

## Public Pension Issues and Trends

Alex Brown
New Mexico Interim Investments and
Pensions Oversight Committee
October 2022

#### Public Pensions in the U.S.

- \$5.12 trillion in assets (as of 6/30/22)
- 14.6 million active (working) participants
  - 10 percent of the nation's workforce
- 11.2 million retirees and survivors
  - Received \$320+ billion in benefits
- Annual contributions = \$238 billion
- Of 5,000 public retirement systems, the largest 75 account for 80+ of assets and members



#### **Public Pensions in New Mexico**

- \$34.4 billion in assets as of FY 21
- 109,078 active (working) participants
  - 13 percent of the state workforce
- 96,523 retirees and survivors
  - Received \$2.5+ billion in benefits
- Annual contributions = \$1.5 billion
  - \$629 million, or 43 percent, from employees
  - \$841 billion, or 57 percent, from employers
- Five pension plans administered by two retirement systems (PERA and ERB)



## Public Retirement Plan Stakeholders and Their Objectives

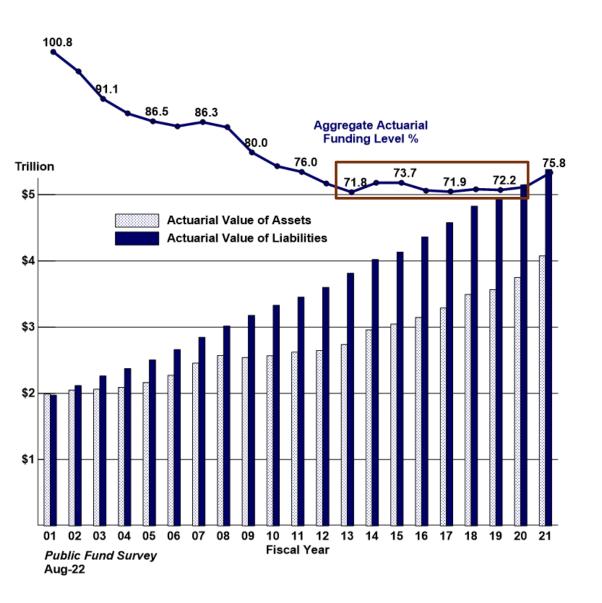
- Public employees
  - A competitive compensation package
  - Ability to retire at an appropriate age
  - Financial security in retirement
- Public employers
  - Attract and retain qualified workers
  - Return on investment in employee training
  - Orderly progression of personnel
- Taxpayers (i.e. recipients of public services)
  - Public services that are provided by professionals in a reliable and cost-efficient manner
  - Costs that are stable and predictable over time



$$C + I = B + E$$

Contributions + Investment Earnings = Benefits + Expenses

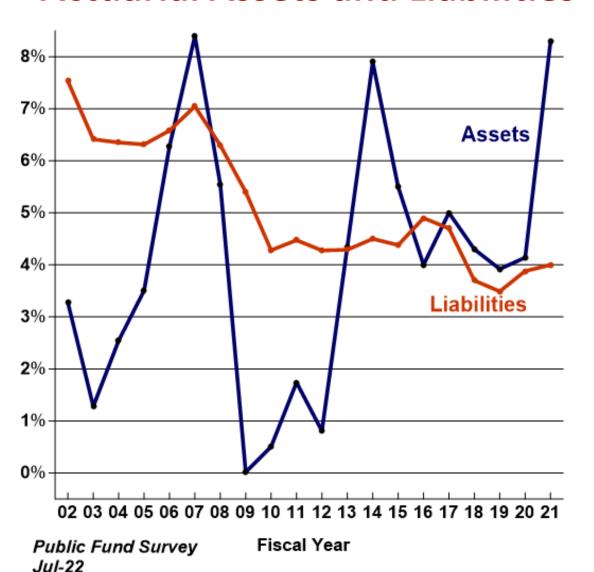




**Change in** aggregate public pension actuarial value of assets and liabilities and funding level, FY 01 to FY 21

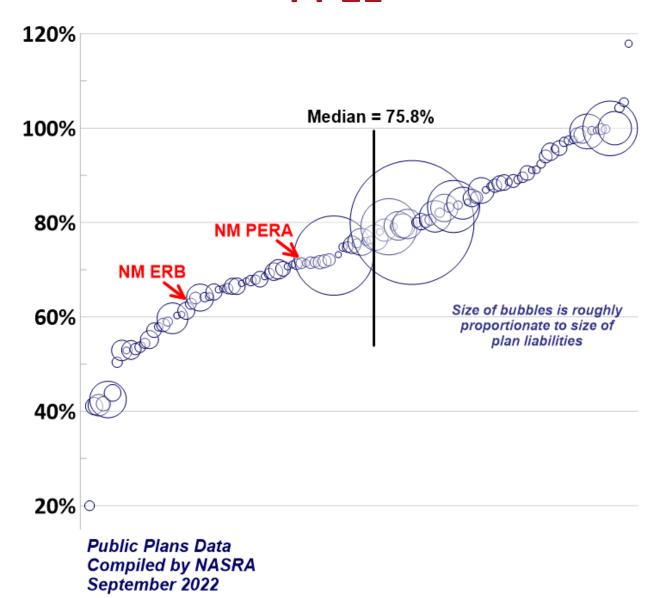


### Median Annual Change in Combined Actuarial Assets and Liabilities



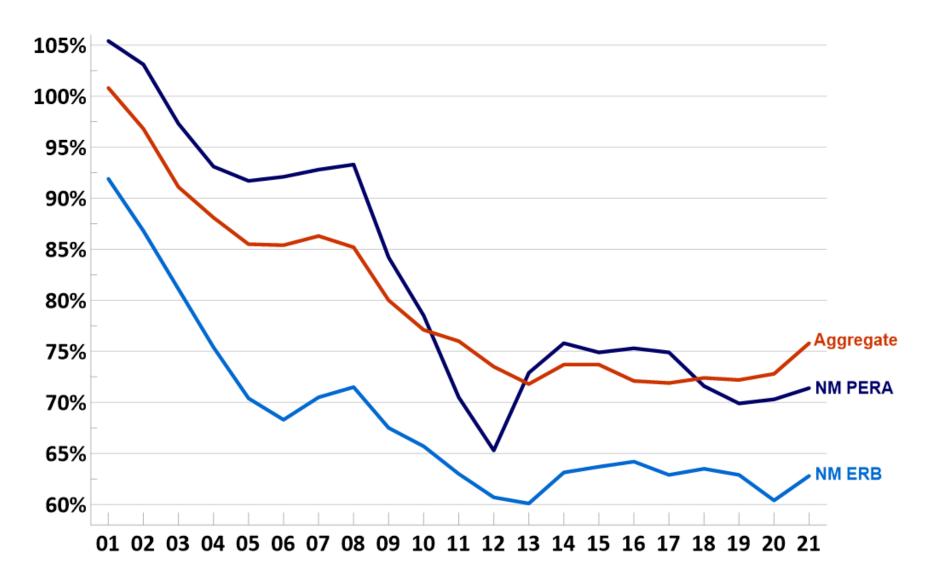


### Distribution of Public Pension Funding Levels, FY 21



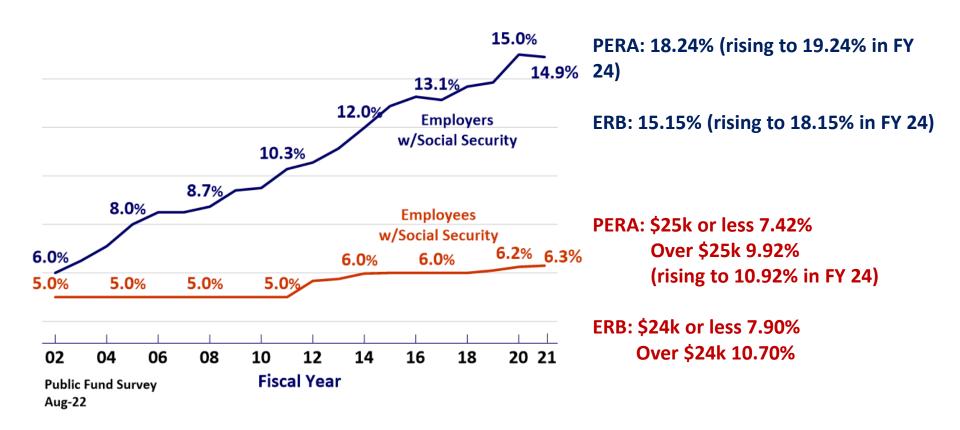


### Aggregate Funding Level, FY 01 to FY 21





## Median Contribution Rates Employee and Employer Social Security-Eligible



Contribution rates reflected here are those for general employees and public school teachers and predominantly exclude rates for public safety personnel



### **Key Factors Affecting Public Pension Funding Conditions**

#### Pushing Higher

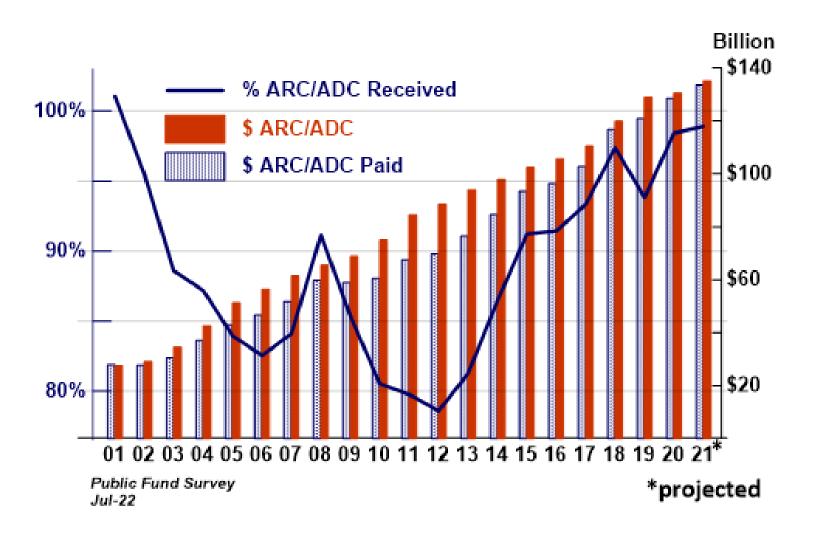
- Sufficient and surplus contributions
- Strong investment returns
- More conservative amortization policies
- Slower liability growth
  - Reforms have reduced benefit levels
  - Fewer and lower COLAs
  - Slower wage growth
  - Plan maturity

#### **Pulling Lower**

- Inadequate contributions
- Lower investment return assumptions
- Improving mortality: retirees are living longer
- Participants retiring sooner

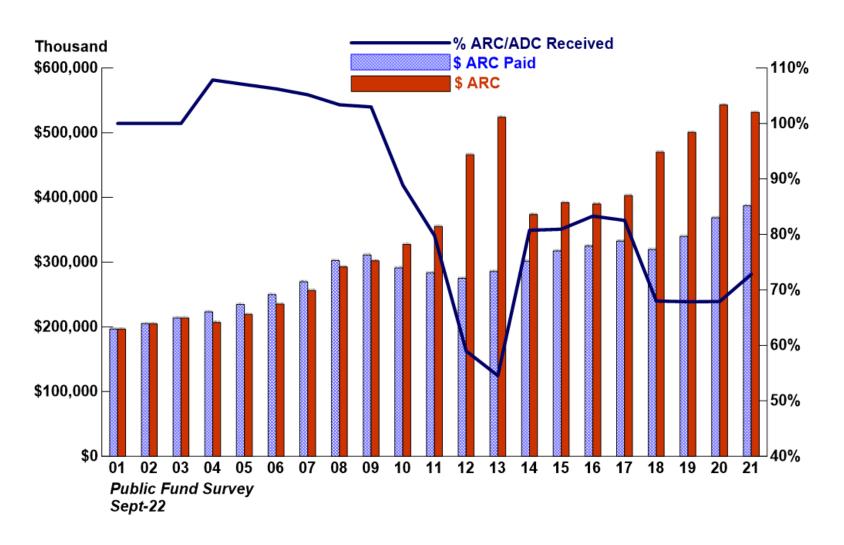


## Annual Required Contribution / Actuarially Determined Contribution Experience, FY 01 – FY 21 ~116 plans



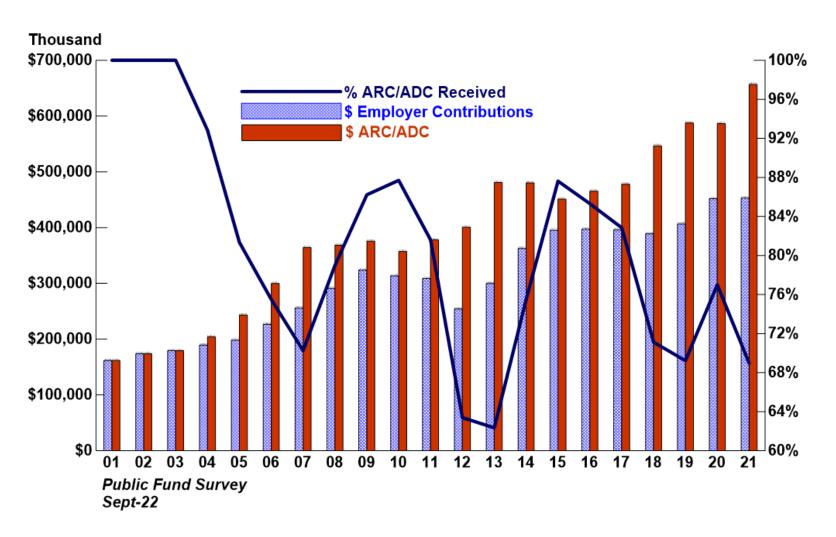


## Annual Required Contribution / Actuarially Determined Contribution Experience, FY 01 – FY 21 New Mexico PERA



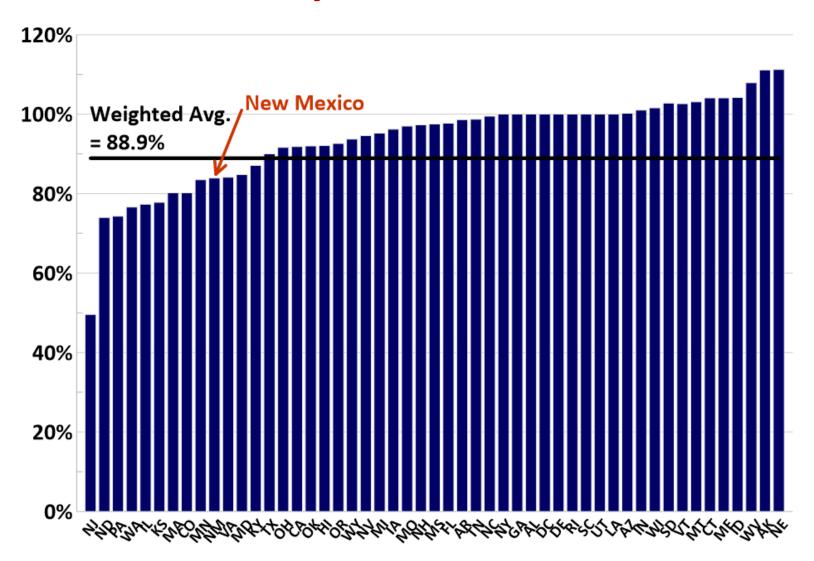


## Annual Required Contribution / Actuarially Determined Contribution Experience, FY 01 – FY 21 New Mexico ERB





## Distribution of Weighted Average ARC/ADC Received by State, FY 01 to FY 20

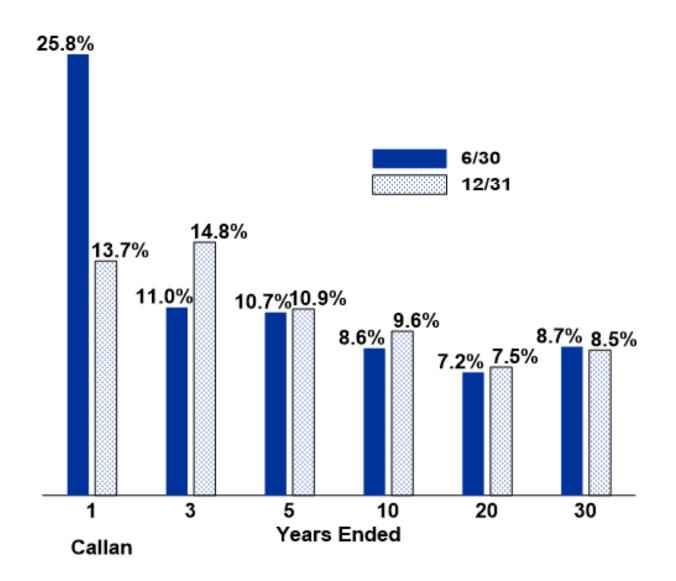




#### **Dedicated Funding Sources**

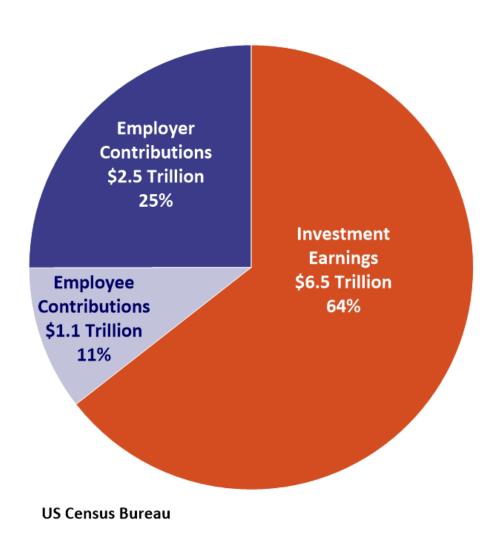
- An ongoing or one-time revenue source that must, by law, be contributed to the pension fund:
  - The Montana legislature in 2013 voted to dedicate a portion of the coal severance tax revenue to the State's unfunded pension liabilities
  - The New Jersey legislature in 2017 approved the transfer of ownership of the state lottery to the state pension fund
  - The Oklahoma TRS receives 5 percent of the State's sales, use, and corporate and individual income taxes, collected as a dedicated revenue source. The fund also receives 1 percent of the State's cigarette tax revenue and 5 percent of net lottery proceeds
  - For each year in which the ADC for state employees and teachers is lower than that for the prior year, the Rhode Island governor shall include a supplemental appropriation to the pension fund equal to 20 percent of the rate reduction

## Median Public Pension Investment Returns for FY-end dates in 2021

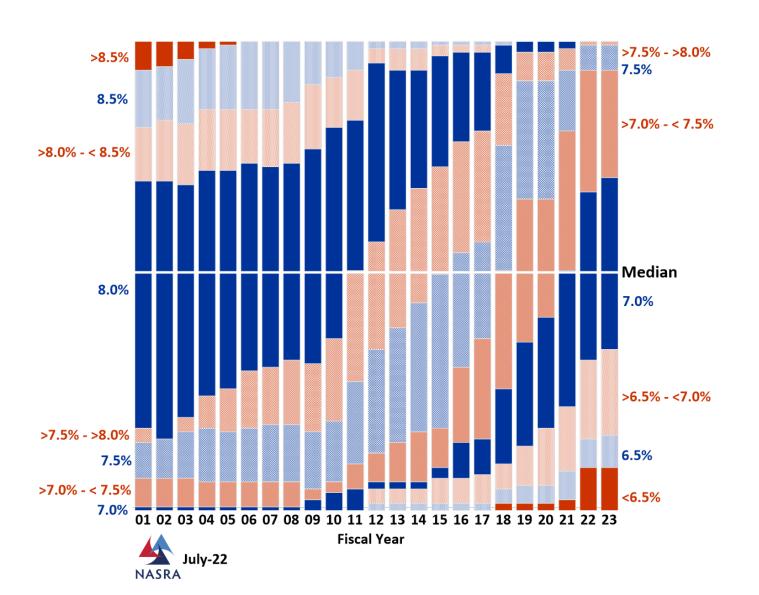




### Public Pension Sources of Revenue, 1992 to 2021

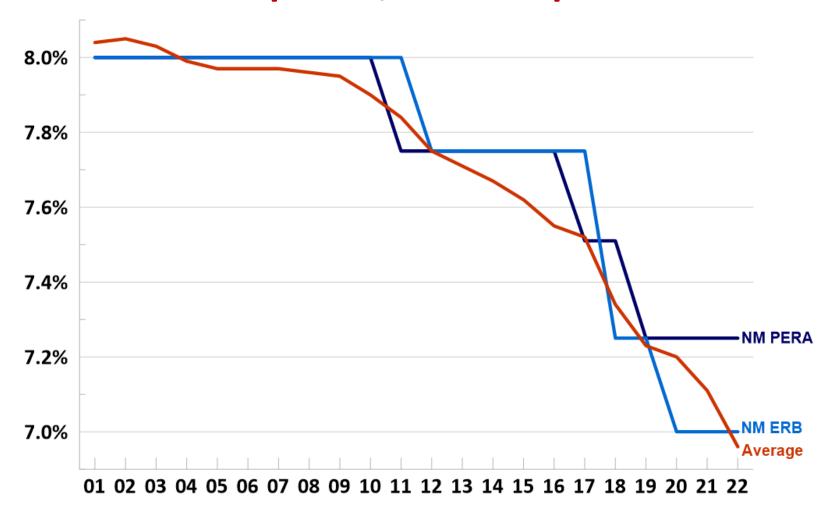


## Distribution of nominal investment return assumptions, FY 01 to latest



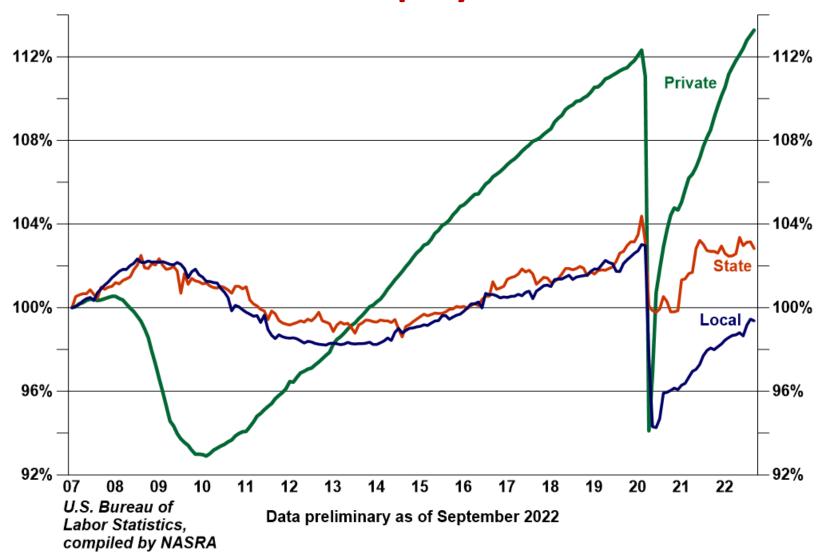


## Change in Average Public Pension Plan and New Mexico PERA and ERB Investment Return Assumptions, FY 01 to present



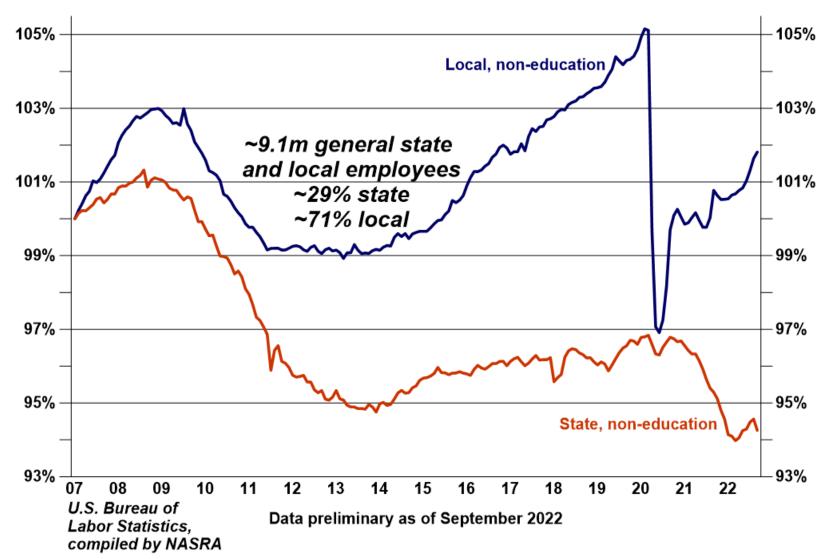


### Relative Change in Private and State and Local Employment since 2007



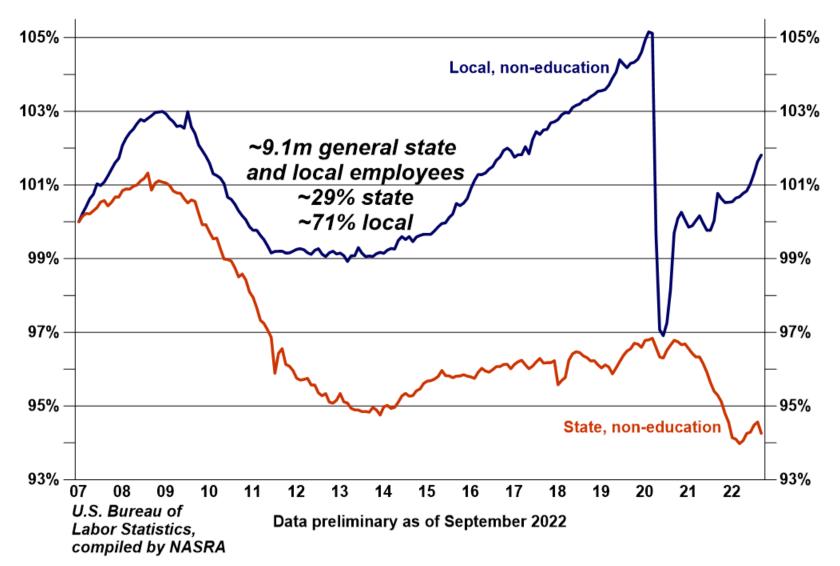


## Relative Change in General State and Local Employment since 2007



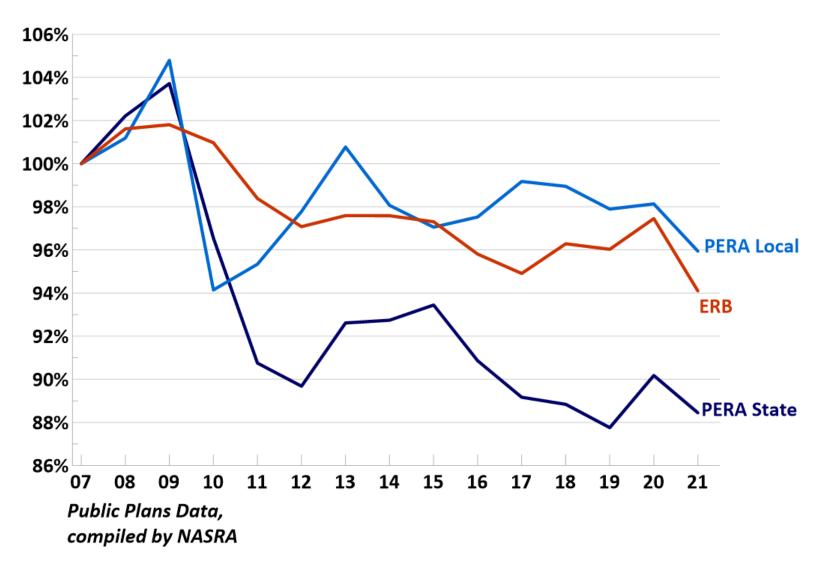


## Relative Change in State and Local Education Employment since 2007

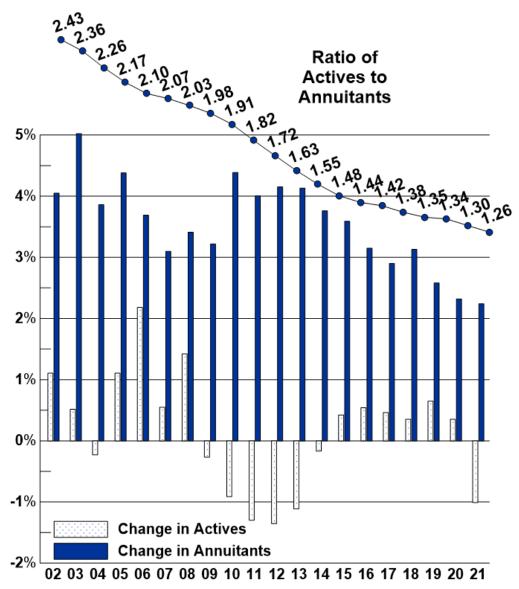




### Relative Change in Membership, New Mexico ERB and PERA, since 2007





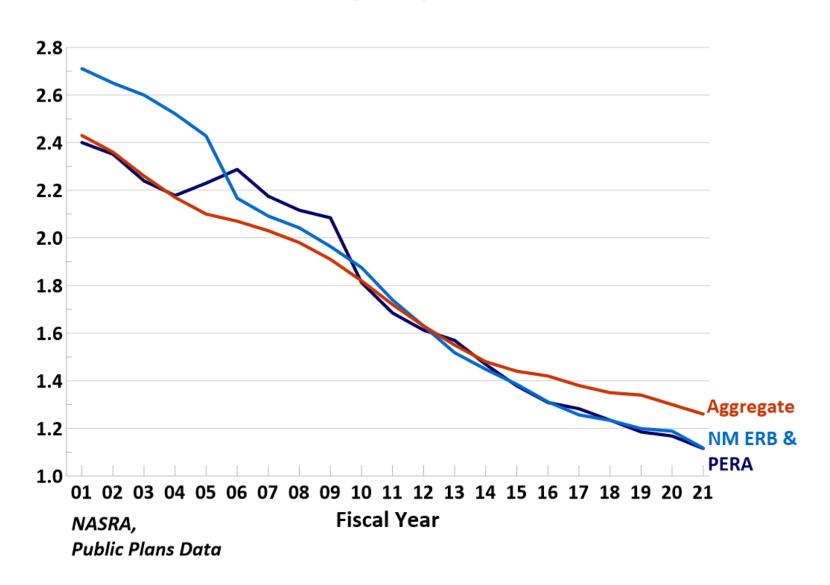


# Median annual change in actives and annuitants

Public Fund Survey Oct-22 Fiscal Year

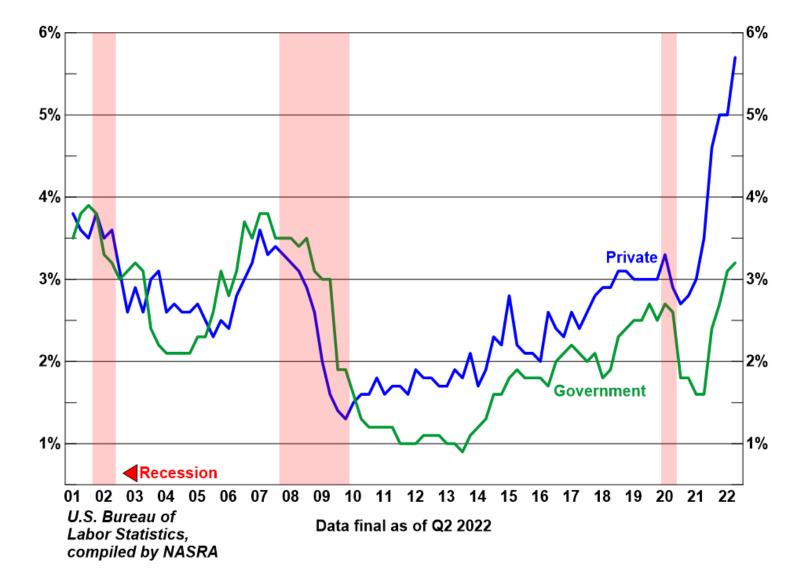


### Number of Active Members per Annuitant, FY 01 to FY 17

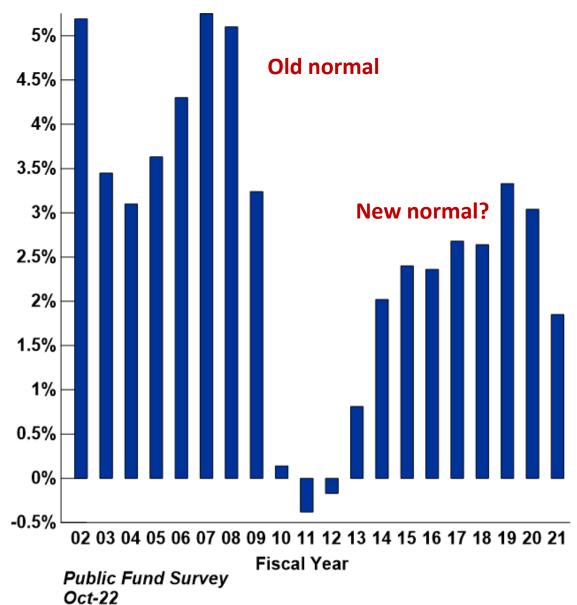




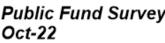
### Annualized Quarterly Change in Wage and Salary Costs for Private and State and Local Workers since 2001





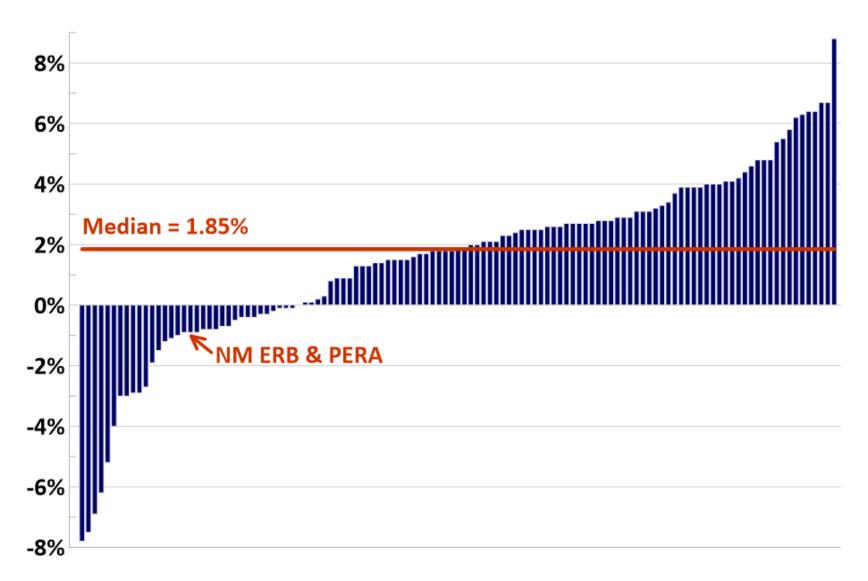


### **Median Annual Change in Payrolls** FY 02 to FY 21



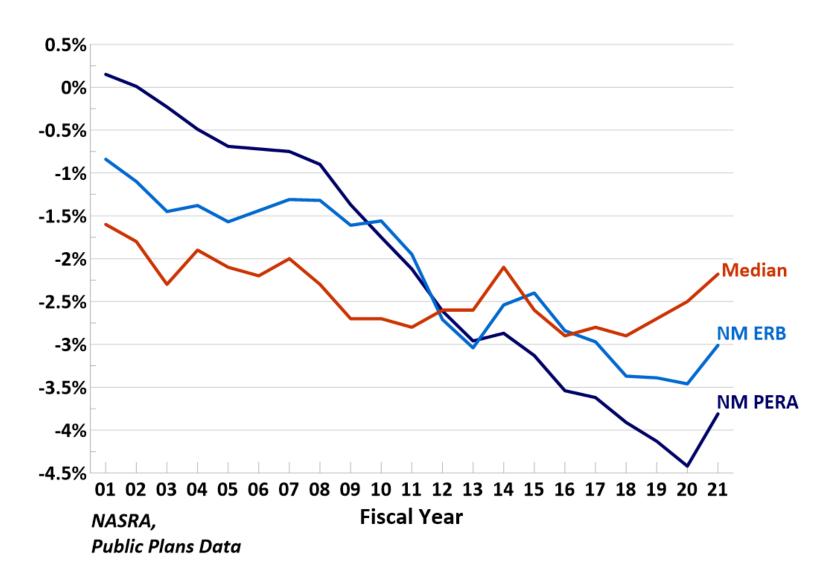


### Distribution of payroll growth, FY 21





### Median Cash Flow, FY 01 to FY 21





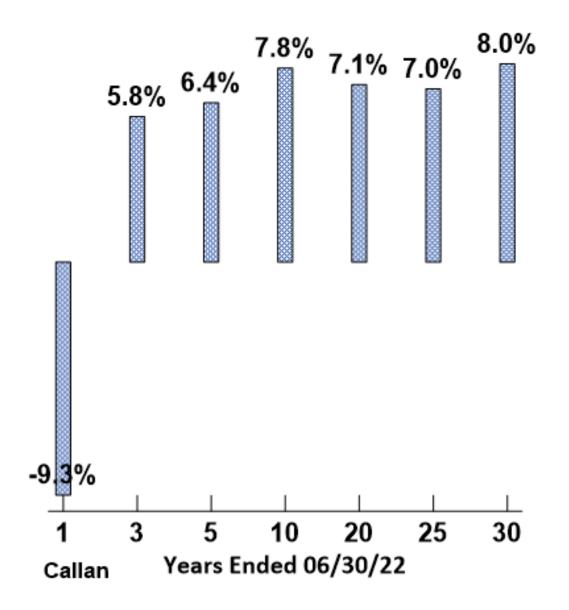
## Where Will Public Pension Funding Conditions Go From Here?

- Sub-par investment returns for FY 22 to be incorporated
- More conservative actuarial assumptions and methods
- Rates of public sector hiring and salary growth remain below previous levels
- Some employers still not contributing the full ADC

New Mexico's fixed rate employer pension contribution policy has been a major obstacle to improving the funding level of the state's pension plans

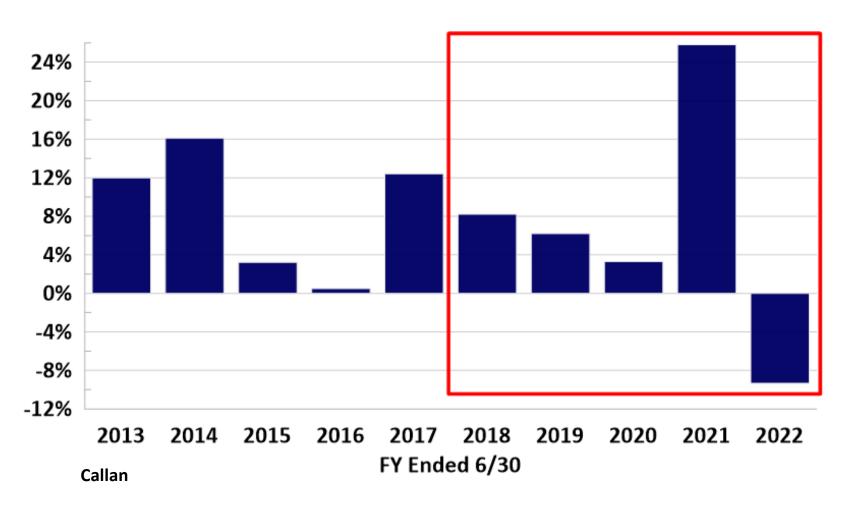


## Median Annualized Public Pension Fund Investment Returns for Years Ended 6/30/22



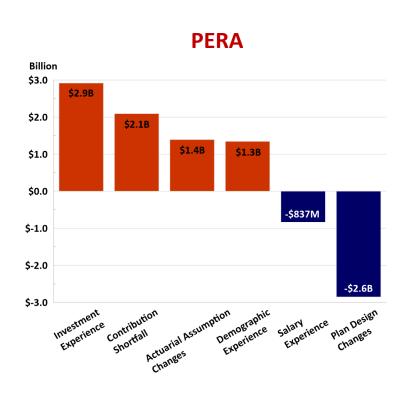


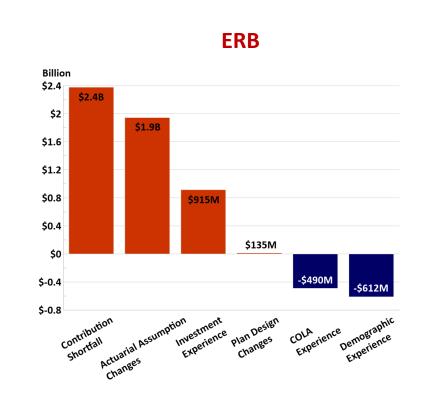
## Median Public Pension Fund Investment Returns for Individual Years ended 6/30 2013 to 2022





### Sources of increase or decline in unfunded liability, FY 2010 – FY 2021, New Mexico PERA and ERB







### Sustainability provisions for fixed rate plans

- Ohio state law requires each statewide plan to maintain a maximum amortization period of 30 years. Exceeding this threshold in any given year triggers a requirement to submit a plan for a boardapproved plan for reducing the amortization period
- Hawaii state law stipulates that employer contribution rates to the Hawaii ERS are subject to adjustment when the plan's funding period exceeds 30 years
- Montana state law requires employers and members to make supplemental contributions until the actuarial valuation identifies a funding period of 25 years or fewer



### Sustainability provisions for fixed rate plans

- Retired participants of the ERS and TRS of Texas are not eligible to receive a COLA if the plan's amortization period exceeds 30 years by one or more years
- Five percent of Oklahoma state income, sales, and use taxes, and lottery revenue, is dedicated to the Oklahoma TRS, without a required legislative appropriation
- The Wyoming Retirement System calculates an actuarially determined contribution that includes an amortization payment calculated on the basis of a layered amortization policy

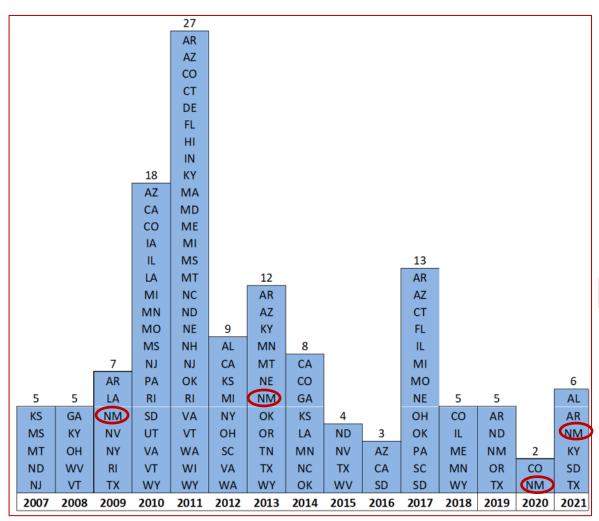


# **Q&A on Funding Issues**

#### **Pension Reforms in Recent Years**

- Since the 2008-09 market decline and recession, states and other public pension plan sponsors have implemented an unprecedented series of reforms to their pension plans
- Unprecedented both in the number of states enacting reform and in their magnitude
- A major theme of reforms has been establishment of features intended to share risk among employers and employees
- Also, lower benefits and higher employee contributions





# States that reformed pension plans by year, 2007-2021



## **Risk Sharing Conceptually**

$$C + I = B + E$$

- Over time, the revenue into a retirement plan must equal the plan's expenses
- This balance is maintained when the plan's actuarial assumptions are approximately correct over time
- In a traditional defined benefit plan, when this balance is disrupted, employer contribution rates must rise
- Risk-sharing introduces the possibility that employee contributions or benefit levels will be adjusted under certain conditions

#### **Examples of Risk-Sharing**

- Hybrid retirement plans
  - DB+DC
  - Cash balance
- Contingent or limited cost-of-living adjustments
- Flexible employee contribution rates
- Adjustable benefit levels

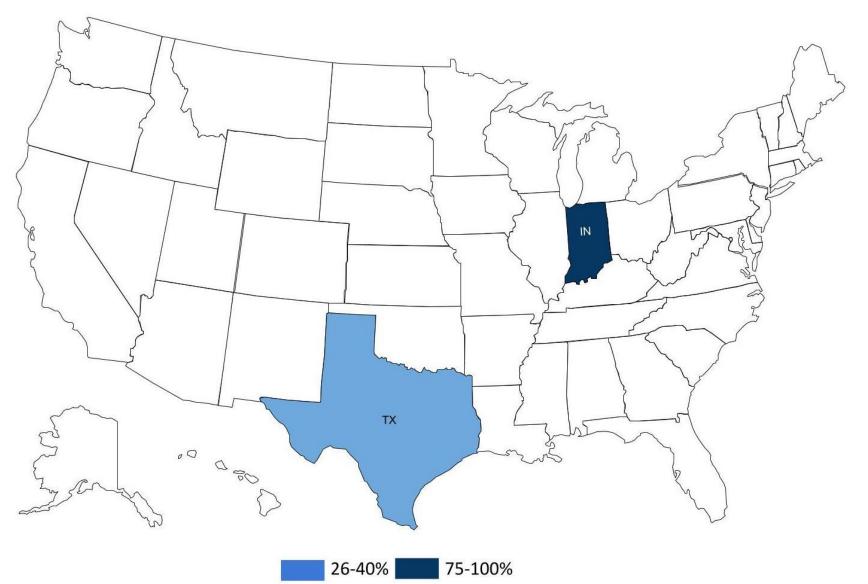


#### **Hybrid plans**

- New hybrid plans are being created by legislatures nearly every year
- Mostly combination (DB-DC), some cash balance plans
- Usually apply to new hires only
- Hybrid plans are one form of risk sharing
  - DB-DC plans maintain a DB component, with a lower benefit accrual rate
  - Cash balance plans contain key features of DB plans,
     but transfer some investment risk to workers

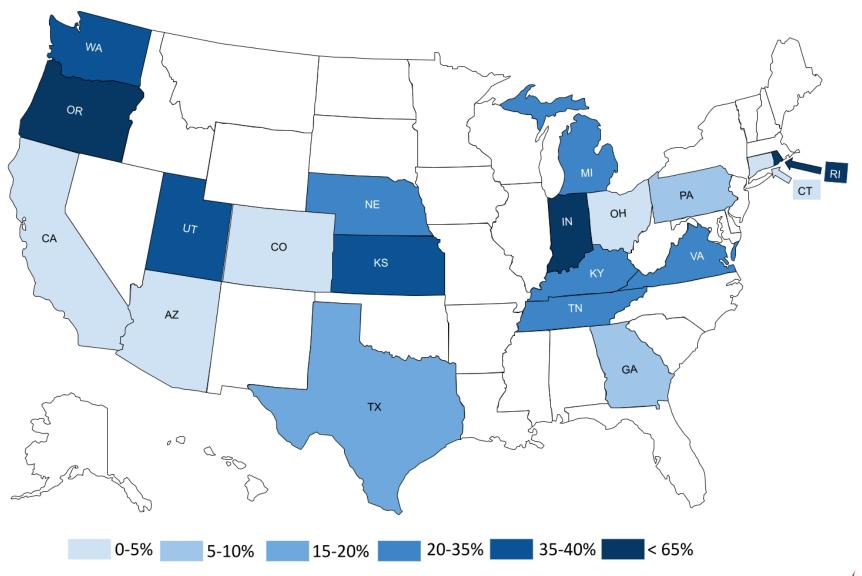


# Statewide hybrid plans, 1995





## Statewide Hybrid Plans, 2021



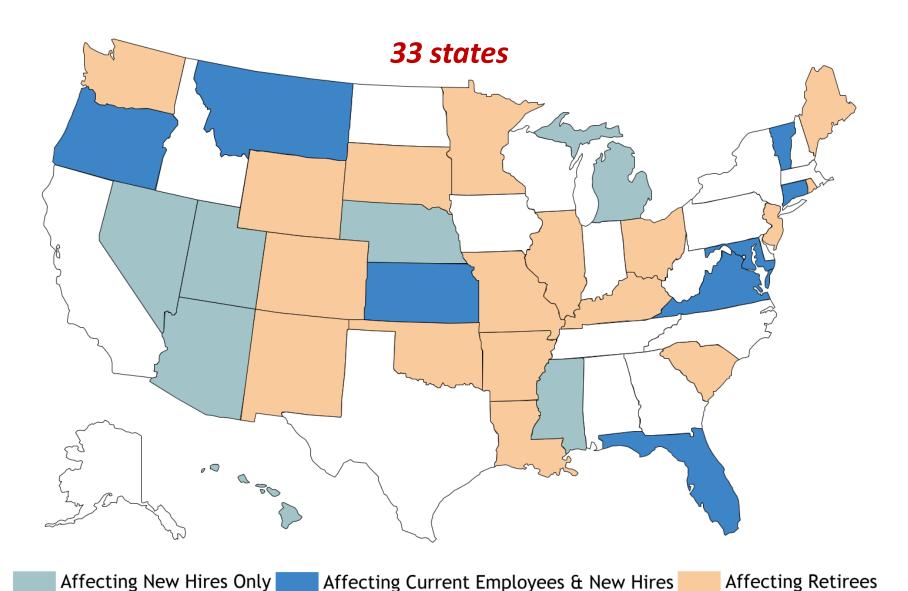


#### **Contingent COLAs**

- Wisconsin established the first contingent COLA, which is triggered by investment performance on an actuarial basis that exceeds the expected return
- South Dakota calculates its COLA each year as the COLA that can be paid while keeping the plan fully funded and contribution rates at current levels
- Other contingent COLA designs:
  - Delayed onset or minimum age
  - Applied only to a portion of the pension benefit
  - Linked to investment performance
  - Linked to inflation
  - Linked to plan funding level



#### States that reduced automatic COLAs





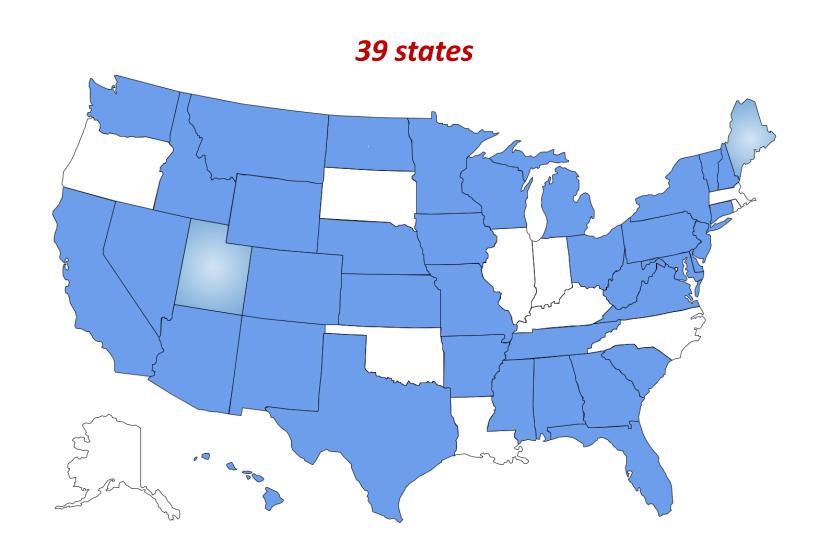
#### Flexible Employee Contribution Rates

- Employees and employers split the full actuarial cost at the Arizona State Retirement System and the Nevada PERS
- Most new hires in California since 2013 are required to pay at least one-half of the normal cost of their benefit
- Iowa statue requires employees participating in the PERS to pay 40 percent of the total cost of the plan
- Public employees in Utah must pay the cost of their pension plan above 10 percent

Requirements that employees share in the total plan cost exposes them to all of the actuarial risks to the plan



#### States that increased employee contributions



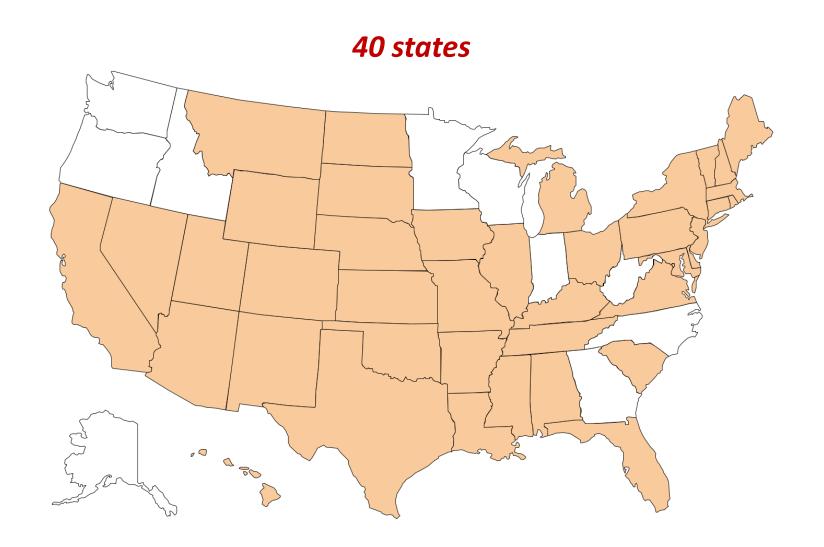


#### Flexible Benefit Levels

- The City of Houston pension plans feature a contribution rate corridor arrangement
- A rise or fall in the employer contribution rate outside the established corridors triggers automatic changes, including in:
  - Actuarial methods and assumptions
  - Employee contributions
  - COLA
  - Normal retirement age
- Michigan teachers and other school employees hired since 2018 must choose between a (default) defined contribution plan or a hybrid plan
- The new hybrid plan includes a provision that will increase the normal retirement age when the plan's actuarial experience study shows an improvement in the participant mortality experience by at least one year
  - There are exemptions for those closest to the current normal retirement age
- This effectively shifts a portion of the plan's mortality risk from the employer to participants

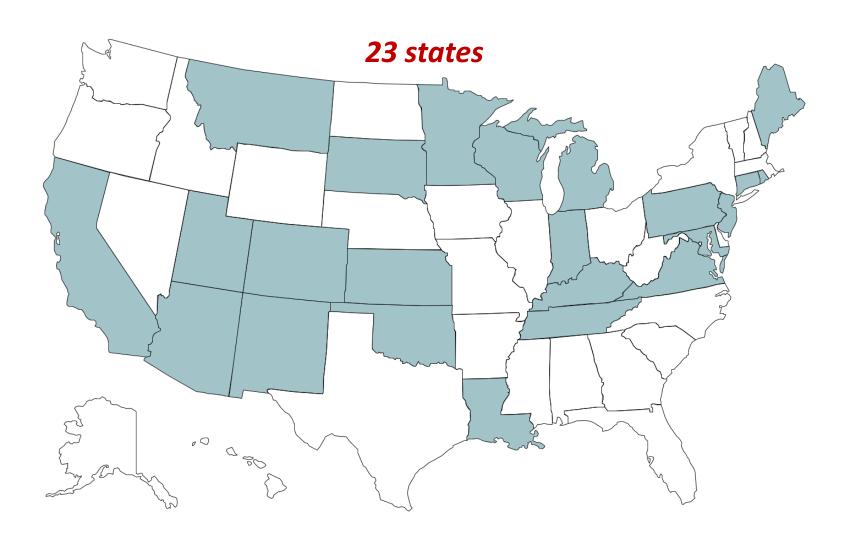


# States that reduced pension benefits





# States Adding or Modifying Shared-Risk Plan Design Features Since 2000





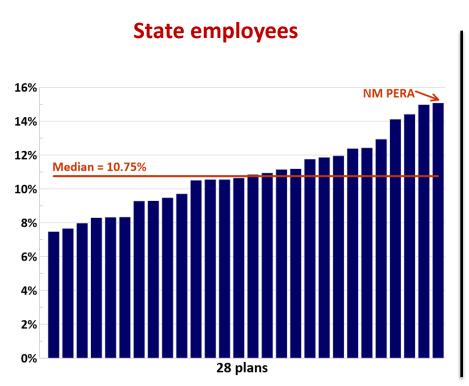
### **Risk Sharing in New Mexico**

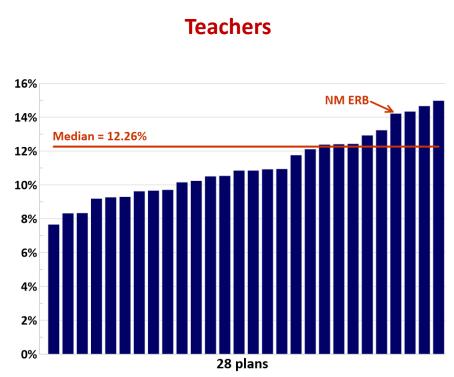
- Public pension plans in New Mexico reflect principles of risk sharing through the COLA:
  - The ERB COLA, which is tied to inflation and capped, is also reduced until the plan attains a 100 percent funded ratio
  - The PERA COLA is tied to investment performance and the plan's funding level

Both COLA provisions expose retirees to inflation risk, as well as all actuarial risks that affect the plans' funding condition



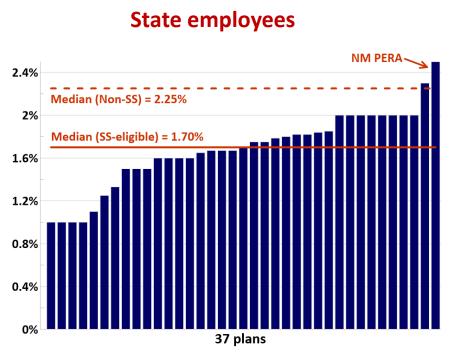
# Distribution of FY 21 total normal costs for selected Social Security-eligible state employee and teacher plans



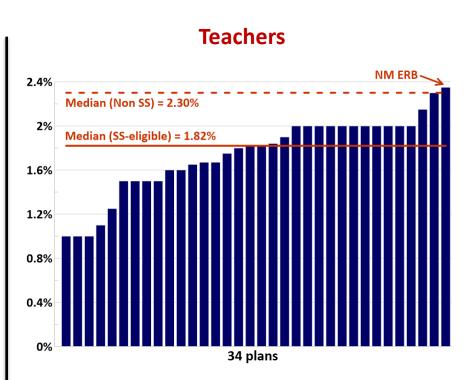




# Distribution of multipliers\* for new hires participating in selected Social Security-eligible state and teacher plans











#### **Final Thoughts**

- New Mexico has approved multiple rounds of pension reform in recent years that are consistent with the types of reforms enacted in other states
- The New Mexico ERB and PERA plan designs include principles of shared risk through the COLA provision
- Retirement benefits for New Mexico state employees and teachers are among the highest for Social Security-eligible employees nationally



# Thank you

**Alex Brown** 

alex@nasra.org

202-624-8461