### GENERAL ASSEMBLY OF NORTH CAROLINA

## Session 2005

# Legislative Actuarial Note

#### RETIREMENT

**BILL NUMBER:** Senate Bill 648 (First Edition)

**SHORT TITLE:** 25-Year Retirement for First Responders.

**SPONSOR(S):** Senator Brock

**FUNDS AFFECTED:** General Fund, Highway Fund, Receipt Funds and Local Funds.

**SYSTEM OR PROGRAM AFFECTED:** Teachers' and State Employees' Retirement System and Local Governmental Employees' Retirement System.

EFFECTIVE DATE: July 1, 2005

**BILL SUMMARY:** Reduces the service requirement for unreduced retirement benefits from 30 years of service to 25 years of service as a law enforcement officers of both the Teachers' and State Employees' Retirement System and Local Governmental Employees' Retirement System. Also, defines "Career firefighter" and "Career emergency medical services worker" and reduces the service requirement for an unreduced retirement benefits from 30 years of service to 25 years of service as a fireman or emergency services worker, regardless of age. The bill also reduces the requirement of 30 years to 25 years in order to qualify to receive the special separation allowance of .85% of salary for each year of service.

### ESTIMATED IMPACT: Teachers' and State Employees' Retirement System

<u>Retirement System Actuary</u>: Mellon estimates the normal cost will increase by .01% and the accrued liability cost will increase by .02% for a total increase of .03% of the payroll of all members of the Teachers' and State Employees' Retirement System.

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
General Fund	\$2.4M	\$2.5M	\$2.7M	\$2.8M	\$2.9M
Highway Fund	\$ 0.1M				
Receipt Funds	\$ 0.8M	\$ 0.8M	\$ 0.9M	\$ 0.9M	\$ 1.0M
Ret. Cost	\$3.3M	\$3.5M	\$3.7M	<b>\$3.8M</b>	<b>\$4.0M</b>
Separation Allow.	<b>\$0.6M</b>	<u>\$1.1M</u>	<u>\$1.4M</u>	<b>\$1.7M</b>	<b>\$2.0M</b>
TOTAL COST	<b>\$4.0M</b>	\$4.6M	\$5.0M	\$5.5M	\$6.0M

<u>General Assembly Actuary</u>: Hartman & Associates estimates the normal cost will increase by .01% and the accrued liability cost will increase by .03% for a total increase of .04% of the payroll of all members of the Teachers' and State Employees' Retirement System.

	<u>2005-06</u>	<u>2006-07</u>	2007-08	2008-09	<u>2009-10</u>
General Fund	\$3.2M	\$3.4M	\$3.5M	\$3.7M	\$3.9M
Highway Fund	\$0.2M	\$0.2M	\$0.2M	\$0.2M	\$0.2M
Receipt Funds	\$1.1M	\$1.1M	\$1.2M	\$1.2M	\$1.3M
Ret. Cost	<b>\$4.4M</b>	<b>\$4.7M</b>	<b>\$4.9M</b>	\$5.1M	\$5.3M
Separation Allow.	<b>\$1.6M</b>	<b>\$1.9M</b>	<b>\$2.3M</b>	<b>\$2.8M</b>	<b>\$3.3M</b>
TOTAL COST	\$6.0M	\$6.6M	\$7.2M	\$7.9M	\$8.6M

There are available gains of 0.47% of payroll in the Teachers' and State Employees' Retirement System to fund this benefit enhancement.

#### **ESTIMATED IMPACT: Local Governmental Employees' Retirement System**

Retirement System Actuary: Mellon estimates the normal cost for law enforcement officers will increase from 5.27% of payroll to 5.92% for a net increase of .65% of the payroll of law enforcement officers and estimates the normal cost for firefighters and emergency services workers will increase from 4.80% of payroll to 5.60% for a net increase of .80% of the payroll of firefighters and emergency medical services workers. Mellon estimates that the first year annual cost to pay the unfunded accrued liability will be \$12,184,000 based on a 15-year amortization period.

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
Normal Cost (LEO)	\$4.6M	\$4.9M	\$5.2M	\$5.5M	\$5.8M
Normal Cost (Fire & Medical)	\$3.2M	\$3.4M	\$3.6M	\$3.8M	\$4.0M
Accrued Liability	\$12.2M	\$12.2M	\$12.2M	\$12.2M	\$12.2M
Ret. Cost	\$20.0M	\$21.2M	\$22.4M	\$23.8M	\$25.2M
Separation Allow.	<u>\$ 4.4M</u>	\$ 6.2M	<u>\$ 7.4M</u>	\$ 8.6M	\$ 9.2M
TOTAL COST	<b>\$24.4M</b>	\$27.4M	<b>\$29.8M</b>	\$32.4M	\$34.4M

**General Assembly Actuary**: Hartman & Associates estimates the normal cost for law enforcement officers will increase from 5.27% of payroll to 5.83% for a net increase of 0.56% of the payroll of law enforcement officers and they estimate the normal cost for firefighters and emergency services workers will increase from 4.80% of payroll to 5.85% for a net increase of 1.05% of the payroll of all firefighters and emergency services workers. Hartman & Associates estimates that the first year annual cost to pay the unfunded accrued liability will be \$11,183,198 based on a 15-year amortization period.

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
Normal Cost (LEO)	\$4.0M	\$4.2M	\$4.5M	\$4.8M	\$5.0M
Normal Cost (Fire & Medical)	\$4.2M	\$4.4M	\$4.7M	\$5.0M	\$5.2M
Accrued Liability	\$11.2M	<u>\$11.8M</u>	\$12.5M	\$13.3M	<u>\$14.1M</u>
Ret. Cost	\$19.4M	\$20.5M	\$21.7M	\$23.0M	\$24.3M
Separation Allow.	\$ 6.1M	\$ 7.1M	\$ 8.4M	\$ 9.1M	\$ 9.3M
TOTAL COST	\$25.5M	\$27.6M	\$30.1M	\$32.1M	\$33.7M

There are available actuarial gains of 0.52% of total payroll of \$4.270 billion of all employees of the Local Governmental Employees' Retirement System. These gains are equal to \$22.2 million of local funds.

#### ASSUMPTIONS AND METHODOLOGY:

# **Teachers' & State Employees' Retirement System**

The cost estimates of the System's Actuary are based on the employee data, actuarial assumptions and actuarial methods used to prepare the December 31, 2003 actuarial valuation of the fund. The data included 303,768 active members with an annual payroll of \$10.1 billion and 123,077 retired members in receipt of annual pensions totaling \$2.1 billion. Significant actuarial assumptions used include (a) an investment return rate of 7.25%, (b) salary increase rate of 6.25%, (c) the George B. Buck Mortality Tables for deaths in service and after retirement and (d) rates of separation from active service based on System experience. The actuarial cost method used was the entry age normal method with open-end unfunded accrued liability and a frozen unfunded liquidation period of nine years. Detailed information concerning these assumptions and methods is shown in the actuary's report, which is available upon request from Stanley Moore.

#### **Local Governmental Employees' Retirement System**

The cost estimates of the System's Actuary are based on the employee data, actuarial assumptions and actuarial methods used to prepare the December 31, 2003 actuarial valuation of the fund. The data included 119,755 active members with an annual payroll of \$3.9 billion and 34,861 retired members in receipt of annual pensions totaling \$487.5 million. Significant actuarial assumptions used include (a) an investment return rate of 7.25%, (b) salary increase rate of 6.25%, (c) the 1979 George B. Buck Mortality Tables for deaths in service and after retirement and (d) rates of separation from active service based on System experience. The actuarial cost method used was the projected benefit method with aggregate level normal cost and frozen accrued liability. Detailed information concerning these assumptions and methods is shown in the actuary's report, which is available upon request from Stanley Moore.

**SOURCES OF DATA:** System Actuary - Mellon

General Assembly Actuary - Hartman & Associates, LLC

**TECHNICAL CONSIDERATIONS:** In order to determine who is a fireman or rescue squad worker, the State Firemen's Association and the Association of Rescue Squad & EMT gave the Retirement Systems Division the social security numbers of all those that they considered a full-time paid unit. This enabled the Retirement Systems Division to identify 10,315 fulltime members of the Local Governmental Employees' Retirement System. The estimated annual payroll of these members is \$397,692,832. The estimated payroll of all the law enforcement officers who are members of the Local Governmental Employees' Retirement System is \$715,000,000.

**FISCAL RESEARCH DIVISION:** (919) 733-4910. The above information is provided in accordance with North Carolina General Statute 120-114 and applicable rules of the North Carolina Senate and House of Representatives.

**PREPARED BY:** Stanley Moore

**APPROVED BY:** James D. Johnson, Director

Fiscal Research Division

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