



NORTH CAROLINA GENERAL ASSEMBLY

Session 2021

Legislative Retirement Note

Short Title: Advanced Cert. Service Purchase Option/LEOs.
Bill Number: Senate Bill 72 (First Edition)
Sponsor(s): Senator Steinburg

SUMMARY TABLE

ACTUARIAL IMPACT OF S.B. 72, V.1 (\$ in thousands)

	<u>FY 2021-22</u>	<u>FY 2022-23</u>	<u>FY 2023-24</u>	<u>FY 2024-25</u>	<u>FY 2025-26</u>
State Impact					
General Fund Impact	\$17 to \$168	\$43 to \$433	\$54 to \$539	\$57 to \$573	\$57 to \$572
Highway Fund Impact	- to -	- to -	- to -	- to -	- to -
Other/Receipts Impact	- to -	- to -	- to -	- to -	- to -
NET STATE IMPACT	\$17 to \$168	\$43 to \$433	\$54 to \$539	\$57 to \$573	\$57 to \$572
Local Impact					
Local Governments	\$51 to \$510	\$136 to \$1,365	\$195 to \$1,948	\$237 to \$2,370	\$267 to \$2,668
NET LOCAL IMPACT	\$51 to \$510	\$136 to \$1,365	\$195 to \$1,948	\$237 to \$2,370	\$267 to \$2,668

ACTUARIAL IMPACT SUMMARY

Systems Affected: Teachers' and State Employees' Retirement System (TSERS), Local Governmental Employees' Retirement System (LGERS), law enforcement special separation allowances.

Senate Bill 72 (First Edition) adds an option for law enforcement officers (LEOs) to purchase up to four years of service in TSERS or LGERS if they have earned the Advanced Law Enforcement Certificate awarded by the Criminal Justice Education and Training Standards Commission or the Sheriffs' Education and Training Standards Commission and have completed at least five years of membership service. The purchase would require a lump sum payment equal to the full actuarial cost of the additional service, calculated as the present value of TSERS or LGERS benefits with the purchase minus the present value of TSERS or LGERS benefits without the purchase. This present value is currently calculated using a 7% interest rate, 4% assumed cost-of-living adjustment (COLA), the valuation salary increase assumption, and retirement at the earliest unreduced age determined using the amount of service with or without the purchase. The lump sum does not include the value of additional special separation allowance or retiree medical benefits. This would be the first type of purchase in TSERS or LGERS known as "air time" that is not tied to a specific period of time.

Both Cavanaugh Macdonald, the actuary for the retirement systems, and Hartman & Associates, the actuary for the General Assembly, estimate that this bill will have no material impact on the contribution rates or liabilities of TSERS or LGERS. G.S. 120-114(g) requires actuarial notes on bills modifying service purchases to contain an estimate of the impact measured using Treasury Bond yields and cost-of-living adjustment and salary increase assumptions consistent with those yields. Both actuaries estimate that the bill will also have no material impact measured using these alternative assumptions.

Cavanaugh Macdonald estimates that the present value of the separation allowance is roughly \$190,000 for each member who receives the separation allowance as a result of the purchase. Hartman & Associates estimates that the bill will increase separation allowance payments by the following amounts:

Range of Additional Separation Allowance Payments				
Fiscal Year	State LEOs		Local LEOs	
	Low	High	Low	High
FY 2021-22	\$ 16,847	\$ 168,473	\$ 50,998	\$ 509,977
FY 2022-23	43,283	432,828	136,495	1,364,946
FY 2023-24	53,938	539,384	194,759	1,947,595
FY 2024-25	57,259	572,594	237,047	2,370,466
FY 2025-26	57,243	572,425	266,840	2,668,396
FY 2026-27	54,147	541,470	283,541	2,835,414
FY 2027-28	53,553	535,526	290,768	2,907,676
FY 2028-29	52,733	527,328	288,313	2,883,129
FY 2029-30	49,497	494,970	278,501	2,785,010
FY 2030-31	46,284	462,839	266,969	2,669,687

The significant difference between the low and high estimates is due to uncertainty about the number of members who will choose to make the purchase.

Hartman & Associates estimates that the bill will have no material other postemployment benefit (OPEB) impact on the State and related governmental units due to retired LEOs being eligible for more years of retiree medical benefits.

ASSUMPTIONS AND METHODOLOGY

The cost estimates of the actuaries are based on the employee data, actuarial assumptions and actuarial methods used to prepare the December 31, 2019 actuarial valuations, except where new assumptions based on the experience study completed in 2020 would have a material impact on the results. Significant membership and financial statistics, assumptions, methods, and benefit provisions are shown in the following tables:

Membership Statistics (as of 12/31/2019 unless otherwise noted, M = millions)		
	<u>TSERS</u>	<u>LGERS</u>
Active Members		
Count	305,962	132,058
General Fund Compensation	\$11,166M (2020 session)	
Valuation Compensation (Total)	\$16,112M	\$7,066M
Average Age	45	44
Average Service	10.8	9.9
Inactive Members		
Count	183,347	79,588
Retired Members		
Count	228,291	75,002
Annual Benefits	\$4,804M	\$1,479M
Average Age	71	69
New Retirees During 2020	11,000	4,300

Financial Statistics (as of 12/31/2019 unless otherwise noted, M = millions)		
	<u>TSERS</u>	<u>LGERS</u>
Accrued Liability (AL)	\$84,873M	\$30,701M
Actuarial Value of Assets (AVA)	\$73,354M	\$27,435M
Market Value of Assets (MVA)	\$75,487M	\$28,225M
Unfunded Accrued Liability (AL - AVA)	\$11,520M	\$3,266M
Funded Status (AVA / AL)	86%	89%
Required Employer Contribution for FY 2021-22 (as % of pay)	15.74%	11.35% (non-LEO)
Salary Increase Assumption (includes 3.50% inflation and productivity)	3.50% - 8.10%	3.50% - 7.75%
Assumed Rate of Investment Return: 7.00%		
Cost Method: Entry Age Normal		
Amortization: 12 year, closed, flat dollar		
Demographic assumptions based on 2010-2014 experience, RP-2014 mortality, and projection of future mortality improvement with scale MP-2015		

Benefit Provisions		
	<u>TSERS</u>	<u>LGERS</u>
Formula	1.82% x Service x 4 Year Avg Pay	1.85% x Service x 4 Year Avg Pay
Unreduced retirement age/service	Any/30; 60/25; 65 (55 for LEO)/5	Any/30; 60/25; 65 (55 for LEO)/5
Employee contribution (as % of pay)	6%	6%

For the measurement required in G.S. 120-114(g), both actuaries assumed a 2.39% 30-year Treasury Bond yield and a cost-of-living adjustment assumption of 0.5%. Hartman & Associates also used a 2% wage inflation assumption.

For calculating the present value of the separation allowance, Cavanaugh Macdonald used a discount rate of 2.39%.

In recent years, the NC Department of Justice has awarded the following number of advanced professional certificates:

Advanced Certificates Awarded		
Year	Criminal Justice	Sheriffs'
2015	492	195
2016	451	271
2017	548	254
2018	665	336
2019	852	398
2020	485	374

Further detailed information concerning these assumptions and methods is shown in the actuary's report, which is available upon request from the Fiscal Research Division.

TECHNICAL CONSIDERATIONS

N/A.

DATA SOURCES

Cavanaugh Macdonald Consulting, LLC, "Purchase Option/Advanced Law Enforcement Certificate Act – Senate Bill 72", March 1, 2021, original of which is on file in the General Assembly's Fiscal Research Division.

Hartman & Associates, LLC, "Senate Bill 72: An Act to Allow for Purchase of Up to Four Years Creditable Service in the TSERS or LGERS at Full Cost by Law Enforcement Officers Holding an Advanced Law Enforcement Certificate", March 10, 2021, original of which is on file in the General Assembly's Fiscal Research Division.

LEGISLATIVE ACTUARIAL NOTE – PURPOSE AND LIMITATIONS

This document is an official actuarial analysis prepared pursuant to Chapter 120 of the General Statutes and rules adopted by the Senate and House of Representatives. The estimates in this analysis are based on the data, assumptions, and methodology described above. This document only addresses sections of the bill that have projected direct actuarial impacts on State or local government retirement systems and does not address sections that have no projected actuarial impacts.

CONTACT INFORMATION

Questions on this analysis should be directed to the Fiscal Research Division at (919) 733-4910.

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March 12, 2021



Signed copy located in the NCGA Principal Clerk's Offices