

San José Federated City Employees' Retirement System

Pension Economic Assumptions Review

October 16, 2025

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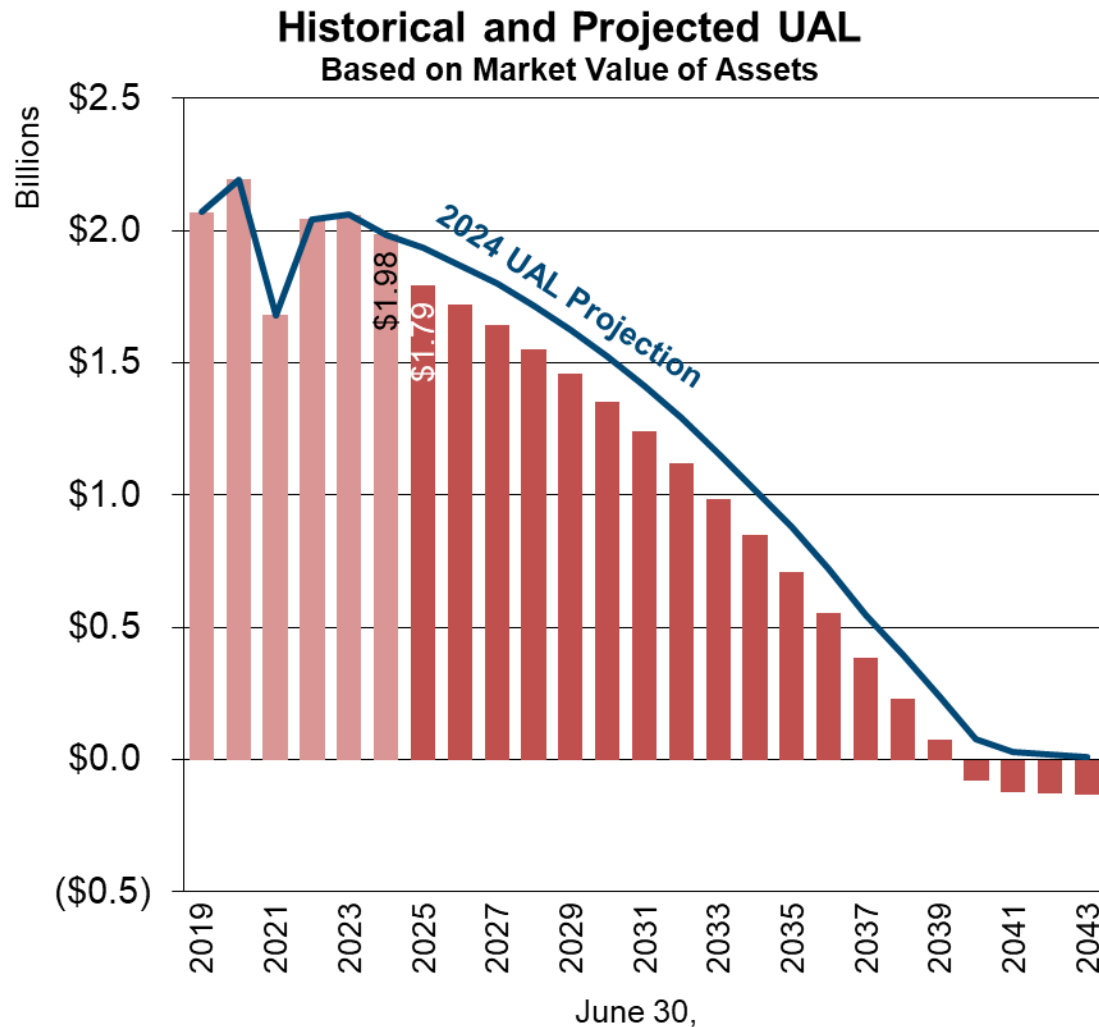


- Schedule
- Preliminary Updates
- Economic Assumptions
 - Price Inflation
 - Wage Inflation
 - Amortization Payment Increase Rate
 - Discount Rate
- Board Decisions
- Appendix



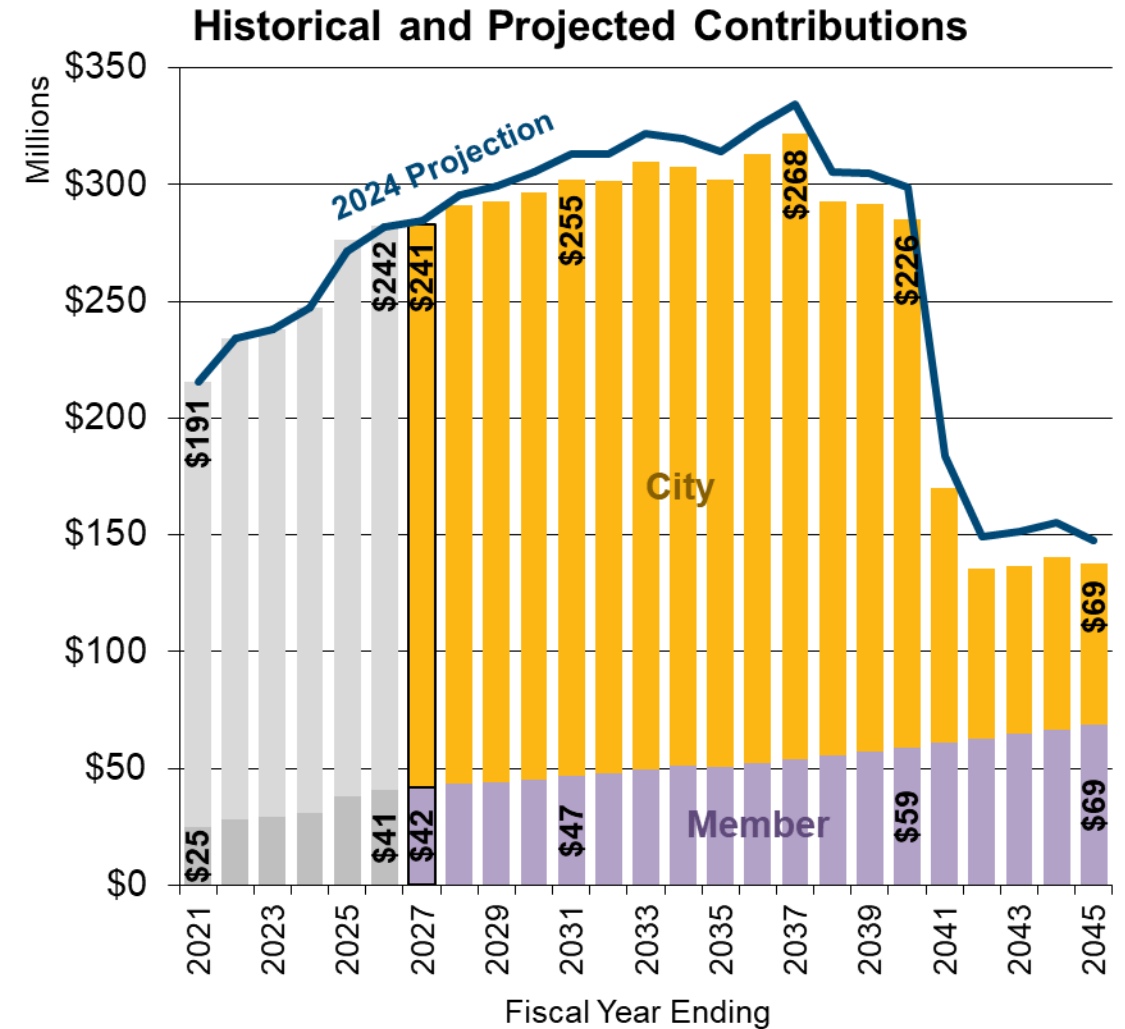
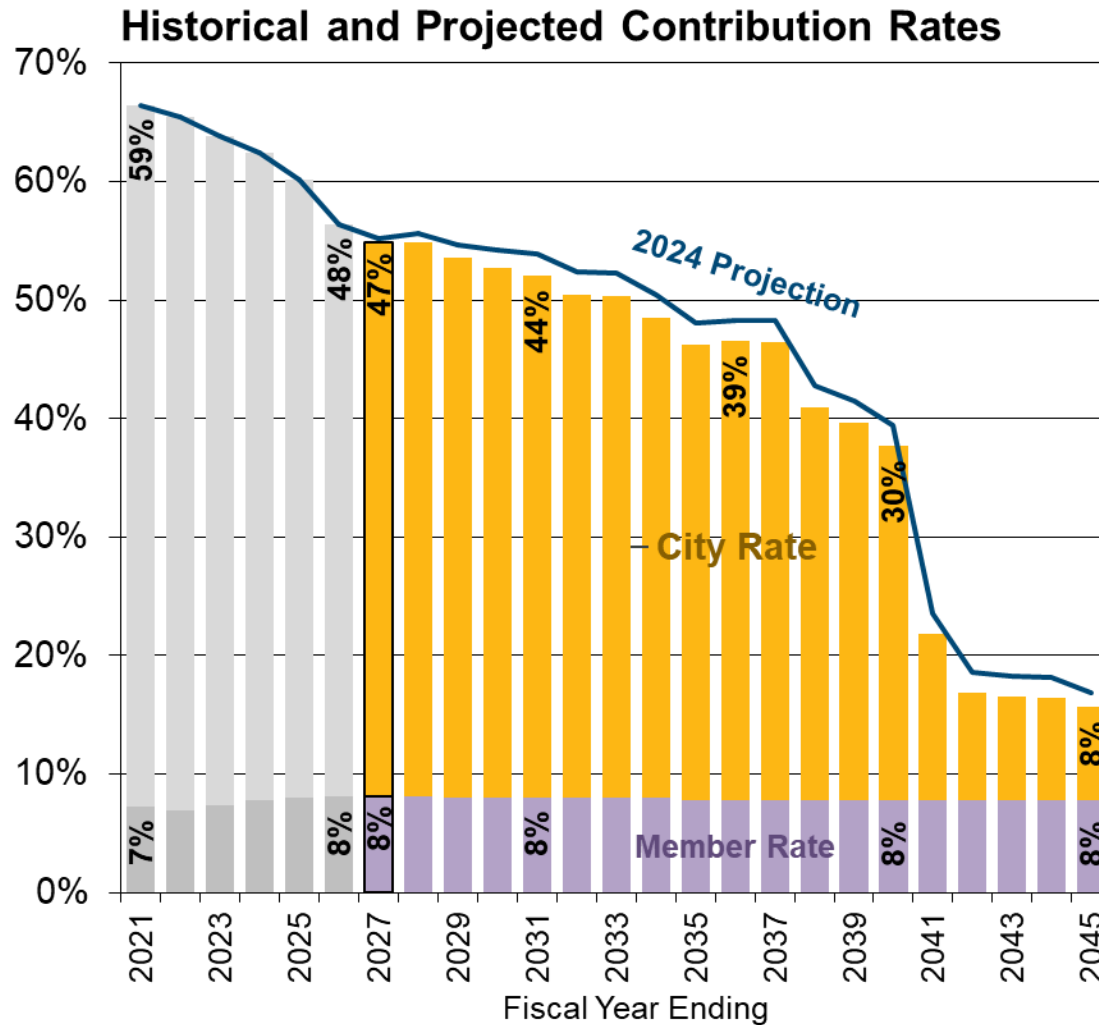
- **October Board Meeting**
 - **Pension Economic Assumption Review**
- November Board Meeting
 - Preliminary Pension Valuation Results
 - OPEB Assumptions Review
- December Board Meeting
 - Final Pension Valuation Presentation
 - Final Pension Valuation Report
 - Preliminary OPEB Valuation Results
- January Board Meeting
 - Final OPEB Valuation Presentation
 - Final OPEB Valuation Report

Projections with Preliminary Asset Information



- FYE 2025 investment returns were better than assumed (~10.0%)
- Funded Ratio is estimated to improve:
 - Market value: 61% → 66%
 - Actuarial value: 61% → 65%
- UAL is estimated to decrease:
 - Market value: \$2.0 B → \$1.8 B
 - Actuarial value: \$2.0 B → \$1.9 B
- 2025 valuation changes still pending
 - Potential economic assumption changes
 - Updated census data
- Significant potential variability in projections

Projections with Preliminary Asset Information



Economic Assumptions

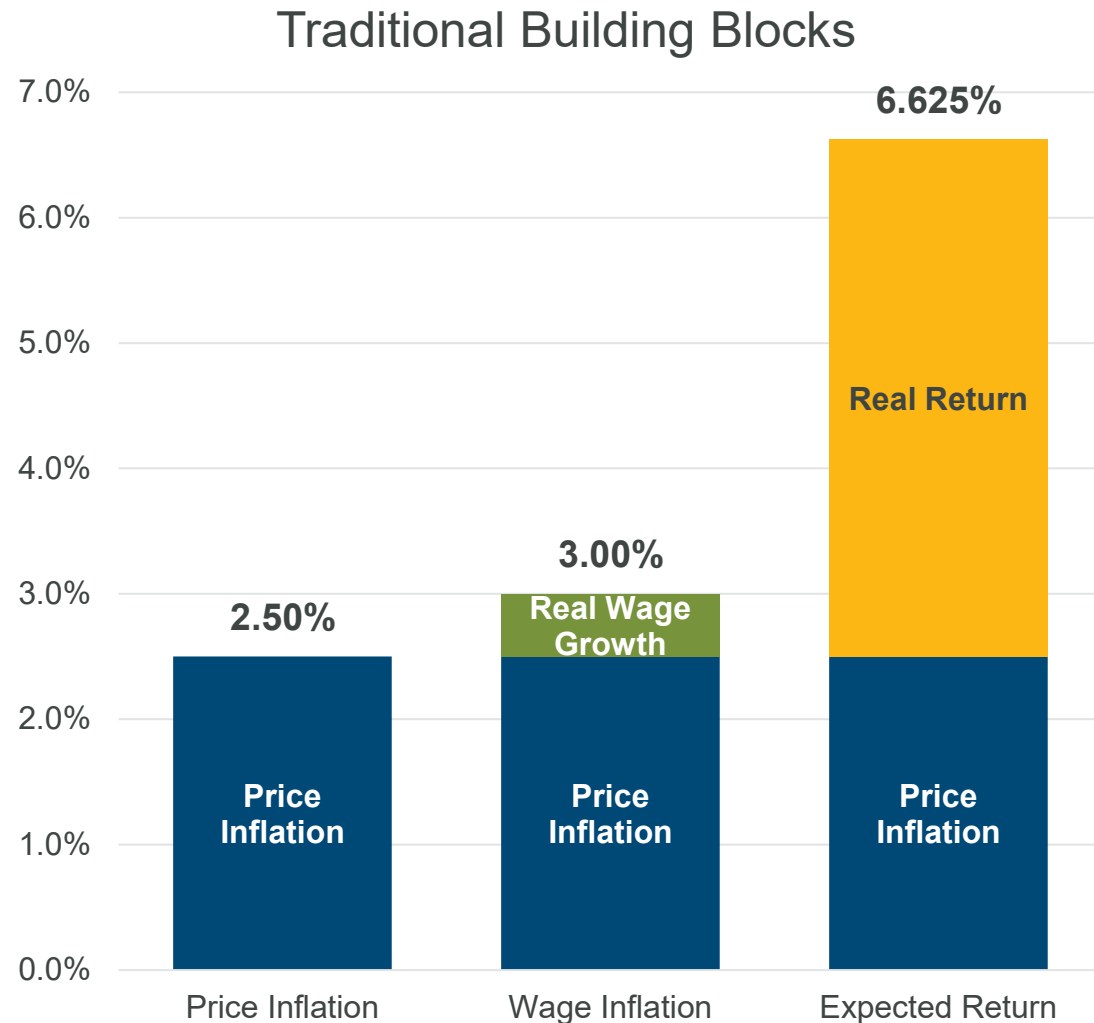


Review of Economic Assumptions



- Economic assumptions are reviewed every year
- Demographic experience study performed every four years
 - Last study in 2023
- Assumptions adopted will be used for the 2025 actuarial valuation to determine contributions for FYE 2027
 - Price Inflation – Pension and OPEB valuations
 - Wage Inflation – Pension and OPEB valuations
 - Amortization Payment Increase Rate – Pension valuation only
 - Discount Rate – Pension valuation only
- **No changes proposed**

Price Inflation



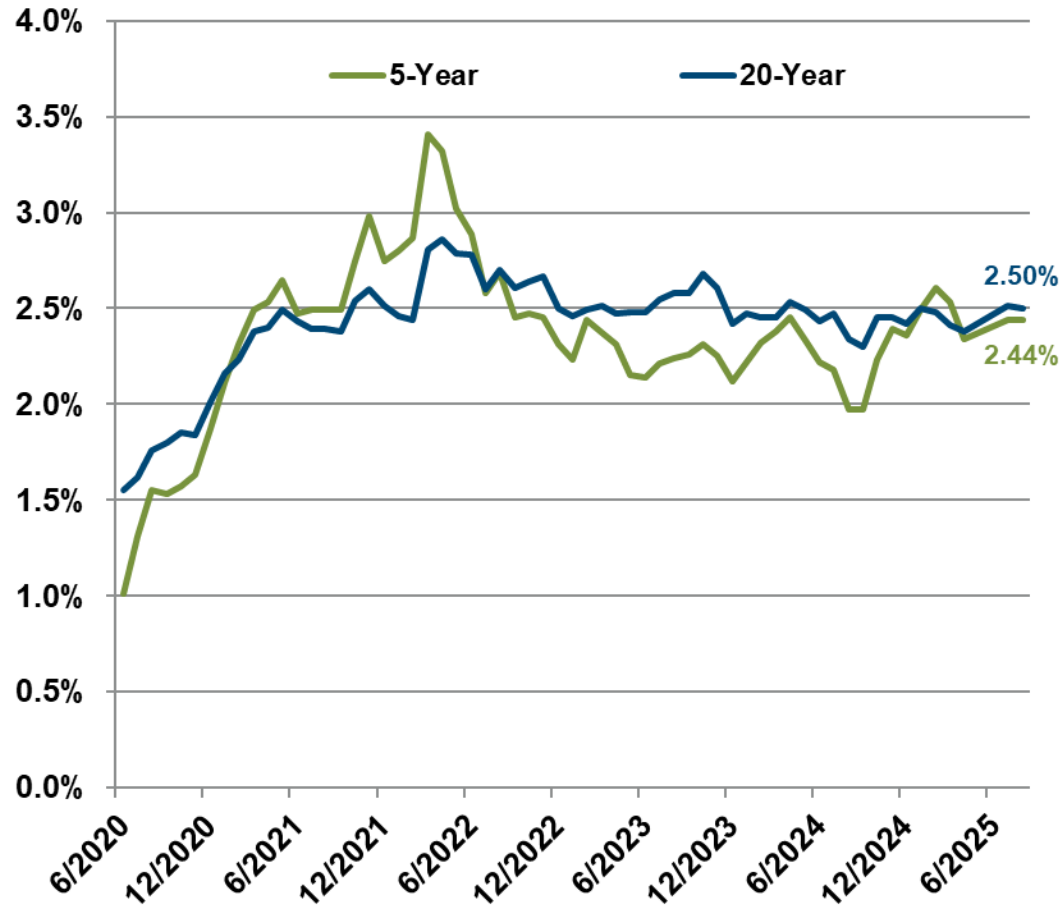
- Price inflation – foundation for all economic assumptions
 - Wage inflation = Price inflation + Real wage growth
 - Expected return = Price inflation + Real return
- Current price inflation assumption = 2.50%
- Very limited direct impact on the valuation
 - Tier 1 COLA is fixed at 3.0%
 - Tier 1 Guaranteed Purchasing Power provision and 415(b) limits affect very few retirees
 - Tier 2 COLAs equal inflation up to a maximum that varies from 1.25% to 2.0% depending on service

Price Inflation Forecasts

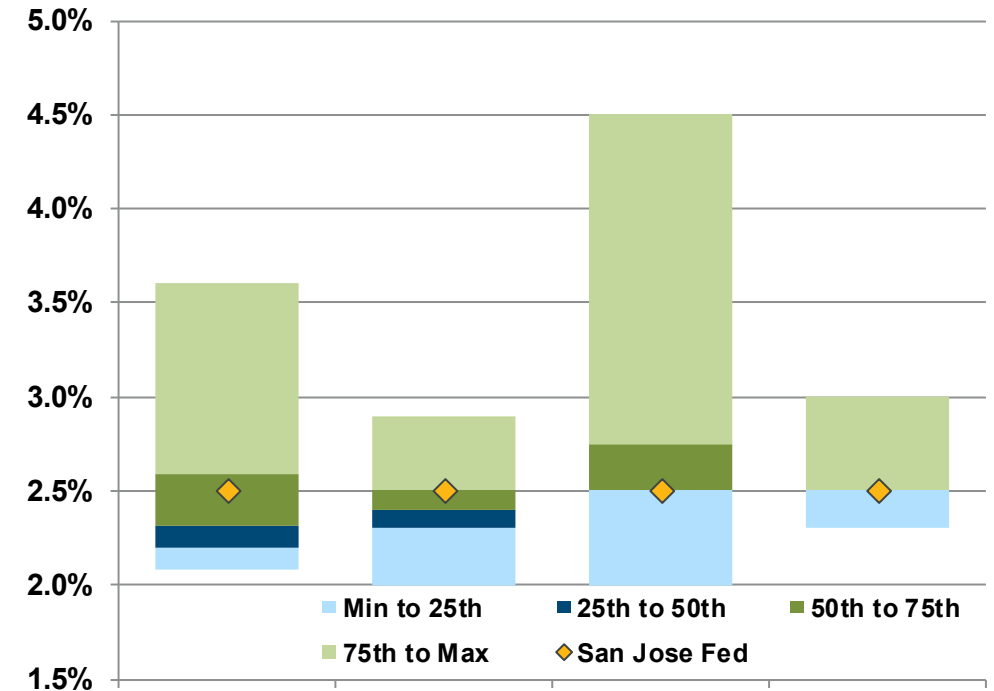


Break-Even Inflation

Yield on Treasuries Minus Yield on TIPS



Survey of CPI Assumptions

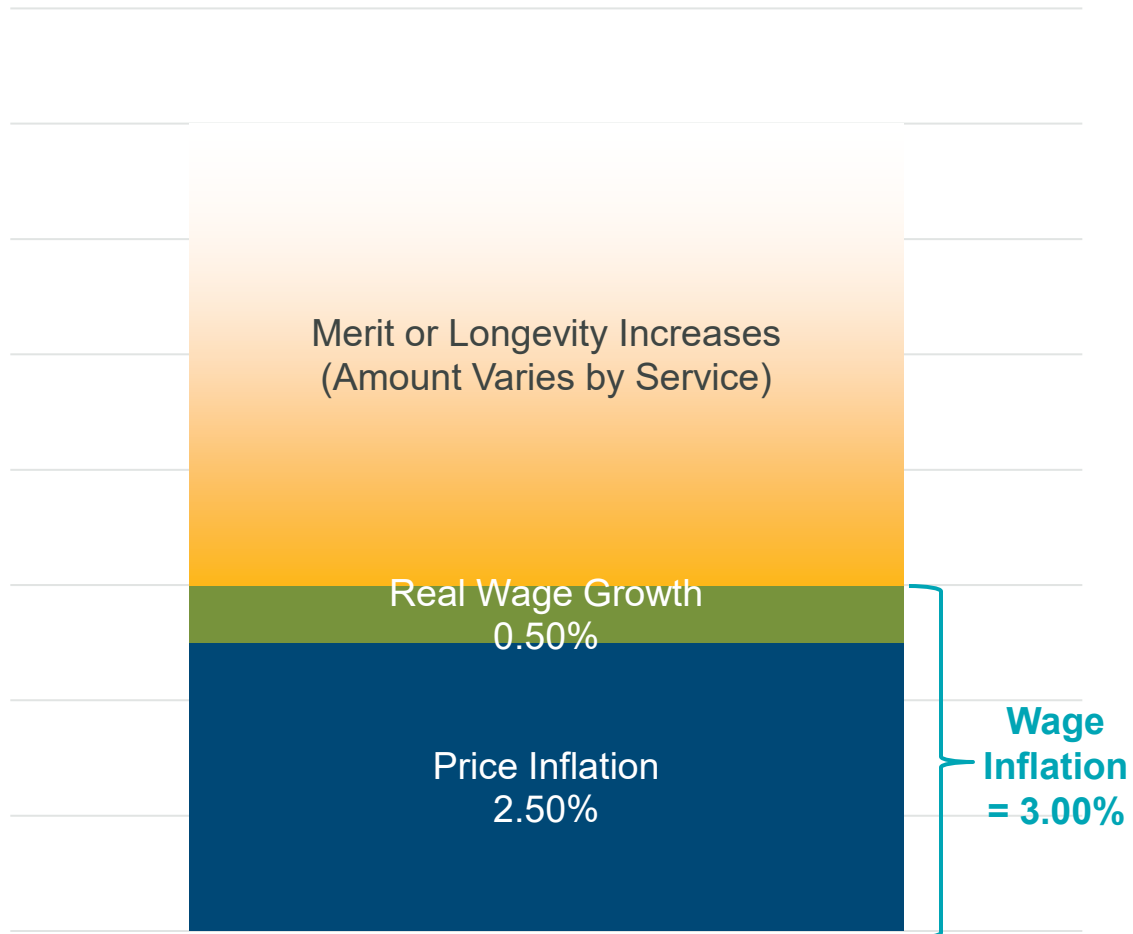


	Pro Forecasters - Third Qtr 2025	2025 Horizon Survey	2024 Public Plan Database	2024 California Survey
Minimum	2.08%	2.00%	2.00%	2.30%
25th	2.20%	2.30%	2.50%	2.50%
50th	2.31%	2.40%	2.50%	2.50%
75th	2.59%	2.50%	2.75%	2.50%
Maximum	3.60%	2.90%	4.50%	3.00%

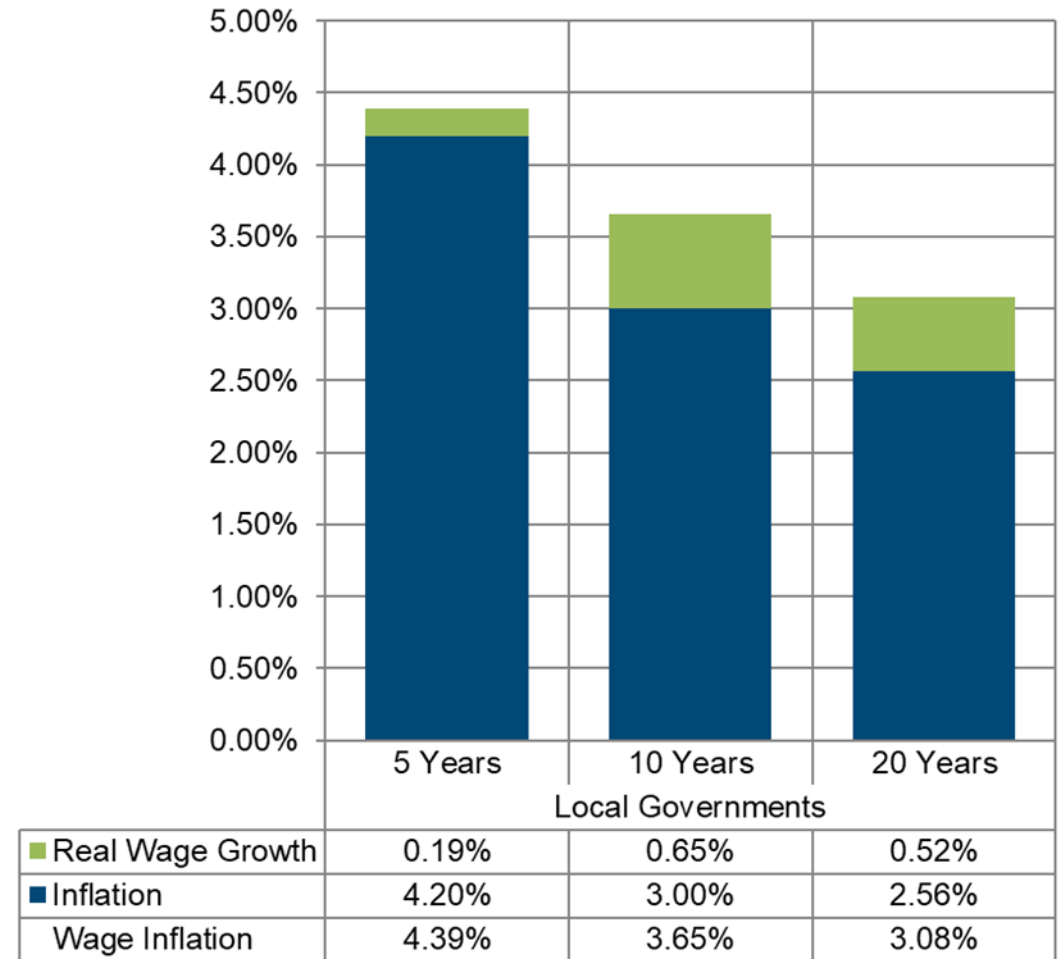
Wage Inflation



Components of Salary Increases



Wage Inflation Data



Wage Inflation



- Current assumption
 - Reflect negotiated agreements
 - Valuation year increases reflected by the bargaining group
 - An aggregate rate is applied for all bargaining groups for subsequent years
 - 3.0% after agreements expire
- No new bargaining agreements
- No changes proposed

Current Bargaining Agreements					
Unit	7/1/2024	1/1/2025	7/1/2025	1/1/2026	7/1/2026
ABMEI	4.0%	1.0%	3.5%		
AEA	4.0%	1.0%	3.5%		
ALP	4.0%	1.0%	3.5%		
AMSP	4.0%	1.0%	3.5%		
CAMP	4.0%	1.0%	3.5%		
IBEW	6.0%		4.0%	1.0%	3.5%*
MEF	4.0%	1.0%	3.5%		
OE#3	6.0%		4.0%	1.0%	3.5%*
POPRA	4.0%	1.0%	3.5%		3.0%
SJPDA	4.0%	1.0%	3.5%		
Unit 99	4.0%	1.0%	3.5%		

* May convert to 4.0% depending on City budget situation

Amortization Payment Increase Rate

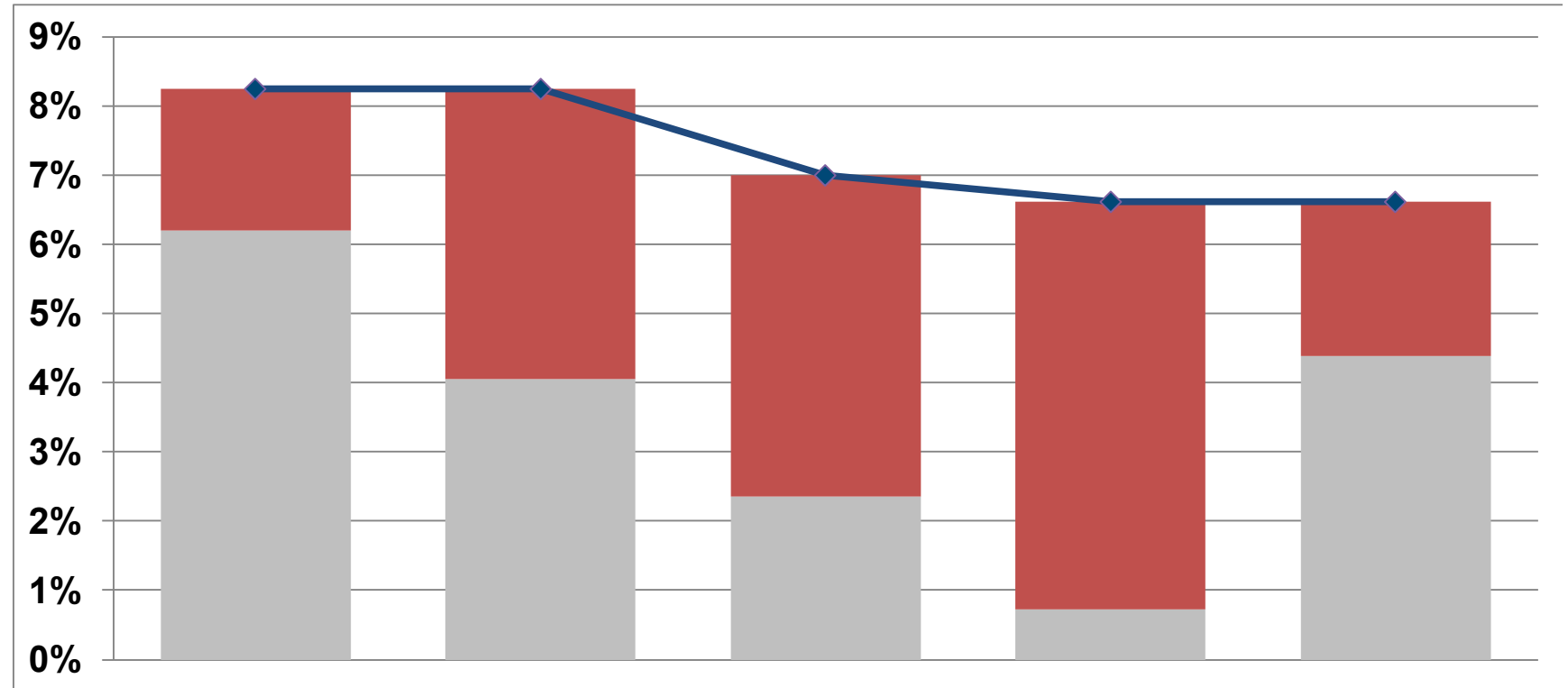


- Amortization payments currently increase 2.75% each year
 - Higher than the inflation assumption of 2.50%
 - Lower than the wage inflation assumption of 3.00%
 - Payments are expected to decline gradually as a percentage of total payroll
- No change proposed



- Most powerful single assumption
 - Higher expected return → Lower expected contributions
 - Over time, actual contributions will depend on actual investment returns (not expected)
 - Current discount rate is 6.625%
- Context for selecting the discount rate
 - Historical experience
 - Industry trends
- Primary factors considered in selecting the discount rate
 - Expectations for the future
 - Board's risk preference

Changes in Interest Rates



	1995	2005	2015	2020	2025
Federated Discount Rate	8.25%	8.25%	7.00%	6.625%	6.625%
Yield on 10-Year Treasury	6.21%	4.06%	2.36%	0.73%	4.38%
Expected Risk Premium	2.04%	4.19%	4.64%	5.90%	2.25%

Expected Return on Assets



- Meketa provided forward-looking capital market assumptions for 2025
 - 10- and 20-year time horizons
- Horizon survey includes:
 - 10-year time horizon (41 consultants)
 - 20-year time horizon (27 consultants)
- Expectations remain higher than discount rate
 - Interest rates have been higher for last two years
 - Fed started reducing interest rates in September

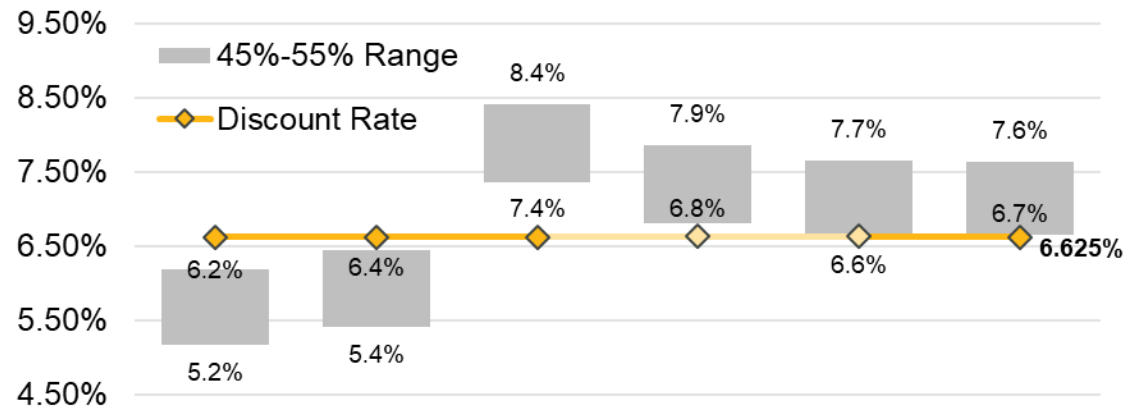
Expected Distribution of Average Annual Passive Returns				
Percentile	10-Year Timeframe		20-Year Timeframe	
	Horizon Survey	Meketa	Horizon Survey	Meketa
95th	13.8%	14.2%	12.2%	13.6%
75th	9.8%	10.0%	9.5%	10.6%
60th	8.1%	8.2%	8.3%	9.3%
55th	7.6%	7.7%	7.9%	9.0%
50th	7.1%	7.1%	7.6%	8.6%
45th	6.7%	6.6%	7.2%	8.2%
40th	6.6%	6.4%	6.9%	7.8%
25th	4.5%	4.3%	6.6%	6.7%
5th	0.9%	0.5%	3.1%	3.8%

Cheiron calculations based on capital market assumptions from the 2025 Horizon survey and from Meketa

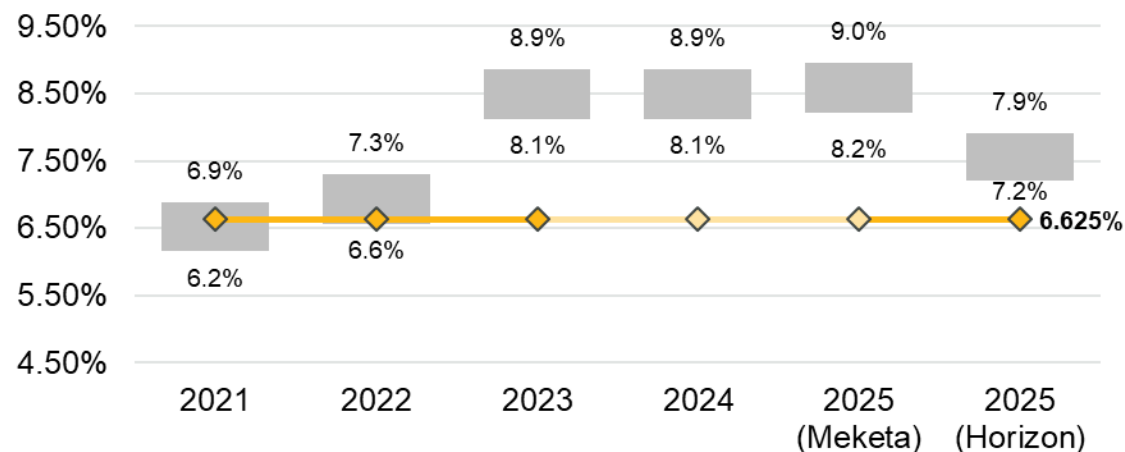
Expected Return on Assets



**Discount Rate vs. Capital Market Assumptions
10-Year Horizon**



20-Year Horizon



- Capital market assumptions fluctuate
 - Interest rates
 - Valuations (P/E ratios)
- Time horizon considerations
 - 10 years ~ 40% of the present value of benefits
 - 20 years ~ 70% of the present value of benefits
- Current discount rate of 6.625%
 - Conservative compared to 2023 – 2025 capital market assumptions
 - Chance of return exceeding discount rate
 - 10 years ~ 55% (Meketa and Horizon)
 - 20 years ~ 75% (Meketa), 63% (Horizon)

Discount Rate Considerations



- Is the increase in capital market assumptions temporary?
 - The primary driver of increased capital market assumptions has been the rise in interest rates
 - The Federal Reserve is expected to reduce interest rates over the next year
- It is very painful to reduce the discount rate
 - Be cautious about increasing the discount rate
 - Don't want to increase the discount rate and then have to reverse course and reduce the discount rate again
- It is okay for the discount rate to be less than the expected return
 - Higher probability of achieving a return greater than the discount rate
 - Provides margin against adverse experience
 - The reverse is not true – it is not okay for the expected return to be materially less than the discount rate
- We propose no change to the discount rate this year

Board Decisions – No Changes Proposed



- Price Inflation = 2.50%
- Wage inflation
 - Current bargaining agreements
 - Ultimate rate = 3.0%
- Amortization payment increases = 2.75%
- Discount rate = 6.625%



The purpose of this presentation is to review the economic assumptions for the City of San José Federated City Employees' Retirement System.

In preparing our presentation, we relied on information (some oral and some written) supplied by the Plan. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

This presentation and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this presentation. This presentation does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This presentation was prepared exclusively for the City of San Jose Federated City Employees' Retirement System for the purpose described herein. Other users of this presentation are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

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Appendix – Wage Inflation

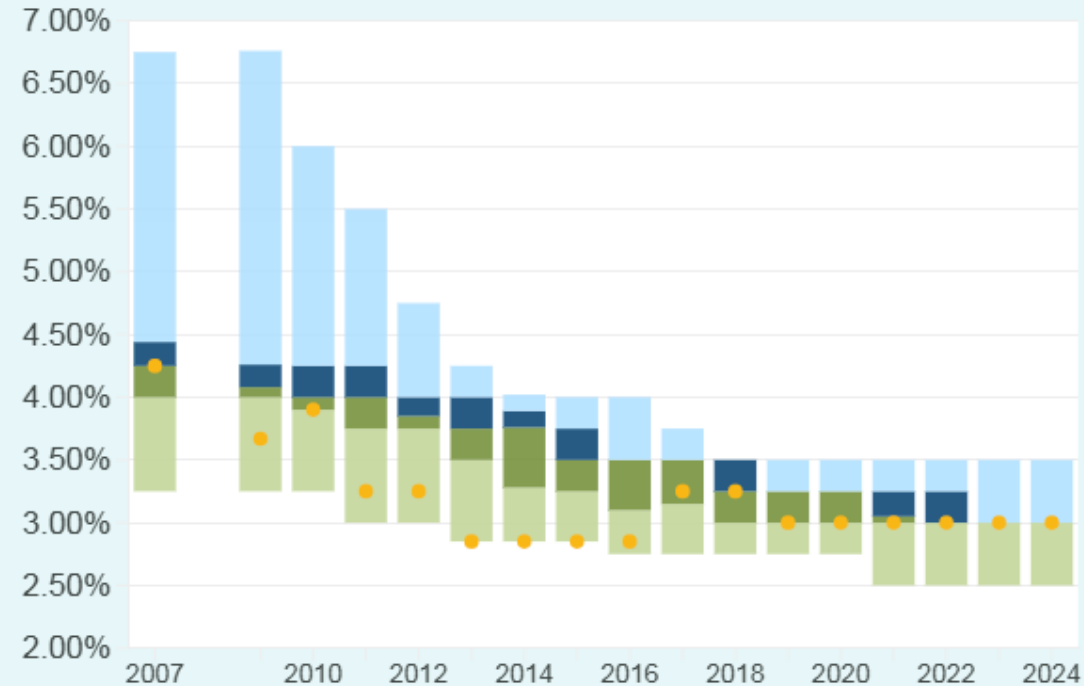


California Public Retirement Systems - Distribution of Wage Inflation Assumptions

Wage Inflation = Price Inflation + Real Wage Growth

Gold dot = **San Jose Federated**

Percentiles of Distribution ■ Min to 25th ■ 25th to 50th ■ 50th to 75th ■ 75th to Max



CHEIRON Hover over a bar to see the statistics for that year. Click on a bar to see a bee swarm of the plans for the year. Close the tab in the browser to return to the menu.

Current Bargaining Agreements

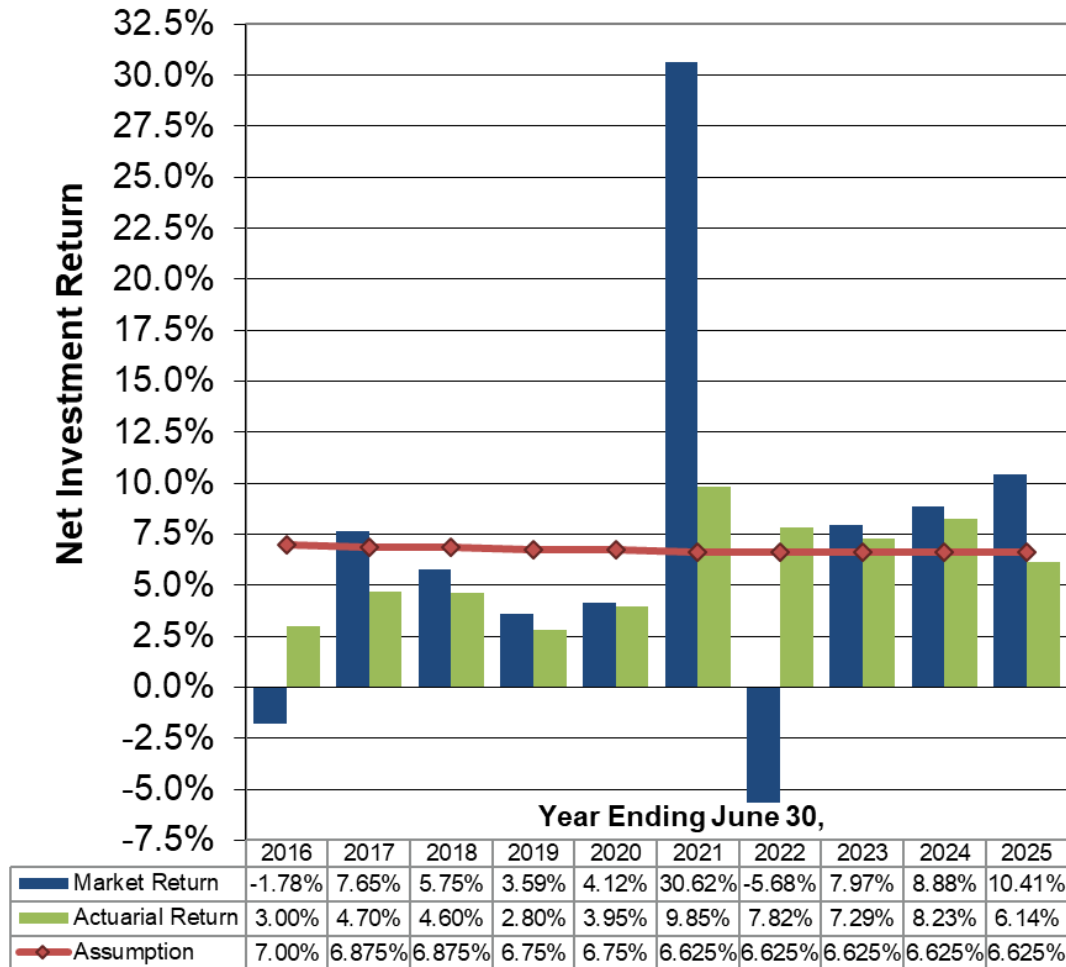
Unit	7/1/2024	1/1/2025	7/1/2025	1/1/2026	7/1/2026
ABMEI	4.0%	1.0%	3.5%*		
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AMSP	4.0%	1.0%	3.5%*		
CAMP	4.0%	1.0%	3.5%*		
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SJPDA	4.0%	1.0%	3.5%*		
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* May convert to 4.0% depending on City budget situation

Appendix – Historical Returns and California Trends



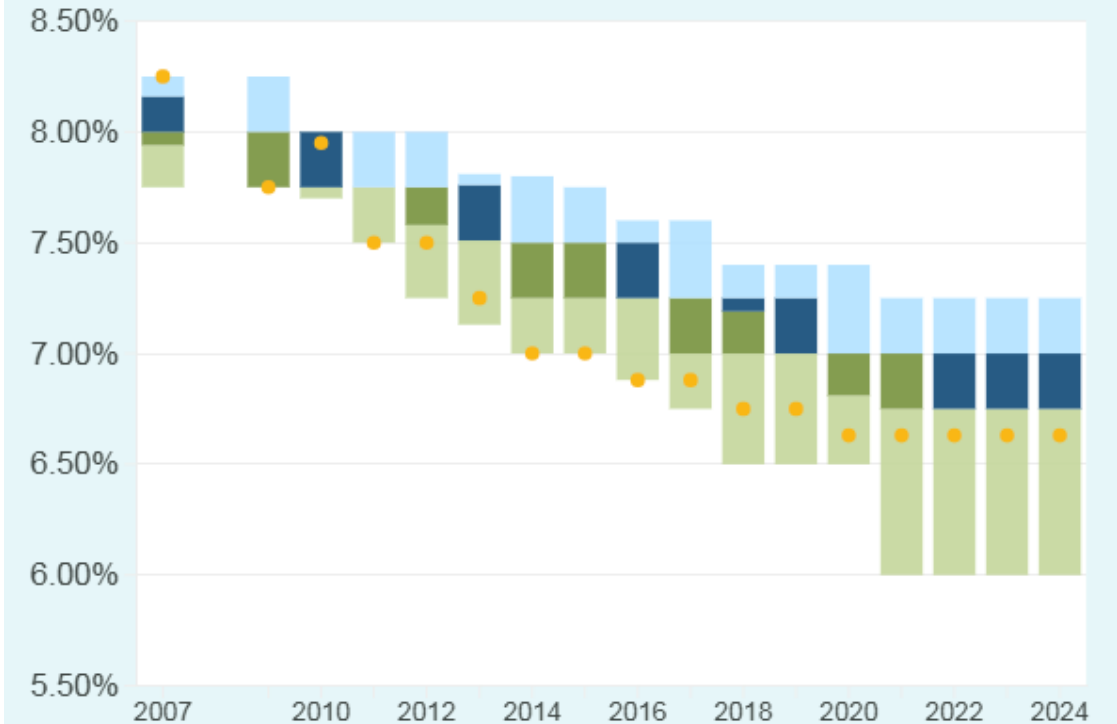
Expected vs. Actual Rates of Return




California Public Retirement Systems - Distribution of Discount Rates

Gold dot = **San Jose Federated**

Percentiles of Distribution ■ Min to 25th ■ 25th to 50th ■ 50th to 75th ■ 75th to Max



CHEIRON  Hover over a bar to see the statistics for that year. Click on a bar to see a bee swarm of the plans for the year. Close the tab in the browser to return to the menu.

Appendix – California Survey



Cheiron's 2024 Survey of Public Retirement Systems in California

System Name	Discount Rate	Wage Inflation	Price Inflation	Valuation Date	System Name	Discount Rate	Wage Inflation	Price Inflation	Valuation Date
AC Transit	6.75%	3.00%	2.75%	1/1/2024	Sacramento CERS	6.75%	2.75%	2.50%	6/30/2024
Alameda CERA	7.00%	3.00%	2.50%	12/31/2023	Sacramento Regional Transit	6.75%	2.75%	2.50%	7/1/2024
CalPERS	6.80%	2.80%	2.30%	6/30/2024	San Bernardino CERA	7.25%	3.00%	2.50%	6/30/2024
CalSTRS	7.00%	3.50%	2.75%	6/30/2024	San Diego City ERS	6.50%	3.25%	3.00%	6/30/2024
Contra Costa CERA	6.75%	3.00%	2.50%	12/31/2023	San Diego County ERA	6.50%	3.00%	2.50%	6/30/2024
East Bay Municipal Utility District	6.75%	3.00%	2.50%	6/30/2024	San Diego Transit	6.00%	2.50%	2.50%	7/1/2024
Fresno CERA	6.50%	3.00%	2.50%	6/30/2024	San Francisco ERS	7.20%	3.25%	2.50%	7/1/2024
Fresno City Employee System	6.75%	3.00%	2.50%	6/30/2024	San Joaquin CERA	6.75%	3.00%	2.75%	1/1/2024
Fresno City Fire & Police	6.75%	3.00%	2.50%	6/30/2024	San Jose Federated	6.625%	3.00%	2.50%	6/30/2024
Golden Gate Transit	6.75%	3.25%	2.75%	1/1/2024	San Jose Police & Fire	6.625%	3.00%	2.50%	6/30/2024
Imperial CERS	6.75%	3.00%	2.50%	6/30/2024	San Luis Obispo County	6.75%	3.00%	2.50%	1/1/2024
Kern CERA	7.00%	3.00%	2.50%	6/30/2024	San Mateo CERA	6.25%	3.25%	2.75%	6/30/2024
LA City ERS	7.00%	3.00%	2.50%	6/30/2024	Santa Barbara CERS	7.00%	3.00%	2.75%	6/30/2024
LA County ERA	7.00%	3.25%	2.75%	6/30/2024	Sonoma CERA	6.75%	3.00%	2.50%	12/31/2023
LA Fire & Police	7.00%	3.00%	2.50%	6/30/2024	Stanislaus CERA	6.75%	2.75%	2.50%	6/30/2024
LA Water and Power	6.50%	3.00%	2.50%	7/1/2024	Tulare CERA	7.00%	3.00%	2.75%	6/30/2024
Marin CERA	6.75%	3.00%	2.50%	6/30/2024	University of California	6.75%	3.25%	2.50%	7/1/2024
Mendocino CERA	6.50%	3.00%	2.50%	6/30/2024	Valley Transit Authority	6.75%	2.75%	2.50%	1/1/2024
Merced CERA	6.75%	2.75%	2.50%	6/30/2024	Ventura CERA	6.75%	3.00%	2.50%	6/30/2024
Orange CERS	7.00%	3.00%	2.50%	12/31/2023					

Access California survey tool at: <https://cheiron.us/cheironHome/content/resources/databases/survey-of-california-public-retirement-systems>

Appendix – Meketa's CMAs



2025 Capital Market Assumptions

Meketa's Assumptions					Horizon Survey Assumptions				
Asset Class	Allocation	Standard Deviation	Arithmetic Returns		Asset Class	Allocation	Standard Deviation	Arithmetic Returns	
			10-Year	20-Year				10-Year	20-Year
Cash Equivalents	5.0%	1.0%	2.81%	3.11%	US Treasuries	9.0%	1.5%	3.60%	3.61%
Long-term Government Bonds	4.0%	12.0%	5.61%	6.34%	US Corp Bonds - Core	6.0%	6.2%	5.19%	5.28%
Investment Grade Bonds	6.0%	4.0%	4.97%	5.37%	TIPS	2.0%	6.0%	4.63%	4.61%
TIPS	2.0%	7.0%	4.51%	5.22%	US Corp Bonds - High Yield	2.0%	9.8%	6.44%	6.82%
High Yield Bonds	2.0%	11.0%	6.81%	7.63%	Private Debt	3.0%	11.8%	8.58%	8.71%
Private Debt	3.0%	15.0%	9.61%	10.06%	Non-US Debt - Emerging	3.0%	10.6%	6.57%	6.87%
Emerging Market Bonds (major)	1.5%	12.0%	7.50%	7.73%	US Equity - Large Cap	25.0%	16.5%	7.67%	8.29%
Emerging Market Bonds (local)	1.5%	12.0%	7.10%	7.33%	Non-US Equity - Developed	12.0%	18.2%	8.58%	8.96%
US Equity	25.0%	17.0%	7.59%	9.63%	Non-US Equity - Emerging	12.0%	23.4%	9.96%	10.63%
Developed Market Equity (non-US)	12.0%	18.0%	8.52%	10.07%	Private Equity	12.0%	22.2%	11.51%	12.14%
Emerging Market Equity	12.0%	22.0%	9.04%	10.72%	Real Estate	8.0%	16.2%	7.52%	7.59%
Buyouts	8.0%	24.0%	11.74%	13.24%	Infrastructure	3.0%	14.9%	8.30%	8.65%
Venture Capital	4.0%	34.0%	14.67%	16.34%	Hedge Funds	3.0%	8.0%	6.25%	6.57%
Core Private Real Estate	5.0%	12.0%	6.10%	8.03%	Inflation			2.39%	2.41%
Value-Added Real Estate	2.0%	20.0%	10.00%	11.27%					
Opportunistic Real Estate	1.0%	26.0%	12.11%	13.62%					
Natural Resources (Private)	2.0%	22.0%	9.34%	11.21%					
Infrastructure (Core Private)	1.0%	14.0%	7.01%	8.85%					
Hedge Funds	3.0%	7.0%	4.41%	6.22%					
Inflation			2.30%	2.70%					