



U.S. DEPARTMENT OF  
**ENERGY**

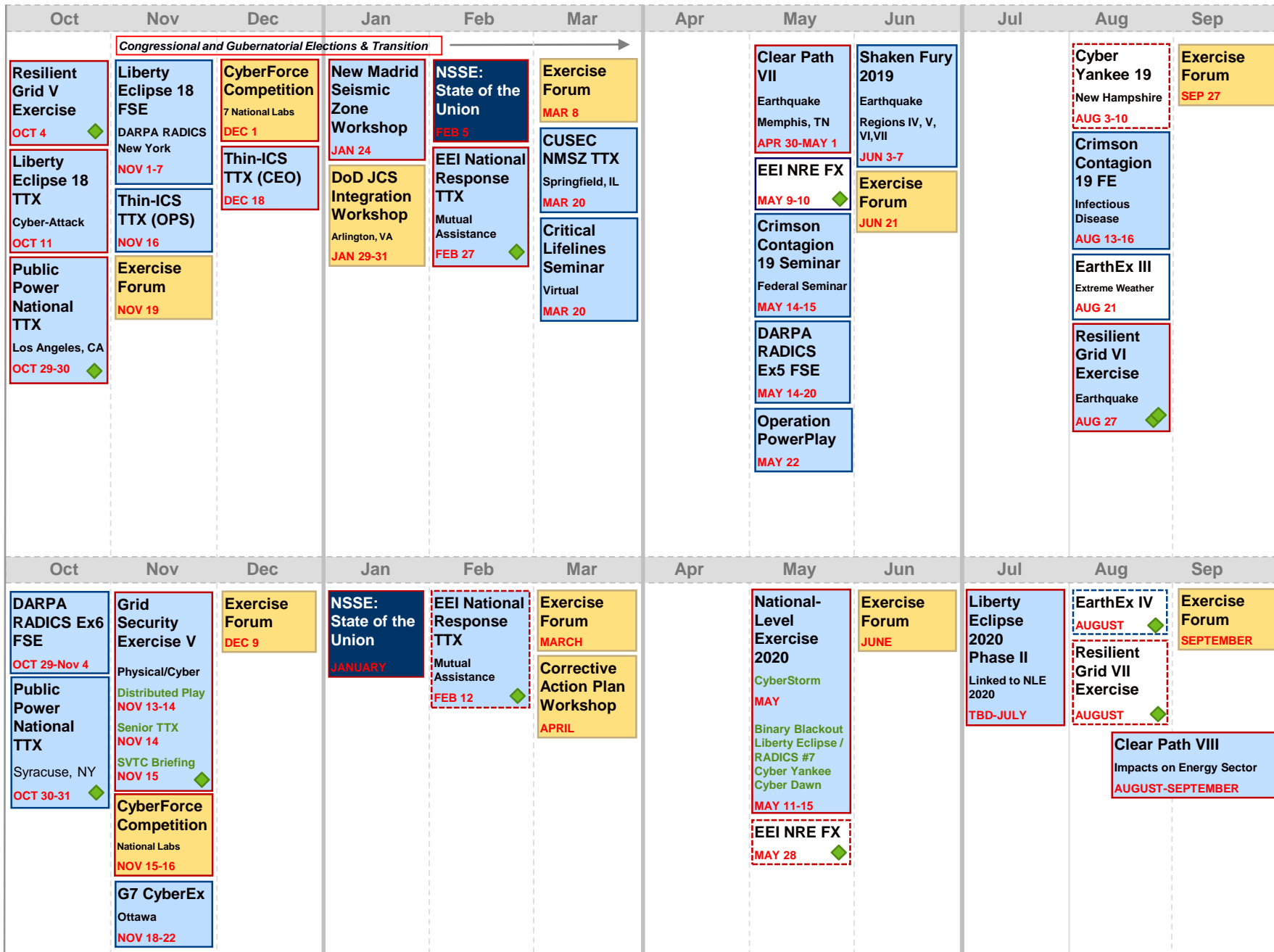
Cybersecurity, Energy Security,  
and Emergency Response



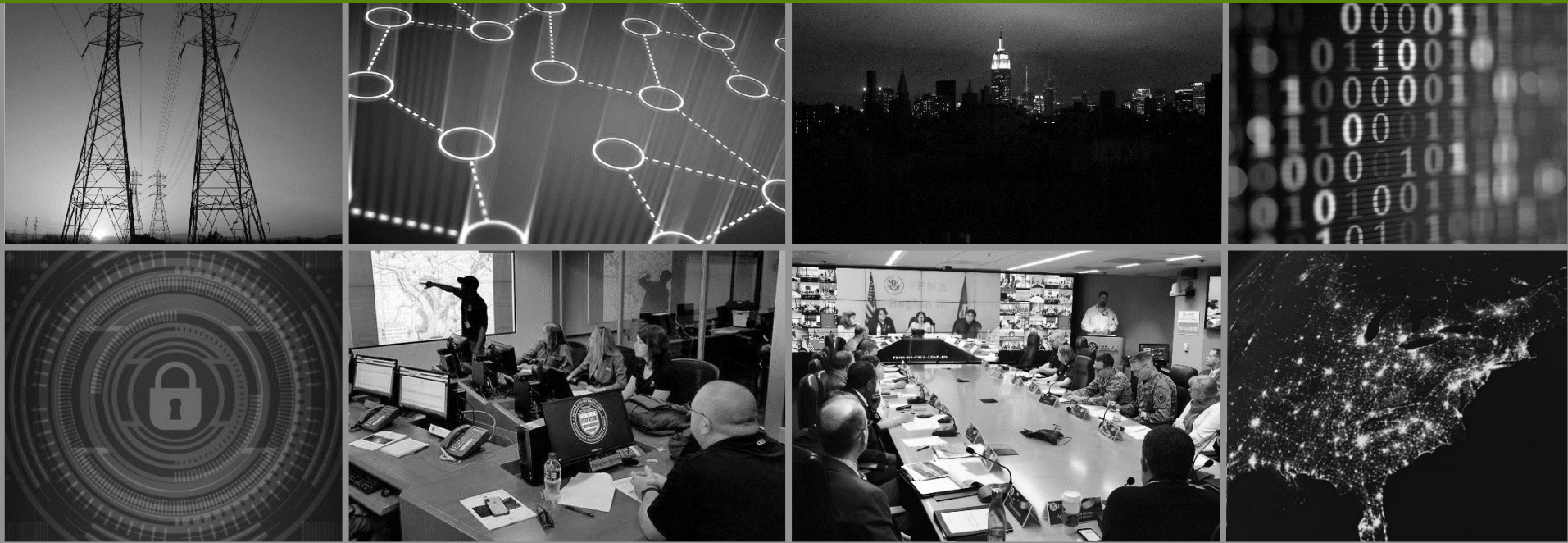
# Energy Sector Exercises



# U.S. DOE-CESER Energy Sector Exercises - Exercise Outlook Schedule



Legend: Exercises (Blue box), Key Programmatic Events (Yellow box), National Special Security Events (Dark Blue box), Senior-Level Engagement (Red box), TBD / Observing (Dashed box), Industry/Partners sponsored (Green diamond)



# NATIONAL EXERCISE PROGRAM

Validating our nation's preparedness

National Level Exercise 2020

Overview Briefing

Publicly Releasable Rev. 07.16.2019



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# 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**
- Aligns **common challenges and emerging issues** identified by states, local jurisdictions, tribes, and territories into national strategic goals called **Principals' Strategic Priorities**, issued by the Principals Committee of the National Security Council at the White House
- Provides **exercise design and delivery assistance** for exercises that align to the Principals' Strategic Priorities
- Integrates evaluation results from each exercise into an overall **analysis of the nation's readiness** and informs the National Preparedness Report



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# Planning Considerations

A number of important  
**PLANNING  
CONSIDERATIONS**

*were taken into account when developing  
the concept for a National Level Exercise*



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## Operational Coordination and Communications



## Cybersecurity



## Stabilization and Restoration of Critical Community Lifelines



## National Security Emergencies



## Public Health Emergencies



## Community Recovery and Economic Resilience



## Mass Care and Housing



## Continuity



## School Safety and Security

# National Level Exercise Background

The NLE is the culminating event of the two-year National Exercise Program cycle

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
- “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)



# National Level Exercise 2020

NLE 2020 will involve complex, multidimensional, widespread cyberattacks involving significant impacts to multiple critical infrastructure sectors, resulting in a domestic national security emergency

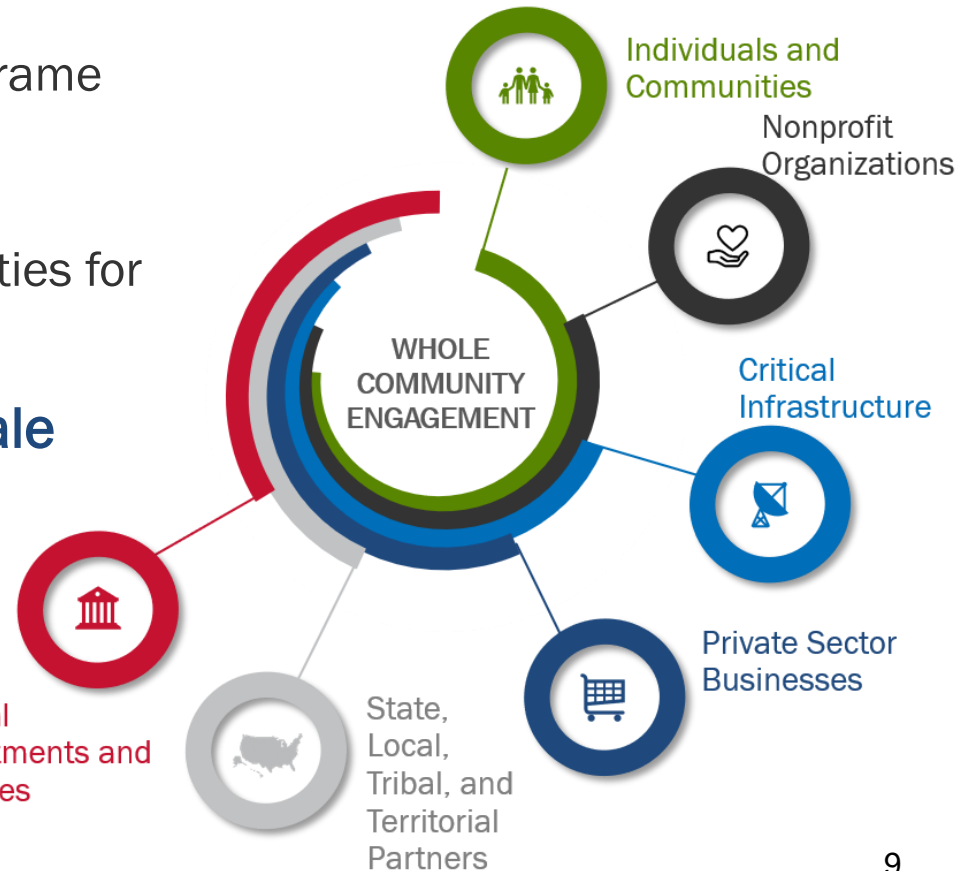
- Several **existing exercises have been integrated** to form NLE 2020
  - A common scenario and control architecture will unify these exercises
- NLE 2020 will take place as a **series of modules** occurring from **February through May 2020**
- Partners across the **whole community**, including all levels of government, the private sector, nongovernmental organizations, and community groups will participate in NLE 2020





# Changing the Dynamics of the NLE Program

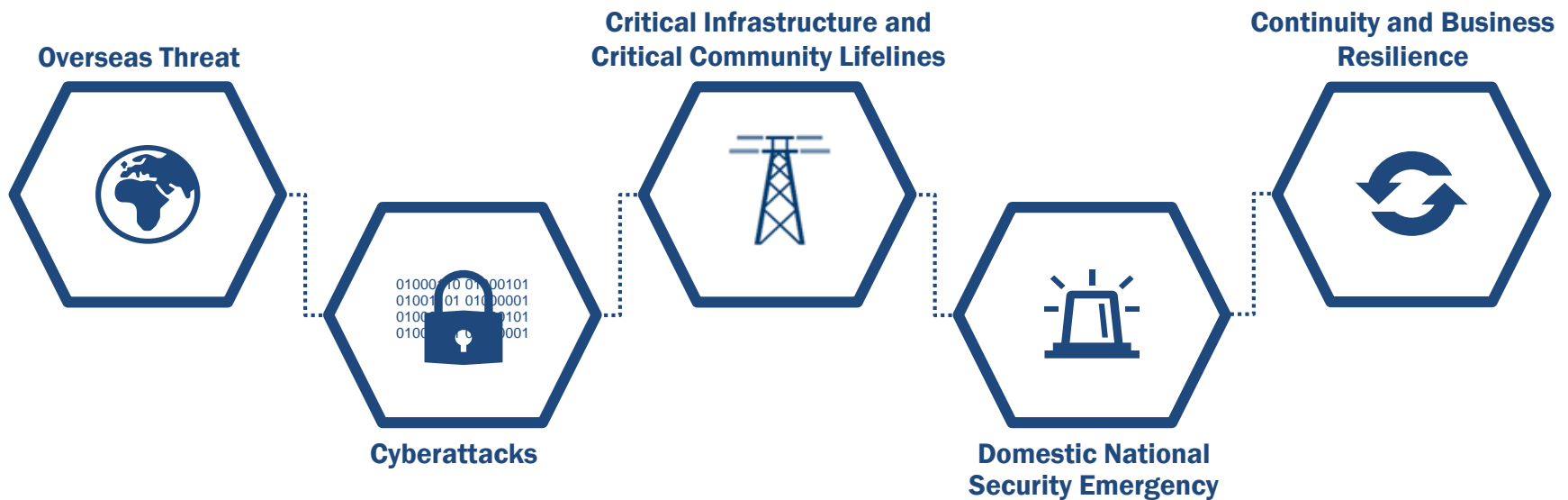
- **Progressive build of preparedness activities over a two-year cycle**
  - Builds capability over a longer timeframe
- **Create a nationwide impact**
  - Drive discussions and build capabilities for all citizens nationwide
- **Broadened from two-week full-scale exercise to a modular approach**
  - Incorporates multiple components to examine distinct phases of a connected threat



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# NLE 2020 Concept

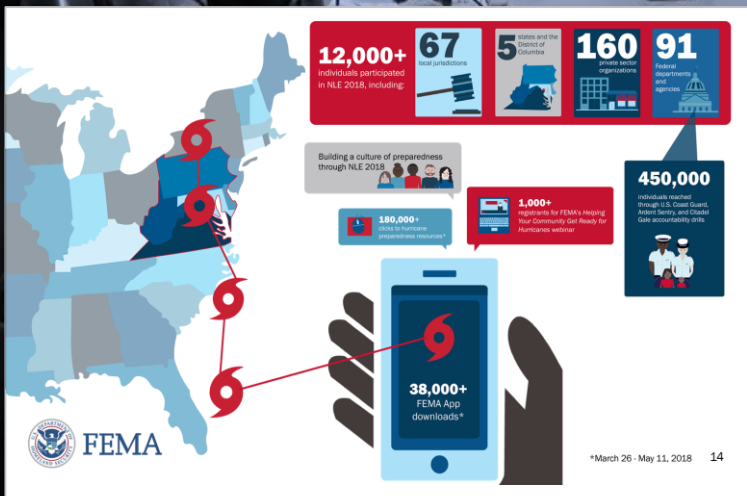
The NLE 2020 concept involves a complex, adversary-based multidimensional attack that reflects the evolving threat environment



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# Whole Community Engagement Strategy

Building off the success of NLE 2018, NLE 2020 will continue to engage the whole community in compelling ways to promote a culture of preparedness



**National Level Exercise 2018**

**What is National Level Exercise 2018?**

**What are the goals of the exercise?**

**What are the objectives of the exercise?**

**What are the activities of the exercise?**

**What are the outcomes of the exercise?**

# Unified Exercise

Planning and execution for NLE 2020 includes key federal, regional, and state partners as integrated parts of one unified exercise.



# Regional Cyber Workshop Series

The FEMA Administrator directed that NLE 2020 drive progress in building a culture of preparedness through a series of lead-up events that build capability with as many individuals across the whole community as possible

- With cybersecurity as a central theme in NLE 2020, the Regional Cyber Workshop Series will **bring tailored workshops to each FEMA Region** as lead-up preparedness activities for NLE 2020
- The National Exercise Division intends to develop the concept and scope of the workshop in close collaboration with the FEMA Regions, as well as with key stakeholders throughout the Department of Homeland Security

1



Demonstrate understanding of **roles, responsibilities, resources, capabilities, and emergency contacts** in the event of a cyber attack

2



**Strengthen regional connections** among emergency management and cybersecurity professionals

3



Share **best practices** among emergency managers for cyber incident preparedness

4



**Support communities in preparing for participation** in NLE 2020



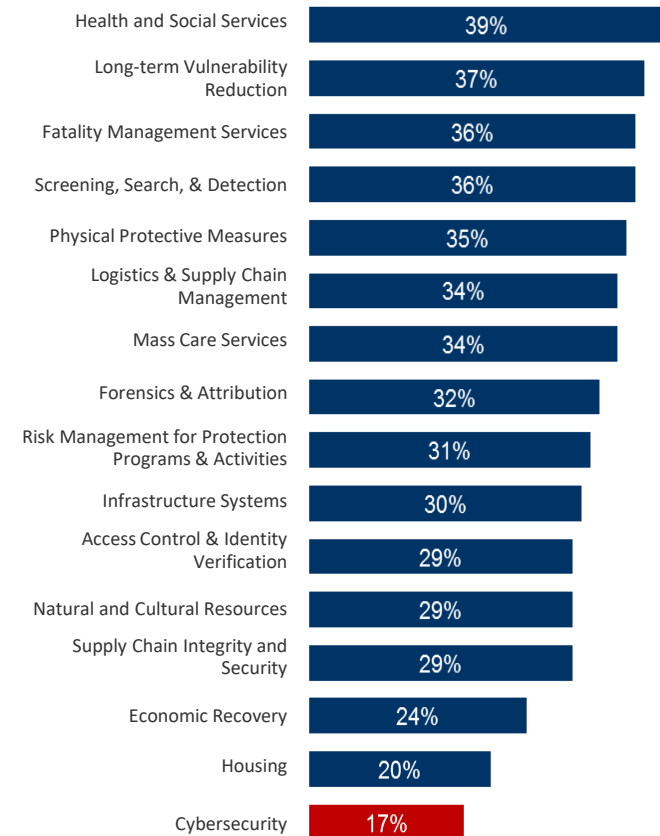
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# Cyber Trends in Preparedness Data

# Assessing Preparedness: Focus on Cybersecurity

- States, territories, tribes, urban areas, and other communities use the Threat and Hazard Identification and Risk Assessment (THIRA) and Stakeholder Preparedness Review (SPR) to assess their preparedness
- FEMA includes the results of the THIRA and SPR, along with several other preparedness indicators, in the annual National Preparedness Report (NPR)
- Analytic results help shape planning, training, exercise, and other prioritization decisions at all levels
- Since 2012, states and territories have reported a low level of proficiency in Cybersecurity
- Cybersecurity received **the lowest proficiency ratings of all core capabilities** in the 2017 SPRs, as shown in the graph (right) which depicts the 16 lowest-rated capabilities overall

## Proficiency Ratings



Percentage of 4-5 Ratings Based on 5-Point Scale (5=Highest Rating)

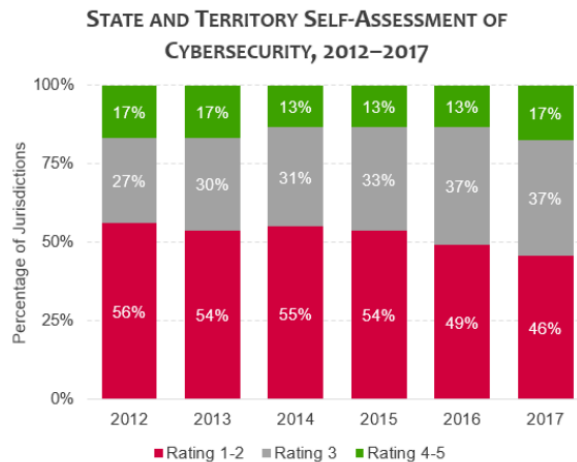


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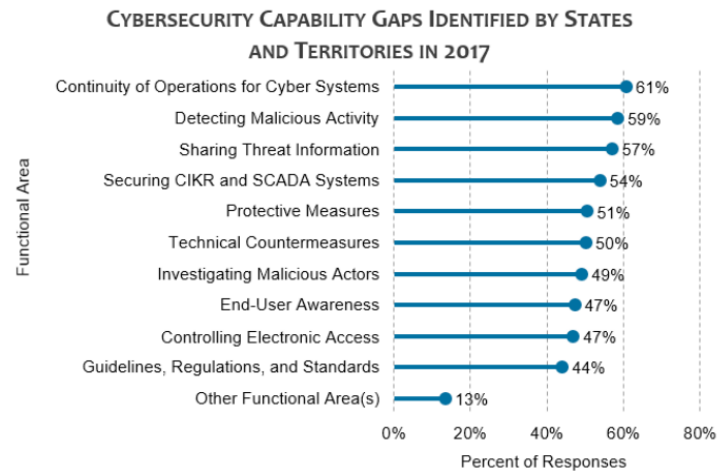
# National Preparedness Report: Cybersecurity

Since 2012, states and territories have consistently reported Cybersecurity as their least proficient capability

## STATE AND TERRITORY PERSPECTIVES



**Figure 21.** Since 2012, states and territories have reported a low level of proficiency (indicated by percentage of 4 and 5 ratings) in Cybersecurity.



**Figure 22.** Since 2014, states and territories have identified functional gaps in their annual State Preparedness Report responses. Functional areas break down core capabilities into more granular-level functions, which were identified from national preparedness doctrine.



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2018 National Preparedness Report



# 2018 NPR Cybersecurity Key Findings

Based on an in-depth analysis and assessment of national capabilities, the 2018 National Preparedness Report outlines key findings related to Cybersecurity

- **Evolving cyber threats continue to outpace the development of protective practices**; at the same time, technology users often fail to implement precautionary measures to safeguard their cyber systems
- **Insufficient information sharing between the public and private sectors** has hindered the Nation's effectiveness in defending against cyber threats
- The Federal Government faces **persistent challenges in the recruitment and retention of cybersecurity personnel**, though it has taken steps to improve cybersecurity training for the Nation

# Get Involved in NLE 2020

## Integrate



*Have your organization participate in the functional and full-scale exercise portions of NLE 2020*

## Create



*Design a lead-up event within your organization to promote cybersecurity preparedness*

## Educate



*Promote cybersecurity preparedness through educational campaigns*



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# Liberty Eclipse 2020 / RADICS Exercise #7

- Two phase approach
- RADICS aligned with primary NLE 2020 play on May 11-15
- TTX/Game in Summer months (TBD)
- Advance discussions from RADICS/GridEx and other cyber exercises



# Point of Contact Information

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Energy Sector Exercises

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