

THE RISE OF ALTERNATIVE DESIGNS FOR PUBLIC PLANS

BY JEAN-PIERRE AUBRY AND LAURA D. QUINBY*

Introduction

State and local government workers have traditionally had defined benefit (DB) pensions that insulate them from the stock market and ensure that they do not outlive their savings. Funding these plans, however, has become burdensome for many governments, with costs rising dramatically in the immediate wake of the 2008 financial crisis and continuing to grow since then. In response, some governments have introduced alternative plan designs that shift investment and/or longevity risk onto workers.

Given the rise in alternative designs, this *brief* answers two questions: 1) how prevalent were alternative designs before the financial crisis? and 2) how have they evolved since then? The discussion proceeds as follows. The first section introduces the various ways that state and local employers can shift risk onto their workers. The second section describes recent trends in plan design. The third and fourth sections identify the types of plans with alternative designs and explore what factors lead them to adopt these features.

The data show that the share of plans with alternative designs has grown continuously since 2008, so that plans with some risk sharing now cover roughly half of the state and local workers. A decline in funded status and Republican leadership often predict the shift towards alternative designs, while local plans

and those covering public safety workers are more likely to stay traditional DBs. The final section concludes that risk sharing in the public sector is likely here to stay, but that workers still have significant protections.

How Do States and Localities Shift Risk to Workers?

In a traditional DB plan, workers earn benefits that are paid as an annuity throughout their retirement. To help fund these benefits, public sector plans typically require employees to contribute a percentage of their salary to the pension's trust fund, but employers are responsible for any shortfall between the assets accumulated in the fund and promised benefit payments. This arrangement imposes two types of risk on employers: 1) investment risk, if assets in the trust fund underperform target returns; and 2) longevity risk, if retirees live longer than expected. The 2008 financial crisis was a stark example of investment risk: the stock market crash reduced the aggregate funded ratio of state and local plans from 86 percent in 2007 to a low of 72 percent in 2013.¹

* Jean-Pierre Aubry is associate director of research for retirement plans and finance at the Center for Retirement Research at Boston College (CRR). Laura D. Quinby is associate director of research for employee benefits and labor markets at the CRR.

To mitigate such risks, many employers have shifted at least some of it onto employees through alternative plan designs. In practice, these designs often follow one of the following models:

Stand-alone defined contribution (DC) plan. Like 401(k)s in the private sector, public sector DCs rely on individual accounts to which workers and employers each contribute a set percentage of the employee's salary. Workers decide how to invest their assets and draw down the funds in retirement. Hence, workers bear *all* the investment risk during their working years as well as the risk of outliving their savings once they retire.²

Stand-alone cash balance (CB) plan. These plans also rely on individual accounts, but the employer determines how to invest the contributions and guarantees a minimum investment return. Account balances are automatically annuitized at retirement, which protects retirees from outliving their savings while placing longevity risk on the employer.

Hybrid plan. Some states and localities pair a smaller traditional DB with a DC or CB plan.³ The notion is that the DB provides a modest base of core income support, while the DC or CB component insulates employers from bearing all the risk.

These three plan designs represent a fundamental shift away from traditional DBs. Yet, plan sponsors can also act within the DB structure to insulate themselves from rising cost in the following ways:

Variable employee contribution rate. Public sector DBs often set the level of the worker's contribution in state statute. Employers are then on the hook for any increase in the actuarially required contribution (ARC). To reduce this exposure, some employers instead set the employee contribution rate as a percentage of the ARC or explicitly set conditions under which employee contributions will increase. Effectively, workers' take-home pay is cut when the plan does poorly, and increased when the plan does well.

Variable cost-of-living adjustment (COLA). Public DB plans can also share risk by making COLAs contingent on the plan's financial condition in two ways. First, it has been long-standing practice for some plans to fund their COLAs solely from "excess return" accounts where funds are deposited whenever a plan's investment performance exceeds actuarial targets (or some other threshold).⁴ This approach implicitly links the availability and size of COLA payments to the plan's investment performance. More recently, some

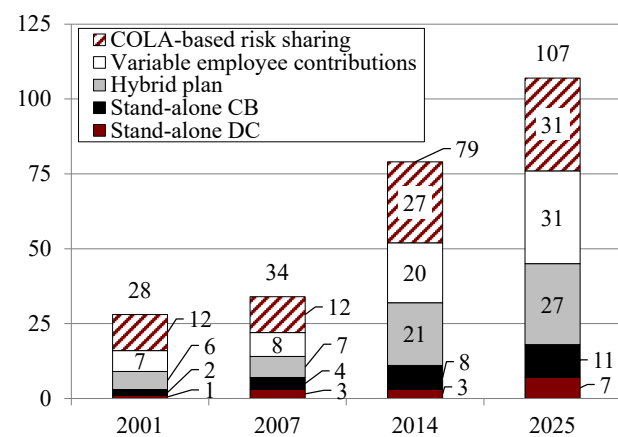
plans have explicitly linked annual COLA payments to either the plan's funded ratio, recent investment returns, or both.

Clearly, these incremental risk-sharing features within traditional DBs have much less impact on employees than shifting away from the DB structure. However, all these designs transfer some degree of risk to the worker compared to the basic DB model. The question is, to what extent have these alternative designs gained traction in recent years?

Trends in Alternative Plan Design

Although the 2008 financial crisis was a watershed moment for alternative plan designs, a handful of public retirement systems – 34 of the 250 plans in the *Public Plans Database* (PPD) – had previously adopted some type of risk sharing. Prior to 2001, most of these arrangements involved risk sharing within traditional DBs – variable employee contributions or investment-linked COLAs (see Figure 1). But 9 plans already had DC, CB, or hybrid structures.⁵

FIGURE 1. TOTAL NUMBER OF STATE AND LOCAL PLANS WITH ALTERNATIVE DESIGNS, 2001-2025



Note: This figure assigns one alternative design per plan. For plans with more than one, changes to plan structure are considered primary, followed by variable employee contributions, and then COLA-based risk-sharing.

Sources: Authors' calculations from the *Public Plans Database* and various actuarial valuation reports (2001-2025).

Between 2001 and 2007, another handful of plans switched to DC, CB, and hybrid designs.⁶ Unlike the reforms to follow, these transitions were not necessarily perceived as detrimental to workers as they took advantage of a strong stock market during the period.

The 2008 financial crisis changed the picture completely. The number of state and local plans shifting investment risk onto workers more than doubled in the seven years following the crash, from 34 plans in 2007 to 79 in 2014. Importantly, legislators in this period had little appetite for moving workers into a stand-alone DC plan, where the employee bears all the risk. Instead, many reforms involved shifting new employees into less risky (for the worker) CB and hybrid plans, as well as introducing some risk-sharing within existing traditional DB plans.

In the decade since, alternative plan designs have continued to proliferate, with 107 state and local plans currently having some form of risk sharing (see Appendix Table A1).⁷ To put these numbers into perspective, Figure 2 shows the percentage of all state

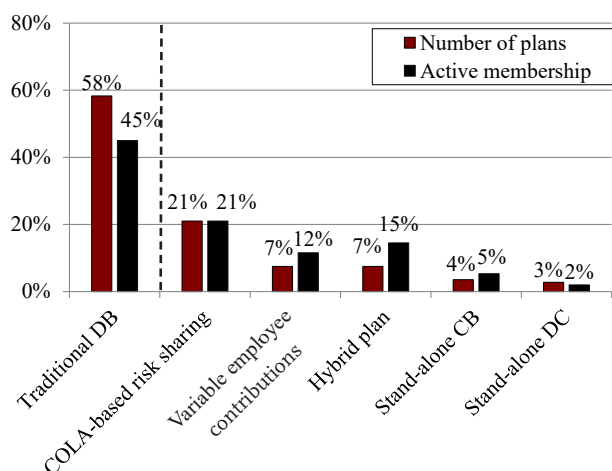
Among plans with DC elements, the hybrid model has clearly gained the most traction – affecting plans that cover 15 percent of all active retirement system members. For risk sharing within the DB, COLA-based risk sharing is the most prevalent.⁸

It is important to keep in mind, however, that this figure may overstate the share of active members *currently* impacted by alternative designs as many plans only applied the new features to employees hired after the reform. That said, it gives a sense of the widespread nature of risk sharing and highlights that the approach to alternative plan designs has remained protective of workers – very few plans have introduced stand-alone DC plans.

Are States or Localities More Likely to Adopt Alternative Designs?

While the trend indicates a shift away from traditional DBs, somewhat less than half of plans have done so. Which plans are making these changes? The first step here is to consider whether the changes are affecting large state-administered systems or smaller local plans. Figure 3 shows the percentage of state and locally administered plans in the PPD that currently have alternative designs. Clearly, most activity has been concentrated among state plans – more than

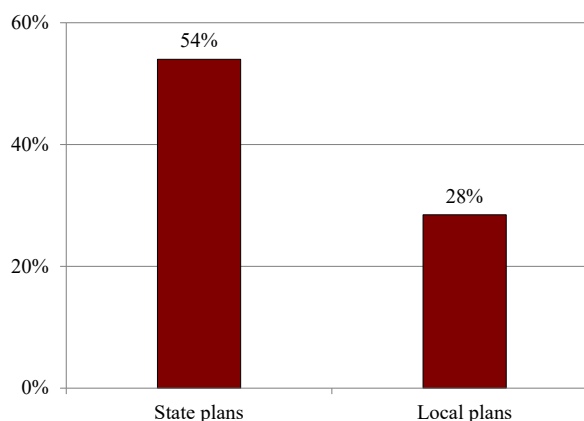
FIGURE 2. PLANS AND ACTIVE MEMBERS AS A SHARE OF TOTAL, BY PLAN DESIGN, 2025



Note: Alternative design features are not mutually exclusive. Sources: Authors' calculations from the *Public Plans Database* and various actuarial valuation reports (2001-2025).

and local plans with alternative plan designs along with the total active members in those systems. The first cluster bar shows the share with a traditional DB, while the shorter bars to the right break the remainder down into the five different types of risk sharing.

FIGURE 3. SHARE OF STATE AND LOCALLY ADMINISTERED PLANS WITH ALTERNATIVE DESIGNS, 2025

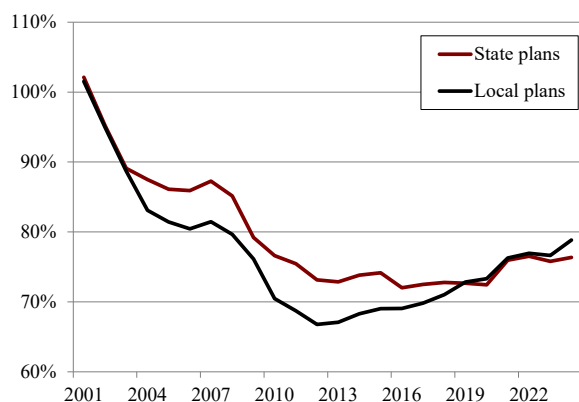


Sources: Authors' calculations from the *Public Plans Database* and various actuarial valuation reports (2001-2025).

half of which now have some alternative design. In contrast, less than a third of local plans have adopted alternative designs.

The difference in adoption rates is perhaps surprising given that local plans for a long while had consistently lower funded ratios (see Figure 4) and higher costs than state plans. Compounding these financial challenges, local government revenue is less diversified than state revenue due to reliance on property taxes – a weakness that hit localities hard during the 2008 financial crisis.⁹ In addition, relative to a typical DC plan, self-administering a DB plan requires significant staff resources and investment expertise. Larger state governments arguably have more capacity to manage these plans, making the persistence of traditional DBs run by local governments even more surprising.

FIGURE 4. AGGREGATE FUNDED RATIO FOR STATE AND LOCAL PLANS, 2001-2024

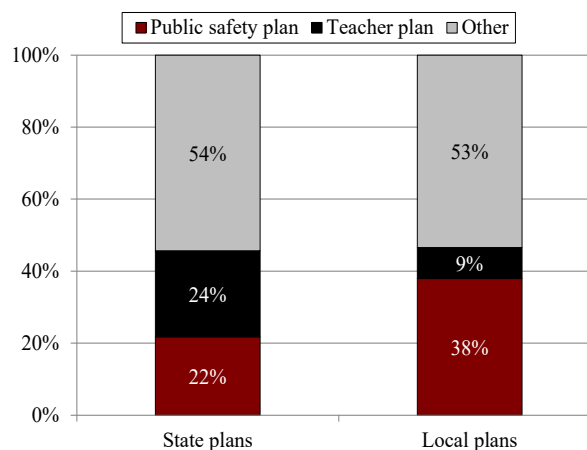


Sources: Authors' calculations from the *Public Plans Database* and various actuarial valuation reports (2001-2024).

One reason for this somewhat counterintuitive trend could be the political environment in which state and local plans operate. State plans are governed by legislators who often represent a broader swath of stakeholders. Local politicians, on the other hand, generally deal with a narrower constituency and might be more easily affected by the views of employee groups. Another reason could be the type of workers covered by state and local plans. While roughly half of both state and local plans are either

teacher or public safety plans, local plans are much more likely to cover police and firefighters – two groups who particularly value traditional DB benefits, are heavily unionized, and are often active in local politics (see Figure 5)¹⁰

FIGURE 5. DISTRIBUTION OF STATE AND LOCAL PLANS, BY PLAN TYPE, 2025



Sources: Authors' calculations from the *Public Plans Database* and various actuarial valuation reports (2001-2025).

To further examine the potential reasons behind the adoption of alternative plan designs, the next section turns to a regression analysis.

Why Did Some Plans Adopt Alternative Designs?

The sharp rise in alternative plan designs after the financial crisis suggests a defensive motivation: to avoid the costs associated with large unfunded liabilities and to unload some of the investment and longevity risk associated with traditional DB plans. But the difference in uptake among states and localities also suggests political forces at play. To check whether this story is supported by the data, we used regression analysis to find the factors associated with the probability that a plan sponsor would switch to an alternative design. The analysis includes data on each

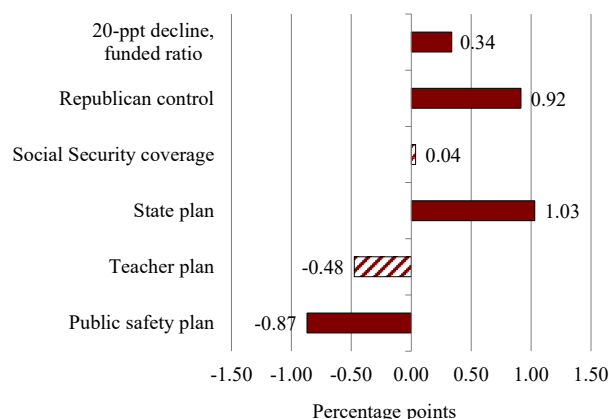
plan in the PPD from 2001-2024.¹¹ The dependent variable is set equal to zero if no action was taken in the year and 1 if the government introduced a mandatory (or default) alternative design. The independent variables include:

- *Change in the plan's funded ratio since 2001:* plans experiencing a steady deterioration in funding may be more likely to switch to an alternative design.
- *Republican control:* jurisdictions with Republican leadership may be more ideologically motivated to adopt alternative designs. For state plans, we identify Republican leadership when the governor is Republican and all legislative bodies are majority Republican. For local plans, we classify Republican leadership as when the mayor is Republican and the city council (or other major governing body) is majority Republican.
- *Social Security coverage:* around one-quarter of state and local workers are not covered by Social Security because their employer has agreed to provide comparable benefits.¹² These non-covered plans may be less likely to adopt alternative designs to ensure that their members receive the annuity that they otherwise would have from Social Security.
- *State plan:* in general, states have greater fiscal and managerial capacity to manage a DB plan. At the same time, state legislators may consider the preferences of a broader constituency than local governing bodies.¹³
- *Teacher plan:* teachers are more likely to spend their whole career in the public sector and so may be more likely to value traditional DB benefits.¹⁴ They are also better represented in state and local politics, suggesting that plans catering to these workers are more likely to remain traditional DBs.
- *Public safety plan:* similarly, police and firefighters are also more likely to value traditional DB benefits and are often strongly represented in local politics through their unions, suggesting that plans for these workers are more likely to remain traditional DBs.

The results are shown in Figure 5 (with more details in Appendix Table A2).¹⁵ The bars show the correlation between each factor and the probability of introducing an alternative plan design in any given year. As expected, a plan's deteriorating funded status is predictive of the switch. For ease of interpretation, the figure scales this result to reflect a 20-percentage-point drop in the funded ratio, as experienced by public plans on average between 2001 and 2009. It shows that this drop is associated with a 0.34-percentage-point increase each year in the probability of adopting some form of risk sharing.

Similarly, Republican control is associated with a 0.92-percentage-point increase in the annual probability of switching plan design, while being state-administered is associated with a 1.03-percentage-point increase. Conversely, as expected, plans covering police officers and/or firefighters are 0.87-percentage-points less likely to switch in any given year. While the coefficient on teacher plan is also negative, as expected, it is not statistically significant. And interestingly, we find no impact of Social Security coverage.¹⁶

FIGURE 6. FACTORS ASSOCIATED WITH THE LIKELIHOOD OF ADOPTING AN ALTERNATIVE DESIGN IN A GIVEN YEAR, 2001-2024



Note: Solid bars are statistically significant at the 10-percent level or greater.

Sources: Authors' calculations from the *Public Plans Database* and various actuarial valuation reports (2001-2024).

While a 1-percentage-point change in annual likelihood might seem small, it becomes meaningful when compounded over our 25-year analysis period. For example, although 42 percent of plans currently

have alternative designs, the average likelihood of adopting one in any given year was less than 2 percent. So, a 1-percentage-point increase in that baseline likelihood is actually substantial.

Conclusion

Alternative plan designs – where investment and longevity risk are shared between employees and employers – are now well established in the public sector. Indeed, plans that cover roughly half of state and local workers currently have some form of risk sharing. The shift away from traditional pensions has been driven by sharply declining funded ratios after the financial crisis, with state and local politics also playing a role. Nevertheless, most reforms to date have remained protective of workers, eschewing stand-alone 401(k)-style plans in favor of other designs that alleviate some employer burden while still providing core annuity benefits to retirees.

Endnotes

1 *Public Plans Database* (2001-2024). Fluctuations in investment returns take some time to fully affect a plan's funded ratio because most plans smooth gains and losses over a period (typically 5 years) to prevent sharp changes in required contributions.

2 Of course, the flip side is that workers also enjoy all the investment gains and have the option of leaving a bequest.

3 Many states and localities also offer employees in traditional DB plans the option of participating in supplemental DC plans – 457 or 403(b) plans. These optional accounts are not included in this *brief*. See Quinby and Sanzenbacher (2020) for more information.

4 For example, Connecticut Teachers and many of the state-administered Louisiana plans have used these types of accounts since the 1990s as the mechanism to provide for (or abstain from) the payment of COLAs.

5 Texas County and District and Texas Municipal were opened as cash balance plans. Indiana Teachers and PERF were opened as hybrid DB-DC plans. Various plans within the Washington Retirement Systems began enrolling employees in a hybrid DB-DC plan in 1996. Finally, Michigan SERS began enrolling new employees in a DC-only plan in 1996.

6 In 2003, Nebraska State and County plans transitioned from stand-alone DC plans to CB plans for new members. In 2004, Oregon PERS shifted from a traditional DB plan to a hybrid plan for new members that consists of a DB plan funded solely by employer contributions and a DC-type plan funded solely by employee contributions. In 2006, Alaska PERS and TRS shifted from a traditional DB plan to a DC plan for new members.

7 In total, 115 plans in the PPD have had an alternative plan design at some point, but 8 of them shifted back to a traditional DB by 2025.

8 Included in the variable employee approach are plans with fixed statutory employee and employer contributions defined explicitly as either a share of the total cost, or in direct relation to each other. While the

contribution rates for these plans do not float explicitly with plan finances, the plans have shown a history of moving both the employee and employer contributions in lock-step whenever changes to statutory rates are made.

9 U.S. Census Bureau (2001-2023).

10 Police and firefighters, who often spend most of their career in the public sector, benefit less from the enhanced portability of DC plans. Police and firefighters also tend to retire earlier than those in other occupations due to the physically intense nature of their jobs, so the annuity feature of DB plans is particularly appealing to them (Aubry et al. 2022).

11 Due to data limitations, the analysis period is from 2001 to 2024. The focus is on initial shifts away from the traditional DB from 2001 to 2024. As a result, plans are removed from the sample once their initial action is taken and plans with alternative designs prior to 2001 are excluded from the analysis completely.

12 Quinby, Aubry, and Munnell (2020).

13 In results not shown, we also included a variable for the change in the sponsor's own-source revenue since 2001. The coefficient was negative – suggesting that plans sponsored by governments with slower revenue growth were more likely to take action. However, the value was economically and statistically insignificant – so it was omitted for parsimony.

14 Aubry et al. (2022) and Quinby and Wettstein (2021).

15 Robust standard errors are clustered at the plan level.

16 This finding aligns with what has transpired for plans in Colorado, Ohio, Maine, and Alaska – all states with a very high proportion of non-covered workers. Although we surmised that non-covered plans would want to avoid alternative designs, Colorado PERA, Ohio Teachers, and Maine PERS all have implemented COLA risk-sharing and allow for variable employee contributions. In Alaska, despite the fact that nearly three-quarters of public employees are not covered by Social Security, all new hires are required to join a DC plan.

References

- Aubry, Jean-Pierre, Siyan Liu, Alicia H. Munnell, Laura D. Quinby, and Glenn R. Springstead. 2022. "State and Local Government Employees Without Social Security Coverage: What Percentage Will Earn Pension Benefits That Fall Short of Social Security Equivalence?" *Social Security Bulletin* 82(3): 1-20.
- Brainard, Keith and Alex Brown. 2018. "In-depth: Risk Sharing Retirement Plans." Lexington, KY: National Association of State Retirement Administrators.
- National Association of State Retirement Administrators. 2025. State Hybrid Retirement Plans: A Comprehensive Overview of State Hybrid Plans. Issue Brief. Lexington, KY.
- Pew Charitable Trusts. 2017. Cost-Sharing Features of State Defined Benefit Pension Plans. Report. Washington, DC.
- Public Plans Database*. 2001-2024. Center for Retirement Research at Boston College, Center for State and Local Government Excellence, and National Association of State Retirement Administrators.
- Quinby, Laura D., Jean-Pierre Aubry, and Alicia H. Munnell. 2020. "Pensions for State and Local Government Workers Not Covered by Social Security: Do Benefits Meet Federal Standards?" *Social Security Bulletin* 80(3): 1-29.
- Quinby, Laura D. and Geoffrey T. Sanzenbacher. 2020. "Do State and Local Government Employees Save Outside of Their Defined Benefit Plans When They Need To?" Working Paper 2020-17. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Quinby, Laura D. and Gal Wettstein. 2021. "Do Deferred Benefit Cuts for Current Employees Increase Separation?" *Labour Economics* 73(102081): 1-14.
- U.S. Census Bureau. 2001-2023. State and Local Government Finances. Washington, DC. <https://www.census.gov/programs-surveys/gov-finances/data/datasets.html>.

APPENDIX

TABLE A1. STATE AND LOCAL RETIREMENT SYSTEMS WITH ALTERNATE PLAN DESIGNS AS THE DEFAULT

State	Plan name	Year alternate plan design initiated	Alternate plan structure	COLA-based risk sharing	Variable employee contributions
AK	Alaska PERS	2006	Stand-alone DC		
AK	Alaska Teachers	2006	Stand-alone DC		
AZ	Arizona SRS	pre-2001		Yes	Yes
AZ	Arizona State Corrections Officers	2018		Yes	
AZ	Arizona Public Safety	2016		Yes	Yes
AZ	Phoenix ERS	2016		Yes	Yes
AZ	Tucson Supplemental RS	2006			Yes
CA	California PERF	2013			Yes
CA	University of California	2013	DB/DC hybrid		Yes
CA	California Teachers	pre-2001			Yes
CA	Alameda County ERS	2013			Yes
CA	Kern County ERS	2013			Yes
CA	LA County ERS	2013			Yes
CA	Orange County ERS	2013			Yes
CA	Sacramento County ERS	2013			Yes
CA	San Bernadino County ERA	2013			Yes
CO	Colorado School	2018		Yes	Yes
CO	Colorado State	2018		Yes	Yes
CO	Colorado Municipal	2018		Yes	Yes
CO	Denver Schools	2018		Yes	Yes
CT	Connecticut Teachers	pre-2001		Yes	
CT	Connecticut SERS	2017	DB/DC hybrid		
DE	New Castle County Pension	2011	DB/DC hybrid		
FL	Jacksonville Police and Fire	2017	Stand-alone DC		
FL	Jacksonville ERS	2017	Stand-alone DC		
FL	Miami Fire and Police	pre-2001		Yes	
GA	Georgia ERS	2009	DB/DC hybrid		
GA	Atlanta Fire*	2011	DB/DC hybrid		
GA	Atlanta Police*	2011	DB/DC hybrid		
GA	Atlanta ERS*	2011	DB/DC hybrid		

TABLE A1. (CONTINUED)

State	Plan name	Year alternate plan design initiated	Alternate plan structure	COLA-based risk sharing	Variable employee contributions
IA	Iowa PERS	pre-2001			Yes
ID	Idaho PERS	pre-2001		Yes	Yes
IL	Illinois Teachers	2017	DB/DC hybrid		
IN	Indiana PERF	pre-2001	DB/DC hybrid		
IN	Indiana Teachers	pre-2001	DB/DC hybrid		
KS	Kansas PERS	2013	Cash balance		
KY	Kentucky ERS	2014	Cash balance	Yes	
KY	Kentucky County	2014	Cash balance	Yes	
LA	Louisiana Schools	pre-2001		Yes	
LA	Louisiana Parochial Employees	pre-2001		Yes	
LA	Louisiana Teachers	pre-2001		Yes	
LA	Louisiana Firefighters	2011		Yes	Yes
LA	Louisiana Municipal Police	2011		Yes	Yes
LA	Louisiana SERS	pre-2001		Yes	
LA	Louisiana Municipal Employees	pre-2001		Yes	
LA	Baton Rouge City-Parish ERS	pre-2001		Yes	
LA	New Orleans Firefighters	pre-2001		Yes	
MD	Maryland PERS	2011		Yes	
MD	Maryland Teachers	2011		Yes	
MD	Montgomery County ERS	2010	Cash balance		
MD	Baltimore City Employees	2014	DB/DC hybrid		
ME	Maine Local	2020		Yes	Yes
MI	Michigan Public Schools	2010	DB/DC hybrid		
MI	Michigan SERS	pre-2001	Stand-alone DC		
MI	Detroit Police and Fire	2014	DB/DC hybrid	Yes	
MI	Detroit General RS	2014	DB/DC hybrid	Yes	
MN	Minnesota GERF**	2010		Yes	
MN	Minnesota Teachers***	2010		Yes	
MN	Minnesota Police and Fire***	2010		Yes	
MN	Minnesota State Employees***	2010		Yes	
MO	Missouri Local	pre-2001		Yes	

TABLE A1. (CONTINUED)

State	Plan name	Year alternate plan design initiated	Alternate plan structure	COLA-based risk sharing	Variable employee contributions
MO	Kansas City Fire	2014		Yes	
MO	Kansas City ERS	2014		Yes	
MO	Kansas City Schools	pre-2001		Yes	
MT	Montana PERS	2013		Yes	Yes
MT	Montana Teachers	2013		Yes	Yes
ND	North Dakota PERS	2025	Stand-alone DC		
ND	North Dakota Teachers	pre-2001			Yes
NE	Nebraska Schools	pre-2001			Yes
NE	Nebraska State	2003	Cash balance		
NE	Nebraska County	2003	Cash balance		
NE	Omaha School	2018			Yes
NE	Omaha ERS	2015	Cash balance		
NJ	New Jersey PERS	2010		Yes	
NJ	New Jersey Teachers	2010		Yes	
NJ	New Jersey Police & Fire	2010		Yes	
NM	New Mexico PERA	2010		Yes	
NM	New Mexico Educational	2010		Yes	
OH	Ohio Teachers	2012		Yes	
OK	Oklahoma PERS	2015	Stand-alone DC		
OR	Oregon PERS	2004	DB/DC hybrid		
PA	Pennsylvania School Employees	2017	DB/DC hybrid		Yes
PA	Pennsylvania State ERS	2017	DB/DC hybrid		Yes
PA	Philadelphia Municipal	2016	DB/DC hybrid		
RI	Rhode Island State and Teacher	2011	DB/DC hybrid	Yes	
RI	Rhode Island Municipal	2011	DB/DC hybrid	Yes	
SC	South Carolina RS****	2013			Yes
SC	South Carolina Police****	2013			Yes
SD	South Dakota RS	2010		Yes	
TN	TN State and Teachers	2013	DB/DC hybrid		
TN	TN Political Subdivisions	2013	DB/DC hybrid		
TX	Texas LECOS	2022	Cash balance		

TABLE A1. (CONTINUED)

State	Plan name	Year alternate plan design initiated	Alternate plan structure	COLA-based risk sharing	Variable employee contributions
TX	Texas ERS	2022	Cash balance		
TX	Texas Municipal	pre-2001	Cash balance		
TX	Texas County & District	pre-2001	Cash balance		
TX	Austin Fire	2025		Yes	Yes
TX	Austin Police	2022			Yes
TX	Dallas Police and Fire	pre-2001		Yes	
TX	Houston Firefighters	2018		Yes	
TX	Houston Police	2018		Yes	
TX	Houston Municipal	2018	DB/CB hybrid	Yes	
UT	Utah Noncontributory	2011	DB/DC hybrid		
UT	Utah Public Safety and Fire	2011	DB/DC hybrid		
VA	Virginia RS	2012	DB/DC hybrid		
VT	Burlington ERS	2018		Yes	
WA	Washington School Employees Plan 2/3	pre-2001	DB/DC hybrid		
WA	Washington PERS Plan 2/3	pre-2001	DB/DC hybrid		
WA	Washington Teachers Plan 2/3	pre-2001	DB/DC hybrid		
WA	Washington LEOFF Plan 2	pre-2001	DB/DC hybrid		
WI	Wisconsin RS	pre-2001		Yes	Yes
WI	Milwaukee County ERS	2018			Yes
WV	WV Municipal Police and Fire	2010			Yes
WY	Wyoming Public Employees	2012		Yes	
WY	Wyoming Firemen's Plan B	2012		Yes	
WY	Wyoming Law Enforcement	2012		Yes	

*Effective January 1, 2025, the City of Atlanta plans for General Employees, Police Officers, and Firefighters changed the combination DB/DC for employees hired on or after September 1, 2011 to be a full DB plan.

**2010 legislation introduced a COLA tied to plan funding levels. 2018 legislation replaced the COLA tied to plan funding levels with an inflation-based COLA. 2025 legislation introduced caps to the inflation-based COLA tied to funded levels.

***2010 legislation introduced a COLA tied to plan funding levels. 2018 legislation replaced the COLA tied to plan funding levels with an inflation-based COLA.

****The variable employee contribution rate was put into place by 2012 benefit reform legislation and removed by 2017 pension funding reform legislation. Pre-2012 and post-2017, the member rate was set at a fixed rate by statute, with any increases needed to maintain the system's funded status affecting only the employer rate.

Sources: Authors' calculations based on review of retirement system financial reports and actuarial valuations.

TABLE A2. FACTORS ASSOCIATED WITH THE LIKELIHOOD OF ADOPTING AN ALTERNATIVE DESIGN IN A GIVEN YEAR, 2001-2024

Variables	(1) Alternative plan design
Change in funded ratio since 2001	-0.0169** (0.0067)
Republican control	0.00915* (0.0052)
Social Security coverage	0.0004 (0.0053)
State plan	0.0103* (0.0045)
Teacher plan	-0.0048 (0.0067)
Public safety plan	-0.00870* (0.0047)
Constant	0.0157*** (0.0056)
Observations	4,038
R-squared	0.004

Notes: Standard errors clustered at the plan level are in parentheses. * p<0.10 ** p<0.05 *** p<0.01.

Sources: Authors' estimates from the *Public Plans Database* and various actuarial valuation reports (2001-2024).

C E N T E R *for*
RETIREMENT
RESEARCH
at BOSTON COLLEGE

About the Center

The mission of the Center for Retirement Research at Boston College is to produce first-class research and educational tools and forge a strong link between the academic community and decision-makers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center conducts a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception in 1998, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

Affiliated Institutions

Mathematica – Center for Studying Disability Policy
Syracuse University
University of Massachusetts Boston
Urban Institute

Contact Information

Center for Retirement Research
Boston College
Haley House
140 Commonwealth Avenue
Chestnut Hill, MA 02467-3808
Phone: (617) 552-1762
Fax: (617) 552-0191
E-mail: crr@bc.edu
Website: <https://crr.bc.edu/>

The Center for Retirement Research thanks Allianz Life Insurance Company of North America, Bank of America, Capitalize®, Cheiron, First Eagle Investments, Great Gray Trust Company, Guideline, Manulife® | John Hancock®, The Pew Charitable Trusts, and TIAA Institute for support of this project.

© 2025, by Trustees of Boston College, Center for Retirement Research. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that the authors are identified and full credit, including copyright notice, is given to Trustees of Boston College, Center for Retirement Research.

The research reported herein was supported by the Center's Partnership Program. The findings and conclusions expressed are solely those of the authors and do not represent the views or policy of the partners, Boston College, or the Center for Retirement Research.