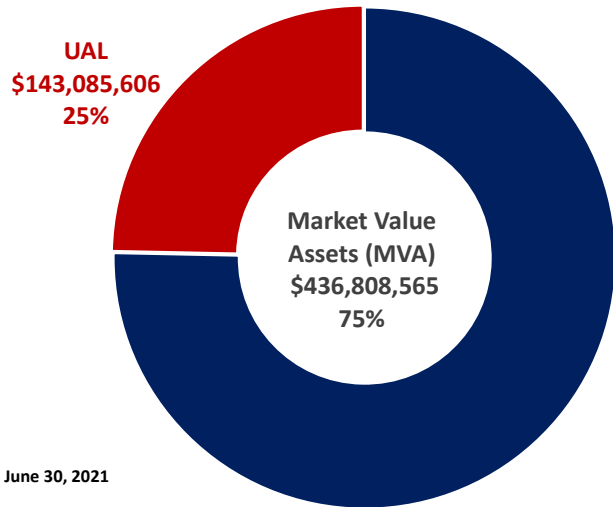
The shortfall or difference between these amounts is the UAL. This agency has a pension funding shortfall or UAL of \$143 million – a 75% funding level.

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The agency’s Classic plan has a 2.7% @ 55 benefit formula, compared to many agencies that have 2.0% @ 50 benefit formula. As a result, the agency has a lower funding ratio than average.

Standard & Poor’s Rating Service considers pension funding status of 80% a minimum funding level, below which is considered underfunded and requires additional review.

The UAL is viewed as a “past due” amount owed to CalPERS for prior service credit earned by current employees or retirees.



**Amortization Bases** –The UAL is comprised of a series of Amortization Bases, similar to a loan, which account for changes/adjustments to the UAL.

Each year CalPERS adds new amortization bases for the impact of investment return, change in assumptions, and demographics performance.

Each Amortization Base has a different final maturity or term, which are calculated based on an interest rate of **6.80%** (some repayment terms include an escalation or ramp-up feature).

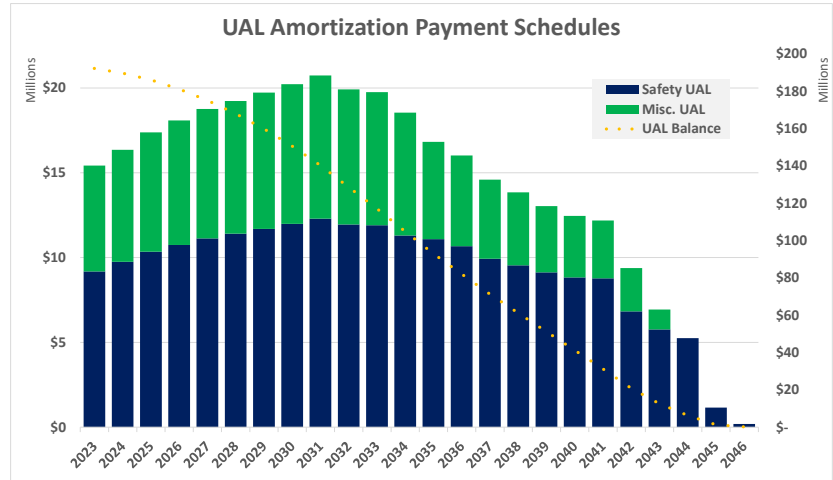
Each Amortization base has a unique amortization or repayment schedule. For example, some have 5-year ramp-up and ramp-down, or escalating debt or straight-line amortization.

This member agency has a total of 28 Amortization Bases for its Miscellaneous Plan, with a UAL Balance equal to \$42.3 million, and payment terms ranging from 9 years to 29 years, as illustrated in the accompanying chart. The agency also has 28 amortization bases for its Safety plan (not shown).

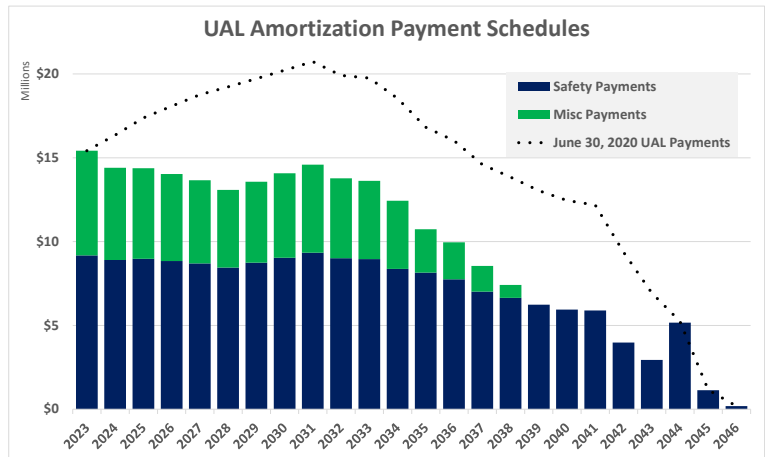
MISCELLANEOUS PLAN AMORTIZATION BASES - June 30, 2021						
Year	Reason	Ramp	Esc.	Term	Balance	
1	2005	Fresh Start	NO	2.75%	12	\$ 8,061,575
2	2009	Assumption Change	NO	2.75%	9	3,842,587
3	2009	Special (Gain)/Loss	NO	2.75%	19	2,887,229
4	2010	Special (Gain)/Loss	NO	2.75%	20	1,539,586
5	2011	Assumption Change	NO	2.75%	11	3,049,442
6	2011	Special (Gain)/Loss	NO	2.75%	21	187,476
7	2012	Payment (Gain)/Loss	NO	2.75%	22	6,967,678
8	2012	(Gain)/Loss	NO	2.75%	22	310,254
9	2013	(Gain)/Loss	100%	2.75%	23	24,135,494
10	2014	Assumption Change	100%	2.75%	14	(17,120,544)
11	2014	(Gain)/Loss	100%	2.75%	24	10,628,317
12	2015	(Gain)/Loss	100%	2.75%	25	8,422,322
13	2016	Assumption Change	100%	2.75%	16	10,672,575
14	2016	(Gain)/Loss	100%	2.75%	26	3,891,571
15	2017	Assumption Change	80%	2.75%	17	(9,648,806)
16	2017	(Gain)/Loss	80%	2.75%	27	3,279,993
17	2018	Method Change	60%	2.75%	18	(4,293,981)
18	2018	Assumption Change	60%	2.75%	18	7,959,692
19	2018	(Gain)/Loss	60%	2.75%	28	2,231,834
20	2019	Non-Investment (Gain)/Loss	NO	0.00%	19	(1,276,568)
21	2019	Investment (Gain)/Loss	40%	0.00%	19	974,838
22	2020	Non-Investment (Gain)/Loss	NO	0.00%	20	4,796,229
23	2020	Investment (Gain)/Loss	20%	0.00%	20	79,511
24	2021	Assumption Change	NO	0.00%	20	596,328
25	2021	Net Investment Gain	20%	0.00%	20	(24,267,275)
26	2021	Non-Investment (Gain)/Loss	NO	0.00%	20	(5,676,362)
27	2021	Risk Mitigation	NO	0.00%	1	6,747,279
28	2021	Risk Mitigation Offset	NO	0.00%	1	(6,747,279)
UAL - June 30, 2021						\$ 42,230,995

**UAL Payments** – Based on the June 30, 2020 actuarial report, the agency will be required to pay a fixed dollar UAL payment of **\$15.4 million** in FY 22-23, in addition to the annual normal costs, which is equal to 10.8% of payroll.

The UAL represents an approximately **27%** of payroll. UAL payment are scheduled to grow until it peaks in FY 2030-31 at **\$20.7 million – a 34% increase**, as illustrated in the accompanying the chart.



**FY21** – CalPERS had a banner year in 2021, it reported a 21.3% return for fiscal year ending June 30, 2021. The return exceeded the benchmark rate of return or Discount Rate of 7.0% by 14.3%. The net impact was a dramatic reduction in the UAL from \$192 million to \$143 million, which increase this agency’s funding level from 65% to 75%.



**CalPERS Funding Risk Mitigation**

Policy required CalPERS to automatically lower the Discount Rate from 7.0% to 6.8% the following year. Overall, CalPERS reached an average funding level of 80%, from 72% the prior year. *However, It is not likely that CalPERS will “out earn” its unfunded liability (UAL) – we had a unprecedented 10-year economic recovery after the Great Recession and CalPERS remained 68% funded ratio.*

**Dynamic Liability** – Your UAL is adjusted each year due to a combination of factors, including investment performance, actual retirement/mortality patterns, and changes in assumptions & methods. The UAL is dynamic and should be actively managed. In some years, an agency can earn “credits” against this liability for positive investment performance, while in other years CalPERS may fall short of the Discount Rate (6.8%) and a new base is added to increase the UAL.

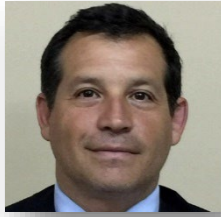
Our recommendations are:

- (1) *Actively monitor the UAL*
- (2) *Develop a long-term pension management plan (comprising diversified strategy) that is committed to documentation and proposed funding policy*
- (3) *Formally adopt the proposed strategy*



*This article was designed to provide a background in the terms and mechanics of your UAL. Subsequent articles will address an update on the June 30, 2022 return (“Waiting for the Other Shoe to Drop...”), drafting pension funding policies, and potential pension funding solutions.*

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Mr. Morales heads Kosmont’s pension advisory practice. He is the only financial advisor dedicated full-time to addressing pension/OPEB and related issues. Mr. Morales has nearly 30 years having served as Finance Director and City Manager. He holds a MPP from Harvard, MBA from UCLA, and BGS from the University of Michigan.

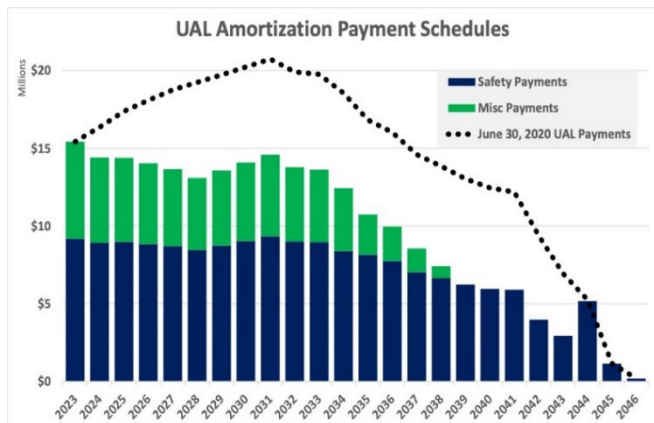
# CalPERS 2022 Update

Waiting for the Other Shoe to Drop...

*This article assumes a fundamental understanding of pension liabilities and may use certain CalPERS nomenclature /acronyms. If you would like to develop a former grasp of key [CalPERS] pension concepts.*

## Pension Primer Link

Many of you have opened your most recent CalPERS actuarial report and found good news. CalPERS reported a 21.3% return at the end of last fiscal year (June 30, 2020). The return resulted in a significant credit toward your unfunded accrued liability (UAL), which lowered your annual payment, effectively eliminating the 1012 year "peak", as indicated by the black dotted line (June 30, 2020 UAL payments in the chart below:



## CalPERS

CalPERS is the largest, defined benefit pension system in the United States, with \$496 billion in reported asset value, followed by the California State Teacher's Fund (CalSTRS) with \$313 billion in assets. Third, is the State of New York and New York City with \$267 billion each.<sup>1</sup>

*A Defined Benefit Pension or "DB Plan" pays its employees based on a pre-determined formula at retirement (e.g., PEPRAs Miscellaneous Formula: 2.0% @62). The majority of State-run government pension programs are DB plans, which are responsible to make-up funding shortfalls.*

<sup>1</sup> Source: Pension & Investments. Values as of September 30, 2020.

*A defined contribution plan, which is common in the private sector, is funded by both employee and employer contributions. A 401k, 401A, and Roth? IRA are examples of defined contribution plan. Payout is based on the underlying asset value at retirement; however, is not guaranteed.*

## Pension Funding Requirements

According to CalPERS, the majority of its operating budget is funded from investment returns (61%) and the remainder from from employer contributions and employees' shares.



Moreover, CalPERS pays out a greater amount in benefits to its current retirees than it receives contributions from members who are current employees. The pension burden for an individual agency will depend on a number of factors including:

- Ratio of current employees to retirees
- Employee plans
- Benefit formulas and enhancements
- Ratio of Classic vs. PEPRAs employees

## Light at the end of the Tunnel

One of the key provisions of pension reform in 2013 was that CalPERS implemented a 30-year UAL payment plan for all agencies. CalPERS also took the additional step in 2019 to change the amortization method of new amortization bases

from 30-year escalating to 20-year level annual payments.

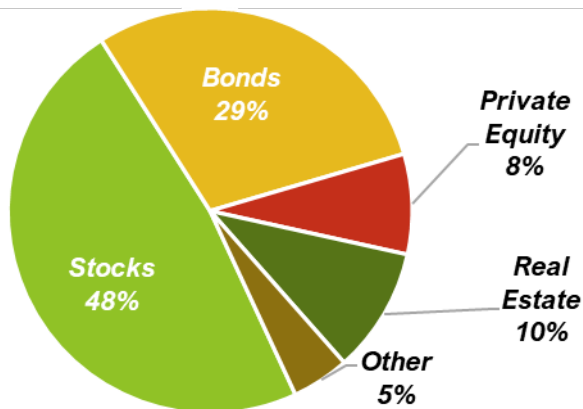
As a result, most agencies should be able to pay off a significant portion of their UAL as long as they continue to make their annual UAL payments and CalPERS continues to meet its investment targets, at which point, the majority of your workforce would comprise PEPPRA employees.

### Portfolio Diversification

CalPERS has a long-term (30-year) investment horizon, but must balance competing investment objectives: maximizing total returns while maintaining liquidity sufficient to make retiree payments, and providing downside protection in market downturns.

Diversification is a fundamental component of a risk management strategy for any investment portfolio. A diversified portfolio contains a mix of distinct asset types and investment vehicles designed to limit exposure to any single asset, risk type or sector. The companion chart illustrates CalPERS' current target asset allocation for their investment portfolio.

CalPERS' Asset Liability Management Committee



reviews its target mix of assets each year to optimize its return and meet cash flow requirements.

### The narrative changed in 2022

After a prolonged, 24-month period of near zero rates (the Federal Funds Target Range was 0.0 to 0.25% from March 16, 2020 to March 17 2022) when the FOMC began to raise rates in an effort to curb inflation. Simultaneously, the stock and bond prices peaked and have taken a turn south. As a result, CalPERS reported a (6.1%) return for the period ending June 30, 2022, effectively reversing the gain realized the prior year.

*“But we had a 21.3% return in FY 2021 and 6.1% return in FY22 - shouldn't I still be ahead?”*

Let's go a little deeper into the numbers to explain.

CalPERS had an annual investment target, known as the Discount Rate. Therefore, the 21.3% return actually represented a net 14.5% gain:

Gain	21.3%
Less: Lowering of discount rate	(6.8)%
Net gain	14.5%

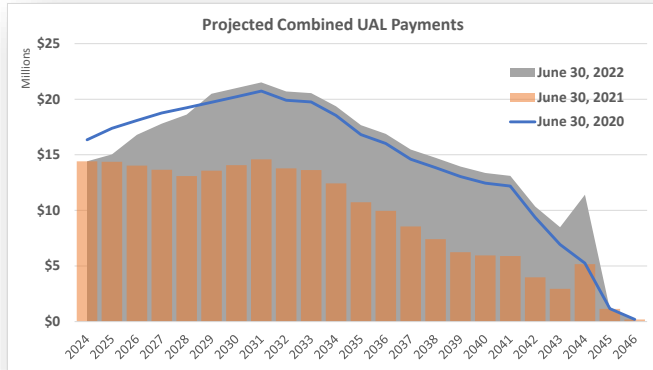
The 21.3% triggered the automatic provision in the Funding Risk Mitigation Policy that required lowering the Discount rate from 7.0% to 6.8%, which effectively had the effect of reducing the investment return by ~25%.

CalPERS reported a return of -6.1% (period ending June 30, 2020). The net impact was a 12.9% loss, when accounting for the shortfall from the 6.8% investment target. (-6.1% to 6.8% = 12.9%).

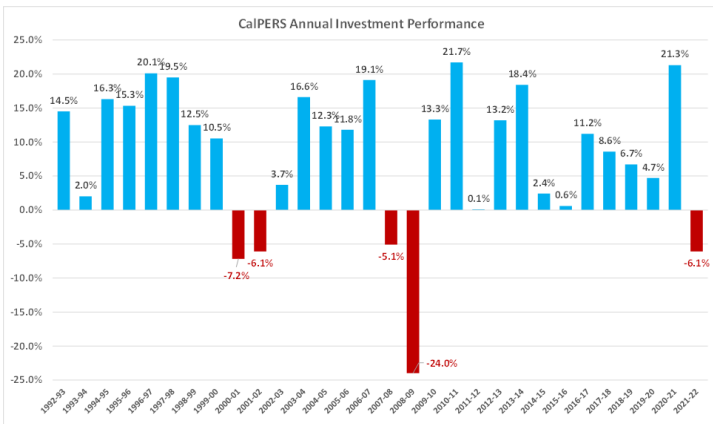
The -6.1% return will be reported on the upcoming actuarial report, dated June 30, 2022, which will be released next August. As illustrated in the accompanying chart, the FY 22 return of -6.1% (grey area) effectively eliminated the gains from the

prior year (orange bars), placing us back where we were in 2020 (blue line).

**It's a roller coaster ride**

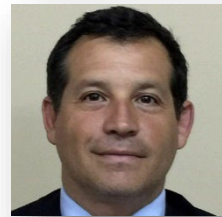


The stock market has inherent volatility. CalPERS maintains diversified investment holdings, but is essentially at 60/40 (equity/fixed income) portfolio. Therefore, we should expect the asset value to fluctuate from year to year. The chart below provides CalPERS' portfolio return over the past 30+ years.



Like the stock market, CalPERS investment performance is punctuated by periodic market adjustment and downturns, which has occurred six times over the past 32-year period: 1993,2000-2002,2007-2009,2011,2014-2016, and 2021-2022. However, the stock market typically has a strong rebound in subsequent years.

Due to the inherent volatility, you should expect fluctuations in your UAL and required payments from year-to-year. We recommend to take a long-term perspective toward addressing your pension liabilities, actively monitor your pension liability, and develop a long-term plan and formal pension funding policies.



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*Mr. Morales heads Kosmont's pension advisory practice. He is the only financial advisor dedicated full-time to addressing pension/OPEB and related issues. Mr. Morales has nearly 30 years having served as Finance Director and City Manager. He holds a MPP from Harvard, MBA from UCLA, and BGS from the University of Michigan.*