SUMMARY February 2013



#### The plans:

North Carolina has two large state-administered pension systems, three smaller state-administered systems, and many locally-administered systems. The state also maintains one retiree health plan for state employees. This analysis focuses primarily on the largest state-administered system – the North Carolina Retirement Teachers' and State Employees' Retirement System (TSERS) – which makes up just over 65 percent of active public plan membership in the state.

#### The impact of the crisis:

As a result of the economic crisis, the amount required to amortize the unfunded liabilities increased from 0 percent to 4 percent of payroll for TSERS. However, the system remained a responsible funder over much of the crisis period, continuing to fund 100 percent or more of the annual required contribution (ARC) except for in 2011 when the system paid only 73 percent of the ARC. For the state as a whole, the economic crisis increased the share of state and local budgets devoted to pensions from 2.9 percent to 4.2 percent.

#### The impact of pension plan reforms:

In the wake of the crisis, TSERS introduced a minor reduction to new-hire benefits by increasing the tenure required to qualify for normal retirement benefits from five to ten years of service. This change had a neglible impact on the system's normal cost.

Because TSERS's benefit changes are projected to have almost no impact on pension costs, any decline in future costs is likely to stem from paying down the system's unfunded liabilities. If the system continues to pay the full ARC – as it has historically done – and assumed returns materialize, the share of state and local budgets devoted to pensions is projected to drop from 2.9 percent today to 2.1 percent by 2046. A key element in the projected pension costs for TSERS will be its ability to stick to the funding schedule. Currently, the system has in place a target date for full funding of 2023.

#### **Total state costs:**

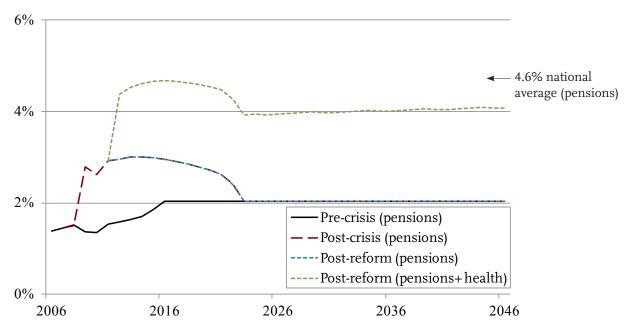
North Carolina state government also provides retiree health benefits, which amounted to 1.5 percent of state and local budgets prior to the crisis and are projected to grow to 2.1 percent by 2046. When retiree health and pension costs are combined, North Carolina's total retirement benefit costs as a percent of state and local budgets equaled 2.9 percent prior to the crisis, increased to 4.2 percent during the crisis, and are projected to remain at 4.2 percent into 2046 as the long-term decline in pension costs offsets increases in health costs.



# PENSION AND RETIREE HEALTH COSTS: PRE- AND POST-CRISIS

#### NORTH CAROLINA: TOTAL PENSION AND RETIREE HEALTH COSTS

FIGURE 1. EMPLOYER PENSION AND RETIREE HEALTH COSTS AS PERCENT OF BUDGET: PRE-CRISIS, POST-CRISIS, AND POST-REFORM



Note: Budget = general own source revenues of all North Carolina state/local governments. Retiree health costs are assumed pay-as-you-go.

TABLE I. EMPLOYER PENSION AND RETIREE HEALTH COSTS AS PERCENT OF BUDGET, BY PLAN

Plan	Pre-crisis	Post-crisis	Post-reform	
			2028	2046
Total pensions	1.4%	2.9%	2.1%	2.1%
North Carolina TSERS	0.8	2.1	1.3	1.3
Other pension plans <sup>a</sup>	0.6	0.8	0.8	0.8
Total retiree health	1.5	1.3	1.9	2.1
North Carolina State retiree health	1.5	1.3	1.9	2.1
Total	2.9	4.2	4.0	4.2

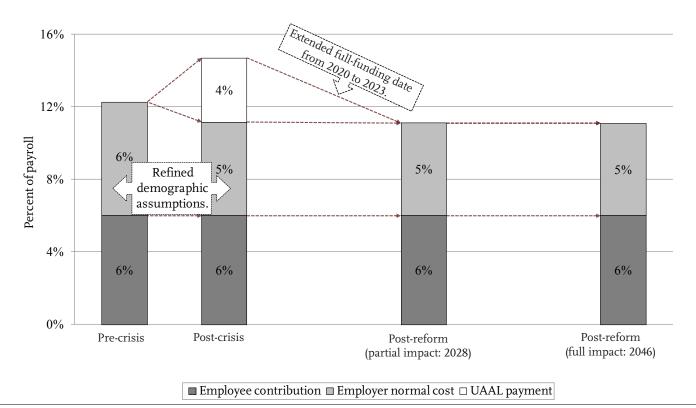
<sup>&</sup>lt;sup>a</sup> Includes a state-administered municipal retirement system – the North Carolina Local Government Employee Retirement System – three small state-administered plans for legislators, judges, and the national guard, as well as all the locally-administered pension plans within the state of North Carolina.

Note: Since a detailed analysis was undertaken only for TSERS, when projecting total state pension burden the costs of North Carolina LGERS and other plans were assumed to remain a constant percent of state and local budgets in all three scenarios.

Sources: CRR calculations from plan actuarial valuations; and U.S. Census Bureau, State and Local Government Finances and State and Local Public-Employee Retirement Systems.

# NORTH CAROLINA TEACHERS AND STATE EMPLOYEES RETIREMENT SYSTEM (TSERS)

FIGURE 2. PENSION COSTS AS PERCENT OF PAYROLL: PRE-CRISIS, POST-CRISIS, AND POST-REFORM



#### **KEY FACTS**

Structure of retirement system

- ✓ Social Security coverage
- Defined benefit
- ☐ Defined contribution/hybrid

*Funding method and history* 

- ☐ Set by statute
- Actuarially determined

Pre-crisis, the system averaged 100 percent of the GASB-required ARC. Post-crisis, the rate has been 100 percent or higher, except for 2011 when it dropped to 73 percent.

#### Plan design changes

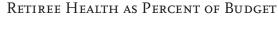
- ☐ Cut COLA
- ☐ Increased employee contribution
- ✓ Increased age/tenure eligibility: new hires only
- ☐ Increased average salary period
- ☐ Reduced benefit factor
- □ None

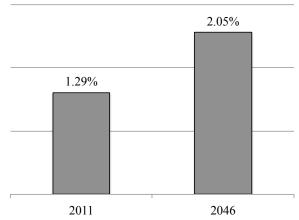
## Table 2. Pension Finances and Actuarial Assumptions

Item	Due enisie	Post-crisis	Post-reform	
item	Pre-crisis	Post-crisis	2028	2046
Plan finances				
Funded ratio	104.7 %	94.0 %	_	_
Employer ARC rate*	3.4	7.7	5.1	5.1
Percent of ARC paid	100.0	73.0	100	100
Assumptions				
Discount rate	7.25	7.25	7.25	7.25
Payroll growth	4.50	4.25	4.25	4.25
Amortization period	9 yrs.	12 yrs.	12 yrs.	12 yrs.

<sup>\*</sup> The reported employer ARC rate for a given year is that provided in that year's actuarial valuation. For TSERS, the rate is applied to payroll two years after the valuation is performed. *Sources:* Actuarial valuations and CRR calculations.

#### NORTH CAROLINA STATE HEALTH PLAN



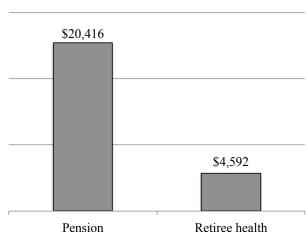


Sources: CRR calculations from plan actuarial valuations; and U.S. Census Bureau, State and Local Government Finances.

#### Retiree health funding and costs

- O Funding method: Pay-as-you-go.
- Medical inflation rate: 8 percent, drops to 5 percent by 2020.
- Employer contribution: Depending on the health plan, retirees may be required to pay a premium.
  In no case is the retiree premium more than the premium for active employees.

### Average Annual Benefit



Source: CRR calculations from plan actuarial valuations.

#### Benefits and membership

- Benefit eligibility: Hired after October 1, 2006 20 years of service credit. All others - 5 years of service credit.
- O Benefits for Medicare-eligible retirees: Secondary coverage provided by the plan.
- O Active employees: 341,500
- O Beneficiaries: 179,120
- Most recent actuarial valuation: 12/31/11