

# Cyber & Homeland Security

*Increase Business-Government Collaboration to Protect the Nation*

## RECOMMENDED ACTIONS

↓  
Expand partnership between business and government to report and manage cyber and homeland security threats and reduce systemic risk

↓  
Increase government support to limit liability in the event of a cyberattack and create incentives that encourage transparency, cross-industry knowledge sharing and the adoption of best practices

↓  
Provide federal technology, tools and best practices to businesses (e.g., encryption) to ensure high protection of U.S. assets against cyber threats

↓  
Train a national cybersecurity workforce through public-private partnerships (e.g., apprenticeship models, government placements, training of veterans)

**Nearly 500 million**

Personal records stolen or lost in 2018

**~246 million**

New unique pieces of malware identified in 2018

**\$6 trillion**

Estimated annual cost of counterattacks globally by 2021, up from \$3 trillion in 2015

**Competition for cyber talent is increasing, leading to a major skills shortage.**

**~3.5 million**

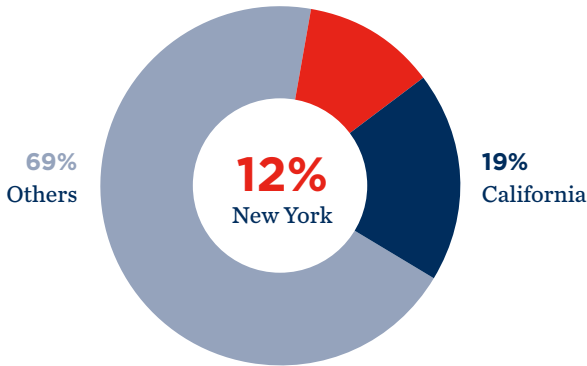
Expected global shortfall in cybersecurity professionals by 2021

**300,000+**

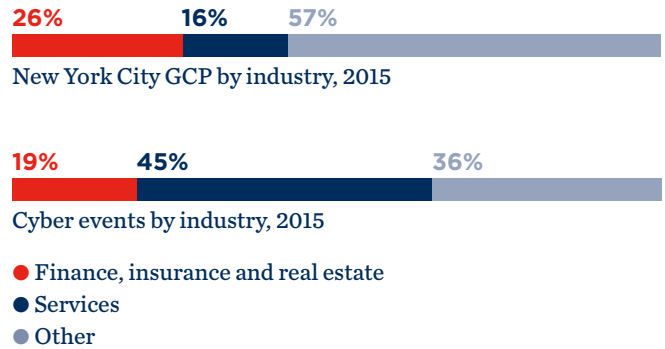
Unfilled cybersecurity jobs in the U.S.

**Figure 6**

*As a global financial, media and services center, New York City is a target for cyberattacks.*

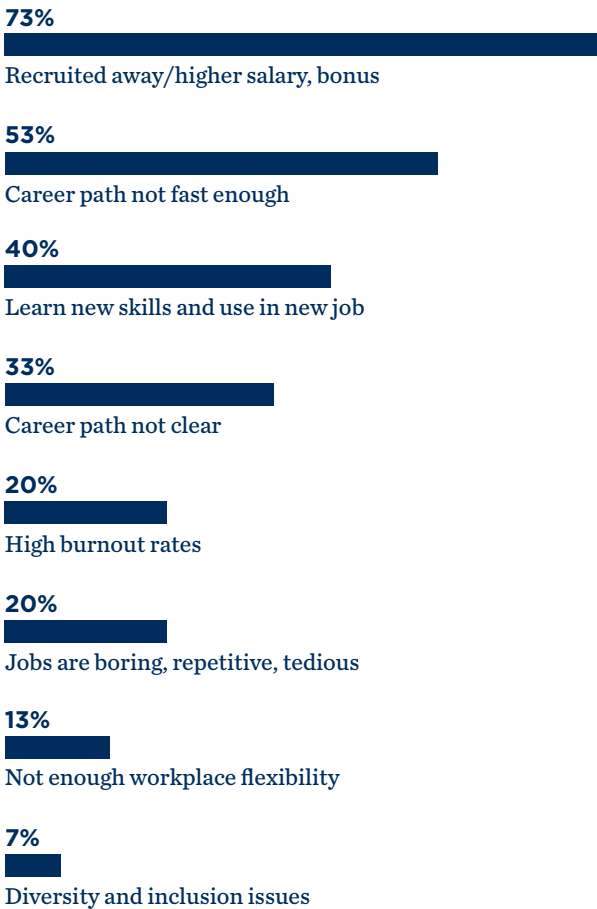


*Share of U.S. events by state to date.*



**Figure 7**

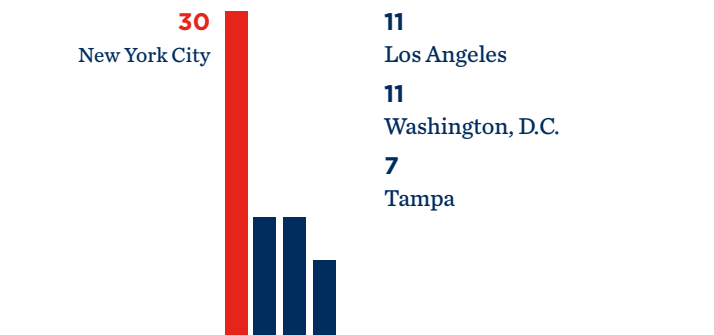
*There are a number of reasons the cyber industry struggles to recruit talent.*



*Based on a 2016 global survey.*

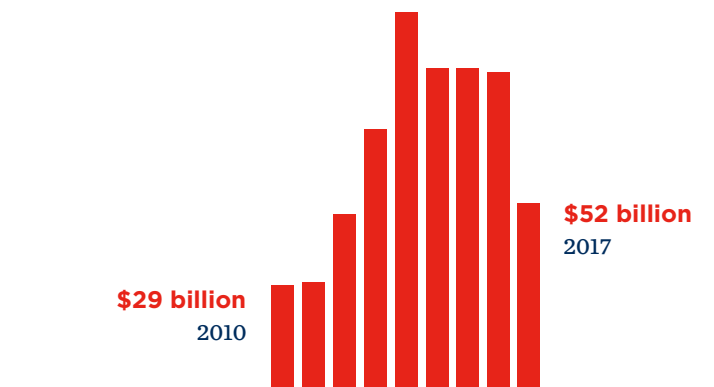
**Figure 8**

*New York City suffered the highest number of terrorist incidents of any U.S. city (2002–2017).*



**Figure 9**

*The global economic cost of terrorism is significant.*



*Economic cost includes direct and indirect costs from the loss of life, destruction of property and losses from ransom payments.*