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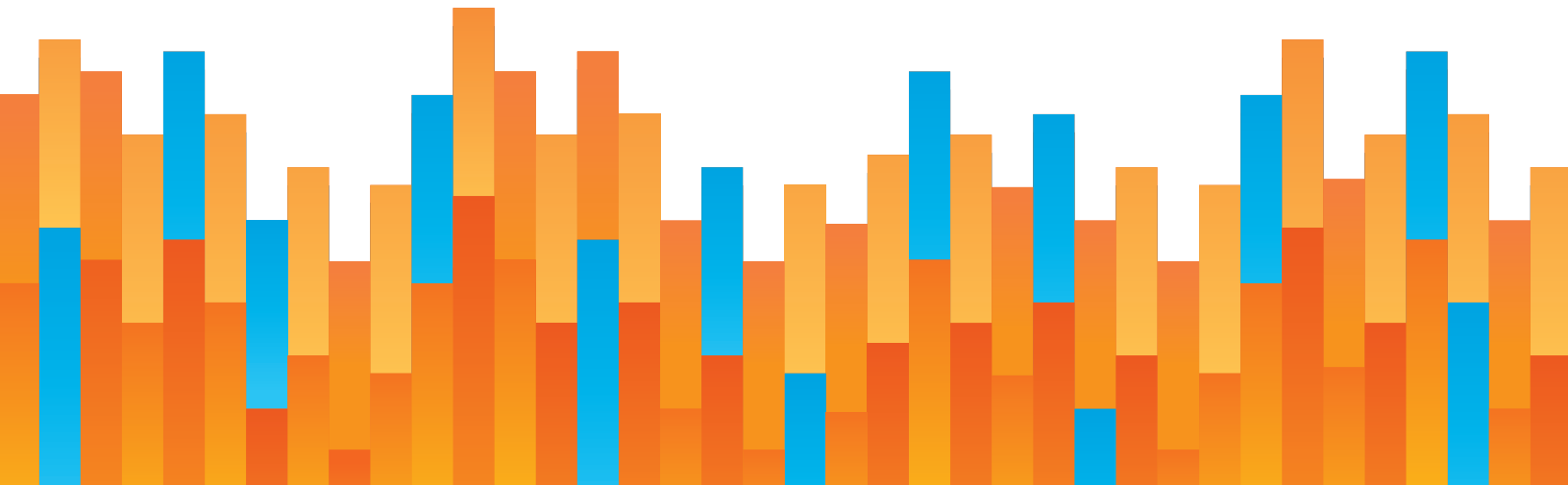
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# ANALYSIS OF THE NEW MEXICO PERA PENSION SOLVENCY TASK FORCE'S PRELIMINARY RECOMMENDATIONS

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by Anil Niraula, Andrew Abbott and Leonard Gilroy  
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# PART 1

## INTRODUCTION

New Mexico Gov. Michelle Lujan Grisham’s Public Employees Retirement Association’s Pension Solvency Task Force released preliminary recommendations and related actuarial analyses for a set of policy approaches that improves PERA’s solvency by eliminating over \$6 billion in unfunded liabilities over the next 25 years. The changes, proposed earlier this month, are significant and positive steps for PERA, but still leave some systemic challenges—namely actuarial methods and assumptions—unaddressed.

Several months back, financial experts urged policymakers to prepare for potential scenarios that could endanger the health of the state’s pension plan.<sup>1</sup> The task force has done so by exploring recommendations that include increased contribution inflows, adjusting COLA provisions, and implementing other policies to improve PERA’s financial health, as detailed in this brief.

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<sup>1</sup> Niraula, Anil. “New Mexico Holds Public Hearings to Gauge Remedies for Persistent Public Pension Woes.” June. 28, 2019. <https://reason.org/commentary/new-mexico-holds-public-hearings-to-gauge-remedies-for-persistent-public-pension-woes/>

## PART 2

# INCREASED PENSION CONTRIBUTIONS

Insufficient pension contributions are endemic in retirement funds covering teachers, first responders, and other public employees in many different jurisdictions, helping to drive public pension underfunding. Per our analysis of PERA's historical financial documents, the pension contribution rates set in statute have systematically underfunded the plan for at least a decade, and have been an important contributor to unfunded liability growth since 2001.

Put simply, instead of paying the actuarially determined employer contribution (ADEC)—the employer pension contribution level PERA's actuaries report annually as necessary to achieve long-term solvency—PERA contributions are set by law at a rate too low to properly fund the plan (see Figure 1). New Mexico is not the only state setting its pension contributions in statute, as opposed to simply paying the ADEC rate. Colorado's PERA,<sup>2</sup> the

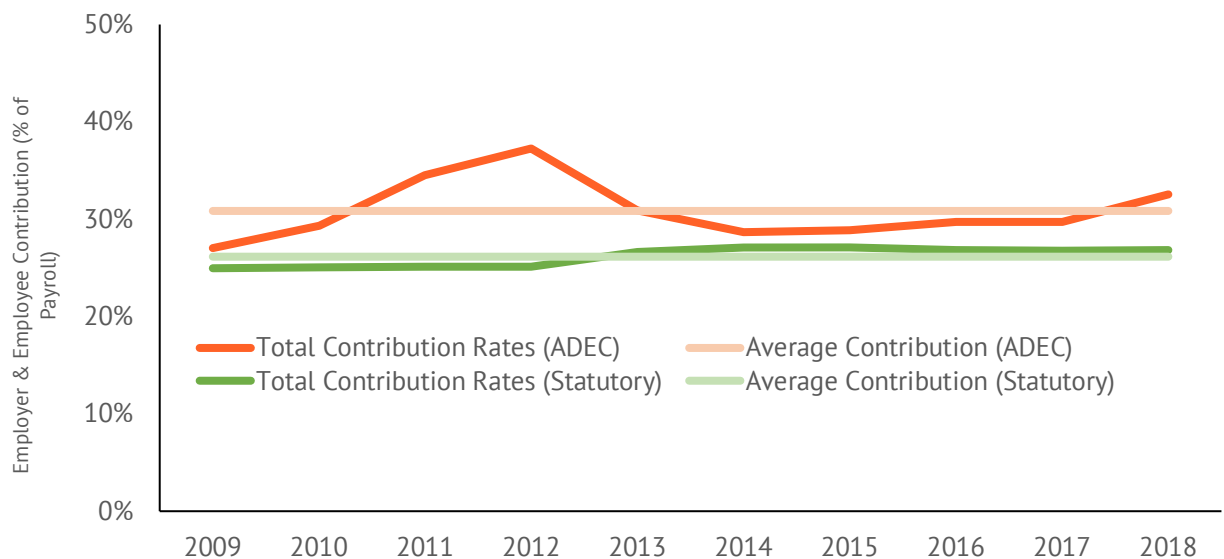
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<sup>2</sup> Randazzo, Anthony, Leonard Gilroy and Zachary Christensen. "Colorado Adopts Significant Pension Changes for All Public Employees." Reason Foundation. May 25, 2018. <https://reason.org/commentary/colorado-adopts-significant-pension-changes-for-all-public-employees/>

Arkansas Teacher Retirement System<sup>3</sup> and the Teacher Retirement System of Texas<sup>4</sup> are just a few of many examples.

Per the task force's recommendations, employee and employer statutory contributions (as a share of payroll) into PERA (except the State Police/Adult Correctional Officers Division), should both be increased by 0.5% per year for four years, bumping aggregate contributions up by 4.0% overall. PERA reports from 2018, however, indicate that the total statutory contribution rate (i.e. employee and employer combined for all divisions) was 26.84% of payroll, which falls short of the ADEC rate by 5.73%.<sup>5</sup> Total contributions falling below actuarially required amounts—which for PERA constituted an average 4.7% annual gap between 2009 and 2018—has been a chronic problem for PERA, as shown in Figure 1.

**FIGURE 1: STATUTORY VS. ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION RATES, ALL PERA DIVISIONS (2009–2018)**



Source: Pension Integrity Project's analysis of PERA valuation reports and CAFRs

<sup>3</sup> Arkansas Teacher Retirement System. "Annual Actuarial Valuation of Active and Inactive Members." Prepared by GRS Retirement Consulting. June 30, 2018.

[https://www.arters.gov/Publications/ATRS\\_Actuary\\_GRS\\_ActiveInactive\\_FY2018.pdf](https://www.arters.gov/Publications/ATRS_Actuary_GRS_ActiveInactive_FY2018.pdf)

<sup>4</sup> Christensen, Zachary, Leonard Gilroy, Steven Gassenberger and Vance Ginn. "Pension Solvency Overview: Teacher Retirement System (TRS) of Texas."

<https://reason.org/policy-brief/pension-solvency-overview-teachers-retirement-system-trs-of-texas/>

<sup>5</sup> Public Employees Retirement Association (PERA) of New Mexico. "Annual Actuarial Valuation as of June 30, 2018." Prepared by Cavanaugh Macdonald Consulting, LLC.

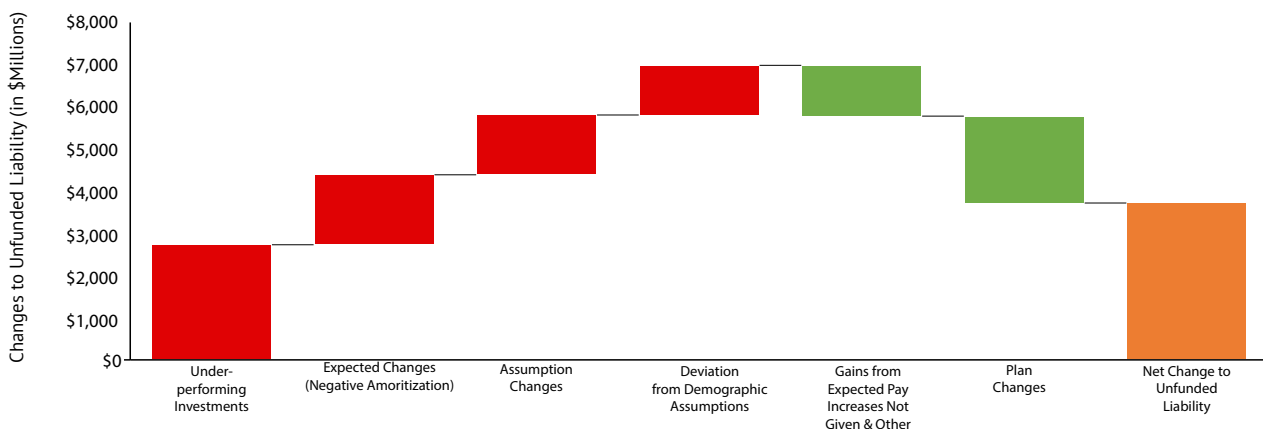
<http://www.nmpera.org/assets/uploads/downloads/retirement-fund-valuation-reports/6-30-2018-PERA-Valuation-Report-FINAL.pdf>

While any additional public funds committed to PERA would at least help to preserve—or even better, improve—the plan’s financial health, the recommended increases are still likely insufficient to fully fund promised benefits and amortize the large PERA unfunded liability over the long run, leading to further pension debt accruals.

That’s because, more often than not, statutorily-set contribution rates lag the actuarially required amounts, as seen in cases like Colorado,<sup>6</sup> Arkansas,<sup>7</sup> and Texas.<sup>8</sup> And, as we pointed out in our previous piece<sup>9</sup> on the New Mexico Educational Retirement Board (NMERB), the straight path to remedy this is to transition from a statutorily-based to an ADEC-based contribution policy.

In addition to the contribution policy, another important issue to consider is the current method used to amortize PERA’s unfunded liabilities. In some cases, like New Mexico’s PERA, annual contribution appropriations can fall short of even covering the annual interest accrued on the past pension debt (so-called “negative amortization”). Our analysis, shown in Figure 2, indicates that negative amortization has contributed \$1.7 billion to the overall growth of PERA unfunded liabilities since 2001.

**FIGURE 2: CHANGES IN PERA UNFUNDED LIABILITY PER GAIN/LOSS CATEGORY (2001–2018)**



**Source:** Pension Integrity Project’s analysis of PERA valuation reports and CAFRs

<sup>6</sup> “What Has Caused Colorado’s Pension Crisis?” <https://unfundedcolorado.org/>

<sup>7</sup> Arkansas Teacher Retirement System. “Annual Actuarial Valuation of Active and Inactive Members.” [https://www.artsr.gov/Publications/ATRS\\_Actuary\\_GRS\\_ActiveInactive\\_FY2018.pdf](https://www.artsr.gov/Publications/ATRS_Actuary_GRS_ActiveInactive_FY2018.pdf)

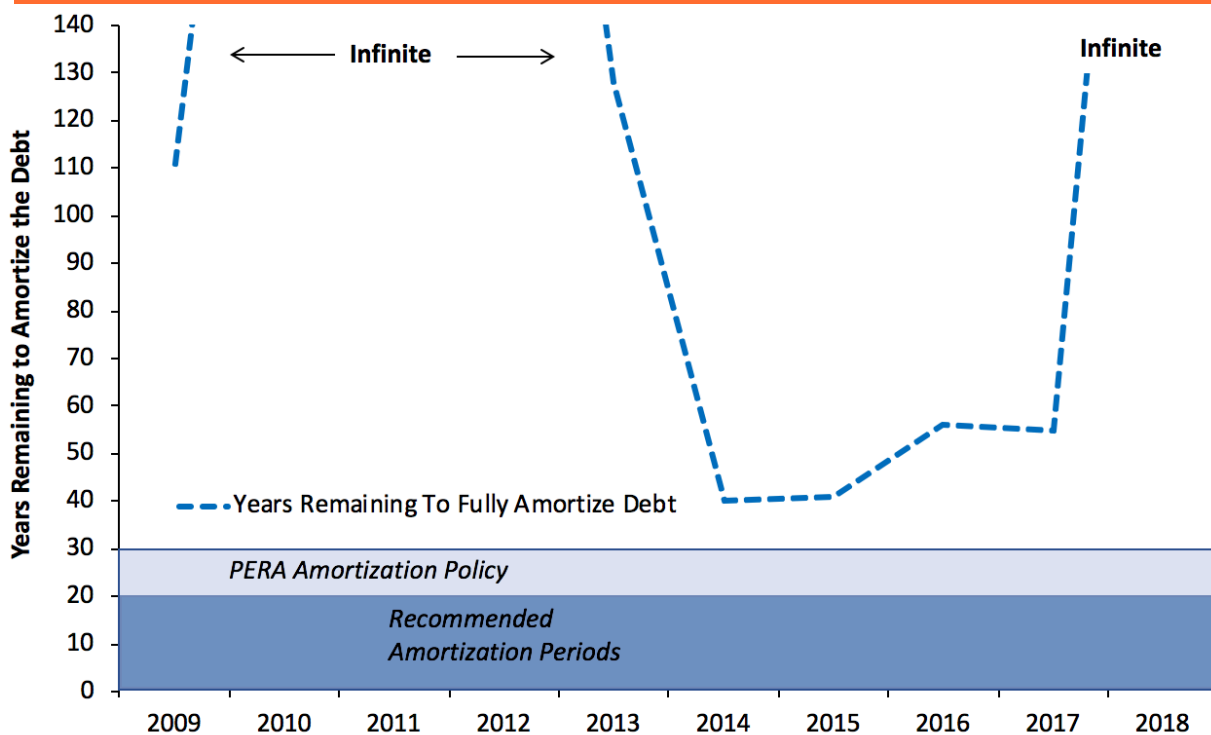
<sup>8</sup> Christensen, et al. “Pension Solvency Overview: Teacher Retirement System (TRS) of Texas.”

<sup>9</sup> Niraula, Anil and Andrew Abbott. “New Mexico Takes Steps to Reform Teacher Pensions But More Is Needed.” Reason Foundation. May 17, 2019. <https://reason.org/commentary/new-mexico-takes-steps-to-reform-teacher-pensions-but-more-is-needed/>

According to a recent report<sup>10</sup> by Pew Charitable Trusts, New Mexico ranked among the states with the highest average net amortization (amount needed to cover both interest and principal debt payments) between 2015 and 2017. This underfunding produces ripple effects.

For example, PERA maintains an internal policy to completely amortize the system's total pension debt over a 30-year period (as previously noted, the task force recommends shortening this period to 25 years, which would be an improvement over current policy). Regardless, the combined effects of investment underperformance, negative amortization and a fixed, statutory PERA contribution rate are undermining this policy and moving the goal post on the plan's actual amortization period end date much further than the prescribed 30 years (see Figure 3).

**FIGURE 3: YEARS LEFT TO AMORTIZE PERA UNFUNDED LIABILITY (2009–2018)**



Source: Pension Integrity Project's analysis of PERA valuation reports and CAFRs

<sup>10</sup> Pew Charitable Trusts. The State Pension Funding Gap: 2017. June 27, 2019. <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2019/06/the-state-pension-funding-gap-2017>



To avoid this phenomenon, professional actuaries, including the Society of Actuaries Blue Ribbon Panel on Public Pension Plan Funding, have begun to recommend that overall amortization schedules should not exceed 15 to 20 years to prevent negative amortization.<sup>11</sup> While the PERA task force has thus far not issued recommendations on this subject, we would recommend the use of a layered base amortization approach designed to pay off any new unfunded liabilities accruing in any given year over a short (10 years or less) term on an equalized annual dollar basis (so-called “level-dollar” amortization). This policy should be paired with a shift to an ADEC-based funding policy (instead of the statutory contribution rates used today, as discussed above) to ensure maximum utility.

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<sup>11</sup> Report of the Blue Ribbon Panel on Public Pension Plan Funding. February 2014.  
<https://www.soa.org/globalassets/assets/files/newsroom/brp-report.pdf>

## PART 3

# SHIFTING TO AN ALTERNATIVE COLA STRUCTURE

Outlined recommendations also propose that PERA shift away from the compounded, fixed 2.0% cost of living adjustment (COLA) most current and legacy members receive that kicks in at different points of time after retirement depending on when the employee was hired. This approach effectively acts as an automatic fixed upward shift in benefits untethered to any actual change in consumer prices in the economy, which is the purpose of a COLA.

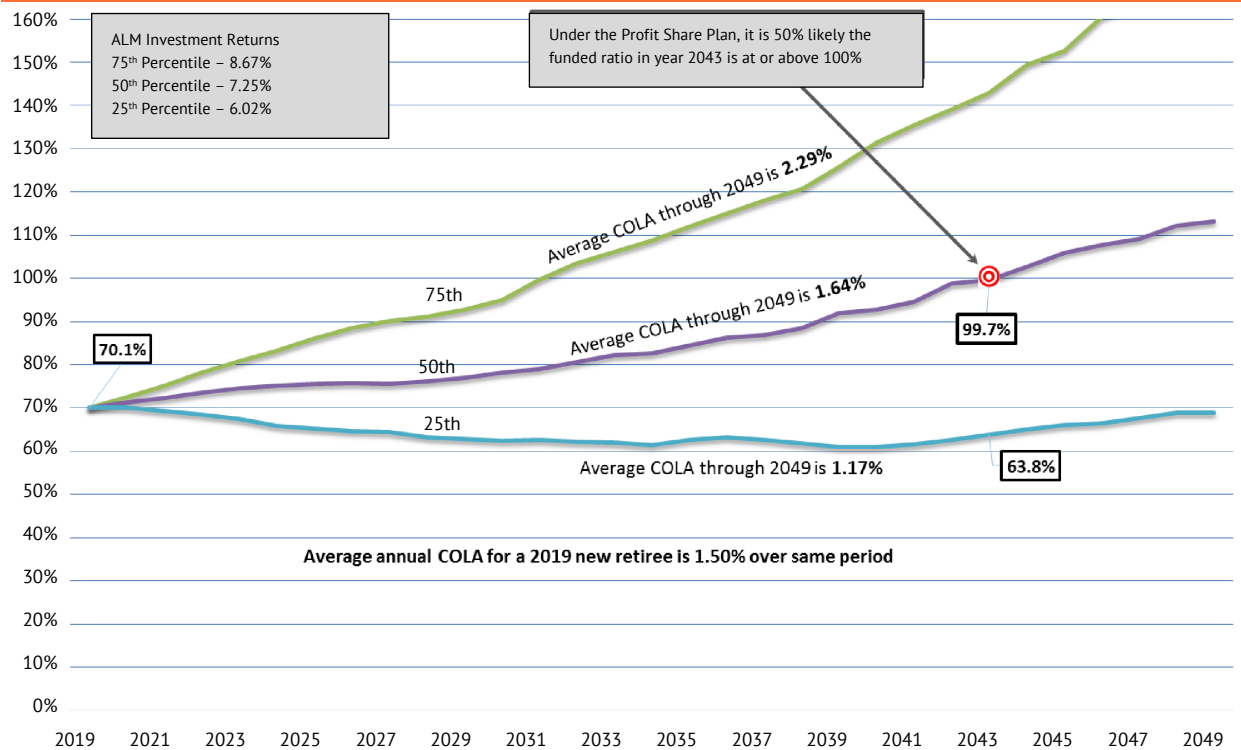
Instead, the task force recommends a temporary shift to a non-compounding COLA that acts like a bonus and then transitions into a profit-sharing approach.

Specifically, the task force recommends capping the new COLA between 0.5% and 3%, tying the actual level in any given year to both investment performance and the plan's funded status. COLAs would only exceed the minimum level if smoothed asset returns exceed 6.0%. The COLAs would be tied to the plan's funded status, and the 3.0% cap would rise to 5.0% if the plan were to reach full funding.

As an illustration, if the plan's assets were to return 7.0% (i.e. 1.0% above the 6.0% benchmark) for the next fiscal year, it would bump the minimum 0.5% COLA to 1.5% if the plan was 100% funded, thereby funding 100% of the 1.0% increase. In the current situation

whereby PERA is 60% funded, the same 7.0% return would lead to 0.6% bump and result in a 1.1% COLA instead (i.e. funding 60% of the 1.0%). In effect, returns above 6.0% would be appropriated/funded toward COLA increases commensurate with the plan’s funding that year. Under this proposal, COLA rates are projected to average out to 1.64% annually through 2049, by which year PERA is assumed to reach full funding using the plan’s assumed 7.25% rate of return (see Figure 4).

**FIGURE 4: PERA FUNDED RATIO BY PERCENTILE RANK UNDER PROFIT-SHARING COLA PLAN**



Source: “Analysis of Governor’s PERA Pension Solvency Task Force Preliminary Recommendations,” <http://www.nmpera.org/assets/uploads/home-banner/8.8.2019-Presentation-1-Recommendations.pdf>

Overall, the proposed COLA structure is a more sustainable approach relative to the status quo, as the projected 1.64% average COLAs—compared to the current fixed 2.0% COLA—would slow actuarial liability accrual and improve the funded status of the plan.

However, such mechanisms should be designed with caution. Examining similar policies in other states shows that profit-sharing mechanisms can negatively affect overall asset growth, and consequently solvency, if designed poorly and not properly accounted for. For example, the Teachers’ Retirement System of Louisiana’s (TRSL) Permanent Benefit

Increase,<sup>12</sup> funded through capturing 50% of investment income above \$200 million, increased TRSL's unfunded liability by \$832 million between 2000 and 2018. Arizona Public Safety Personnel Retirement System (PSPRS) used a similar approach until it was recognized as a major driver behind a decline in solvency and discontinued it as part of a 2016 pension reform.<sup>13</sup> These examples show that COLAs based on profit-sharing policies, if not properly designed and prefunded, can potentially destabilize asset growth by preventing plans from using the full benefit of investment gains, thereby endangering long-term savings.

Additionally, while the proposed COLA structure has a number of advantages relative to the status quo, it's important to remember that the core purpose of a COLA is to protect retirees against inflation eroding away the purchasing power of future pension benefits. Linking future COLAs to a regional or local CPI index, with a 2%–3% cap, provides a more balanced approach.

Additional recommendations feature switching from a compound to fixed 2% COLA for three years and reinstating the two-year COLA wait period from the current seven-year wait. These recommendations fall on the heels of 2013 Senate Bill 27,<sup>14</sup> which decreased the COLA from 3% to 2% effective July 1, 2013, and raised the new COLA eligibility waiting period from two to seven years.

Per the Pension Solvency Task Force's projections, PERA has only a 38% chance of reaching full funding by 2043 (see Figure 5). Applying all of the proposed changes to COLA policy, however, would improve the plan's chances of full funding by that time to 63%.

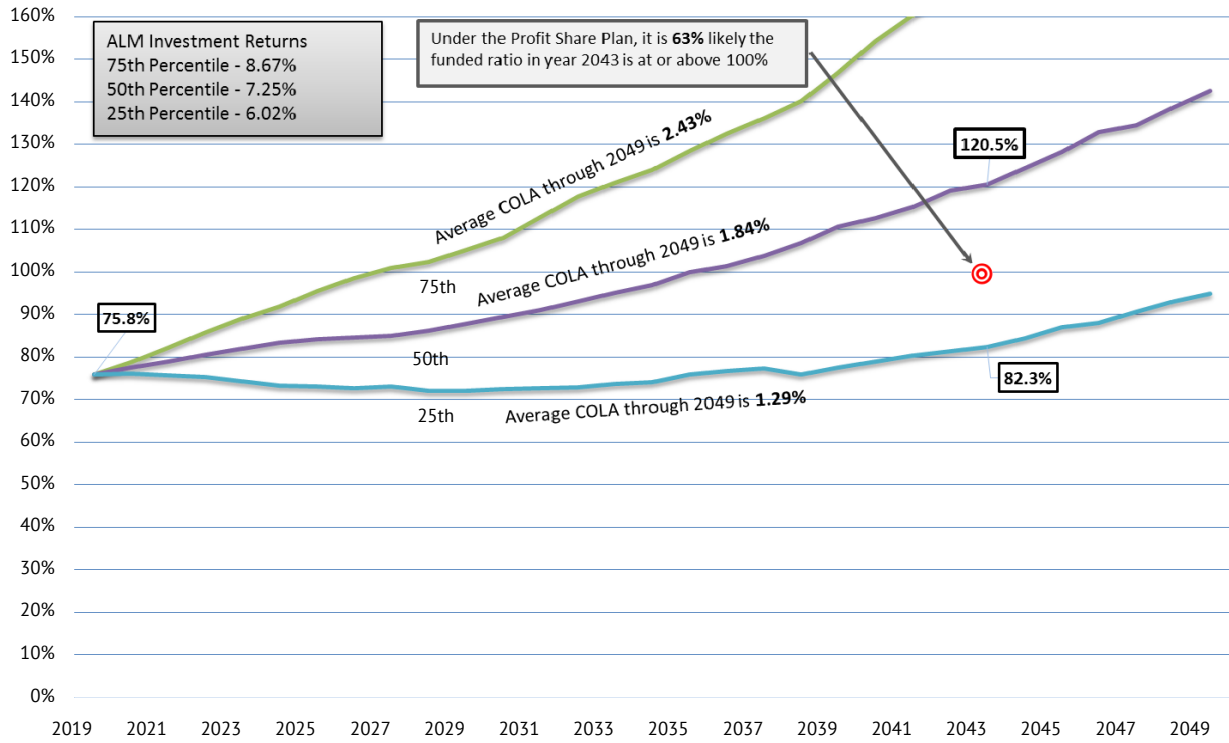
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<sup>12</sup> Gilroy, Leonard, Anil Niraula, Zachary Christensen and Steven Gassenberger. Teachers' Retirement System of Louisiana (TRSL) Pension Solvency Analysis. June 18, 2019. <https://reason.org/policy-study/teachers-retirement-system-of-louisiana-trsl-pension-solvency-analysis/>

<sup>13</sup> Gilroy, Constant and Randazzo. "Arizona Enacts Groundbreaking Public Safety Pension Reform." <https://reason.org/commentary/az-public-safety-pension-reform/>

<sup>14</sup> Public Employee Retirement Changes. Legislative Education Study Committee Bill Analysis. Bill# CS/SB 27a. March 15, 2013. <https://www.nmlegis.gov/Sessions/13%20Regular/LESCAnalysis/SB0027.PDF>

**FIGURE 5: PERA FUNDED RATIO BY PERCENTILE RANK UNDER PROFIT-SHARING COLA PLAN AND OTHER COLA CHANGES**



Source: "Analysis of Governor's PERA Pension Solvency Task Force Preliminary Recommendations," <http://www.nmpera.org/assets/uploads/home-banner/8.8.2019-Presentation-1-Recommendations.pdf>

## PART 4

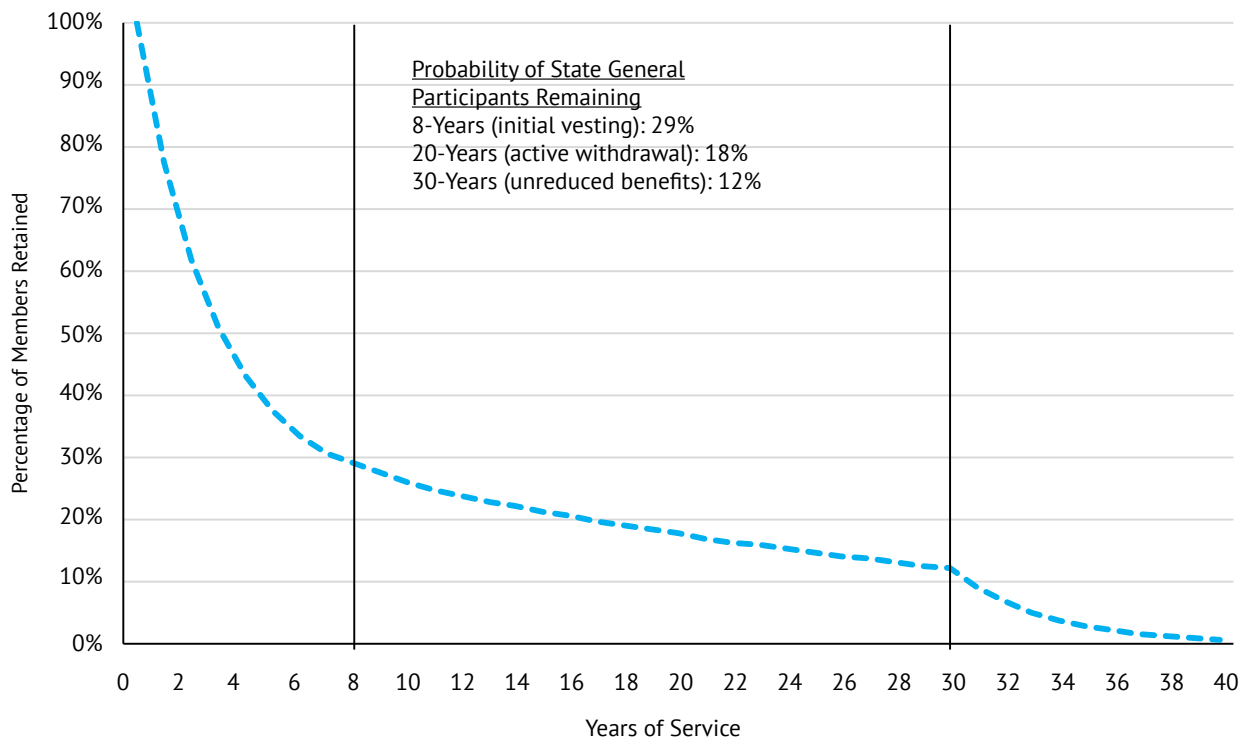
# REMOVING THE EARNINGS CAP OF 90%

The task force also recommends eliminating the current 90% cap on the maximum salary used to calculate an employee's pension benefits, presuming that removing this pensionable earnings cap will encourage employees to work longer. Given the back-loaded nature of defined benefits<sup>15</sup>—with a majority of pension benefits accruing near the end of employees' careers—this will likely mostly affect mid- to late-career employees, but it is unlikely to motivate newer members. Per the plan's own retention assumptions, PERA is assumed to lose around 70% of new Tier 2 State General members in the first eight years (see Figure 6). This steep decline highlights larger challenges in retaining non-vested employees that removing a 90% earnings cap may not fix.

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<sup>15</sup> Niraula, Anil. "Many Georgia Teachers Missing Out on Retirement Benefits, New Analysis Finds." February 18, 2019. <https://reason.org/commentary/many-georgia-teachers-missing-out-on-retirement-benefits-new-analysis-finds/>

**FIGURE 6: PERCENTAGE OF PERA STATE GENERAL MEMBERS RETAINED (ASSUMED)**



Source: Pension Integrity Project’s analysis of PERA valuation reports and CAFRs

It may be prudent to consider adding graded multipliers,<sup>16</sup> among other things, to boost early- to mid-career retention rates. Adjusting the vesting period for new members could be another route to explore. That said, all benefit changes involve a mix of costs, benefits, and tradeoffs to consider. Given the high attrition rates, it may also be worth considering introducing alternative, more-portable plan design choices<sup>17</sup> into the mix (such as hybrids, cash balance plans, and the like) for new hires, as states like Colorado,<sup>18</sup> Arizona,<sup>19</sup> Utah,

<sup>16</sup> Pension Integrity Project. Arizona State Retirement System Solvency Analysis. Reason Foundation. April 11, 2019. <https://reason.org/wp-content/uploads/arizona-asrs-pension-solvency-analysis.pdf>

<sup>17</sup> Marchitello, Max. “States Should Offer Teachers the Portable Retirement Option Available to Other Public Employees.” TeacherPensions.org. April 16, 2018. <https://www.teacherpensions.org/blog/states-should-offer-teachers-portable-retirement-option-available-other-public-employees>

<sup>18</sup> Randazzo, Anthony, Leonard Gilroy and Zachary Christensen. “Colorado Adopts Significant Pension Changes for All Public Employees. Reason Foundation. May 25, 2018. <https://reason.org/commentary/colorado-adopts-significant-pension-changes-for-all-public-employees/>

<sup>19</sup> Gilroy, Constant and Randazzo. “Arizona Enacts Groundbreaking Public Safety Pension Reform.” February 16, 2016. <https://reason.org/commentary/az-public-safety-pension-reform/>

Pennsylvania, Florida,<sup>20</sup> and Michigan<sup>21</sup> have all recently done. This approach would allow employees to self-select the plans that best match their preferences. Regardless of the form taken (pension, hybrid, etc.), as long as all choices offered are designed to be risk-managed and operated to ensure that legacy pension plan liabilities continue to be paid down on a sustainable basis, expanding plan choices can offer a creative way to reduce prospective pension risks for both employees and the government.

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<sup>20</sup> Williams, Raheem, Steven Gassenberger and Leonard Gilroy. Continuing Reform: Challenges Persist With the Florida Retirement System (FRS). August 21, 2019. <https://reason.org/policy-study/continuing-reform-challenges-persist-with-the-florida-retirement-system-frs/>

<sup>21</sup> Gilroy, Leonard, Anthony Randazzo and Daniel Takash. "Michigan Adopts Most Innovative Teacher Pension Reform in the Nation." Reason Foundation. June 16, 2017. <https://reason.org/commentary/michigan-adopts-most-innovative-teacher-pension-reform-in-the-nation/>

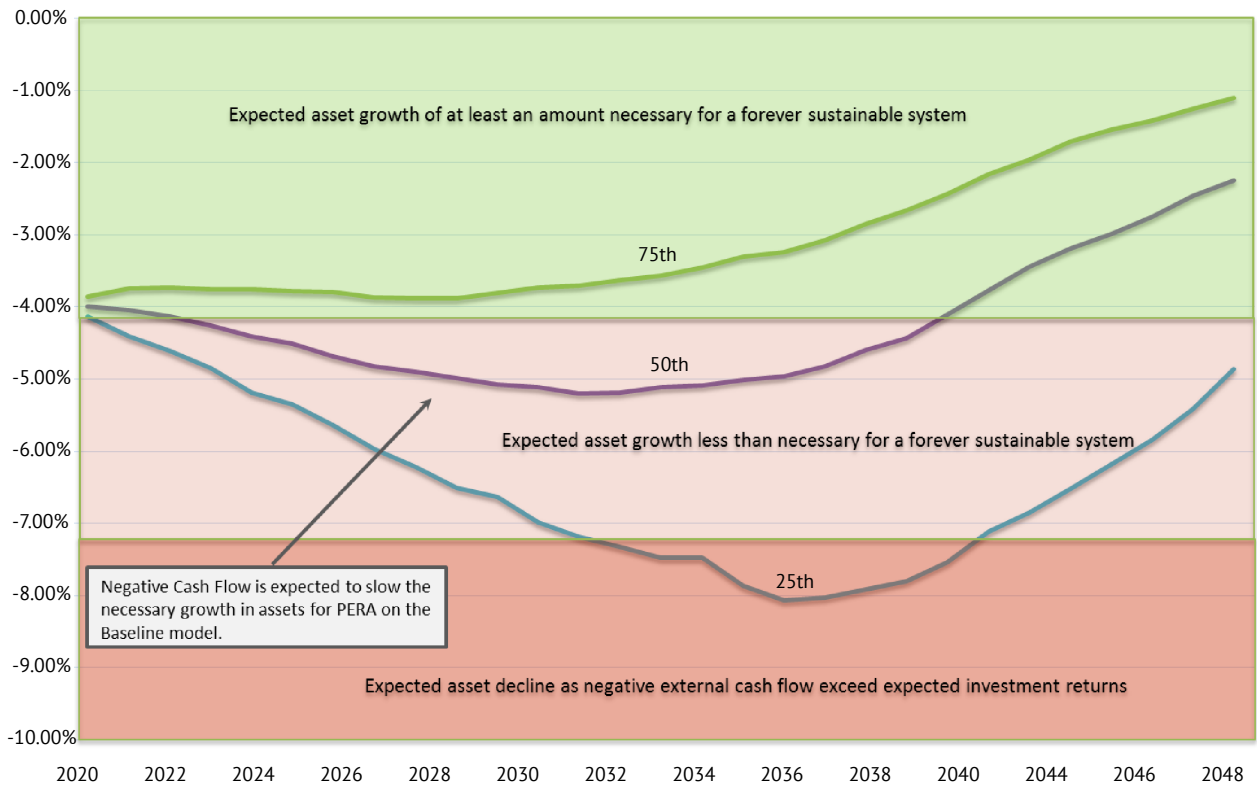


## PART 5

# NEGATIVE CASH FLOWS

Many mature state-level pension plans experience negative cash flows. This shows how dependent a plan becomes on assumed investment returns and adequate contributions as plans mature and pension liabilities increase. Under the baseline (50<sup>th</sup> percentile) and pessimistic (25<sup>th</sup> percentile) scenarios presented by the task force, in the next 20 years PERA would need to achieve annual investment returns ranging between 5% and 7% just to maintain its asset levels, up from the current 4%. These amounts are needed to equate contributions with increasing benefit payments and contribution refunds (see Figure 7). Put simply, PERA has a real cash flow problem, which the task force helpfully highlights.

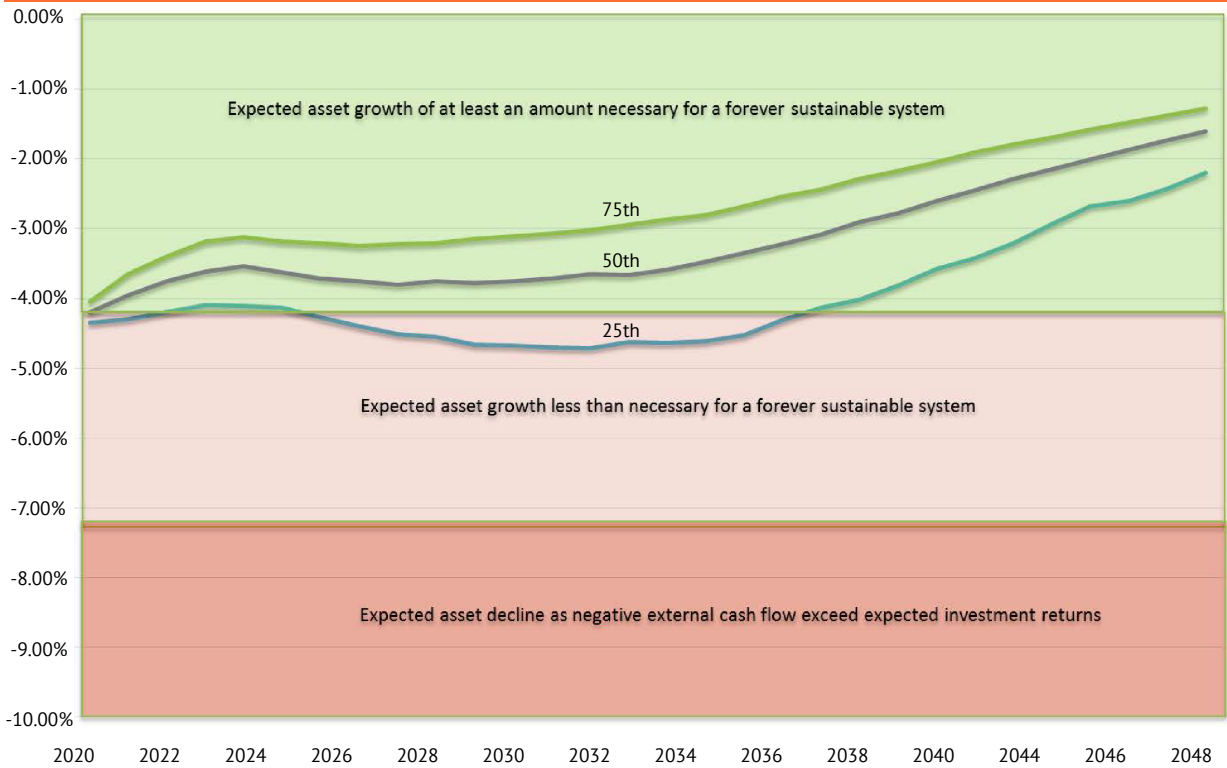
**FIGURE 7: NEGATIVE EXTERNAL CASH FLOW BY PERCENTILE RANK UNDER CURRENT PLAN**



Source: “Analysis of Governor’s PERA Pension Solvency Task Force Preliminary Recommendations,” <http://www.nmpera.org/assets/uploads/home-banner/8.8.2019-Presentation-1-Recommendations.pdf>

Following the implementation of a profit-sharing COLA and other changes, the negative cash flow is projected to improve to around 3.5% of investment returns, which falls in line with the amounts necessary to at least preserve, and then grow, assets (see Figure 8).

**FIGURE 8: NEGATIVE EXTERNAL CASH FLOW BY PERCENTILE RANK UNDER PROFIT-SHARING COLA PLAN**



Source: “Analysis of Governor’s PERA Pension Solvency Task Force Preliminary Recommendations,” <http://www.nmpera.org/assets/uploads/home-banner/8.8.2019-Presentation-1-Recommendations.pdf>

## PART 6

# IMPROVING ACTUARIAL ASSUMPTIONS?

Unfortunately, recommendations do not include revisions to any of the actuarial assumptions, despite the assumed rate of return and payroll growth assumptions significantly deviating from PERA's actual experience over the past 18 years. With states like Michigan, New York, Connecticut, and Washington now adopting assumed rates of return below 7.0% for major state-level pension plans, and other states like Virginia<sup>22</sup> and Hawaii adopting regular pension stress testing requirements, there is an increasing need for a more rigorous and realistic approach to understanding and setting the actuarial assumptions that drive pension math.

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<sup>22</sup> VRS Stress Test and Sensitivity Analysis. Report to the General Assembly of Virginia. Virginia Retirement System. December 2018. <https://www.varetire.org/Pdf/Publications/VRS-Stress-Test-and-Sensitivity-Analysis-2018.pdf>

## PART 7

# CONCLUSION

If New Mexico legislators decide to implement the task force's recommendations, PERA would no doubt be better funded and have more assets to spare than under the status quo. State policymakers should also consider other options for PERA beyond the task force's proposals to prevent missed actuarial assumptions, lengthy amortization schedules, and other current practices from further increasing unfunded liabilities.

# ABOUT THE AUTHORS

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