Plan for Implementation of a Statewide School Safety Mobile Application

Virginia Department of Criminal Justice Services
1100 Bank Street, Richmond, VA 23219
www.dcjs.virginia.gov

December 2019

Table of Contents

Background

The Virginia Department of Criminal Justice Services (DCJS) prepared this report in response to the 2019 General Assembly's consideration of various proposals for improving safety in Virginia's public schools:

1. Item 381 F of the 2019 Budget Bill

Item 381 F is the impetus for this report as it directs the Secretary of Public Safety and Homeland Security to:

"Develop a plan for implementation for a statewide school safety mobile application to be accessed by all school divisions. The Secretary shall submit his plan to the Governor and the Chairmen of the House Appropriations and Senate Finance Committees by December 1, 2019."

The Secretary directed DCJS, which houses the Virginia Center for School and Campus Safety (VCSCS), to prepare the report required by Item 381 F.

2. Senate Bill 1608

The 2019 General Assembly also considered, but ultimately did not pass, SB1608, which would have directed the Virginia State Police to develop or obtain a school safety mobile application that would:

(i) facilitate the provision of real-time, 24 hours a day, seven days a week crisis intervention services by licensed clinicians, including support or crisis counseling, suicide prevention, and referral services to students and youth in the Commonwealth through calls, texts, and online chat portals; and,
(ii) provide to students and youth in the Commonwealth a platform that is capable of receiving text, audio, images, or video to furnish information concerning a suspected, anticipated, or completed criminal violation.

Because the Senate passed this bill and thereby expressed an interest in a mobile application with the capabilities above, DCJS considered these capabilities in its review of existing school safety mobile applications.

3. House Bill 1734/Senate Bill 1213

The General Assembly reenacted §§ 9.1-184 and 22.1-79.4 of the Code of Virginia by passing HB1734/SB1213, which directs the Virginia Center for School and Campus Safety to: "Develop a case management tool for the collection and reporting of data by threat assessment teams pursuant to § 22.1-79.4."

Because a school safety mobile application would be receiving threat data, DCJS also sought information on whether other states, or system vendors, have developed a threat reporting system that integrates with a threat case management tool.

Development Process

To develop the plan and prepare this report, DCJS conducted research on the current landscape of school safety mobile applications. Specifically, DCJS gathered and reviewed information from:

- 12 other states on school safety mobile applications already implemented in these states, to identify approaches used by these states, and lessons learned concerning their use, costs and benefits, and funding mechanisms.

- Local school divisions in Virginia that have already implemented school safety mobile applications, to understand their processes and experiences.
- Federal sources on school safety mobile applications, to identify information that states should consider when planning for such applications.
- Vendors of school safety mobile applications, to understand the functions and capabilities of the systems provided by these vendors.

Additionally, DCJS brought together an advisory committee of experts from the Virginia Information Technology Agency, Department of Education, and local school district practitioners to review the research and recommendations.

This report is a summary of the current landscape as well as recommended next steps.

Executive Summary of Findings and Recommendations

Major Findings

Finding: Based on the reviews previously outlined, the primary finding to guide planning for a statewide school safety reporting application is this: In order to effectively implement a statewide school safety mobile application there needs to be infrastructure in place to handle and appropriately respond to the reports it will receive. Providing Virginia's roughly one million public school students with a mobile tool to easily report potential threats to safety is a fairly simple technological endeavor. The loftier and more critical task is going to be the development and maintenance of the complex "behind the scenes" technical, personnel, fiscal, and legal/policy infrastructure.

Recommendation 1
Virginia should create a school safety application technology workgroup to provide multidisciplinary input and buy-in on the purpose, design, and operation of the statewide school safety mobile application. The workgroup should be chaired by the VCSCS, and include representatives from the Department of Education and local school divisions, Department of Behavioral Health and Developmental Services, Department of Health, Department of State Police, local law enforcement, Office of the Attorney General, VITA, and other appropriate groups. The workgroup should produce a report addressing the feasibility and implementation of the recommendations listed below and any other issues necessary to guide a Virginia system.

Finding: The technologies and practices now used to allow students and others to send and receive information about threats to schools and individuals are fairly new and evolving. There are various off-the-shelf reporting systems available to choose from, but there is no single, uniform model for operating and utilizing such a system.

Recommendation 2
The school safety application technology workgroup should closely examine the experiences of states that are already operating school safety reporting systems. These states have adopted different approaches to the administrative, technological, legal, and fiscal requirements for establishing and operating their systems, and Virginia should leverage this experience to learn which approaches have worked well and which have not. The workgroup may want to consider visiting states that have systems similar to what Virginia is seeking, to see close-hand how these systems operate.

Finding: Relatively few states have implemented truly statewide school safety reporting system. Of those that have, some are simple one-way "tip lines" that allow sending calls or text messages to a central monitor for routing to appropriate officials for further action. Other states have sophisticated systems that allow two-way conversations, reporting via phone, text, mobile app, or website, that can include pictures and video, and that are staffed by highly trained security or mental health/crisis response technicians.

Recommendation 3
If Virginia decides to implement such a statewide reporting system, the system should provide staffed coverage around the clock. The experience of other states shows that, although many tips are reported during school hours, a substantial number of tips are reported during after-school hours and during the summer months.

Virginia should implement a system that supports all of the major communication methods commonly used by youth, which include two-way conversations, with reporting via phone, text, mobile app, chat, or website, that can include pictures and video.

Finding: The most frequent issues reported to existing statewide systems by students and youth concern potential suicides, mental health crises, and bullying. Reports concerning physical threats to schools and individuals, while critical, make up a relatively small percentage of the reports to these systems.

Recommendation 4

A Virginia school safety reporting system should anticipate and plan for responding primarily to reports of self-harm and mental health crises reports, but also to threats to others and to schools. The system should be staffed by individuals who are qualified to provide appropriate responses to students experiencing mental health crises.

Finding: States that currently operate school safety reporting systems stressed the importance of having staff who are trained and qualified to respond to the varied types of reports received by the system. These staff receive training in how to effectively communicate with youth, vetting and triaging reports, providing appropriate responses, and routing reports to appropriate services providers when necessary.

Recommendation 5

Virginia should clearly identify the types and levels of training and qualifications required for those who staff the reporting system. Staff who respond to reports involving suicide and mental health crisis must be trained in dealing with people in crises. Similarly, staff who respond to threats of harm to others or schools must be trained to contact the appropriate local authorities.

Finding: States that currently operate school safety reporting systems receive a large number of reports. The number of reports received annually by the systems reviewed ranged from slightly over 1,000 individual incidents annually in Wyoming, to nearly 23,500 during the first six-months of operation in Pennsylvania. Additionally, most states reported increasing volumes of reports over time.

Recommendation 6

Virginia should anticipate the need to receive and respond to as many as 25,000 reports annually and that this number may increase as awareness of the system increases. While the volume of anticipated reports is an estimate, the experiences of other states suggest this is reasonable.

Virginia should consider whether its current public safety and mental health crisis response systems will be able to handle the large number of additional reports that a statewide school safety reporting system will generate.

Finding: All of the systems now in use allow anonymous and/or confidential reporting, but also allow reporters to provide their identities if they choose to do so. Most have legal provision for breeching confidentiality in life-threatening emergencies or by court order.

Recommendation 7

Virginia should develop a reporting system that provides confidential reporting (i.e., the caller is assured that his/her identity will not be shared without their consent or in the event of imminent harm to self or others). Because many responses will require providing acute crisis services, the system should not provide totally anonymous reporting (i.e., responders have no way to determine the identity of the caller). Furthermore, confidential, rather than totally anonymous reporting, may help deter false reporting.

Virginia should also develop a policy for breaking confidentiality if it is deemed necessary, such as reports involving imminent harm.

Finding: Most of the systems are managed by the office of the state attorney general or by a state law enforcement agency. In some cases, the attorney general's office handles the policy, financial, and marketing aspects of the system, while the technical/communications function is handled by a law enforcement or emergency communications center that has the required technical communications infrastructure.

Recommendation 8
Virginia should carefully consider which agencies and organizations will be responsible for implementing and operating a statewide school safety reporting system. It may be appropriate to divide this responsibility among agencies/organizations having the different areas of expertise needed to operate, train, and market the system.

Finding: States operating statewide school safety reporting systems have created statutes and policies to address the security and dissemination of information reported to the system. These statutes and policies take into consideration both state privacy and data security laws, as well as federal laws such as HIPPA and FERPA. They also considered the concerns of school administrators, parents and students regarding how information reported to the system would be maintained, safeguarded and shared.

Recommendation 9
Virginia must have written policies on compliance with all applicable state and federal laws regarding the collection, retention and dissemination of data reported to the school safety reporting system. These policies should be made clear to those who staff the system, and to all potential reporters to the system.

Virginia should also seek the input of parents and students regarding concerns about how data reported to the system will be maintained, safeguarded and shared.

Finding: States that currently operate statewide school safety reporting systems have reported annual operating costs of about $850,000 to $1.2 million, depending on the capabilities of the system and the number and types of persons staffing the system.

Recommendation 10
When estimating costs for its statewide system, Virginia should consider the costs of the entire system, and not just the cost of implementing the system's technology. Although there will be costs associated with purchasing, maintaining and upgrading the system technology, the larger costs will be for training and staffing system personnel, for ongoing marketing of the system, and for providing resources needed to respond to the reports received through the system.

Finding: All states that currently operate statewide school safety reporting systems heavily market and promote the availability of the system to youthful users, and how and when to use it.

Recommendation 11
Virginia should develop a statewide marketing plan to inform students, school administrators and staff, parents, and others of the availability of the school safety application. Funding for and marketing of the school safety application should be continuous to maintain awareness of the school safety application, and the marketing should be attuned to changes in how young people use communications platforms and software.

Finding: None of the school safety reporting systems reviewed had a direct link to a school threat assessment case management system. Most states focused on having their reporting systems able to quickly transfer information to the appropriate responders, or to quickly allow responders to access information about individuals reported as potential threats, rather than focus on linking information with a threat case management system.

Recommendation 12

Although no states reviewed had a school safety reporting system linked directly to a threat assessment case management system, HB1734 directed DCJS to develop a case management system and mandated its use. Given the purpose behind implementing a statewide school safety application, such a system should be developed and implemented with thought to possible integration with the threat assessment case management system required by HB1734. Most of the reports received by the school safety application, including those involving self-harm or mental health issues, may already be handled by school threat assessment teams as stated in the threat assessment legislation.

Finding: All states that operate school safety applications require annual reports to Executive and/or Legislative officials on the operation of the school safety application. Such reports are used to provide officials with information on report volumes, characteristics, and trends and changes in reporting, as well as providing recommendations for improvements to the system.

Recommendation 13

Virginia should require an annual report on the operation of school safety application to the Governor and General Assembly. The report should address, at a minimum, the following topics:

- Numbers of reports to the school safety reporting system annually, monthly, by day of the week, and by time of day,
- Numbers of reports to the system from each school division,
- Categories of incidents reported via the school safety application (suicide, bullying, threat to other students, etc.),
- Summary of outcomes and actions taken on reports made via the school safety application,
- Breakdown of types of recipients to whom school safety application reports were referred (mental health services, law enforcement, school administrators, etc.),
- Number and types of incidents of misuse of the school safety application (false/hoax reports, inappropriate reports, etc.),
- Breakdown of the method by which the report was sent via the school safety application (by phone, text, website, etc.), and,
- The total cost to operate the school safety application reporting program, including staffing costs, administrative costs, and support costs.

Finding: All of the major statewide reporting systems currently in place were created by state statute, which mandates participation by all public schools. In some cases, access to the reporting application may be limited to students above a certain grade level.

Recommendation 14

If Virginia decides to implement a statewide mobile application system, it should be established in statute. The statute creating the system should address, at a minimum, the following:

- Types of reports to be received by the system (threats of harm to others, threats of harm to self, mental health crises, criminal activity, etc.),

- Agencies/organizations responsible for establishing and operating the system,
- Which schools will be mandated to participate in the system (K-12 public schools, private schools, specialized schools, etc.),
- Legal liability for agencies/individuals operating the system and responding to reports to the system,
- How the development and ongoing operations of the reporting system will be funded,
- Security of the data received by the system, including with whom data can be shared and how data will be retained,
- Provisions for breaching confidentiality of reporting in extreme circumstances,
- Penalties for fraudulent or prank reports made through the school safety application, and,
- Required reporting on system operation to the Governor and General Assembly.

Review of School Safety Mobile Applications in Other States

DCJS identified 12 states that now have some form of operational school safety mobile tip line application. For the purposes of this report, "tip line" can refer to oral or written reporting via phone, mobile device, or computer. The states and their systems are listed below in Table 1.

Table 1: States with Operational School Safety Mobile Applications				
State	System		State	System
Colorado	Safe2Tell		Ohio	SaferOH
Kentucky	S.T.O.P.!		Oregon	SafeOregon
Maryland	#SafeSchoolsMaryland		Pennsylvania	Safe2Say Something
Michigan	OK2SAY		Tennessee	SafeTN App
Missouri	Courage to Report		Utah	SafeUT
Nevada	SafeVoice		Wyoming	Safe2Tell Wyoming
Note: Several other states reported that they are exploring or just starting development of a school safety tip line or mobile app, but have not yet implemented one.				

DCJS obtained tip line information from each of the 12 states. The length of time that each state has operated its tip line varied greatly. Colorado's has been operational since 2004, while some states only started operations in early 2019.

Five of the twelve states (Colorado, Michigan, Oregon, Pennsylvania, and Wyoming) have been operating their tip lines long enough to have published annual reports describing their operations and outcomes. Therefore, much of the information presented here is based on the experience of these five states. A side-by-side comparison of the major characteristics of these five systems is presented in Table 2 on pages 11–12.

Most Common Features of State School Safety Tip Lines

Although the capabilities and complexities of the tip line systems used by different states vary, there are features central to almost all of them. These are summarized below.

The tip lines were created by state statute.
In most cases, participation by all public schools is mandated, and in some states the mandate also includes private and nontraditional schools. In states where some local school divisions have already established tip lines, they may have the option of using their own tip line rather than joining the state system.

Most tip lines are managed by the office of the attorney general or a state law enforcement agency.
When the tip line is managed by the attorney general's office, the office typically handles the policy, financial, and marketing functions. The actual technical/communications function is often handled by a law enforcement or other emergency communications center because these entities already have the technical communications infrastructure to do so.

Tip line awareness is actively marketed to potential tip line reporters.
There is an active, ongoing marketing campaign to make students, parents, and others aware of the system. Some states stressed their use of "student ambassadors" to sell awareness and use of the tip line, because students are more likely to pay attention to information from peers rather than school or law enforcement officials. Some states avoided using school resource officers or law enforcement to

market the system as it may discourage trust in the system. Most use public service announcements, billboards, and other traditional marketing techniques to increase tip line awareness.

Reporting to the tip line is anonymous or confidential.
The identities of reporters are usually protected by law. Most anonymous/confidential systems allow the reporter to provide identifying information if the reporter chooses to do so. There often are legal provisions for breaching these restrictions in immediate life-or-death situations, or based on a court order. Anonymous reporting typically means the reporter cannot or would not be identified. Confidential reporting typically means the reporter can be identified by the receiver, but will not be identified unless they volunteer their identity.

Tips can be submitted via multiple types of devices.
Most state systems allow tips to be submitted through mobile applications, via computer to a website, by text, or by phone call. States stressed the importance of having systems that keep up with the types of technology and the social media and other mobile platforms, used by youth to communicate. This, in turn, requires tip line system operators to stay aware of youth culture. Most states make their mobile applications available for download on the Google and Apple app sites. Some of the state systems began with more limited options for reporting (e.g. via just a phone number or text message), but were later expanded to include other forms of communication used by today's youth.

The tip line is monitored 24 hours a day.
All of the tip lines systems reviewed are now monitored 24 hours a day, 7 days a week, 365 days a year. Some, in their earlier development stages, were not monitored around the clock. In some cases, tips might be checked at certain intervals (e.g. every three or six hours), and when not monitored the system automatically advised reporters to call 911. Staffing a tip line with live responders at all times is one of the main cost-drivers of operating a tip line system.

Most tip line systems are purchased from tip line vendors.
Most states have purchased a tip line system from one of the major vendors (P3 Campus, Spregio, etc.), but some have developed their own systems in conjunction with state technology agencies or universities. Some states reported having initially purchased a vendor-supplied system, but then later moving to an in-state, custom-built system because the vendor's system did not meet their needs.

Most states require an annual report on tip line operations and results.
This reporting requirement is often contained in the legislation creating the tip line system. States stressed that tip line systems must be able to demonstrate results to maintain credibility with funders and, just as importantly, with school administrators, students, and others who are asked to use the system. Such annual reports provide information that demonstrates the numbers of tips received, the topics of the tips, any problems with the system, and trends in operations that may indicate that changes are needed in the system.

False reports are a problem, but are only a small percentage of the reports received.
False reporting is often cited as a concern with school safety tip lines. All states reported receiving false reports, but usually cited them as making up only about 1–3% of all reports received. Most states publicize against making false reporting in their tip line monitoring, sometimes noting that there can be criminal penalties for false reporting. Most states identified reports that are inappropriate for the tip line (such as complaints against school polices, or information requests) as much more common than deliberate false reports.

No tip lines were fully integrated with a threat case management system.
None of the states reviewed had tip line systems that were integrated into a threat assessment case management system. The tip line would route reports that would require a threat assessment to appropriate officials when necessary, but the tip line itself was not part of the threat assessment system. Some states' tip line response centers did allow for close communication with other service providers, or, like Michigan's system, fast access to multiple records systems for information about individuals identified through the tip line.

Most state tip lines costs about $1 million annually to operate.
Tip line operations costs identified varied across the states. In four of the five states that published annual reports on tip line operations, the annual cost was about $1 million. Wyoming, with less than 100,000 students statewide, was an exception, with annual costs at about $300,000 (in Virginia, Fairfax County alone has 188,000 public school students). The major cost driver for the systems was for the personnel to staff the system. Most states funded their system via state appropriations, although some cited federal grants as a major funding source.

Reports of suicide and self-harm are much more common than threats against others.
School safety tip lines are often thought of primarily as a method for reporting physical threats such as shootings or bombings. However, by far the most frequent reports to tip lines involved suicide/self-harm or bullying. For example, in Michigan and Pennsylvania, almost two-thirds of the reports involved suicide/self-harm or bullying. Threats involving firearms, bombs, and other physical harm, typically made up about five percent of the tips reported. Figure 1 on pages 13–14 illustrates the most frequent types of threats reported in the five states with tip line annual reports.

Table 2: Characteristics of Existing State Tip Line Systems					
	Colorado Safe2Tell Colorado	Michigan Michigan OK2SAY	Oregon SAFEOREGON	Pennsylvania Safe2Say Something	Wyoming Safe2Tell Wyoming
Authority for Tip Line	State statute (C.R.S. § 24-31-611)	Michigan Student Safety Act (PA 183 of 2013)	ORS 339.329, 2017	Act 44 of 2018 General Assembly	SF97 (W.S.S. 9-1-603(a)(ix)(e))
Start Date	2004	Sept. 2014	Jan. 2017	Jan. 2019	Oct. 2016
Operator	Office of the Attorney General, CO State Patrol Communications Branch	Office of the Attorney General, MI State Police Fusion Center	Oregon State Police	Office of the Attorney General	Office of the Attorney General, WY Highway Patrol dispatch center
Availability	24/7/365	24/7/365	24/7/365	24/7/365	24/7/365
Reporting Methods	Mobile app, phone, email, text, website	Mobile app, phone, email, text, website	Mobile app, website, text, phone, email	Mobile app, website, phone hotline	Mobile app, phone, website
Two-way Communication?	Yes	Yes	Unknown	Yes	Unknown
Reporter ID	State law ensures reporter is anonymous, illegal for unauthorized person to see, use or track data.	Reporter ID protected by law, can only be released with consent of reporter, a minor reporter's parents, or by court order. Exempt from MI FOIA law.	Anonymously or confidential.	State law ensures confidentiality; exempt from PA open records laws; prosecutors or defendants can request tip records, with reporter's name redacted, if judge allows.	Legally protected from public release; can be subpoenaed in some cases.
Tip Distribution	CO State patrol routes tips to law enforcement, school officials and mental health professionals.	Team leader routes tips to law enforcement, community mental health, Dept. of Health & Human Services.	Technician may route to school, law enforcement, or 911. May refer tips to another hotline or social services program.	Tips go to OAG call center for triage, then go to school administration and/or law enforcement.	WY Highway Patrol sends tips to school administrators, police, and mental health counselors.

Table 2: Characteristics of Existing State Tip line Systems (continued)					
	Colorado Safe2Tell Colorado	Michigan Michigan OK2SAY	Oregon SAFEOREGON	Pennsylvania Safe2Say Something	Wyoming Safe2Tell Wyoming
Vendor/ Developer/ Software System	P3 Campus	Michigan Dept. of Technology Management & Budget, MI State Police	Sprigeo	OAG and Sandy Hook Promise	P3 Campus
Cost	Just over $1 million; state funded	Total for 2018 was $825,604: $461,692 for OAG, $363,911 for MSP	State funded	$600,00 for first 6-months, expected $1.2 million for full year	$275,000 per year, funded by federal Homeland Security grant
Link to Case Management System?	No	Yes. Fusion Center MI-Intel system gives tip analysts 24/7 access to MI, federal, INTERPOL LE systems, and school contact information.	No	Unknown	No

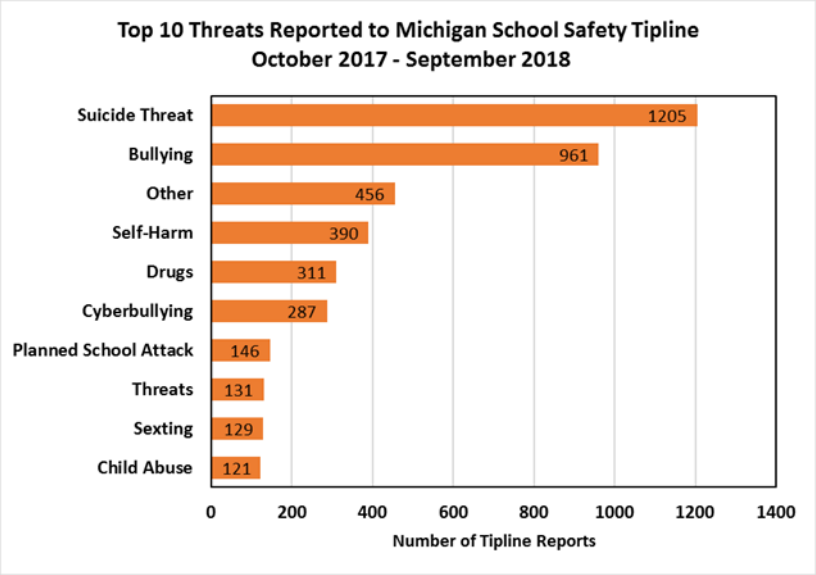
Types of Threats Reported to Tip Lines

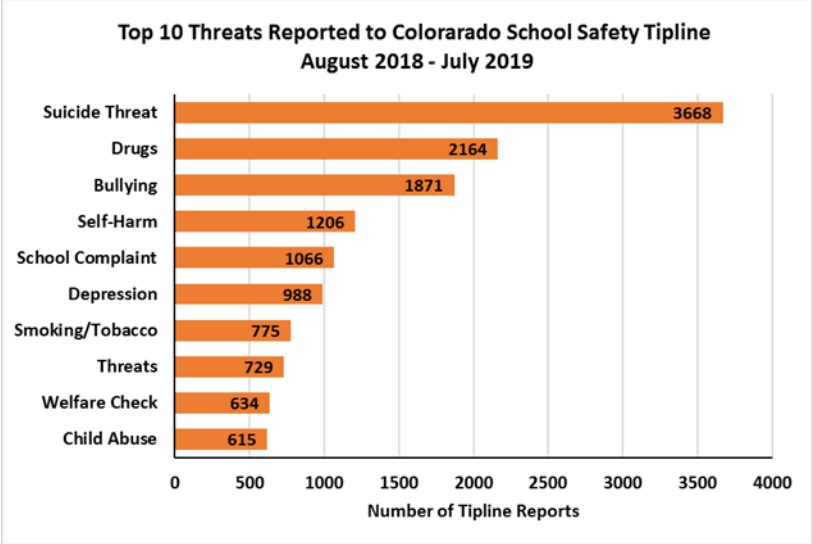
One striking characteristic of the information provided by the five states listed in Table 2 is the similarity in the types of threats and incidents reported to the tip lines in each state. Figure 1 below illustrates the 10 most frequently reported types of threats/incidents reported in each state.

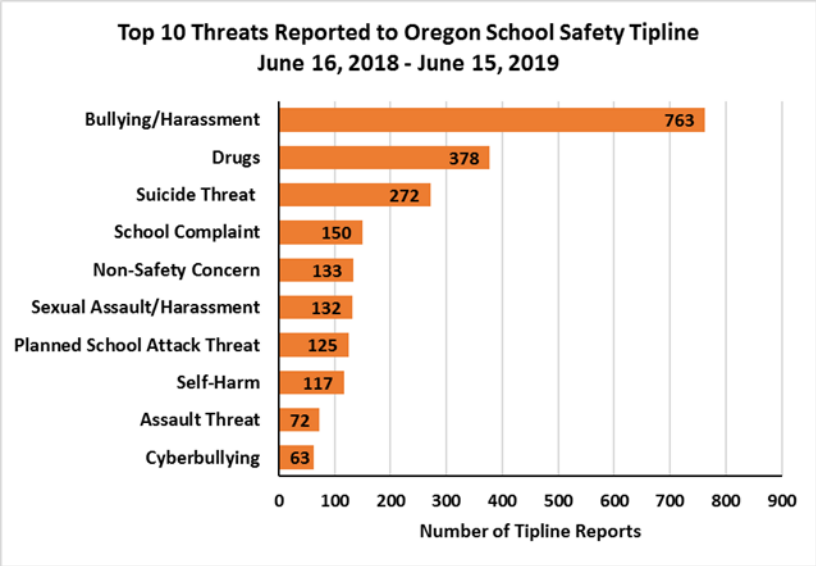
Figure 1:

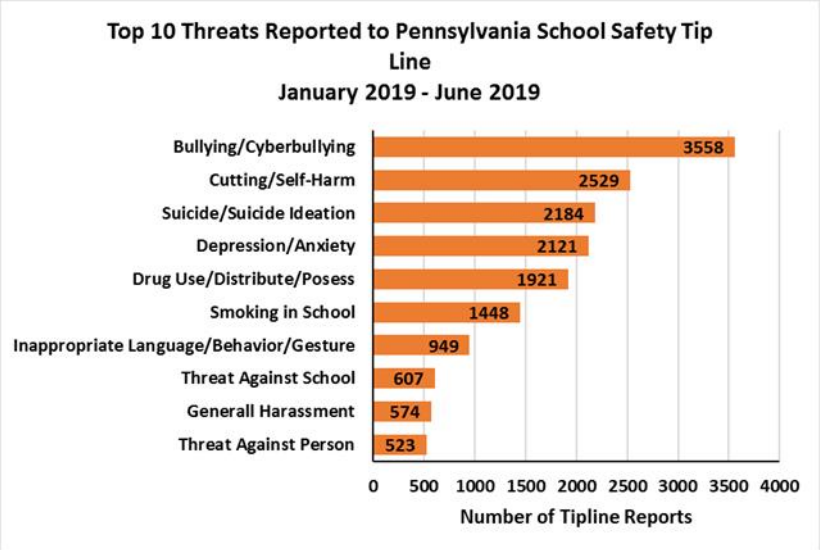
Top 10 Most Frequently Reported Issues to Statewide School Safety Tip Lines

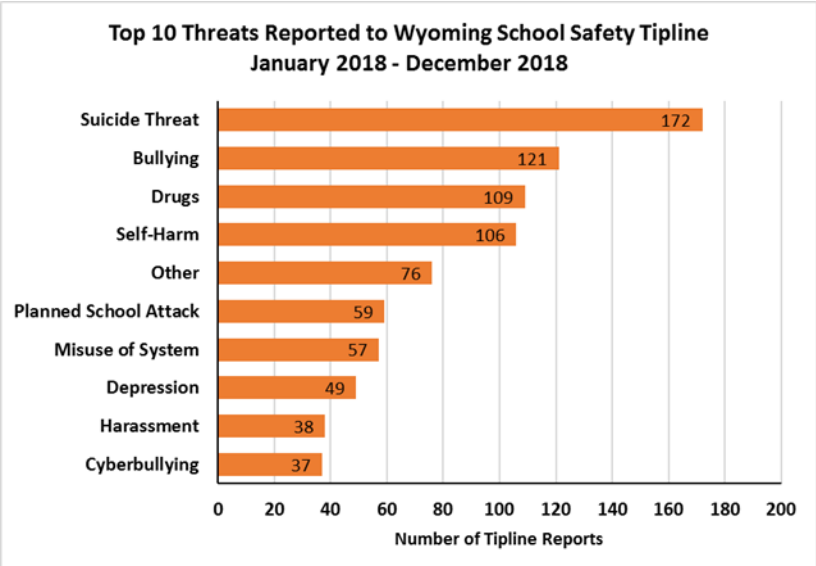
Oregon, Michigan, Colorado, Pennsylvania and Wyoming






Top 10 Threats Reported to Oregon School Safety Tipline
June 16, 2018 - June 15, 2019
Bullying/Harassment
Drugs
Suicide Threat
School Complaint
Non-Safety Concern
Sexual Assault/Harassment
Planned School Attack Threat
Self-Harm
Assault Threat
Cyberbullying
763
378
272
150
133
132
125
117
72
63
0 100 200 300 400 500 600 700 800 900
Number of Tipline Reports


Top 10 Threats Reported to Pennsylvania School Safety Tip Line
January 2019 - June 2019
Bullying/Cyberbullying
Cutting/Self-Harm
Suicide/Suicide Ideation
Depression/Anxiety
Drug Use/Distribute/Posess
Smoking in School
Inappropriate Language/Behavior/Gesture
Threat Against School
Generall Harassment
Threat Against Person
3558
2529
2184
2121
1921
1448
949
607
574
523
0 500 1000 1500 2000 2500 3000 3500 4000
Number of Tipline Reports


Top 10 Threats Reported to Wyoming School Safety Tipline
January 2018 - December 2018
Suicide Threat
Bullying
Drugs
Self-Harm
Other
Planned School Attack
Misuse of System
Depression
Harassment
Cyberbullying
172
121
109
106
76
59
57
49
38
37
0 20 40 60 80 100 120 140 160 180 200
Number of Tipline Reports

It is worth comparing this data to the data from the Virginia's School Safety Survey, which is conducted annually by the DCJS Virginia Center for School and Campus Safety. The survey, which includes all Virginia K-12 schools, asked schools to report the number of threat assessments conducted during the 2018-2019 school year.

The survey found that a total of 16,573 threats were assessed by K-12 schools during the 2018-2019 school year.

Of these assessed threats, 60% (9,868) were threats made against self (i.e., self-harm or suicide), 36% (5,893) were threats against others only, and 5% (812) were threats against both self and others. This indicates that, like other states, a Virginia statewide system would likely receive many more threats involving self-harm than it would threats to others.

It is important to note that the 16,573 is the number of reported threats that were *assessed* by the schools. It does not include the number of threats that were reported to the schools that were not assessed.

In addition to the major findings from the examination of the five states shown in Table 2, DCJS also reviewed information from other states that are developing, or have only recently implemented, tip lines. This information was gathered through various means including conversations, emails, or reports or statements issued by the states. These various experiences, as well as other experiences from the five states in Table 2, are listed below.

Types of respondents answering tip line

- *Colorado:* Tips to Safe2Tell are routed to local law enforcement, school officials, and appropriate responding parties. Safe2Tell is not an emergency response unit. It is a conduit of information from anonymous tips to local law enforcement, school officials, and appropriate responding parties.
- *Kentucky:* State Safety Tipline, Online Prevention (S.T.O.P) Tipline website contains the following disclaimer: "Due to the nature of the internet and use of technology we cannot guarantee 100% timely delivery or receipt of the submitted information."
- *Maryland:* Tips go to MD Emergency Management Agency, which employs five tip takers. Tips are not routed to the Maryland Coordination and Analysis Center (similar to the Virginia Fusion Center), which is staffed by law enforcement, in part due to concerns about giving law enforcement access to student records information.
- *Michigan:* Tips go to MI OK2SAY, which does not do any form of threat assessment, nor advise schools or law enforcement agencies on how they should respond to a tip. OK2SAY is merely a central intake/tip managing center and to ensure tip is given to the appropriate jurisdiction for handling. All OK2SAY technicians are trained in Applied Suicide Intervention Skills, as suicides are a common tip line call issue. To ensure all tips are properly triaged, linked, responded to, and categorized properly, all technicians must complete a lengthy training process that includes:
    - Learning the Mi-Intel system and its capabilities.
    - Tips such as planned school attacks require federal attention, so technicians must learn how to enter and submit a Suspicious Activity Report (SAR) for processing.
    - Training on using various databases and social media to assist in tracking down people in cases involving threat to life.
- *Nevada:* Tips that indicate a need for immediate intervention are sent directly to law enforcement for emergency response.
- *Utah:* Tips go to the licensed therapists at University of Utah's Neuropsychiatric Institute, who respond to all messages received, and provide supportive listening, joint problem-solving, crisis intervention and suicide prevention in multiple languages.

False/inappropriate reports to tip line

- *Colorado:* "Administrators frustrated and wanting consequences for prank calls."
- *Nevada:* "Have had incidents of false reports where administrators have gotten very concerned." Nevada has a state law to go behind curtain to find out who has done that due to promise of being anonymous.
- *Utah:* Has policy to determine location of those submitting false tips.
- *Wyoming:* The percentage of false alarms is relatively low; in CY2018 were less than 1 percent of reports.

Privacy Concerns

- *Maryland:* Each tip is associated with a log-in ID number, not a telephone number or a person's name. If submitter wants to follow up or add more information, they use the log-in number to maintain anonymity.
- *Nevada:* Reporter may choose to remain anonymous, or may give name and/or contact information to allow self-reporting or to be contacted as a friend or witness.
- *Ohio:* Every tip can remain anonymous; analysts may ask reporter for additional information, but caller can remain anonymous or leave contact information for later follow-up.

Statewide vs. Local/Regional Systems

- *Maryland:* "It's easier for school systems to sign-up with the statewide tip line than establish one of their own, and it saves them money over having their own tip line. It also helps make connections if a student lives in one county but knows about something happening in another county . . . state tip line also guarantees quicker access to a wider array of services, and it saves the school systems money since they don't have to contract with vendors to provide services such as IT and tip monitoring."

Marketing the Tip Line

- *Colorado:* Uses student ambassadors to go into school to present on Safe2Tell, since kids relate better and pay more attention to peers.
- *Michigan:* Stresses getting marketing messages out "over and over." Developed public service announcements (PSAs) using Secretary of State to run OK2SAY advertisements. School bus drivers are required to have two hours of OK2SAY training, OK2SAY advertisements are on all buses, and drivers wear OK2SAY t-shirts every Friday.
- *Nevada:* Put SafeVoice stickers on back of all student IDs. Planning to market at boys and girls clubs.
- *Oregon:* Some schools print tip line information on back of student ID cards. Oregon Sheriff's Association PSA and student led PSA has been "spreading like wild fire."
- *Pennsylvania:* Provides an "awareness kit" to each division/school at no cost.
- *Wyoming:* Had video contest to get student participation for advertising campaign. Back to school drive handed out tip line swag for kids who need help with school supplies.

Other Issues

- *Michigan:* Gives state police list of schools where OK2SAY presentations will be held because historically there is an increase in tips at those schools right after a presentation.
- *Nevada:* Whenever there is an incident or threat, Nevada experiences an increase in tips.
- *Pennsylvania:* State mandates that system encompass all K-12 students, including charter, private and vocational-technical schools. Schools/districts already using a tip line can determine whether or not to continue using what they have in addition to providing a contact and participating in the Safe2Say Something program.

Review of School Safety Mobile Applications in Virginia School Divisions

Tip Line Data from the Virginia School Safety Survey

DCJS first examined the data concerning school safety reporting systems gathered by the DCJS 2019 School Safety Survey. As previously mentioned, the survey included all K-12 public schools and school divisions in Virginia. The survey found the following:

- When the 132 school divisions were asked if their division had a division-wide, web-based, anonymous text or tip line (for use with computer or smart phone) for reporting threats/aberrant behavior, 69 (52%) of the divisions reported having a tip line and 63 (48%) reported not having a tip line.
- When asked more specifically if they had a division wide "school safety mobile application (app) for students and others to report and receive information about threats or crimes via text, audio or video/images in real time (24/7)," only 27 (20%) of the 132 school divisions reported having such an application.
- When asked if the division had a division-wide "school safety mobile application (app) for real-time (24/7) crisis intervention services by licensed clinicians (via calls, texts, online chat portals," only seven (5%) of the 132 school divisions reported having such an application.

A Look at Several Tip Lines in Use in Virginia

DCJS also contacted several large Virginia school districts to obtain information about school safety tip line systems that they have implemented or are developing. None of the systems currently used by Virginia schools are as sophisticated as the statewide systems reviewed earlier in this report. However, they do provide some insight into how Virginia schools are approaching tip lines.

Arlington County Public Schools – SafeSchools Alert

Arlington County's SafeSchools Alert Tip Reporting System has been operational since January 2019. It allows students, parents, and staff to report threats around the clock to an on-line forum using any type of internet-connected device. The system is one-way only; it receives information from reporters, but is not used to distribute information from authorities out to users, or to conduct two-way conversations. When a reporter sends a message to the system, the system does present a list of resources (such as crisis centers) that the reporter can then contact. Reporting is anonymous. If a reporter voluntarily chooses to provide his/her identity, it is kept confidential.

The system does not take phone calls. An Arlington official stated that they feared that a phone system could be "weaponized" to report on people who do not pose a clear threat to school safety. A particular concern cited was that people would use the system to report on persons suspected to be illegal immigrants, given that there is a large immigrant population in Arlington. Arlington is now working on adding a mobile phone application for reporting. Arlington reports that it has had no major problems with fake calls to the system.

The system uses technology provided by Haystax, a McLean, Virginia vendor. The system is based in the Amazon Web Service cloud, and meets all federal security and back-up requirements. Haystax also provides tip line systems to schools in California and Florida.

Arlington County, which funded the system, paid for significant customization of the basic Haystax system. The cost to operate the system is about $700 per building served, with about 42 buildings in the Arlington system (i.e. about $30,000 annually).

Arlington uses a separate "school messenger" system to push out information to students. Student must have an account to receive messages. This system is now only used for middle and high school students.

Arlington's tip line system is not directly connected to a threat case management system, but it does allow for basic details related to reported threats deemed serious to be forwarded to Arlington's threat assessment team case management system.

Fairfax County – Fairfax County Public Schools Tip Line

The Fairfax County Public Schools Tip Line system has been operational for 5+ years. The system allows confidential and anonymous reporting via text, email, and phone, but is not an actual mobile "application." The system does not send out information to users, it only receives information from reporters.

The system is managed by the Fairfax County Public School System's 24/7 security center and personnel. Tips that are received are first reviewed by a manager before being forwarded to the appropriate responders.

The system was developed in-house and relies on the "Blackboard" communications system used by many schools and colleges. There is no additional cost to operate the system since it is built into an existing Fairfax County Public Schools system.

Fairfax cited two issues encountered during its operation of the system which may be considerations when planning a statewide system. One is that the Fairfax system experienced a "BOT" attack that required adding additional security (a verification sign-in) to the system. Another issue reported was that "we are saturating the market with these tip lines so much so that it causes confusion as to which one to use." (This concern was also cited by system officials in other states, who noted that there are various other state and national hotlines for reporting potential suicides and mental health issues, and that this may confuse callers).

The Fairfax tip line does not connect to a threat assessment case management system.

Fairfax County Website Tip Line Display
Please report any school safety issues, such as threats, dangerous rumors, drug use, theft, harassment, gang activities, existence of weapons, and vandalism to FCPS' Tip Line. It's completely anonymous. The following confidential and anonymous telephone hotline and text tip line options are available for submitting tips: **Call:** 571-423-2020 **Text:** 571-418-6870; Keyword TIP

Henrico County – Anonymous Alerts

Henrico County's Anonymous Alerts application system allows students, parents, or others to go to the Henrico County Public Schools website and click on the "Anonymous Alerts" button or the text link to submit a report expressing a concern. It allows for one-way or two-way anonymous, encrypted communication between those

submitting reports (students, parents, or community members) and school division administration and staff members. Users can add a screenshot, photo, or video about the incident to their report. System users have the option to remain anonymous or reveal their identity when submitting a report. Anonymous Alerts is a vendor-provided application (see below).

Anonymous Alerts Vendor Marketing Description
Student anti-bullying mobile app **Anonymous Alerts®** anti-bullying app and safety reporting system is simple, secure and enables students to quickly report incidents related to bullying, cyberbullying, student depression, family problems, self-harm, drugs, gang-related issues, harassment, weapons on campus or unusual student behavior which may warrant immediate attention by school officials. The reporter of the incident can establish **anonymous 2-way communications** with school officials. Anonymous Alerts® encourages those who feel vulnerable or less confident to speak up without fear of reprisal and **report it**.
Student anonymous report submissions • Incidents can be anonymously submitted to school officials • One button incident reporting • Student can establish anonymous 2-way communications • Students can attach a photo, screenshot, or video with their report • Customize incidents types, locations, and languages • Customize who receives tips (individuals and groups) • Robust help and resources section (completely customizable) • Students can receive emergency notifications • iPhone/iPad App available for download and reporting • Android App available for download and reporting • Chromebook App available for download and reporting • Secure Sockets Layer (SSL) encryption • Government level encryption • Family Educational Rights and Privacy Act (FERPA) compliance

Henrico's Anonymous Alert website notes "False reporting will be taken seriously to the full extent of the law."

The Anonymous Alerts site is not constantly monitored. Messages received are more likely to be seen during business hours from 8:00 a.m. to 4:30 p.m. Beyond these hours, messages may or may not be seen immediately, and the sites advises users that if the message is an emergency, they should call 911.

Henrico County Website Tip Line Display
NEW Anonymous Alerts: The safety and anti-bullying reporting system enables those with safety concerns to establish encrypted, anonymous two-way communication with administrators. Click here for more details about HCPS Anonymous Alerts

Summary of Information from Virginia School Divisions

Although about one-half of Virginia school divisions have implemented some type of school safety reporting system, none of these have the sophistication of the statewide systems that have been implemented in other states. Far fewer divisions have systems with the capabilities that were listed in SB1608 (2019).

If Virginia implements a statewide school safety mobile reporting application, it will have to determine how to mesh with this system with the systems already in use by some Virginia school divisions. Some states with mandated statewide systems have given local school systems the option of continuing to use locally-developed systems, while other states have mandated joining the single statewide system.

Review of Information Provided by School Safety Mobile Application Vendors

In August 2019, the DCJS issued a Request for Information (RFI) to vendors seeking information about their commercially available school safety mobile applications and online threat assessment case management tools**.** Vendors were informed that although development of school safety mobile reporting application and an online threat assessment case management tool were two separate mandates, VCSCS was seeking a system that could integrate information reported through the mobile application into the broader case management system.

The RFI specified that the school safety mobile application should provide the following capabilities:

1. A crisis hotline application;
2. An application for reporting suspicious behavior; and
3. An application for emergency communications to students.

The RFI also specified that the online threat assessment case management tool should provide the following capabilities:

1. Provide threat assessment team members and school personnel case management capabilities for threats that may affect the safety of students and staff,
2. Allow for DCJS-VCSCS to access quantitative data from school divisions about threats that is required by law,
3. Allow school administrators the ability to generate reports on reported threats, application use, or suspicious activity,
4. Have the ability to report incident data and information,
5. Capture reports of threats, suspicious, or criminal behavior reported on the student reporting app,
6. The application must be user friendly and customizable, and
7. Allow transfer of case information to schools upon student enrollment and records transfer.

VCSCS received 16 responses from the following vendors listed in Table 3.

Table 3: School Safety Mobile Application Vendors Responding to DCJS RFI

Anderson P3 Campus	Edclick	NaviGate Prepared	Sprigeo
Anonymous Alerts	Esri	Panasonic Response	STOP It SOLUTIONS
Awariety	Guard911 Schoolguard	Public Consulting Group	USA Software
CrisisGo	LiveSafe	Sandy Hook Promise	VTech Solution

The 16 responses illustrated the wide and complex range of systems that have been developed for school safety reporting and information collection. Some of the systems described were essentially one-way “panic buttons” for reporting emergencies to schools and 911 call centers. Others provided more sophisticated reporting features and two-way communications, but were not directly integrated with a case management system for following up on threats reported through the system. Two vendors, Anonymous Alerts and Panasonic, indicated that their systems have a limited capacity to forward information to other systems.

Some, but not all, of the responding vendors provided pricing estimates. For those that did, estimates varied depending on specific capabilities desired, number of schools served, etc., but all appeared to cost a minimum of several million per year for a statewide system.

Only 2 of the 16 responding vendors (Anonymous Alerts and Panasonic) offered systems that appeared to meet most or all of the requirements specified in Virginia's RFI. These two are briefly described below:

Anonymous Alerts

Mobile App:

- Can be used to report suspicious activity, bullying, and threats.
- User can choose to be anonymous or known.
- Can be set to provide a button to a crisis hotline.
- Can be used on Apple, Android, or on computers so teachers can report from a classroom.
- Can upload pictures and videos.
- GPS location is sent when panic button is used.
- User can communicate with school administration, School Resource Officer or responding crisis team member.
- School admin can broadcast messages to users in an emergency, and can be done via facility or geofence, by school or by district.

Case Management:

- Can collect data from reports and present them in common customizable Excel and PDF formats.
- Report results can be searched and filtered by school, or type, etc.
- Can connect live to responding 911, police, or other first responders for constant live communication during a crisis.
- Does not pull data from outside sources, only receives what is entered.

Panasonic Response Mobile Reporting and Case Management Tool

Mobile App:

- Students, parents and community members can report crimes or suspicious activity.
- Reporting can be done anonymously or as a known reporter.
- Includes panic buttons for students that can alert schools or parents.
- Parents can check the status of students at multiple school locations.
- Panic buttons automatically capture GPS, and turn on recording.
- Can allow users to communicate with dispatch, or special crisis monitoring can be set up.
- Mobile app data is integrated into the report management tool.

Case Management:

- Can pull data from multiple sources (schools, mental health, law enforcement, social media, etc.) to focus a team and gather as much data as possible to track threats; this would require inter-agency cooperation and information sharing.
- Data is stored and managed, and can be shared with school administration, crisis teams, school resource officers, mental health and counseling personnel, and others.
- Law enforcement and school resource officers can access court and law enforcement records which can be reported on and generates focuses or alerts to point out any concerns by scoring all the data. The data can be searched and viewed but cannot be saved.
- Uses Caseworx system for case management, FocalPoint to share and manage data from multiple sources.
- Pricing can be provided for a onetime unlimited basis or on a yearly license structure.

Tip Line System Integration with Threat Case Management Systems

When reviewing school safety tip line systems now being used in other states, DCJS attempted to identify systems in which the tip line for reporting potential threats was integrated with a case management tool for collecting, reporting, and managing the information provided through the tip line. The potential benefits of integrating the two include streamlining the entire reporting and assessment process, as well as making the entire process for receiving, assessing, and responding to threats more uniform throughout the state. Currently, of the 132 Virginia school divisions, only 27 (20%) reported on the 2019 Virginia School Safety Survey as having an "electronic/computer-based threat assessment case management tool to assist in the records management of threats."

DCJS did not identify any states that had school safety threat reporting and school threat case management systems fully integrated. Most states focused on having their tip line systems able to quickly and easily interact with systems for transferring information to appropriate responders, or to systems that could provide information about individuals reported as potential threats, rather than on integrating information with a threat case management system.

In the course of its reviews, DCJS discovered that some states cited reasons for *not* seeking an integrated student mobile threat reporting application and threat assessment case management system:

- The state's priority was getting a statewide reporting system established, which could be done faster and with lower cost than simultaneously developing and implementing an integrated case management system.
- Many tips received from students (and others) do not rise to a level that require an assessment by a school threat assessment team. Some will not be serious enough (e.g. reports about unhappiness with school conditions, students smoking, etc.), and some will require an immediate response without an assessment (e.g. threats of imminent suicide). Sending information on these types of cases into a threat case management system may simply "clog up" the system.
- There may be pushback from students, parents and others to a reporting system which will create a "case" or "record" on reporters, or on the individuals being reported by reporters. States cited concerns that people would be wary of using a system that could create a record on a person that would continue to follow them after a given incident is resolved. This was particularly the case if a reporting system was seen as part of larger system that was, or could be, linked to law enforcement, mental health, or school disciplinary system.

Review of School Safety Mobile Application Information from Federal Sources

DCJS identified several reports addressing school safety reporting systems that were produced or funded by the Federal government. Summaries and/or excerpts from two of these reports are provided below.

Office of Justice Programs (2019): *School Tip Line Toolkit: A Blueprint for Implementation and Sustainability*

In 2019 the Office of Justice Programs' National Criminal Justice Reference Service published the *School Tip Line Toolkit: A Blueprint for Implementation and Sustainability*. The report included information from the June 2018 National Summit on School Safety Tip Lines, hosted by the Oregon State Police and included input from Safe2Tell Colorado, Kentucky's S.T.O.P. Tip line, Michigan's OK2SAY, Nevada's SafeVoice, SafeOregon, SafeUT, and Safe2Tell Wyoming.

The information below is excerpted from the report, which is designed to help stakeholders "navigate key decisions and consider the factors necessary to support successful and efficient tip line implementation as part of an overall school safety strategy."

Why a Tip Line?

- Tip lines leverage students' direct knowledge of potential threats or adverse events, which is critical because students are often the best source of such information.
- Victimizations, bullying, and other disorders such as drug and alcohol use are often not reported directly to school authorities. Students don't want to be identified, don't want to get a friend or classmate in trouble, or simply don't know how or where to report threats.
- Tip lines break the code of silence; they knock down barriers by giving voice to students who might otherwise remain silent out of fear of retaliation or rejection.

Coordination is Key

- Successful tip lines require coordination and buy-in from multiple stakeholders across various disciplines.
- These can include school personnel, parents, students, law enforcement agencies, and social service providers (e.g., mental health/substance abuse treatment providers); all of whom may have varying types and levels of input germane to tip line planning, adoption, and implementation.
- Convening a School Safety Tip Line task force, commission, or advisory group may help formalize stakeholder roles and increase group commitment and cohesion over time.

Tip Line Mechanics

Marketing and outreach

- Market it to various audiences across multiple platforms.
- Audiences must know the tip line exists, how it works, and where and how to access it.
- Marketing and outreach to students is foundational, and messaging is key.
- Information about how to access the tip line should be prominent on materials that students access often.
- Students must trust that the information they provide will remain confidential, if not anonymous.

- Students must trust that some action or change will occur as a result of the tip provided.
- Tip line visibility should extend beyond schools into the broader community.

Information reception

- A key consideration is determining whether the tip line will function as confidential or anonymous (confidential tips may involve follow up contact with the reporter, whereas anonymous tips may not).
- Disclosing whether reporting is confidential or anonymous at the outset on a tip report platform may be prudent or legally necessary.
- Explore strategies to identify and address tip line misuse and malicious false reporting
- Involve tip line advisors or stakeholders who have a pulse on students' technology and social media use.
- Performance or use issues might arise if the reporting application is not well integrated into other platforms that students regularly use.

Information access and triage

- Consider how reported information will be accessed and triaged; the information should be reported to a team that can make informed decisions regarding the appropriate triage and response to tips.
- It is critical that the threat assessment team be informed of state laws and regulations germane to their tip line access and triage.
- Consider written policies requiring reports on outcomes to the tip line database; communicate this to reporters to show that information they provide is being taken seriously and acted upon.
- Some tip information may need to be validated; multiple reports from separate reporters about the same incident, or cross-validating information with other information from schools or other authorities, can help verify that a threat is legitimate.

Training

- Identifying, recruiting, and training qualified staff to answer and respond to tip line calls is critical to effective tip line implementation.
- The tip line should be staffed 24/7/365 to respond to crisis calls whenever they come in.
- All tip line staff should pass a background check and fully understand the scope of their work.
- Consider having staffers commit to a minimum number of hours per week to maintain their skills to engage with reporters and respond to tips; but a maximum number of hours may also be important to minimize burnout.
- Conduct frequent assessments for vicarious trauma among staff and provide support as necessary; refresher training at regular intervals is desirable.
- An operations manual that includes tip line policies and standard operating procedures can be a helpful reference for tip line technicians.
- Staff should have access to a database of emergency contacts to route tip messages to, and be trained to recognize red flags indicating situations that should be forwarded to law enforcement, school administrators, child protective services, other first responders, or community services.

Recording Information

- Information from the initial tip should capture all information provided about the event, including the type of event and specific details to determine whom the information should be forwarded to and how urgent a response is needed.

- The initial tip may also indicate whether the reporter can be contacted (by providing a name or saying that he or she can be contacted anonymously through the app).
- The record should indicate whom the tip was routed to and when, a confirmation that the responder was notified of or received the tip information.
- The responder should provide information to the tip record, including the date of receipt, follow-up actions taken, and status of the issue identified in the tip.
- Consider how the tip record can include any information that can link the tip to already-identified events or individuals.
- Consider creating a case management system for recording tips and threats; maintaining information in a central database enables access to appropriate parties and facilitates linkages across incoming tips.

Archiving and Maintenance

- Information should be retained in a database that allows for tracking trends in tip volume and types of tips received, identifying unique incidents and individuals involved in incidents, and tracking responses to the received.
- Information should be retained in a format that allows for linking and analysis and is compatible with other school or emergency response systems (i.e., 911 service calls), school administrative systems that track information on safety events and discipline responses, or other systems maintained by community partners.
- To protect privacy and maintain control of information, limit access to the tip line database to tip line administrators and key staff from partners.
- Data should be housed on a secure platform that prevents unauthorized access to or disclosure of the information.
- Retain the information for multiple years to allow analysis of trends over time and to link individuals, events, and event locations that are identified across multiple tips.
- Consider routine data review to identify common gaps in information reported.
- Consider regular (1) testing tip line functioning and (2) backing up tip line data; IT support should conduct regular testing of all tip line communication methods.

Dissemination and Reporting

- Regular, concise reports targeted to schools, potential tip line reporters, likely responders to tips, and community partners can provide evidence that the tip line has been implemented as intended and is receiving and responding to safety-related information.
- For tip line partners, particularly those that have committed resources to develop and support implementation of the tip line, consider quarterly reporting that focuses on the volume and types of tips received.
- In addition to statistics, information on a crisis averted, an individual who was removed from an unsafe situation, or someone who was linked to counseling or other support services can be a powerful message.
- Reports and other dissemination materials are most effective when they are targeted, concise, and communicated through a variety of media.

Resources

- The most significant cost drivers for a tip line include hosting a vendor platform (i.e., phone, text, social media, and online systems) and hiring, managing, and training staff.

- Best practice and optimal tip line functioning includes staffing the tip line with a 24-7 live operator, but this can drive up costs.
- Alternatively, tip lines may include a tip line operator for only a portion of the day (e.g., 6 a.m.–10 p.m.); during times when there is no operator (e.g., 10 p.m.–6 a.m.), voice recordings or automated replies to texts and online submissions may direct callers to contact local law enforcement.
- Another alternative is asynchronous tip line monitoring - there isn't a tip line operator, but staff review tips (e.g., voicemails, texts, online reports) at regular intervals (e.g., every 4 hours)
- In addition to staffing, other directs costs include marketing and promoting awareness systems, maintenance, and supplies.
- Ongoing attention to securing funding is paramount.

Potential Risks

- Potential risks may include issues involving liability and accountability.
- Liability issues in tip line technology range from (1) protecting the confidentiality of reporters, (2) treating the tip as sensitive information, and (3) being held responsible for prompt review, triage, and appropriate response to tips received.
- Failure to comply with federal and state laws and regulations, including FERPA and HIPPA, may create liability.
- Responsible parties (e.g., schools, FBI) may be held liable if they receive information about a threat to student or school safety and fail to act on it, so tip line planning should develop and clearly communicate performance standards to responsible parties.

National institute of Justice (2016): A Comprehensive Report on School Safety Technology

This report, prepared for NIJ by the Johns Hopkins University Applied Physics Laboratory, examined a range of school safety technologies, including school safety tip lines. The report included a section on capabilities to consider when comparing school safety tip line/application vendors. These are excerpted below:

Reachability: For voice, this is measured as the success rate for reaching a live agent, operator, or dispatcher on the first try without the call being blocked or the caller receiving a busy tone. For electronic tip lines, reachability includes the reporter success rate for contacting and receiving confirmation that the tip was received.

User friendliness: The tip line must be easy to use and not present any challenge for the user whether using voice or electronic format.

Timeliness and accuracy of reporting to school officials: Third-party providers should pass tips to the appropriate officials as soon as they can verify the content and context of the tip. In emergency situations, timeliness may supersede rigorous verification.

Timely resolution by school officials: Tracking the timespan between the time the third party contacts the school and the resolution time for the situation can indicate how quickly the school officials respond and the thoroughness and accuracy of the information passed from the third party.

Anonymity, as appropriate: The general rule is that the reporter must remain anonymous. However, if the reporter is suicidal or making specific threats, policy should indicate that the tip line provider is able to identify the reporter to school officials and law enforcement.

Policy Impacts

The authors identified three policy impacts for this technology which should be explored for compliance with state and local regulations:

- Third-party questions: What questions should the third party be allowed to ask?
- Third-party use of information: What can the third party do with the information it receives from reporters after the incident has been addressed or resolved? Where do they keep it? How long is the information stored?
- Follow-up policy: Does the school address every issue from the tip line? How do they address fallacious or vindictive tips?

Accommodations Needed for Disabilities

For individuals with a hearing or speech impediment, a voice tip line may be ineffective without specific measures to address these issues. Likewise, without accommodation, an electronic tip line requiring reading may be ineffective for individuals who are visually impaired. Voice and electronic tip lines should support the use of assistive technologies.

Conclusions and Recommendations

Item 381 F of the 2019 Budget Bill directed the Secretary of Public Safety and Homeland Security to "develop a plan for implementation for a statewide school safety mobile application to be accessed by all school divisions…" and submit the plan to the Governor and General Assembly by December 1, 2019.

The General Assembly also expressed interest in a mobile application that would provide students and youth with access to mental health services, such as crisis counseling and suicide prevention, and that would allow the reporting of criminal activity using text, video and other messaging formats.

Additionally, although not directly related to the school safety mobile application, the 2019 General Assembly directed the Virginia Center for School and Campus Safety to "develop a case management tool for the collection and reporting of data by threat assessment teams…"

In response to the above, DCJS gathered and reviewed information on school safety mobile applications from multiple sources, including 12 states now using such systems, several Virginia school divisions now using such systems, federally-sponsored research on such systems, and various vendors that market these systems. As part of this review, DCJS also examined mobile applications that included reporting to mental health services and providing multiple reporting formats, as well as those connected to threat assessment case management tools.

Major Findings

Finding: Based on the reviews previously outlined, the primary finding to guide planning for a statewide school safety reporting application is this: In order to effectively implement a statewide school safety mobile application there needs to be infrastructure in place to handle and appropriately respond to the reports it will receive. Providing Virginia's roughly one million public school students with a mobile tool to easily report potential threats to safety is a fairly simple technological endeavor. The loftier and more critical task is going to be the development and maintenance of the complex "behind the scenes" technical, personnel, fiscal, and legal/policy infrastructure.

> **Recommendation 1**
> Virginia should create a school safety application technology workgroup to provide multidisciplinary input and buy-in on the purpose, design, and operation of the statewide school safety mobile application. The workgroup should be chaired by the VCSCS, and include representatives from the Department of Education and local school divisions, Department of Behavioral Health and Developmental Services, Department of Health, Department of State Police, local law enforcement, Office of the Attorney General, VITA, and other appropriate groups. The workgroup should produce a report addressing the feasibility and implementation of the recommendations listed below and any other issues necessary to guide a Virginia system.

Finding: The technologies and practices now used to allow students and others to send and receive information about threats to schools and individuals are fairly new and evolving. There are various off-the-shelf reporting systems available to choose from, but there is no single, uniform model for operating and utilizing such a system.

> **Recommendation 2**
> The school safety application technology workgroup should closely examine the experiences of states that are already operating school safety reporting systems. These states have adopted different

approaches to the administrative, technological, legal, and fiscal requirements for establishing and operating their systems, and Virginia should leverage this experience to learn which approaches have worked well and which have not. The workgroup may want to consider visiting states that have systems similar to what Virginia is seeking, to see close-hand how these systems operate.

Finding: Relatively few states have implemented truly statewide school safety reporting system. Of those that have, some are simple one-way "tip lines" that allow sending calls or text messages to a central monitor for routing to appropriate officials for further action. Other states have sophisticated systems that allow two-way conversations, reporting via phone, text, mobile app, or website, that can include pictures and video, and that are staffed by highly trained security or mental health/crisis response technicians.

Recommendation 3

If Virginia decides to implement such a statewide reporting system, the system should provide 24/7/365 staffed coverage. The experience of other states shows that, although many tips are reported during school hours, a substantial number of tips are reported during after-school hours and during the summer months.

Virginia should implement a system that supports all of the major communication methods commonly used by youth, which include two-way conversations, with reporting via phone, text, mobile app, chat, or website, that can include pictures and video.

Finding: The most frequent issues reported to existing statewide systems by students and youth concern potential suicides, mental health crises, and bullying. Reports concerning physical threats to schools and individuals, while critical, make up a relatively small percentage of the reports to these systems.

Recommendation 4

A Virginia school safety reporting system should anticipate and plan for responding primarily to reports of self-harm and mental health crises reports, but also to threats to others and to schools. The system should be staffed by individuals who are qualified to provide appropriate responses to students experiencing mental health crises.

Finding: States that currently operate school safety reporting systems stressed the importance of having staff who are trained and qualified to respond to the varied types of reports received by the system. These staff receive training in how to effectively communicate with youth, vetting and triaging reports, providing appropriate responses, and routing reports to appropriate services providers when necessary.

Recommendation 5

Virginia should clearly identify the types and levels of training and qualifications required for those who staff the reporting system. Staff who respond to reports involving suicide and mental health crisis must be trained in dealing with people in crises. Similarly, staff who respond to threats of harm to others or schools must be trained to contact the appropriate local authorities.

Finding: States that currently operate school safety reporting systems receive a large number of reports. The number of reports received annually by the systems reviewed ranged from slightly over 1,000 individual incidents annually in Wyoming, to nearly 23,500 during the first six-months of operation in Pennsylvania. Additionally, most states reported increasing volumes of reports over time.

Recommendation 6

Virginia should anticipate the need to receive and respond to as many as 25,000 reports annually and that this number may increase as awareness of the system increases. While the volume of anticipated reports is an estimate, the experiences of other states suggest this is reasonable.

Virginia should consider whether its current public safety and mental health crisis response systems will be able to handle the large number of additional reports that a statewide school safety reporting system will generate.

Finding: All of the systems now in use allow anonymous and/or confidential reporting, but also allow reporters to provide their identities if they choose to do so. Most have legal provision for breeching confidentiality in life-threatening emergencies or by court order.

Recommendation 7

Virginia should develop a reporting system that provides confidential reporting (i.e., the caller is assured that his/her identity will not be shared without their consent or in the event of imminent harm to self or others). Because many responses will require providing acute crisis services, the system should not provide totally anonymous reporting (i.e., responders have no way to determine the identity of the caller). Furthermore, confidential, rather than totally anonymous reporting, may help deter false reporting.

Virginia should also develop a policy for breaking confidentiality if it is deemed necessary, such as reports involving imminent harm.

Finding: Most of the systems are managed by the office of the state attorney general or by a state law enforcement agency. In some cases, the attorney general's office handles the policy, financial, and marketing aspects of the system, while the technical/communications function is handled by a law enforcement or emergency communications center that has the required technical communications infrastructure.

Recommendation 8

Virginia should carefully consider which agencies and organizations will be responsible for implementing and operating a statewide school safety reporting system. It may be appropriate to divide this responsibility among agencies/organizations having the different areas of expertise needed to operate, train, and market the system.

Finding: States operating statewide school safety reporting systems have created statutes and policies to address the security and dissemination of information reported to the system. These statutes and policies take into consideration both state privacy and data security laws, as well as federal laws such as HIPPA and FERPA. They also considered the concerns of school administrators, parents and students regarding how information reported to the system would be maintained, safeguarded and shared.

Recommendation 9

Virginia must have written policies on compliance with all applicable state and federal laws regarding the collection, retention and dissemination of data reported to the school safety reporting system. These policies should be made clear to those who staff the system, and to all potential reporters to the system.

Virginia should also seek the input of parents and students regarding concerns about how data reported to the system will be maintained, safeguarded and shared.

Finding: States that currently operate statewide school safety reporting systems have reported annual operating costs of about $850,000 to $1.2 million, depending on the capabilities of the system and the number and types of persons staffing the system.

Recommendation 10

When estimating costs for its statewide system, Virginia should consider the costs of the entire system, and not just the cost of implementing the system's technology. Although there will be costs associated with purchasing, maintaining and upgrading the system technology, the larger costs will be for training and staffing system personnel, for ongoing marketing of the system, and for providing resources needed to respond to the reports received through the system.

Finding: All states that currently operate statewide school safety reporting systems heavily market and promote the availability of the system to youthful users, and how and when to use it.

Recommendation 11

Virginia should develop a statewide marketing plan to inform students, school administrators and staff, parents, and others of the availability of the school safety application. Funding for and marketing of the school safety application should be continuous to maintain awareness of the school safety application, and the marketing should be attuned to changes in how young people use communications platforms and software.

Finding: None of the school safety reporting systems reviewed had a direct link to a school threat assessment case management system. Most states focused on having their reporting systems able to quickly transfer information to the appropriate responders, or to quickly allow responders to access information about individuals reported as potential threats, rather than focus on linking information with a threat case management system.

Recommendation 12

Although no states reviewed had a school safety reporting system linked directly to a threat assessment case management system, HB1734 directed DCJS to develop a case management system and mandated its use. Given the purpose behind implementing a statewide school safety application, such a system should be developed and implemented with thought to possible integration with the threat assessment case management system required by HB1734. Most of the reports received by the school safety application, including those involving self-harm or mental health issues, may already be handled by school threat assessment teams as stated in the threat assessment legislation.

Finding: All states that operate school safety applications require annual reports to Executive and/or Legislative officials on the operation of the school safety application. Such reports are used to provide officials with information on report volumes, characteristics, and trends and changes in reporting, as well as providing recommendations for improvements to the system.

Recommendation 13

Virginia should require an annual report on the operation of school safety application to the Governor and General Assembly. The report should address, at a minimum, the following topics:

- Numbers of reports to the school safety reporting system annually, monthly, by day of the week, and by time of day,

- Numbers of reports to the system from each school division,
- Categories of incidents reported via the school safety application (suicide, bullying, threat to other students, etc.),
- Summary of outcomes and actions taken on reports made via the school safety application,
- Breakdown of types of recipients to whom school safety application reports were referred (mental health services, law enforcement, school administrators, etc.),
- Number and types of incidents of misuse of the school safety application (false/hoax reports, inappropriate reports, etc.),
- Breakdown of the method by which the report was sent via the school safety application (by phone, text, website, etc.), and,
- The total cost to operate the school safety application reporting program, including staffing costs, administrative costs, and support costs.

Finding: All of the major statewide reporting systems currently in place were created by state statute, which mandates participation by all public schools. In some cases, access to the reporting application may be limited to students above a certain grade level.

Recommendation 14

If Virginia decides to implement a statewide mobile application system, it should be established in statute. The statute creating the system should address, at a minimum, the following:

- Types of reports to be received by the system (threats of harm to others, threats of harm to self, mental health crises, criminal activity, etc.),
- Agencies/organizations responsible for establishing and operating the system,
- Which schools will be mandated to participate in the system (K-12 public schools, private schools, specialized schools, etc.),
- Legal liability for agencies/individuals operating the system and responding to reports to the system,
- How the development and ongoing operations of the reporting system will be funded,
- Security of the data received by the system, including with whom data can be shared and how data will be retained,
- Provisions for breaching confidentiality of reporting in extreme circumstances,
- Penalties for fraudulent or prank reports made through the school safety application, and,
- Required reporting on system operation to the Governor and General Assembly.

APPENDIX 1:
Article Excerpt: *The Role of Technology in Improving K-12 School Safety*

This section of a 2016 RAND Corporation report focuses on Colorado's Safe2Tell reporting system. Because Colorado has one of the longest operating and most sophisticated reporting systems, it is included in this appendix as a reference.

Anonymous Bystander Tip Line in Colorado

The State of Colorado has implemented an anonymous bystander tip line program known as Safe2Tell. The safety model was first piloted in the Pikes Peak region of Colorado in the late 1990s and subsequently was made available to other districts in an effort to promote communication and reduce distrust of authority by allowing reports of concerns, crimes, or abuse to be anonymous, particularly in highly diverse and economically disadvantaged areas. The program adopted a similar approach as Crime Stoppers, which rewards anonymous reporters who provide information about felony crimes. Unlike Crime Stoppers, Safe2Tell does not provide rewards to anonymous reporters.

Safe2Tell is unique in three ways: The reporting parties and the report they give are guaranteed anonymity under Colorado's Safe2Tell law, passed in 2007; outcomes of reports are documented and include the action that was taken by responders at the local level; and an extensive education component was designed to empower students, engage them to ask for help when it involves their safety or the safety of others, and encourages their use of the Safe2Tell reporting tool.

The Safe2Tell program was launched statewide in 2004 after a state assessment showed that a hotline implemented after the Columbine shootings was underused and less than effective. Safe2Tell's core competency is giving a bystander a reporting tool, allowing people who know of concerning or dangerous situations to report them; traditional hotline programs are focused on providing help to the person in crisis and not a bystander.

Safe2Tell began as a comprehensive strategy to provide both fidelity and accountability that other models could not. In addition, education and outreach are critical components that help in changing the attitudes of young people and adults about what to watch for and report, which results in an increased number of reports submitted. Although Safe2Tell was initially a grassroots, nonprofit organization, it has since become funded by the state through the Colorado Office of the Attorney General. Also, a Safe2Tell national nonprofit organization now provides technical assistance and guidance to other states wishing to implement the model. Anonymous reporters can make a report via the web (most popular), a toll-free number, or a mobile device app.

Tips are received by trained dispatchers with the Colorado State Patrol dispatch center and routed instantly to the appropriate local law enforcement agencies and school-based response teams. School response teams, identified in the Safe2Tell system, typically consist of principals and assistant principals, counselors, school resource officers, and representatives from law enforcement. High-level threats to life or threats of violence are also forwarded to the state-based Safe2Tell team, as well as to appropriate fusion centers—federal, state, and local threat-related information-sharing centers.

Responses to anonymous tips differ depending on the jurisdiction (e.g., district, school) and type of report. In the case of life-threatening emergencies such as suicides or bomb threats, law enforcement and first responder teams will provide an immediate, around-the-clock response, with assistance from school response teams. A majority of reports come in after hours and on weekends. Other incidents (e.g., bullying, substance use,

suspicions of abuse or neglect) may require investigation by the appropriate authorities (e.g., child services), school-based counseling, or implementation of prevention and intervention services.

An upgraded, customized, intelligence-gathering and information-sharing tipping platform system was implemented in July 2015. All reports are now routed through a centralized system with a streamlined interface. The interface includes time-stamped information and indicates which users have viewed information. In addition, the system is compliant with various laws and guidelines to protect privacy such as the Family Educational Rights and Privacy Acts, Criminal Justice Information Services security policy, and the Health Insurance Portability and Accountability Act, and encrypted to ensure anonymity.

Attachments such as photographs, videos, social media posts, and other pieces of evidence can be uploaded by reporting parties to provide law enforcement with probable cause to act in an urgent situation. In addition, the new system ensures that disposition reports and in-progress notes can be completed for all tips and are accessible by the entire response team.

The system also provides an integrated way for dispatchers to communicate live with reporting parties to gather more information necessary for responders (i.e., two-way communication). Law enforcement and school response teams can communicate within the software system to share critical information to aid in the response. These upgrades have improved the quality of information and efficiency of communication between school response teams, law enforcement, and Safe2Tell's state-level team.

Recognizing that students are often the greatest source of information before a tragedy occurs, the Safe2Tell program teaches students how to recognize potentially life-threatening and risky situations and when to alert an adult. This is accomplished through education, outreach, and training of staff and students about recognizing and reporting troubling behaviors and related concerns to ensure prevention and early intervention in violence and other risky behavior. Lowering the threshold from reporting a crime that has already occurred to reporting suspicious, concerning, or unsafe behavior allows the responders to intervene early and potentially prevent tragedy. Safe2Tell encourages students to break the code of silence that is pervasive in schools and to develop empathy for fellow students who may be suffering.

Safe2Tell staff provide free educational videos, toolkits, and promotional materials (e.g., posters) to schools. In addition, Safe2Tell staff make site visits to train and educate staff and students about when and how to use the system. Interviewees said that these visits are particularly useful in the aftermath of incidents because of increased awareness about and interest in prevention.

Interviewees thought that Safe2Tell was highly effective. Several participants noted that they thought that the program had saved several lives because it enabled local teams to respond to and intervene in numerous situations involving potential or real suicide, child abuse, bullying, and illicit drug use. The use of Safe2Tell has also led to the discovery and removal of weapons on school property. Reports have increased on average 58 percent each year, from 102 in 2004–5 to 3,178 in 2013–14. In addition, several participants reported that the program has helped shift the culture to a positive climate in which students care for and look out for one another and that trusting relationships between staff and students have been established.

By implementing a consistent marketing strategy across Colorado, Safe2Tell education and promotional efforts and materials focus on positive messaging of engaging peers and communities to watch out for each other and to speak up when a friend needs help. Safe2Tell provides key opportunities to address issues with youth that are often identified as precipitators to violence: depression, mental health, suicidal thoughts and actions, self-harm, and threats to safety.

Interviewees identified several factors as important enablers of successful implementation of Safe2Tell. First, there has been widespread demand for responses to violence in Colorado, especially in the wake of the Columbine school shooting. Second, those involved in Safe2Tell (many of whom began as volunteers) cross multiple disciplines, which has helped to secure cross-agency buy-in. Third, having an advocate champion the program was critical to its expansion from a local pilot to a state-funded statewide tip line. Fourth, community members, including students, began to have confidence in the system and to use it more extensively as they saw effective local response to tips.

Participants emphasized the importance of gaining buy-in from the community, school staff, and students. This is particularly critical for encouraging students to report concerning behaviors. In addition, participants noted the importance of all program components, particularly outreach and education, to initiate shifts in school climate. Simply implementing an anonymous hotline is unlikely to be successful if students do not feel empowered to make reports. Providing outreach, as well as a successful intervention in response to tips, has bolstered confidence in and use of the system.

Conversely, several barriers to implementation were noted. First, because the system is anonymous, issues with false reporting or misuse of the system have occurred occasionally. Unfortunately, there are few ways to address this issue without compromising the anonymity of reporters. Although the reporting system could be confidential rather than anonymous, this may discourage reporting. The participants we spoke with encouraged identifying strategies to reduce misuse of the system rather than removing legal protections of anonymity.

Safe2Tell also encourages and provides training resources, education, and outreach to ensure awareness and use of the reporting tool. This can be difficult, given the finite amount of time staff may have in front of students, given busy school schedules. Relatedly, it can be challenging to encourage separate staff from law enforcement, counseling, and education to communicate and cooperate in the ways required to make the program work. These issues can be overcome by the use of technology and online tools to provide toolkits for classrooms, webinars for trainings, and marketing materials at the local level.

Staff can also implement creative ways to integrate the Safe2Tell message with current school programming, such as existing bullying and suicide prevention programs. This might be as simple as having a conversation with youth to let them know that they are part of the solution. Finally, there is no statewide mandate ensuring consistent response across school districts. Because education and response are implemented at the local level, there is likely to be large variation in whether students use the program, as well as how local teams respond. To prevent violence and tragedies, communities should focus on collaborative prevention efforts with support from multiple systems: justice, education, health, mental health, and human services. Safe2Tell provides a unique bridge between these agencies and the youth who need help to avert an act of violence or tragedy across the state of Colorado.

APPENDIX 2:
Information Sources

A Comprehensive Report on School Safety Technology. Johns Hopkins University Applied Physics Laboratory, National Institute of Justice (2016).

Florida Plan for a Huge Database to Stop School Shootings Hits Delays, Legal Questions. South Florida Sun-Sentinel (May 30, 2019).

Michigan OK2SAY 2017 Annual Report. Michigan Attorney General (2018).

Oregon Statewide School Safety Tip Line 2018-2019 Annual Data Report June 16, 2018 – June 15, 2019. Oregon State Police (2019).

Pennsylvania Safe2SaySomething Annual Report 2018 – 2019 School Year. Office of Attorney General (2019).

Rethinking School Safety in the New Normal. Public Consulting Group, Inc. (2019).

SafeUT 2018-2019 Annual Report. SafeUT Commission (2019).

Safe2Tell Colorado Annual Report 2018. Colorado Attorney General (2018).

Safe2Tell Wyoming Annual Report for the Period 1/1/2018 to 12/31/2018. Wyoming Attorney General's Office, Division of Victims Services (2019).

School Tip Line Toolkit: A Blueprint for Implementation and Sustainability. Office of Justice Programs (2019).

School Safety Information Sharing Program. Illinois Statewide Terrorism & Intelligence Center (STIC) (2019).

SVH Statistics – FY 2018. Missouri State Highway Patrol (2018).

The Role of Technology in Improving K–12 School Safety, RAND Corporation (2016).