

Teacher Pensions – A Win, Win, Win for Students, Teachers and the Economy



REAM Meeting

St. Paul , MN

February 21, 2019

Diane Oakley, Executive Director



**NATIONAL INSTITUTE ON
Retirement Security**

Reliable Research. Sensible Solutions.

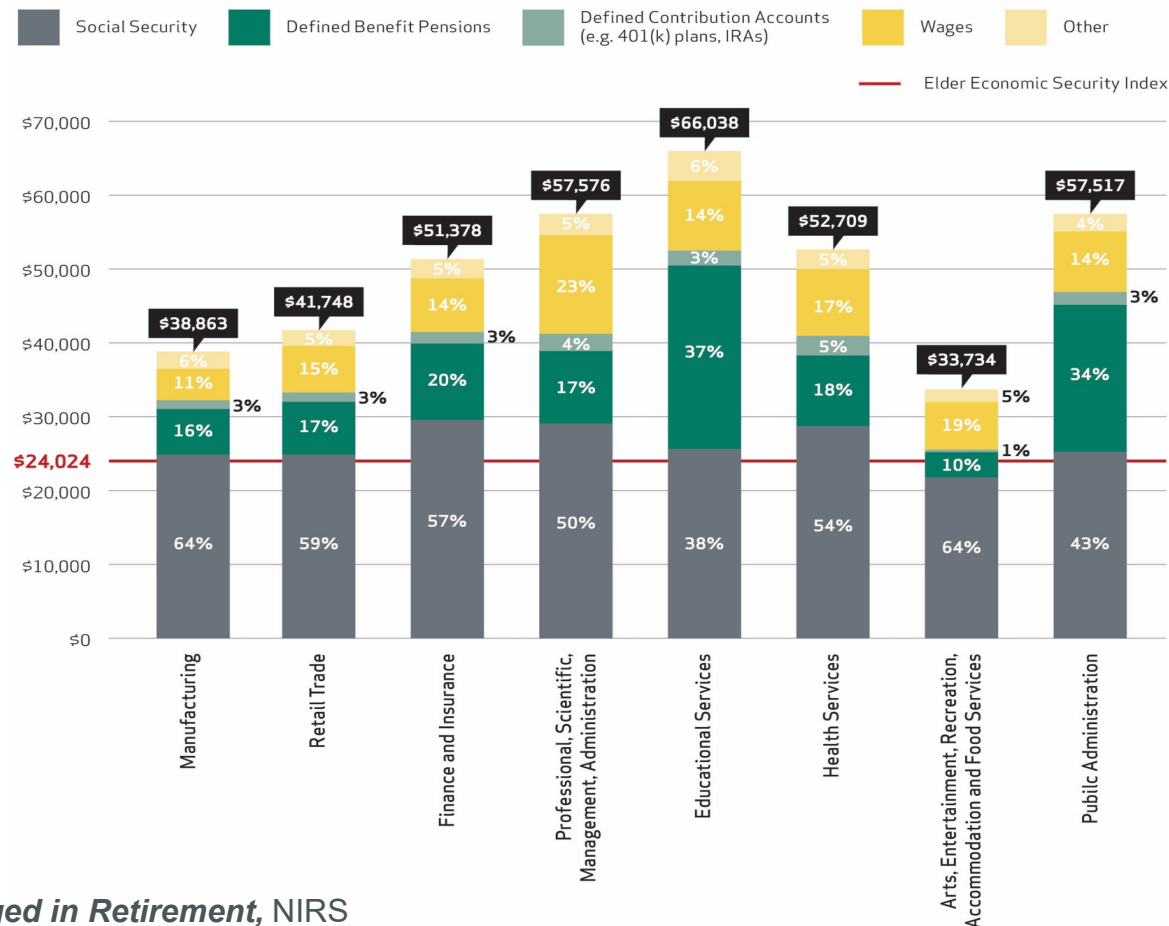
Agenda

- Good news on Teacher Pensions
- Pensionomics 2018 – Win for Economy
- Retention value of pensions – Win for teachers and students
- Bang for the Buck and *Win, Win*: pensions benefit all stakeholders
- Tools from NIRS – State Fact Sheets
- Favorable Views on Teachers' Retirement
- Q&A



Women Who Worked in Education Have Highest Incomes among Households Age 65 and Older

Figure 12: **Composition of average household income for women aged 65 and over, by industry, in 2013**



Pensionomics 2018: What We Found

- In 2016, expenditures from public and private pension benefits supported:
 - **\$1.2 trillion** in economic output nationwide
 - **7.5 million jobs** that paid **\$386.7 billion** in income
 - **\$685 billion** in value added nationally
 - **\$202.6 billion** in federal, state, and local tax revenue



What We Found: Multiplier Effect

What is the total economic impact of each dollar paid out in pension benefits?

Pension Expenditure Multiplier



\$1.00

pension benefits paid to
retirees with DB pension income



\$2.13

total output



NATIONAL INSTITUTE ON
Retirement Security

What We Found: Taxpayer Investment

What is the “return” on each dollar taxpayers “invest” in state and local pension plans?

Taxpayer Investment Factor*



\$1.00

contributed by taxpayers to
state and local pensions over 30 years



\$8.48

total output



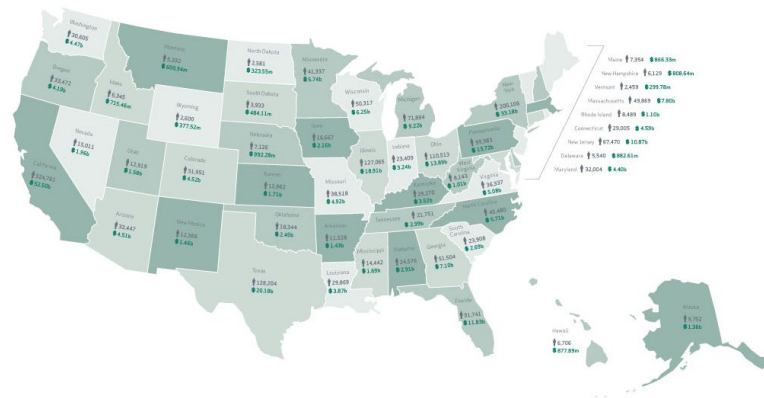
NATIONAL INSTITUTE ON
Retirement Security

Pensionomics 2018: Economic Impact On Minnesota

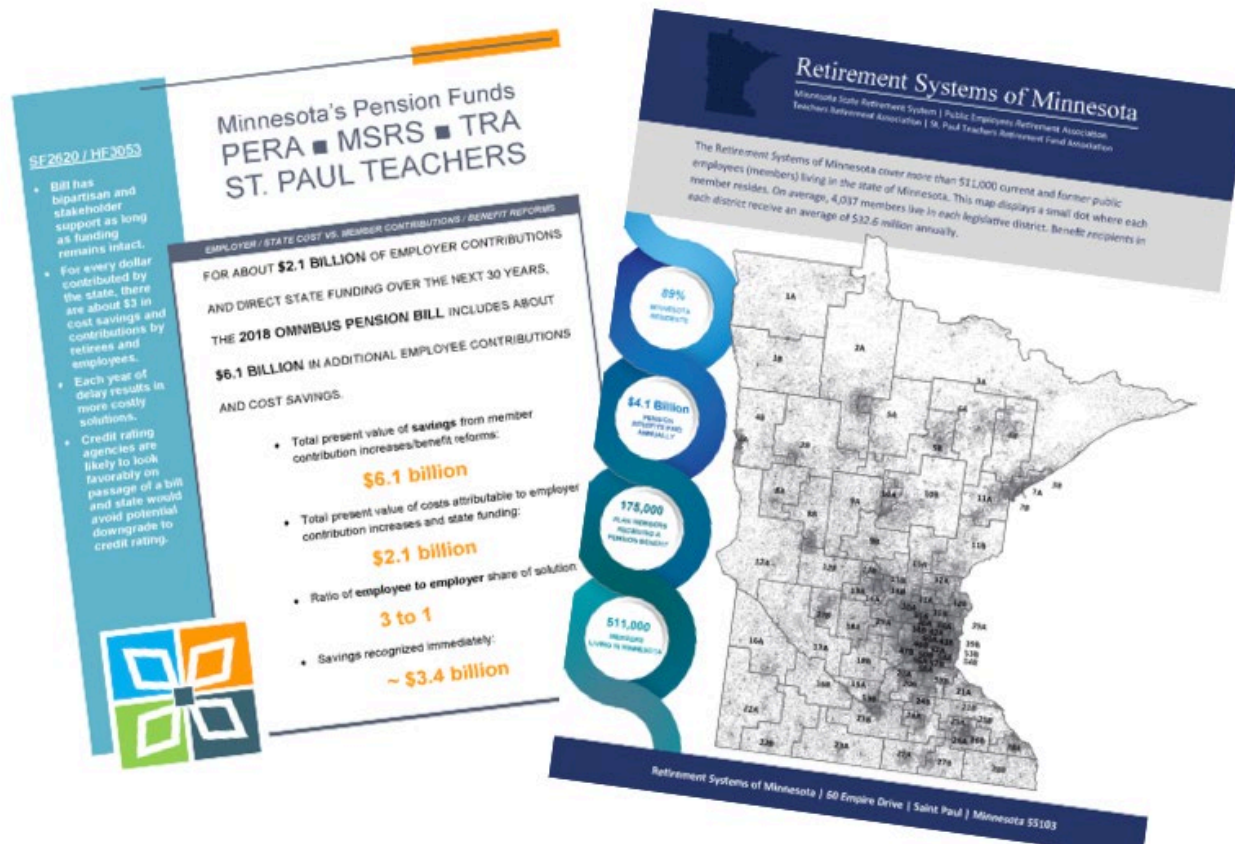
Expenditures from MN Public Pension benefits supported...

- **Over \$7.2 billion** in economic output in MN
- **Over 48.1 thousand jobs** that paid over **\$2.4 billion** in income
- **Over \$627 billion** in value added nationally
- **\$1.5 billion** in federal, state, and local tax revenue

Each \$1 that MN taxpayers pay into plans = \$9.83 in economic output.



Minnesota Retirement Systems Used *Pensionomics 2016* in Pension Reform



NATIONAL INSTITUTE ON
Retirement Security

In Contrast to Minnesota – Kentucky TRS Pension Reform 2018

- GOP governor and legislature committed to move teachers from DB pension to DC 401(k) plan and to cut retired teachers' COLAs.
- During legislative session, outside groups (LJAF and Pew) and “dark money” implemented an anti-pension campaign with the Chamber of Commerce as another player.
- In last hours of the session, SB 151 passed putting future teachers cash balance plan and eliminated the inviolable contract for teachers starting in 2019, future legislators to make more cuts.
- SB 151 did not have the required actuarial analysis at the time of the vote, as required for pension legislation. The bill would have shifted third of pension costs to local school districts, but did little to restore funding of legacy plan.
- On June 21, 2018, a Circuit Court judge struck down controversial pension reform law deeming it unconstitutional based on the Attorney General's lawsuit.

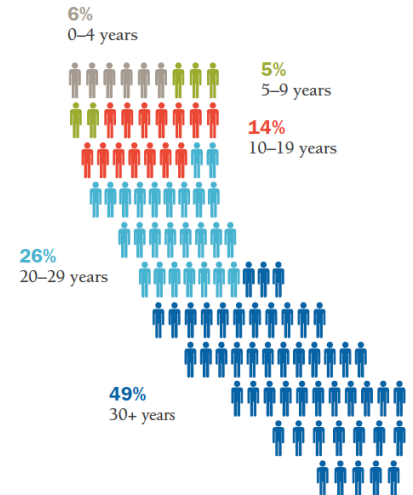


UC Berkeley: Are California Teachers Better Off with a Pension or a 401(k)?

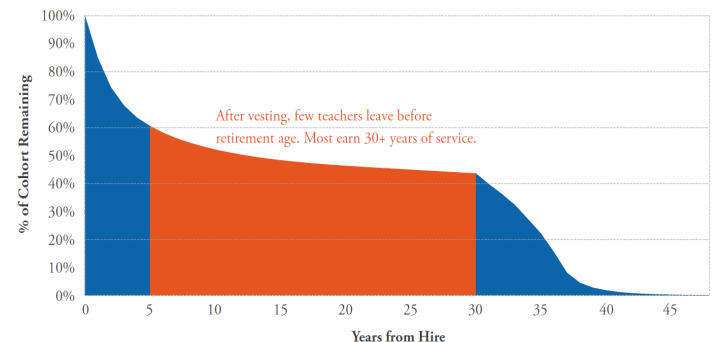
While CalSTRS has four out of 10 new hires leave before vesting in any given year they represent less than 6 percent of the classroom teachers.

It is misleading to use young, new-hire turnover to represent the majority of teachers as a whole.

Projected Tenure of Current California Teachers



Cumulative Retention for Teachers Hired at Age 25



UC Berkeley: Are California Teachers Better Off with a Pension or a 401(k)?

- For six out of seven CA teachers, CalSTRS provides a greater retirement income compared to a 401(k) plan.
- CalSTRS DB benefit is greater than a generous cash balance plan at age 56, when 79% of active educators are still teaching.

Study's Key Findings Show Pensions Benefit a Long-Term Educator Workforce



Three-quarters of classroom teaching in California is performed by long-term teachers

61

age at retirement with around 29 years of service

75%

of active educators will have worked at least 20 years

49%

of educators will retire with 30 or more years of service

26%

will have been covered by CalSTRS for 20-29 years



NATIONAL INSTITUTE ON
Retirement Security

Teacher Pensions vs 401(k) Plans

Start with Demographic Profiles of 6 States

Teacher Pensions vs. 401(k)s in Six States:

Connecticut, Colorado, Georgia, Kentucky,
Missouri, and Texas



Nari Rhee
Leon F. Joyner, Jr.
January 2019

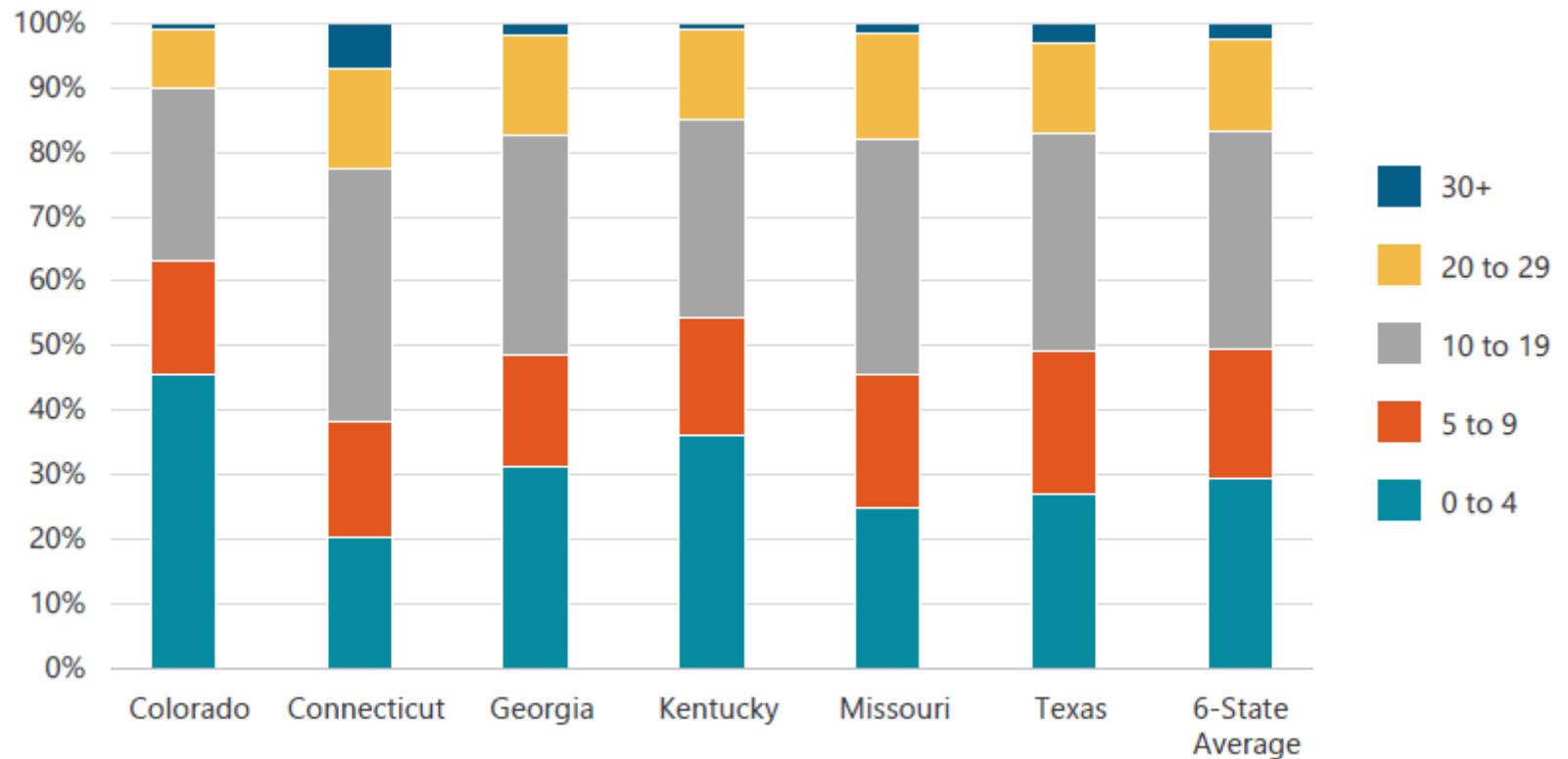


Current Active Membership Age/Service Profile, FY 2017

	Median Entry Age	Median Age in 2017	Median Service in 2017	% with <5 Years Service
Colorado PERA - State Division	36	46	6	29%
Colorado PERA - School Division	35	45	6	46%
Connecticut TRS	28	44	12	20%
Georgia TRS	31	45	10	31%
Kentucky TRS	28	42	8	36%
Missouri PSRS	27	41	10	25%
Texas TRS	28	41	10	27%

NOTE: Colorado PERA includes non-teachers.

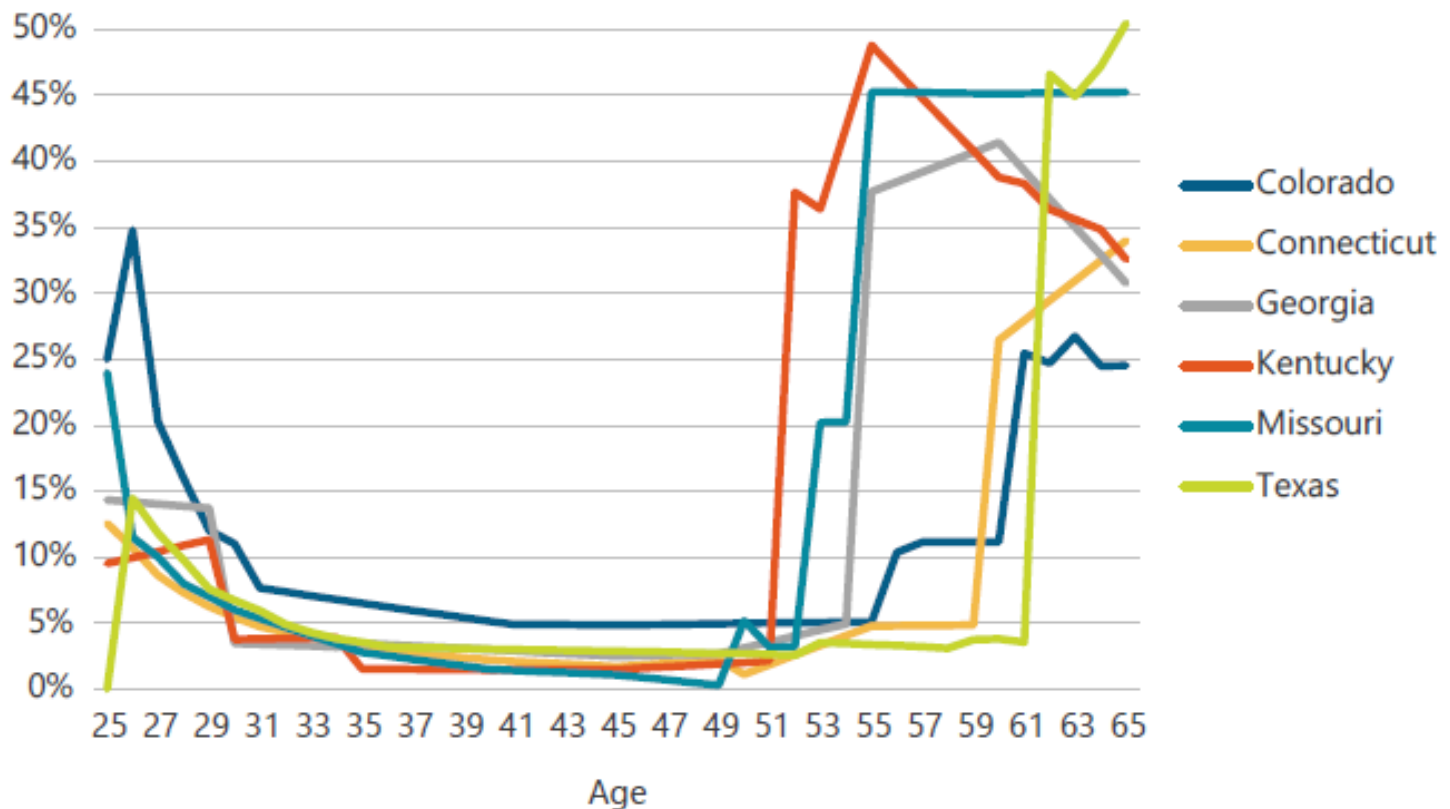
Across the Six States Teacher Service Distributions Varied



NOTE: Colorado PERA includes non-teachers.

Teacher turnover and retention shaped by pension benefit policy

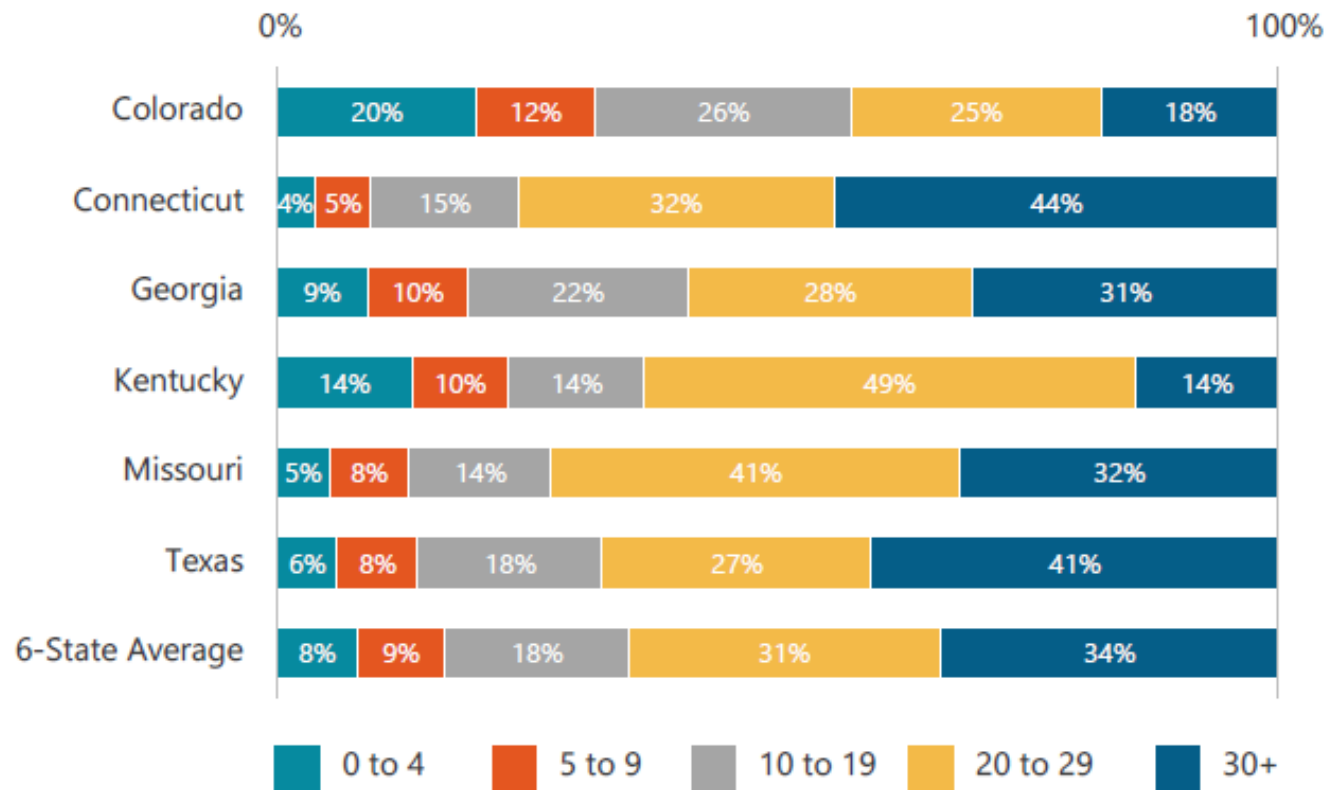
Annual Turnover Rates for Age 25 Hire Cohort



NOTE: Colorado PERA includes non-teachers.

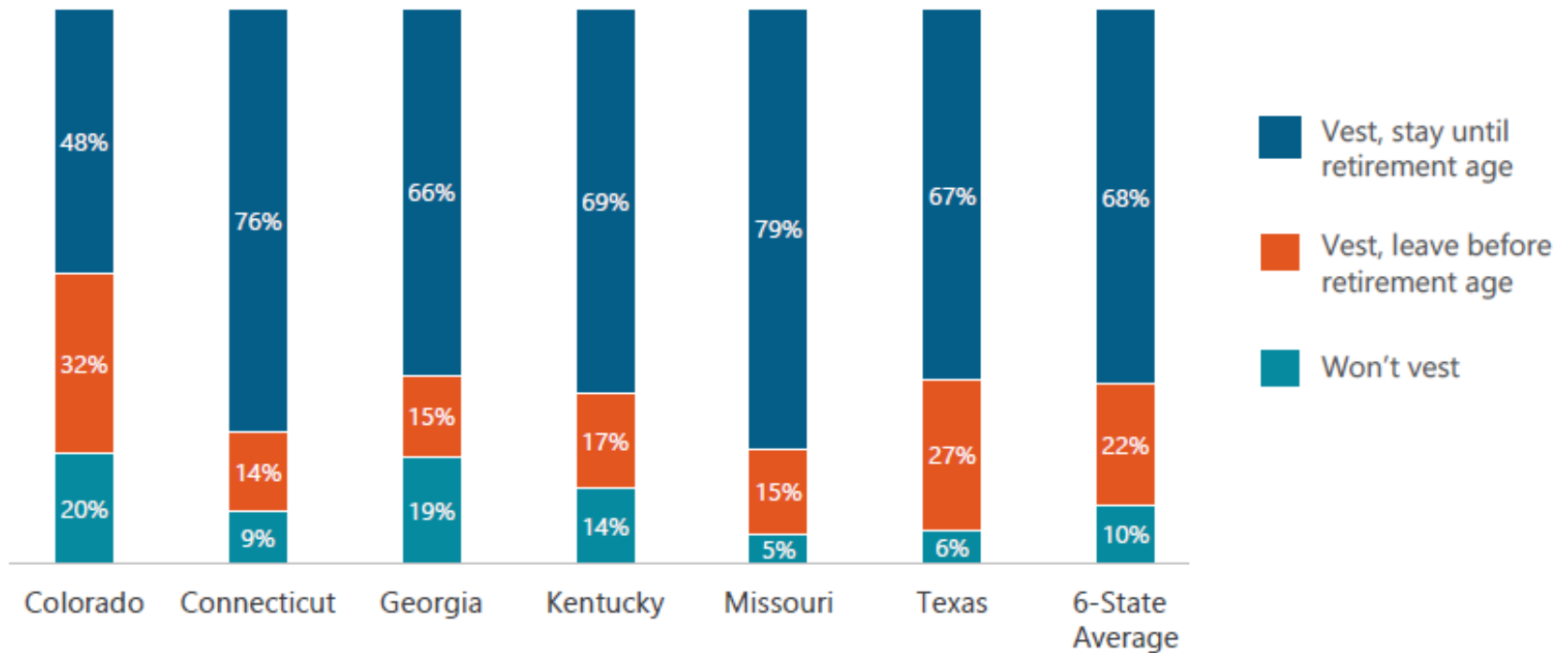
65% of teachers will serve 20+ years

Distribution of Teachers by Projected Service at Exit



68% of teachers will serve until retirement eligibility

Distribution of Teachers by Vesting and Retirement Eligibility Status at Exit



By early retirement, pension is worth significantly more than 401(k)

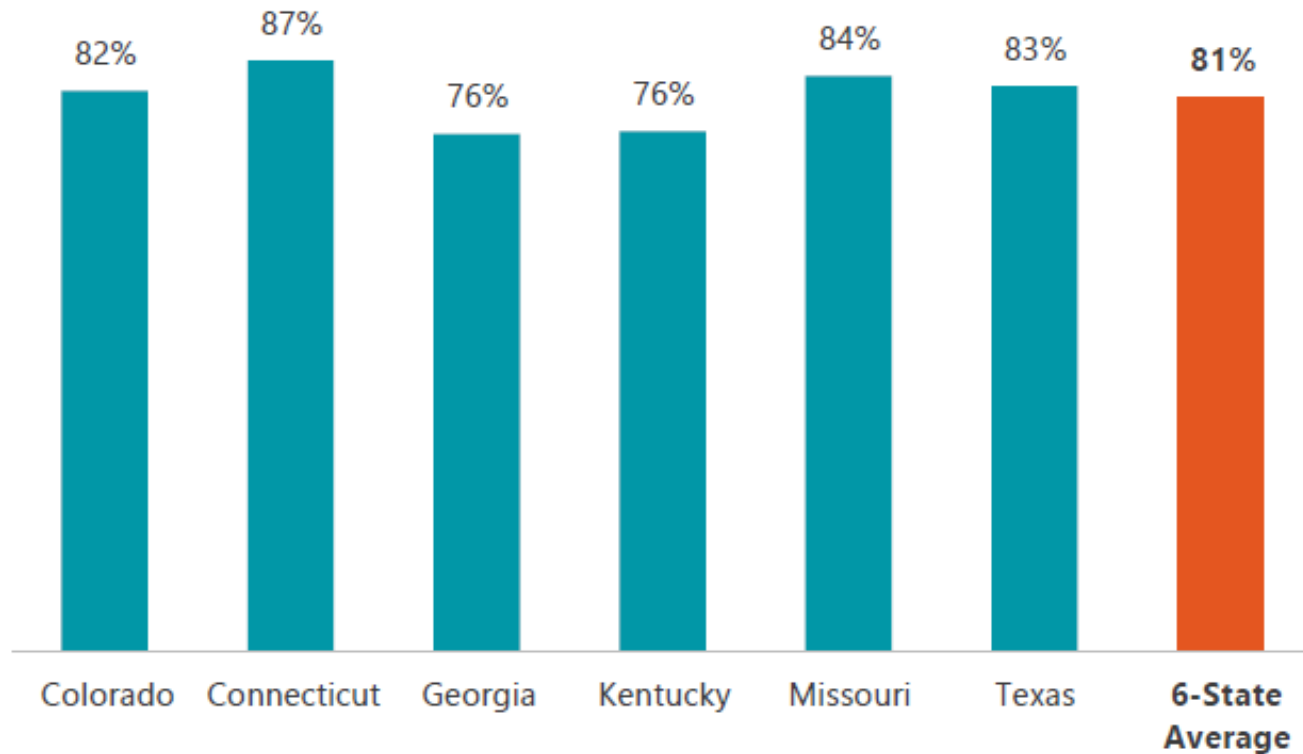
Ratio of Benefit Value to Salary at Earliest Retirement Age for Typical Teacher



Note: Calculations are based on estimated median entry age and service retirement provisions in each state.

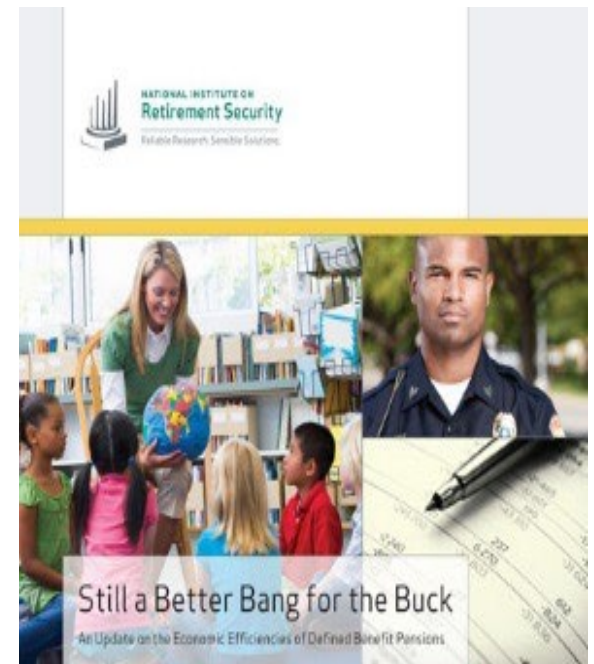
81% of teachers better off with pension than 401(k) with typical individual investor

Share of Teachers Who Are Better Off with Pension than Realistic 401(k)



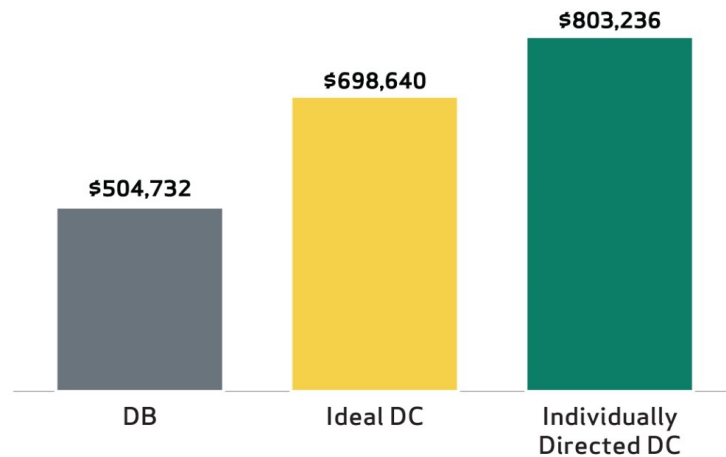
Bang for the Buck: 3 Reasons Why DB Is a Better Value Compared to DC


1. Pool the longevity risks.
2. Maintain optimally balanced investment portfolio compared to down-shifting to a lower risk/return asset allocation.
3. Higher investment returns and lower fees investors.



Still A Better Bang for the Buck: Compares 3 Plan Designs Providing \$2,700 & DB Pension Costs Less

Figure 7:
**Per Employee Amount Required at Age 62
DB Plan vs. DC Plan**



 **Contribution needed to
fund DB plan is 16.3%
of payroll.**

DB plan

- Typical asset allocation and fees.

Individually Directed DC plan

- Target Date Fund (TDF).
- Average fund fees, modest “behavioral drag.”

“Ideal” DC plan

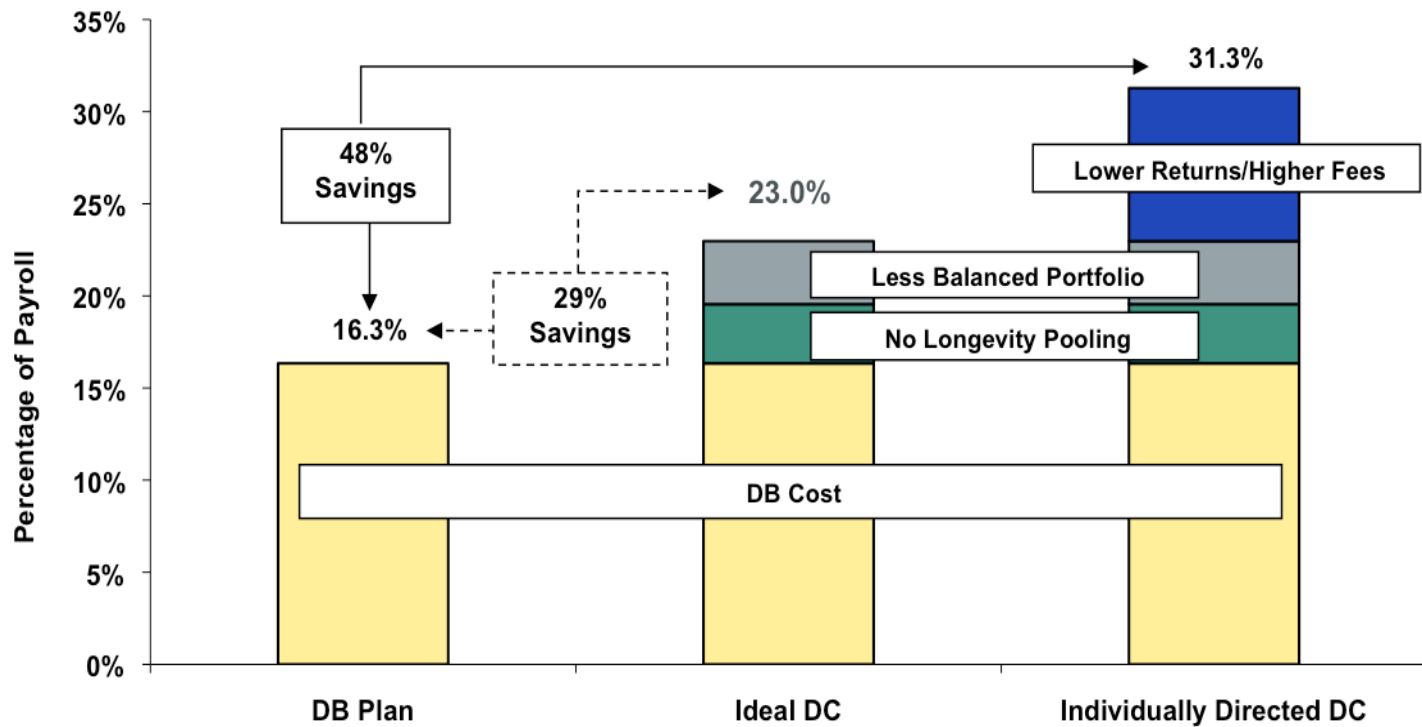
- TDF with same glide path.
- Same DB fees, no behavioral drag
- No employee choice.



NATIONAL INSTITUTE ON
Retirement Security

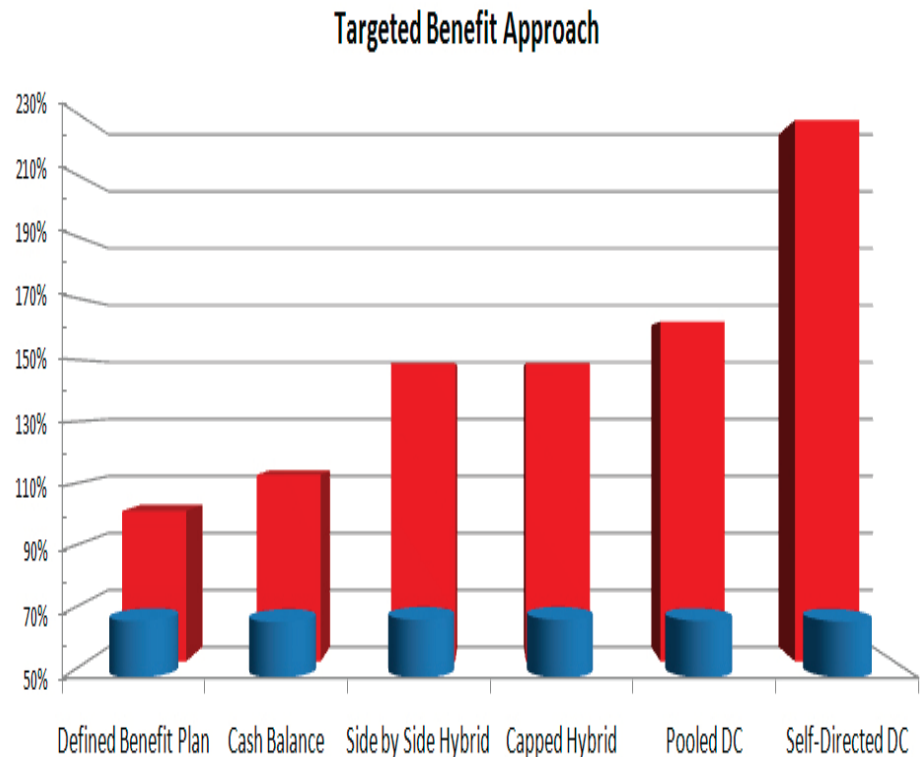
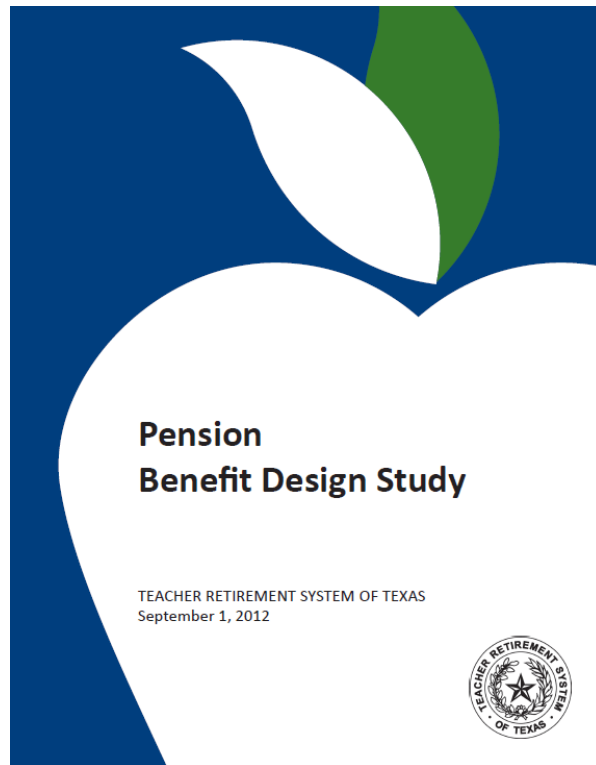
Summary: DB Plan Delivers Same Benefit at About Half the Cost of DC Plan

Figure 1: Cost of DB & DC Plans as Percentage of Payroll



Texas Teachers Retirement System Benefit Design Study Added:

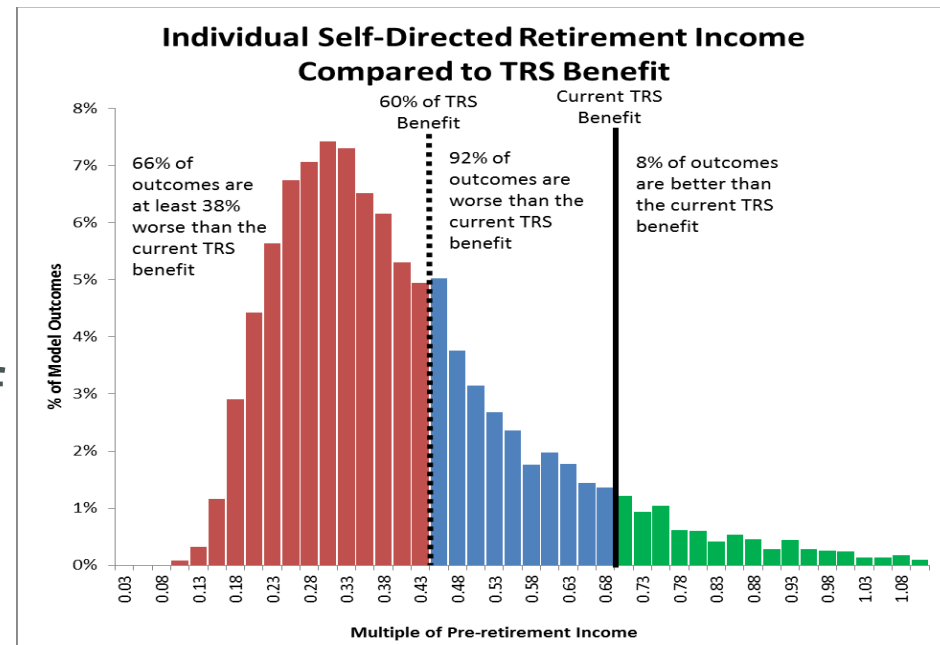
Comparison of Multiple Plan Designs



Texas TRS Study Added: Pension Benefit Simulations

Simulations of DC plan probable outcomes for employees.

- Workers would have only a 50% chance of reaching 60% of the benefit provided by the DB plan, at the same cost.





Colorado Pension Design Study

A Comprehensive Study Comparing the Cost and Effectiveness

Office of the
State Auditor
Considered
Alternative Plan
Designs Costs

SAME BENEFIT
for a 30-year
Employee at 65

Comparison of Defined Benefit and Defined Contribution Side-by-Side Plan with PERA Hybrid Defined Benefit Plan					
Targeted Benefit Approach State Division					
				PERA Hybrid Defined Benefit Plan	Defined Benefit and Defined Contribution Side-by-Side Plan ¹
Employer Contribution ²				0.82%	5.29%
Member Contribution ²				8.00%	9.03%
Relative Cost (to replace the same age-65 benefits as under the PERA Hybrid Defined Benefit Plan)				100%	160%
REPLACEMENT RATIOS (set equal at age 65 with 30 years of service)					
Age at Hire	Age at Termination	Years of Service	Benefit Commencement Age		
35	65	30	65	72.2%	72.2%
35	62	27	62	62.5%	61.0%
35	60	25	60	49.7%	50.2%
40	60	20	65	39.6%	43.3%
25	45	20	65	20.6%	32.5%
40	50	10	65	13.0%	18.0%
40	43	3	65	4.4%	2.0%
Source: Gabriel, Roeder, Smith & Company.					
¹ Features of the Alternative Plan: Defined benefit plan multiplier of 1.50% of final 3 year's pay; the Employer contributes 5.29% of pay. Defined Contribution Plan: Members contribute 9.03% of pay, the Employer contributes 0% of pay, the fund earns 5.5% return each year; the account balance at age 65 is converted to a lifetime annuity based on 5.5% and the valuation mortality table.					
² Contribution amounts are calculated as a percentage of employee salary.					

Win Win: Key Findings for Schools, Students and Teachers

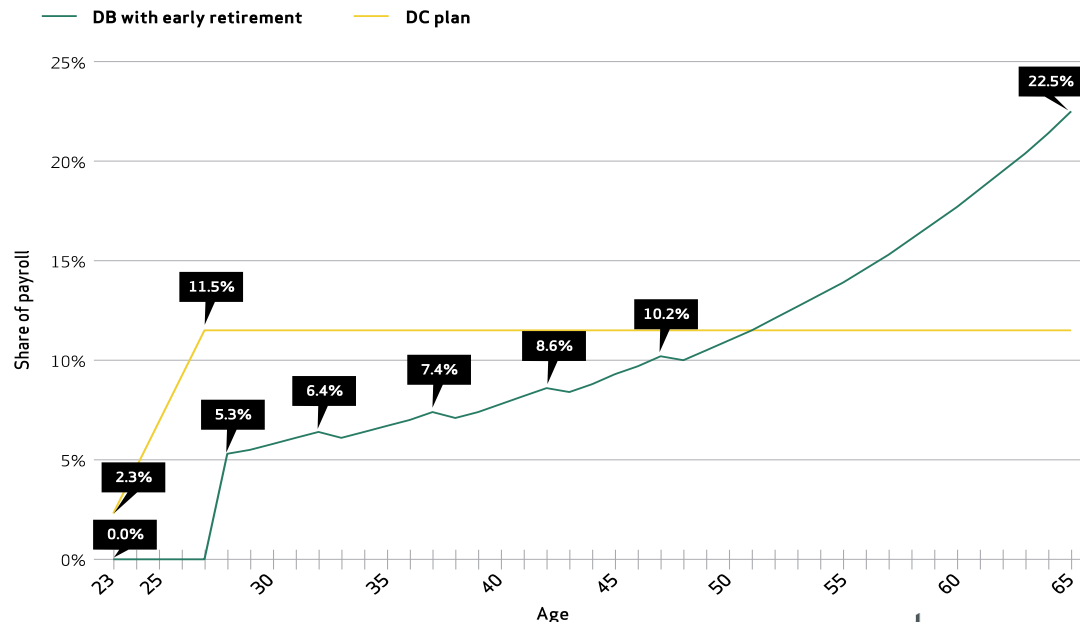
1. DB plans help employers recruit and retain committed teachers. Schools benefit from teachers' increasing effectiveness.
2. DB pensions better address obstacles to retirement income security and a majority of teachers have adequate benefits.
3. The public strongly supports DB pensions for teachers and acknowledges their retention effects.



Win, Win: DB Plans Give School An Effective Recruitment & Retention Tool

DB pensions create economic incentives for experience teachers to stay by deferring some compensation

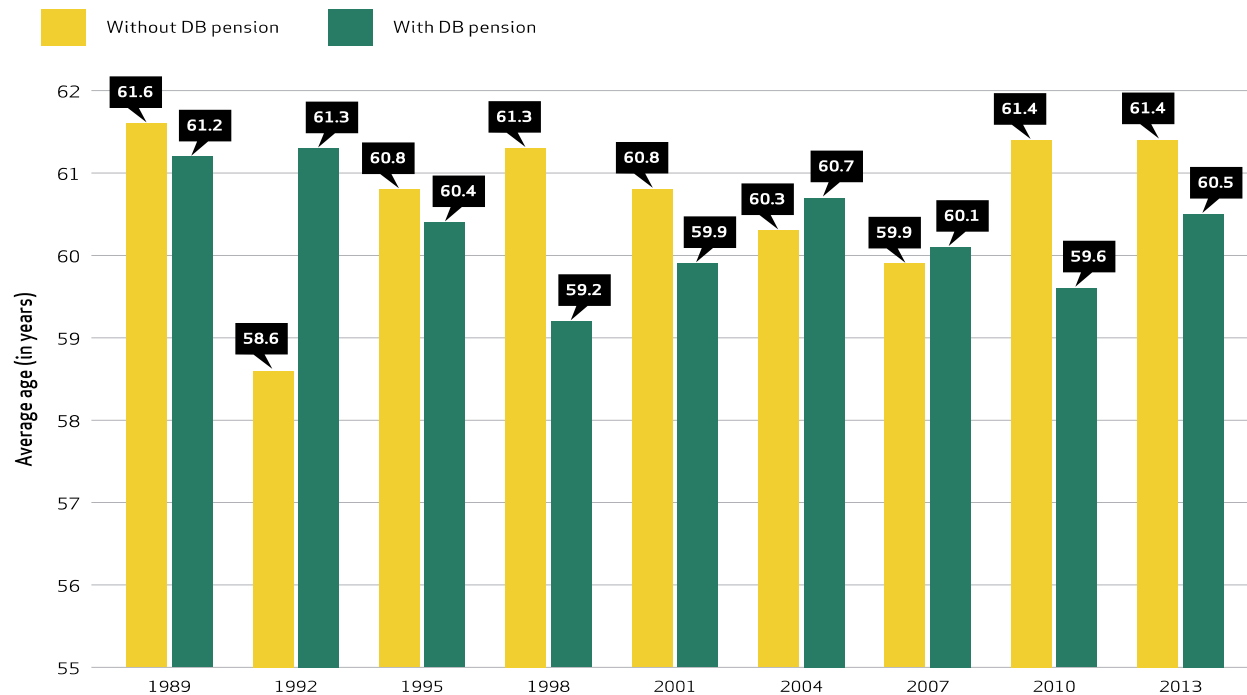
Figure 1: Annual wealth changes for teacher entering in 2017 relative to earnings, under DB pension and DC plan, constant normal cost



Win, Win: DB Plans Also Provide Predictable Retirement

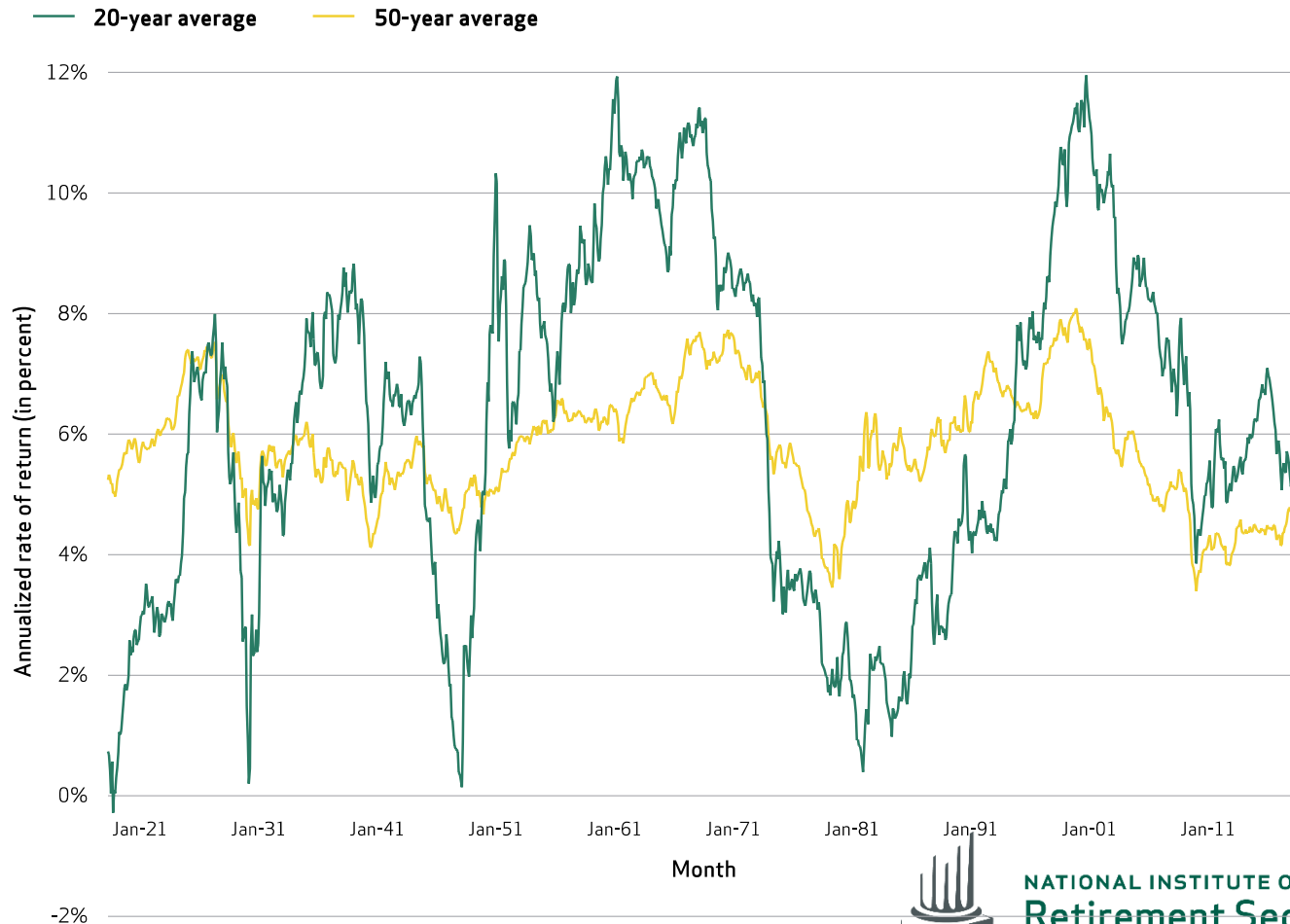
DB plans result in more predictable retirement ages for teachers, so schools can plan for turnover.

Figure 6: **Retirement age by defined benefit pension coverage**



Win, Win: DB Pensions Overcome Obstacles Including Investment Risks

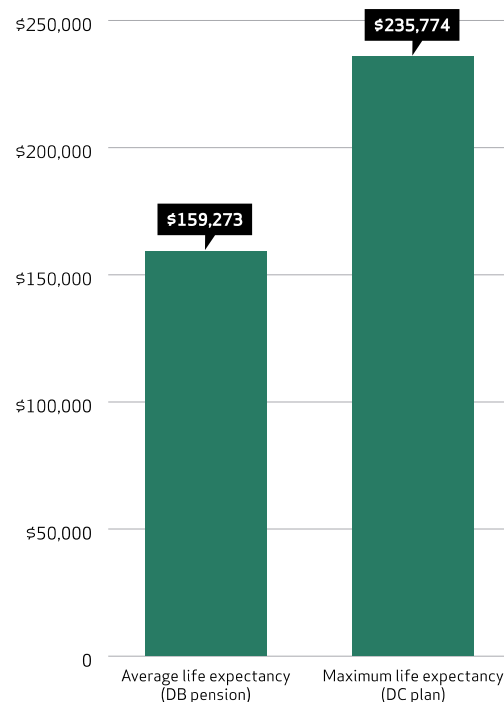
Figure 3: 20-year and 50-year stock market average real returns



Win, Win: Overcoming Obstacles – DB Plans Lower Costs for Income Security

DB pensions help provide teachers with a decent standard of living in retirement, and do so more effectively than a DC plan.

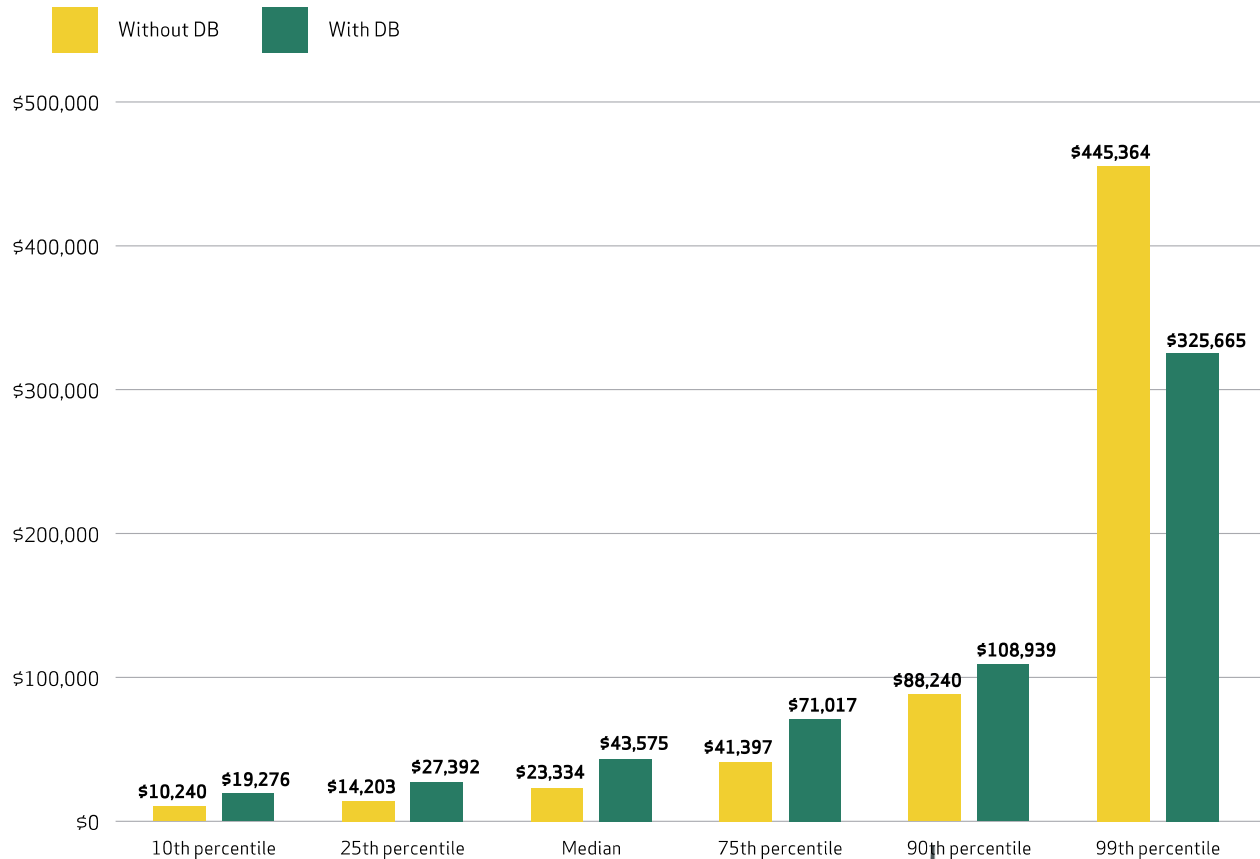
Figure 4: **Wealth necessary for monthly inflation-adjusted retirement income of \$1,000 when planning for average and maximum life expectancy**



NATIONAL INSTITUTE ON
Retirement Security

Win, Win: DB Pensions Overcome Retirement Obstacles with More Equity

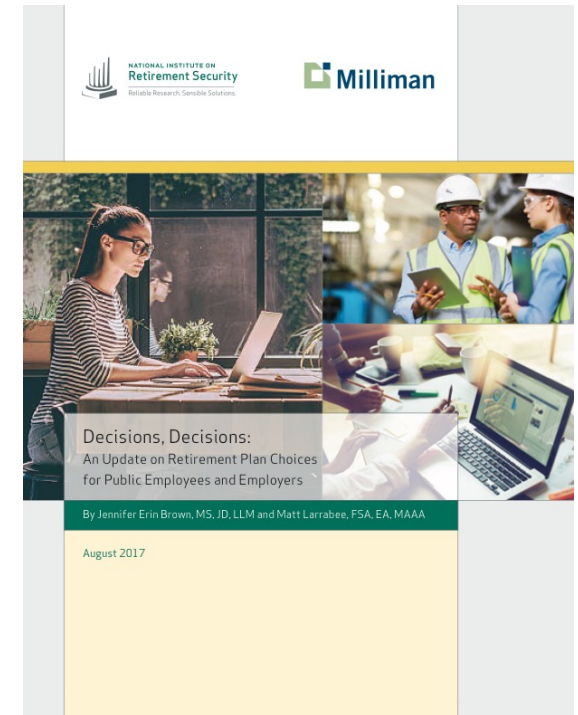
Figure 5: Inflation-adjusted retiree income at select percentiles from 2010 to 2013



NATIONAL INSTITUTE ON
Retirement Security

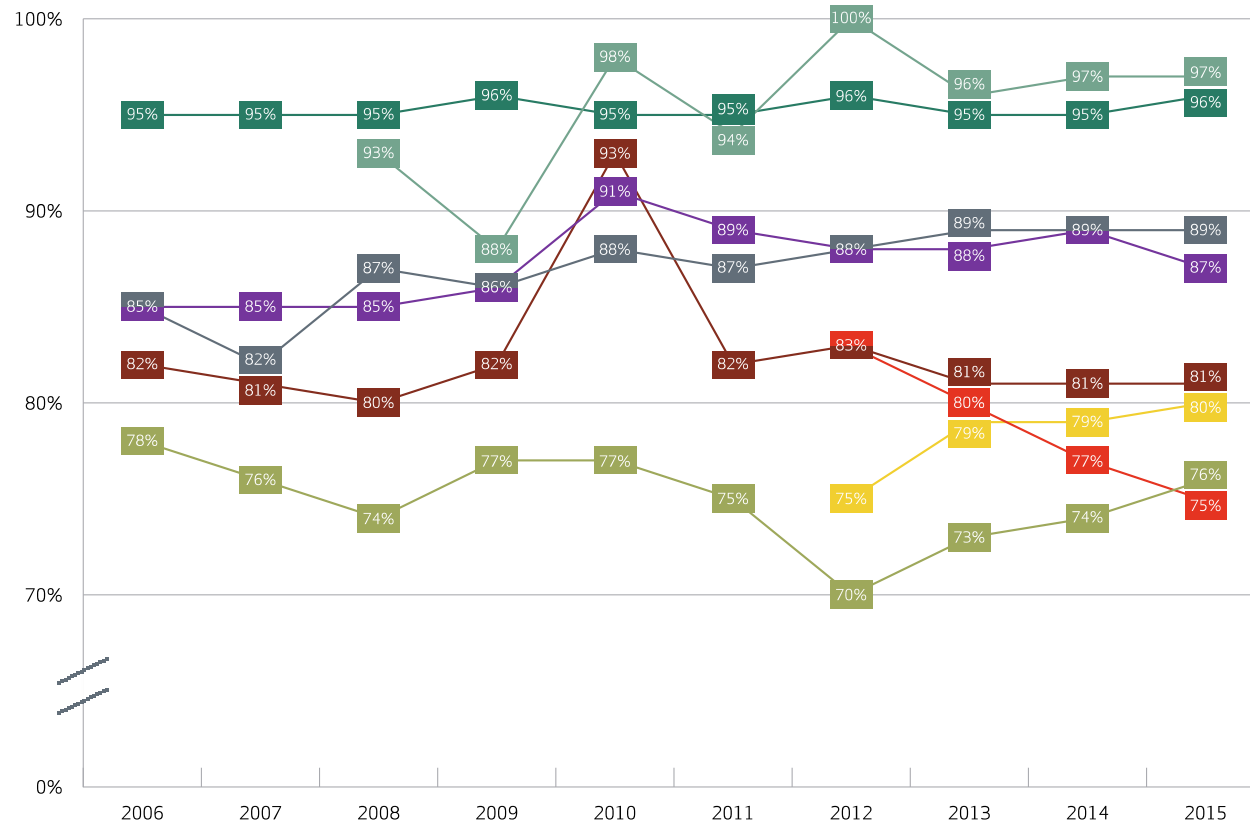
Decisions, Decisions: Findings

- Overwhelmingly, public employees choose the DB pension as retirement plan, when offered a choice.
- Shift to DC does nothing to address underfunding of DB.
- When legislatures encouraged the DC plan, employees still choose the DB plan.
- DC plans are less cost efficient than DB plans.



Decisions Decisions: Most Employees Choose a DB Plan

Figure 3. **Total DB Elections over Time**

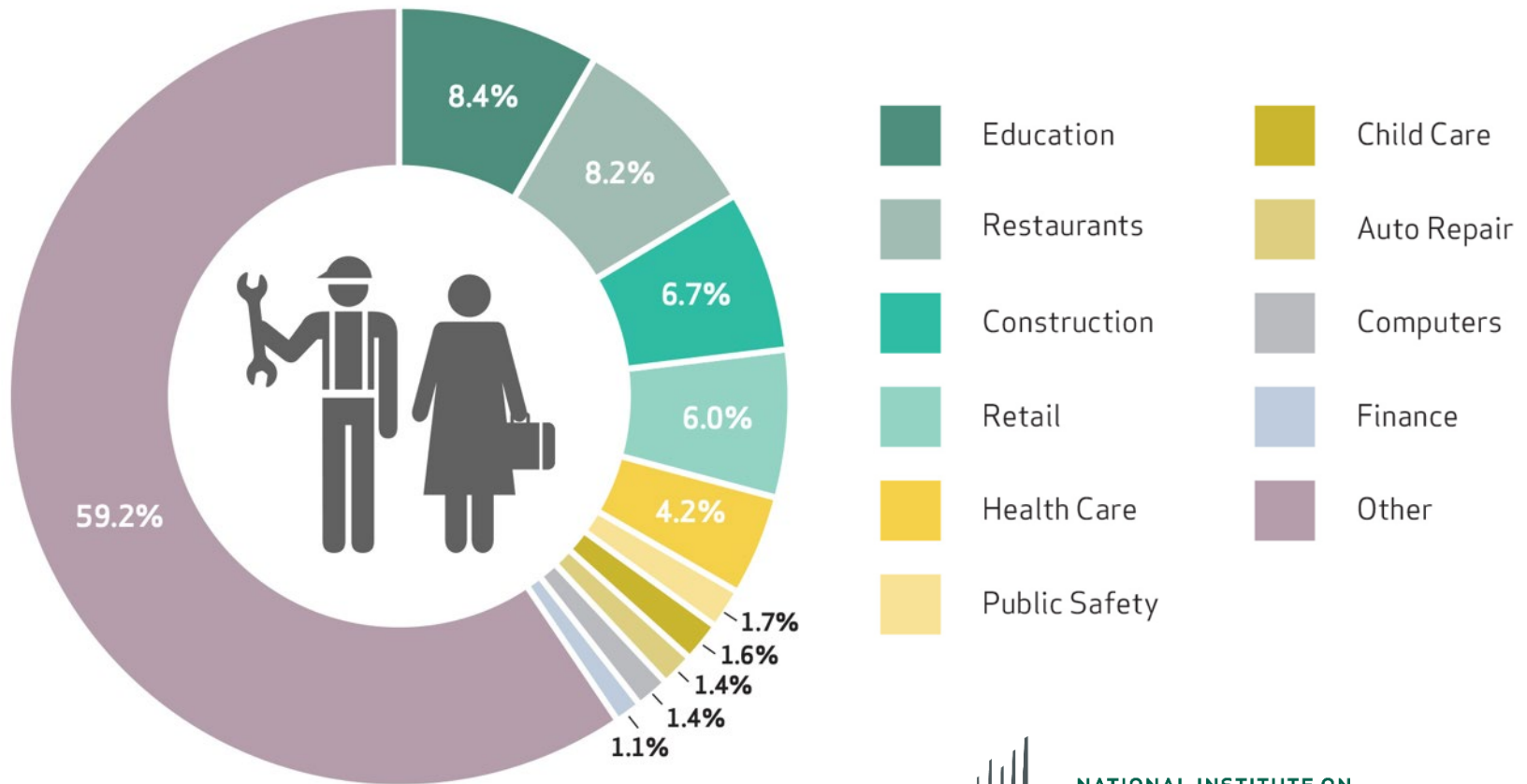


Decisions Decisions: States Encourage DC – Utah and Florida

- » Utah's public employees must choose either the DB/DC or DC only plan and Utah created open contribution liability for employees in DB/DC the plan. Still only 20 to 25% of employees select the DC-only plan.
- » Florida ERS offered DB or DC choice since 2002 with about 25% choosing DC. Lowering DB benefits in 2008 move 5% more to DC but when DC benefits were lowered the choice switched back. Now moves its default to DC!



Education Leads The Top-Ten Industries Where Millennials Work



NATIONAL INSTITUTE ON
Retirement Security

Millennials in Education Have High Access - Confused about Type of Plan

	Access	Eligibility	Participation
Education	86.8%	58.5%	45.3%
Restaurants	46.6%	25.4%	11.4%
Retail	76.3%	37.1%	25.4%
Construction	38.3%	50.5%	19.3%
Health Care	91.8%	57.5%	52.1%
Computers	75.7%	55.9%	39.3%
Public Safety	95.4%	85.9%	75.0%
Finance	91.2%	75.3%	68.6%
Child Care	34.5%	48.2%	16.6%
Auto Repair	32.3%	24.1%	7.8%



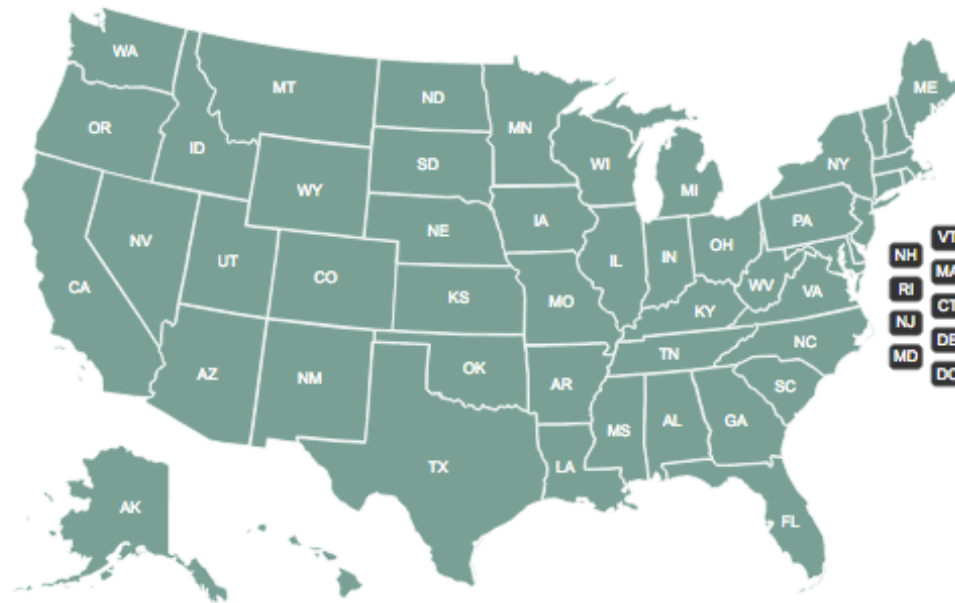
SIPP self-reported data included type of plan:

Just 16.3% indicated they had access to a DB plan.



NATIONAL INSTITUTE ON
Retirement Security

Tools: State Retirement System Fact Sheets Via Interactive Map



NOTE: Guam, Puerto Rico and the U.S. Virgin Islands are not included in this study.



<https://www.nirsonline.org/resources/nirs-fact-sheets/>

Snapshot Fact Sheet -- *Teacher Retirement System*

AARP IN THE STATES

SNAPSHOT: Teacher Retirement System of Texas

The Teacher Retirement System of Texas (TRS) provides benefits to qualified public education employees. Teachers do not participate in Social Security.

The TRS Pension Works for Texas Stakeholders



Effective teachers are the cornerstone of education quality, but teachers are underpaid. Pensions help schools keep teachers and compensate for low pay.



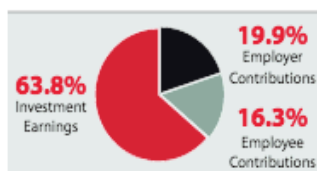
Retaining experienced midcareer teachers boosts student performance. Pensions help keep effective midcareer teachers in the classroom, increasing education quality.



Pensions offer teachers the best path to retirement security. They are cost-effective and provide modest lifetime income that will not run out.

Taxpayers Only Pay a Small Part of Pension Costs

The funding of public employee pensions is shared by employees and employers. New TRS employees contribute 7.7% of their pay into the fund. Over time, investment income earned by the fund does most of the work. In fact, between 1993 and 2014, taxpayers paid only 19.9% of the cost of benefits.



Pensions Cost Half as Much as a 401(k) Plan

Pensions can provide the same benefit as a 401(k) retirement account at about half the cost because of the following key factors:

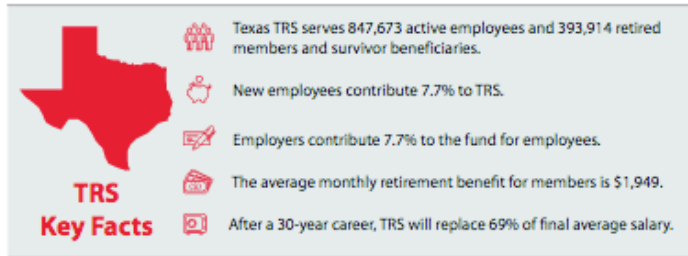


How does the Teacher's Retirement System help stakeholders?

Where does the money to fund the Retirement system come from?

How much does the DB pension plan save?

Snapshot Fact Sheet – *Teacher Retirement System*



Historical TRS Funding Experience

Texas established long-term funding policies to provide for the cost of public pension benefits. The employee contribution is set by law and the actuary calculates the employers' contributions each year. As of the end of its 2016 year, TRS had \$138.8 billion in assets in the fund.

The Actuarially Determined Contribution (ADC) is the amount needed to fund benefits earned in the year and to pay down the plans' unfunded actuarial accrued liability. Paying the full ADC each year is important to ensure that the fund becomes financially sound over time.

Texas Paid 86.6% of Weighted Average Percent of ADC from FY2001-FY2015 for TRS



Texas Made Plan Changes to TRS in Recent Years

Following the global stock market crash in 2008-2009, Texas policymakers proactively made changes to TRS to ensure long-term sustainability. These included:

- Employee contributions for current members increased to 7.7% of salary and new teachers must work longer to be eligible for normal retirement benefits.

The Economic Impact of Texas Pensions:

\$22 billion
in economic output generated by retirees' spending from public pensions in Texas.

142,126 jobs
paying \$7 billion in wages supported by retirees' spending from public pensions in Texas.

\$3.5 billion
in federal, state, and local tax revenues generated by retiree benefits and spending in Texas.

Key Facts about TRS

Funding Experience

- How much money does the System have?
- History of Contributions to System

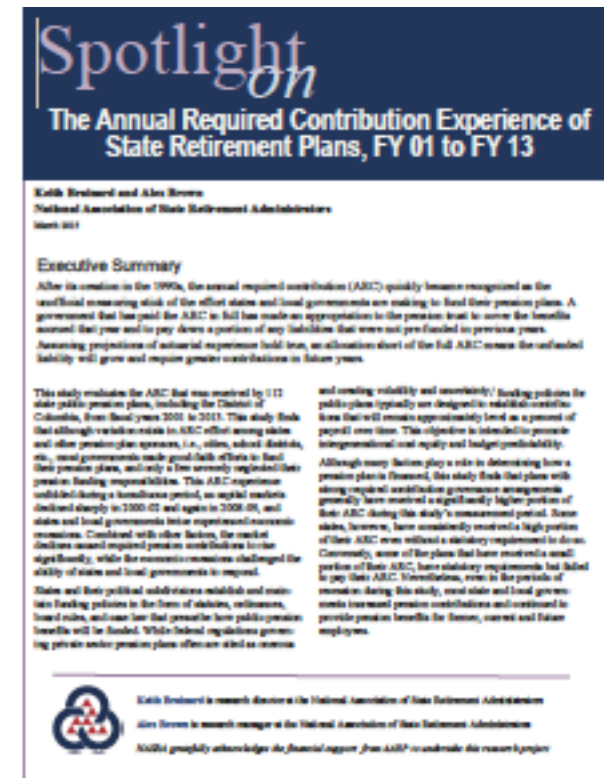
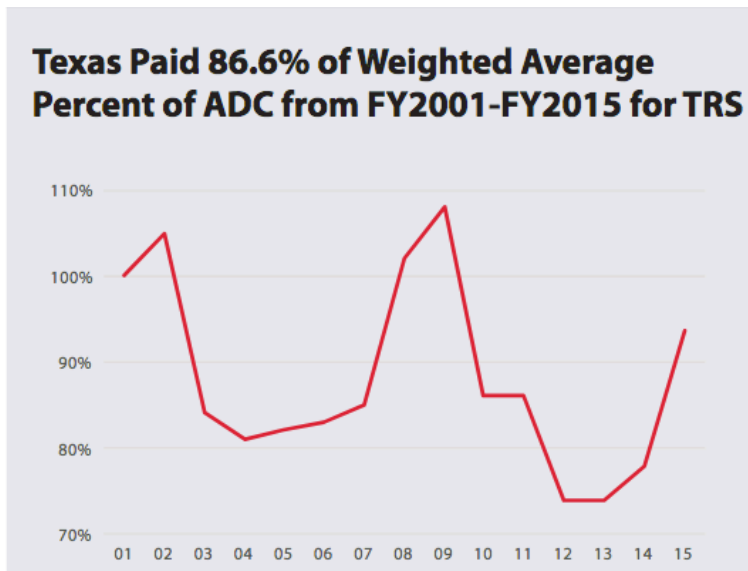
Summary of Pension Changes

State Pensionomics Data

Background Resource

Teacher Retirement System

- What is Actuarial Determined Contribution or ADC?
- How much of ADC paid each year?



Why Pensions Fact Sheet

Why Pensions Work for Taxpayers, Teachers

AARP IN THE STATES

Why Pensions Work
for Texas and Teachers

Pensions Help Deliver Quality Education in Texas

Defined benefit (DB) pensions play a fundamental role in retaining high-quality, experienced teachers in the classroom. These effective, experienced teachers are the most important school-based element that provides quality educational outcomes for our children.

A wide body of academic research on teacher productivity finds that teachers become more effective with experience. These studies demonstrate that experienced teachers have students who achieve at higher levels. In contrast, when experienced, mid-career teachers are replaced by inexperienced teachers, other studies show productivity drops across the school.

DB pensions give schools an effective tool to retain experienced teachers. These benefits provide teachers an incentive to continue delivering quality education to K-12 students.¹ This incentive becomes all the more important over a teaching career as the erosion of teachers' wages, when compared to the wages of similar college educated workers, widens for more experienced teachers.

There are important policy reasons to continue offering teachers DB pensions. Because pensions help attract and retain workers, Texas can keep teachers in the classrooms and empower students to achieve their highest potential.

Pensions Help to Bridge the Teacher Wage Gap

A national study of K-12 public school teachers' wages identified a 17 percent pay gap relative to comparable private sector workers in 2015. At the same time, teachers' benefits, including pensions, help bridge that gap and allow states to attract and retain highly qualified educators by reducing that overall gap in compensation to 11 percent. In Texas, teachers experience a 27% wage gap when compared to other college graduates in the workforce.²



Americans understand that teacher pensions play an important role in retaining quality teachers and in offsetting the impact of their lower salaries.



92% 92 percent of Americans say pensions are a good way to recruit and retain qualified teachers.



81% 81 percent of Americans agree that teachers deserve pensions to compensate for lower pay.³

AARP
Real Possibilities

NRTA
AARP's Educator Community

NATIONAL INSTITUTE ON Retirement Security
Public Research. Sensible Solutions.

NATIONAL INSTITUTE ON Retirement Security
Public Research. Sensible Solutions.



By Christian E. Weller, Ph.D.

Economic Policy Institute

The teacher pay gap is wider than ever

Teachers' pay continues to fall further behind pay of comparable workers

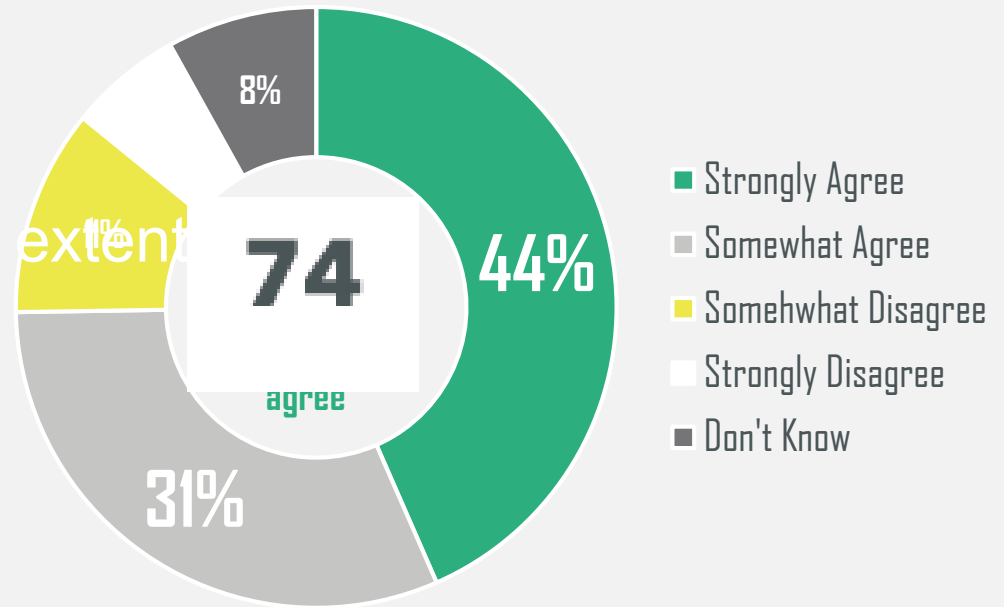
Report • By Sylvia A. Allegretto and Lawrence Mishel • August 9, 2016

74% of Americans Support Pensions for Teachers.

Q:

To what extent do you agree or disagree with the following statement?

Public schoolteachers
deserve pensions to
compensate for lower pay.



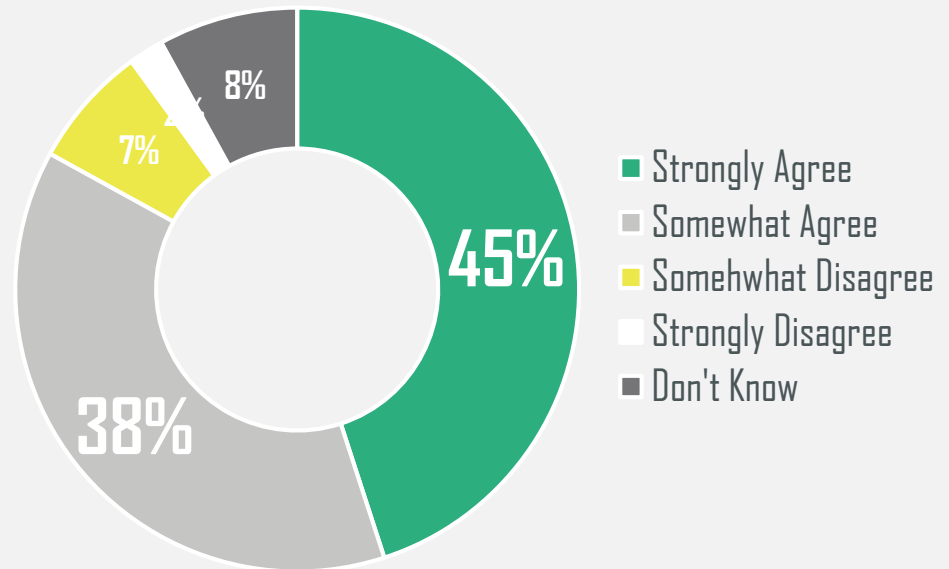
NATIONAL INSTITUTE ON
Retirement Security

83% of Americans See Public Pensions as a Recruitment Tool.

Q:

To what extent do you agree or disagree with the following statement?

Pensions are a good way to recruit and retain qualified teachers, police officers, and firefighters.



NATIONAL INSTITUTE ON
Retirement Security

Conclusions

- Real threats for teacher pensions. More appear each day. New efforts to drive an unfairness wedge between young and experienced teachers. Need to educate new teachers about DB pension benefits.
- Critics of DB plan have funded research that pits younger and older teachers against one another with a push toward cash balance and DC retirement plans.
- You can find help on challenges on NIRS Website:
www.nirsonline.org



Questions?



National Institute on Retirement Security
www.nirsonline.org



**NATIONAL INSTITUTE ON
Retirement Security**