K-12 SCHOOL SECURITY ASSESSMENT TOOL

ABBREVIATIONS

CISA ....Cybersecurity and Infrastructure Security Agency

CCTV ....Closed-Circuit Television

K-12 .... Kindergarten Through 12th Grade

SSAT...School Security Assessment Tool

SME ....Subject Matter Expert

SSO .... School Safety Officer

SRO ....School Resource Officer

The effectiveness of the School Security Assessment Tool depends on the accuracy of the information collected and submitted to the Tool by users of the Tool. Accordingly, the U.S. Department of Homeland Security cannot make any guarantees or warranties as to the effectiveness of the Tool. The U.S. Department of Homeland Security does not endorse any person, product, service, or enterprise. References to specific agencies, companies, products, or services therefore should not be considered an endorsement by the U.S. Department of Homeland Security. Rather, the references are illustrations to supplement discussion of the issues. The Internet references cited in this publication were valid as of the date of this publication.

QUICK-START GUIDE

This Quick-Start Guide is intended to help users of the K-12 School Security Assessment Tool (SSAT) use the tool and interpret the results. Security and safety planning is a continuous process. Consider using the SSAT regularly, or whenever your school experiences substantial changes in relevant threats or in safety or security plans or capabilities. More information about the SSAT structure and limitations can be found in the accompanying User Guide and Technical Appendix.

WHO SHOULD USE THE SSAT?

The primary audience for the tool are users that lead or support school physical security. The tool is designed for users of varying levels of expertise, including district leaders and school administrators. Teams that consist of school or district leaders, local first responders or law enforcement officers, security experts, and community members can also use the SSAT to support school physical security efforts.

HOW DO I ACCESS THE SSAT?

The SSAT is a web-based tool that can be used with most popular Internet browsers, such as Chrome or Microsoft Edge. It can be used on a desktop computer, tablet, or smartphone. The app runs entirely locally on an internet browser—no information is sent or stored remotely. You can also save the information you have entered locally, and reload this data the next time you use the SSAT.
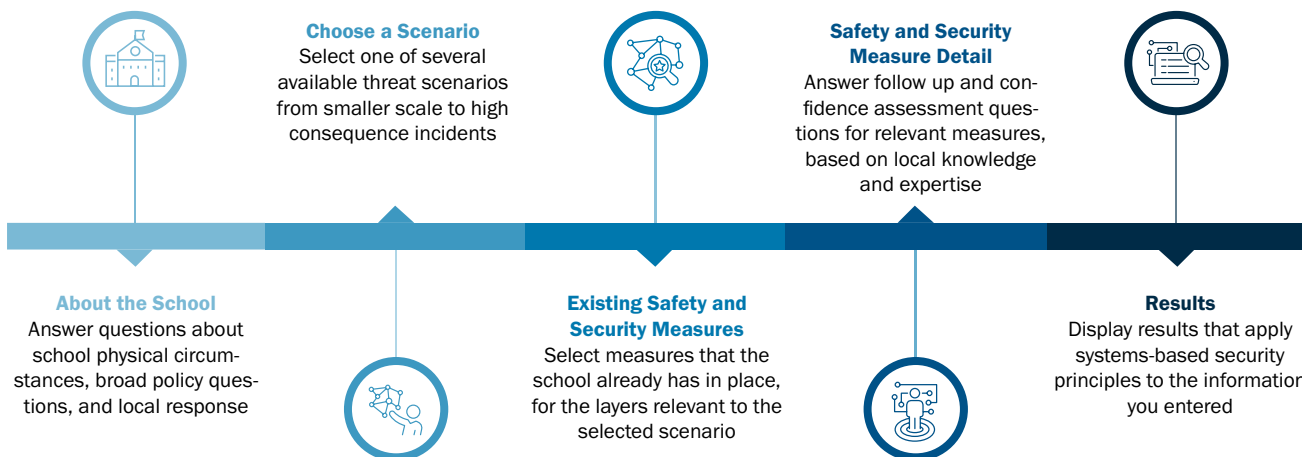
HOW IS THE SSAT STRUCTURED?

The SSAT takes a *systems-based approach* to school security, which means that physical security is one component of the broader school safety system. The SSAT prompts you to think holistically about how security equipment, site and building design features, personnel assigned to security roles, policies, and training programs work together across your school's campus to *detect, delay,* and *respond* to threats. The SSAT organizes the school physical security system into four *layers*—the grounds perimeter, the school grounds, the building perimeter, and the building interior—and analyzes your school's security system across layers, which can help you avoid gaps and guard against single points of failure.

WHAT WILL YOU LEARN FROM THE SSAT?

The SSAT will help you identify the physical security assets already in place at your school, and the gaps in your physical security system. The results that it provides are actionable, relevant to your school's context, consider cost implications as well as the impact that security measures may have on school climate, and aim to increase the overall security benefits of your school's entire physical security system.
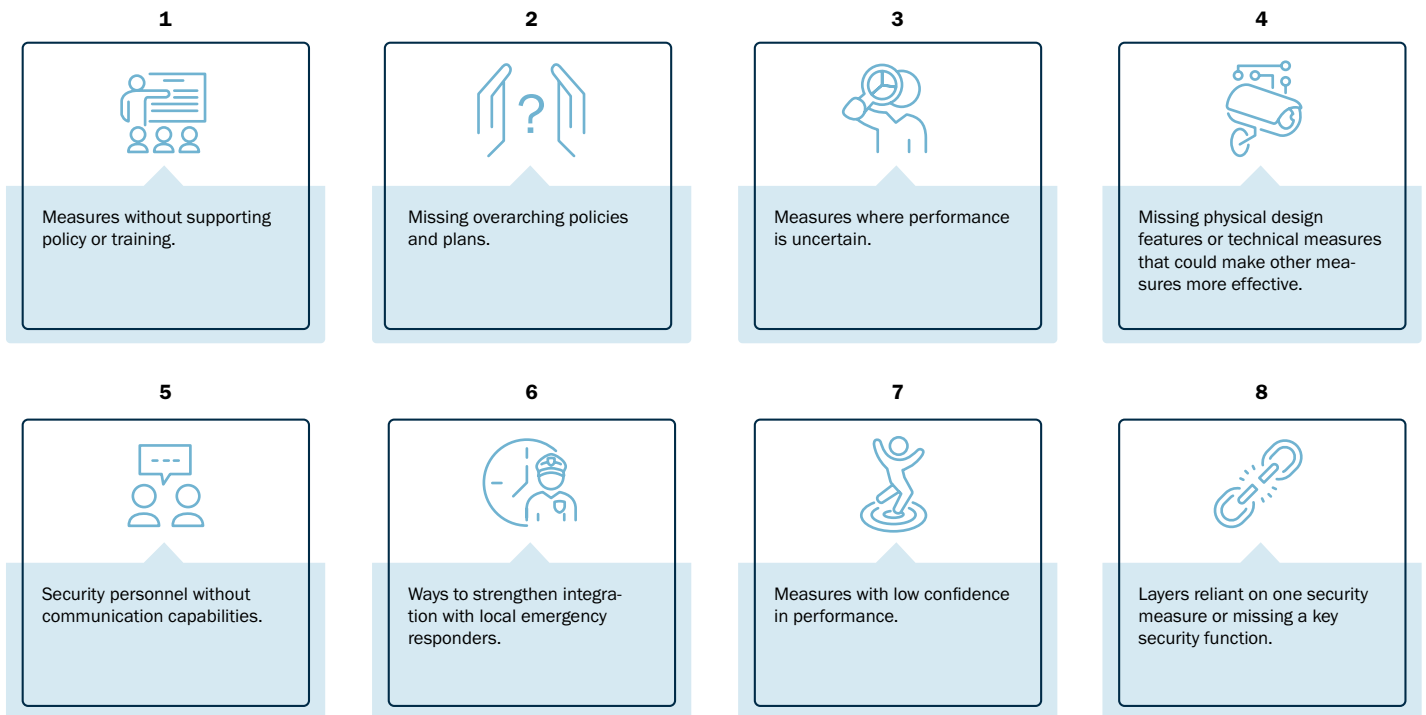
HOW TO USE THE SSAT

Follow the steps outlined in the figure below.

Choose a Scenario
Select one of several available threat scenarios from smaller scale to high consequence incidents

Safety and Security Measure Detail
Answer follow up and confidence assessment questions for relevant measures, based on local knowledge and expertise

About the School
Answer questions about school physical circumstances, broad policy questions, and local response

Existing Safety and Security Measures
Select measures that the school already has in place, for the layers relevant to the selected scenario

Results
Display results that apply systems-based security principles to the information you entered

WHAT DO THE RESULTS MEAN?

The results include information about the approximate cost of each option and its likely effect on school climate. You can view results directly in the SSAT, save them to your local device, or print them. **The SSAT returns eight results modules:**

1

Measures without supporting policy or training.

2

Missing overarching policies and plans.

3

Measures where performance is uncertain.

4

Missing physical design features or technical measures that could make other measures more effective.

5

Security personnel without communication capabilities.

6

Ways to strengthen integration with local emergency responders.

7

Measures with low confidence in performance.

8

Layers reliant on one security measure or missing a key security function.

STEPS YOU SHOULD TAKE BEFORE USING THE SSAT

The SSAT is meant to be used as part of a holistic planning process. Before you use the SSAT, consider forming a team that includes school staff and community stakeholders such as community organizations, local first responders, and families, and have that team gather relevant local data that will help your school conduct threat and risk analyses.

LIMITATIONS OF THE SSAT

The SSAT attempts to balance several competing priorities. To make the SSAT responsive to school context, accessible to users of verying levels of expertise, usable without extensive training, and to minimize repetition and completion time while still considering the full school security system, developers of the tool made several simplifications and assumptions.

» The SSAT is not designed as an all-hazards tool, and does not include certain categories of incidents affecting the security and safety of the school community, such as extreme weather events.

» A limited number of incident scenarios allow the SSAT to be responsive to local safety concerns and minimize completion time.

» The school campus and security assets are organized in four layers, which a review of the literature around school physical security identifies as the four main layers integral to enhancing school safety and security.

» The SSAT asks about a limited set of security measures such as cameras, entry control systems, and locking mechanisms, which are common in schools, omitting less common measures to minimize completion time.

» The SSAT treats the ability of each security measure to detect, delay, or respond to a threat as equal to look across measures and identify areas for improvement.

» The SSAT asks a discrete set of questions about interactions among security measures, which avoids repetition but does not capture all of the possible interactions among security measures and across layers.

INTRODUCTION

The Cybersecurity and Infrastructure Security Agency (CISA) developed the K-12 School Security Assessment Tool (SSAT) to help schools create safe and secure learning environments. The SSAT incorporates school context and applies the systems-based approach described in the 3rd edition of CISA's *K-12 School Security Guide*, a companion product you can use in conjunction with the SSAT to improve your school's physical security. The SSAT and 3rd edition of the guide build on the prior second editions of both documents. The Technical Appendix that accompanies this user guide contains detailed information about how the SSAT was developed.

This user guide describes:

Who should use the SSAT

How to access the SSAT

How the SSAT is structured

What you will learn from the SSAT

How to use the SSAT

What the SSAT results mean

Steps you should take before using the SSAT

Limitations of the SSAT

WHO SHOULD USE THE SSAT?

The primary audience for the tool are users that lead or support school physical security. The tool is designed for users of varying levels of expertise, including district leaders and school administrators. The SSAT can also be used by school security contractors, local law enforcement or first responders, and security experts such as DHS Protective Security Advisors (PSAs) as a complementary tool or resource in their work. Teams that consist of school or district leaders, local first responders or law enforcement officers, security experts, and community members can also use the SSAT to contribute to multi-disciplinary or multi-stakeholder security planning efforts.

HOW SHOULD I ACCESS THE SSAT?

The SSAT is a web-based tool accessible over the internet. You can use it with most popular Internet browsers, such as Chrome or Microsoft Edge. You can use it on a desktop computer or a mobile device such as a tablet or smartphone. If you use the SSAT on a mobile device, you can use it during a walkthrough of your school campus. Although the tool is web-based, only one user should input information and access results at a time. The application runs entirely locally on your internet browser; no information is sent or stored remotely. The SSAT does provide the option to save the information you entered locally, and reload this information for the next use.

HOW IS THE SSAT STRUCTURED?

The SSAT takes a *systems-based approach* to school physical security. A systems-based approach encourages schools to conceptualize physical security as a component of the broader school safety system that includes actions to protect people and infrastructure, mitigate the severity of threats, respond to threats quickly and effectively, and recover from security incidents. The SSAT focuses on *protection and mitigation. Protection* refers to keeping people and property safe from threats and emergencies. *Mitigation* entails reducing the damage or harm that these safety-related incidents cause when they occur. Protection and mitigation comprise one of the three phases in the broader school safety system (which also includes prevention and response & recovery).

Please also note that the SSAT does not take an all-hazards approach to school physical security, but focuses instead on the most common incidents of crime and violence in K-12 schools across the United States, as identified by the U.S. Department of Education.

A systems-based approach to school security means that security measures work together in an integrated way, and that planning incorporates the relevant policies and training programs that sustain the system and allow it to work effectively.
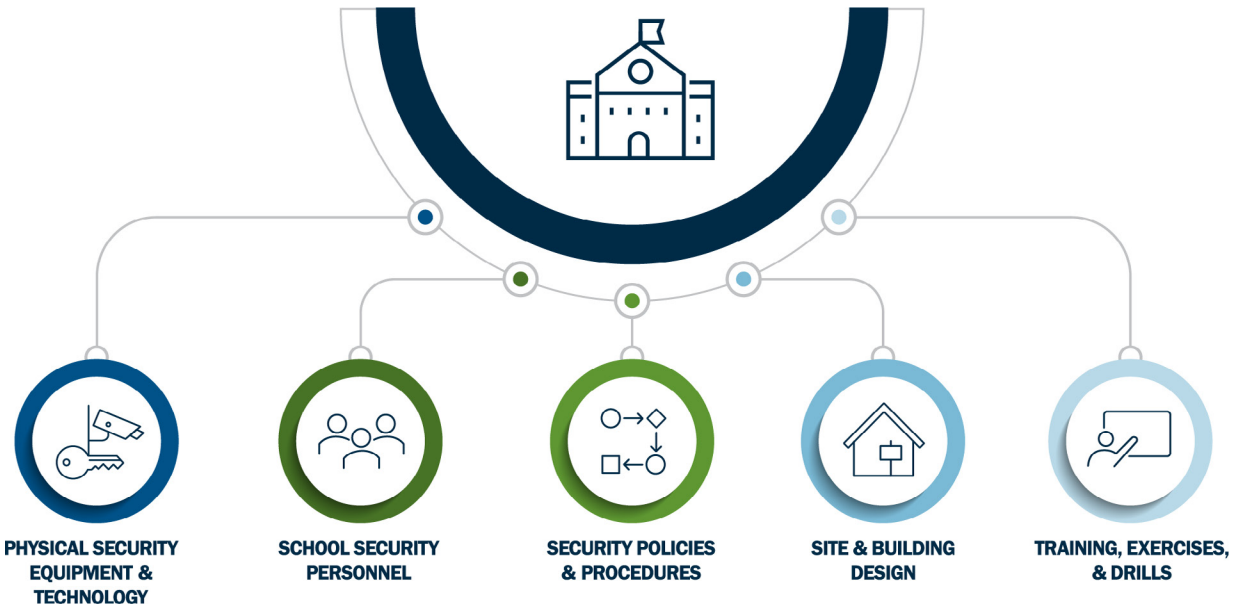
The SSAT helps users apply the three main physical security strategies of *detection, delay,* and *response.* The tool prompts you to think holistically about how various pieces of security equipment, site and building design features, personnel assigned to security roles, policies, and training programs work together across your school's campus to detect, delay, and respond to threats.

The SSAT organizes the school physical security system into four layers. These layers are the grounds perimeter, the school grounds, the building perimeter, and the building interior layers, as shown in Figure 1. You will answer questions about measures and policies in place at each layer of your school's campus. The SSAT is structured this way because different security measures in place across a school campus can reinforce one another within and across layers. By analyzing your school's security system across layers, the SSAT can help you avoid gaps and guard against single points of failure.

FIGURE 1 | **THE FOUR SCHOOL PHYSICAL SECURITY LAYERS**

1. The **grounds perimeter layer**, which demarcates the outer boundary of a school campus;

2. The **school grounds layer**, which encompasses athletic fields, parking lots, playgrounds, and any other outdoor space that is part of a school's campus;

3. The **building perimeter layer**, or walls enclosing the inside of school buildings; and

4. The **building interior layer**, which comprises all of the spaces inside school buildings (e.g. administrative offices, hallways, cafeterias, classrooms, gymnasiums, auditoriums, etc.).
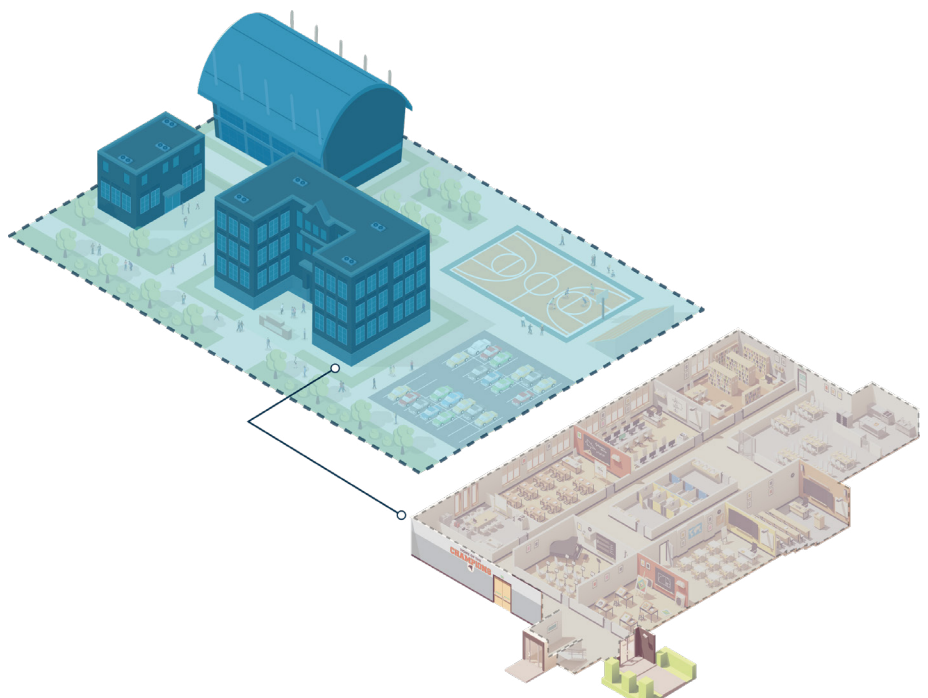
SOURCE: Moore et al., 2021.

The SSAT asks users to think about the various components that make up their physical security system. A physical security system typically includes five elements: physical security equipment and technology; site and building design features; school security personnel; policies and procedures related to school security; and training, exercises, and drills. The tool which questions about each of these elements.

PHYSICAL SECURITY EQUIPMENT & TECHNOLOGY

SCHOOL SECURITY PERSONNEL

SECURITY POLICIES & PROCEDURES

SITE & BUILDING DESIGN

TRAINING, EXERCISES, & DRILLS

WHAT WILL YOU LEARN FROM THE SSAT?

The SSAT will help you identify the physical security assets already in place at your school, and the gaps in your physical security system. The results that it provides are actionable, relevant to your school's context, consider cost implications as well as the impact that security measures may have on school climate, and aim to increase the overall security benefits of your school's entire physical security system.

You will learn five key things from the SSAT:

Where you can add *missing ingredients* to make the security measures you have more effective at detecting and responding to threats. These missing ingredients include complementary measures such as lighting or design features that enhance visibility, policies or training related to the use of specific measures, and overarching policies for response such as an evacuation policy or lockdown policy.

Where you can add *communication capabilities* to ensure that security measures at outer layers of your campus enable an effective response at inner layers.

How to *strengthen layers* where one or more key functions – detection, delay or response – is missing or depends on only a single security measure.

How you can better assess and increase your *confidence* that the measures you already have in place will successfully detect or respond to a threat.
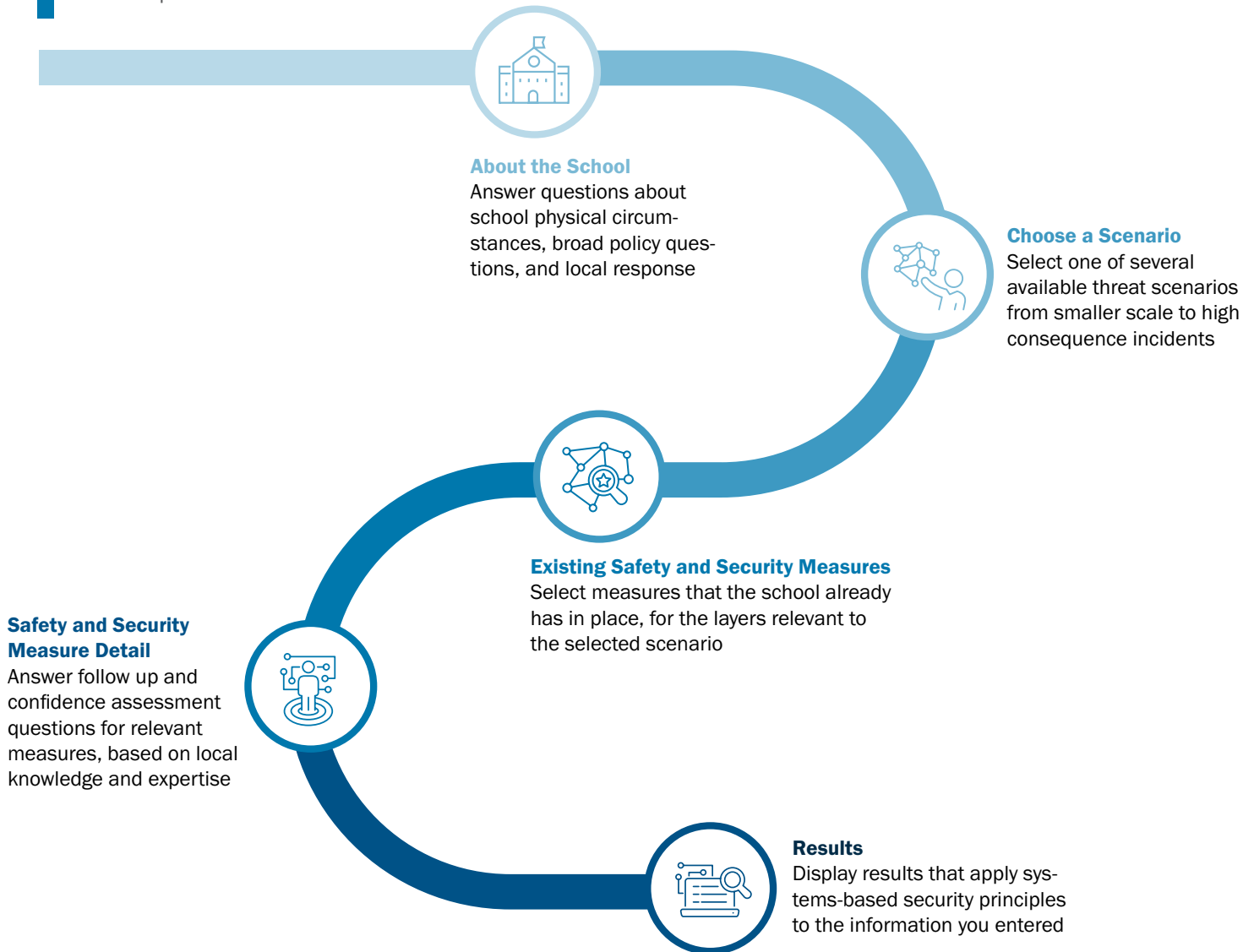
How to enable *local emergency responders to respond quickly* to school incidents.

HOW TO USE THE SSAT

The SSAT will ask you to do four things, as depicted in Figure 2 and described below. After going through each step, the next section describes the results that the tool will provide.

1 Answer questions about your school	2 Choose an incident scenario (such as an active assailant attack in a school building during classroom instruction)	3 Indicate the security measures your school already has in place for that incident scenario	4 Answer follow up questions about existing security measures and assess your confidence that each measure (as applicable) will effectively detect, delay, or respond to a threat

FIGURE 2 | **THE FIVE STEPS OF THE SSAT**

About the School
Answer questions about school physical circumstances, broad policy questions, and local response

Choose a Scenario
Select one of several available threat scenarios from smaller scale to high consequence incidents

Existing Safety and Security Measures
Select measures that the school already has in place, for the layers relevant to the selected scenario

Safety and Security Measure Detail
Answer follow up and confidence assessment questions for relevant measures, based on local knowledge and expertise

Results
Display results that apply systems-based security principles to the information you entered

SOURCE: HSOAC

STEP 1.

Answer the questions about your school

The SSAT considers unique school attributes such as grade levels served, location (e.g., rural, urban), physical layout of a school campus (e.g., presence of modular units or multiple buildings), use of dedicated school security staff (e.g., a school security officer (SSO) or school resource officer (SRO)), and likely response time of local law enforcement.

STEP 2.

Choose an incident scenario

» Select the incident scenario that is most applicable to your local conditions and context. *If multiple incident scenarios are of interest to you, you can run the tool again using a different incident scenario. As shown in Figure 2 (above), the incident scenario determines which layers and security measures are relevant and thus reduces completion time.*

» Version 1 of the SSAT includes four types of incident scenarios: active assailant scenarios, student fight scenarios, scenarios in which parents without custody kidnap their children, and a bomb threat scenario.

» These incident scenarios include threats that K-12 schools in different contexts across the United States face with some frequency, as well as incidents that are more rare but have devastating consequences when they do occur.

» The incident scenarios are designed to occur at different times of the school day as well as after school hours, and at different locations aross a school's campus.

Future iterations of the SSAT may expand on these incident scenario categories, and/or include different incident scenario categories that reflect the evolving nature of threats to K-12 schools across the United States.

The SSAT uses the details of each incident scenario to determine four things:

1. Determines which physical security **layers** on a school campus are relevant. For example, measures that protect the school building might not help during an incident that unfolds on school grounds.

2. Defines what **security measures are relevant.** For example, a security measure intended to keep people who are not part of the school community off campus would not help in an incident where a student is the perpetrator.

3. Determines how the different measures a school has in place **reduce a specific type of risk.**

4. Guides the SSAT in producing **relevant results.**

After selecting an incident scenario, you will be asked a series of follow up questions about whether your school has policies and training related to the incident scenario. You will also be asked to assess your **confidence** that school staff will be able to detect and effectively respond to the threat described in the incident scenario.

STEP 3.

Indicate the security measures your school already has in place

In this step you will indicate the specific security measures that your school has in place.

» Select "yes" only if the measure is fully implemented and functional (e.g., the lights work; the perimeter barrier is in good repair).

» The SSAT will also only ask you about measures that relate to the incident scenario you chose in Step 2. This means that you may not be asked about some security measures that you have in place at your school. Questions about those measures might appear if you selected another incident scenario. The measures the SSAT may ask you about could include staffing and technologies such as access control systems or closed-circuit television.

» The layers the tool asks about depend on whether or not the incident scenario "passes through" that layer. For example, an incident occurring on the school grounds will not pass through the building perimeter layer; therefore, the SSAT will not ask about building access control measures.

» Some measures, such as staff patrols or lighting, may exist at multiple layers across a school campus. The SSAT will ask you about these measures at each layer in which they appear; this is because they may function differently depending on the location.

» At each layer that is relevant to your chosen incident scenario, you will have an opportunity to indicate if your school has other measures in place that the SSAT did not directly ask about. Indicate the number of additional measures you have in place and briefly describe what they are and what they do.

STEP 4.

Answer follow up questions about existing measures

This step will ask you a series of follow up questions about the security measures your school already has in place at each layer. The questions are specific to the incident scenario and relatively consistent for each measure. You will need to make the following judgments:

Assess your confidence that the measure will **detect** the threat presented in the selected incident scenario at the applicable layer;

Determine where there is a **policy** in place that describes the appropriate response if the threat described in the selected incident scenario is detected at the applicable layer;

If a policy is in place, determine whether staff have been **trained** on the policy within the last year; and

Assess your confidence that the measure will support an **effective response** to the threat detailed in the incident scenario.

Why does the SSAT ask about confidence, policy, and training?
Simply having a measure in place does not guarantee that the measures will have any value when an incident occurs. Similarly, staff need to know what to do (policy), and have practiced doing it (training), for the measure to have maximum benefit.

If a school has measures in place *but you aren't confident that those measures will perform well in an incident,* taking steps to increase confidence should be a high priority in security planning.

STEP 4.

Answer follow up questions about existing measures

Security measures that involve staff—such as staff patrols or staff who monitor CCTV footage—include an additional question about whether staff have *functional communications equipment* to report the threat in the selected incident scenario to school leadership or directly to local law enforcement.

» The follow-up questions ask you to consider all of the factors that could affect whether a security measure your school has in place can perform its function if a threatening incident occurs.

  ◦ If your school's security plan relies on staff members to detect a threat, is the layout of your school buildings and school grounds such that they can see well? Is there lighting in areas they monitor? Have they been taught what to look for?

  ◦ If part of your physical security planning relies on exterior emergency exit doors that close and lock, do you think these doors will actually be closed and locked during an incident? Do staff check that they are closed regularly? Are doors ever propped open?

» Only someone with local knowledge of your school can make these assessments, because only they are sufficiently familiar with the conditions and environment at your school. Your realistic confidence judgments as you use the SSAT—or your honest assessment that you don't know your level of confidence about a specific measure—are critical for the SSAT to produce accurate results that will be useful for your security planning efforts.

» The SSAT repeats these questions for each measure at each layer, since the same measure can function differently—that is, have different capacity to detect or respond to a threat—at different layers. Your confidence that the measure will detect or respond to a threat may also differ across layers. The SSAT asks these questions in the same order, using the same wording, for the measures in place at each layer.

» The follow up questions also include reminders about aspects of your school context, drawn from your answers to previous questions; these aspects will be helpful to keep in mind as you answer questions. For example, if you indicated that your school has dedicated security staff, the SSAT prompts you to consider their training when you assess your confidence that staff will detect or respond effectively to a threat.

The follow up questions ask you to consider the factors that could affect whether a security measure at your school can perform its function if a threatening incident occurs. When answering the questions in Step 4, keep the following information in mind:

  » The specific security measure about the question is asking you about

  » The layer in which that measure exists (shown in the header of each section of questions)

  » The specific threat and time of the incident described in the scenario (shown at the top of the screen)

  » Aspects of your school context that might affect your confidence that a measure will detect or effectively respond to a threat

WHAT DO THE RESULTS MEAN AND HOW SHOULD YOU USE THEM?

The SSAT results use the information you provided to identify a variety of options you can use to improve your school's security posture. The SSAT will only display results that are relevant to the incident scenario you selected and to your school's context. It will also take into account the security measures already in place at your school and your confidence that those measures will detect and respond effectively to the threat.

The SSAT Results Summary page includes high-level information about the potential cost associated with each option and its likely effect on school climate. This information is intended to help you balance the costs and benefits of each option in the context of budget and the school's educational mission.

Cost and climate ratings shown in the SSAT:

Cost
- $ low cost for most schools
- $$ medium cost for most schools
- $$$ high cost for most schools
- $-$$$ costs for most schools will vary

School Climate
- +   likely positive impact on school climate
- ±   neutral or variable impact on school climate
- –   likely negative impact on school climate

You will have the option of viewing results directly in the SSAT, saving them to your local device, or printing them. The SSAT returns a total of eight results modules:

1

Security measures that need policy development and/or training. This module explains which security meaures need accompanying policies and/or training.

- » Personnel who have safety and security responsibilities need to know what they are supposed to do if an incident occurs (i.e., there is a policy in place) and need to have been trained on relevant actions.

- » Implementing policies and training are a lower cost approach to increasing the effectiveness of existing security measures compared with other approaches, such as increasing personnel.

2

Core policies and plans that are missing. This module identifies overarching policies and plans including lockdown, lock out, and evacuation policies that are missing from your security strategy.

- » Implementing such policies is a lower cost approach to improving school security relative to some other measures.

3

Security measures where performance is uncertain. This module identifies security measures where you need more information to accurately assess their contribution to your school's security.

- » The module returns a list of all measures where you inputted "I don't know" when asked about your confidence in the performance of various security measures.

4

Missing physical design features or technical measures that could make other measures more effective. This module identifies whether the user has measures that could benefit from complementary physical design features or technical measures to improve security.

» Measures like lighting or design features such as clear sightlines can make other personnel-based security measures and CCTV cameras more effective.

5

Measures involving security personnel who do not have communication capabilities. This module identifies where communications capabilities are missing and returns a list of measures that would benefit from the addition of such capabilities.

» Communication capabilities are the key "connective tissue" that enables staff who detect a threat can pass on a warning to others, enabling them to act and giving them more time to do so. Adding them is a relatively lower cost approach to increasing the effectiveness of existing security measures compared with other strategies, such as increasing personnel.

6

Ways to strengthen integration with local emergency responders. This module presents a list of options to enhance linkages between the school and local emergency responders.

» Although the timeline of many school violence incidents is short enough that emergency response focuses on the consequences of the incident, rather than interrupting an incident in progress, certain physical security measures are designed to facilitate emergency response to threats.

» Putting such measures in place requires close collaboration with local emergency responders and can be relatively costly compared with other measures such as policies and training.

7

Measures with low confidence in performance. This module returns a list of all the measures for which you said you had no, or low confidence, in their performance.

» The tool suggests some steps that you could take to increase your confidence, and therefore increase the security value of the measures you already have in place.

8

Layers reliant on one security measure or entirely missing a key security function. If no relevant measures, or only a single relevant measure, are present at any particular layer to detect, delay, or respond to a threat, the SSAT returns a list of the specific layers and physical security functions (e.g., Grounds Perimeter, Delay) as potential options for strengthening.

» A list of measures that are not already implemented at the school, but could improve security capabilities, is included in the SSAT printable Results Summary page. In a robust physical security system, each layer includes more than one measure that can detect, delay, and respond to potential threats. Then, if one measure fails, another is in place as a backup.

» Layers that do not include any security measures or that rely on only a single measure to detect, delay or respond to threats would be high priority areas for strengthening. However, since the implementation of new measures could be significantly more costly than options like improvements in policy, training, or lighting, the SSAT presents these options after presenting lower cost approaches to improving security at your school.

WHAT SHOULD YOU DO BEFORE USING THE SSAT?

The SSAT is meant to be used as part of a holistic planning process. Obtaining an informative result may therefore require input from school staff, local first responders, and members of the school community. Before you use the SSAT, consider forming of a team that includes school staff and community stakeholders such as community organizations, local first responders, and families, and have that team gather relevant local data that will help your school conduct threat and risk analyses. A more complete description of this planning process is described in the companion *K-12 School Security Guide.*

WHAT ARE THE LIMITATIONS OF THE SSAT?

The SSAT attempts to balance several competing priorities. The SSAT was designed to be responsive to school context but also to minimize repetition and completion time. It was designed to be accessible to non-experts and usable without extensive training, but also designed to allow participants to consider the full school security system alongside the cost and school climate implications of various security measures that you may wish to implement. In balancing these competing priorities, developers made several simplifications and assumptions:

» **The SSAT is explicitly not an all-hazards tool.**
  To fully assess your school's level of preparedness, you would need to run the tool multiple times and compare results. A truly all-hazards tool would also include non-violent threats to school safety, such as extreme weather events. These are not built into Version 1 of the tool.

» **Incident scenarios are the basis of the security assessment.**
  The SSAT offers a limited number of incident scenarios that focus on threats such as active assailants, unauthorized parents, and student fights, which are a small subset of schools' security concerns. However, the incident scenarios allow the SSAT to be responsive to local safety concerns (not all threats are equally relevant to all schools) and help minimize completion time by tailoring questions to each incident scenario.

» **The school campus and security assets are organized in layers.**
  The SSAT focuses on four layers that are common to most school contexts but does not consider all possible layers. For some schools, considering a greater or smaller number of layers could be more appropriate for security planning.

» **The SSAT asks about only the most common security measures—not every measure—to reduce burden on users.**
  The SSAT balances this limitation by including the option for the user to manually add additional security measures at each layer relevant to the selected incident scenario.

» **The SSAT treats the ability of each security measure to detect, delay, or respond to a threat as equal.**
  In reality, however, the detection capability that a burglar alarm system provides is very different from the detection capability that a security staff member provides when a violent threat or incident is in progress. The SSAT treats these as providing equal detection capabilities—the simplification allows the tool to look across different measures in an effort to identify areas for improvement.

» **The SSAT asks a discrete set of questions about interactions among security measures.**
  This approach avoids repetition but does not capture all of the possible interactions among security measures and across layers.

CONCLUSION

Security and safety planning is a continuous process. In accordance with the guidance provided by CISA in the companion *K-12 School Security Guide*, consider following the planning process and using the SSAT regularly, or whenever your school experiences substantial changes in relevant threats or implements changes in safety or security plans or capabilities.