

# Whither Goest CalPERS?

CSMFO Annual Conference

Richard Costigan, Board Member

Marcie Frost, CEO

Scott Terando, Chief Actuary

February 8, 2017

A photograph of a modern building's exterior, featuring a prominent glass and steel structure. The building has a complex, multi-level design with a grid of steel beams and large glass panels. The sky is a clear, pale blue. A white rectangular frame is superimposed over the center of the image, containing the word "WELCOME" in a clean, white, sans-serif font.

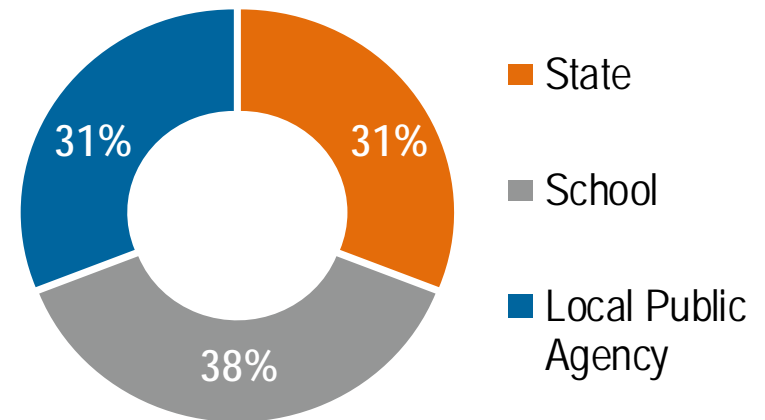
WELCOME

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# About CalPERS

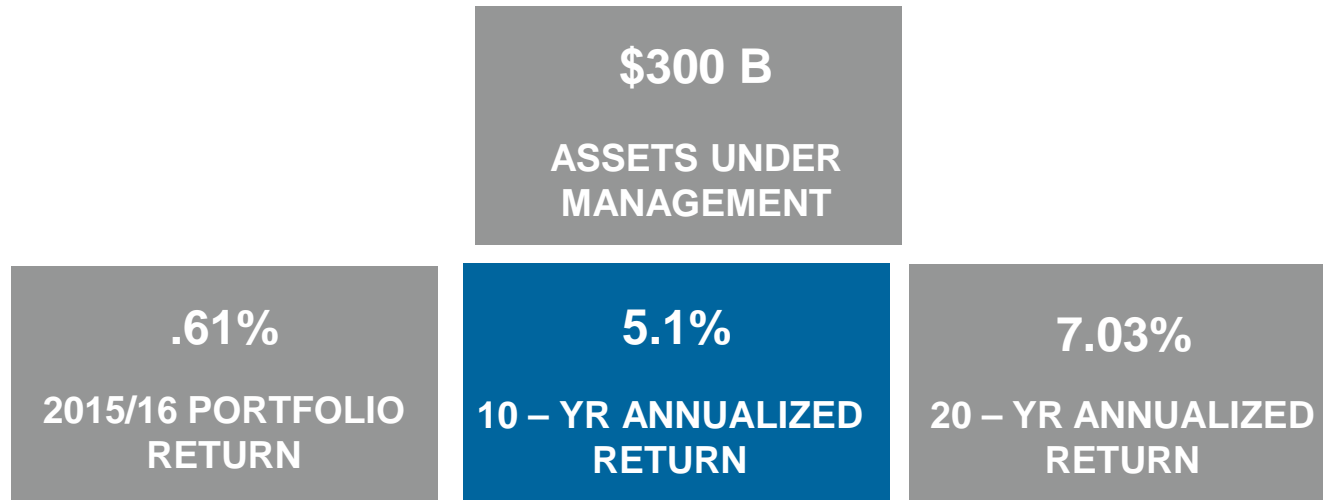
- More than 3,900 Actuarial Valuations
- 1.8 Million Members
- \$20.5 Billion Annual Retirement Benefits

Total Membership by Category



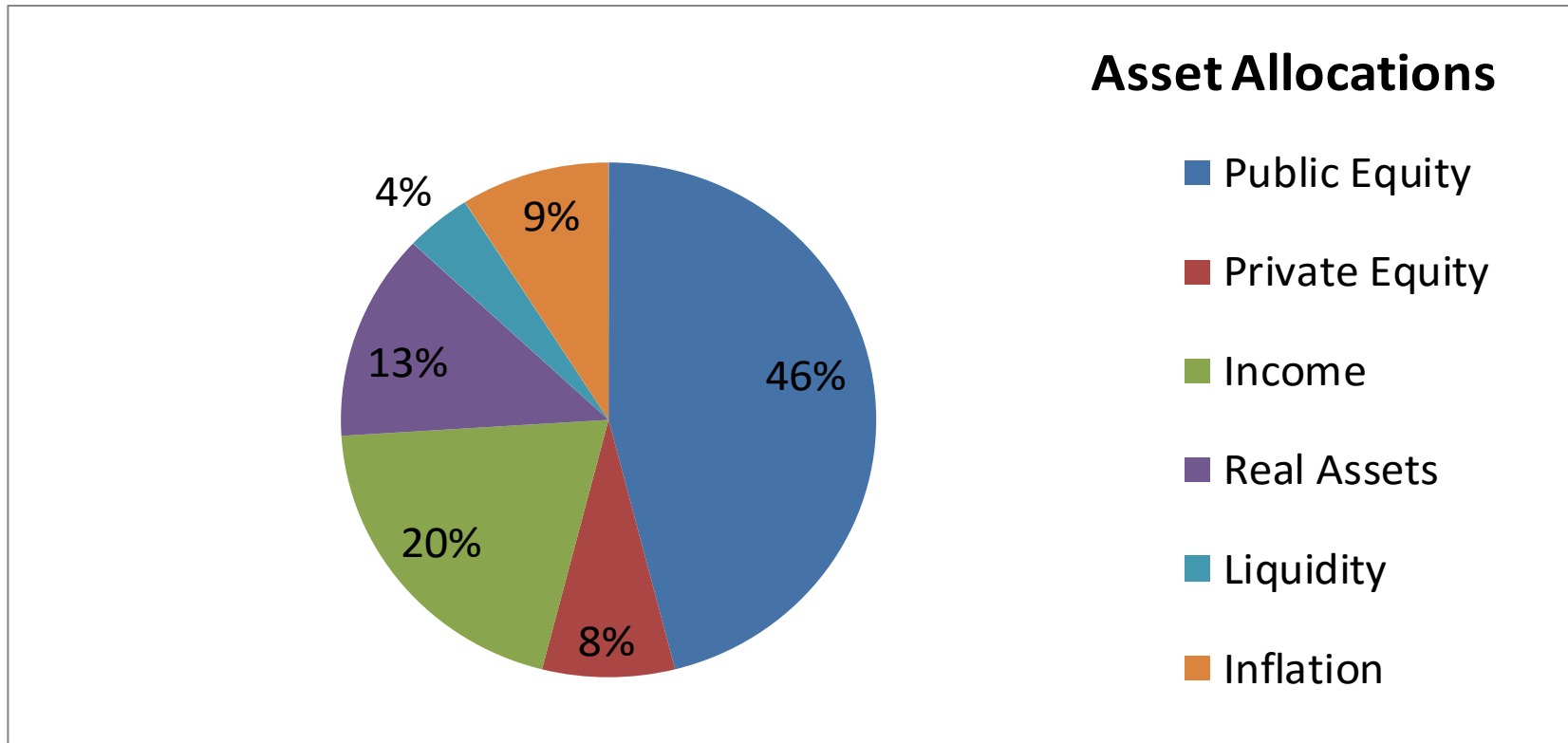
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# Financial Highlights



# CalPERS Investments

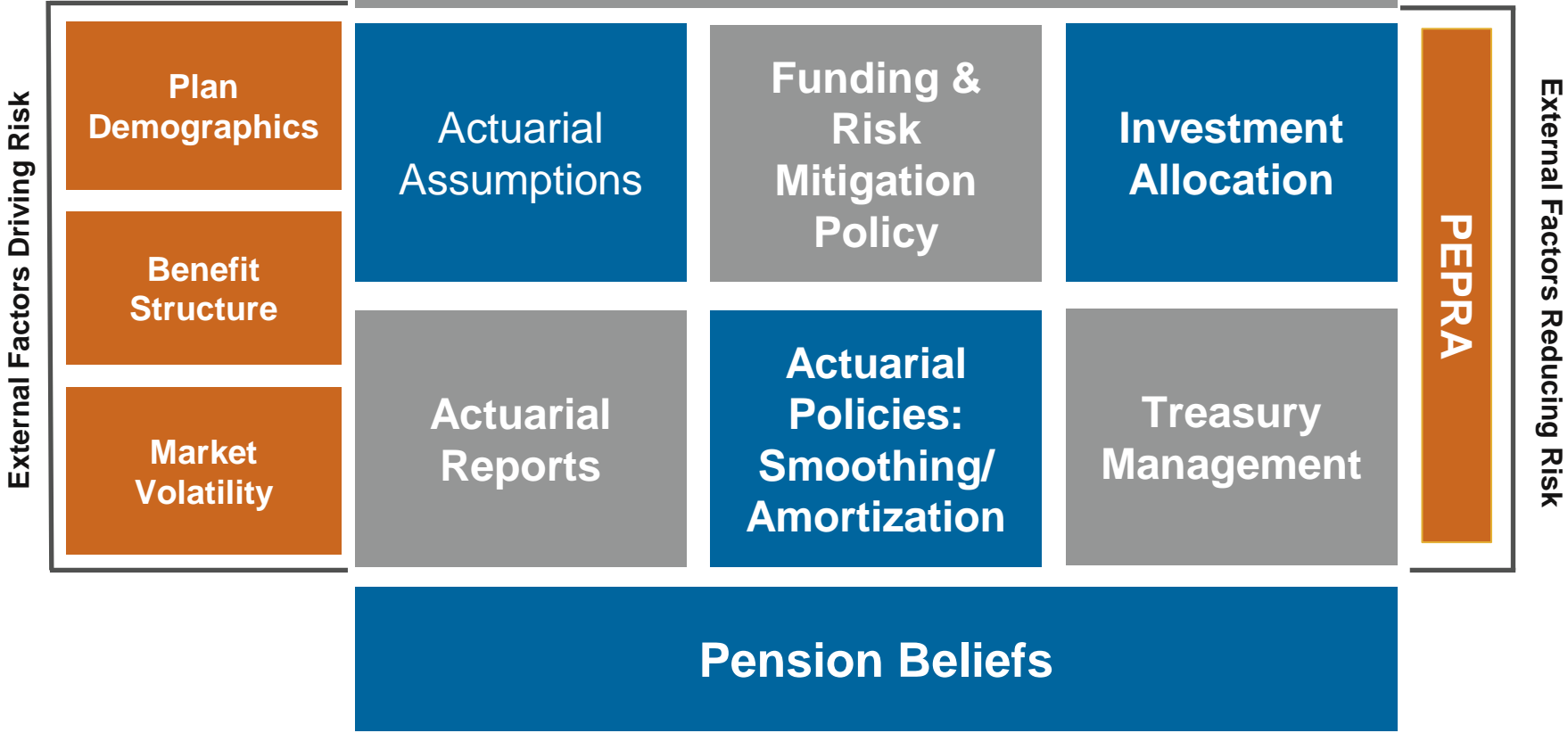
Asset Allocations, as of September 2016



A photograph of a modern building with a glass facade, featuring a prominent glass tower and a covered walkway with a metal grid ceiling. The scene is set against a clear blue sky.

# ASSET LIABILITY MANAGEMENT

# Asset Liability Management



A photograph of a modern glass skyscraper with a white rectangular frame overlaid on the image. The text "WHAT IS DRIVING RISK?" is centered within the frame.

# WHAT IS DRIVING RISK?



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# Factors Driving Funding Risk



## Plan Demographics

- Plans are maturing
- Public employees are living longer
- Increase cash outflows



## Benefit Structure

- Asset and liability to payroll ratios increase with higher benefit formulas



## Market Volatility

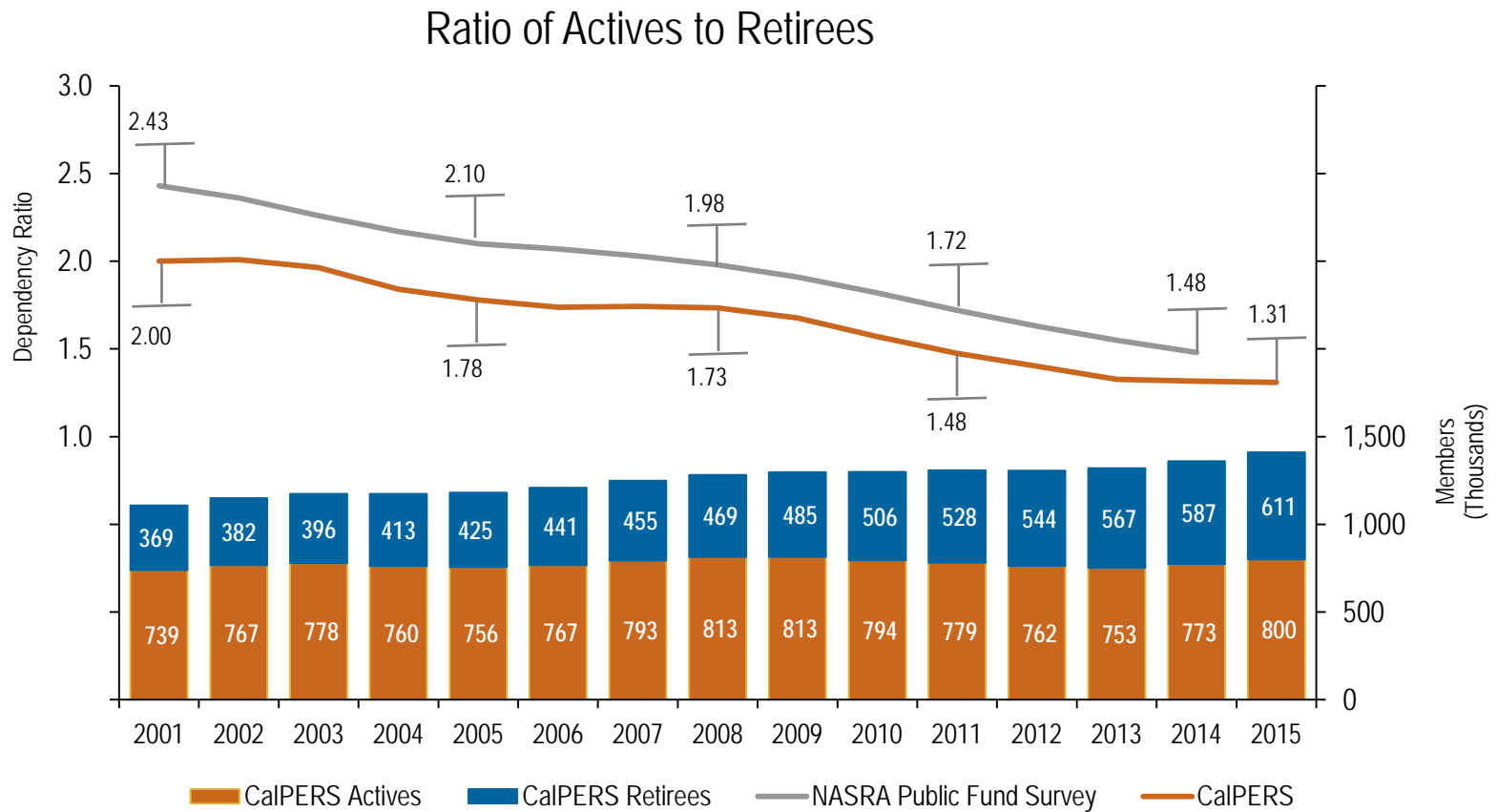
- Current risk return includes significant volatility
- Market return expectations

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# PLAN DEMOGRAPHICS

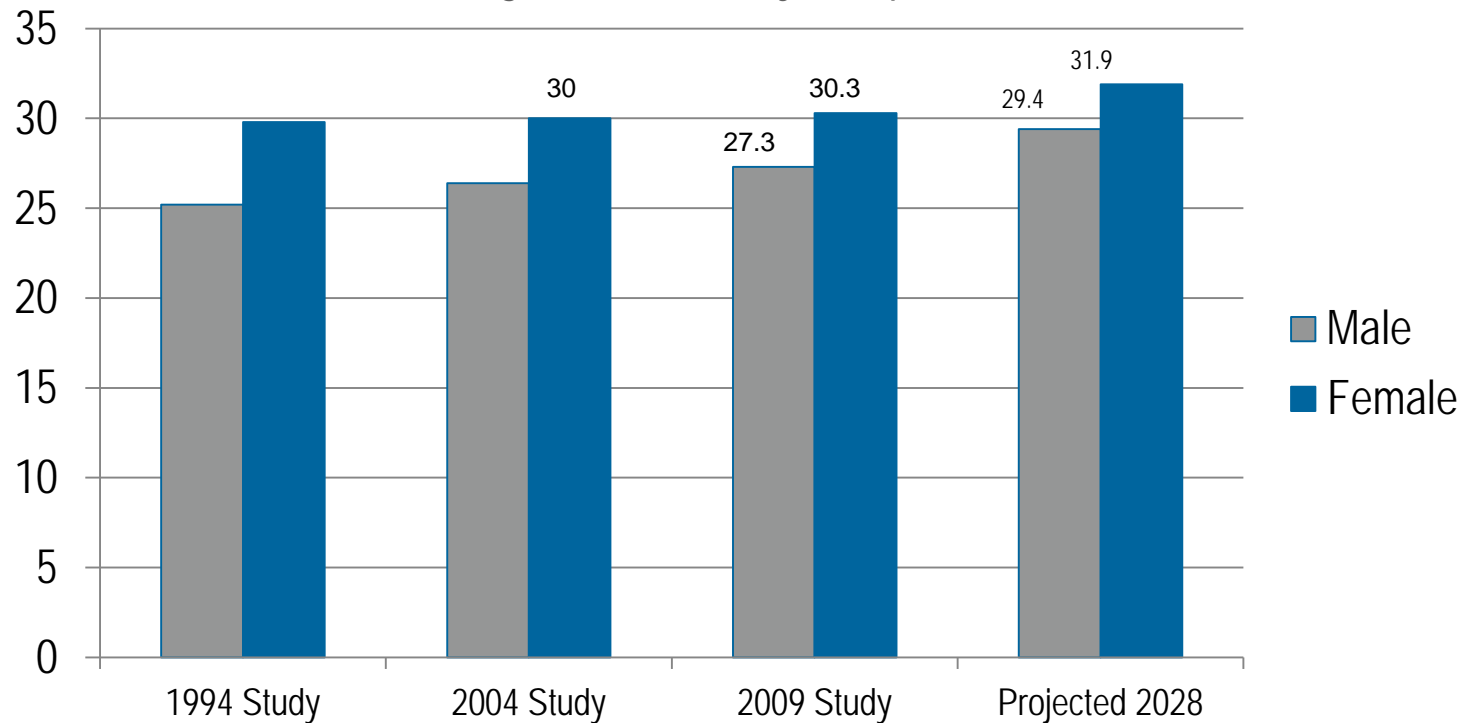


# Pension Funds are Maturing



# Life Expectancy is Increasing

Male & Female Life Expectancy at Age 55 for Healthy Recipients



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# Plan Demographics Mitigation

- Actuarial Experience Study
- Change in Actuarial Assumptions
- Funding Level & Risk Report



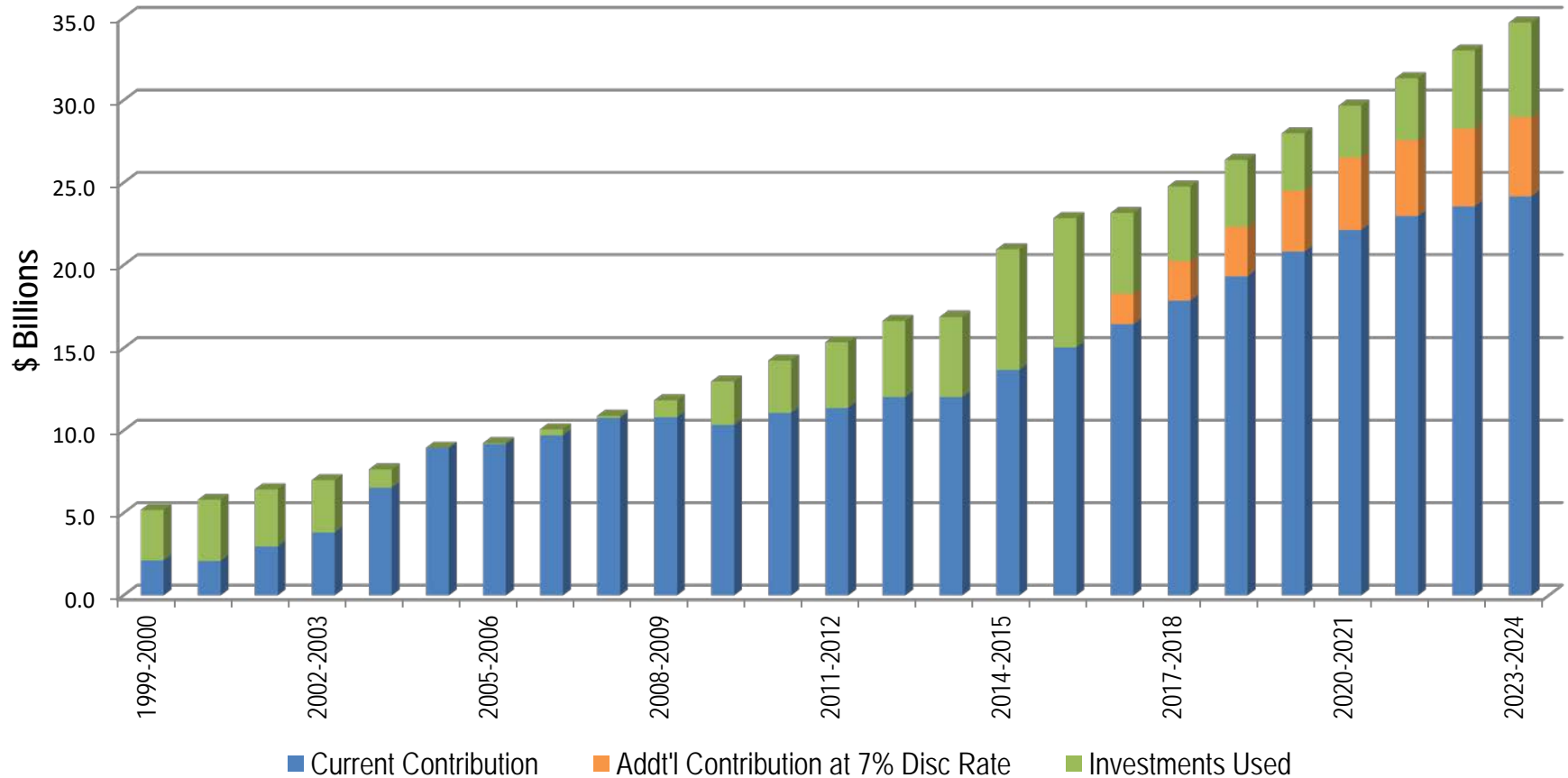
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# BENEFIT STRUCTURE



# Contribution & Benefit Payments



**Historical & Projected PERF Contributions & Investments for Benefit Payments**





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# Life Expectancy & Average Retirement Pension Benefits

June 30, 2007

 - 80 yrs  
 - 84 yrs

June 30, 2015

 - 82 yrs  
 - 85 yrs

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\$1,881 

\$2,627 



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# Benefit Structure Mitigation

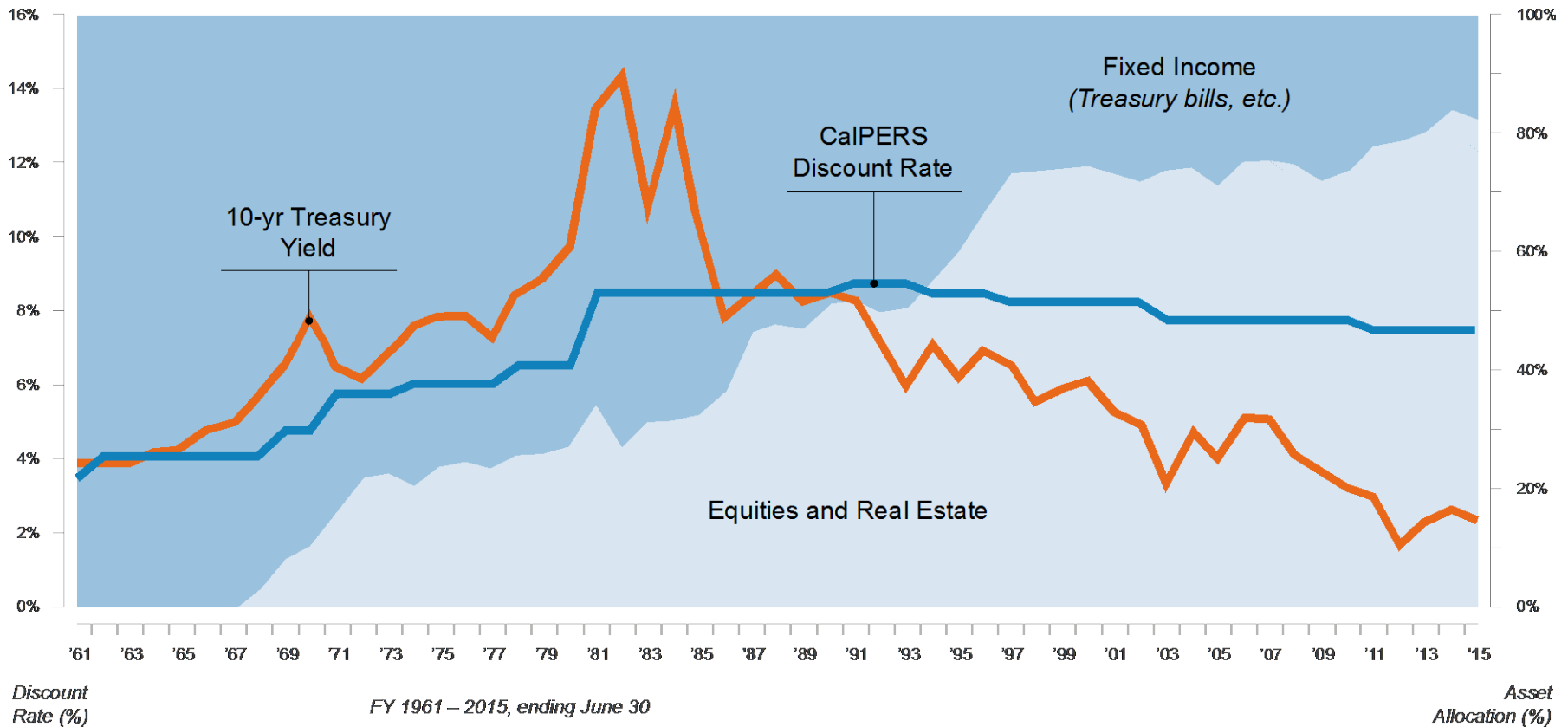
- Funding Level & Risk Report
- New actuarial policies
- Smoothing
- Amortization
- Treasury Management

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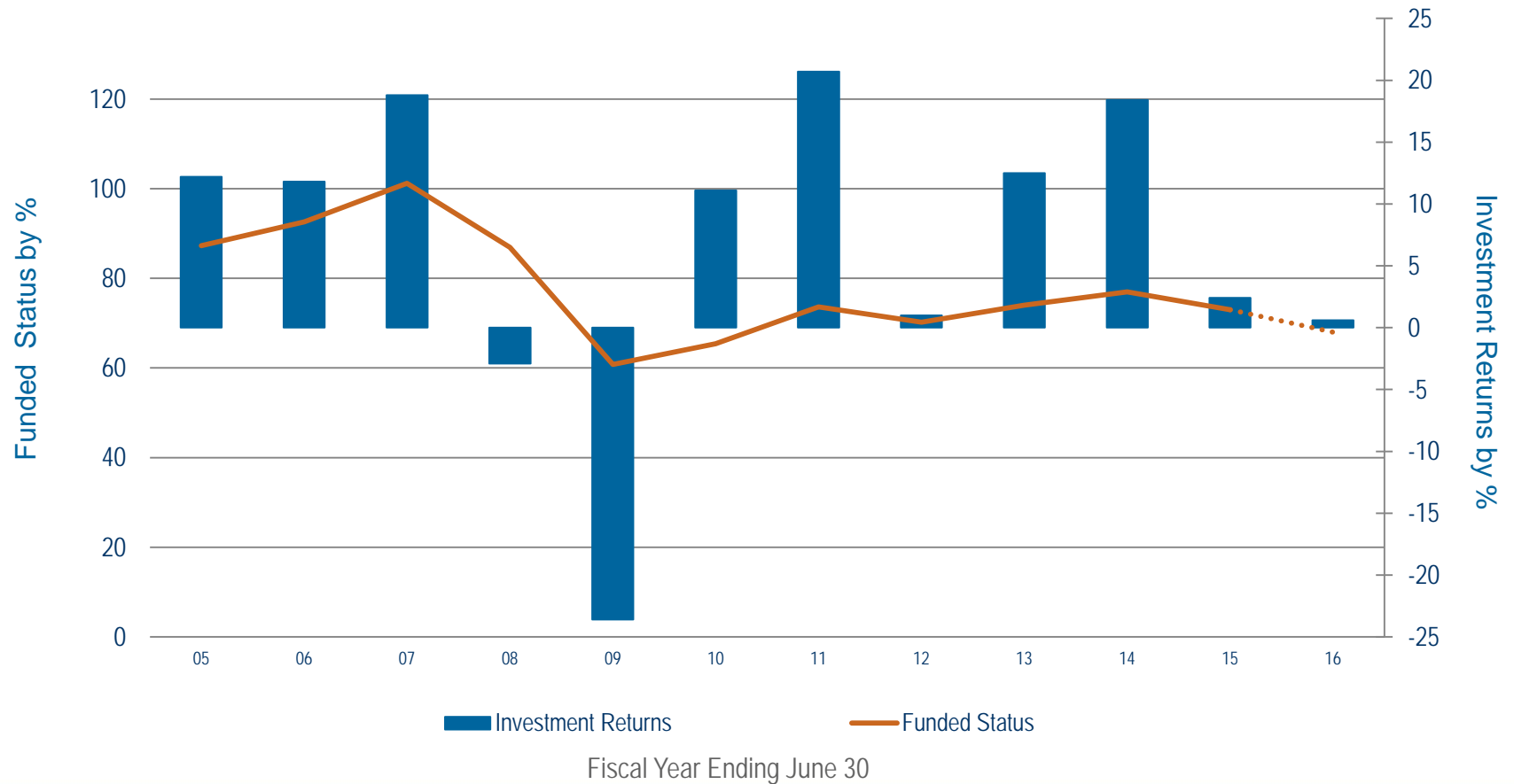
# MARKET VOLATILITY



# Lower Interest Rates = More Risk and Lower Returns for All Investors



# Funded Status & Investment Returns



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# Market Volatility Mitigation

- Actuarial Valuation Report
- Investment Allocation
- New Actuarial Policies: Smoothing/ Amortization
- Funding Risk Mitigation Policy

A photograph of a modern building with a glass facade and a wooden slat canopy. The text is overlaid on a white-bordered box in the center.

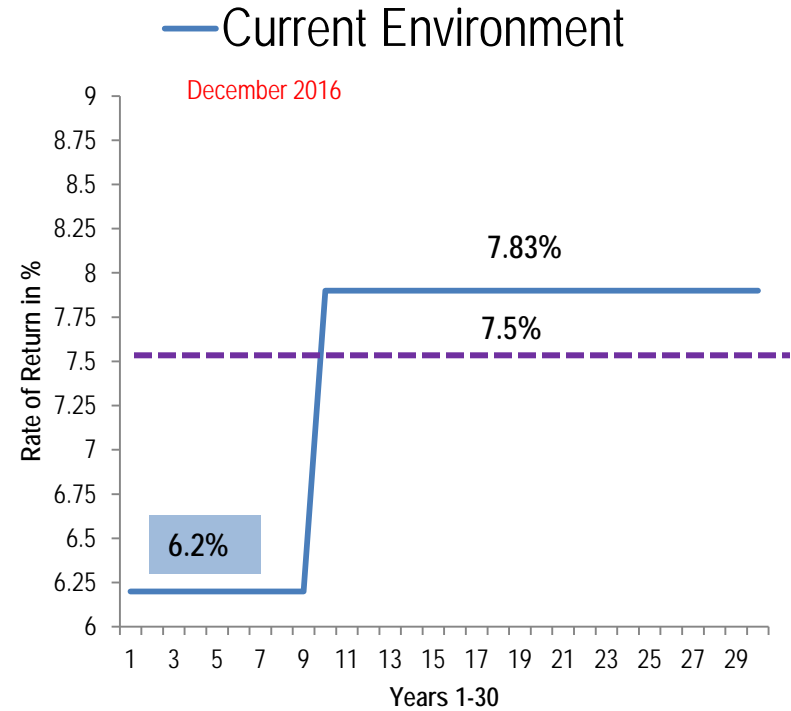
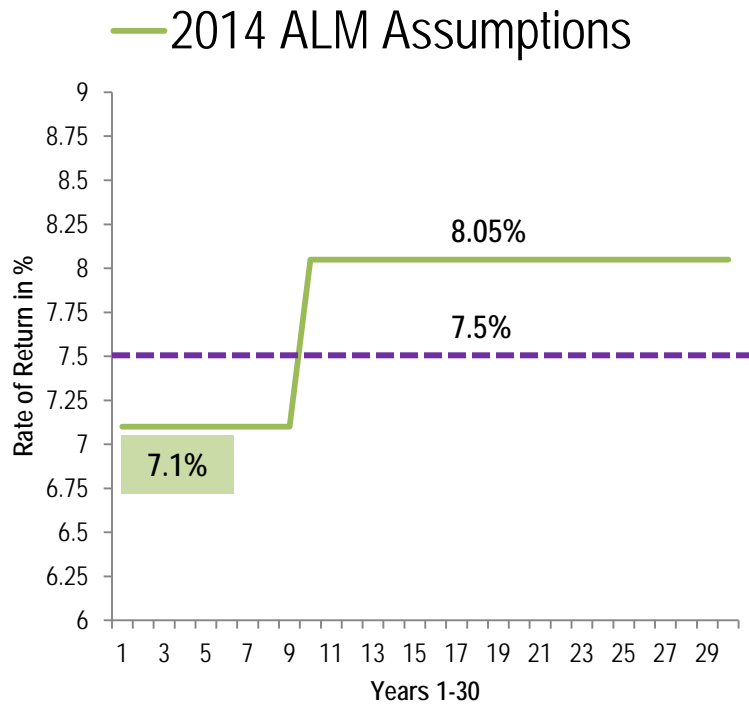
# WHY A DISCOUNT RATE CHANGE NOW?

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# Why a Discount Rate Change Now?

- ALM cycle requires us to recognize changing conditions
- Market conditions have changed
- Seeing more uncertainty in the forecast
- Next 10 years are consequential
- To close the cash flow funding gap
- Risks in system continue to grow

# Change in Market Conditions Led to this Action

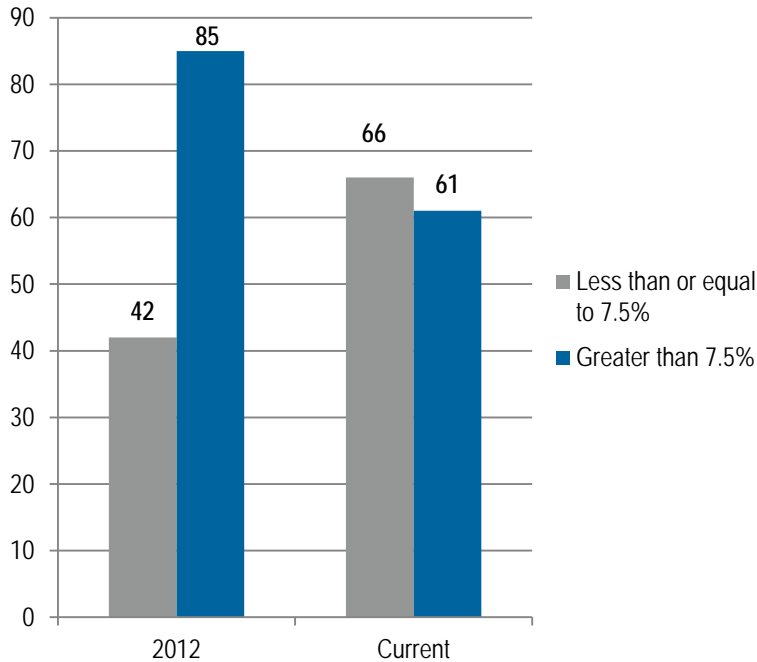


--- Assumed rate of return



# Discount Rates are Trending Downward

Assumed Rates of Return Above & Below 7.5%



Since 2012  
**59**  
↓  
Assumed Rate  
of Return

**8.0%**  
2012 Median  
Assumed Rate  
Of Return

**7.5%**  
Current Median  
Assumed Rate  
of Return


Based on 2016 NASRA Survey

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# Other Driving Factors

- Market conditions have changed
- Seeing more uncertainty in the forecast
- Next 10 years are consequential
- To close the cash flow funding gap
- Risks in system continue to grow



A photograph of a modern building with a glass facade and a wooden pergola structure. The text is overlaid on the image.

WHAT DID THE BOARD ADOPT  
AND HOW WILL IT BE  
IMPLEMENTED?

# Approved Discount Rate Phase-In

Valuation Date	FY Required Contribution	Discount Rate
June 30, 2016	2018-19	7.375%
June 30, 2017	2019-20	7.25%
June 30, 2018	2020-21	7.00%

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# Timing of Change to Annual Valuations

Employers	Contribution Rate Change
State	17/18
Schools	18/19
Public Agencies	18/19

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# Public Agency - Employer Contribution Increases – Misc. Plan

FY Impact	Normal Cost	UAL Payments
2018-19	0.25% - 0.75%	2% - 3%
2022-23	1.0% - 3.0%	20% - 25%

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# Public Agency - Employer Contribution Increases – Safety Plan

FY Impact	Normal Cost	UAL Payments
2018-19	0.50% - 1.25%	2% - 3%
2022-23	2.0% - 5.0%	20% - 25%

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# Benefits of Reducing the Discount Rate

- Strengthens long-term sustainability of the fund to pay promised benefits
- Reduces negative cash flow; additional contributions will help to offset growing pension payments
- Reduces the long-term chances of falling below a 50% or 60% funded status that would weaken the sustainability of the fund
- Reduces the risk of contribution increases in the future from volatile investment markets



A photograph of a modern building's exterior, featuring a prominent glass and steel structure. The building has a complex, multi-level design with a grid of steel beams and large glass panels. The sky is a clear, pale blue. A white rectangular frame is superimposed over the center of the image, containing the text "LOOKING AHEAD" in a clean, white, sans-serif font.

# LOOKING AHEAD

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# Next Steps

- Public Agency valuations distributed in July 2017
- Begin Asset Liability Management cycle of reviews
  - Asset allocation
  - Capital market assumptions
  - Experience study
- Reconsider discount rate in February 2018

# QUESTIONS

Call (888) CalPERS or (888) 225-7377

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