

METAL DETECTOR IMPLEMENTATION STUDY

An analysis of the policy, operational, financial and cultural considerations of metal detector use in schools

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EXECUTIVE SUMMARY

Following the September 2025 shooting at Evergreen High School, Jefferson County Public Schools initiated a formal review of metal detector implementation at its high school campuses. This report synthesizes research evidence, operational requirements, legal considerations, cost implications, equity issues, and alternative safety approaches to inform district leadership and the broader community. No recommendation for or against implementation is made; the purpose is to present factual information that supports informed decision-making.

RESEARCH EVIDENCE

- Multiple independent research reviews find no clear evidence that metal detectors reduce school violence. Some studies document a “displacement effect”—determined individuals circumvent screening through alternate entry points or accomplices.
- Some research links visible security measures, like metal detectors, with decreased student perceptions of safety, the opposite of the intended effect.
- Research highlights a lack of evidence of effectiveness of detectors and points to potential unintended harms.
- Practitioner perspectives from security professionals note that school shootings are typically planned events, making single-point screening easier to circumvent.

OPERATIONAL REQUIREMENTS

- Effective implementation requires either a closed-campus policy or continuously staffed screening, alarmed and locked exterior doors and windows at all secondary entry points, and defined protocols for late arrivals, deliveries, and after-hours events.
- AI-based walk-through systems (e.g., Evolv Express) allow students to pass through with backpacks on and offer higher throughput than traditional detectors but generate 9–20% secondary alert rates requiring continuous hand-wand screening staff.
- Armed personnel must be present at every active checkpoint at all times screening is in operation. This would require a significant ramp up hiring of armed personnel.
- Multi-building campuses require either multiple checkpoints or controlled internal movement between buildings.

COST IMPLICATIONS

- Estimated annual cost: \$249,000–\$452,000 per school, driven primarily by staffing (equipment lease is approximately \$30,000–\$36,000/year; the balance is personnel).
- These figures do not include one-time costs for facility modifications or infrastructure upgrades required at most Jeffco campuses.
- Given that there is no current source of funding directed to screening infrastructure, implementation may require tradeoffs with other student support services.

LEGAL AND POLICY CONSIDERATIONS

- Current Board policies do not authorize metal detectors. Policy JIH (Search and Seizure) and related policies (ECAB/EEAEA, potentially KCD) require Board-approved revisions before any implementation can proceed.
- Metal detector screening constitutes a search under the Fourth Amendment and is permissible only if applied universally. Selective or inconsistent enforcement creates constitutional exposure.

EQUITY CONSIDERATIONS

- National data from districts with metal detectors document disproportionate rates of secondary screening for students of color, a risk that applies to AI-based systems as well as traditional detectors.
- In the context of Jeffco Public Schools, there is also a risk of high income schools securing resources to purchase metal detectors on their own, leaving schools with fewer resources feeling comparatively less safe.

Community Engagement

- The district should work with schools and stakeholders to design a community input process and decision making framework to be used consistently across schools when considering the implementation of metal detectors.
- Community input processes should be designed to reach all school communities equitably, including multilingual outreach and engagement with historically underrepresented groups.

IF IMPLEMENTATION IS CONSIDERED: MINIMUM PREREQUISITES

- Alarmed and locked windows and exterior doors at all campus buildings
- Closed-campus policies or controlled re-entry policy.
- Dedicated armed security personnel at every active checkpoint (new hiring required).
- Board policy revisions authorizing universal screening

SUMMARY

The decision of whether to implement metal detectors involves weighing complex and competing considerations. Metal detectors offer a visible, tangible security measure that some families find reassuring, and the possibility of intercepting even one weapon carries moral weight. At the same time, field research finds no clear evidence of effectiveness, implementation prerequisites are substantial, annual costs are significant in a constrained budget environment, and that evidence-based alternatives have stronger research support for violence prevention.

INTRODUCTION

This report provides an analysis of potential metal detector implementation for Jefferson County Public Schools. Following the September 2025 incident at Evergreen High School, at the urging of concerned stakeholders, the district initiated a formal exploration process to examine whether metal detectors should be deployed in schools. This analysis synthesizes research evidence, operational requirements, legal considerations, and cost implications to inform district decision-making.

METHODOLOGY

This report was developed through two primary lines of inquiry: stakeholder interviews and external research review. Twelve stakeholder interviews were conducted with individuals who are mostly internal to Jefferson County Public Schools, including district leadership, legal counsel, risk management, operations, and human resources personnel. These interviews focused on understanding current district operations, existing policies and infrastructure, staffing and budget realities, and the practical constraints and considerations that would shape any implementation decision in the Jeffco context. In parallel, an extensive review of external research was conducted, including academic literature, trade publications, and vendor documentation. Together, these two lines of inquiry inform the report.

A NOTE ON SECURITY SENSITIVITY

In the interest of public safety, this report does not identify specific security vulnerabilities, gaps in current protocols, or site-level weaknesses. To the extent that information of this nature was discovered, it has been intentionally omitted from this document to prevent that information from being used to circumvent existing safety measures.

EFFECTIVENESS

Summarized below is what the available research and practitioner experience indicate about the effectiveness of metal detectors as a school safety measure. Because the research base is limited and evolving, this section aims to present findings from multiple perspectives — including both the concerns raised by researchers and the arguments made by practitioners and communities that have chosen to implement screening programs.

DEFINING "EFFECTIVENESS"

Before reviewing the evidence, it is useful to be precise about how "effectiveness" is defined in the context of this report. These are the questions we asked::

- **Detection effectiveness:** Does the equipment reliably identify weapons when they are present?

- **Deterrence effectiveness:** Does the presence of metal detectors discourage individuals from bringing weapons onto campus in the first place?
- **Violence prevention:** Does the use of metal detectors reduce the incidence or severity of school violence overall?
- **Perception of safety:** Do students, staff, and families feel safer when metal detectors are in use?

These are distinct questions, and the research addresses them unevenly. The evidence on detection performance – particularly for AI-based systems – is relatively limited in independent peer-reviewed form. The evidence on violence prevention is more studied but methodologically challenging because school shootings are rare events, and prevention measures vary greatly from district to district, and school to school, making statistical analysis difficult. The evidence on deterrence and perceived safety is mixed, largely qualitative, and context-dependent.

WHAT THE RESEARCH SHOWS

Concerns Raised by Researchers

Academic research on the effectiveness of metal detectors in K-12 schools has raised substantial questions. Multiple independent research reviews have found no clear evidence that metal detectors reduce school violence, and several studies have identified potential negative unintended consequences.

Key findings from the academic literature include:

- **[NASP Research Summary \(2018\)](#):** The National Association of School Psychologists concluded that "there is no clear evidence that the use of metal detectors, security cameras, or guards in schools is effective in preventing school violence, and little is known about the potential for unintended consequences that may accompany their adoption." The summary notes that the research base is limited partly because school shootings are statistically rare, making controlled study difficult.
- **[Cornell University Commentary \(2015\)](#):** A review by Dr. Dewey Cornell at the University of Virginia – one of the country's leading school safety researchers – found that multiple studies have concluded security measures such as metal detectors are "consistently ineffective in protecting students." Cornell emphasizes that the most significant daily safety threats students face are not mass shootings but more common forms of aggression, bullying, and interpersonal conflict, which metal detectors are not designed to address.
- **[Tanner-Smith, Fisher, Addington, & Gardella \(2018\)](#):** Using national survey data, this study found that schools using metal detectors in combination with security personnel and surveillance cameras were actually associated with greater student exposure to drugs, firearms, and fighting. The authors hypothesize that this may be because these formal controls shift responsibility for behavior management from teachers to security

personnel, eroding the relationship between faculty and students. When students feel compelled to follow the rules in order to maintain their relationship with their teachers, they may be less likely to break those rules. The authors note these effects were "relatively small in magnitude" and that "the existing evidence about the effect of metal detectors on informal social control is inconsistent but suggests a lack of beneficial effects and the potential for negative ones."

- [Hankin, A., Hertz, M., & Simon, T. \(2011\).](#) This peer-reviewed systematic literature review, authored by researchers at Emory University and published in the *Journal of School Health*, screened 128 papers on metal detector use in schools and identified 7 that met rigorous inclusion criteria. All 7 relied on self-report survey data. The review found mixed results overall: several studies suggested potential detrimental effects of metal detectors on student perceptions of safety, while one study found a significant beneficial effect – linking metal detector presence to a decreased likelihood of students reporting weapon-carrying at school. The authors concluded that the evidence base is insufficient to draw firm conclusions about whether metal detectors reduce school violence and noted that some research points to negative effects on school climate.

The Affirmative Case

Despite the limitations in the academic literature, there are substantive arguments made by practitioners, security professionals, and communities that have chosen to implement screening programs:

Deterrence Logic: Proponents argue that even if metal detectors do not prevent every weapon from entering a school, they raise the difficulty and visibility of attempting to do so. The argument holds that some potential incidents may be prevented precisely because they never appear in the data – a student who decides against bringing a weapon because screening is in place does not become a statistic. However, this argument is not supported by empirical research. The deterrence rationale is inherently difficult to test because prevented incidents, by definition, leave no record. No peer-reviewed research has established that the presence of weapons screening deters students from attempting to bring weapons onto campus. Decision-makers should weigh the intuitive appeal of the deterrence argument against the absence of evidence confirming its effect in school safety contexts

Incremental protection: Security professionals note that no single safety measure is foolproof, and metal detectors are rarely proposed as a standalone solution. In layered security frameworks, physical screening is one component among many – alongside threat assessment, surveillance, access control, and staff training. Within this frame, the question is not whether metal detectors alone prevent all violence, but whether they add a meaningful layer of protection as part of a comprehensive strategy.

Community response to specific incidents: Some districts have implemented metal detectors in direct response to community demand following a violent incident, with the stated goal of

restoring confidence and demonstrating visible action. While this may not align with the evidence on violence prevention, it reflects a legitimate community function: signaling that the school takes security seriously and is taking tangible steps in response to harm.

Practitioner experience: Campus Safety Magazine, a trade publication serving K-12 and higher education security professionals, notes that metal detectors are a widely used component of school safety programs and that districts with long-term screening programs – particularly in large urban systems – often report operational value in terms of weapons confiscation and staff situational awareness. These practitioner accounts are less systematically studied than academic research but reflect real-world implementation experience.

Weapons actually found: Proponents point to documented instances of weapons being detected and confiscated at school entrances as direct evidence of utility. While critics note this does not prove violence prevention, it does demonstrate that some individuals attempt to bring weapons through screened entry points – and that detection is possible.

DISPLACEMENT EFFECT

One of the most frequently cited concerns in the practitioner and academic literature is the "displacement effect" – the possibility that individuals intent on harm adapt their behavior in response to screening rather than being deterred entirely.

The Concern

Security researchers and law enforcement professionals note that a determined attacker has multiple potential responses to the presence of metal detectors:

- **Temporal displacement:** Hiding weapons in the school during periods when detectors are not active (such as during evening events, athletic practices, or cleaning hours when exterior doors may be propped open), then retrieving them later.
- **Geographic displacement:** Conducting an attack just outside the screening checkpoint – in the parking lot, at a bus drop-off, or in an outdoor common area – before entering the building.
- **Facilitated entry:** Working with a person already inside to pass weapons through a door or window that has been left ajar, circumventing the checkpoint entirely.
- **Alternative weapons:** Using weapons that are not effectively detected – including non-metallic materials, 3D-printed components, or edged weapons below detection thresholds.

These vulnerabilities are not hypothetical. Law enforcement officials and school safety consultants who have reviewed Jeffco's campuses have noted that most high schools have multiple entry points, extensive perimeter access, and outdoor spaces that would require significant additional investment in access control to meaningfully reduce these gaps.

The Counter-Argument

Proponents of metal detectors acknowledge displacement risks but argue they do not eliminate the value of screening:

- **Raising the bar matters:** Even if circumvention is possible, requiring additional planning, coordination, and risk-taking to bring a weapon into a school may deter opportunistic or impulsive acts of violence. Not all potential incidents are the result of sophisticated planning.
- **Access control as complement, not prerequisite:** While critics argue that open-campus policies and multiple entry points make screening incomplete, proponents note that the answer is to improve access control alongside screening – not to abandon screening because access control is currently imperfect.
- **Partial screening still catches some weapons:** A system that intercepts some weapons is better than one that intercepts none. The displacement argument, taken to its logical conclusion, could be used to argue against any security measure.

The degree to which displacement limits the effectiveness of metal detectors is likely to depend heavily on the specific campus configuration, the degree of access control, and the hours during which screening is active. Jeffco's campuses – many of which have multiple buildings, open-campus policies, and extended-hours activities – present a more complex displacement challenge than a single-building school with one entry point.

EFFECT ON SCHOOL CLIMATE AND PERCEIVED SAFETY

Separate from violence prevention, a significant body of research examines how metal detectors affect the day-to-day experience of students and staff – and whether they increase or decrease the sense of safety in school.

Research Suggesting Negative Effects

Several studies have found that the presence of metal detectors and visible security measures is associated with *decreased* rather than increased student perceptions of safety:

- **Students and Perceived School Safety: The Impact of School Security Measures (2013)**: This study found that metal detectors and the number of visible security measures were associated with a decrease in student reports of feeling safe. The researchers theorized that the presence of security equipment may signal to students that school is a dangerous environment, paradoxically increasing anxiety.
- **NASP (2018)** cautions that "over-emphasizing extreme physical security measures may undermine the learning environment while not necessarily safeguarding students," and notes that security-heavy environments can impair the trusting relationships between students and adults that are considered foundational to both safety and learning.
- **Mukherjee, E. (2007). Criminalizing the Classroom: The Over-Policing of New York City Schools. New York Civil Liberties Union / ACLU Racial Justice Program.**: Based on 1,000 student surveys and interviews with students, parents, teachers, administrators, and

NYPD personnel, this report documents the experience of NYC's school metal detector and policing program — at the time the largest school policing operation in the country. The report found that the burden of intensive screening fell disproportionately on schools with permanently installed metal detectors, whose student populations were disproportionately Black, Latino, and low-income compared to citywide averages. Students in these schools were more frequently subject to police contact for non-criminal incidents, and their schools had higher suspension and dropout rates. The report also documents significant disruption to instruction — in one documented instance, more than one-third of students were marked late and attendance dropped approximately 10% on a day of intensive metal detector screening. It should be noted that this is an advocacy publication from a civil liberties organization, not a peer-reviewed academic study, and should be read with that framing in mind.

Additionally, qualitative research and school climate surveys consistently find that students in high-security school environments report feeling surveilled and suspected rather than protected. This dynamic can undermine the trust between students and staff that threat assessment programs depend on — if students feel treated as suspects, they are less likely to report concerns.

Research and Arguments Suggesting Positive or Neutral Effects

- **Normalization of security screening:** Some researchers and many practitioners note that today's students have grown up with security screening at airports, stadiums, concerts, and other public venues. For some student populations, the presence of screening equipment may be perceived as normal and expected rather than threatening.
- **Community reassurance:** Parents may report increased confidence in school safety when metal detectors are present. While student perceptions may be mixed, family and community perceptions of safety are a legitimate consideration.
- **Context matters significantly:** The impact on school climate may depend on *how* screening is implemented rather than whether it exists. Schools where screening personnel are trained to be welcoming, where the process is fast and minimally disruptive, and where students understand how the system works may have more positive climate effects than schools where screening is experienced as punitive or stigmatizing.
- **Post-incident context:** In the immediate aftermath of a violent incident — as is the case for Jeffco following the September 2025 shooting at Evergreen High School — community perceptions of what constitutes a "safe" environment may be different from baseline. Some families and students may actively want visible security measures as a signal that the school has responded to what occurred.

What the Research Does and Does Not Say

Research on metal detector effectiveness is often cited selectively by both proponents and critics. The following is intended to clarify the limits and scope of the evidence:

The research does suggest:

- There is no strong, consistent body of evidence that metal detectors reduce the overall rate of school violence.
- Metal detectors in isolation are not sufficient to prevent a determined attacker from entering or bringing a weapon to a school.
- There are documented risks of negative effects on school climate, particularly if implementation is poorly managed or concentrated in schools serving marginalized populations.
- Alternative approaches such as threat assessment programs and mental health supports have a stronger and more consistent evidence base for violence prevention.

The research does not suggest:

- That metal detectors can never detect or deter a weapon from entering a school.
- That the deterrence effect is zero – this is difficult to measure, and the research does not rule it out.
- That communities and schools are wrong to want visible safety measures, particularly following a traumatic incident.
- That there is a definitive "right answer" – the evidence base has significant gaps, and reasonable people can reach different conclusions from the same data.

Summary

The available evidence does not provide a clear verdict on metal detectors as a school safety measure. Field research raises meaningful concerns about their effectiveness as violence prevention tools and documents potential negative effects on school climate and equity. At the same time, practitioner experience, deterrence logic, and community safety considerations provide a legitimate basis for implementation that goes beyond what the academic literature alone addresses.

The weight of the field evidence suggests caution about expecting metal detectors to prevent mass violence. However, the decision is not purely data-driven. It also involves how the school community wants to signal its commitment to safety and what level of visible security is consistent with its values and culture. The district must also consider the significant costs and operational requirements against available resources.

DEVICE ASSUMPTIONS

There are currently many different types of metal detectors on the market, each with a different price point and each with different impacts on daily operations.

Major categories of metal detectors include:

- **Standard walk-through detectors** – Electromagnetic machines that trigger an alert when any metal object above a set size threshold passes through. These systems require students to remove metal items from pockets and to pass bags through a separate screening belt.
- **Advanced detection or AI systems** – Walk-through systems that use electromagnetic sensors combined with machine-learning algorithms to distinguish likely weapons (firearms, large knives) from common personal items such as keys, phones, and belt buckles, allowing students to pass through without removing backpacks or emptying pockets.
- **Handheld wands** – Portable, handheld metal detectors

For the purposes of this report, handheld wands are only considered as secondary screening options to be used if a walk-through detector sounds an alert. Additionally, because traditional walk-through detectors require students and staff to send backpacks and other items through a separate screening system, which greatly increases operational complexity, the report focuses on advanced detection systems.

Evolv is the current market leader for this type of system. According to the company, The Evolv Express system is specifically designed so that students keep their backpacks on their shoulders as they walk through. The system allows students to quickly pass through screening individually or in groups with backpacks on shoulders, phones and keys in pockets, and carrying musical instrument cases or other items.

The cost and operating analysis in this report is based on implementation of Evolv Express, or a similar AI product, for primary screening, with hand wands used for secondary screening.

AI-based walk-through systems use electromagnetic sensors combined with machine-learning algorithms to identify the shape, density, and profile of concealed objects. Unlike traditional walk-through metal detectors – which alert to any metallic mass above a set threshold – AI-based systems are designed to distinguish weapons (firearms, large knives) from common personal items (keys, phones, belt buckles, laptops, coins).

When the system identifies a potential weapon, it displays a visual "red box" on a connected tablet or screen, indicating to the operator the approximate location on the person's body where the alert was triggered. Operators then direct that individual to secondary hand-wand screening.

Throughput for AI systems can be up to 1,000 people in 15 minutes, which greatly reduces wait times compared to traditional systems. The alert rate ranges from 9-20% depending on sensitivity settings. All alerts require secondary screening.

AI-based systems offer meaningful operational advantages but carry documented limitations that are relevant to this assessment:

- Sensitivity tradeoffs: Evolv Express sensitivity can be adjusted across a range of settings (labeled A–G). At lower sensitivity, fewer false alarms occur but certain weapons may not be detected. At higher sensitivity, more weapons are flagged but so are innocuous metal objects, increasing secondary screening rates.
- Non-metallic weapons: Like traditional systems, AI-based walk-through detectors have limited or no ability to detect weapons made from non-metallic materials.
- Bag-only screening gap: With the Evolv Express walk-through unit, backpacks and bags are carried through without independent bag screening. While the system is still screening bags, it is not an independent bag screening.

Also of note, Evolv's business model is to lease the detectors at a cost \$2,500-3,000 per month. There is no option to purchase the units.

OPERATIONAL IMPLICATIONS

Metal detector implementation poses significant requirements across multiple operational areas, including arrival procedures, staffing needs, and student flow management. These must be considered carefully when deciding on whether to move forward.

ARRIVAL PROCEDURES AND THROUGHPUT

A primary operational advantage of AI-based systems over traditional metal detectors is throughput. Evolv Technology advertises that its system can process approximately 1,000 people per 15 minutes per lane when operating in free-flow mode. This stands in stark contrast to traditional walk-through detectors, where guidance from Campus Safety Magazine notes that it "may take an hour to get everybody in" when screening an entire school population.

Whether advertised throughput translates to real-world performance depends significantly on secondary alert rates and staffing. At a 9–20% secondary alert rate (the range documented at Nashville's Metro schools during a 2025 Evolv pilot), a school of 1,500 students could expect 135–300 secondary screenings per morning, each requiring a brief hand-wand check. This has meaningful implications for both flow time and staffing.

AI-based systems are designed for free-flow screening: students walk through individually or in small groups, keeping backpacks on their shoulders, with phones and keys in their pockets. The system does not require students to stop, remove items, or queue at a belt.

However, free-flow entry requires adequate lane width and defined queuing space. Industry guidance specifies a minimum of three feet between individuals passing through the detection field. For Jeffco's high schools, lane configuration planning will need to account for:

- Physical entry dimensions at each campus – including lobby depth, door width, and proximity of the exterior to the interior corridor
- Number of lanes needed to process the student population before the first class period
- Weather and outdoor queuing, particularly during winter months
- How late arrivals, early releases, and mid-day entries are handled relative to the screening checkpoint

While AI-based systems reduce queuing substantially compared to traditional detectors, the district should model expected processing times for each school before implementation. Key variables include: number of lanes deployed, secondary alert rate at the chosen sensitivity setting, and available staffing for secondary screenings.

If implementation proceeds, adjustment to school start and end times – either staggered entry by grade level, or an earlier official start time – may be necessary at higher-enrollment campuses to avoid delays to the first period. Such a change would have ripple effects including implications for bus schedules. The potential logistical impact of changing transportation schedules is significant.

STAFFING REQUIREMENTS

AI-based systems reduce the staffing footprint compared to traditional metal detectors by eliminating the need for staff whose primary role is directing students to remove items or managing bag conveyors. The roles required per active checkpoint are:

Role	Quantity	Responsibilities
System Operator	1 per lane	Monitor AI display; respond to red-box alerts; direct secondary screening
Armed Security Personnel	1 minimum per checkpoint	Armed response to confirmed weapon alerts; required at all times screening is active
Secondary Screening Staff	1–2 per checkpoint	Conduct targeted hand-wand screening on alerted individuals (unarmed staff may assist if armed officer present)
Checkpoint Supervisor / Administrator	1 per checkpoint	Oversee process; manage student flow; address issues; document incidents

When the AI system generates an alert (the "red box" indicator), a staff member must conduct a targeted hand-wand screening of the flagged individual. At a 9–20% alert rate, this is a frequent occurrence that must be continuously staffed during entry periods. Districts deploying Evolv in urban areas have operated with approximately four staff per lane during the morning entry window.

Secondary screening of students by unarmed staff is a sensitive legal and operational issue. Jeffco's legal counsel has flagged that secondary searches – particularly hand-wand screening close to the body – require clear policy guidance, trained personnel, and documented protocols. Situations where alerts are generated near sensitive body areas (e.g., waistbands, undergarments) require particular care.

Additionally, an armed officer must be present and available to take over any secondary search that may involve a weapon. Stakeholder interviews conducted for this study reflect universal agreement among district safety, operations, and legal staff that armed personnel must be present at any active screening checkpoint. This requirement is not technology-specific – it applies equally to traditional and AI-based systems. If screening is intended to detect weapons, then any alert must be assumed to be a weapon. Unarmed personnel cannot be expected to respond to situations where potential weapons are detected.

The requirement for armed personnel is the most significant staffing constraint for metal detector implementation. Across Jeffco's high school campuses – each of which may have multiple entry points requiring coverage – the armed personnel needed could require significant new hiring. This cost is captured in the following cost analysis.

The current positions in the district that could align with these roles include:

- System operator – this could be filled by a Campus Supervisor
- Armed security personnel – there are currently two positions in the district that could serve this function: Armed Campus Security Patrol Officer or Armed Patrol Officer
- Secondary screening – this could be the role of either a Campus Supervisor or a Campus Security Officer
- Checkpoint supervisor: this is a more administrative role that could be filled by an administrative support staff. However, current negotiated job duties do not include this type of responsibility

There are also significant training requirements for both armed and unarmed personnel. Staff need comprehensive training in:

- Proper metal detector operation and calibration
- Secondary screening procedures with hand-held wands
- Weapons screening policies and protocols
- Conflict de-escalation techniques
- Visual screening techniques

COVERAGE DURING ALL SCHOOL ACTIVITY PERIODS

A consistent finding across stakeholder interviews is that weapon screening limited to the morning arrival window creates an incomplete security layer. Students who arrive late, leave campus during the day, or attend after-school activities and events are not screened under a morning-only model. To address this, districts have explored:

- Extending staffed checkpoint hours through the end of the school day – a significant staffing cost increase
- Using portable Evolv units at after-school event entrances (stadiums, gymnasiums, auditoriums) with separate event-specific staffing
- Accepting that mid-day entries and open-campus departures are a gap in the screening model

The district's current open-campus policies at most high schools make any time-limited screening model incomplete without broader access control changes. An individual with ill intent could simply enter the building during a period when screening is not active.

ACCESS CONTROL AND CLOSED-CAMPUS REQUIREMENTS

Effective weapon detection screening – regardless of technology – requires that all individuals entering a building pass through the screening checkpoint. This is only possible if every other entry point to the building is either locked from the outside or alarmed. If even one exterior door can be opened from inside (by a student who has been screened) to admit someone who has not been screened without detection, the security value of the entire system is undermined. Implementing alarmed access control at all secondary entry points, meaning all doors and windows, is also a required infrastructure investment – and one that is independent of which screening technology is selected.

A related vulnerability noted in stakeholder interviews: a student can be screened, enter the building, retrieve a weapon hidden near an exterior door or in an outdoor area, and bring it inside after the fact. Even if doors are alarmed, the weapon could be discharged before personnel could respond to that alarm. Perimeter patrols and regular checks of areas around the building (bushes, exterior alcoves, adjacent parking structures) are a best practice complement to any screening program.

OPEN CAMPUS VS. CLOSED CAMPUS

All but two of Jeffco's high school campuses currently operate with open-campus policies during lunch and at other times during the school day. Open campus means students leave and re-enter the building multiple times per day – often through entry points other than the main entrance. Converting to a closed campus is a significant policy change that affects students, families, and staff and requires community engagement and school-level policy review. Of note, if schools were to convert to closed campuses, the impact on food and nutrition services would be substantial. Schools could expect to see the number of students eating lunch in cafeterias to

double or triple, requiring major modifications to lunch schedules, food service staffing, food expenses, and even the physical space requirements for cafeterias..

MULTI-BUILDING CAMPUS CONFIGURATIONS

Several of Jeffco's high school campuses include detached or semi-detached buildings (gymnasiums, vocational buildings, field houses, portable classrooms). Students and staff may move between buildings during the school day. Screening at the main entrance does not cover movement between buildings.

Options the district would need to evaluate include: (a) accepting that inter-building movement during the day is not screened which introduces additional risk; (b) requiring that students who exit the main building re-enter through a screened checkpoint upon return; or (c) installing additional screening lanes at secondary building connections. Each option carries cost, staffing, and operational implications as well as varying degrees of risk.

IMPACT ON STUDENT, STAFF AND VISITOR EXPERIENCES

STUDENT EXPERIENCE

One experience that is similar across both AI-based and traditional systems is the secondary screening process when an alert is triggered. A student who triggers an alert must step aside and undergo a hand-wand screening – an experience that may feel stigmatizing or embarrassing, particularly if it occurs in front of peers. At a 9–20% alert rate, this is not a rare event.

Stakeholder interviews note concern that students who observe classmates being pulled aside for secondary screening may develop anxiety, and that rumor and speculation about why specific students were flagged could contribute to negative school climate dynamics. Clear communication to students about how the system works – including the high frequency of false alerts – may help mitigate this.

STAFF SCREENING

Consistent application of screening policy requires that staff pass through the same checkpoint as students. Staff with implants, prosthetics, or medical devices may require alternate screening protocols. Staff who arrive early to set up classrooms, or who re-enter after a duty-free lunch, must have a clear procedure for re-entry.

Jeffco's HR department has identified that any policy requiring staff to undergo screening as a condition of entry may need to be addressed through the existing labor relations process.

VISITORS AND CONTRACTORS

School visitors, substitute teachers, contractors, and delivery personnel must be incorporated into the screening protocol. AI-based systems can accommodate individuals with mobility aids or medical devices through alternate screening procedures, but these take additional time and require trained staff.

EXTRACURRICULAR ACTIVITIES AND ATHLETIC EVENTS

AI-based walk-through systems are designed to be portable and are frequently used for event-based screening at stadiums, gymnasiums, and auditoriums. Evolv Express units can be transported and set up at alternate entry points for evening events. This offers a flexibility advantage over fixed traditional installations.

For events, the district would need to determine: (a) whether attendees (not just students) will be screened; (b) how bag policies apply to spectators; and (c) how staffing for events is sourced and compensated.

If event-based screening is added to the program, it extends the hours during which armed security coverage is required – beyond the school day and into evenings and weekends.

ACCOMMODATIONS FOR SPECIAL POPULATIONS

Students with disabilities may require individualized accommodations for the screening process. Considerations include:

- Students with implanted medical devices (pacemakers, insulin pumps) may be affected by electromagnetic fields; districts should follow manufacturer guidance and consult with families
- Students in wheelchairs or who use mobility aids may require alternate screening lanes or protocols
- Students with sensory sensitivities, trauma histories related to physical contact, or individualized education plans (IEPs) addressing environmental triggers may require modified screening procedures
- Section 504, IDEA, and ADA requirements must be evaluated to ensure the screening program does not create discriminatory barriers to educational access

Developing individualized protocols for these populations adds staffing and coordination complexity. Students with disabilities who require modified screening procedures should be identified in advance and protocols documented in their IEP or 504 plans, in consultation with legal counsel.

IMPLEMENTATION CONSIDERATIONS IF SCREENING IS ADOPTED

The following are operational prerequisites identified through stakeholder interviews. These represent minimum requirements if the district moves forward with AI-based screening at any school:

- Alarmed and locked exterior doors at all secondary entry points.
- Defined school-level policies on closed-campus or controlled re-entry policy – without this, the screening model has a structural gap.
- Armed security personnel assigned as dedicated checkpoint staff during all hours of active screening – this cannot rely on SRO's who have duties across multiple campuses and must be available to respond to incidents district wide and in the community, if there

is an imminent life safety concern, and they are the closest officer. Further research is required to determine the market supply for these type roles, and to determine if there are enough qualified personnel to fill these positions. There are also significant financial costs associated with staffing screening systems which are examined later in this report.

- Clear written protocols for secondary screening procedures, including having staff who are the same gender as the flagged student conduct secondary screening, documentation of alerts, and escalation procedures.
- Board policy revisions authorizing universal weapon screening, including amendments to policies JIH (Search and Seizure), ECAB/EEAEA (facilities and safety), and potentially KCD (donations), to ensure any equipment acquisition goes through the Department of Safety. (See policy considerations)
- A limited pilot design, if the district chooses to proceed, that includes clear outcome metrics (secondary alert rate, weapons found, time-to-clear, student perception surveys) and a defined evaluation period before district-wide rollout.

COST IMPLICATIONS

Implementation of metal detectors will carry a significant financial cost. At a minimum, at each location, annual costs will include:

- Lease of at least one AI screening unit – annual cost of \$30,00-36,000
- Additional personnel
 - One system operator – (Campus Security Officer) – approximately \$48,000/year in salary and benefits
 - One armed security personnel (Armed Campus Security Patrol Officer or Armed Security Patrol Officer) – range of \$75,000 to \$93,000 per year in salary and benefits
 - Two secondary screening personnel (Campus Security Officer or Campus Supervisor) – range of \$48,000 to \$56,000 per person per year in salary and benefits
 - Checkpoint supervisor – if this role cannot be filled with existing personnel, it would likely be another Campus Security Officer at approximately \$48,000 per year
- If the school is in operation for more than 8 hours per day, additional shifts and/or overtime pay would be required to staff the checkpoint for that longer day

At a minimum, an annual implementation cost would be about \$250,000 per school per year, and that figure could go as high as \$450,000 per year.

Summary Costs	Low	High	With 1.5 Shifts
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Equipment Lease	\$ 30,000	\$ 36,000	
System Operator	\$ 48,000	\$ 48,000	\$ 72,000
Armed Officer	\$ 75,000	\$ 93,000	\$ 139,500
Secondary Screeners (2)	\$ 96,000	\$ 112,000	\$ 168,000
Checkpoint Supervisor	\$ -	\$ 48,000	\$ 72,000
Total	\$ 249,000	\$ 337,000	\$ 451,500

There are also potential indirect costs including:

- Staff training programs and ongoing professional development
- Infrastructure modifications (electrical, structural)
- Modifications to door and window alarms
- Purchase of handheld wands for secondary screening
- Technology updates and system maintenance
- Potential need for additional equipment during events and extracurricular activities

EQUITY CONSIDERATIONS

Equity considerations are central to any evaluation of weapon screening in schools. Research and national experience identify several equity concerns that Jeffco must weigh:

DISPROPORTIONATE IMPACT

In large urban districts – most notably New York City – metal detectors have been deployed primarily in schools serving higher proportions of students of color and lower-income students, while schools in wealthier communities were not similarly equipped. This disparity has led to parent and advocacy group challenges on grounds of discriminatory impact. If Jeffco implements screening at some schools but not others, it should anticipate scrutiny about the basis for that determination and its demographic implications. There is significant potential for the district to create unintended equity issues if schools with more affluent populations are able to fundraise to purchase or staff metal detectors through donations while other schools are unable to follow suit.

SECONDARY SCREENING AND BIAS RISK

AI-based systems are marketed as reducing the potential for human bias in screening decisions – the "red box" directs a targeted secondary search rather than relying on a staff member's visual judgment about who to pull aside. However, secondary screening discretion is not fully eliminated: staff make decisions about how to conduct wand searches, when to escalate, and how to treat students during the process. Comprehensive, standardized training and clear documentation requirements help mitigate but do not fully eliminate this risk.

Consistency Across the District

Stakeholder interviews reflect broad agreement that if weapon screening is adopted at any Jeffco high school campus, the district must establish uniform implementation standards. School-level decision-making does not eliminate the district's obligation to set minimum safety standards. Inconsistent implementation creates conditions where the district assumes legal and reputational risk if incidents occur at a school whose screening program lacked adequate safeguards.

To address both the desire for local flexibility and the need for consistent safety outcomes, the district should consider a framework that allows schools to make screening decisions while requiring any school that adopts screening to meet non-negotiable district standards. At minimum, those standards should include:

- **Armed personnel:** At least one armed, trained security officer must be present and actively monitoring the screening checkpoint whenever screening is in operation. This is not optional – screening checkpoints without armed personnel present an unacceptable safety risk if a weapon is detected.
- **Approved equipment:** Only district-approved screening technology may be used. Equipment purchased through donations, grants, or other outside funding sources must meet the same approval standards as district-procured equipment.
- **Mandatory staff training:** All personnel involved in screening operations must complete district-approved training before participating in any screening activities. Training must address screening protocols, de-escalation, student rights, and procedures for responding to alerts – with regular refresher requirements.
- **Standardized alert response protocols:** Consistent, documented procedures must govern how staff respond when a weapon or prohibited item is detected, including escalation procedures and documentation requirements.
- **Audit and compliance mechanisms:** The district should establish a process for monitoring and auditing compliance with these standards across all schools operating screening programs.

If the district elects to permit school-level decision-making, it should make clear that any school accepting the option to screen also accepts full accountability for meeting these standards. This framework ensures that school choice does not come at the expense of student safety or district-wide equity.

FISCAL EQUITY

Jeffco's current \$60 million budget deficit means that any new safety expenditure involves opportunity costs. Resources allocated to weapon detection screening – equipment, staffing, facility modifications – are resources that cannot be spent on other priorities. The district should weigh this tradeoff explicitly in its analysis. There is currently no source of funding for purchasing metal detectors or for staffing up appropriately to operate detectors. Schools that

wish to implement screening systems may need to consider eliminating services or positions, imposing security fees, or determining other ways to pay these costs.

COMMUNITY INPUT

Before any decision is made about metal detectors, community input must be gathered at both the district level and within each individual school community. This approach reflects the reality that campuses differ significantly in their physical layouts, student populations, staffing, and community culture. Meaningful engagement ensures that the perspectives of students, families, staff, and community members directly shape the options and tradeoffs presented to decision-makers at each school and at the district-level.

Stakeholder interviews conducted as part of this exploration consistently raised equity as a central concern: if only some schools adopt metal detectors, those communities may feel singled out or stigmatized. Conversely, if some schools are able to secure private donations to fund the purchase of metal detectors, those schools that cannot do so may be left feeling less safe. At the same time, operational and financial realities make a uniform district-wide rollout highly uncertain in the near term.

As one next step, the district should define a school-level process for gathering input and reaching a decision about implementing metal detectors. The community input process should be designed with equity in mind, ensuring that:

- All school communities have a genuine and equivalent opportunity to provide input, not just communities that are already vocal or organized.
- Input processes are accessible to students, families, and staff across language, cultural, and socioeconomic differences.
- The district provides consistent factual information to all schools so that community input reflects an informed understanding of costs, operational requirements, and research evidence rather than assumptions or misinformation.

Recommended Input Methods

A multi-method approach is recommended to reach the broadest cross-section of the community and to capture both quantitative sentiment and qualitative perspective. The following methods should be considered at the individual school level, supported by district-level coordination:

Surveys

Short, structured surveys distributed to students, parents/guardians, and staff can gauge baseline sentiment and surface key concerns. Surveys should be:

- Available in multiple languages reflecting the school community's demographics.

- Accompanied by a brief, plain-language summary of what metal detectors are, how they work, what implementation would require, and what the research evidence shows.
- Conducted separately for students, families, and staff, as these groups may have distinct concerns and priorities.
- Designed to capture both directional responses (e.g., support or opposition) and open-ended qualitative input to understand the reasoning behind positions.

Community Forums and School Advisory Council Meetings

Facilitated community conversations allow stakeholders to ask questions, hear from others with different perspectives, and deliberate on tradeoffs in real time. These sessions should:

- Be held at times and locations accessible to working families, including evening and weekend options.
- Include a structured presentation of factual information before open discussion, to ensure input reflects a shared understanding of the options and their implications.
- Explicitly solicit the perspectives of students, who are the most directly affected stakeholders. Student leadership teams should be engaged in planning and facilitating these conversations.
- Be documented and summarized for those unable to attend in person, with a mechanism for asynchronous input (e.g., written comment submission).

Targeted Focus Groups

In addition to broad surveys and open forums, targeted focus groups with specific populations can surface perspectives that may not emerge in larger settings. Priority groups for focused outreach include students (particularly those from historically marginalized communities), families with students who have disabilities or medical devices that would trigger detection equipment, staff responsible for daily operations, and mental health and student support staff who can speak to potential impacts on school climate and student well-being.

Vendor Demonstrations Open to the Community

Several stakeholders noted that community members' impressions of metal detectors are often based on older, high-disruption equipment rather than current technology. Where possible, offering community members the opportunity to observe or participate in demonstrations of available products—including AI-assisted walk-through systems—can ground input in a more accurate understanding of what implementation would actually look and feel like on a daily basis.

Key Design Principles for the Input Process

- **Lead with information, not advocacy.** Community input should be preceded by a clear, factual briefing on costs, staffing requirements, research findings, and implementation

considerations. Input gathered before communities understand the tradeoffs may not reflect considered judgment.

- **Make results transparent.** Survey results and forum summaries should be shared back with the school community, along with a clear explanation of how input will be used in the decision-making process.
- **Distinguish between sentiment and decision authority.** Community input is an essential input to the decision, but the ultimate authority rests with district and school leadership. The process should be clear about what role input will play and avoid creating the impression that a vote or majority preference alone determines the outcome.
- **Account for equity across school communities.** The district should monitor whether schools with historically underrepresented or lower-income communities are receiving the same quality and depth of engagement as schools with more organized parent advocacy structures.

Coordinate across schools. Even if decisions are made at the school level, the district should have a consistent and prescribed input process to ensure consistency in the information shared, the questions asked, and the timeline for engagement, enabling meaningful comparison of results across schools.

LEGAL AND POLICY IMPLICATIONS

There are relatively few legal barriers to using metal detectors in schools and clearly districts around the country have found ways to implement various screen systems without violating student and staff legal rights. However, an understanding of the key legal issues impacting the use of metal detectors is valuable.

FEDERAL CONSIDERATIONS

The Fourth Amendment to the United States Constitution protects against unreasonable searches and seizures. This protection applies to searches conducted by public school officials, not just law enforcement. The U.S. Supreme Court established in 1985 in *New Jersey v. T.L.O.*, that the Fourth Amendment's prohibition on unreasonable searches applies to public school environments, but with a modified standard appropriate to the school setting.

Key principles from *New Jersey v. T.L.O.* include:

- School officials act as representatives of the state, not merely as surrogates for parents, and therefore must comply with constitutional requirements when conducting searches.
- Students have a legitimate expectation of privacy in schools, but this expectation is balanced against the school's need to maintain order and discipline.
- School officials need 'reasonable suspicion' rather than the higher 'probable cause' standard required for law enforcement searches. School searches must be 'reasonable' under all circumstances.

- School officials do not need to obtain a warrant before conducting a search, unlike law enforcement.

Additionally, courts have generally treated metal detector searches in schools as administrative searches, like airport security screening. Under this framework, metal detector searches may be constitutional even without individualized suspicion when implemented properly.

To survive constitutional scrutiny, metal detector programs must adhere to specific implementation requirements:

1. Universal or Random Application

Metal detectors must be applied universally to all individuals entering a school or event, or on a truly random basis. Selective screening based on characteristics or suspicion may require individualized reasonable suspicion and could raise equal protection concerns. Courts have emphasized that the fact that searches are conducted universally or in some random manner is an important factor in determining that the Constitution is not violated.

2. Minimal Intrusiveness

Metal detector scans are considered minimally intrusive when properly conducted. However, any subsequent physical search triggered by detector activation must be conducted privately and with appropriate protocols to protect student dignity and privacy rights.

3. Written Policies and Procedures

Best practice guidelines recommend that students receive written notice of metal detector policies, including when and how they will be used. Clear, written policies help establish the reasonableness of the search program and provide notice to students and families.

STATE FRAMEWORK

Colorado Revised Statutes § 22-32-109.1 (Colorado Safe Schools Act) establishes comprehensive requirements for school safety planning but does not specifically mandate or prohibit metal detector use. Key provisions include:

- Each school district board of education must adopt a mission statement that includes 'making safety for all students and staff a priority in each public school of the school district.' (C.R.S. § 22-32-109.1(1.5))
- Districts must adopt and implement a safe school plan following consultation with accountability committees, parents, teachers, administrators, students, and the community. (C.R.S. § 22-32-109.1(2))
- Safe school plans must address conduct and discipline codes that promote consistency and respect student rights. (C.R.S. § 22-32-109.1(2)(a))

- Districts must comply with the National Incident Management System (NIMS) framework for emergency response and coordinate with community partners including law enforcement. (C.R.S. § 22-32-109.1(2)(b))

While Colorado statutes do not contain specific provisions authorizing or restricting metal detector use, the Colorado School Violence Prevention and Student Discipline Manual (published by the Colorado Department of Education) recognizes that school administrators have authority to conduct searches based on reasonable suspicion. The manual acknowledges that metal detectors may be used as part of comprehensive school safety strategies.

The Colorado Association of School Boards (CASB) provides sample policies (JIHC - Use of Metal Detectors) suggesting that when administration has reasonable cause to believe weapons are in possession of unidentified students, when there has been a pattern of weapons found at school, or when violence involving weapons has occurred, administration may be authorized to use stationary or mobile metal detectors in accordance with Board-approved procedures. Any search of a student's person resulting from detector activation should be conducted privately in accordance with personal search policies.

CURRENT BOARD POLICY

Jeffco's current search policies, as outlined in the Student & Family Handbook and referenced as Policy JIH (Student Interviews, Interrogations, Searches, and Arrests), allows for personal property searches. The policy allows searches of 'a student's person or personal effects such as a backpack, purse, book bag, electronic devices, motor vehicle, etc., within the school or on school grounds' when officials 'reasonably suspect that the search will uncover evidence of a violation of Board and/or district policies, school rules, or federal, state, or local laws or uncover the presence of an item that presents an immediate danger of physical harm or illness to any person.'

This requires reasonable suspicion for individual student searches but does not address systematic screening technologies

Jeffco's current policies do not include:

- Any authorization for the use of metal detectors (stationary or handheld)
- Procedures for universal or random screening of students without individualized suspicion
- Protocols for conducting secondary searches when metal detectors activate
- Training requirements for staff operating metal detection equipment
- Requirements that personnel be armed
- Criteria for when and where metal detectors would be deployed
- Notice requirements to students and families about metal detector use

Policy Area	Current Jeffco Policy	Required for Metal Detectors
Authorization	No explicit authorization for metal detectors in current policy	New policy language explicitly authorizing metal detector use with Board approval and specified triggering conditions
Search Standard	'Reasonable suspicion' required for personal searches	Universal or random screening without individualized suspicion; reasonable suspicion required for secondary searches after detector activation
Operational Procedures	General search procedures exist but no technology-specific protocols	Detailed regulations covering entry procedures, equipment operation, handling of activations, accommodation for students with medical devices or IEP's
Notice Requirements	Student handbook includes general search policy; no specific notice for systematic screening	Written advance notice to families, clear signage, handbook updates, ongoing communication about where and when metal detectors are in use
Training	Campus supervisors trained in 'searches' generally; no metal detector-specific training program	Comprehensive training program including equipment operation, constitutional requirements, student rights, de-escalation, and privacy protection
Law Enforcement Role	Agreements exist with SROs and law enforcement partners	Updated agreements specifying SRO role in metal detector operations, protocols for handling detected weapons, evidence custody procedures
Data & Privacy	General student privacy protections under FERPA and state law	Specific protocols for recording activation data, incident documentation, privacy safeguards, and regular

		reporting with demographic analysis to identify disparate impacts
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Note that this report should not be considered a legal opinion. The district should consult with legal counsel throughout any implementation process to ensure specific policies and procedures comply with all applicable federal and state law and should consider ongoing legal review as case law and regulations continue to evolve in this area.

CONCLUSION

The decision of whether to implement metal detectors in Jefferson County Public Schools involves weighing a range of complex and, at times, competing considerations. Every school, and every school community, has a different culture and different priorities. All schools want their children and faculty to thrive in safe and secure settings.

The research evidence on metal detector effectiveness in preventing school violence is limited and inconclusive, and academic literature raises questions about potential impacts on school climate. At the same time, metal detectors represent a visible, tangible security measure that some community members and families find reassuring – and the possibility that even one weapon is detected and removed before harm occurs carries significant weight. Schools might also consider that threat assessment programs, mental health supports, and anonymous reporting systems have demonstrated stronger evidence bases for violence prevention, and that these approaches may address the underlying conditions that lead to violence rather than its immediate means.

If individual schools choose to move forward with metal detector implementation, this report has identified substantial conditions that must be in place for a program to function as intended. These include armed personnel at every active checkpoint, infrastructure modifications to control building access, staffing levels that have been estimated at a minimum cost of approximately \$250,000 to \$450,000 per school annually, and Board policy revisions specifically authorizing universal screening and identifying requirements for schools that choose to implement metal detectors. Partial implementation – without these prerequisites – would create security gaps that could expose the district to potential liability while providing a false sense of security.

The September 2025 incident at Evergreen High School has understandably prompted families, students, and staff to ask what more can be done to keep schools safe. This report is intended to ensure that whatever path is chosen, it is grounded in accurate information about costs, operational requirements, legal obligations, and the current state of research evidence – so that those making and living with this decision can do so with a full understanding of what each option entails.

APPENDIX A - CONTRIBUTORS

The following individuals contributed to this report:

- Greg Avedikian - Project Manager, Strategy, Jeffco Public Schools
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APPENDIX B - BEST PRACTICES IN VIOLENCE PREVENTION

The district's exploration of metal detectors occurs within a broader national conversation about how schools can most effectively promote safety. Research and practitioner guidance consistently identify several approaches that may complement or serve as alternatives to physical security hardware. This section summarizes the primary alternatives identified in the literature and by district stakeholders, along with key implementation considerations for each. Inclusion of these approaches is not intended to advocate for or against any particular strategy; rather, it reflects the full range of options available to the district as it weighs its path forward.

BEHAVIORAL THREAT ASSESSMENT PROGRAMS

Behavioral threat assessment is a structured, evidence-based process for identifying, evaluating, and intervening with individuals who may pose a risk of targeted violence. Unlike reactive security measures, threat assessment is preventive in nature: it focuses on identifying warning signs and addressing underlying problems before they escalate.

What the Research Shows:

The National Association of School Psychologists (NASP) identifies addressing the continuum of student needs as a more promising approach than increasing physical security measures alone. Research by Dr. Dewey Cornell at the University of Virginia – whose Virginia Student Threat Assessment Guidelines became an evidence-based practice recognized in the National Registry of Evidence-based Programs and Practices in 2013 – has demonstrated measurable outcomes in schools that adopt this model. Studies of schools using these guidelines found lower rates of student suspensions, reduced bullying, and greater student willingness to report concerns. A randomized control study of 40 schools found students in threat assessment schools were approximately four times more likely to receive counseling services compared to control schools.

The Colorado context is particularly relevant: district stakeholders noted that threat assessment programs combined with the Safe2Tell anonymous reporting system have been credited with preventing approximately 30 active shootings in Colorado. This represents a documented, local application of threat assessment as a violence prevention tool.

Key Components of Effective Threat Assessment Programs:

- A multidisciplinary team typically including administrators, counselors, school psychologists, and law enforcement liaisons is charged with threat assessment
- There are clear protocols for evaluating the seriousness of reported threats on a continuum
- There is an emphasis on connecting at-risk students with counseling, family support, or other services rather than defaulting to suspension or expulsion
- Staff and faculty are universally trained to recognize and report warning signs
- There are systems in place for documenting and tracking incidents and follow up actions

Implementation Considerations for Jeffco:

- Jeffco already has threat assessment infrastructure in place. Expansion would involve evaluating current team capacity, caseloads, and training consistency across all schools.
- Increasing the number of trained personnel – including school psychologists, counselors, and campus safety staff with threat assessment training – would be a primary resource need.
- Consistent implementation across all high schools and other grade levels would require standardized protocols, regular auditing, and significantly improved systems for tracking and monitoring
- Coordination between building-level teams and district-level oversight would be essential to ensure fidelity and share information across campuses.

STUDENT MENTAL HEALTH SUPPORTS AND WELLNESS PROGRAMMING

Community feedback gathered following the September 2025 shooting at Evergreen High School consistently emphasized the importance of mental health supports alongside any discussion of physical security. These two areas are not mutually exclusive and are widely considered by researchers and practitioners to be interconnected components of a comprehensive school safety strategy.

What the Research Shows:

Research cited by Cornell (2015) notes that the most significant threats to student safety are not mass shootings, but more common forms of aggression, bullying, and behavioral crises that require different prevention strategies. A meta-analysis by Wilson and Lipsey found that counseling programs and other psychological interventions produce moderate to strong effects in reducing student aggression and improving behavior. Cornell also notes that school systems spending heavily on physical security infrastructure often lack sufficient funds to hire counselors, psychologists, and social workers – highlighting a direct tradeoff between hardware and human support.

NASP recommends that schools address the full continuum of student needs as the foundation for safe and successful schools. This includes universal prevention programming, early identification of at-risk students, and individualized intervention for those with acute needs.

Key Areas of Mental Health Investment:

- Adequate counselor and school psychologist staffing ratios (national recommendations are 1 counselor per 250 students and 1 psychologist per 500 students; many districts fall short of these benchmarks)
- Social-emotional learning (SEL) curricula embedded in classroom instruction
- Universal screening tools for early identification of students experiencing mental health challenges

- Crisis intervention teams and clear protocols for responding to students in acute distress
- Trauma-informed school practices, particularly relevant in the aftermath of a school shooting
- Peer support programs and student wellness initiatives
- Family engagement and community partnerships with mental health providers

Implementation Considerations for Jeffco:

- A needs assessment of current counselor and psychologist staffing ratios across schools would provide a baseline for understanding gaps relative to recommended standards.
- Mental health investments typically require ongoing personnel costs. Within the context of the district's \$60 million budget deficit, this may require reallocation of existing resources, grant funding, or community partnerships.
- Coordination with Jefferson Center for Mental Health and other community providers could extend district capacity without solely relying on district-employed staff.

STRENGTHENING RELATIONSHIPS: TRAINED SAFETY PERSONNEL AND COMMUNITY CONNECTIONS

Multiple stakeholders across the district's interview process – including the district leadership, operational leadership, and legal counsel – emphasized that trained armed personnel with established relationships within school communities may provide safety benefits that physical screening equipment alone cannot replicate. This view aligns with findings in the professional literature.

What the Research and Stakeholders Suggest:

Campus Safety magazine notes that having a school resource officer on-site is considered by many practitioners to be among the most effective deterrents to campus violence. Stakeholders noted that armed personnel who know students, observe daily behavior, and participate in threat assessment processes provide both a physical deterrent and an early warning function. There is a generally accepted belief that increasing the number of trained armed staff present in buildings daily – developing relationships with students and observing for warning signs – is more impactful than passive screening equipment.

At the same time, NASP cautions that the presence of school resource officers can, if not carefully managed, contribute to the criminalization of student behavior. Research on SRO programs shows mixed outcomes depending on how officers are trained, integrated, and supervised.

Key Considerations:

- Jeffco Schools has 27 armed patrol officers who are trained similarly as law enforcement but are not sworn law enforcement officers and work district wide.

Dedicated building presence for all high schools would require significant expansion of this capacity.

- Meaningful relationships between safety personnel and students depend on continuity, training in adolescent development and de-escalation, and clear role boundaries.
- Any expansion of armed personnel programs would require clear memoranda of understanding with law enforcement agencies, defined roles and responsibilities, and staff training protocols.
- Community perspectives on law enforcement presence in schools vary significantly and would need to be part of any stakeholder engagement process.

ANONYMOUS REPORTING SYSTEMS

Research on school shootings by the FBI and U.S. Secret Service has consistently found that in most cases, other students were aware of concerning behavior or statements before an attack occurred. Anonymous reporting systems provide a mechanism for students to share information without fear of social consequences.

Colorado Context:

Safe2Tell, Colorado's statewide anonymous reporting program administered by the Colorado Attorney General's office, provides a 24/7 tip line and app accessible to all Colorado students. Jeffco stakeholders credited the combination of threat assessment infrastructure and Safe2Tell with preventing approximately 30 active shootings in Colorado. Ongoing utilization depends on student awareness, trust that reports are taken seriously, and visible follow-through.

Implementation Considerations:

- Regularly promoting Safe2Tell awareness across all grade levels, particularly at the start of each school year
- Training staff to respond consistently and promptly to tips, reinforcing student trust in the system
- Reviewing district data on tip volume and response outcomes to identify gaps

Summary Comparison: Alternative Approaches

The following table summarizes the key dimensions of the alternative approaches described in this section.

Approach	Evidence Base for Violence Prevention	Primary Cost Driver	Capital / Equipment Cost
Behavioral Threat Assessment	Strong (evidence-based)	Moderate-High (personnel)	Low-None
Mental Health / SEL Programs	Strong (evidence-based)	Moderate-High (personnel)	Low
Trained Safety Personnel / SROs	Mixed (varies by implementation)	High (personnel)	Low-Moderate
Anonymous Reporting (Safe2Tell)	Moderate-Strong	Low (awareness/training)	Minimal
Metal Detectors (for comparison)	Unclear / insufficient evidence	High (personnel + equipment)	Moderate-High

Note on Evidence Standards

The evidence base for threat assessment programs and mental health interventions is generally considered stronger and more consistent than the evidence base for metal detectors. However, it is important to note that these approaches address different threat types and serve different functions. Many practitioners and researchers recommend a layered approach that incorporates multiple strategies rather than relying on any single measure. This summary is intended to inform discussion, not to prescribe a particular course of action.

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