

National Infrastructure Advisory Council (NIAC)



Regional Resilience Working Group

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Constance H. Lau

*President and Chief Executive Officer,
Hawaiian Electric Industries, Inc.*
Co-Chair

Dr. Beverly Scott

*General Manager/CEO
Metropolitan Atlanta Rapid Transit Authority*
Co-Chair

Agenda

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Background

- At its April 17, 2012 Quarterly Business Meeting, the Council approved the recommendation of the Regional Resilience Scoping Working Group to launch a new study that
 - Builds on prior Council studies and incorporates a strong element of regionalization of resilience.
 - Focuses on the Northeastern U.S., the lifeline sectors (energy, water, transportation, and telecom), and key sectors important to the Northeast, and has applicability to other regions of the U.S.
 - Involves Council members who have experience and expertise in one or more of the regions or sectors of interests.
- Federal Government representatives affirmed that the study should proceed. A Regional Resilience Working Group was formed and the study was launched.

Working Group Members

WG Member	Sector Experience
Constance H. Lau , <i>President and Chief Executive Officer, Hawaiian Electric Industries, Inc. (HEI), Co-Chair</i>	Electricity, Financial Services
Beverly Scott , <i>General Manager/CEO Metropolitan Atlanta Rapid Transit Authority (MARTA), Co-Chair</i>	Transportation
Jack Baylis , <i>Executive Director and Senior Vice President for The Shaw Group</i>	Water
Glenn S. Gerstell , <i>Managing Partner, Milbank, Tweed, Hadley, & McCloy LLP</i>	Water, Telecommunications
David J. Grain , <i>Founder and Managing Partner, Grain Management</i>	Telecommunications
Margaret E. Grayson , <i>President, Grayson Associates</i>	IT, Defense Industrial Base
James A. Reid , <i>President, Eastern Division, CBRE, Inc.</i>	Commercial Facilities
Michael J. Wallace , <i>Former Vice Chairman and COO, Constellation Energy</i>	Electricity, Nuclear

Status Update

- ❑ Two members added, 5 meetings conducted
- ❑ Reaffirmed and refined study scope
- ❑ Agreed on study objectives
- ❑ Selected Philadelphia and surrounding region to serve as a case study on regional resilience
- ❑ Agreed on preliminary study framing questions
- ❑ Reviewing federal, state, and local authorities

Defining Regional Resilience

Working Definition of Regional Resilience¹:

The ability to reduce the magnitude and/or duration of disruptive events.

The effectiveness of a resilient **regional** infrastructure depends upon the ability to anticipate, **avoid**, absorb, adapt to, rapidly recover from, **work together**, and **learn** from a potentially disruptive event.

¹ Based on NIAC reports on resilience (*Critical Infrastructure Resilience* 2009, and *A Framework for Establishing Critical Infrastructure Resilience Goals* 2010)

Study Objectives

- 1. Best Practices:** Identify the characteristics that make a region resilient and the steps that can be taken by critical infrastructure owners and operators; federal, state, and local government; and the private sector to improve resilience within their region.
- 2. Process Improvements:** Determine how public and private critical infrastructure partners can work together to improve regional resilience.
- 3. Federal Role:** Recommend how federal government capabilities and resources can help accomplish resilience goals and address any gaps that can help regions become more resilient.

Study Region: Philadelphia

- Philadelphia combined statistical area (CSA):
 - 6.6 million people, 8th largest CSA in the US
 - Complex region spans four states (PA, NJ, DE, MD)
 - Economically significant: \$331 million GDP in 2008
 - Contains key critical infrastructures with complex interdependencies (energy, transportation, chemicals, banking and finance, commercial facilities, public health and healthcare)
 - Close in population and GDP to other major US cities
- Extend examination to Baltimore and Washington regions for lifeline sectors

Framing Questions for Regional Resilience: Best Practices

What are best practices for regional resilience?

- ❑ What are the characteristics that make some regions more resilient than others?
- ❑ How do regions manage their critical infrastructure to increase their resilience?
- ❑ How do public-private partnerships and relationships affect regional resilience?
- ❑ What is the relationship between infrastructure and economic resilience? Do owners and operators benefit from and value regional resilience?
- ❑ How can regions mitigate risks associated with infrastructure interdependencies?

Framing Questions for Regional Resilience: Process Improvements

How can public and private CIKR partners work together to improve regional resilience? What steps can be taken by CIKR owners and operators, state and local jurisdictions, and the private sectors to improve resilience within their region?

- What is the protocol for engaging public and private stakeholders before, during, and after an event? What mechanisms are available?
 - What can the federal government do to rapidly bringing together key public and private decision makers/executives to direct resources to mitigate risk?
 - What is the interplay among major cities, between sectors, and between stakeholders of those sectors, especially users?
 - What processes and structures exist or are needed to address unforeseen catastrophic events?
- What are the respective roles of the private sector, local and state governments, community organizations, and the federal government to recover from a large scale regional event?
 - What federal and state authorities and legal framework exist for responding to disasters?
 - How are resources allocated for recovery after a major disaster?
- What barriers exist to effective private sector coordination, such as security clearances, that inhibit sharing of information?

Framing Questions for Regional Resilience: Federal Role

How can federal government capabilities and resources best accomplish resilience goals and address any gaps to make regions more resilient?

- ❑ What is the federal role in helping regions to bring together stakeholders to identify gaps and help improve their protective posture?
- ❑ What can the federal government itself do (in terms of its own organization) to address proper planning for events to improve resilience? For example, could the federal government use predesignated incident commanders to work with the private sector?
- ❑ What agencies of the federal government need to work together more effectively – e.g., new roles, structures, and authorities needed to improve resilience – prior to an event occurring?
- ❑ What are the triggers that elevate a scenario to require federal engagement?
 - What are the benchmarks for the trigger points and what are the responsibilities at these points?
- ❑ What are the implications of a major loss of CI services to federal facilities in the Philadelphia-DC corridor?

Preliminary Approach

- Review best practices and legal authorities
- Develop a hypothesis of effective regional resilience
- Conduct a case study of the Philadelphia metropolitan area
 - Examine resilience of key critical infrastructure sectors within Philadelphia's combined statistical area
 - Examine resilience of the lifeline sectors (energy, water, transportation, and telecommunications) into the Baltimore and Washington area to capture major regional interdependencies
 - Strain critical infrastructures to reveal gaps in regional resilience
 - Examine the impact of events on federal facilities
- Use case study results to pressure test hypothesis in other regions for general applicability
- Recommend federal government measures, consistent with legal authorities and appropriate federal role, to improve resilience before, during, and after a regional incident

Next Steps

- ❑ Continue review of legal authorities
- ❑ Continue review of studies of regional and community resilience
- ❑ Initiate interviews to understand
 - Best practices in regional resilience
 - What works well, what doesn't
 - Key gaps in regional resilience
- ❑ Examine options for straining critical infrastructures in a regional scenario
- ❑ Capture lessons from June mid-Atlantic "derecho" storm
- ❑ Invite Council members to participate as experts
- ❑ Incorporate input from July 17 NIAC meeting

Questions for the Administration

1. What factors are driving the Administration's emphasis on improving regional resilience? In what ways can regional resilience reduce critical infrastructure risks beyond the sector-specific efforts being pursued at the national level?
2. Are there particular security concerns or gaps regarding critical infrastructure failures across regions?
3. Are there particular issues or gaps that the NIAC should focus on regarding the public and private sector roles in making regions more resilient?
4. Is the Administration interested in having NIAC examine the impact of regional critical infrastructure failures on federal facilities that depend on these infrastructures?
5. There are already many public and private guides, models, and resources to help regions become more resilient. How can the NIAC add to this conversation?
6. Could the Administration provide some insight on how the National Planning Frameworks outlined under PPD-8 will evolve so that we can understand the context against which our study will be done and the inject points where the output of our study could help inform what you are developing?