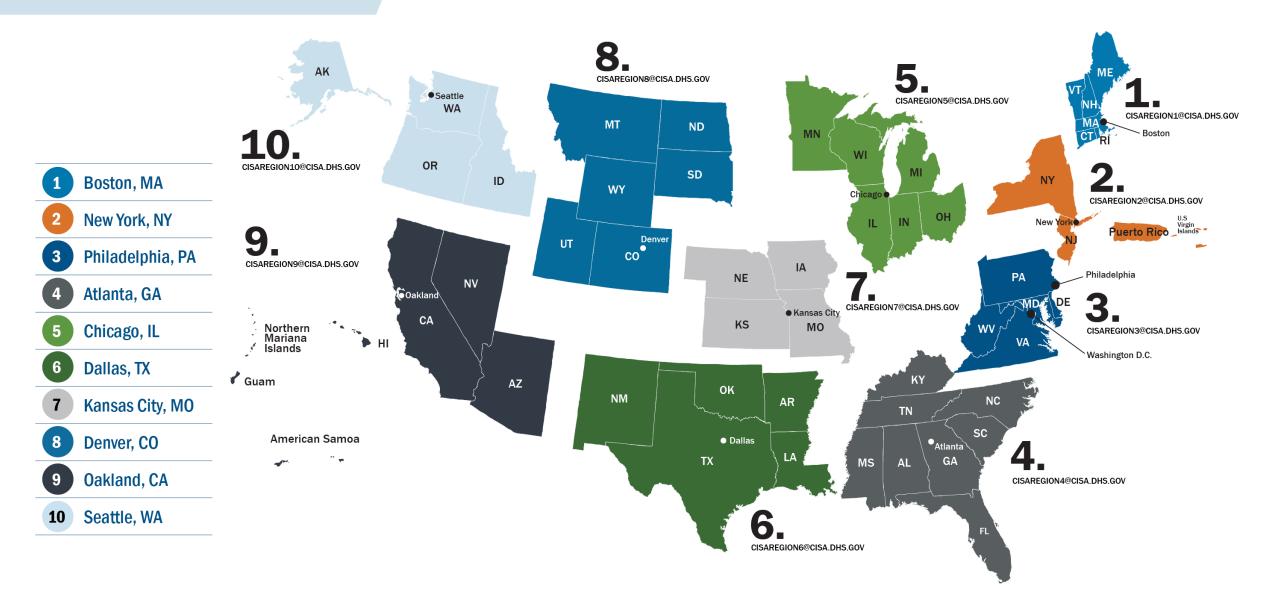
**U.S. Department of Homeland Security** 

# **CYBERSECURITY** AND **INFRASTRUCTURE SECURITY AGENCY**



### **CISA Regions**



# **Security Advisor Programs**

Security Advisors are field-based critical infrastructure security specialists who link State, local, tribal, territorial (SLTT) & private sector stakeholders with infrastructure protection resources

- Assess: Evaluate critical infrastructure risk.
- **Promote:** Encourage best practices and risk mitigation strategies.
- Build Capacity: Initiate, develop capacity, and support communities-of-interest and working groups.
- Educate: Inform and raise awareness.
- Listen: Collect stakeholder concerns & needs.
- **Coordinate:** Bring together incident support and lessons learned.

Protective Security Advisors (PSA): Security, Emergency Preparedness, and Business Continuity Programs

Cybersecurity Advisors (CSA): Cybersecurity for Information Technology & Operational Technology networks



## **Assist Visits/Cyber Protective Visits**

#### Assist Visits/Cyber Protective Visits are the cornerstone of voluntary outreach.

- Establish and enhances CISA's relationship with SLTT governments or critical infrastructure owners and operators;
- Informs of the importance of their facilities and reinforce the need for continued vigilance;
- Explains how their facility or service fits into its specific critical infrastructure sector;
- Provides an overview of the CISA resources available to the organization to enhance security and resilience.

Visits are often followed by the delivery of other CISA services



### **Protective Security Advisors**

#### **Protective Security Advisors (PSAs):**

- Plan, coordinate, and conduct security and resiliency surveys and assessments
- Plan and conduct outreach activities
- Support National Special Security Events (NSSEs) and Special Event Activity Rating (SEAR) events
- Provide vital link for information sharing during steady state and incident response
- Coordinate and support risk mitigation training





### **PSA Assessments**

#### **Organizational Maturity Around Security/Resiliency**

#### Security Assessment at First Entry (SAFE)

- Programs Reviewed
  - Security
  - Emergency Preparedness
  - Business Continuity
- Time Requirement = Site Dependent; Tour of facility(s) followed by conference room meeting
- Written report provided

#### Infrastructure Survey Tool (IST)

- Programs Reviewed
  - Security
  - Emergency Preparedness
  - Business Continuity
  - Dependencies/Interdependencies
  - Information Technology
- Time Requirement = Typically two full days
- Written report provided



### **Security Assessment at First Entry**



- The Security Assessment at First Entry (SAFE) is designed to assess the current security posture and identify options for facility owners and operators to mitigate relevant threats
- The SAFE is suited for all facilities, including smaller ones such as rural county fairgrounds, houses of worship with only weekend services and few members, and small health clinics



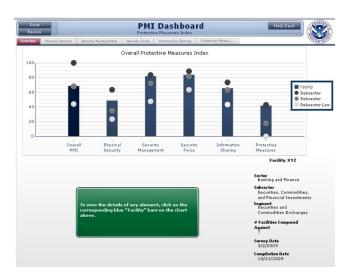
### Infrastructure Survey Tool

- The Infrastructure Survey Tool (IST) is a web-based vulnerability survey tool that applies weighted scores to identify infrastructure vulnerabilities and trends across sectors
- Facilitates the consistent collection of security information
  - Criticality/Significant Assets
  - Physical Security
  - Security Management

- Information Sharing
- Protective Measures
- Dependencies
- Generates the Protective Measures Index and

**Resilience Measurement Index** 





### **Cybersecurity Advisors**

#### **Cybersecurity Advisors (CSAs):**

- Advise FSLTT and private sector partners on risk levels, security posture, & cost-benefit analysis of information security programs & processes
- Review risk management programs by using evaluation results to create or enhance the effectiveness of the partner's information sharing
- Reduce risks to the nation's critical cyber infrastructure by delivering key mitigation capabilities
- Promote collaborative efforts to reduce risks and threats to critical information, enterprise, communications, and control systems
- Plan and conduct outreach activities relating to cybersecurity initiatives
- Build regional and local cybersecurity coalitions to promote information sharing



## **Cyber Services - Initial**

#### **Step One**

**Cyber Protective Visit (CPV):** 

 Initial visit with a Cyber Security Advisor (CSA) to gauge interest in CISA services, understand the organization's needs, and develop the foundation for further engagements and offerings.

#### Step Two

Cyber Hygiene Vulnerability Scanning (CyHy):

- Maintain enterprise awareness of your internet-accessible systems
- Provide insight into how systems and infrastructure appear to potential attackers
- Drive proactive mitigation of vulnerabilities and reduce risk

#### **Step Three**

Cyber Security Evaluation Tool (CSET):

The CSET provides a systematic, disciplined, and repeatable method for assessing infrastructure; compare multiple assessments to establish a baseline and determine trends; controls priority list.



# **Cyber Hygiene Services - Intermediate**

Continuous Phishing Campaign Assessment (ConPCA): Services provided by invite only

- Objectives
- Reduce risk to malicious phishing email attempts by testing and informing users
- Understand how users are enticed to click on links and report suspicious activity
- Properly emulate malicious phishing activity to provide a quality learning experience

Web Application Scanning

Services provided by invite only

- Objectives
- Maintain enterprise awareness of your publicly accessible webbased assets
- Provide insight into how systems and infrastructure appear to potential attackers
- Drive proactive mitigation of vulnerabilities to help reduce overall risk

Remote Penetration Testing (RPT)

Services provided by invite only

Objectives

- Conduct assessments to identify vulnerabilities and work with customers to eliminate exploitable pathways.
- Simulate the tactics and techniques of real-world threats and malicious adversaries.
- Test centralized data repositories and externally accessible assets/resources.
- Avoid causing disruption to the customer's mission, operation, and network infrastructure.



## **Cyber Hygiene Services - Advanced**

Risk and Vulnerability Assessment (RVA) Services provided by invite only

#### Objectives

- Identify weaknesses through network, system, and application penetration testing
- Test stakeholders using a standard, repeatable methodology to deliver actionable findings and recommendations
- Analyze collected data to identify security trends across all RVA stakeholder environments

Validated Architectural Design and Review (VADR)

Services provided by invite only

- **Objectives**
- Analyze systems based on standards, guidelines, and best practices.
- Ensure effective defense-indepth strategies.
- Provide findings and practical mitigations for improving operational maturity and enhancing cybersecurity posture

Critical Product Evaluation (CPE)

Services provided by invite only

- Objectives
- Enumerate the vulnerabilities associated with the product's inscope software, firmware, and hardware.
- Attempt exploitation of vulnerabilities that pose the greatest risk, using known exploits or new code/techniques.
- Assist in developing remediation or mitigation strategies.



### **CSA Assessments**

#### Operational

Cyber Infrastructure Survey (CIS)

- Domains
  - Cybersecurity Management
  - Cybersecurity Forces
  - Cybersecurity Controls
  - Incident Response
  - Dependencies
- Time Requirement = 2 to 4-hour
- Access to interactive dashboard

#### **Tactical**

External Dependencies Management Assessment (EDM)

- Domains
  - Relationship formation
  - Relationship management and governance
  - Service protection and sustainment
- Time Requirement = 2 to 4-hour
- Written report provided.

#### Strategic

Cyber Resiliency Review (CRR)

#### • Domains

- Asset Management
- Controls Management
- Configuration and Change Management
- Vulnerability Management
- Incident Management
- Service Continuity Management
- Risk Management
- External Dependency Management
- Training and Awareness
- Situational Awareness
- Time Requirement = 6 to 8-hour
- Written report provided



### **CSA Assessments**

#### **Incident Management Review (IMR):**

- Domains
  - Event Detection and Handling
  - Incident Declaration, Handling, and Response
  - Post-Incident Analysis and Testing
  - Integration of Organizational Capabilities
  - Protection and Sustainment of the Incident Management Function
  - Preparation for Incident Response
- Time Requirement = 2 to 4-hour
- Written report provided.

#### Cyber Resiliency Essentials (CRE):

#### • Domains

- Identify Services and Assets
- Control Access to Assets
- Protect Data and Manage Recovery Capabilities
- Protect and Monitor the Network
- Prevent and Monitor Exposure to Malware
- Manage Changes to Technology
- Identify and Manage Vulnerabilities
- Plan for Incident Management
- Identify and Manage Risks
- Manage External Dependency Risk
- Perform Security Awareness and Training Activities
- Time Requirement = 2 to 4-hour
- Written report provided.

#### Cyber Performance Goals (CPGs):

- A set of high-impact security actions for critical infrastructure organizations that address both IT and OT/ICS considerations.
- Mapped to the relevant NIST Cybersecurity
  Framework subcategories, as well as other frameworks (e.g., IEC 62443).
- Domains

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- Account Security
- Device Security
- Data Security
- Governance and Training,
- Vulnerability Management,
- Supply Chain/Third Party,
- Response and Recovery
- Other (network segmentation, email, etc,)



### **Outreach & Support**

- Drills & Exercises
- Special Event Security Planning
- Products: Protective Measures, Resource Guides, Geographical Information System support, Infrastructure Visualization Platform (IVP)
- Campaigns: Operation Flashpoint, Elections Security, Securing Public Gatherings, School Security, Shields Up, etc.
- Incident Support





### Training

CISA offers a variety of training topics through various mediums:

- Independent Study Courses
- Videos
- Virtual Instructor-Led Courses
- Webinars
- Virtual and On-Site Presentations



### **Training and Presentations**

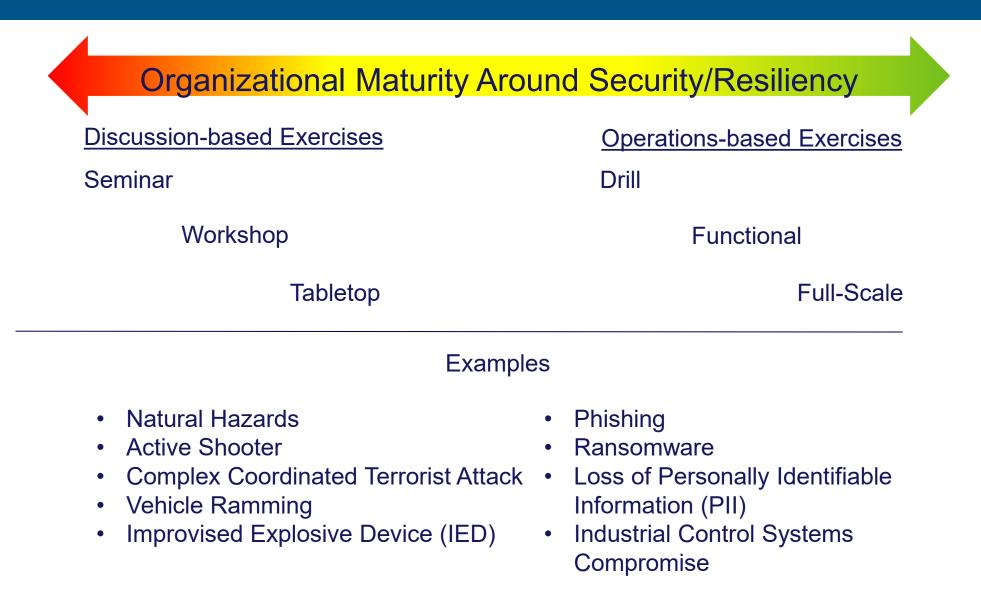
- CISA 101
- Active Shooter
- Bombing Threat Management
- Bombing Prevention
- Insider Threat
- Cybersecurity Awareness
- Elections Security
- Targeted Violence
- De-Escalation Training for CI



Securing Public Gatherings

- Hometown Security
- School Security
- Security of Soft Targets and Crowded Places
- See Something, Say Something
- Counter Unmanned Aircraft Systems
- Power of Hello
- Workplace Security
- Cyber Incident Response

### **Exercises**



### **Information Sharing**

Intelligence and information sharing is essential to the protection of critical infrastructure – to enable informed decisions and timely actions:



- CISA.gov
- National Cyber Awareness System
- Homeland Security Information Network (HSIN)
- TRIPwire
- Information Sharing and Analysis Centers (ISACs)
- Information Sharing and Analysis Organizations (ISAOs)
- Fusion Centers
- Automated Indicator Sharing



### Information Sharing & Analysis Centers (ISACs)

- American Chemistry Council
- Automotive ISAC
- Aviation ISAC
- Communications ISAC
- Downstream Natural Gas ISAC
- Elections Infrastructure ISAC
- Electricity ISAC
- Emergency Management & Response ISAC
- Financial Services ISAC
- Healthcare Ready
- Health ISAC
- Information Technology ISAC
- Maritime Transportation System ISAC

- Media & Entertainment ISAC
- Multi-State ISAC
- National Defense ISAC
- Oil & Natural Gas ISAC
- Real Estate ISAC
- Research & Education Networks ISAC
- Retail & Hospitality ISAC
- Small Broadband ISAC
- Space ISAC
- Surface Transportation, Public Transportation & Over-the-Road Bus ISACS
- Water ISAC



### **CISA.GOV**

