Kentucky Teachers' Retirement System Funding Work Group

Benefit Comparison

August 28, 2015

Goal: *Make recommendations to strengthen the solvency of the KTRS*

Agenda

- Recap from July 31
- Comparisons of benefits
  - Other non-Social Security States
  - Consider total compensation
- Recap of changes already made to KTRS
- Case studies of reform
  - Not a legal analysis of what's possible, but a survey of what's been done (and employee/legal/financial ramifications)
- PTA analysis of actuarial components
  - Overview only at this stage in anticipation of complete audit
  - Sources of change in unfunded liability
- Planning for September 11 constituents meeting

Key Points from July 31

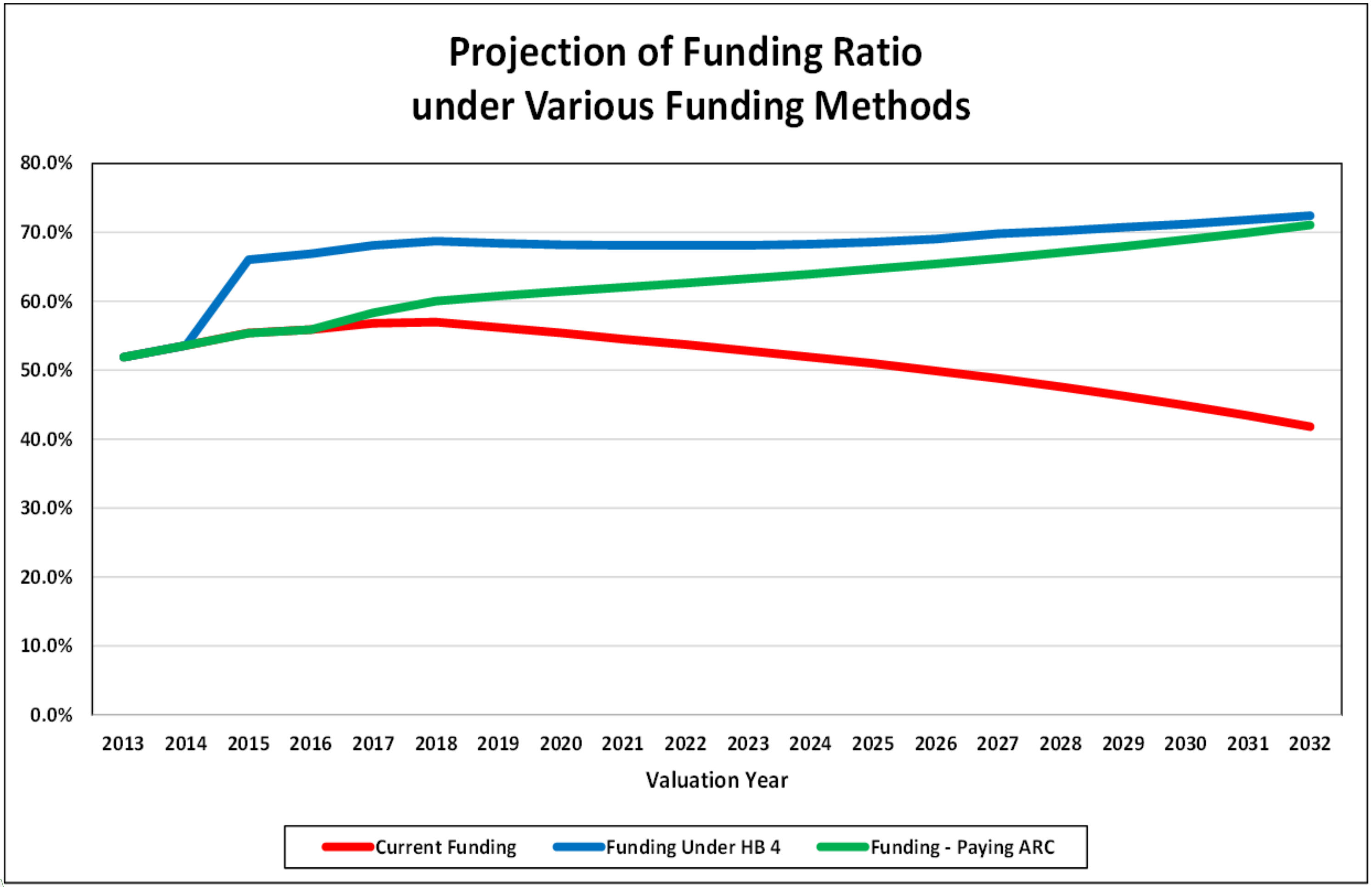
- If we don't increase contributions, we won't be able to pay current level of benefits
  - If not now, likely within 20 years
- Broad options are:
  - Increase Contributions
  - Reduce Benefits
  - Some combination of both
- Key point
  - What benefit changes meet our commitments, pass legal muster and minimize impact on educational outcomes

Key Points from July 31, continued

- Most elements of KTRS are inviolable, exceptions are:
  - Increase to benefit based on 3 year salaries if at least 55 & 27
  - Post-retirement re-employment provisions
  - Part-time and substitute provisions
  - Sick leave payments used for retirement calculation provisions
- KTRS will quantify the costs for each of these
  - Not expected to be substantial, and
  - may have offsetting savings to districts and/or health care

Key Points from July 31, continued

Phasing into ARC is necessary to prevent insolvency



Key Points from July 31, continued

- Pension Obligation Bonds are not a complete solution
  - Phase into ARC is the key driver
  - Increased pension fund investments mean more risk
  - Pension fund return is expected to exceed POB interest cost
  - Additional assets Improve fund liquidity
  - Additional assets improve long term solvency
  - POB can hurt debt capacity and credit rating
  - Transaction can improve credit rating if part of structural reform

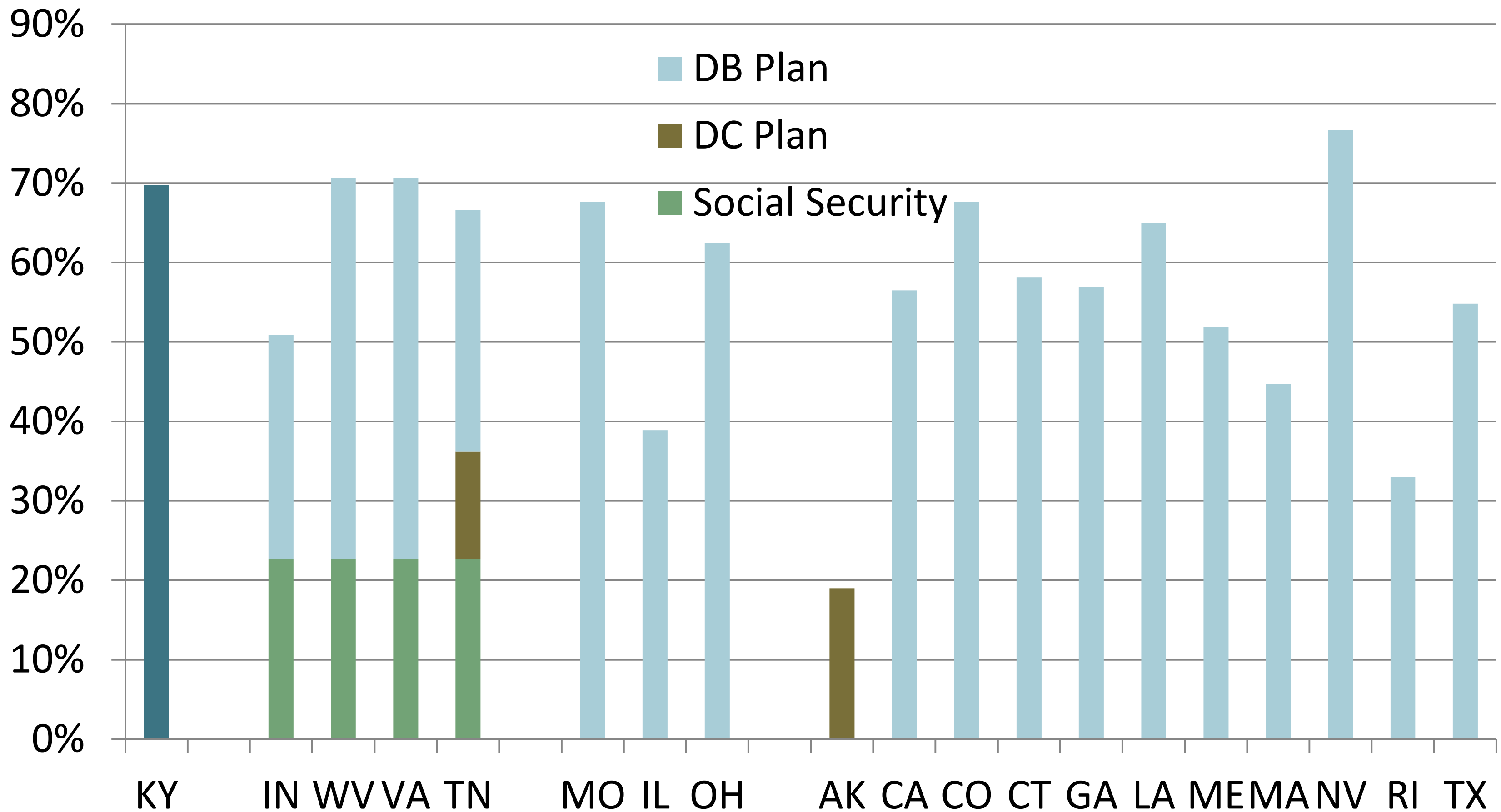
Comparison of Benefits

- Three typical female teachers hired in the future
  - Hired at age 24 (median of youngest third)
  - Hired at age 33 (the current median)
  - Hired at age 48 (median of oldest third)
- From different employers
  - Non- Social Security States
    - AK,CA,CO,CT,GA,IL,LA,ME,MA,MO,NV,OH,RI,TX
  - KY Contiguous States (OH,IN,IL,MO,TN,VA,WV)

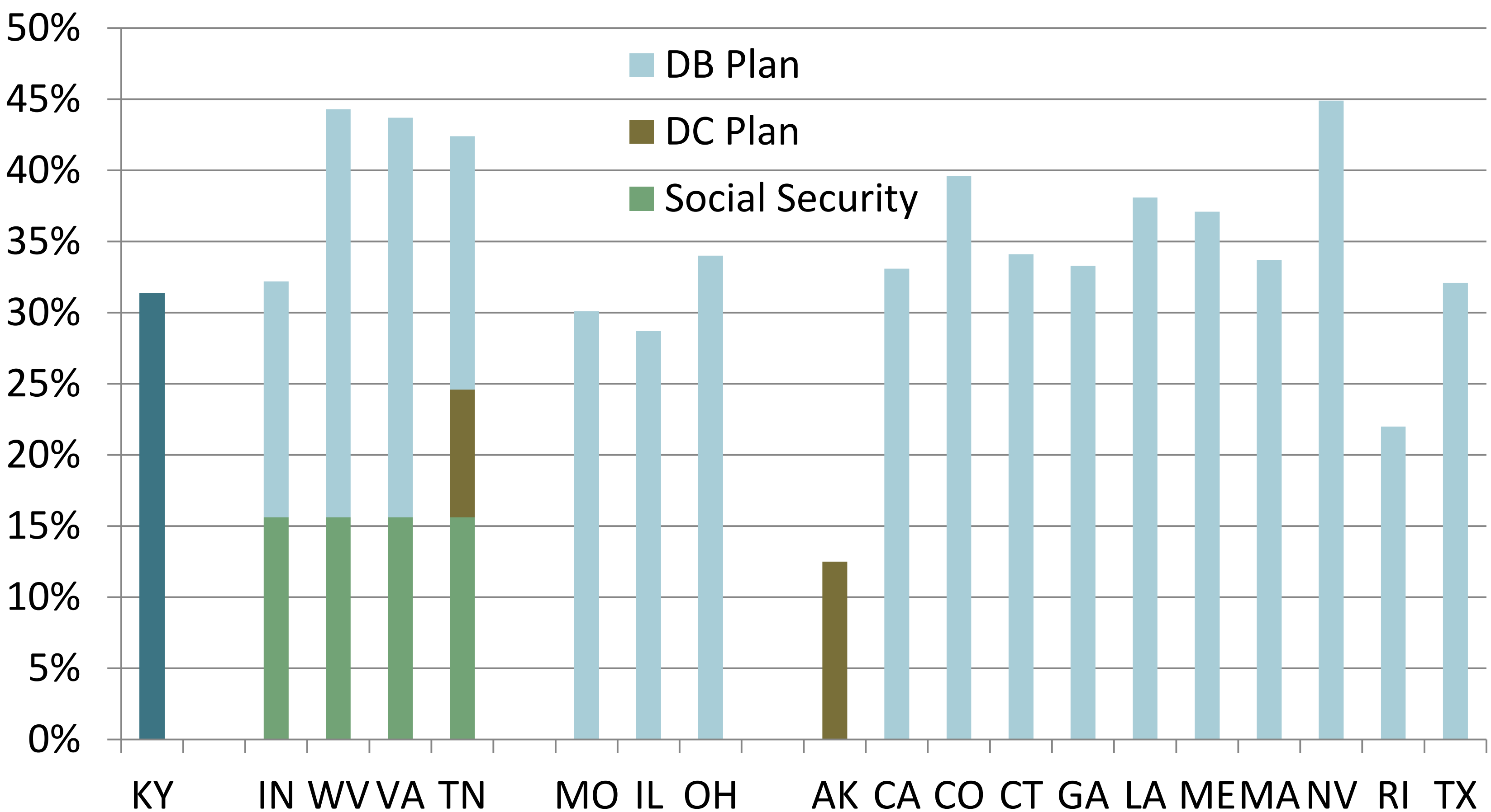
Comparison of Benefits – Benefit Provisions Considered

- All Major Provisions are Considered
  - Pension Multiplier
  - Final Average Pay Period
  - COLA (1.5% baseline)
  - Retirement Eligibilities
- Provisions not Considered
  - Member contribution rate
    - Including Member Financed DC
  - Non-retirement benefits
  - Other ancillary benefits
  - Non-standard benefits, such as:
    - Deferred Retirement Option (DROP)
    - Sick Leave Conversion

Benefits as % of Pay – Age 33 hire, retiring at 62

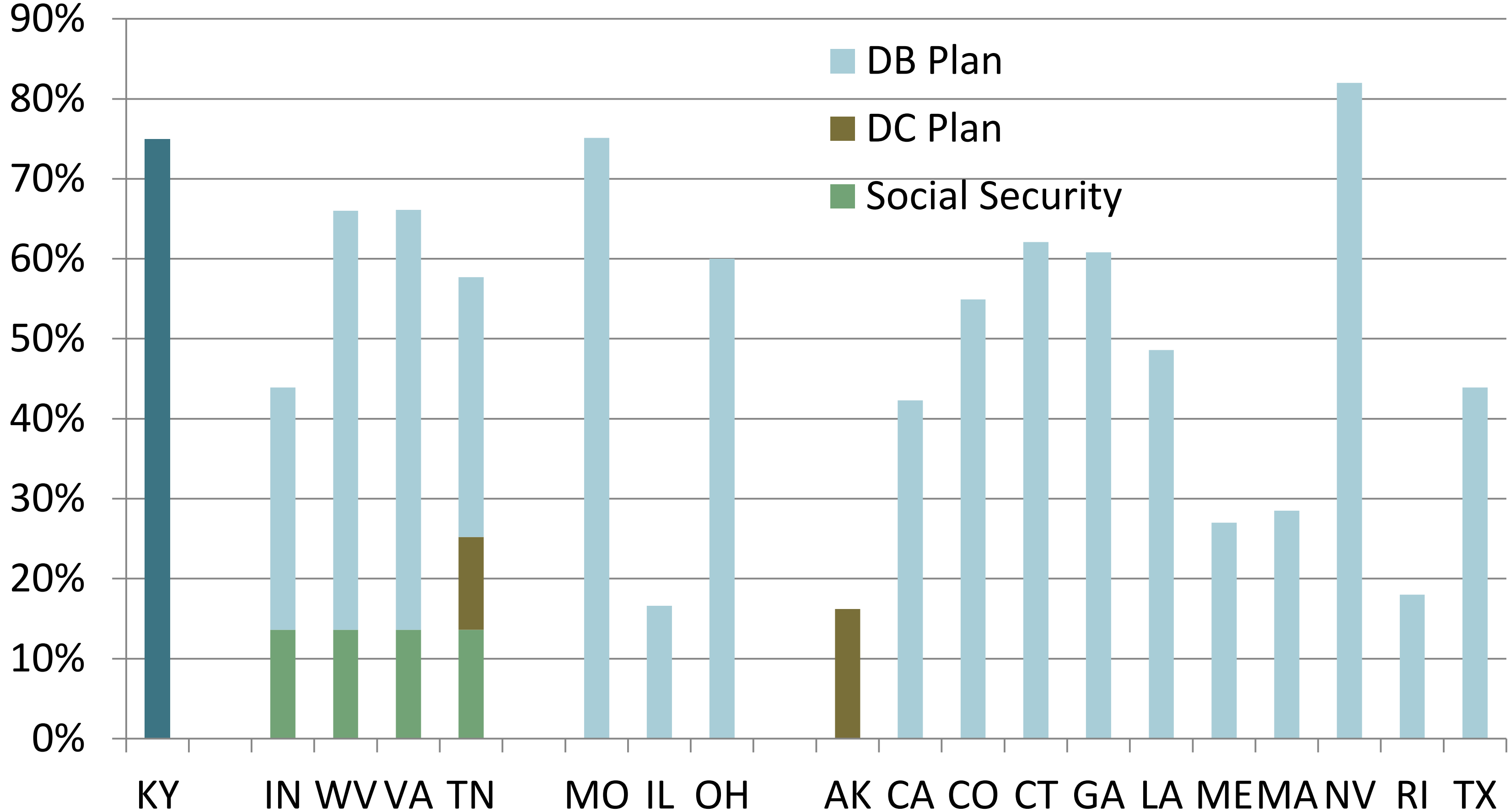


Benefits as % of Pay – Age 48 hire, retiring at 65

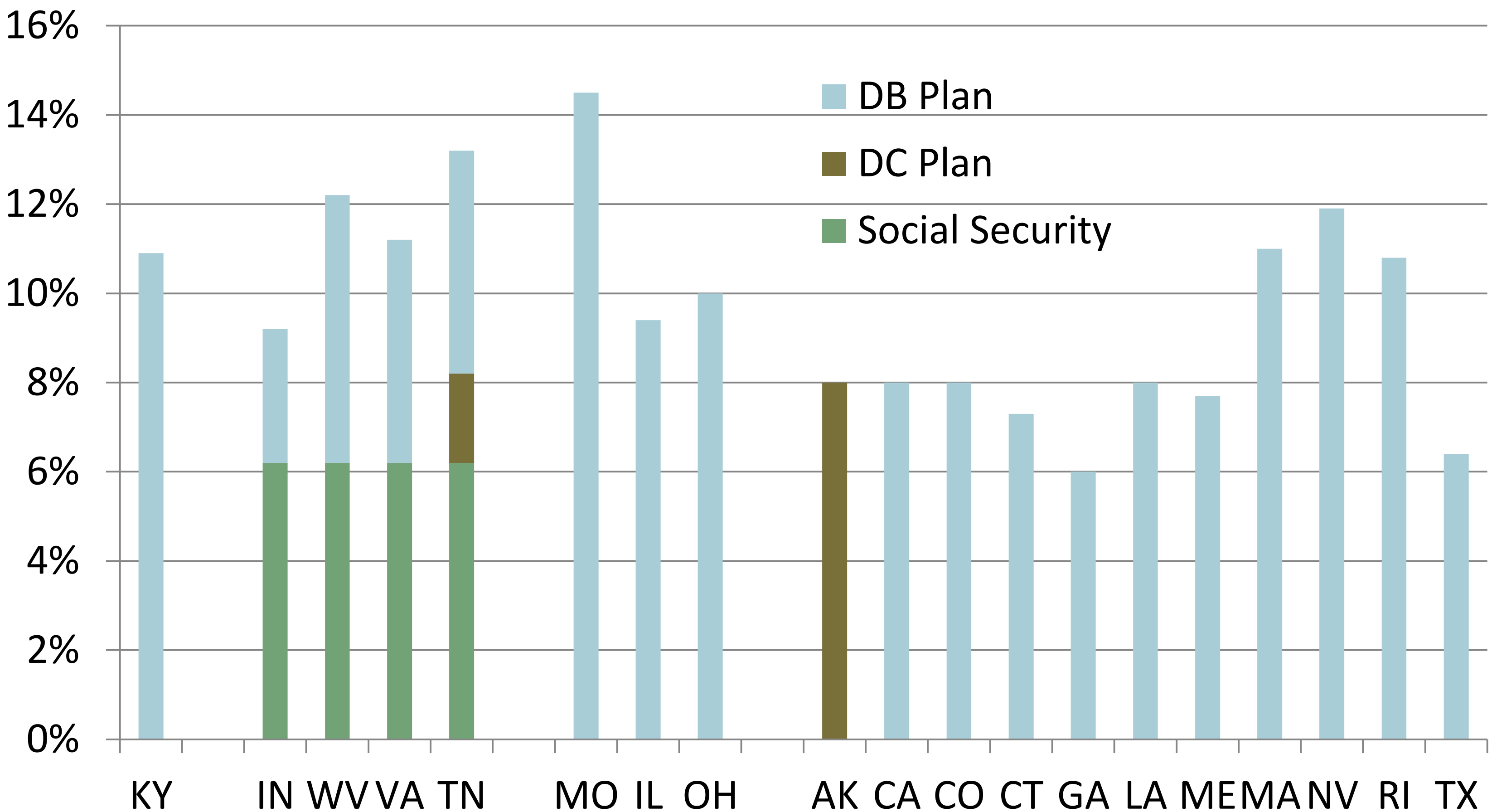


Note that teacher hired at 48 would likely have other covered Social Security

Benefits as % of Pay – Age 24 hire, retiring at 55

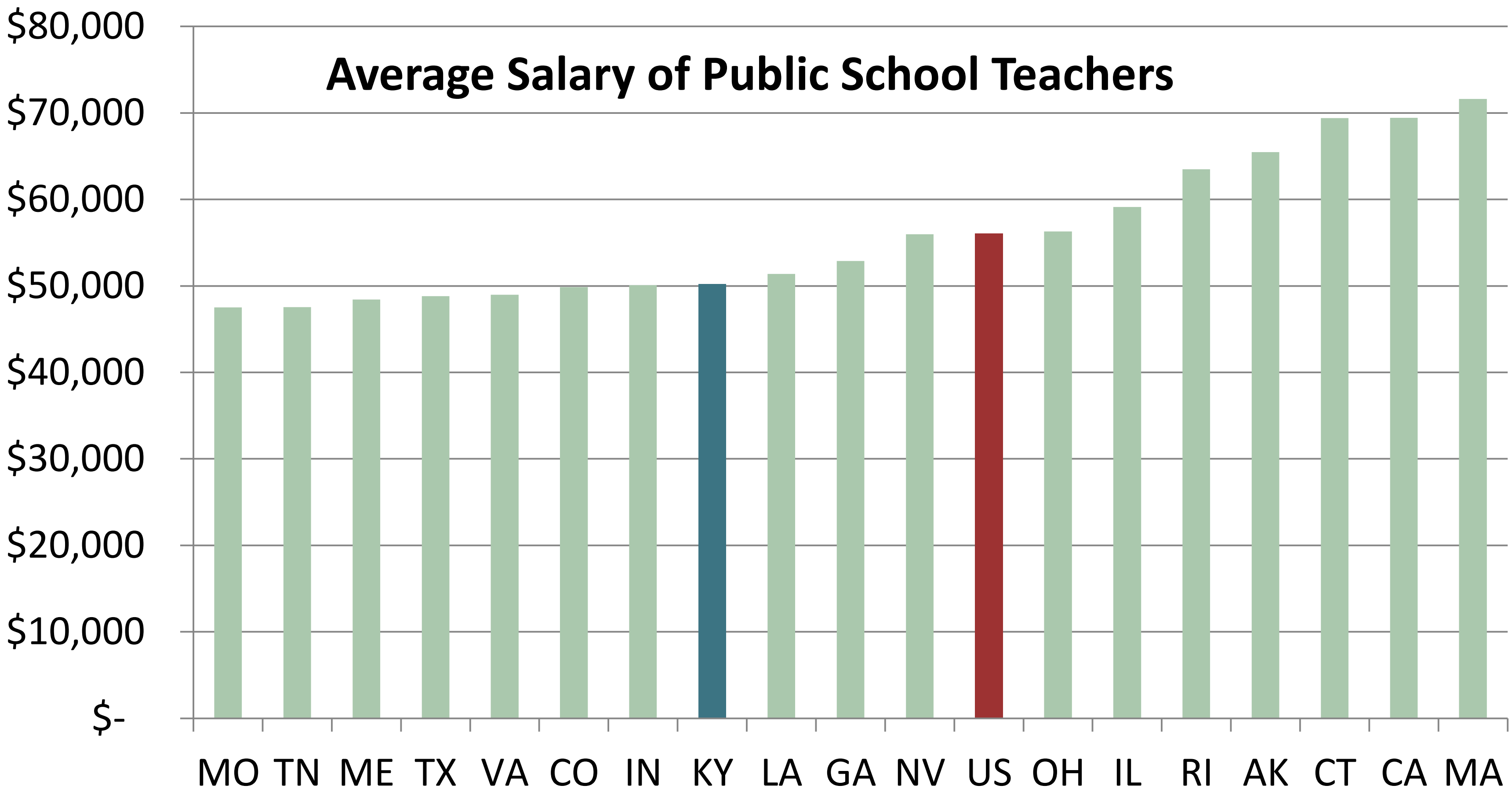


Teacher Contribution Rate



Source: NCTQ Report – Not limited to future teachers only

Kentucky Teacher Wage Comparison



SOURCE: NEA 2014 Ranking of the States: analysis of average salaries of public school teachers 2012-2013

Conclusions from Comparisons

- Several states have made significant reductions in teacher pensions for future teachers
- KTRS benefits are higher as % of compensation for long service younger future teachers
- KTRS benefits are slightly higher as % of compensation for average future teachers retiring at 62
- KTRS benefits are lower than other systems for teachers hiring at later ages in future
- Kentucky teacher compensation is somewhat lower than many states

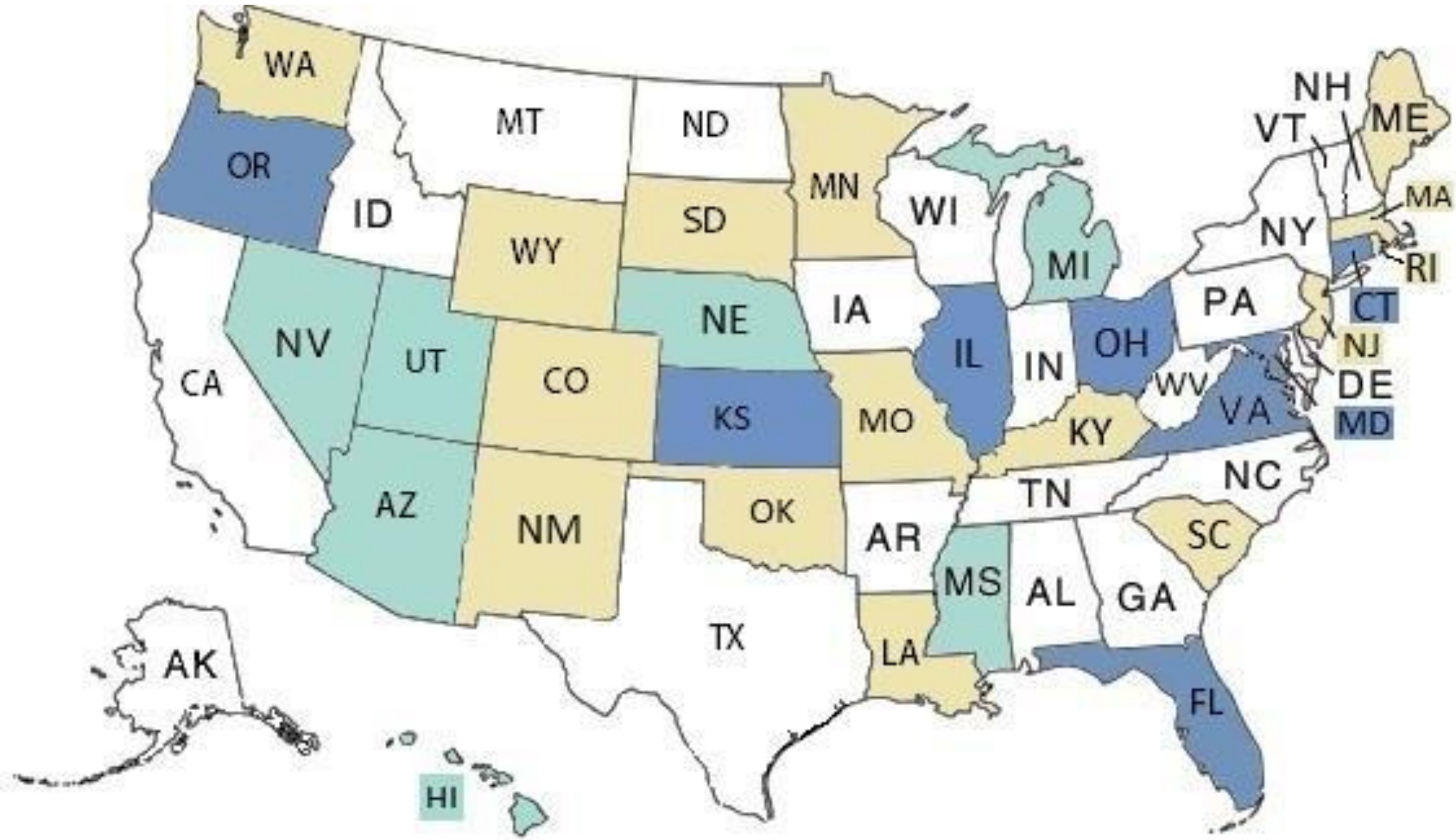
KTRS Benefits were modified effective in 2008

- For those hired after 2008 who retire with less than 27 years of service
  - Later retirement age
  - Lower pension multiplier
  - More substantial early retirement reduction
    - 6% per year instead of 5%
  - KTRS Actuary reports that benefit changes save 1.25% ultimately
- Member contribution rate increased by 1%
  - Picked up by employer
- For those who work past 30 years, all salary is averaged over 3 years rather than 5 years

Case Studies of Pension Reform

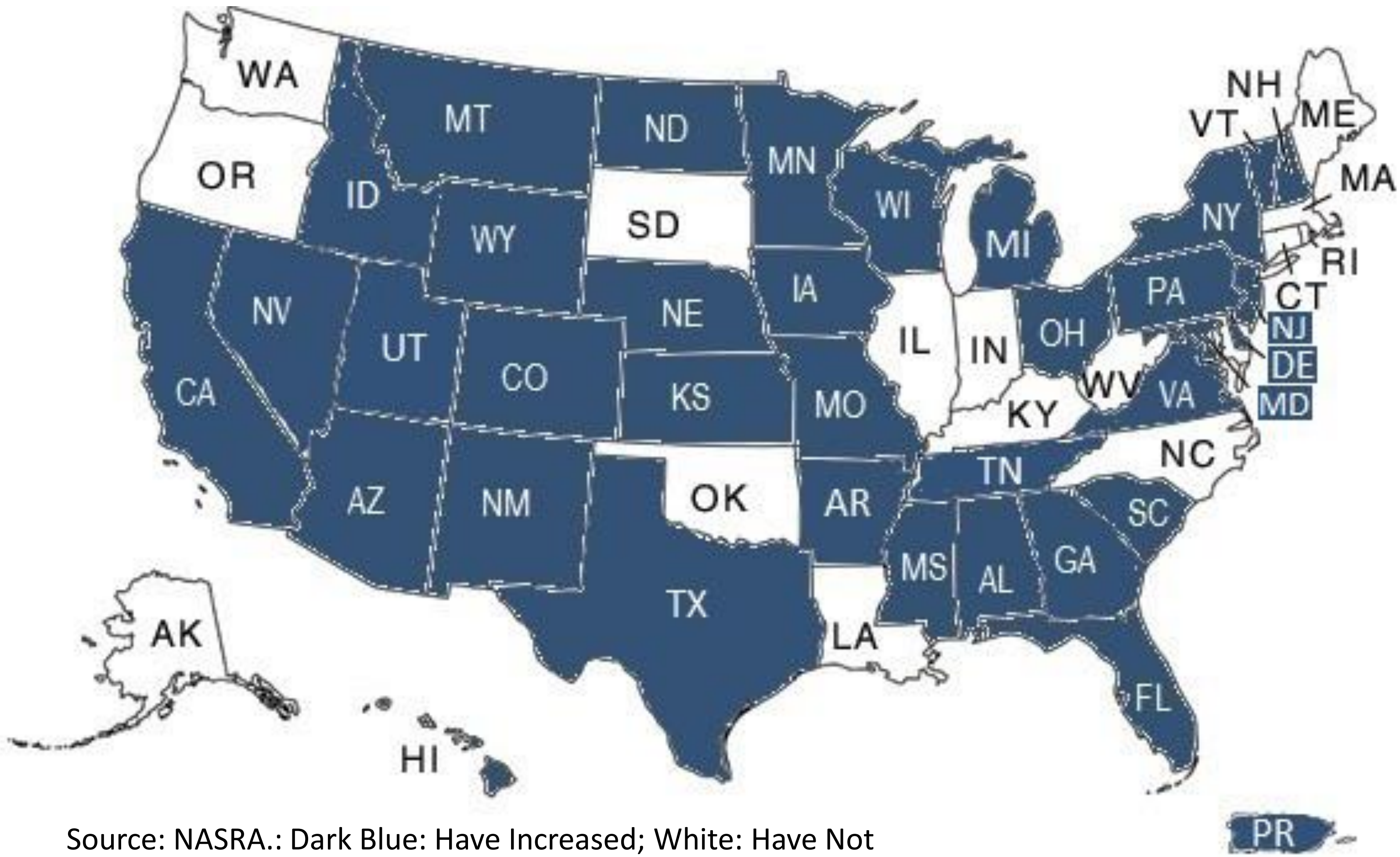
- National Association of State Retirement Administrators summarized extensive state data, including non-teachers:
  - Cost of Living Adjustments
  - Employee Contribution Increases
  - Risk Sharing
  - Hybrid Plans

State Retirement Systems Undergoing COLA Legislative Changes, 2009-2015



Source: NASRA.: Aqua: New Hires Only; Blue: Current Employees also; Tan: Current Retirees also

State Retirement Systems Modifying Employee Contributions since 2009



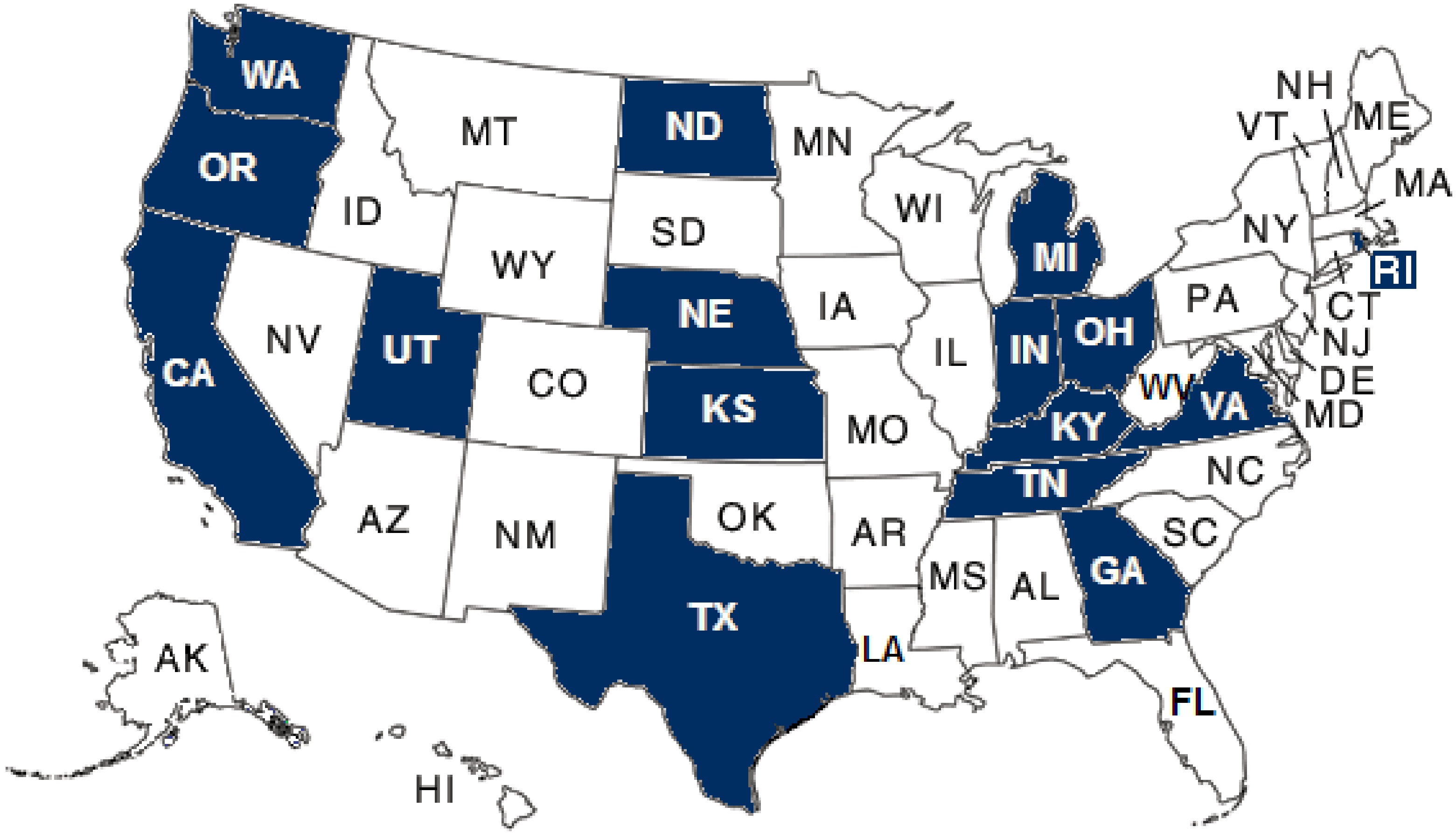
Source: NASRA.: Dark Blue: Have Increased; White: Have Not

State Retirement Systems Implementing Risk Sharing

- Variable Contributions:
  - AZ, IA, NV, OH, PA
- Variable Benefits:
  - SD, WI, OH
- Multiple Plan Designs (including DC, Cash Balance)
  - VA, RI, UT
- De-Facto Risk Sharing
  - CO, OH

Source: NASRA. Research Brief

State Retirement Systems With Hybrid Plans



Source: NASRA.: Dark Blue: Have Implemented CB or DB+DC as mandatory or optional

Examples of Teacher Pension Reform

State	Reduce COLA	Raise Retirement Age	Increase Earnings Years	Decrease Multiplier	Increase Teacher Contributions
Ohio	X	X	X	X	X
Indiana					
Illinois	X	X	X		
Missouri					X
Tennessee				X	
Virginia					
West Virginia	X	X	X	X	X

Source: Plan CAFRs and NCTQ report

Specific Case Studies of Teacher Pension Reform

- Ohio
- Illinois
- Tennessee
- Colorado
- Alaska
- Rhode Island
- Massachusetts

Ohio Teacher Pension Reform

- STRS mandated to find solution so that fixed contributions would amortize UAAL over 30 years
- Extensive deliberative process with STRS board
- Changes included:
  – Reduced health care allocation
  – Reduced COLA
  – Later retirement eligibility for future hires
  – Increase teacher contributions

Illinois Teacher Pension Reform

- Long history of inadequate funding
- 2011 Changes included new tier:
  - Reduced COLA
  - Later retirement eligibility for future hires
  - Salary average increase to 8 years from 4
- New law
  - Reduced benefits for retired and active teachers
  - Ruled unconstitutional
- Have also considered extending state income tax to pensions

Tennessee Pension Reform

- Relatively well funded plan
- Changes only for those hired 2014 and later:
  - Later retirement eligibility (Rule of 90 or age 65)
  - Multiplier is only 1.0%
  - 5% employee contributions
- New Hybrid Plan
  - 5% employer contributions toward DC plan
  - 2% automatic employee contributions
  - Increasing or decreasing contributions permitted

Colorado Pension Reform

- Reform passed in 2010
- Shared sacrifice theme
- Changes for future hires:
  - Later retirement eligibility
- Changes for all – Reduce COLA from 3.5% to 2.0%
- For active members – contribution increase
- Employer contribution increases

Alaska Pension Reform

- Reform passed in 2005
- Defined Contribution Plan for future hires:
- Some Defined Benefit Components remain
  - Death and Disability benefits
  - Modest Retiree Health Care Subsidy
- Unfunded Liability remains high
- Some difficulty with inadequate benefits and retention

Rhode Island Pension Reform

- Reform passed in 2011
- Very poorly funded plan
- Hybrid Plan for future hires:
- Suspended COLAs
- Increased Retirement Age
- Froze Benefits and started Hybrid Plan
- Settlement reached in most litigation
  - Some COLA restoration
  - Some reduction in early retirement impact

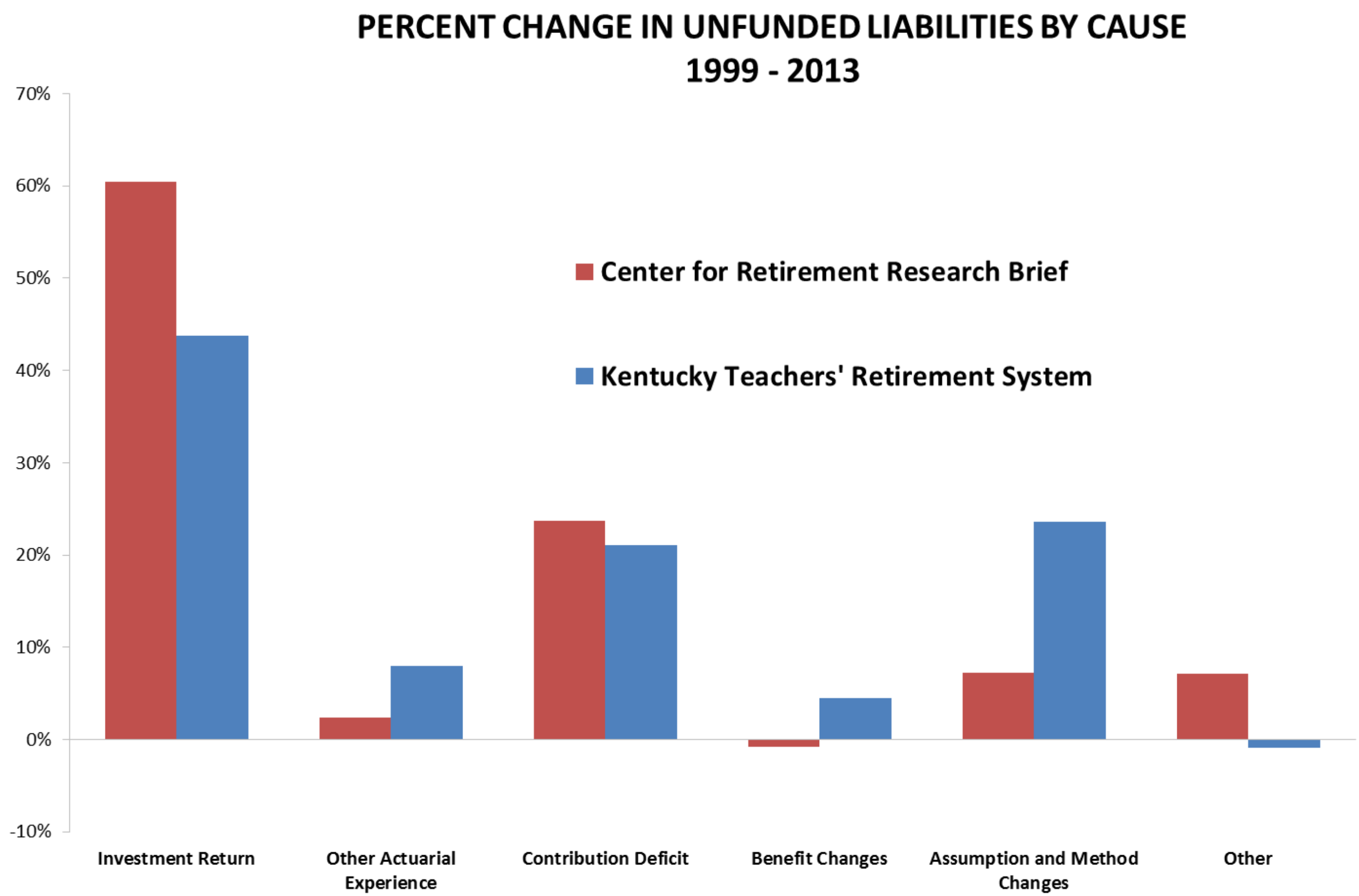
Massachusetts Pension Reform

- Reform for those hired April 2012 and later
  - Full Retirement raised from 65 to 67
  - Steeper reduction for retiring before 67
  - Salary averaging increased from 3 years to 5 years
  - Retirement Eligibility Increased
    - Was either 20 years or age 55 with 10 years
    - Now only age 60 with 10 years
  - Employee contribution falls from 11% or 9% to 6% after 30 years

Initial review of KTRS actuarial assumptions and methods

- Initial impression is that costs and liabilities are being fairly represented
- Expected Rate of Return of 7.5% is typical
  - Public Fund Survey Median is 7.9%
  - Wilshire average is 7.65%
- Mortality basis is typical, but will likely result in future increases in costs and liabilities if mortality improvement continues
- Inflation assumption of 3.75% is somewhat higher than the median of 3.00% (which increases costs and liabilities)
- Will conduct more complete review once actuarial audit is complete next month

Sources of increase in unfunded liabilities: KTRS vs National Averages



Actuarial Calculations in Process

- By Cavanaugh MacDonald (KTRS actuary)
  - Ongoing normal cost of current plan
  - Cost savings of potential elimination of benefit provisions which are not inviolable
  - Projections of insolvency with reduced new tier
- By Segal – Actuarial Audit
- By PTA
  - Review of above
  - Incorporate into cost savings
  - Consideration of offsetting labor costs savings and/or health care savings associated with non-inviolable provision repeals

Meeting Agendas

- September 11 – Constituency Concerns
- September 25 – PTA general presentation of broad alternatives
- October 16 – Work group feedback on alternatives
- November 6 – Begin to draft proposal
- November 20 – Complete proposal