

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 1 of 18

Quarterly Business Meeting Agenda

Friday, November 14, 2014, 2:00 p.m. - 4:30 p.m. EDT

Navy League Building

2300 Wilson Blvd

Arlington, VA 22201

I. OPENING OF MEETING

Nancy J. Wong, Designated Federal Officer (DFO), National Infrastructure Advisory Council (NIAC), Department of Homeland Security (DHS)

II. ROLL CALL OF MEMBERS

Nancy J. Wong, DFO, NIAC, DHS

III. OPENING REMARKS AND INTRODUCTION

Constance H. Lau, NIAC Chairwoman

Ray Alexander, Senior Director for Response Policy, National Security Council

Heather King, Director, Critical Infrastructure Protection and Resilience, National Security Council

Eric Letvin, Director, Hazard Mitigation and Risk Reduction Policy, National Security Council (NSC)

Suzanne Spaulding, Under Secretary for National Protection and Programs Directorate, DHS

Dr. Ronald Clark, Deputy Under Secretary for National Protection and Programs Directorate, DHS

Caitlin Durkovich, Assistant Secretary for Infrastructure Protection, DHS

IV. APPROVAL OF JUNE 2014 MINUTES

Constance H. Lau, NIAC Chair

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 2 of 18

**V. NIAC TRANSPORTATION
SECTOR RESILIENCE WORKING
GROUP PRESENTATION AND
DISCUSSION**

Dr. Beverly Scott, Working Group Co-Chair

Jack Baylis, Working Group Co-Chair

Glenn Gerstell, Working Group Co-Chair

**VI. CEO ENGAGEMENT WORKING
GROUP PRESENTATION AND
DISCUSSION**

Michael Wallace, Working Group Chair

**VII. CRITICAL INFRASTRUCTURE
SECURITY AND RESILIENCE
NATIONAL R&D PLAN WORKING
GROUP PRESENTATION**

David Grain, Working Group Chair

**VIII. PUBLIC COMMENT: DISCUSSION
LIMITED TO MEETING AGENDA ITEMS
AND PREVIOUS NIAC STUDIES**

Nancy J. Wong, DFO, NIAC, DHS

**IX. DISCUSSION AND DELIBERATION
ON RECOMMENDATIONS FOR THE
CRITICAL INFRASTRUCTURE SECURITY
AND RESILIENCE NATIONAL R&D
PLAN**

Constance H. Lau, NIAC Chair

X. CLOSING REMARKS

Constance H. Lau, NIAC Chair

*Heather King, Director, Critical Infrastructure
Protection and Resilience, NSC*

*Eric Letvin, Director, Hazard Mitigation and
Risk Reduction Policy, NSC*

*Caitlin Durkovich, Assistant Secretary for
Infrastructure Protection, DHS*

XI. ADJOURNMENT

Constance H. Lau, NIAC Chairwoman

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 3 of 18

MINUTES:

NIAC MEMBERS PRESENT IN WASHINGTON:

Ms. Margaret Grayson; General Albert Edmonds (ret.); Mr. Glenn Gerstell; Ms. Constance Lau; Dr. Beverly Scott; Mr. David Kepler; Mr. James Murren; Mr. Michael Wallace; Mr. Tom Noonan; Mr. David Grain

NIAC MEMBERS ATTENDING VIA CONFERENCE CALL:

Mr. Bruce Rhode; Mr. Jack Baylis; Mr. James Reid; Mr. James Nicholson

MEMBERS ABSENT:

Mr. Philip Heasley; Mr. Raymond Kelly; Mr. Donald Knauss; Mr. Gregory Peters; Mr. David Bronczek; Mr. Greg Wells; Mr. Gilbert Gallegos

SUBSTANTIVE POINTS OF CONTACT PRESENT IN WASHINGTON:

Mr. Richard Houck; Ms. Tamara Powell; Mr. Brian Kane;

SUBSTANTIVE POINTS OF CONTACT ATTENDING VIA CONFERENCE CALL:

Ms. Joan Gehrke (for Mr. James Nicholson)

OTHER DIGNITARIES PRESENT:

Mr. Ray Alexander, NSC; Ms. Heather King, NSC; Mr. Eric Letvin, NSC; Ms. Suzanne Spaulding, NPPD, DHS; Mr. Ronald Clark, NPPD, DHS; Ms. Caitlin Durkovich, IP, DHS; Mr. Scott Tousely, S&T, DHS; Ms. Kristin Wyckoff, S&T, DHS; Ms. Nancy Wong, DFO, NIAC, DHS

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 4 of 18

I., II. OPENING OF MEETING, ROLL CALL

Nancy J. Wong, Designated Federal Officer (DFO), National Infrastructure Advisory Council (NIAC), Department of Homeland Security (DHS)

Nancy Wong opened the meeting and called the roll. Upon completion of the roll call, she turned the meeting over to Ms. Constance Lau, NIAC Chair to greet the Council members and others present, and to chair the rest of the meeting.

III. OPENING REMARKS AND INTRODUCTION

Constance H. Lau, NIAC Chairman

Ray Alexander, Senior Director for Response Policy, NSC

Heather King, Director, Critical Infrastructure Protection and Resilience, NSC

Eric Letvin, Director, Hazard Mitigation and Risk Reduction Policy, NSC

Suzanne Spaulding, Under Secretary for National Protection and Programs Directorate, DHS

Ronald Clark, Deputy Under Secretary for National Protection and Programs Directorate

Caitlin Durkovich, Assistant Secretary for Infrastructure Protection, DHS

Ms. Lau welcomed NIAC members and Federal Government representatives, and provided an overview of the meeting. The Council has been tasked with three studies by the White House: 1) A report on the Council's perspectives on the Critical Infrastructure Security and Resilience (CISR) National Research and Development (R&D) Plan; 2) a study on Engagement of CEOs to enhance the Critical Infrastructure Security and Resilience (CISR) public-private partnership, including a summary of National Infrastructure Protection Plan 2013 (NIPP 2013); and 3) a

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 5 of 18

study on Transportation Systems Resilience. Working Groups will provide an update on their studies they have been tasked with producing. The Council will conduct deliberations on the National CISR and R&D Plan Working Group Report.

Ms. Lau then introduced the dignitaries at the table representing the government for opening remarks. Mr. Alexander, of the National Security Council, thanked the Council for their efforts on the time and energy spent on each NIAC tasking. He noted that the White House believes that the Council's work is important, so the White House is working on getting more members on the Council. The President relies on the Council's recommendations as they undertake the most difficult and complex tasks related to securing and enhancing the resilience of the Nation's critical infrastructure. The President recognizes how challenging the taskings to the Council are, but regardless of the task the Council always exceeds expectations. Mr. Alexander noted his staff in the NSC has been taking on a different type of resilience fight; his team members in the past few weeks have been focused on coordinating the Ebola crisis. Mr. Alexander observed that the Council has demonstrated their commitment to the resilience and security of the Homeland based on the work the members have completed. Mr. Alexander also noted that his term at the NSC is coming to an end and he will greatly miss working with the Council.

Ms. Lau thanked Mr. Alexander for his hard work for the Council. She noted that he highlighted the important role the Council's recommendations provide in building a real partnership with the government.

Ms. Suzanne Spaulding, Under Secretary (US) for (NPPD), DHS, thanked Mr. Alexander for his support for the Council and stated he will be missed. She thanked the Council and noted that NIAC is an important element to the protection of the Homeland. The last time US Spaulding was present the Council had received the R&D tasking and addressed it with enthusiasm. She noted that she had reviewed the draft and that the Council has completed the tasking with excellence. The Council did a superb job identifying the drivers as to why these recommendations matter. The work produced is impressive and shows the importance of technology, as well as the importance of processes and training. For example, communication devices were used in the Pentagon parking lot on September 11, but without proper training the technology was not utilized to its full extent. Without proper training, technology can become useless.

Ms. Spaulding then introduced Dr. Ronald Clark, NPPD's new Deputy Under Secretary.

Dr. Clark stated that although he spent most of his career in the Marine Corps overseas, he spent five years at the NSC. He stated that he is honored to be able to collaborate with the Council in the coming months.

Ms. Caitlin Durkovich, Assistant Secretary (AS) for Infrastructure Protection (IP), DHS, spoke on the changing climate as a primary risk for the Nation's critical infrastructure, but noted the range of threats from other sources continue to grow. From the events of Hurricane Sandy, the Nation saw two Improvised Explosive Devices (IEDs) in Boston, and an attempt to bring Silicon

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 6 of 18

Valley into darkness. There was also an explosion at a fertilizer factory. Assistant Secretary Durkovich noted the importance of being aware of the range of threats today and to recognize possible threats to come in the future in order to prepare for them. She applauded the Council for the time, work and recommendations provided by the NIAC, and expressed her gratitude on the continuing relationship with the members.

**IV. APPROVAL OF JUNE 2014
MINUTES**

Constance H. Lau, NIAC Chairman

Ms. Lau asked for a motion to approve the September Quarterly Business Meeting Minutes. There were no objections and the meeting minutes were approved.

**V. NIAC TRANSPORTATION SECTOR
RESILIENCE WORKING GROUP
PRESENTATION AND DISCUSSION**

Dr. Beverly Scott, Working Group Co-Chair

Jack Baylis, Working Group Co-Chair

Glenn Gerstell, Working Group Co-Chair

Dr. Beverly Scott expressed her pleasure to present the status of the Working Group at the Council meeting. At the September Quarterly Business Meeting, she noted the Working Group outlined their approach to this study. Since then, the Working Group has made progress to complete the tasking. Dr. Scott thanked her co-chairs and Working Group members for the support they provided. In addition, she thanked the Transportation Resilience Study Group and its co-chairs, Rick Houck and Ted Basta.

Dr. Scott began by reminding the members of the specific charge for the study. The tasking is to apply the NIAC recommended framework identified in its 2010 Resilience Report on the Electric and Nuclear Sectors to establish resilience goals. The tasking requires testing and validating the usefulness of the framework, highlight key Transportation Sector resilience issues, and identify potential opportunities to address them.

The Working Group is currently interviewing transportation experts and has completed four in-depth interviews. Thus far, the Working Group has interviewed Mr. Mort Downey, Dr. Steven Flynn, Ms. Deborah Matherly, and Mr. Jeff Morales. There are five additional interviews to be completed by the end of 2014. There have been nine presentations from federal agencies. Through its study group, the team collected and analyzed existing studies in an effort to identify

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 7 of 18

innovative or emerging transportation resilience concepts. The data produced is being integrated, synthesized, and sorted. The study group has 12 members across all the modes, interdependent sectors, and state and local government. The study group has held four panel discussions and anticipates an additional two panel discussions in the future. They will present their findings to the Working Group in January.

Dr. Scott affirmed and emphasized the complexity of the transportation systems. . She noted that the sector is extremely fragmented. When it comes to issues of resilience, there are no findings of a high degree of cross-modal resilience and planning. An issue for the Transportation Sector is aging infrastructure. An example can be seen in the flooded tunnels of New York City during Hurricane Sandy. There are also situations that are repeatedly highlighted of government barriers -- intentional and non-intentional -- which hinder recovery and resilience. There are also supply disruptions across multiple states, such as supply shortages in the California San Francisco Bay Area affecting Nevada.

Dr. Scott noted that the Working and Study groups received data from experts that cyber risk is a major concern for the Transportation Sector. Cybersecurity is unique in each sector. Technology is constantly evolving, and consequently, the culture of resiliency has to have a different motivator in each sector, particularly for operations.

Furthermore, Dr. Scott stated that standards are important for building resilience into infrastructure. The Working Group observed that the sector may have to look at how they value, how they fund, and how they frame their standards. The sector and owners and operators need to ask: What is important?

Dr. Scott gave a timeline of scheduled deliverables. A final report will be completed by the second NIAC Quarterly Business Meeting in June 2015. Currently, the Study Group is on track to present initial findings in January 2015. The Study Group is deciding whether or not to do a tabletop exercise as part of their study. The scheduled plan is to have initial findings in early 2015 and have a thorough deliberative discussion in April in the Working Group.

When asked for additional comments by Dr. Scott, Mr. Jack Baylis thanked Dr. Scott for the presentation.

Ms. Glenn Gerstell commented that it is almost impossible to overstate the significance of the cybersecurity issues. There is no other sector that is being transformed by technology like the Transportation Sector. He observed that ports are advancing their operations through technology (i.e. Aviation with NextGen program). Across the board all the modes are using more computer systems, making them susceptible to vulnerabilities. However, these computer systems provide better efficiency. He observed that the level of vulnerability has not been fully thought through.

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 8 of 18

Ms. Margaret Grayson highlighted what was learned from the interviews. She noted the physical infrastructure is aging. When looking at bridges and tunnels, she noted it is critical to see how to design cyber resilience into their rebuilding.

Ms. Lau opened the discussion to the Administration and Council members for individual comments, suggestions, or questions.

Mr. Tom Noonan stated the Transportation Sector is highly interconnected and open to Internet Protocol networks. This provides wonderful opportunities to be more efficient and safer, but dramatically increases vulnerabilities. Today, there are 15 billion devices connected to the internet and by 2025 there will be 50 billion. Unfortunately, there is no easy answer on how to secure the connections to all the systems, but with the tasking, hopefully some answers can be found.

Ms. Durkovich noted that as the sectors and owners and operators start to retrofit, building in resilience is critical. The Federal Government is in a process of applying resilience findings nationally with federal infrastructure investments. However, the Administration is also asking what the capabilities are beyond government investment.

Mr. Eric Letvin stated for the Working Group's consideration, the President has recommended looking at Green Infrastructure. There is much to be done with research and development on infrastructure, but there is an emphasis in building Green Infrastructure. A request was made that the NIAC staff provide a copy of the recently issued State Local Tribal Task Force Report on this topic to the NIAC Working Group.

VI. CEO ENGAGEMENT WORKING GROUP PRESENTATION AND DISCUSSION

Michael Wallace, Working Group Chair

Mr. Michael Wallace stated there is an evolution of effectiveness that the Council has helped to create in partnership with the Federal Government. He noted that when looking back to the 2010 NIAC study, there was zero action for 15 months after the report was issued. At the end of the 15 months, the efforts for implementation of that report took off and the value proposition became enormously clear to both the public and private sectors. Currently, Mr. Wallace stated they are in a routine process for senior executive level of engagement in the Electricity Sector, de-risking the grid, and improving its resilience. The study went from zero results to 2.5 years of real significant progress, but that effort has also levered into other areas, such as transportation and regional resilience. Mr. Wallace then moved on to speak on the progress of the CEO Engagement Working Group.

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 9 of 18

Mr. Wallace recognized and thanked his Working Group colleagues: General Edmonds, Ms. Margaret Grayson, and Mr. David Kepler. Collectively, they represent 40 years of NIAC experience. To benefit from the report, a collection of data points needed to be gathered. The Working Group has been meeting biweekly for an hour to an hour and half on conference calls. These calls involve interviews from the six sectors, including the life-line sectors to show how CEO engagement works in each sector. He further noted the tasking can seem a bit mundane, but the overall impact may be great. From the data, the Working Group has found challenges and issues to address, in an effort to find better ways to be more effective in public-private sector engagement to advance the mission. The findings and recommendations are focused for long-term sustainability at the most senior-executive level engagement. The recommendations include a NIPP CEO summary intended to be a model of how to communicate with CEOs. While the Working Group is reaching some conclusions and identifying some findings, it still has some work to do.

Mr. Wallace noted that the requested additional time for this study was a good decision. The additional time allows for a more thoughtful deliverable that will advance the concepts of public-private partnership. The additional data being collected has proved invaluable and deeper insights. Currently, the Working Group has six interviews to complete. The data is coming together in an integrated way. Each interviewee is uniquely different; however, the answers provided share major commonalities.

Mr. Wallace stated the Working Group conducted its first deliberation in the morning meeting of the Working Group. About 70% of the conclusions have been identified. The tasking will be completed by the next Quarterly Business Meeting in March. Based on the deliberative discussion held so far by the Working Group, Mr. Wallace believes the report will be succinct and actionable.

Mr. Wallace opened the discussion to his colleagues for comments.

General Edmonds stated the Working Group has done a good job collecting useful data. The findings the Working Group will produce will have useful data points.

Mr. Kepler commented that there is a process and interdependency aspects as well in the Working Group analysis.

Ms. Grayson stated the deliberations conducted by the Working Group were extremely valuable. All of the findings will be gathered, studied, and used to better understand process, structures, roles and responsibilities. The value proposition at the CEO level has to be concise; and hopefully, the Working Group will deliver such a report.

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 10 of 18

Ms. Lau opened the discussion up to all members asking if the Council members or administrative officials have individual comments or suggestions.

Ms. Heather King commented that she is excited to hear about concrete and tangible findings. She is looking forward to how these findings may be applicable to other sectors, such as the Health Sector.

Mr. Wallace commented that the findings will be actionable. The report will not understate nor dilute each sector's unique attributes. There are many cross-sector dependencies among the Nation's critical infrastructure. One question the report will answer is: How do you deal with subsector and cross-sector dependencies?

**VII. CRITICAL INFRASTRUCTURE
SECURITY AND RESILIENCE NATIONAL
R&D PLAN WORKING GROUP
PRESENTATION**

David Grain, Working Group Chair

Mr. David Grain began his briefing by thanking all members and staff who were involved in producing the draft report for consideration by the Council. He then reviewed the tasking from the Administration as to its scope and deliverables: national drivers for critical infrastructure security and resilience research and development, cross-sector nationally significant priorities for research and development, and supporting rationale, supporting public-private partnerships and a timeline of what should be addressed in the first five years and then beyond that time. He observed that Presidential Policy Directive 21 required the Administration to deliver a Critical Infrastructure Security and Resilience National Research and Development Plan in February of 2015. The Council's perspectives provided in response to the tasking would provide input into the plan.

Mr. Grain stated the first step was data collection to provide the Working Group a foundation to identify findings and draw conclusions. The Working Group began by disseminating a survey to all members of NIAC, as well as conducting interviews with Subject Matter Experts (SMEs).

From the data, the Working Group identified six strategic drivers: 1) Overcoming Obstacles to Action: Policy, Regulatory and Structural Barriers; 2) Dependency on and Interconnectedness through Cyber Systems; 3) Aging Infrastructure and the Effects of Catastrophic Natural Disasters; 4) Evolving Terrorist and other Man-made Physical Threats; 5) Growing complexity and consequences of cross-sector dependencies, subject to a growing range of threats; 6) Workforce Changes, Evolution and Requirements. He noted the Working Group identified two categories of capabilities to address these drivers: 1) Eliminating and reducing obstacles to

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 11 of 18

action; and 2) Improving the effectiveness and efficiency of resilience programs proved to be the greatest concern of the study. The Council made 14 recommendations: nine priorities for research and development; two enhancements to support public-private partnerships to implement research and development programs; one on the timeline for investment; and two recommendations in the immediate term to enhance the sustainability of research and development program implementation.

Mr. Grain listed the nine priorities for research and development: 1) Criteria for Nationally Significant Capabilities-Defining National Significance; 2) Regulations and Policy; 3) Market Incentives for Mission-Critical Investments 4) Addressing Barriers to Cross Sector and Public-Private Collaborations; 5) Cybersecurity Capabilities; 6) Understanding and Management of Cross-sector Dependencies and Cascading Effects; 7 Building of resilience into Design and Operations; 8) Workforce Development; 9) Contingency and Preparedness Planning. Mr. Grain addressed the question, “How do you define national significance” as part of identifying the priorities for research and development? The Working Group spoke with Jane Lute to develop an answer to this question. Ms. Lute noted that national security is not the same as homeland security. National Security is highly centralized with the Federal government. She stated that homeland security is highly decentralized and cannot be controlled and managed out of the Federal Government. The Federal Government is a partner.

Mr. Grain stated that the Working Group found an extraordinary number of commonalities from the interviews and surveys. These commonalities drove the Working Group’s findings and recommendations.

Mr. Grain noted that the timeline recommendation was intended to inspire action to be taken in an 18-24 month timeframe, and beyond five years, start to focus on the future for some more challenging and longer-term recommendations.

Mr. Grain completed his presentation and asked if other Working Group members had comments.

Ms. Grayson commented that during the working group’s collection of the data, it became clear we are at a point where the critical infrastructure community does not need to relearn what it already knows. It is time to move forward. Knowledge and skill is there for the stakeholder community to reach out to. Knowing how to bake in cyber risks is absolutely important. The critical infrastructure community does not have to do the same things over again.

Dr. Scott noted the synergy between this report, and all the other reports of the NIAC on which she was a participant, has been “spot on”. The critical infrastructure community is using 20th century armor to do a 21st century job.

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 12 of 18

Ms. Lau thanked Mr. Grain for his leadership on this Working Group. When the White House first tasked NIAC with this report, Ms. Lau was concerned about the timeline for completion. She further noted that it has become clear that when in the response and recovery mode, many understand why expenditures have to be made. But in talking about resiliency, the Council has to answer why stakeholders should make investments. The recommendations from this report have the ability to change that conversation. The approach is to bake resilience into upfront investments.

General Edmonds, Mr. Murren, and Mr. Kepler all commented that work is being done at the university level that can be helpful to research and development. Mr. Murren agreed that it would be beneficial to identify meaningful metrics; if it is important, it should be measured.

Mr. Murren also commented that he has learned more than he contributed to this report, and hopes to make a stronger commitment going forward. He stated he cannot wait until he sees the working effort on the CEO engagement. He is ready to implement the findings in his company. It occurred to Mr. Murren from listening to the results of this tasking; he is always faced with reacting to different situations. For example, cyber was not on his radar until several retailers were attacked. Currently, Mr. Murren's company has made efforts to address the cyber threat, but not in a coordinated fashion. Stakeholders are approaching cyber threat in different ways, using different consultants and protocols. A Standard Operating Procedure (SOP) could be created stating the bare minimum standards of what should be done; this would be extremely beneficial.

Mr. Murren stated his company files information about his company in multiple jurisdictions, but does not know what happens to the documents. . There is no control of that data once it is transferred to a state or Federal Government. E-filing could transcend multiple industries and be subject to greater data security. In particular, Mr. Murren stated he was motivated by the potential of the Public-Private Partnership. There is such a tremendous amount of untapped knowledge from academic institutions that the government and private sector could use. Academic institutions yearn to be relevant and would find contributing to these issues rewarding.

Ms. Lau turned the meeting over to Ms. Wong to preside over the session for the Council to receive public comments.

**VIII. PUBLIC COMMENT: DISCUSSION
LIMITED TO MEETING AGENDA ITEMS
AND PREVIOUS NIAC STUDIES**

Nancy J. Wong, DFO, NIAC, DHS

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 13 of 18

Ms. Wong noted that since the Federal Register Notice and draft was published, public comments have come in, specifically from the Electricity Sector Coordinating Council (ESCC), which comments have been provided to the members. Such comments need to be considered in today's deliberations. Ms. Wong opened the floor to public comments in person on the studies discussed that day, or done in the past. No comments were volunteered during the meeting by the public.

Ms. Lau asked for comments from Administration representatives present.

Ms. Heather King, Director, Critical Infrastructure Protection and Resilience, NSC, introduced two government officials from DHS' Science and Technology (S&T) Directorate, Mr. Scott Tousley and Ms. Kristin Wyckoff, as government officials leading the effort to develop the CISR National Research and Development (R&D) Plan required by Presidential Decision Directive 21. They were in attendance to ask questions to clarify the Council's recommendations and to provide answers to the Council members if they had questions.

Mr. Tousley commented that the R&D study is exceptional work and he plans to make use of it very quickly.

Mr. Eric Letvin, Director, Hazard Mitigation and Risk Reduction Policy, NSC stated he was recently on a panel with Dr. Steven Flynn. Mr. Letvin observed that in order to put incentives in place, you have to have design standards and metrics. The Federal Government normally does not set standards and hence there is a need for ways to measure and define resilience. Mr. Letvin stated the government needs guidance or thoughts on how to move forward. The Council's report and recommendations substantively address that need.

Assistant Secretary Durkovich commented that she was encouraged by the report. She would like to footnote the value that universities can bring. IP had done a tabletop exercise on climate change at the College of Charleston. A lot of data was pulled, which brought many interesting perspectives and context to the meeting. The academicians questioned some of the data that IP brought to the table. They had trusted partnerships and relationships in the community. As members think about workforce changes, Assistant Secretary Durkovich encouraged members to think about the infrastructure of today and tomorrow, and how to connect cybersecurity to economic resilience.

Ms. King thanked the Council for the report and recognized how the tasking was a huge lift for its members. She stated that the Council had produced a thorough product.

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 14 of 18

**IX. DISCUSSION AND DELIBERATION
ON RECOMMENDATIONS FOR THE
CRITICAL INFRASTRUCTURE
SECURITY AND RESILIENCE
NATIONAL R&D PLAN**

Constance H. Lau, NIAC Chairwoman

Mr. Kepler began the discussion among the members stating that he has edits for the Chemical Sector portion of Appendix B that he will submit. He observed that in the NIAC report conducted last year on the executive order addressed metrics for measuring the efficacy of Critical Infrastructure that was sponsored by the Homeland Security S&T Directorate of DHS. He further observed that in the last 10 years of NIAC metrics recommendations on metrics, the Council has never seen implementation. He thought that the metrics report that was attached to last year's EO-PPD Implementation Report was the best report he had ever seen on metrics. The Council made metrics recommendations in its reports in November 2012 and 2013. In addition, he observed that the Council also talked about incentives in the EO-PPD Implementation Report, and identified a whole methodology about incentives. He added that first the community needs to understand what problem we are trying to solve and to believe that there is a way to solve that problem. He added that "we do not want to get involved with something with unintended consequences".

General Edmonds began his comments by referring to page 46 of the draft report. He noted that there were about a half dozen of key items that should be focused on for R&D. General Edmonds thought it would be helpful to highlight the one or two items that are the most important. He added an example of incentives related to incentivizing communities to take action to fix transportation problems. The Federal Government has incented the communities to take action by giving them money to address issues. He observed that providing support to universities can translate into public jobs. The General requested that the Council go back to the report data and find the one or two nuggets of R&D that could do the most good for each sector to become partners, and subsequently incent assistance from Congress. The General noted that the change would provide greater detail to the last part of the report. He concluded that it was a great report and laid out well.

Ms. Wong reminded the members that the scope of the tasking specifically requested the Council provide perspectives on Cross-Sector Nationally Significant Priorities. She further noted that the Working Group had provided sector-specific data in the Appendix and had consolidated common themes across the sectors, to arrive at their specific priority recommendations.

Mr. Grain acknowledged General Edmonds comments and stated that he understood his point.

Mr. Wallace commented that he wanted to build on the point that Gen. Edmonds had made. The government has spent billions of dollars developing top notch capabilities that could be applied

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 15 of 18

to the Commercial Sector, but the sectors do not operate within the government and normally have no access to those capabilities. Between the two parties, there should be a matchup of needs to capabilities. He observed that billions of dollars is already spent or planned to be spent and sits there waiting to be levered, but it is necessary to help both parties see the mutual value and convergence. The money is already spent. “The connection just needs to be made and we are missing the ball if we do not.”

Mr. Wallace noted that on slide five of the presentation relating to “overcoming obstacles”, bullet three addresses barriers related to the phrase “national significance”. He stated that the Electricity Sector has been through several recent exercises. At one point, the sector deliberated on whether an event was of national significance or a national security event. “National significance” does not create a sense of urgency. The same barriers to action for nationally significant events are the same barriers we run into at national security events. He noted that scanning through the bullets on the slide, that 80 percent were also relevant for national security, even scenarios that the owners and operators are concerned about, which may create a sense of urgency to take action right now. It does not apply to everything for business reasons; workforce development is irrelevant to an event tomorrow. Mr. Wallace stated that there is a reality that national security events can be obscured and therefore a loss of leverage to use that categorization to drive a sense of urgency.

Mr. Grain noted that the report can highlight the issue in the final report and recommendations.

Dr. Scott joined the conversation by noting that “we have a transformative opportunity”. She further noted that one of the most profound issues that need to be addressed is the lack of funding across all sectors. It is a real crisis and a fundamental barrier. She stated that we continue to rearrange the chairs on the deck, but that does not appear to advance to solutions. She also noted that when she talks to her peers, they all agree that the articulation of outcomes needs to help the public connect the dots. When the discussion expands to workforce and community, the justification for investments become more meaningful and clearer. The end game is investing in community outcomes. It is about stakeholders in communities. When that outcome is the basis for the investment, it becomes like the New Deal. There are many examples of how to articulate these issues and the meaning of these efforts. These are the game changers. The real heart of the issue is that we can do all the research and development, but stakeholders need to want to invest to use the capabilities. The issue is about stakeholders and outcomes, not bricks and mortar. There needs to be business model. Then there can be a discussion about outcome, jobs creation, etc. to justify and fill the gap due to a lack of funding.

Mr. Gerstell commented that this is a very thoughtful report. He acknowledged that the Council is not supposed to give advice to Congress. However, he also thought that the Council should suggest that the executive branch should suggest legislative changes to Congress to fully address the issues identified by the report. These required actions are not just for the executive branch.

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 16 of 18

Mr. Grain began by observing that the regulatory and incentive piece in the report was his major contribution. Mr. Grain's industry is highly regulated and those regulations often bring with them unintended consequences. He noted that earlier this week comments were received from the White House about net neutrality. It is the responsibility of the executive branch to determine what those objectives are and what incentives they want to put in place. However, this is not solely a legislative issue, but a legal issue as well. Mr. Grain agreed with Mr. Gerstell, but it is not always certain how the situation in his industry's recommendations will play out against the current legal frameworks in place.

Ms. Lau asked Mr. Grain to make a motion to accept the report, pending additional comments or recommendations.

Mr. Grain asked if members on the phone had any comments or deliberations. No comments or deliberations were voiced.

Mr. Grain moved to approve the draft of this report, including the comments made by the members.

Ms. Wong stated there needs to be more specificity to the changes to findings and recommendations the Council approves. It is not clear what specific changes are to be made. She recommended a motion to approve the report and define the requirements for changes to the report, as part of the deliberation following the motion prior to approval by the Council.

Mr. Grain agreed and moved to approve the report and to define the specific requirements for changes in the subsequent deliberation of the motion. The motion was seconded by Ms. Grayson.

Ms. Lau began the deliberation by affirming that more use should be made of academic institutions. She addressed the comments made previously by General Edmonds that the Council can look to the specific recommendations of individual sectors in a cross-sectoral manner. She observed that one of the research and development priorities would be to identify some of the common barriers that the Council has identified in multiple council studies and address the top few barriers as the most urgent of the priorities. These would help address specifically national security events. She added that incorporating or drawing out in the report areas that the executive branch might highlight for Congress that could be changed or enacted to address Mr. Gerstell's comments.

Mr. Grain noted that Mr. Kepler's comments addressed consideration for the metrics discussion in the November 2012 report and should be incorporated into the final report. Incentives tied to specific goals need to be considered. He also commented that the previous discussion also addressed narrowing objectives to address interdependencies among industries. He also summarized the comments about recognizing resources that may be made available between

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 17 of 18

public and private sectors, that there is opportunity for leveraging between public and private sectors. He noted that a primary theme in the comments was a focus on infrastructure investment around outcomes. Mr. Wallace reiterated that addressing barriers need to be not only for long term research and development, but also to address national security event implications to create a sense of urgency.

Ms. Lau added that the council incorporated the written comments that were provided by the Electricity Sector Coordinating Council.

Dr. Scott stated that the workforce development recommendation needs to be expanded to include impact on the broader community; and to include specific examples for economic development.

Mr. Kepler affirmed that the key point he was trying to put across is to identify what factors should be considered to assure an outcome orientation. A laundry list of recommendations not based on results and outcomes is not useful. We need to be clear about what problem we are trying to solve.

Ms. Lau affirmed that the intended outcome of the tasking was to achieve national resilience and recover from an event faster through research and development investments. She asked for final deliberative comments. No other comments were provided.

Ms. Lau called for a vote of the members present to approve the draft report, incorporating the specific recommended modifications provided by the members during the deliberative discussion.

Ms. Lau asked for approval by voice vote of “Ayes”, which was given. She subsequently asked for any dissenting “nays”. Hearing none, the Chair declared the report approved, subject to approved modifications. She thanked Mr. Grain again for leading this very special effort. She also reminded the members about Ms. King’s comments on how important this report was to the White House. She thanked all the members for their engaging discussion and contributions to the deliberations.

X. CLOSING REMARKS

Constance H. Lau, NIAC Chairwoman

Heather King, Director, Critical Infrastructure Protection and Resilience, NSC

Eric Letvin, Director, Hazard Mitigation and Risk Reduction Policy,

Suzanne Spaulding, Under Secretary for NPPD, DHS

National Infrastructure Advisory Council

Meeting Minutes for the November 14, 2014 Quarterly Business Meeting

Page 18 of 18

*Caitlin Durkovich, Assistant Secretary for IP,
DHS*

Ms. Lau asked for closing comments from the Administration officials present.

Ms. King thanked the Council for their continued hard work. She noted the conversation held today was rich and helpful. The information provided in the report will be utilized by the President as part of issuing the research and development national plan in February, 2015. Therefore, the delivery of this report this month was timely.

Ms. Durkovich applauded the Council and noted that the work of the Council continues to be very impressive.

XI. ADJOURNMENT

Constance H. Lau, NIAC Chairwoman

Ms. Lau thanked all members for their participation and adjourned the meeting.