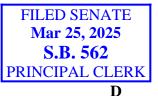
GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2025



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SENATE BILL DRS45291-LRa-130A

Short Title:	Cybersecurity and Quantum Resilience Study.	(Public)
Sponsors:	ponsors: Senators Theodros, Salvador, and Chaudhuri (Primary Sponsors).	
Referred to:		

A BILL TO BE ENTITLED

AN ACT ESTABLISHING THE NORTH CAROLINA CYBERSECURITY AND QUANTUM RESILIENCE STUDY COMMISSION AND APPROPRIATING FUNDS FOR THAT PURPOSE.

5 The General Assembly of North Carolina enacts:

6 SECTION 1.(a) This act shall be known and may be cited as the North Carolina
7 Cybersecurity and Quantum Resilience Study Act.

8 SECTION 1.(b) The North Carolina Cybersecurity and Quantum Resilience Study 9 Commission (Commission) is established to investigate the potential impacts of emerging 10 quantum computing technologies on the security of State systems, legacy encryption methods, 11 and critical infrastructure—including the Internet of Things (IoT) and smart city initiatives. The 12 Commission shall review vulnerabilities and provide recommendations on necessary future 13 measures to enhance the state's cybersecurity posture. To help guide the Commission work, the 14 General Assembly finds that:

- 15 (1) Advances in quantum computing pose potential risks to traditional encryption
 16 methods, such as Rivest–Shamir–Adleman (RSA) and Elliptic Curve
 17 Cryptography (CC), that many State and local systems rely on.
 - (2) Emerging technologies and IoT integrations, common in smart city initiatives, could be at risk if quantum computing breakthroughs compromise existing security protocols.
 - (3) North Carolina is home to a robust academic and technological ecosystem which can contribute significantly to understanding and mitigating these risks.
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(4) A proactive study is necessary to understand the scope of these vulnerabilities and to inform potential legislative or administrative actions in the future.

SECTION 1.(c) The Commission shall be composed of twenty-one (21) members,
 with seven members appointed by the Governor, seven members appointed by the President Pro
 Tempore of the Senate, and seven members appointed by the Speaker of the House of
 Representatives, as follows:

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(1) Five representatives from cabinet agencies appointed by the Governor.

- 30 (2) Three cybersecurity experts from both the public and private sectors appointed
 31 by the President Pro Tempore.
- 32 (3) Two academic experts in quantum computing and cybersecurity from North
 33 Carolina institutions appointed by the President Pro Tempore
- 34 (4) Three industry representatives involved in IoT, smart infrastructure, and
 35 cryptographic technologies appointed by the Speaker.



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	General Assem	bly Of North Carolina	Session 2025		
1 2	(5)	Two public policy experts with experience in t appointed by the Speaker.	echnology and cybersecurity		
3 4	(6)	Six members of the general public knowledgeab information technology.	le about State government or		
5	SEC	TION 1.(d) The Commission is charged with the	following duties:		
6 7	(1)	Conducting a comprehensive review of star infrastructure to identify vulnerabilities associ	te IT systems and critical		
8		methods.			
))	(2)	Evaluating the potential impact of quantum com			
)	(3)	Analyzing current and emerging quantum-resist			
	(4)	Assessing risks in IoT and smart city implement			
	(5)	Providing a roadmap and recommendations regulatory, or administrative measures to bolster			
		quantum threats.	r cybersecurity against future		
	SEC	TION 1.(e) The Commission's tasks and deliverable	oles include:		
	(1)	Risk assessment to identify and document			
	()	vulnerable to quantum-related cyber threats an			
		cybersecurity measures and determine gaps in p			
	(2)	Research collaboration to engage with local uni	versities and industry experts		
		to gather insights on quantum-resistant cryptogr	aphic techniques.		
	(3)	Develop a recommendation roadmap to propose	-		
		quantum-safe encryption methods where needed	1 I		
		or incentives for upgrading critical infrastructure			
		TION 1.(f) The Commission shall submit a compresent			
		essessment, and recommended actions to the General TION $2(a)$ Effective July 1, 2025, there is compared			
	SECTION 2.(a) Effective July 1, 2025, there is appropriated from the General Fund to the General Assembly the sum of two hundred fifty thousand dollars (\$250,000) to fund the				
		nmission, including research initiatives, public hea			
		lopment. The Commission may explore potential			
		supplement research and study efforts.	participanips of federal grant		
	SEC	TION 2.(b) The Commission shall be convened	l within 30 days of this act's		
		Commission members shall elect a chair and			
	Commission sha	all receive reimbursement as provided by Chapter 1	38 of the General Statutes.		
	SEC	TION 2.(c) Sensitive information received by t	he Commission shall remain		
		does not constitute a public record as defined by			
		n, the chair and vice-chair of the Commission may			
		ter balancing the need for public access aga	inst security concerns and		
	confidentiality r	1			
		TION 2.(d) The Joint Legislative Committee on I nmission's progress. The Commission's report ar			
		General Assembly to determine any further legisla			
	•	g the 2026 Regular Session of the 2025 General A			
		ies or actions as needed.	section, the provisions for		
		TION 3. Except as otherwise provided, this act	is effective when it becomes		
	law.				