NASRA Issue Brief:
State and Local Government Spending on Public Employee Retirement Systems

Updated March 2018

State and local government pension benefits are paid not from general operating revenues, but from trust funds to which public retirees and their employers contributed during retirees' working years. On a nationwide basis, contributions made by state and local governments to pension trust funds account for 4.7 percent of direct general spending (see Figure 1).[i] Pension spending levels, however, vary widely among states, depending on various factors, and are sufficient for some pension plans and insufficient for others.

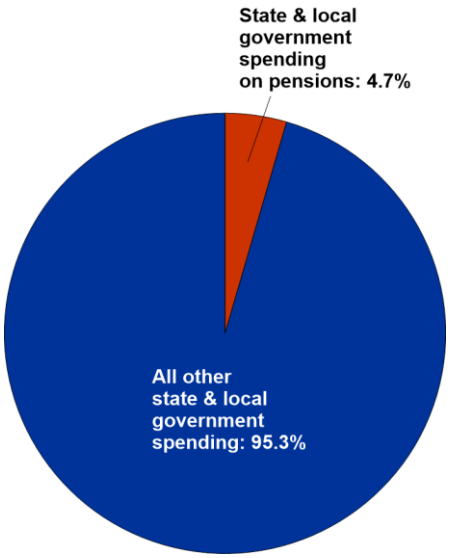
In the wake of the 2008-09 market decline, nearly every state and many cities have taken steps to improve the financial condition of their retirement plans and to reduce costs.[ii] States and cities changed their pension plans by adjusting employee and employer contribution levels, restructuring benefits, or both.

This update provides figures for public pension contributions as a percentage of state and local government direct general spending for FY 2015, and projects a rate of spending on pensions on an aggregate basis for FY 2016.

Nationwide Spending on Public Pensions

Based on the most recent information provided by the U.S. Census Bureau, 4.7 percent of all state and local government spending is used to fund pension benefits for employees of state and local government. As shown in Figure 2, pension costs rose sharply since FY 02 after falling equally sharply in the preceding years. These costs declined from a high point of 4.6 percent, in FY 87, to a low of 2.3 percent in FY 02, and reached 4.7 percent again in FY 15. State and local governments contributed, in aggregate, approximately $141 billion to pension funds in FY 16, a figure that is projected to equal 4.8 percent of state and local direct general spending, as displayed in Figure 2.[iii]

Figure 1. State and local spending on public pensions as a percentage of total government direct general spending, FY 15



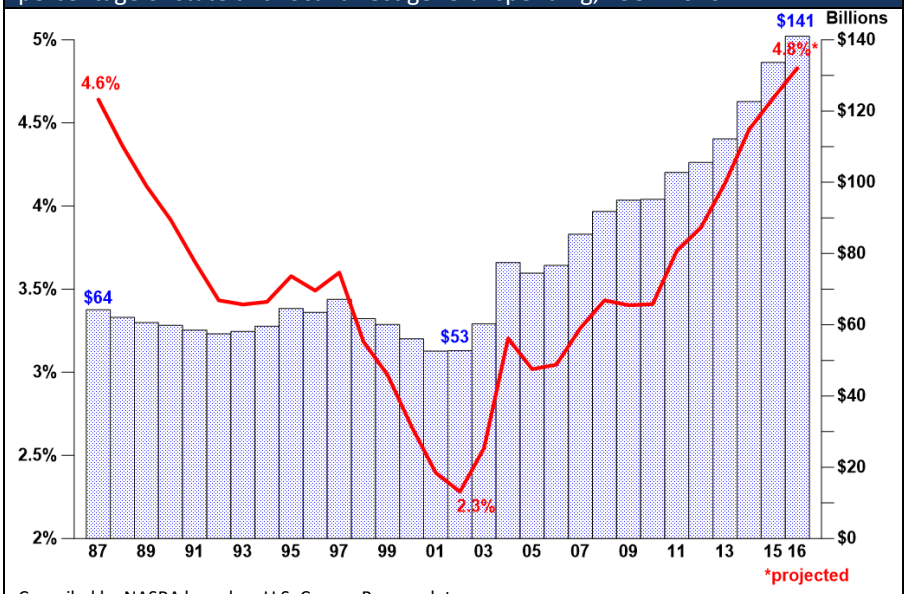
Compiled by NASRA based on U.S. Census Bureau data

Although pensions on average do not comprise a significant portion of aggregate state and local spending, as shown in Table 1, spending on pensions by states and political subdivisions varies widely among states, from 1.88 percent to nearly 9.0 percent. Some municipalities have reported higher pension costs as a percentage of their budget. One study estimates that total required spending on pensions could consume as much as 13 percent of one state's budget,[iv] due mostly to past failures to adequately fund pension costs and assuming a conservative five percent investment return. Failure to pay required contributions results in greater future contributions to make up the difference.

Differences in Pension Cost Levels

The variation in pension spending levels among states is attributable to such factors as differences in benefit levels; variations in the size of unfunded pension liabilities; the level of commitment by the state and its local government plan sponsors to make required pension contributions; and the portion of the state's population that lives in an urban area. Most employees of state and local government participate in statewide retirement systems. In FY 16, state and local government contributions to statewide retirement systems accounted for 76 percent of total pension contributions, with the remaining 24 percent belonging to locally administered systems. As a percentage of total spending, cities have spent approximately 31 percent more than states on pensions over the 30-year period spanning 1986-2015.[v] This higher

Figure 2. State and local pension contributions, in 2016 dollars, and as a percentage of state and local direct general spending, 1987-2016



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*Projected, based on estimated state and local government spending from National Association of State Budget Officers (NASBO) and U.S. Census Bureau data

commitment is largely attributable to the fact that a larger portion of local government spending goes toward salaries and related benefits compared to spending by states.

Differences in Benefit Levels

Pension benefit levels, and therefore required costs, vary among public pension plans, as plans in some states provide greater pension accrual rates than in others. As described below, this difference is particularly pronounced for the 25 percent to 30 percent of state and local government employees who do not participate in Social Security, as their pension benefit levels—and costs—generally are higher to compensate for all or part of the absence of Social Security benefits.

Size of Unfunded Liabilities

An unfunded pension liability is the projected difference between the pension benefits that have been accrued and the assets that have been set aside to pay for them. For a plan with a relatively large unfunded liability, the annual cost of paying down that liability can exceed the cost of benefits accrued each year. By contrast, the cost for a plan with no unfunded liability is simply the cost of benefits accrued each year. States with pension plans that have a relatively large unfunded liability will have higher pension plan spending levels, assuming the employer is making a good faith effort to pay its required contributions.

Social Security Coverage

Twenty-five to thirty percent of state and local governments and their employees make contributions to their retirement plan instead of to Social Security. This is the case for most to substantially all of the state and local government workforce in seven states, 40 percent of the nation's public school teachers, and a majority of firefighters and police officers.[vi] Pension benefits—and costs—for those who do not participate in Social Security are usually higher than for those who do participate, in order to compensate for the absence of Social Security benefits. This higher cost should be considered in the context of the 12.4 percent of payroll, or an estimated $2.6 billion annually,[vii] these employers and employees would otherwise be paying into Social Security.

Level of Commitment to Pay Required Contributions

State and local government efforts to pay required contributions vary widely: some employers consistently pay the full Actuarially Determined Contribution, and others pay less.[viii] Whatever the cost of the pension plan, actual spending on pensions as a percentage of all spending is affected by employers' effort to fund the plan.

Urbanization

Another variable that appears to contribute to differences among states in pension costs is the extent to which the state's population resides in urban areas, or cities. A NASRA analysis of state and local spending on pensions and the population density of metropolitan areas within each state (i.e., the number of persons per square mile residing in and near cities), suggests that, although not true in every case, states characterized by greater urban population density are more likely to experience higher costs for public pension benefits than states with less urban population density[ix]. This may be due to the fact that more public services are provided in urban areas, and that the types of public services that are provided, such as public safety, increase personnel costs, including retirement benefits. Also, the cost of living, including salaries and wages, usually is higher in cities than in rural areas. Other factors may also affect this difference in costs; further research into the relationship of pension costs and urban density would clarify these differences.

In addition to these reasons, consistent comparisons of pension spending by local governments can be difficult to make because the fiscal relationship between each state and its political subdivisions is unique with respect to revenue, spending structure and taxing authority, and varies widely. For example, funding responsibility for K-12 education budgets ranges from primarily a state duty to one that is primarily a local responsibility. Likewise, revenue-sharing arrangements and the authority of local governments to tax and raise revenue also run a wide range. As with states, pension costs for municipalities also can vary widely.

Cost and Financing Factors

Public pensions are financed through a combination of contributions from public employers (state and local agencies) and public employees, and the investment earnings on those contributions. Since 1987, investment earnings have accounted for 61 percent of all public pension revenue; employer contributions, 27 percent; and employee contributions, 12 percent.[x]

Employee Contributions

Because nearly all public employees are required both to participate in their employer-sponsored retirement plan and to contribute toward the cost of their pension benefit—typically four to eight percent of pay—most state and local government retirement plans are, in fact, mandatory savings programs. In recent years, many states have increased rates of required employee contributions. On a national basis, in fiscal year 2016, employee contributions accounted for 27 percent of all public pension plan contributions, with employer contributions making up the remaining 73 percent.[xi]

Employer Contributions

A variety of state and local laws and policies guide governmental pension funding practices. Most require employers to contribute what is known as the Actuarially Determined Contribution (ADC), which is the amount needed to finance benefits accrued each year, plus the annual cost to amortize unfunded liabilities from past years, less required employee contributions. On a weighted basis, the average ADC paid in recent years has been around 90 percent. Beneath this average contribution experience lies diversity: approximately 75 percent of plans in the Public Fund Survey[xii] consistently receive 90 percent or more of their ADC.[xiii] This means that although a majority of plans have been receiving their required funding, some plans have not been adequately funded, which will result in higher future costs.

Leading national public sector associations established a Pension Funding Task Force, which in 2013 released its report *Pension Funding: A Guide for Elected Officials* urging policymakers to follow recommended guidelines for an actuarially determined contribution to government retirement systems.

Investments and Other Parts of the Financing Equation

The largest portion of public pension funding comes from investment earnings, which illustrates the major role this revenue source plays in determining pension costs (see *NASRA Issue Brief: Public Pension Plan Investment Return Assumptions*, February 2018).

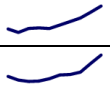
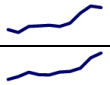
In addition to the performance of pension fund investments, actuarial expectations regarding macro-economic and demographic events also affect the cost of the plan. These events include such changes as retirement rates, attrition and rates of hiring, and wage growth, which can be affected by salary cuts and layoffs. Additionally, legislatures in nearly every state have made changes to pension benefits and/or financing structures, in some cases reducing plan costs and long-term obligations.

Conclusion

Employers in FY 16 contributed a total of $141 billion to pension benefits for employees, an amount that, on average, is a relatively small—but growing—part of state and local government spending. Required costs, benefit levels, funding levels, and funding adequacy vary widely, and this rate has been rising in recent years. Over $280 billion is paid out annually from these trusts to retirees and their beneficiaries, benefits that reach virtually every city and town in the nation.[xiv]

Actual costs of pensions paid by state and local government employers vary widely and reflect multiple factors, including differences in benefit levels, the size of the plan's unfunded actuarial liability, and the employer's effort to pay required contributions.

Table 1: State and local government contributions to pensions as a percentage of all state and local government direct general spending, by state, FY 06 to FY 15

	FY 06 %	FY 06 to FY 15 %	FY 15 %
Alabama	2.50		3.38
Alaska	3.94		20.00[1]
Arizona	2.00		3.92
Arkansas	3.67		3.52
California	4.39		5.98
Colorado	2.58		3.11
Connecticut	4.32		6.80
Delaware	2.00		3.02
District of Columbia	1.44		2.07
Florida	2.29		2.90
Georgia	2.29		3.79
Hawaii	4.30		5.31
Idaho	3.00		3.18
Illinois	3.20		8.71
Indiana	2.96		3.75
Iowa	1.90		2.54
Kansas	2.01		3.18
Kentucky	2.81		4.29
Louisiana	5.02		6.78
Maine	3.24		3.30
Maryland	2.66		4.76
Massachusetts	4.55		4.56
Michigan	2.82		5.35
Minnesota	1.97		2.43
Mississippi	3.01		4.08
Missouri	3.48		4.77

	FY 06 %	FY 06 to FY 15 %	FY 15 %
Montana	2.52		3.74
Nebraska	1.98		2.77
Nevada[2]	4.60		7.13
New Hampshire	1.42		3.34
New Jersey	0.16		3.02
New Mexico	3.27		3.41
New York	4.24		7.18
North Carolina	0.95		2.33
North Dakota	1.57		2.70
Ohio	4.39		4.22
Oklahoma	3.88		4.53
Oregon[3]	3.41		3.47
Pennsylvania	1.44		4.52
Rhode Island	4.40		5.90
South Carolina	2.37		3.11
South Dakota	1.89		1.91
Tennessee	2.49		3.19
Texas	2.78		2.78
Utah	3.15		4.60
Vermont	1.74		2.22
Virginia	3.53		4.47
Washington	0.93		2.73
West Virginia	1.42		6.40
Wisconsin	3.19		2.20
Wyoming	1.43		1.88
US Average	**3.05**		**4.65**

Compiled by NASRA based on U.S. Census Bureau data

Table Notes

Charts in the FY 06 to FY 15 % column reflect the percentage spending for each of the 10 years within the timeframe Percent-of-spending as of publication date. Figures are subject to periodic revisions by the U.S. Census Bureau.
States where more than one-half of public employee payrolls are estimated to be outside of Social Security are italicized.

[1]Alaska statewide retirement systems (PERS and TRS) received in FY 15 a one-time contribution of $3.0 billion from state budget surplus monies to reduce the plans' unfunded liability. These amounts were equal to 232 percent and 528 percent of the required employer contributions for PERS and TRS, respectively.

[2]In addition to being a non-Social Security state, one-half of Nevada PERS employers' contribution is attributable to a non-refundable pre-tax salary reduction to fund the employees' portion of the contribution.

[3]Contributions include an annual amount required to amortize the balance of employer side accounts

See also

National Governors Association, National Conference of State Legislatures, The Council of State Governments, National Association of Counties, National League of Cities, The U.S. Conference of Mayors, International City/County Management Association, National Council on Teacher Retirement, National Association of State Auditors, Comptrollers and Treasurers, Government Finance Officers Association, and National Association of State Retirement Administrators, "Pension Funding: A Guide for Elected Officials," 2013, http://www.nasra.org/files/JointPublications/PensionFundingGuide.pdf

Center for Retirement Research at Boston College, "The Impact of Public Pensions on State and Local Budgets," October 2010, http://crr.bc.edu/briefs/impact-of-public-pensions-on-state-and-local-budgets/

Center on Budget Priorities and Policies, "Misunderstandings Regarding State Debt, Pensions, and Retiree Health Costs Create Unnecessary Alarm," January 2011, http://www.cbpp.org/cms/index.cfm?fa=view&id=3372

National Association of State Retirement Administrators, Issue Brief: Public Pension Plan Investment Return Assumptions, Updated February 2018, http://www.nasra.org/returnassumptionsbrief

National Association of State Retirement Administrators, Issue Brief: Employee Contributions to Public Pension Funds, September 2017, http://nasra.org/contributionsbrief

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[i] The U.S. Census Bureau defines direct general expenditures as all payments to employees, suppliers, contractors, beneficiaries, and other final recipients of governmental payments. Excluded from this category are expenditures for utilities, publicly owned liquor stores, employee retirement benefits paid from trust funds, and intergovernmental payments. Some state and local government spending is non-discretionary, and therefore not in competition for funds with other programs and services. Including non-discretionary spending would make the effect of pension spending appear smaller. In addition, some states and cities do not contribute the amount determined actuarially to adequately fund the plan.

[ii] Significant Reforms to State Retirement Systems, https://www.nasra.org/reforms & Selected Approved Changes to State and Selected Local Public Pensions, https://www.nasra.org/files/Compiled%20Resources/nasrapensionchanges.pdf

[iii] Projected spending for 2016 derived from actual state expenditures as reported by the National Association of State Budget Officers in the 2015-2017 State Expenditure Report (https://www.nasbo.org/mainsite/reports-data/state-expenditure-report p. 8 and projected increase in local government direct general spending, as provided by the U.S. Census Bureau http://www.census.gov/govs/local/

[iv] Center for Retirement Research at Boston College, "The Impact of Public Pensions on State & Local Budgets," supra

[v] Author's calculations using public pension and state and local government finance data provided by the U.S. Census Bureau

[vi] http://www.nasra.org/socialsecurity

[vii] Author's calculation based on 30 percent of state and local government employees not participating in Social Security

[viii] The Annual Required Contribution Experience of State Retirement Plans, FY 01 to FY 13, http://www.nasra.org/arc & State and Local Government Contributions to Statewide Pension Plans: FY 14, http://www.nasra.org/adcbrief

[ix] A moderate positive relationship is observed to exist between each state's weighted cost for pension benefits, with an adjustment for Social Security costs, and the number of persons per square mile residing in Census-designated urban areas. Pension costs are sourced from Public Plans Data (www.publicplansdata.org), and are weighted for plans in each state and adjusted between 0-400 basis points depending on the percentage of public employees covered by Social Security in each state. Urban density data are published by the U.S. Census Bureau and may be accessed at https://www.census.gov/geo/reference/ua/urban-rural-2010.html.

[x] U.S. Census Bureau, http://www.census.gov/govs/retire/ - Table 2a. Revenues of State and Local Public Employee Retirement Systems by State and Level of Government, Fiscal Year 1987-2016

[xi] U.S. Census Bureau, https://www.census.gov/govs/retire/ - State and Locally-Administered Defined Benefit Pension Systems – All Data by State and Local Government: 2016

[xii] Public Fund Survey, http://www.nasra.org/publicfundsurvey

[xiii] The Annual Required Contribution Experience of State Retirement Plans, FY 01 to FY 13, http://www.nasra.org/arc, supra

[xiv] U.S. Census Bureau, http://www.census.gov/gos/retire/ ; see also "Economic Effects of Public Pensions," http://www.nasra.org/economiceffects