May 19, 2020

The Honorable Walter G. Copan  
Director  
National Institute of Standards and Technology  
100 Bureau Drive, Stop 2000  
Gaithersburg, MD 20899

Dear Dr. Copan,

As Americans across the country make changes to their daily routines to slow the spread of COVID-19, new cybersecurity challenges and latent vulnerabilities have come to light. This crisis has reinforced the importance of the National Institute of Standards and Technology’s (NIST) Framework for Improving Critical Infrastructure Cybersecurity (Framework) and presents an opportunity to make constructive improvements. I urge you to continue work on the Framework by advancing metrics and measurements to evaluate cybersecurity strategies.

The NIST Roadmap for Improving Critical Infrastructure Cybersecurity Version 1.1 from April 2019 makes clear that “The development of reliable ways to measure risk and effectiveness would be a major advancement and contribution to the cybersecurity community.” A NIST framework that includes clear, quantifiable metrics can provide a useful framework to guide decision making, maximize the impact of limited resources, and help improve cybersecurity in the U.S.

As companies, nonprofits, and state and local governments work to quickly assess their cybersecurity strategies and evaluate measures to improve security during the pandemic, additional guidance from NIST could help speed the decision-making process and funnel resources to effective, proven methods. Additionally, with quantifiable measurement tools, cybersecurity strategies can be compared across industries and between entities. Metrics and measurements that facilitate comparisons and assess risk will be valuable for consumers, companies, and governments.

However, before NIST can begin developing these metrics, it must first establish a set of flexible, consensus-based definitions with the input of industry. Without agreement on a taxonomy of terms to assess cybersecurity performance, quantifiable metrics produced by the
Framework run the risk of being arbitrary or counterproductive. I urge NIST to move quickly to solicit stakeholder feedback and begin developing the necessary definitions to facilitate it’s work in establishing cybersecurity metrics and measurements as part of the Framework.

Sincerely,

Doris Matsui
Member of Congress