Spotlight *on*

Significant Reforms to State Retirement Systems

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Executive Summary

Although states have a history of making adjustments to their workforce retirement programs, changes to public pension plan design and financing have never been more numerous or significant than in the years following the Great Recession.[1] The global stock market crash sharply reduced state and local pension fund asset values, from $3.2 trillion at the end of 2007 to $2.1 trillion in March 2009,[2] and due to this loss, pension costs increased. These higher costs hit state and local governments right as the economic recession began to severely lower their revenues.[3] These events played a major role in prompting changes to public pension plans and financing that were unprecedented in number, scope and magnitude.

Since this time, nearly every state passed meaningful reform to one or more of its pension plans. Although the global market crash and recession affected all plans, differing plan designs, budgets, and legal frameworks across the country defied a single solution; instead, each state met its challenges with tailored changes specific to its unique circumstances. For example, some states faced legal limitations on how much modification could be made to their existing retirement plans. Other states did not require major law changes due to their financial condition or the presence of automatic adjustments in their plan designs.

Balanced Objectives

Public pension reforms typically adjusted retirement plan provisions while balancing multiple stakeholder objectives:

- For employees, competitive compensation that includes income security in retirement;
- For employers, a management tool to maximize the training and experience invested in their employees; and
- For taxpayers, public services performed in the most effective and cost-efficient manner.

These objectives can both conflict with and complement one another. Retirement plan reforms focused on one of these goals, to the exclusion of others, are likely to produce unintended negative outcomes. While public pension changes took different forms throughout the country, reforms generally kept those core features known to balance retirement security, workforce management, and economic efficiencies sought by stakeholders, namely: [4]

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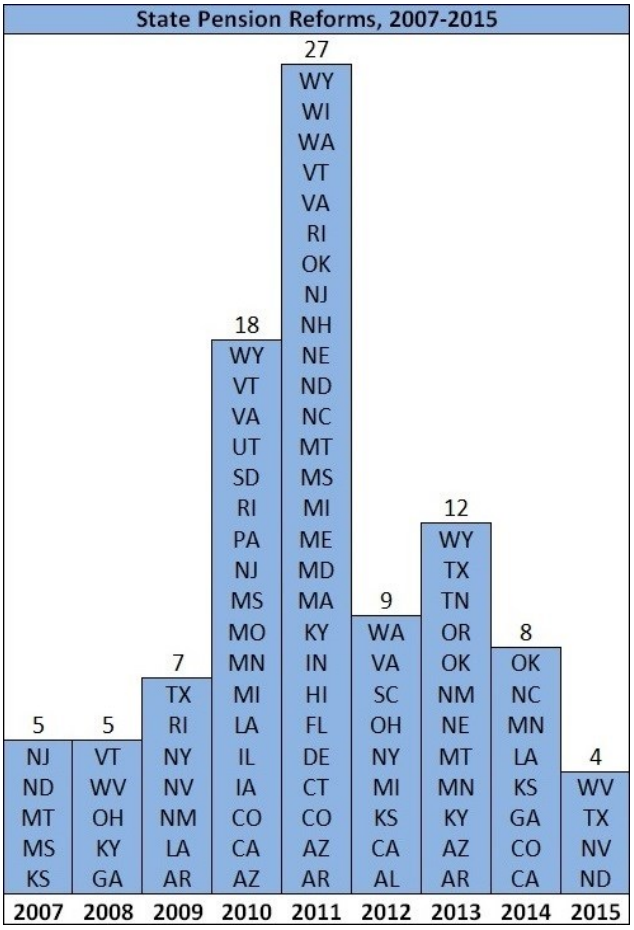
- **Mandatory participation**. Most state and local governments require participation in the retirement program as a condition of employment.
- **Cost sharing between employers and employees**. Public employees typically are required to contribute 5 to 10 percent of their wages on a tax-deferred basis to their state or local pension.



- **Pooled and professionally managed assets**. By providing professional management, greater portfolio diversity and economies of scale, pooled investments in public pension trusts can earn higher returns with lower fees.
- **Targeted income replacement**. Most public pension policies aim to replace a certain percentage of pre-retirement wages to better assure financial independence in retirement.
- **Lifetime benefit payouts**. The vast majority of state and local governments do not allow for lump sum distribution of benefits; rather, they require retirees to take most or all of their pensions in installments over their retired lifetimes. Most also make periodic cost-of-living adjustments to curb the effects of inflation.
- **Survivor and disability benefits**. Many state and local pensions integrate survivor and disability protections into their retirement programs, a particularly critical feature for positions involved in hazardous duty, or a public safety plan.
- **Supplemental savings**. Many governments sponsor a supplemental savings plan in addition to the general retirement plan to allow participants to defer an additional portion of their salary in anticipation of retirement needs, and some governments provide matching contributions and automatic enrollment/escalation features to encourage participation.

Reforms in most cases preserved these important features and modified some combination of required employee contributions, benefit levels, or eligibility for retirement. Many changes also shifted part of the risk associated with the retirement program from the employer to the employee. This risk shift occurred mostly in one of two ways: 1) the level of benefits or employee's costs became dependent on the fiscal condition of the plan, including investment performance; or 2) more of an employee's benefit became dependent on individual savings plans; or both. Most of these changes apply to future employees, but many also impact existing employees and retirees.

While public pension changes took different forms throughout the country, they generally retained those core features known to balance retirement security, workforce management, and economic efficiencies sought by stakeholders.

The following summary identifies the most common types of reforms, including changes that faced legal challenge, self-adjusting plan features that did not require legislative action, and the public pension landscape following these reforms.

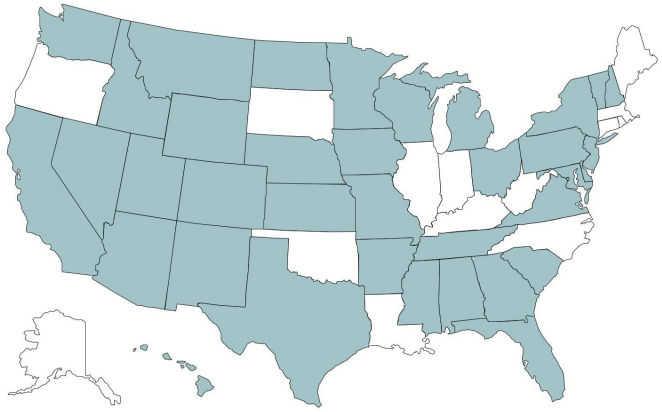
Employees Required to Pay More

Nearly all employees of state and local government are required to contribute toward the cost of their retirement, and in many states, budget challenges and rising pension costs made employee contribution increases a central part of pension reform. Employees in over 40 plans in 36 states were affected by increases to member contribution rates, some that are temporary, but more that are permanent or indefinite.

Most increases impacted current members and new hires, although higher contribution rates in some states applied to new hires only.

While a few state retirement plans prior to the recent reforms did not have mandatory employee pension contributions, nearly all now have this requirement. Some states, such as Missouri, added mandatory employee contributions for new hires only. Other states, such as Florida, enacted a required employee contribution for both new and current employees. States such as Virginia and Wisconsin passed laws requiring new and existing employees to pay the contributions that previously were made by employers in lieu of a salary increase. Of these, the new contribution requirement in Florida was challenged legally, but the Florida Supreme Court ultimately upheld it.

Figure 1. States that have increased employee contribution rates, 2009-2014



Required contribution rates vary among plans, particularly between those that provide a benefit in addition to Social Security and those that provide a public pension benefit instead of Social Security.[5] Employee contribution rates in non-Social Security states generally are higher than in states that participate in Social Security.[6] The median (mid-point) employee contribution rate in non-Social Security states is 8 percent of salary, although this number masks a wide range.[7] The median employee contribution rate in plans that also provide Social Security coverage has risen from 5 to 6 percent during this period of pension reform.[8] This type of change was among the most common reform passed by state legislatures since 2009.

Increases in required employee contributions was among the most common type of pension reform passed by state legislatures since 2009.

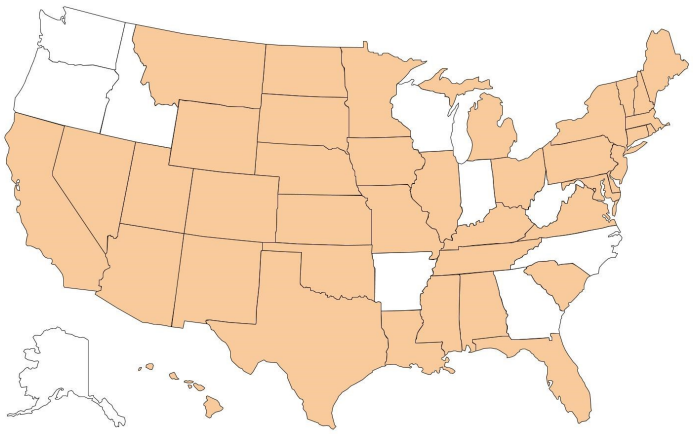
Benefits Lowered

Pension benefits are intended to replace a certain amount of an employee's salary in retirement, typically through a formula that provides a percentage of salary for every year worked for the employer. For example, for a worker retiring with 25 years of service with a final average salary of $50,000 in a pension plan that provides 1.5 percent of salary for each year worked, the annual pension benefit would be calculated as follows:

25 x $50,000 x 1.5% = $18,750

As the calculation shows, three components are used to determine an employee's pension benefit: the number of years he or she worked for their employer; their average salary;[9] and the retirement multiplier, which is the percent of income that will be replaced for every year worked. Benefit reductions passed between 2009 and 2014 took a variety of forms, including: 1) An increase to the period used to calculate average salary (usually reducing the salary on which the benefit is based); 2) A reduced retirement multiplier (less percent of income per year worked); and 3) Reducing or eliminating cost-of-living adjustments (COLAs).

Figure 2. States that Reduced Pension Benefits, 2009-2014



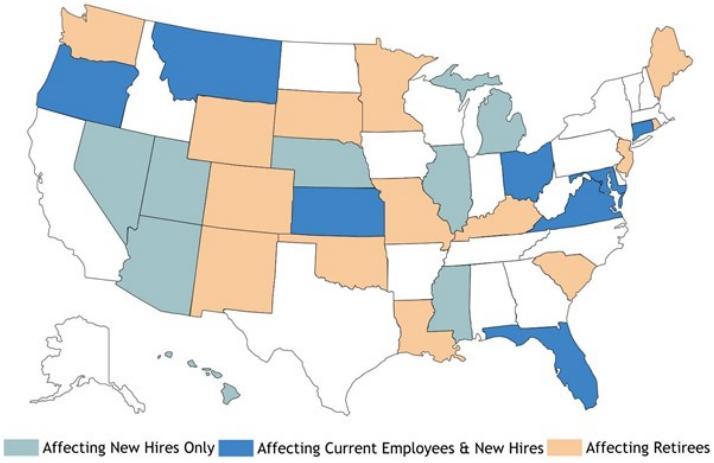
Many plans provide a COLA, which is an increase to benefits while in retirement, made annually or granted by discretion, to protect the benefits from inflation. COLAs vary in amount and often are linked to a gauge of inflation, such as the consumer price index (CPI), which measures the change in prices paid for a representative group of goods and services.

A 2013 study by NASRA and the Center for State and Local Government Excellence found that benefit reforms could reduce the retirement benefit of new employees by between 1 and 20 percent, compared to pre-reform benefits.[10] This finding did not include the future benefit impact through COLA reductions or eliminations, which could be considerable.

COLA Reductions Significantly Impact Benefits

Depending on how long a retiree lives, how much the COLA was reduced, and the actual rate of inflation, a COLA reduction can significantly reduce the value of a benefit over the remaining life of a retiree. An annual COLA of two percent will increase the value of a pension benefit by nearly 50 percent after 20 years (and protect purchasing power from inflation). New COLA formulas for current active employees or new hires offer lower fixed-rate COLAs, which in many cases are linked to an external indicator such as CPI or the plan's funded status.[11] Changes to COLA benefits for retired members were challenged in court in most states where they were passed. The cuts were upheld in most cases, although the Oregon Supreme Court, for example, declared the 2013 reduction in the COLA for retirees in that state unconstitutional.

Figure 3. State COLA Reductions, 2009-2015



Plans that reduced more than one element of the benefit formula (final average salary and retirement multiplier) saw the steepest cuts in benefits for new hires. Those that also changed COLAs further reduced the value of those benefits over time, sometimes significantly.

Employees Required to Work Longer

Pension plans for public employees require employees to work a certain period of time, known as the vesting period, to become eligible to receive any benefit from a pension plan. To begin drawing a benefit, the employee must also reach a second level of retirement eligibility, generally expressed as a certain age, a number of years of employment, or both.

Nine states passed laws that increased the vesting period for new employees, from 5 years to 10. In one case—North Carolina—the state reversed its higher vesting period, citing a lack of meaningful savings from the change and a conflict with the workforce management goals the retirement system is intended to promote.[12]

Other common reforms passed included increases to the age and service requirements that must be met to begin drawing a benefit. Twenty-nine states increased retirement eligibility, affecting over 40 plans, and typically took the form of an increase in age, required years of employment, or a combination of both. These new requirements apply generally to new hires as part of the creation of a new benefit tier, although in a few cases the increased requirement applied to current employees.

In establishing lower benefits for new hires, some states eliminated retirement at any age with a specified amount of service. Increases to retirement eligibility covered a wide range, from an additional one to five years of age needed and/or an additional two to five years of service required to become eligible to begin receiving a retirement benefit. Most increases to the retirement age were by two years, and most increases to required service were by five years.

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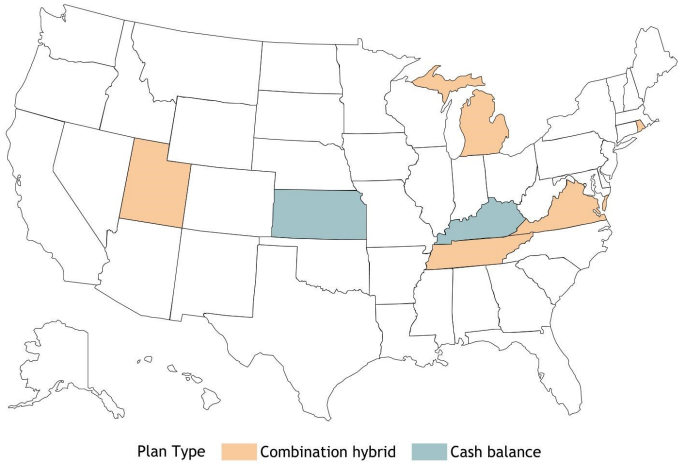
Most States Retained Traditional Pension Plans - But Not All

Nearly every state chose to retain its traditional pension plan and modify employer and employee contributions, restructure benefits, or both, as closing their traditional pension plan to future (and, in some cases, existing) employees could increase—rather than reduce—costs.[13] Providing only an individual account plan (i.e., 401k) does not meet important retirement security, human resource, or budget objectives. Some states, however, have looked at plan types that combine elements of traditional pensions and individual account plans. A combination hybrid plan combines a defined benefit plan, typically with a more modest

level of benefit, with participation in an individual account plan. A cash balance plan features individual employee accounts with guaranteed investment returns on contributions. Most cash balance plans in the public sector require the benefit to be paid in the same way as a traditional pension, that is, monthly payments guaranteed over an employee's lifetime once the employee meets a required minimum age and/or years of employment. Some cash balance plans in the public sector, however, operate more like an individual account plan, where an employee may draw down on their accumulated account in retirement, which can be exhausted. Although hybrid and cash balance plans have been in place in public sector retirement systems for decades, this plan design received increased attention in recent years.

Since 2009, five states—Michigan, Utah, Rhode Island, Virginia, and Tennessee—created combination hybrid plans and two states—Kansas and Kentucky—created cash balance plans for newly hired state or educational employees, or both.[14] Rhode Island was the only state that passed a new plan type—a hybrid plan—requiring participation from some current plan participants.

Figure 4. Statewide Hybrid Plans Established 2009-2014



Two states—Arizona and Oklahoma—enacted legislation closing the traditional pension plan and placing newly hired workers into individual account plans. In Arizona, the change affected only future elected officials, and in Oklahoma, only state employees hired as of November 1, 2015 were affected.

In most cases, changes to plan design were purely prospective, i.e., establishing new plan designs for newly hired workers only. In other cases, a new plan design was coupled with changes to the existing defined benefit plan, in an effort to address the costs.

Nearly every state chose to retain its traditional pension plan and modify employer and employee contributions, restructure benefits, or both.

Pension Reforms Faced Legal Challenges

Roughly half of the states were sued regarding their pension reforms. In many cases, what was upheld in one state was struck down in another. For example, employee contribution increases were upheld in Florida, yet they were found illegal in Arizona. A reduction in retiree cost-of-living calculations was deemed constitutional in Colorado, yet was struck down in Oregon.

Two clauses in the US Constitution often cited as protecting pension benefits include: Article 1, Section 10 (clause 1), known as the Contracts Clause, states that "No State shall enter into any Treaty...impairing the Obligation of Contracts." The Fifth Amendment contains what is called the Takings Clause: "No person shall be ... deprived of life, liberty, or property, without due process of law…" Levels and types of legal protections for public pensions vary by state and are considered by some to be unclear or uncertain.

Self-Adjusting Features Can Alter Plans Considerably

A number of state plans employ self-adjusting features that do not require legislative changes. For example, plans for some or all workers in Arizona, Iowa, Nevada, and Pennsylvania require employee contributions to fluctuate depending upon the plan's actuarial or financial condition. In Idaho and Colorado (for public safety officers), the board of the public retirement systems can increase the employee contribution rate, and in Idaho and some other states, the board can increase the employer contribution rate. In the vast majority of states, the employer contribution rate is automatically adjusted to meet an amount determined by the system's actuary.

Other states automatically alter benefit levels depending on factors such as plan funding ratio, investment performance, inflation, or some combination of these. Retirees of the Wisconsin Retirement System (WRS), for example, receive a benefit that is automatically subject to annual

adjustment depending on the performance of plan investments. WRS does not provide an annual COLA to retired members; rather, benefits may be adjusted if the fund experiences investment gains, and increases provided in prior years may be adjusted downward or eliminated entirely in years in which investments perform poorly (reductions may never fall below the base benefit). In 2014, WRS announced the first post-retirement benefit increase in five years after several years of favorable investment returns. Some retirees, particularly those who have been retired for longer periods, experienced five consecutive years of reduction in their benefit.

In these and other instances, law changes were not required, but plan financing and benefit levels were nevertheless altered. In some cases, they were altered even more significantly than states that enacted pension reform laws.

Public Pension Landscape Changed to Meet the Unique Needs of Each State

As the Center for Retirement Research at Boston College notes in its issue brief "State and Local Pension Costs: Pre-Crisis, Post-Crisis, and Post-Reform," a state's appetite for pension reform was largely in line with the size of the fiscal issues the state faced. Generally, plans that were more poorly funded enacted reforms that were more comprehensive than states that were well funded.

Each legislature passing pension reform approached the process given their unique set of economic and demographic circumstances. However, one overarching characteristic shared by most of the reforms is a shift from employers to employees of the risk associated with financing retirement benefits.

Most public retirement plans are risk-sharing arrangements, meaning that the plan is designed to have employees share some of the risk of the benefit or its cost. Recent pension reforms clarified, strengthened, or established new risk-sharing mechanisms for benefit levels, required contributions, or delivery of benefits through different plan designs. These new features include, for example, contribution rates or benefits that can increase or decrease depending on factors such as fund investment performance, the funding condition of the plan, and/or the measured increase in the cost of living. In some cases, these changes were made permanent for new employees and some current participants. Other risk-distributing changes were made on an as-needed basis.[17] The outcome of nearly all reforms passed during this period is that public employees are responsible for an increasing share of funding of their retirement benefits and in some cases, the accumulation of their own retirement assets.

One overarching characteristic shared by most of the reforms is a shift from employers to employees of the risk associated with financing retirement benefits.

Retirement plans for public employees were altered in many ways during this reform wave. The state-by-state listing on the following pages presents detailed descriptions of changes affecting contributions, benefits, or eligibility for retirement plans that were affected by pension reform legislation. The details in this section are intended to reflect the pension reforms as passed by the legislature in each state.

[1]Selected Approved Changes to State Public Pensions to Restore or Preserve Plan Sustainability, NASRA, updated June 2015

[2]http://www.federalreserve.gov/releases/z1/20090611/z1.pdf

[3]Joint submission from national organizations representing state and local governments, public officials, public employees and retirement systems to the Senate Finance Committee Tax Reform Working Group on Savings & Investment: http://www.nasra.org/files/Letters/PublicPensionNetworkCommentsSFCWorkingGroup4-15-15.pdf

[4]NASRA Resolution 2010-01, Guiding Principles for Retirement Security and Plan Sustainability and 2006-04, Supplemental Plans for State and Local Government Employees, http://www.nasra.org/resolutions

[5]The Public Fund Survey is a compendium of data and information on public employee retirement systems maintained by NASRA and representative of approximately 85 percent of the overall public pension community. http://www.publicfundsurvey.org

[6]Public Fund Survey Summary of Findings for FY 13, NASRA

[7]Average salary is measured over a designated portion of the worker's career, typically the final three or five years.

[8]Effects of Pension Plan Changes on Retirement Security, NASRA and the Center for State & Local Government Excellence, April 2014 (Table 1, page 3)
http://www.nasra.org/files/JointPublications/Effects%20of%20Pension%20Plans%20on%20Retirement%20Income.pdf

[9]NASRA Issue Brief: Cost-of-Living Adjustments, February 2014 www.nasra.org/colabrief

[10]Report to the 2014 Session of the 2013 General Assembly of North Carolina, North Carolina General Assembly Legislative Research Commission, March 31, 2014 (page 13)
http://www.ncleg.net/documentsites/committees/lrc/2014%20Committee%20Reports%20to%20LRC/Committee%20on%20Treasurer%20Investment%20Targets%20and%20State%20Employee%20Retirement%20Options.pdf

[11]NASRA and The Center for State & Local Government Excellence (Figure 2, page 8)

[12]NASRA, "Cost of Switching from a Defined Benefit to a Defined Contribution Plan," http://www.nasra.org/plandesignchange

[13]NASRA Issue Brief: State Hybrid Retirement Plans, September 2013 www.nasra.org/hybridbrief

[14]State and Local Pension Costs: Pre-Crisis, Post-Crisis, and Post Reform, The Center for Retirement Research at Boston College, March 2013 http://crr.bc.edu/briefs/state-and-local-pension-costs-pre-crisis-post-crisis-and-post-reform/

[15]NASRA Issue Brief: Shared Risk in Public Retirement Plans, June 2014 http://www.nasra.org/content.asp?contentid=124

[16]NASRA Issue Brief: Shared-Risk in Public Retirement Plans, June 2014 www.nasra.org/sharedriskbrief

[17]NASRA Issue Brief: Shared-Risk in Public Retirement Plans, June 2014 www.nasra.org/sharedriskbrief

Alabama

Retirement Systems of Alabama

Types of Pension Changes

Increased Employee Contributions (for active members) • Decreased Employee Contributions (for new hires) • Reduced Pension • Increased Age/ Service Requirement

Overview

The Retirement System of Alabama administers pension and other benefits to most public employees in Alabama. The system consists of the Teachers' Retirement System (TRS) and the Employees' Retirement System (ERS), which includes state employees, state police officers, and employees of political subdivisions that have elected to participate. RSA also administers the Judicial Retirement Fund.

In 2011, the Alabama legislature increased the amount current active state employees, teachers, and public safety officers must contribute toward the cost of their pension benefits. 2012 legislation created a new tier with reduced benefits for newly hired employees as of January 1, 2013. For these members, benefits are earned at a lower rate than in the old tier and their benefits are subject to an overall limit. New hires must be older to retire and begin drawing a normal (unreduced) benefit. New tier members also no longer will be able to retire based solely on completing 25 years of service, and are required to contribute less toward the cost of their benefits.

Members of the new tier are estimated to have a beginning benefit that is approximately 20 percent less than an employee in the old tier[1]. According to the State's Executive Budget Office, the effect of the new tier was projected to produce savings for RSA employers of approximately $5 billion from FY16 through FY43.

Reform Detail

Year	Affected Worker Groups	Modifications
2012	Newly hired state employees, teachers, public safety officers, and state police officers as of 1/1/13	• Reduced employee contribution rates for general employees and teachers, from 7.5% of salary to 6.0%, and for police officers and firefighters from 8.5% of salary to 7.0% • Lengthened the period used to calculate final average salary from highest 3 years to highest 5 years • Reduced the benefit multiplier (percent of final average salary earned toward a retirement benefit for every year worked) for general employees, teachers, and public safety officers from 2.0125% to 1.65%, and for state police officers from 2.875% to 2.375% • Placed a limit on annual retirement benefit of 80% of final average salary • Required general employees and teachers with at least 10 years of service to be age 62, rather than age 60, in order to retire and begin receiving a normal (unreduced) benefit. Eliminated the provision that employees with 25 years of service may retire with unreduced benefits regardless of age.
2011	Current active members and new hires	• Increased contribution rates, phased in over two years; for general employees and teachers, from 5.0% of salary to 7.25% on 10/1/11, and to 7.5% on 10/1/12, and for police officers and firefighters, from 6.0% of salary to 8.25% on 10/1/11 and 8.5% on 10/1/12.

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014

Alaska

Alaska Public Employees' Retirement System

Alaska Teachers' Retirement System

Types of Pension Changes

None

Overview

The Alaska Public Employees' Retirement System (PERS) administers pension and other benefits for state employees and employees of political subdivisions that have elected to participate. Legislation approved in 2005 transferred responsibility for asset management from the AK State Pension Investment Board to the AK Retirement Management Board. This legislation also closed the TRS and the PERS to new members hired after June 30, 2006. Employees hired after this date participate only in a defined contribution plan.

The Alaska Teachers' Retirement System (TRS) administers pension and other benefits to certificated public school teachers and other designated employees of school districts, the state university, and the department of education. Legislation approved in 2005 transferred responsibility for asset management from the AK State Pension Investment Board to the AK Retirement Management Board. This legislation also closed the TRS and the PERS to new members hired after June 30, 2006. New workers beginning July 1, 2006 participate only in a defined contribution plan.

Alaska did not pass any major legislative pension reforms between 2007 and 2015.

In 2005, the state legislature closed the defined benefit plans for state employees and teachers and established a new defined contribution plan for new hires on or after July 1, 2006. Individual accounts are financed through mandatory contributions from employees and employers. Employees are required to contribute 8 percent, while employers are required to contribute 7 percent for teachers and 5 percent for state employees. An additional employer contribution of 1.75 percent of covered employee payroll is required for both groups for retiree health insurance. The law also provided for current active members to freeze their participation in the defined benefit plan and elect to participate in the defined contribution plan for future service.

In 2008, the state legislature changed the defined benefit plan for state employees from an agent plan, in which each employer pays a cost based on its unique actuarial experience, to a cost-sharing plan, in which employers share their actuarial experience and all pay at the same rate. The legislature also set an employer contribution rate of 22 percent and established a payment to the pension plan by the state general fund for required contributions that exceed the statutory rate. This law has provided participating employers with a predictable contribution rate each year, removing the volatility experienced previously.

In 2014, the Alaska state legislature passed a law appropriating $3 billion from the state's oil reserve fund to reduce the plans' unfunded pension liabilities.

No major legislative reforms passed between 2007-2015

Arizona

Arizona State Public Safety Personnel Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirement • Reduced Cost-of-living Adjustment

Overview

The Arizona Public Safety Personnel Retirement System (PSPRS) administers pension and other benefits for police and firefighters employed by the state and political subdivisions that have elected to participate.

2011 legislation created a new tier for newly hired police officers and firefighters as of January 1, 2012. New hires earn reduced benefits, make greater contributions as a percentage of their salary and must work longer to qualify for unreduced retirement benefits.

PSPRS changes are projected to produce savings and improve the funding status for most PSPRS employers. Prior to the reforms, the system's actuary projected the median employer funding level to approach 90 percent, and median employer contribution rates to fall below 30 percent of covered employee payroll, by 2042. As a result of the reforms, the median funding status is projected to approach 100 percent and median employer contribution rates are projected to fall below 15 percent by 2042.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	New hires as of 1/1/12	• Increased required employee contribution rates gradually, from 7.65% of salary to 11.65%. • Required participating employers to make contributions on behalf of retirees who return to work after retirement. • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Increased the service requirement to qualify for normal (unreduced) retirement. Workers may retire at age 52.5 with 25 years of service. Previously they could retire at any age with 20 years of service, or at age 62 with 15 years. • Reduced the Permanent Benefit Increase (PBI), which provided a cost-of-living adjustment (COLA) when investment returns exceeded the actuarially assumed rate, for those who retire after 8/1/11, to be based on a graduating scale determined by the plan's actuarial funding level, and increases the investment return threshold needed to trigger a PBI, from 9% to 10.5%.

Arizona

Arizona State Retirement System

Types of Pension Changes

Reduced Pension • Increased Age/Service Requirement • Reduced Cost-of-living Adjustment

Overview

The Arizona State Retirement System (ASRS) administers pension and other benefits for most state employees, public and charter school teachers, and employees of other political subdivisions that have elected to participate. The state maintains separate plans for public safety personnel, correctional officers, and elected officials; and the cities of Phoenix and Tucson maintain their own plans.

2010 legislation established a new tier for newly hired state employees hired as of July 1, 2011. New hires earn reduced benefits and must work longer to qualify for normal (unreduced) benefits. 2013 legislation eliminated the Permanent Benefit Increase (PBI), which provided a cost-of-living adjustment (COLA) when investment returns exceeded the system's assumed rate.

The ASRS changes included a requirement that employees contribute 53 percent of the cost of benefits earned each year, an increase from their prior share of 50 percent. Upon legal challenge, this action was found to violate the state constitution's pension protections, and was reversed with legislation passed in 2012. The ASRS actuary projected cost savings to the state and other participating employers from the 2010 reforms of $953 million over 10 years, and $587 million over 30 years for the 2011 reforms.

Year	Affected Worker Groups	Modifications
2013	New hires as of 9/13/13	• Eliminated the Permanent Benefit Increase (PBI), which provided a cost-of-living adjustment (COLA) when investment returns exceeded the actuarially assumed rate.
2011	New hires as of 7/1/11	• Increased the age and service requirements for normal (unreduced) retirement. Workers must reach either age 55 with 30 years of service, age 60 with 25 years of service, age 62 with 10 years of service, or age 65 with any length of service. Previously, they could retire at the Rule of 85 (their age and service add up to 85).
2010	New hires as of 7/1/11	• Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Eliminated employer contribution refunds for most members who terminate from ASRS and choose to withdraw their account balance. • Increased the age and service requirements for normal (unreduced) retirement. Workers must reach the Rule of 85 (their age and service add up to 85). Previously, they could retire at the Rule of 80 (their age and service add up to 80).

Arkansas

Arkansas Public Employees Retirement System

Types of Pension Changes

Increased Employee Contributions

Overview

The Arkansas Public Employees Retirement System (APERS) administers pension and other benefits to nearly all public employees in the state except teachers, highway employees, and local police officers & firefighters. Employees of more than 700 employers participate in APERS, including state agencies, counties, cities, school districts, and others. Members hired as of 7/1/05 are required to participate in the new contributory plan (the plan was non-contributory until that date). In 2009, members of the non-contributory plan were provided with a six-month window in which they could elect to participate in the contributory plan. Subsequent legislation extended this window to provide for a permanent opportunity to join the contributory plan.

2011 legislation required that Arkansas PERS employers make contributions on behalf of all active employees. Prior to this change, employers were not required to make contributions on behalf of employees who joined the deferred retirement option program (DROP) or returned to work. An actuarial analysis commissioned by the state legislature estimated that the employers would contribute an additional $11.6 million per year as a result of the new requirement.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Participating employers	• Required that APERS employers must make contributions for both active and retired members who return to work after retirement.
2009	Current active members of the non-contributory system, which was closed to new hires on 6/30/05	• Provided a six-month window in which members may elect coverage under the new contributory system, which replaced the non-contributory system effective 7/1/05. Members who elect this option must begin making contributions, and they receive benefits calculated with a higher multiplier. Subsequent legislation made the opportunity to switch plans permanent.

Arkansas

Arkansas Teacher Retirement System

Types of Pension Changes

Increased Employee Contributions

Overview

The Arkansas Teacher Retirement System (ARTRS) provides pension and other benefits to public school teachers and other employees of public educational institutions in the state.

2011 legislation required that member purchases of service credit be made at the full actuarial cost. According to the bill's actuarial analysis, the ATRS was effectively bearing 55% of the cost of employees' purchases of service credit. Under the 2011 changes, the employee would be responsible for paying the full excess reserve required to fund the benefit produced by the additional service credit. In 2013, the legislature provided for the member contribution rate to change, within an established range of 6 percent to 7 percent of salary, as determined by the ARTRS Board based on actuarial need.

Reform Detail

Year	Affected Worker Groups	Modifications
2013	Current active and newly hired members	• Authorized the Board to set the member contribution rate between 6% and 7% of salary, based on actuarial need.
2011	Current active members	• Required that all purchases of service credit be made at the full actuarial cost. Prior law provided for the ability of members to purchase service at a cost equal to the employee and employer contributions that would have otherwise been required to be made, plus interest.

California

California Public Employees' Retirement Association

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements

Overview

The California Public Employees' Retirement System (CalPERS) is the nation's largest pension fund, administering pension and other benefits for employees of the state, 26 counties, and more than 1,500 other political subdivisions, including school districts. The system comprises 10 plans, including 6 defined benefit plans, 3 defined contribution plans, and an Other Post-Employment Benefit plan. The Public Employees Retirement Fund provides coverage for more than 99% of all CalPERS active members. The other DB plans are for legislators and judges.

In 2010 and again in 2012 the California legislature passed a series of pension reforms affecting newly hired state and state safety employees. Changes include increases to required employee contribution rates and new benefit formulas with reduced benefits and lengthened retirement eligibility requirements.

According to a CalPERS cost analysis, the PEPRA legislation is expected to generate between $42 billion and $55 billion in savings for all state, school, and local agency plans. The changes are also estimated to reduce the immediate cost of benefits earned each year for all plans, with savings amounting to between 0.6 percent to nearly 6.5 percent of payroll depending on the plan.

Reform Detail

Year	Affected Worker Groups	Modifications
2012	New hires as of 1/1/13	• Established a requirement that members to contribute 50% of the annual cost of benefits earned each year. • Capped the amount of compensation used to calculate benefits at the Social Security salary contribution limit (for employees eligible for Social Security) or 120% of the cap (for employees ineligible for Social Security). (The 2016 Social Security salary limit is $118,500.) • Created a new defined benefit formula for non-safety public employees with a 2.0% multiplier at age 62 and a maximum benefit of 2.5% at age 67, and an increase to the early (reduced) retirement age from 50 to 52. • Created three new benefit formulas for safety employees, including a maximum benefit of 2.0% (of final average salary) at age 57, 2.5% at age 57, or 2.7% at age 57, with an early retirement age of 50 and early retirement multipliers ranging from 1.426% to 2%.
2010	New hires as of 1/15/11	• Increased state employee contributions by 2% to 5% of salary, depending on bargaining unit and classification (contribution rates for most workers are set in labor contracts). • Lengthened the period used to calculate final average salary, from 1 year to 3 years. • Created a new defined benefit formula for state non-safety employees with a multiplier of 2.0% (of final average salary) at age 60 and 2.418% at age 63. • Created a new defined benefit formula for state safety employees with a 2% multiplier at age 55.

California

California State Teachers' Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements

Overview

The California State Teachers' Retirement System (CalSTRS) is the largest educator-only pension fund in the world. It administers a hybrid retirement system, consisting of traditional defined benefit, cash balance and voluntary defined contribution plans. CalSTRS provides pension and other benefits for certificated employees of approximately 1,700 public school districts, community colleges, and educational agencies throughout California.

In 2012, the California Legislature passed a series of pension reforms including a new formula with reduced benefits, potentially higher contribution rates by new teachers and a longer period to calculate highest average salary for some new teachers.

In 2014, the Legislature passed a new funding plan for CalSTRS with increases to the required contribution rates for employees, school districts, and the State. Prior to the adoption of the new 2014 funding plan, CalSTRS' employee contribution rates had not been increased in the past 42 years. The rates established by the new plan are projected to be sufficient to fully fund CalSTRS in 32 years. For more information: http://www.calstrs.com/calstrs-2014-funding-plan.

According to CalSTRS' estimates, at the time the 2012 legislation was enacted, the cost of benefits earned each year for the 2.0 percent at 62 plan was projected to be 2.61 percent of payroll less than the same cost of the 2.0 percent at 60 plan. This reduction is projected to save an estimated $22.7 billion over 30 years.

Reform Detail

Year	Affected Worker Groups	Modifications
2014	Current active members, the State of California, and participating employers (school districts, charter schools, community colleges, etc.)	• Required school district employers to increase contributions, from 8.25% of salary to 19.1%, phased in over a 7-year period beginning with the new state fiscal year on 7/1/14. Employee and state contributions will also rise, over a 3-year period beginning on 7/1/14. Employee rates will rise from 8.0% of salary to a projected 9.205% for 2% at 62 members and to 10.25% for 2% at 60 members. The state contribution will rise from 5.41% of salary in 2013 to 8.28% in 2016. The Teachers' Retirement Board will have limited authority to adjust the state and employer contribution rates, beginning in 2017 and 2021, respectively.
2012	New hires as of 1/1/13	• Established a requirement that new members contribute 50% of the annual cost of benefits earned each year. • Lengthened the period used to calculate final average salary, for those with at least 25 years of service, from 1 year to 3 years. • Reduced the retirement multiplier (corresponding to retirement age) for 2% (of final average salary) at age 62 members, from a range of 1.4% to 2.4% (age 55-63+) to a range of 1.16% to 2.4% (age 55-65+). • Increased the age for normal (unreduced) retirement from 60 to 62.

Colorado

Colorado Public Employees' Retirement Association

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements • Reduced Cost-of-Living Adjustment

Overview

The Colorado Public Employees' Retirement Association (PERA) administers pension and other benefits for state employees, public school teachers, and employees (other than public safety personnel) of political subdivisions that have elected to participate. The System administers separate plans for state employees, school employees, local governments, and judges; PERA also administers a separate plan for the Denver Public Schools. Certain new state hires since January 1, 2006 may choose between the traditional pension plan or an individual account plan administered by PERA. PERA also administers voluntary individual supplemental savings plans.

The Colorado PERA Board in 2009 conducted a series of meetings throughout the state to communicate with plan stakeholders about the actuarial and financial challenges facing the system and to receive feedback on proposed solutions. The result of these meetings was legislation introduced and approved in 2010 that affects new, current and retired employees, participating employers, and other taxpayers. The reforms reduced the PERA plans' collective unfunded liability by approximately $9 billion, or 25 percent, and placed the plans on a path toward full funding in approximately 30 years. The constitutionality of the reforms was subject to a legal challenge; in 2014 the Colorado Supreme Court affirmed the General Assembly's authority to make the changes.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Current active state employees, teachers, and employees of participating municipalities	• Extended the employee contribution rate increase, from 8.0% of salary to 10.5%, for FY13, and extended the employer contribution rate decrease, from 10.15% of salary to 7.65%.
2010	Retired members; current active state employees, teachers, and employees of participating municipalities and new hires	For current and future retirees: • Reduced COLA for current and future retirees to 2.0% or less under certain instances, from 3.5%; required future retirees to be retired for 1 year before receiving a COLA. For current active members: • Increased employee contribution rates from 8.0% of salary to 10.5%, for FY12 only, and reduced employer rates from 10.15% to 7.65%. • Increased additional incremental contributions scheduled from employees and employers from 3% to 5% by 2017. • Required retirees who return to work, for periods of 110 days or fewer, to make contributions at the same rate as all members working for that employer. These contributions are nonrefundable, do not accrue a benefit and are not credited to the member's account. Modified the benefit calculation for retirees who return to work for a length of service that exceeds 110 days. Prior to the change, a retiree who returned to work would have their benefit recalculated considering their new highest average salary and additional service, upon re-retirement. After the change, a retiree who returns to work receives a separate benefit based on their additional service credit. • Required employees to have at least 5 years of employment to qualify for the 50% employer match when an employee leaves service and takes a refund of their own contributions, effective 1/1/11. For new hires: • For new hires as of 1/1/11, implemented a modified Rule of 88 (age and service add to 88) with a minimum age of 58 to qualify for normal (unreduced) retirement. • For new hires as of 1/1/17, implemented the Rule of 90 with a minimum age of 60.

Colorado

Colorado Fire & Police Pension Association

Types of Pension Changes

Increased Employee Contributions

Overview

The Colorado Fire & Police Pension Association (FPPA) provides pension, disability, and defined contribution plans for employees of local government fire and police departments and volunteer fire plans that have elected to participate.

Colorado statute permits the board of the FPPA to adjust employee pension contribution rates with the approval of a supermajority of members and a majority of employers. The board put this decision to a vote of the members and employers and they voted in 2014 to increase the employee contribution rate. Employee rates began rising in 2015 by 0.5 percent each year, from 8 percent, until the rates reach 12 percent. The increased contributions are intended to protect the plan against adverse experience that could otherwise require benefit rollbacks and other plan safeguards to be implemented; and to increase the likelihood of a meaningful cost of living adjustment being provided to members in retirement.

Reform Detail

Year	Affected Worker Groups	Modifications
2014	Police officers and firefighters employed by participating local governments who participate in the CO FPPA defined benefit plan	• Increased employee contributions in one-half percent per year increments, from 8% of salary in 2014 to 12% in 2022.

Connecticut

Connecticut State Employees' Retirement System

Types of Pension Changes

Reduced Pension • Increased Age/Service Requirements • Reduced Cost-of-Living Adjustments

Overview

The Connecticut State Employees' Retirement System (SERS) administers pension and other benefits for state employees. Assets are managed by the state treasurer, who serves as sole trustee. The system is administered by the Retirement Division of the state comptroller.

Benefits for Connecticut state employees are collectively bargained. In 2011, the State of Connecticut and the State Employees Bargaining Agent Coalition (SEBAC) entered into an agreement that made changes to the retirement benefits and eligibility for current active members and that created a new benefits tier for workers hired after June 30, 2011.

Members of the new tier, identified as Tier III, must work longer to become vested in the plan and must attain a higher age to qualify for an unreduced retirement benefit. The agreement also established an optional "hybrid" retirement plan that new higher education employees may make a one-time, irrevocable election to join instead of joining Tier III. The optional plan requires higher employee contributions than those required under Tier III, and includes, upon separation from state service, a "cash out option," which is a refund of a member's own contributions and an employer match, plus interest, that may be accepted instead of the traditional pension benefit.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Current active members and new hires as of 7/1/11	For current active members and new hires as of 7/1/11: • Increased the age needed to qualify for normal (unreduced) retirement, for members who are eligible to retire after 7/1/22, from 60 to 63 with 25 years of service. An option to retire at age 65 with 10 years of service was also created. Members were permitted to make a one-time decision to elect to pay additional contributions of 0.72% of salary and to retain the current retirement eligibility requirements beyond 7/1/22. • Increased the benefit reduction for early retirement, effective for retirements after 10/1/11, from 3% to 6% for each year before a member would be eligible for normal (unreduced) retirement. • Reduced the minimum annual COLA from 2.5% to 2.0%, for members who retire on or after 10/2/11. The maximum COLA of 7.5% was retained. The COLA amount is based on the inflation rate. For new hires as of 7/1/11: • Established a new optional "hybrid" retirement plan for higher education employees with employee contributions 3% higher than the rate paid by most current members. Also created an employee option, upon leaving state service, of a "cash out option," which is a refund of the employee's own contributions plus a 5% employer match, plus 4% interest. • Increased the age needed to qualify for early (reduced) retirement with 10 years of service, from 55 to 58. • Increased the age and service requirements for normal (unreduced) retirement for hazardous duty workers, to 50 with 20 years of service or any age with 25 years of service, from retirement at any age with 20 years of service. • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Increased the vesting period, from 5 years to 10 years.

Delaware

Delaware Public Employees' Retirement System

Types of Pension Changes

Increased Employee Contributions • Increased Age/Service Requirements

Overview

The Delaware Public Employees' Retirement System (PERS) administers pension and other benefits for substantially all public employees in Delaware. The system administers the following plans: State Employees' Pension Plan, Special Pension Plan, New State Police Pension Plan, Judiciary Pension Plans (Closed and Revised), County & Municipal Police/Firemen's Pension Plans, County & Municipal Other Employees' Pension Plan, Volunteer Firemen's Pension Plan, Diamond State Port Corporation Pension Plan, and the Closed State Police Pension Plan. The State Employees' Pension Plan includes public school teachers and comprises more than 80 percent of all active members.

In addition to the pension reforms approved in 2011, the legislation also included changes to the state health insurance program. Beginning in 2012, state employees are required to pay more for health insurance, and a free, basic health plan was eliminated.

According to PERS, long term projections for cost savings associated with the 2011 pension reforms were roughly $328 million over 15 years with a significant portion ($248 million) coming from the employee contribution rate increase.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	New hires as of 1/1/12	• Increased the age needed to qualify for normal (unreduced) retirement, to age 65 with 10 years of service or 60 with 20 years, from age 62 with 5 years of service or 60 with 15 years. The option to retire at any age with 30 years of service was retained. • Increased the employee contribution rate from 3% to 5% of salary above $6,000. • Excluded overtime pay from the determination of final average salary. • Increased the vesting period from 5 years to 10 years. • Increased the reduction for early retirement to 4/10 of one percent of each year the employee is retired before age 60.

District of Columbia

District of Columbia Retirement Board

Types of Pension Changes

None

Overview

The District of Columbia Retirement Board (DCRB) administers pension and other benefits for public school teachers, police, and firefighters employed by the District of Columbia. General employees of the District participate in a defined contribution plan.

Because of several factors pertaining to the manner in which the DCRB plans are administered, the District of Columbia made no major legislative benefit reforms between 2007 and 2015.

DCRB administers two pension plans; one for police officers and firefighters, and one for teachers. Prior to 1997, the plans were sponsored by the Federal Government. In 1997, the federally sponsored plans were frozen and DCRB adopted replacement plans for benefits earned after June 30, 1997. The Federal Government remained responsible for benefits earned prior to July 1, 1997. Upon this change, the DCRB plans were modified for new hires, with changes including caps on retiree cost-of-living adjustments, increases to employee contributions, and changes in the benefit calculation formula.

As a result of the relatively young status of the two plans, the fact that substantive changes were made only a decade before, and the Plans' well-funded status, no further structural changes were necessary.

Reform Detail

No major legislative reforms passed between 2007-2015

Florida

Florida Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements • Reduced Cost-of-Living Adjustment

Overview

The Florida Retirement System (FRS) administers pension and other benefits for most public employees in the state, including state employees; instructors and other employees in the K-20 education system; and employees of political subdivisions that have elected to participate. FRS assets are managed by the State Board of Administration, whose board members are the governor, state treasurer, and state comptroller. New employees since 2002 are given a choice between the traditional defined benefit plan and a defined contribution plan.

In 2011, the Florida legislature passed a series of changes affecting current active and newly hired state employees, teachers and public safety officers who participate in the FRS. One change is a requirement, effective July 1, 2011, that current active members contribute 3 percent of their salary towards their benefits. Prior to this change, employee contributions had not been required since 1975. Additionally, cost-of-living adjustments (COLAs) were frozen for all service after that date, meaning that when a member retires they will earn a COLA benefit only on the benefits earned up to July 1, 2011.

Newly hired employees participate in a new tier with reduced benefits, increased age and service requirements needed to qualify for unreduced retirement benefits, and no COLA. Members of the new tier are estimated to have a beginning benefit that is approximately 3.5 percent less than an employee in the old tier[1].

Based on a study of the changes enacted that took effect July 1, 2011, the reforms reduced the plan's unfunded liability by $1.1 billion. The blended cost, reflecting all employee groups and their benefit levels, of benefits earned each year by plan participants, was reduced by 7.13 percent of payroll and the contribution rate to pay down the unfunded liability was reduced by 0.32 percent. This produced a $1.7 billion reduction in the required employer cost in the first year.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Current active members and new hires as of 7/1/11	For current active members: • Increased employee contributions to 3% of salary; the plan previously had been non-contributory. • Eliminated accumulation of additional COLA benefits for all service after 7/1/11. For new hires as of 7/1/11: • Lengthened the period used to calculate final average salary, from 5 years to 8 years. • Increased the vesting period, from 6 years to 8 years. • Increased the age and service requirements for normal (unreduced) retirement. To qualify, general employees and teachers must reach age 65 with 8 years of service, or any age with 33 years of service; previously they could retire at age 62 with 6 years of service or any age with 30 years of service. Public safety members must reach age 60 with 8 years of service or any age with 30 years of service; previously they could retire at age 55 with 6 years of service or any age with 25 years of service.

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014

Georgia

Employees' Retirement System of Georgia

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Changed Plan Design

Overview

The Employees' Retirement System of Georgia (ERSGA) administers pension and other benefits for state employees, non-certificated employees of public school districts, and employees of political subdivisions that are adjuncts of the state, such as county tax commissioners, county health departments and county departments of family and children services. ERS is made up of five defined benefit plans, three defined contribution plans and a life insurance fund.

The current cost of benefits earned each year of the defined benefit plan is approximately 3 percent lower for the newest tier, for those hired as of January 1, 2009, than for the prior tier.

Hybrid plan (GSEPS) participants now make up close to 45 percent of the active member population. Required employer contributions are nearly $27 million lower in FY15 than they would have been had the GSEPS tier not been enacted. About two-thirds of that cost reduction is reallocated to the employer match to the defined contribution component of the hybrid plan, which averages a little over 2 percent of GSEPS payroll (the maximum employer contribution is 3 percent). The rate of total liability growth in the defined benefit plan has slowed noticeably since 2009, to less than 1 percent per year, as the GSEPS membership becomes an increasingly large portion of the active member population.

Reform Detail

Year	Affected Worker Groups	Modifications
2014	New hires as of 7/1/14	• Increased the default employee contribution rate to the defined contribution plan to 5%, from 1%, in order for the member to take advantage of the full employer match. Employees may continue to elect to opt out within 90 days of their hire, or change their contribution rate.
2008	New hires as of 1/1/09	• Established a hybrid plan featuring a defined benefit component with a 1% multiplier and a defined contribution component with an employer contribution match. Employee contributions of 1.25% of salary are required to the defined benefit plan, and a 1% default contribution to the defined contribution plan. Employees may opt out of the defined contribution plan within 90 days of their hire.

Teachers' Retirement System of Georgia

Types of Pension Changes

None

Overview

The Teachers' Retirement System (TRS) of Georgia administers pension and other benefits for certificated teachers employed by school districts, public libraries, public colleges and universities, and other educational agencies.

Reform Detail

No major legislative reforms passed between 2007-2015

Hawaii

Hawaii Employees' Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirement • Reduced Cost-of-Living Adjustment

Overview

The Hawaii Employees' Retirement System (HIERS) administers pension and other benefits for substantially all public employees in the state. The system maintains three plans: a contributory, non-contributory, and hybrid plan. The Hybrid plan took effect July 1, 2006; the "hybrid" moniker refers not to a hybrid plan design, but to the retention of service credit from the legacy Non-Contributory plan and participation in the Hybrid plan, which is contributory for plan participants.

In 2011, the Hawaii legislature established a new tier for state employees, teachers and public safety officers hired as of July 1, 2012. Members of the new tier receive reduced benefits, a reduced cost-of-living adjustment (COLA), make greater pension contributions and are required to work longer to become eligible to receive unreduced retirement benefits. Members of the new tier are estimated to have an initial benefit that is approximately 14.6 percent less than a member in the old tier[1].

Contribution requirements for participating employers are set in statute as a percentage of covered employee payroll. The 2011 law increased the required percentage that employers must contribute, phased in over several years. Estimated savings from the reform total approximately $440 million from FY12 through FY16. Longer term savings, attributed to the reduction in benefits for new hires, are projected as well.

As a result of the benefit reductions and contribution rate increases, the system is projected to become fully funded within 30 years.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	New hires as of 7/1/12	• Increased the age needed to qualify for normal (unreduced) retirement. Workers must reach age 55 with 25 years of service, or age 60 with 10 years. • Increased the employee contribution rate from 7.8% of salary to 9.8% for general employees and teachers, and from 12.2% to 14.2% for public safety workers. • Increased statutory employer contribution rates, from 15% to 17% for general employees and teachers, and from 19.7% to 25.0% for public safety personnel, phased in over several years. • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Increased the vesting period, from 5 years to 10 years. • Reduced the retirement multiplier, from 2.0% to 1.75%. • Reduced the annual COLA from 2.0% to 1.5%. • Reduced the interest rate on accumulated contributions, from 4% to 2% (effective 7/1/11).

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014

Idaho

Public Employee Retirement System of Idaho

Types of Pension Changes

Increased Employee Contributions

Overview

The Public Employee Retirement System of Idaho (PERSI) administers pension and other benefits to substantially all public employees in the state, including state employees, teachers, and employees of political subdivisions who have elected to participate.

Idaho made no major legislative pension reforms between 2007 and 2015. The Idaho legislature and the PERSI administrative staff evaluated the changes which were taking place nationally. Idaho determined that their approach to structure and financing, using conservative assumptions and requiring all benefits enhancements to be prefunded by an ongoing revenue stream was sufficient to sustain the pension system without additional reform. The PERSI board has the authority to increase the total contribution rate, with the amount of the increase shared between employees and employers.

Contribution rates remained constant from FY05 through FY13, at 10.39 percent for employers on behalf of general employees and 6.23 percent for general employees, until increasing to 11.32 percent and 6.79 percent, respectively, beginning in FY14.

Reform Detail

No major legislative reforms passed between 2007-2015

Illinois

State Retirement Systems of Illinois

State Universities Retirement System of Illinois

Illinois Teachers Retirement System

Types of Pension Changes

Reduced Pension • Increased Age/Service Requirement • Reduced Cost-of-Living Adjustment

Overview

The State Retirement Systems of Illinois (SRS) administers three separate systems, each with its own board of trustees: SERS, the General Assembly Retirement System, and the Judges Retirement System. The systems share a common administrative staff. SERS administers a single employer pension plan and other benefits for state employees who do not qualify for membership in another state system. Assets are managed by the State Board of Investments. The State Universities Retirement System of Illinois (SURS) administers pension and other benefits for colleges and universities throughout the state. The system offers participants their choice of a traditional defined benefit plan and a defined contribution option, known as a self-managed plan. The Illinois Teachers Retirement System (TRS) provides pension and other benefits for certificated employees of school districts outside Chicago.

State fiscal problems and historically underfunded pensions led the state legislature to approve reforms to the statewide retirement systems for state employees, teachers, university employees, and employees of participating local governments. In 2010, the Illinois legislature established a new tier with reduced benefits and lengthened eligibility requirements for state employees, teachers and university employees hired as of January 1, 2011. According to the Illinois Commission on Government Forecasting and Accountability, the new tier, Tier II, is projected to reduce the statewide retirement systems' accrued liability by $208 billion over the next 35 years[1].

TRS Tier II members make contributions in excess of the cost of their benefits. As more teachers are hired into Tier II, the lower cost of those benefits will reduce the overall cost of the plan to employers, reducing the cost from around 20 percent of payroll to under 10 percent by 2042.

In 2013, the state again passed comprehensive pension reform legislation affecting, differently for each plan, members of the three large statewide retirement systems and the small plan covering legislators. This law was challenged and found unconstitutional by the Illinois Supreme Court in May 2015.

Reform Detail

Year	Affected Worker Groups	Modifications
2010	New hires as of 1/1/11	• Lengthened the period used to calculate final average salary, from 4 years to 8 years. • Increased the vesting period, for state employees, from 8 years to 10 years, and for teachers and university employees, from 5 years to 10 years. • Reduced the cap on the amount of salary that can be applied toward the calculation of pension benefits, for 2010-11, from $245,000 to $106,800. The cap will increase annually by the lesser of 3% or one-half of the rate of inflation. • Increased the age and service requirements to qualify for normal (unreduced) retirement to age 67 with 10 years of service, from age 60 with 8 years or age 62 with 5 years. Increased the age requirement to qualify for normal retirement with 35 years of service, from 60 to 67. Eliminated eligibility to retire at any age under the Rule of 85 (age and service adds to at least 85). • Increased the age of eligibility for an early (reduced) retirement benefit to age 62 with 10 years of service, from between age 55 and 60 with 25 to 30 years of service. • Reduced COLA from automatic, 3% compounded to the lower of 3% or one-half of the inflation rate, non-compounded. • Delayed eligibility for COLA until age 67.

[1]Report on the Financial Condition of the Illinois State Retirement Systems, 2010: http://cgfa.ilga.gov/Upload/FinCondILStateRetirementSysMar2010.pdf; 2011: http://cgfa.ilga.gov/Upload/FinCondILStateRetirementSysMarch2011.pdf

Illinois

Illinois Municipal Retirement Fund

Types of Pension Changes

Reduced Pension • Increased Age/Service Requirement • Reduced Cost-of-Living Adjustment

Overview

The Illinois Municipal Retirement Fund (IMRF) administers pension and other benefits for more than 2,900 political subdivisions in the state. Participation is mandatory for employees of counties outside Cook, non-certified employees of school districts outside Chicago, and employees of municipalities and other political subdivisions with a population over 5,000 that, prior to reaching this level, do not provide Social Security or equivalent coverage for their employees.

Reform Detail

Year	Affected Worker Groups	Modifications
2010	New hires as of 1/1/11	• Lengthened the period used to calculate final average salary, from 4 years to 8 years. • Increased the vesting period, from 8 years to 10 years. • Reduced the cap on the amount of salary that can be applied toward the calculation of pension benefits, for 2010-11, from $245,000 to $106,800. The cap will increase annually by the lesser of 3% or one-half of the rate of inflation. • Increased the age and service requirements to qualify for normal (unreduced) retirement to age 67 with 10 years of service, from age 60 with 8 years. Increased the age requirement to qualify for normal retirement with 35 years of service, from 60 to 67. • Increased the age of eligibility for an early (reduced) retirement benefit to age 62 with 10 years of service, from between age 55 and 60 with 25 to 30 years of service. • Increased the benefit reduction for early retirement, from 0.25% for each month a member's age is less than 60 or has less than 35 years of service, to 0.5% for each month a member's age is less than 67 or their service is less than 35 years. • Reduced COLA from automatic, 3% compounded to the lower of 3% or one-half of the inflation rate, non-compounded. • Delayed eligibility for COLA until age 67.

Indiana

Indiana Public Retirement System

Types of Pension Changes

Changed Plan Design (Optional)

Overview

The Indiana Public Retirement System (INPRS) was created in 2011 as a result of legislation that combined the Public Employees' Retirement Fund (PERF) and the Teachers' Retirement Fund (TRF). The new INPRS administers pension and other benefits for substantially all employees of state and local government in Indiana.

Public employees in Indiana participate in a combination (defined benefit/defined contribution) hybrid plan that was established in 1955. In 2011, the Indiana legislature established an optional individual account (ASA Only) plan for newly hired state employees as of March 1, 2013.

If a new employee elects to participate in the ASA Only plan, they are required to contribute 3.0 percent, though the law provides that this amount is to be contributed by their employer on their behalf. Employer contributions are also required, and they are to be not less than 3.0 percent and not greater than the cost of benefits earned each year in the defined benefit (DB) portion of the hybrid plan, which was 4.7 percent of covered employee payroll in FY14.

Reform Detail

Year	Affected Worker Groups	Modifications
2015	Employees of participating political subdivisions hired as of 6/1/15	• Established an optional individual account (ASA Only) plan for employees of participating political subdivisions who are hired after 6/1/15. Employers may choose to offer the plan, and if they do, employees may elect to join the plan. An employee who does not actively elect to join the ASA Only plan becomes a member of the hybrid plan. This plan is similar to state employees' plan, but not identical. The employee need not be a first time employee or participant in PERF; the employee needs only to be hired by the participating employer after 6/1/15. Employers are not required to offer the plan, but if they do, the employees may elect to join the plan. Employees who fail to make the election will be defaulted into the traditional PERF retirement account. Employee contributions are immediately vested, and there is a 5 year vesting schedule for employer contributions. The benefit is the sum of all employer mandatory contributions, employee mandatory contributions (picked up or after-tax), employee voluntary contributions, and any employer matching amounts.
2011	Newly hired state employees as of 3/1/13	• Established an optional individual account (ASA Only) plan for newly hired state employees. A state employee who does not actively elect to participate in the ASA Only plan becomes a member of the hybrid plan. A 3% contribution is required of members who elect to join the ASA Only plan, which is paid by the state on behalf of the member. Employer contributions are also required, and employer credits to individual accounts are specified to be not less than 3% and not greater than the cost of benefits earned each year in the DB portion of the hybrid plan. Employee contributions are immediately vested, and there is a 5 year vesting schedule for employer contributions.

Iowa

Iowa Public Employees' Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements

Overview

The Iowa Public Employees' Retirement System (IPERS) administers pension and other benefits for employees of more than 2,100 public entities in the state, including the state, school districts, and cities and counties. Assets are managed by the IPERS Investment Board, whose members include the state treasurer and others appointed by the governor. A separate retirement system administers pension benefits for many municipal public safety personnel.

A series of events, chiefly investment losses experienced during the market declines of 2000-2001 and 2008-2009, as well as a statutory limit on pension contributions for 12 years led to the growth of IPERS unfunded liabilities. In 2009, the system's Benefits Advisory Committee conducted a comprehensive analysis of potential adjustments to the IPERS benefit and funding structures to offset the plan's unfunded liability.

2010 legislation made a series of adjustments to IPERS' required contribution rates and benefit levels for active and new members. These included an increase in the period used to calculate final average salary, an increase in the number of years required to vest, and an increased reduction for early retirement. The law also provided for a one-time increase in the total contribution rate, from 11.45 percent of covered employee payroll to 13.45 percent (split 60/40 between employers and employees, per statute). The law also authorized the Board to set contribution rates thereafter based upon the actuarial required rate and the Board's funding policy. The law restricted any increase in future contribution rates to no greater than 1 percentage point annually.

Although the changes affected current members, the legislature also attempted to preserve vested benefits earned through June 30, 2012, with all reductions applied to benefits earned after that date. For instance, at retirement a member's 3-year average salary as of 6/30/12 is compared to the member's 5-year average salary at retirement, with the retirement benefit calculated based on the greater of the two averages. Additionally, the benefit reduction for early retirement is calculated at 3 percent per year short of full retirement eligibility, for service credits earned through June 30, 2012, and at 6 percent for service credits earned from July 1, 2012 through retirement.

As a result of the reforms, the IPERS unfunded liability was reduced by $674 million, and the period in which the system is projected to fully amortize, or pay off, its unfunded liability was reduced to 34 years. Prior the reforms the amortization period was infinite.

Year	Affected Worker Groups	Modifications
2010	New hires as of 7/1/12 and current active members for benefits earned after 7/1/12	• Increased the total contribution rate, from 11.4% to 13.45%. Provided for the ability to raise or lower the total contribution rate by 1% in future years. Prior law set the rates in statute. • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Increased the vesting period, from 4 years to 7 years (for non-vested members only). • Increased the actuarial reduction for early retirement, from 3% to 6% for each year an employee elects to retire prior to age 65.

Kansas

Kansas Public Employees Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Changed Plan Design • Reduced Cost-of-Living Adjustment

Overview

The Kansas Public Employees Retirement System (KPERS) administers pension and other benefits for most public employees in the state. The system maintains three plans; the largest of these is the Kansas PERS plan, which covers school teachers and most employees of state and local government; PERS plan members comprise 95% of all System members. Other plans are for judges and public safety personnel. The City of Wichita maintains its own plan for civilian and public safety personnel.

The Kansas legislature has made a series of changes to contribution rates and retirement benefits for state employees and teachers who participate in KPERS. Members hired since 1/1/15 participate in a cash balance plan which features individual, notional accounts that receive contributions from employees and notional "retirement credits" or "pay credits" funded by the employers. The account balances grow at a guaranteed rate of interest plus formulaic dividend credits. The law that established the new cash balance plan also eliminated the retiree cost-of-living adjustment (COLA) for members hired between 7/1/09 and 1/1/15. The requirement that members hired before 7/1/09 elect either a higher contribution rate or reduced benefits was subject to IRS approval, which was not received. Therefore, as required by the legislation, members hired before 7/1/09 were moved to the higher contribution rate and corresponding higher multiplier.

Reform Detail

Year	Affected Worker Groups	Modifications
2014	New hires as of 1/1/15	• Reduced the guaranteed interest accrual rate for cash balance participants (new hires as of 1/1/15), from 5.25% to 4.0%. This change was made prior to any employees joining the plan. • Removed discretionary interest credit (provided to accounts when investment earnings are strong) granted by the Board and created in its place a formula for annual additional interest credits to equal 75% of the 5-year average net compound rate of return for that calendar year and the previous 4 calendar years on the market value of the system's assets that is above 6%.
2011	Participating employers; current active members; new hires as of 1/1/15	For participating employers: • Increased the year-over-year cap on participating employer contribution rates for the state, school and local groups. The cap increased from 0.6% of covered employee payroll to 0.9% in FY14, 1.0% in FY15, 1.1% in FY16 and 1.2% in FY17. For current active members hired between 7/1/09 and 1/1/15: • Eliminated COLAs and increased the retirement multiplier, from 1.75% to 1.85%, retroactive to 7/1/09. For current active members hired before 7/1/09: • Required members to choose between accepting an increase in the member contribution rate, from 4% of salary to 6%, with a corresponding increase to the retirement multiplier, from 1.75% to 1.85%, or retaining the member contribution rate of 4% with a corresponding reduction in the retirement multiplier, from 1.75% to 1.4%, for service beginning 1/1/14 (in the absence of IRS approval, all active members defaulted to the higher contribution and higher multiplier as of 1/1/14). For new hires as of 1/1/15: • Established a cash balance plan, with employee contributions of 6% of salary, and employer pay credits as a percentage of their salary, that grow with increasing service. Accounts will grow at an annual rate of 5.25% (this rate subsequently was reduced to 4.0%), which may be higher if discretionary credits are granted by the Board, based in part on investment returns.
2007	Current active members and new hires as of 7/1/09	• Decreased the vesting period, from 10 years to 5 years (applies to all current active members). • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Increased the requirements for normal (unreduced) retirement to age 65 with 5 years of service, or age 60 with 30 years, from age 65 with 1 year of service, age 62 with 10 years, or the Rule of 85 (age and service add to 85).

Kentucky

Kentucky Retirement Systems

Types of Pension Changes

Reduced Pension • Increased Age/Service Requirement • Changed Plan Design • Reduced Cost-of-Living Adjustment

Overview

The Kentucky Retirement Systems (KRS) administers pension and other benefits to nearly all public employees in the state, other than school teachers. The system includes three pension plans: the Kentucky Employees Retirement System (KERS), the County Employees Retirement System (CERS), and the State Police Retirement System (SPRS).

The Kentucky legislature made a series of changes affecting newly hired state and participating local employees and retirees in recent years. A new tier with reduced benefits and increased retirement eligibility requirements applies to employees hired between 9/1/08 and 1/1/14. Employees hired as of 1/1/14 participate in a cash balance plan instead of a traditional pension. Annual cost-of-living adjustments were suspended indefinitely for all plan participants until the system funding level exceeds 100 percent or direct funds are set aside by the legislature.

2013 legislation required that the state make full payment of actuarially determined contributions beginning in FY15, which the state had not done for most of the past 20 years. As a result of the new legislation, the state paid its required pension contribution for FY15, and appropriated funds to pay for FY16 as well. For future years, the receipt of required contributions depends on the outcome of the biennial budget process. Making the required contributions will increase pension spending in the near term; however, assuming the required contributions continue to be made, projections developed by the system's actuary indicate the 2013 changes will produce a gradual decline in the required employer contribution rates over the next 20 years, and a reduction in the system's long-term pension liability of $4.5 billion by 2032.

Year	Affected Worker Groups	Modifications
2013	Retired members; newly hired state and local government employees as of 1/1/14	• Suspended retiree COLAs unless the system is over 100% funded or the COLA is prefunded by the legislature. • Created a cash balance plan for newly hired state and local workers. Employee accounts are guaranteed an annual return of 4%, plus 75% of investment returns above 4%. Employee contributions of 5% of salary, and employer contributions of 4% are required.
2011	Current and future retirees	• Suspended retiree COLAs for 2012 and 2013.
2008	New hires as of 9/1/08	• Reduced the retirement multiplier from 2.0% (county) or 1.97% (state) to between 1.1% and 2.0%, depending on length of service. The multiplier for police and hazardous duty occupational employees was reduced from 2.5% to between 1.3% and 2.5%, depending on length of service. • Eliminated lump-sum compensation from the calculation of the pension benefit. • Capped the rate of interest paid on member contributions upon withdrawal before vesting to 2.5% for all workers. Prior to the change the interest rate was determined by the KRS Board and not subject to a cap. • Increased the age and service requirements for normal (unreduced) retirement, for state and county workers. Workers must reach age 65 and be employed for at least 5 years, or meet the Rule of 87 (age and service adds up to 87) at age 57. Previously, they could retire at age 65 with at least 4 years of employment or at any age with at least 27 years of employment. Police and hazardous duty workers must now complete 25 years of employment, or at least 5 years of employment and reach age 60, rather than age 55 under the prior plan. • Limited retiree COLAs to 1.5%. Previously COLAs were tied to CPI and capped at 5%.

Kentucky

Kentucky Teachers' Retirement Systems

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirement

Overview

The Kentucky Teachers' Retirement System administers pension and other benefits to certified employees of school districts, state universities and community colleges, and other public educational agencies.

In 2008, the Kentucky legislature reduced benefits for teachers and university employees hired as of 7/1/08. For these members, benefits will be earned at a lower rate than in the old tier and they will be required to work longer to begin drawing a benefit without penalty. Also, new hires are required to pay more toward the funding of their benefits.

Reform Detail

Year	Affected Worker Groups	Modifications
2008	Newly hired teachers and university employees as of 7/1/08	• Increased required employee contributions to 10.855% of salary, from 10.355% for teachers and 9.375%, from 8.715% for university employees. Rates for teachers will rise by an additional 2.0% and 1.025% for university employees by the 2014-15 fiscal year. • Reduced the retirement multiplier to a scale ranging from 1.7% to 3.0% for teachers and 1.5% to 2.0% for university employees depending on length of service. • Reduced the rate of interest paid on member contributions upon withdrawal before vesting, from 3.0% to 2.5%. • Eliminated lump-sum compensation from determination of final average salary. • Increased the requirement for early retirement at age 55 to require 10 years of employment instead of 5, with a penalty of 1% for each year short of 27 years of service or age 60.

Louisiana

Louisiana State Employees' Retirement System

Teachers' Retirement System of Louisiana

Types of Pension Changes

Reduced Pension • Increased Age/Service Requirements • Reduced Cost-of-Living Adjustment

Overview

The Louisiana State Employees' Retirement System (LASERS) administers pension benefits for state employees not including higher education faculty and staff; certain unclassified employees and appointed and elected officials may elect to participate in an optional retirement plan also administered by LASERS.

The Teachers' Retirement System of Louisiana (TRSL) administers pension and other benefits for employees of public K-12 and post-secondary educational institutions in the state. The System also administers an optional defined contribution plan for academic and administrative employees of state higher educational institutions and their governing boards.

2009 legislation restructured the state's debt owed to its retirement systems and dedicated the first $200 million for TRSL and the first $100 million for LASERS in future investment returns above the assumed rate of return (currently 7.75%) to pay down the unfunded pension liability. Funds in a special account exclusively for cost-of-living adjustment (COLA) payments and other accounts and credits were set aside to pay down the unfunded pension liability. Going forward, this COLA account would be credited with one-half of investment returns above the assumed rate, only after the first $200 million for TRSL and $100 million for LASERS in excess earnings was used to pay down the unfunded pension liability. Prior to this law, there was no requirement that monies be set aside to pay down the unfunded pension liability before the COLA account was funded. Act 497 also increased from age 55 to 60 the age for eligibility for a COLA. Legislative reforms, including those listed above, have a projected long-term savings of more than $5 billion for TRSL and $3 billion for LASERS.

Reform Detail

Year	Affected Worker Groups	Modifications
2014	Current and future retired state employees and teachers; newly hired state employees and teachers as of 7/1/15	For current and future retired state employees and teachers: • Tied the provision of an ad hoc COLA to the plan's funded status, and limited maximum COLA distribution to every other year, if funds are available, until the system is 85% funded. Also, capped the excess investment returns that can be held in the COLA account to the cost necessary to grant one COLA, until the system is 80% funded. The account was previously capped at the cost of two COLAs. For newly hired state employees and teachers as of 7/1/15: • Increased the normal (unreduced) retirement age from 60 to 62.
2010	Newly hired teachers as of 1/1/11; newly hired state employees for whom the provisions did not already apply	For newly hired teachers as of 1/1/11, and for newly hired state employees for whom the provisions did not already apply (the provisions apply to most state employees hired as of 7/1/06): • Eliminated eligibility for normal (unreduced) retirement at age 55 with 25 years of service or at any age with 30 years of service, thereby establishing the minimum retirement age for normal retirement at 60. • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Established a uniform standard for state retirement systems by which a member's final average salary may increase, for purposes of calculating pension benefits, at 115%. The prior thresholds were 125% for LASERS and 110% for TRSL.
2009	Current and future retired state employees and teachers	• Restructured COLA eligibility and granting requirements and directed funds previously dedicated to COLAs to reduce the LASERS and TRSL unfunded liabilities.

Maine

Maine Public Employees Retirement System

Types of Pension Changes

Increased Age/Service Requirements • Reduced Cost-of-Living Adjustment

Overview

The Maine Public Employees Retirement System (PERS) administers pension and other benefits for most public employees in the state, including state employees, public school teachers and other school district employees, and employees of political subdivisions that have elected to participate. The System administers the State & Teacher Plan; and the Consolidated Plan, for employees of state and local public entities, including school districts; and plans for legislators and judges. Maine PERS also administers a 401(a), 403(b) and 457 plan.

2011 changes included a three-year suspension of retiree cost-of-living adjustments, increased the normal retirement age for new employees and employees with less than 5 years of service from 62 to 65, and a provision that limits the number of years and the amount of salary for retirees who return to work in a position covered by the State/Teacher plan. These limitations have since been amended to permit more flexibility for "classroom-based employees" who return to work.

The changes reduced the PERS unfunded liability by approximately $1.7 billion, with most of the reduction attributed to the COLA changes. The reforms also reduced the employer's cost of benefits earned each year by around $25 million in FY12 and FY13, respectively.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Retired members and current active members with less than five years of service as of 7/1/11	For retired members as of 7/1/11 and future retirees: • Suspended COLAs for three years; thereafter, COLAs to be based on the rate of inflation up to 3% on the first $20,000 of benefits, which increases each year by the rate of inflation. For members who have attained normal retirement age and who retire after 7/1/11: • Required that members who retire and return to work in a position covered by the State/Teacher plan may work no more than 5 years and only at a salary not more than 75% of that established for the position. For members with less than 5 years of service as of 7/1/11: • Increased the normal (unreduced) retirement age from 62 to 65.

Maryland

Maryland State Retirement & Pension System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements • Reduced Cost-of-Living Adjustment

Overview

The State Retirement & Pension System of Maryland (SRPS) administers pension and other benefits for most public employees in the state, including public school teachers, state employees, and employees of local school systems and political subdivisions that have elected to participate.

In 2011, the Maryland legislature passed a series of pension reforms affecting current and newly hired state employees, teachers and public safety officers, effective July 1, 2011. Pre-reform active members are required to contribute a greater percentage of their salary toward their pension, and receive a reduced cost-of-living adjustment (COLA) applied to service credit earned after the reform's effective date. New hires participate in a new tier with reduced benefits and increased eligibility requirements. Members of the new tier are estimated to receive an initial benefit that is approximately 18.7 percent less than an employee in the old tier[1].

Through enactment of the 2011 law, the Maryland legislature expressed its intent to reach a pension funding level of 80 percent within 10 years, to be achieved not only by the reforms but by reinvesting a portion of the savings generated by the benefit reductions. Projections developed by the State Department of Legislative Service at the time, indicated that the system's funded ratio was projected to achieve this goal by FY2023, three years earlier than it would in the absence of the reinvestment provision.

The law also produced reductions to projected state contribution rates over time. At the time of the reforms, the 2026 projected employer contribution rate was just over 25 percent of payroll, accounting for the reinvested savings. Today, the maximum projected rate of 18.4 percent occurs in 2016.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Current active members and new hires as of 7/1/11	For current active members and new hires as of 7/1/11: • Increased employee contribution rates, from 5% of salary to 7%, for all general employees and teachers not current contributing that amount. • Increased required contribution rates for law enforcement officers, from 4% of salary to 6% in FY12, and to 7% in FY13 and thereafter. • Reduced COLA for service credit earned after 7/1/11, to the rate of inflation up to 2.5% in years when the assumed investment return is achieved; 1% when it is not. COLA for service credit before 7/1/11 is the rate of inflation up to 3%. For new hires as of 7/1/11: • Increased the age needed to qualify for normal (unreduced) retirement for general employees and teachers. Workers must reach age 65 with 10 years of service, or Rule of 90 (age and service add up to 90). Previously they could retire at age 62 with 5 years of service, age 63 with 4 years, age 65 with 2 years, or any age with 30 years. • Increased the age needed to qualify for early (reduced) retirement with 15 years of service for general employees and teachers, from age 55 to 60. • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Reduced the retirement multiplier, from 1.8% to 1.5%. • Increased the vesting period, from 5 years to 10 years.

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014

Massachusetts

Massachusetts State Employees Retirement System

Massachusetts Teachers' Retirement System

Types of Pension Changes

Reduced Pension • Increased Age/Service Requirements • Increased Cost-of-Living Adjustment

Overview

The Massachusetts State Employees Retirement System (MSERS) administers pension and other benefits for substantially all qualifying state employees and certain non-state entities. The Massachusetts Teachers' Retirement System (MTRS) administers pension benefits for public school teachers and other licensed educators in the state, excluding Boston, which maintains its own retirement system. The Public Employee Retirement Administration Commission (PERAC) provides oversight of and actuarial services for the SERS, TRS and the other 102 public retirement systems in the state. Assets of the MSERS and MTRS (and some local funds) are managed by the Pension Reserves Investment Management Board (PRIM), whose nine members include the state treasurer, the governor or his or her designee, elected representatives of the state employees and teachers' retirement systems, and elected board members from the MSERS and TRS.

2011 legislation established a new tier for newly hired Massachusetts public employees, which is estimated to provide an initial retirement benefit that is approximately 1.2 percent less than an employee in the prior tier[1]. In addition to reducing benefits for new hires, the law included benefit improvements and other provisions affecting current members of the MSERS and MTRS. For active members and retirees, the base benefit on which cost-of-living adjustments (COLAs) are calculated and the minimum spousal survivor benefit for in-service death were increased.

According to the PERAC, the reforms are projected to save the state $5 billion over the next 30 years and to eliminate the combined MSERS and MTRS unfunded liability by 2040.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Current and future retired members; current active employees; newly hired state employees, teachers and public safety officers as of 4/1/12	For current and future retired members: • Increased the amount of annual benefit on which future COLAs will be based, from the first $12,000 to the first $13,000. • Increased the minimum spousal survivor benefit for in-service death from $250/month to $500/month. For current active members and new hires: • Instituted an anti-spiking provision that requires that final average salary may not exceed the average of the two preceding years by more than 10% (certain exceptions apply, such as change of position or payment for additional duties). • Increased the rate of interest charged for certain purchases of service credit, from one-half of the actuarially assumed interest rate to the fund's full assumed rate of return. For new hires as of 4/1/12: • Reduced the retirement multiplier, which is based on a range commensurate with age, starting at 1.45% at age 60 to a maximum of 2.5% at age 67 for general employees. (Original tier multipliers were 2.0% at age 60 and 2.5% at age 65.) • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Increased the age to qualify for normal (unreduced) retirement with 10 years of service, for general employees and teachers from 65 to 67 and for public safety officers from 55 to 57. Increased the minimum retirement age with 10 years of service from 55 to 60. Eliminated retirement at any age with 20 years of service. • Increased the reduction for early retirement, from 4% to 6%.

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014

Michigan

Michigan State Employees' Retirement System

Types of Pension Changes

Increased Employee Contributions

Overview

The Michigan State Employees' Retirement System (SERS) administers pension, disability, health insurance and survivors benefits for substantially all state employees hired prior to April 1997. In 1997, the Michigan Legislature established a mandatory defined contribution (DC) plan for state employees joining after March 1997. Assets are managed by the state treasurer, who serves as sole fiduciary.

In 2011, the legislature passed pension reform requiring current active members in the defined benefit (DB) plan (those hired before March 1997) to make an election regarding their benefits and contribution rates. Employees were required to either begin contributing toward the cost of their benefits or freeze service in the DB plan and convert to a DC plan for future service. Non-vested DB plan members electing to switch to the DC plan are permitted to use DC service time to vest in frozen DB service for retirement and health care benefits.

The 2011 legislation also provided an option for current DC plan participants who were not former members in the DB plan to keep a subsidized retiree health care benefit or switch to a 2 percent employer match to employees' accounts to build assets within the State of Michigan 401(k) and 457 Plans toward the cost of financing their retiree health care.

For DC participants hired as of 1/1/12, subsidized retiree health care is no longer available, but participants are automatically enrolled in a 2 percent employer match to employees' accounts to build assets within the State of Michigan 401(k) and 457 Plans toward the cost of financing their retiree health care.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Current active members hired before 1997	• Established an employee contribution rate of 4% of salary. The plan was previously non-contributory. If an employee elects to pay this amount they may choose to remain in the DB plan until retirement, or until they complete 30 years of service, with DB benefits frozen thereafter and the employee transferring to the DC plan for any additional service.

Michigan

Michigan Public School Employees' Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Changed Plan Design • Reduced Cost-of-Living Adjustment

Overview

The Michigan Public School Employees' Retirement System (MPSERS) administers pension, disability, health insurance, and survivors benefits for employees of public school districts, and participating colleges, and universities in the state. Assets are managed by the state treasurer, who serves as sole fiduciary.

In 2010, the Michigan legislature closed the defined benefit (DB) plan for the Public School Employees' Retirement System to new hires and replaced it with a combination hybrid plan featuring a reduced defined benefit plan with a mandatory defined contribution component. Cost-of-living adjustments (COLAs) were eliminated for hybrid plan participants. The hybrid plan is projected to produce employer savings of $129.4 million over 10 years. Total estimated savings from all changes are $3.33 billion over 10 years, virtually all of which is attributed to the establishment of a 3 percent employee contribution to retiree health benefits[1]. The additional costs associated with a retirement incentive offset a portion of the savings.

In addition to the options presented to members who first worked before July 1, 2010, the 2012 legislation provided all members an option to keep a subsidized retiree health care benefit or switch to a 2 percent employer match to employees' accounts to build assets within the State of Michigan 401(k) and 457 Plans toward the cost of financing their retiree health care, although the employee may use the money in retirement for health care or other retirement expenses. New hires were given a choice to participate in either the hybrid plan or a DC plan, with the hybrid plan serving as the default selection with a 75-day window to elect the DC plan instead. Whether they elected to stay in the hybrid plan or join the DC plan, 2 percent of the match in the defined contribution plan is designated as a health care contribution, although the employee may use the money in retirement for health care or other retirement expenses. Unfunded pension liabilities were projected to be $1.6 billion less under the new law than they would have been if no changes were made.

Reform Detail

Year	Affected Worker Groups	Modifications
2012	Current active members who first worked before 7/1/10 and new hires as of 9/26/12	For current active members who first worked before 7/1/10: • Required employees to either pay increased contributions, receive reduced benefits, or move to a defined contribution plan. The employee contribution rate was increased from either zero to 4% of salary, or from 3%-6% to 7%, depending on the plan. Employees who elected to accept the increased contribution rates kept their existing retirement multiplier of 1.5%. If an employee instead elected to keep their contribution rates, benefits were frozen at the 1.5% multiplier and will accrue at 1.25% for future years of service. • Permitted employees to elect to move into a defined contribution plan for future service with a flat 4% employer contribution rate. For new hires as of 9/26/12: • Provided employees with a choice to join either the hybrid plan or a defined contribution plan. The hybrid plan is the default option.
2010	Current active members and new hires as of 7/1/10	For current active members: • Created an incentive to retire by 9/1/10 by temporarily increasing the retirement multiplier and reducing retirement eligibility requirements for those who retired by that date. For new hires: • Established a hybrid plan featuring a defined benefit plan with the same multiplier as the prior plan (with increased employee contributions) and automatic enrollment in a defined contribution plan. • Eliminated COLAs.

[1]Legislative Analysis, Public School Retirement Revisions: Senate Bill 1227 as Enacted http://www.legislature.mi.gov/documents/2009-2010/billanalysis/House/pdf/2009-HLA-1227-7.pdf (page 4)

Minnesota

Minnesota State Retirement System

Types of Pension Changes

Increased Employee Contributions • Increased Age/Service Requirement • Reduced Cost-of-Living Adjustment

Overview

The Minnesota State Retirement System (SRS) administers pension and other benefits for state employees and employees of universities, cities, counties, school districts, and other political subdivisions and other entities that have elected to participate. The system consists of six defined benefit plans and two defined contribution plans. SRS assets are managed by the State Board of Investment.

2010 legislation reduced the cost-of-living adjustment (COLA) for current and future retirees, increased contribution rates for employees and employers, and increased eligibility requirements for newly hired state employees in Minnesota.

The plan changes, combined with other modifications to actuarial assumptions, were projected to reduce the State Employees Retirement Fund unfunded liability by $674 million and decrease the employer's contribution rate by 7.3% of payroll.

Reform Detail

Year	Affected Worker Groups	Modifications
2014	Current active members	• Increased the employee and employer contribution rate, from 5.0% of salary to 5.5%, effective 7/1/14.
2010	Retirees and current active members; new hires as of 7/1/10	For current and future retirees: • Beginning 1/1/11, reduced COLA from 2.5% to 2.0% for state employees, and from 2.5% to 1.5% for state patrol officers, until system funding ratio = 90% For current active members: • Reduced the rate of interest applied to refunded member contributions, from 6% to 4%. • Reduced the rate of interest applied to benefits for deferred vested members, to 2%, beginning 7/1/12. For new hires: • Increased the vesting period, from 3 years to 5 years.

Minnesota

Minnesota Teachers Retirement Association

Types of Pension Changes

Increased Employee Contributions • Reduced Cost-of-Living Adjustment

Overview

The Teachers Retirement Association of Minnesota (TRA) administers retirement and other benefits for most of the state's public school teachers, administrators, and state college faculty. Teachers employed in Minnesota's public elementary and secondary schools, charter schools, and certain educational institutions maintained by the state (except those teachers employed by the city of St. Paul and by the University of Minnesota system) are required to be TRA members. State university, community college, and technical college teachers first employed by the Minnesota State College and Universities (MnSCU) may elect TRA coverage within 90 days of first employment. Alternatively, these teachers may elect coverage through the Defined Contribution Retirement Plan (DCR) administered by MnSCU. TRA assets are managed by the State Board of Investment.

2010 legislation reduced the cost-of-living adjustment (COLA) for current and future retired teachers and increased contribution rates for employees and employers.

The plan changes, combined with other modifications to actuarial assumptions, were projected to reduce the system's unfunded liability by $1.75 billion and to decrease the employer's contribution rate by 3.2% of payroll.

Reform Detail

Year	Affected Worker Groups	Modifications
2010	Retirees and current active members	For current and future retirees: • Suspended COLAs for calendar years 2011 and 2012; beginning 1/1/13, reduced COLA from 2.5% to 2.0% until system funding ratio = 90%. For current active members: • Increased employee contribution rate from 5.5% of salary to 7.5% over 4 years, in 0.5% increments. • Reduced the rate of interest applied to refunded member contributions, from 6% to 4%. • Reduced the rate of interest applied to benefits for deferred vested members, to 2%, beginning 7/1/12.

Minnesota

Minnesota Public Employees Retirement Association

Types of Pension Changes

Increased Employee Contributions • Increased Age/Service Requirement • Reduced Cost-of-Living Adjustment

Overview

The Minnesota Public Employees Retirement Association (PERA) administers pension and other benefits for employees of approximately 2,000 cities, counties, school districts, and other political subdivisions in the state. The system administers three defined benefit plans; the largest of these is the General Employees Retirement Fund (GERF), which accounts for approximately 90% of all System active members. Other plans are for public safety personnel and correctional officers. PERA assets are managed by the State Board of Investment. PERA also administers a defined contribution plan for employees of local ambulance services, physicians at public hospitals in the state, and local elected officials.

2010 legislation reduced the cost-of-living adjustment (COLA) for current and future retirees, increased contribution rates for employees and employers, and increased eligibility requirements for newly hired local government employees in Minnesota. Contribution rates were again increased in 2013.

The plan changes, combined with other modifications to actuarial assumptions, were projected to reduce the General Employees Retirement Plan unfunded liability by $2.5 billion and to decrease the employer's cost for benefits earned each year by 4.30% of payroll. The unfunded liability of the Public Employees Police & Fire Plan was projected to be lowered by $625 million, and the employer's contribution rate decreased by 7.1% of payroll.

Reform Detail

Year	Affected Worker Groups	Modifications
2014	Current active general employees	• Increased employee contribution rate from 6.25% of salary to 6.5%, effective 7/1/15. • Increased employer contribution rate from 7.25% of payroll to 7.5%, effective 7/1/15.
2013	Current active police & fire members	• Increased employee contribution rate from 9.6% of salary to 10.2% on 1/1/14, and to 10.8% on 1/1/15. • Increased employer contribution rate from 14.4% of payroll to 15.3% on 1/1/14, and to 16.2% on 1/1/15.
2010	Retirees and current active members; new hires as of 7/1/10	For current and future retirees: • Reduced COLA from 2.5% to 1.0% until system funding ratio = 90%. For current active members: • Increased employee contribution rate for general employees, from 6% of salary to 6.25%, and for police officers and firefighters, from 9.4% to 9.6%, effective 1/1/11. • Increased employer contribution rate for general employees, from 7% of payroll to 7.25%, and for police officers and firefighters, from 14.1% to 14.4%, effective 1/1/11. • Reduced the rate of interest applied to refunded member contributions, from 6% to 4%, beginning 7/1/11. • Reduced the rate of interest applied to benefits for deferred vested members, to 1%, beginning 1/1/12. For new hires: • Increased the vesting period, from 3 years to 5 years.

Mississippi

Mississippi Public Employees' Retirement System

Types of Pension Changes

Increased Employee Contributions • Increased Age/Service Requirements • Reduced Cost-of-Living Adjustment

Overview

The Public Employees' Retirement System of Mississippi (PERS) administers pension and other benefits for employees of substantially all public employers in the state, including employees of the state, universities and colleges, public school teachers and other school district employees, and employees of political subdivisions that have elected to participate. The System administers separate plans for highway patrol officers, a closed plan for firefighters and police officers, and a plan for legislators.

The Mississippi legislature has made a series of changes affecting benefits, retirement eligibility, employee contribution rates and cost-of-living adjustments (COLAs) for current active and newly hired members of PERS. Members of the new tier who attain 30 years of service are estimated to have an initial retirement benefit that is approximately 4 percent less than an employee in the old tier[1].

The 2011 COLA reductions reduced the cost for benefits earned each year by 0.76% of payroll. At 9 percent of salary, employees currently are paying approximately 80 percent of this cost.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	New hires as of 7/1/11	• Changed the retirement formula to 2% of final salary for the first 30 years of service plus 2.5% for each year beyond 30. The previous formula provided for 2% of final salary for the first 25 years of service plus 2.5% for each year beyond 25. • Increased the age to qualify for a normal (unreduced) retirement benefit with 8 years of service, from 60 to 65, and increased the amount of service needed to qualify for a normal retirement benefit at any age, from 25 years to 30. • Increased the age at which retiree COLA converts from simple to compounded, from 55 to 60.
2010	Current active members	• Increased employee contribution rate, from 7.25% of salary to 9.0%.
2007	New hires as of 7/1/07	• Increased the vesting period from 4 years to 8 years. • Increased the service requirement to qualify for a normal (unreduced) retirement benefit at age 60, from 4 years to 8 years.

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014

Missouri

Missouri State Employees' Retirement System

Missouri Department of Transportation & Highway Patrol Employees' Retirement System

Types of Pension Changes

Increased Employee Contributions • Increased Age/Service Requirements

Overview

The Missouri State Employees' Retirement System (MOSERS) administers retirement and other benefits for most state employees, including members of the state general assembly, state elected officials, and judges. The System administers three plans, of which the State Employees' Plan represents more than 99% of all members and comprises three benefit structures: the MSEP, which is a closed plan; the MSEP 2000, for employees hired between June 30, 2000 and January 1, 2011; and the MSEP 2011, for employees hired as of January 1, 2011. Other plans are for judges and legal advisors.

The Missouri DOT & Highway Patrol Employees' Retirement System (MPERS) administers pension and other benefits for employees of the state's department of transportation and highway patrol.

In 2010, the Missouri legislature created a new tier for all state employees hired as of January 1, 2011. Members of the new tier, which includes law enforcement officers, are required to contribute a percentage of their salary toward their pension and are required to work longer to become vested in the plan and to receive an unreduced retirement benefit. Members of the prior tier are not required to make pension contributions. The new tier is projected to reduce state spending by $600 million over the ensuing decade.

Reform Detail

Year	Affected Worker Groups	Modifications
2010	Newly hired state employees and state transportation employees as of 1/1/11	• Established an employee contribution rate of 4% of salary. The prior tier for each plan is non-contributory. • Increased the vesting period, from 5 years to 10 years. • Increased the criteria for normal (unreduced) retirement eligibility, to age 67 with 10 years of service or the Rule of 90 (age and service adds to 90) at age 55, from age 62 with 5 years of service or the Rule of 80 at age 48. • Increased the criteria for early (reduced) retirement eligibility, to age 62 with 10 years of service, from age 57 with 5 years of service.

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014

Missouri

Public School and Education Employee Retirement Systems of Missouri

Types of Pension Changes

Reduced Cost-of-Living Adjustment

Overview

The Public School Retirement System of Missouri (PSRS) administers pension and other benefits for certificated employees of public school districts and state community colleges. St. Louis and Kansas City maintain separate teacher plans. The System is administered jointly with the Public Education Employees Retirement System (PEERS) of Missouri. Both systems are overseen by a common board and administered by a common staff.

In 2011, the Board of the PSRS/PEERS of Missouri adopted changes to the formula that determines the retiree cost-of-living adjustment (COLA) as part of a broader Funding Stabilization Policy. The stated purpose of the policy was to mitigate the effects of rising contribution rates on members and participating employers. Full policy details are available online: https://www.psrs-peers.org/News/Funding-Stabilization-Policy.html

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Current and future retired teachers and public education employees	• Reduced the COLA from automatic, based on CPI up to 5%, compounded, to either zero, 2%, or 5% depending on whether the CPI is negative, positive and below 5%, or above 5%, respectively.

Montana

Montana Public Employee Retirement Administration

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirement • Reduced Guaranteed Annual Benefit Adjustment

Overview

The Montana Public Employee Retirement Administration (MPERA) administers pension and other benefits for substantially all public employees and volunteer firefighters in the state except teachers. MPERA administers eight defined benefit plans, an optional 457 plan, and an optional core defined contribution (DC) retirement plan with a long-term disability (OPEB) plan established as an alternative to the defined benefit (DB) plan. More than 80 percent of active members belong to the PERS Plan, which covers general employees of the state and participating political subdivisions. DB Plan assets are managed by the Montana State Board of Investments. The alternative DC plan was approved in 2002 by the Montana Legislature.

In 2007, the Montana legislature reduced the Guaranteed Annual Benefit Adjustment (GABA) to 1.5 percent for newly hired state employees. The GABA is similar to a cost-of-living adjustment but is a flat percentage established in statute.

In 2011, the Montana legislature passed a series of pension reforms affecting current active and newly hired state employees. Current active members are required to contribute a greater percentage of their salary toward their pensions. A new tier was established for new hires with reduced benefits and increased eligibility requirements. Members of the new tier are estimated to have an initial retirement benefit that is approximately 13 percent lower than an employee in the old tier[1].

The legislation also reduced the GABA to a variable rate for all members, including retirees. This provision was subjected to a legal challenge; 2015 court rulings reversed the GABA reduction for retirees and active members hired before 7/1/13. Cuts were upheld for members hired as of 7/1/13. The GABA has continued to be paid throughout this process.

Reforms to the Montana PERS reduced its amortization from infinity to 27 years and reduced the immediate cost of benefits earned each year from 11.80 percent of payroll to 11.18 percent.

Reform Detail

Year	Affected Worker Groups	Modifications
2013	New hires as of 7/1/13	• Reduced the GABA from 1.5% to a variable rate ranging from a minimum of 0 to a maximum of 1.5%, depending on the plan's funded status.
2011	Current active members; new hires as of 7/1/11	For current active members and new hires: • Increased the employee contribution rate from 6.9% of salary to 7.9%. For new hires: • Lengthened the period used to calculate final average salary, from the highest consecutive 36 months to the highest consecutive 60 months. • Reduced the retirement multiplier, from 1.7857% for those retiring with less than 25 years of service and 2.0% for those retiring with 25 years of service, to 1.5% for those retiring with 10 years of service, 1.7857% for those retiring with 10 or more years of service but less than 30, and 2.0% for those retiring with 30 or more years of service. • Increased the age required to qualify for normal (unreduced) retirement with 5 years of service, from 60 to 65, and with any amount of service, from 65 to 70 attained before or while still employed in a covered position. • Eliminated the ability to retire at any age with 30 years of service.
2007	New hires as of 7/1/07	• Reduced the GABA from 3.0% to 1.5%.

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014

Montana

Montana Teachers' Retirement Board

Types of Pension Changes

Increased Employee Contributions • Increased Age/Service Requirement • Reduced Guaranteed Annual Benefit Adjustment

Overview

The Montana Teachers' Retirement System (TRS) administers pension and other benefits for all teachers and other certificated employees of public schools, colleges, and universities. The System also administers an optional retirement plan for approximately 4,400 employees of the state university system. Assets are managed by the State Board of Investments.

In 2013, the Montana legislature passed a series of pension reforms affecting newly hired teachers. Newly hired teachers receive reduced benefits, must contribute a greater percentage of their salary toward their pension, and must work longer to become eligible to receive retirement benefits.

The legislation also reduced the Guaranteed Annual Benefit Adjustment (GABA), which is a cost-of-living adjustment, to a variable rate for all members, including retirees. This provision was subjected to a legal challenge; 2015 court rulings reversed the GABA reduction for retirees and active members hired before 7/1/13. Cuts were upheld for members hired as of 7/1/13. The GABA has continued to be paid throughout this process.

Reform Detail

Year	Affected Worker Groups	Modifications
2013	New hires as of 7/1/13	For new hires as of 7/1/13: • Increased employee contribution rate from 7.15% of salary to 8.15%. • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Established a minimum age of 55, with at least 30 years of service, to qualify for normal (unreduced) benefits. Previously members could retire at any age with 25 years of service. • Increased the retirement age for early (reduced) retirement with 5 years of service, from age 50 to 55. • Reduced the GABA from 1.5% to a variable rate ranging from a minimum of 0.5% to a maximum of 1.5%, depending on the plan's funded status.

Nebraska

Nebraska Public Employees' Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Reduced Cost-of-Living Adjustment

Overview

The Nebraska Public Employees' Retirement System (NPERS) administers pension and other benefits for most public employees in the state. The System administers five plans, including three defined benefit plans, for teachers, judges, and members of the highway patrol; and two cash balance plans, for state and county employees, respectively. State and county employees hired prior to 1/1/03 were enrolled in a defined contribution plan; those who are still working and who have not elected to switch to the cash balance plan remain in the DC plan.

In 2011, the Nebraska general assembly made changes affecting current and newly hired teachers and other school employees who participate in NPERS. Changes included increased employee contribution rates and anti-spiking provisions for current members. Legislation enacted in 2013 established a new tier for employees hired as of July 1, 2013 with reduced benefits and a reduced cost-of-living adjustment (COLA).

Employee contributions account for more than 80 percent of the current cost of benefits earned each year of 12.11 percent of payroll.

Reform Detail

Year	Affected Worker Groups	Modifications
2013	Newly hired teachers and other school employees as of 7/1/13	• Retained the employee contribution rate of 9.78% of salary indefinitely. The rate had previously been scheduled to reduce to 7.28% on 9/1/17. • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Reduced maximum annual COLA from 2.5% to 1.0%.
2011	Current active teachers and other school employees	• Temporarily increased employee contribution rates, beginning 9/1/11, from 8.28% of salary to 8.88%. On 9/1/12 the rate is increased to 9.78%. On 9/1/17 the rate is decreased to 7.28%. • Excluded compensation increases greater than 9% per year, during the 5 years prior to retirement, from eligible compensation for purposes of calculating pension benefits, from 7/1/12 to 7/1/13. Beginning 7/1/13 the cap on compensation is reduced to 8%.

Nevada

Nevada Public Employees' Retirement System

Types of Pension Changes

Reduced Pension • Increased Age/Service Requirement • Reduced Cost-of-Living Adjustment

Overview

The Public Employees' Retirement System of Nevada (PERS) provides pension, disability, and survivor benefits for employees of the State, University System, public schools, and most political subdivisions in the state. The System administers two plans: Regular and Police Officer & Firefighter. Public employees in Nevada do not participate in Social Security.

Nevada PERS plan participants contribute via a non-refundable pre-tax salary reduction. As the cost of the plan rose in the wake of the 2008-09 market decline, employees' contribution to fund the plan rose equally with the employers' rising rate. In 2009 and 2015, the Nevada legislature established new benefits tiers for employees hired as of January 1, 2010, and as of July 1, 2015, respectively. Both new tiers offer reduced benefits, increased age and/or length of service requirements to qualify for an unreduced retirement benefit, and reduced cost-of-living adjustments (COLAs) compared to the prior tier.

Cost savings associated with these reforms are projected at 1.95 percent of payroll for PERS Regular and 1.11 percent of payroll for PERS Police/Fire over the next 20-30 years.

Reform Detail

Year	Affected Worker Groups	Modifications
2015	New hires as of 7/1/15	• Reduced the retirement multiplier, from 2.5% to 2.25%. • Increased the age and service requirements for normal (unreduced) retirement for general employees, to age 55 with 30 years of service or any age with 33.3 years of service. Previously they could retire at any age with 30 years of service. • Established a cap on pensionable compensation of $200,000, which will increase each year at the rate of inflation. • Established a prohibition on the use of achieving retirement eligibility using purchased service, and on the inclusion of purchased service in the calculation of retirement benefits. • Reduced COLA to 2.0% following the 3rd anniversary of retirement, 2.5% following the 6th anniversary of retirement, and the lesser of 3.0% or the preceding year's increase in the CPI following the 9th anniversary of retirement and thereafter.
2009	New hires as of 1/1/10	• Reduced the retirement multiplier, from 2.67% to 2.5%. • Increased the normal retirement age (unreduced) for general employees, from 60 to 62. • Increased the length of service requirement for normal (unreduced) retirement for police officers and firefighters, from 25 years to 30 years. • Increased the benefit reduction for an early retirement benefit, from 4% for each year short of eligibility, to 6%. • Reduced the COLA ceiling from 5% annual increase on the 14th anniversary of retirement to 4% annual increase on the 12th anniversary of retirement. • Instituted an anti-spiking provision restricting large compensation changes during the period used to calculate final average salary.

New Hampshire

New Hampshire Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirement

Overview

The New Hampshire Retirement System (NHRS) administers pension and other benefits for substantially all public employees in the state, including state employees, teachers, police officers, firefighters, and employees of county and local governments that have elected to participate. The major 2011 legislative enactments to NHRS were the culmination of several years of scrutiny of the retirement system that began in the wake of the 2001-02 investment market decline, and continued following sharp increases in projected employer contribution rates due to investment losses associated with the 2008-09 market decline and changes to actuarial methods and assumptions in preceding years.

In 2011, the New Hampshire legislature enacted a series of pension reforms affecting current active state employees and teachers. Current active members are required to contribute a greater percentage of their salary toward their pensions. New hires as of July 1, 2011, and active members who were in service prior to July 1, 2011 but had not worked long enough to become vested (eligible to receive benefits), participate in new tiers with reduced benefits and, in some cases, increased age and service requirements that must be met to qualify for unreduced retirement benefits. Newly hired state employees are estimated to have an initial retirement benefit that is approximately 11.2 percent less than an employee in the prior tier[1].

The benefit changes enacted in 2011 were projected by the NHRS actuary to save employers approximately $3 billion over 20 years, primarily through increased member contributions. However, these savings were partially offset by changes to actuarial assumptions, the cumulative effect of which produced a decrease in the system's funded ratio from FY2010 (58.5 percent) to FY2011 (57.4 percent).

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Current active state employees, teachers, police officers and firefighters; new hires as of 7/1/12 and current active members not vested as of 1/1/12	For current active members: • Increased employee contribution rates, for general employees and teachers, from 5% of salary to 7%; for police officers, from 9.3% to 11.55%; and for firefighters, from 9.3% to 11.8%. For new hires and current active members who were in service prior to 7/1/11 but not vested as of 1/1/12: • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Limited pension to the lesser of 85% of final average salary or $120,000. • Reduced the multiplier for state employees, from 1/60th of final average salary to 1/66th. • Reduced the multiplier for newly hired police officers and firefighters, from 2.5% to 2%, and established a transitional schedule of multipliers, between 2.1% and 2.4%, for police officers and firefighters who have at least 4 years of service, but less than 10, as of 1/1/12. • Increased the normal (unreduced) retirement age for general employees and teachers, from 60 to 65. • Increased the age and service requirements for normal (unreduced) retirement for police officers and firefighters, to age 52.5 with 25 years of service. Previously they could retire at age 45 with 20 years of service. Also established a transitional schedule of minimum retirement ages and service requirements, between age 46-49 with 21-24 years of service, for police officers and firefighters who have at least 4 years of service, but less than 10, as of 1/1/12.

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014

New Jersey

New Jersey Division of Pensions & Benefits

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements • Suspended Cost-of-Living Adjustment

Overview

The New Jersey Division of Pension and Benefits (DPB) administers pension and other benefits for most public employees in the state, including teachers, state employees, and employees of political subdivisions that have elected to participate. The Division maintains nine pension plans. Three plans--the Public Employees' Retirement System, Teachers' Pension & Annuity Fund and the Police & Firemen's Retirement System--comprise more than 98% of all active members. Assets are managed by the state treasurer's office.

From FY2001 to FY2013, the New Jersey pension plans as a group received just 37.1 percent of their annual required contribution. Combined with benefit enhancements approved in the late 1990s and the market losses of 2000-02 and 2008-09, the plans' funding condition deteriorated and required costs rose sharply.

In 2010, the New Jersey legislature created a new tier with reduced benefits for state employees, teachers and public safety workers hired as of May 21, 2010. In 2011, sweeping changes were made affecting retiree cost-of-living adjustments (COLAs), employee contribution rates and retirement eligibility requirements, different elements of which applied to retirees, current active members and new hires. Employees hired as of July 1, 2010 are estimated to have an initial benefit that is approximately 11 percent less than an employee in the old tier.[1]

The cumulative state and local savings resulting from the 2010 reforms, from FY2013 to FY2026, are projected to total $1.7 billion and $1.4 billion, respectively, excluding the provision requiring phasing-in of full actuarial contributions. According to the retirement system's FY2010 Comprehensive Annual Financial Report, the reforms approved in 2011, particularly suspension of the COLA in 2011, reduced the combined state and local unfunded pension liability by approximately $17.5 billion, or 32.6 percent, and caused the plans' combined funding level to increase from 62.0 percent to 70.5 percent. The COLA suspension was overturned by a State Appellate Court and currently is under appeal to the New Jersey Supreme Court.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Retired general employees & teachers; current active general employees, teachers, public safety officers & state police officers; newly hired general employees & teachers as of 6/28/11	For retired general employees and teachers, and future retirees: • Suspended COLAs until plans reach a funding level of 80%, after which COLAs may be considered. • Increased employee contribution rates, for general employees and teachers from 5.5% of salary to 6.5%, then phased up to 7.5% over 7 years; for public safety officers, from 8.5% to 10%; for state police officers, from 7.5% to 9%. For new hires as of 7/1/11: • Increased the normal (unreduced) retirement age for general employees and teachers with 30 years of service, from 62 to 65.
2010	Newly hired general employees, teachers and public safety workers as of 5/21/10	• Reduced the retirement multiplier, from 1.82% to 1.67%. • Lengthened the period used to calculate final average salary, for general employees and teachers, from 3 years to 5 years, and for public safety officers, from 1 year to 3 years.
2007	Current active general employees and teachers	• Increased employee contribution rate, from 5.0% of salary to 5.5%.

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014

New Mexico

New Mexico Public Employees Retirement Association

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements • Reduced Cost-of-Living Adjustment

Overview

The Public Employees Retirement Association of New Mexico (PERA) administers pension and other benefits for substantially all public employees in the state except teachers, who belong to the Educational Retirement Board. PERA administers four funds: the Public Employees Retirement Fund, whose active members comprise approximately 90% of all active members; and funds for judges, magistrates, and volunteer firefighters.

In 2013, the New Mexico legislature made sweeping changes affecting retired, current active and newly hired state employees and public safety officers. Changes include reductions to the cost-of-living adjustment (COLA) for current and future retirees, increased employee contribution rates, and a new tier for employees hired as of July 1, 2013. Members of the new tier are required to work longer to become eligible for unreduced benefits and earn benefits that are approximately 18.7 percent less than those for employees in the prior tier[1]. The estimated reduction in the unfunded pension liability for the PERA as a result of the 2013 reforms is $1.69 billion, or approximately 25 percent, and a reduction in the plan's immediate cost for benefits earned each year of 1.9 percent of payroll, or approximately 9.0 percent of the pre-reform normal cost. The 2009 reforms reduced the plan's cost by more than 1.0 percent of pay.

Reform Detail

Year	Affected Worker Groups	Modifications
2013	Retired members; current active members; new hires as of 7/1/13	For retired members and future retirees: • Reduced COLA from 3% to 2%. For current active members: • Established a blended pension formula, with a lower retirement multiplier applied to service credit earned after 7/1/13. • Reduced COLA from 2.5% to 2.0%, and increased the length of time a member must be retired before receiving a COLA, from 2 years to 7 years. The 7-year period is phased in for active members, so the period for those retiring prior to 7/1/16 is shorter than 7 years. • Increased the employee contribution rate from 7.42% of salary to 8.92% for participants whose salary is over $20,000 annually. • Increased the statutory employer contribution rate by 0.4% beginning in FY15. For new hires as of 7/1/13: • Increased the service requirement for normal (unreduced) retirement at age 65, for state employees, to 8 years, from 5, and consolidated various eligibility requirements into the Rule of 85 (age and service add to 85). • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Increased the vesting period, for state employees, from 5 to 8 years, and for public safety officers, from 5 to 6 years. • Reduced the retirement multiplier by 0.5%; previously the multiplier was 2-3%, depending on the worker group. • Reduced COLA from 3% to 2%, except for those whose annual pension is less than $20,000 and who have more than 25 years of service or who receive a disability benefit. COLA for these members is 2.5%.
2009	New hires as of 7/1/10	• Increased the age for normal (unreduced) retirement with 5 years of service, from 65 to 67 and consolidated various eligibility requirements into the Rule of 80 (age and service add to 80). Increased the service requirement for normal retirement at any age, from 25 years to 30. • Capped salary increases used to calculate pension benefits at 35% from the prior year's salary.

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014

New Mexico

New Mexico Education Retirement Board

Types of Pension Changes

Increased Employee Contributions • Increased Age/Service Requirements • Reduced Cost-of-Living Adjustment

Overview

The Educational Retirement Board of New Mexico (ERB) administers pension and other benefits for all employees of public school districts, state colleges and universities, and employees of educational state agencies with current teaching licenses.

The New Mexico legislature has enacted a series of changes affecting retired, current active and newly hired members who participate in the ERB. Changes included reductions to the cost-of-living adjustment (COLA) for current and future retirees, increased employee contribution rates, and increased requirements to become eligible to receive unreduced retirement benefits for new hires.

Reform Detail

Year	Affected Worker Groups	Modifications
2013	Retired members; current active members and participating employers; new hires as of 7/1/13	For retired members and future retirees: • Reduced COLA to an average of 1.8% for retirees with 25 years of service and benefit below median of retirement benefits, and an average of 1.6% for all others, to remain in place until ERB is 90% funded, at which point reduced COLAs will equal 1.9% for retirees with 25 years of service and benefit below median of retirement benefit, and 1.8% for all others. Once ERB is 100% funded, COLA reductions will cease. (The COLA provision in place previously provided a COLA averaging 2%.) For current active members and participating employers: • Increased employee contribution rates from 9.4% of salary to 10.1% in FY14 and 10.7% in FY15 for participants whose salary is over $20,000 annually. • Increased employer contribution rates from 10.90% of salary to 13.15% in FY14 and 13.90% in FY15. For new hires: • Established a minimum normal (unreduced) retirement age of 55. • Delayed the onset of COLA until retiree reaches age 67, from 65.
2009	New hires as of 7/1/10	• Increased the age and service requirements for normal (unreduced) retirement. Members may retire at age 67 with 5 years of service, any age with 30 years, or at the Rule of 80 (age and service adds up to 80). Previously they could retire at age 65 with 5 years of service, any age with 25 years, or Rule of 75.

New York

New York State and Local Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements

Overview

The New York State & Local Retirement System (NYSLRS) administers pension and other benefits for substantially all public employees, excluding school teachers, outside of New York City. The state comptroller serves as sole trustee and administrative head of the system. The system administers two plans: the ERS and the Police and Fire Retirement System. The plans administer six benefit tiers; membership in each tier is determined by the employee's date of entry into the plan. Differences among the tiers are primarily the age of eligibility for retirement and required employee contributions.

In 2009 and again in 2012, the New York legislature created new tiers for newly hired teachers. Members of Tier V, who are hired between 1/1/10 and 4/1/12, contribute a greater percentage of their salary toward their pension, and are required to work longer to become eligible to receive a retirement benefit. Members of Tier VI, who are hired as of 4/1/12, receive reduced retirement benefits, contribute a greater percentage of their salary toward their pension, and are required to work longer to qualify for an unreduced retirement benefit. A member of Tier VI is estimated to have an initial benefit that is approximately 7 percent less than a member of Tier V[1].

The governor's office estimates that the state will save $874 million over 10 years as a result of the changes approved in 2012. New York City, whose retirement plans are also subject to these reforms, will save $1.8 billion and other member governments and authorities will cumulatively save $5 billion, for a total of about $5.9 billion over 10 years.

Reform Detail

Year	Affected Worker Groups	Modifications
2012	New hires as of 4/1/12	• Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Increased employee contributions, from 3% of salary to a sliding scale based on salary, from 3% to 6%. • Reduced the retirement multiplier for members with up to 20 years of service credit, from 2.0% to 1.75%; for members with more than 20 years of service credit, from 60% of final average salary plus 1.5% per year to 35% of final average salary plus 2% per year. • Increased the retirement age to qualify for a normal (unreduced) benefit with 10 years of service, from 62 to 63.
2009	New hires as of 1/1/10	• Increased the vesting period from 5 years to 10 years. • Extended the period during which participants must contribute to the plan (3% of salary) from the first 10 years of service to as long as they are participating. • Eliminated eligibility for a normal (unreduced) benefit at age 55 with 30 years of service. • Increased the benefit reduction for retirement at age 55, from 27.0% to 38.33%.

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014

New York

New York State Teachers' Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements

Overview

The New York State Teachers' Retirement System (NYSTRS) administers pension and other benefits for certificated employees of more than 800 public school districts, state universities and colleges, and other state educational agencies outside New York City.

In 2009 and again in 2012, the New York legislature created a new tier for newly hired teachers. Members of Tier V, who were hired between 1/1/10 and 3/31/12, receive reduced benefits, contribute a greater percentage of their salary toward their pension, and are required to work longer to become eligible to receive a retirement benefit. Similar changes apply to members of Tier VI, who were hired on or after 4/1/12. A member of Tier VI is estimated to have an initial benefit that is approximately 7 percent less than a member of Tier V.

The governor's office estimates that the state will save $874 million over 10 years as a result of the changes approved in 2012. New York City, whose retirement plans are also subject to these reforms, will save $1.8 billion and other member governments and authorities will cumulatively save $5 billion, for a total of about $7.7 billion over 10 years.

Reform Detail

Year	Affected Worker Groups	Modifications
2012	New hires as of 4/1/12	• Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Increased employee contributions from 3.5% of salary to a sliding scale based on salary, from 3% to 6%. • Reduced the retirement multiplier for members with 20 or more years of service credit, to 35% of final average salary plus 2.0% per year of service credit beyond 20, from 60% of final average salary plus 1.5% per year of service credit beyond 20. • Increased the age to qualify for a normal (unreduced) benefit with 10 years of service, from 62 to 63. Eliminated retirement eligibility at age 57 with 30 years of service. • Increased the early retirement reductions for retirement at ages 55 to 63.
2009	New hires as of 1/1/10	• Increased the vesting period from 5 years to 10 years. • Extended the period during which participants must contribute to the plan (3.5% of salary), from the first 10 years of service to as long as they are participating. • Increased the threshold at which point a higher multiplier of 2.0% takes effect, from 20 years to 25 years. The multiplier for service below the threshold is 1.67%. • Increased the age to qualify for a normal (unreduced) retirement benefit with 30 years of service, from 55 to 57. • Increased the benefit reductions for retirement at ages 55 to 62.

North Carolina

North Carolina Retirement System

Types of Pension Changes

Reduced Pension • Increased Age/Service Requirements

Overview

The North Carolina Retirement Systems (NCRS) administers pension and other benefits for most public employees in the state. The system is a division of the state treasurer's office and the state treasurer serves as sole trustee of system assets. The Teachers' and State Employees system and the Local Government Employees system account for more than 99% of all active members.

2011 legislation increased the length of service required for newly hired state employees and teachers who participate in the NCRS. The Legislature reversed the 2011 legislation in 2014 amid concerns that the longer vesting period could impair employers' workforce management efforts[1]. According to NCRS, the effect of the longer vesting period on the normal cost was more thoroughly evaluated in 2014 and found to be relatively small compared to the overall reduction in the value of the employee benefit package caused by the vesting change. Specifically, this change was saving the state about $1 million each year from a $1.2 billion annual employer contribution, and would have meant that roughly 60% of employees would never vest in their retirement plan.

2014 legislation also included a provision to curb the ability of employees to inflate their pension benefits through the process of pension "spiking." The anti-spiking provision is a limit on pension benefits for current and future employees whose final average salary is $100,000 or greater, adjusted annually for inflation. Retiring workers with a final average salary above the limit, who are identified by the NCRS to have "spiked" their benefit, will be given three options: their final employer can compensate the NCRS for the additional pension liability caused by spiking; the retiring member can pay this liability; or the retiring member may accept a reduced benefit.

Reform Detail

Year	Affected Worker Groups	Modifications
2014	Current active members and new hires as of 1/1/15	• Established a contribution-based cap on pension benefits for current active members and new hires whose final average salary meets or exceeds $100,000 (adjusted annually for inflation). • Decreased the vesting period, from 10 years to 5 years.
2011	New hires as of 8/1/11	• Increased the vesting period, from 5 years to 10 years.

[1]Report to the 2014 Session of the 2013 General Assembly of North Carolina, North Carolina General Assembly Legislative Research Commission, March 31, 2014 (page 13) http://www.ncga.state.nc.us/documentsites/committees/lrc/2014%20LRC%20Reports%20to%20General%20Assembly/Committee%20on%20Treasurer%20Investment%20Targets%20and%20State%20Employee%20Retirement%20Options.pdf

North Dakota

North Dakota Public Employees Retirement System

Types of Pension Changes

Increased Employee Contributions • Increased Age/Service Requirements

Overview

The North Dakota Public Employees Retirement System (NDPERS) administers pension, health insurance and other benefits for most public employees in the state except teachers. Assets are managed by the State Investment Board.

In 2011, and again in 2013, the North Dakota legislature increased the percentage of their salary current and newly hired employees must contribute toward their benefits.

Reform Detail

Year	Affected Worker Groups	Modifications
2015	New hires as of 1/1/16	• Increased eligibility for normal (unreduced) retirement from the Rule of 85 (age and service adds to 85) to the Rule of 90. • Increased the benefit reduction for early retirement, from 6% to 8% for each year retired prior to eligibility for normal retirement.
2013	Current active members and new hires	• Increased the employee contribution rate from 6% of salary to 7%, and the employer contribution rate from 6.12% to 7.12%.
2011	Current active members and new hires	• Increased the employee contribution rate from 4% of salary to 6%, phased in over two years, beginning 1/1/12.

North Dakota Teachers' Fund for Retirement

Types of Pension Changes

Increased Employee Contributions • Increased Age/Service Requirements

Overview

The North Dakota Teachers' Fund for Retirement (TFFR) administers pension and other benefits for certificated employees of school districts, state agencies, colleges and universities, and other educational institutions in North Dakota. Assets are managed by the State Investment Board.

In 2007, and again in 2011, the North Dakota legislature made changes affecting current active members and new hires, by increasing contribution rates for current members and new hires, and requiring newly hired teachers to work longer to qualify for retirement benefits. The current cost of benefits earned each year of the TFFR, is 11.63 percent of payroll, meaning that plan participants are paying the entire cost of their benefit, plus an additional 0.12 percent to amortize the plan's unfunded pension liability.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Current active members and new hires	• Increased the employee contribution rate from 7.75% of salary to 11.75% in two increments of 2% each, effective 7/1/12 and 7/1/14.
2007	Current active members and new hires as of 7/1/08	For current active members and new hires: • Increased the employee contribution rate from 7.75% of salary to 8.25%, effective until the system reaches a funding ratio of 90%. For new hires as of 7/1/08: • Increased the criteria for normal (unreduced) retirement, from Rule of 85 (age and service adds up to 85) to Rule of 90. • Increased the service requirement for early (reduced) retirement at age 55, from 3 years to 5 years. • Increased the vesting period, from 3 years to 5 years.

Ohio

Ohio Public Employees Retirement System

Types of Pension Changes

Reduced Pension • Increased Age/Service Retirement • Reduced Cost-of-Living Adjustment

Overview

The Ohio Public Employees Retirement System (OPERS) administers pension and other benefits for substantially all public employees not eligible for membership in one of the other public retirement systems in the state, including the State Teachers Retirement System of OH, the OH School Employees Retirement System, the OH Police & Fire Pension Fund, OH State Highway Patrol, and the Cincinnati Retirement System.

In 2012, the Ohio legislature passed a series of pension reforms affecting all current active members of OPERS who did not retire before January 1, 2013. Active participants who were eligible to retire within 5 years of the enacted legislation were affected by a reduction to the cost-of-living adjustment (COLA) beginning in 2019; members who were eligible to retire within 10 years of the enacted legislation or who had 20 or more years of service as of January 7, 2013, were affected by both the COLA reduction and increases to eligibility criteria for normal (unreduced) retirement; members who were not eligible to retire within 10 years or who had fewer than 20 years of service as of January 1, 2013, and newly hired members, were impacted by all changes.

Reforms reduced the Ohio PERS unfunded pension liability by $3.2 billion, or 17 percent, and reduced the immediate cost to the employer for benefits earned each year from 15.44 percent of payroll to 13.16 percent.

Reform Detail

Year	Affected Worker Groups	Modifications
2012	Current active members and new hires as of 1/1/13.	Established three "transition" groups for the Traditional Pension Plan, depending on members' proximity to eligibility for (unreduced) age and service retirement benefits. Age and service requirements for early and normal retirement benefits were increased for those first eligible to retire after 1/7/18. • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Increased the required years of service, from 30 to 35, when the retirement multiplier increases from 2.2% to 2.5%. • Reduced annual COLA, beginning 5 years after the enactment of reform, from 3% to the rate of inflation, not to exceed 3%. • Increased the actuarial reduction for early retirement.

Ohio

Ohio State Teachers' Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Retirement • Reduced Cost-of-Living Adjustment

Overview

The State Teachers' Retirement System of Ohio (STRS) administers pension, disability, health insurance, and survivors' benefits for certified teachers and other faculty members employed in public schools and agencies of the state and political subdivisions.

In 2012, the Ohio legislature passed a series of reforms affecting current active and newly hired state teachers. Employees will earn reduced benefits, contribute a greater percentage of their salary toward their pension benefits, and are required to work longer to become eligible to receive a normal (unreduced) benefit. Once retired, cost-of-living adjustments (COLAs) are delayed and reduced. Additional provisions included increased eligibility requirements for disability and survivor benefits for new hires and a requirement that participants pay 100 percent of the cost of purchasing additional service credit.

The reforms approved for the STRS of Ohio resulted in a $15.7 billion reduction in the unfunded liability, and the immediate cost to the employer for benefits earned each year was reduced from 15.72 percent of payroll to 11.97 percent.

Reform Detail

Year	Affected Worker Groups	Modifications
2012	Current active members and new hires	• Increased the employee contribution rate, from 10% of salary to 14%, phased in over a 4-year period. • Lengthened the period used to calculate final average salary, from 3 years to 5 years, effective 8/1/15. • Established a flat 2.2% retirement multiplier, eliminating enhanced multipliers for service in excess of 30 years, effective 8/1/15. • Eliminated COLAs for one year for those who retire before 7/1/13. For those who retire thereafter, established a 5-year waiting period before onset of COLA. Reduced COLA from 3%, simple (applied only to the principal benefit) to 2%, simple. • Phased in increased age and service requirements to qualify for normal (unreduced) retirement, to ultimately reach age 60 with 35 years of service or age 65 with 5 years, by 8/1/26. Previously members could retire at any age with 30 years of service.

Ohio

Ohio School Employees Retirement System

Types of Pension Changes

Increased Age/Service Retirement

Overview

The School Employees Retirement System of Ohio (SERS) administers pension, health care, disability, and survivors benefits for non-certificated employees of the state's school districts.

In 2008, in response to demographic trends showing increased member longevity, the Ohio legislature approved SERS' request for an increase in age and service requirements for new hires only. The 2008 reforms were the first of their kind among the non-uniformed personnel retirement systems in Ohio.

2012 reforms extended the application of the 2008 retirement eligibility changes to current active members with fewer than 25 years of service as of 8/1/17. Effective 8/1/17, new retirement eligibility provisions require members to work longer to qualify for a normal (unreduced) retirement benefit.

Reforms approved for Ohio SERS reduced the cost to the employer for benefits earned each year by 0.92 percent of payroll and eventually by 1.06 percent when the new plan provisions are fully implemented.

Reform Detail

Year	Affected Worker Groups	Modifications
2012	Current active members who do not have at least 25 years of service as of 8/1/17	Effective 8/1/17, for members with less than 25 years of service: • Increased the age and service required to qualify for normal (unreduced) retirement, from any age with 30 years of service or age 65 with 5 years, to age 67 with 10 years of service or age 57 with 30 years. • Increased the age and service required to qualify for early (reduced) retirement, from age 60 with 5 years of service or age 55 with 25 years, to age 62 with 10 years of service or age 60 with 25 years.
2008	New hires as of 5/14/08	• Increased the age and service required to qualify for normal (unreduced) retirement, from any age with 30 years of service or age 65 with 5 years, to age 67 with 10 years of service or age 57 with 30 years. • Increased the age and service required to qualify for early (reduced) retirement, from age 60 with 5 years of service or age 55 with 25 years, to age 62 with 10 years of service or age 60 with 25 years. • Replaced "early retirement reduction factors" from a statutory 3% per year, to actuarially determined factors.

Ohio

Ohio Police & Fire Pension Fund

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Retirement • Reduced Cost-of-Living Adjustment

Overview

The Ohio Police & Fire Pension Fund (OP&F) administers pension and other benefits for all police officers and firefighters employed by Ohio municipalities and other political subdivisions.

In 2012, the Ohio legislature passed a series of pension changes affecting current active and newly hired police officers and firefighters. All current active members are required to contribute a greater percentage of their salary toward their pension benefits. Members with less than 15 years of service as of 7/1/13 earn reduced benefits and retiree cost-of-living adjustments (COLAs). Newly hired workers are subject to these changes and to an increased normal (unreduced) retirement age.

The changes made to the Ohio Police & Fire plan reduced the immediate cost of benefits earned each year from 19.95 percent of payroll to 17.70 percent, and reduced the unfunded liability from $6.04 billion to $5.36 billion. The reforms also increased the plan's funding ratio from 63.1 percent to 70.8 percent, and reduced the plan's funding period to 30 years from infinity.

Reform Detail

Year	Affected Worker Groups	Modifications
2012	Current active members and new hires	For current active members: • Increased the employee contribution rate from 10% of salary to 12.25%, phased in over 3 years. For current active members with less than 15 years of service as of 7/1/13: • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Reduced COLA from 3%, simple (applied only to the principal benefit), to 3%, up to CPI, simple; postponed onset of COLA until age 55. For new hires as of 7/1/13: • Increased the age required to qualify for normal (unreduced) retirement with 25 years of service, from 48 to 52.

Oklahoma

Oklahoma Public Employees Retirement System

Types of Pension Changes

Reduced Pension • Increased Age/Service Retirement • Changed Plan Design • Reduced Cost-of-Living Adjustment

Overview

The Oklahoma Public Employees Retirement System (OPERS) administers pension and other benefits for state employees and employees of more than 150 county and local governments that have elected to participate.

In 2015, the Oklahoma legislature closed the defined benefit plan for state employees and established a defined contribution plan for new hires of November 1, 2015. Teachers and public safety officers are exempt from this change and will continue to participate in a defined benefit plan. The requirement that retiree cost-of-living adjustments (COLAs) be funded at the time of approval resulted in the elimination of plans' actuarial assumptions that an annual COLA of 2 percent would be paid. The effect of eliminating this assumption was to reduce the OPERS unfunded liability by $1.7 billion, from $3.3 billion to $1.6 billion. The OPERS funding ratio also increased in response to this change, from 66.0 percent to 80.7 percent.

Reform Detail

Year	Affected Worker Groups	Modifications
2015	Newly hired state employees as of 7/1/15	• Increased the mandatory minimum employee contribution from 3% of salary to 4.5%, for members of the defined contribution plan. This change was made prior to any employees joining the plan.
2014	Newly hired state employees as of 7/1/15	• Closed the defined benefit plan and established a defined contribution plan with minimum employee contributions of 3% of salary and a 6% employer contribution match, for new hires. Employees receive a 7% employer match if they increase their contribution to 7%.
2013	New hires as of 7/1/13	• Lengthened the period used to calculate final average salary, from 3 years to 5 years.
2011	Current and future retirees and new hires as of 11/1/11	For current and future retirees: • Required future COLAs to be fully funded at the time they are approved, effectively eliminating them for the foreseeable future. For new hires as of 11/1/11: • Increased the age for normal (unreduced) retirement with 6 years of service, from 62 to 65. Implemented a minimum retirement age of 60 to become eligible to retire at the Rule of 90 (age and service add to 90).

Oklahoma

Oklahoma Teachers' Retirement System

Types of Pension Changes

Increased Age/Service Retirement • Reduced Cost-of-Living Adjustment

Overview

The Teachers' Retirement System of Oklahoma (TRS) administers pension and other benefits for public school teachers and other certificated employees of public school districts, community colleges, and other educational institutions in Oklahoma.

The 2011 requirement that retiree cost-of-living adjustments (COLAs) be funded at the time of approval resulted in the elimination of plans' actuarial assumptions that an annual COLA of 2 percent would be paid. The change reduced the OTRS unfunded liability by an estimated $2.9 billion and resulted in an increase in the plan's funding level from 48 percent to 56 percent.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Current and future retirees and new hires as of 11/1/11	For current and future retirees: • Required future COLAs to be fully funded at the time they are approved, effectively eliminating them for the foreseeable future. For new hires: • Increased the age for normal (unreduced) retirement with 5 years of service, from 62 to 65. Implemented a minimum retirement age of 60 to become eligible to retire at the Rule of 90 (age and service add to 90).

Oregon

Oregon Public Employees' Retirement System

Types of Pension Changes

Reduced Cost-of-Living Adjustments

Overview

The Oregon Public Employees' Retirement System (PERS) administers pension and other benefits for employees of the state and most political subdivisions, including school districts. The Oregon Legislature in 2003 established an alternative plan design, known as the Oregon Public Service Retirement Plan (OPSRP). The OPSRP is a hybrid plan, providing an employer-funded defined benefit component with a multiplier of 1.5% (1.8% for public safety personnel) with a mandatory 6% contribution to an individual account (similar to a defined contribution plan).

In 2013, the Oregon legislature reduced the cost-of-living adjustment (COLA) for current and future retirees. As a result of a subsequent court decision, the reduced COLA applies to active members in the plan and new hires only, for benefits earned after the legislation's effective date (October 2013). The 2013 law also eliminated the tax remedy benefit, which was a benefit increase provided to some retirees to offset the effect of state income taxes levied on their retirement benefits.

The COLA reductions reduced the plan's unfunded liability by approximately $900 million; the tax remedy change reduced the unfunded liability by an estimated $400 million.

Reform Detail

Year	Affected Worker Groups	Modifications
2013	Current active members and new hires, for benefits earned after the effective date of the legislation, and members who receive a tax remedy benefit but are not Oregon residents for tax purposes.	• Reduced COLA from 2.0% to 1.25% on the first $60,000 of benefits and 0.15% on amounts above $60,000. • Eliminated the tax remedy benefit, in place to offset the effect of income tax on pension benefits, for recipients who do not pay Oregon state income taxes because they are not residents of Oregon.

Pennsylvania

Pennsylvania State Employees' Retirement System

Pennsylvania Public School Employees' Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements

Overview

The Pennsylvania State Employees' Retirement System (SERS) administers pension and other benefits for substantially all employees of the Commonwealth of Pennsylvania. The Pennsylvania Public School Employees' Retirement System (PSERS) administers pension and other benefits for employees of public school districts, including school teachers, in Pennsylvania.

2010 legislation established new membership classes with shared-risk defined benefit plans for newly hired members of the PA SERS and PSERS. New hires earn benefits at a lower rate than the old tier unless they elect, within 45 days of their hire, to contribute a higher rate of pay toward their benefit. Regardless of this election, employee contribution rates for new hires can increase by up to 0.5 percent per year (with additional contributions limited to 2.0 percent of salary) depending on the retirement system's investment performance. New hires also must work longer to qualify for a retirement benefit. For members of the new classes who do not elect to pay increased contributions, retirement benefits are approximately 20 percent lower than the benefits earned by members of the prior classes[1].

According to the Pennsylvania Public Employee Retirement Commission (PERC), the combined effect of the changes approved in 2010 to SERS and PSERS will result in $2.859 billion in employer cost savings through FY 2043-44. Specifically, this includes $1.477 billion in savings to SERS and $1.382 billion in savings to PSERS[2].

Reform Detail

Year	Affected Worker Groups	Modifications
2010	Newly hired state employees, as of 1/1/11 and newly hired public school employees as of 7/1/11	• Established a "shared-risk" provision that could result in future higher employee contribution rates depending on fund investment performance, and creates a floor for employee rates. The shared-risk portion of the rate is equal to 0.5% of salary for every 1.0% that the SERS or PSERS investment return is less than the assumed rate, for a 3-year period, capped at 2%. • Established employer contribution rate "collars" in FY10 and FY11 that limit the amount the employer rate may increase over the prior year's rate. The rate collars remain in effect until no longer needed (i.e., the rise in the employer contribution rate is less than the rate cap in effect at the time). • Reduced the benefit accrual rate (multiplier), from 2.5% to 2.0%. Permitted the option to retain a 2.5% multiplier with increased contributions of 9.3%, up from 6.25%, for state employees, and 10.3%, up from 7.5%, for public school employees. • Established a cap on pension benefits of 100% of final average salary. • Increased the vesting period, from 5 years to 10 years. • Increased the age and service requirements for normal (unreduced) retirement, to age 65 with 3 years of service or Rule of 92 (age and service adds to 92) with 35 years of service. Previously, PSERS members could retire at age 60 with 30 years of service, age 62 with 3 years, or any age with 35 years, and SERS members could retire at age 60 with 3 years of service or at any age with 35 years.

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014
[2] Senate Appropriations Committee Fiscal Note, House Bill 2497 http://www.legis.state.pa.us/WU01/LI/BI/SFN/2009/0/HB2497P4476.pdf

Rhode Island

Rhode Island Employees' Retirement System

Types of Pension Changes

Reduced Pension • Increased Age/Service Requirements • Changed Plan Design • Reduced Cost-of-Living Adjustment

Overview

The Employees' Retirement System of Rhode Island (ERSRI) administers pension benefits for substantially all state employees, public school teachers, and employees of most political subdivisions in the state, not including the City of Providence. The System maintains separate plans for state employees and teachers; municipal employees; state police; and judges. System assets are invested by the State Investment Commission, which, like the ERSRI, is part of the Office of the State Treasurer.

In 2011, the General Assembly established a hybrid retirement plan, including a reduced defined benefit (DB) combined with mandatory participation in a defined contribution plan (DC), for the same employee groups, as July 1, 2012. The plan also suspended cost-of-living adjustments (COLAs) until the system attains an 80% funding level, at which point a revised COLA formula takes effect with the size of the annual COLA determined by the investment performance of the retirement system's assets. The law was challenged in court and some provisions were ultimately revised as part of a negotiated settlement between the State and representatives of public employee groups, which was approved by the legislature, per Rhode Island statute, in 2015. The settlement restricted participation in the hybrid plan to current active workers with less than 20 years of service as of June 30, 2012, and new hires, and provided for interim and periodic COLAs whose provision differs from the original legislation. More information on the settlement terms is available online: RI Pension Settlement Agreement.

The 2011 reforms reduced the combined unfunded accrued liability for the state, teachers and judicial plans by $2.77 billion, or approximately 40 percent. The changes also produced an immediate reduction of 2.86 percent of payroll in the cost of benefits earned each year for teachers, from 11.82 percent, which will grow ultimately by 5.57 percent, over the plan's 25-year funding period. For state workers, the same cost declined from 11.39 percent of payroll by 2.03 percent immediately and 5.21 percent ultimately, over the plan's 25-year funding period. Because the population of active members at the time the reforms took effect had benefits partially based on the provisions in place at the time, and partially based on the new provisions, their cost for benefits earned each year is a blend of the two benefit packages. As members who have more of the prior provisions retire or terminate employment and are replaced by new members only in the new plan, the normal cost of the plan as a whole will decrease over time until ultimately only members in the new provisions remain.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	New hires and current active members with less than 20 years of service as of 6/30/12	• Created a new hybrid plan requiring employees to contribute to both a DB and a DC component; state employees and teachers contribute 3.75% of salary to the DB plan and 5% to the DC plan; municipal employees contribute 1% or 2% to the DB plan, depending on their COLA election, and 3% to the DC plan. • Revoked 3.0% automatic COLA in lieu of a risk-based COLA. The COLA formula is 50% of the 5-year smoothed investment return less 5.5%, with a floor of zero and a 4.0% cap; and 50% of the previous year's rate of inflation with a maximum increase of 3.0%, for a total maximum increase of 3.5%. It is applied only to the first $25,855 of benefits, indexed. • Delayed the onset of COLA until the latter of Social Security normal retirement age or 3rd anniversary of retirement. • Suspended COLA payments until plan funding level reaches 80%. This provision was modified in a 2015 settlement that provides for the issuance of an "interim" COLA to retirees with the amount differing depending on their date of retirement, and for the provision of a COLA every 4 years until the plan reaches 80% funding. • Modified the future benefit accrual factor for service after 6/30/12, to include the sum of the member's percentage accrual based on the current provisions through 6/30/12, plus 1% for general employees and 2% for public safety officers.
2010	Current active members	• Modified COLAs to apply only to the first $35,000 of benefits, rather than the entire benefit, and commencing on the 3rd anniversary of retirement or at age 65, rather than in the first year of retirement.
2009	Current active members not eligible to retire as of 9/30/09	• Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Increased the normal (unreduced) retirement age for state employees and teachers, from 59 to 62.

South Carolina

South Carolina Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements • Reduced Cost-of-Living Adjustment

Overview

The South Carolina Retirement System (SCRS) administers pension and other benefits for substantially all public employees in the state, including teachers, state employees, and employees of political subdivisions that have elected to participate. The South Carolina Retirement System plan provides coverage for nearly 90% of all the system's active members. The Police Officers Retirement System covers virtually all others, including police officers, correctional officers, and firefighters; other plans are for members of the general assembly, judges, solicitors, and members of the National Guard. New hires since 2002 may elect to participate in the Optional Retirement Plan, a defined contribution plan alternative to the SCRS traditional pension plan.

In 2012, the South Carolina legislature passed sweeping changes affecting retired, current active and newly hired general employees, teachers and public safety officers who participate in the SCRS. A new tier was established for new hires that includes reduced benefits, and lengthened age and/or service requirements to qualify for a full (unreduced) retirement benefit. Other changes included increases to eligibility requirements for disability retirement and increases to the member's cost of the purchase of additional service credit.

The pension reforms adopted in 2012 reduced the cost of benefits earned each year from 10.68 percent of payroll to 9.93 percent and lowered the system's unfunded liability by nearly 14 percent, from $14.4 billion to $12.4 billion.

Reform Detail

Year	Affected Worker Groups	Modifications
2012	Retired and current active members, participating employers, and new hires as of 7/1/12	For retired, active, and newly hired members: • Reduced COLA from 2.0% to 1.0%, not to exceed $500 annually. For current active and newly hired members, and participating employers: • Increased the employee contribution rate for state employees and teachers from 6.5% of salary to 8.0%, in 0.5% increments, beginning in FY13. • Increased the employer contribution rate for state employees and teachers to 10.6% of salary on 7/1/12 and 10.9% on 7/1/14, and for public safety officers to 12.3% on 7/1/12 and 12.5% on 7/1/14. For new hires as of 7/1/12: • Increased the vesting period, from 5 years to 8 years. • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Increased eligibility for normal (unreduced) retirement for state employees and teachers. Workers may retire at age 65 with 8 years of service, or at the Rule of 90 (age and service add up to 90). Previously they could retire at any age with 28 years. • Eliminated early retirement at age 55 for general employees and teachers, resulting in the earliest minimum retirement age of 60 (with a 5% benefit reduction for each year retired before age 65). • Increased the required years of service needed to retire at age 55, for police officers, from 5 to 8 years, and to retire at any age, from 25 to 27 years.

South Dakota

South Dakota Retirement System

Types of Pension Changes

Reduced Cost-of-Living Adjustment

Overview

The South Dakota Retirement System (SDRS) administers pension and other benefits for more than 481 employers, including the state and employees of school districts and other participating political subdivisions. Assets are managed by the South Dakota Investment Council.

In 2010, the South Dakota legislature made various changes affecting the plan provisions, including retiree cost-of-living adjustments (COLAs), which were changed from a fixed 3.1 percent to variable COLAs tied to the system's funding status and the annual change in the rate of inflation. Combined with other changes, including modifications to termination refund benefits and retiree return to work provisions, the 2010 reforms reduced the plan's unfunded pension liability by $368 million, or more than 50 percent, and reduced the cost of benefits earned each year by approximately 0.5 percent of employee payroll.

Reform Detail

Year	Affected Worker Groups	Modifications
2010	Retired and current active members	• Tied the annual COLA to the plan's actuarial funding condition and the change in the rate of inflation, with a floor of 2.1%, payable when the plan is funded below 80%, up to 3.1% when the plan is funded at or above 100%. Also eliminated the pro-rated COLA payable prior to one year after retirement. • Reduced the refund payable to participants terminating and electing to withdraw contributions. • Required a three-month break in service, a 15% reduction in benefits and a reallocation of contributions for retirees that returned to covered employment.

Tennessee

Tennessee Consolidated Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Changed Plan Design

Overview

The Tennessee Consolidated Retirement System (TCRS) administers pension and other benefits for most public employees in the state. The System maintains three plans: the State Employees, Teachers and Higher Education Employees' Pension Plan (SETHEEPP); the Political Subdivisions Pension Plan (PSPP); and the Hybrid Plan. The System is part of the state treasury department. The state treasurer, who manages the system's assets, is elected by the general assembly.

In 2013, the Tennessee legislature closed the state's defined benefit plan and established a hybrid retirement plan for state employees, teachers and higher education employees who are hired after June 30, 2014. Political subdivisions may elect for their employees who are hired after that date to join the hybrid plan. The hybrid plan provides a reduced defined benefit combined with mandatory participation in a defined contribution plan. Hybrid plan participants are required to contribute 5 percent of their salary to fund the defined benefit plan. Employee contributions to defined contribution accounts are set at a default rate of 2 percent of salary; employees may opt out or elect to contribute more or less, including zero. Employers contribute 5 percent to employee DC plan accounts, regardless of the employee's contribution rate to their individual account.

State employees and some local government TCRS participants hired prior to the effective date of the 2013 legislation are not required to make pension contributions.

The net cost to the employer for benefits earned each year for the DB portion of the hybrid plan is 4.0 percent of payroll for teachers, down from 9.04 percent for the legacy pension plan; and 4.0 percent of payroll for state employees, down from 15.14 percent for the legacy pension plan.

Reform Detail

Year	Affected Worker Groups	Modifications
2013	Newly hired state employees, teachers and employees of political subdivisions who elect coverage, as of 7/1/14	• Established a combination defined benefit/defined contribution hybrid plan with a defined benefit multiplier of 1% and employee contributions of 5% of salary to the DB plan and 2% (with an opt-out provision) to the DC plan.

Texas

Employees Retirement System of Texas

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirement

Overview

The Employees Retirement System of Texas (ERS) administers pension, disability, life insurance, defined contribution savings, and health insurance for state employees and retirees. The System administers the ERS of Texas Plan, the Law Enforcement and Custodial Officer Supplemental Retirement Plan (LECOS), and two judicial retirement plans.

The Texas legislature has enacted a series of pension reforms affecting current active and newly hired state employees. Generally, new hires, who participate in Group 2 (hired as of 9/1/10) or Group 3 (hired as of 9/1/13) receive reduced benefits and must work longer to qualify for retirement. 2015 legislation increased the percentage of salary employees must contribute toward their pension, through the end of FY17, and thereafter tied employee contributions to the State's contribution rate.

The changes to the main ERS plan reduced the plan's immediate cost of benefits earned each year from 13.37 percent of payroll in 2008 to 12.27 percent in 2015. The 2015 contribution rate changes reduced the period in which the plan is expected to pay off its unfunded liabilities from infinite to 33 years.

Reform Detail

Year	Affected Worker Groups	Modifications
2015	Current active members	• Increased employee contribution rates to 9.5% of salary for service beginning 9/1/15 through 8/31/17. For service after 8/31/17, contribution rates may decline, depending upon change in the state rate.
2013	Current active members; new hires as of 9/1/13 (Group 3)	For current active members and new hires: • Increased contribution rates gradually over 4 years, from 6.6% of salary in FY14 to 7.5% in FY17. For new hires as of 9/1/13: • Lengthened the period used to calculate final average salary, from the highest 36 or 48 months to the highest 60 months. • Added a 5% per year benefit reduction for those retiring before age 62 (age 57 for law enforcement or custodial officers). There is no cap on the benefit reduction.
2009	New hires as of 9/1/10 (Group 2)	• Increased the vesting period to retire under the Rule of 80 (age and service add to 80) from 5 years to 10 years. • Lengthened the period used to calculate final average salary from the highest 36 months to the highest 48 months. • Added a 5% per year benefit reduction for those retiring before age 60 (age 55 for law enforcement or custodial officers). The benefit reduction is capped at 25%.

Texas

Teacher Retirement System of Texas

Types of Pension Changes

Increased Employee Contributions • Increased Age/Service Requirement

Overview

The Teacher Retirement System of Texas (TRS) administers pension, disability, health care, and survivor's benefits for school teachers and other employees of more than 1,300 educational institutions--school districts, community colleges, universities, and other educational entities throughout Texas. TRS also administers TRS-Active Care, a health insurance program for more than 200,000 active members employed by school districts that elect to participate; and TRS-Care, a health care benefit for 200,000 retired TRS members and their beneficiaries.

In 2013, the Texas legislature increased the percentage of salary employees must contribute toward their pension and required that newly hired teachers work longer to qualify for an unreduced retirement benefit. These changes reduced the period in which the plan is expected to pay off its unfunded liabilities from infinite to 30 years.

Reform Detail

Year	Affected Worker Groups	Modifications
2013	Current active members; new hires and unvested members as of 9/1/13	For current active members: • Increased employee contribution rates gradually over 4 years, from 6.4% of salary in FY14 to 7.7% in FY17. For new hires and unvested members as of 9/1/13: • Established a minimum age of 62 to qualify for normal (unreduced) retirement under the Rule of 80 (age and service add to 80).

Utah

Utah Retirement Systems

Types of Pension Changes

Reduced Pension • Increased Age/Service Requirements • Changed Plan Design • Reduced Cost-of-Living Adjustment

Overview

The Utah Retirement Systems (URS) administers pension and other benefits for substantially all public employees in the state. The system maintains a contributory and a noncontributory plan for state employees, teachers, and employees of political subdivisions, and plans for law enforcement personnel, firefighters, judges, and the governor and legislators. The system also maintains a 401k and 457 plan. Currently, more than 65% of active members belong to the Non-contributory Plan.

In 2010, the Utah legislature closed the traditional defined benefit plan to new hires (except judges) and offered employees hired as of July 1, 2011 a choice to participate in either a hybrid plan with a reduced defined benefit combined with a defined contribution plan, or participation in a defined contribution plan only. The new plan installed risk mitigation features designed to promote stable and predictable employer contribution rates. Regardless of the employee's election, participating employers contribute 10 percent of covered employee payroll for each participant. Prior to the change the required employer contribution rate fluctuated as determined by the system's actuary. For public safety workers, the employer contributes the first 12 percent of payroll toward the cost of the benefit, and the rate of benefit accrual is higher.

Employee contributions depend on factors including plan type and plan cost. Employee contributions to the defined contribution plan are voluntary. Employee contributions to the defined benefit plan depend on the cost of the plan. For hybrid plan participants, if the annual cost of the defined benefit plan exceeds 10 percent of payroll, the employee is responsible for contributing the difference between 10 percent and the required rate. Conversely, if the annual cost of the defined benefit plan is less than 10 percent of payroll, the employer contributes the difference between the required rate and 10 percent to employees' defined contribution accounts.

In addition to the employer contribution rate, the employer must also make a payment to amortize the unfunded liability. The current cost to the employer for benefits earned each year for the new plan is 8.22 percent of payroll, reduced from the same cost of the closed plan of 12.25 percent.

Reform Detail

Year	Affected Worker Groups	Modifications
2010	New hires as of 7/1/11	• Replaced the defined benefit plan with a choice to elect to participate in a hybrid plan, with a multiplier of 1.5%, combined with participating in a defined contribution plan, or a traditional defined contribution plan. • Required employers to fund the first 10% of either the defined contribution or hybrid plan, depending on employee election. The contribution limit for employers of public safety workers is 12%. • Required that if the employee elects the hybrid plan and the plan costs are less than 10% (12% for public safety), the difference is contributed to the employee's defined contribution account. • Required that if the employee elects the hybrid plan and the plan costs are more than 10% (12% for public safety), the employee is responsible for contributing any amount over 10% (12% for public safety). • Increased the service requirement to qualify for normal (unreduced) retirement at any age, from 30 years to 35 years for regular public employees, and for public safety and firefighters from 20 years to 25 years. • Increased the benefit reduction for retirement before age 65 with fewer than 35 years of service, from 7% for every year under age 60 and 3% for each year between ages 60 and 65, to 7% for each year between ages 60 and 63 and approximately 9% for each year between ages 64 and 65. • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Reduced maximum annual COLA from 4.0% to 2.5%.

Vermont

Vermont State Employees' Retirement System

Types of Pension Changes

Increased Employee Contributions

Overview

The Vermont State Employees' Retirement System (VSERS) administers pension and other benefits for all full-time state employees. The System is a division of the state treasurer's office; the retirement division also administers the TRS and a municipal retirement system.

2008 legislation increased the percentage of salary state employees must contribute to their pension. Rates were again increased and extended in 2011, through 6/30/16. The 2011 increase in the state employees' contribution rate reduced the employer's cost of benefits earned each year from 4.81 percent to 3.99 percent of payroll.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Current active members	• Increased the employee contribution rate from 5.0% of salary to 6.3% from 7/1/11 through 6/30/16 (rates are decreased to 5.0% effective 7/1/16 or if 100% funding status is attained before 6/30/16).
2008	Current active members	• Increased the employee contribution rate from 3.25% of salary to 5.0% .

Vermont State Teachers Retirement System

Types of Pension Changes

Increased Employee Contributions • Increased Pension • Increased Age/Service Requirement

Overview

The Vermont State Teachers' Retirement System (VSTRS) administers pension and other benefits for certificated public school teachers. The System is a division of the state treasurer's office; the retirement division also administers the state employees' retirement system and a municipal employees system.

2010 legislation increased the percentage of salary current active teachers must contribute to their pension, and increased retirement eligibility criteria for teachers who are more than 5 years away from qualifying for retirement, and for new hires. The increased eligibility requirements were offset with benefit increases for these members. The changes reduced the TRS plan's unfunded liability by $47 million, or 6.4 percent. Combined with the increase in required employee contributions, the TRS employers' cost of benefits earned each year declined from 3.89 percent to 1.80 percent of payroll.

Reform Detail

Year	Affected Worker Groups	Modifications
2010	Current active members	For all current active members: • Increased the employee contribution rate from 3.54% of salary to 5.0%, effective until the system reaches a funding ratio of 90%. For current active members who are more than 5 years away from qualifying for normal (unreduced) retirement as of 6/30/10: • Increased normal (unreduced) retirement eligibility to age 65 with any length of service or Rule of 90 (age and service adds to 90). Previously workers could retire at age 62 with any length of service or any age with 30 years of service. • Increased the maximum benefit, from 50% of final average salary to 60% of final average salary. • Increased the retirement multiplier for those with 20 years of service or more, from 1.67% to 2.0%.

Virginia

Virginia Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements • Changed Plan Design • Reduced Cost-of-Living Adjustment

Overview

The Virginia Retirement System (VRS) administers pension, disability, survivors, and other benefits for most public employees in the Commonwealth, including state employees, public school teachers, and employees of political subdivisions that have elected to participate. The system administers four pension plans, including the VRS, which covers all participants who are not public safety personnel, correctional officers, or judges; other plans are for state police, other law enforcement personnel and correctional officers, and judges.

The changes approved in 2010 and 2012, affecting members who were not yet vested, produced modest (less than $1 billion) reductions in the plans' unfunded pension liabilities for the state and participating counties, cities, and school districts.

The employer's cost of benefits earned each year was reduced following benefit reductions enacted in 2010 and 2012. For members in Plan 2 (for those hired after June 30, 2010 and before January 1, 2014), this cost is 4.22 percent of payroll, lower than the 4.91 percent cost to employers of members in Plan 1 (for those hired before 7/1/10). The cost to employers of the Hybrid plan (for those hired after December 31, 2013), is 2.65 percent. As more new members are hired and covered in the Hybrid plan, the normal cost rate will shift toward the lower hybrid rate.

The changes approved in 2012 also required the phasing-in of the full required contribution rates as prescribed by the VRS board, which reduces the potential for future unfunded liabilities. The Virginia General Assembly has followed the schedule to phase in the full rates and actually accelerated contribution levels for State, Teachers, State Police Officers, Local government law enforcement officers, and Judges to 90% of the Board certified rates effective August 10, 2015, one year ahead of schedule. In addition, the Governor and General Assembly approved $193 million of additional funding for the Teacher plan that was contributed on June 30, 2015 to pay down the balance of the 10 year deferred contributions from the 2010-12 biennium.

Reform Detail

Year	Affected Worker Groups	Modifications
2012	New hires as of 1/1/14; current active state and teacher members not vested as of 1/1/13; employees of local governments	For new hires as of 1/1/14: • Established a hybrid plan with a defined benefits multiplier of 1% and mandatory participation in a defined contribution plan. Current active members were given until 4/30/14 to make a one-time, irrevocable election to join the hybrid plan. For current active members not vested as of 1/1/13 and new hires as of 1/1/14: • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Reduced the retirement multiplier, from 1.7% to 1.65%. • Increased the normal retirement age from 65 to Social Security retirement age or Rule of 90 (age and service adds up to 90). • Reduced COLA from one based on CPI up to 5% to one based on the 1st 2% of CPI plus one-half of the next 2% of CPI, with a total not to exceed 3%. • Delayed the onset of COLA until age 65 for those who retire with less than 20 years of service. For employees of participating local governments: • Required employees to contribute at a rate of 5% of salary, phased in by 7/1/16, with salary increase.
2011	Current active members	• Extended 5% employee contribution rate for all members.
2010	New hires as of 7/1/10	• Required state and teacher members to make contributions of 5% of salary. • Reduced COLA, from 3% plus one-half of the next 4% of CPI, to 2% plus one-half of the next 6% of CPI. • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Established early retirement eligibility at age 60 with 5 years of service. • Increased the normal retirement age from the Rule of 80 (age and service adds up to 80) to Social Security normal retirement age or Rule of 90 (age and service adds up to 90).

Washington

Washington State Department of Retirement Systems

Types of Pension Changes

Reduced Cost-of-Living Adjustment

Overview

The Washington State Department of Retirement Systems (DRS) administers pension, disability, and defined contribution savings benefits for most public employees in the state, including state employees, employees of higher education, public school teachers, law enforcement officers and fire fighters, and employees of political subdivisions that have elected to participate. The Cities of Seattle, Tacoma and Spokane each maintain a retirement plan for their employees. More than 1,300 state, local government, school district and higher education employers participate in the DRS, which administers seven retirement systems and 15 plans, including three hybrid plans, and a deferred compensation plan. DB plan assets are managed by the Washington State Investment Board.

In 2011, the Washington legislature eliminated the cost-of-living adjustment (COLA), known as the "Uniform COLA," for current and future retired members of the closed Public Employees' (PERS) and Teachers' Retirement Systems (TRS) Plan 1. This change reduced the PERS Plan 1 unfunded liability by $1.635 billion and the TRS Plan 1 unfunded liability by $1.596 billion. Although this change applied to PERS and TRS Plan 1 participants only, because employers of PERS, the School Employees' Retirement System (SERS) and the Public Safety Employees' Retirement System (PSERS) contribute toward the PERS 1 unfunded liability, these plans are affected by the reduced cost associated with these changes.

In 2012, the legislature increased the benefit reduction for individuals who elect to retire before meeting the criteria for normal, or unreduced retirement. This change reduced the cost to the employer for benefits earned each year for the PERS 2/3, TRS 2/3 and SERS 2/3 plans by 0.23 percent, 0.41 percent and 0.16 percent of payroll, respectively.

Reform Detail

Year	Affected Worker Groups	Modifications
2012	Newly hired general employees and teachers as of 5/1/13	• Increased the benefit reduction for early retirement, from 3.0% for each year retired under age 65, to 5.0% for each year, and restricted eligibility for early retirement to those age 55 or older who have at least 30 years of service.
2011	Retired and current active members of the closed Public Employees' and Teachers' Retirement Systems Plan 1	• Eliminated the annual benefit increase, or "uniform COLA," above the amount in effect on 7/1/10, unless a retiree qualifies for the minimum benefit. The two plans were closed to new members in 1977.

West Virginia Consolidated Public Retirement Board

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements

Overview

The West Virginia Consolidated Public Retirement Board (CPRB) administers pension and other benefits for substantially all public employees in the state. The Board maintains a defined benefit plan for teachers (TRS) that was closed to new members from July 1, 1991 until reopening in 2005. Teachers hired during that period were enrolled in a defined contribution plan. In 2007, teachers in the DC plan were given an opportunity to switch to the TRS plan. The CPRB also administers the Public Employees Retirement System (PERS), a DB plan for state and local government employees; a judges' DB plan; and DB plans for state and local public safety personnel. Assets are managed by the state Investment Management Board.

In 2015, the West Virginia legislature established a new benefits tier for state employees, teachers, and public safety officers hired as of July 1, 2015. For these members, benefits are reduced and some retirement eligibility provisions eliminated. New hires must also contribute a higher percentage of their salary toward the funding of their pension benefits.

The changes made to the PERS reduce the cost to the employer for benefits earned each year from 5.60 percent of payroll to 2.38 percent. In current dollars, the ultimate reduction is projected to be $44.8 million annually, phased in over the next 30 years.

The changes made to the TRS reduce the cost to the employer for benefits earned each year from 4.30 percent of payroll to the 3.79 percent. In current dollars, the ultimate reduction is projected to be $8.4 annually, phased in over the next 30 years.

The changes made to the State Police Retirement System reduce the cost to the employer for benefits earned each year from 10.38 percent of payroll to 9.44 percent. In current dollars, the ultimate reduction is projected to be $282,000 annually, phased in over the next 30 years.

Reform Detail

Year	Affected Worker Groups	Modifications
2015	New hires as of 7/1/15	• Increased the employee contribution rate from 4.5% of salary to 6.0%. • Lengthened the period used to calculate final average salary, from 3 years to the highest 5 of the last 15 years of service. • Eliminated the use of unused leave for additional service credit. • Eliminated eligibility for normal (unreduced) retirement at the Rule of 80 (age and service adds up to 80) for members of the Public Employees' Retirement System, and the Rule of 85 for members of the Teachers' Retirement System. • Increased the normal retirement age from 60 to 62. • Modified service credit provisions, including the elimination of the use of unused sick leave for additional service credit and a requirement that members pay for up to 5 years of military service credit. Previously, military service was offered at no cost to the member.

Wisconsin

Wisconsin Retirement System

Types of Pension Changes

Increased Employee Contributions • Increased Age/Service Requirements

Overview

The Wisconsin Retirement System (WRS) administers pension and other benefits for substantially all public employees in the state except those working for the City of Milwaukee and Milwaukee County, which maintain their own retirement plans. WRS assets are managed by the State of Wisconsin Investment Board.

Prior to 2011, most employee pension contributions were paid by the employer on behalf of the employee. 2011 legislation effectively ended this practice for most employee groups except those in protective occupations, such as public safety officers. As of July 1, 2011, employees are required to make pension contributions equal to one-half of the total pension contribution rate.

The 2011 law also established a five-year vesting period for newly hired workers. This means that new hires must complete five years of service to become eligible to receive a retirement benefit. Prior law called for immediate vesting.

Reform Detail

Year	Affected Worker Groups	Modifications
2011	Current active members and new hires as of 7/1/11	For current active members and new hires: • Established a requirement that non-protective occupation employees contribute 50% of the total pension contribution rate. Prior law permitted employers to pay all or part of the employee's contribution, agreed to via collective bargaining. Protective occupation employees maintained the ability to collectively bargain the payment of their employee contributions. For new hires as of 7/1/11: • Established a vesting period of 5 years. Prior law provided for immediate vesting.

Wyoming

Wyoming Retirement System

Types of Pension Changes

Increased Employee Contributions • Reduced Pension • Increased Age/Service Requirements • Reduced Cost-of-Living Adjustment

Overview

The Wyoming Retirement System (WRS) administers pension and other benefits for substantially all employees of the state, school districts, and other political subdivisions that have elected to participate. Eight defined benefit plans and one 457 deferred compensation plan comprise the system; more than 85% of participants are in the Wyoming Public Employees Plan; separate plans are maintained for highway patrol and other state law enforcement officers; firefighters; and judges.

The Wyoming legislature has made a series of changes affecting retired, current active and newly hired members of the WRS. On three separate occasions, in 2010, 2012 and 2013, employee contribution rates were increased for all active members. 2012 changes also included the indefinite suspension of cost-of-living adjustments (COLAs) for current and future retirees until the system is fully funded, and the creation of a new tier for state employees and teachers hired as of September 1, 2012. Members of the new tier are required to work longer to become eligible for unreduced retirement benefits and earn benefits that are approximately 9.7 percent less than those for members of the prior tier[1].

The new tier established in 2012 has a benefits cost of 9.23 percent of payroll, compared to the 10.81 percent benefits cost of the legacy plan. Employees pay 8.25 percent of payroll, or 89 percent of this cost. This lower cost of the new tier is projected to reduce overall employer benefits costs by $1.2 billion over 30 years.

Reform Detail

Year	Affected Worker Groups	Modifications
2013	Current active general employees and teachers	• Increased the employee contribution rate from 7.5% of salary to 8.25%, effective 7/1/14.
2012	Current and future retired members; current active general employees and teachers; new hires as of 9/1/12	For current and future retired members: • Suspended COLAs until the system is fully funded, and full funding is not impaired by the provision of a COLA. For current active general employees and teachers, effective 7/1/13: • Increased the employee contribution rate from 7.0% of salary to 7.5%. For new hires as of 9/1/12: • Reduced the retirement multiplier from 2.125% to 2.0% for the first 15 years of service. The multiplier is 2.25% for years of service above 15. • Lengthened the period used to calculate final average salary, from 3 years to 5 years. • Increased the age for normal (unreduced) retirement with 4 years of service, from 60 to 65. • Increased the age for early (reduced) retirement, with 4 years of service, from 50 to 55, and with 25 years of service, from any age to 50. Authorized the WRS Board to establish a benefit reduction for early retirement.
2010	Current active members and new hires	• Increased the employee contribution rate from 5.57% of salary to 7.0%, and required that employees pay the additional 1.43% (employers continue to pay 5.57% on behalf of employees).

[1] *Effects of Pension Plan Changes on Retirement Security,* Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014