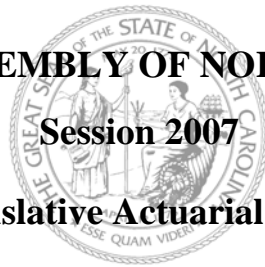# GENERAL ASSEMBLY OF NORTH CAROLINA

Session 2007

Legislative Actuarial Note

RETIREMENT

BILL NUMBER: Senate Bill 2132 (First Edition)

SHORT TITLE: Enhance TSERS Benefits/Retirement COLAs.

SPONSOR(S):   Senator Dannelly

FUNDS AFFECTED: General Fund, Highway Fund, and Receipt Funds for the Teachers' and State Employees' Retirement System, General Fund for the Consolidated Judicial Retirement System and the Legislative Retirement System and local funds for the Local Governmental Employees' Retirement System

SYSTEM OR PROGRAM AFFECTED: Teachers' and State Employees' Retirement System, Consolidated Judicial Retirement System, Legislative Retirement System and Local Governmental Employees' Retirement System.

EFFECTIVE DATE: July 1, 2008

BILL SUMMARY: This bill is an agency bill requested by the board of trustees of the systems. The bill increases the formula in the Teachers and State Employees' Retirement System from 1.82% to 1.84% effective July 1, 2008. The bill grants a 4.1% cost of living adjustment to the retirees of the Teachers and State Employees' Retirement System, the Consolidated Judicial Retirement System, and the Legislative Retirement System effective July 1, 2008. The bill also grants a 2.1% cost of living adjustment to the retirees of the Local Governmental Employees' Retirement System.

ESTIMATED FISCAL IMPACT:

Formula Increase from 1.82% to 1.84% in Teachers' and State Employees' Retirement System
Retirement System Actuary: Buck Consultants estimates the cost to be 0.82% of the payroll of all members of the Teachers' and State Employees' Retirement System.

	2008-09	2009-10	2010-11	2011-12	2012-13
General Fund	$80.0M	$83.4M	$87.0M	$90.8M	$94.7M
Highway Fund	$3.9M	$4.0M	$4.2M	$4.4M	$4.6M
Receipt Funds	$28.8M	$30.0M	$31.3M	$32.7M	$34.1M
Total Cost	$112.6M	$117.5M	$122.5M	$127.8M	$133.8M

General Assembly Actuary**:** Hartman & Associates estimates the cost to be 0.80% the payroll of all members of the Teachers' and State Employees' Retirement System.

	2008-09	2009-10	2010-11	2011-12	2012-13
General Fund	$78.0M	$81.4M	$84.9M	$88.5M	$92.3M
Highway Fund	$3.8M	$3.9M	$4.1M	$4.3M	$4.5M
Receipt Funds	$28.1M	$29.3M	$30.5M	$31.9M	$33.2M
Total Cost	$109.9M	$114.6M	$119.5M	$124.7M	$130.0M

4.1% COLA for Teachers' and State Employees' Retirement System
Retirement System Actuary: Buck Consultants estimates the cost to be 1.35% of the payroll of all members of the Teachers' and State Employees' Retirement System.

	2008-09	2009-10	2010-11	2011-12	2012-13
General Fund	$131.7M	$137.3M	$143.2M	$149.4M	$155.8M
Highway Fund	$6.4M	$6.6M	$6.9M	$7.2M	$7.5M
Receipt Funds	$47.4M	$49.4M	$51.5M	$53.8M	$56.1M
Total Cost	$185.4M	$193.4M	$201.7M	$210.4M	$219.4M

General Assembly Actuary**:** Hartman & Associates estimates the cost to be 0.80% the payroll of all members of the Teachers' and State Employees' Retirement System.

	2008-09	2009-10	2010-11	2011-12	2012-13
General Fund	$123.9M	$129.2M	$134.8M	$140.6M	$146.6M
Highway Fund	$6.0M	$6.2M	$6.5M	$6.8M	$7.1M
Receipt Funds	$44.6M	$46.5M	$48.5M	$50.6M	$52.7M
Total Cost	$174.4M	$181.9M	$189.8M	$197.9M	$206.4M

Any of the above cost would be reduced by the following which represents gains available within the system of 0.42% of payroll in the Teachers' and State Employees' Retirement System:

	2008-09	2009-10	2010-11	2011-12	2012-13
General Fund	$41.0M	$42.7M	$44.6M	$46.5M	$48.5M
Highway Fund	$2.0M	$2.1M	$2.2M	$2.2M	$2.3M
Receipt Funds	$14.7M	$15.4M	$16.0M	$16.7M	$17.4M
Total Gains	$57.7M	$60.2M	$62.8M	$65.5M	$68.3M

4.1% COLA for Consolidated Judicial Retirement System
Retirement System Actuary: Buck Consultants estimates the cost to be 2.13% of the payroll of all members of the Consolidated Judicial Retirement System.

	2008-09	2009-10	2010-11	2011-12	2012-13
General Fund	$1,299,300	$1,328,404	$1,358,161	$1,388,583	$1,419,688

General Assembly Actuary**:** Hartman & Associates estimates the cost to be 2.09% the payroll of all members of the Consolidated Judicial Retirement System.

	2008-09	2009-10	2010-11	2011-12	2012-13
General Fund	$1,274,900	$1,303,458	$1,332,655	$1,362,507	$1,393,027

There are available gains of 1.90 of payroll in the Consolidated Judicial Retirement System to fund this increase.

4.1% COLA for Legislative Retirement System

<u>Retirement System Actuary</u>: Charles Dunn estimates the cost to be 2.5% of the payroll of all members of the Legislative Retirement System.

	2008-09	2009-10	2010-11	2011-12	2012-13
General Fund	$90,500	$90,500	$90,500	$90,500	$90,500

<u>General Assembly Actuary</u>**:** Hartman & Associates estimates the cost to be 2.42% the payroll of all members of the Legislative Retirement System.

	2008-09	2009-10	2010-11	2011-12	2012-13
General Fund	$87,604	$87,604	$87,604	$87,604	$87,604

2.1% COLA for Local Governmental Employees' Retirement System

<u>Retirement System Actuary</u>: Buck Consultants estimates the cost to be 0.34% of the payroll of all members of the Local Governmental Employees' Retirement System

	2008-09	2009-10	2010-11	2011-12	2012-13
Local Funds	$16.9M	$17.6M	$18.4M	$19.2M	$20.1M

<u>General Assembly Actuary</u>**:** Hartman & Associates estimates the cost to be 0.32% the payroll of all members of the Local Governmental Employees' Retirement System

	2008-09	2009-10	2010-11	2011-12	2012-13
Local Funds	$15.9M	$16.6M	$17.3M	$18.1M	$18.9M

There are available gains of 0.34% of payroll in the Local Governmental Employees' Retirement System to fund this increase without increasing the contribution rate to units of local government.

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, 2006 actuarial valuation of the fund. The data included 330,117 active members with an annual payroll of $11.7 billion, 140,292 retired members in receipt of annual pensions totaling $2.7 billion and actuarial value of assets equal to $52.4 billion. Significant actuarial assumptions used include (a) an investment return rate of 7.25%, (b) average salary increase rate of 6.25%, (c) the 1994 Group Annuity Mortality Tables. Tables are no adjusted for male teachers, set forward one year for female teachers, set forward two years for general employees and law enforcement officers and set forward two years for the beneficiaries of deceased member (d) rates of separation from active service based on System experience. The actuarial cost method used was the entry age normal cost method and a frozen 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.

Consolidated Judicial 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, 2006 actuarial valuation of the fund. The

data included 512 active members with an annual payroll of $53.3 million, 460 retired members in receipt of annual pensions totaling $23.9 million and actuarial value of assets equal to $406 million Significant actuarial assumptions used include (a) an investment return rate of 7.25%, (b) salary increase rate of 6.25%, (c) the 1994 Group Annuity Mortality Tables. Tables are set forward two years for pos-retirement period and set back one year for pre-retirement period. Special mortality tables are used for period after disability retirement and (d) rates of separation from active service based on System experience. The actuarial cost method used to determine the liabilities is the projected unit credit. Projected benefits and the corresponding liabilities are allocated based on proration by creditable service. The method used to determine the contribution rate is the projected unit credit method with 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.

Legislative 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, 2006 actuarial valuation of the fund. The data included 170 active members with an annual payroll of $3.7 million, 245 retired members in receipt of annual pensions totaling $1.7 million and actuarial value of assets equal to $29.6 million Significant actuarial assumptions used include (a) an investment return rate of 7.25%, (b) the 1971 Group Annuity Mortality Tables for deaths in service and after retirement and (c) 100% vesting after five years of service with no assumptions for terminations other than death and disability. The actuarial cost method used was the projected unit credit cost method with service prorata. The actuarial liability is computed by using member service to date and attributing an equal benefit amount to each year of credited and expected future service. 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, 2006 actuarial valuation of the fund. The data included 124,844 active members with an annual payroll of $4.5 billion, 40,574 retired members in receipt of annual pensions totaling $639.3 million and actuarial value of assets equal to $15.6 billion. Significant actuarial assumptions used include (a) an investment return rate of 7.25%, (b) salary increase rate of 6.25%, (c) the 1994 Group Annuity Mortality Tables. Tables are forward three years for males, set forward two years for females and set forward two years for the beneficiaries of deceased members. Special mortality tables are used for period after disability 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. Gains and losses are reflected in the normal rate. 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: Buck Consultants
Hartman & Associates, LLC
Charles W. Dunn, Consulting Actuary

TECHNICAL CONSIDERATIONS: None

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:

Lynn Muchmore, Director
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DATE: June 2, 2008

Signed Copy Located in the NCGA Principal Clerk's Offices