#### NORTH CAROLINA GENERAL ASSEMBLY

#### LEGISLATIVE ACTUARIAL NOTE

**BILL NUMBER:** Proposed Committee Substitute Senate Bill 561 Law Officers' 25-Year Retirement

SHORT TITLE: Law Officers' 25-Year Retirement

SPONSOR(S): Senator Odom

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

FUNDS AFFECTED: General Fund, Highway Fund, Receipts and Local Government Funds

**BILL SUMMARY**: Reduces the service requirement for unreduced retirement benefits from 30 years of service to 25 years of service as a law enforcement officer regardless of age. The bill also reduces the requirement of 30 years to 25 years for the special separation allowance of .85% of salary for each year of service.

**EFFECTIVE DATE:** July 1, 1999

# ESTIMATED IMPACT ON STATE Teachers' and State Employee's Retirement System

<u>Retirement System Actuary</u>: Buck Consultants estimates the normal cost will increase by .0080% of the payroll of all members of the Teachers' and State Employee's Retirement System. Buck Consultants estimates the cost to fund the accrued liability cost will be .0342% of the payroll of all members.

General Fund Normal Cost Increase Accrued Liability Total General Fund	1999-2000	2000-01	2001-02	2002-03	2003-04
	\$501,200	\$527,764	\$555,735	\$585,189	\$616,204
	<u>\$2,142,630</u>	\$2,256,189	\$2,375,767	\$2,501,683	\$2,634,272
	\$2,643,830	\$2,783,953	\$2,931,502	\$3,086,872	\$3,250,476
Highway Fund Normal Cost Increase Accrued Liability Total Highway Fund	1999-2000	2000-01	2001-02	2002-03	2003-04
	\$40,320	\$42,457	\$44,274	\$46,169	\$48,145
	<u>\$172,368</u>	<u>\$181,504</u>	\$189,272	<u>\$197,373</u>	<u>\$205,820</u>
	\$212,688	\$223,960	\$233,546	\$243,542	\$253,965
Receipt Funds Normal Cost Increase Accrued Liability	1999-2000	2000-01	2001-02	2002-03	2003-04
	\$135,280	\$142,450	\$150,000	\$157,950	\$166,321
	<u>\$578,322</u>	\$608,973	\$641,249	<u>\$675,235</u>	<u>\$711,022</u>

Total Receipt Fu	ands \$713	3,602 \$751	.423 \$791	1,248 \$833	.184 \$8	377,343
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	1999-2000	2000-01	2001-02	2002-03	2003-04
General Fund	\$2,643,830	\$2,783,953	\$2,931,502	\$3,086,872	\$3,250,476
Highway Fund	\$212,688	\$223,960	\$233,546	\$243,542	\$253,965
Receipt Funds	\$713,602	<u>\$751,423</u>	<u>\$791,248</u>	\$833,184	<u>\$877,343</u>
<b>Total Retirement Cost</b>	\$3,570,120	\$3,759,336	\$3,956,297	\$4,163,598	\$4,381,785
Separation Allowance	\$290,000	\$839,000	\$1,292,000	\$1,642,000	\$1,887,000
TOTAL COST	\$3,860,120	\$4,598,336	\$5,248,297	\$5,805,598	\$6,268,785

General Assembly Actuary: Hartman & Associates estimates the normal cost will increase by .011% of the payroll of all members of the Teachers' and State Employee's Retirement System. Hartman & Associates estimates the cost to fund the accrued liability cost will be .032% of the payroll of all members.

General Fund	1999-2000	2000-01	2001-02	2002-03	2003-04
Normal Cost Increase	\$689,150	\$725,675	\$764,136	\$804,635	\$847,281
Accrued Liability	\$2,004,800	\$2,111,054	\$2,222,940	\$2,340,756	\$2,464,816
Total General Fund	\$2,693,950	\$2,836,729	\$2,987,076	\$3,145,391	\$3,312,097
<u>Highway Fund</u>	1999-2000	2000-01	2001-02	2002-03	2003-04
Normal Cost Increase	\$55,440	\$58,378	\$61,472	\$64,730	\$68,161
Accrued Liability	<u>\$161,280</u>	\$169,828	\$178,828	<u>\$188,607</u>	<u>\$198,287</u>
Total Highway Fund	\$216,720	\$228,206	\$240,301	\$253,037	\$266,448
Receipt Funds	1999-2000	2000-01	2001-02	2002-03	2003-04
Normal Cost Increase	\$186,010	\$195,869	\$206,250	\$217,181	\$228,691
Accrued Liability	<u>\$541,120</u>	<u>\$569,799</u>	<u>\$599,999</u>	<u>\$631799</u>	<u>\$665,284</u>
Total Receipt Funds	\$727,130	\$765,668	\$806,248	\$848,979	\$893,975
	1000 2000	2000 01	2001.02	2002.00	2002.04
	1999-2000	2000-01	2001-02	2002-03	2003-04
General Fund	\$2,693,950	\$2,836,729	\$2,987,076	\$3,145,391	\$3,312,097
Highway Fund	\$216,720	\$228,206	\$240,301	\$253,037	\$266,448
Receipt Funds	<u>\$727,130</u>	<u>\$765,668</u>	<u>\$806,248</u>	<u>\$848,979</u>	<u>\$893,975</u>
<b>Total Retirement Cost</b>	\$3,637,800	\$3,830,603	\$4,033,625	\$4,247,408	\$4,472,520
Separation Allowance	\$ 319,047	\$ 840,589	\$1,261,209	\$1,555,290	\$1,717,394
TOTAL COST	\$3,956,847	\$4,671,192	\$5,294,834	\$5,802,698	\$6,189,914

The above cost estimates are based on 3,276 State law enforcement officers employed during the calendar year of 1998 projected at the average annual increase of 5.3% in the compensation base for the State System over the next five years.

#### ESTIMATED IMPACT ON LOCAL GOVERNMENTS:

## Local Governmental Employee's Retirement System

<u>Retirement System Actuary</u>: Buck Consultants estimates the normal cost will increase from 5.27% of payroll to 5.86% for a net increase of .59% of the payroll of law enforcement officers. Buck Consultants estimates that the first year annual cost to pay the unfunded accrued liability will be \$4,058,000 based on a 15 year amortization period.

	1999-2000	2000-01	2001-02	2002-03	2003-04
Normal Cost Increase	\$2,810,517	\$2,984,770	\$3,169,825	\$3,366,354	\$3,575,068
Accrued Liability	\$4,058,000	\$4,309,596	<u>\$4,576,791</u>	\$4,860,552	\$5,161,906
Total Retirement Cost	\$6,868,517	\$7,294,366	\$7,746,616	\$8,226,906	\$8,736,975
Separation Allowance	\$ 668,000	\$1,932,000	\$2,967,000	\$3,790,000	\$4,511,000
Total Local Funds	\$7.536,517	\$9,226,366	\$10,713,616	\$12,016,906	\$13,247,975

General Assembly Actuary: Hartman & Associates estimates the normal cost will increase from 5.27% of payroll to 5.98% for a net increase of .71% of the payroll of law enforcement officers. They also estimates that the first year annual cost to pay the unfunded accrued liability will be \$37,541,844 which is expressed as 7.881% of the payroll of law enforcement officers.

	1999-2000	2000-01	2001-02	2002-03	2003-04
Normal Cost Increase	\$3,382,148	\$3,591,841	\$3,814,535	\$4,051,037	\$4,302,201
Accrued Liability	\$4,277,703	\$4,542,920	\$4,824,582	\$5,123,706	<u>\$5,441,375</u>
Total Retirement Cost	\$7,659,851	\$8,134,762	\$8,639,117	\$9,174,742	\$9,743,576
Separation Allowance	\$ 423,322	\$1,231,977	\$2,030,254	\$2,740,990	\$3,463,463
Total Local Funds	\$8,083,173	\$9,366,739	\$10,669,371	\$11,915,732	\$13,207,039

The above cost estimates are based on 15,960 local law enforcement officers employed during the calendar year of 1998 with an annual compensation base of \$476,358,894 projected at the average annual increase in compensation base of 6.2% for the Local System over the next five years.

ASSUMPTIONS AND METHODOLOGY: Teacher's & 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, 1997 actuarial valuation of the fund. The data included 271,128 active members with an annual payroll of \$7.374 billion and 92,236 retired members in receipt of annual pensions totaling \$1.231 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 an 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, 1997 actuarial valuation of the fund. The data included 106,802 active members with an annual payroll of \$2.743 billion and 25,456 retired members in receipt of annual pensions totaling \$261.2 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: Retirement System Actuary - Buck Consultant, Inc. General Assembly Actuary - Hartman & Associates, LLC

**FISCAL RESEARCH DIVISION:** 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.

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**APPROVED BY**: Tom Covington

**DATE:** Monday, April 26, 1999

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