THE MARYLAND GENERAL
ASSEMBLY
ANNAPOLIS, MARYLAND 21401-1991

JOINT COMMITTEE ON CYBERSECURITY, INFORMATION TECHNOLOGY, AND BIOTECHNOLOGY

December 20, 2021

The Honorable Bill Ferguson, Co-Chair
The Honorable Adrienne A. Jones, Co-Chair
Members of the Legislative Policy Committee

Members of the Committee:

The Joint Committee on Cybersecurity, Information Technology (IT), and Biotechnology respectfully submits this summary report of its 2021 interim activities. The joint committee held three meetings primarily focused on cybersecurity and government information technology modernization.

At the first meeting on June 23, the joint committee heard from the following speakers concerning the IT governance and cybersecurity best practices.

- The Cybersecurity and Infrastructure Security Agency (CISA) discussed various assessments the agency offers at no-charge to State and local governments. Broadly, the assessments are designed to evaluate an entity's cybersecurity strengths and weaknesses. CISA also emphasized its recent Dotgov.gov initiative which provides .gov web addresses to all government entities at no-charge. The .gov web address is managed by CISA and provides additional website protections to those agencies and government entities.

- The Department of Information Technology (DoIT) discussed its plans and strategies to move towards a centralized and modernized enterprise model to govern the State's IT and cybersecurity systems. DoIT emphasized the value of this strategy, both in cost savings (compared to each agency independently maintaining their own practices and systems) and system security and resilience.

- John Quinn, the Vermont Chief Information Officer, discussed recent legislative actions to centralize IT and cybersecurity in the State of Vermont. Broadly, Mr. Quinn described

Vermont's new centralized system, and expressed support for DoIT's vision and endeavors to centralize IT for the State of Maryland.

- The Maryland Municipal League and a representative from the City of Salisbury discussed the difficulties with operating and maintaining robust IT and cybersecurity systems at the local level. The speakers emphasized the difference in needs between State and local governments (primarily due to system scale) and the need to protect local IT budgets.

- The Maryland State Department of Education and Executive Director of the IT Department for the Baltimore County Public School System (BCPS) discussed cybersecurity issues from the education perspective. BCPS was the victim of a significant ransomware attack in recent years and shared the lessons it has learned as a result. BCPS emphasized (1) how support from DoIT, the Maryland Department of Emergency Management, and the Maryland Coordination and Analysis Center was paramount in the recovery process and (2) the importance of information sharing between State and local governments, user awareness/training, and multi-factor authentication as resilient cybersecurity practices.

- Representatives from Atlantic Data Forensics and the National Cybersecurity Center discussed common issues they encounter in providing services to the private sector and governmental entities. Broadly, they discussed how the most common cyber and ransomware attacks generally take advantage of poor IT management practices. They emphasized the importance of basic cybersecurity strategies, such as user training and multi-factor authentication, as excellent first steps to enhance State systems.

At the second meeting on September 29, the joint committee heard from the following speakers concerning the issues surrounding outdated State legacy systems.

- DoIT discussed the importance of upgrading the State's outdated legacy IT systems to both improve State operations and protect those systems from cyberattack. DoIT was asked by the joint committee to answer the question of how it would prioritize the top legacy systems in the State and for the timeline and cost for those modernization projects. At the time, DoIT was unable to provide the information, including a prioritization strategy and roadmap, to the committee, simply referring it to the summary report for the State's Major Information Technology Development Projects. The joint committee plans to follow-up with DoIT next interim for more detailed information, given the likelihood of significant IT and cybersecurity legislation during the 2022 Legislative Session.

- Representatives from the Maryland Association of Counties and Maryland Association of County Health Officers (MACHO) discussed how outdated State legacy systems directly affect local government operations. Many local government entities, especially health

departments, must use State systems for a variety of reasons, and state legacy systems can cause service disruptions and interoperability issues. MACHO also emphasized the importance of consistent funding and staffing levels to maintain resilient and safe IT systems.

- Shawn Riley, the North Dakota Chief Information Officer discussed recent legislative actions to centralize IT and cybersecurity in the State of North Dakota. Mr. Riley emphasized the unique responsibility that government has to protect citizen data. To that end, North Dakota's state IT agency is authorized to provide centralized IT services for each branch of State government, local governments, and schools. Moreover, North Dakota's system has been so successful that it has begun to provide services to nearby states.

- Private sector representatives from GCOM and System Automation discussed various services and modernization strategies that could be used by the State of Maryland as it continues to improve and upgrade its IT systems.

At its final meeting on November 9, representatives from the Maryland Cybersecurity Council (MCC) presented findings and recommendations from an in-depth cybersecurity governance study that was conducted by an MCC workgroup over the 2021 interim. The joint committee would like to thank the workgroup members including: Ben Yelin at the Center for Health and Homeland Security (CHHS) at the University of Maryland School of Law and Senator Katie Fry Hester (District 9, Carroll and Howard Counties), Senator Susan Lee (District 16, Montgomery County), Delegate Ned Carey (District 31A, Anne Arundel County), Acting Secretary Russell Strickland (Maryland Department of Emergency Management), Charles "Chip" Stewart (State Chief Information Security Officer), Kevin Kinnally (Legislative Director, Maryland Association of Counties), and Dr. Gregory von Lehmen (Special Assistant for Cybersecurity, University of Maryland Global Campus, and staff to the Maryland Cybersecurity Council) and the externs who supported the working group: Serena Chenery, Robert Layne, Gavin Rader, Alek Stathakis, Stephanie Vangellow, Mike Rovetto, Makenzie Donaldson, Chris Lidard and Connor Armstrong.

The study examined and researched governance strategies and alternatives for both State and local government entities and involved discussions with the federal government and other states that have recently enhanced State information technology systems and cybersecurity structures. Broadly, the workgroup recommended working towards a more centralized IT and cybersecurity governance model for the State, upgrading the State's numerous vulnerable legacy IT systems, and providing additional support and resources to local government entities. Additionally, representatives from the private sector discussed the importance of hazard planning and information sharing to maintain a robust and resilient cybersecurity strategy.

At the request of the President of the Senate and Speaker of the House, the Co-Chairs of the joint committee will propose legislation, largely based on the letter from the presiding officers and recommendations of the MCC workgroup and other information learned through the interim meetings, to improve and enhance the State's cybersecurity and IT systems.

Please contact us or the joint committee staff, Richard Duncan, Erika Schissler, and Donavan Ham, if you have any questions concerning the joint committee's activities.

Respectfully submitted,

Katie Fry Hester
Senate Chair

Pat Young
House Chair

KFH:PY/RLD/mta

cc: Ms. Victoria L. Gruber
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