

Presentation to the Retirement Board  
City and County of San Francisco  
Employees' Retirement System

Projections  
Stress Testing Contribution Rates  
Based on the July 1, 2009 Actuarial Valuation



February 9, 2010



# Topics

- Introduction
- Scenarios for Projections
- Projections
  - Baseline – Budget projection provided to the Controller
  - 1-Year Shock
  - 5-Year Moderate
  - 5-Year Significant
- Closing Remarks



# Introduction

- Baseline projection provided to the Controller represents our median projection, but there is a significant range of possibilities
- Stress test projections are intended to provide some sense of the range of potential contribution rates in the short to medium term
  - Only reflects the impact of different investment returns. Other factors can also affect contribution rates, including changes in plan provisions from new Propositions.
  - Actual returns will be different than any of the scenarios projected and may produce contribution rates outside the bounds of these projections.



# Scenarios for Projections

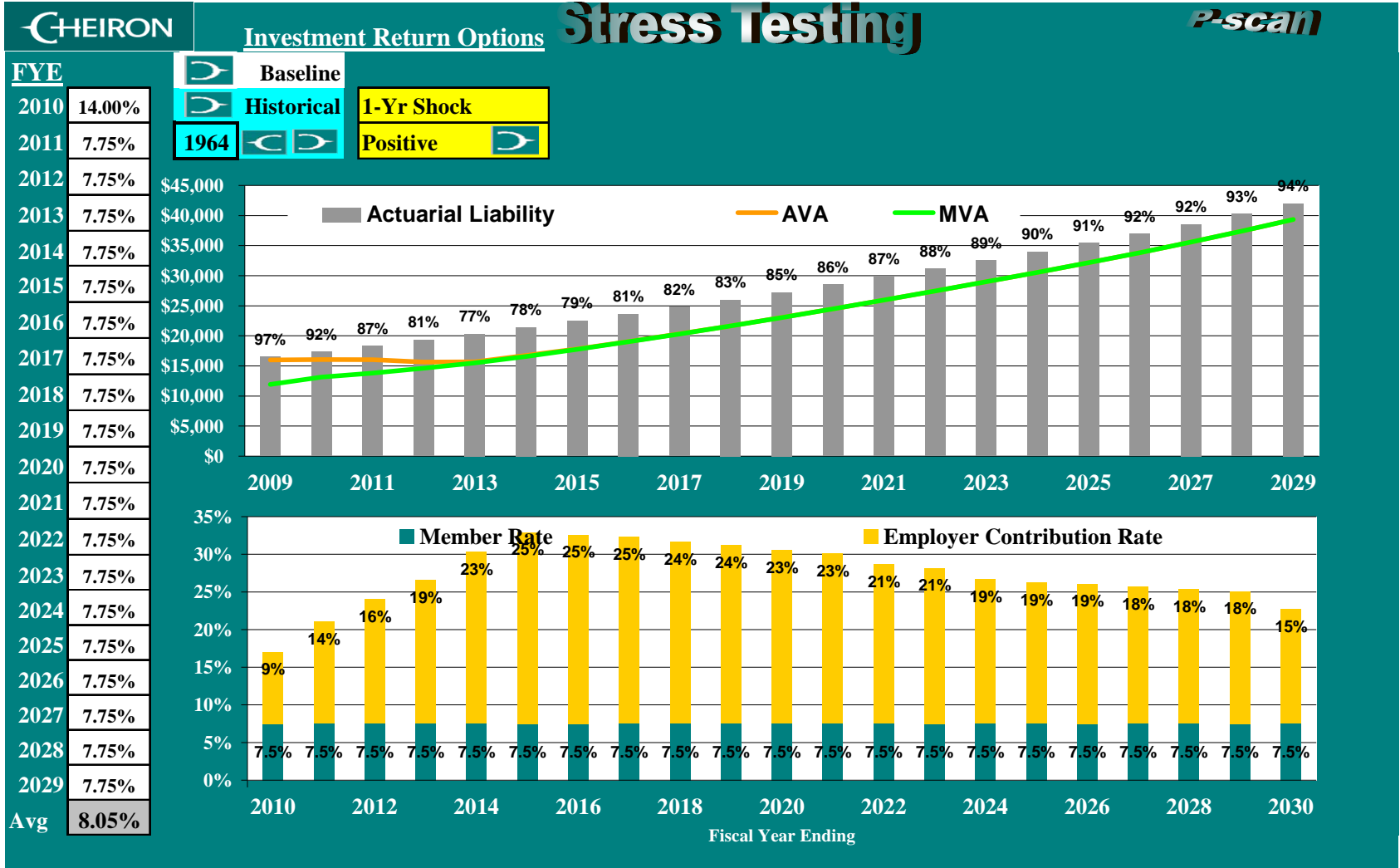
- Theoretical scenarios provide controlled method to test sensitivity to specific investment outcomes
- Not meant to be realistic
- Scenarios based on theoretical 1- and 5-year distributions of returns from Experience Study Table II-5

Expected Distribution of Average Annual Returns					
Percentile	Years				
	1	5	10	20	30
5%	-9.6%	0.0%	2.2%	3.8%	4.5%
25%	0.6%	4.5%	5.5%	6.1%	6.4%
50%	7.7%	7.7%	7.7%	7.7%	7.7%
75%	14.8%	10.9%	9.9%	9.3%	9.0%
95%	25.0%	15.4%	13.2%	11.6%	10.9%

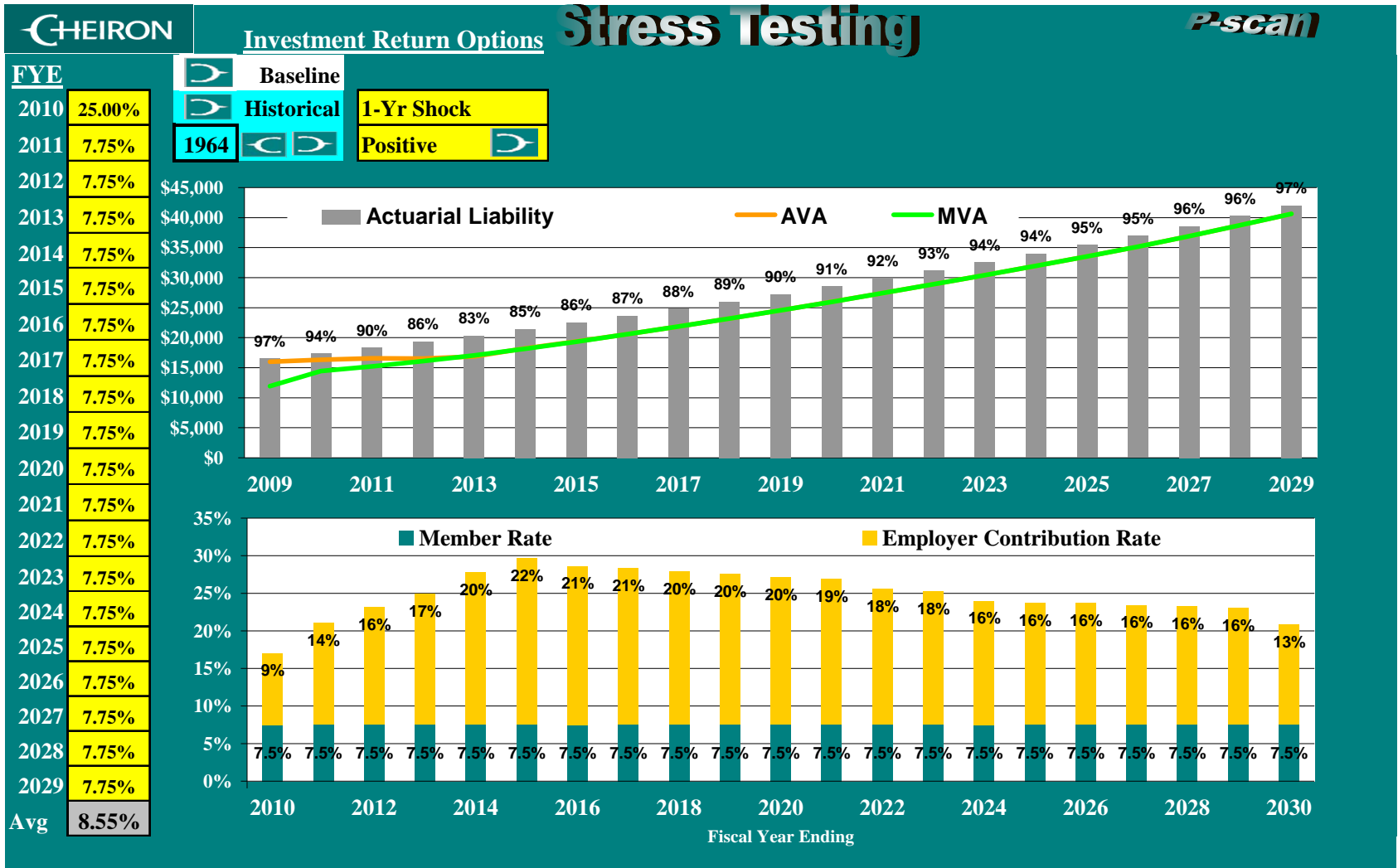
Theoretical Scenarios					
1-Yr Shock		5-Yr Moderate		5-Yr Significant	
Neg	Pos	Neg	Pos	Neg	Pos
-9.60%	25.00%	4.50%	10.90%	0.00%	15.40%
7.75%	7.75%	4.50%	10.90%	0.00%	15.40%
7.75%	7.75%	4.50%	10.90%	0.00%	15.40%
7.75%	7.75%	4.50%	10.90%	0.00%	15.40%
7.75%	7.75%	4.50%	10.90%	0.00%	15.40%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
7.75%	7.75%	7.75%	7.75%	7.75%	7.75%



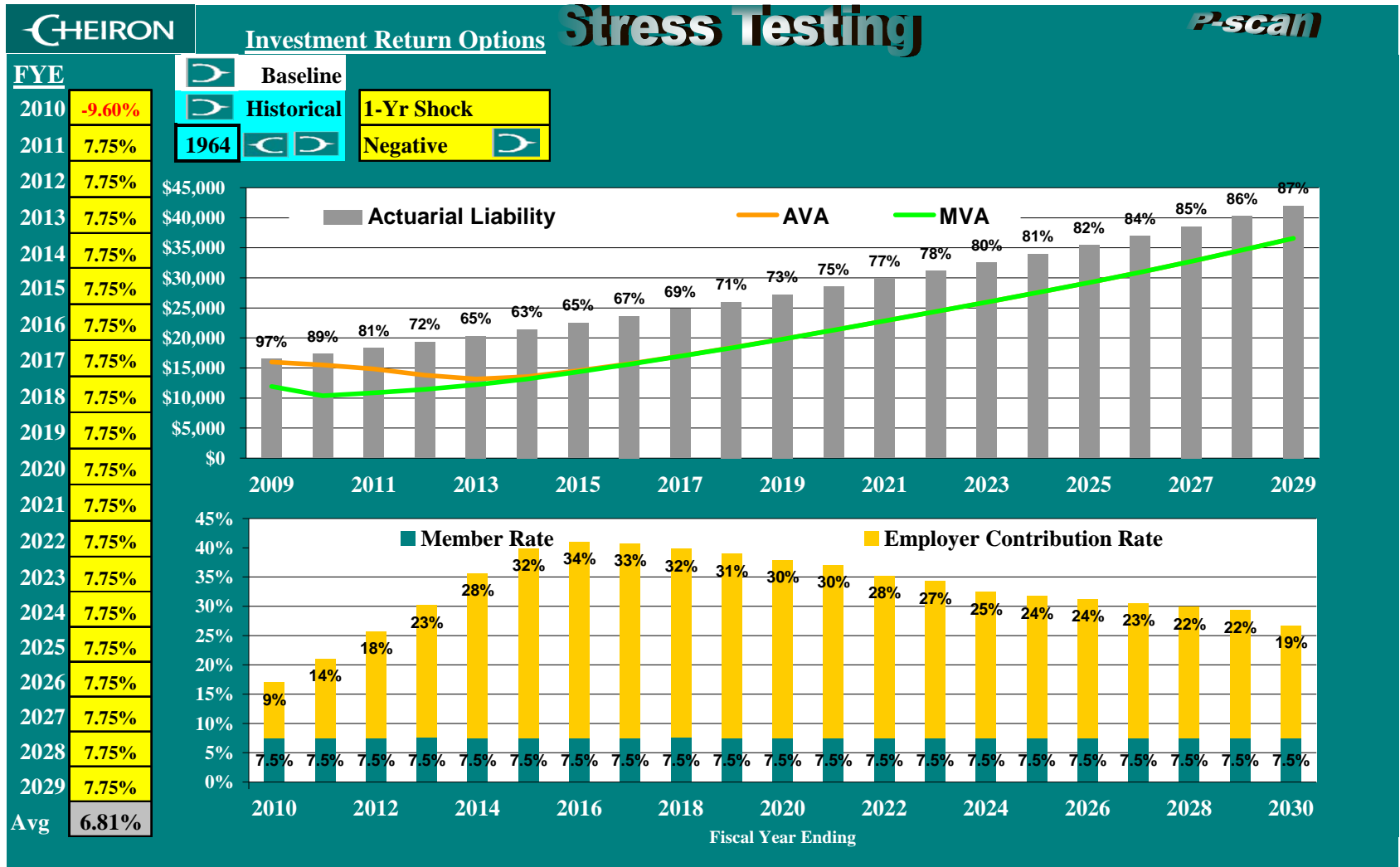
# Projections – Baseline



# Projections – Positive 1-Year Shock

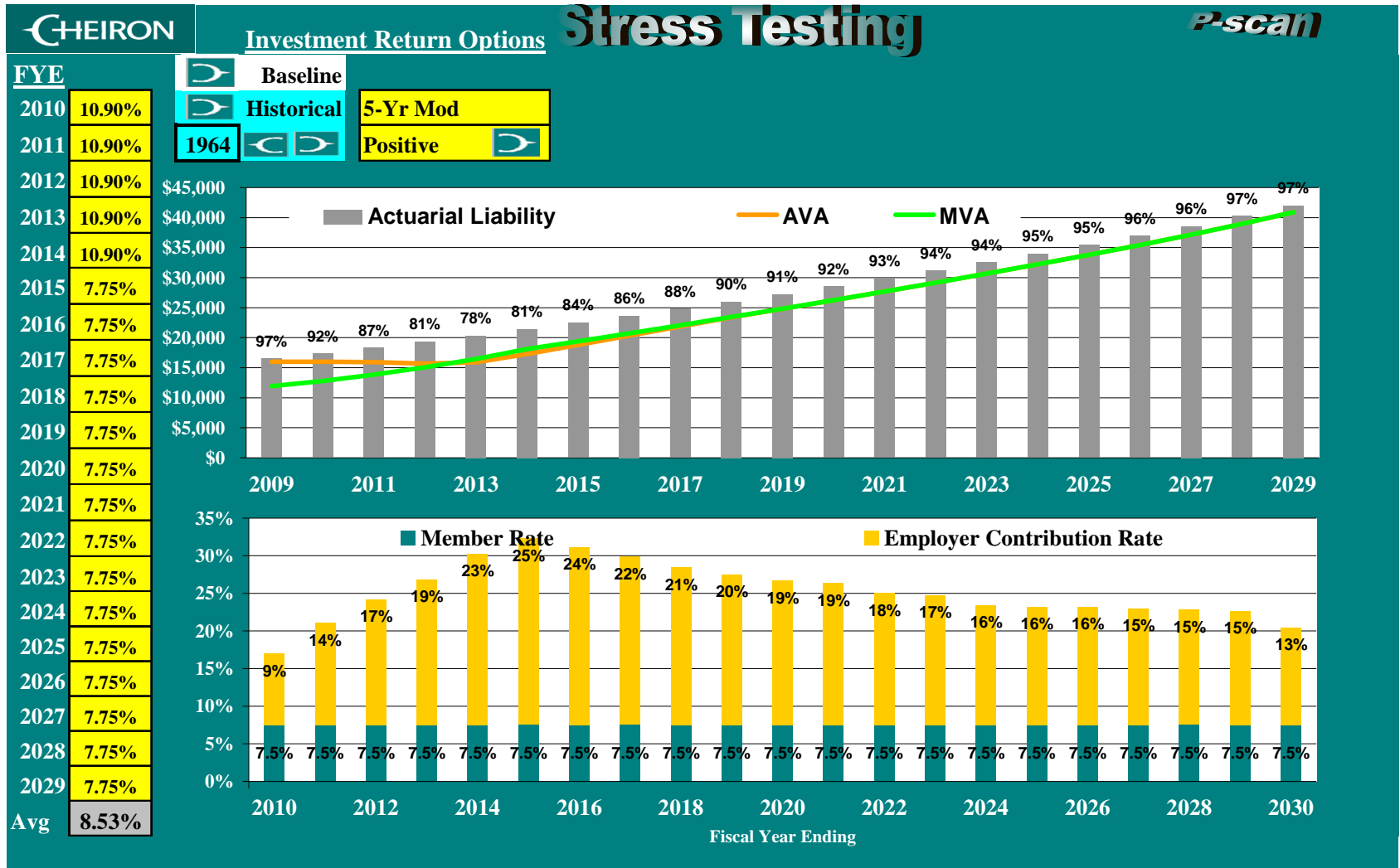


# Projections – Negative 1-Year Shock





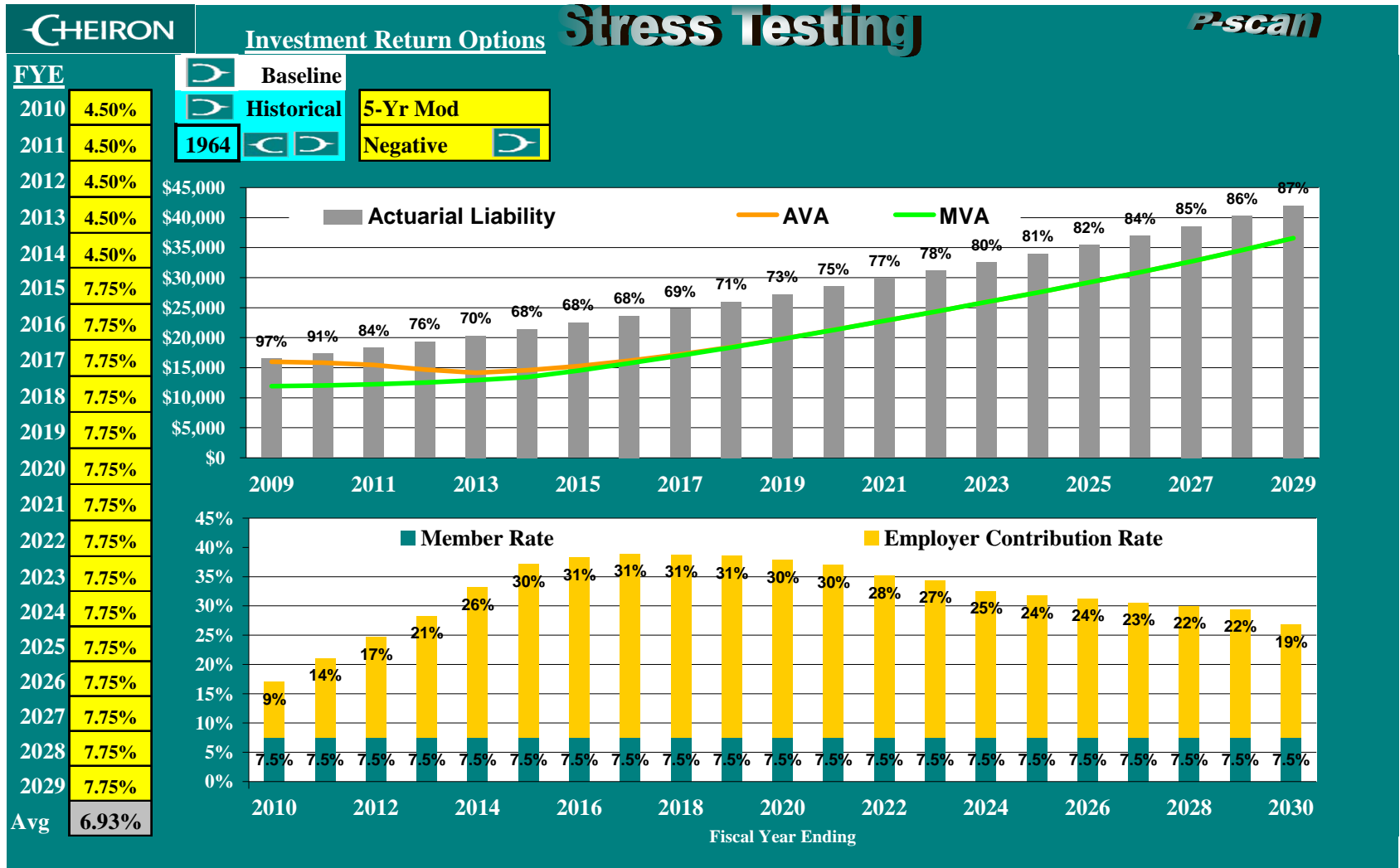
# Projections – Positive 5-Year Moderate





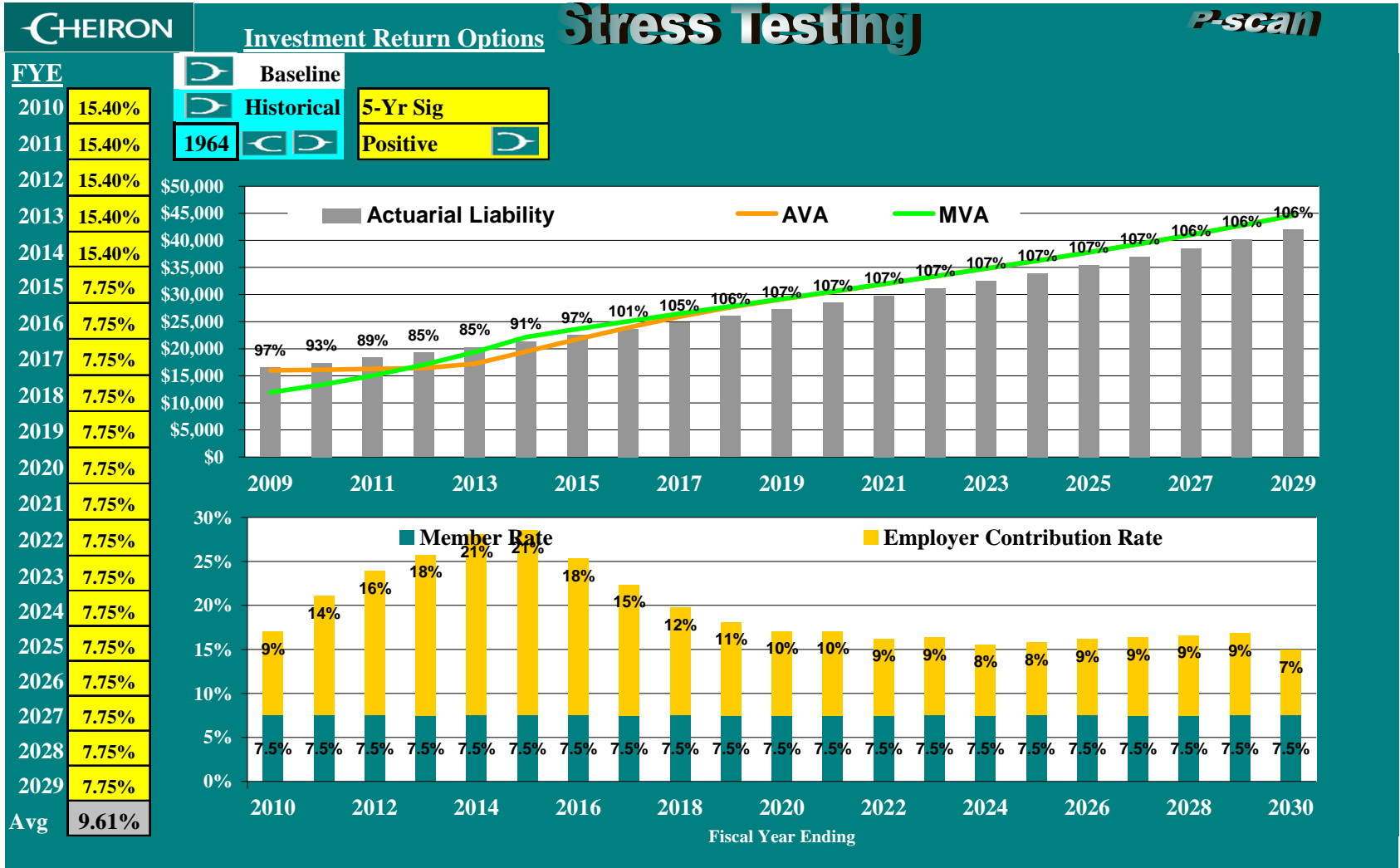


# Projections – Negative 5-Year Moderate



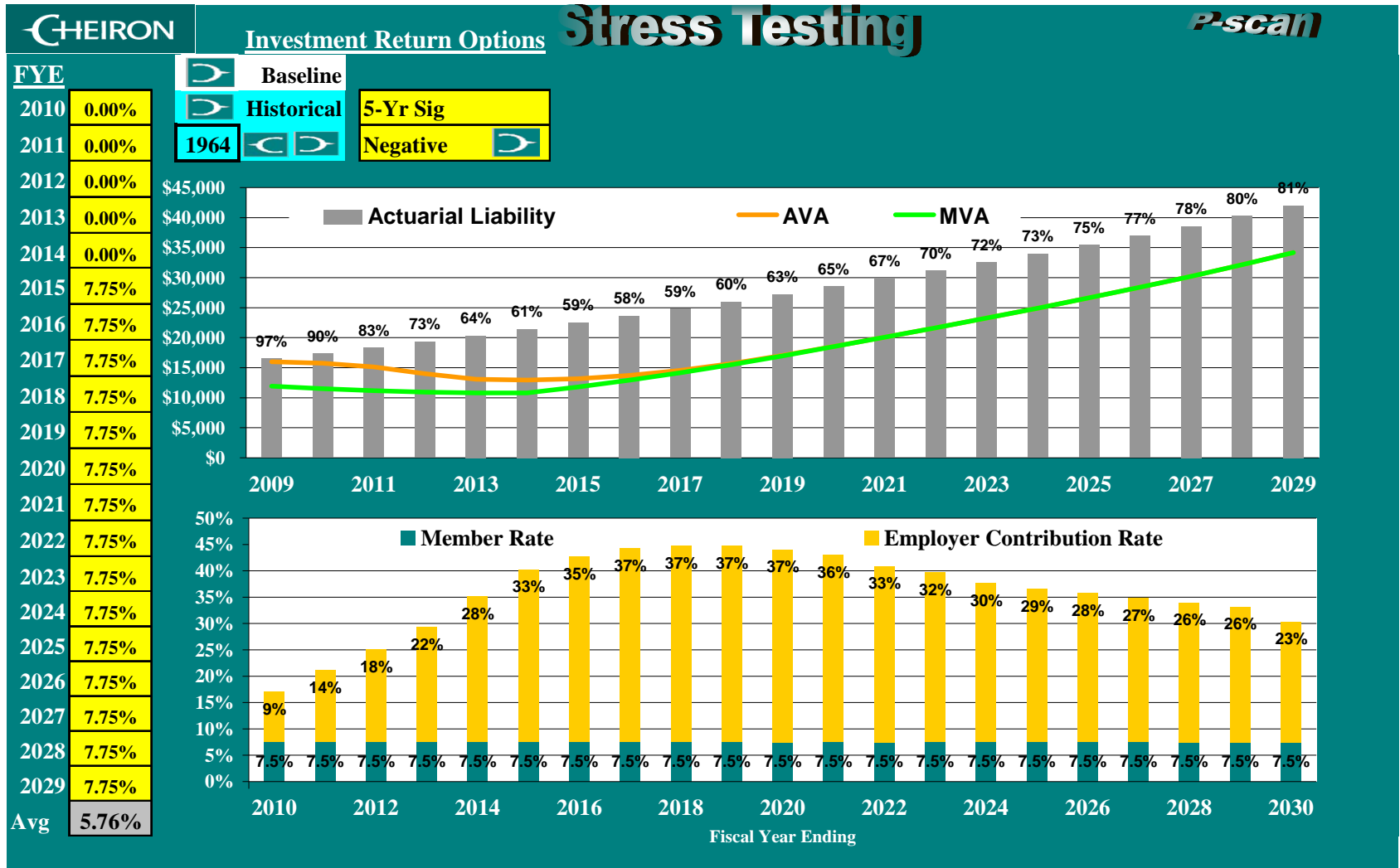


# Projections – Positive 5-Year Significant





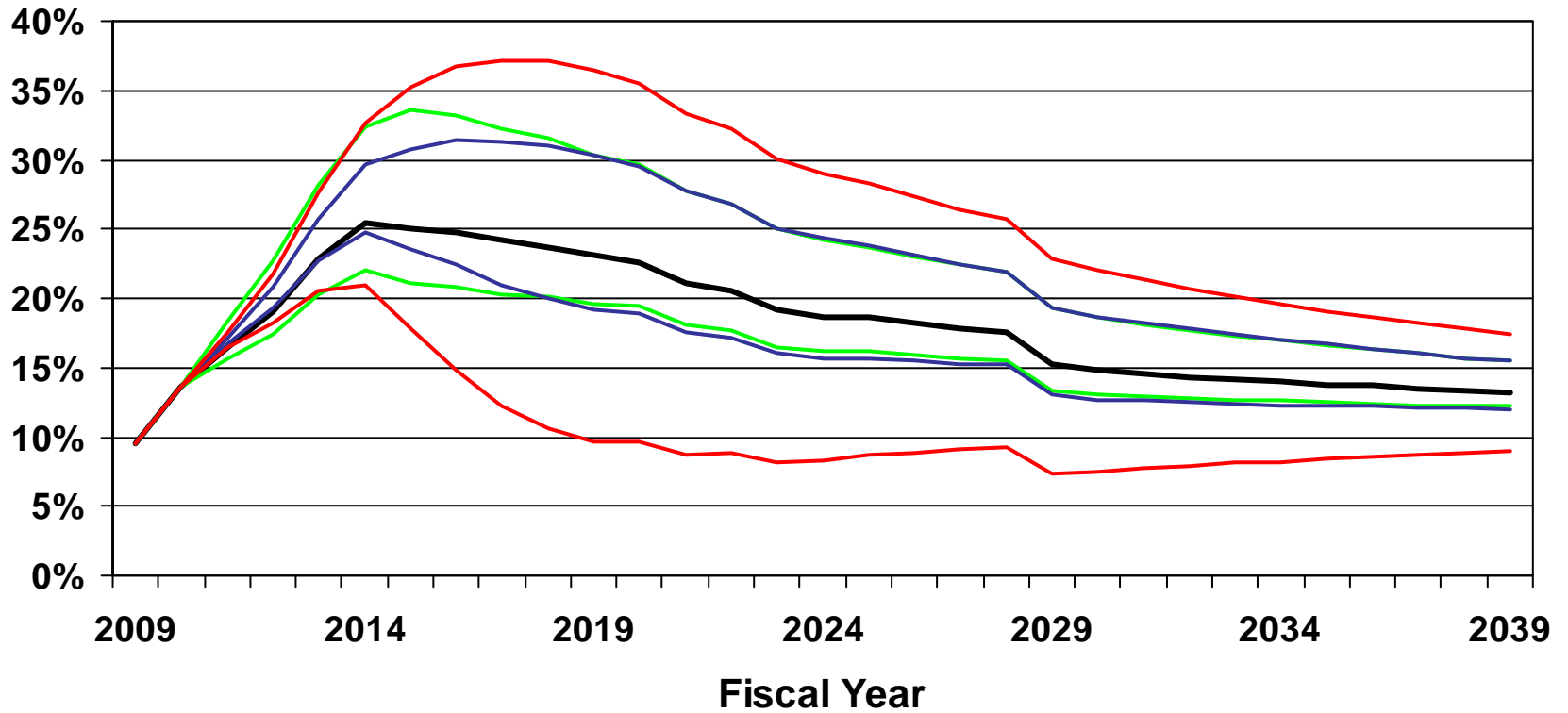
# Projections – Negative 5-Year Significant





# Projections – Summary

## Employer Contribution Rates



— Baseline — 1-Yr Shock — 5-Yr Moderate — 5-Yr Significant



# Closing Remarks

- Due to the unprecedented investment losses in the last fiscal year, contribution rates are expected to increase in the short-term under most economic scenarios.
- The expected pattern of contributions is determined by the actuarial methods, including the asset smoothing and amortization methods.
- The actual pattern of contributions will depend on the actuarial methods, actual plan experience, and any changes to benefit provisions resulting from future Propositions.



# Next Steps

- February Board Meeting – Employer Contribution Rate Projections
- Summer 2010 – Demographic Experience Study
- November Board Meeting – Economic Experience Study