



# NORTH CAROLINA GENERAL ASSEMBLY

Session 2021

## Legislative Retirement Note

---

**Short Title:** Preserve State Pension Plan Modernization.  
**Bill Number:** House Bill 763 (First Edition)  
**Sponsor(s):** Representatives Elmore, Moffitt, and Saine

### SUMMARY TABLE

---

#### ACTUARIAL IMPACT OF H.B. 763, V. 1 (\$ in thousands)

	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
--	------------	------------	------------	------------	------------

##### State Impact

General Fund	No estimate available. See Actuarial Impact Summary.
Highway Fund	No estimate available. See Actuarial Impact Summary.
Other/Receipts	No estimate available. See Actuarial Impact Summary.

---

**TOTAL STATE EXPENDITURES**

**No estimate available. See Actuarial Impact Summary.**

---

### ACTUARIAL IMPACT SUMMARY

---

Systems Affected: Teachers' and State Employees' Retirement System (TSERS)

House Bill 763 (First Edition) defines a "COLA-eligible member" as a teacher or State employee who either did not earn service prior to July 1, 2021 or withdrew that service. For COLA-eligible members, the bill changes the formula for unreduced benefits in TSERS from  $1.82\% \times \text{Service} \times \text{Average Final Compensation}$  to  $1.5\% \times \text{Service} \times \text{Average Final Compensation}$  and creates a mechanism to automatically provide cost-of-living adjustments (COLAs) when assets exceed liabilities for those COLA-eligible members who have retired.

The bill creates a new fund within TSERS called the Pension Distribution Fund for COLA-eligible Members. All benefits for the COLA-eligible members will be paid from this Fund. At retirement, an amount equal to the present value of the member's future benefits will be transferred from other funds within TSERS to the new Fund. An annual valuation of the assets and liabilities of the Fund will be performed. The valuation and present value calculations will use an asset return assumption chosen to have a high probability of being exceeded by the actual returns over the remaining lives of the beneficiaries of the Fund.

The Board of Trustees shall annually increase or decrease benefits paid from the Fund to make the liabilities of the Fund equal to the assets of the Fund. No retiree's benefit may be lowered below

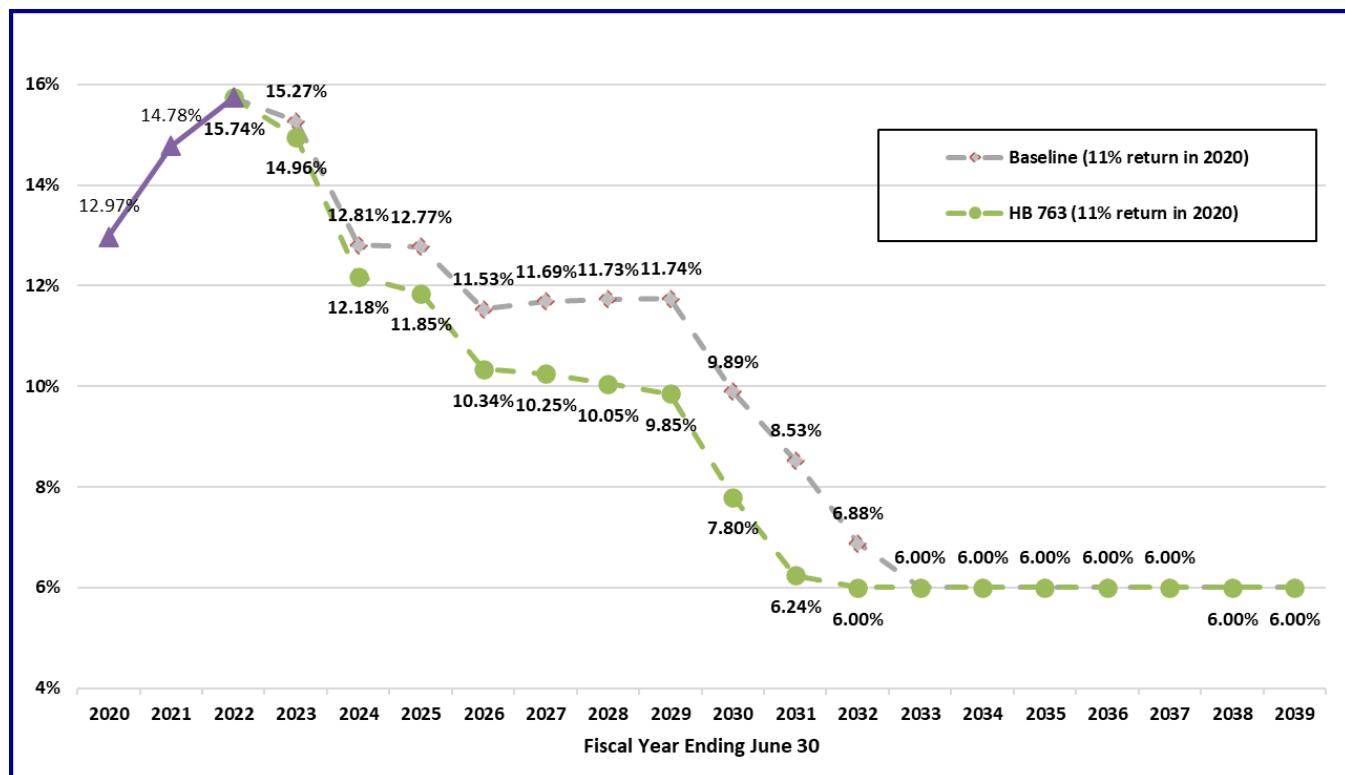


the amount that would be due if no adjustments had ever been made. No increase shall occur unless the required employer contribution rate is being contributed for the current fiscal year.

The Board of Trustees shall develop a process to allow other TSERS members to elect to begin participating as COLA-eligible members.

Because the actuarial impact on TSERS depends on the asset return assumption adopted by the Board of Trustees for the Fund and the process developed to allow other TSERS members to elect to participate as COLA-eligible members, the Summary Table above states that no estimate is available.

Cavanaugh Macdonald, the actuary for the retirement systems, projects the impact on the TSERS employer contribution rates shown in the following graph, assuming the Board adopts a 4.0% post-retirement asset return assumption and that actual returns are 6.5% per year after 2020.



Cavanaugh Macdonald states that the number of current members choosing to become COLA-eligible members will depend on the education offered related to the choice, the years until retirement for a member, personal life expectancy, and inertia, and that these factors may result in anti-selection (people more likely to have higher costs as COLA-eligible members electing to switch). For illustrative purposes, Cavanaugh Macdonald estimates the following impact if all current members elected to switch:



	Post-Retirement Asset Return Assumption	
	4.0%	4.5%
Increase in Employer Normal Cost	0.79% of pay	0.10% of pay
Increase in Accrued Liability	\$4.8 billion	\$2.6 billion

Hartman & Associates, the actuary for the General Assembly, estimates that at the 6.5% interest rate adopted by Board of Trustees in January 2021, a post-retirement asset return assumption of 4.63% would produce no change in the current normal cost rate. At other asset return assumptions, the impact on future normal cost as a percentage of new hire payroll would be as follows:

Post-Retirement Asset Return Assumption	Increase in Normal Cost for New Hires
3.5%	1.35% of pay
4.0%	0.71%
4.5%	0.14%
5.0%	(0.38%)

Hartman & Associates estimates that the number of current members electing to become COLA-eligible members will be low. For those who do elect to switch, Hartman & Associates estimates that the normal cost impact will be similar to that shown for new hires above and that the average impact on the accrued liability contribution rate will be roughly 3 times the normal cost impact.

## **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>
Active Members	
Count	305,962
General Fund Compensation	\$11,166M (2020 session)
Valuation Compensation (Total)	\$16,112M
Average Age	45
Average Service	10.8
Inactive Members	
Count	183,347
Retired Members	
Count	228,291
Annual Benefits	\$4,804M
Average Age	71



New Retirees During 2020	11,000
--------------------------	--------

Financial Statistics (as of 12/31/2019 unless otherwise noted, M = millions)	
	<u>TSERS</u>
Accrued Liability (AL)	\$84,873M
Actuarial Value of Assets (AVA)	\$73,354M
Market Value of Assets (MVA)	\$75,487M
Unfunded Accrued Liability (AL - AVA)	\$11,520M
Funded Status (AVA / AL)	86%
Required Employer Contribution for FY 2021-22 (as % of pay)	15.74%
Salary Increase Assumption (includes 3.50% inflation and productivity)	3.50% - 8.10%
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>
Formula	1.82% x Service x 4 Year Avg Pay
Unreduced retirement age/service	Any/30; 60/25; 65 (55 for LEO)/5
Employee contribution (as % of pay)	6%

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, "Preserve State Pension Plan Modernization – House Bill 763", May 10, 2021, original of which is on file in the General Assembly's Fiscal Research Division.

Hartman & Associates, LLC, "House Bill 763: An Act Preserving State Pension Plan Modernization by Establishing a Mechanism For an Automated COLA Increase Within the TSERS", May 7, 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.

### **ESTIMATE PREPARED BY**

---

David Vanderweide

### **ESTIMATE APPROVED BY**

---

Mark Trogdon, Director of Fiscal Research  
Fiscal Research Division  
May 10, 2021



Signed copy located in the NCGA Principal Clerk's Offices

