

National Infrastructure Advisory Council

Meeting Minutes for the July 29, 2013 Quarterly Business Meeting

Page 1 of 12

NATIONAL INFRASTRUCTURE ADVISORY COUNCIL

QUARTERLY BUSINESS MEETING AGENDA

July 29, 2013

1:30 p.m. – 4:30 p.m. EDT

United States Access Board

1331 F Street NW, Washington, DC 20001

- | | |
|--|---|
| I. OPENING OF MEETING | <i>Nancy J. Wong</i> , Designated Federal Officer (DFO), National Infrastructure Advisory Council (NIAC), Department of Homeland Security (DHS) |
| II. ROLL CALL OF MEMBERS | <i>Nancy J. Wong</i> , DFO, NIAC, DHS |
| III. OPENING REMARKS AND INTRODUCTIONS | <i>Constance H. Lau</i> , NIAC Chair

<i>Nitin Natarajan</i> , Director, Critical Infrastructure Policy, National Security Staff |
| IV. APPROVAL OF APRIL 8, 2013 MINUTES | <i>Constance H. Lau</i> , NIAC Working Group Chair |
| V. NIAC PRESENTATION REGIONAL RESILIENCE WORKING GROUP | <i>Constance H. Lau</i> , NIAC Working Group Chair

<i>Dr. Beverly Scott</i> , NIAC Working Group Co-Chair |
| V. PUBLIC COMMENT: DISCUSSION LIMITED TO MEETING AGENDA ITEMS AND PREVIOUS NIAC STUDIES | <i>Nancy J. Wong</i> , DFO, NIAC, DHS |
| VI. REGIONAL RESILIENCE WORKING GROUP DELIBERATIONS | <i>Constance H. Lau</i> , NIAC Chair |

National Infrastructure Advisory Council

Meeting Minutes for the July 29, 2013 Quarterly Business Meeting

Page 2 of 12

- VII. UPDATE AND DISCUSSION ON EXECUTIVE ORDER 13636-PRESIDENTIAL POLICY DIRECTIVE 21 WORKING GROUP** *Mr. David Kepler, EO-PPD Working Group Co-Chair*
Mr. Philip Heasley EO-PPD Working Group Co-Chair
- VIII. UPDATE AND DISCUSSION ON EXECUTIVE ORDER 13636 AND PRESIDENTIAL POLICY DIRECTIVE 21** *Nitin Natarajan, Director, Critical Infrastructure Policy, National Security Staff*
- IX. IDENTIFICATION OF POTENTIAL AREAS TO RECOMMEND FOR NEXT NIAC STUDY** *Nancy J. Wong, DFO, NIAC, DHS*
- X. CLOSING REMARKS** *Constance H. Lau, NIAC Chair*
Suzanne Spaulding, Acting Under Secretary for the National Protection and Programs Directorate, DHS (invited)
Nitin Natarajan, Director, Critical Infrastructure Policy, National Security Staff

National Infrastructure Advisory Council

Meeting Minutes for the July 29, 2013 Quarterly Business Meeting

Page 3 of 12

MINUTES

NIAC MEMBERS PRESENT IN WASHINGTON:

Mr. Glenn Gerstell; Ms. Margaret Grayson; Ms. Constance Lau; Mr. James Nicholson; Dr. Beverly Scott

NIAC MEMBERS ATTENDING VIA CONFERENCE CALL:

Mr. Jack Baylis; Mr. Albert Edmonds; Mr. Philip Heasley; Mr. David Kepler; Mr. Thomas E. Noonan; Mr. James Reid; Mr. Bruce Rohde

MEMBERS ABSENT:

Mr. David Bronczek; Mr. Gilbert Gallegos; Commissioner Raymond Kelly; Mr. Donald Knauss; Mr. Gregory Peters; Mr. Michael Wallace; Mr. Greg Wells; Mr. David Grain

SUBSTANTIVE POINTS OF CONTACT PRESENT IN WASHINGTON:

Mr. Ted Basta (for Dr. Beverly Scott); Ms. Joan Gehrke (for Mr. James Nicholson); Mr. Rick Houck (for Ms. Constance H. Lau)

SUBSTANTIVE POINTS OF CONTACT ATTENDING VIA CONFERENCE CALL:

Mr. Ryan Beck (for Commissioner Raymond Kelly); Mr. Guarav Wallawalker (for Mr. David Grain)

OTHER DIGNITARIES PRESENT:

Mr. Nitin Natarajan, NSS; Ms. Nancy Wong, DFO, NIAC, DHS

National Infrastructure Advisory Council

Meeting Minutes for the July 29, 2013 Quarterly Business Meeting

Page 4 of 12

I, II. OPENING OF MEETING, ROLL CALL *Nancy J. Wong, DFO, NIAC, DHS*

Nancy Wong opened the meeting and called the roll. She then turned the meeting over to Constance Lau, NIAC Chair, and Dr. Beverly Scott, NIAC Vice Chair.

III. OPENING REMARKS AND INTRODUCTIONS

Constance H. Lau, NIAC Chair

Nitin Natarajan, Director, Critical Infrastructure Policy, National Security Staff

Ms. Lau welcomed NIAC members and Federal Government representatives in attendance, and provided an overview of the meeting. Topics included a status report from the Regional Resiliency Working Group (RRWG), an update from the Executive Order 13636 (EO) and Presidential Policy Directive 21 (PPD-21) Implementation Working Group (EO-PPD WG), and discussion on potential areas for the next NIAC study. Ms. Lau then provided time for administration officials and Dr. Beverly Scott, NIAC Vice Chair, to provide opening remarks.

Dr. Scott thanked Ms. Wong, Ms. Lau, and members of the Council for their attendance, and offered her appreciation to administration and DHS officials for their interest in remaining aware of the Council's projects. She also expressed her gratitude to RRWG Study Group members for their work to improve resiliency, as their report had been delivered to the RRWG earlier in the day, highlights of which would be shared later in the meeting as part of the RRWG's update to the full Council.

Mr. Natarajan thanked NIAC members and noted that the Administration pays close attention to the Council's recommendations, as members' insight and perspective differ greatly from other councils and organizations. He added that the critical infrastructure threat environment is shifting, with the terrorism-focused approach being replaced with an all-hazards approach that includes attention toward aging infrastructure and the cascading effects associated with the failure of an asset. Mr. Natarajan noted that the Administration's goal is to generate policies in the best interest of the public.

IV. APPROVAL OF APRIL 8, 2013 MINUTES

Constance H. Lau, NIAC Working Group Chair

Following the opening remarks, Ms. Lau initiated a review of the meeting minutes from the April 8th Quarterly Business Meeting. The minutes were approved unanimously.

National Infrastructure Advisory Council

Meeting Minutes for the July 29, 2013 Quarterly Business Meeting

Page 5 of 12

V. NIAC PRESENTATION REGIONAL RESILIENCE WORKING GROUP

Constance H. Lau, NIAC Working Group
Chair

Dr. Beverly Scott, NIAC Working Group
Co-Chair

Dr. Scott began by thanking Study Group participants and the Council's non-RRWG members for their contributions to the case study report on Superstorm Sandy. She explained that in the next 2 months, the Working Group will be developing recommendations to present to the full Council. On August 5, the Working Group will review a detailed report outline and plans to begin reviewing the full draft report by August 23 in order to complete the report for full council review and approval at the next Quarterly Business Meeting on October 7, 2013.

Mr. Rick Houck, Chair of the Regional Resilience Study Group, then outlined the Study Group's findings.

He noted that there are commonalities between many of the Sandy-related findings and those from prior disasters. The severity and scale of Superstorm Sandy did also lead to unique observations related to the complexities of dealing with such wide-ranging damage, and several interdependencies became apparent as a result. Key findings include:

- It is vital to maintain the continuity of lifeline sector services
- Strong public-private partnerships were central to successful response efforts
- Planning, analysis, and risk management at the regional level are essential to developing long-term resilience
- Complex rules and regulations still pose impediments to rapid response and recovery efforts
- Effective communication at all levels of government and the private sector were pivotal to successful response efforts during Superstorm Sandy
- Regional resilience is reliant on the capacity of individuals and communities to become self-sufficient for short-term survival

Dr. Scott described the Working Group's preliminary findings as belonging to one of three areas of focus:

- Foundational findings on what is needed to improve the regional resilience of critical infrastructure sectors
- Regional coordination and communication are central to response efforts
- The importance of investment in resilient infrastructure

National Infrastructure Advisory Council

Meeting Minutes for the July 29, 2013 Quarterly Business Meeting

Page 6 of 12

Dr. Scott then expanded on the Working Group's foundational findings.

The first foundational finding is that all regions are different, and require a tailored approach based on the forms and density that critical infrastructure takes within a given region. Dr. Scott noted that such flexibility is important, as it avoids imposing a uniform standard on varied regions, while also allowing infrastructure partners to determine the most critical sectors within a region.

The second foundational finding is that in the context of national security and resilience, there are four lifeline sectors — Water, Energy, Communications, and Transportation — that are vital in all regions, and as a result should be given top priority for resilience enhancement. Lifeline sectors underpin the continuity of operations for all critical infrastructure sectors, and the absence of these services can present potentially life-threatening conditions.

The Working Group's third foundational finding is that strong public-private partnerships and active cross-sector coordination are the most important factors in establishing regional resilience. Dr. Scott noted that the Nation is in a transformative period with regard to public-private partnerships; institutions and models for businesses and funding are transforming as such partnerships become an integral part of operations. Dr. Scott commented that as a result of these evolutionary connections, there are new opportunities for proactive engagement that did not exist before.

The fourth foundational finding emphasizes the value of executive-level engagement in establishing strong, effective public-private partnerships. The involvement of senior officials allows for the streamlining of response and coordination efforts, as well as for the expediting of the decision-making process. Dr. Scott commented that during Superstorm Sandy, partnerships with executive-level involvement were able to bypass many of the bureaucratic issues that can delay response to a disaster.

Dr. Scott then discussed the Working Group's fifth foundational recommendation: Nonprofits and local organizations play an essential role in preparing communities for catastrophic events, and play a key part in long-term recovery efforts. Nonprofits have an ability to mobilize resources faster than the Federal Government can, as such organizations do not have to wait for a state or community to request assistance. Similarly, community groups naturally have an understanding of their support areas that the Federal Government could not achieve, simply by virtue of the number of communities that exist nationwide.

The sixth foundational finding is that interdependencies are not well understood by the businesses, governments, and communities. Increasing connections among local and regional lifeline sector critical infrastructure networks are creating more hidden risks and revealing others that were previously unknown — and present dangers to multiple jurisdictions, and across

National Infrastructure Advisory Council

Meeting Minutes for the July 29, 2013 Quarterly Business Meeting

Page 7 of 12

geographic areas. Dr. Scott noted that joint regional exercises are one of the most effective means of finding and addressing such independencies and improving response capabilities.

The seventh foundational finding from the Working Group is that incident response personnel continue to encounter complex rules and regulations that prevent rapid access to critical infrastructure assets and facilities within disaster areas, preventing timely restoration of essential services. Dr. Scott commented that similar issues have been catalogued by the Council in previous reports, and that while coordination has improved, challenges remain. She noted that state and local law enforcement sometimes unintentionally delay service restoration as a result.

Dr. Scott noted that the eighth foundational recommendation — that social media has emerged as a powerful tool for communicating and collecting data to improve situational awareness, inform decision-making, and dispel rumors — is one of particular importance to the Working Group. Public and private sector partners are still learning how social media can be used as a tool for situational awareness and mitigating rumors, though Dr. Scott emphasized the importance of proactive engagement. She commented that the subject has not been studied prior to the NIAC's examination of the subject, and that as a result, findings are still limited.

The ninth foundational recommendation notes that owners and operators have had difficulty establishing a strong enough value proposition to justify investment in infrastructure upgrades. While owners and operators appreciate the goals of sustainability and the benefits of upgrades for the community, the ultimate budgetary effect for those improvements is often a net negative. As a result, there is a need for public support for such enhancements, via cost recovery mechanisms and similar incentives. Dr. Scott added that the changing models for businesses and funding make such changes in approach vital to the process of enhancing resilience.

The Working Group's 10th finding addresses the value of building resilience into upgrades and repairs, in order to create inherently resilient infrastructure. Innovative technologies offer owners and operators the opportunity to build, rebuild, and upgrade smarter, creating inherently resilient systems whose costs can be justified and recouped.

The final Working Group finding references the need for a consistent, agreed-upon benchmarking system that would allow owners and operators to compare the resilience of their facilities against a resilience standard. This would help regional partners understand the threat environment and their own vulnerabilities. Regional partners would then be able to take appropriate steps to become more resilient.

Mr. Natarajan thanked Working Group members, for their input, and noted the uniqueness of the recommendations.

National Infrastructure Advisory Council

Meeting Minutes for the July 29, 2013 Quarterly Business Meeting

Page 8 of 12

**VI. REGIONAL RESILIENCE
WORKING GROUP
DELIBERATIONS**

Constance H. Lau, NIAC Chair

Mr. Kepler complimented the RRWG for its preliminary findings. He commented that the process of mobilizing private sector participants in disaster response efforts is not firmly established, and that the Council should explore best practices in that regard. He noted that when lifeline sector contingencies have failed in the past, outside companies have been pulled in from other regions in an untimely and ad hoc process.

Mr. Nicholson commented that the Working Group should provide as much detail as possible with regard to benchmarking recommendations, as the private sector greatly appreciates guidance on how to improve resilience.

Ms. Grayson commented that the Working Group's study of the interdependencies associated with lifeline sectors has been an important step forward, and noted her gratitude for the comments provided by non-RRWG members, as well as the opportunity to participate in the Working Group.

Mr. Gerstell encouraged the Council to develop specific recommendations with the support of expertise offered by the Council's membership. He also suggested that social media will be a driving force and a meaningful contribution for the Council's future recommendations at the end of the study.

Council members then approved the motion to concur with the findings of the Working Group. Ms. Lau emphasized that these are preliminary findings and are subject to change.

**VII. UPDATE AND DISCUSSION ON
EXECUTIVE ORDER 13636-
PRESIDENTIAL POLICY
DIRECTIVE 21 WORKING
GROUP**

*Mr. David Kepler, EO-PPD Working Group
Co-Chair*

*Mr. Philip Heasley EO-PPD Working
Group Co-Chair*

Ms. Lau then introduced Mr. David Kepler and Mr. Philip Heasley, Co-Chairs of the EO-PPD WG. She noted that the EO-PPD WG had held a public meeting on July 17, and asked if the Working Group had any updates to make.

Mr. Kepler noted the efficacy of engagement has been efficient between the EO-PPD WG and the Federal Government, and explained that the Working Group has been able to provide feedback and receive timely answers to clarification questions.

National Infrastructure Advisory Council

Meeting Minutes for the July 29, 2013 Quarterly Business Meeting

Page 9 of 12

Ms. Lau noted that the EO-PPD WG is a different way for the Council to contribute and that she and the other Council members appreciate Mr. Kepler and Mr. Heasley's efforts.

VIII. UPDATE AND DISCUSSION ON EXECUTIVE ORDER 13636 AND PRESIDENTIAL POLICY DIRECTIVE 21 *Nitin Natarajan, Director, Critical Infrastructure Policy, National Security Staff*

Mr. Natarajan noted his appreciation to the EO-PPD WG for its input, and then updated the Council on the activities of the Administration and the Integrated Task Force (ITF). He explained that DHS has been tasked to lead the ITF with the help of other Federal Government partners, private sector partners, and state and local government partners. The ITF has eight working groups to meet the deliverables set forth by the EO and PPD-21. He noted the upcoming deadline for the third deliverable for PPD-21, which concerns data modeling. Mr. Natarajan also noted that DHS has made all deadlines and deliverables to date, and that all future deadlines and deliverables will coincide with the rewrite of the National Infrastructure Protection Plan (NIPP) later this year.

Mr. Natarajan added that the NIPP rewrite is the beginning of an aggressive and continuous implementation process to integrate physical and cyber infrastructure security and resilience under an all-hazards approach. He also noted that many of the issues discussed during the meeting were not under consideration 5 to 10 years ago. He again thanked the NIAC for their continued work.

Mr. Lau thanked Mr. Natarajan for his comments, and reiterated her gratitude to Mr. Kepler and Mr. Heasley for their leadership of the EO-PPD WG.

IX. IDENTIFICATION OF POTENTIAL AREAS TO RECOMMEND FOR NEXT NIAC STUDY *Nancy J. Wong, DFO, NIAC, DHS*

Ms. Wong then initiated a discussion concerning possible for next study topics. She asked Mr. Natarajan to begin the discussion for the Government.

Mr. Natarajan commented that after Superstorm Sandy and other disaster events, energy and transportation issues have been major focuses for the Administration. He noted that transportation — and specifically public transportation — is less understood. Mr. Natarajan noted that while the Superstorm Sandy Task Force has been considering transportation issues for the New York metropolitan area, every municipality has a different configuration and different challenges. He noted that because of limited resources, there is a clear need for coordinated,

National Infrastructure Advisory Council

Meeting Minutes for the July 29, 2013 Quarterly Business Meeting

Page 10 of 12

intelligent strategies for addressing transportation needs in the wake of a catastrophic event, and that the Administration wants to work with industry and experts to find solutions to such issues.

Dr. Scott agreed with Mr. Natarajan that a NIAC study into public transportation would greatly benefit critical infrastructure security and resilience.

Ms. Wong noted that the NIAC conducted a 2010 Electric and Nuclear Sector resilience study that provided a model for other sectors and recommended that the NIAC be tasked to explore the efficacy of that model to other sectors. Ms. Lau suggested that work replicable or relevant from the 2010 be incorporated into this possible study model and also noted the importance of including a cyber-component in this model to reflect current priorities.

General Edmonds endorsed Ms. Lau's suggestion to add a cyber component to the study. He added that cyber issues need to be prioritized as a part of the Transportation Sector, as well as all other critical infrastructure sectors.

Mr. Gerstell asked for clarification on the current transportation proposal, asking what sorts of recommendations the Council would be seeking to make.

Ms. Wong explained that the 2010 Electric and Nuclear Sector resilience study considered the factors that determine resilience, and also established a framework to set goals and deliverables. The transportation study would seek to determine whether the sector resilience study model that was applied to the Electric and Nuclear Sector could be applied to other sectors. In addition, public ownership of Transportation Sector assets would test the efficacy of the study for non-private sector entities.

Mr. Natarajan added that interdependency — particularly cyber and physical integration and physical infrastructures vulnerability to cyber attacks — is a prime concern. He noted that a public transportation study could help discern the realistic vulnerabilities that exist between physical and cyber infrastructure, and that transportation is often overlooked as a part of critical infrastructure security and resilience.

Dr. Scott commented that a transportation study would be a great opportunity for the Council to provide advice on something rarely addressed, as well as to determine if the successes of the Electric and Nuclear Sector efforts are replicable in other sectors. She also noted that the study would provide an opportunity for the Council to address a timely issue, as Federal transportation funding legislation nears expiration.

National Infrastructure Advisory Council

Meeting Minutes for the July 29, 2013 Quarterly Business Meeting

Page 11 of 12

Mr. Natarajan also noted that the report would not need to focus solely on publicly owned transportation — airlines, for instance, are largely privately owned — but that the scope is intended to be focused on the transit of people, rather than goods and products.

Dr. Scott volunteered to chair the working group for the transportation study. Members interested in participating should submit their names to the NIAC Secretariat.

X. CLOSING REMARKS

Constance H. Lau, NIAC Chair

*Nitin Natarajan, Director, Critical
Infrastructure Policy, National Security
Staff*

Mr. Natarajan thanked the NIAC for their continued hard work on regional resilience and the implementation of the EO and PPD-21. There are many layers of complexity to achieving this goal, but he expressed optimism that the combination and integration of cyber and physical concerns will help create a greater value proposition for dealing with these challenges. Bringing the cyber and physical communities together is essential in looking at cascading consequences and larger effects that are likely to increase time and resources allocated to enhancing resilience through the public-private partnership.

Mr. Natarajan emphasized that input provided by the NIAC provides a different perspective than what the Administration and the Implementation Integrated Task Force (ITF) typically receive. He thanked the NIAC for their continued work on the RRWG study and the EO-PPD WG feedback on implementation and the NIPP rewrite. He also noted his interest in the discussion on the role of social media, particularly with regard to the challenges of speed and accuracy. The rapid sharing of information that has not been fully vetted or validated can present substantial issues, and government's effective use of this technology will require considerable balance. He also noted that that the Federal Government would be wise to engage these technologies more fully, as they are likely to become increasingly widespread in use.

Ms. Lau and Dr. Scott thanked all participants, and expressed their confidence in the Regional Resilience study and the implementation of the EO and PPD-21. Ms. Lau then adjourned the meeting.

National Infrastructure Advisory Council

Meeting Minutes for the July 29, 2013 Quarterly Business Meeting

Page 12 of 12

XI. ADJOURNMENT

Constance H. Lau, NIAC Chair

Ms. Lau thanked all in attendance and adjourned the meeting.

I hereby certify the foregoing minutes accurately represent the discussion and events that transpired at the meeting held on the date first noted above.

By: _____ Date: _____
Constance H. Lau, Chair, NIAC

National Infrastructure Advisory Council (NIAC)

July 29, 2013

United States Access Board

Opening of Meeting

Nancy Wong

Designated Federal Officer, NIAC

Roll Call of Members

Nancy Wong

Designated Federal Officer, NIAC

Roll Call – NIAC Meeting Attendance

NIAC Member Present Telecon POC NIAC Member Present Telecon POC

<u>Jack Baylis</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>James B. Nicholson</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>David J. Bronczek</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Thomas E. Noonan</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Albert J. Edmonds</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Gregory A. Peters</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Glenn Gerstell</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>James A. Reid</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>David Grain</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Bruce Rohde</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Margaret Grayson</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Dr. Beverly Scott</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Philip Heasley</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Michael Wallace</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Raymond Kelly</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<u>David Kepler</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<u>Donald Knauss</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<u>Constance Lau</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

Opening Remarks and Introduction

Constance Lau
NIAC Chair

Opening Remarks and Introduction

NIAC PRESENTATION AND DISCUSSION ON REGIONAL RESILIENCE WORKING GROUP

Constance H. Lau

NIAC Working Group Co-Chair

Dr. Beverly Scott

NIAC Working Group Co-Chair

National Infrastructure Advisory Council (NIAC)



Regional Resilience Working Group

July 29, 2013– Report #4

Constance H. Lau

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

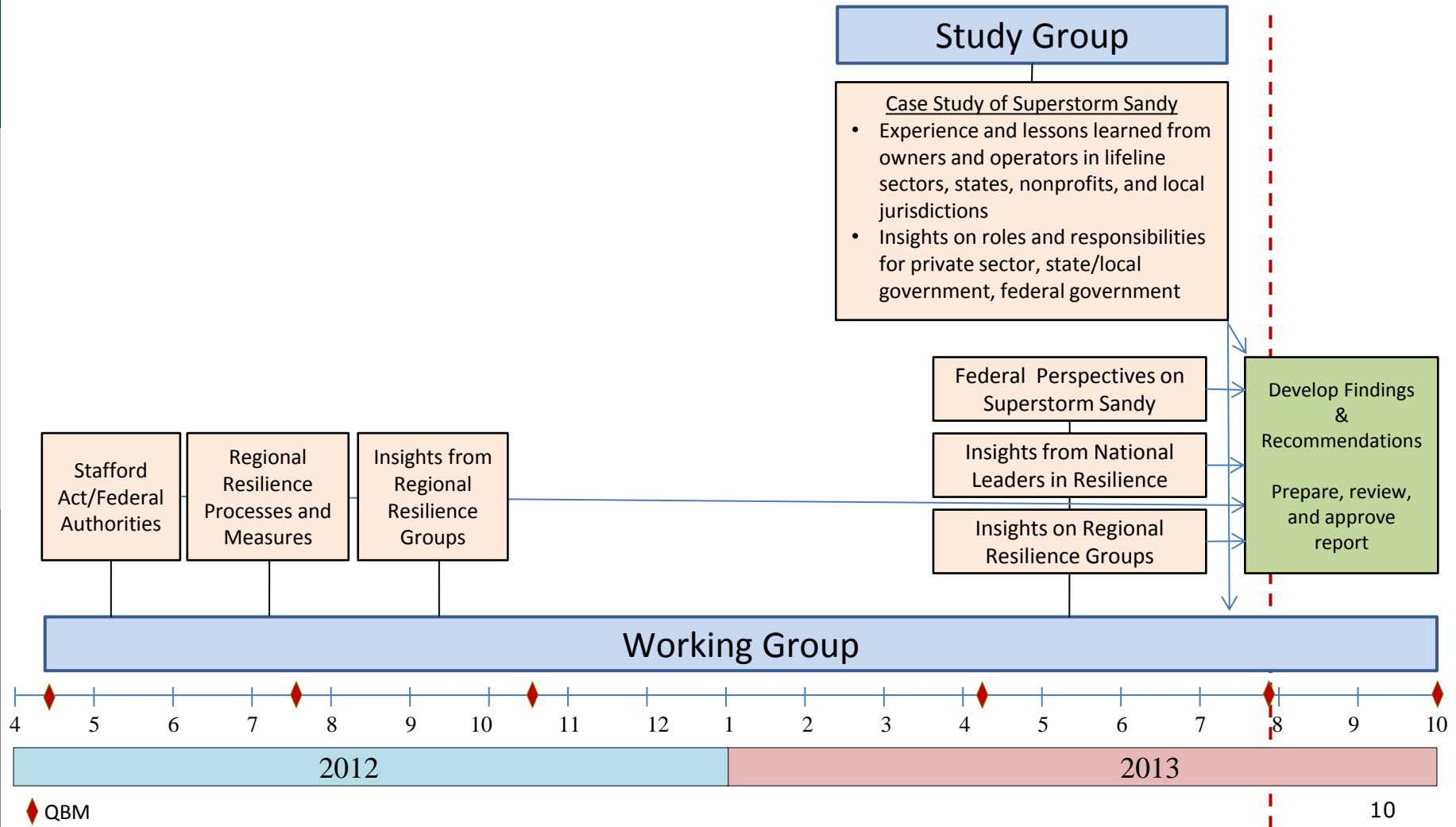
Dr. Beverly Scott

*General Manager
Massachusetts Bay Transportation Authority
Co-Chair*

Agenda

- Status Update
- Results of the Case Study on Superstorm Sandy
- Preliminary Findings of the Working Group
- Next Steps

Work Plan for Regional Resilience Study



Regional Resilience Study Update

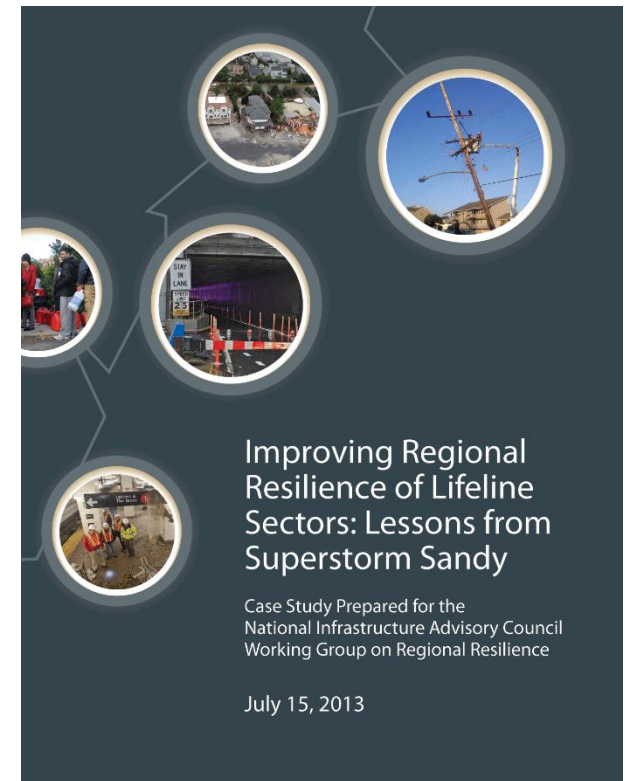
- Federal Perspectives on Superstorm Sandy
 - DOE ■ EPA ■ FEMA
- Insights from National Leaders in Resilience
 - Dr. Dane Egli, Applied Physics Lab, Johns Hopkins University
 - Mr. Richard Reed, American Red Cross
 - Adm. Thad Allen (Ret.), Booz Allen Hamilton
 - Dr. Stephen Flynn, Northeastern University
- Working Group deliberations on initial findings
- Study Group Delivered Final Report (7/15/13) –
Improving Regional Resilience of Lifeline Sectors: Lessons from Superstorm Sandy

Charge to the Superstorm Sandy Study Group

- Examine the planning, coordination, and response for Superstorm Sandy as it applies to the lifeline sectors in Philadelphia and the Mid-Atlantic region.
 - Understand regional impacts on the lifeline sectors (energy, transportation, communication, and water)
 - Identify failure mechanisms between interdependent sectors and gaps in regional resilience
 - Evaluate how Superstorm Sandy placed stress on one or more of the lifeline sectors
 - Examine the impact of physical and cyber disruptions on critical infrastructures, including impacts due to aging infrastructure
 - Examine lessons learned in the impacted areas stretching from New York to Washington, D.C.

Study Group Sources and Inputs

- ❑ Study Group member experiences and lessons learned
- ❑ 7 Sector-Specific Panel Discussions
 - Electricity, Oil & Natural Gas, Transportation, Communications, Water, State and Local Government, Non-Governmental Organizations
- ❑ Expert Interviews (PANYNJ, EEI, MBTA, Boston Police Dept., Philly311)
- ❑ 267 published reports, news stories, videos, webinars, and in-process studies on Superstorm Sandy impacts
- ❑ All-day Study Group workshop (5/31)



Study Group Key Findings

1. Maintaining the continuity of services of the lifeline sectors is paramount to regional resilience.
2. Strong public-private partnerships and cross-sector coordination were the most important success factors in preparing for and responding to Sandy.
3. Planning, analysis, and risk management at the regional level is essential for long-term resilience.
4. Impediments to rapid response and recovery remain despite efforts to remove them.
5. Effective communications at all levels, using multiple tools and methods, was pivotal to success during Sandy.
6. Regional resilience relies on the capacity of individuals and communities to strengthen local readiness and personal responsibility for short-term survival.

Working Group Preliminary Findings

Three areas of focus

- ❑ Foundational Findings on the Regional Resilience of Critical Infrastructure Sectors
- ❑ Regional Coordination and Communication
- ❑ Investment in Resilient Infrastructure

Foundational Findings

1. All regions are different, calling for a tailored approach to resilience that reconciles the types and density of a region's infrastructure with regional-based risk assessments.
2. Four lifeline sectors—energy, water, transportation, and telecommunications—are top priorities for strengthening resilience in all regions.
3. Strong public-private partnerships and active cross-sector coordination are the most important success factors in helping regions to achieve sustainable resilience.
4. Public-private partnerships based on executive-level engagement prove to be the most robust.
5. Non-profit and community groups play an essential role in building the capacity of communities to prepare for catastrophic events and assist them with long-term recovery.

Regional Coordination and Communication

6. The increasing interdependence and integration of lifeline infrastructures within regions has created hidden risks that are not widely understood by the businesses, governments, and communities that depend upon them for essential services.
7. Incident response personnel in critical sectors continue to encounter complex rules and regulations, inefficient processes for granting waivers and permits, and problems gaining rapid access to disaster areas to repair assets.
8. Social media has emerged as a powerful tool for communicating and collecting data that can improve situational awareness, inform public decision making, and mitigate rumors, yet businesses and government are just learning how to harness it.

Investment in Resilient Infrastructure

9. Owners and operators find it difficult to establish the strong value proposition needed to invest in new or upgraded infrastructure without public support and the ability to recoup costs.
10. Regions can mitigate long-term risks by applying innovative technologies to build resilience into new and replacement structures and rethinking system designs to create infrastructure that are inherently resilient.
11. A consistent, agreed-upon method that would enable owners and operators to benchmark their resilience posture would help regional partners to better understand the risks they face and identify specific steps that can be taken to improve their resilience.

Next Steps

- ❑ Finalize Working Group Findings
- ❑ Develop Recommendations
- ❑ Prepare the final report of the Working Group on Regional Resilience
- ❑ Present the recommendations and final report to the Council for deliberation at the October 7 Quarterly Business Meeting

Appendix

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, Massachusetts Bay Transportation Authority Co-Chair</i>	Transportation
Jack Baylis , <i>President and CEO, The Baylis 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, MTN Government Services</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

Regional Resilience Study

Purpose: Identify ways regions can become more resilient and the steps the Federal Government can take to help regions accomplish resilience goals.

Objectives

- 1. Best Practices:** Identify the characteristics that make a region resilient and the steps that can be taken to improve resilience within a 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.

Public Comment

Nancy Wong

Designated Federal Officer, NIAC

**REGIONAL RESILIENCE WORKING GROUP
DELIBERATIONS**

Constance H. Lau
NIAC Chair

**UPDATE AND DISCUSSION ON EXECUTIVE
ORDER 13636 AND PRESIDENTIAL
POLICY DIRECTIVE 21 BY THE
DEPARTMENT OF HOMELAND SECURITY**

IDENTIFICATION OF POTENTIAL AREAS TO RECOMMEND FOR NEXT NIAC STUDY

Closing Remarks

Adjournment

Constance Lau
NIAC Chair