Partnering for Critical Infrastructure Security and Resilience

Government-University-Industry Research Roundtable

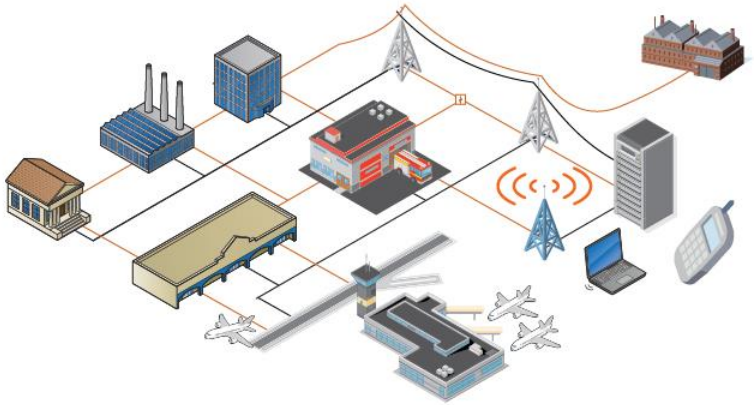
February 2016

Homeland Security

Strategic Drivers

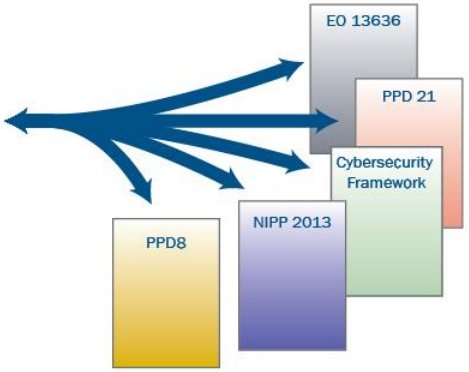
Diverse Stakeholders

Complex Interdependencies



Evolving Threats

National Policies



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Critical Infrastructure Today

***Critical Infrastructure defined**: "Assets, systems, and networks, whether physical or virtual, so vital to the United States that their incapacitation or destruction would have a debilitating effect on national security, economic security, national public health or safety, or any combination thereof."*

16 Critical Infrastructure Sectors

- Chemical
- Commercial Facilities
- Communications
- Critical Manufacturing
- Dams
- Defense Industrial Base
- Emergency Services
- Energy
- Financial Services
- Food & Agriculture
- Government Facilities
- Healthcare and Public Health
- Information Technology
- Nuclear Reactors, Materials and Waste
- Transportation Systems
- Water & Wastewater Systems

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Today's Risk Landscape

America remains at risk from a variety of threats including:

- Acts of Terrorism
- Cyber Attacks
- Extreme Weather
- Pandemics
- Accidents or Technical Failures
- International

NIPP 2013 offers a distributed approach for addressing the diverse and evolving risk environment.

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NIPP Vision

*A Nation in which physical and cyber critical infrastructure remain **secure** and **resilient**, with vulnerabilities reduced, consequences minimized, threats identified and disrupted, and response and recovery hastened*

Security: *Reducing the risk to critical infrastructure by physical means or defensive cyber measures to intrusions, attacks, or the effects of natural or manmade disasters*

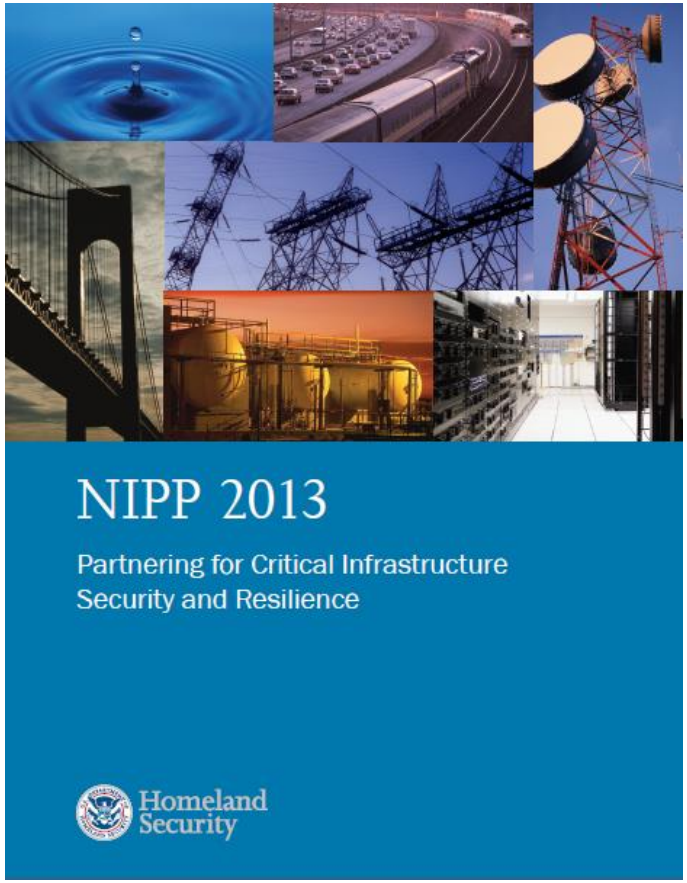
Resilience: *The ability to prepare for and adapt to changing conditions, and withstand and recover rapidly from disruptions*

NIPP 2013 Goals

- *Assess and analyze critical infrastructure threats, vulnerabilities and consequences to inform risk management*
- *Address multiple threats through sustainable efforts to reduce risk; account for costs and benefits of security investments*
- *Enhance critical infrastructure resilience; minimize the adverse consequences of incidents…as well as conduct effective responses…*
- *Share actionable and relevant information across the critical infrastructure community to build awareness and enable risk-informed decision making*
- *Promote learning and adaptation during and after exercises and incidents*

Core Tenets

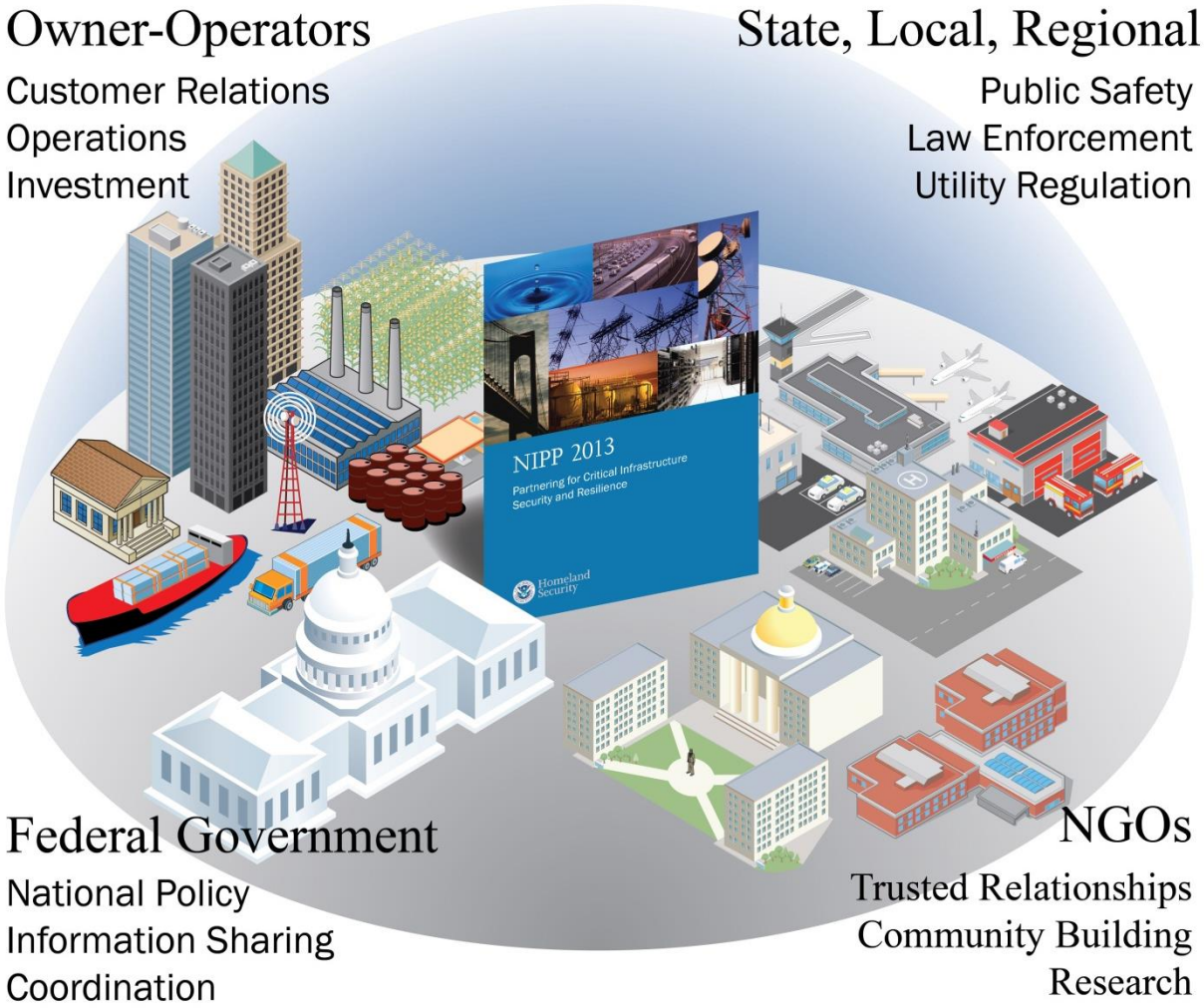
- Coordinated and comprehensive risk identification and management
- Cross-sector dependencies and interdependencies
- Enhanced information sharing
- Comparative advantage in risk mitigation
- Regional and SLTT partnerships
- Cross-jurisdictional collaboration
- Security and resilience by design



Many Stakeholders, Many Strengths

Comparative Advantage

- Engaging in collaborative processes
- Applying individual expertise
- Bringing resources to bear
- Building the collective effort
- Enhancing overall effectiveness



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Call to Action

A whole of community approach to advancing the national effort

Build on Existing Partnerships

Innovate in Managing Risk

Focus on Outcomes

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Call to Action

Build upon Partnership Efforts

- Set National Focus through Joint Priority Setting
- Determine Collective Actions through Joint Planning Efforts
- Empower Local and Regional Partnerships to Build Capacity Nationally
- Leverage Incentives to Advance Security and Resilience

Call to Action

Innovate in Managing Risk

- Enable Risk-Informed Decision-Making through Enhanced Situational Awareness
- Analyze Infrastructure Dependencies, Interdependencies, and Associated Cascading Effects
- Rapidly Identify, Assess, and Respond to… Cascading Effects During and Following Incidents
- Promote Infrastructure, Community, and Regional Recovery
- Strengthen Coordinated Technical Assistance, Training, and Education
- Improve Critical Infrastructure Security and Resilience by Advancing R&D Solutions

Call to Action

Focus on Outcomes

- Evaluate Achievement of Goals
- Learn and Adapt During and After Exercises and Incidents

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