ANALYSIS OF SENATE BILL 176: MODERNIZING SOUTH CAROLINA'S STATE RETIREMENT SYSTEM

Prepared by: Pension Integrity Project at Reason Foundation
May 4, 2021
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
Overview

This analysis examines Senate Bill 176 of 2021 and its impact on the membership and long-term solvency of the South Carolina Retirement System (SCRS).*

Featuring for New Hires:
- A new, risk-reduced defined benefit (DB) pension option to all new members looking to make a career of public service.
- Now offering a modernized defined contribution (DC) pension option to all new hires as the default.

Objectives of SB 176:
- The current defined benefit SCRS pension plan would remain unchanged for legacy workers and retirees.
- All new hires will have a choice between a new DC plan and reduced-risk DB plan, with the default being the new DC option.
- Create a realistic path to pay off all current unfunded liabilities while transitioning to a lower-risk set of retirement choices than offered today.

*No changes modeled impact current member and retiree benefits.
Reduced-Risk DC+DB Choice for Employers

**Regulates cost** better than the existing standalone DB plan, because the risk-managed DB benefit will not be as vulnerable to market volatility and unpredictability.

**Limits risk** by increasing the number of those participating in the DC option, which means more workers accruing stable, predictable benefits.

**States that Use a DC-DB Choice Plan:**
- Arizona
- Colorado
- Michigan
- Pennsylvania
  - Utah
  - Florida
  - South Carolina
Reduced-Risk DC+DB Choice for Employees

**Diversifies** retirement savings options to address the needs of an assorted workforce. More choices means serving a wider range of employment situations.

**Advances** retirement security by providing more portable retirement options for short-term, non-professional workers that, for various reasons, may not commit a full 30-year career in public service, such as IT professionals.

The portability of a defined contribution retirement account frees employees to pursue future professional advancement opportunities regardless of location or tenure.

Cash retirement benefits accrue faster than DB benefits, meaning the DC option may be more valuable for those who plan to eventually move on to other opportunities outside of public employment.
The following analysis is for the purposes of comparing long-term costs and funding outcomes of a proposed reform option for policy guidance.

This is for information purposes only and not an endorsement of any particular reform package.
Stress Testing Proposed Retirement Choice Plan 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.
SCRS Funding Status Tied to Investment Returns
7.00% Constant Returns – Status Quo

Source: Pension Integrity Project actuarial forecast of SCRS. State is assumed to continue annual statutory contributions until full funding is achieved, at which point the state adopts an ADEC contribution policy to avoid significant overfunding.
SCRS Funding Status Tied to Investment Returns
Two Recessions + 6% Constant Returns – Status Quo

Stress testing suggests that SCRS isn’t prepared for the "new normal" of market volatility and lower expected returns.

Source: Pension Integrity Project actuarial forecast of SCRS. State is assumed to continue annual statutory contributions.
Modeling Scenarios

Status Quo
(Baseline)

- Represents the current state of SCRS
- No changes are made to funding policies or actuarial assumptions.
- To avoid unrealistic outcomes, the analysis assumes that the state will reduce contributions at the point of full funding to avoid significant overfunding

S.B.176
(as introduced)

- Offers a choice between new DB and default DC retirement option to all new hires.
- Seals the current DB plan for active and retired members so any unfunded liability calculated by plan actuaries can be placed on a predetermined payment scheduled to full funding.

Legacy DB Plan Details

- Maintain current statutory contribution and amortization policies

New DB Plan Details

- Employer contributions cannot increase more than 1.5% of pay in one year
- Employee contributions cannot increase more than 1.0% of pay in one year
- 50/50 cost sharing of normal cost and amortization payments
- Assumed rate of return capped at 6%
- Any new debt amortized with 10-year layered, level dollar policy
SB 176 Has Minimal Effect on Annual Costs

Employer Contributions Under S.B.176 (as introduced) vs. Status Quo

Since SB176 leaves legacy contribution policy as is, and the plans for new hires will have little impact over the first few decades, the reform has little effect on year-to-year contributions.

Source: Pension Integrity Project actuarial forecast of SCRS. Market stress = Two Recessions + 6% Constant Returns. State is assumed to continue annual statutory contributions until full funding is achieved, at which point the state adopts an ADEC contribution policy to avoid significant overfunding.
The introduction of a DB/DC choice for new hires makes a slight change to SCRS’ current path to full funding, extending the year when 100% is achieved.
Long Term Results of S.B.176

<table>
<thead>
<tr>
<th></th>
<th>7.25% Returns (SCRS Assumption)</th>
<th>Two Recession + 6% Returns</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>30-Year Employer Contributions</td>
<td>2050 Unfunded Liability</td>
</tr>
<tr>
<td><strong>Baseline</strong> (status quo)</td>
<td>$53.9 B</td>
<td>$(0.6) B</td>
</tr>
<tr>
<td><strong>SB 176</strong> (as introduced)</td>
<td>$62.5 B</td>
<td>$(1.0) B</td>
</tr>
</tbody>
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Source: Pension Integrity Project actuarial forecast of SCRS. Values are rounded and adjusted for inflation. State is assumed to contribute until full funding is achieved, at which point the state adopts an ADEC contribution policy to avoid significant overfunding.
Why is the Reform Generating Higher Costs?

✓ The new DC plan uses employer contributions of 7%, which is a much higher rate compared to the 1.63% DB employer normal cost. That means that each new worker going into the DC plan will require a higher floor of annual contributions.

<table>
<thead>
<tr>
<th></th>
<th>Status Quo DB</th>
<th>Shared-risk DB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer NC:</td>
<td>1.63%</td>
<td>6.08%</td>
</tr>
<tr>
<td>Employer UAAL Amortization Payments:</td>
<td>14.93%</td>
<td>0%</td>
</tr>
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</table>

The new DB will start with no debt and will be much less likely to accrue new debt going forward, exchanging a higher contribution commitment in the near-term for greater long-term savings.
BUILDING ON S.B. 176 (2021)
Improving SB176 with ADEC Funding

- Switching how the state contributes towards legacy benefits to an actuarially determined contribution rate (ADEC) would ensure sufficient payments to address the legacy debt in a way that better responds to market volatility.

- The savings generated by the state adopting an ADEC funding policy for legacy benefits would be enough to keep the risk-reduction reforms associated with SB176 as essentially cost-neutral over the next 30 years.
Modeling Improvements to SB 176

- Offers a choice between new DB and default DC retirement option to all new hires.
- Seals the current DB plan for active and retired members so any unfunded liability calculated by plan actuaries can be placed on a predetermined payment schedule to full funding.

**Legacy DB Plan Details**
- Maintain current statutory contribution and amortization policies

**New DB Plan Details**
- Employer contributions cannot increase more than 1.5% of pay in one year
- Employee contributions cannot increase more than 1.0% of pay in one year
- 50/50 cost sharing of normal cost and amortization payments
- Assumed rate of return capped at 6%
- Any new debt amortized with 10-year layered level dollar policy

**S.B.176 (as introduced)**
- Includes all of the above, except…

**Legacy DB Plan Details**
- Switch to actuarially contributions (ADEC) for determining annual employer contributions, with existing amortization policy
Responsive Contribution Rates Perform Better Under Expected Market Stress

Employer Contributions Under S.B.176 + ADEC Legacy Contributions

ADEC contributions for legacy debt and reduced risk for new members would improve SCRS' responsiveness to market stress.

Source: Pension Integrity Project actuarial forecast of SCRS. Market stress = Two Recessions + 6% Constant Returns.
Responsive Contribution Rates Perform Better Under Expected Market Stress

Unfunded Liabilities Under S.B.176 + ADEC Legacy Contributions

Responsive contributions and reduced risk for new members would improve SCRS' ability to recover from market stress.

Source: Pension Integrity Project actuarial forecast of SCRS. Market stress = Two Recessions + 6% Constant Returns.
### Comparison of S.B. 176 as introduced vs. Added Legacy Funding Improvements

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<td></td>
<td>2050 Unfunded Liability</td>
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</tr>
<tr>
<td></td>
<td>Total All-in Employer Costs</td>
<td>Total All-in Employer Costs</td>
</tr>
<tr>
<td><strong>Baseline</strong> (status quo)</td>
<td>$53.9 B</td>
<td>$(0.6) B</td>
</tr>
<tr>
<td></td>
<td>$74.0 B</td>
<td>$20.5 B</td>
</tr>
<tr>
<td><strong>SB 176</strong> (as introduced)</td>
<td>$62.5 B</td>
<td>$(1.0) B</td>
</tr>
<tr>
<td></td>
<td>$77.0 B</td>
<td>$24.9 B</td>
</tr>
<tr>
<td><strong>SB 176 + ADEC Legacy Contributions</strong></td>
<td>$60.4 B</td>
<td>$(0.5) B</td>
</tr>
<tr>
<td></td>
<td>$83.5 B</td>
<td>$9.2 B</td>
</tr>
</tbody>
</table>

Source: Pension Integrity Project actuarial forecast of SCRS. Values are rounded and adjusted for inflation.
# For the Same or Less Cash, There’s A Better Way

<table>
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<tr>
<th>Reform Objectives</th>
<th>Baseline (status quo)</th>
<th>SB176 (as introduced)</th>
<th>SB176 + ADEC Legacy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Keeping Promises</strong></td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Ensure the ability to pay 100% of the benefits earned and accrued by active workers and retirees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Retirement Security</strong></td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Provide retirement security for all current and future employees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Predictability</strong></td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Stabilize contribution rates for the long-term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Risk Reduction</strong></td>
<td>NO</td>
<td>SOME</td>
<td>YES</td>
</tr>
<tr>
<td>Reduce pension system exposure to financial risk and market volatility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Affordability</strong></td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Reduce long-term costs for employers, employees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Attractive Benefits</strong></td>
<td>SOME</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Ensure the ability to recruit 21st Century employees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Good Governance</strong></td>
<td>NO</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Adopt best practices for board organization, investment management, and financial reporting</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Key Takeaways

- SB 176 would provide new employees with a modernized set of risk-managed retirement designs well suited to a more mobile future workforce

- The risk-managed DB + DC plans will effectively prevent additional runaway costs associated with any new member

- Contribution rates hard-coded into law don’t adjust to market outcomes, therefore SCRS’ legacy debt payment plan is not well-positioned to weather multiple recessions and a ”new normal” in market returns

- De-risking the legacy DB Pension Plan by committing to an ADEC contribution policy would greatly improve the ability of SCRS to reach full funding AND it would generate long-term savings large enough to cover additional costs from establishing a de-risked and more accurately priced retirement option for new workers
Questions?

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