

# **Overview of Public Pension Issues and Trends**

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**Vermont Pension Task Force  
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# Presentation Overview

- Overview of public pension issues in Vermont
- Comparison of Benefits: Vermont SERS and TRS and regional peers
- Pension reform trends
- Discussion of COLA arrangements



# Public Pensions in Vermont

- ~\$5.0 billion in assets
- ~28,000 active members
- ~22,000 annuitants
- \$248 million in employer contributions
- ~\$457 million in benefits paid
- FY 20 actuarial funding levels
  - VSERS: 66.4%
  - VSTRS: 51.3%
  - VMERS: 75.8%



# Factors Working For and Against Public Pension Plans Improving Their Funding Condition

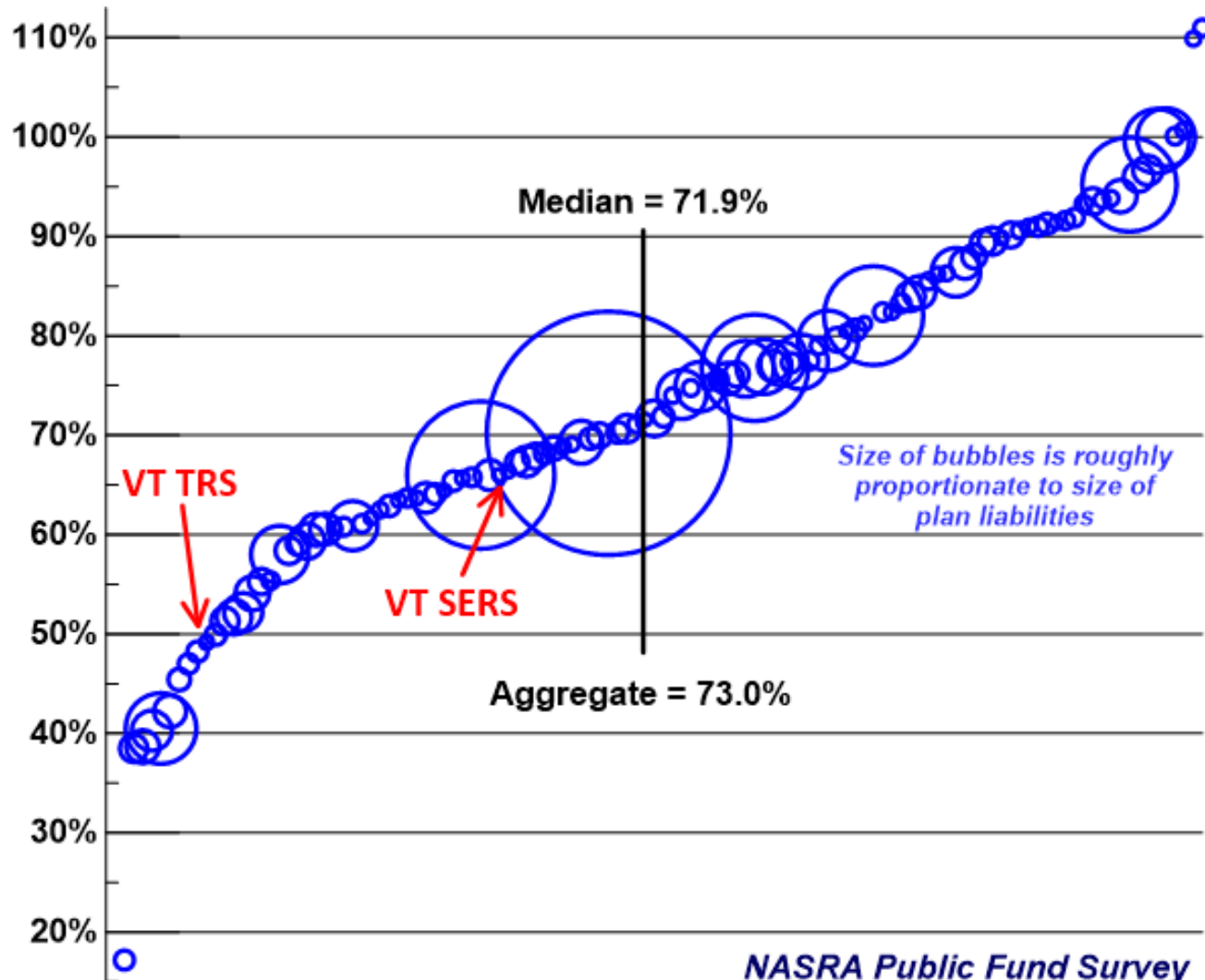
## For

- Actuarially sufficient and surplus contributions
- Investment returns above assumptions
- More aggressive amortization policies
- Participants working longer
- Reforms that reduce unfunded liabilities

## Against

- Lower investment return assumptions
- Lower rates of payroll growth
- Participants retiring sooner
- Updated mortality assumptions

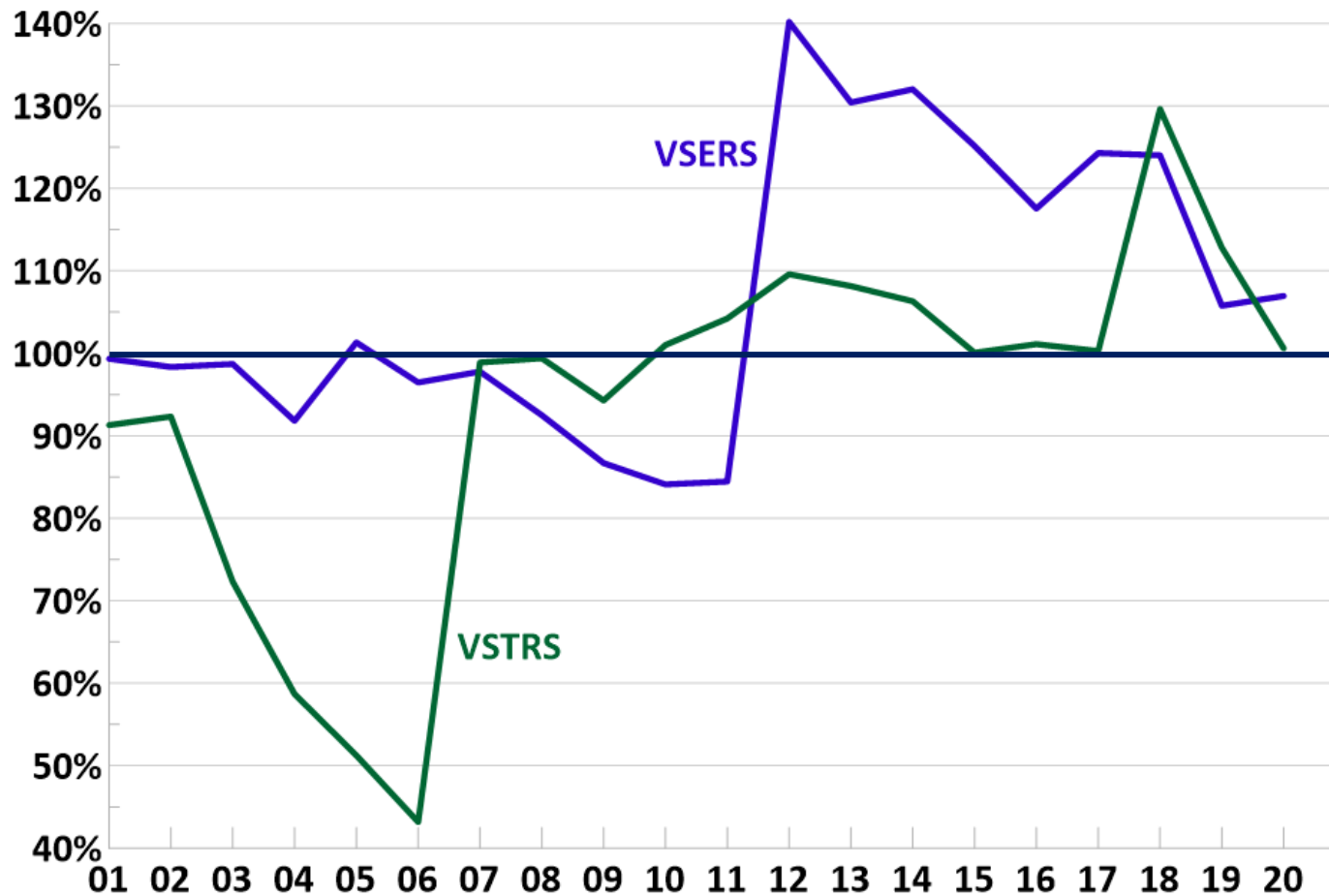
# Distribution of Public Pension Funding Levels, FY 20



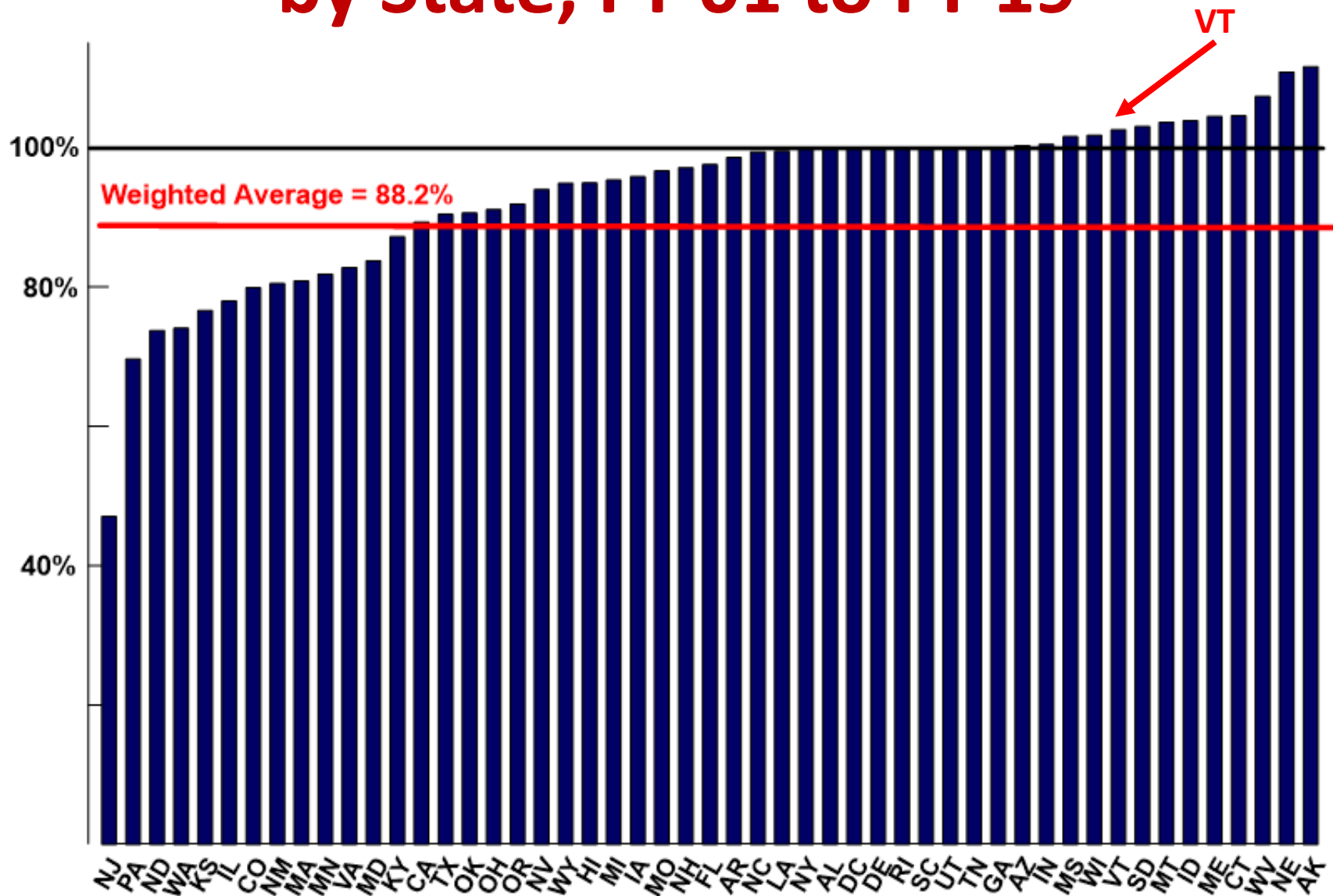
NASRA Public Fund Survey  
Jun-21



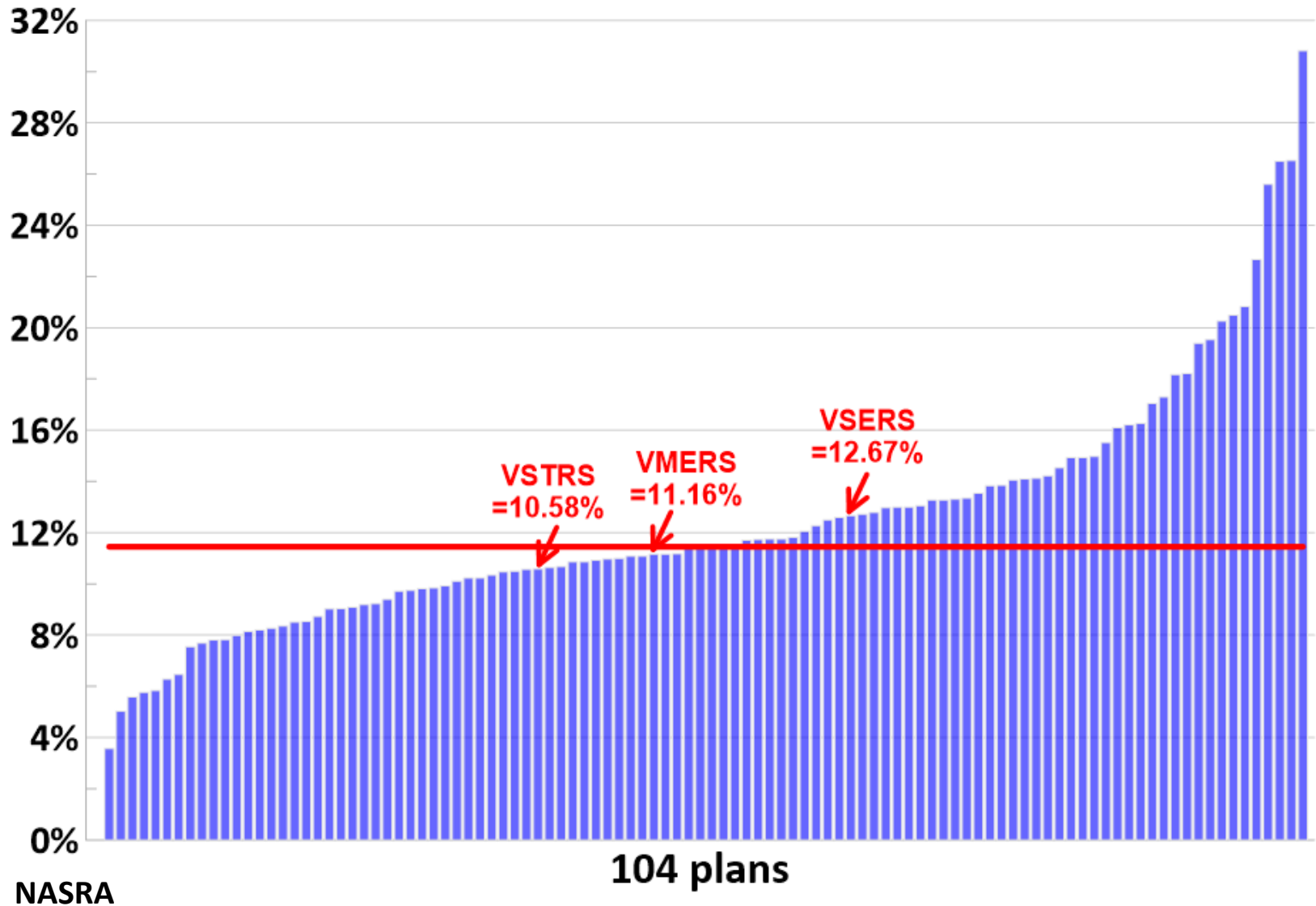
# Employer Contributions to VSERS and VSTRS as a Percentage of ARC/ADC, FY 01 – FY 20



# Distribution of ADC Received, by State, FY 01 to FY 19

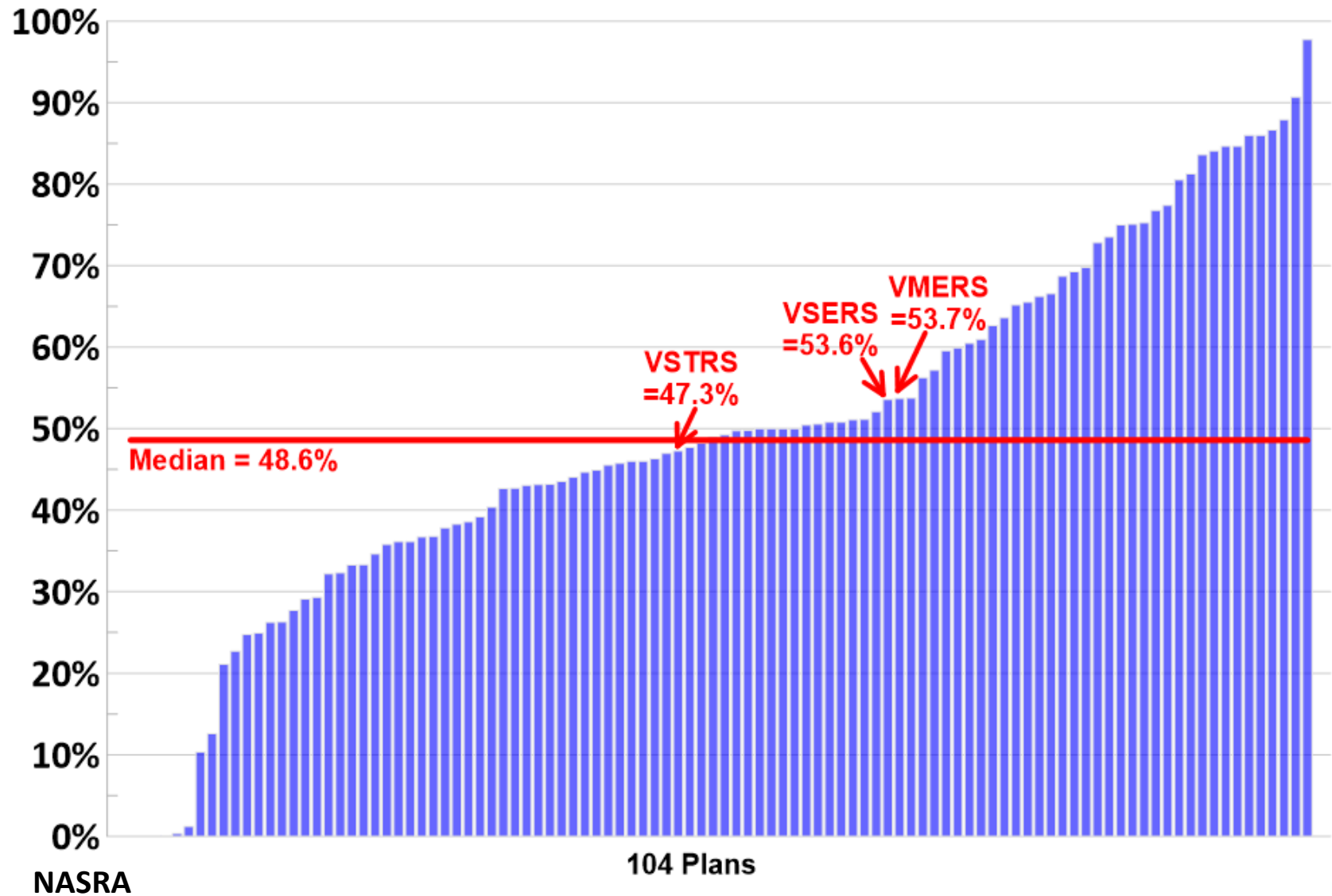


# Distribution of Total Normal Cost, Social Security-Eligible, FY 20

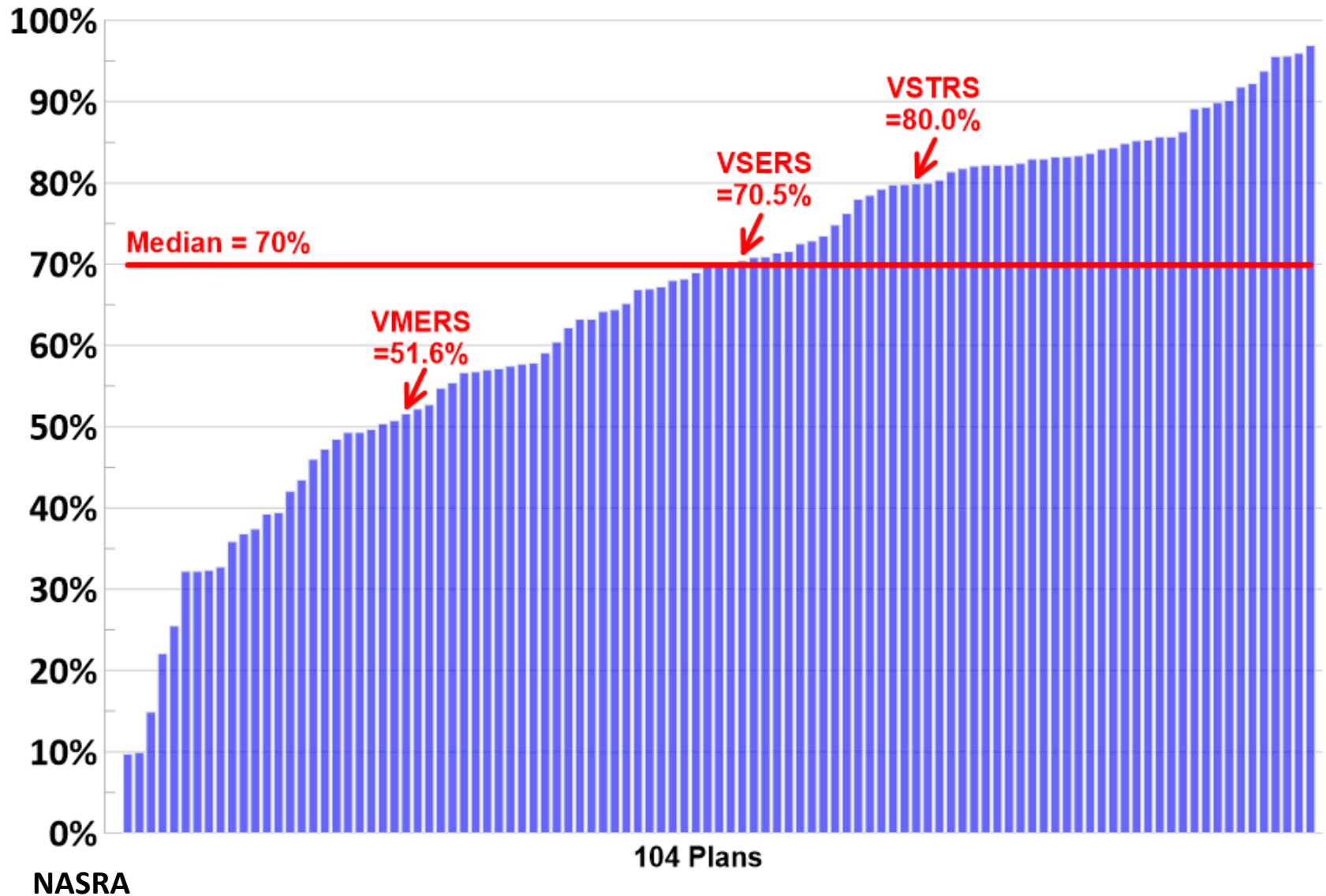




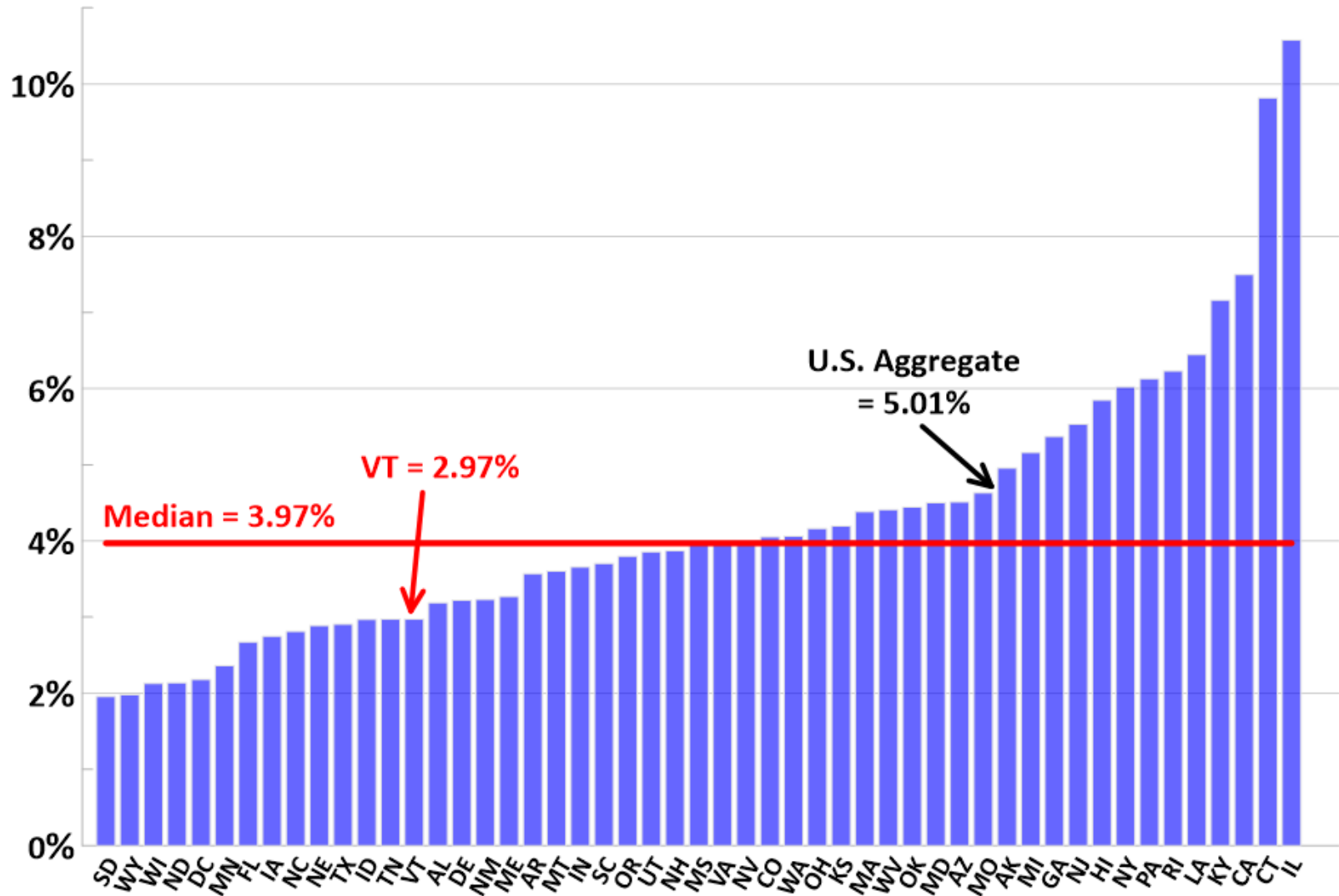
# Distribution of Total Normal Cost Paid by Employees Social Security-Eligible, FY 20



# Distribution of ADEC Directed to Amortization of Unfunded Liability Social Security-Eligible, FY 20



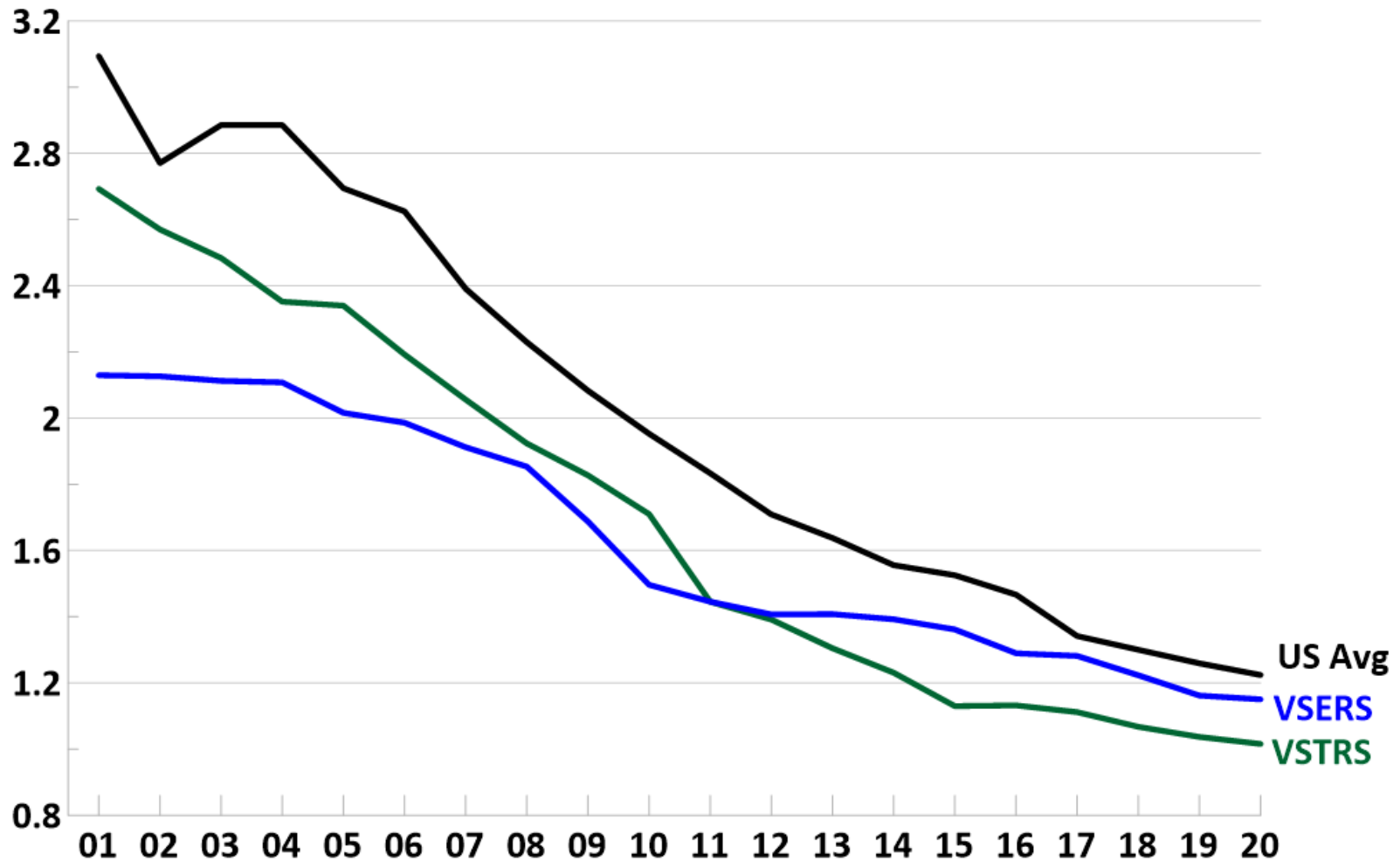
# Spending by States as a Percentage of All State and Local Government Spending, FY 19



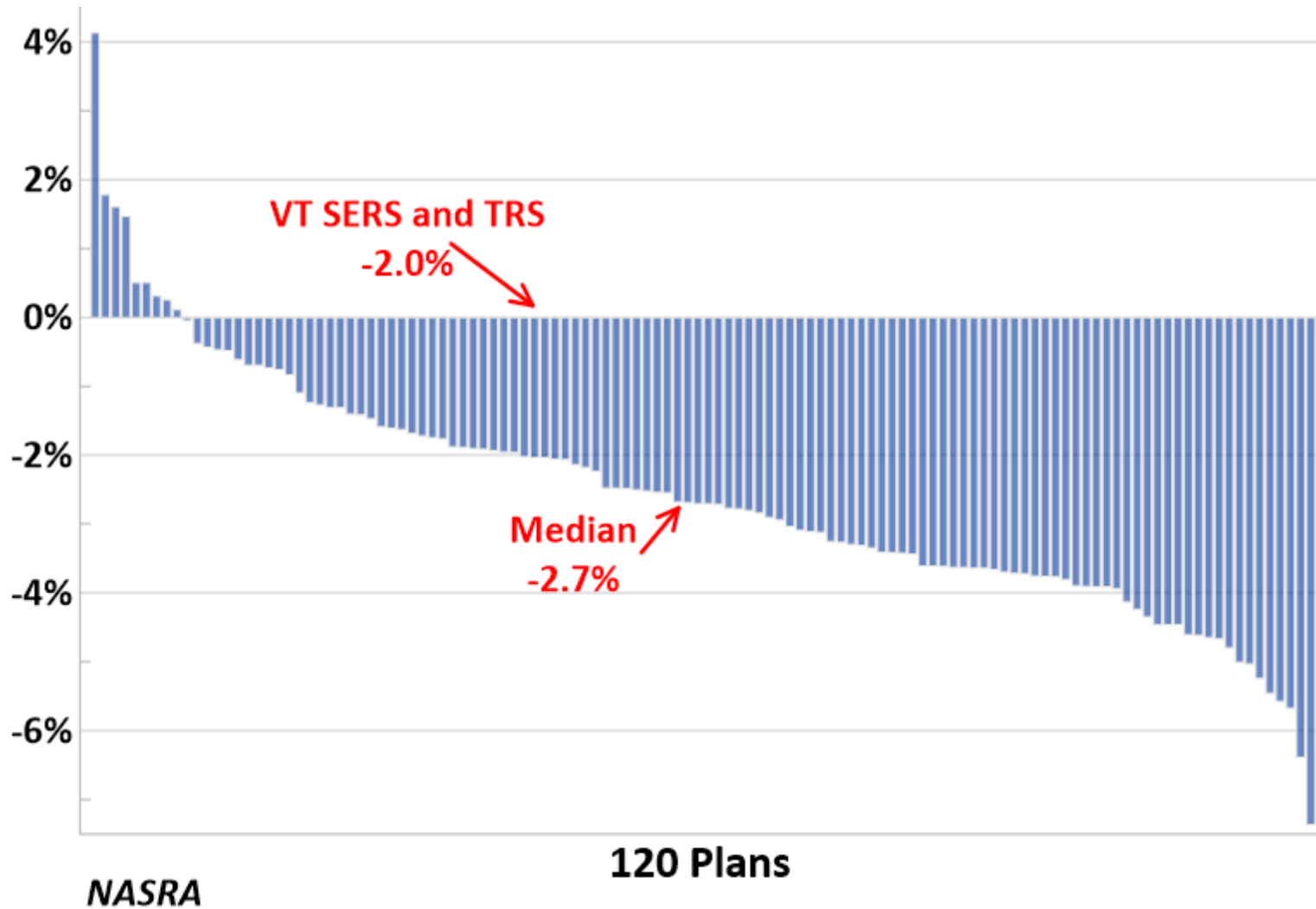
US Census Bureau, compiled by NASRA



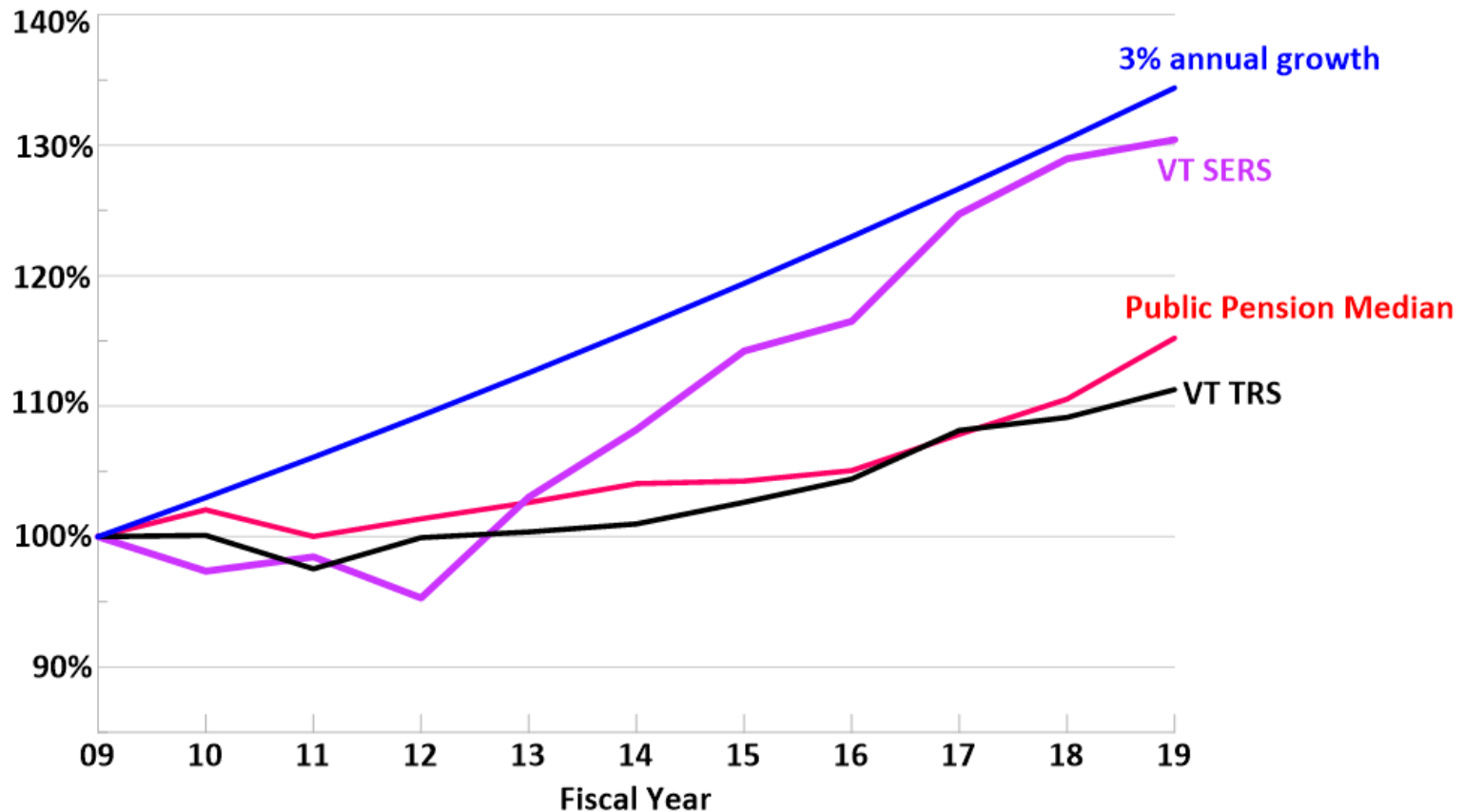
# Ratio of Active Members to Annuitants, VT SERS and VT TRS and US Avg, FY 01 to FY 20



# Distribution of Public Pension Cash Flows, FY 19



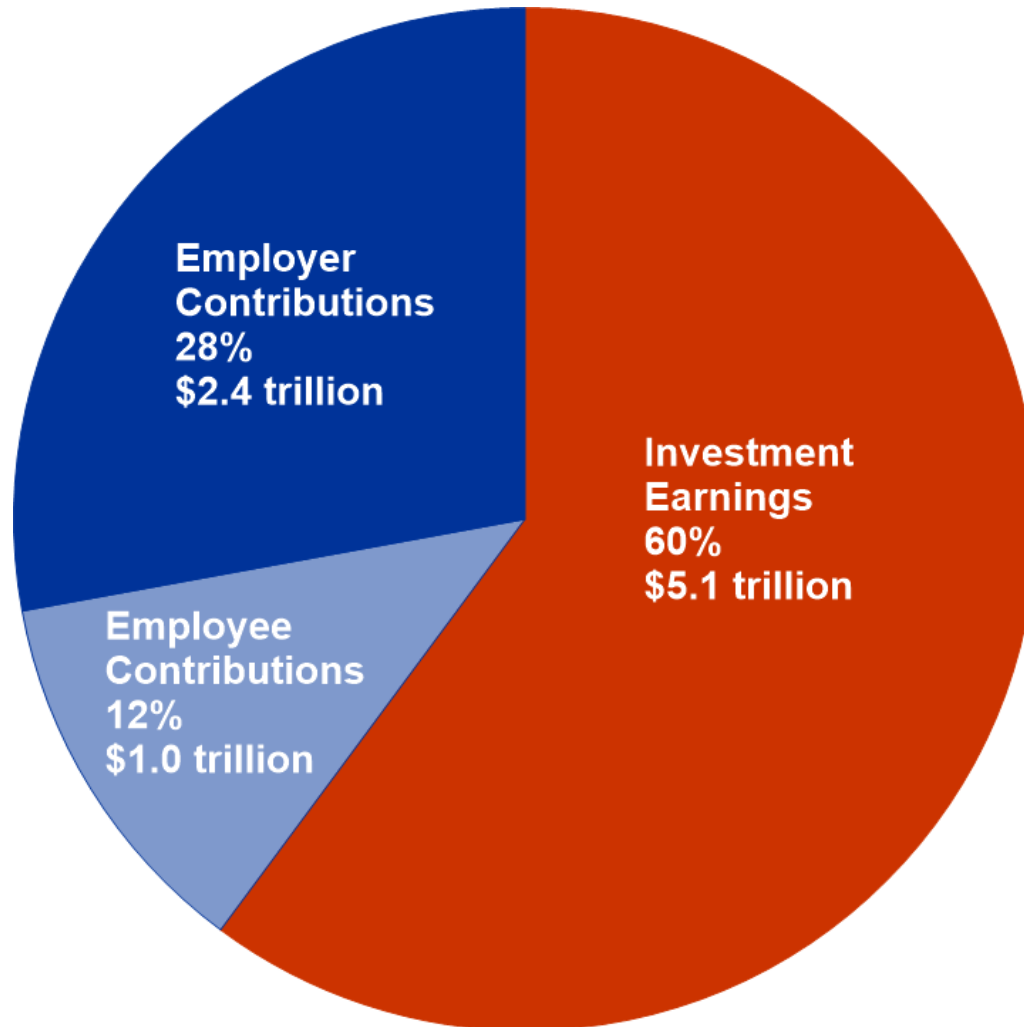
# Payroll Growth Experience: Vermont SERS, TRS, and comparatives



NASRA



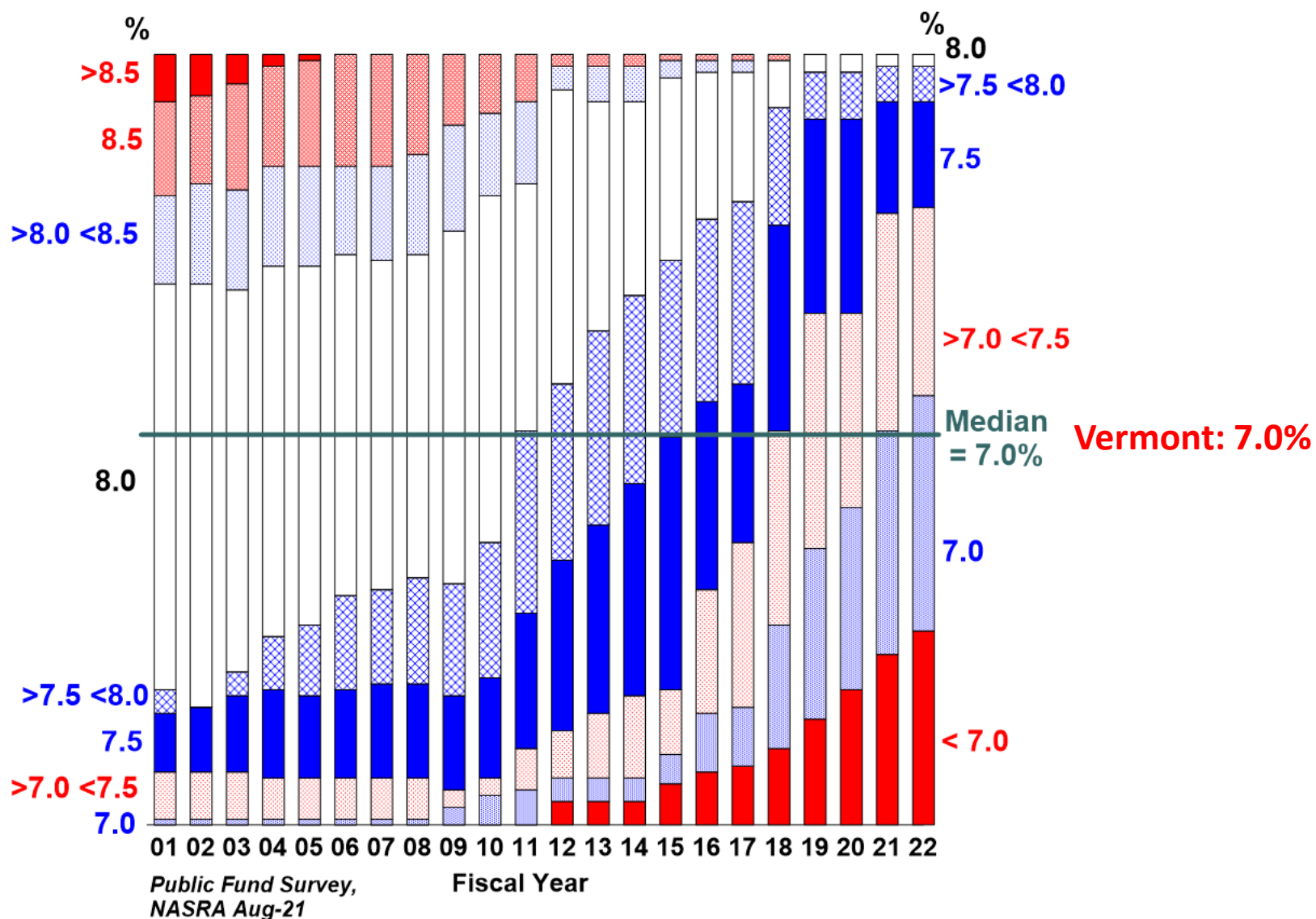
# Public Pension Fund Sources of Revenue, 1991-2020



US Census Bureau  
Compiled by NASRA

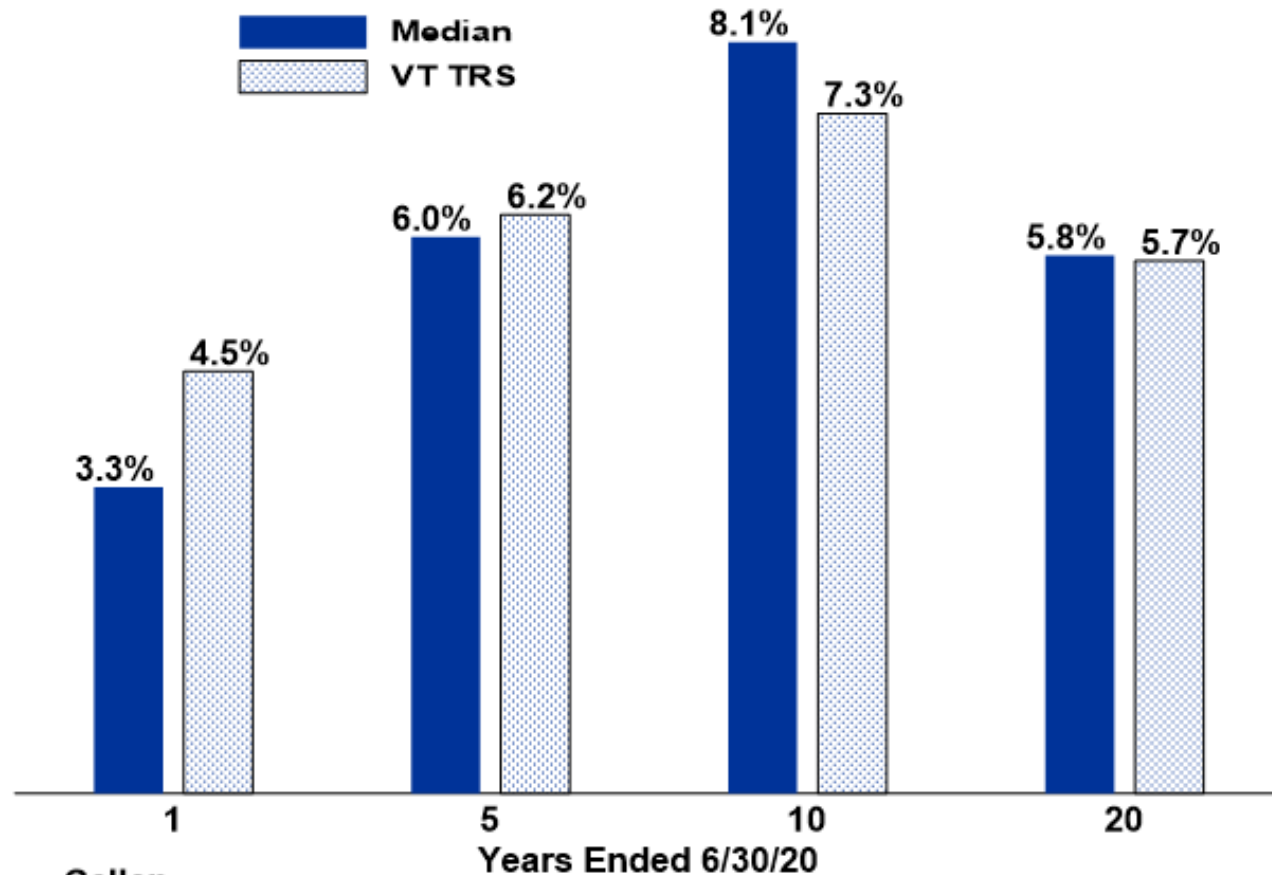


# Change in Investment Return Assumptions





# Investment Returns for Years Ended 6/30/20: Public Pension Median and Vermont TRS



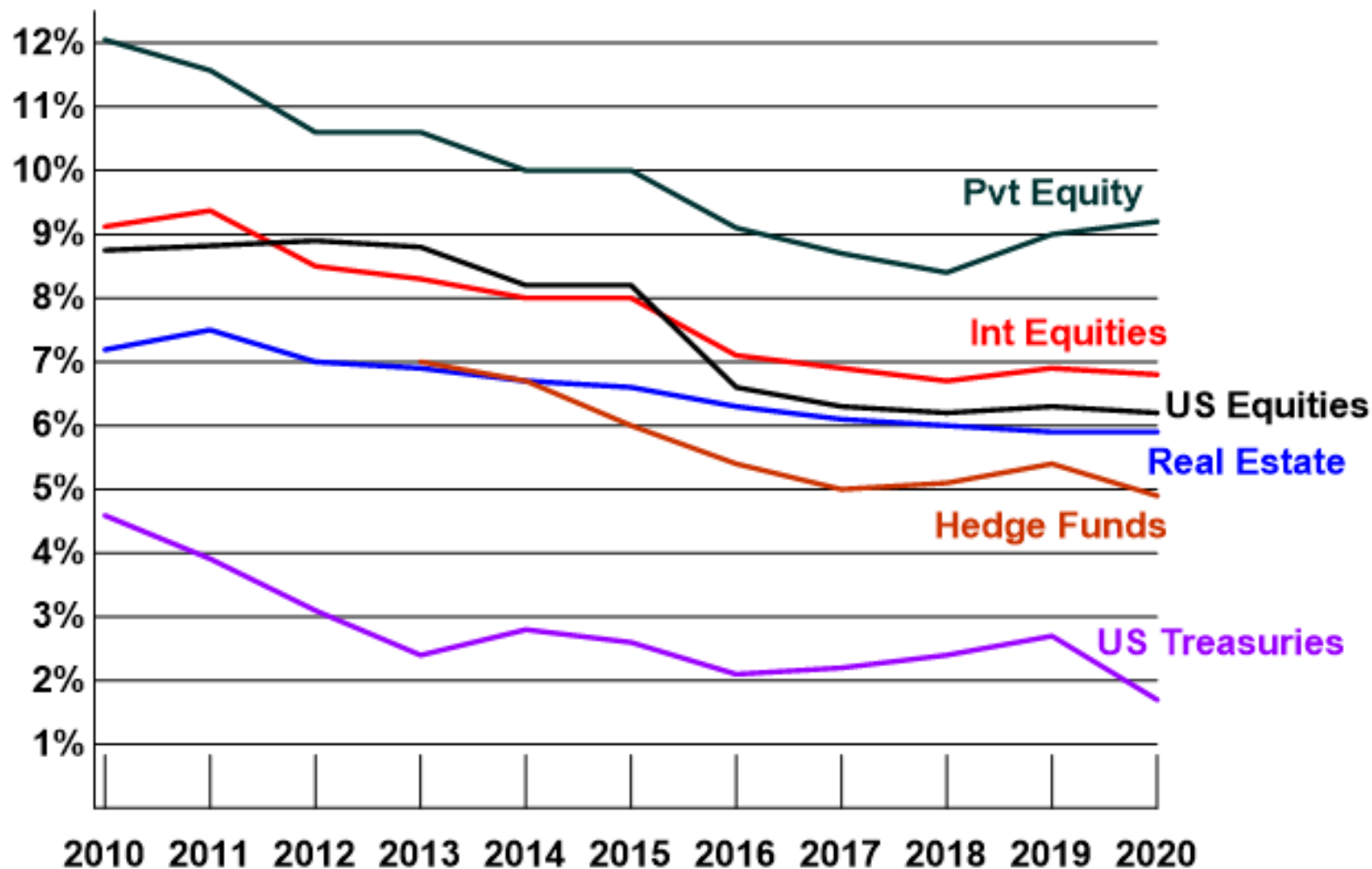
Callan  
and Public Plans Database



# S&P 500 Returns Based on FY-end Dates



# Change in Projected Returns by Asset Class



Horizon Actuarial Services



# Amortization Policy

- The rules and processes that determine the length of time and structure of payments required to systematically eliminate a UAAL or to recognize a surplus
- Key elements of an amortization policy include:
  - Is the amortization period open or closed?
  - Are separate amortization layers utilized for gains or losses?
  - What is the length of the amortization period?
  - Are amortization payments determined on a level dollar or level percent-of-payroll basis?



# Amortization Policy Preferences

- Multiple, fixed amortization layers
- Ideal amortization period for actuarial gains and losses is a range from 15 to 20 years
- “Longer than 20 years becomes difficult to reconcile with demographic matching to promote the policy objective of intergenerational equity”
- Shorter than 15 years can introduce untenable volatility in cost and funding level



# **Vermont Retirement Systems**

## **Amortization Method**

- Closed, level percentage of payroll
- Per statute, scheduled to amortize in 2038



# **Comparison of Benefits: Vermont SERS and TRS and Regional Peers**



# Pension Reforms in Recent Years

- Since 2009 nearly every state modified public pension benefits, financing arrangements, or both
- Higher contributions
  - Often from employees
  - Usually from employers
- Lower benefits
  - Lower multipliers
  - More required years of service
  - Higher retirement age
  - Reduced, suspended, or eliminated COLAs
- Increased use of hybrid plans
- A major theme of recent pension reform has been the establishment or strengthening of shared-risk provisions





# Pension Reform in Vermont

- Legislation enacted in 2008 and 2011 increased the employee contribution rate for current active VSERS participants
- 2010 legislation specified plan design changes for VSTRS, including:
  - Increased the employee contribution rate for all current active participants until the plan reaches a funding ratio of 90%
  - Increased the normal retirement eligibility requirement for current active participants who were more than five years away from the previous requirement as of 6/30/10
  - Increased the benefit multiplier and maximum benefit percentage



# Pension Reform Considerations

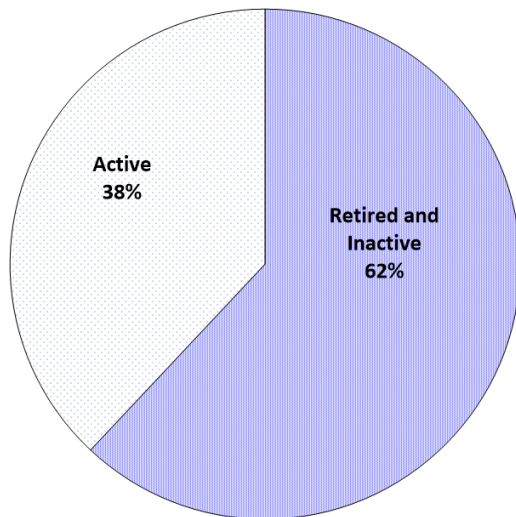
- Pension reform can be divided into one of two broad classes:
  - Changes that affect future hires only
  - Changes that affect current active participants (working and retired)
- Reducing the plan's unfunded liability via benefit changes requires that benefit levels of current active participants be reduced
- Reducing benefit levels only for future hires may alter the plan's cost trajectory, but these reforms will not reduce the unfunded liability
- The most dramatic effects on unfunded liabilities have occurred by altering cost-of-living adjustments for current retirees



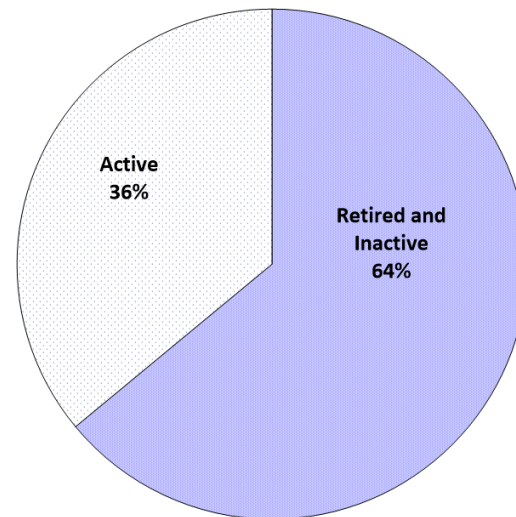
# Pension Reform Considerations

- Attribution of the plan's actuarial accrued liability can help guide policymakers to determine the impact of pension reform
- 62% of VSERS, and 64% of VSTRS AAL is associated with retired and inactive participants

**VT SERS**

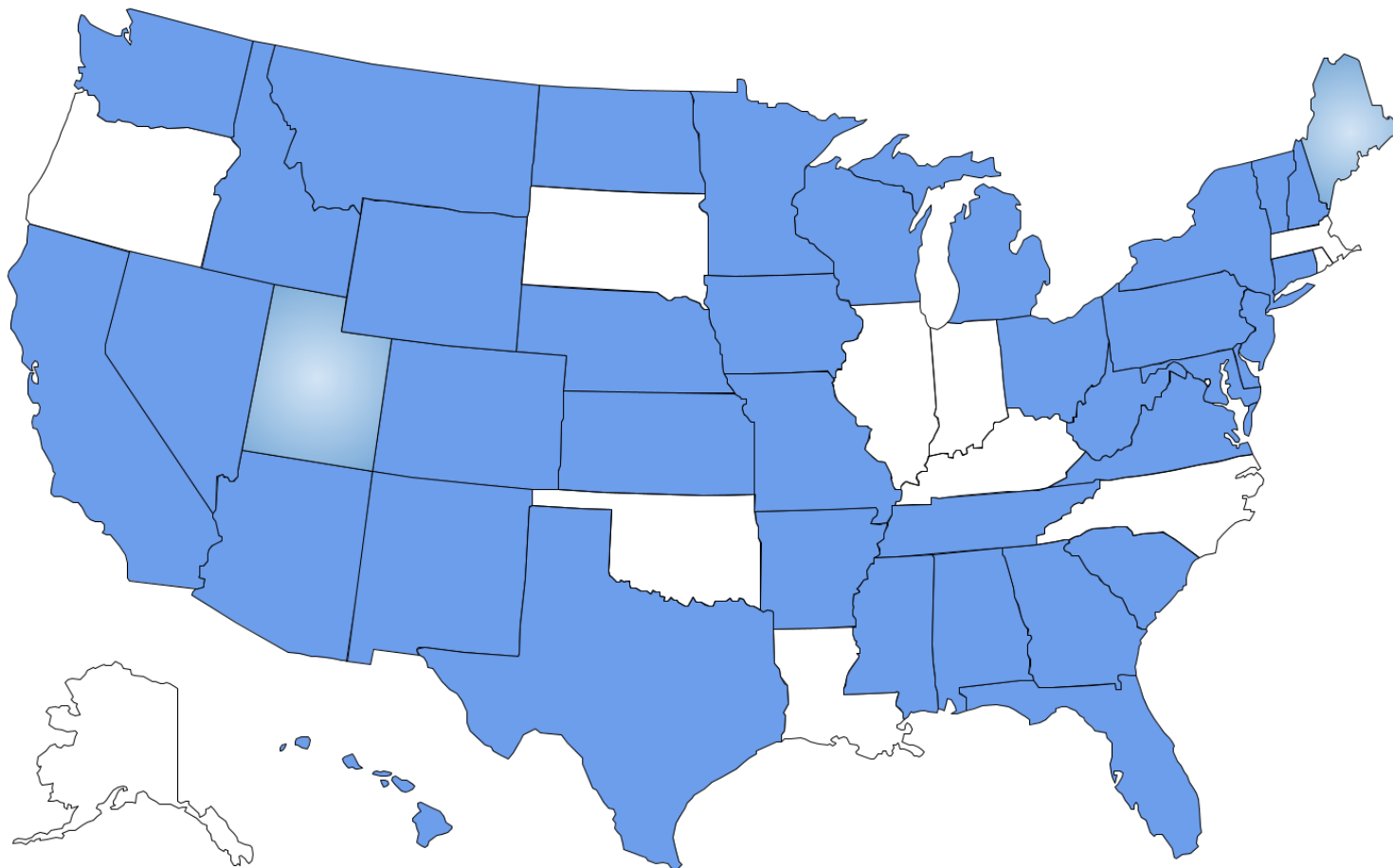


**VT TRS**



# States That Have Increased Employee Contribution Rates Since 2009

*38 states*



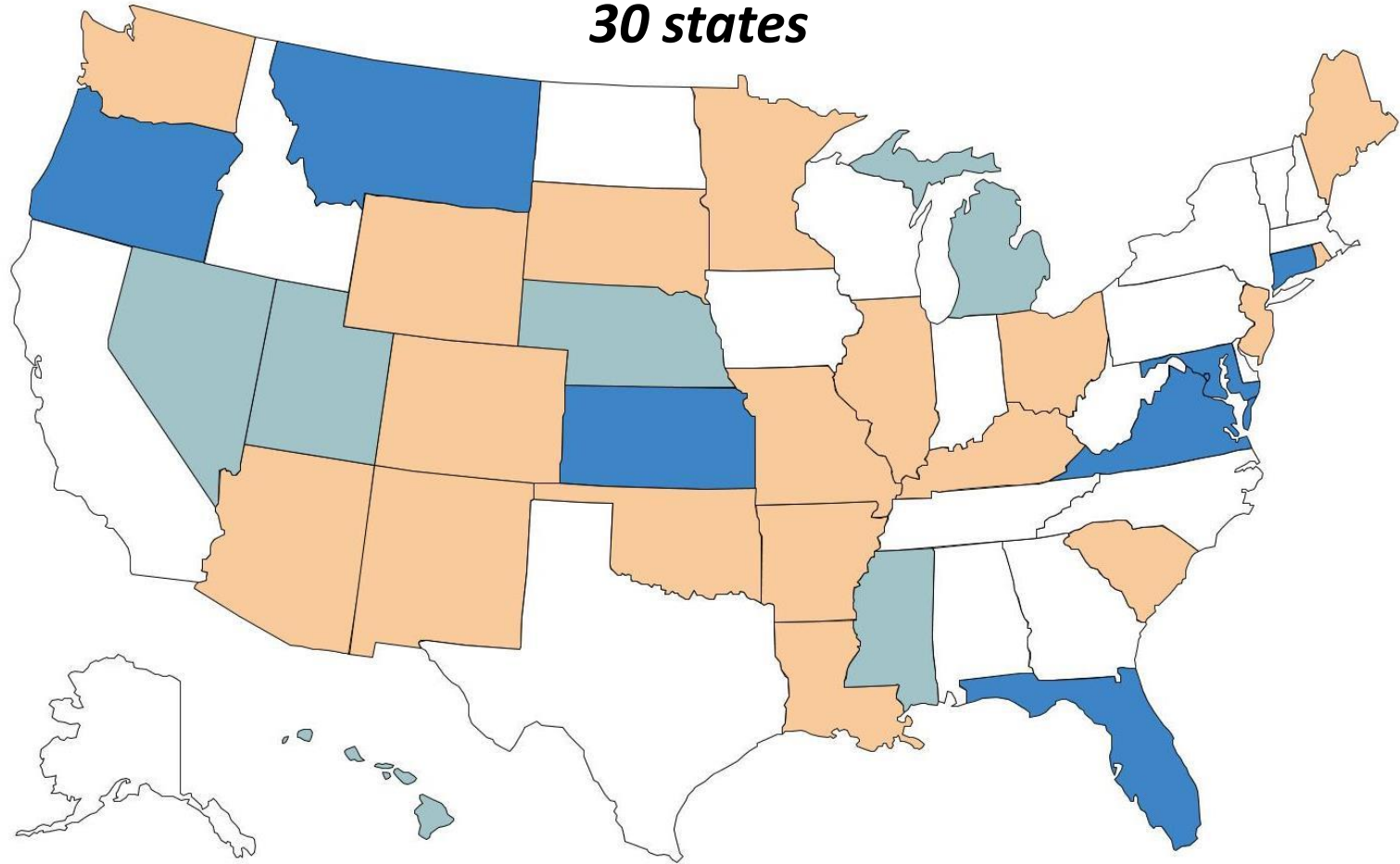
# States That Reduced Pension Benefits Since 2009

*40 states*



# States that Have Made Changes to Cost-of-Living Adjustments Since 2009

*30 states*



Affecting New Hires Only

Affecting Current Employees & New Hires

Affecting Retirees



# Risk Sharing Conceptually

$$C + I = B + E$$

- Contributions plus Investment Earnings equals Benefits plus Expenses
- Over time, the revenue into a retirement plan must equal the plan's expenses
- In a traditional defined benefit plan, when revenues are insufficient to pay benefits, contribution rates must rise
- Risk-sharing introduces the possibility that employee contributions or benefit levels will be adjusted under certain conditions



# Types of Retirement Plan Risk

- Investment risk
  - The risk that investment returns will be less than expected
- Inflation risk
  - The risk that inflation will erode the purchasing power of one's retirement benefit
- Longevity risk
  - The risk of outliving one's retirement assets



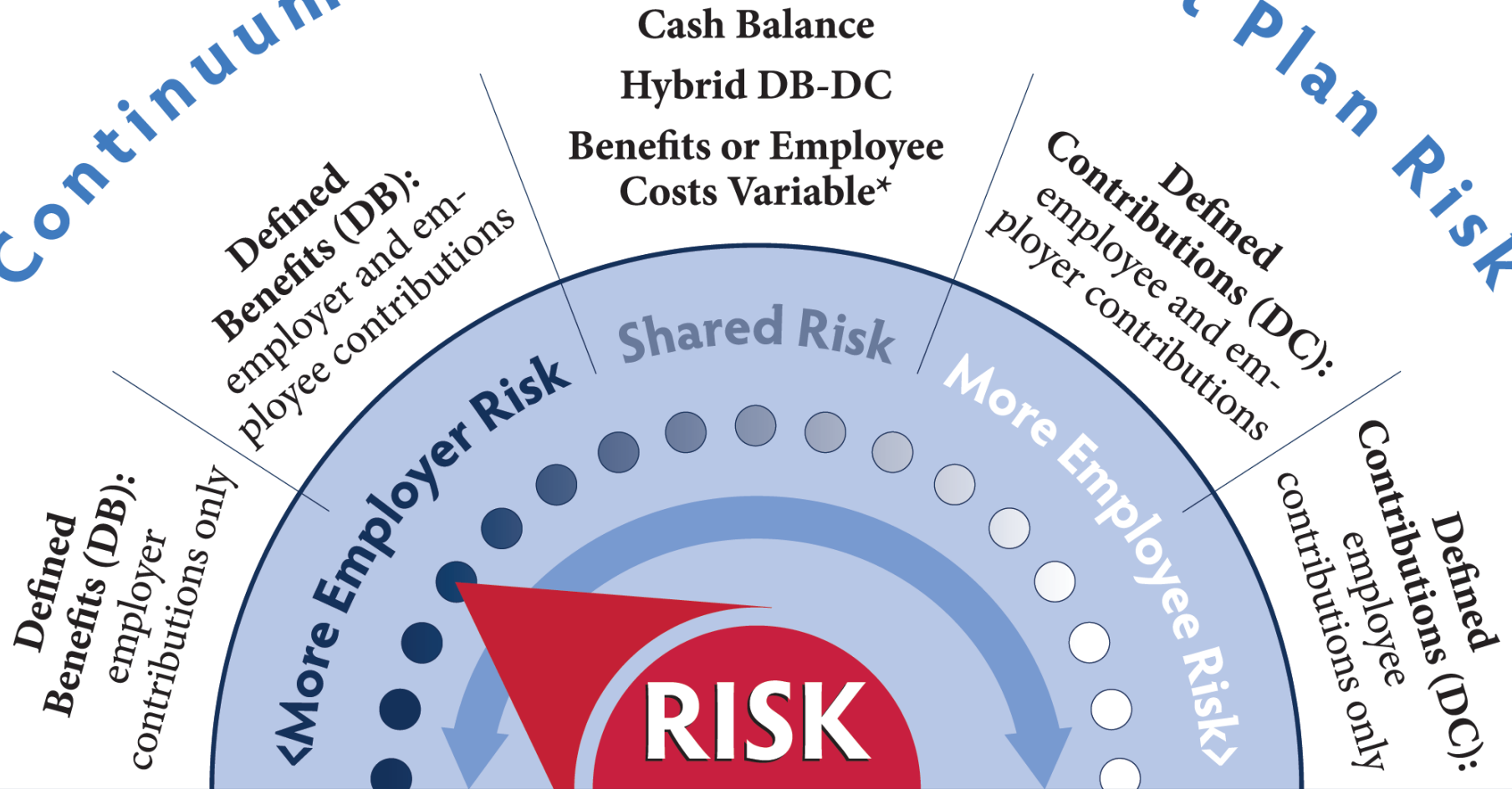


# Who Bears Retirement Plan Risk?

- Risk is distributed differently, depending on the plan type and plan design
- In traditional defined contribution plans, employees typically bear all (or most) of the risk
- In traditional defined benefit plans, employers typically bear all (or most) of the risk
- In modern public pension plans
  - Type type and degree of risk-bearing varies
  - More risk is being shifted from employers to employees



# Continuum of Public Retirement Plan Risk



*\*Benefits or costs vary based on investment performance and financial or actuarial condition of the plan*



# Examples of Risk Sharing

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



**24 states**

A map of the United States with 24 states highlighted in teal. The highlighted states are: California, Washington, Oregon, Nevada, Idaho, Utah, Arizona, New Mexico, Wyoming, Colorado, Kansas, Oklahoma, Texas, Minnesota, Iowa, Missouri, Arkansas, Louisiana, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Kentucky, Tennessee, West Virginia, Maryland, Delaware, Pennsylvania, New Jersey, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, Maine, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Kentucky, Tennessee, West Virginia, Maryland, Delaware, Pennsylvania, New Jersey, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, Maine. The text '24 states' is written in bold black font at the top center of the map.



# Flexible Employee Contribution Rates

- Plans in **Arizona, Nevada, and Wisconsin** require employees to share equally in the total contribution rate
- **Maine PERS**: 55/45 employer/employee split, with upper limits
- **Iowa PERS**: 60/40 employer/employee split
- **California** requires new hires since 1/1/14 to pay at least half of the normal cost
- Many employees in **Montana and North Dakota** contribute at a rate that will decline when their plan funding level reaches a designated threshold
- *Linking the employee contribution rate to the plan's actual cost exposes employees to all the plan's risks*



# Flexible Benefits

- **Michigan Public Schools Retirement System** includes a plan design feature that increases the age of normal retirement when the experience of the plan is found to have increased mortality by more than one year
- The **New Brunswick, Canada** plan provides a plan design feature with two components: a core benefit that is virtually certain to be paid, and a second component whose benefit depends on the plan's investment and actuarial experience
- For **Houston, Texas** employees, when the plan's cost varies by more than five percent of pay from a starting "target" rate, a series of prescribed adjustments are made to benefits, contribution rates, and actuarial methods and assumptions

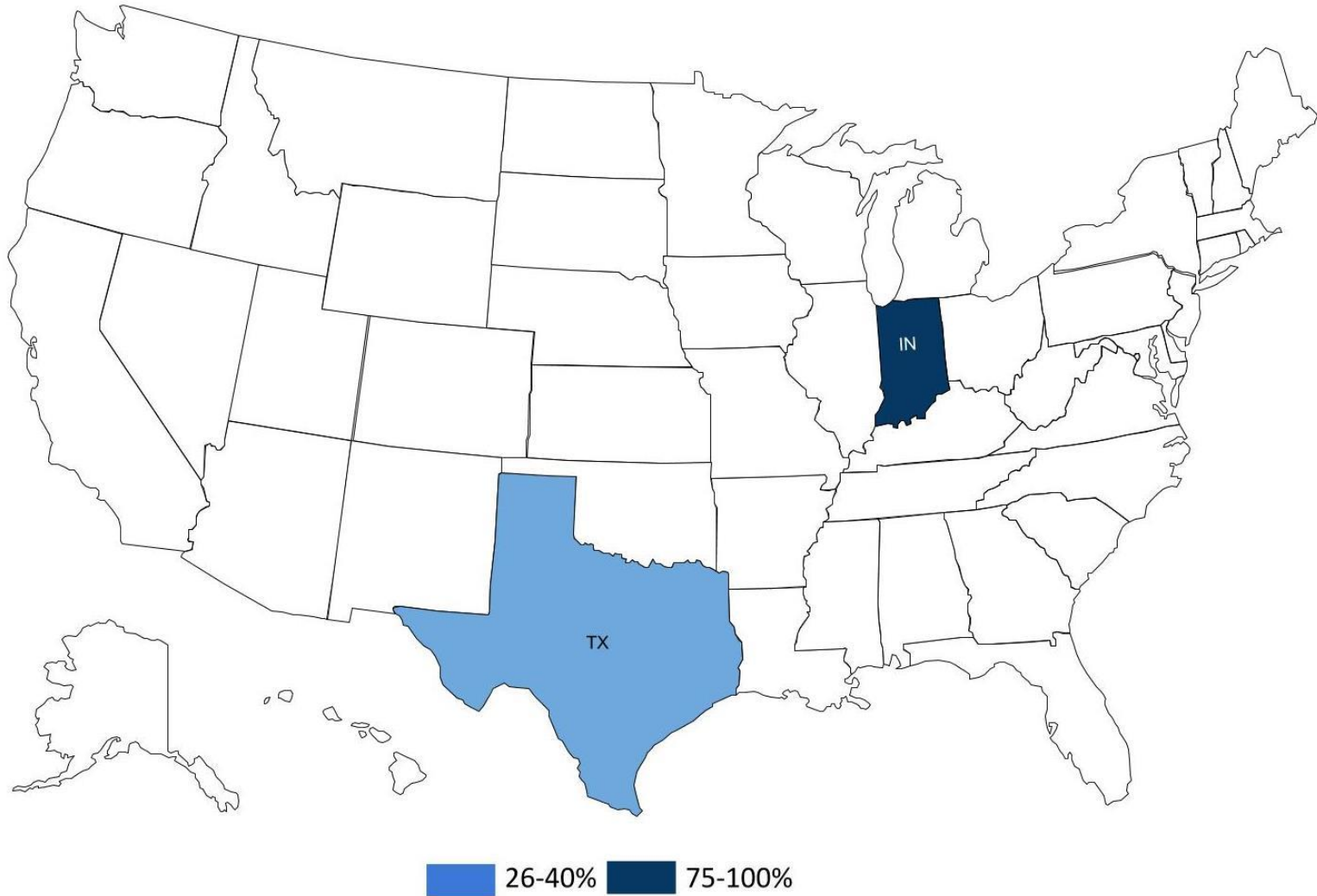


# Hybrid Plans

- DB-DC Hybrid Plans
  - A more modest traditional pension plan combined with participation in a defined contribution plan
  - Employees bear all risk in the DC plan component
  - Employer risk is reduced because the promised DB plan benefit is reduced
- Cash Balance Plans
  - A retirement benefit based on the accumulated balance of a notional retirement account with a maximum interest crediting rate
  - Employer risk is lower because they pay a benefit based on a lower investment return
  - Employees may share in strong investment performance
  - Benefit is annuitized upon attainment of retirement eligibility

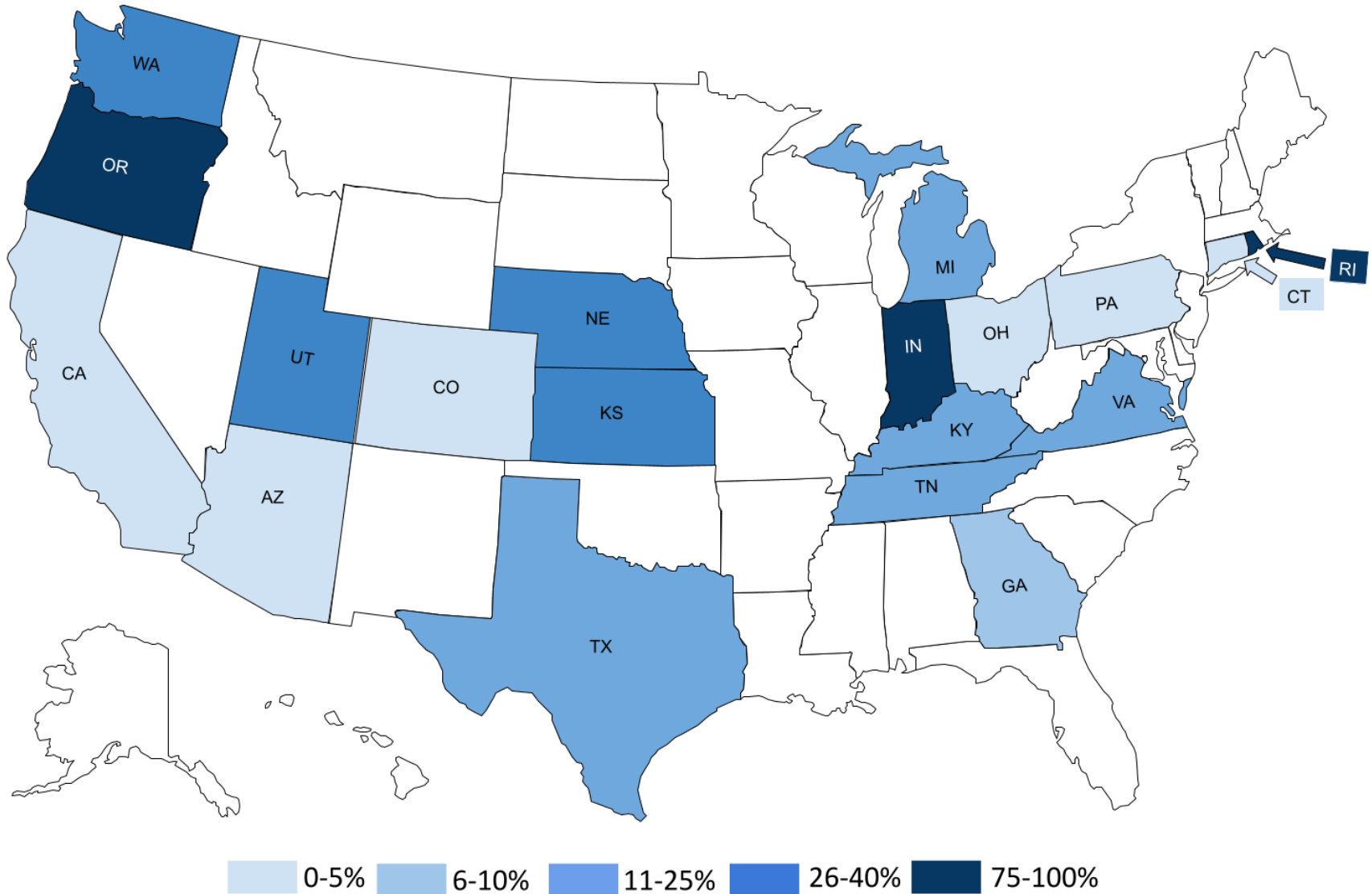


# Statewide Hybrid Plans, 1995





# Statewide Hybrid Plans, 2021



# Contingent or Limited COLAs

- A postretirement benefit adjustment that depends on some external factor, such as the investment return or the plan's funding level, or is otherwise limited
  - Delayed onset or minimum age
  - Applied only to a portion of the pension benefit
  - Linked to investment performance
  - Linked to plan funding level



# COLA Arrangements

