

GENERAL ASSEMBLY OF NORTH CAROLINA

Session 2005

Legislative Actuarial Note

RETIREMENT

BILL NUMBER: Senate Bill 622 (Conference Committee Report)

SHORT TITLE: 2005 Appropriations Act.

SPONSOR(S):

SPECIAL PROVISION: PROVIDE COST-OF-LIVING INCREASES FOR RETIREES OF THE TEACHERS' AND STATE EMPLOYEES' RETIREMENT SYSTEM, THE JUDICIAL RETIREMENT SYSTEM, THE LEGISLATIVE RETIREMENT SYSTEM, AND LOCAL RETIREMENT SYSTEM

FUNDS AFFECTED: General Fund, Highway Fund, and Receipt Fund 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, 2005

PROVISION SUMMARY: Provides a post-retirement increase of 2% in the benefits of retirees of the Teachers' and State Employees' Retirement System, the Consolidated Judicial Retirement System, the Legislative Retirement System and a post-retirement increase of 2.5% in the benefits of retirees of the Local Governmental Employees' Retirement System.

ESTIMATED IMPACT: Teachers' and State Employees' Retirement System
Retirement System Actuary: Mellon estimates the cost to be .64% 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	\$51.6M	\$54.1M	\$56.6M	\$59.3M	\$62.1M
Highway Fund	\$ 2.6M	\$ 2.7M	\$ 2.8M	\$ 3.0M	\$ 3.1M
Receipt Funds	<u>\$16.9M</u>	<u>\$17.7M</u>	<u>\$18.5M</u>	<u>\$19.4M</u>	<u>\$20.3M</u>
TOTAL COST	\$71.1M	\$74.4M	\$78.0M	\$81.7M	\$85.6M

General Assembly Actuary: Hartman & Associates estimates the cost to be 0.60% 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	\$48.4M	\$50.7M	\$53.1M	\$55.6M	\$58.3M
Highway Fund	\$ 2.4M	\$ 2.5M	\$ 2.6M	\$ 2.8M	\$ 2.9M
Receipt Funds	<u>\$15.8M</u>	<u>\$16.6M</u>	<u>\$17.4M</u>	<u>\$18.2M</u>	<u>\$19.1M</u>
TOTAL COST	\$66.6M	\$69.8M	\$73.1M	\$76.6M	\$80.27M

There are available gains of 0.47% of payroll in the Teachers' and State Employees' Retirement System so a direct appropriation to the retirement system would be necessary to pay the additional cost. The appropriation needed is as follows:

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
General Fund	\$13.7M	\$14.4M	\$15.0M	\$15.8M	\$16.5M
Highway Fund	\$ 0.7M	\$ 0.7M	\$ 0.8M	\$ 0.8M	\$ 0.8M
Receipt Funds	<u>\$ 4.5M</u>	<u>\$ 4.7M</u>	<u>\$ 4.9M</u>	<u>\$ 5.2M</u>	<u>\$ 5.4M</u>
Total Appropriation	\$18.9M	\$19.8M	\$20.7M	\$21.7M	\$22.7M

Consolidated Judicial Retirement System

Retirement System Actuary: Mellon estimates the cost to be 0.98% of payroll.

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
General Fund	\$513,520	\$533,599	\$554,462	\$576,142	\$598,669

General Assembly Actuary: Hartman & Associates estimates the cost to be 0.96% of payroll.

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
General Fund	\$503,040	\$522,709	\$543,147	\$564,384	\$623,507

There are available gains of 1.51% of payroll in the Consolidated Judicial Retirement System so this can be done with no additional appropriation needed.

Legislative Retirement System

Retirement System Actuary: Charles Dunn estimates the cost to be 0.99% of payroll.

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
General Fund	\$35,640	\$35,640	\$35,640	\$35,640	\$35,640

General Assembly Actuary: Hartman & Associates estimates the cost to be 0.96% of payroll.

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
General Fund	\$34,560	\$34,560	\$34,560	\$34,560	\$34,560

ESTIMATED IMPACT: Local Governmental Employees' Retirement System

Retirement System Actuary: Mellon estimates the cost to be 0.33% of the payroll of all members of the Local Governmental Employees' Retirement System.

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
Local Funds	\$14.1M	\$14.9M	\$15.8M	\$16.7M	\$17.7M

General Assembly Actuary: Hartman & Associates estimates the cost to be 0.30% of the payroll of all members of the Local Governmental Employees' Retirement System.

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
Local Funds	\$12.8M	\$13.6M	\$14.4M	\$15.2M	\$16.1M

There are available gains of 0.52% of payroll in the Local Governmental Employees' Retirement System to fund this cost-of-living adjustment without increasing the contribution rates of each employer.

SPECIAL PROVISION: INCREASE THE MONTHLY PENSION FOR MEMBERS OF THE FIREMEN'S AND RESCUE SQUAD WORKERS' PENSION FUND

FUNDS AFFECTED: General Fund

SYSTEM OR PROGRAM AFFECTED: Firemen's and Rescue Squad Workers' Pension Fund

EFFECTIVE DATE: July 1, 2005

PROVISION SUMMARY: Increases the monthly benefit to retirees and future retirees of the Firemen's and Rescue Squad Workers' Pension Fund from \$161 to \$163.

ESTIMATED IMPACT ON STATE:

Both the Fund's actuary, Melon, and the General Assembly's actuary, Hartman & Associates, LLC, estimates the cost to be as follows:

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
Benefit Increase	\$607,708	\$607,708	\$607,708	\$607,708	\$607,708

There are actuarial gains in the Fund in the amount of \$202,430 so an appropriation of \$405,278 is required.

SPECIAL PROVISION: INCREASE THE MAXIMUM MONTHLY PENSION FOR RETIRED MEMBERS OF THE NORTH CAROLINA NATIONAL GUARD

FUNDS AFFECTED: General Fund

SYSTEM OR PROGRAM AFFECTED: North Carolina National Guard Pension Fund

EFFECTIVE DATE: July 1, 2005

PROVISION SUMMARY: Increases the benefit from the North Carolina National Guard Pension Fund from \$50 to \$75 per month for the first 20 years of creditable service and from \$5.00 to \$7.50 per month for each additional year of creditable service with the maximum benefit increased from \$100 to \$150 per month.

ESTIMATED IMPACT ON STATE: Both, Mellon, the Retirement System’s actuary, and Hartman & Associates, the General Assembly’s actuary, agree that the cost will be as follows:

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
Normal Cost	\$ 0.1M	\$ 0.1M	\$ 0.1M	\$ 0.1M	\$ 0.1M
Accrued Liability	\$ 4.4M	\$ 4.4M	\$ 4.4M	\$ 4.4M	\$ 4.4M
Total Annual Cost	\$ 4.5M	\$ 4.5M	\$ 4.5M	\$ 4.5M	\$ 4.5M

There are no gains within the Fund so a General Fund appropriation in the above amounts will be required. The accrued liability would be liquidated in a nine-year period of time.

SPECIAL PROVISION: CONFORM RETIREE RETURN TO TEACHING BENEFITS TO IRS GUIDELINES/CLARIFY DEFINITION OF RETIREMENT

FUNDS AFFECTED: General Fund, Highway Fund, and Receipt Fund

SYSTEM OR PROGRAM AFFECTED: Teachers’ and State Employees’ Retirement System

EFFECTIVE DATE: June 30, 2005/November 1, 2005

PROVISION SUMMARY: The Continuing Resolution extended the law until June 30, 2007 that will allow a teacher to return to teach without reducing their retirement benefits. This bill requires that a teacher can render no service in the six months immediately prior to returning to service. The special provision will require each local school administrative unit to make a contribution to the Retirement System equal to 11.70% of the salary for all retired employees, who are reemployed with that local school administrative unit. Allows retired teachers who are employed with a charter school to return with no earning restrictions under the same conditions as public school teachers. Also, the definition of “retirement” is changed for all members of the Teachers' and State Employees’ Retirement System to require that a member completely separate from service for a period of six months with no intent or agreement to return to service. These changes should put the System in compliance with Internal Revenue Service regulations as to the length of time before a member can return to service and require a bona fide termination of employment.

IRS rulings indicate that in order to maintain qualified status, a retirement plan may not pay benefits unless an employee has completely separated from service. The IRS has also indicated that there is not a complete separation from service if the employee and the employer intend or agree that the employee will return to service after some brief period of separation.

ESTIMATED IMPACT:

Retirement System Actuary: Mellon estimates the cost to be 0.06% 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	\$4.8M	\$5.1M	\$5.3M	\$5.6M	\$5.8M
Highway Fund	\$0.2M	\$0.3M	\$0.3M	\$0.3M	\$0.3M
Receipt Funds	\$1.6M	\$1.7M	\$1.7M	\$1.8M	\$1.9M
TOTAL COST	\$6.7M	\$7.0M	\$7.3M	\$7.7M	\$8.0M

General Assembly Actuary: Hartman & Associates estimates the cost to be 0.07% 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	\$5.6M	\$5.9M	\$6.2M	\$6.5M	\$6.8M
Highway Fund	\$0.3M	\$0.3M	\$0.3M	\$0.3M	\$0.3M
Receipt Funds	<u>\$1.8M</u>	<u>\$1.9M</u>	<u>\$2.0M</u>	<u>\$2.1M</u>	<u>\$2.2M</u>
TOTAL COST	\$7.8M	\$8.1M	\$8.5M	\$8.9M	\$9.4M

The 11.70% employer contribution rate should fund this additional cost.

SPECIAL PROVISION: INCREASE BENEFIT/SHERIFFS' SUPPLEMENT PENSION FUND

FUNDS AFFECTED: General Fund/Court cost

SYSTEM OR PROGRAM AFFECTED: Sheriffs' Supplemental Pension Plan

EFFECTIVE DATE: July 1, 2005

PROVISION SUMMARY: Increases the court cost that is directed to the Sheriff's Supplemental Pension Plan from \$.75 to \$1.25 and increases the maximum monthly benefit payable from \$1,200 to \$1,500.

Fund's Actuary: Stanley, Hunt, Dupree & Rhine, Inc. estimates the cost to be \$238,500 for calendar year 2006 and \$397,500 for 2007 as a result of additional dollars generated through court cost.

General Assembly Actuary: Hartman & Associates says that the benefit amounts are directly dependent on the value of assets in the Fund and are re-determined each year, no additional liabilities or funding requirements are created for the Fund. If sufficient assets are not available, the payment to retired sheriffs will be reduced.

SPECIAL PROVISION: TRANSFER OF MEMBERSHIP AND SERVICE OF UTILITIES COMMISSIONERS FROM THE TEACHERS' AND STATE EMPLOYEES' RETIREMENT SYSTEM TO THE JUDICIAL RETIREMENT SYSTEM/RETIREMENT ALLOWANCE LIMITATION FOR MEMBERS OF THE LEGISLATIVE RETIREMENT SYSTEM.

EFFECTIVE DATE: September 1, 2005

PROVISION SUMMARY: Allows the 7 members of the Utility Commission to be members of the Consolidated Judicial Retirement System at the same accrual rate as provided for Superior Court Judges and transfers all service, contributions and reserves for service as a Utility Commissioner from the Teachers' & State Employees' Retirement System to the Judicial Retirement System.

ESTIMATED IMPACT: Consolidated Judicial Retirement System

Both, Buck Consultants, the Retirement System's actuary, and Hartman & Associates, the General Assembly's actuary, agree that the cost for the transfer of service would be 0.14% of payroll.

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
General Fund	\$73,360	\$76,228	\$79,209	\$82,306	\$90,928

There are available gains of 1.51% of payroll in the Consolidated Judicial Retirement System so this can be done with no additional appropriation needed.

The employer contribution rate will increase from 2.34% of payroll to 12.59% of payroll as a result of the transfer. The estimated increase is as follows:

	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>
General Fund	\$79,758	\$82,877	\$86,117	\$89,484	\$92,983

Prohibits a member of the Legislative Retirement System from retiring if the individual is a member of the Teachers' & State Employees' Retirement System or the Judicial Retirement System. Both, Charles Dunn, the System's actuary, and Hartman & Associates, the General Assembly's actuary, agree that the savings would be approximately 1% to 1.5% of payroll. Which would be between \$36,000 and \$54,000 annually. No contributions have been made to the Legislative Retirement System in recent years.

SPECIAL PROVISION: CHANGE DISABILITY PLAN AMENDMENT EFFECTIVE DATE

SYSTEM OR PROGRAM AFFECTED: Disability Income Plan of North Carolina

FUNDS AFFECTED: General Fund, Highway Fund and Receipt Fund

BILL SUMMARY: Extends the effective date from August 1, 2005 to August 1, 2006 for the changes made in the Disability Income Plan of North Carolina.

ESTIMATED IMPACT ON STATE: Both actuarial agree that the changes in the effective date could result in a loss of savings that would occur.

SPECIAL PROVISION: EXTENDS COVERAGE FOR LINE-OF-DUTY DEATH BENEFIT.

SYSTEM OR PROGRAM AFFECTED: Extends the death benefit to law enforcement officers, rescue squad workers, senior members of the Civil Air Patrol, State forestry workers and Department of Insurance instructors who die as the direct and proximate result of a myocardial infarction suffered while on duty or within 24 hours after participating in a training exercise or responding to any emergency situation.

EFFECTIVE DATE: July 1, 2005

ESTIMATED IMPACT ON STATE:

System Actuary: Buck Consultants is unable to estimate cost since there is no data available.

General Assembly Actuary: Hartman & Associates estimates the cost to be \$75,000 to \$125,000 annually.

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.

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, 2003 actuarial valuation of the fund. The data included 497 active members with an annual payroll of \$49.5 million and 408 retired members in receipt of annual pensions totaling \$19 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 Table for deaths after 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 benefit method; however, 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, 2003 actuarial valuation of the fund. The data included 170 active members with an annual payroll of \$3.7 million and 235 retired members in receipt of annual pensions totaling \$1.5 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 prorate. 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, 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.

Firemen's and Rescue Squad Workers' Pension Fund: The cost estimates of the Fund's Actuary are based on the employee data, actuarial assumptions and actuarial methods used to prepare the June 30, 2004 actuarial valuation of the fund. The data included 32,811 active members and 9,194 retired members in receipt of annual pensions totaling \$17.8 million. Significant actuarial assumptions used include (a) an investment return rate of 7.25%, (b) the 1974 George B. Buck Mortality Table for deaths after retirement and (c) rates of separation from active service based on Fund experience. The actuarial cost method used was the entry age 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.

North Carolina National Guard Pension Fund: The cost estimates of the Fund'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 7,281 active members, 6,813 former members entitled to deferred benefits and 2,319 retired members in receipt of annual pensions totaling \$2.2 million. Significant actuarial assumptions used include (a) an investment return rate of 7.25%, (b) the 1979 George B. Buck Mortality Table for deaths after retirement and (c) rates of separation from active service based on Fund experience. The actuarial cost method used was the entry age 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.

Sheriff's Supplemental Pension Fund: The Fund was created in 1985 and provides a supplemental benefit based on the total number of years of all retired sheriffs that meet the qualifications to receive a benefit. The qualifications are:

1. age 55 with 10 years as the sheriff,
2. 30 years of service with 10 years as the sheriff,
3. disability retirement with 10 years as the sheriff.

Presently there are 79 retired sheriffs receiving benefits from the Fund. The annual benefit is \$743,400.

Disability Income Plan of North Carolina

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 314,271 active members with an annual payroll of \$10.9 billion, actuarial value of assets \$267 million and 5,083 disabled members in receipt of annual pensions totaling \$46 million. Significant actuarial assumptions used include (a) an investment return rate of 7.25%, (b) across-the-board salary increases of 5.75%, (c) rates of disability and termination based on the Group Long-Term Disability (GLTD) Valuation Tables published in the Society of Actuaries Transactions Volume XXXIX, 1987. The assumed rate of approval for Social Security disability benefits prior to the completion of four years of disability is 75% and the assumed future increases in Social Security benefits are 3.75% per year. Claims cost for the Long-Term Disability (LTD) benefits are calculated using the one-year term cost method, i.e., the cost of coverage is the present value of all LTD benefits payment that will be made on expected claims incurred during the year following the valuation date. Short-Term Disability benefits are calculated on a pay-as-you-go basis. 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
Charles W. Dunn
Stanley, Hunt, Dupree & Rhine, Inc

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: James D. Johnson, Director
Fiscal Research Division



DATE: August 7, 2005

Signed Copy Located in the NCGA Principal Clerk's Offices