

Protecting School Systems: Understanding Cybersecurity Threats to Protect the K-12 Community

Arizona Business & Education Coalition School Safety & Security Summit

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DON HOUGH, DEPUTY ASSOCIATE DIRECTOR | CISA SCHOOL SAFETY TASK FORCE

MARTIN TAPIA, PROGRAM SPECIALIST | CISA SCHOOL SAFETY TASK FORCE

JERRY KEELY, CYBERSECURITY ADVISOR, CISA REGION 9



Agenda

- **K-12 RISKS & THREAT ENVIRONMENTS**
- **SCHOOLSAFETY.GOV TOOLS & RESOURCES**
- **SCHOOL SAFETY BEST PRACTICES**
- **CYBERSECURITY RESOURCES**
- **CSA RESOURCES**



Our School Safety Perspective

OVERVIEW

THE CISA SCHOOL SAFETY TASK FORCE (SSTF) WAS ESTABLISHED TO SUPPORT THE FEDERAL GOVERNMENT'S EFFORTS IN STRENGTHENING THE SAFETY AND SECURITY OF KINDERGARTEN THROUGH GRADE 12 (K-12) SCHOOLS ACROSS THE COUNTRY. THE SSTF'S WORK CENTERS AROUND BUILDING THE CAPACITY OF K-12 SCHOOL SAFETY COMMUNITY AND ADMINISTERING THE **FEDERAL SCHOOL SAFETY CLEARINGHOUSE** AND **SCHOOLSAFETY.GOV**

SCHOOL SAFETY ISSUE AREAS

- BULLYING AND CYBERBULLYING
- CHILD EXPLOITATION
- CYBERSECURITY
- EMERGENCY PLANNING
- INFECTIOUS DISEASE & PUBLIC HEALTH
- MENTAL HEALTH
- PHYSICAL SECURITY
- SCHOOL CLIMATE
- TARGETED VIOLENCE
- TREAT ASSESSMENT & REPORTING



MISSION

THE SSTF ENHANCES THE SAFETY AND SECURITY OF SCHOOLS BY:



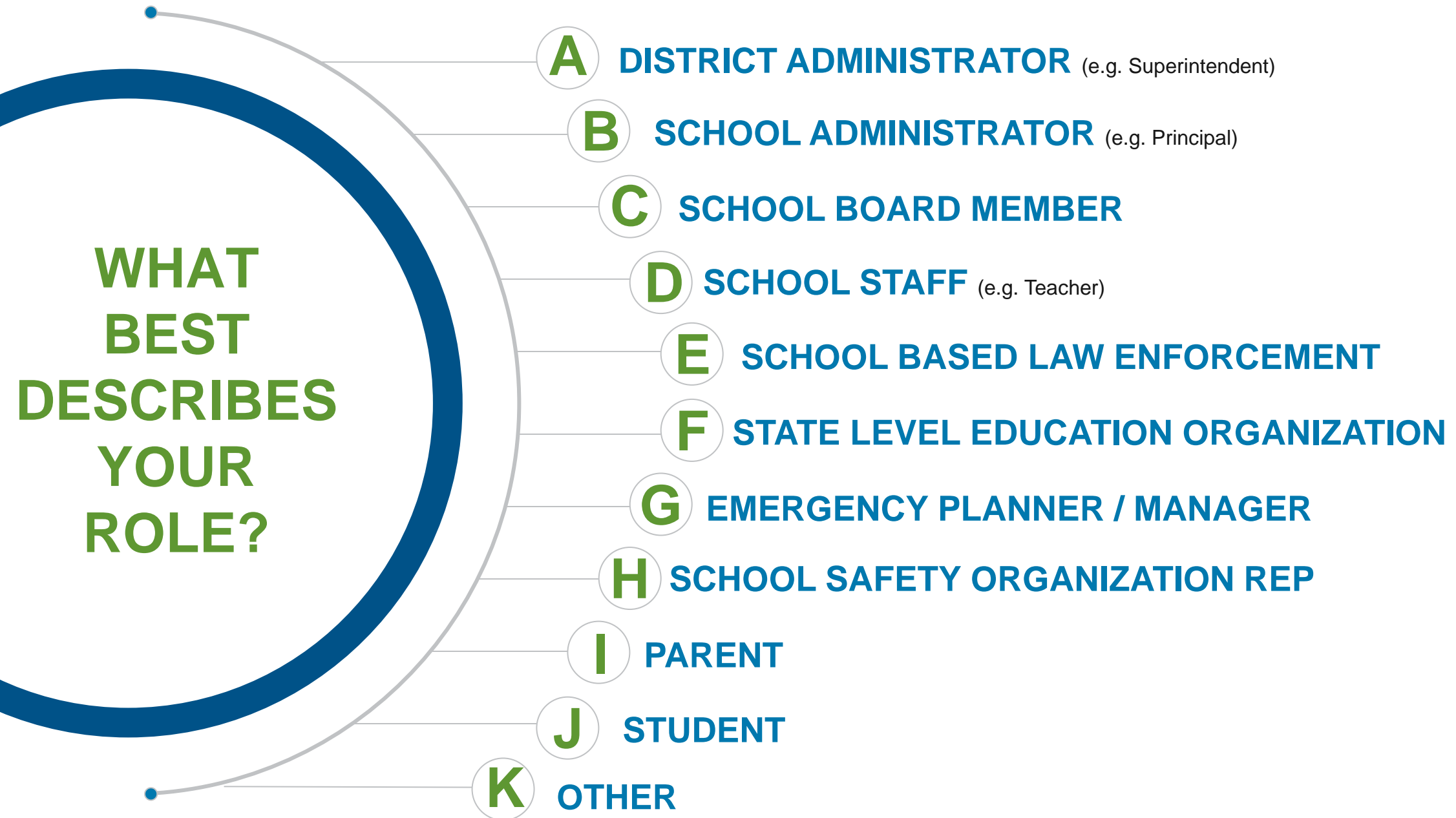
FOSTERING CHANGE THROUGH OUTREACH, ENGAGEMENT, AND EDUCATIONAL CAMPAIGNS



FACILITATING ACTION BY CREATING, COORDINATING, AND DISSEMINATING RESOURCES, PRODUCTS, AND TOOLS TO SUPPORT SCHOOLS IN IMPLEMENTING AND STRENGTHENING THEIR PHYSICAL SECURITY POSTURES



EQUIPPING STAKEHOLDERS WITH TRAINING AND EXPERTISE TO APPLY RECOGNIZED BEST PRACTICES IN THE CONTEXT OF THEIR SPECIFIC COMMUNITIES, VENUES, AND SCHOOLS

































**CYBERSECURITY
& INFRASTRUCTURE
SECURITY AGENCY**



K-12 School Safety Risk & Threat Environment Trends

CISA SCHOOL SAFETY TASK FORCE

What Teachers Are Saying...

	1 ST MOST COMMON	2 ND MOST COMMON	3 RD MOST COMMON	4 TH MOST COMMON	5 TH MOST COMMON	6 TH MOST COMMON	7 TH MOST COMMON
ELEMENTARY SCHOOL TEACHERS	 57% Bullying	 10% Teacher Attacks	 8% Fights	 7% Self-Harm	 7% Other Crimes	 6% Active Shooter	 3% Drugs
MIDDLE SCHOOL TEACHERS	 58% Bullying	 17% Fights	 8% Self-Harm	 7% Drugs	 4% Active Shooter	 3% Other Crimes	 2% Teacher Attack
HIGH SCHOOL TEACHERS	 31% Bullying	 25% Drugs	 17% Fights	 13% Self-Harm	 4% Other Crimes	 4% Active Shooter	 3% Teacher Attacks
ALL LEVELS TEACHERS	 49% Bullying	 12% Fights	 11% Drugs	 10% Self-Harm	 6% Teacher Attacks	 5% Other Crimes	 5% Active Shooter

Source: Teachers' Views on School Safety: Consensus on Many Security Measures, But Stark Division About Arming Teachers | RAND

Current Trends within the K-12 Environment



Targeted Violence

67% of public schools reported having at least one violent incident, and 59% reported having at least one nonviolent incident.¹



Cybersecurity Threats

Since 2016, there has been a total of 1,331 publicly disclosed school cyber incidents affecting U.S. school districts across a wide array of incidents.²



Hoax Calls & Swatting

In the 2022-2023 school year, 63.8% of all violent incidents were false reports of an active shooter within the school (i.e., Swatting).³



Unreported Concerning Behavior

94% of school attackers told a classmate or someone within their school about their plans for violence prior to taking action.⁴



Sources:

¹ DoE National Center of Educational Statistics, 2024. ² K12 Security Information Exchange (K12 SIX), 2022.

³ Educator's School Safety Network, 2022. ⁴ U.S. Secret Service National Threat Assessment Center, 2021



SchoolSafety.gov



SCHOOLSAFETY.GOV

FEDERAL SCHOOL SAFETY CLEARINGHOUSE

Federal and State Resources, Guidance, and
Tools to Create Safe School Environments

SUPPORTING STUDENT MENTAL HEALTH

MENTAL HEALTH AND WELLNESS ARE INNATELY CONNECTED TO STUDENTS' SUCCESS IN THE CLASSROOM AND TO A THRIVING SCHOOL ENVIRONMENT.



PREVENTING BULLYING

BULLYING & CYBERBULLYING INCREASES THE RISK FOR DEPRESSION, ANXIETY, SLEEP DIFFICULTIES, LOWER ACADEMIC ACHIEVEMENT, AND DROPPING OUT OF SCHOOL.



AVERTING VIOLENCE

IMPROVING SCHOOLS' PHYSICAL SECURITY AND INVOLVING SCHOOL PERSONNEL WHO ARE TRAINED TO PREVENT, RECOGNIZE, AND RESPOND TO THREATS OF VIOLENCE.



ENSURING ONLINE SAFETY

THESE ATTACKS CAN IMPACT A SCHOOL'S ABILITY TO CARRY OUT ITS EDUCATIONAL OBLIGATIONS AND PROTECT SENSITIVE STUDENT AND STAFF DATA.



IMPROVING SCHOOL CLIMATE

DEVELOPING STUDENTS WITH STRONG CHARACTER WHO ARE CONNECTED TO THEIR PEERS, EDUCATORS, AND COMMUNITIES IN MEANINGFUL WAYS CAN IMPROVE SCHOOL CLIMATE, AND BEHAVIORAL AND ACADEMIC OUTCOMES.



INTERVENING WITH SUPPORT EARLY

IDENTIFY AND ADDRESS THREATENING OR ESCALATING BEHAVIORS BEFORE THEY LEAD TO VIOLENCE.

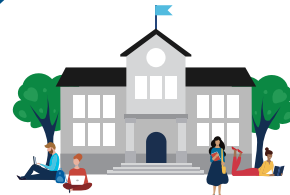


TRAINING, EXERCISES, & DRILLS

PREPARES STUDENTS, TEACHERS, STAFF, PARENTS, AND COMMUNITY PARTNERS FOR THE ACTIONS TO TAKE BEFORE, DURING, AND AFTER SAFETY INCIDENTS.



HOLISTIC SAFETY



**WHAT SAFETY
TOPICS ARE
MOST
RELEVANT TO
YOUR
SCHOOL?**

A

BULLYING & CYBERBULLYING

B

CHILD EXPLOITATION

C

CYBERSECURITY

D

EMERGENCY PLANNING

E

INFECTIOUS DISEASES AND PUBLIC HEALTH

F

MENTAL HEALTH

G

SCHOOL CLIMATE

H

TARGETED VIOLENCE

I

THREAT ASSESSMENT AND REPORTING

SAFETY TOPICS



BULLYING & CYBERBULLYING



CHILD EXPLOITATION



CYBERSECURITY



EMERGENCY PLANNING



INFECTIOUS DISEASES & PUBLIC HEALTH



MENTAL HEALTH



SCHOOL CLIMATE



TARGETED VIOLENCE



THREAT ASSESSMENT & REPORTING

KEY TOOLS & FEATURES



SAFETY READINESS TOOL



STATE SEARCH TOOL



RESOURCE LIBRARY



CALENDAR OF EVENTS



GRANTS FINDER TOOL



K-12 COMMUNITY BULLETIN



COMMUNICATIONS CENTER



Grants Finder Tool

HELPS MEMBERS OF THE K-12 SCHOOL COMMUNITY MORE EASILY FIND, APPLY FOR, AND ULTIMATELY RECEIVE SCHOOL SAFETY-RELATED FEDERAL FUNDING.



SAFETY TOPIC



AWARD AMOUNT



TYPE OF GRANT



APPLICABLE AUDIENCES



RELEASE & DEADLINES



LEVEL OF EFFORT NEEDED



FUNDING AGENCY



ALERTS & NOTIFICATIONS



LINK: [SCHOOLSAFETY.GOV/GRANTS-FINDER-TOOL](https://schoolsafety.gov/grants-finder-tool)



State Search Tool

LOCATE AND ACCESS STATE-SPECIFIC SCHOOL SAFETY RESOURCES, PROGRAMS, CONTACTS, AND OPPORTUNITIES.



SCHOOL SAFETY PROGRAMS



EVENTS & TRAININGS



STATES FUNDING OPPORTUNITIES



STATE RESOURCES



STATE & FEDERAL CONTACTS



Tools & Features

RESOURCE LIBRARY



FIND **ACTIONABLE RESOURCES**, GUIDANCE, TRAINING, AND FACT SHEETS THAT CAN BE FILTERED BY AUDIENCE, INTENDED APPLICATION, AND TOPICS TO HELP SCHOOLS CREATE AND MAINTAIN A SAFE LEARNING ENVIRONMENT.

LINK: [SCHOOLSAFETY.GOV/FIND-SCHOOL-SAFETY-RESOURCES](https://schoolsafety.gov/find-school-safety-resources)



CALENDAR OF EVENTS



FIND UPCOMING WEBINARS, TRAINING SESSIONS, AND CONFERENCES FOR SCHOOL SAFETY PERSONNEL, ADMINISTRATORS, EDUCATORS, AND PARENTS.

LINK: [SCHOOLSAFETY.GOV/EVENTS](https://schoolsafety.gov/events)

COMMUNICATIONS CENTER



PROVIDES A COMPREHENSIVE COLLECTION OF **HANDOUTS**, PRESENTATIONS, **NEWSLETTER BULLETINS**, AND MATERIALS AVAILABLE FROM SCHOOLSAFETY.GOV.

LINK: [SCHOOLSAFETY.GOV/SCHOOL-SAFETY-COMMUNICATIONSCENTER](https://schoolsafety.gov/school-safety-communicationscenter)

Cybersecurity

CISA released its “Partnering to Safeguard K-12 Organizations from Cybersecurity Threats” report with a supporting toolkit.

Recommendations

CISA provides three recommendations to help K-12 leaders build, operate, and maintain resilient cybersecurity programs:

1. **Invest** in the most impactful security measures and build toward a **mature** cybersecurity plan
2. Recognize and **actively** address resource constraints
3. Focus on collaboration and **information-sharing**

Cybersecurity Resources

Visit [SchoolSafety.gov](https://www.schoolsafety.gov) for cybersecurity resources, programs, and tools:



CISA Online Toolkit



General Cybersecurity Resources



Ransomware and Phishing Resources





CYBERSECURITY
& INFRASTRUCTURE
SECURITY AGENCY



SAFEGUARDING K-12 ORGANIZATIONS FROM CYBERSECURITY THREATS

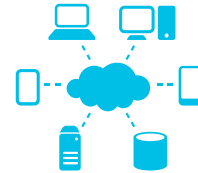
2023

The Cyber Challenges Posed To K-12

THE LEADING CYBER CHALLENGE FOR EDUCATION INSTITUTIONS IS DISRUPTING THE VARIOUS CYBER THREATS AND ATTACKS CAUSING MONETARY LOSSES AND IMPEDING IN THE EDUCATION PROCESS, SUCH AS:



**STUDENT AND TEACHER
DATA BREACHES**



WEBSITE DEFACEMENTS



RANSOMWARE ATTACKS



ONLINE CLASS INVASION



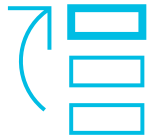
**EMAIL
COMPROMISE SCAMS**



**DENIAL OF SERVICE
(DDoS) ATTACKS**



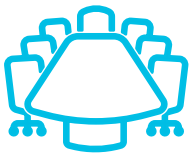
Key Findings & Recommendations



WITH FINITE RESOURCES, K–12 INSTITUTIONS CAN TAKE A SMALL NUMBER OF STEPS TO **SIGNIFICANTLY REDUCE** CYBERSECURITY RISK.



MANY SCHOOL DISTRICTS STRUGGLE WITH **INSUFFICIENT IT** RESOURCES AND CYBERSECURITY CAPACITY



NO K–12 ENTITY CAN SINGLEHANDEDLY **IDENTIFY AND PRIORITIZE** EMERGING THREATS, VULNERABILITIES, AND RISKS.



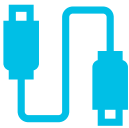
Tools For K-12 Cyber Safety



REPORTING & INFORMATION SHARING



TRAINING COURSES



RESOURCE & RECOVERY PLANS



ACCESS GRANT FUNDING



REPORTS & FACTS SHEETS



[LINK: CISA.GOV/PROTECTING-OUR-FUTURE-CYBERSECURITY-K-12](https://www.cisa.gov/protecting-our-future-cybersecurity-k-12)



ABEC SCHOOL SAFETY & SECURITY SUMMIT
APRIL 2024

CISA Cybersecurity Resources

NATIONAL CYBERSECURITY ASSESSMENTS

- Cyber Infrastructure Review (CIS)
- Cyber Resilience Essentials (CRE)
- Cyber Protection Goals (CPG's)
- Incident Management Review (IMR)
- **Ransomware Readiness Assessment (RRA)**
- [Cyber Resource Hub | CISA](#)
- **Cyber Hygiene: Vulnerability Scanning**
- Web Application Scanning
- Remote Vulnerability Assessment (RVA)

OTHER CYBER RESOURCES

- Cyber Security Evaluation Tool (CSET)
- Malware Analysis
- National Cyber Exercise and Planning Program TTX
- Regional Cyber Exercise team
- STOP.THINK.CONNECT
- STOPRANSOMWARE
- CISA.GOV
- **Cyber Protective Visit (CPV)**
- **Physical Protective Visit (PPV)**





Question & Answer

THANK YOU



**FOR ADDITIONAL [SCHOOLSAFETY.GOV](https://www.schoolsafety.gov) NEWS,
RESOURCES AND EVENTS:**



FOLLOW @SCHOOLSAFETYGOV



SUBSCRIBE TO OUR LIST-SERVE





Resources & References

SCHOOLSAFETY.GOV

- [Grants Finder Tool](#)
- [Safety Readiness Tool](#)
- [State Information Sharing Tool](#)
- [Resource Library](#)
- [Calendar of Events](#)
- [Informational Webinar Series](#)
- [Monthly School Safety Community Bulletin](#)
- [Communication Center](#)

DHS

- [NTAS Bulletin](#)
- [CP3: Prevention Resources](#)
- [If You See Something, Say Something](#)

CISA

- [K-12 School Security Guide Product Suite](#)
- [National Summit on K-12 School Safety and Security](#)
- [Active Shooter Preparedness: School Security and Resilience](#)
- [Protecting our Future: Partnering to Safeguard K-12 Organizations from Cybersecurity Threats](#)
- [Partnering to Safeguard K-12 Toolkit](#)
- [Bombing Prevention Resources and Trainings](#)
- [Securing Mass Gathering Resources](#)
- [De-Escalation of Violence Resources](#)
- [Tabletop Exercise Packages](#)
- [Protective Security Advisors \(PSA\)](#)
- [Cross-Sector Cybersecurity Performance Goals | CISA](#)

USSS NTAC

- [Mass Attacks in Public Spaces: 2016-2020](#)
- [Averting Targeted School Violence: A U.S. Secret Service Analysis of Plots Against Schools](#)
- [Protecting America's Schools: A U.S. Secret Service Analysis of Targeted School Violence](#)
- [Enhancing School Safety Using a Threat Assessment Model: An Operational Guide for Preventing Targeted School Violence](#)

DOC

- [Cybersecurity Framework | NIST](#)

