



THE STATE OF OHIO

The plans:

Ohio has four large state-administered pension systems, two smaller state-administered systems, and some locally-administered systems. The state also maintains four retiree health plans. This analysis focuses primarily on the four large state-administered systems – the Ohio Public Employees Retirement System (PERS), the State Teachers Retirement System of Ohio (STRS), the School Employees Retirement System of Ohio (SERS), and the Ohio Police and Fire Pension Fund (P&F) – which make up nearly all 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 dramatically for all Ohio plans. For PERS and SERS, which fully paid their annual required contribution (ARC) throughout the crisis and subsequent economic downturn, the required payment increased by 6 percent of payroll. For STRS and P&F, which were less consistent funders during the crisis, amortization payments increased much more. STRS was hit hardest, with its unfunded liability payment going from 8 percent to 21 percent of payroll. P&F's amortization payment to jumped from 8 percent to 19 percent of payroll. The increase in costs was dampened by refined demographic assumptions, which lowered the total liability. For the state as a whole, the economic crisis increased the share of state and local budgets devoted to pensions from 4.0 percent to 7.7 percent.

The impact of pension plan reforms:

In response to the financial crisis, Ohio enacted substantial plan design changes. First, all systems, except SERS, increased the employees' contributions. Second, all four systems reduced their benefits. PERS and STRS were the most aggressive, tightening retirement eligibility requirements, lengthening the average salary period, reducing the benefit factor, and decreasing the cost-of-living adjustment for both current employees and new hires. P&F's less aggressive reforms lengthened the average salary period and decreased the cost-of-living adjustment for current employees and new hires, but tightened retirement eligibility requirements for new hires only. SERS put in place only one form of benefit reduction, tightening retirement eligibility requirements for current employees and new hires. Across the four systems, these changes will reduce the employers' portion of the normal cost by about 3 percentage points, to 4 percent of payroll by 2046. If each system pays its full GASB ARC – something that STRS and P&F historically have not done – and assumed returns materialize, the amortization payments will also 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 7.7 percent today to 2.5 percent by 2046.

Total state costs:

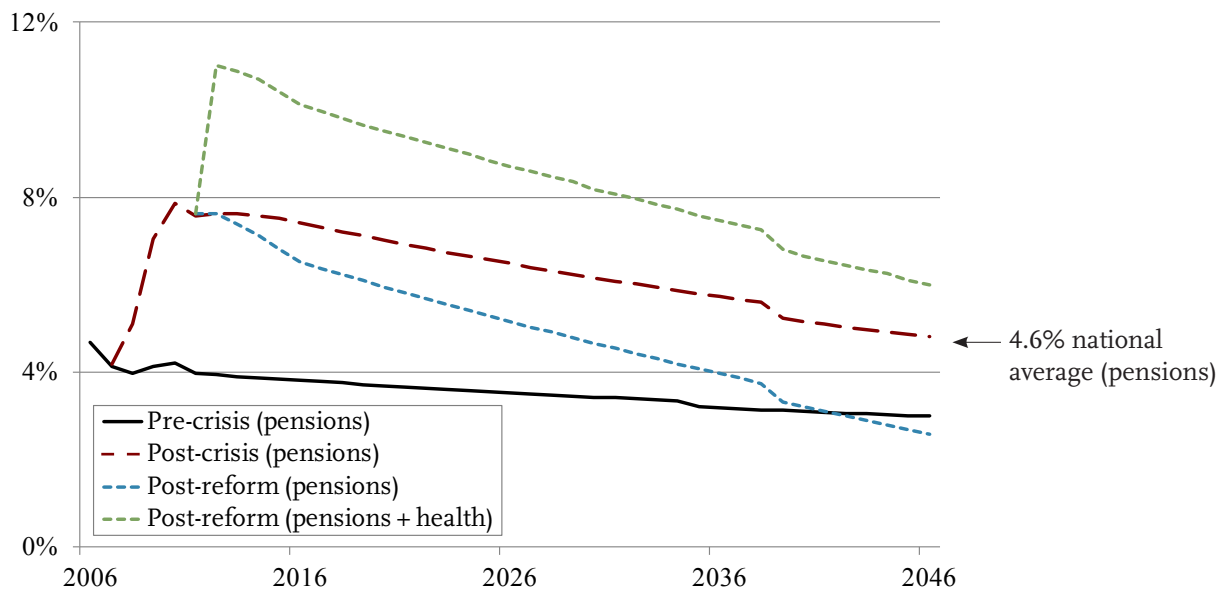
Ohio state government also provides retiree health benefits, which amounted to about 2.6 percent of state and local budgets prior to the crisis, and are projected to grow to 3.5 percent by 2046. When retiree health and pension costs are combined, Ohio's total retirement benefit costs as a percent of state and local budgets equaled 6.6 percent prior to the crisis, increased to 10.9 percent during the crisis, and are projected to drop to 6.0 percent in 2046 after pension reforms are fully in place.



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

OHIO: TOTAL PENSION AND RETIREE HEALTH COSTS

FIGURE I. 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 Ohio state/local governments. Retiree health costs assumed pay-as-you-go.

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

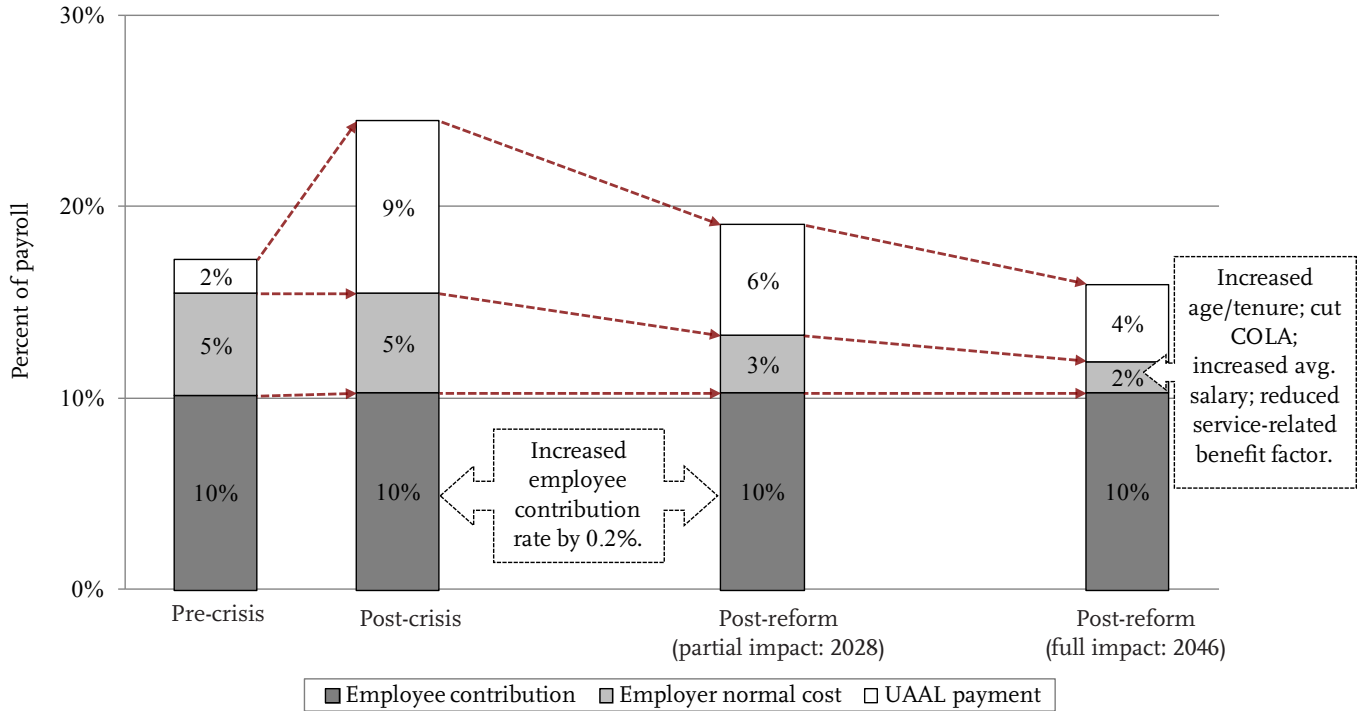
Plan	Pre-crisis	Post-crisis	Post-reform	
			2028	2046
Total pensions	4.0 %	7.9%	5.0%	2.5 %
Ohio PERS	1.3	2.6	1.7	1.0
Ohio STRS	1.8	4.0	2.2	1.1
Ohio P&F	0.6	0.9	0.6	0.3
Ohio SERS	0.2	0.3	0.4	0.0
Other pension plans ^a	0.1	0.1	0.1	0.1
Total retiree health	2.6	3.2	3.6	3.5
Ohio PERS retiree health	1.7	2.1	2.1	1.9
Ohio STRS retiree health	0.5	0.6	0.8	0.9
Ohio P&F retiree health	0.1	0.1	0.2	0.2
Ohio SERS retiree health	0.3	0.4	0.5	0.5
Total	6.6	11.1	8.6	6.0

^a Includes the Ohio State Highway Patrol Retirement System and all the locally-administered plans within Ohio.

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*.

OHIO PUBLIC EMPLOYEES RETIREMENT SYSTEM (PERS)

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

Employer contributions have equaled or been greater than 100 percent of the ARC.

Plan design changes

- Cut COLA: all active employees
- Increased employee contribution: all employees
- Increased age/tenure eligibility: all employees
- Increased average salary period: all employees
- Reduced benefit factor: all employees
- None

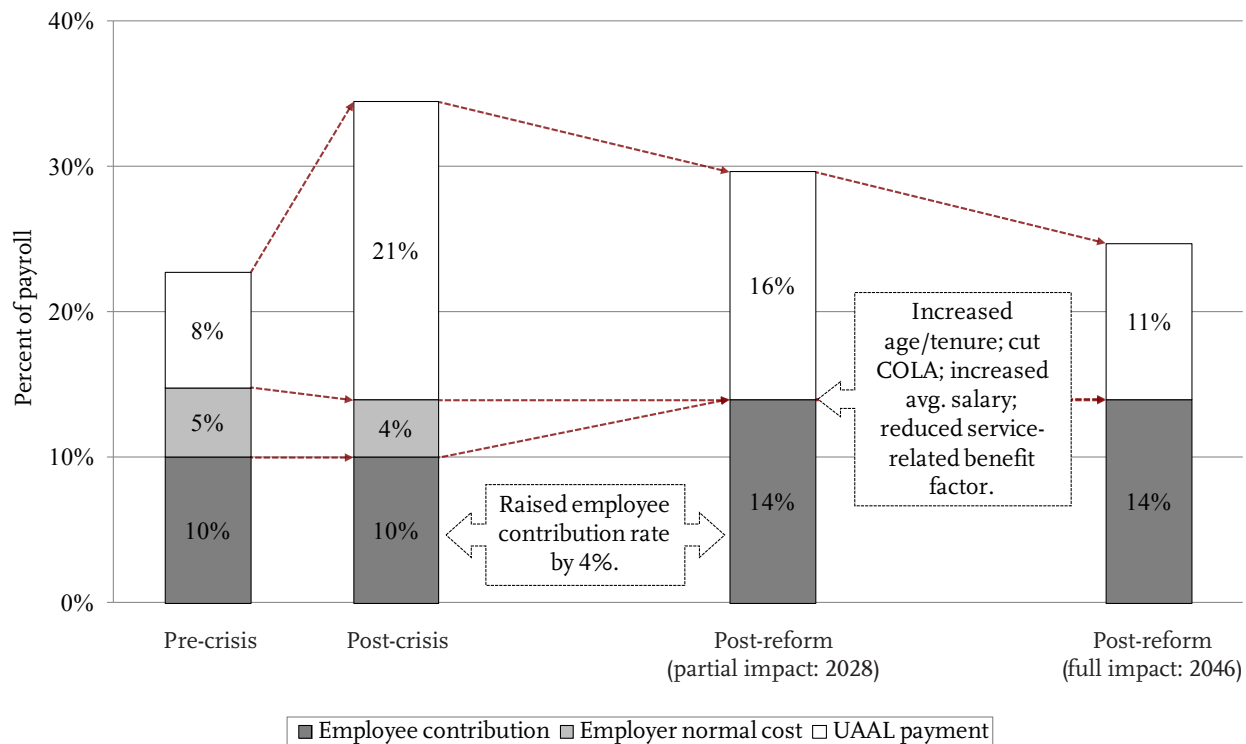
TABLE 2. PENSION FINANCES AND ACTUARIAL ASSUMPTIONS

Item	Pre-crisis	Post-crisis	Post-reform	
			2028	2046
Plan finances				
Funded ratio	96.3 %	77.4 %	-	-
Employer ARC rate	7.1	14.2	9.2	5.7
Percent of ARC paid	100.0	100.0	100	100
Assumptions				
Discount rate	8.0	8.0	8.0	8.0
Payroll growth	4.0	4.0	4.0	4.0
Amortization period	30 yrs.	30 yrs.	30 yrs.	30 yrs.

Sources: Actuarial valuations and CRR calculations.

OHIO STATE TEACHERS RETIREMENT SYSTEM (STRS)

FIGURE 3. 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

Currently uses statutory rate well below GASB-required contribution: 51 percent of the GASB ARC in 2011. Under current statutory rate, system will never pay down unfunded liability.

Plan design changes

- Cut COLA: all employees
- Increased employee contribution: all employees
- Increased age/tenure eligibility: all employees
- Increased average salary period: all employees
- Reduced benefit factor: all employees
- None

TABLE 3. PENSION FINANCES AND ACTUARIAL ASSUMPTIONS

Item	Pre-crisis	Post-crisis	Post-reform	
			2028	2046
Plan finances				
Funded ratio	82.2 %	59.1 %	-	-
Employer ARC rate	12.7	24.5	13.6	6.6
Percent of ARC paid	83.0	52.0	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.

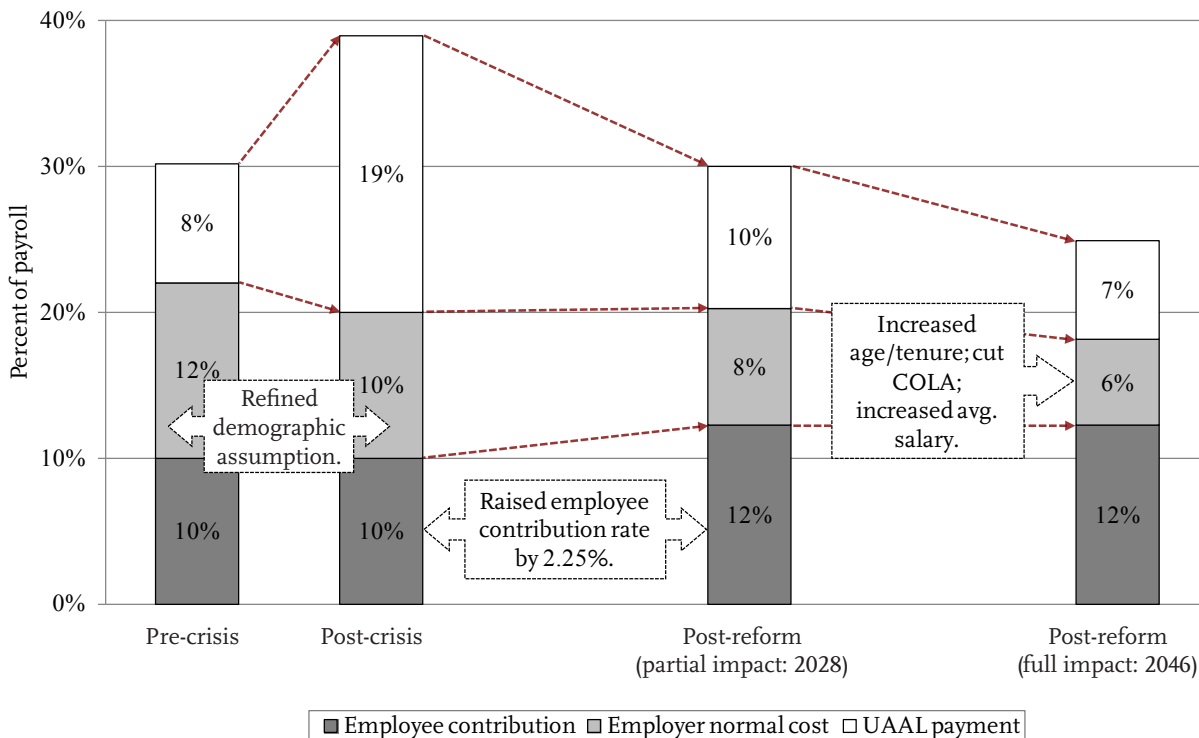
* 3.5 percent for 11 years, then 4 percent.

** 3.5 percent for 7 years, then 4 percent.

Sources: Actuarial valuations and CRR calculations.

OHIO POLICE AND FIRE PENSION FUND (P&F)

FIGURE 4. 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

Statutory contribution rate equaled 77 percent of the GASB ARC in 2007 but fell to 62 percent of the GASB ARC in 2010. Unfunded liability will never be paid off at current statutory rate.

Plan design changes

- Cut COLA: all active employees
- Increased employee contribution: all employees
- Increased age/tenure eligibility: new hires only
- Increased average salary period: employees < 15 yrs. of service
- Reduced benefit factor
- None

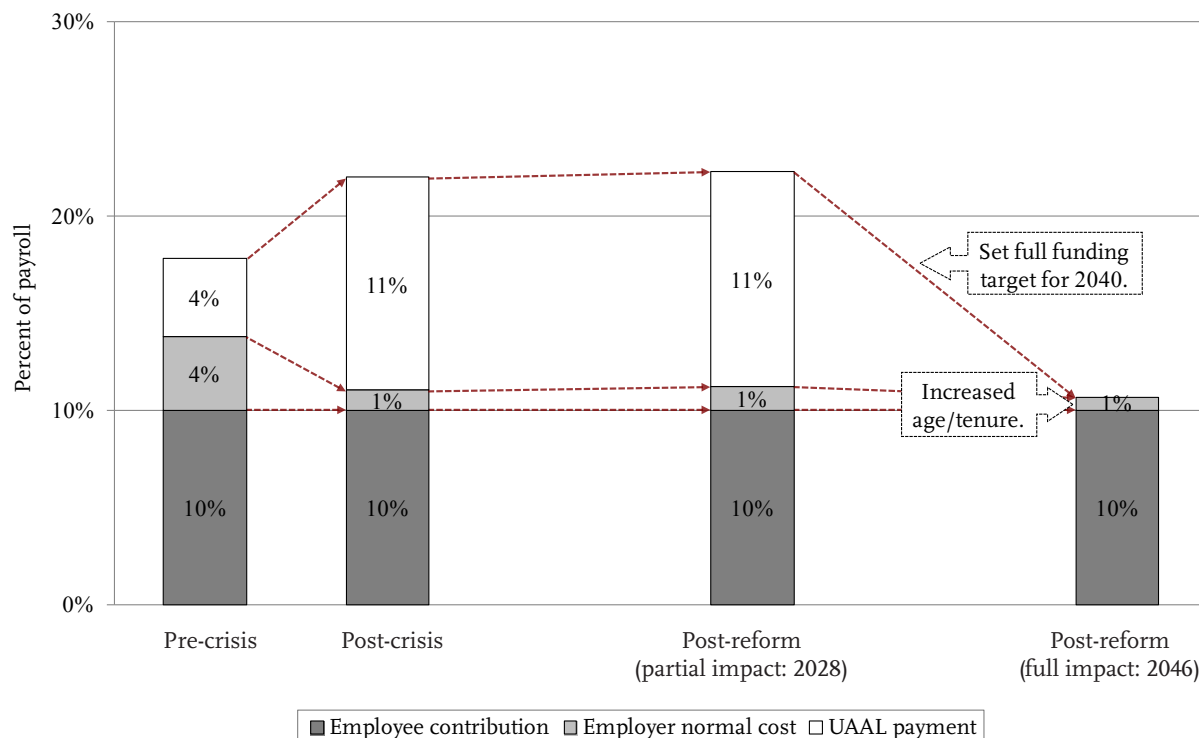
TABLE 3. PENSION FINANCES AND ACTUARIAL ASSUMPTIONS

Item	Pre-crisis	Post-crisis	Post-reform	
			2028	2046
Plan finances				
Funded ratio	81.7 %	63.1 %	-	-
Employer ARC rate	20.2	28.7	17.8	12.7
Percent of ARC paid	77.0	57.0	100	100
Assumptions				
Discount rate	8.25	8.25	8.25	8.25
Payroll growth	4.00	3.75	3.75	3.75
Amortization period	30 yrs.	30 yrs.	30 yrs.	30 yrs.

Sources: Actuarial valuations and CRR calculations.

OHIO SCHOOL EMPLOYEES RETIREMENT SYSTEM (SERS)

FIGURE 5. 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
- Historically, the statutory rate has equaled or been greater than 100 percent of the ARC rate required to pay down the unfunded liability within a 30-year period. In 2009, changed its closed funding period from 28 years to 30 years in response to the crisis.

Plan design changes

- Cut COLA
- Increased employee contribution
- Increased age/tenure eligibility: all employees
- Increased average salary period
- Reduced benefit factor
- None

TABLE 3. PENSION FINANCES AND ACTUARIAL ASSUMPTIONS

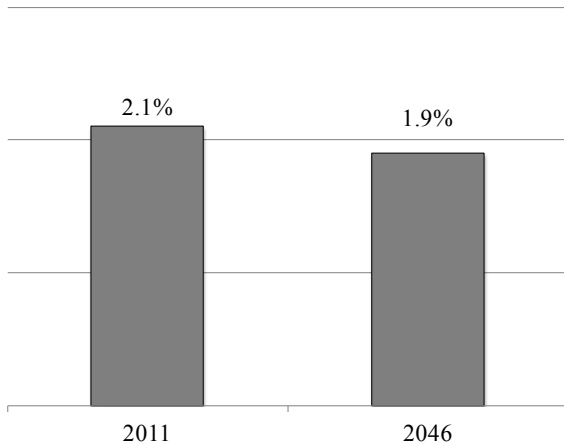
Item	Pre-crisis	Post-crisis	Post-reform	
			2028	2046
Plan finances				
Funded ratio	80.8 %	72.6 %	-	-
Employer ARC rate*	9.8	12.6	11.6	0.0
Percent of ARC paid*	90.0	100.0	100	100
Assumptions				
Discount rate	8.00	8.00	8.00	7.75
Payroll growth	4.0	4.0	4.0	4.0
Amortization period	29 yrs.	28 yrs.	11 yrs.	0 yrs.

* ARC = GASB required ARC.

Sources: Actuarial valuations and CRR calculations.

OHIO PUBLIC EMPLOYEES RETIREE HEALTH AND MEDICARE BENEFITS

RETIREE HEALTH AS PERCENT OF BUDGET

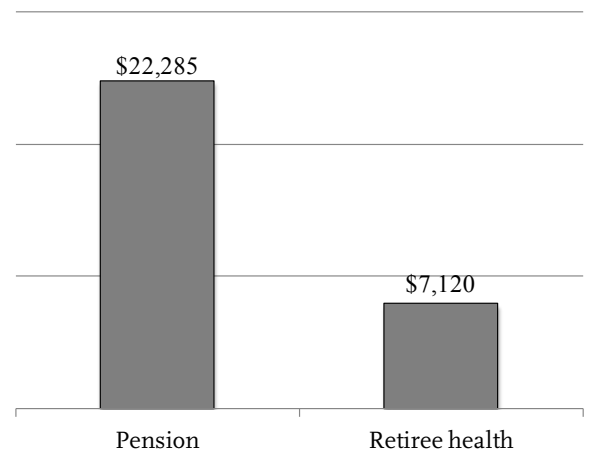


Sources: CRR calculations from plan actuarial valuations; and U.S. Census Bureau, *State and Local Government Finances*.

Retiree health funding and costs

- Funding method: Pension allocation. Rate was 4 percent of payroll in 2011.
- Medical inflation rate: 8.5 percent, drops to 4 percent by 2018.
- Employer contribution: Approximately 85 percent of the cost of insurance in 2010, with employer and federal government paying remainder.

AVERAGE ANNUAL BENEFIT



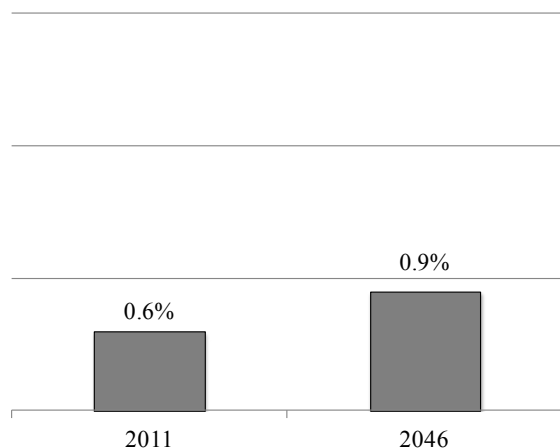
Source: CRR calculations from plan actuarial valuations.

Benefits and membership

- Benefit eligibility: Members applying for age-and-service retirement with 10 or more years of Ohio service credit.
- Benefits for Medicare-eligible retirees: The plan replaces Medicare coverage, and Medicare-eligible retirees are eligible for premium reimbursement.
- Active employees: 348,112
- Beneficiaries: 186,987
- Most recent actuarial valuation: 1/1/10

STATE TEACHERS RETIREMENT SYSTEM OF OHIO RETIREE HEALTH CARE BENEFITS

RETIREE HEALTH AS PERCENT OF BUDGET

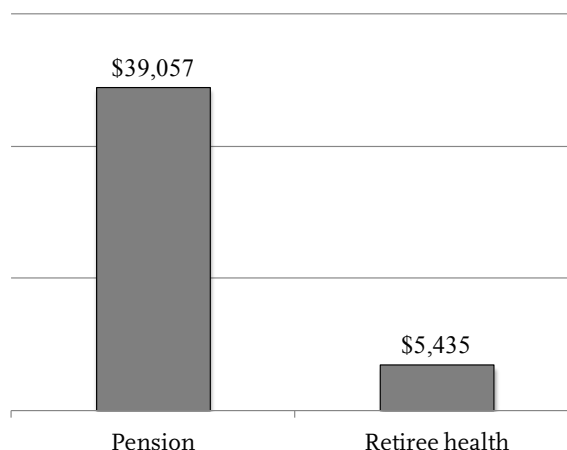


Sources: CRR calculations from plan actuarial valuations; and U.S. Census Bureau, *State and Local Government Finances*.

Retiree health funding and costs

- Funding method: Statutory rate funds a trust. Rate was 1 percent of payroll in 2011.
- Medical inflation rate: 9.8 percent, down to 5 percent by 2021.
- Employer contribution: Members contributed around 37 percent of the cost of insurance.

AVERAGE ANNUAL BENEFIT



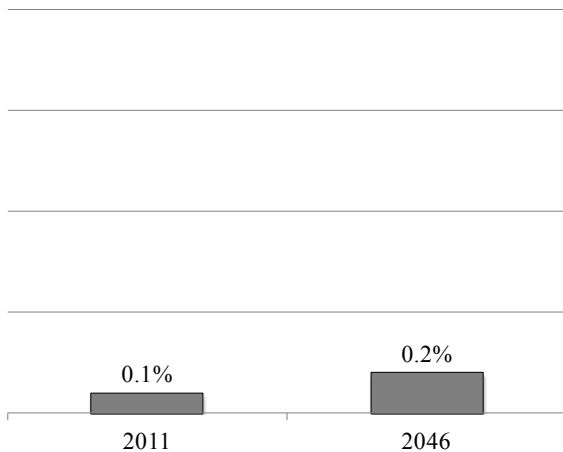
Source: CRR calculations from plan actuarial valuations.

Benefits and membership

- Benefit eligibility: Members with 15 or more years of service are eligible for subsidized health care coverage.
- Benefits provided for Medicare-eligible retirees: Medicare-Advantage plan and part-B premium reimbursement provided.
- Active employees: 175,842
- Beneficiaries: 115,754
- Most recent actuarial valuation: 4/30/12

OHIO POLICE AND FIRE RETIREE HEALTH CARE BENEFITS

RETIREE HEALTH AS PERCENT OF BUDGET

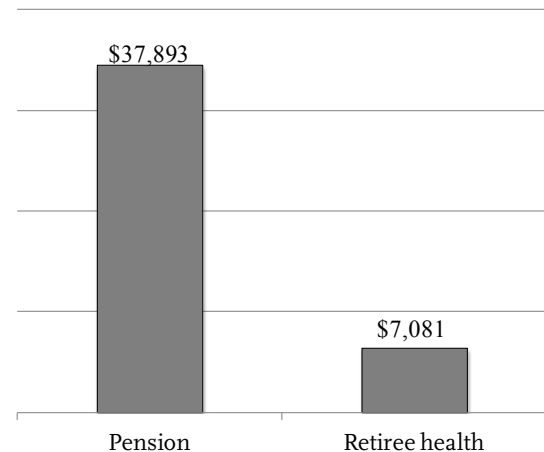


Sources: CRR calculations from plan actuarial valuations; and U.S. Census Bureau, *State and Local Government Finances*.

Retiree health funding and costs

- Funding method: The plan is funded by statute. In 2011, 6.25 percent of payroll was allocated to fund the Retiree Health Care Stabilization Fund.
- Medical inflation rate: 6 percent, down to 5 percent by 2019 (varies by cost source).
- Employer contribution: Members contribute between 75 percent and 25 percent of premiums. Contributions averaged 35 percent of benefits paid in 2011.

AVERAGE ANNUAL BENEFIT



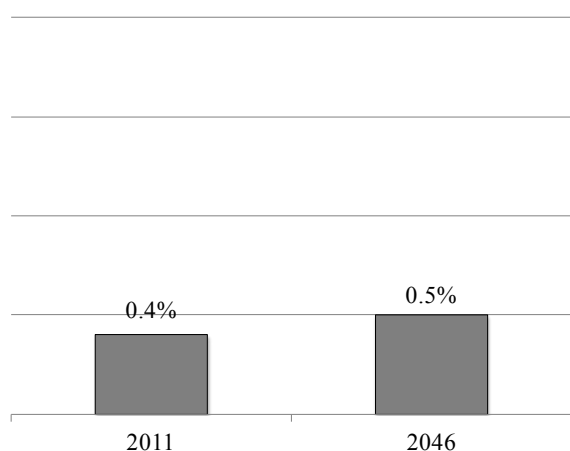
Source: CRR calculations from plan actuarial valuations.

Benefits and membership

- Benefit eligibility: All pension benefit recipients.
- Benefits for Medicare-eligible retirees: Three Medigap plans are offered.
- Active employees: 27,463
- Beneficiaries: 25,003
- Most recent actuarial valuation: 1/30/12

OHIO POLICE AND FIRE RETIREE HEALTH CARE BENEFITS

RETIREE HEALTH AS PERCENT OF BUDGET



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

Retiree health funding and costs

- Funding method: Trust fund started in 2007, 13.7 percent fund in 2010.
- Medical inflation rate: 9.5 percent, down to 5 percent by 2017.
- Employer contribution: Retirees contribute 50 percent of medical premiums starting in 2011; earlier retirees contribute 25 percent to 50 percent.

AVERAGE ANNUAL BENEFIT



Source: CRR calculations from plan actuarial valuations.

Benefits and membership

- Benefit eligibility: Members hired after May 13, 2008 must be 62 with at least 10 years of service, 60 with 25 years of service, or 55 with 30 years of service.
- Benefits provided for Medicare-eligible retirees: four Medicare-Advantage plans are available.
- Active employees: 126,015
- Beneficiaries: 50,605
- Most recent actuarial valuation: 6/30/10