



Teachers' and State Employees' Retirement Systems of North Carolina

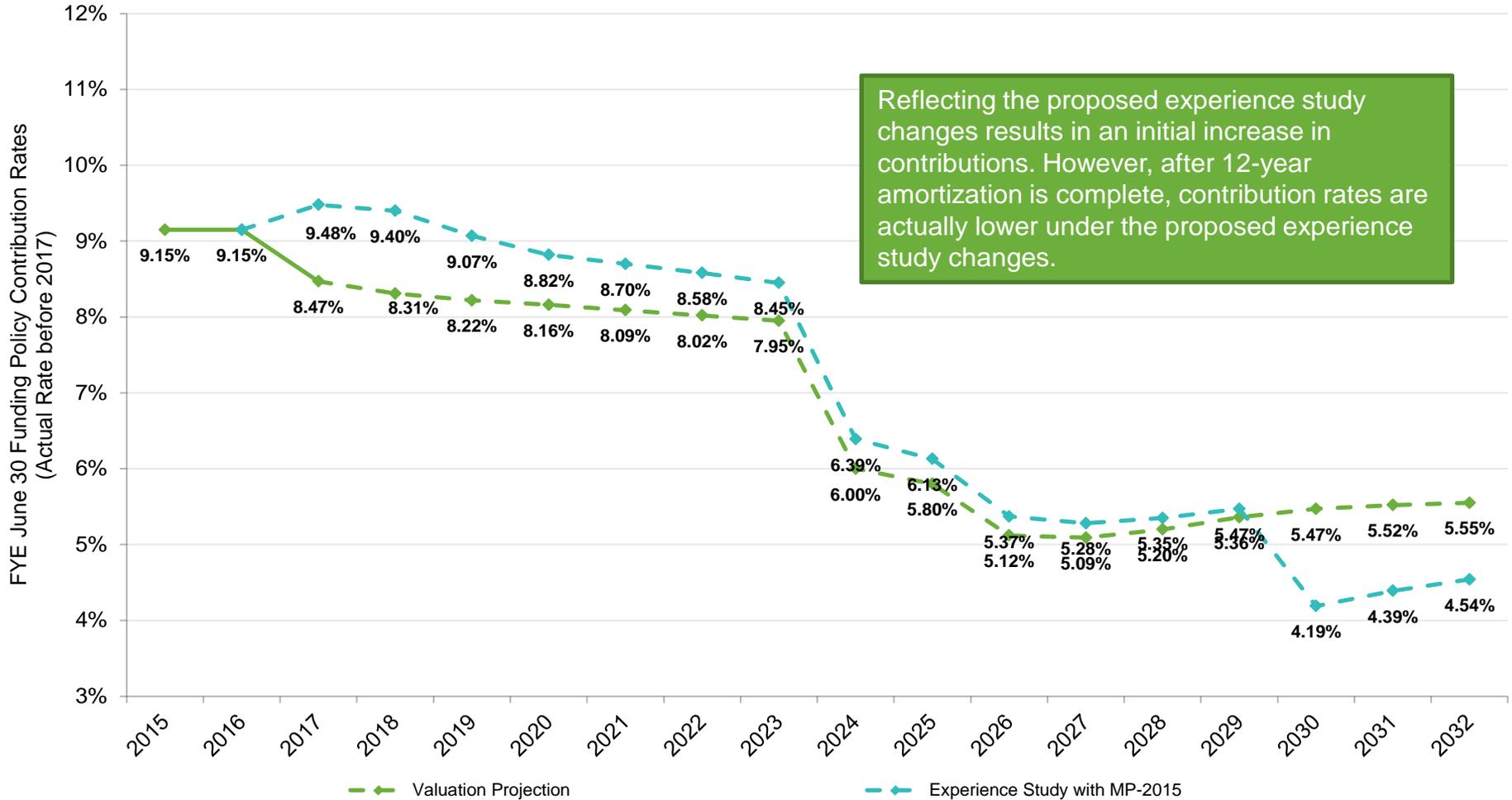
Annual Required Contribution (ARC) Projections for State System

January 21, 2016

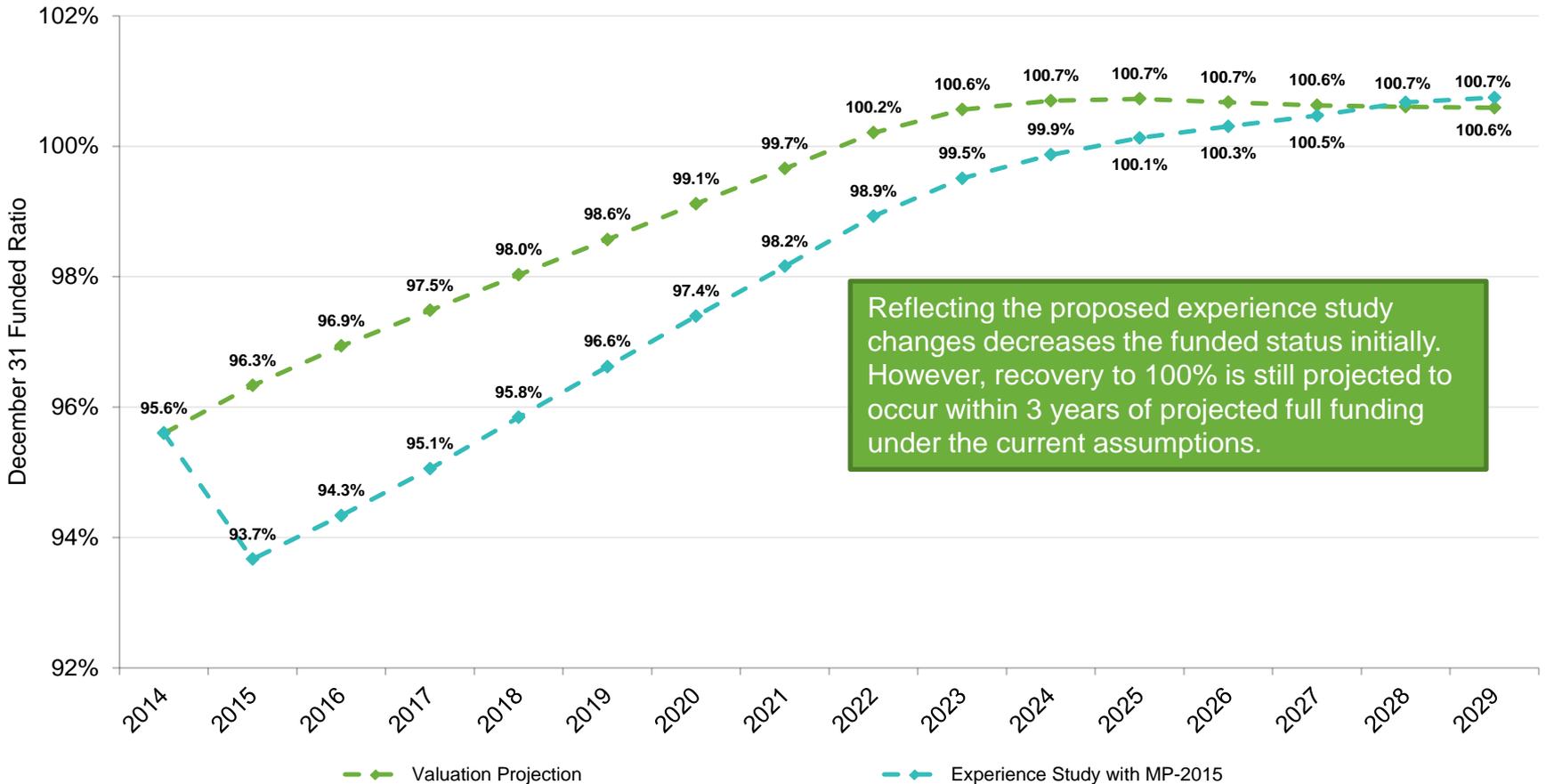
Projections of Employer Contribution Requirements and Funded Status

- Projections of employer contribution requirements and funded status into the future can be helpful planning tools for stakeholders.
- Projections of the actuarial valuation are known as deterministic projections. Deterministic projections are based on one scenario in the future.
- The following projection (“Experience Study Projection”) is based on:
 - December 31, 2014 valuation results of TSERS, except that proposed economic and demographic assumptions have been reflected based on the experience study presented in October 2015 as modified to reflect the latest mortality projection scale (MP-2015)
 - Valuation interest rate and assumed asset return of 7.25% for all years
 - No cost-of-living adjustments granted
 - Assumes future pay increases based on long-term valuation
 - Assumes active headcount will remain level in future years
- For comparison purposes, we have also included the “Baseline Projection” for TSERS presented in October 2015 based on the December 31, 2014 valuation results
 - Does not reflect proposed experience study changes
 - Valuation interest rate and assumed asset return of 7.25% for all years

Projected Employer Required Contribution Rates (Experience Study Projection)



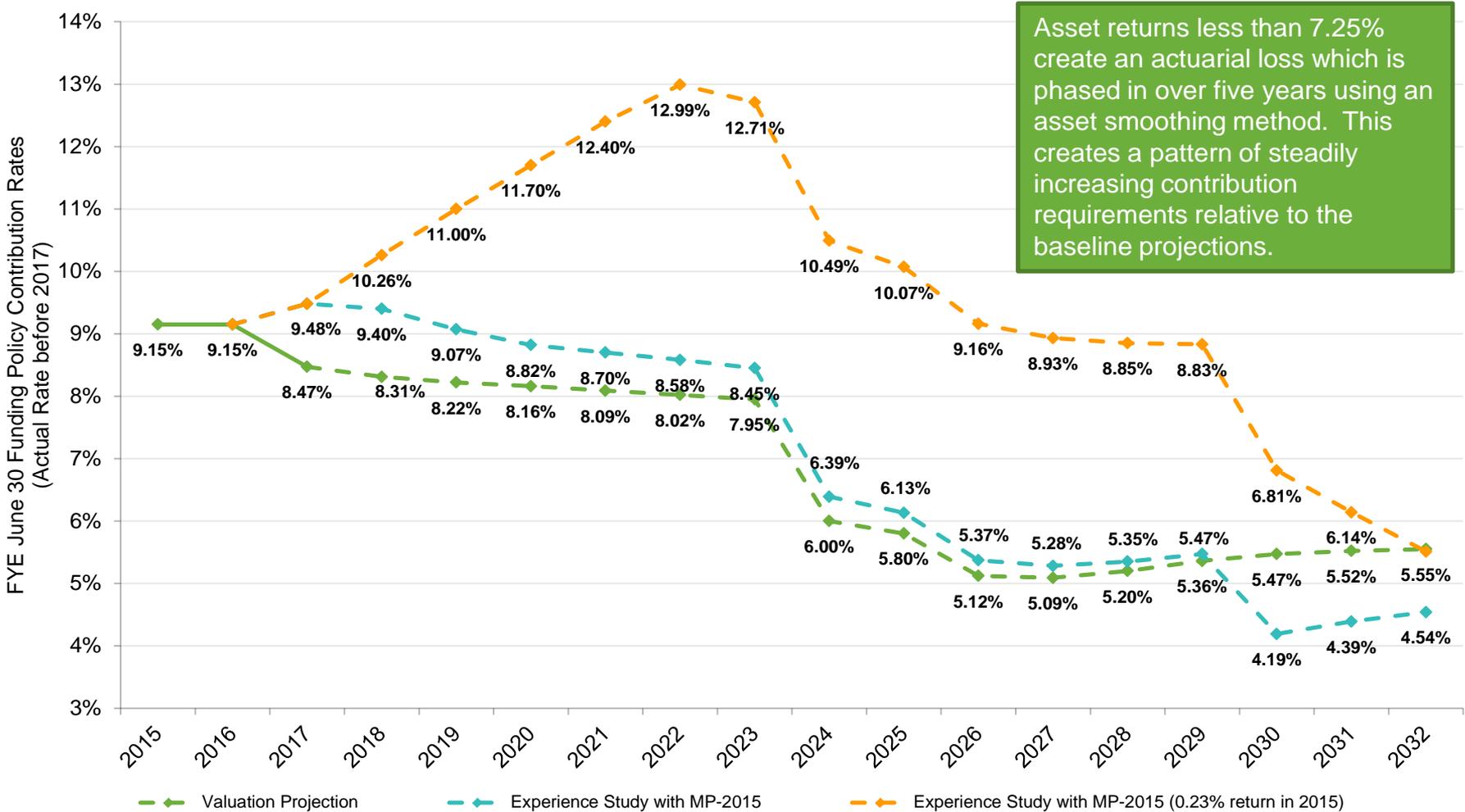
Projected Funded Ratio (Experience Study Projection)



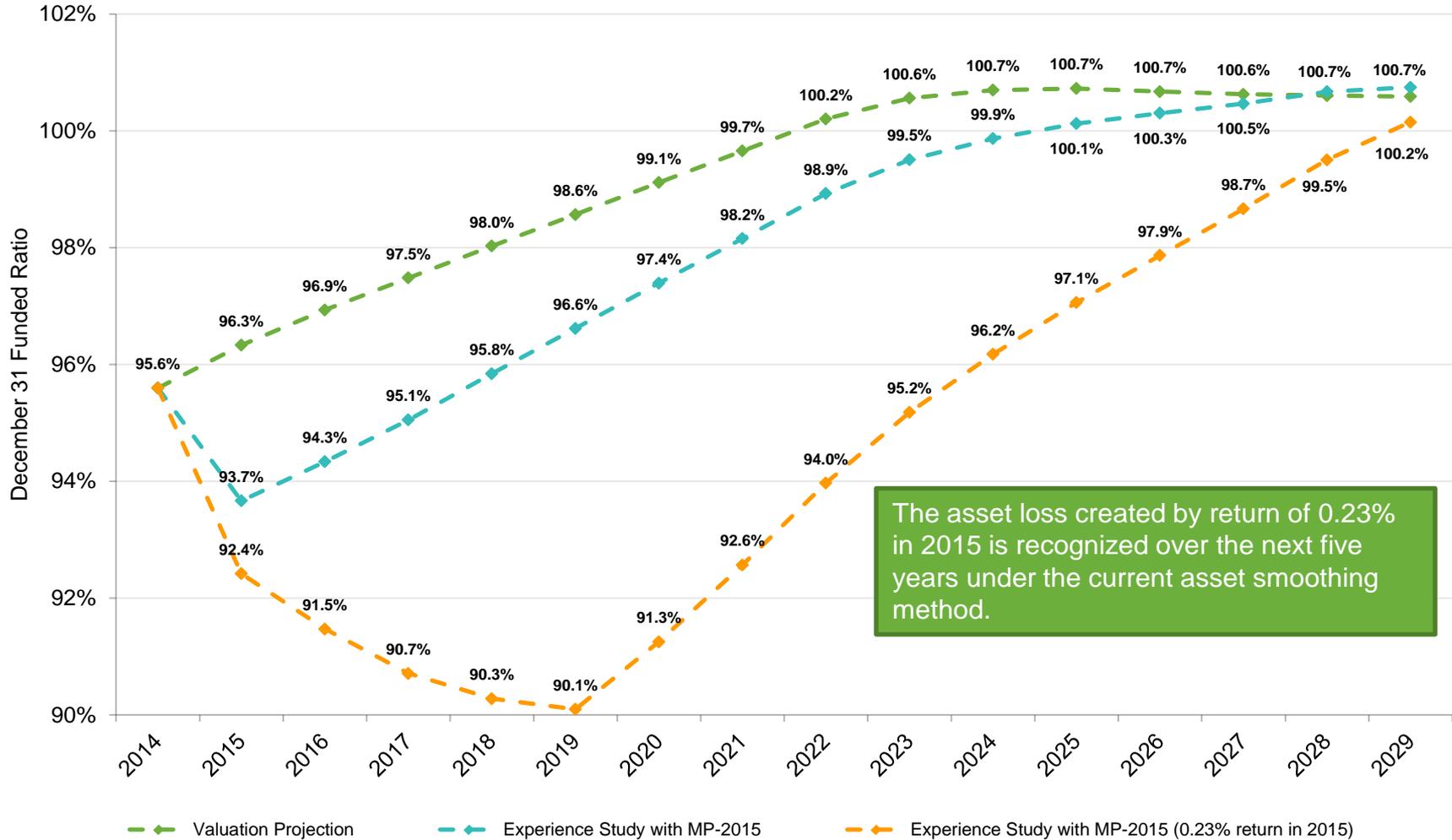
Alternate Projections of Employer Contribution Requirements and Funded Status

- In addition to reflecting the demographic and economic assumptions from the proposed experience study, we have performed an alternative projection assuming a lower rate of return for calendar year 2015.
- For this projection, the assumed rate of return is 0.23% for 2015 and then 7.25% for all future years.

Projected Employer Required Contribution Rates (Assuming 0.23% return for 2015)



Projected Funded Ratio (Assuming 0.23% return for 2015)



Certification

These results were prepared under the direction of Larry Langer and Michael Ribble who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. These results have been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions about them.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law.

Except where otherwise indicated, an analysis of the potential range of such future differences is beyond the scope of this report.

Larry Langer, FCA, ASA, EA, MAAA
Principal, Consulting Actuary

Michael Ribble, FSA, EA, MAAA
Principal, Consulting Actuary

Questions?

THANK YOU