



Cybersecurity Services for K-12 Education



Joe Frohlich
CISA



Burke Honzel
Montana DES



Andy Hanks
CIS

March 8, 2024



CISA

**CYBERSECURITY &
INFRASTRUCTURE
SECURITY AGENCY**

Cybersecurity and Infrastructure Security Agency (CISA)

VISION

Secure and resilient infrastructure for the American people.

MISSION

Lead the national effort to understand, manage, and reduce risk to the nation's cyber and physical infrastructure.



16 Critical Infrastructure Sectors

Education Infrastructure is Critical Infrastructure

 CHEMICAL	CISA	 FINANCIAL	Treasury
 COMMERCIAL FACILITIES	CISA	 FOOD & AGRICULTURE	USDA & HHS
 COMMUNICATIONS	CISA	 GOVERNMENT FACILITIES	DHS & GSA
 CRITICAL MANUFACTURING	CISA	 HEALTHCARE & PUBLIC HEALTH	HHS
 DAMS	CISA	 INFORMATION TECHNOLOGY	CISA
 DEFENSE INDUSTRIAL BASE	DOD	 NUCLEAR REACTORS, MATERIALS AND WASTE	CISA
 EMERGENCY SERVICES	CISA	 TRANSPORTATIONS SYSTEMS	TSA & USCG
 ENERGY	DOE	 WATER	EPA

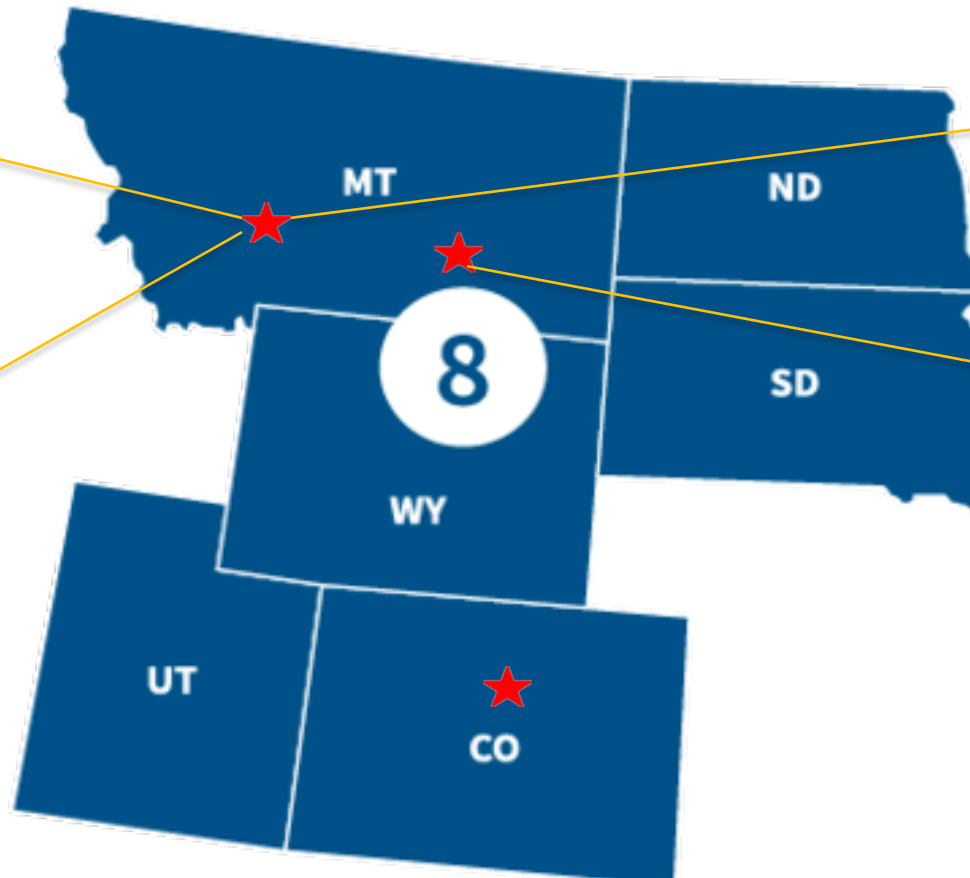


The Education Facilities Subsector covers pre-kindergarten through 12th grade schools, institutions of higher education, and business and trade schools.



CISA Region 8 – Montana Cadre

CISA Cyber Security Advisors
Joe Frohlich <i>Cybersecurity State Coordinator (CSC)</i> <i>State & Local Government,</i> <i>K-12, Higher Education</i> <i>Helena</i>
Travis Light <i>Cybersecurity Advisor (CSA)</i> <i>Critical Infrastructure Focus</i> <i>Helena</i>



CISA Protective Security Advisors
Randy Middlebrook <i>Protective Security Advisor (PSA)</i> <i>Helena</i>
Albert Mendoza <i>Protective Security Advisor (PSA)</i> <i>Billings</i>



CISA School Safety & Cybersecurity for K-12

School Safety

- K-12 Bystander Reporting Toolkit
- SchoolSafety.gov
- K-12 School Security Guide Product Suite



<https://www.cisa.gov/topics/physical-security/school-safety>



Cybersecurity for K-12

- K-12 Digital Infrastructure Brief: Defensible and Resilient
- Cybersecurity Guidance for K-12 Technology Acquisitions
- Cybersecurity Education and Career Development
- STOP Ransomware



<https://www.cisa.gov/K12Cybersecurity>

CISA Montana K-12 Cyber Tabletop Exercises

In-Person (with remote option)

Billings: April 23, 2024; 1:00 p.m. 5:00 p.m. MDT

Montana State University City College Campus

Health Science Building, Room 117, 3803 Central Avenue, Billings, MT 59102



Missoula: April 25, 2024; 1:00 p.m. 5:00 p.m. MDT

Missoula College University of Montana, 1205 E Broadway Street, Missoula, MT 59802

Exercise Objectives

- Increase the Montana K12 School Districts' cybersecurity resilience.
- Examine Montana K12 School Districts' information sharing procedures during a cyber incident.
- Examine policies, plans, and procedures of Montana K12 School Districts to respond to a significant cyber incident.
- Increase the understanding of external resources available to Montana K12 School Districts.



Sampling of Voluntary & No-Cost Cybersecurity Offerings

• Assessments & Evaluations

• Strategic

- ★ • Cybersecurity Performance Goals (CPGs)
- Cyber Resilience Review (CRR™)
- ★ • Cyber Resilience Essentials (CRE)
- Cyber Infrastructure Survey (CIS)
- External Dependencies Management (EDM)
- Cyber Security Evaluation Tool (CSET™)

• Technical

- ★ • Vulnerability Scanning (CyHy)
- Web Application Scanning (WAS)
- Technical Phishing Test (TPT)
- Remote Penetration Test (RPT)
- Risk and Vulnerability Assessment (RVA)

Preparedness Activities

- Tabletop Exercises
- Security Alerts, Tips and other updates (US-Cert)
 - National Cyber Awareness System
 - ICS-Cert
- ★ • Known Exploited Vulnerabilities (KEV)
- Informational Products and Recommended Practices
- Outreach, Work group collaboration
- Cyber Exercises and Workshops
- Cybersecurity Training and Webinars
- Guides and “Playbooks”
- National Cybersecurity Workforce Framework
- October Cybersecurity Awareness Month

Incident Response Assistance

- Incident Coordination
- Malware Analysis



Technical Assessment - Vulnerability Scanning

2020-03-30

CYBER HYGIENE

REPORT CARD

Sample Organization



0
Hosts with unsupported software



14
Potentially Risky Open Services



9%
Increase in Vulnerable Hosts



CISA
CYBER+INFRASTRUCTURE

HIGH LEVEL FINDINGS

LATEST SCANS

December 31, 2019 — March 30, 2020

Host Scans on All Addresses

March 12, 2020 — March 30, 2020

Vulnerability Scans on All Hosts

ADDRESSES OWNED

147,274

No Change

ADDRESSES SCANNED

147,274

No Change
100% of addresses scanned

HOSTS

422

Increase of 6

SERVICES

3,352

Decrease of 24

VULNERABLE HOSTS

168

Increase of 14
40% of hosts vulnerable

VULNERABILITIES

383

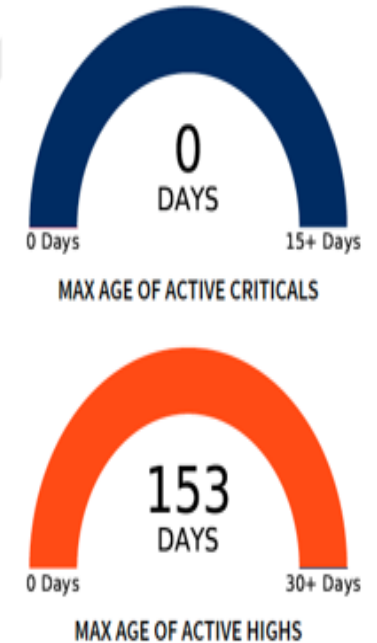
Increase of 45

VULNERABILITIES

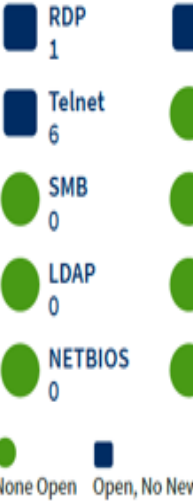
SEVERITY BY PROMINENCE



VULNERABILITY RESPONSE TIME



POTENTIALLY RISKY OPEN SERVICES



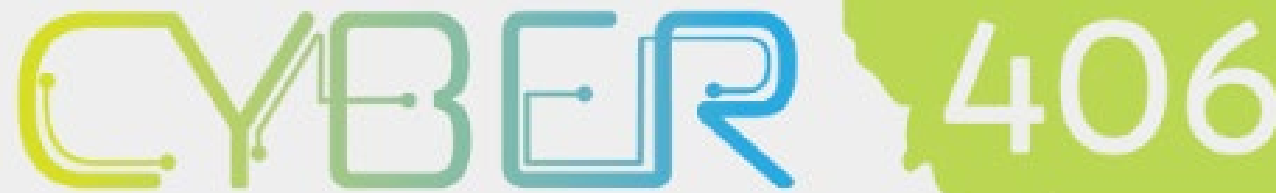
Service counts are best guesses and not accurate. Details can be found in services.csv in Appendix G.



To start simply email to vulnerability@cisa.dhs.gov with the subject "Requesting Vulnerability Scanning"



Cyber406 strives to improve Montana's cybersecurity defensive posture across private and public sectors by increasing the state's ability to prevent, identify, and eradicate cyber threat vulnerabilities through a systematic approach of Collaboration, Operations, Education, and Research.



<https://www.cyber406.org/>



Contact Information

CISA Contact Information

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General Inquiries

iodregionaloperations@cisa.dhs.gov

STATE AND LOCAL CYBERSECURITY GRANT PROGRAM

**Burke Honzel - Montana Disaster and Emergency
Services (Bureau Chief) & State Administrative Agency**



STATE AND LOCAL CYBERSECURITY GRANT PROGRAM

- Infrastructure Investment and Jobs Act (IIJA) amended Homeland Security Act of 2021 and appropriated \$1 Billion nationally over 4 years
- Montana's Estimated Allocations:

Allocation Year	Match %	Statewide	State – 20% (FED)	Local - 80% (FED)
Year 1	Waived	\$2,427,866	\$485,573	\$1,942,293
Year 2	20%	\$4,947,036	\$989,407	\$3,957,629
Year 3	30%	\$3,650,000	\$730,000	\$2,920,000
Year 4	40%	\$1,200,000	\$240,000	\$960,000



FUNDING REQUIREMENTS



80% must be passed to local jurisdictions/organizations



20% may be used for state-level projects



5% of the total award is retained by MT DES for Management and Administration (M&A). The entire amount is taken from the state allocation



25% of the total funds must be passed through to Rural jurisdictions/organizations



Funding may be retained by the state on behalf of the locals upon written agreement

GRANT REQUIREMENTS

CYBERSECURITY PLAN

■ GOAL

- Assist State, Local, and Tribal governments with managing and reducing cyber risk

■ Objectives

- Governance and Planning
- Assessment and Evaluation
- Mitigation

Workforce Development

CYBERSECURITY PLANING COMMITTEE

Roles

- Develop, implement, and revise Cybersecurity Plans
- Approve Cybersecurity Plan
- Assist with determination of effective funding `priorities (i.e., individual projects)



CURRENT CYBER PLANNING COMMITTEE

- **Kevin Gilbertson** - State of Montana Department of Administration (Chief Information Officer) – Chair – Voting Member
- **Chris Santucci**- State of Montana Department of Administration (Chief Information Security Officer) – Vice Chair – Voting Member should Chair be absent
- **Anne Dormady** - MT Division of Criminal Investigation – Voting Member
- **Buel Dickson** - MT National Guard – Voting Member
- **Carol Phillips** - Elder Grove School District & Montana Educational Technologists Association - Voting Member
- **Jason Hecock** - Kalispell Public Schools - Voting Member
- **Jacob Hammersmith** - Billings Clinic - Voting Member
- **Jody Faircloth** - Partnership Health Center - Voting Member
- **Burke Honzel** – Disaster and Emergency Services (Bureau Chief) & State Administrative Agency) – Non-Voting Member
- **Eric Bryson** – Montana Association of Counties (MACo) – Voting Member
- **Victoria Lowe** – Sheridan County (Information Technology Director) – Voting Member
- **Kelly Carrington** – Carbon County (Sheriff’s Office) – Voting Member
- **Erika Billiet** – City of Kalispell (Information Technology Director) – Voting Member
- **Neil Cardwell** – City of Belgrade (City Manager) – Voting Member
- **Matt Bunko** – Gallatin County (CIO/CISO) – Voting Member
- **Joe Frohlich** - Cybersecurity and Infrastructure Security Agency (CISA) - Advisor & Non-Voting Member
- **Andy Hanks** – Center for Internet Security - Advisor & Non-Voting Member



PROJECT PRIORITY AREAS

Whole of State
Cyber Security
Initiatives

Security Strategic
Assessments

Security Technical
Assessments

Migrate to .GOV
domains

Security
Awareness

Build a
Cybersecurity
Workforce

Behavior Based
Endpoint
Protection

Network
Monitoring and
Intrusion
Detection Systems



PROJECT INFORMATION

BUILD SECURITY AWARENESS

- Basic end user security awareness training to employees
- Up to \$3.50 / license

BUILD CYBERSECURITY WORKFORCE

- Professional cybersecurity course - Incident Response or IT Risk Management as part of curriculum
- Up to \$4,100 per course – maximum number of courses to be determined
- In person instructor led courses may be an option



PROJECT INFORMATION

BEHAVIOR BASED END POINT PROTECTION (Level 1)

- Protection for connected devices such as desktops, laptops, servers
- Monitors behavior to identify unusual activity

NETWORK MONITORING / INTRUSION DETECTION (Level 2)

- Monitors traffic through the network, receives alerts, analysis and provides recommended actions.
- May block traffic that is deemed a threat



REQUIREMENTS AND RECOMMENDATIONS

Jurisdictions receiving funds or services from the SLCGP must:

- Complete the Nationwide Cybersecurity Review (NCSR) Annually
- Utilize the following Cyber Hygiene services:
 - Web Application Scanning
 - Vulnerability Scanning

Recommended

- Become a member in the Multi-State Information Sharing and Analysis Center
- Utilize free CISA services and tools
- Perform a CISA assessment



NEXT STEPS – ESTIMATED TIMELINE

- ✓ CISA/FEMA approved the State Plan on November 28, 2023
- \$ FY23 SLCGP Awarded on December 21, 2023 Cost share waiver request was denied
- ☑ State Guidance Completed: April 1
- 🕒 Estimated Application Period: April 15th to June 7th
- 📍 Project submission to FEMA – June 30th
- 🏆 Projected Approval: August 1st



NEXT STEPS – APPLICATION PROCESS

- Applications will be completed through MT DES
 - Information will be placed on <https://des.mt.gov/>
- Jurisdictions to submit one consolidated application
- Jurisdictions will need to prioritize projects
- Not all applications are guaranteed to be awarded due to funding limitations





MS-ISAC[®]

Multi-State Information
Sharing & Analysis Center[®]

MASS/METAtechED Conference 2024

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MS/EI-ISAC, CIS and CISA

Missions at a glance



CISA focuses on the cybersecurity of all critical infrastructure within the United States (including election offices).



The MS-ISAC is a trusted resource for cyber threat prevention, protection, response, and recovery for U.S. State, Local, Tribal, and Territorial (SLTT) government entities.



The EI-ISAC supports the rapidly changing cybersecurity needs of U.S. SLTT election offices.



CIS is home to the MS-ISAC and the EI-ISAC



MS-ISAC: Focused Visibility on K12 Sector



K12 Report and Joint #StopRansomware Guide

K-12 Report
CIS MS-ISAC Cybersecurity
Assessment of the
2022-2023 School Year

CIS Center for Internet Security®
 MS-ISAC Multi-State Information Sharing & Analysis Center®

**JOINT
CYBERSECURITY
ADVISORY**

Co-Authored by:

MS-ISAC®
Multi-State Information Sharing & Analysis Center®

#StopRansomware Guide

<https://learn.cisecurity.org/2023-k12-report>

<https://www.cisa.gov/resources-tools/resources/stopransomware-guide>

Confidential & Proprietary

TLP:CLEAR



<https://learn.cisecurity.org/ms-isac-registration>

Cyber Threat Intelligence

- Cyber Alerts & Advisories
- Quarterly Threat Report
- Regular IOCs
- White Papers
- Cyber Threat Briefings
- Real-Time Intelligence Feeds

Cybersecurity Services

- 24x7x365 Security Operations Center (SOC)
- ISAC Threat Notification Service (IP & Domain Monitoring)
- Malicious Domain Blocking & Reporting (MDBR)
- *NEW – Email Protection Service*

Cyber Framework & Best Practices

- Nationwide Cybersecurity Review (NCSR)
- CIS SecureSuite Membership
 - *Tools to implement the CIS Critical Security Controls and CIS Benchmarks*

Other Member Resources

- MS-ISAC Webinars
- MS-ISAC Working Groups
- Homeland Security Information Network (HSIN)
- CIS CyberMarket
- Virtual Service Reviews



Free to All Public K12 Organizations



Support

**Network
Monitoring
Services
+
Research and
Analysis**



**Analysis &
Monitoring**

**Threats,
Vulnerabilities
+
Attacks**



Reporting

**Cyber Alerts &
Advisories
Web Defacements
Account
Compromises**



**To report an incident or
request assistance:**

Phone: 1-866-787-4722

Email: soc@cisecurity.org



Register for MS-ISAC
Membership

<https://learn.cisecurity.org/ms-isac-registration>

MS-ISAC 24x7 Security
Operations Center

SOC@cisecurity.org | 1-866-787-4722

Schedule a Virtual
Services Review

info@cisecurity.org





MS-ISAC[®]

Multi-State Information
Sharing & Analysis Center[®]

Cybersecurity Advisory Services Program

Cybersecurity Advisory Services Program

Service Descriptions

Available Now

Available Now

Available April
2024

Available May
2024

Available June
2024

- **Community Advisory:** One or more advisory meetings with multiple members about a single cyber topic specific to their community.
- **Member Advisory:** One or more advisory meetings with a single member about multiple cyber topics specific to their environment.
- **Strategic Advisory:** Ten weeks of advisory meetings with a single member to develop a security strategic plan.
- **Deep Dive:** Comprehensive webinars about a single cyber topic (CIS Critical Security Controls, current events, hot topics, etc.).
- **Cybersecurity Consulting:** Eight weeks of technical consulting meetings with one or more members to implement security controls.



Cybersecurity Advisory Services Program

Service Profiles

Community Advisory

- 60 mins per engagement
- Interactive
- Multiple members
- Single topic

Member Advisory

- 60 mins per engagement
- Interactive
- Single member
- Multiple topics

Strategic Advisory

- 100 hours over 10 weeks
- Interactive
- Single member
- To develop a Cybersecurity Strategic Plan

Deep Dive

- 60 mins per webinar
- On demand
- Multiple members
- Critical controls, current events, hot topics, etc.

Cyber Consulting

- 80 hours over 8 weeks
- Interactive
- One or more members
- To implement security controls

Cybersecurity Advisory Services Program

Availability

- **Must be an MS-ISAC and EI-ISAC Member to request a service**
- **Priority given to cyber-underserved Members**
- **Priority given to Members hosting systems for high priority sectors:**
 - SLTT Elections
 - SLTT Health care
 - SLTT K-12
 - SLTT Water and Wastewater Systems
- **Requests can be submitted at: <https://www.cisecurity.org/ms-isac/services/cybersecurity-advisory-services-program>**



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Multi-State Information
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Thank you!

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Questions or Comments?



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