Examining the Solvency & Resiliency of Ohio Pensions

Prepared by:

Pension Integrity Project at Reason Foundation

Ohio House of Representatives Pensions Committee

December 2023

reason FOUNDATION

Pension Integrity Project at Reason Foundation

We offer pro-bono technical assistance:

- **Customized analysis** of pension system design, trends
- **Independent actuarial modeling** of reform scenarios
- Consultation and modeling around **new 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

Objectives of Good Pension Reform

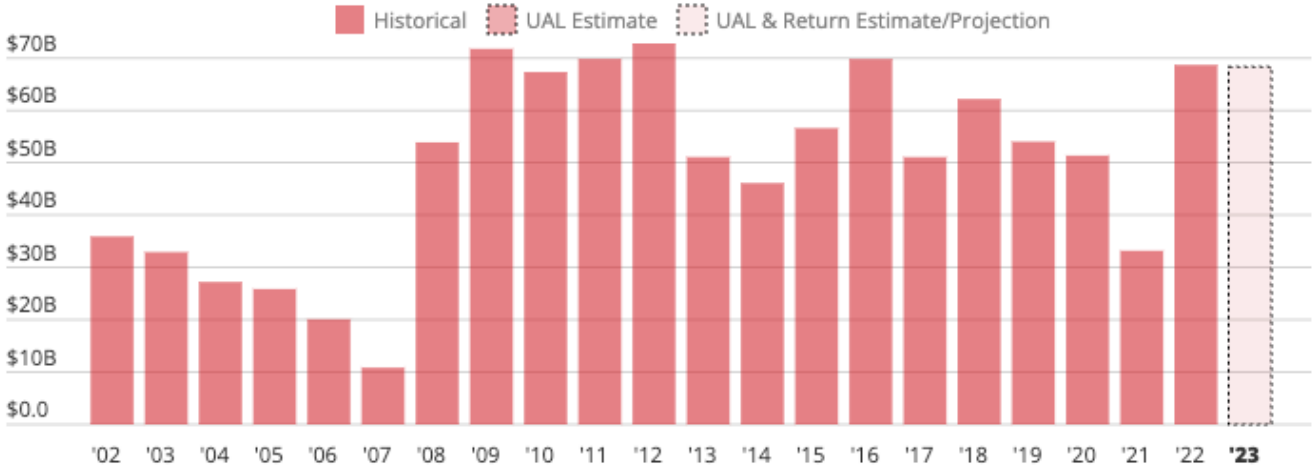
- **Keeping Promises**: Ensure the ability to pay 100% of the benefits earned and accrued by active workers and retirees
- **Retirement Security**: Provide retirement security for all current and future employees
- **Predictability**: Stabilize contribution rates for the long-term
- **Risk Reduction**: Reduce pension system exposure to financial risk and market volatility
- **Affordability**: Reduce long-term costs for employers/taxpayers and employees
- **Attractive Benefits**: Ensure the ability to recruit 21st Century employees
- **Good Governance**: Adopt best practices for board organization, investment management, and financial reporting

THE PENSION UNDERFUNDING CHALLENGE

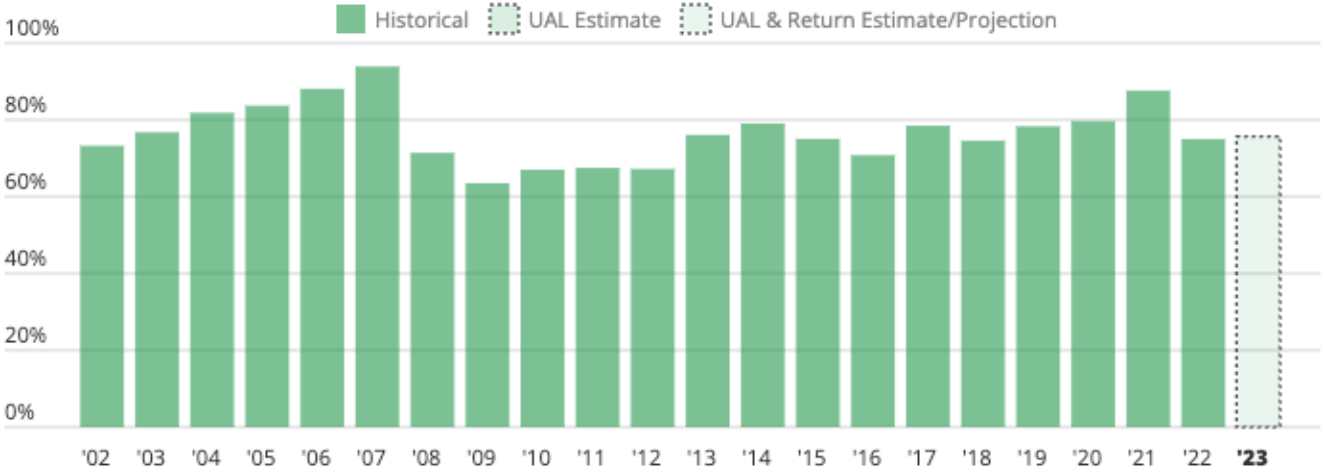
Putting Ohio's public pension funding in context

Funding History: Ohio's Four Major Pensions

Ohio Unfunded Liability



Ohio Funded Ratio

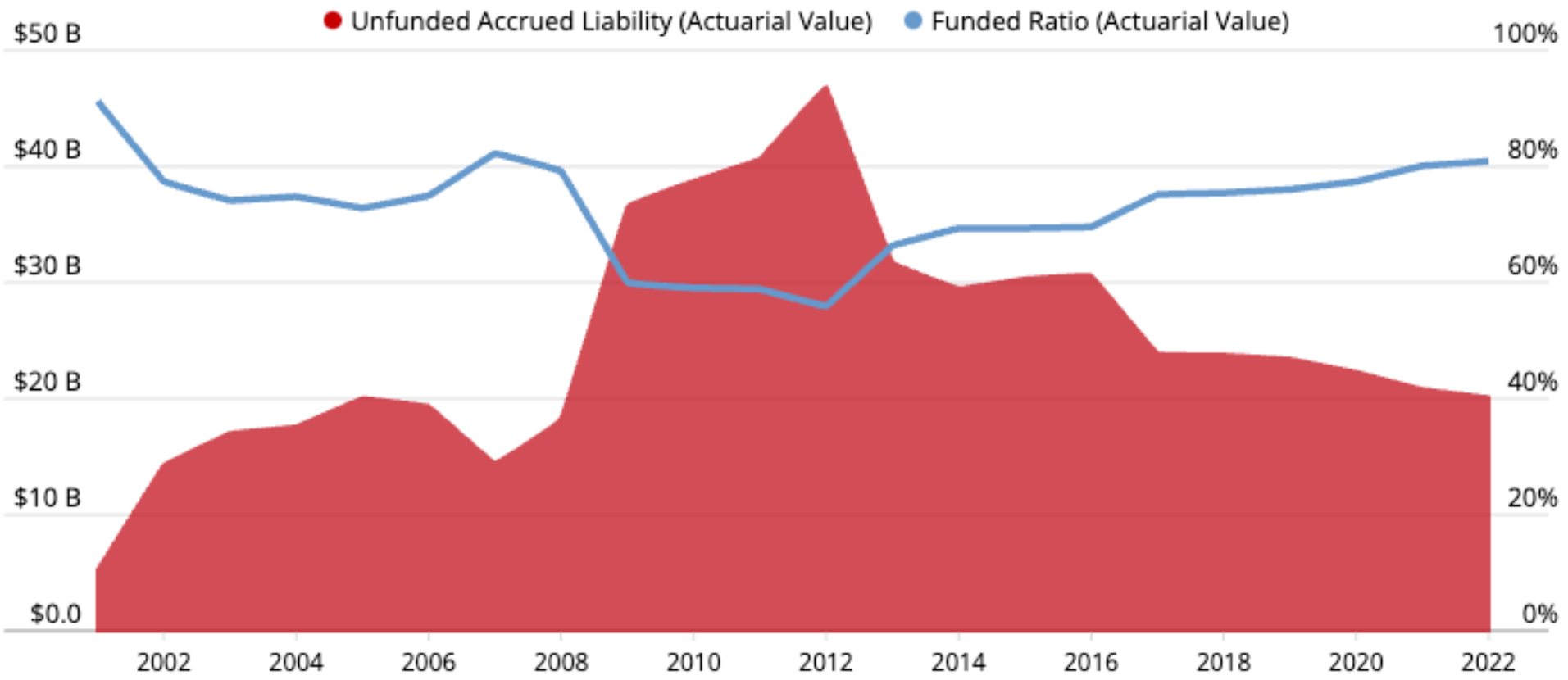


Reason Estimated 2023 Funding Metrics

	Funded Ratio	UAL
United States	76.0%	$1.35 T
Ohio	75.7%	$68.3 B
PERS	76.1%	$29.9 B
STRS	78.0%	$23.4 B
OP&F	62.5%	$9.92 B
SERS	77.6%	$5.05 B

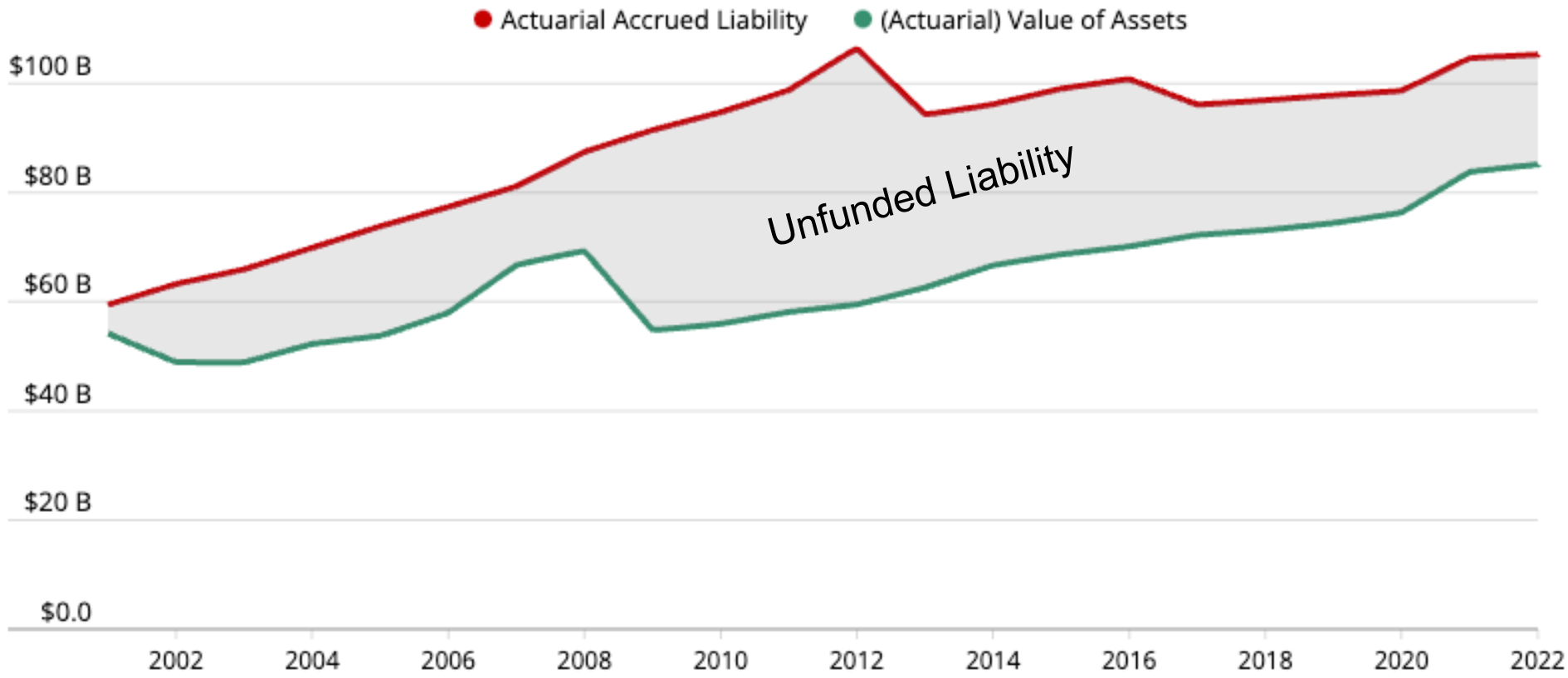
Source: Pension Integrity Project analysis of STRS, PERS, SERS, & OP&F actuarial data.
Unfunded Liabilities are reported on a market value of assets (MVA) basis.

Unfunded Pension Liabilities: Ohio STRS



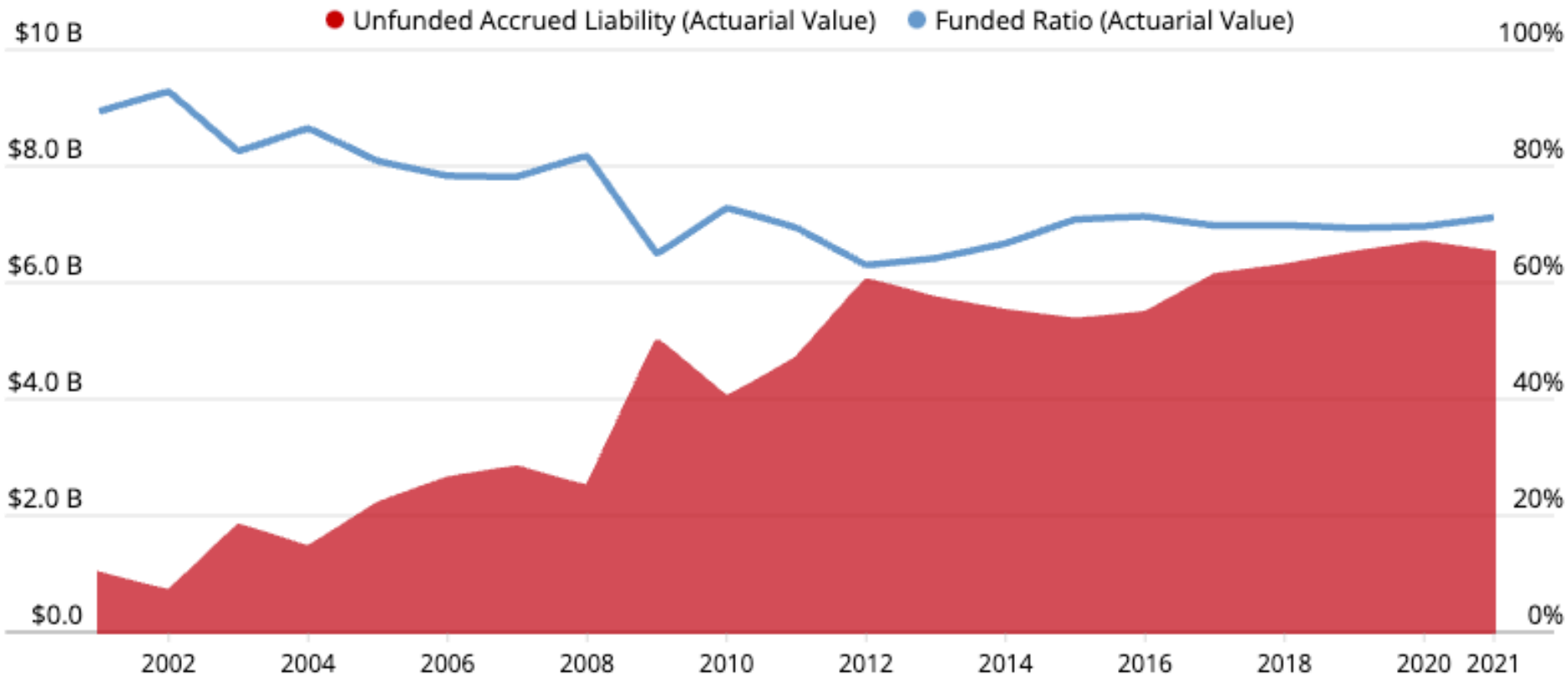
Source: Pension Integrity Project analysis of STRS actuarial data. Unfunded Liabilities are reported on an actuarial value of assets (AVA) basis.

Assets vs Liabilities: Ohio STRS



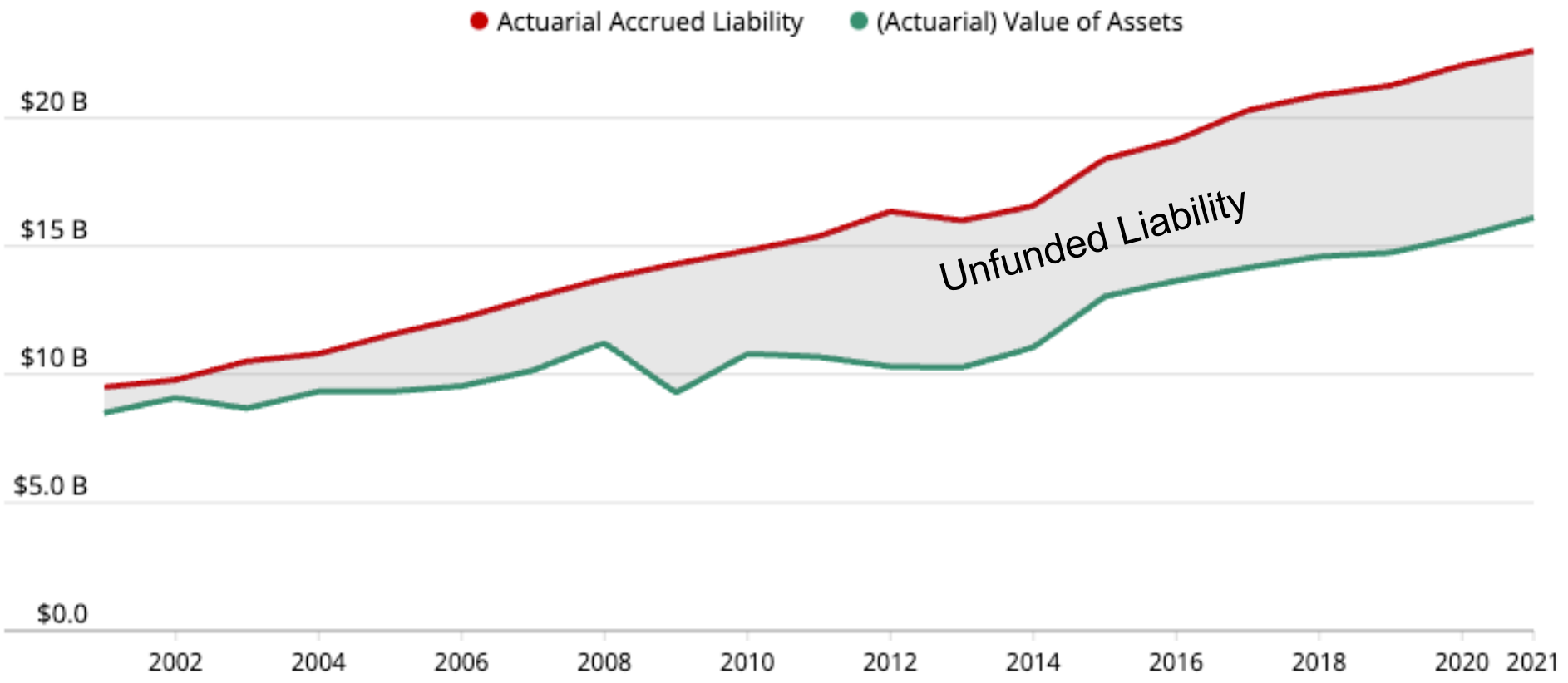
Source: Pension Integrity Project analysis of STRS actuarial data. Unfunded Liabilities are reported on an actuarial value of assets (AVA) basis.

Unfunded Pension Liabilities: OP&F



Source: Pension Integrity Project analysis of OP&F actuarial data. Unfunded Liabilities are reported on an actuarial value of assets (AVA) basis.

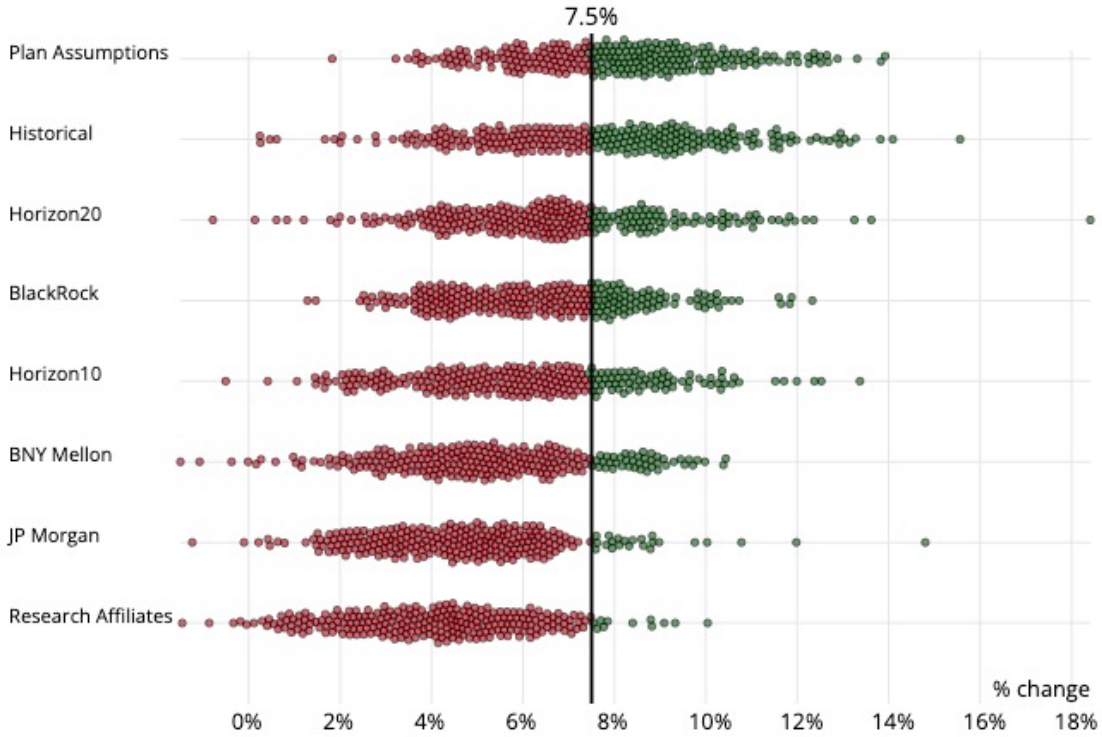
Assets vs Liabilities: OP&F



Source: Pension Integrity Project analysis of OP&F actuarial data. Unfunded Liabilities are reported on an actuarial value of assets (AVA) basis.

Overestimated Returns: OP&F

The Monte Carlo analysis applies market assumptions from major experts to run 10,000 return simulations. This reveals the probabilities of potential outcomes.



The probability that OP&F will achieve a 7.5% rate of return

Plan Assumptions: 59%	Historical: 52%
Horizon10: 25%	BNY Mellon: 16%
Horizon20: 33%	BlackRock: 29%
JP Morgan: 10%	Research Affiliates: 4%

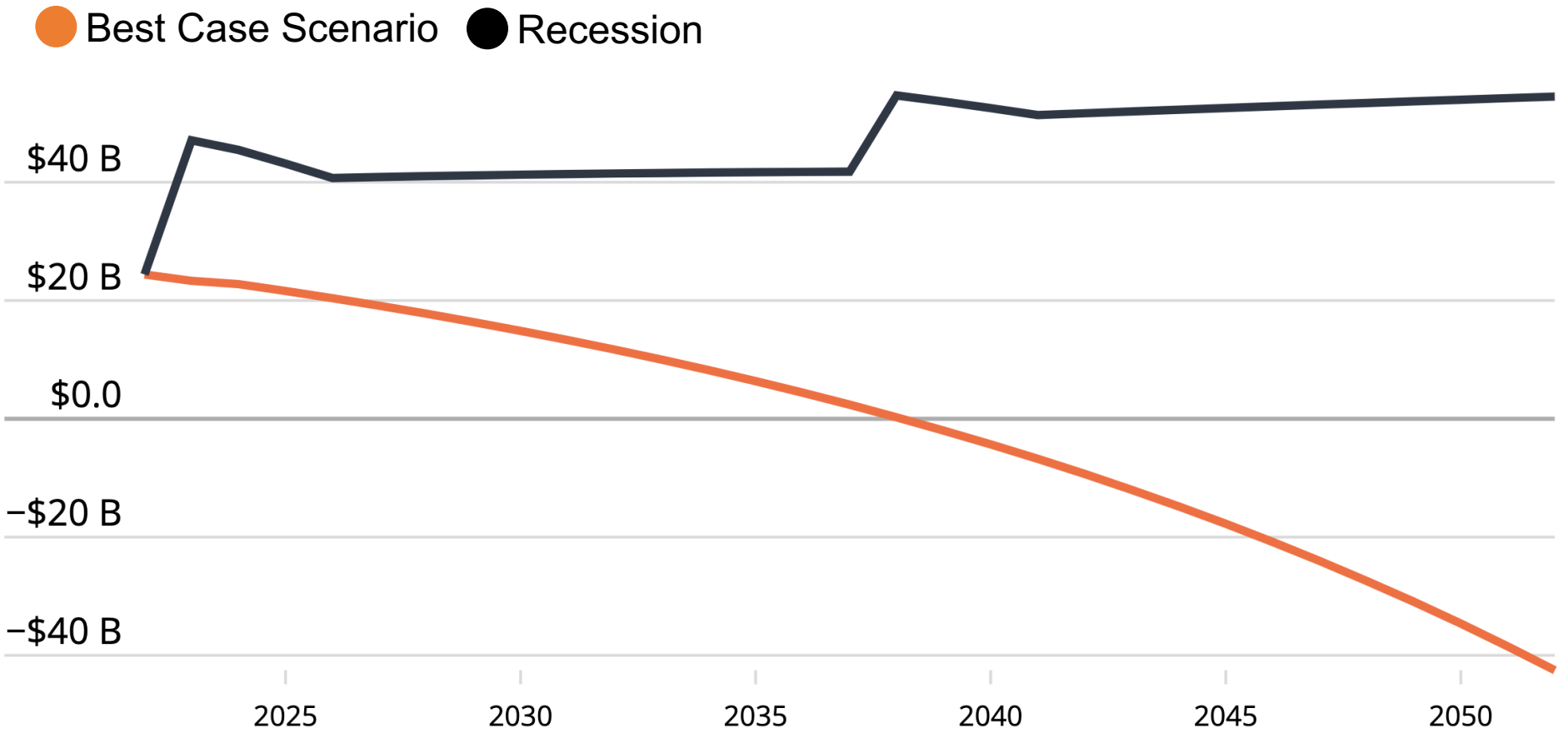
Source: Pension Integrity Project analysis of OP&F actuarial data.

TESTING OHIO'S PENSION RESILIENCY

Actuarial modeling reveals how prepared STRS and OP&F are for a volatile future

Resiliency Concerns Remain for STRS

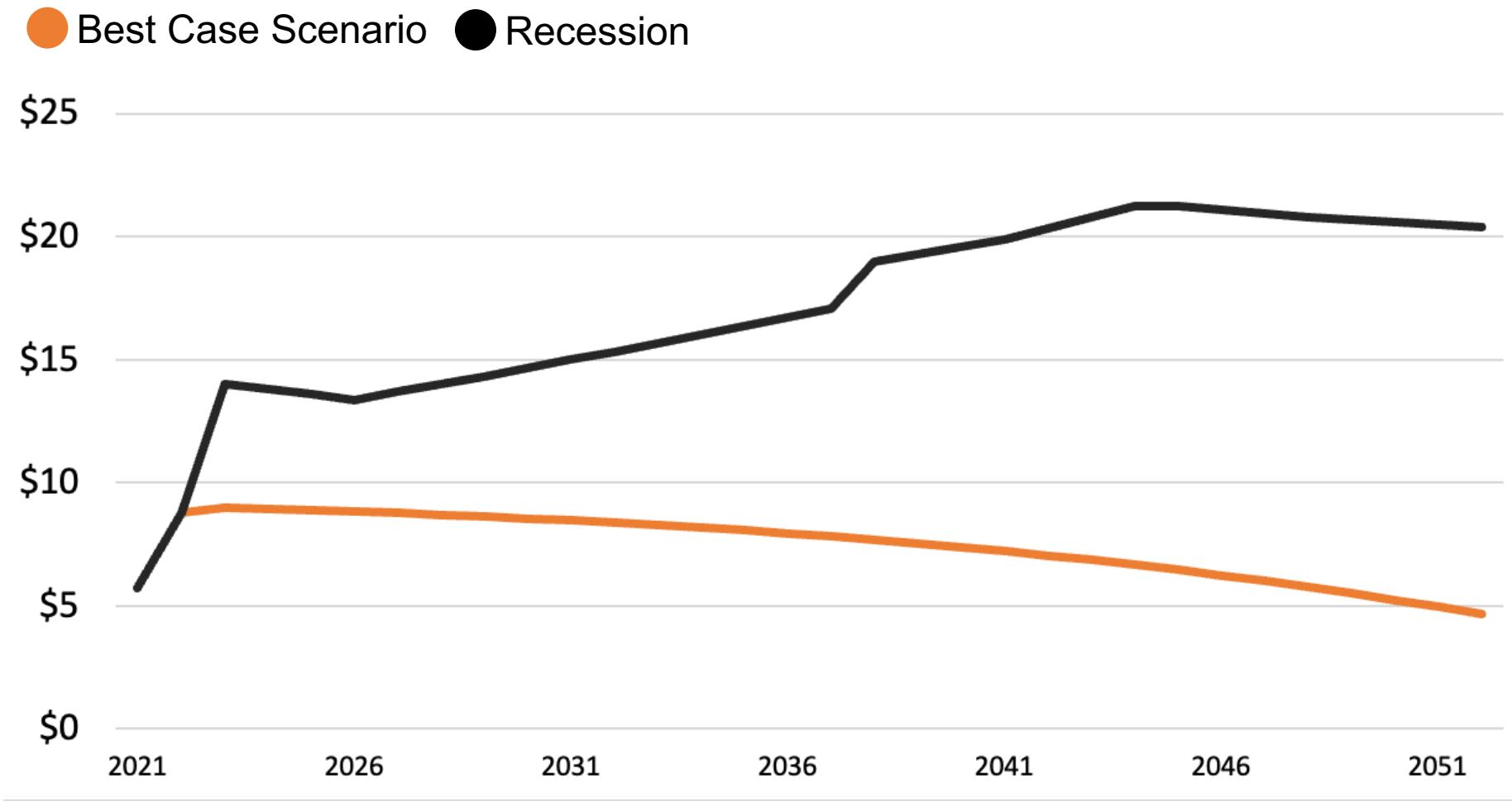
Long-term Actuarial Forecast of Unfunded Liabilities



Source: Pension Integrity Project actuarial modeling of STRS. Unfunded Liabilities are reported on a market value of assets (MVA) basis. Recession Scenario applies Dodd-Frank returns in 2024 and 2039. Values are adjusted for inflation.

OP&F Remains Fragile, Likely to Worsen

Long-term Actuarial Forecast of Unfunded Liabilities



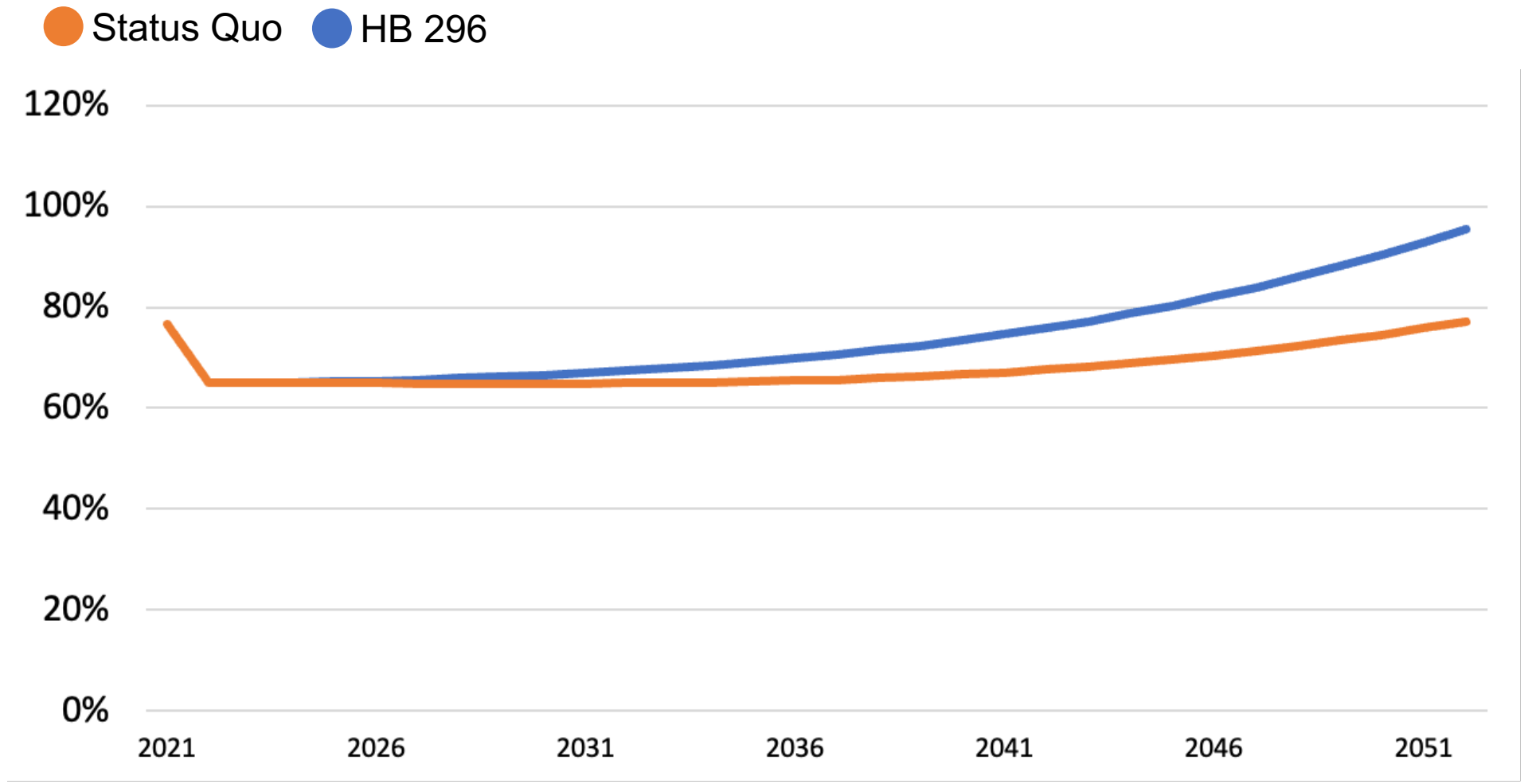
Source: Pension Integrity Project actuarial modeling of OP&F. Unfunded Liabilities are reported on a market value of assets (MVA) basis. Recession Scenario applies Dodd-Frank returns in 2024 and 2039. Values are adjusted for inflation.

IMPACT OF HB 296 ON OP&F

Will the contribution increase from House Bill 296 improve the solvency and resiliency of OP&F?

House Bill 296 Fiscal Impact

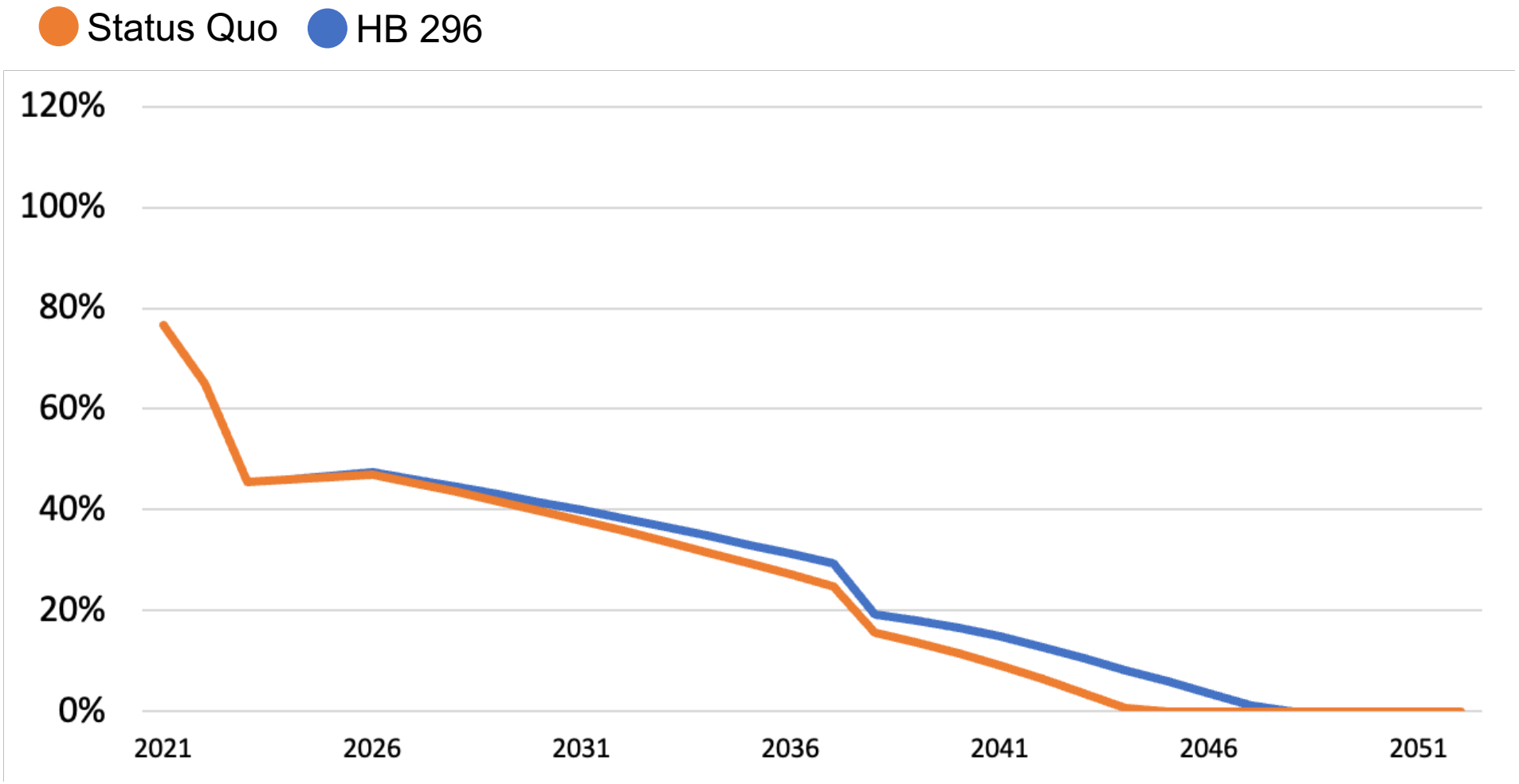
OP&F Funded Ratio Trajectory Under Best Case Scenario (7.5% Returns Each Year)



Source: Pension Integrity Project actuarial modeling of OP&F. Funded ratios are reported on a market value of assets (MVA) basis.

Major Vulnerability to Market Remains

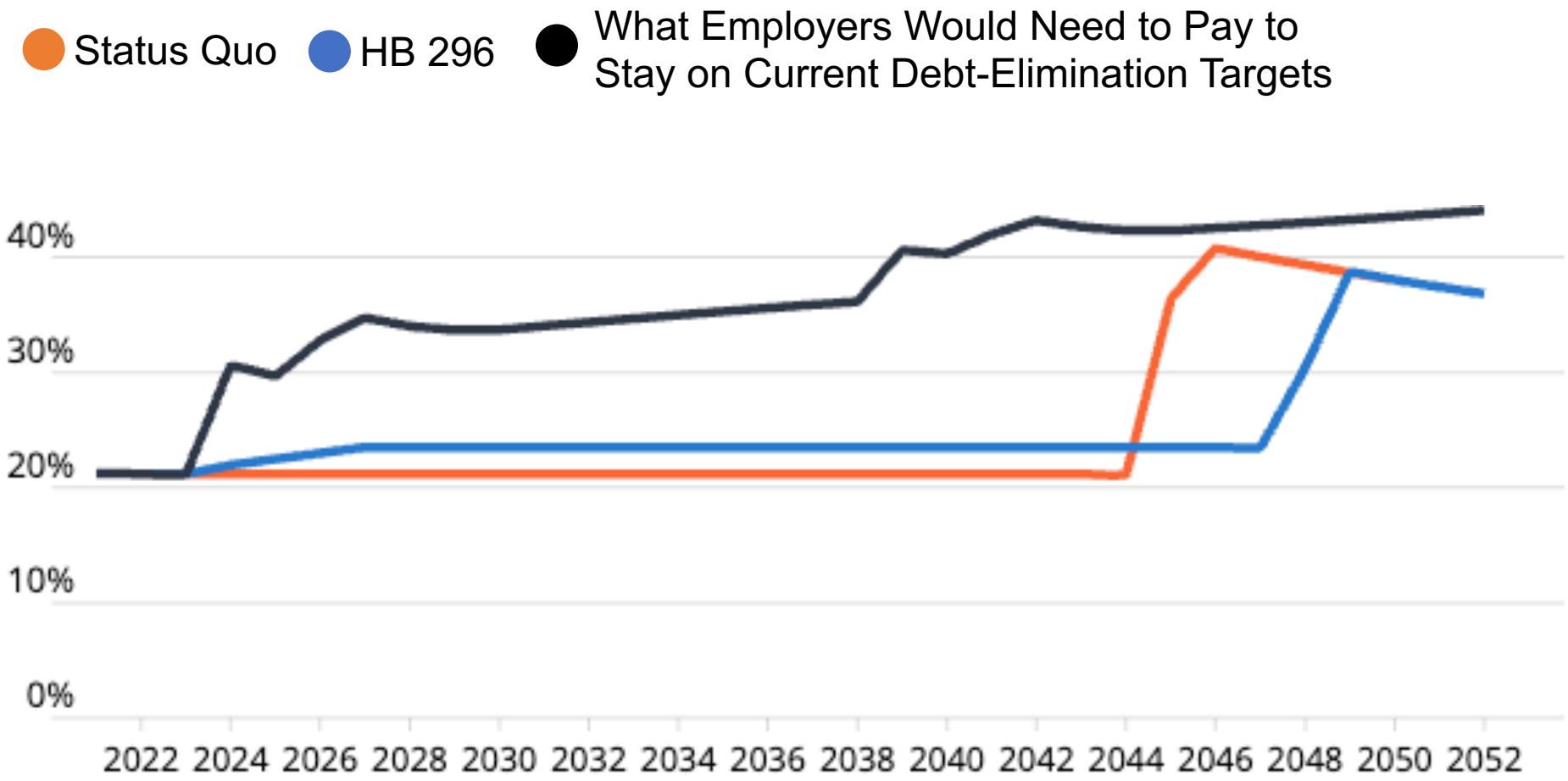
OP&F Funded Ratio Becomes Insolvent Under Recession Scenario



Source: Pension Integrity Project actuarial modeling of OP&F.
Recession Scenario applies Dodd-Frank returns in 2024 and 2039. Funded ratios are reported on a market value of assets (MVA) basis.

OP&F Needs Much Higher Contributions

OP&F Employer Contribution Trajectory Under Recession Scenario



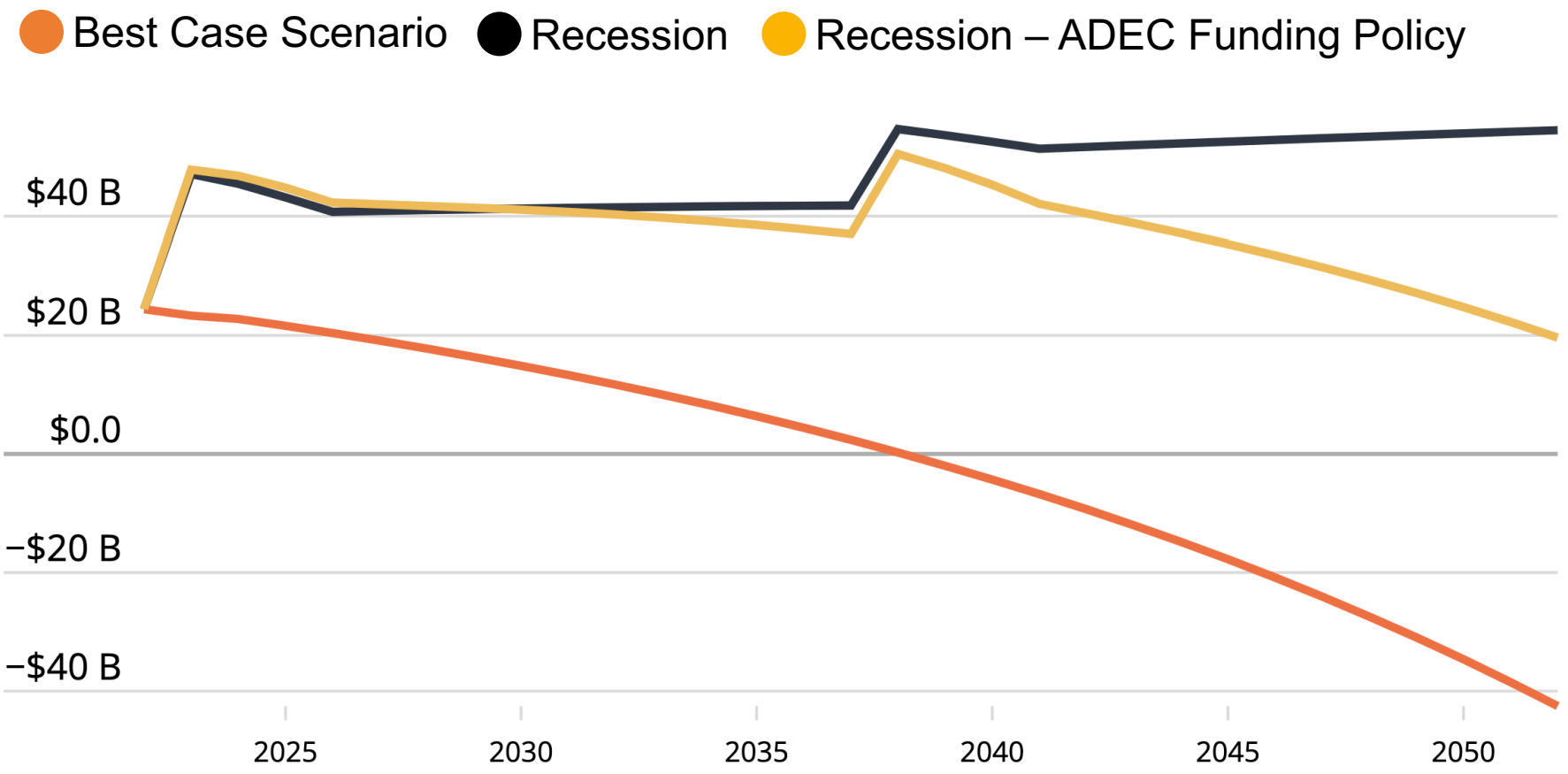
Source: Pension Integrity Project actuarial modeling of OP&F.
Recession Scenario applies Dodd-Frank returns in 2024 and 2039.

POLICIES TO IMPROVE THE RESILIENCY OF OHIO'S PENSIONS

Shifting from statutorily set to actuarially determined employer contributions and modernizing assumption policies can protect the state from future funding challenges and runaway costs

ADEC Funding Policy Makes STRS Resilient

Long-term Actuarial Forecast of Unfunded Liabilities using Actuarially Determined Employer Contributions (ADEC)



Source: Pension Integrity Project actuarial modeling of STRS. Unfunded Liabilities are reported on a market value of assets (MVA) basis. Values are adjusted for inflation.

Long-term Cost of Inaction: STRS

30-year Cost Analysis of Ohio STRS Under Stress Scenario

	Total ER Contribution	Ending Unfunded Liabilities	All-in Cost
Current Contribution Policy	$55.4 B	$52.5 B	$107.9 B
ADEC Contribution Policy	$80.3 B	$19.6 B	$99.9 B

Source: Pension Integrity Project actuarial modeling of STRS. Unfunded Liabilities are reported on a market value of assets (MVA) basis. Values are adjusted for inflation.

Long-term Cost of Inaction: OP&F

30-year Cost Analysis of Ohio OP&F Under Stress Scenario

	Total ER Contribution	Ending Unfunded Liabilities	All-in Cost	
Current Contribution Policy	$22.7 B	$20.4 B	$43.1 B	7.5% Assumed Return
ADEC Contribution Policy	$32.9 B	$4.7 B	$37.6 B	
Current Contribution Policy	$22.7 B	$21.5 B	$44.2 B	7.0% Assumed Return
ADEC Contribution Policy	$32.5 B	$3.2 B	$35.7 B	
Current Contribution Policy	$22.7 B	$24.2 B	$46.9 B	6.0% Assumed Return
ADEC Contribution Policy	$35.1 B	$0.8 B	$35.9 B	

Source: Pension Integrity Project actuarial modeling of OP&F. Unfunded Liabilities are reported on a market value of assets (MVA) basis. Values are adjusted for inflation.

Main Takeaways

STRS

- Despite several prudent reforms to improve solvency, STRS remains at serious risk of future growth in unfunded liabilities.

Potential Reforms to Improve STRS Resiliency:

- Contribution policy reforms
  - Committing to an **ADEC contribution floor** will ensure that STRS continues to get the necessary funding to fulfill all pension promises.
  - Adopting a shorter **amortization policy** will make contributions more responsive to needs and reduce expensive interest on pension debt.
- Adjustments to market assumptions.
- Explore innovative reforms to address risk management, tensions over benefit adjustments, governance issues, etc.

Main Takeaways

OP&F

- HB 296 will not address the structural underfunding of OP&F and will leave the plan exposed to a high probability of insolvency.

Potential Reforms to Improve OP&F Resiliency:

- Contribution policy reforms
  - The current approach of waiting until OP&F faces funding problems to incrementally increase employer contributions is adding unnecessary costs to the state and taxpayers. An **ADEC contribution policy** is needed.
  - A shorter **amortization policy** will greatly reduce long-term costs and risks of insolvency.
- Adjustments to assumptions
  - More conservative **investment assumption** adjustments are needed due to high market volatility.
  - The **payroll growth assumption** should move toward 0% to reduce reliance on backloading.
- Explore additional risk management and cost-saving reforms.

Questions?

Zachary Christensen
Managing Director
Pension Integrity Project
Reason Foundation
zachary.christensen@reason.org