The Office of Infrastructure Protection

National Protection and Programs Directorate
Department of Homeland Security

Regional Resiliency Assessment Program

USACE

May 03, 2018
The goal of the Regional Resiliency Assessment Program (RRAP) is to generate greater understanding and action among public and private sector partners to improve the resilience of a region’s critical infrastructure.

- Resolves infrastructure security and resilience knowledge gaps
- Informs risk management decisions
- Identifies resilience-building opportunities and strategies
- Improves critical partnerships among stakeholders
Infrastructure Resilience

- Resilience: “the ability to prepare for and adapt to changing conditions and withstand and recover rapidly from disruptions”

 Courtesy: DHS
Knowledge Gaps

- What infrastructure exists in a region?
- How does the infrastructure operate and what does it need?
- How important is the infrastructure to the region?
- How are infrastructure systems interconnected?
- What hazards could most disrupt regional infrastructure?
- What capability and planning gaps exist in the region?
- Are there opportunities to strengthen resilience?
RRAP Project Lifecycle

- RRAPs have a 3-year funding lifecycle
- Key Activities include:
  - Data collection
  - Analysis
  - Implementation
- Participation requirements vary throughout the project’s lifecycle
Typical RRAP Activities

**Scoping**
- Goals and objectives
- Research questions
- Stakeholders
- Data needs
- Products
- Implementation activities

**Data Collection**
- Outreach meetings
- Facilitated discussions
- SME interviews
- Site/system assessments
- Observing exercises

**Analysis**
- Infrastructure system modeling
- Geospatial
- Economic
- Supply chain
- Hazard analysis
- Literature review
- Data synthesis

**Product Development**
- Summary report
- Interactive mapping products
- Dependency visualizations
- Infrastructure data sheets
- Technical reports
Maritime Projects

- 17 projects addressing different aspects and issues of maritime transportation operations

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<th>FY 2014</th>
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<tr>
<td>Savannah, GA</td>
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McAlpine Locks and Dam Project

- Examine impacts of catastrophic failure of the McAlpine L&D on:
  - River navigation
  - Critical manufacturing
  - Hydroelectric and coal-fired power generation
  - Municipal water systems

- Identify potential near-term transportation alternatives

- Address prioritization of river-borne transport following recovery of the pool post-disruption

Source: Argonne National Laboratory

Homeland Security

Presenter's Name          June 17, 2003
Recovery of Waterway Analysis

Courtesty of the University of Mississippi
Dependency & Interdependency of Lifeline and other critical infrastructure in southwest Jefferson County

- Lifeline: electricity, natural gas, water, wastewater, transportation sectors (road, rail, and pipeline), and emergency communications
- Added hospitals
- Specific area of interest “Rubbertown” facilities
Example Geospatial Products

Source: Idaho National Lab
Example Geospatial Products

Source: Idaho National Lab
Dependencies & Interdependencies

Source: DHS IP Gateway
Dependency Tool Mapping

Source: DHS IP Gateway
Preliminary Findings

- Extent of inundation and CI impacts is truly significant
- Just because you are high and dry doesn’t mean you won’t be impacted
- Most facilities in Rubbertown don’t have flood plans (perhaps not so much a need in the past, but with new normal climate and aging infrastructure, necessary)
- Need to identify a process with critical factors/trigger points for initiating preparedness activities
- Need to collectively make decisions on priorities for moving hazardous materials
Getting Involved

- Share sector or organizational priorities for study with RRAP program office
- Nominations for projects are submitted annually
- Work with local DHS/IP Protective Security Advisors (PSAs) and Regional Director to develop and submit nominations
- Nominations are reviewed and compared, with final projects selected by the DHS/IP Assistant Secretary
For more information, visit: www.dhs.gov/critical-infrastructure

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