

# Illinois Cyber Navigator Program

Illinois State Board of Elections

# PA 100-0587 (10 ILCS 5/1A-55)

- ▶ Sec. 1A-55. Cyber security efforts. The State Board of Elections shall provide by rule, after at least 2 public hearings of the Board and in consultation with the election authorities, a Cyber Navigator Program to support the efforts of election authorities to defend against cyber breaches and detect and recover from cyber-attacks. The rules shall include the Board's plan to allocate any resources received in accordance with the Help America Vote Act and provide that no less than half of any such funds received shall be allocated to the Cyber Navigator Program. The Cyber Navigator Program should be designed to provide equal support to all election authorities, with allowable modifications based on need. The remaining half of the Help America Vote Act funds shall be distributed as the State Board of Elections may determine, but no grants may be made to election authorities that do not participate in the Cyber Navigator Program.

# What does PA 100-0587 do?

- ▶ Creates the “Cyber Navigator Program”
  - ▶ An effort to help election authorities to defend against cyber breaches and detect and recover from cyber-attacks
- ▶ Designed to provide equal support to all election authorities
  - ▶ Allowable modifications based on need
- ▶ 2018 HAVA Election Security Grant Funds (\$13,893,905)
  - ▶ Half (\$6,946,952.50) must go to the Cyber Navigator Program
  - ▶ Half (\$6,946.952.50) may be used at the discretion of the SBE
    - ▶ No additional grants from these remaining funds may be made to election authorities that do not participate in the Cyber Navigator Program

# The Cyber Navigator Program

## Infrastructure

- Illinois Century Network Expansion

## Information

- Cybersecurity Information Sharing Program

## Personnel

- Cyber Navigators

# 1.) Infrastructure

Illinois Century Network (ICN) Expansion Project

# Illinois Century Network (ICN)

- ▶ High performance network built to meet the Internet and Intranet needs of the educational, research, governmental, and healthcare organizations serving the state of Illinois
- ▶ Serves as an Illinois “local area network”
- ▶ Maintained by the Illinois Department of Innovation & Technology (DoIT)

# ICN Built-In Benefits

- ▶ Distributed Denial of Service (DDoS) Mitigation
- ▶ Cleaner, safer internet through IP filtering, geo-filtering, etc.
- ▶ Data transmission **without** the internet
  - ▶ Traffic routed through the ICN stays entirely within the ICN and its protections

# ICN Benefits for Election Authorities

- ▶ Centrally managed firewall
  - ▶ Provides broad protection against malicious IP addresses
  - ▶ Central “choke point” for attacks against Illinois elections infrastructure
- ▶ 24/7 Security Operations Center Monitoring
  - ▶ Web server & perimeter firewall monitoring for attack prevention & detection
- ▶ Intrusion Detection (DHS Albert Sensor)
  - ▶ Dedicated Intrusion Detection device for additional 24/7 monitoring



# Will centralizing elections agencies into a single network create a higher value target for attackers?

- ▶ Election Authorities keep and maintain complete control over their perimeter firewalls
- ▶ All your existing protections remain in place
- ▶ The ICN is essentially a private internet service provider - with added security benefits
- ▶ We believe the added security benefits the ICN is able to offer outweigh any additional risk

# Isn't the ICN Expensive?

- ▶ 2018 HAVA Election Security Grant Funding will be used for the initial buildout and first year of service
- ▶ The SBE will budget for and continue to pay for ICN services in subsequent years through the IVRS Budget
  - ▶ These payments will be made directly to DoIT
  - ▶ Election Authorities will not see a bill for their internet service
- ▶ The expense associated with each ICN benefit individually far outweigh the additional cost of the ICN

## 2.) Information Sharing & Outreach

Illinois Cybersecurity Information Sharing Program

# Cybersecurity Information Sharing Program Manager (CISPM)

- ▶ Hired as a permanent, full-time employees by the Illinois State Board of Elections
- ▶ Stationed at the Illinois Statewide Terrorism & Intelligence Center (STIC)
- ▶ Serves as the coordinator for outreach and information sharing to election authorities across Illinois

# Duties of the CISPM

- ▶ Maintain relationships with election officials throughout Illinois
- ▶ Disseminate information on cybersecurity “best practices”
- ▶ Facilitate the flow of threat intelligence between local election officials and State/Federal partners
- ▶ Conduct webinars and conferences focused on cybersecurity
- ▶ Oversee security awareness training for local election officials and their staffs
  - ▶ Yearly training on common vulnerabilities, phishing attacks
- ▶ Work with local election officials to ensure that they have access to all available services and assistance in the event of a cyberattack
- ▶ Provide routine administrative updates to the State Board of Elections
- ▶ Mature the program

# 3.) Personnel

The Cyber Navigators - Boots on the Ground

# Cyber Navigator Staffing

- ▶ Funded by the 2018 HAVA Election Security Grant
- ▶ 9 Cyber Navigators (1 lead, 8 field)
  - ▶ 2 Navigators for each zone
- ▶ Initial 12-month contract, ongoing need will be evaluated
- ▶ Provided by DoIT on a personal services contract

# Cyber Navigator Goals

- ▶ Comprehensive Risk Assessment
  - ▶ This process includes a methodical review of the organization's security controls, as well as an assessment of the likelihood and magnitude of harm that could be potentially realized from the unauthorized access, use, disclosure, disruption, modification, or destruction of critical information
- ▶ Analyze system and network documentation for accuracy
- ▶ Guidance regarding software patches, system updates, email, security software, etc.
- ▶ Assistance with the Center for Internet Security's Security Controls



# Cyber Navigator Phased Approach

- ▶ Considerations for costs, timing, and election authority interest have led us to prioritize placing risk assessments in the hands of election officials as soon as possible
  - ▶ Additional Phase 1 goals are included as they have limited costs and are the most efficient use of grant funding to address overall cybersecurity posture
- ▶ The SBE is committed to the long-term success of the Cyber Navigator Program
  - ▶ We anticipate providing assistance in implementing all 20 CIS Controls in future phases
  - ▶ As the program progresses, we will be able to make informed decisions on future use of grant funds

# Program Participation

Requirements for additional grant funding

# Public Act 100-0587

## Requirements

- ▶ No less than half of 2018 HAVA Election Security Grant funds received shall be allocated to the Cyber Navigator Program
- ▶ The Cyber Navigator Program should be designed to provide equal support to all election authorities, with allowable modifications based on need
- ▶ No additional 2018 HAVA Election Security Grant funding may be made available to election authorities that do not participate in the Program

# Requirement #1: ICN Participation

- ▶ An Election Authority must utilize the ICN for connectivity to Illinois State Board of Elections' systems
  - ▶ OR have entered into an agreement to do so as soon as practicable

# Requirement #2: Cybersecurity Information Sharing Program Participation

- ▶ An Election Authority must:
  - ▶ Register with the Elections Infrastructure Information Sharing and Analysis Center (EI-ISAC)
  - ▶ Work with the CISPM to establish two-way data sharing
  - ▶ Have at least one representative complete Security Awareness training

# Requirement #3: Cyber Navigator Participation

- ▶ An Election Authority must allow a Cyber Navigator to complete a comprehensive risk assessment

# Verifying an Election Authority has completed requirements for participation

- ▶ The assigned Cyber Navigator will provide in writing to the Cybersecurity Information Sharing Program Manager certification that the Election Authority has completed the required risk assessment
- ▶ The Cybersecurity Information Sharing Program Manager will provide in writing to the State Board of Elections verification that the Election Authority has met all Program requirements

# Questions?