CalPERS Update & Discussion

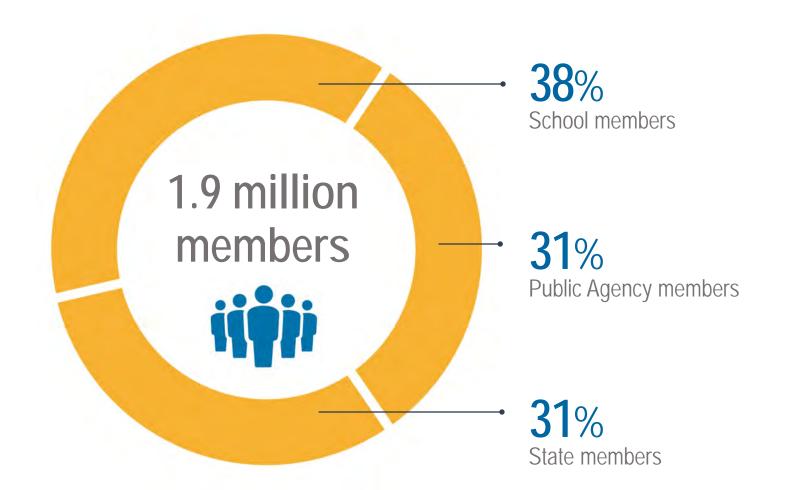
David Teykaerts | Stakeholder Strategy Manager Kurt Schneider | Supervising Pension Actuary October 10, 2019



Fundamental Concepts and Investments



CaIPERS Membership





Functions In Pension Decision-Making

CalPERS Board

- Fiduciary obligation
- Set risk tolerance
- Set investment asset allocation

Legislature

- Set menu of pension benefit formulas
- Make and change pension laws
- Benefit design changes

Employees

- Make contributions
- Select employer
- Collectively bargain salary and (optional) cost sharing

CalPERS Staff

- Administer pensions
- Calculate pension costs
- Effectuate investment strategy

Employers

- Select pension formulas
- Add optional provisions
- Set salaries
- Make contributions

<u>Courts</u>

 Rule on legal questions of pension law

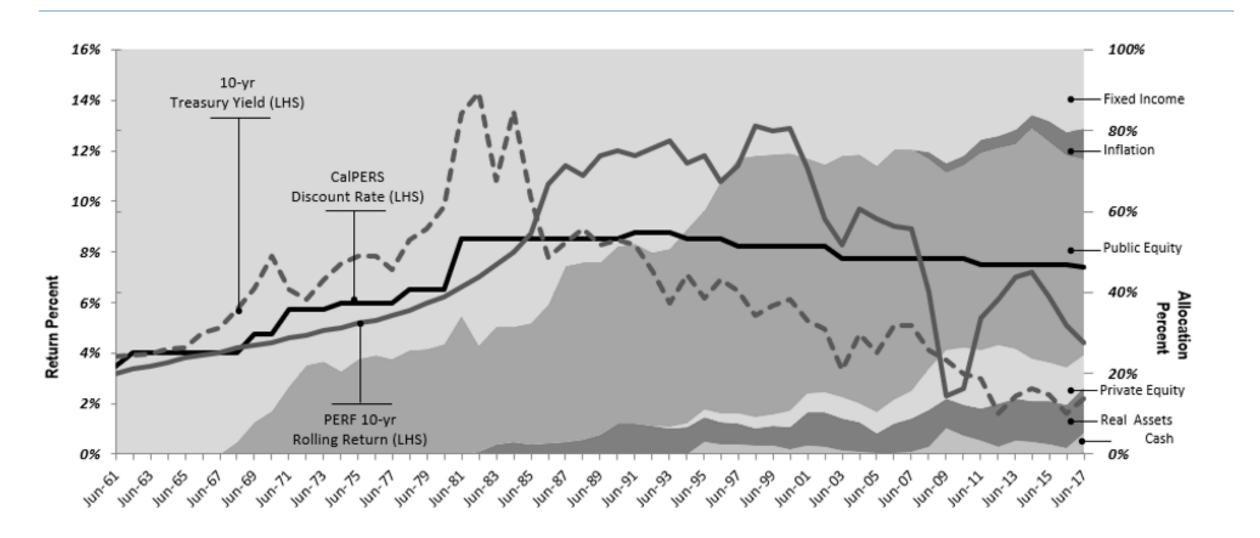


CalPERS Recent & Historical Investment Performance

Current Fund Value \$380 billion~

6.7%	8.1%	5.6%	6.1%	8.4%
2018/19	5-yr Annualized	10-yr Annualized	20-yr Annualized	30-yr Annualized
	Return	Return	Return	Return







Three Key Risks





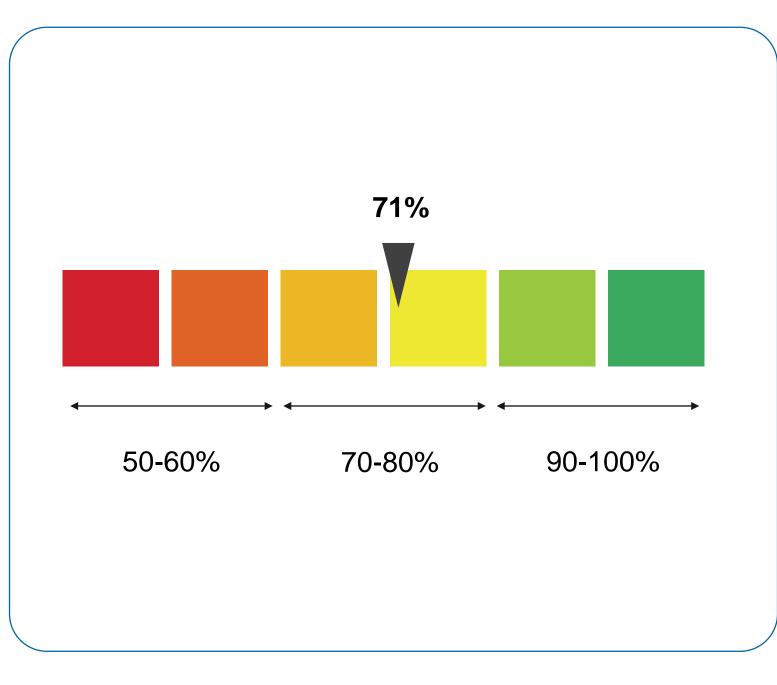
How are CalPERS Pensions Funded?







Funded status goal: 100%



Divestment | Corporate Engagement



CalPERS Focus Going Forward

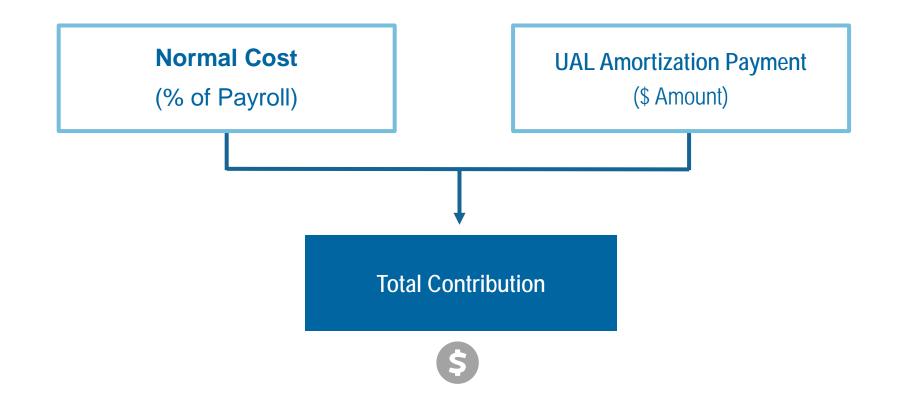
- Investment performance is paramount
 - growth assets are key
- Top quality leadership and investment team
- Streamlined investment strategies
- Capitalize on and weather financial market downturns
- Recognize that employers are essential to sustaining benefits
- One message to all stakeholders
- Provide access and information



Actuarial Concepts and the City's Pension Costs



Contribution Components





Unfunded Accrued Liability (UAL)





Required Contribution is the Minimum Payment

- Agencies are required to make minimum annual payments on the UAL
- Unfunded accrued liability is long-term debt
- Interest rate charged on UAL = Discount rate



Principles of Paying Down Debt

- Basic Financial Principle pay down most costly debt first
- Government Finance Officers Association (GFOA)
 - Every agency should have a funding policy
 - Provide assurance that benefits will be funded equitably and sustainably
 - Handle UAL paydown in a systematic way



Options for Accelerating the Funding of a Plan



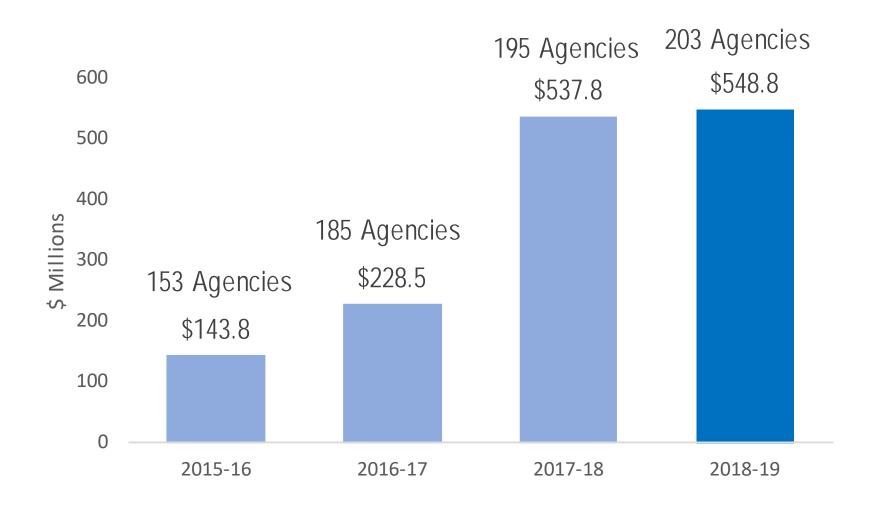


Additional Discretionary Payments (ADPs)

- Saves money by reducing future interest payments
- Ad hoc basis
- Savings strategies
 - Short-term Savings : apply to shortest base
 - Long-term Savings : apply to longest base
- Can be used to achieve contribution stability
- If used in conjunction with agency's funding policy ADPs can
 - Handle UAL paydown in a systematic way, and
 - Provide assurance that benefits will be funded equitably and sustainably



ADPs in Practice





ADPs in Practice (continued)

- Woodland May 2018
- Lodi July 2018 and July 2019
- Rocklin 2016, 2017, 2018 and 2019
- Yuba City September 2018

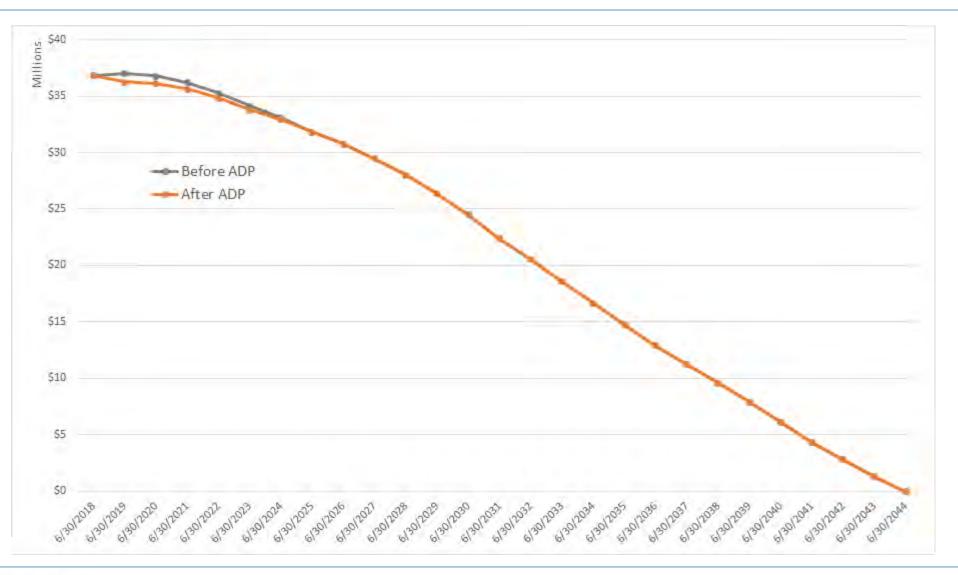


Schedule of Amortization Bases

Reason for Base	Date Established	Ramp Up/Down 2020-21	Escalat- ion Rate	Amorti- zation Period	Balance 6/30/18	Expected Payment 2018-19	Balance 6/30/19	Expected Payment 2019-20	Balance 6/30/20	Scheduled Payment for 2020-21
BENEFIT CHANGE	06/30/02	No Ramp	2.750%	3	\$1,293,432	\$291,165	\$1,082,768	\$298,875	\$849,404	\$304,824
ASSUMPTION CHANGE	06/30/03	No Ramp	2,750%	5	\$1,738,566	\$1,054,017	\$769,982	\$146,550	\$672,289	\$150,580
METHOD CHANGE	06/30/04	No Ramp	2,750%	6	\$(152,532)	\$(22,779)	\$(139,647)	\$(23,388)	\$(125,229)	\$(23,835)
ASSUMPTION CHANGE	06/30/09	No Ramp	2.750%	11	\$3,240,806	\$327,975	\$3,128,402	\$336,830	\$2,998,970	\$342,547
SPECIAL (GAIN)/LOSS	06/30/09	No Ramp	2,750%	21	\$1,523,980	\$104,603	\$1,522,457	\$107,457	\$1,517,874	\$108,825
SPECIAL (GAIN)/LOSS	06/30/10	No Ramp	2,750%	22	\$649,495	\$43,475	\$649,989	\$44,662	\$649,289	\$45,213
ASSUMPTION CHANGE	06/30/11	No Ramp	2,750%	13	\$215,114	\$19,590	\$209,908	\$20,120	\$203,790	\$20,444
SPECIAL (GAIN)/LOSS	06/30/11	No Ramp	2,750%	23	\$(1,468,820)	\$(96,035)	\$(1,472,298)	\$(98,659)	\$(1,473,305)	\$(99,838)
PAYMENT (GAIN)/LOSS	06/30/12	No Ramp	2.750%	24	\$387,089	\$24,757	\$388,576	\$25,434	\$389,467	\$25,729
(GAIN)/LOSS	06/30/12	No Ramp	2,750%	24	\$9,535,105	\$609,841	\$9,571,738	\$626,519	\$9,593,683	\$633,767
(GAIN)/LOSS	06/30/13	100% →	2.750%	25	\$11,718,625	\$621,363	\$11,896,186	\$797,960	\$11,903,503	\$807,498
ASSUMPTION CHANGE	06/30/14	100% →	2.750%	16	\$6,682,699	\$367,645	\$6,770,193	\$503,528	\$6,723,253	\$639,309
(GAIN)/LOSS	06/30/14	100% →	2,750%	26	\$(8,959,019)	\$(357,138)	\$(9,216,724)	\$(489,243)	\$(9,355,818)	\$(618,671)
(GAIN)/LOSS	06/30/15	80% >	2,750%	27	\$5,276,186	\$142,371	\$5,498,249	\$219,426	\$5,656,150	\$295,840
ASSUMPTION CHANGE	06/30/16	60% >	2.750%	18	\$2,206,395	\$41,636	\$2,317,775	\$85,551	\$2,391,524	\$130,206
(GAIN)/LOSS	06/30/16	60% >	2.750%	28	\$5,037,814	\$69,908	\$5,318,147	\$143,669	\$5,541,805	\$217,786
ASSUMPTION CHANGE	06/30/17	40% >	2.750%	19	\$(19,658)	\$(77,054)	\$58,671	\$1,107	\$61,633	\$2,247
(GAIN)/LOSS	06/30/17	40% >	2,750%	29	\$(4,696,969)	\$0	\$(5,025,757)	\$(69,824)	\$(5,305,333)	\$(141,025)
METHOD CHANGE	06/30/18	20% *	2,750%	20	\$874,999	\$(19,009)	\$955,912	\$(19,532)	\$1,043,030	\$19,447
ASSUMPTION CHANGE	06/30/18	20% >	2,750%	20	\$2,049,408	\$(73,704)	\$2,269,107	\$(75,731)	\$2,506,281	\$46,729
(GAIN)/LOSS	06/30/18	20% >	2,750%	30	\$(281,661)	\$0	\$(301,377)	\$0	\$(322,473)	\$(4,404)
TOTAL					\$36,851,053	\$3,072,647	\$36,252,257	\$2,581,311	\$36,119,787	\$2,903,218

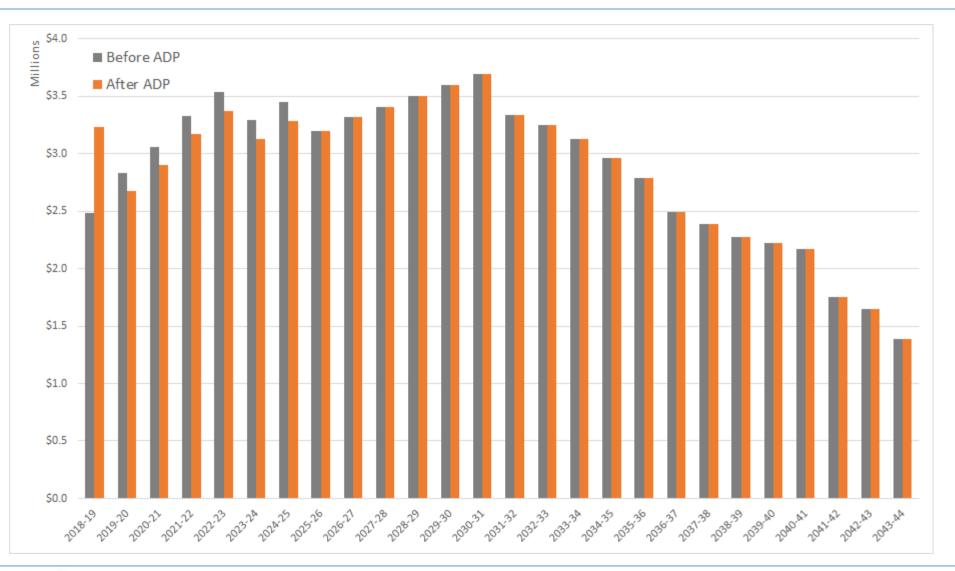


Miscellaneous UAL Balance before and after 2018 ADP



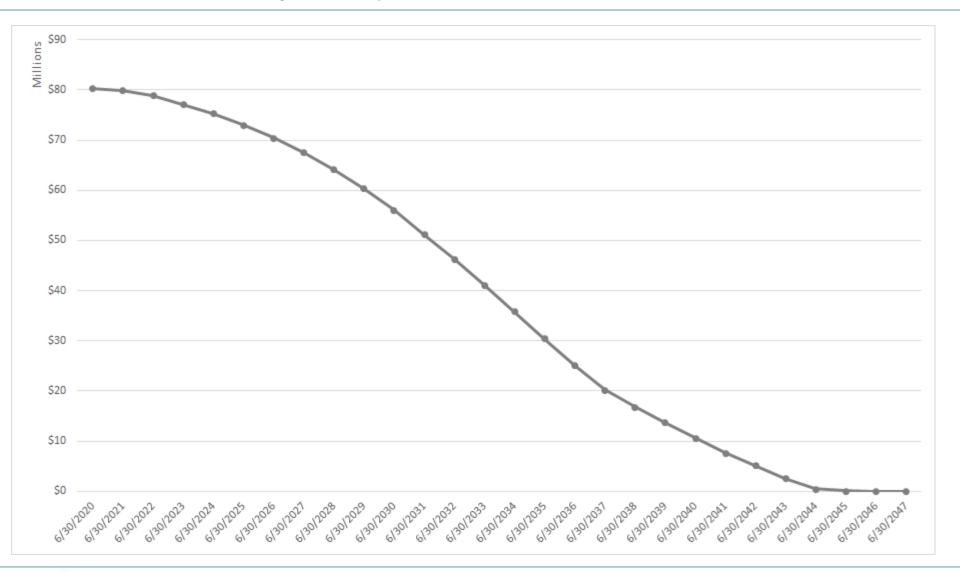


Miscellaneous UAL Annual Payments before and after ADP



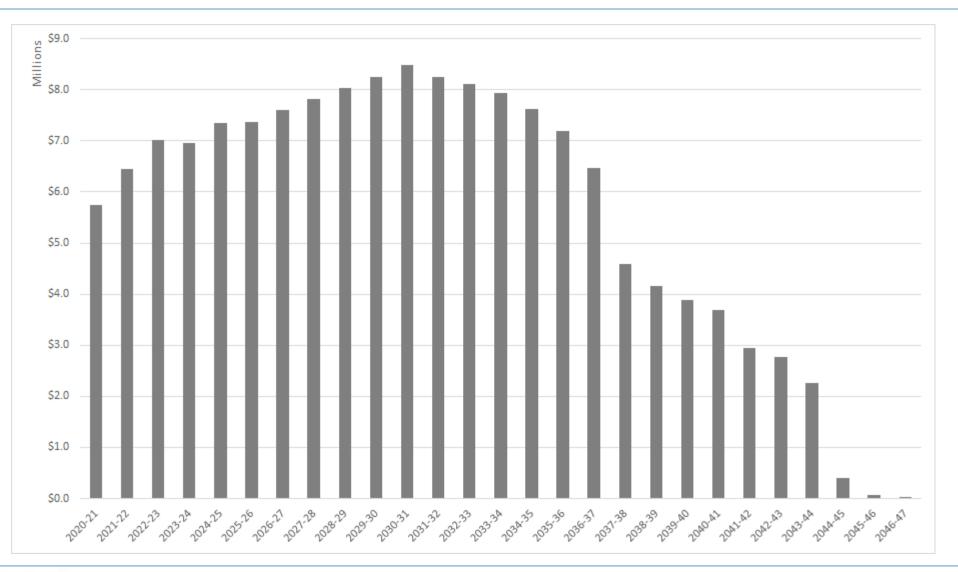


Combined Yuba City Projected UAL Balance



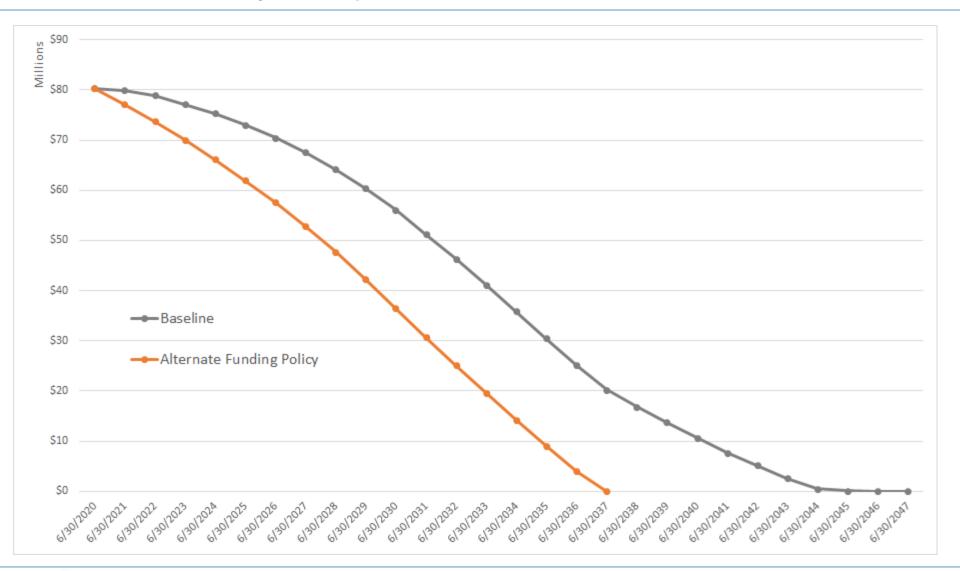


Combined Yuba City Projected UAL Payments



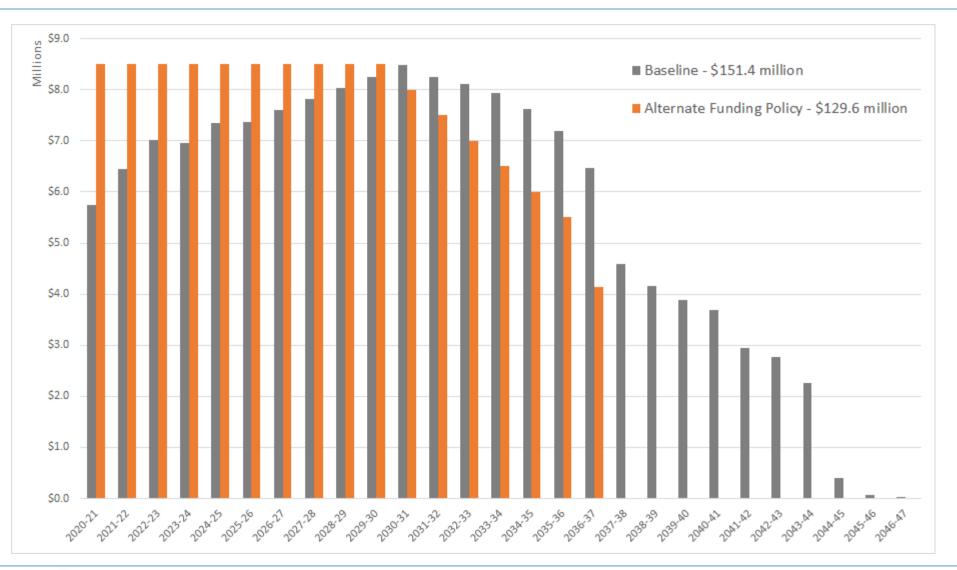


Alternate Yuba City Projected UAL Balance





Alternate Yuba City Projected UAL Payments





Alternate Funding Policies

- ADPs allow maximum flexibility
- Agency can budget for any payment structure
 - Level annual payments
 - Gradually increasing payments
 - Gradually decreasing payments
- Agency can target full funding date



Advantages to Establishing a Funding Policy

- Provides assurance that benefits will be funded equitably and sustainably
- Handles UAL paydown in a systematic way
- Allows agency to budget contributions years in advance
- Actuarial experience or assumption changes less likely to trigger contribution increases
- Significant savings are possible

