January 26, 2017

Teachers' and State Employees' Retirement Systems of North Carolina

Employer Contribution Projections

Conduent Human Resource Services

Projections: Employer Contribution Rate and Funded Status

- Projections of employer contribution rates 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.
- Baseline deterministic projection is based on:
  - December 31, 2015 valuation results
  - December 31, 2015 valuation assumptions and methods to project future valuation results, including
    - Valuation interest rate of 7.25% for all years
    - Investment return of 7.25% on market value of assets
  - The contribution rate under the Employer Contribution Rate Stabilization Policy is contributed until fiscal year ending 2022.
  - The actuarially determined employer contribution (ADEC) is contributed for fiscal years ending 2023 and beyond.
  - 0% increase in total active member population
  - No cost-of-living adjustments granted
  - Future pay increases based on long-term salary increase assumptions
- Alternate deterministic projection based on the same assumptions as the baseline deterministic projection, except
  - Assumes 6.00% asset return for calendar year 2016

Employer Contribution Rate Stabilization Policy (ECRSP)

- The ECRSP was adopted by the Board of Trustees on January 21, 2016.
- The ECRSP sets recommended employer contributions equal to 0.35% of payroll greater than the appropriated contribution during the prior year, with the following bounds:
    - Contributions may not be less than the actuarially determined employer contribution (ADEC); and
    - Contributions may not be greater than the contribution determined using the same assumptions used to calculated the ADEC but using a discount rate equal to the 30-year Treasury Rate as of the valuation date.

Projections: Employer Contribution Rates

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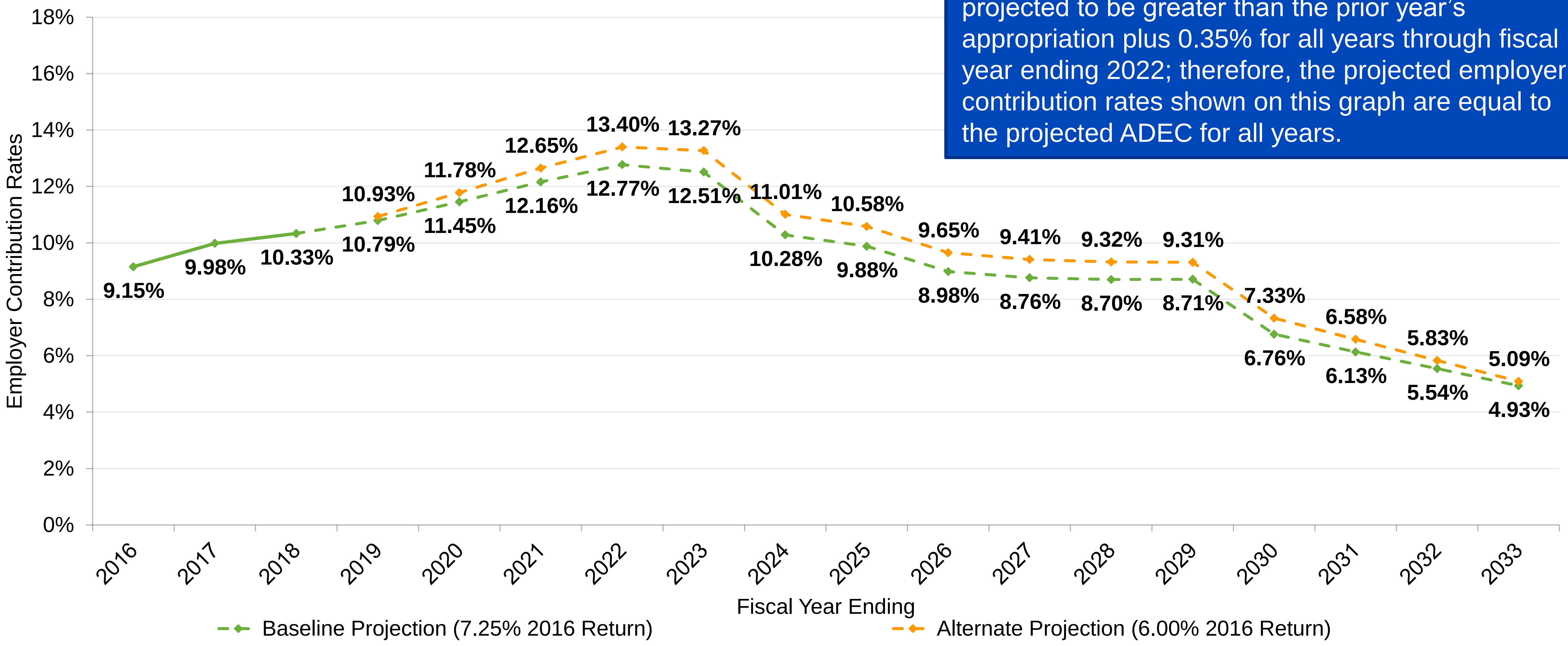
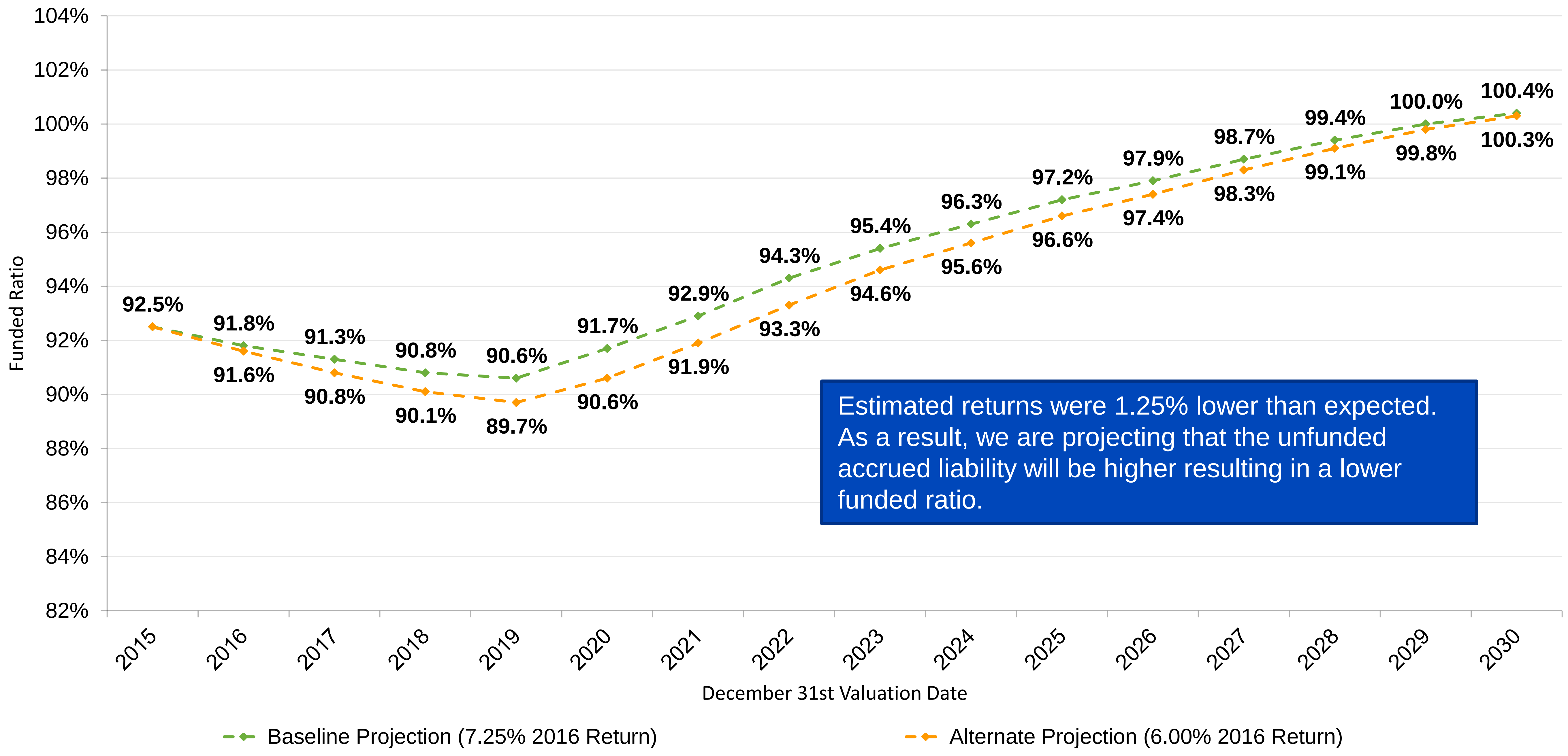


Under both projection scenarios, the ADEC is projected to be greater than the prior year's appropriation plus 0.35% for all years through fiscal year ending 2022; therefore, the projected employer contribution rates shown on this graph are equal to the projected ADEC for all years.

Estimated returns were 1.25% lower than expected. As a result, we are projecting that the unfunded accrued liability will be higher resulting in higher contributions.

Projections: Funded Ratio



Estimated returns were 1.25% lower than expected. As a result, we are projecting that the unfunded accrued liability will be higher resulting in a lower funded ratio.

Certification

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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.

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Questions?

THANK YOU

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