Briefing to New Mexico Investments & Pensions Oversight Committee

Pension Reform Process

Presented by
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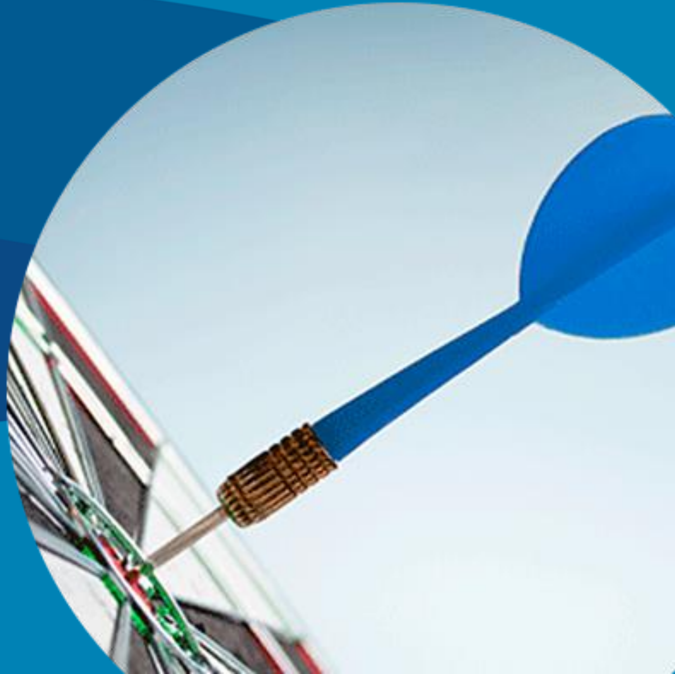

Agenda

- Comparison to General Problem Solving
- Overview of Pension Specific Process
  - Identify and acknowledge the problem
  - Make macro-level decisions
  - What specific strategies meet goals
  - Stress test proposed solutions
  - Refine and select a strategy
  - Implement strategy
  - Monitor progress

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Typical pension reform

- Plan sponsor believes costs have exceeded desired levels
- Various stakeholders request savings estimates for micro-level decisions
- The combination of changes that produce a minimally appropriate cost requirement is adopted
  - Changes usually inequitably pushed to newer and future hires
  - New program will typically have same, if not amplified risks, than before reform
  - New program less likely to meet goals of stakeholders
- Often, it is easy to predict another round of reforms at some point in the future

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Pension reform should be treated like any other problem solving exercise

- Identify and acknowledge the problem
- Define the goals
- Brainstorm and test solutions
- Select a strategy
- Implement the strategy
- Monitor progress

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Identify and acknowledge the problem

- What is the current situation?
- Why are stakeholders discussing possible reform?
- What were the sources and/or causes of the need for reform?
- Assess assumptions
  - When were all assumptions last reviewed?
  - Should at least at a high level review assumed return on assets, projected payroll (or plan sponsor budget growth), and longevity assumptions to ensure the most recent and relevant information has been incorporated
- Assess limitations
  - What benefits can be modified?
  - What revenue restrictions exist?
  - Use illustrations to better set expectations

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High level goals of Retirement Programs
(and reform processes)

1. Have a high probability of being a lasting, long-term solution
2. Be based on a sustainable contribution policy
3. Provide an appropriate amount of retirement income at reasonable retirement ages
4. Meet the human capital goals of the plan sponsor
5. Protect all stakeholders against the most unmanageable fringe risks
6. Optimize efficiency to minimize the amount of contributions needed to provide the benefits while balancing risk across generations
7. Have increased disclosure on the level of funding risk
8. Have a feasible and agreeable transition plan.

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Macro-level decisions: Separating the Issues

Current	Future
Size of UAAL and Funding Ratio	Prospective Benefits
Affordability	Risk Sharing
Re-amortization	HR Considerations
Fairness/Equity	
Self Correcting Mechanisms	
Sustainable Funding Policy	

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Human Capital Goals

- What are the stakeholders attempting to accomplish through the retirement program?
  - security in retirement?
  - attraction?
  - retention?
  - portability?
  - manage retirement patterns?
  - maximize economic value?

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What are the fringe risks?

- A fringe risk is a risk that is difficult, or impossible, for one group of stakeholders to manage on their own
  - Longevity protection
  - Managing risk and reward in investments during the life cycle
  - Contribution requirements pushing out other budgetary goals
  - Intergenerational equity (future stakeholders having no say in the current negotiations)
  - Are the members in social security?

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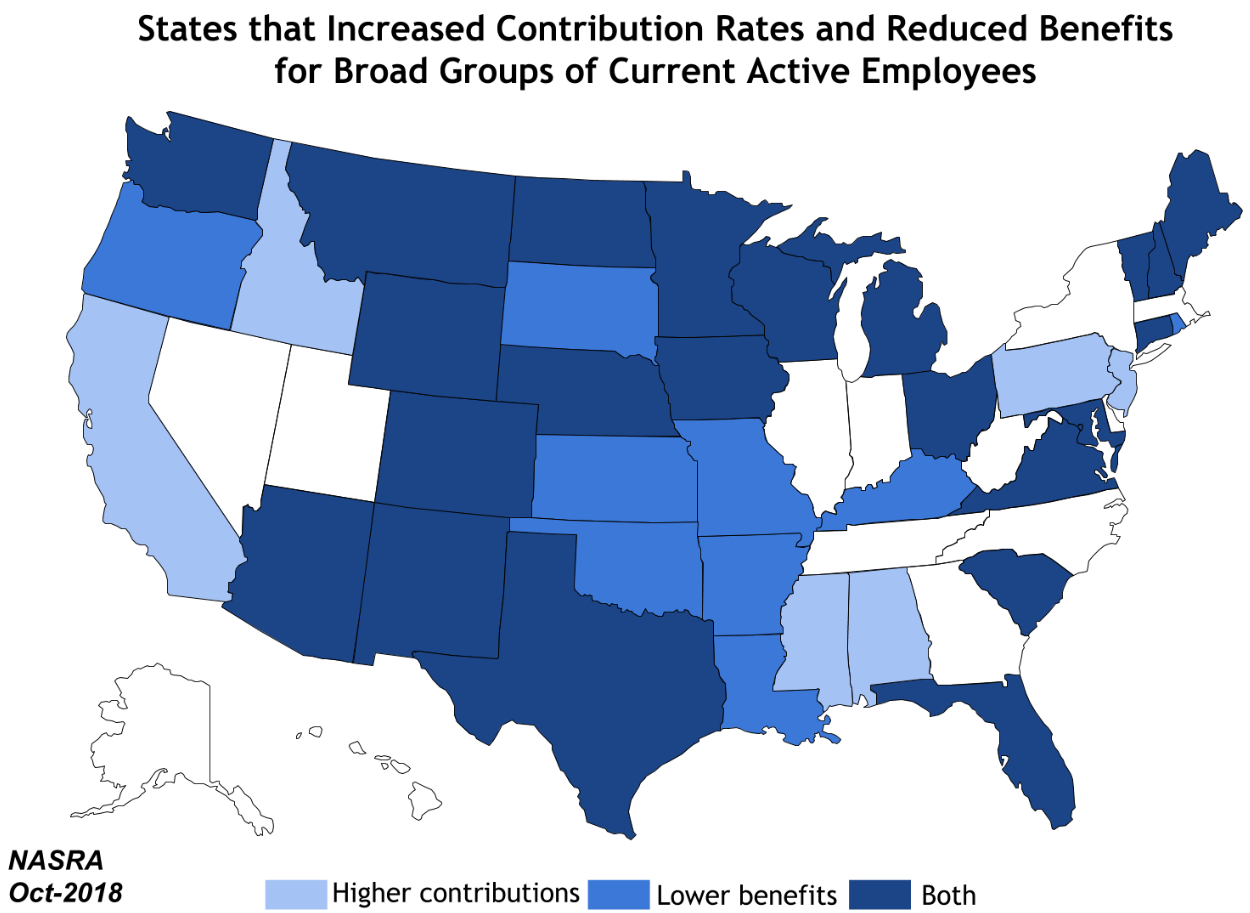
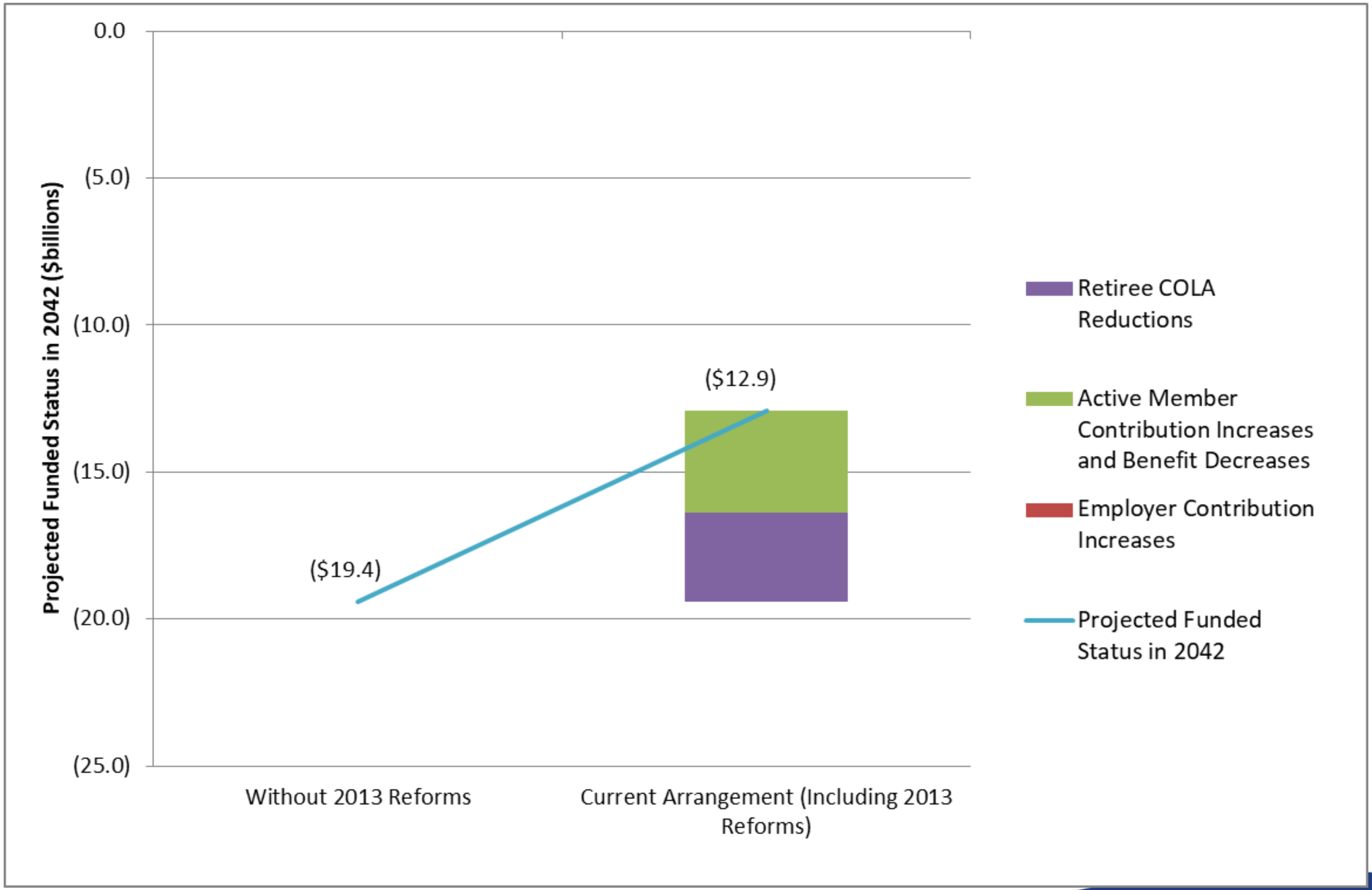
Even in defined benefit plans, members share implicitly in the risk, but it is not always equitable across generations



New Mexico ERB Stakeholders Impact of 2013 Reforms



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Negative Amortization

- Negative amortization occurs when the UAAL increases from one year to the next because the interest charges on the unfunded liability are larger than the amortization payments contributed against that liability.
- In most pension plans, this occurs when the funding period is above 20 years
- At 30 Years, only about 80% of the interest is being covered

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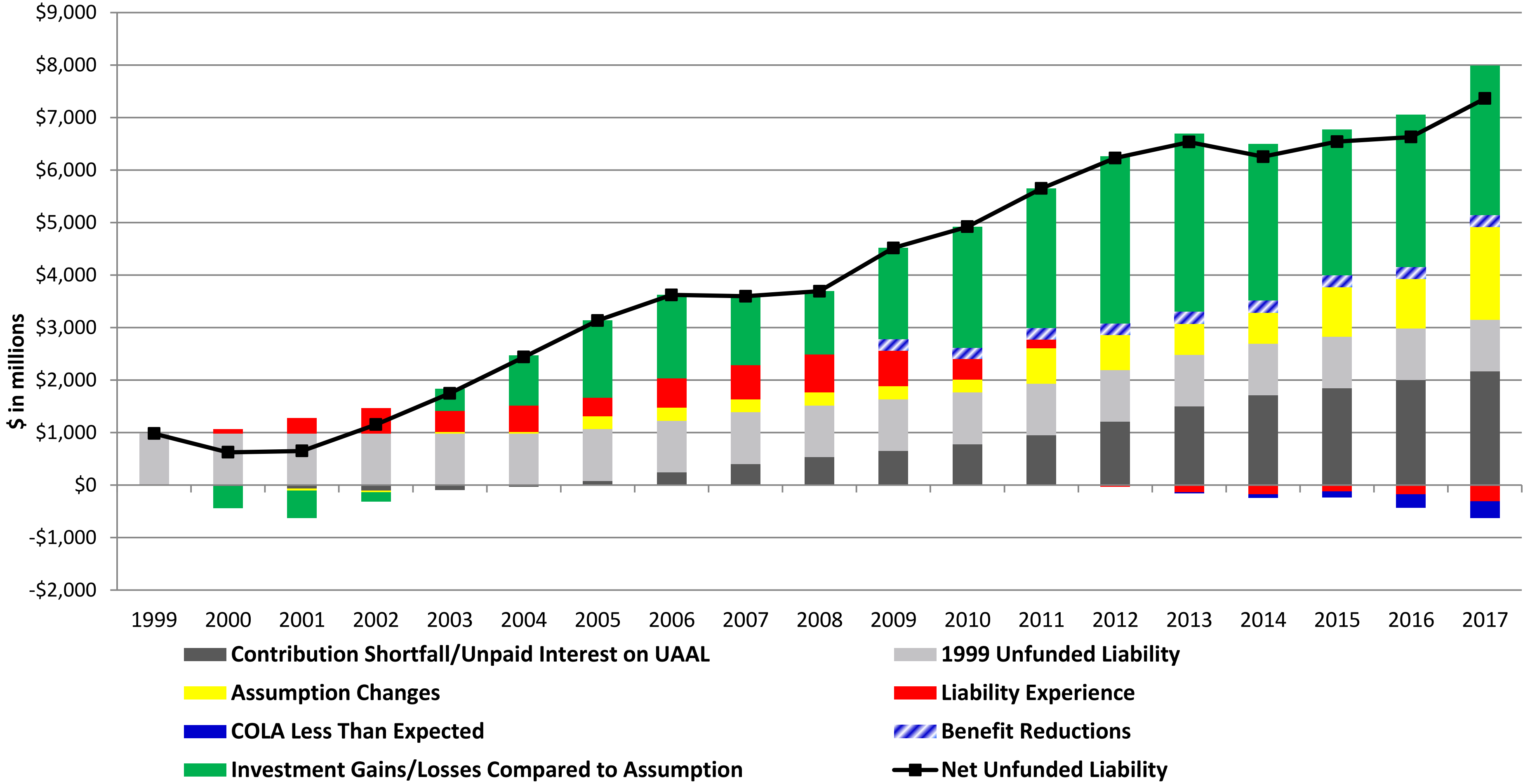
Growth in UAAL



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Actuarial Standards of Practice No 4. Exposure Draft

- *"Actuarially Determined Contribution using a contribution allocation procedure that satisfies the following conditions:*
  - *.... **c. if an amortization method is used, it should be consistent with section 3.14;***
- *Section 3.14: "If the actuary selects an amortization method, the actuary should select an amortization method that **produces amortization payments that exceed nominal interest on the unfunded actuarial accrued liability** or that satisfy the following conditions:*
  - *a. the payments do not increase or do not increase more rapidly than expected covered payroll; and*
  - *b. **the payments fully amortize the unfunded actuarial accrued liability within a reasonable time period**. "*

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White Paper from CCA Public Plan Committee

- “The amortization policy should reflect explicit consideration of the level and duration of negative amortization, if any.”
- “Longer than 20 years becomes difficult to reconcile with demographic matching, the intergenerational aspect of inter-period equity”
- “negative amortization is a much greater concern when using open or rolling amortization periods.”

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White Paper from CCA Public Plan Committee

- The paper also lists the following a “Unacceptable Practices”
  – Layered fixed period amortization by source of UAAL over longer than 30 years.
  – Rolling/open amortization over longer than 25 years of a single combined gain/loss layer.

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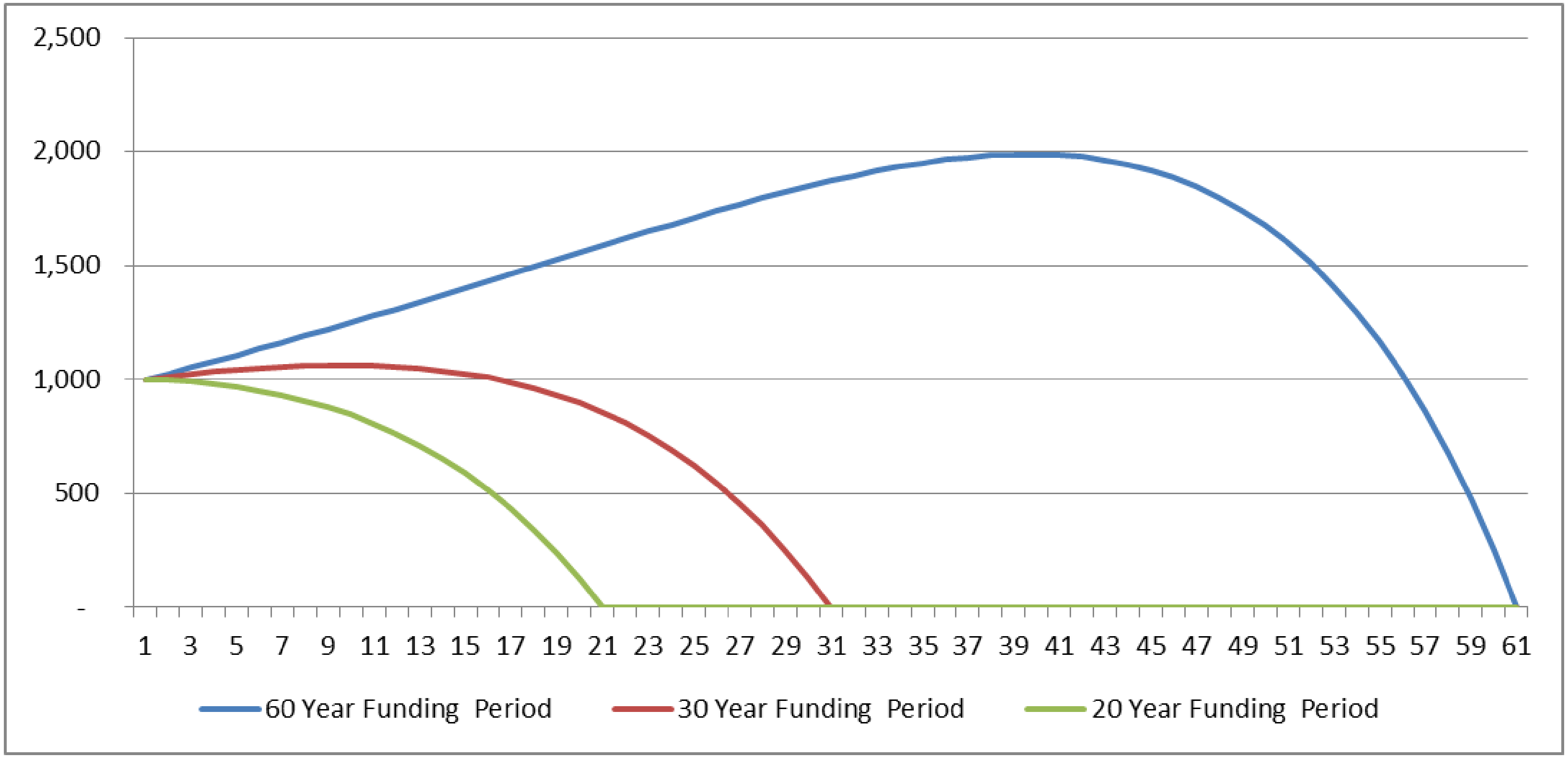
Trajectory of UAAL



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Funding Structure

- The current funding policy for ERB is a statutorily fixed contribution as a rate of payroll
  - This is referred to as a “fixed rate plan”
- Generally, systems funded with this type of strategy are not performing as well as their peers in terms of improving funded status and general outlook
- This type of strategy is becoming a discouraged practice in the actuarial community

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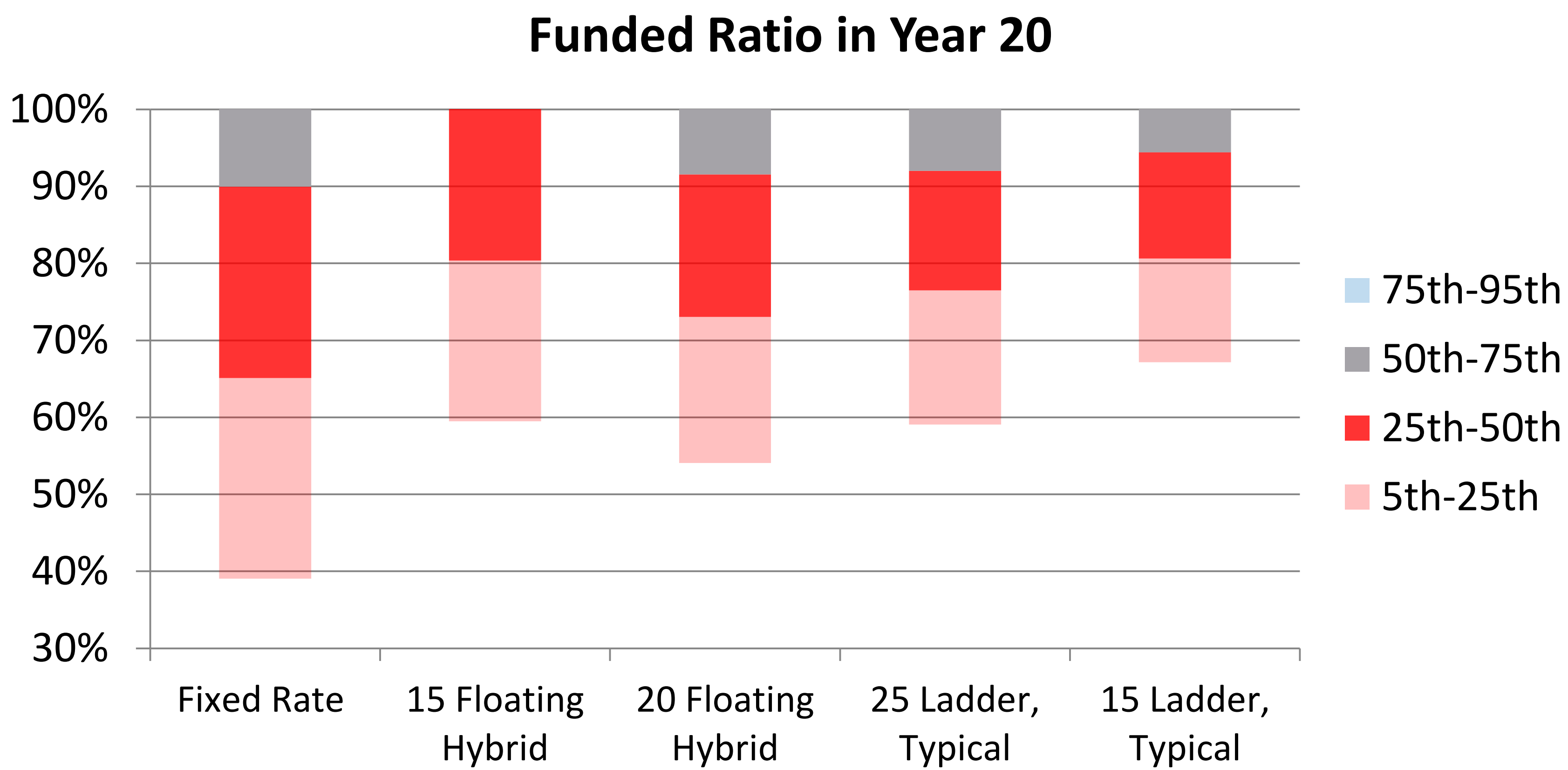
From recent funding policy analysis for peer system



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Importance of Funding Policy and Governance

- *"evidence suggests that plans operating under a legal structure in which the ARC must be paid are more likely to receive their required contribution, which is vital to the long-term success of a pension plan."*
- *"Assuming projections of actuarial experience hold true, an allocation short of the full ARC means the unfunded liability will grow and require greater contributions in future years."*

https://www.nasra.org/files/JointPublications/NASRA_ARC_Spotlight.pdf

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Better Approaches

- There are funding policies that emphasize the main goals (sustainability, higher funded ratios, benefit security, contribution volatility) more, and thus produce a better pattern of results
- The contribution rate does not have to change annually, or even very often, but there does have to be a mechanism to force change when necessary

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Example Floating Structure

- Fixed approach with required/automatic minimums
  - Combination approaches that will behave like a fixed rate plan in most situations, but will force contributions to increase as necessary based on an appropriate policy
  - Allows for smoothing more than just asset performance

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Example Floating Structure

- Simple Example
  - Calculated Contribution equals the 20 year ADC
  - If plan is less than 100% funded, the Actual Contribution equals the greater of the Calculated Contribution or last year's Actual Contribution
    - Provides an appropriate floor to enhance benefit security
    - With amortization period <= 20, this would always produce positive amortization, thus enhancing intergenerational equity
    - In most years the employer's contribution rate would not change, thus enhancing contribution rate stability
    - After a negative event, allows the amortization period to float, thus dampening contribution volatility and enhancing intergenerational equity by not forcing the current (next 5-10 years) taxpayers to bear all of the burden
  - If plan is greater than 100% funded, the Actual Contribution equals the Normal Cost

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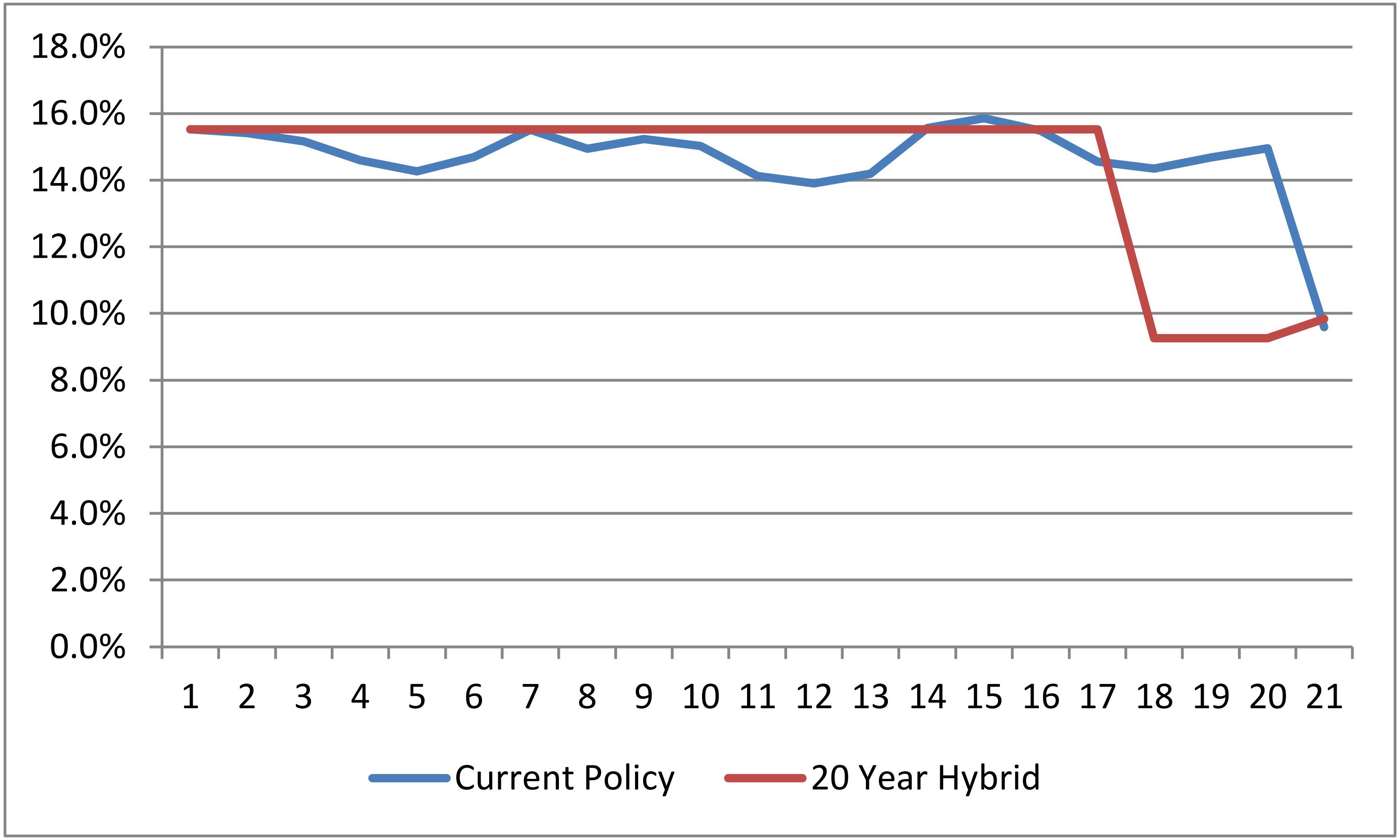
Contribution Rate Pattern



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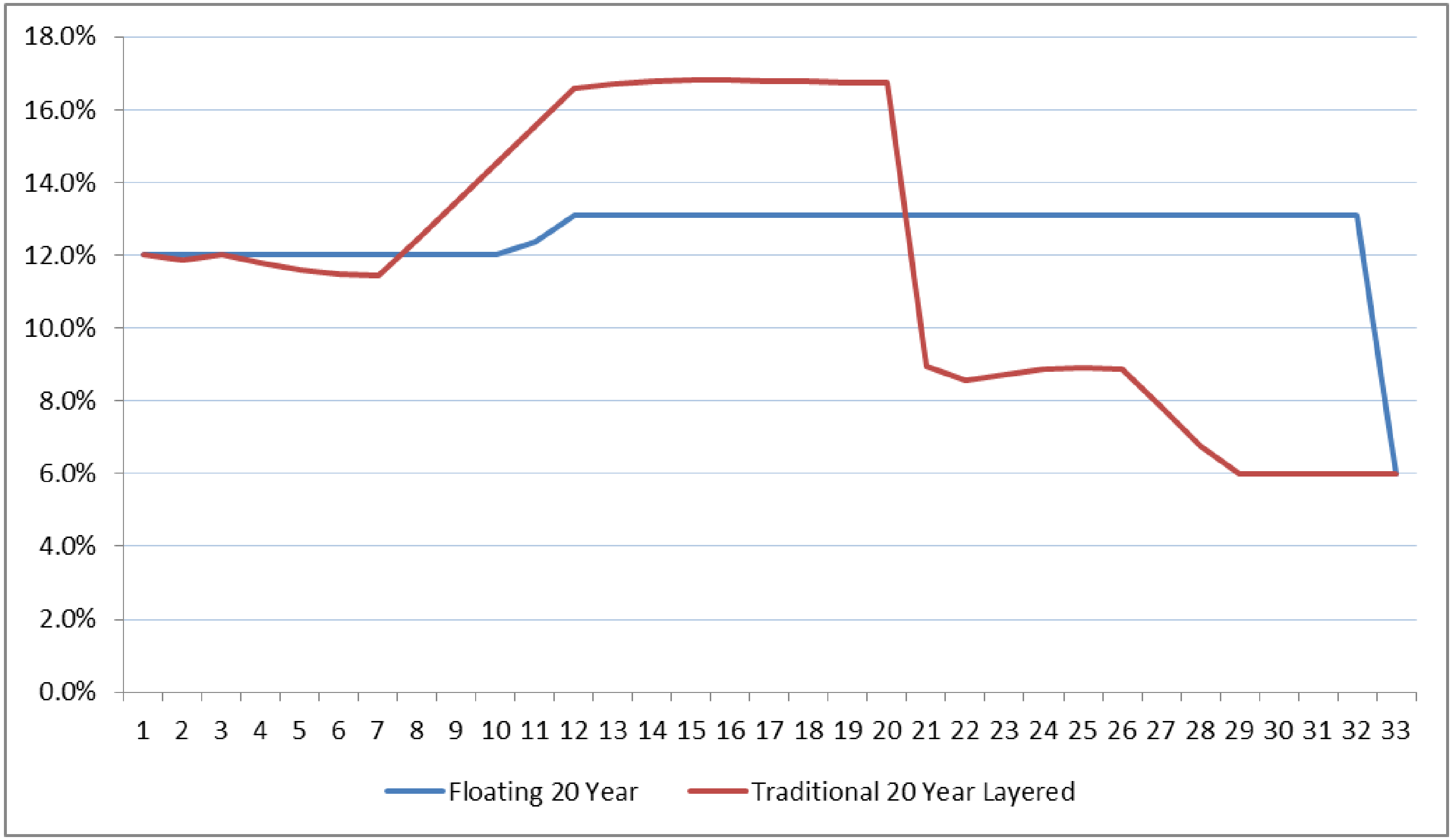
Same comparison with -10% return in Year 6



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Recommendation

- We strongly recommend any reform process include a focus on an appropriate funding policy that includes automatic adjustments when necessary and moves towards a appropriate funding period
- Sustainability can also be attained through risk sharing mechanisms or self-correcting benefit provisions
  - Temporary COLA reductions, stacked DB/DC benefits, cash balance structure, etc.

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What are the next steps?

- *Without sustainability, there are currently anticipated benefits that are at risk*

- Sustainability can only be improved from three areas based on the actuarial funding equation:

$$C + I = B$$

  – Where:
    - C = Contributions
    - I = Investment Earnings
    - B = Benefits

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Relative Magnitude and Velocity of Change

- In the beginning, we recommend that the focus be
  - on the overall structure of the benefit program,
  - on the overall magnitude of the change needed, and
  - on which groups will be impacted (velocity)
- Develop a "matrix" of benefit changes for the pension plans
  - Create the appropriate magnitude of change
  - Meet any known sustainability objective
  - Meet the benefit objective
- Then, a few strategic benefit changes can be priced
- Once the appropriate level of benefits and contribution strategy have been decided, combinations of provisions can be strategically selected to meet the goals of the stakeholders

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Again: macro decisions that should be addressed first

1. What should be the prospective funding (contribution) policy?
   - What are the short term limitations?
   - What are reasonable transition periods?
   - Are all individual cost centers being individually evaluated?
2. What plan structure meets the most goals?
   - Is that structure sustainable?
   - Is that structure implementable?
   - What are the possible adverse impacts of changing structures?
3. What is the necessary magnitude and velocity of change?
4. How can we ensure we are not back here again?
   - Appropriate risk sharing

And now, micro level decisions can be made to complete the process

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Stress Test the Result

- Purpose
  - Identify the stressors to the System
  - Optimize policies and procedures (assumptions, funding procedures and methods, and perhaps even benefits) in order to improve sustainability and educate stakeholders of those potential risks.
- Focus is not on the outcomes of the test
- Focus is on the decisions that should be considered, or improvements to current processes, based on the outcomes of the test
- Purpose of a stress test is not to just find an extreme set of scenarios to prove a System is not sustainable
- Likewise, the purpose of a stress test is not to feed gentle scenarios into the model to show the System is "sustainable"

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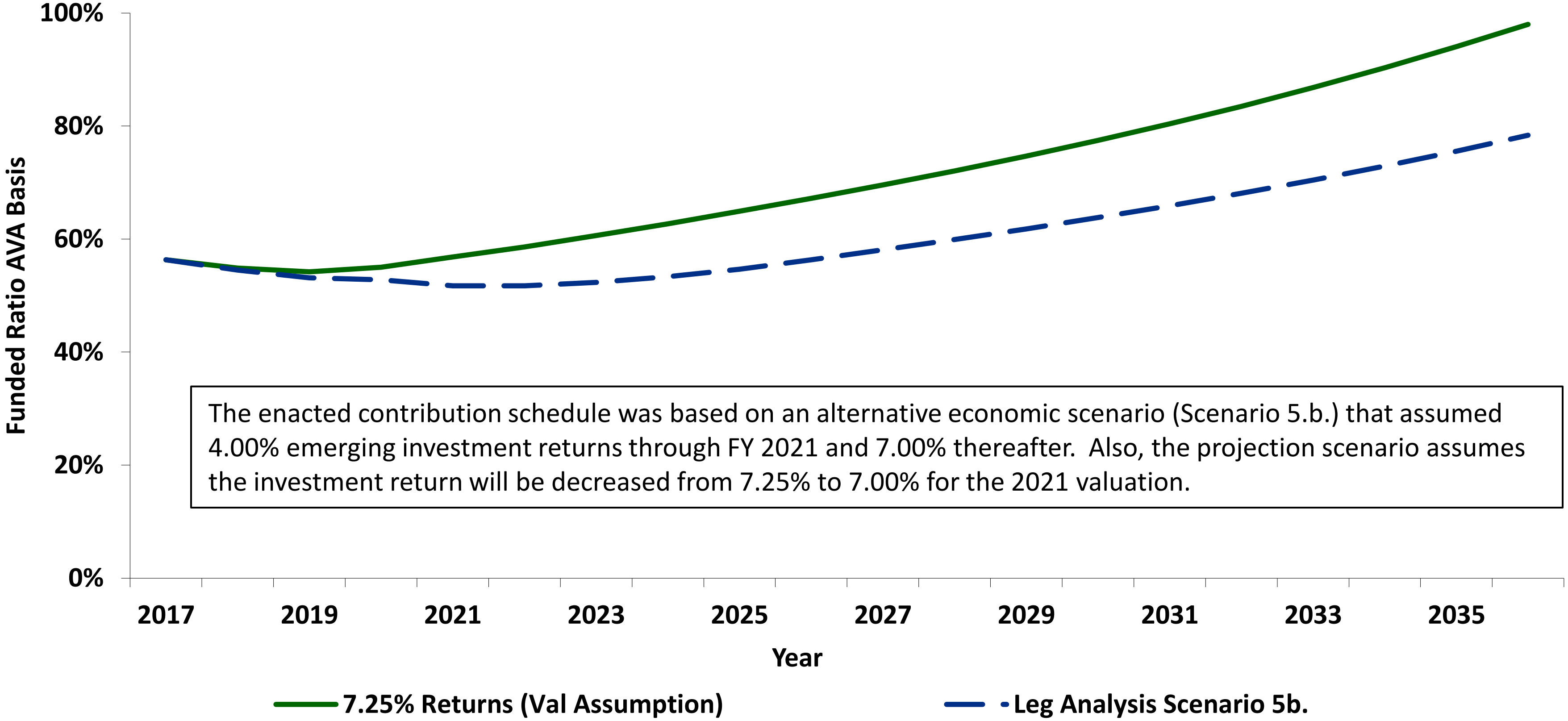
Example Stress Testing Used for Decision Making for a Peer System



The enacted contribution schedule was based on an alternative economic scenario (Scenario 5.b.) that assumed 4.00% emerging investment returns through FY 2021 and 7.00% thereafter. Also, the projection scenario assumes the investment return will be decreased from 7.25% to 7.00% for the 2021 valuation.

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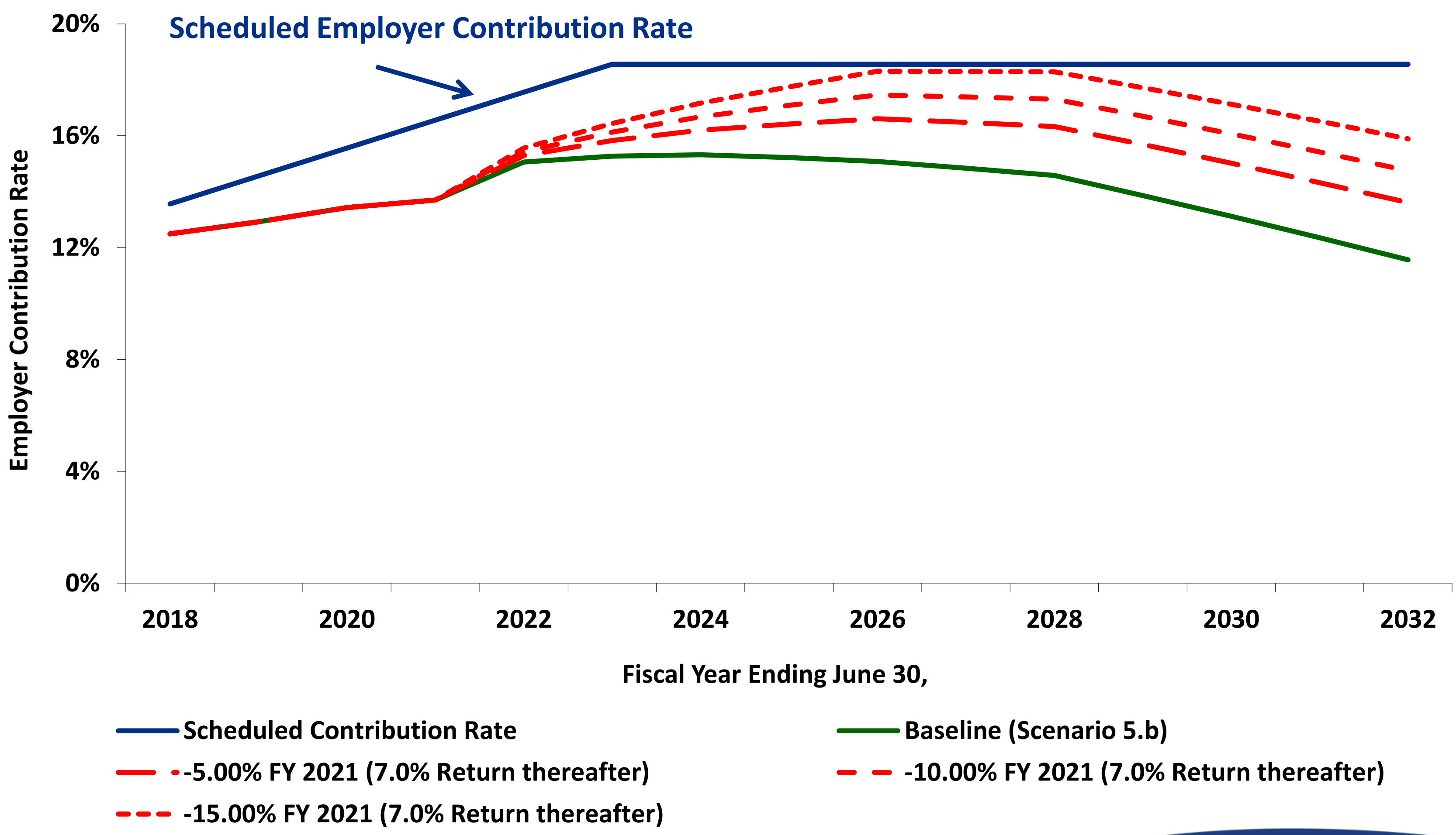
Impact of Short-Term Shocks
Projected Margin in Scheduled Contribution Rate



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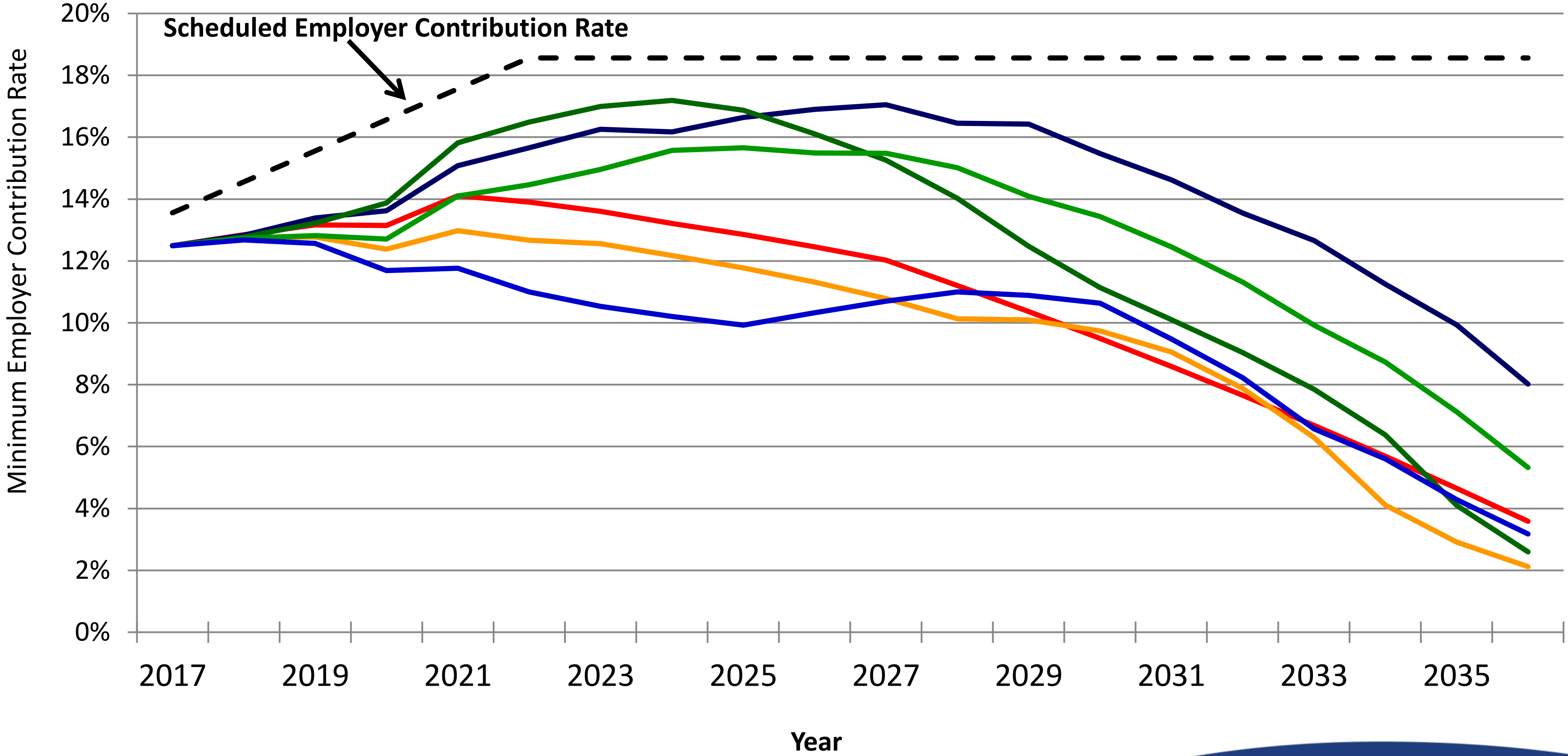
Volatility – Impact on Minimum Calculated Employer Contribution Rate

Each of These Scenarios Have a 7.0% Average Annual Return Over 20 Years



Overriding Factors In The Decision

- Pension reform will create “friction” amongst stakeholders
- Yet continuing an unsustainable benefit structure will eventually lead to either decreased benefits, smaller salaries, or smaller budgets for other areas of service
- Thus, approaches generally have to look at these issues concurrently
- And policies need to be implemented that will increase the sustainability of the program

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Summary

- Pension redesign projects will always be a multifaceted and time-consuming effort
- Following a proven, organized, and well-thought-out process can lead to successful outcomes in the eyes of all stakeholders
- Successful redesigns have accomplished long-term success with a "top-down" approach
  - Determines the overall magnitude of change needed in the redesign effort
  - Works through the necessary steps
- Comprehensive problem solving structure
  - Produced highly probable and workable outcomes
  - Given stakeholders the requisite confidence that a long-term and sustainable solution has been achieved

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