PTA PENSION TRUSTEE ADVISORS

Shared Risk Hybrid Retirement Program
SB 88 – Actuarial Implications

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Presentation to Alaska Senate Finance Committee

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William B. Fornia, FSA Credentials

- Highest Actuarial Credentials
  - Fellow of the Society of Actuaries (1986)
  - Enrolled Actuary under ERISA (1984)
  - Member of the American Academy of Actuaries (1983)
  - Former Elected Board member and Secretary/Treasurer of 35,000-member Society of Actuaries
- Author and Frequent Speaker
  - American Academy of Actuaries – Fixed Rate Pension Funding, 2023
    - https://www.actuary.org/sites/default/files/2023-02/Fixed_Rate_Pension_Funding_Practice_Note.pdf
  - "A Better Bang for the Buck 3.0" (with National Institute on Retirement Security), 2022
  - "Are California Teachers Better off with a Pension or 401(k)" University of California Berkeley Labor Center and Journal of Retirement, 2016
  - Frequent Testimony to Legislatures and City Councils
  - Regular Expert Witness (Detroit, Massachusetts Bay Transit Authority)

Sample Work History

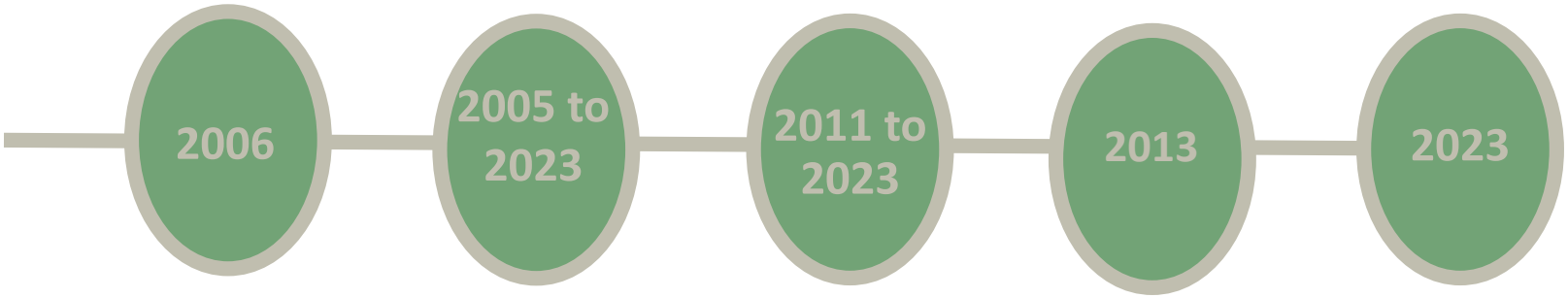
- Corporate actuary for Boeing 1980-1984
- Founded Pension Trustee Advisors in 2010
- Alaska related experience
  - ARMB first ongoing review actuary 2005-2006
  - Audited Alaska PERS/TRS actuarial valuations 2009
  - Former leader of Buck Consultants' Denver retirement practice
  - Advisors to labor groups since 2011, including testimony
- Consulting services for 23 statewide retirement systems in Alaska, Colorado, Missouri, North Dakota, Oklahoma, Pennsylvania, Puerto Rico, Utah, Texas, Vermont, Wyoming and others.
  - Served as system actuary for most of these (including CO, MO, ND, OK, WY)
  - Ongoing consultant to Ohio Retirement Study Council, including reform
- Expert testimony and consulting for governments, pension systems, and labor groups
- Other clients have included the US Department of State, Cities of Baltimore, New York and Philadelphia, IBM, US WEST and Ford

Shared-Risk Hybrid Retirement Program

- How did we get here?
- Why is change necessary?
- Actuarial Implications
- Illustration of Financial Projections

Shared-Risk Hybrid Retirement Program

How Did We Get Here?



PERS Tier 3 Closed.

Tier 4 Created in response to poor funding position.

US Pension Reform

States move toward shared-risk arrangements in response to costs and poor funding.

Labor Shortages

Many public safety workers leave Alaska for states with DB.

Shared-Risk Hybrid

Public Safety groups develop Shared-Risk Hybrid (HB247) approach in lieu of mere return to DB

SB 88

Shared-Risk Hybrid approaches from 2018 SB212 & HB 395 to 2022 HB55 to SB88 in 2023.

What might be the objectives of pension reform

- Provide a benefit which stems retention concerns
- At little or no additional cost
  - To the State
  - To other employers
- With minimal risk of becoming underfunded
- With burdens shared between employer and labor force

Illustration of hypothetical teacher benefits - $50,000 Final Average Salary

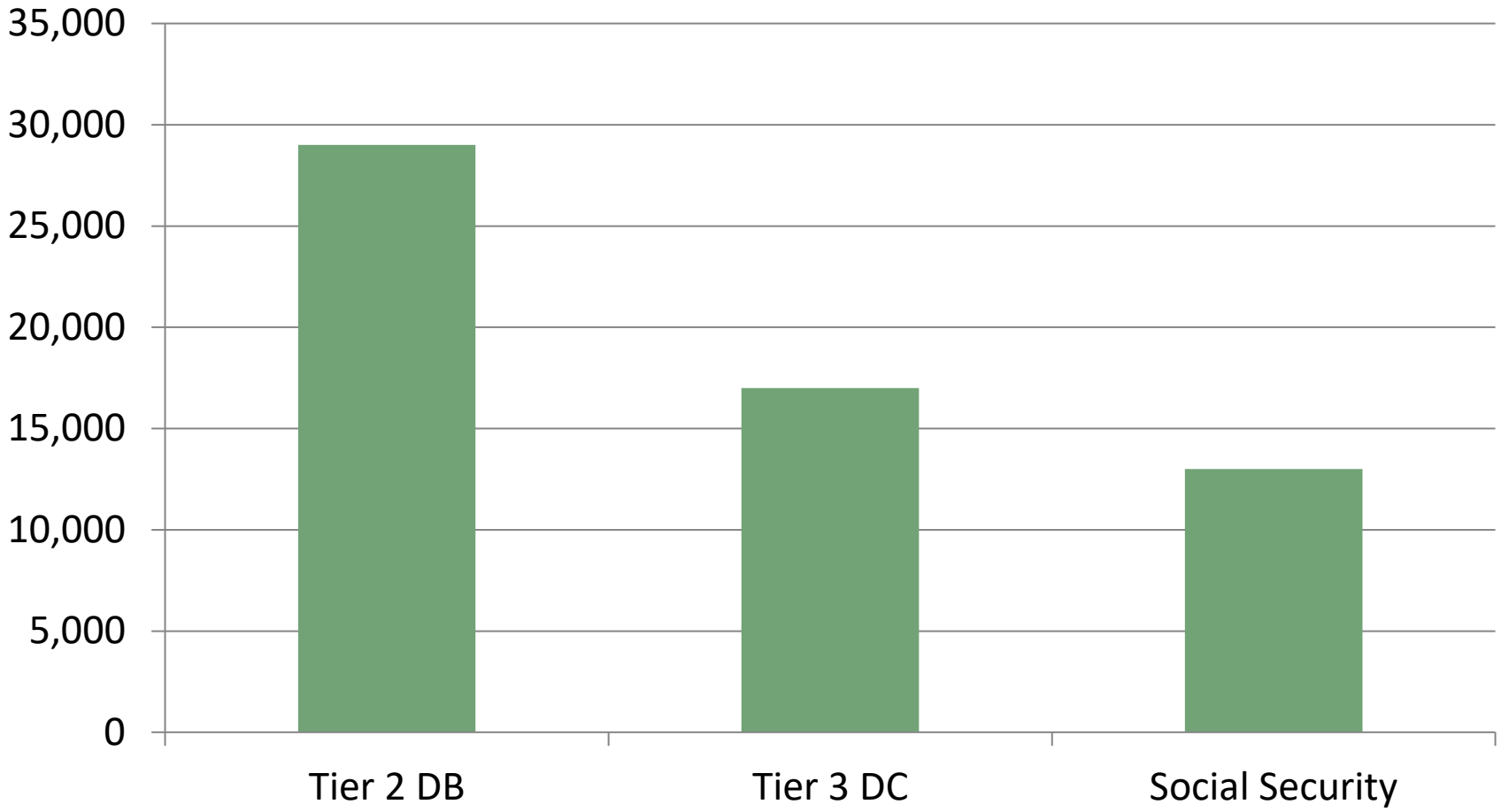
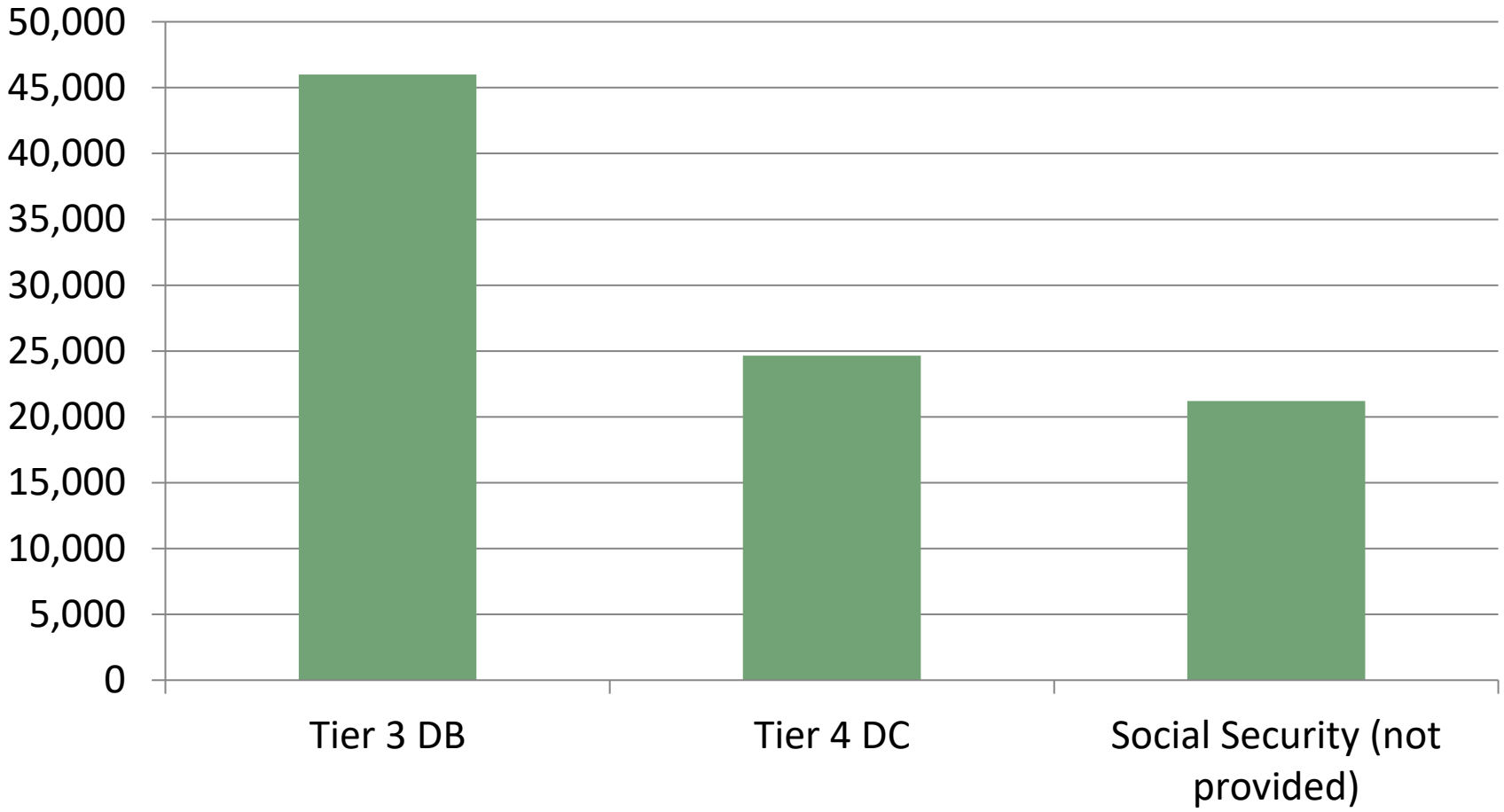


Illustration of hypothetical police/fire benefits: $80,000 Final Average Salary



Key Considerations with Shared-Risk Hybrid Retirement Programs

- DB Plans are more cost effective at providing retirement benefits
  - DB pension plans pool "longevity risks"
  - DB pension plans can maintain a better diversified portfolio because, unlike individuals, they do not age
  - DB pension plans achieve better investment returns because of professional asset management and lower fees
- DC Plans are more consistent with individual responsibility
  - Benefit is a clearly defined contribution from the employer and employee to a trust
  - Benefit is more under the control and full ownership of the individual
  - Benefit is much more portable
  - No risk of unfunded liabilities to employer
- Shared-Risk Hybrid Plans have many features of both
  - Cost-effectiveness of DB plans
  - But not all of the actuarial risk is borne by the employer

Actuarial Implications of SB 88

- Similar Fiscal notes showed modest cost or savings
- Risk to State is “Adverse Plan Experience”
- SB 88 Plan has Safeguards to mitigate this risk
- We have performed simulations to analyze this risk
  - On similar programs (HB 55 for labor groups and 2021 PERS/TRS for legislature)
- Senate Finance Actuary and/or PERS/TRS actuary will be making similar simulations
  - I expect similar findings
  - I would be pleased to return to discuss if desired

How does SB 88 strike a compromise?

- Start with reasonable employer contribution rate and manage plan within that target as possible
- Reasonable target benefit levels
  - Based on benefits provided by DCR and latest DB
- Build in benefit and/or employee contribution adjustment mechanisms
- These provide cushion against adverse experience

Safeguard #1:
Reduce benefits vis-à-vis legacy DB

- Tighten retirement eligibility
- Five-year average salary
- Eliminate Alaska 10% COLA
- Eliminate pre-Medicare health coverage
- Reduce Post-Retirement Pension Adjustment for non-Alaska-residents

Safeguard #2:
Triggers if funding level falls below 90%

- Plan will start out 100% funded
- ARMB Board has authority to adjust if below 90% funded
  - Suspend Post-Retirement Pension Adjustment
  - Increase employee and employer contributions up to 4% each

Benefit Plan Simulations

- In the real world, returns will not be stable from year to year.
- Even though the anticipated cost is less than the contribution going in, plan still might become underfunded
- To protect against this, plan has additional "safeguards" beyond funding cushion
  - Don't pay Post Retirement Pension Adjustment
  - Increase member contributions by up to 4.0%
  - Increase employer contributions by up to 4.0%

Benefit Plan Simulations- Stochastic

- To illustrate this, we simulated potential scenarios for thirty years using “stochastic” modeling

- ARMB investment advisors estimate a “standard deviation” of 13.55% for the investment return of the current asset mix
  - This roughly means that in one of every three years, return would be more than 13.55% above or below 7.38%.
    - Above 21% in one-sixth of the years and below minus 7% in one-sixth of the years
  - Although this standard deviation is somewhat higher than we typically see, we modelled future returns consistent with ARMB advisors estimates

Above analysis conducted in 2021 based on slightly different provisions. SB 88 analysis expected to be similar

Benefit Plan Simulations

- We modelled 10,000 random simulations based on ARMB actuaries assumptions of 7.38% return on assets
- In simulations where the funded ratio fell below 90% threshold, we activated the triggers
  - Boost contributions by 1% (up to 4%)
    - Presumably shared between employees and employer
  - Suspend the Post Retirement Pension Adjustment

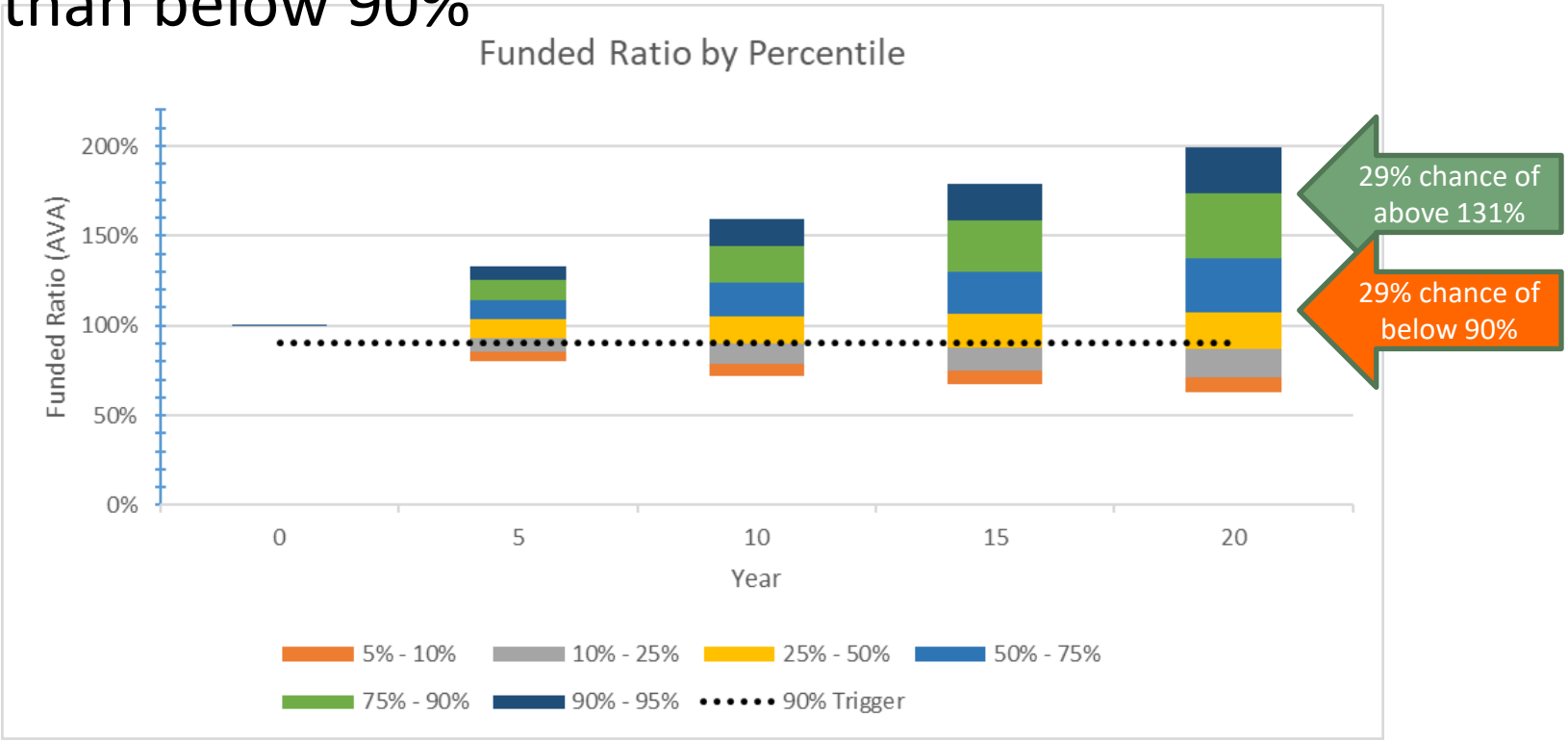
Benefit Plan Simulations (cont.)

- High likelihood (59%) that TRS funded ratio will be more than 100% in most years
  - 65% for Other PERS
- Median funded ratio in 20 years is 108% for TRS and 112% for Other PERS
- But still about 29% chance that TRS funded ratio will be 90% or below after 20 years
  - 25% for Other PERS
- Only about 14% chance that TRS funded ratio will be 75% or below after 20 years
  - 11% for Other PERS

Above analysis conducted in 2021 based on slightly different provisions. SB 88 analysis expected to be similar

Benefit Plan Simulations (cont.)

- It's as likely that TRS funded ratio will be above 131% than below 90%



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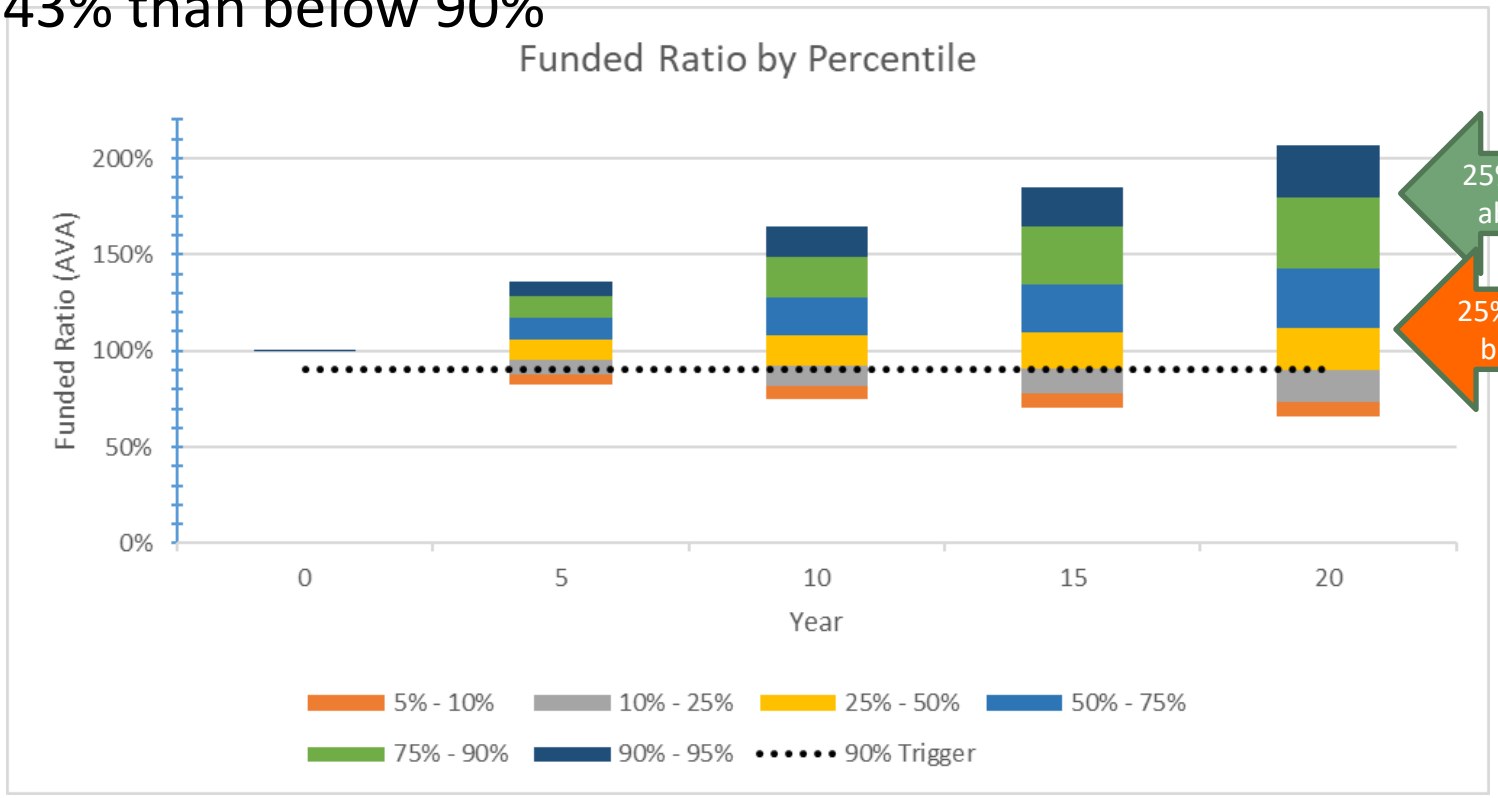
Benefit Plan Simulations (cont.)

- It's as likely that funded ratio for Other PERS will be above 143% than below 90%



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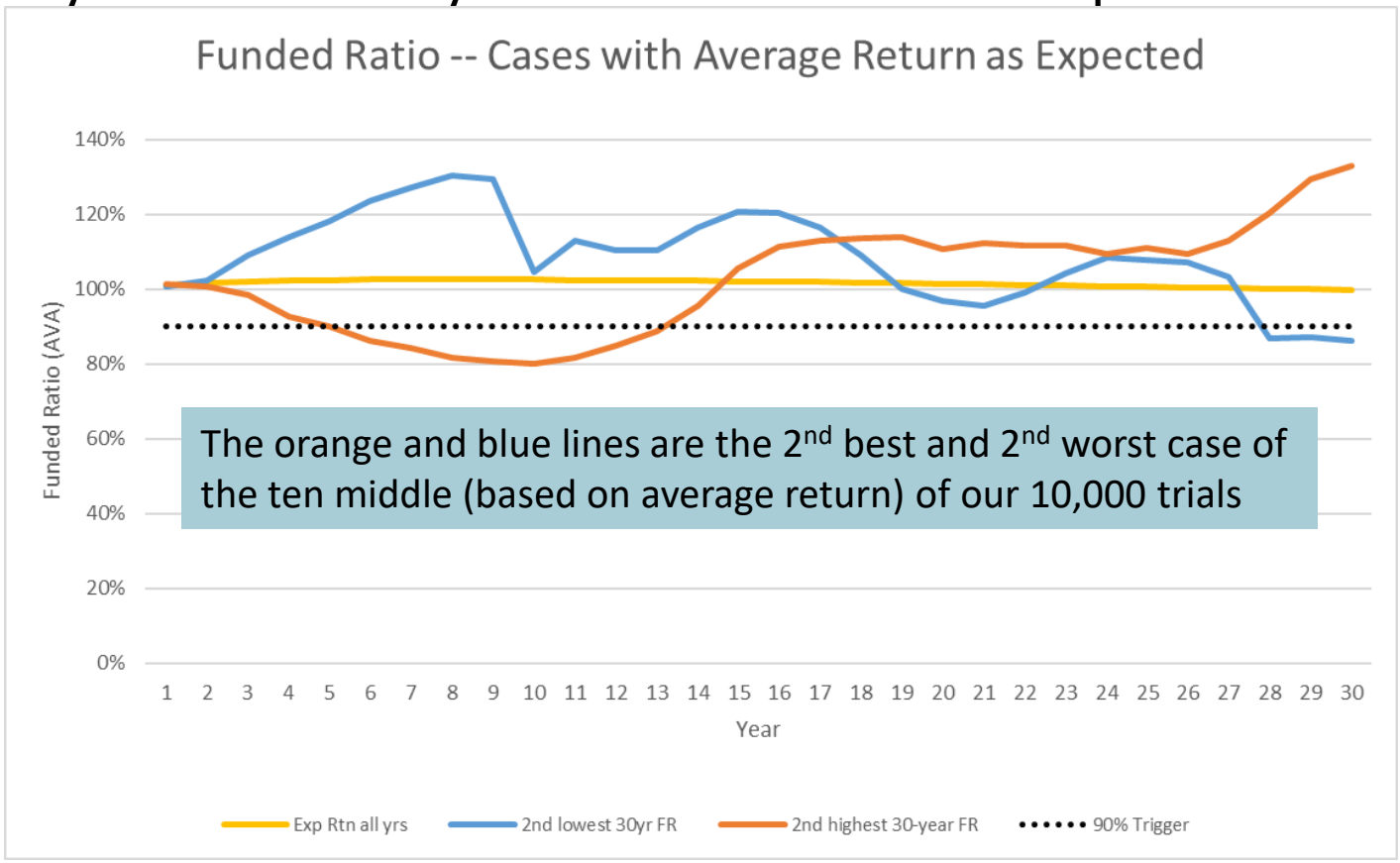
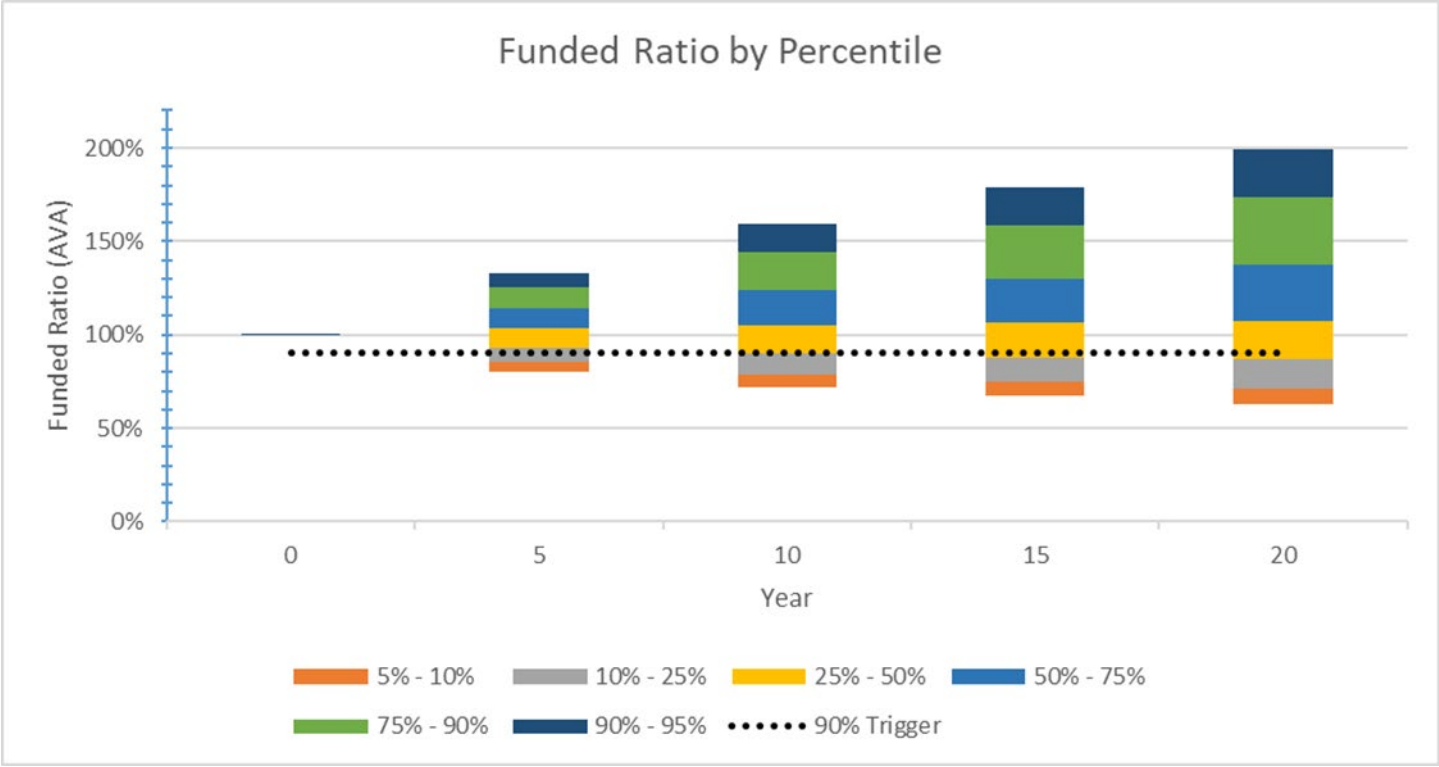
Benefit Plan Simulations (cont.)

- Even if we hit our return expectations in the long run, there's likely to be volatility in short run – TRS example



Benefit Plan Simulations (cont.)

- Safeguards are what provides downside protection – TRS example



Simulation Conclusions

- Safeguards have been implemented to protect against downside risk
  - Baseline contributions slightly higher than expected cost
  - Conservative assumed rate or return
  - Triggers if funded ratio fall below 90%
    - Increased contributions by up to 4% each employee and employer
    - Suspension of Post Retirement Pension Adjustment
- High likelihood of being extremely well funded
- But still some risk of being under-funded

How have other states' shared risk plans operated?

Case Study – Wisconsin

- Cost of Living Adjustment is dependent on fund returns
- At retirement, each member has a fixed benefit
- A variable benefit is added to this, based on fund returns
- The variable benefit itself can go down as well as up, but the fixed benefit does not decrease
- Following 2008, the variable benefit did decrease, but has recovered

Case Study – FPPA

- Colorado Fire and Police Pension Association
  - Formed in 1980, creating new statewide plan
  - Contributions are fixed at 8% employee + 8% employer
  - This level was sufficient for core DB plan
  - Excess contributions went into DC plan during good times
  - Board has discretion over COLA, which kept costs below 16%
    - But currently, Normal Cost exceeds 16%
  - Employees voted by supermajority to voluntarily increase contributions to increase likelihood of COLA

Case Study – SDRS

- Historically among best funded state plans
- SDRS is considered a DB plan with fixed contributions and variable benefits
- History of substantive benefit improvements funded by favorable investment results—included retirees
- Fixed member and employer contributions
- Variable benefit features (primarily COLA)
- Statutory triggers requiring Board recommendations for corrective actions (benefit reductions, not higher employer contributions)
  - COLA flexibility was 2010 corrective action
  - Retirees now receive smaller COLA, but have often kept up with inflation

Case Study – Ohio

- Employer contributions are fixed for each of five statewide retirement systems
- Systems were and are required to develop plans to keep funded periods within 30 years
- Major pension reform completed in 2012 leading to new tiers with lesser benefits
- Plans include retiree healthcare (like Alaska), but pension funding takes priority.

Many other Shared Risk Plans

- Colorado Public Employee Retirement Association
- Kentucky Teachers RS
- Missouri PEERS/PSRS
- Utah Retirement System
- Washington State Public Employees Retirement System
- Wyoming Retirement System

Recap

- Alaska has concern with potential future unfunded liabilities
- DCR provides inadequate benefits
- SB 88 Shared-Risk Hybrid Retirement Program is a potential solution
  - If actuarial experience is as expected, benefits will be paid comparable to Tier 3 PERS / Tier 2 TRS
  - If actuarial experience is unfavorable, lower benefits will be paid
  - Individuals do not take this risk, the government does not take this risk; pools of individuals do

Questions?

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Technical Note

- We recommend that PERS actuary review and refine our estimates
- Estimates based on limited publicly available actuarial information, while PERS actuary has complete information
- Actuarial calculations were made by or under the direction of William Fornia, FSA, a Member of the American Academy of Actuaries, who is qualified to render these actuarial opinions