Will COVID-19 Trigger Teacher Retirements?

Webinar

| August 14, 2020
Agenda

01. Introductions
02. Research Review
03. Q&A
Speakers

Dan Doonan
NIRS Executive Director

David Lamoureaux
CalSTRS Deputy System Actuary
Speakers

Paul Angelo
Segal Senior Vice President and Actuary

Rocky Joyner
Segal Senior Vice President and Actuary
Number of Students Enrolled in Traditional Education Programs

2009-2010: 615,842
2010-2011: 592,890
2011-2012: 544,014
2012-2013: 430,757
2013-2014: 382,036
2014-2015: 346,115
2015-2016: 337,707
2016-2017: 330,759
2017-2018: 328,163

Change in Teacher Pipeline
2009-10 through 2017-18

Change in Enrollment: Traditional Programs
2009-10 through 2017-18

2016 UCLA/CIRP American Freshman Survey: Percent of Freshmen Pursuing Education Majors

Sources: Chronicle of Higher Education: [https://www.chronicle.com/interactives/freshmen-survey](https://www.chronicle.com/interactives/freshmen-survey) and UCLA/CIRP: [https://heri.ucla.edu/publications-tfs/](https://heri.ucla.edu/publications-tfs/)
A large majority of teachers will serve out long careers

- Teachers in the 6 states will typically serve 25 or more years and leave service at age 58 or later.
- Nearly 7 out of 10 will serve until at least early retirement age under current pension rules.
- Many defer retirement past the first eligibility for retirement benefits.
- Clearly the benefit designs for most teacher plans encourage this behavior.
- The next slides provide context.
FY 2017 Teacher Service Distribution

![Bar chart showing distribution of teacher service years among states and the average of six states. The chart includes bars for Colorado, Connecticut, Georgia, Kentucky, Missouri, Texas, and a 6-State Average. The bars are color-coded to represent different service years: 30+ years (blue), 20 to 29 years (gold), 10 to 19 years (gray), 5 to 9 years (orange), and 0 to 4 years (teal).]
Typical teacher will serve 25 years and leave at age 58

Projected Teacher Median Age and Service Years at Exit, by State

<table>
<thead>
<tr>
<th>Teacher Pension Plans</th>
<th>Median Service Years</th>
<th>Median Age</th>
<th>% with 20+ Years Projected Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>17</td>
<td>57</td>
<td>43%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>28</td>
<td>60</td>
<td>76%</td>
</tr>
<tr>
<td>Georgia</td>
<td>23</td>
<td>57</td>
<td>59%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>26</td>
<td>54</td>
<td>63%</td>
</tr>
<tr>
<td>Missouri</td>
<td>27</td>
<td>55</td>
<td>73%</td>
</tr>
<tr>
<td>Texas</td>
<td>26</td>
<td>62</td>
<td>67%</td>
</tr>
<tr>
<td>6-State Average</td>
<td>25</td>
<td>58</td>
<td>65%</td>
</tr>
</tbody>
</table>

Note: Authors’ analysis based on retirement system active membership data and actuarial assumptions as of FY 2017. 6-State averages are weighted by teacher membership count.
65% of Teachers Will Serve 20+ Years

Distribution of Teachers by Projected Service at Exit

- **Colorado**: 20% 12% 26% 25% 18%
- **Connecticut**: 4% 5% 15% 32% 44%
- **Georgia**: 9% 10% 22% 28% 31%
- **Kentucky**: 14% 10% 14% 49% 14%
- **Missouri**: 5% 8% 14% 41% 32%
- **Texas**: 6% 8% 18% 27% 41%
- **6-State Average**: 8% 9% 18% 31% 34%
68% of Teachers Will Serve Until Retirement Eligibility

Distribution of Teachers by Vesting and Retirement Eligibility Status at Exit

- Vest, stay until retirement age
- Vest, leave before retirement age
- Won't vest

<table>
<thead>
<tr>
<th>State</th>
<th>Vest, Stay Until Retirement Age</th>
<th>Vest, Leave Before Retirement Age</th>
<th>Won't Vest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>48%</td>
<td>14%</td>
<td>20%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>76%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Georgia</td>
<td>66%</td>
<td>19%</td>
<td>15%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>69%</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>Missouri</td>
<td>79%</td>
<td>15%</td>
<td>5%</td>
</tr>
<tr>
<td>Texas</td>
<td>67%</td>
<td>27%</td>
<td>6%</td>
</tr>
<tr>
<td>6-State Average</td>
<td>68%</td>
<td>22%</td>
<td>10%</td>
</tr>
</tbody>
</table>
But what if COVID-19 disrupts pattern?

Pandemic Causing Older Workers to Leave Workforce Earlier Than Planned

Local educators retiring instead of facing the risk of being exposed to the coronavirus this coming school year

‘Too many unknowns’: Tallahassee 3rd grade teacher retires early due to COVID-19 concerns

1,193 Quarantined for Covid. Is This a Successful School Reopening?

A suburban Atlanta county opened its schools amid controversy and a growing case count, previewing a difficult national back-to-school season.

Fearing back-to-school COVID-19 exposure, some teachers opt for safety, sparking worries of staffing shortages

16 Early Retirement

Weighing the Risks
This could lead to greater retirements than predicted with possible consequences

• Increased benefit payouts, potentially creating cash flow issues
• Increase in required contributions for pension plans
• Teacher shortages
• Where will replacement teachers be found?
• What is a Pension Board or School District to do?
• Will COVID be considered a “line of duty” disability (NYC schools has enacted this)
• Or (as has started in some states), will laws be adopted that limit liability for employers and others from claims relating to COVID-19 exposure?
What are implications if retirements spike?

Paul Angelo
Segal Senior Vice President and Actuary

- Liability
- Payroll
- OPEB
- Retirement Eligibility Rules
Modeling Risk
CalSTRS Review of Funding Levels and Risks

**Investment Risk**
Potential for lower returns and increased market volatility

**Longevity Risk**
Members living longer in retirement

**Membership and Payroll Growth Risk**
Affects incoming contributions if membership base declines
Distribution of CalSTRS Active Members by Age Group

- Age 70 and over
- Age 65 to 70
- Age 60 to 65
- Age 55 to 60
- Age 50 to 55
- Age 45 to 50
- Age 40 to 45
- Age 35 to 40
- Age 30 to 35
- Age 25 to 30
- Age Less than 25

Age categories: Less than 25, 25 to 30, 30 to 35, 35 to 40, 40 to 45, 45 to 50, 50 to 55, 55 to 60, 60 to 65, 65 to 70, and 70 and over.
Number of Active Members for the Last 15 Years
(Defined Benefit Program Only)
Impact of Membership Fluctuations on Funded Status

Actual Population

Stable Population


60% 62% 64% 66% 68% 70% 72% 74% 76% 78% 80%
Modeling the Impact of a Recession and Recovery

- Scenario #1 – “Dot Com Bubble”
  - 2000 to 2008 period
- Scenario #2 – “Financial Crisis”
  - 2008 to 2018 period
Projected Funded Status and Contributions Rates

**Base Scenario**
- 7% return each year
- 3.50% annual payroll growth

Funded Status in 2046: 99.9%

<table>
<thead>
<tr>
<th>Unfunded Actuarial Obligation</th>
<th>Eliminated by 2046</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employers’ Share</td>
<td>YES</td>
</tr>
<tr>
<td>State’s Share</td>
<td>YES</td>
</tr>
<tr>
<td>Unallocated</td>
<td>NO</td>
</tr>
</tbody>
</table>
Projected Funded Status and Contributions Rates

Recession and Recovery
Scenario #1
Dot Com Bubble

Funded Status in 2046: 98.8%

Unfunded Actuarial Obligation | Eliminated by 2046
--- | ---
Employers’ Share | YES
State’s Share | YES
Unallocated | NO
Projected Funded Status and Contributions Rates

Projected Funded Status

Recession and Recovery
Scenario #2
Financial Crisis

Funded Status in 2046: 71.0%

Unfunded Actuarial Obligation | Eliminated by 2046
---|---
Employers’ Share | YES
State’s Share | NO
Unallocated | NO
Questions