THE STATE OF TEXAS

The plans:

Texas has four large state-administered pension systems, two smaller state-administered systems, and many locally-administered systems. The state also maintains two retiree health plans. This analysis focuses primarily on two of the four large state-administered systems – the Texas Employees Retirement System (ERS) and the Teacher Retirement System (TRS) – which make up nearly 80 percent of public plan active 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 for both ERS and TRS. For ERS, it jumped from from 1 percent of payroll to 4 percent of payroll. For TRS, the jump was smaller, increasing from 2 percent to 4 percent of payroll. Over the crisis period, the statutory contribution rate was consistently less than the annual required contribution (ARC), which exacerbated the impact of the crisis on pension costs. For the state as a whole, the economic crisis increased the share of state and local budgets devoted to pensions from 3.1 percent to 4.2 percent.

The impact of pension plan reforms:

In the wake of the crisis, ERS made modest changes to benefits for new hires, while TRS focused only on curtailing pension abuses. For ERS, benefit changes included tightening eligibility requirements and lengthening the averaging period used for calculating benefits. ERS also increased the contribution rate for all employees from 6 percent to 7 percent of payroll. All of these changes combined will gradually reduce the projected employer's contribution to the normal cost from 8 percent of payroll today to 6 percent in 2046, at which point all active employees will be covered under the new benefit structure.

For TRS, stronger anti-spiking language was introduced to limit the practice of increasing pay or other compensation for the purpose of boosting pension benefits. The system also increased the cost of purchasing service for members. These reforms were meaningful but had a negligable impact on costs.

Going forward, if both systems pay the full ARC – something they have not done in recent years – and assumed returns materialize, the payments required to amortize the unfunded liability will decline. Taking into account both the benefit changes and paying down the unfunded liabilities, the share of state and local budgets devoted to pensions is projected to drop from 4.2 today to 3.6 percent by 2046.

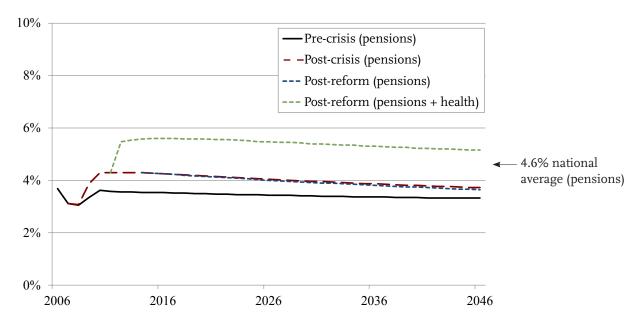
Total state costs:

In Texas, the state also provides retiree health benefits, which amounted to about 1.2 percent of state and local budgets prior to the crisis, and are projected to grow to 1.5 percent by 2046. When retiree health and pension costs are combined, Texas' total retirement benefit costs as a percent of state and local budgets equaled 4.3 percent prior to the crisis, increased to 5.4 percent during the crisis, and are projected to drop to 5.1 percent in 2046 after pension reforms.

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

TEXAS: 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 Texas state/local governments. Retiree health costs assumed pay-as-you-go.

Plan	Pre-crisis	Post-crisis	Post-reform	
			2028	2046
Total pensions	3.1 %	4.2%	4.0%	3.6 %
Texas ERS	0.3	0.5	0.5	0.4
Texas TRS	1.6	2.2	2.0	1.7
Other pension plans ^a	1.2	1.5	1.5	1.5
Total retiree health	1.2	1.2	1.5	1.5
Texas ERS retiree health	0.5	0.5	0.6	0.7
Texas TRS retiree health	0.7	0.7	0.9	0.8
Total	4.3	5.4	5.5	5.1

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

^a Includes two state-administered municipal retirement systems – Texas County and District Retirement System and Texas Municipal Retirement System – as well as all locally-administered plans within Texas.

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.

TEXAS EMPLOYEES RETIREMENT SYSTEM (ERS)

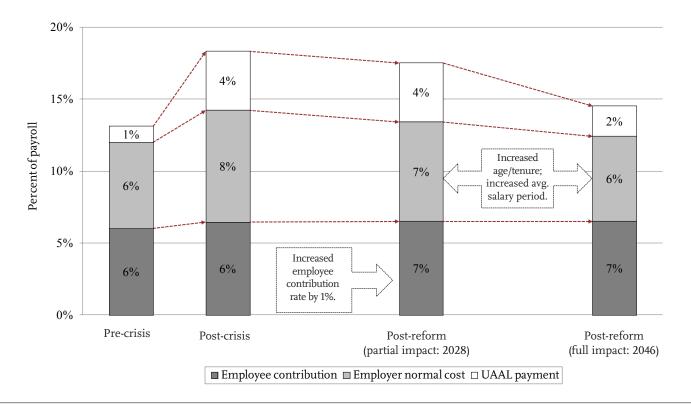


FIGURE 2. PENSION COSTS AS PERCENT OF PAYROLL: PRE-CRISIS, POST-CRISIS, AND POST-REFORM

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 statutory rate averaged 80 percent of the GASB-required ARC. Post-crisis, the rate dropped to 58.5 percent in 2011.

Plan design changes

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

TABLE 2. PENSION FINANCES AND ACTUARIAL ASSUMPTIONS

T.	Due eniaia	Deat minin	Post-reform	
Item	Pre-crisis	Post-crisis	2028	2046
Plan finances				
Funded ratio	95.6%	84.5 %	_	_
Employer ARC rate	7.1	12.2	10.6	8.6
Percent of ARC paid	88.9	58.5	100	100
Assumptions				
Discount rate	8.0	8.0	8.0	8.0
Payroll growth	4.0	3.5	3.5	3.5
Amortization period	30 yrs.	30 yrs.	30 yrs.	30 yrs.

Sources: Actuarial valuations and CRR calculations.

TEXAS TEACHERS RETIREMENT SYSTEM (TRS)

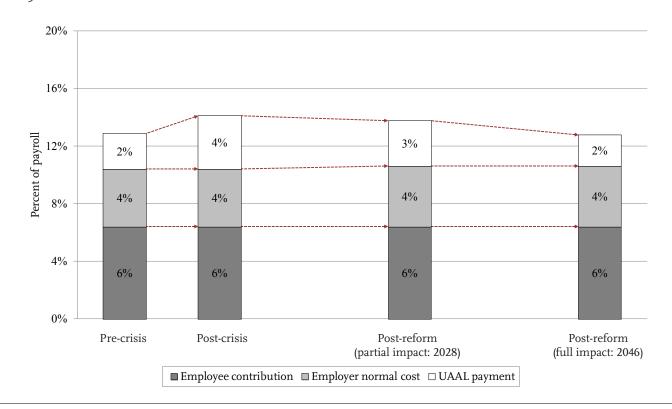


FIGURE 3. PENSION COSTS AS PERCENT OF PAYROLL: PRE-CRISIS, POST-CRISIS, AND POST-REFORM

KEY FACTS

Structure of retirement system

- $\hfill\square$ Social Security coverage
- Defined benefit
- □ Defined contribution/hybrid

Funding method and history

- \checkmark Set by statute
- □ Actuarially determined

Pre-crisis, the statutory rate has equaled 80 percent or more of the GASB-required ARC. Post-crisis, the rate rose to 85 percent in 2011.

Plan design changes

- □ Cut COLA
- □ Increased employee contribution
- □ Increased age/tenure eligibility
- □ Increased average salary period
- □ Reduced benefit factor
- ✓ None

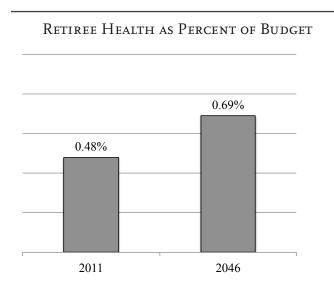
TABLE 3. PENSION FINANCES AND ACTUARIALAssumptions

.	Durantation	D	Post-reform	
Item	Pre-crisis	Post-crisis	2028	2046
Plan finances				
Funded ratio	90.5 %	82.7 %	_	_
Employer ARC rate	6.1	7.8	7.2	6.3
Percent of ARC paid	102.0	85.0	100	100
Assumptions				
Discount rate	8.0	8.0	8.0	8.0
Payroll growth	3.5	3.5	3.5	3.5
Amortization period	30 yrs.	30 yrs.	30 yrs.	30 yrs.

Sources: Actuarial valuations and CRR calculations.

👆 TEXAS RETIREE HEALTH PLANS

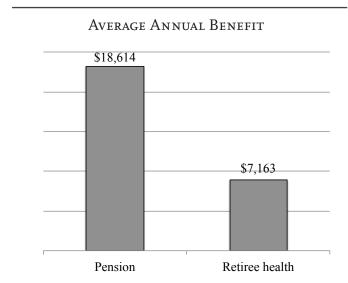
TEXAS EMPLOYEES GROUP BENEFITS PROGRAM



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

Retiree health funding and costs

- Funding method: Pay-as-you-go.
- Medical inflation rate: 8 percent, drops to 5.5 percent by 2018.
- Employer contribution: Fixed dollar amount updated annually.



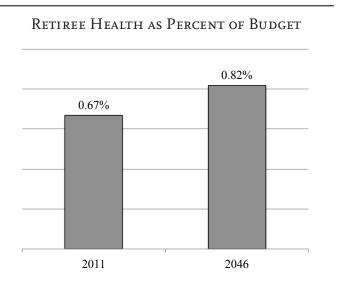
Source: CRR calculations from plan actuarial valuations.

Benefits and membership

- Benefit eligibility: Retiree must be receiving pension benefits to be eligible for retiree health.
- Benefits for Medicare-eligible retirees: Secondary coverage provided by the plan.
- \bigcirc Active employees: 227,786
- O Beneficiaries: 90,213
- Most recent actuarial valuation: 6/30/11

👆 TEXAS RETIREE HEALTH PLANS

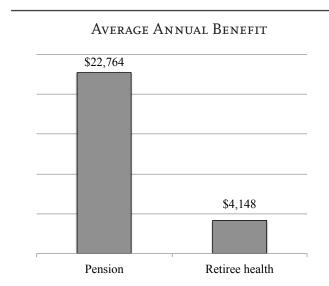
TEXAS TRS-CARE RETIREE HEALTH CARE PLAN



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

Retiree health funding and costs

- Funding method: Pay-as-you-go.
- Medical inflation rate: 10 percent, drops to 4.5 percent by 2020.
- Employer contribution: Basic coverage is available at no cost to the retirees. Retiree must contribute toward any additional cost in excess of base coverage.



Source: CRR calculations from plan actuarial valuations.

Benefits and membership

- Benefit eligibility: Retiree must be receiving pension benefits to be eligible for retiree health.
- Benefits for Medicare-eligible retirees: Secondary coverage provided by the plan.
- Active employees: 681,457
- Beneficiaries: 222,454
- O Most recent actuarial valuation: 8/31/11