ANALYSIS OF SENATE BILL 321:

MODERNIZING THE TEXAS EMPLOYEES RETIREMENT SYSTEM

Prepared by:

Pension Integrity Project at Reason Foundation

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About the Pension Integrity Project

We offer pro-bono technical assistance to public officials to help them design and implement pension reforms that improve plan solvency and promote retirement security, including:

- *Customized analysis* of pension system design, trends
- *Independent actuarial modeling* of reform scenarios
- Consultation and modeling around *custom policy designs*
- Latest pension reform *research and case studies*
- *Peer-to-peer mentoring* from state and local officials who have successfully enacted pension reforms
- Assistance with *stakeholder outreach*, engagement and relationship management
- Design and execution of *public education programs* and media campaigns

What We've Done with ERS

The Pension Integrity Project aggregated all comprehensive annual financial reports (CAFRs) and valuations published by the Employees Retirement System of Texas to produce a history of ERS that spotlights the technical causes leading to the underfunding of accrued employee retirement benefits. Using these data, we've also developed advanced actuarial models of the current ERS system to forecast its future trajectory under various market and reform scenarios, like SB 321.

The following analysis offers a presentation of our findings in three parts:

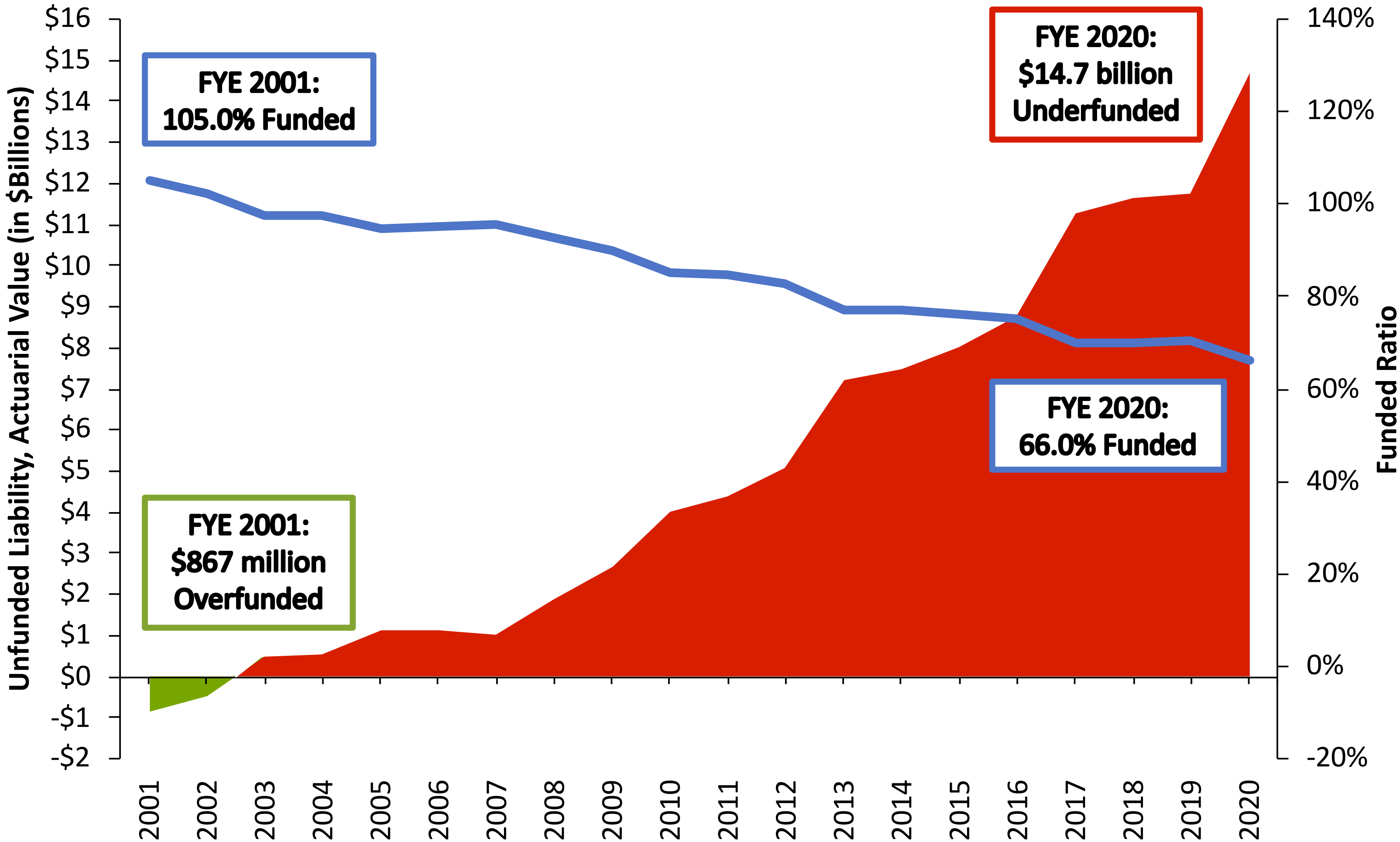
I. *ERS: The Breakdown*
(The History of ERS)

II. *Modernizing ERS for the 21st Century Workforce*
(Summary of Cash Balance Plan Design)

III. *Reform to Improve ERS*
(Actuarial Evaluation of SB 321)

ERS: THE BREAKDOWN

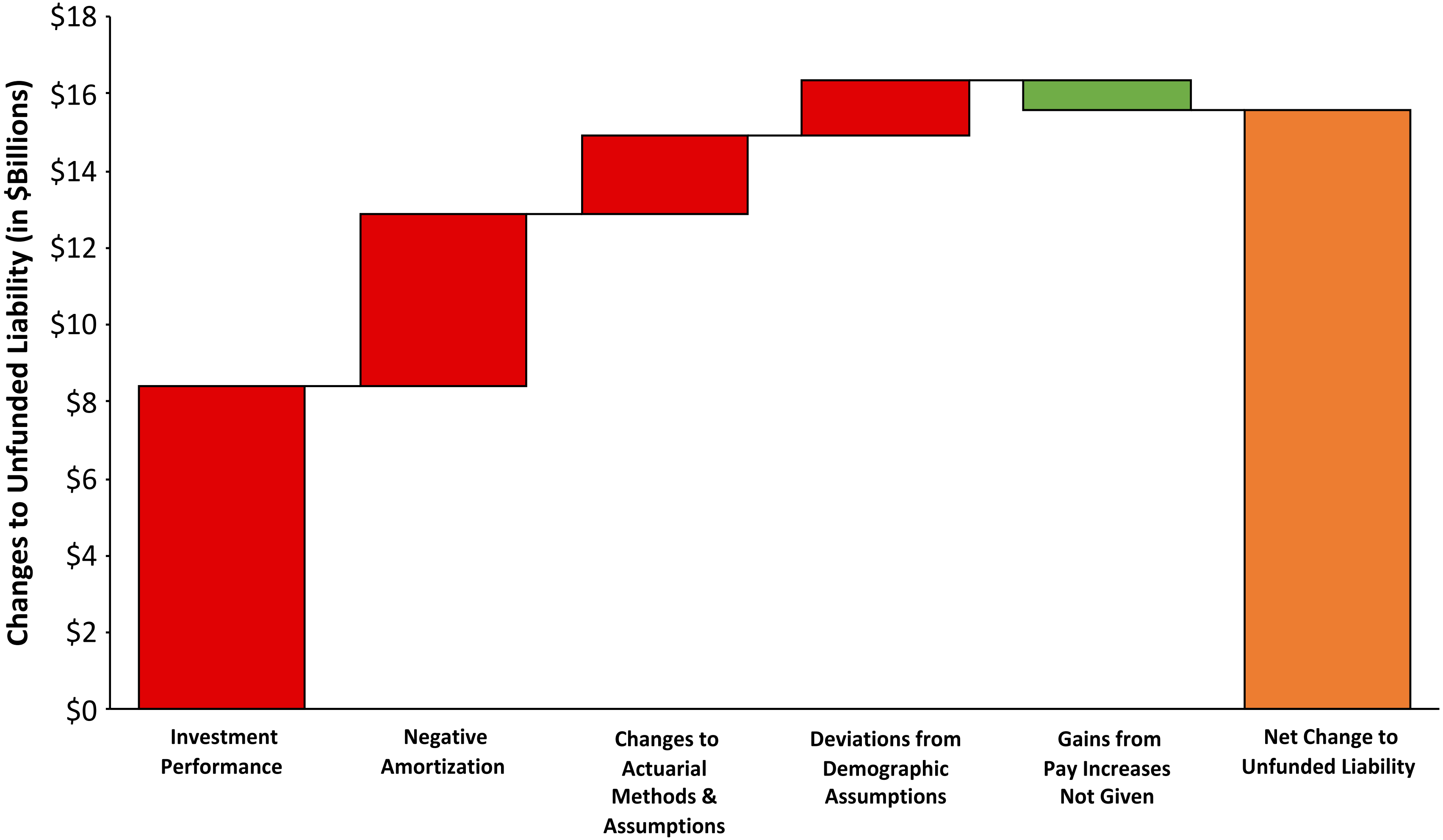
A History of ERS Solvency (2001-2020)



Source: Pension Integrity Project analysis of actuarial value of assets and actuarial accrued liability found in ERS actuarial valuation reports and CAFRs

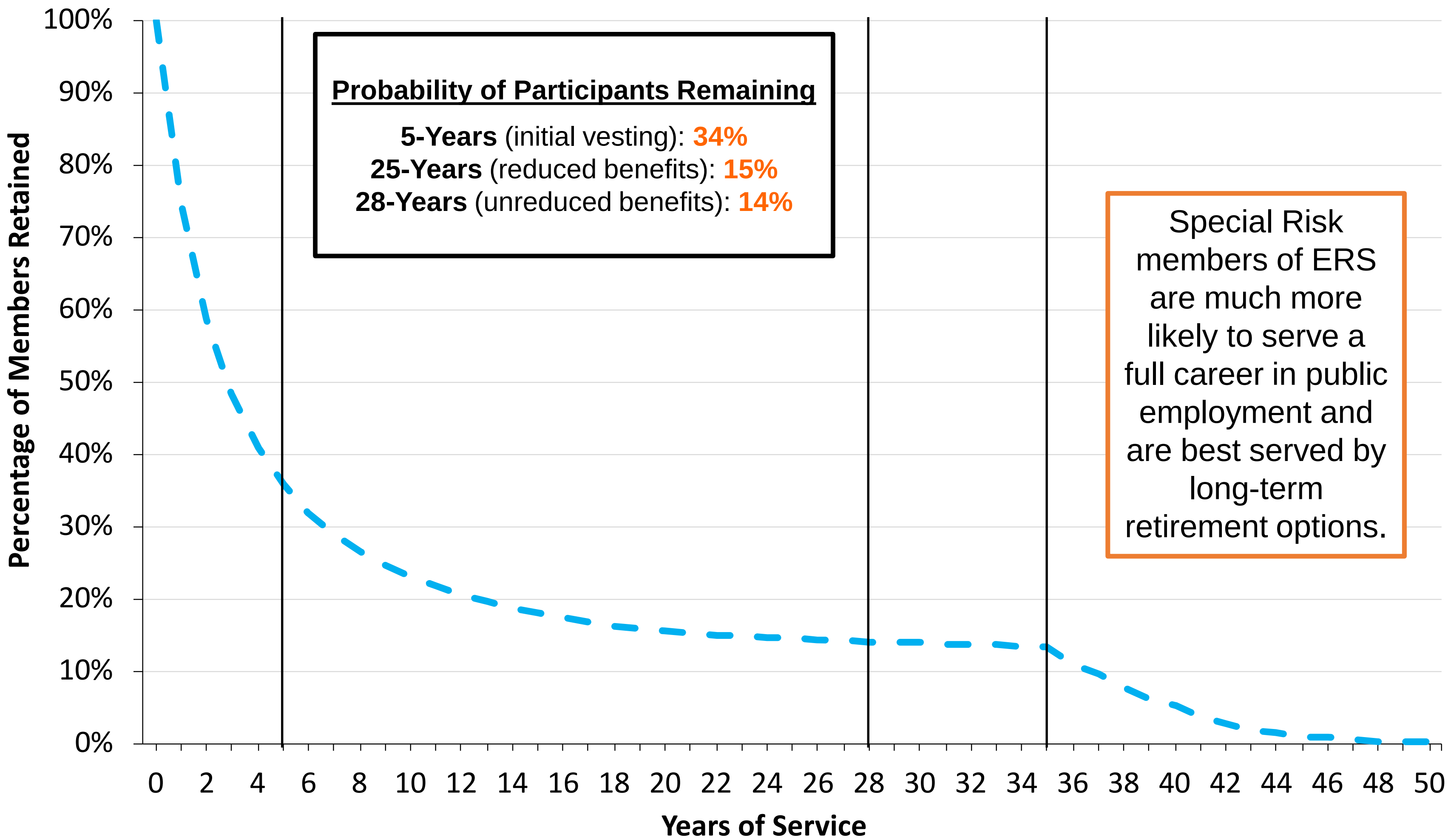
The Causes of the Pension Debt

Actuarial Experience of ERS, 2001-2020



Source: Pension Integrity Project analysis of ERS CAFRs. Data represents cumulative unfunded actuarial liability by gain/loss category. “Negative Amortization” is calculated using ERS valuation reports as a difference between interest accrued on the debt and amortization payments.

Probability of Members Remaining in ERS



Source: Pension Integrity Project analysis of ERS actuarial reports and CAFRs. Illustration is based on plan's assumptions and a hypothetical analysis of an average Regular State Employee hired at the age of 25. The unreduced benefit is calculated using 28-Years under the Rule of 80.

Three Major Challenges Currently Facing ERS

1. **Deviations from Investment Return Assumptions** have been the largest contributor to the ERS unfunded liability, adding $8.43 billion since 2001.

2. **Extended Amortization Timetables and Statutory Contribution Limits** have resulted in interest on ERS debt exceeding the actual debt payments (negative amortization) since 2001 and a net $4.46 billion increase in the unfunded liability.

3. **66% of New ERS Members Leave Before 5 Years** and another 19% of new members still working after 5 years will leave within the 25 years of service it takes to qualify for reduced ERS benefits—leaving the majority of those entering ERS without an optimal retirement plan.

SB321 POLICY CONCEPT: CASH BALANCE RETIREMENT PLAN DESIGN

What is a Cash Balance (CB) Retirement Plan?

Cash balance retirement plans are designed to guarantee asset growth while providing a steady accrual rate, offering members portability, and ensuring a path to retirement security for all.

- **Benefits -** A standard cash balance plan design provides members with their own individual retirement account within which they contribute a portion of their salary along with their employer, who adds an additional predetermined annual interest credit.
  - Both traditional defined benefit (DB) pensions and cash balance (CB) plan designs are examples of guaranteed return plans.
  - A CB designed plan defines a member's benefit as a constantly growing account balance, while a traditional DB pension plan defines a member's benefit using an accrual formula based on salary and years of service.
  - Cash balance plans credit a member's account each year with a "pay credit" (% of pay) and an "interest credit rate" (either a fixed rate or a variable rate linked to some formula).
- **Investments -** Assets of cash balance plans are pooled and professionally managed in a government-sponsored retirement system. Thus, the employer bears the investment risks.
  - The interest credit functions like a DB mechanism in that this interest credit is guaranteed, usually at or just above the risk-free rate, and any plan investment experience below the assumed rate is borne by the employer.
- **Life Annuities -** Cash balance plans are required to offer employees the ability to receive their benefits in the form of lifetime annuities.
  - When a member elects to retire, their annuity benefit will be based on their final account balance. Conversely, most cash balance plans allow the members the flexibility to simply take a lump sum of their account balance in lieu of receiving an annuity.

Cash Balance Retirement Benefit
=
Annual Employee Contributions
+ Annual Employer Contributions
+ Annual Interest Credit
+ Upside Sharing

Cash Balance for Employers

Fixed Contributions generally benefit the employer's ability to forecast and manage costs over the long-term.

Reduces Risk of accruing unfunded liabilities on behalf of new members.

States With At Least One Cash Balance Plan:

- *California*
- *Kansas*
- *Kentucky*
- *Nebraska*
- *Texas (municipal)*

Allowing new hires to join a cash balance plan has no impact positively or negatively on current ERS members or the plan's unfunded liabilities associated with current members and retirees.

Any new retirement plan for new hires should be paired with a sustainable plan to pay down legacy unfunded liabilities.

Cash Balance for Employees

Portability allows members to take their full account balance with them whenever they leave public employment.

Return Guarantees offer predictability to plan members by removing much of the investment risk, yet still can offer upside gainsharing during years of extraordinary investment performance.

Turnkey Options allow members to lean on investment professionals and removes the need for members to manage their own investment portfolios.

- In a CB plan, the employee and employer contributions are co-mingled and the state manages the investments in the plan just as it does in a traditional DB pension plan.

Cash Balance Design Costs vs. Risks

Costs:

- A cash balance plan with fixed employer contributions and a guaranteed interest crediting rate (+ upside share) that is lower than the current ERS assumed investment return assumption could reduce employers' direct costs of providing lower-risk—but still guaranteed—benefits that resemble traditional DB pensions.

Risks:

- Similar to a DB pension, a CB plan's assets are managed by the employer, who bears the investment risks.
- Yet, setting a guaranteed benefit rate reduces downside risks for employers by removing the plan's heavy reliance on market and demographic assumptions.
- Employees also enjoy a contribution floor guarantee and benefit from upside sharing of investment returns above the floor.

Cash balance plans can still accrue unfunded liabilities if investments severely underperform; however, risks are lower compared to a DB design that is subject to gains and losses from actuarial experiences.

ANALYSIS OF SB321 (AS PASSED BY SENATE)

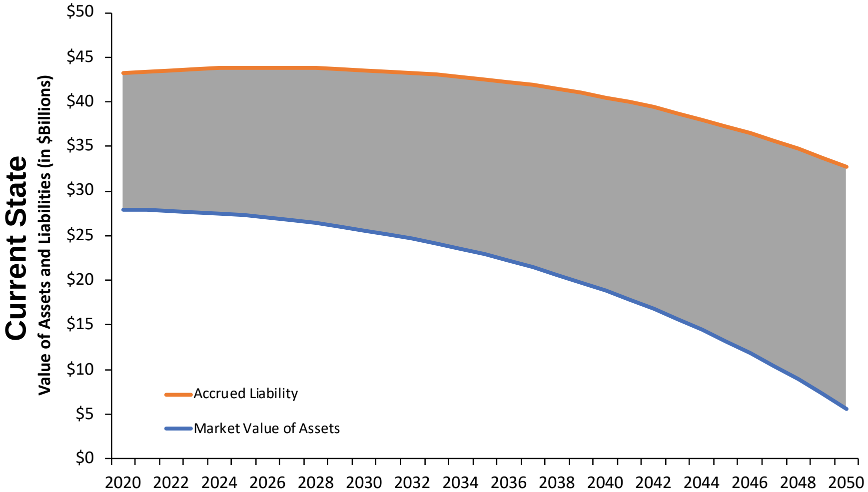
How does the proposed reform address ERS challenges?

Quick Note…

The purpose of the following prospective analysis is to compare long-term costs and funding outcomes of SB 321 (as passed by Senate) to the status quo for legislative policy guidance.

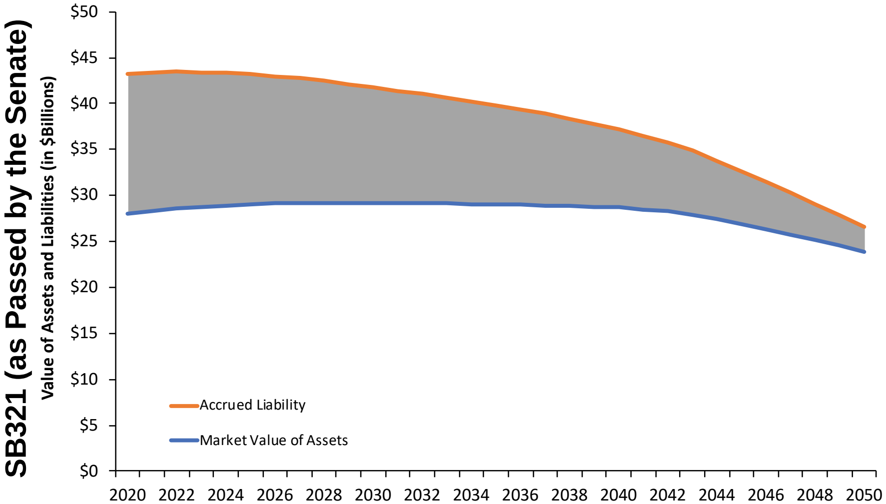
This is for information purposes only and does not constitute an endorsement of any particular reform concept.

SB321 (as Passed by the Senate) Brings ERS Closer to Closing the Funding Gap



- Without change, ERS liabilities will continue to be well above assets over the next 30 years even if assumptions are accurate.
- According to ERS investment managers and administrators, future market returns are unlikely to prevent ERS from running out of funds.

- SB321 increases the accrual of assets with the use of actuarially determined contributions (ADEC).
- The reform also bends the accrual of liabilities down over time with new members entering a Cash Balance plan.



Source: Pension Integrity Project actuarial forecast of ERS. Values are adjusted for inflation.

Modeling Scenarios

Status Quo
(Baseline)

- Represents the current state of ERS
- No changes are made to funding policies or actuarial assumptions.

SB321
(As passed by Senate)

- Change contribution policy to pay the actuarially determined employer contribution (ADEC) every year
  - This policy ensures annual contributions are sufficient to eliminate unfunded liabilities by the determined amortization date (2054).
  - This would mean the fund is getting enough to keep promises made to members past and present, and that the fund would be more responsive to market volatility.
- Provides a <u>new</u> reduced-risk Cash Balance plan for new hires that includes 6% employee contribution, a 9% employer contribution, and a guaranteed interest of 4%;
  - The Cash Balance plan offers all new hires a more portable retirement plan with a benefit accrual that better accommodates the modern workforce.
  - The interest guarantee means that the state pays any amount short of 4%.
  - Any amount of the annual return between 4% and 7% is split equally between the member's account and the ERS fund.
  - Any amount of the annual return above 7% goes entirely to the ERS fund.
  - Employer match at retirement is 150% for all employees. LECO members contribute tribute an additional 2% to the LECO Supplemental Retirement Fund (LECOSRF), with a 300% employer match to employee LECOSRF contributions

Comparing Texas' Cash Balance Plans

	TCDRS	TMRS	SB 321 (as passed by Senate)
Vesting	5, 8, or 10 years	5 or 10 years	5 years
Normal Retirement Eligibility	Age 60 & Vested Rule of 75 or 80 or Any Age & 20 or 30 YOS	Age 60 & Vested or Any Age & 20 or 25 YOS	Pre-2009: Age 60 & Vested / Post-2009: Age 65 & 10 YOS Rule of 80 or Any Age & 20 or Age 55 & 10 YOS
Employee Contribution	4%, 5%, 6%, or 7%	5%, 6%, or 7%	6%
Employer Contribution	100% ADEC	100% ADEC	9%
Assumed Rate of Return / Discount rate	8%	6.75%	7.0%
Guaranteed Return	7%	5%	4% (+50% upside sharing of 5Y Avg Rtr, capped at 7%)
Cost-of-living Adjustment	Ad-hoc	30%, 50%, or 70% of CPI Δ	*N/A*
Funded Ratio	89% (92% with reserve)	87.4%	*N/A*

Source: Texas TCDRS and TMRS actuarial valuations, financial reports and other public plan documents.

Stress Testing SB 321 Using Crisis Simulations

Stress on the Economy:

- Market watchers expect dwindling consumption and incomes to severely impact near-term tax collections – applying more pressure on state and local budgets.
- Revenue declines are likely to undermine employers' ability to make full pension contributions, especially for those relying on more volatile tax sources (e.g., sales taxes) and those with low rainy-day fund balances.
- Many experts expect continued market volatility, and the Federal Reserve is expected to keep interest rates near 0% for years and only increase rates in response to longer-term inflation trends.
- As deployed in the following analysis, recession = -24% returns in 2021, 11% returns in 2022-2024, 6% return each year, save for the 2038 repeat recession.

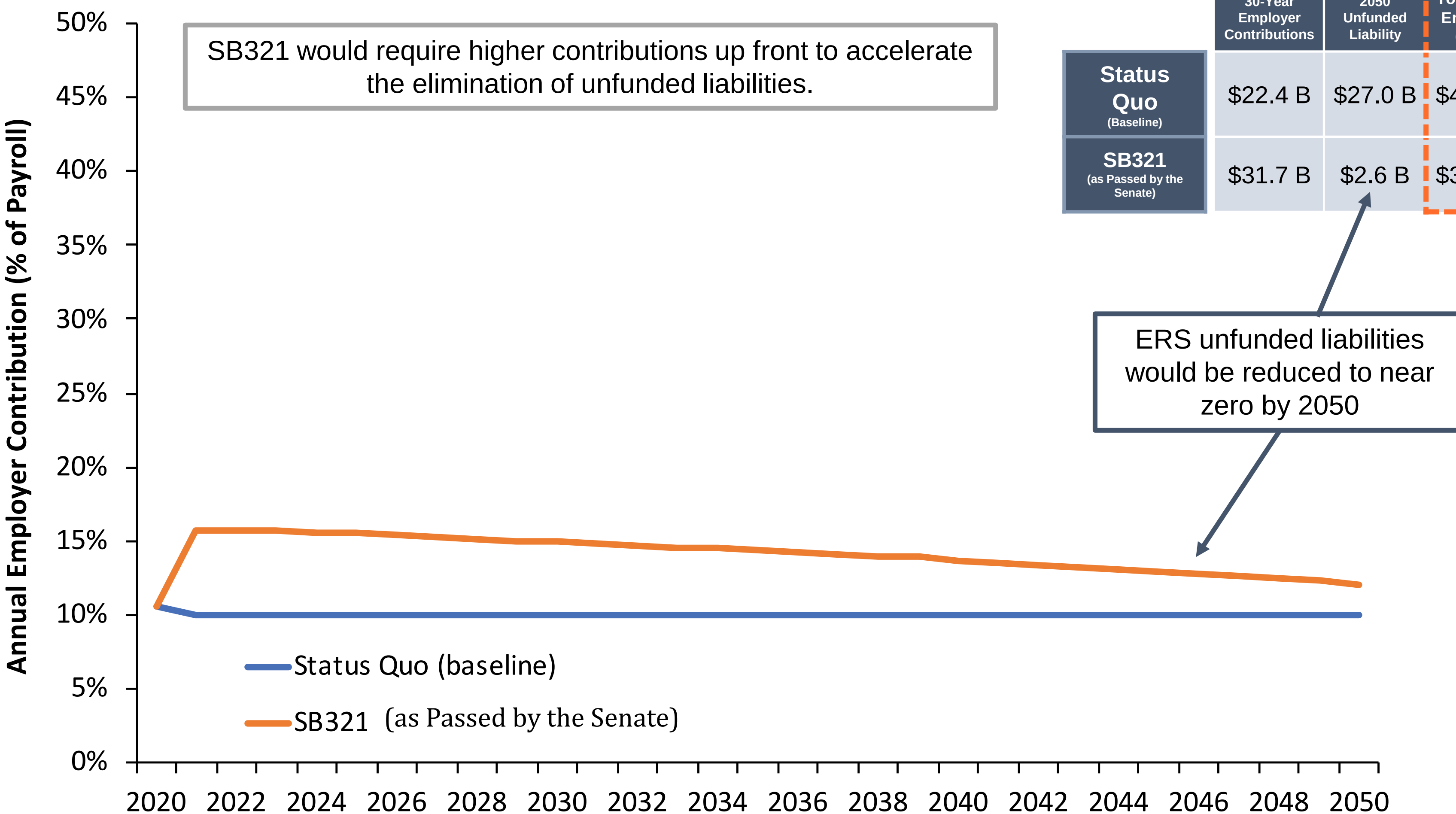
"All-in Employer Cost" Explained

The true cost of a pension is not only in the annual contributions, but also in whatever unfunded liabilities remain. The "All-in Employer Cost" combines the total amount paid in employer contributions and adds what unfunded liabilities remain at the end of the forecasting window.

What if Experience Matches ERS Assumptions?

7% constant returns over 30 years

	30-Year Employer Contributions	2050 Unfunded Liability	Total All-in Employer Costs
Status Quo (Baseline)	$22.4 B	$27.0 B	$49.4 B
SB321 (as Passed by the Senate)	$31.7 B	$2.6 B	$34.3 B

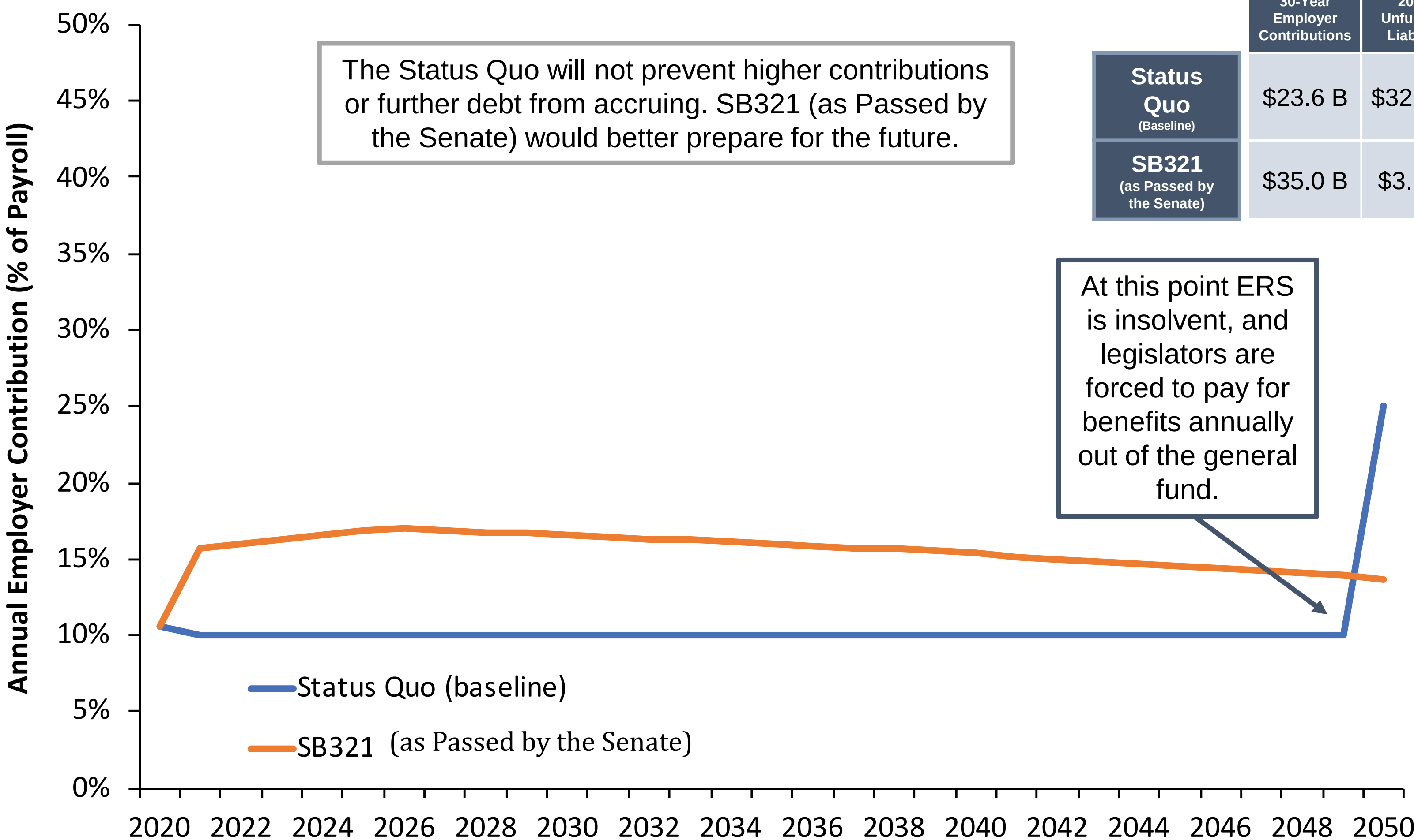


Source: Pension Integrity Project actuarial forecast of ERS. Values are rounded and adjusted for inflation.

What if ERS Experiences One Bad Year?

0% Return in 2021 + 7% constant returns following

	30-Year Employer Contributions	2050 Unfunded Liability	Total All-in Employer Costs
Status Quo (Baseline)	$23.6 B	$32.7 B	$56.3 B
SB321 (as Passed by the Senate)	$35.0 B	$3.1 B	$38.1 B

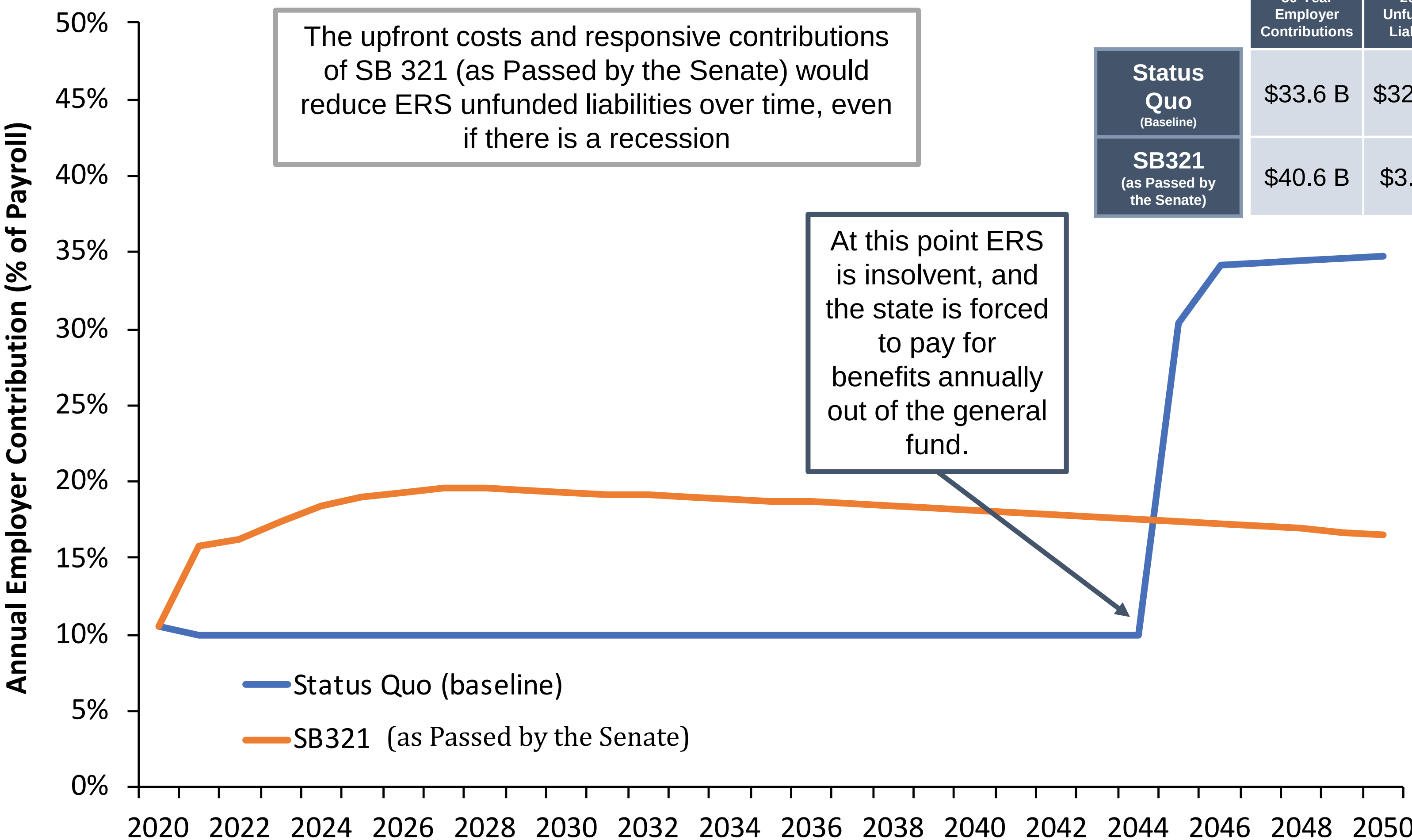


Source: Pension Integrity Project actuarial forecast of ERS. Values are rounded and adjusted for inflation.

What if ERS Experienced Another Recession?

ERS 2008-12 returns repeated in 2021-25 + 7% constant returns following

	30-Year Employer Contributions	2050 Unfunded Liability	Total All-in Employer Costs
Status Quo (Baseline)	$33.6 B	$32.7 B	$66.2 B
SB321 (as Passed by the Senate)	$40.6 B	$3.9 B	$44.5 B

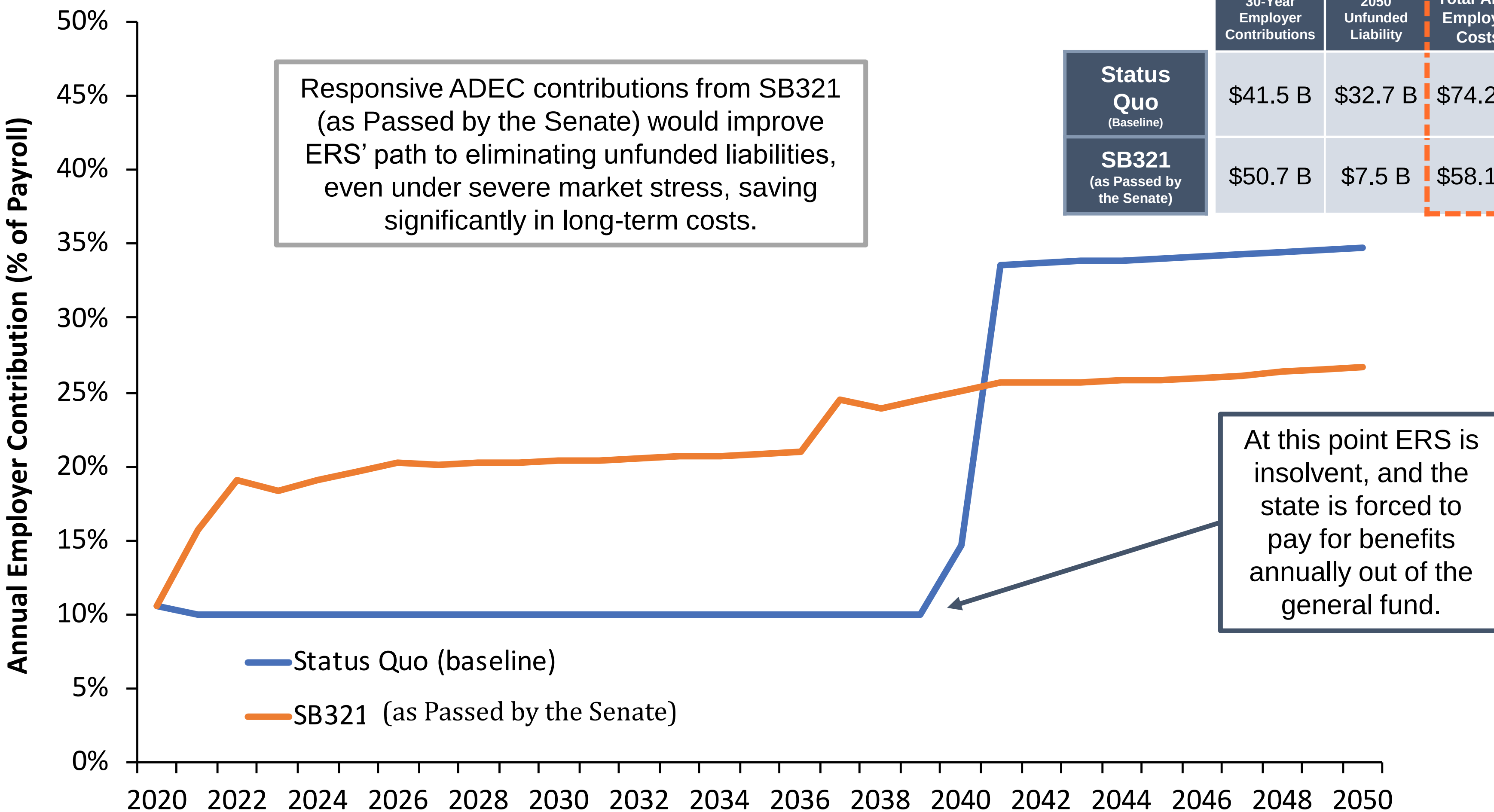


Source: Pension Integrity Project actuarial forecast of ERS. Values are rounded and adjusted for inflation.

What if ERS Faces Severe Market Turmoil?

Recessions in 2021 & 2036 + 6% constant returns following

	30-Year Employer Contributions	2050 Unfunded Liability	Total All-in Employer Costs
Status Quo (Baseline)	$41.5 B	$32.7 B	$74.2 B
SB321 (as Passed by the Senate)	$50.7 B	$7.5 B	$58.1 B



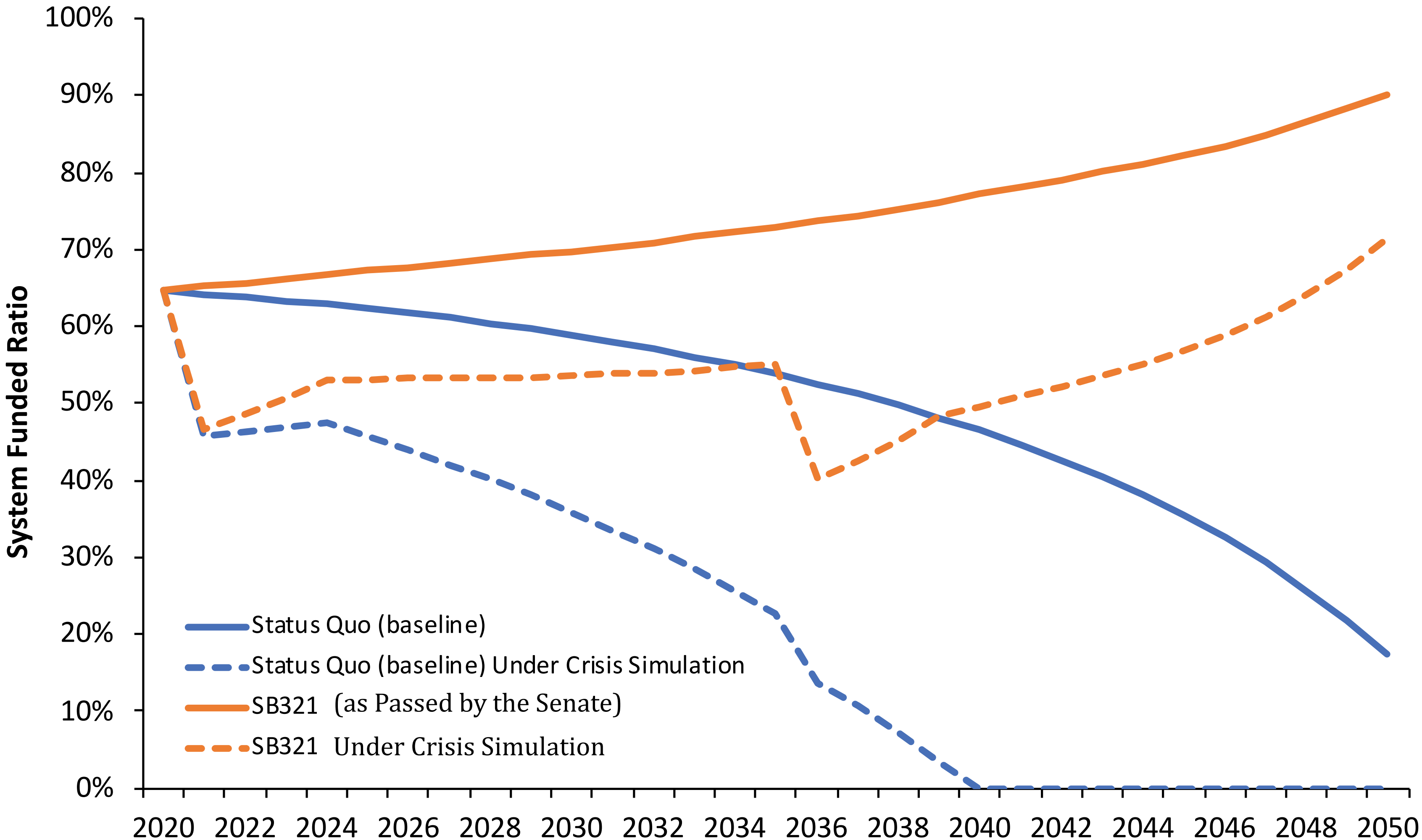
Source: Pension Integrity Project actuarial forecast of ERS. Values are rounded and adjusted for inflation.

Long Term Results of Different Scenarios

	7% Returns (FRS Assumption)			Two Recession + 6% Returns		
	30-Year Employer Contributions	2050 Unfunded Liability	Total All-in Employer Costs	30-Year Employer Contributions	2050 Unfunded Liability	Total All-in Employer Costs
Status Quo (Baseline)	$22.4 B	$27.0 B	$49.4 B	$41.5 B	$32.7 B	$74.2 B
SB 321 (As Passed by the Senate)	$31.7 B	$2.6 B	$34.3 B	$50.7 B	$7.5 B	$58.1 B

Source: Pension Integrity Project actuarial forecast of ERS. Values are rounded and adjusted for inflation.

SB321 (as Passed by the Senate) Prioritizes Full Funding



Source: Pension Integrity Project actuarial forecast of ERS.

SB 321 Meets the Objectives for Good Pension Reform

Reform Objectives	Status Quo (Baseline)	SB321 (As Passed by the Senate)
Keeping Promises *Ensure the ability to pay 100% of the benefits earned and accrued by active workers and retirees*	NO	YES
Retirement Security *Provide retirement security for all current and future employees*	SOME	YES
Predictability *Stabilize contribution rates for the long-term*	NO	YES
Risk Reduction *Reduce pension system exposure to financial risk and market volatility*	NO	YES
Affordability *Reduce long-term costs for employers, employees*	NO	YES
Attractive Benefits *Ensure the ability to recruit 21st Century employees*	NO	YES
Good Governance *Adopt best practices for board organization, investment management, and financial reporting*	SOME	n/a

Key Takeaways

- SB321 (as passed by the Senate) effectively addresses the underfunded benefits of the past and establishes an attractive plan for new hires that manages risk for all parties, which sets ERS up for success in the future.
- The reform will increase annual costs at first, but could eventually save approximately $16 billion long-term.
- ADEC contribution policy will ensure that the state continues to reduce pension debt despite an increasingly turbulent and less-predictable market.

Questions?

Pension Integrity Project at Reason Foundation

Zachary Christensen, Managing Director

zachary.christensen@reason.org

Steven Gassenberger, Policy Analyst

steven.gassenberger@reason.org

Len Gilroy, Senior Managing Director

leonard.gilroy@reason.org