



BEYOND METAL DETECTORS

Rethinking School Security in the Age of AI and Behavioral Threat Assessment

This presentation explores advanced methodologies in school safety, moving beyond traditional hardware to integrate artificial intelligence, behavioral threat assessment, and proactive human-centric strategies.

We examine the intersection of data analysis, security, mental health support, and technological innovation to create safer learning environments.



Information Provided by Trident Group America, Inc



THE ILLUSION OF SECURITY

Deploying Technology Without Trained Human Judgment Creates Predictable Failures

- **AI FALSE POSITIVES:** AI systems flagging innocuous items (e.g., empty chip bags) as threats, leading to armed responses.
- **CONTEXTUAL BLINDNESS:** Surveillance software flagging student comments without human review, resulting in disproportionate consequences.
- **TECHNOLOGY AS SOLUTION FALLACY:** Institutions mistaking the purchase of security systems for achieving actual security outcomes.
- **VENDOR-DRIVEN NARRATIVES:** Technology industry markets AI solutions with confidence which is not fully supported by operational records.

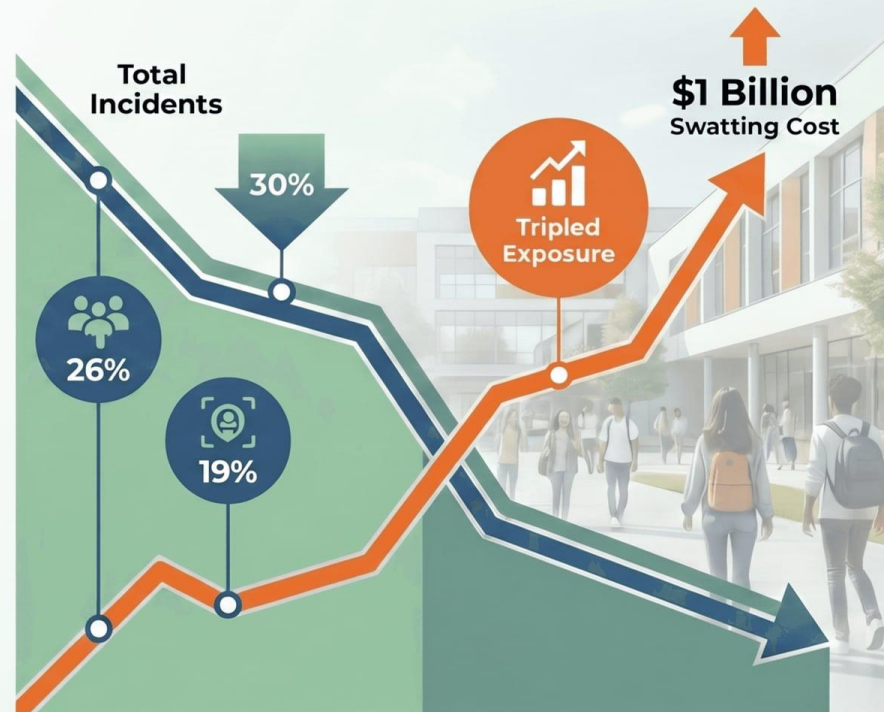




THE EVOLVING THREAT LANDSCAPE

Progress and Persistent Challenges in School Violence Statistics

1. **CAUTIOUS OPTIMISM:** School shootings decreased 30% from 2024 to 2025, with deaths/injuries down 26% and mass shootings down 19% nationally.
2. **AGGREGATE DECLINE VS. PERSISTENCE:** Despite overall improvements, catastrophic individual incidents and structural threat geography persist.
3. **CONCENTRATION OF VIOLENCE:** Student exposure to school shootings nearly tripled since 1999, reflecting larger, more impactful events.
4. **SWATTING SURGE:** Deliberate false emergency threats increased significantly in 2025, costing over \$1 billion and straining emergency resources.



Impact & Exposure



Information Provided by Trident Group America, Inc

BEYOND THE PERIMETER

Addressing Security Challenges in Outdoor Spaces and Higher Education

1. **OUTDOOR INCIDENT DOMINANCE:** Two-thirds of all school shootings over six decades occurred outdoors (parking lots, building fronts).
2. **PERIMETER FOCUS GAP:** Most school security infrastructure is concentrated inside, addressing only one-third of the actual threat environment.
3. **HIGHER EDUCATION COMPLEXITY:** Campuses face different challenges with attackers moving between multiple buildings across open spaces.
4. **FIXED CHECKPOINT LIMITATIONS:** Traditional security checkpoints are ineffective against dynamic threats across expansive university environments.



Information Provided by Trident Group America, Inc



THE PROMISE OF AI

Advanced Technology Capabilities and Their Inherent Limitations

1. **NEXT-GEN WEAPONS DETECTION:** Millimeter-wave and multi-sensor platforms screen hundreds, distinguish objects, and minimize bottlenecks.
2. **VIDEO ANALYTICS PRECISION:** Differentiating holstered vs. brandished weapons, identifying pre-fight indicators, and triggering rapid lockdowns.
3. **SOUND ANALYTICS INTEGRATION:** Detecting aggression via vocal patterns, integrated with video for compound alerting and anomaly confirmation.
4. **FORCE MULTIPLIER, NOT REPLACEMENT:** These capabilities are valuable for trained professionals but do not replace human judgment.



AI AS A FORCE MULTIPLIER

The Critical Role of Human Judgment, Policy, and Training with Advanced Security Tools

- **90% HUMAN TASK:** AI identifies potential threats (10% of task); humans verify, assess, respond, and manage (90% of task).
- **POLICY & TRAINING IMPERATIVE:** Critical to pair AI tools with strong policies, comprehensive training, and responsible oversight to prevent harm.
- **DEFINING TENSION:** Balancing technology with human expertise in a market that pushes towards technology-only solutions.
- **VENDOR INCENTIVES:** Manufacturers market products as solutions, fostering a perception that purchasing a system IS the solution, which is incorrect.



Information Provided by Trident Group America, Inc

THE HUMAN FOUNDATION: BTAM

Behavioral Threat Assessment and Management: Irreplaceable in Preventing Violence

-  1. **SYSTEMATIC HUMAN-LED PROCESS:** Identifying, investigating, and managing concerning behavior before it escalates to violence.
-  2. **NEAR-UNIVERSAL ADOPTION:** 97% of public K-12 schools have a BTAM team, shifting focus from hardware to human intelligence.
-  3. **ATTACKS ARE RARELY IMPULSIVE:** Perpetrators typically leak intentions through observable behaviors prior to attacks.
-  4. **CLINICAL JUDGMENT REQUIRED:** BTAM evaluates the difference between making a threat and posing a threat, requiring contextual knowledge.



Information Provided by Trident Group America, Inc

BTAM IMPLEMENTATION GAPS

Despite High Adoption, Significant Human Capital Deficiencies Persist

- **1. POLICY & PROCEDURE DEFICITS:** Only 53% of schools have written BTAM policies; only 49% have written SOPs.
- **2. FUNDING SHORTFALLS:** Only 23% of schools have dedicated program funding for BTAM.
- **3. PARENTAL INVOLVEMENT:** Only 20% involve parents directly in intervention planning, despite its proven success factor.
- **4. HUMAN CAPITAL GAPS:** Insufficient training, staffing, and institutional investment in the professionals who make the system work.



Information Provided by Trident Group America, Inc



A MODEL OF EFFECTIVE BTAM

Wood County Schools: Uniting Agencies for Coordinated Care and Prevention'

1. **COLLABORATIVE FRAMEWORK:** Unites educators, counselors, public health agencies, and law enforcement in a single BTAM framework.
2. **CENTRALIZED CASE MANAGEMENT:** Allows secure information sharing and coordinated intervention for early indicators of distress.
3. **CLINICAL ORIENTATION:** Philosophy that “a student in distress is not a disciplinary concern but a young person in need of care.”
4. **TECHNOLOGY AS INFRASTRUCTURE:** Platform, communication tools, and data integration are essential but rely entirely on human judgment.



Information Provided by Trident Group America, Inc



THE HUMAN CAPITAL IMPERATIVE

Why Technology Cannot Close the Gap in Dedicated Security Staffing

- » **STAFFING DECLINE:** Only 61% of schools have dedicated security staff weekly (down from 65% in 2019-20), despite high tech adoption.
- » **UNDervaluation OF PROFESSIONALS:** Systematic undervaluation of human security professionals relative to hardware and software.
- » **CONSEQUENCES OF IMBALANCE:** Technology flags threats, but no trained human is positioned to assess and act appropriately.
- » **SROs AS BTAM ASSETS:** School Resource Officers provide both security presence and relational intelligence, crucial for prevention.



Information Provided by Trident Group America, Inc

THE INTEGRATED ARCHITECTURE

Technology in Its Proper Role: Supporting, NOT Replacing Human Judgment

- **CONSENSUS IN 2026:** Emerging school security consensus emphasizes technology and human capital each occupying appropriate roles.
- **TECHNOLOGY'S STRENGTHS:** Continuous monitoring, consistent detection algorithms, rapid data processing, automated alerts.
- **HUMAN'S STRENGTHS:** Contextual judgment, individual knowledge, clinical assessment, multi-agency coordination, relational prevention.
- **HOLISTIC ASSESSMENT:** Technology investments must strengthen the safety of the entire school community within a mission-focused framework.



Information Provided by Trident Group America, Inc

SECURITY THEATER VS. SUBSTANCE

The Dangers of One-Size-Fits-All Technology Mandates

- **VENDOR & LEGISLATIVE PRESSURE:** Schools face pressure to mandate specific technologies without regard to fit.
- **CONTEXTUAL MISMATCH:** Technologies may not fit a facility's threat profile, budget, or human capital capacity.
- **APPEARANCE WITHOUT PROTECTION:** One-size solutions produce security theater – the appearance of protection without its substance.
- **PREDICTABLE OUTCOMES:** Deploying sensors without judgment leads to incidents like the Maryland and Tennessee cases.

