

NASRA Issue Brief: State Hybrid Retirement Plans

June 2021



Hybrid plans are a form of risk-sharing plan design that allocate risk between employers and employees, as shown in Figure 1. In the context of public retirement plans, risk refers to the possibility of an event resulting in a financial loss compared to what is expected. Public retirement plan risk manifests itself primarily in three forms: investment risk, longevity risk, and inflation risk. The degree to which risk is shared between employees and employers varies across differing plan designs. The term *hybrid* generally refers to plans that combine elements of both defined benefit and defined contribution plans to generate participants' benefit upon retirement. The most recognized hybrid plan designs are cash balance plans and defined benefit-defined contribution (DB-DC) combination plans, and these plan designs are the focus of this brief.

Figure 1: Continuum of Public Retirement Plan Risk



Hybrid plans have been in place in public sector retirement systems for decades, and they have received increased attention in recent years as more states established hybrid plans on either an optional or mandatory basis. The growing attention to hybrids has occurred amid the many adjustments states have made to public pension benefits and financing arrangements. Modifying retirement plan designs can have potential unintended outcomes, as states find that closing their traditional pension

plan to future (and, in some cases, existing) employees may increase—rather than reduce—costs,¹ and that providing only a 401(k)-type plan does not meet important retirement security, human resource, or fiscal objectives. While most states have chosen to retain their defined benefit (DB) plan by modifying required employer and employee contributions, restructuring benefits, or both,² some states have looked to hybrid plans as retirement benefit policy solutions.

Despite variability in the design of cash balance and DB-DC combination plans, well-designed plans generally contain the core features of retirement plan design known to best meet the human resources and retirement policy objectives of state and local government: mandatory participation, shared financing between employers and employees, pooled assets invested by professionals, targeted income replacement with survivor and disability protection, and a benefit that cannot be outlived.³ This brief discusses the degree to which these core design features have been retained in public sector hybrid plans.

Shared Risk Plans

Many defined benefit plans in the public sector also employ self-adjusting features, which, by definition, place more of the risk of adverse actuarial experience on plan participants than traditional DB plans. Such features incorporated into traditional public sector DB plans include variable contribution rates, benefits that are linked to the plan's investment performance or actuarial condition, or both. The use of these features embedded in both hybrid and traditional pension plans are discussed in NASRA's *In-depth: Risk Sharing in Public Retirement Plans*.

Cash Balance Plans

Cash balance plans merge elements of traditional pensions and individual accounts. In a typical cash balance plan arrangement, employees own a “notional” account into which their contributions and employer contributions are deposited. Accounts are pooled for investment purposes and accrue a rate of interest specified by the plan (typically between four and seven percent); cash balance plan accruals may not be below zero. Accruals may be supplemented by investment earnings, depending on the terms of the plan. (Table 1 in this brief’s appendix describes the cash balance plans sponsored by states). While employees are working, their future cash balance benefit is somewhat uncertain, as it depends partly on the fund’s future investment performance. Once a cash balance plan participant retires, however, depending on the plan design, any portion of their notional cash balance account is available to be converted into an annuity, which is a fixed monthly benefit that is guaranteed for life. The value of this annuity is determined by the size of the cash balance account and the discount rate used by the plan; the higher the discount rate, the larger will be the value of the annuity. Retirees for some cash balance plans sponsored by states are eligible for benefit increases based on the plan’s investment performance.

DB-DC Combination Plans

DB-DC combination plans combine a traditional DB plan, usually with a lower level of benefit accrual, with an individual defined contribution retirement savings account, referred to in this brief as a “DB+DC plan.” These plans are sometimes referred to as “side-by-side” plans. Detailed descriptions of this type of plan designs in use among states are presented in Table 2 of this brief’s appendix). Among states, some administer the DC plan component themselves, using the resources of the retirement system, and other states rely on one or more third-party administrators.

Core Plan Design Features

Mandatory Participation

In the private sector, just over one-half of the nation’s workforce participates in an employer-sponsored retirement plan⁴, a factor that contributes to a lack of retirement security. By contrast, for nearly all employees of state and local government, retirement plan participation is mandatory. Figure 2 shows the approximate level of participation in hybrid plans among public employees in states that administer statewide mandatory or optional cash balance and DB+DC plans. In some states employees are required to participate in a hybrid plan; in others, participation is elective. Table 1 and Table 2 identify employee groups affected by hybrid plans and the nature of their participation. As with other statewide retirement plans for employees of state and local government, participation remains mandatory in most hybrid plans. (Two partial exceptions are the Georgia Employees’ Retirement System and the Tennessee Consolidated Retirement System, both of which administer a DB+DC plan. Participation in the DB component in each of these plans is mandatory, although participants may elect to opt-out of making employee contributions to the DC component. In the case of the Tennessee plan, the employer makes its contribution to the DC plan even for employees who elect to not make contributions. The vast majority of participants in both plans have remained in the DC plan).

Shared Financing among Employers and Employees

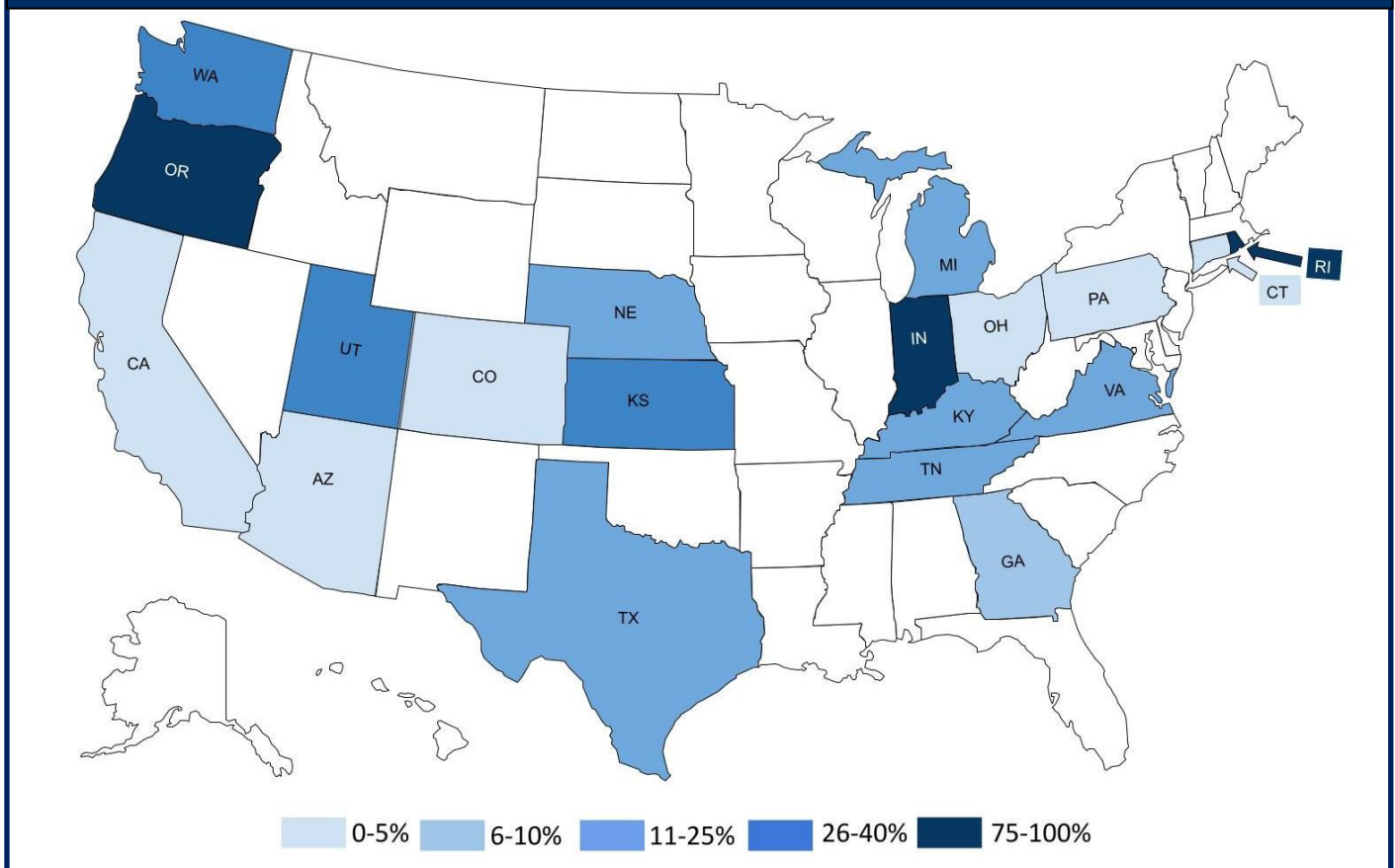
Nearly all traditional pensions in the public sector require employees to contribute toward the cost of their retirement benefit,⁵ and in the wake of the 2008-09 market decline and the Great Recession, many states increased employees’ required contributions.⁶ Hybrid plans likewise typically employ a shared financing approach to retirement benefits.

As shown in Table 1, state-sponsored cash balance plans, which feature annual accruals on employee accounts (cash balances), are funded with mandatory contributions from both employees and employers. Table 3 presents detailed plan design information on DB+DC plans, which vary regarding how much employees and employers are required to contribute to which plan component. As examples, for the hybrid plans in Indiana, Ohio, Oregon, and Washington, the employer finances the entirety of the DB component, and the DC component is funded by mandatory employee contributions (ranging from 3 percent to 15 percent of salary). By contrast, the Michigan Public Schools hybrid plan requires employees to contribute to the DB component, either on a graduated scale based on pay, or at a rate equal to 50 percent of the total plan contribution rate, depending on date of hire.

Employees in the Michigan plan are also required to make a mandatory two-percent-of-salary contribution to the DC component, which employers match at a 50 percent rate.

The Georgia Employees' Retirement System hybrid requires employees to contribute 1.25 percent of salary to the DB component, with the remainder of the DB plan cost financed by the employer. Employees are automatically enrolled in the DC component at 1 percent or 5 percent of salary, depending on date of hire, and may opt out or contribute more. Employers match the first 1 percent of salary and one-half of the next 4 percent of salary voluntarily contributed by the employee to the DC plan.

Figure 2: Percentage of public employees who participate in a hybrid plan in states that administer CB or DB+DC plans as a mandatory or optional primary retirement benefit for groups of general, public safety or K-12 educational employees



The Utah Retirement Systems requires employers to contribute 10 percent of salary (14 percent for public safety) toward the DB plan's cost.⁷ If the cost of the DB plan is less than the employer's contribution, the difference goes into employees' individual 401(k) savings account. If the cost of the DB plan exceeds the employer's contribution rate, employees must contribute the difference to the DB plan. In either instance, employees may elect to make additional contributions to the 401(k) plan. (Employers in Utah must also contribute to the Utah Retirement Systems to amortize the unfunded pension liability accumulated under the previous benefits tier.)

Pooled Assets

Retirement assets that are pooled and invested by professionals offer important advantages over individual, self-directed accounts. Combined portfolios have a longer investment horizon, which allows them to be more diversified and to sustain market volatility. In addition, the professional asset management and lower administrative and investment costs in pooled arrangements result in higher long-term investment returns.

As with traditional pension plan assets, cash balance plan assets also are pooled and invested by professionals; they also guarantee annual returns to plan participants. Likewise, DB+DC plans pool assets in the DB component. The manner in

which DC plan assets in DB+DC plans are managed varies. Most plans provide a range of risk-based investment options: some are retail mutual funds and other investment options are proprietary, maintained by the retirement system and available only to plan participants. One example of this is in Washington state, which provides an option for employees to invest their DC plan assets in a fund that emulates the DB plan fund.

Required Lifetime Benefit Payouts

A core objective of a retirement plan should be to provide an assured source of lifetime income. A major threat to lifetime income is longevity risk, which is the danger of exhausting one's assets before death. Ensuring lifetime income can be accomplished in part by pooling longevity risk, i.e., distributing that risk among many plan participants. The result is that all participants are assured they will not outlive their assets. The alternative is an arrangement, embodied in typical defined contribution plans, in which longevity risk is borne by individuals. In such cases, a reasonable chance exists, particularly for those who live a long life, that they will outlive their assets.

Most public sector plans require some or all of the pension benefit to be paid in the form of an annuity – installments over the remainder of one's life – rather than allowing benefits to be distributed as a lump sum. Annuitizing not only ensures participants will not exhaust retirement assets, but it also reduces costs by allowing retirement assets to be invested as part of the trust over a longer period, and by funding the benefit during participants' working lives for average longevity rather than the potential maximum longevity.

As examples, the two statewide cash balance plans in Texas require most of the value of participant accounts to be paid in the form of a lifetime benefit. Texas county and district employees must elect an annuity to receive employer contributions and may elect to receive their own contributions, plus interest, as an annuity, a partial lump sum, or both, upon retirement. Similarly, participants in the Texas Municipal Retirement System must take their benefit in the form of an annuity, although they may elect to take up to 36 months of their benefit as a lump sum, with an actuarial reduction made to their lifetime benefit. The Nebraska cash balance plan gives employees the option of receiving a lifetime benefit payout on any portion of their account balance, and to receive the remaining portion of their retirement benefit as a lump sum.

DB+DC plans normally require the DB portion of the plan to be paid in the form of a lifetime annuity. The DC portion, however, usually may be paid out in various forms including a lifetime benefit, a lump sum or partial lump sum of the account balance, or installments over a certain term (e.g., 5, 10, 15 or 20 years).

Targeted Income Replacement with Social Security, Disability & Survivor Benefits

Pension plans typically are designed to replace a targeted portion of income in retirement, a feature not inherent to retirement plans with individual accounts, where the benefit is based on the account's accumulated balance at retirement, regardless of the employee's income. Additionally, approximately 25 percent of state and local government employees do not participate in Social Security.⁸ While most public sector retirement plan designs seek to replace a targeted percentage of income, they often also are designed to reflect the presence or absence of income from Social Security.

Benefits that provide income insurance in the event of death or disability are an important feature among public sector employers, particularly for jobs that involve hazardous conditions. Most public sector retirement plans—whether traditional or hybrid—include survivor and disability benefits, which is a cost-effective method for sponsoring these benefits.

Conclusion

Nearly every state has made changes in recent years to their retirement plans.⁹ While DB plans remain the prevailing model, the use of cash balance and DB-DC plans is increasing among states and local governments. The diversity in public sector plan design reflects the fact that a one-size-fits-all solution often does not meet key retirement plan objectives, including the ability of public employers to manage their workforce and to provide an assured source of adequate retirement income for workers. Like defined benefit plans, cash balance and DB+DC plans in the public sector

vary from one jurisdiction to the next, and no single design will address the cost and risk factors of every state or local government.

A vital factor in evaluating a retirement plan is the extent to which it contains the core elements known to best meet human resource and retirement policy objectives of state and local governments: mandatory participation, shared financing, pooled investments managed by professionals, targeted income replacement with disability and survivor protections, and lifetime benefit payouts. These features are a proven means of delivering income security in retirement, retaining qualified workers who perform essential public services, and providing an important source of economic stability to every city, town, and state across the country.¹⁰

Most public retirement systems seek to provide a benefit that meets these objectives while balancing risk between employees and employer. Because many pension plans sponsored by state and local governments contain self-adjusting plan design features, switching to a new hybrid plan design may not be necessary to take advantage of risk-sharing plan design elements like the hybrids described in this brief. The information in the tables below illustrates the ways in which states are using various cash balance and DB+DC designs to achieve these objectives.

See Also

National Association of State Retirement Administrators, Resolution 2016-01: *Guiding Principles for Retirement Security and Plan Sustainability*, <https://www.nasra.org/resolutions#Resolution%202016-01%20GUIDING%20PRINCIPLES>

National Association of State Retirement Administrators, In-depth: Risk Sharing in Public Retirement Plans, <http://www.nasra.org/sharedriskpaper>

National Institute on Retirement Security, *The Hybrid Handbook: Not All Hybrids Are Created Equal*, 2021, <https://www.nirsonline.org/reports/hybridhandbook/>

National Institute on Retirement Security, *Still a Better Bang for the Buck: The Economic Efficiencies of Pensions*, 2014, https://www.nirsonline.org/wp-content/uploads/2017/07/bangforbuck_2014.pdf

National Institute on Retirement Security, *Decisions, Decisions: Retirement Plan Choices for Public Employees and Employers*, 2017, <https://www.nirsonline.org/reports/decisions-decisions-an-update-on-retirement-plan-choices-for-public-employees-and-employers/>

National Institute on Retirement Security, *Look Before You Leap: The Unintended Consequences of Pension Freezes*, 2008, <https://www.nirsonline.org/reports/look-before-you-leap-the-unintended-consequences-of-pension-freezes/>

U.S. Department of Labor, Bureau of Labor Statistics, *National Compensation Survey: Employee Benefits in States and Local Government in the U.S.*, March 2020, <https://www.bls.gov/ncs/ebs/#news>

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¹ NASRA, “Costs of Switching from a DB to a DC Plan,” <http://www.nasra.org/plandesignchange>

² NASRA, “Significant Reforms to State Retirement Systems,” <http://www.nasra.org/reforms>

³ NASRA Resolution 2016-01 – Guiding Principles for Public Retirement System Plan Design and Sustainability, <https://www.nasra.org/resolutions#Resolution%202016-01%20GUIDING%20PRINCIPLES>

⁴ U.S. Department of Labor, Bureau of Labor Statistics, *Retirement Benefits: Access, Participation and Take-Up Rates*, March 2020, <https://www.bls.gov/news.release/ebs2.t01.htm>

⁵ NASRA Issue Brief: Employee Contributions to Public Pension Plans, <http://www.nasra.org/contributionsbrief>

⁶ NASRA, “Significant Reforms to State Retirement Systems,” supra.

⁷ Employers are also required to contribute an actuarially determined rate each year to amortize the DB plan unfunded liability

⁸ U.S. Government Accountability Office, “Social Security: Issues Regarding the Coverage of Public Employees,” 2007, <http://finance.senate.gov/imo/media/doc/1110607testmn1.pdf>

⁹ NASRA, “Significant Reforms to State Retirement Systems,” supra

¹⁰ National Institute on Retirement Security, *Pensionomics: Measuring the Economic Impact of Defined Benefit Pension Expenditures*, 2021,

Table 1: Overview of Cash Balance Hybrid Plans

	Year plan approved	Employee groups affected	Contributions	Rate of return applied to cash balances	Benefit payment options	Info online
CA State Teachers	1995 for the Cash Balance Benefit Program, 2000 for the Defined Benefit Supplement	The Cash Balance Benefit Program is optional for part-time and adjunct educational workers; the Defined Benefit Supplement is a cash balance plan provided to full-time educators	EEs* in the Cash Balance Benefit Program typically pay approximately 4% of earnings, depending on local bargaining agreements; Defined Benefit Supplement EEs contributed 2% from 2001-2010. Beginning in 2011, ER and EE contributions to the Defined Benefit Supplement are 8% each on compensation in excess of one-year of service credit. ER must contribute at least 4% for Cash Balance Benefit participants and the combined EE/ER rate must be at least 8%	Guaranteed minimum interest rate is based on 30-year U.S. Treasury bonds for the period from March to February immediately prior to the plan year (1.53% for 21-22). The CalSTRS board considers paying "Additional Earnings Credits," above the minimum guaranteed rate when the plan's funding level is at least 111 percent.	Lump-sum and/or monthly lifetime annuity or period certain monthly annuity	https://www.calstrs.com/sites/main/files/file-attachments/cashbalancebooklet.pdf
KS PERS	2012	Mandatory for EEs of state and local government, including education employees, hired after 1/1/15	EEs contribute 6% ER pay credits are between 3-6% depending on how long the member has been employed. ER contributions are actuarially determined (subject to statutory caps)	Members are guaranteed an annual rate of return of 4% on their accounts. Accounts may also receive a dividend credit equal to 75% of the investment returns above 6%, calculated on a 5-year rolling average	Retiring participants may annuitize their cash balance and may elect to take up to 30 percent as a lump sum. Participants may also elect to use a portion of their balance to fund an auto-COLA	https://www.kpers.org/pdf/benefitsataglancekpers3.pdf
KY RS	2013	Mandatory for new state and local EEs, judges, and legislators who become members on or after January 1, 2014	EEs contribute 5%; public safety EEs contribute 8% State contributes 4%; 7.5% for public safety EEs	Employee accounts are guaranteed 4% annual return; accounts also receive 75% of all returns above 4%	Member may choose annuity payments, a payment option calculated as the actuarial equivalent of the life annuity, or a refund of the accumulated account balance	https://kyret.ky.gov/Publications/Books/Tier%203%20Guide.pdf

* EE = employee; ER = employer

	Year plan approved	Employee groups affected	Contributions	Rate of return applied to cash balances	Benefit payment options	Info online
KY TRS	2021	Mandatory for teachers hired after 12/31/21 as part of a hybrid plan design featuring a “foundational” DB benefit and a “supplemental” cash balance benefit	EEs and ERs contribute 2.0% to the supplemental cash balance plan	Based on the 5-year rolling average for the 30-year US Treasury Bond	Lifetime annuity, actuarial equivalent based on any board authorized distribution option, period certain distributions, full or partial lump sum	https://apps.legislature.ky.gov/recorddocuments/note/21RS/hb258/A.A.pdf
NE County and State	2002	Mandatory for county and state EEs hired after 2002 and those hired previously who elected to switch from the DC plan	State EEs contribute 4.8%, county EEs contribute 4.5% State contributes 156% of EE rate; counties contribute 150% of EE rate	Based on the federal mid-term rate plus 1.5%. When the mid-term rate falls below 3.5%, EEs receive a 5% minimum credit rate. When favorable returns combine with an actuarial surplus, the governing board may approve a dividend payment to EE accounts	Retiring participants may annuitize any portion of their cash balance and take a lump sum or rollover of any remainder. Members electing an annuity may also elect to take a reduced benefit with an automatic annual COLA	http://npers.ne.gov/SelfService/public/howto/handbooks/handbookState.pdf
TX County and District	1967	Mandatory for EEs of 800+ counties and special districts that have elected to participate in the TCDRS	EEs pay 4%, 5%, 6%, or 7% depending on ER election. ERs pay normal cost plus amount to amortize the unfunded liability within a 20-year closed period	Member accounts receive an annual interest credit of 7% as specified by statute.	Lifetime annuity based on EE final savings account balance, less any EE-elected partial lump-sum payment, plus ER matching	https://www.tcdrs.org/Members/YourPlanAndBenefits/Pages/YourPlanBenefits.aspx
TX ERS	2021	Mandatory for state employees hired after 8/31/22	EEs contribute 6.0% ERs contribute 9.0%	4% minimum, plus gain sharing equal to one-half of the average return on the system’s investments over the preceding five-year period, between 4-10% (for a maximum gain sharing adjustment of 3.0%).	Lifetime annuity based on final account balance	https://capitol.texas.gov/tlodocs/87R/analysis/pdf/SB00321H.pdf#navpanes=0
TX Municipal	1947	Mandatory for EEs of nearly 900 cities that have elected to participate in the TMRS	EEs pay 5%, 6%, or 7%, depending on ER* election ERs pay normal cost plus amount to amortize UAAL within a 25-year closed amortization period	5% (set by statute): The TMRS Board determines the allocation of any excess amounts; the board is authorized to distribute such amounts a) to reduce cities’ unfunded liabilities; b) to EEs’ individual accounts, and/or c) to a reserve to help offset future investment losses	Lifetime annuity based on EE final account balance, including ER matching and other credits, less any partial lump sum, depending on EE election	https://www.tmr.com/down/pubs/TMRS_Member_Benefits_Guide.pdf

Table 2: Basic DB+DC Hybrid Plan Facts

	Year plan approved	Info online	Employee groups affected
Arizona Public Safety Personnel RS	2016	https://www.psprs.com/uploads/sites/1/SB1428_Matrix_of_Changes_Rev_3-9-2017.pdf	Public safety officers who do not participate in Social Security, and who were hired between 1/1/12 and 6/30/17, and did not opt-out by 6/30/17, or who were hired on or after 6/30/17, who elect or default into coverage.
Colorado Fire & Police Pension Association	2004	http://www.fppaco.org/benefits-SWHP.html	Firefighters and police officers employed by participating departments that elect coverage under this plan.
Connecticut SERS	2017	https://www.osc.ct.gov/empret/tier4spddefben/SERSTierIVDBPlanSummPlanDesc112319.pdf	Mandatory for newly hired state employees after 7/30/17.
Georgia ERS	2008	https://www.ers.ga.gov/sites/main/files/file-attachments/benefitsataglance.pdf	Mandatory for new hires since 2009; optional for those hired before 2009 (EE* may opt-out of DC component within 90 days).
Indiana Public Retirement System	1955	https://www.in.gov/inprs/files/PERFHybridPlanMemberHandbook.pdf	Mandatory except for EE hired after 2011 who may elect a DC plan only.
Michigan Public School Employees' Retirement System	2010	http://www.mipensionplus.org/publicschools/yourplan.html	Mandatory for all new hires between 6/30/10 and 9/3/12. Beginning 9/4/12, new employees can choose between the default Pension Plus plan and a Defined Contribution only plan. Beginning 2/1/18, the default plan for new employees is the Defined Contribution only plan; however, they may elect to participate in the Pension Plus 2 plan.
Ohio Public Employees' Retirement System	2002	https://www.opers.org/members/combined/index.shtml	Optional for non-vested members as of 12/31/02 and new hires after 12/31/02 (excluding re-employed retirees and full-time law enforcement and public safety positions). As of 12/31/21, the Combined Plan will no longer be a plan selection option for new hires or option to change for current members. For members in the Combined Plan as of 12/31/21, the Plan will continue to be available.
State Teachers' Retirement System of Ohio	2001	https://www.strsoh.org/pdfs/brochures/20-101.pdf	Optional for new hires and non-vested workers since 2001.
Oregon PERS	2003	http://www.oregon.gov/pers/MEM/Pages/OPSRP-Overview.aspx	Mandatory for all EEs (existing and new) since 2004.
Pennsylvania State Employees' & Public School Employees' RS	2017	http://sers.pa.gov/HybridPlan.html https://www.pasers.pa.gov/Active-Members/NewToPSERS/Documents/Class%20Election%20Insert.pdf	Mandatory for most state employees hired after 12/31/18, and public school employees hired after 6/30/19, who elect or default into coverage. Optional for current state employees and public school employees who elect to join during a 90-day period beginning 1/1/19 and 7/1/19, respectively.
Rhode Island ERS	2011	http://www.ersri.org/pension-settlement-information-2015/#gsc.tab=0	Mandatory for existing members of ERS with fewer than 20 years of service as of 6/30/12, as well as new hires (except judges and some public safety members).
Tennessee Consolidated RS	2013	https://treasury.tn.gov/Portals/0/Documents/Retirement/Forms%20and%20Guides/Active%20Members/HybridMemberGuide.pdf	Mandatory for new state and higher education employees and teachers hired as of 7/1/14; optional for local government entities.
Utah Retirement Systems	2010	https://www.urs.org/mango/pdf/urs/RetirementSystems/tier2Compare.pdf	Optional for new hires as of 7/1/11; all EEs may elect DC-only plan.
Virginia Retirement System	2012	http://www.varetirement.org/hybridemployer/publications.html#Hybrid	Mandatory for most state and local employees, educational employees, and judges, hired as of 1/1/14, excluding state police and other hazardous duty employees.
Washington State DRS	1996	https://www.drs.wa.gov/plan3/basics/	Optional choice between hybrid and DB for most employee groups.

Table 3: DB and DC Component Features

	DB benefit formula (having met age/service requirements)	DB plan contributions	Employer DC plan contributions	Employee DC plan contributions	DC plan investment options	Default DC plan investment options	DC plan withdrawal options
Arizona Public Safety Personnel	Graded multiplier ranging from 1.5% (with 15 years) to 2.5% (with 25 years) depending on years of service x years of service x final average salary = annual benefit	EE and ER contribute 50% of the total plan contribution rate	3.0%	3.0%	Menu of options including target date funds, index funds, mutual funds, and bond funds	Target date fund based on a retirement age of 65	Rollover, lump sum, annuity
Colorado Fire & Police Pension Plan	1.5% x years of service x highest average salary = annual benefit	The board of directors of FPPA annually determines the DB/DC split of the contributions to the plan.	Any excess amount not needed to fund the DB plan is contributed to the Money Purchase Plan.	Any excess not needed to fund the DB plan is contributed to the Money Purchase plan.	19 options, including a broad range of fixed income and equity funds, 11 target date funds, and a brokerage window	Age-appropriate Target Date Fund	Lump sum, monthly periodic payments, monthly lifetime benefit, annuity from outside provider
Connecticut SERS	1.3% x years of service x final average salary = annual benefit	EE contributes 5.0%, plus ½ of the amount of any increase in the ER normal cost (not accounting for smoothing), not to exceed 2.0%. ER contributes an actuarially determined amount plus ½ of the amount of any increase in the ER normal cost	1.0%	1.0%	21 options, including 14 stock index funds ranging from conservative to aggressive, 4 bond index funds, 2 real estate funds, plus a stable value fund	Custom asset allocation program based on participant election at enrollment; can be auto-adjusted for age based on expected years until retirement	Lump sum, partial lump sum, periodic payments, rollover
GA Employees' RS	1% x years of service x final average salary = annual benefit	EE contributes 1.25% and ER contributes the remainder of the annual actuarially determined contribution rate	100% ER match on EE's 1st 1% of salary and 50% match on next 4% of salary for a maximum ER contribution of 3%	EEs hired before 7/1/14 auto enroll at 1% of salary contribution; EEs hired as of 7/1/14 auto enroll at 5% of salary; EEs may vary contribution rate up or down; participants may opt-out of the DC plan within 90 days of their date of hire	15 options ranging from conservative to aggressive, plus 6 lifecycle funds	Lifecycle funds based on age	Rollover, annuity, lump sum, partial lump sum, installments

	DB benefit formula (having met age/service requirements)	DB plan contributions	Employer DC plan contributions	Employee DC plan contributions	DC plan investment options	Default DC plan investment options	DC plan withdrawal options
Indiana Public RS	1.1% x years of service x final average salary = annual benefit	ER funds the DB benefit	None	3% of salary	7 options ranging from conservative to aggressive, and 10 target date funds, all administered by the retirement system	Target date fund closest to the year the participant turns 65	Annuity, rollover, partial lump sum and annuity, deferral until age 70½
Michigan Public Schools RS	1.5% x years of service x final average salary = annual benefit (normal retirement age for new hires after 1/31/18 is subject to change based on mortality experience)	EE contributes on a graduated scale based on pay; ER contributes an actuarially determined amount. New hires after 1/31/18 contribute 50% of the total plan contribution rate of 12.4%	ER matches 50% on up to 2% of EE's salary, (ER max of 1%)	2% of salary	Choice of active and passive investment options, target date funds, and a brokerage window	Target date fund that matches the year the participant will be eligible to retire	Maintain in plan/consolidation from other plans encouraged; or take lump sum, direct rollover to an IRA or other qualified plan, periodic distribution; annuity purchase
Ohio Public Employees' RS	1% x up to 35 years of service x final average salary + 1.25% x years in excess of 35 x final average salary = annual benefit	ER funds the DB benefit	None	10% of salary	16 OPERS-sponsored funds including core and target date funds, plus a brokerage window	Target date fund closest to the year the participant turns 65	Annuity, including partial lump sum, lump sum or rollover
Ohio State Teachers' RS	1% x years of service x final average salary = annual benefit	2% of EE and ER contributions fund the DB benefit	None	12% of salary	9 STRS Ohio-sponsored options ranging from conservative to aggressive plus target date funds	Target date fund closest to the year the participant turns 60	Annuity including partial lump sum, lump sum or rollover

	DB benefit formula (having met age/service requirements)	DB plan contributions	Employer DC plan contributions	Employee DC plan contributions	DC plan investment options	Default DC plan investment options	DC plan withdrawal options
Oregon PERS	Varies depending upon date of hire and which of 3 DB plans EE is enrolled in	EE contributes either 2.5% (Tier 1 & 2) or 0.75% (OPSRP) of salary if earning > \$2,535 per month ER contributes an actuarially determined amount	Optional	6% of salary for EEs earning \$2,535 or less per month EEs earning > \$2,535 per month: 3.5% of salary for Tier 1 & 2 (hired before 8/29/03); 5.25% of salary for OPSRP (hired on or after 8/29/03) EEs earning > \$2,535 per month may also elect to make voluntary after-tax contributions of 2.5% (Tier 1 & 2) or 0.75% (OPSRP)	9 Oregon PERS-sponsored target date funds	Target date fund based on year of birth Effective 1/1/21 participants will have the option to invest in any target date fund that reflects their retirement savings goals	Lump sum payment or in installments over a 5, 10, 15, or 20-yr period or the EE's anticipated lifespan
Pennsylvania PSERS	Either 1.25% (Default Plan) or 1.0% (Alternative Plan) x years of service x FAS (Default Plan)	EE contributes either 5.5% (Default Plan) or 4.5% (Alternative Plan). ER contributes an actuarially determined amount	2.25% (Default Plan) 2.0% (Alternative Plan)	2.75% of salary (Default Plan) 3.0% of salary (Alternative Plan)	12 target date funds plus 11 options ranging from conservative to aggressive	Target date fund based on year of birth	Lump sum, partial lump sum, period certain installments, or life annuity purchase
Pennsylvania SERS	Either 1.25% (Default Plan) or 1.0% (Alternative Plan) x years of service x FAS (Default Plan)	EE contributes either 5.0% (Default Plan) or 4.0% (Alternative Plan). ER contributes an actuarially determined amount)	2.25% (Default Plan) 2.0% (Alternative Plan)	3.25% of salary (Default Plan) 3.5% of salary (Alternative Plan)	18 options, including 10 target date funds, 4 stock index funds, 3 bond index funds, and a money market fund, plus a self-directed brokerage fund option	Target date fund based on year of birth	Annuity, lump sum, partial lump sum, rollover
Rhode Island ERS	1% x years of service x final average salary = annual benefit	State EEs and teachers contribute 3.75% to the DB plan; municipal EEs contribute 1% or 2% based on COLA choice; Municipal police and fire contribute 9% or 10% based on COLA choice.	ER contributes between 1-1.5% for EEs covered by Social Security, and between 3-3.5% for non-covered EEs, depending on service as of 6/30/12	State and local EEs and teachers contribute 5% to the DC plan; 3% for municipal police and fire EEs not covered by Social Security	12 target date funds and 10 funds ranging from conservative to aggressive	Age-appropriate target date fund	Lifetime annuity, lump sum distribution, or distribution in installments (rolling assets into an IRA or leaving assets in the plan).

	DB benefit formula (having met age/service requirements)	DB plan contributions	Employer DC plan contributions	Employee DC plan contributions	DC plan investment options	Default DC plan investment options	DC plan withdrawal options
Tennessee Consolidated RS	1% x years of service x final average salary (maximum annual pension benefit of \$80k, indexed by CPI)	EE contributes 5% to the DB plan ER contributes 4%	ER contributes 5% to the DC plan	EEs contribute 2%, with opt-out feature	11 target date funds and 17 options ranging from conservative to aggressive	Age-appropriate Target Date portfolio	Lump sum, periodic payments, minimum required distributions; beneficiaries may use a combination of more than one method
Utah RS	1.5% (2.0% for public safety officers / firefighters) x years of service x final average salary = annual benefit	ER pays up to 10% of pay, 14% for public safety/fire; if DB costs more, EE pays the difference.	ER pays into DC the difference between DB plan cost and 10% (14% for public safety).	EE contributions optional. State employees may receive a match of up to \$26 per pay period.	8 self-directed core funds ranging from conservative to aggressive. 12 target date funds; brokerage window.	Age-appropriate target date fund	After 4-year vesting period: lump sum, partial balance, periodic distribution, based on: time period, or rate of return assumption, or life expectancy.
Virginia RS	1% x years of service x final average salary = annual benefit	EE contributes 4% to the DB plan; ER contributes an actuarially determined amount to fund the DB benefit (less employer DC contributions)	Mandatory ER contributions of 1% - increases with EE contributions up to 3.5% maximum	EEs may contribute up to 5% to the DC plan (1% mandatory minimum)	10 options ranging from conservative to aggressive, 10 target date funds, and a self-directed brokerage account option.	Target date funds based on the participant's age at enrollment	Depend on the circumstances at termination; DB/DC combo plan requires coordination between the two components
Washington Department of RS	1% x years of service x final average salary = annual benefit	ER funds the DB benefit	None	5% to 15% of salary depending on EE	Either the total allocation portfolio, which mirrors DB plan fund, or 7 self-directed funds ranging from conservative to aggressive, plus target date funds	Target date funds based on the participant's age at enrollment	Lump sum, direct rollover, scheduled payments, personalized payment schedule, and annuity purchase