U.S. Department of Homeland Security

CYBERSECURITY AND INFRASTRUCTURE SECURITY AGENCY

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Cybersecurity Advisor Program
Cybersecurity and Infrastructure Security Agency

June 23, 2020

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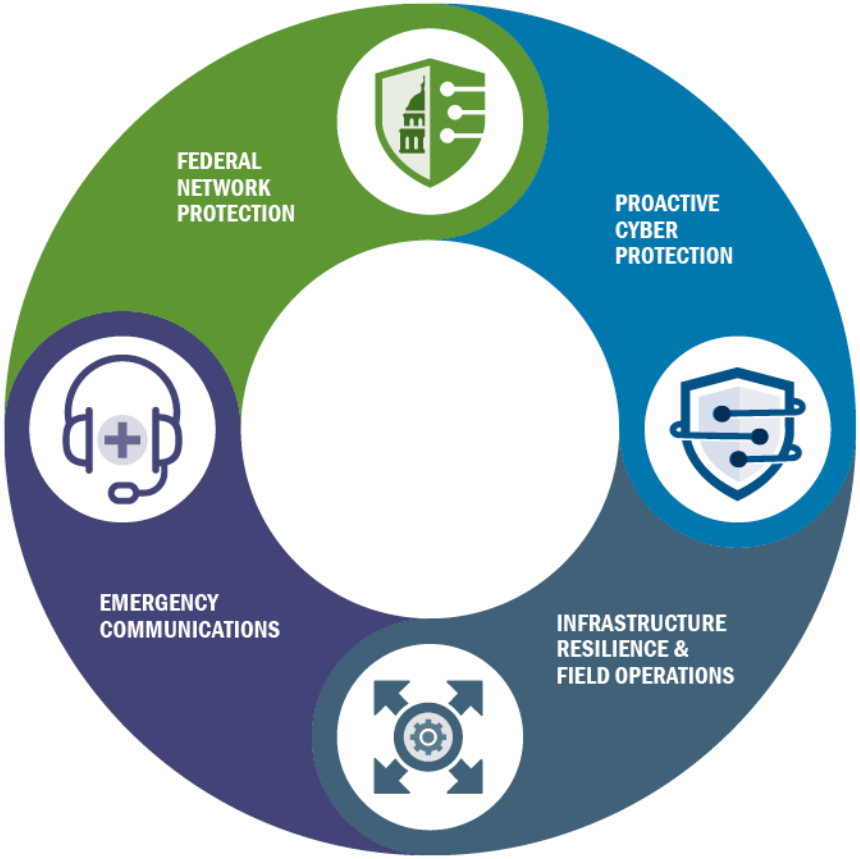
The Nation's Risk Advisors

The Cybersecurity and Infrastructure Security Agency (CISA) is the pinnacle of national risk management for cyber and physical infrastructure



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Cybersecurity Advisor Program

Cybersecurity Advisor Program

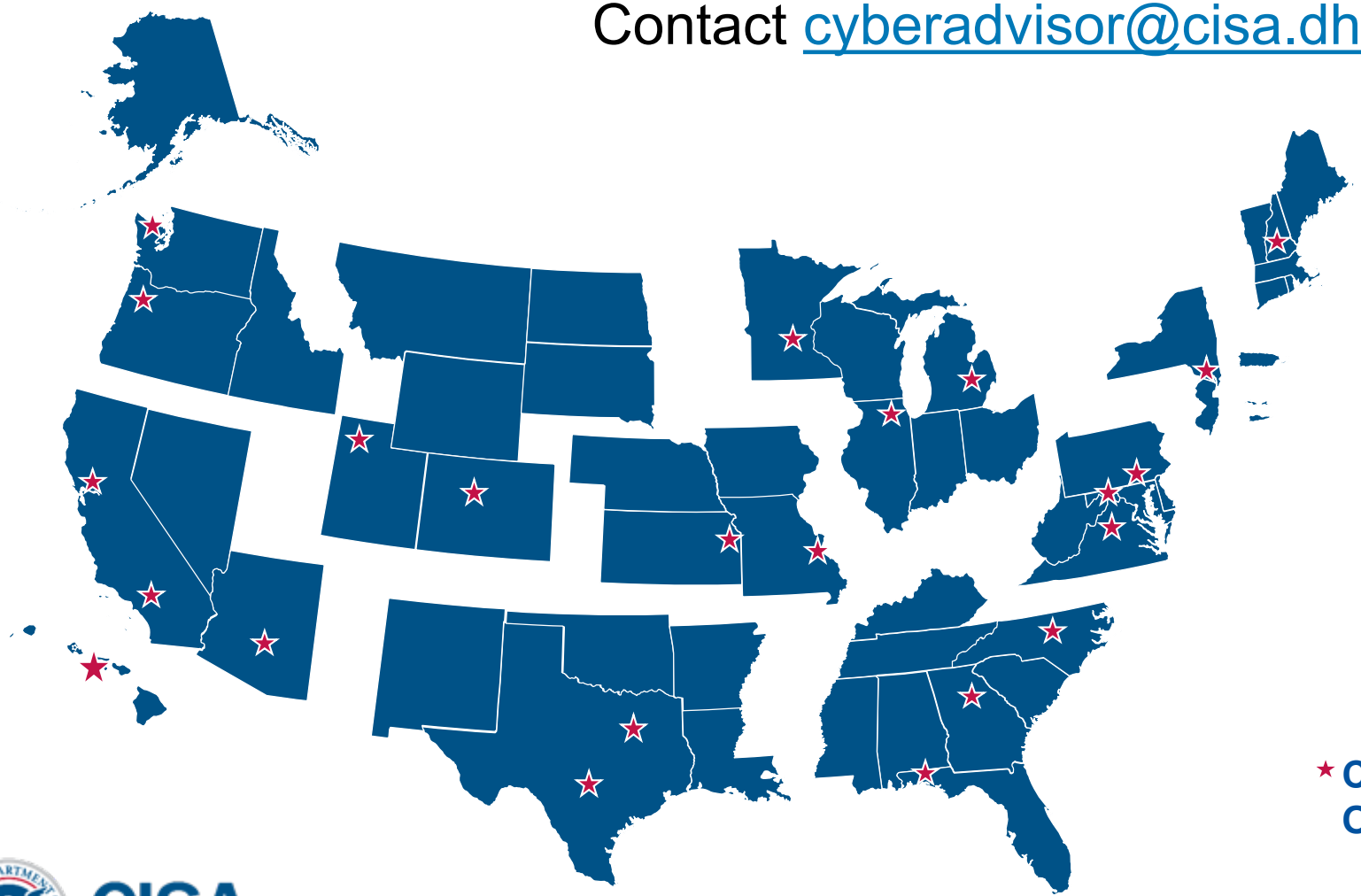
CISA mission: Lead the Nation's efforts to understand and manage risk to our critical infrastructure.

In support of that mission: Cybersecurity Advisors (CSAs):

- **Assess**: Evaluate critical infrastructure cyber risk.
- **Promote**: Encourage best practices and risk mitigation strategies.
- **Build**: Initiate, develop capacity, and support cyber communities-of-interest and working groups.
- **Educate**: Inform and raise awareness.
- **Listen**: Collect stakeholder requirements.
- **Coordinate**: Bring together incident support and lessons learned.

CSA Deployed Personnel

Contact cyberadvisor@cisa.dhs.gov



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Cybersecurity and Resilience

Who is targeting you?

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What is Ransomware?

- Ransomware is a type of malicious software, or malware, designed to deny access to a computer system or data until a ransom is paid. Ransomware typically spreads through phishing emails or by unknowingly visiting an infected website.

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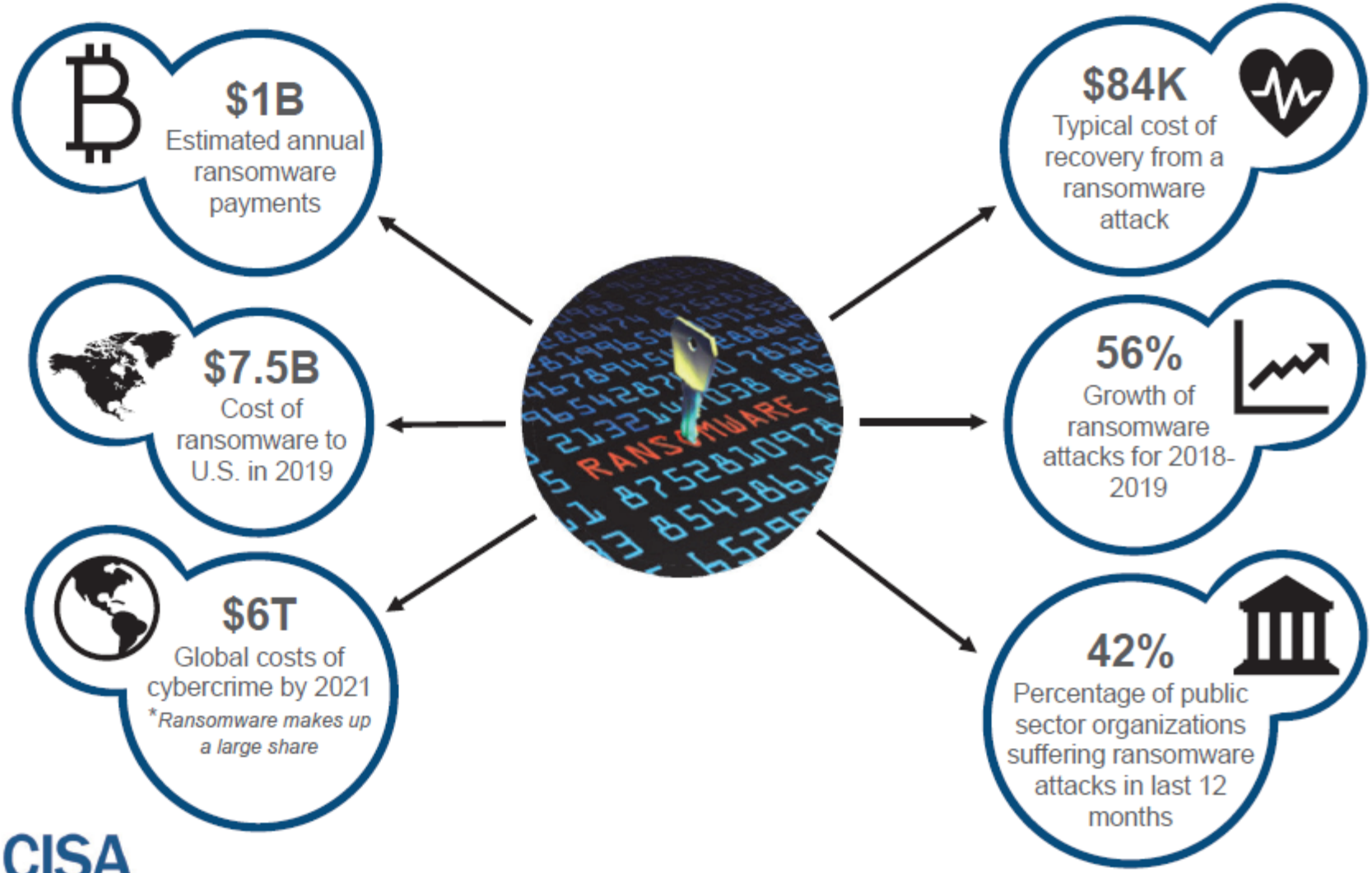
https://www.us-cert.gov/Ransomware

Ransomware by the Numbers



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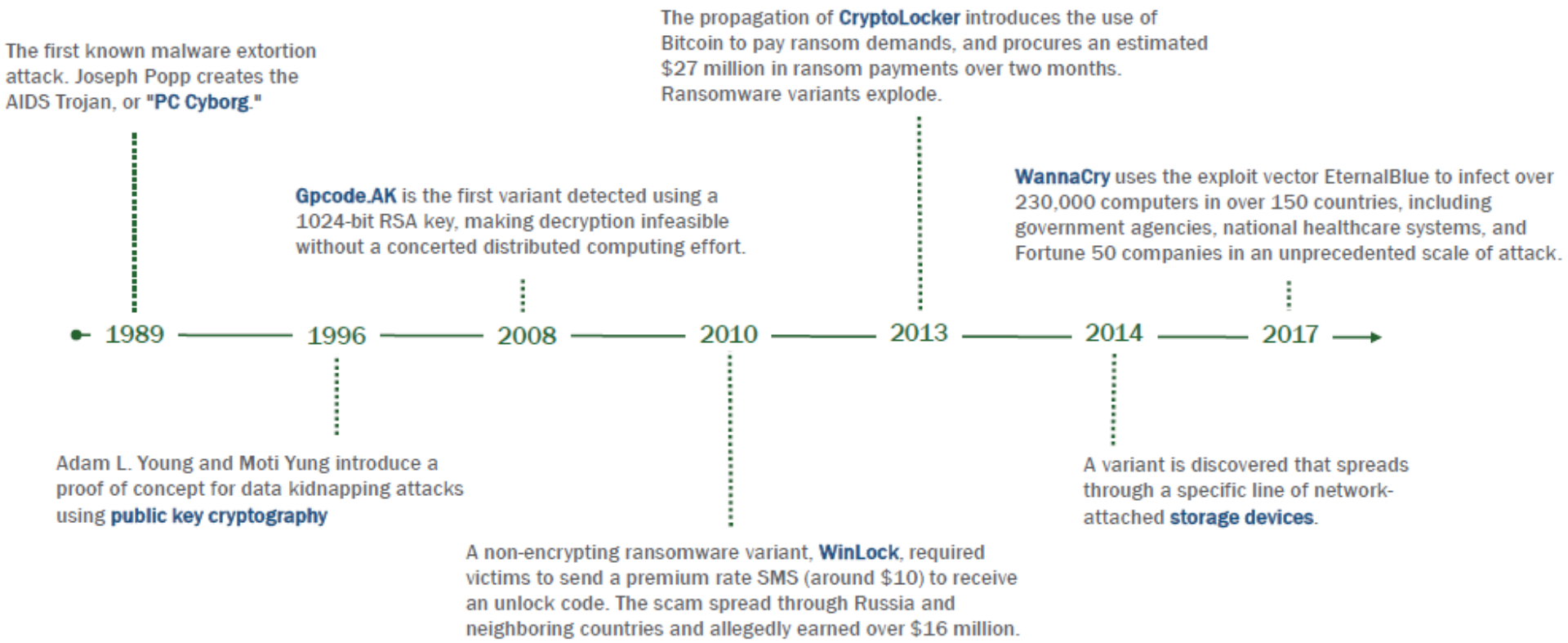
Evolution of Ransomware



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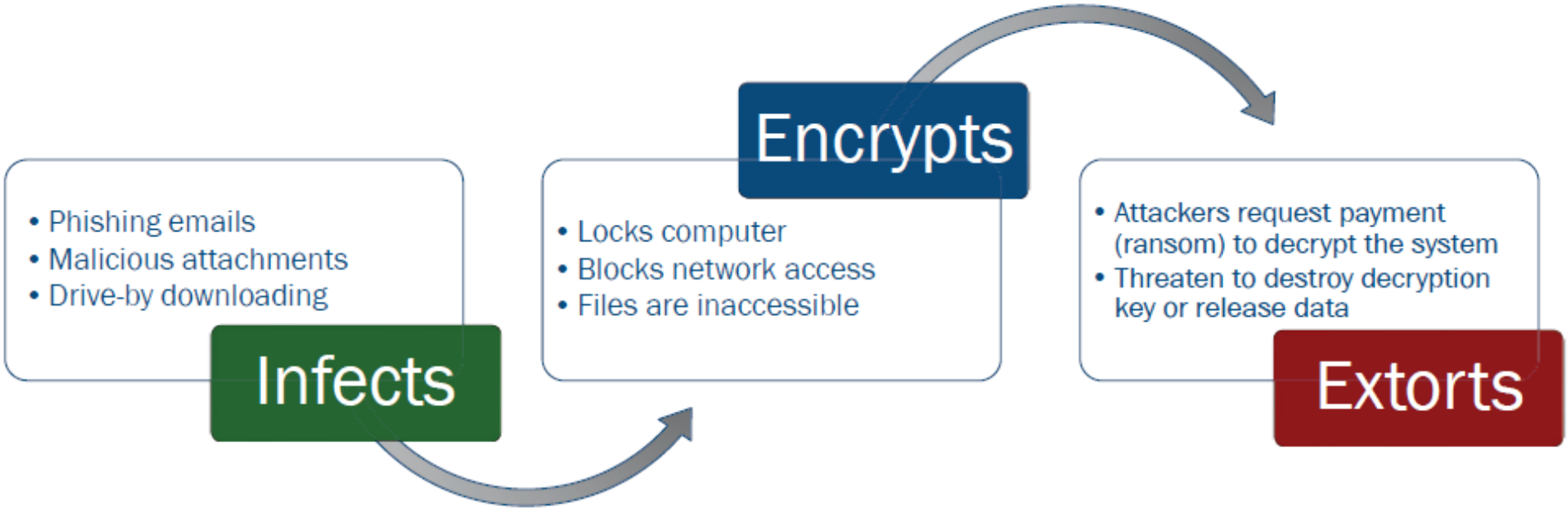
Ransomware Patterns of Behavior



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What can you do today to defend yourselves?

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CISA INSIGHTS
Ransomware Outbreak

Actions for Today – Make Sure You're Not Tomorrow's Headline:

1. Backup your data offline
2. Manage patches
3. Update security solutions
4. Prepare your incident response plan
5. Maintain global situational awareness

Most commonly targeted sectors


Education

Government Agencies



Healthcare

Energy & Utilities



Retail

Finance


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What if become a victim?

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CISA INSIGHTS
Ransomware Outbreak

Actions to Recover If Impacted – Don't Let a Bad Day Get Worse:

1. Ask for help!
2. Work with experts
3. Isolate infection
4. Review the connections
5. Prioritize recovery

Most commonly targeted sectors


Education

Government Agencies



Healthcare

Energy & Utilities



Retail

Finance


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CISA INSIGHTS

Ransomware Outbreak

Actions to Secure Your Environment Going Forward – Don't Let Yourself be an Easy Mark:

1. Practice good cyber hygiene
2. Segment networks
3. Develop containment strategies
4. Know your system's baseline
5. Review recovery procedures

Most commonly targeted sectors


Education

Government Agencies



Healthcare

Energy & Utilities



Retail

Finance


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Ransomware Resources

https://www.us-cert.gov/Ransomware

- Training (Webinar under Training)
- Mitigations
- Best Practices
- Ransomware Alerts

"Don't Wake Up to a Ransomware Attack" provides essential knowledge to prepare you and your organization to prevent, mitigate, and respond to the ever-growing threat of ransomware attacks.

- This course is specifically designed to be accessible to a non-technical audience including managers and business leaders, as well as provide an organizational perspective and strategic overview useful to technical specialists.

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Ransomware Resources

- https://www.justice.gov/criminal-ccips/file/872771/download

- Isolate the infected computer immediately
- Isolate or power-off affected devices
- Immediately secure backup data or systems
- Contact law enforcement
- Secure partial portions of the ransomed data that might exist
- Change all online account passwords and network passwords
- Delete Registry values and files

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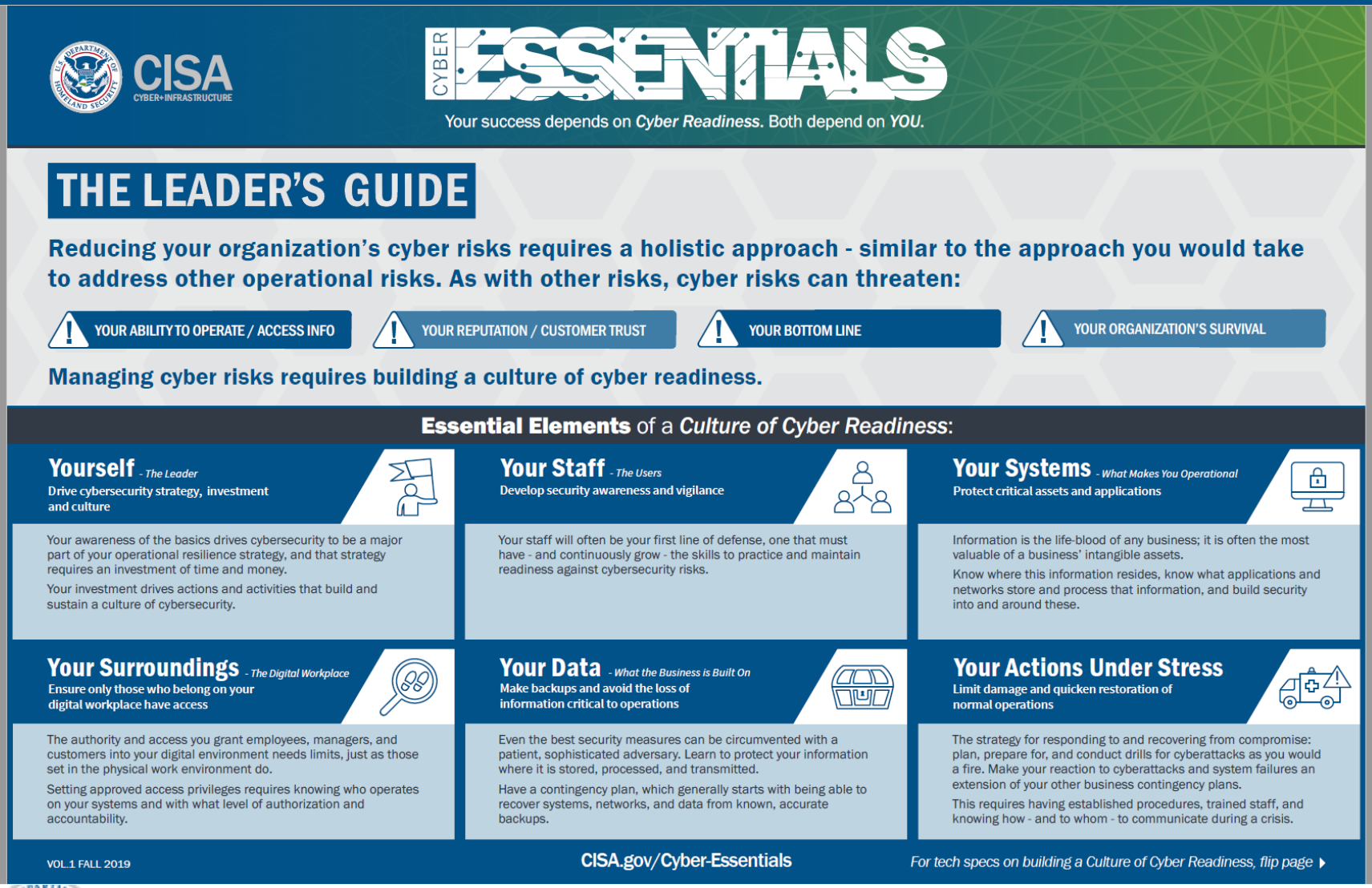
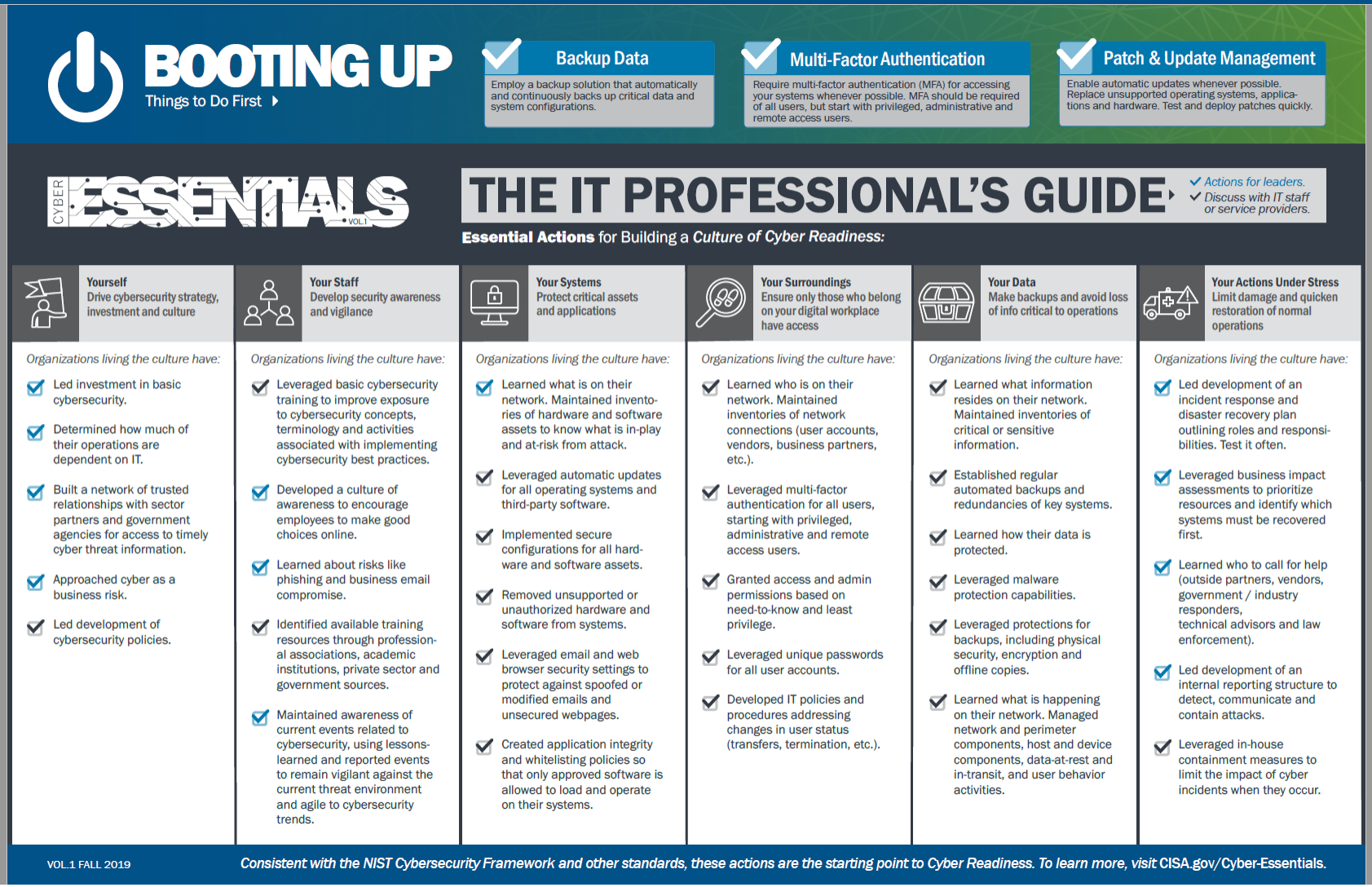
Ransomware Resources

- CISA Security Tip – Protecting Against Ransomware
  - https://www.us-cert.gov/ncas/tips/ST19-001
- CISA Webinar – Combating Ransomware
  - https://www.youtube.com/watch?v=D8kC07tu27A
- Joint Ransomware Statement
  - https://www.us-cert.gov/sites/default/files/2019-07/Ransomware_Statement_S508C.pdf

Additional Resources



Additional Resources



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Incident Reporting

CISA provides real-time threat analysis and incident reporting capabilities

- 24x7 contact number: 1-888-282-0870;
  - cisaservicedesk@cisa.dhs.gov
  - WWW.CISA.GOV

When to Report:

If there is a suspected or confirmed cyber attack or incident that:

❖ Affects core government or critical infrastructure functions;

❖ Results in the loss of data, system availability; or control of systems;

❖ Indicates malicious software is present on critical systems

Malware Submission Process:

- Please send all submissions to the Advance Malware Analysis Center (AMAC) at: submit@malware.us-cert.gov
- Must be provided in password-protected zip files using password “infected”
- Web-submission: https://malware.us-cert.gov

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Range of Cybersecurity Assessments

STRATEGIC
(C-Suite Level)

- Cyber Resilience Review (Strategic) ----------
- External Dependencies Management (Strategic)----------
- Cyber Infrastructure Survey (Strategic)----------
- Cybersecurity Evaluations Tool (Strategic/Technical)-----
- Phishing Campaign Assessment (Technical)----------
- Vulnerability Scanning / Hygiene (Technical)----------
- Validated Architecture Design Review (Technical)--------
- Risk and Vulnerability Assessment (Technical)----------

TECHNICAL
(Network-Administrator Level)

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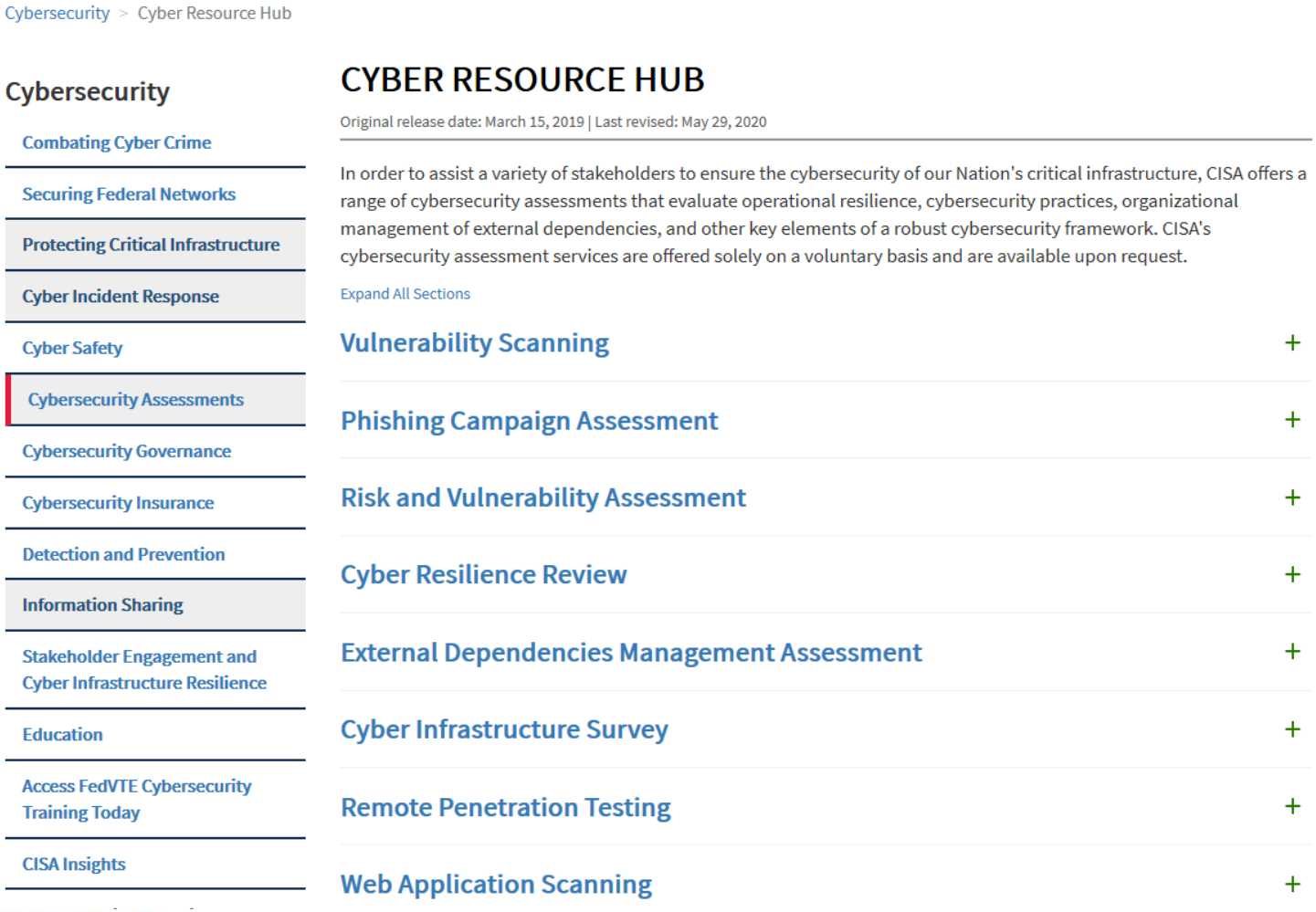
Cyber Resource Hub



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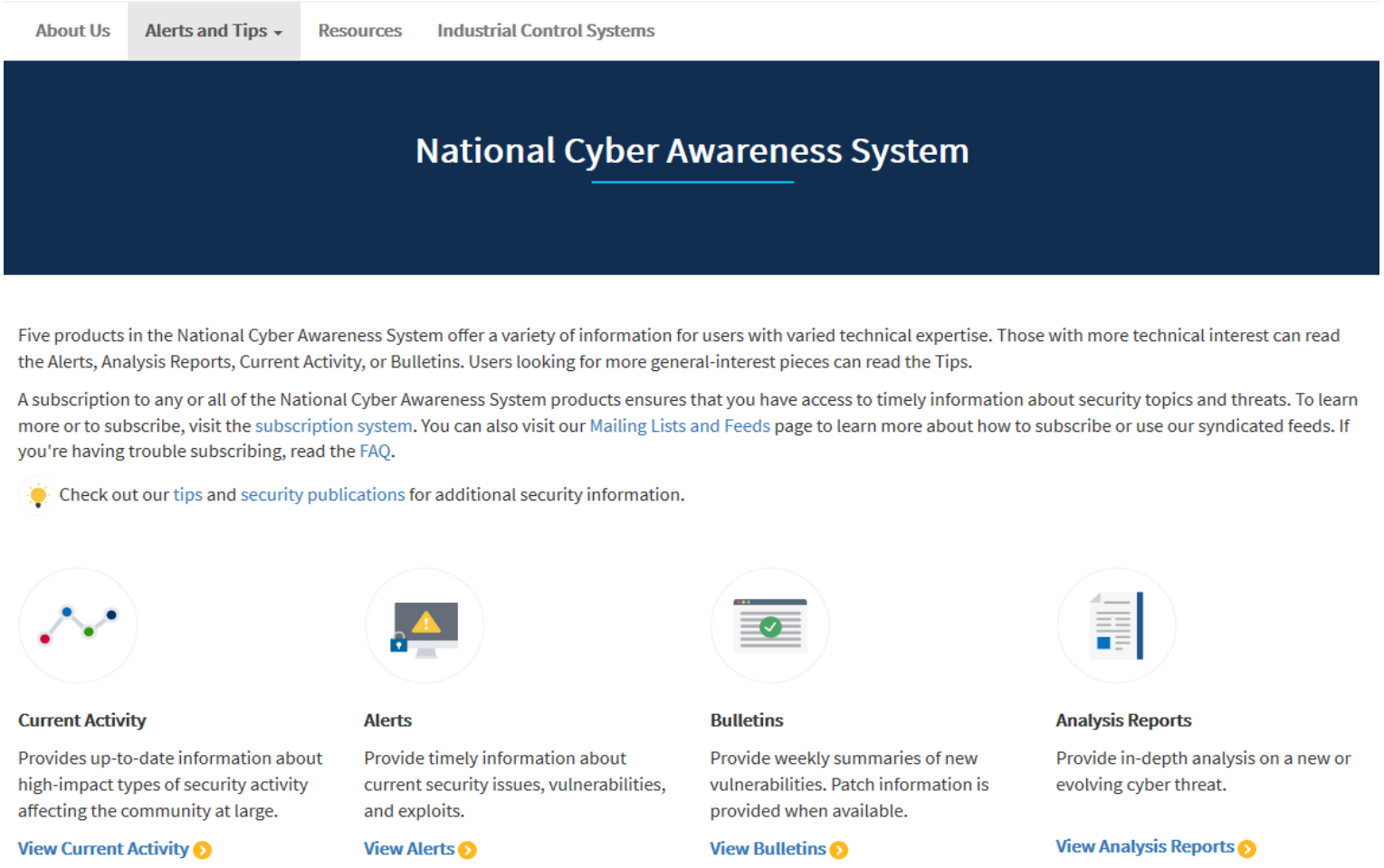
https://www.cisa.gov/cyber-resource-hub

National Cyber Awareness System



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https://www.us-cert.gov/ncas

Contacts and Questions?

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