The Office of Infrastructure Protection

National Protection and Programs Directorate Department of Homeland Security

PSCD 101 Overview Brief

Water ISAC

April 15, 2014



Vision and Mission

- Vision A safe, secure, and resilient critical infrastructure based on, and sustained through, strong public and private partnerships
- Mission Lead the National effort to mitigate terrorism risk to, strengthen the protection of, and enhance the all-hazard resilience of the Nation's critical infrastructure



The Role of Homeland Security

- Unify a National effort to secure America
- Prevent and deter terrorist attacks
- Protect against and respond to threats and hazards to the Nation
- Respond to and recover from acts of terrorism, natural disaster, or other emergencies
- Coordinate the protection of our Nation's critical infrastructure across all sectors



Threats May Come from All Hazards





National Response Framework

- Guides how the Nation conducts allhazards response
- Documents the key response principles, roles, and structures that organize national response
- Allows first responders, decisionmakers, and supporting entities to provide a unified national response



National Response Framework





Presidential Policy Directive-21

- Announced in February 2013, Presidential Policy Directive-21: Critical Infrastructure Security and Resilience replaces Homeland Security Presidential Directive-7 and directs the Executive Branch to:
 - Develop a situational awareness capability that addresses both physical and cyber aspects of how infrastructure is functioning in near-real time
 - Understand the cascading consequences of infrastructure failures
 - Evaluate and mature the public-private partnership
 - Update the National Infrastructure Protection Plan
 - Develop comprehensive research and development plan



Critical Infrastructure Defined

- Critical Infrastructure
 - "Systems and assets, whether physical or virtual, so vital that the incapacity or destruction of such may have a debilitating impact on the security, economy, public health or safety, environment, or any combination of these matters, across any Federal, State, regional, territorial, or local jurisdiction."

Source: National Infrastructure Protection Plan 2009







National Infrastructure Protection Plan

- Comprehensive plan and unifying structure for the public and private sector to enhance the protection and resilience of critical infrastructure
 - Partnership model
 - Risk management framework
 - Roles, responsibilities, and authorities
- Drives internal programs and activities, and guides those of:
 - Other Federal agencies and departments
 - State, local, tribal, and territorial governments
 - Critical infrastructure owners and operators



National Infrastructure Protection Plan

Partnering to enhance protection and resiliency

2009



Critical Infrastructure Sectors

- Banking and Finance
- Chemical
- Commercial Facilities
- Communications
- Critical Manufacturing
- Dams
- Defense Industrial Base
- Emergency Services
- Energy
- Food and Agriculture
- Government Facilities

- Healthcare and Public Health
- Information Technology
- Nuclear Reactors, Materials, and Waste
- Transportation Systems
- Water





Critical Infrastructure Protection Challenges

- A majority of critical infrastructure privately-owned
- The Department of Homeland Security (DHS) has limited legal authority to regulate security practices of private industry (exceptions: National Protection and Programs Directorate Office of Infrastructure Protection (high-risk chemicals), Transportation Security Administration, United States Coast Guard)
- DHS; Sector-Specific Agencies; other Federal entities; the private sector; and State, local, tribal, and territorial governments all have roles and responsibilities in critical infrastructure protection



Protective Security Advisors

- 96 PSAs and Regional Directors, including 89 field deployed personnel, serve as critical infrastructure security specialists
- Deployed to 73 Districts in 50 states and Puerto Rico
- State, local, tribal, territorial, and private sector link to DHS infrastructure protection resources
 - Coordinate vulnerability assessments, training, and other DHS products and services
 - Provide a vital link for information sharing in steady-state and incident response
 - Assist facility owners and operators with obtaining security clearances
- During contingency events, PSAs support the response, recovery, and reconstitution efforts of the States by serving as pre-designated Infrastructure Liaisons (IL) and Deputy ILs at the Joint Field Offices



Protective Security Advisor Locations

Security

Protective Security Advisor (PSA) Locations - June 14, 2013



Value of the PSA Program

- PSAs:
 - Support comprehensive risk analyses for critical infrastructure
 - Assist in the review and analysis of physical/technical security for critical infrastructure
 - Convey local concerns and sensitivities to DHS and other Federal agencies
 - Relay disconnects between local, regional, and National protection activities
 - Communicate requests for Federal training and exercises



Protected Critical Infrastructure Information

- Established under the Critical Infrastructure Information Act of 2002
- Protects voluntarily submitted critical infrastructure information from:
 - Freedom of Information Act
 - State and local sunshine laws
 - Civil litigation proceedings
 - Regulatory usage
- Provides private sector with legal protections and "peace of mind"



Nondisclosure

This document contains Protected Critical Infrastructure Information (PCII). In accordance with the provisions of the Critical Infrastructure Information Act of 2002, 6 U.S.C. §§ 131 et seq. (the "CII Act"), PCII is exempt from release under the Freedom of Information Act (5 U.S.C. 552) and similar State and local disclosure laws. Unauthorized release may result in criminal and administrative penalties. It is to be safeguarded and disseminated in accordance with the CII Act, the implementing Regulation at 6 C.F.R. Part 29 (the "Regulation") and PCII Program requirements.

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Examples of Critical Infrastructure Information

- Protected information defined by the Critical Infrastructure Information Act includes:
 - Threats Actual, potential, or threatened interference with, attack on, compromise of, of incapacitation of a critical asset
 - Vulnerabilities Ability to resist threats, including assessments or estimated of vulnerability
 - Operational experience Any past operational problem or planned or past solution including repair, recovery, or extent of incapacitation
- Any information normally available in the public domain will not be protected



Enhanced Critical Infrastructure Protection Initiative

- Establishes/enhances DHS relationship with facility owners and operators, and informs owners and operators of the importance of their facilities and the need to be vigilant
- ECIP survey
 - Identifies facilities' physical security, security forces, security management, protective measures, information sharing, and dependencies
 - Tracks implementation of new protective measures
- ECIP Dashboard
 - Creates facility protective measures index that can be used to compare against similar facilities
 - Tool for informing protective measures planning and resource allocation
- Information is protected under the PCII program
- Information used by DHS for steady-state analysis and incident management



ECIP Survey Tool

- Web-based vulnerability survey tool that applies weighted scores to identify vulnerabilities and trends for infrastructure and across sectors
- Facilitates the consistent collection of security information
 - Physical Security, Security Force, Security Management, Information Sharing, Protective Measures, Dependencies
- The tool allows DHS to:
 - Identify and document critical infrastructure overall security
 - Provide information for protective measures planning and resources allocation
 - Facilitate government information sharing
 - Enhance its ability to analyze data and produce improved metrics



ECIP Survey Data Categories

- Facility Information
- Contacts
- Facility Overview
- Information Sharing*
- Protective Measures Assessment*
- Criticality*
- Security Management Profile*
- Security Areas/Assets
- Additional DHS Products/Services
- Criticality Appendix
- Images

- Security Force*
- Physical Security*
 - Building Envelope
 - Delivery/Vehicle Access Control
 - Parking
 - Site's Security Force
 - IDS/CCTV
 - Access Control
 - Security Lighting
- Cyber Vulnerability
- Dependencies*

* Comparative analysis provided



Weighting Process and Participants

- Scoring for Physical Security, Security Management, and Security Force was conducted using a working group comprised of:
 - Physical security experts
 - Scientists
 - Mathematicians
 - Sector representatives
 - Owners and operators of facilities being weighted
- Weights validated using a separate panel of representatives
- Example: Fences





- Aluminum chain link fence
- 7 foot height
- With outriggers
- Barbed wire
 - Fence Protective
 Measures Index =
 71



- Wood fence
- 6 foot height
- Partial clear zone
- Fence Protective
 Measures Index =
 13

ECIP Deliverables





20

Dashboards and Information Sharing

3

Areas individually separated into Physical Security, Security Management, Security Force, Information Sharing, and Protective Measures. Owner/Operator can make adjustments and see improvements to individual area and overall protective measure index (PMI).

Print 7 Review 7		res Index Dashboard	
Facility Overview All Sectors Ove	erall Physical Security Security Manage	ment Security Force Information Sharin	g Protective Measures
	Select Various Measures to S	See their Effect on Security Force PMI	
	Yes No		
		After hours Security Checks Recorded Cor	mmand and Control MOU/MOA
Is the security force adequ	late based on		
Physical complexity/size	Number of employees	Nature of work	Number of entrances
Yes, adequate	Yes, adequate	O Yes, adequate	O Yes, adequate
Minor additions to staff needed	Minor additions to staff needed	Minor additions to staff needed	Minor additions to staff needed
Significant additions to staff needed	Significant additions to staff needed	Significant additions to staff needed	Significant additions to staff needed
Minor additions to staff needed Significant additions to staff needed	Significant additions to staff needed	Minor additions to staff needed	
Significant additions to staff needed	Significant additions to staff needed	Significant additions to staff needed	
Scenario Overall PMI		Security Force PMI	
	.86 Staffing		
	Equipment/Weapons		
	Training		
Scenario Security Force PMI	Post Guidelines		
alunturin	Patrois		Subsector Average Facility: Scenario
JULIO CARE	Random Patrois		Facility: Existing
	After-hours Security		
	Checks Recorded		
	Command and Control		
	MOU/MOU		
0 85 100	0	20 40 60	80 100

Greater understanding of the most significant changes and trends.

Notional Information

* Information provided is notional ECIP survey information and does not contain real survey information

I Dash



PMI Dashboard

PMI Da

Dashboard – Physical Security Example





Notional Information

Infrastructure Survey Tool

- New version roll-out on January 8, 2013
- Web-Based Tool
 - New tabs
 - Same "buttonology"
 - Still can have an Access Builder
- Major Changes
 - Physical Security is almost the same and generates the Protective Measures Index (PMI)
- Data contained on this system is Protected Critical Infrastructure Information lnfrastructure Survey Tool PCII-IST-IL-000981-000 Instructions: Answer all the survey questions. Clicking "Save & Continue" at the bottom of the page will save changes and continue to the next section A printable blank template and manual are available under the help icon in the upper right corner. The 🌒 icons next to the questions display additions elp when the mouse is placed over the icon. Areas highlighted in yellow are included in the SAV report. RMI sections are denoted by the color 📕, an PMI sections are denoted by the color ace your mouse over this help icon (🔮) to view general help for this page ace your mouse over this help icon (2) to view comments and briefing note acility Infor Survey Date Other facility n (replicate as n Vho completed the SAV National Guard FTL/PSA Name Other (e.g., SME)
- More on resilience and business continuity to generate the new Resilience Measurement Index (RMI)
- Natural hazard mitigation is more detailed
- Dependencies questions incorporate RRAP-Only tab questions



Other Products and Resources

- DHS InfraGard
- DHS Homeland Security Information Network (HSIN)
- DHS Vulnerability Assessments
- DHS Infrastructure Protection Report Series
- DHS Bomb-making Materials Awareness Program
- DHS TRIPwire and Security Training



InfraGard

- http://www.infragard.net
- InfraGard is an information-sharing and analysis effort serving the interests and combining the knowledge base of a wide range of members.
- At its most basic level, InfraGard is a partnership between the Federal Bureau of Investigation and the private sector
- InfraGard is an association of businesses, academic institutions, State and local law enforcement agencies, and other participants dedicated to sharing information and intelligence to prevent hostile acts against the United States



Homeland Security Information Network

- HSIN is DHS's primary technology tool for trusted information sharing
- HSIN Critical Sectors (HSIN-CS) enables direct communication between DHS; Federal, State, and local governments; and infrastructure owners and operators
- Content Includes:
 - Planning and Preparedness: Risk assessments, analysis, guidance, and security products; geospatial products and hurricane models; exercise and national event info
 - Incident Reporting and Updates: Real-time situational reports and alerts
 - Situational Awareness: Daily and monthly sector-specific and cross-sector reports on topics ranging from cybersecurity to emerging threats
 - Education and Training: Training on topics ranging from critical infrastructure resilience, to threat detection and reaction for retail staff



Vulnerability Assessment Programs

- Site Assistance Visits
 - Brings together Federal, State, and local partners and owners and operators to conduct an "inside the fence" assessment that identifies significant assets, vulnerabilities, protective measures, critical dependencies, and options for improving security and resilience. The findings are compiled in a final product that is PCII-protected
- Computer Based Assessment Tool
 - A computer-based visual cross-platform tool that displays critical site assets and current security postures
 - Integrates assessment data with immersive video, geospatial, and hypermedia data
 - Assists owners and operators, local law enforcement, and emergency response personnel, to prepare for, respond to, and manage critical infrastructure, National Special Security Events, high-level special events, and contingency operations





Homeland Security

Infrastructure Protection Report Series



- The Infrastructure Protection Report Series (IPRS) is developed by the Office of Infrastructure Protection (IP) to increase awareness of the infrastructure mission and build a baseline of security and resilience knowledge throughout the Nation
- The focus of the IPRS is to identify Common Vulnerabilities (CV), Potential Indicators (PI) of Terrorist Activity, and associated Protective Measures (PM), along with actions that can be undertaken to enhance the resilience of critical infrastructure facilities
- Currently under development: IPRS Resilience Series and the IPRS Integrated Reports (CV, PI, PM)





Bomb-Making Materials Awareness



- Comprehensive effort to educate law enforcement and private sector suppliers of materials used in the manufacture and construction of Improvised Explosive Devices (IED) of the potential risks associated with the sale or theft of those products
 - Point-of-Sale Awareness
 - Notification Processes
 - Supply Chain Awareness
 - Law Enforcement Training Material
 - Facilitates partnerships between local law enforcement and private sector
 - Encourages the retail industry to take an active role in bombing prevention efforts at little or no cost



TRIPwire and TRIPwire Community Gateway

- TRIPwire Online unclassified network for law enforcement having bombing prevention responsibilities to discover and share tactics, techniques, and procedures of terrorist IED use
 - Combines expert analysis with relevant documents gathered from terrorist sources to assist law enforcement's ability to anticipate, identify, and prevent IED incidents
- TRIPwire Community Gateway Brings timely bombing prevention awareness information and analysis to the private sector with bombing prevention responsibilities
 - Responds to increasing private sector demand for bombing prevention information and assistance
 - Leverages content, expertise, and reputation of the existing TRIPwire system
 - Shares information on common site vulnerabilities, potential threat indicators, and effective protective measures for the 18 critical infrastructure sectors through HSIN-CS



Risk Mitigation Training

- IED Awareness/Bomb Threat Management Workshop
 - Provides an IED overview and focuses on the steps for managing bomb-related threats by outlining specific mitigation and response strategies to deal with explosive incidents and bomb threats
- IED Search Procedures Workshop
 - Enhances participants' knowledge of IED awareness, prevention measures, and planning protocols by outlining specific search techniques that reduce vulnerability and mitigate the risk of terrorist IED attacks
- Protective Measures Course
 - Provides owners and operators in the public and private sectors with the knowledge to identify the appropriate protective measures for their unique sector
- Surveillance Detection Course for Law Enforcement & Security Professionals
 - Provides participants with the knowledge, skills, and abilities to detect hostile surveillance conducted against critical infrastructure



Risk Mitigation Training (cont.)

- IED Counterterrorism Workshop
 - Enhances the knowledge of State and local law enforcement and public and private sector stakeholders by providing exposure to key elements of the IED threat, surveillance detection methods, and soft target awareness
- Counter-IED/Bomb Threat Management Workshop (Executive Level)
 - High-level workshop, designed for executives and critical infrastructure owners, provides exposure to key elements of the IED threat, soft target awareness, bomb threat management planning, and mitigation cost considerations in order to inform risk management planning



How Can You Help?

- Engage with PSAs and other partners on critical infrastructure protection programs and initiatives
- Encourage participation in efforts to identify, assess, and secure critical infrastructure in your community
- Communicate local critical infrastructure protection related concerns
- Enhanced protection and resilience depends on developing and strengthening partnerships between all entities with a role in critical infrastructure protection



Summary

- Success will depend in part on the strength of our partnership
- Our approach to addressing the terrorism threat will be a long term, ongoing project of the highest priority
- This effort will require the highest degree of vigilance and dedication from all of us





Homeland Security

For more information visit: www.dhs.gov/criticalinfrastructure Frank Westfall Regional Director Franklin.Westfall@dhs.gov