















NATIONAL EXERCISE PROGRAM

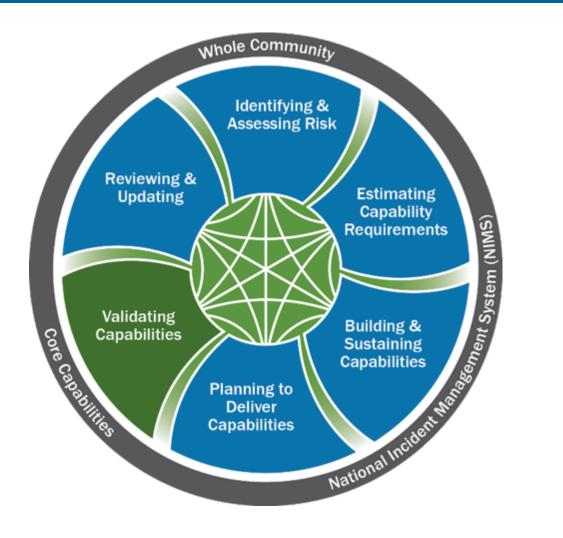
Validating our nation's preparedness

Overview

Alexander Yesnik
Subcommittee on Disaster Reduction
Thursday, July 12, 2018



The National Preparedness System





The National Exercise Program (NEP)



 National-level mechanism for validating core capabilities across all mission areas; consists of a two-year cycle of selected exercises that culminates in a National Level Exercise



Each cycle is guided by **Principals' Objectives**, established by the Principals Committee of the National Security Council



These objectives are **driven by data** through the **National Preparedness System**, including the National Preparedness
Report (NPR), State Preparedness Reports (SPRs), Threat and
Hazard Identification and Risk Assessments (THIRAs), After-Action
Reports (AARs), and other preparedness data



The National Exercise Program (NEP)

- Aligns common challenges and emerging issues identified by states, local
 jurisdictions, tribes, and territories into national strategic goals called
 Principals' Objectives, issued by the Principals Committee of the National
 Security Council at the White House
- Provides a means to assess the ability to build, sustain, and deliver core capabilities of national focus; validate plans, training, and equipment; draw out resource gaps; and identify areas for improvement
- Provides exercise design and delivery assistance for exercises that align to the Principals' Objectives
- Integrates evaluation results from each exercise into an overall analysis of the nation's readiness and informs the National Preparedness Report



The Two-Year NEP Cycle

Exercises inform preparedness analysis



National Exercise Program

Develop after-action reports and improvement plans

Identify lessons learned

Validate core capabilities

Engage the whole community

National Preparedness Analysis

Extract trends from SPR, THIRA, and NPR data

Distill insights from intelligence and risk assessments

Examine real-world events for emerging threats

Generate key analytical findings

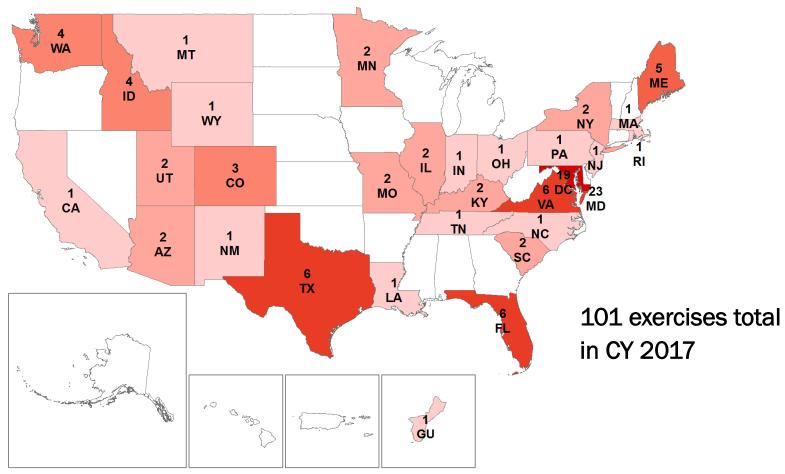


Preparedness analysis informs focus of NEP

Principals' Objectives



2017 NEP Exercises by State





National Exercise Program

2017-2018 Principals' Objectives















Intelligence and Information Sharing



"Examine and validate core capabilities and processes to rapidly exchange and analyze appropriate classified and unclassified information among federal, state, local, tribal, territorial, private sector and international partners prior to and during an incident that threatens the security of the nation."















Intelligence & Information Sharing

Why is this important?

National Preparedness Report

- The 2017 NPR reported that the nation has developed a limited number of assets and partnerships to support intelligence and information sharing
- 2016 NPR reported government agencies are expanding partnerships to improve capabilities needed to prevent terrorist attacks

State Preparedness Report

- 85% of states and territories identified Intelligence & Information Sharing as a "High Priority"
- States and territories reported gaps in developing reports and disseminating information
- Exercises highlighted fusion centers must build stronger twoway information sharing partnerships















Intelligence & Information Sharing

What are the major challenges?

An analysis of real-world and exercise after-action reports (AARs) across the country revealed common challenges:



- Disseminating restricted or limiteddistribution information
- Using plain language and avoiding acronyms
- Ensuring intelligence centers have actionable intelligence policies
- Providing key communications links to increase awareness and expand outreach capabilities
- Developing more sophisticated intelligence processing systems for law enforcement















Lead Federal Agency Coordination



"Examine the ability of departments and agencies to identify and validate appropriate authorities and roles, lead federal agency responsibilities, incident management resources, and organizational and operational structures to prepare for, respond to, and recover from incidents where there is no clear lead federal agency identified in statute or regulation."















Lead Federal Agency Coordination

Why is this important?

National Preparedness Report

- Highlighted uncertainty regarding multi-agency coordination and authorities during incidents in which a disaster declaration under the Stafford Act is not likely
- Highlighted challenges of placing agencies previously unaccustomed to coordinating multiple agencies into that role

State Preparedness Report

 States and territories reported gaps in decontamination and responder safety

Threat and Hazard Identification and Risk Assessment

States identified incidents with different lead agencies among the top 10 most frequently cited hazards, including cyber attacks, pandemic incidents, explosive devices, and chemical hazmat release















Lead Federal Agency Coordination

What are the major challenges?

An analysis of real-world and exercise after-action reports (AARs) across the country revealed common challenges:



- Understanding availability and need for specialized resources
- Clarifying an operational lead during disasters with multiple operations centers
- Developing a uniform multi-jurisdictional system for coordinating triage, patient tracking, and fatality management that includes the nonmedical community
- Providing coordinated public information in different languages and leveraging statewide unified call centers















Multidisciplinary Response Options



"Examine the ability of federal, state, local, tribal, and territorial jurisdictions to conduct integrated multi-jurisdictional and multi-disciplinary response planning, and to coordinate operations among law enforcement, fire and medical services, emergency management, and other whole community stakeholders for incidents with crisis and consequence management components such as complex terrorist attacks."















Multidisciplinary Response Options

Why is this important?

National Preparedness Report

- Identified challenges addressing complex terrorist attacks, including:
 - Improving response coordination
 - Conducting exercises that test coordination between Incident Command Posts and Emergency Operations Centers
 - Medical training to handle complex injuries

Threat and Hazard Identification and Risk Assessment

- States and territories identified explosive devices more frequently than any other threat or hazard
- Active shooter threats had the greatest increase (32%) over 2014

Past NEP Exercises

 Highlighted need for local law enforcement to improve response plans to address attacks against soft targets















Multidisciplinary Response Operations

What are the major challenges?

An analysis of real-world and exercise after-action reports (AARs) across the country revealed common challenges:



- Establishing and maintaining unified coordination across multiple command posts
- Coordinating and integrating plans across multiple agencies
- Establishing unified response plans with command, control, and communications protocols
- Implementing information sharing plans and protocols between incident commands at different attack sites
- Developing personnel plans to protect a large, geographically dispersed area
- Leveraging social media















Cyber Coordination



"Examine the ability of whole community stakeholders to implement national policy, frameworks, and guidance, and to apply relevant authorities, plans, procedures, and available resources to achieve a coordinated response to significant cyber incidents."















Cyber Coordination

Why is this important?

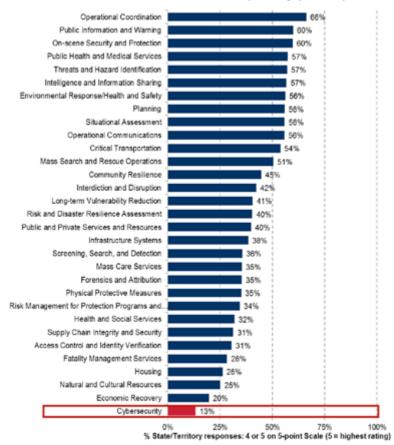
Threat and Hazard Identification and Risk Assessment

80% of states and territories identified "Cyber Attack" as a primary threat of concern more common than any other threat or hazard

National Preparedness Report

 Continuity of Operations for information technology systems and networks identified as the largest functional area gap

SPR Assessment of Current Capability (% 4/5s)

















Cyber Coordination

What are the major challenges?

An analysis of real-world and exercise after-action reports (AARs) across the country revealed common challenges:



- Understanding agency capabilities, responsibilities, and authorities during a cyber intrusion
- Developing a common operating picture
- Prioritizing response actions and managing collateral damage on secondary systems
- Reducing risk from the interconnected nature of IT systems, including reliance on cellular networks
- Linking cyber-specific plans to other relevant plans
- Overcoming legal restrictions on information sharing















Recovery Coordination



"Demonstrate the ability of the whole community, especially state, territorial, tribal, and local governments, to perform effective recovery coordination and planning in parallel with response operations to achieve long-term community recovery objectives."















Recovery Coordination

Why is this important?

National Preparedness Report

- Only 27% of states and territories indicated proficiency in Recovery core capabilities
- Identified Economic Recovery, Housing, and Infrastructure
 Systems as national areas for improvement
- NEP exercises highlighted integration of long-term recovery considerations into response operations as areas for improvement

State Preparedness Report

- Since 2012, states and territories have consistently reported lower levels of proficiency in Recovery core capabilities than in any other Mission Area
- Identified Economic Recovery,
 Health and Social Services,
 Housing, and Natural and Cultural
 Resources among the eight
 lowest-rated capabilities















Recovery Coordination

What are the major challenges?

An analysis of real-world and exercise after-action reports (AARs) across the country revealed common challenges:



- Ensuring businesses and jurisdictions have comprehensive recovery plans
- Improving collaboration and coordination between economic and community recovery activities
- Developing economic impact assessments with inconsistent or incomplete data
- Communicating proactively with businesses during recovery
- Sharing information among agencies
- Prioritizing recovery actions across a region















Infectious Disease and Biological Incidents



"Examine the ability of federal, state, local, tribal, and territorial jurisdictions to implement coordinated, integrated response structures and strategies; detect and categorize disease threats; address domestic and international public health implications; control and contain disease outbreaks; deliver public health and medical services; and communicate with external partners and the public during infectious disease pandemics and biological incidents."















Infectious Disease and Biological Incidents

Why is this important?

National Preparedness Report

 Reported that in 2016, response and recovery during the Zika virus outbreak highlighted progress among federal agencies in improving coordination

State Preparedness Report

- Public Health, Healthcare, and Emergency Medical Services core capability experienced one of the largest one-year declines in self assessments
- 89% of states and territories identified the same core capability as a "High Priority"
- 70% of states and territories identified medical surge as a gap in preparedness

Threat and Hazard Identification and Risk Assessment

 Pandemic was the second most frequently cited threat or hazard















Infectious Disease and Biological Incidents

What are the major challenges?

An analysis of real-world and exercise after-action reports (AARs) across the country revealed common challenges:



- Planning for timely vaccine distribution and allocation among multiple sites
- Developing continuity plans to address staffing shortages
- Ensuring responders attend refresher
 training on mass casualty incidents
- Prioritizing and providing like resources across multiple incident sites
- Identifying and training dedicated Public
 Information Officers on biological incidents
- Coordinating timely public information regarding medical countermeasures















Catastrophic Incidents



"Examine the ability of the whole community to deliver lifesaving and life-sustaining capabilities to survivors following a catastrophic incident that severely affects communities and critical infrastructure."















Catastrophic Incidents

Why is this important?

- The Hurricane Sandy After-Action Report included areas for improvement for largescale incidents, including:
 - Senior leadership coordination
 - Incident management structures
 - Continuity of operations
 - Coordination with local, state, and tribal partners

- Earthquakes, hurricanes, typhoons, and wildfires were among the threats and hazards most frequently identified by jurisdictions (these all have the potential to become catastrophic)
 - Earthquakes: 39 of the 50 states have a moderate to high seismic hazard risk
 - Hurricanes: NOAA and NASA predict future hurricanes and tropical cyclones may have higher wind speeds and increase in intensity















Catastrophic Incidents

What are the major challenges?

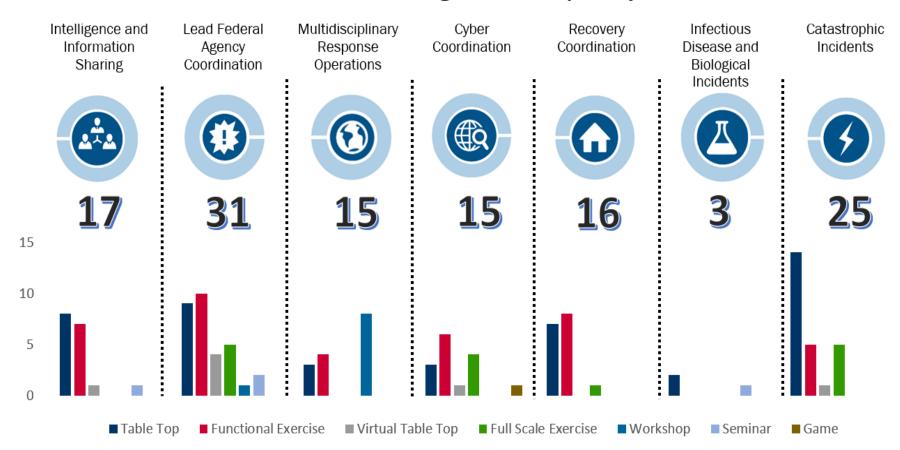
An analysis of real-world and exercise after-action reports (AARs) across the country revealed common challenges:



- Tracking and accepting shipments of resources
- Maintaining situational awareness of resource and staffing needs
- Developing doctrine or standard practices for data collection and analysis
- Coordinating information sharing and reporting
- Understanding legal authorities
- Standardizing protocols for integrating partners across the whole community
- Synchronizing operational tempos and reporting schedules

2017 Exercises By Principals' Objectives

Number of Exercises Aligned with Principals' Objectives





National Exercise Program National Level Exercise

National Level Exercise Background

National Level Exercise (NLE) 2018 served as the culminating event for the 2017-2018 cycle of the NEP

- The Post-Katrina Emergency Management Reform Act of 2006 states that the FEMA Administrator shall conduct national level exercises biennially to:
 - "test and evaluate the capability of Federal, State, local, and tribal governments to detect, disrupt, and prevent threatened or actual catastrophic acts of terrorism, especially those involving weapons of mass destruction" (as the Capstone 2016 exercise did last year), and
 - "test and evaluate the readiness of Federal, State, local, and tribal governments to respond and recover in a coordinated and unified manner to catastrophic incidents."

United States Code, Title 6, Chapter 2, Subchapter II, Part A, Section 748(b)(3)



Planning Considerations

1 Principals' Objectives NEP Exercises and Real-World Incidents **Operational Plans** 3 4 Whole Community Opportunities 5 **Integration of Existing Exercises**

A number of important

PLANNING CONSIDERATIONS

were taken into account when developing the concept for NLE 2018



National Level Exercise (NLE) 2018 examined the ability of all levels of government, private industry, and nongovernmental organizations to protect against, respond to, and recover from a major Mid-Atlantic hurricane



PRE-LANDFALL PROTECTIVE ACTIONS





SUSTAINED
RESPONSE IN
PARALLEL WITH
RECOVERY



RECOVERY PLANNING

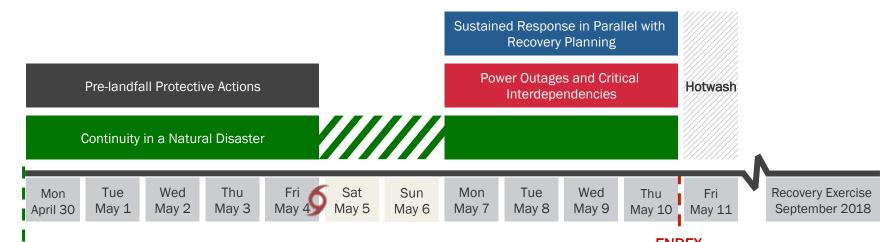


CONTINUITY IN A NATURAL DISASTER



POWER OUTAGES AND CRITICAL INTER-DEPENDENCIES

Functional Exercise Timeline & Scenario Overview



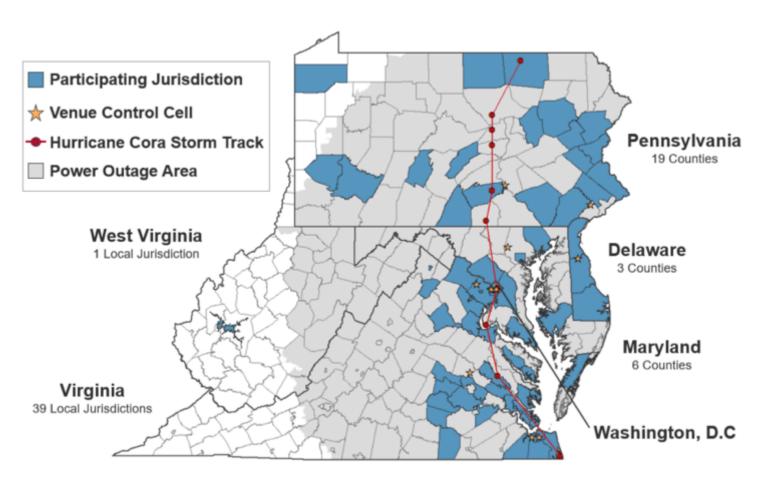
- The NLE 2018 scenario included a major hurricane that made landfall near Hampton Roads, Virginia, causing severe damage to residences, businesses, and critical infrastructure throughout the Mid-Atlantic region
- Fictional Hurricane Cora caused power outages and cascading effects to interdependent systems, including communications, transportation, water, and public health



STARTEX

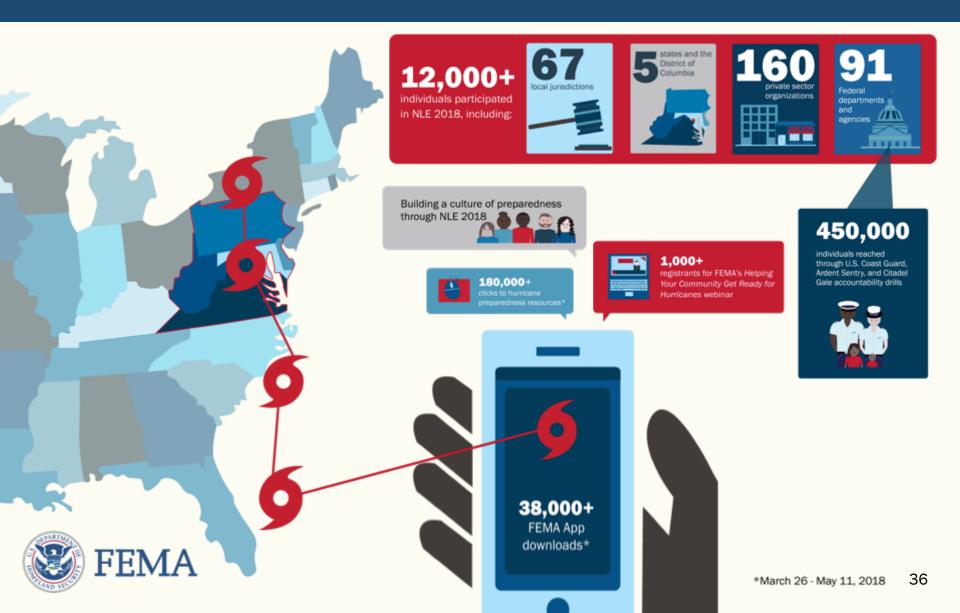


Region-wide and County-level Participation





NLE 2018 Partner & Community Engagement

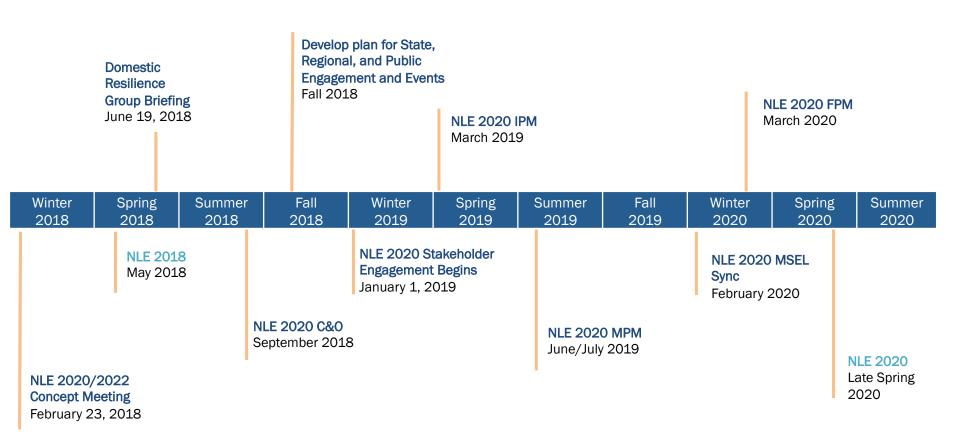


NLE 2020 Concept

- Involves a complex, adversary-based multidimensional attack that reflects the evolving threat environment.
- Begins with a threat that originates overseas by an ambiguous actor, presented initially as a non-state threat, and includes cyberattacks resulting in a domestic national security emergency with significant impacts to critical infrastructure.
- Also includes an option for a weapon of mass destruction (WMD)based threat and the execution of continuity plans with an emphasis on devolution.



NLE 2020 Key Planning Milestones





National Exercise Program

Exercise Starter Kits

Exercise Starter Kits

Exercise Starter Kits are pre-packaged sets of guides and templates to help exercise planners develop tabletop exercises that can be tailored to specific threats, resources, and operational plans of their community.

Each Exercise Starter Kit:

- Includes ready-to-use materials and templates for developing, conducting, and evaluating an exercise
- Incorporates sample scenarios and discussion questions reviewed by experts
- Is flexible and adaptable to meet the needs of individual jurisdictions

Access the Exercise Starter Kits now at http://preptoolkit.fema.gov/





Participating in the National Exercise Program

Benefits of Participating in the NEP



Receive technical assistance and support for your exercises from dedicated exercise design and delivery experts.



Access exercise templates, tools, and other resources to help you design, conduct, and evaluate your exercises.



Pursue new exercise ideas and broaden the impact of your exercises to a wider group of stakeholders.



Influence national preparedness policy and resource allocation decisions at all levels by contributing exercise evaluation data.

Visit
www.fema.gov/nep
to learn more
about the
2017-2018 cycle

Download and complete the Exercise
Nomination Form

Submit the Exercise Nomination Form to nep@fema.dhs.gov The National Exercise
Division at FEMA will
respond to discuss
your exercise



Potential Focus of 2019-2020 Cycle

Operational Coordination and Communications

Cybersecurity

Protection and Restoration of Critical Services

National Security Emergencies

Public Health Emergencies

Community Recovery and Economic Resilience

Mass Care and Housing

Safety of Schools and Other Soft Targets

Operational Resilience





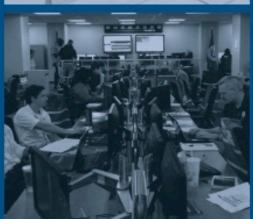














www.fema.gov/nep nep@fema.dhs.gov



Backup Slides

Authorities

- The NEP is established by United States Code, Title 6, Chapter 2, Subchapter II, Part A, Section 748(b)(1), which directs that:
 - "The Federal Emergency Management Agency [FEMA] Administrator, in coordination with the heads of appropriate Federal agencies, the National Council on Disability, and the National Advisory Council, shall carry out a national exercise program to test and evaluate the national preparedness goal, National Incident Management System, National Response Plan [now the National Response Framework], and other related plans and strategies."
- The Post-Katrina Emergency Management Reform Act of 2006 states that the FEMA Administrator shall conduct national level exercises biennially to:
 - "test and evaluate the capability of Federal, State, local, and tribal governments to detect, disrupt, and prevent threatened or actual catastrophic acts of terrorism, especially those involving weapons of mass destruction," and
 - "to test and evaluate the readiness of Federal, State, local, and tribal governments to respond and recover in a coordinated and unified manner to catastrophic incidents."

United States Code, Title 6, Chapter 2, Subchapter II, Part A, Section 748(b)(3)

- 6 U.S.C. § 1136 (d) directs that security exercises for public transportation agencies be a component of the NEP
- 6 U.S.C. § 1166 (d) directs that security exercises for railroad carriers be a component of the NEP
- Public Law 111-353, Section 208 directs that food safety exercises to evaluate and identify weaknesses in the decontamination and disposal model plans be a component of the NEP



National Themes with Focus Areas

Pre-Landfall
Protective Actions

Pre-Staging Resources

Evacuation Decision-Making

Catastrophic Planning

Leveraging Preparedness Data

Private Sector Information Sharing

Sustained Response in Parallel with Recovery Planning

Mass Care

Initiation of Housing

ESF and RSF Integration

EMAC and Mutual Aid

Distribution of Staff

Mission Assignments

Strategic Messaging

Private Sector Engagement

Philanthropic and Volunteer Engagement

Continuity in a Natural Disaster (Focus on NEF #6)

Decision-Making and Implementation

Reporting and Situational Awareness

Inter- and Intra-Agency Coordination

Resilience of Communications and Information Systems

Public/Private Sector Interdependencies

Power Outages and Critical Interdependencies

Public-Private Coordination

Supply Chain Restoration

Prioritization of Resources

Mutual Assistance

Prioritization of Infrastructure Restoration

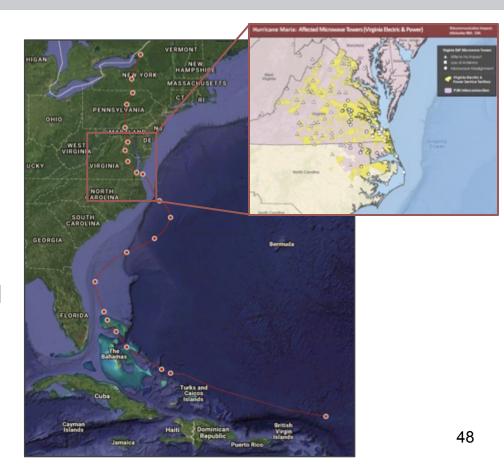


NLE 2018: Integrating Critical Infrastructure

NLE 2018 leveraged the **modeling capabilities** of Clear Path to present realistic impacts to electric, natural gas, and telecommunications infrastructure

- NLE 2018, through Clear Path, integrated multiple private sector companies and utility partners
- Argonne National Laboratory
 expanded upon modeling work
 done for Clear Path to define
 infrastructure impacts
- Long-duration power outages and cascading impacts to critical infrastructure systems





NLE 2018: Integrating the Private Sector & Communities

Private sector and critical infrastructure owners/operators were actively engaged in functional play

- National Business Emergency Operations Center (NBEOC) calls held
 May 2-4 and May 7-9
- Private sector participation focused on testing and evaluating:
 - Information Sharing
 - Request, Acquisition, and Movement of Resources
 - Business Emergency Operations Center (BEOC) Capabilities
- Lead-up events included workshops on information sharing and supply chain

Companies and community organizations leveraged the NLE as an opportunity to engage employees and customers on preparedness

- FEMA hosted a national webinar on hurricane preparedness during NLE 2018
- Organizations conducted their own exercise using an Exercise Starter Kit



NLE 2018: Measuring Engagement with Individuals, Communities, and the Private Sector

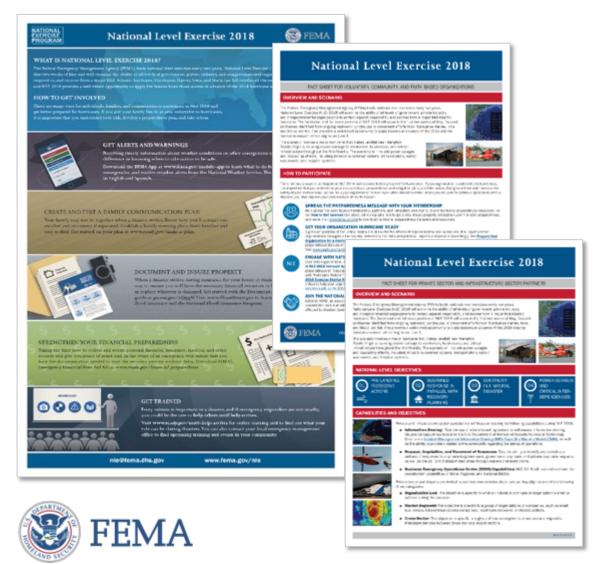
The FEMA Administrator approved several performance measures to gauge the impact of NLE 2018 community engagement:

- Flood Insurance: Increase the number of flood insurance policies purchased by 10,000 nationwide (April 1 August 30)
- FEMA App: Increase by 10% the average downloads of the FEMA App to 31,000 over the NLE campaign timeframe (April 1 August 30)
- Private Sector: 70% of National Business Emergency Operations Center (NBEOC) organizations within the affected area participate during the NLE
- Voluntary/Community Organizations: At least 1,000 registrants participate in the NLE Hurricane Preparedness webinar on May 8, with at least 40% representing non-government sectors
- Online Engagement: Increase web traffic to campaign-promoted hurricane preparedness resources, including:
 - Financial Preparedness Toolkit
 - You are the Help until Help Arrives
 - Creating a Family Communications Plan
 - NLE 2018 Exercise Starter Kit for organizations to conduct internal exercises



NLE 2018: Fact Sheets

Individuals, Private Sector, and Community Organizations



Building upon our efforts to incorporate the whole community into NLE 2018, FEMA developed fact sheets tailored to individuals, the private sector, and community organizations on how to get involved in the NLE and prepare for the 2018 hurricane season

The fact sheets provide calls to action that outline how different groups can get engaged:

- Individual calls to action focus on ways to build resilience without any exercise play
- The private sector and community organization calls to action include options for playing in NLE or holding their own activities

Campaign links were included in all fact sheets to capture the reach of these resources

NLE 2018: FEMA Gets Social with Hurricane Preparedness



FEMA promoted hurricane preparedness messaging on Twitter and Facebook in advance of NLE 2018, focusing on the five calls to action for individuals

Overall, hurricane preparedness social media content shared by FEMA on Twitter and Facebook garnered above average engagement, with a total of over 180,000 impressions on Twitter and reached almost 150,000 on Facebook

@FEMA Twitter	Impressions	Total Engagements	Likes	RTs	Replies
Make a plan 4/23	43,991	417	107	105	3
Financial preparedness 4/24	38,942	253	74	86	1
Until Help Arrives 4/26	34,681	365	84	90	4
Flood insurance 4/27	37,291	230	40	52	1
FEMA App 4/30	28,865	281	56	50	1
TOTAL	183,770	1,546	361	383	10

@FEMA Facebook	Reach	Reactions	Comments	Shares	Link clicks
Make a plan 4/23	34,149	160	14	175	196
Financial preparedness 4/24	24,120	74	7	123	21
Until Help Arrives 4/26	16,048	76	7	54	37
FEMA App 4/30	32,597	104	11	151	109
Exercise photos + FEMA App 5/3	39,282	222	7	71	50
TOTAL	146,196	636	46	574	413



^{*}Social media analytics pulled on 5/21/18.

NLE 2018: Real World Media & News

Presidential Proclamation

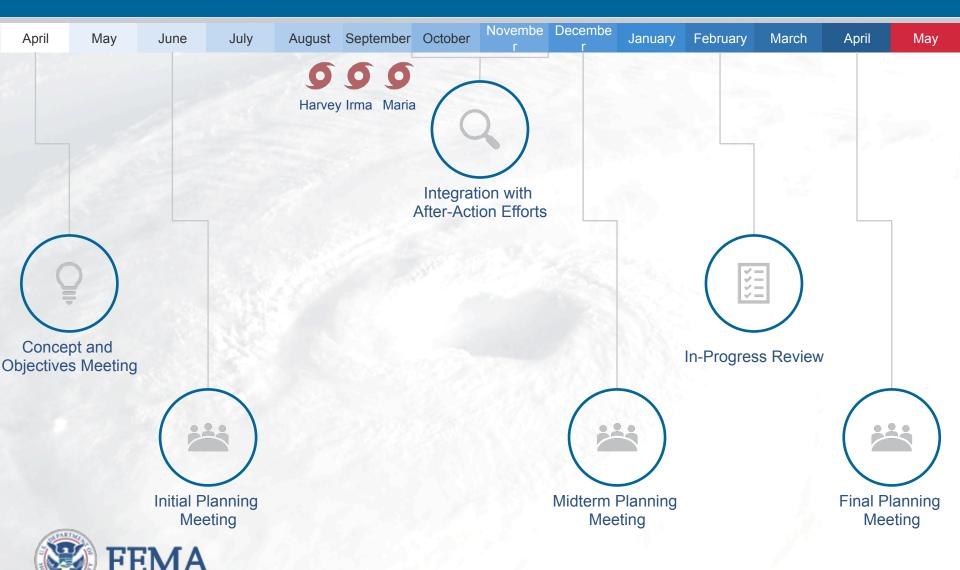


"Further, I recognize the ongoing National Level Exercise 2018, in which more than 250 organizations are participating to examine the ability of all levels of government, private industry, and nongovernmental organizations to protect against, respond to, and recover from a major mid-Atlantic hurricane."

- President Donald J. Trump



NLE 2018: Planning



NLE 2018: State and Local Coordination

- FEMA Region III served as the coordination point for state and local integration into NLE 2018
- The District of Columbia and all states in FEMA Region III—Virginia, Maryland, Delaware, Pennsylvania, and West Virginia—were critical exercise partners and participants
- 67 local jurisdictions participated in the exercise



District of Columbia Virginia Maryland Pennsylvania Delaware



NLE 2018: SimulationDeck

SimulationDeck was an innovative use of technology that added realism and created a more engaging exercise environment

- SimulationDeck served as the player portal for the simulated information environment of NLE 2018:
 - Added realism and built out the scenario environment
 - Drove exercise play and exercise objectives
 - Implemented injects and conveyed scenario details
 - Housed key exercise information, documents, and the Player Directory
- SimulationDeck provided an outlet for mock interviews and public information exercise play









NLE 2018: Leadership Engagement

NLE 2018 included participation from mayors, governors, and senior federal officials, including the Secretary of Homeland Security and FEMA Administrator

