

## Methodology

### Developments supporting pension risk reporting among states

Over the past decade, actuarial requirements governing risk disclosures in plan valuations have prompted increased risk reporting; plan administrators and policymakers have also supported the practice. And developments such as Pew's framework for risk reporting have helped consolidate support for risk assessments targeted to plan sponsors and budgetary decision-makers.

**2014 - [Blue Ribbon Panel on Public Pension Plan Funding](#) report published.**<sup>1</sup> The Society of Actuaries' Blue Ribbon Panel provided actuarial recommendations for funding and governance practices, including stress tests to measure investment and contribution risks.

**2017 - [Actuarial Standard of Practice \(ASOP\) 51](#) adopted.**<sup>2</sup> ASOP 51 clarifies risk disclosures that must be made by actuaries in pension plan valuations. ASOP 51 disclosures must be qualitative, with additional quantitative assessments left to the discretion of the actuary or plan administrator.

**2018 - [Foundation for Public Pensions Risk Reporting](#) published.**<sup>3</sup> Pew's five-point framework builds on accounting and actuarial standards to provide a comprehensive starting point for pension risk analysis for government plan sponsors and budget decision-makers.

**2019 - [National Association of State Retirement Administrators \(NASRA\) Resolution on Public Retirement System Risk Assessment](#) adopted.**<sup>4</sup> The NASRA resolution recommends periodic risk assessments of pension plans that are "decision-useful" to system fiduciaries and stakeholders.

**2020 - [National Association of State Treasurers \(NAST\) Resolution on Stress Testing](#) passed.**<sup>5</sup> The NAST resolution recommends "routine and transparent" stress testing of state pension plans that is targeted to plan sponsors and includes information on budgetary impacts.

**2021 - [Revisions to ASOP 4](#) adopted.**<sup>6</sup> The Actuarial Standards Board adopted a number of revisions to ASOP 4, which clarifies practices for measuring pension plan obligations and costs. Among the adopted revisions is a new requirement for actuaries to calculate and disclose a measurement of plan liabilities using an investment rate based on a general obligation borrowing rate, allowing for the comparison of pension liabilities with other government-issued debt.

## Model stress testing legislation

Pew has identified three essential elements central to a risk reporting requirement that is adopted either through statute or formalized policy. These elements ensure that assessments are routine and transparent, forward-looking and quantitative, and that analysis provides policy-relevant information to plan fiduciaries, governmental plan sponsors, and budgetary decision-makers.

Although there is no uniform approach to implementing such requirements, the model legislative text below offers an example of a standardized policy containing these essential risk reporting elements.

Criteria for pension risk reporting policy	Pew model risk reporting legislation
<p>Formalizes frequency of reporting and intended audience, with a focus on targeting plan sponsors as well as plan fiduciaries.</p> <p>Requires the stress test to include an assessment of investment risk, while maintaining discretion for the plan to select other risks to assess.</p>	<p>(1) General rule — The [plan administrator] shall conduct a stress test of the system in accordance with industry standards and submit the results of the stress test to the [relevant legislative committees], the [retirement system boards of trustees], the [relevant legislative fiscal office], and the [executive budget secretary] no later than [DATE] of each year. The stress test shall identify and assess risks that may reasonably be anticipated to impact the future financial condition and contribution volatility of the retirement system, including investment risk.</p>
<p>Builds on actuarial requirements for risk disclosures by requiring that the assessment of investment risk include quantitative calculations, in addition to any narrative description.</p> <p>Maintains discretion for the plan to select methods for quantitative risk assessments.</p>	<p>(2) The assessment of investment risk included in the stress test shall be based on numerical calculations of projected assets, liabilities, unfunded liabilities, employer contributions, employee contributions, benefit payments and service costs using methods that may include scenario analysis, simulation analysis, and sensitivity analysis.</p>
<p>Provides a budgetary context to help plan sponsors and other state policymakers assess potential costs in terms of state revenues.</p>	<p>(3) The [relevant legislative fiscal office] shall produce a report summarizing the results of the stress test, including a calculation of the ratio of projected employer pension contributions to projected state revenues.</p>

<sup>1</sup> Society of Actuaries, “Report of the Blue Ribbon Panel on Public Pension Plan Funding” (2014), <https://www.soa.org/blueribbonpanel/>.

<sup>2</sup> Actuarial Standards Board, “Actuarial Standard of Practice No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions” (2017), <http://www.actuarialstandardsboard.org/asops/assessment-disclosure-risk-associated-measuring-pension-obligations-determining-pension-plan-contributions-3/>.

<sup>3</sup> The Pew Charitable Trusts, “Foundation for Public Pensions Risk Reporting” (2018), [https://www.hks.harvard.edu/sites/default/files/centers/mrcbg/programs/Foundation for Pensions Risk Reporting \(Strawman\).pdf](https://www.hks.harvard.edu/sites/default/files/centers/mrcbg/programs/Foundation%20for%20Pensions%20Risk%20Reporting%20(Strawman).pdf).

<sup>4</sup> National Association of State Retirement Administrators, “RESOLUTION 2019-01 - Public Retirement System Risk Assessment” (2019), <https://www.nasra.org/resolutions#RESOLUTION%202019-01>.

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<sup>5</sup> National Association of State Treasurers, “Resolution Supporting Policies for Comprehensive Stress Testing and Risk Reporting for Public Pensions” (2020), <https://nast.org/wp-content/uploads/supporting-policies-for-comprehensive-stress-testing-and-risk-reporting-for-public-pensions.pdf>.

<sup>6</sup> Actuarial Standards Board, “Actuarial Standard of Practice No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions” (2021), <http://www.actuarialstandardsboard.org/asops/asop-no-4-measuring-pension-obligations-and-determining-pension-plan-costs-or-contributions/>.