



2023 Public-Private Analytic Exchange Program Topics

5G Impacts on Cybersecurity: This topic will explore cybersecurity safeguards being put in place for transportation with Artificial Intelligence (AI), from smart vehicles to vessels to ensure safety and security. Additionally, this topic could also explore how AI developers are ensuring the integrity of data being fed into AI decision systems and challenges for 5G technologies being provided by many vendors in many geographical contexts.

Chinese Counterfeit Microelectronics: This topic will explore the risk of the counterfeiting industry, which is primarily driven by entities and individuals in the People's Republic of China, providing highly-skilled workers, advanced factories, and sophisticated transportation links to United States systems and possibly leading to private sector purchasing, through third parties, semiconductors and microchips electronics to in-turn sell to government to use and maintain their systems. Additionally, this topic could explore challenges and potential mitigation strategies to both the public and private sectors to detect, mitigate, and deter purchasing of sub-standard products.

Implications of Extreme Weather Events: This topic will explore anticipated impacts of climate change, such as the multiplier effects of sea level rises causing forced migration and accelerating traditional security threats. DHS's Quadrennial Homeland Security Review highlights how climate change may overwhelm critical infrastructure capacities causing widespread disruption of essential services across the country. Various National Intelligence Estimates discuss the impacts of climate change on the military, the way it executes its missions as well as the potential for increased political instability and strife.

National Security and Readiness: This topic will explore what the COVID-19 pandemic exposed, such as: early warning communication practices, the vulnerabilities and gaps in public health, national security, and public-private cooperation. Additionally, this topic could recommend best practices for public-private partnerships to prepare for pandemics across critical infrastructure sectors or reshape political and economic realities.

Rapidly Evolving Sanctions: This topic will explore how recent global events have precipitated a significant expansion of U.S. and multilateral sanctions related to trade, finance, and travel. Multiple U.S. Government agencies are working to implement and enforce a growing list of targeted sanctions. Additionally, this topic could recommend best practices for public and private partners to adapt their financial, supply-chain, and travel practices to ensure compliance and collaboration.

U.S. Maritime Trade and Port Cybersecurity: This topic will explore the risks associated with some of America's largest ports being owned in part by foreign actors. Additionally, this topic could explore the possibility of regulating foreign influence on U.S. ports due to the foreign actors' reliance on American trade, and the need for American ports to modernize cybersecurity to sync with the advancement of port critical infrastructure.