CRITICAL RESPONSE GROUP

America's Common Operating Picture.™

The School Leader's Guide to Emergency Mapping Procurement

How to Evaluate Mapping Solutions that Support Real-World Emergency Response

The Nation's Leader on Critical Incident Mapping Data. To learn more visit: crgplans.com

Why Emergency Mapping Is One of the Most Important Safety Decisions a District Will Make

When evaluating school safety investments, emergency mapping is frequently categorized alongside general school safety tools and treated as a secondary feature within a broader safety platform, or thought of as part of standard facilities documentation.

Those misconceptions though, could have a huge impact on a school's emergency response outcome during an incident. An emergency response map is a critical safety tool. They are purpose-built for easy communication that guides police, fire, EMS, and dispatch during real incidents under stress.

A high-quality emergency response map is validated through an on-site walk-through and ensures all responders are working from the same standardized, XY grid-based navigation that's geo-referenced and oriented to true north. The best emergency mapping solution can have a direct impact on response speed and coordination

The distinction between emergency response maps and facilities maps matters: School emergency response maps are the operational foundation upon which every emergency response protocol, first responder coordination effort, and incident response decision depends.

Facility maps were never designed to guide emergency decision-making. Maps built from architectural or facilities drawings tend to carry outdated layouts, irrelevant technical details for emergencies, and room labels that don't match how staff and students actually refer to spaces on campus. In a crisis, that gap between the map and reality slows responders, creates confusion, and increases risk at exactly the moment when clarity is most critical.

Emergency mapping should be treated as a foundational safety investment, not a bolted on feature to a software purchase. In this guide, we'll explain what emergency maps are, what they are not, why they should be content-first solutions, and best practices for evaluating emergency mapping vendors.

Micro™ CRG

A Micro™ CRG is created for EACH FLOOR to coordinate response inside of the building.

MACRO™ CRG

A MACRO™ CRG is created for each campus to coordinate response outside the building.

What Is an Emergency Response Map? And What it is Not

Emergency response maps are designed to support a coordinated response with first responders that relies on shared language for an outcome that's as streamlined and efficient as possible.

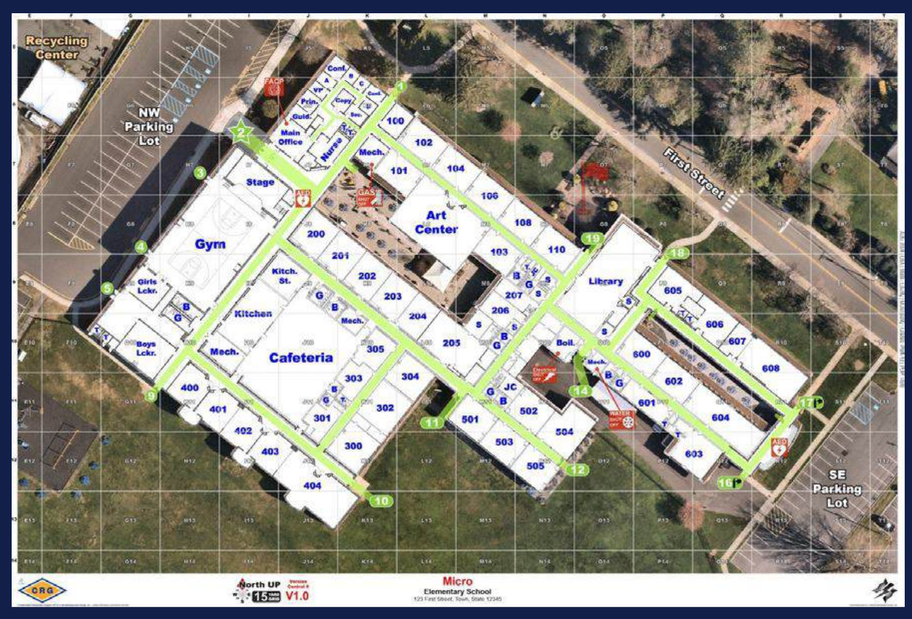
A critical component of any preparedness effort is ensuring that first responders have immediate access to standardized emergency response maps. Emergency response mapping has become a national priority, with more than 22 states passing laws or initiatives requiring schools to implement this technology.

Emergency mapping for schools can be mistaken for another type of software, a feature inside a safety app, or a different use for a facilities map. In reality, school emergency response maps are not a product feature or a separate software workflow; they are the safety backbone of a school's safety operational infrastructure.

Enabling better communication and navigation during an incident has never been more important. Abundant Life Christian School in Wisconsin faced an active shooter situation in December 2024. Fortunately, responding law enforcement teams were able to draw on the school's Collaborative Response Graphics (CRGs) to quickly assess entry points, navigate the building's hallways, and zero in on the threat.

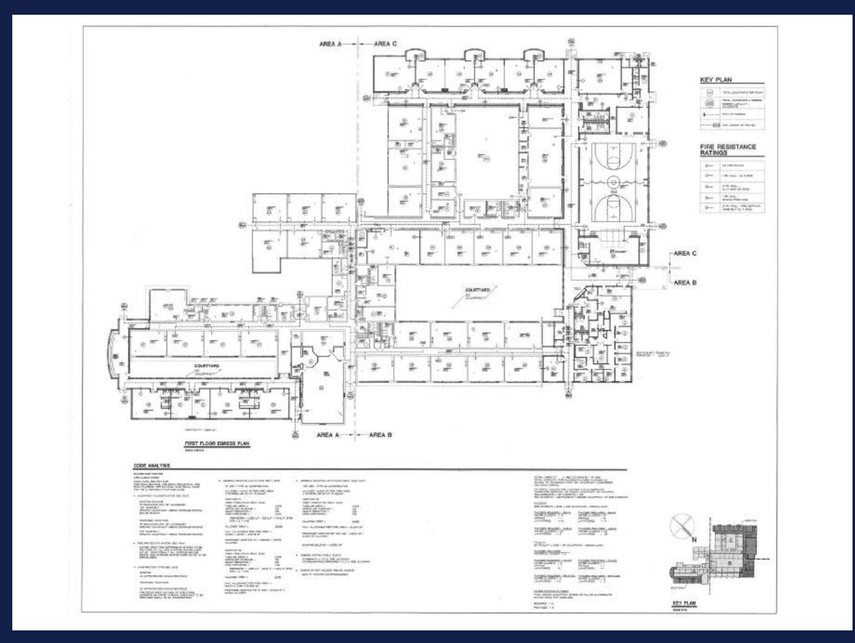
Having access to accurate, real-time mapping data gave officers the situational awareness they needed in a high-stress situation. This underscores what high-quality emergency maps, thorough preparation, and strong collaboration between schools and law enforcement can accomplish when it matters most.

Emergency maps are:



- Purpose-built operational tools for first responders
- Used during active incidents
- Designed to perform under high-stress environments
- Standardized for multi-agency response
- Ensure clear and concise communication during an emergency
- Built for speed, clarity, and navigation during time-sensitive response needs

Emergency maps are not:



- Facility drawings that support daily operations
- Maintenance maps
- Planning diagrams
- Interactive campus apps
- Digital IT asset management tools
- Tools for classroom planning or staff layout maps
- 3D Digital twins
- GIS software platforms

Why Emergency Mapping Must Be Content-Driven, Not Software-Driven

When making decisions about emergency response mapping solutions, you may come across various models.

Some vendors will say “local police can use our software,” or that local authorities “can pay to log into our tool,” but these claims must be verified before purchasing decisions are made. All responders are using different systems, apps, and tools to do their jobs effectively. They don’t need another tool to log into during a critical incident, especially software that may require special logins.

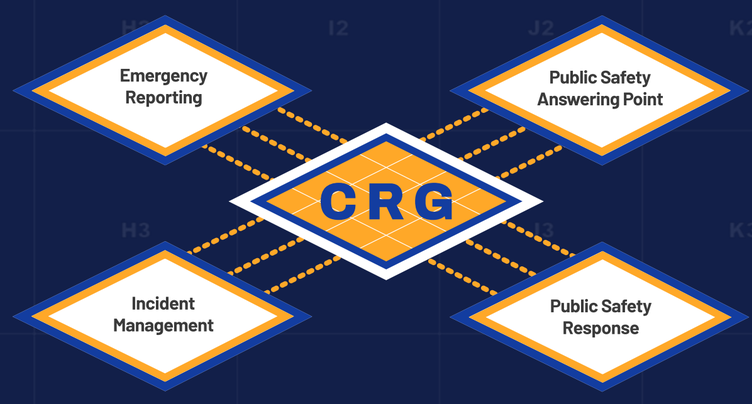
A high-quality emergency response map has to have a content-first approach. Here are distinctions to note when evaluating software-driven emergency map models versus content-driven map models.

A content-driven emergency mapping solution enables law enforcement to coordinate and collaborate in a crisis to reduce response times and act decisively when every moment matters. Critical Response Group’s CRGs seamlessly integrate into the technology platforms law enforcement already use and trust, ensuring these maps are always there when needed.

Software-Driven Mapping Model

- Requires platform licenses
- Requires logins and permissions
- Locks maps into a single ecosystem
- Ties access to vendor technology
- Limits who can use the maps

Content-Driven Mapping Model



- Maps live inside responder systems
- Work across CAD, 911, command, & mobile platforms
- Are platform-agnostic
- Are universally accessible file formats
- Are not tied to software contracts

“I had recently tasked my staff with obtaining maps for public locations, but was disappointed by the inconsistency, outdated information, and lack of tactical usability in the maps we reviewed. We introduced the CRG mapping system to Monterey County’s public safety agencies, schools, and critical locations. I am confident this innovative mapping process will enhance law enforcement’s ability to locate assailants quickly, saving valuable time and ultimately lives.”

– Dave Hober, Chief of Police Monterey, CA

Why Emergency Maps Are the Foundation Layer for School Safety

It can be tempting to add an emergency map as a package with a panic button program, or **to assume that other school safety systems will inform first responders exactly where a school incident is taking place, but these solutions don’t replace emergency mapping.**

There is a place for school safety software like panic buttons and wearable devices, video surveillance integration, and more, but an emergency mapping solution needs to be a separate purchase for accurate locational context and faster response times.

Even if a panic button shows up blinking on a screen that a first responder can see, it doesn’t provide spatial context or an understanding of exactly where that notification is in the school. Without a high quality emergency map to view and orient the responder, they’re not going to know what room the incident is in, which floor, the closest access door, where the nearest AED is, as well as other critical information CRG includes on each map.

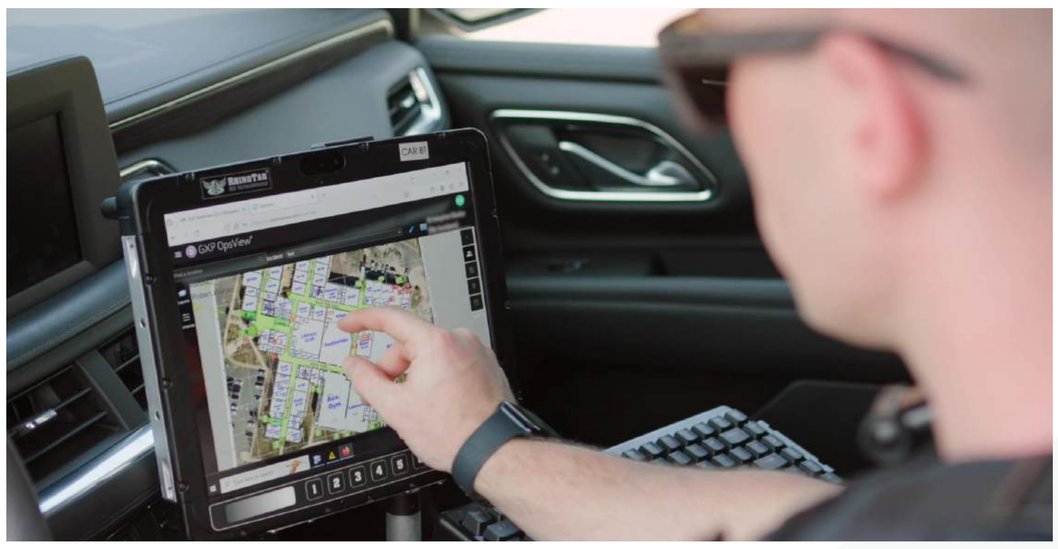
When first responders have access to the best possible tools (including accurate emergency response maps), they are better equipped to act decisively and protect lives when it matters most.

A high-quality, accurate map should be the foundation of every school safety system and is one that can be built upon as other tools are added. CRGs serve as that base layer, integrating camera locations, panic button alerts, security access points, and critical landmarks like AEDs, trauma kits, utility shutoffs, and key boxes. Before making any other safety investment, get the emergency map layer right.

Emergency maps serve as the base layer for:

- Access control systems
- Camera platforms
- Panic buttons and wearable devices
- Emergency communications
- Visitor management
- Threat detection
- Dispatch and response systems
- Command center operations

Problems that can arise when a school does not have a first-responder-ready map as part of a school safety protocol include:



- Alerts that show vague location context
- Camera feeds lack spatial reference and context
- Access control systems don’t show crucial entrances/exits or are challenging to navigate
- Dispatch deficits impact building intelligence
- Command deficiencies reduce situational awareness

The Operational Requirements Every District Should Mandate

While many states (22-plus) already outline emergency mapping requirements for schools, whether there is legislation or not, these are the best practices for emergency school maps from across the nation.

✅ Emergency maps should:

- Be designed for first responders across local, state, and federal public safety agencies
- Allow for data to be downloaded onto individual first responder devices for access offline
- Include grid-based navigation
- Be in a format compatible with software platforms used by local, state, county, and federal law enforcement agencies that provide emergency services to the specific school
- Support a single Common Operating Picture
- Work across all responder platforms without logins and licenses
- Be printable
- Include a gridded overlay with x/y coordinates and point true north
- Be vendor and platform-agnostic
- Be compatible with security software platforms in use by the specific school district
- Be professionally validated for accuracy via an on-site walkthrough from the mapping vendor
- Be governed and maintained
- Include site-specific labeling that reflects the building's actual layout, from room labels, to hallway names, door and stairwell numbers, to hazard locations, utility shutoffs, key boxes, AEDs, and trauma kits

❌ Emergency maps should not:

- Requires per user licenses or logins
- Depend on proprietary apps
- Allow uncontrolled editing and manipulation of the data
- Fragment information with excessive filters
- Lock mapping data into a single platform

"Critical Response Group (CRG) did outstanding work in enhancing [our] school safety through the creation of detailed, easy-to-use building maps....They provided a clear and unified visual tool that improves coordination among law enforcement, fire departments, and school officials during critical incidents. [Now] our schools are better equipped, our responders are more aligned, and our communities are safer."

– Josh Zabin, Ridgefield Public Schools, NJ

How to Evaluate Emergency Mapping Vendors

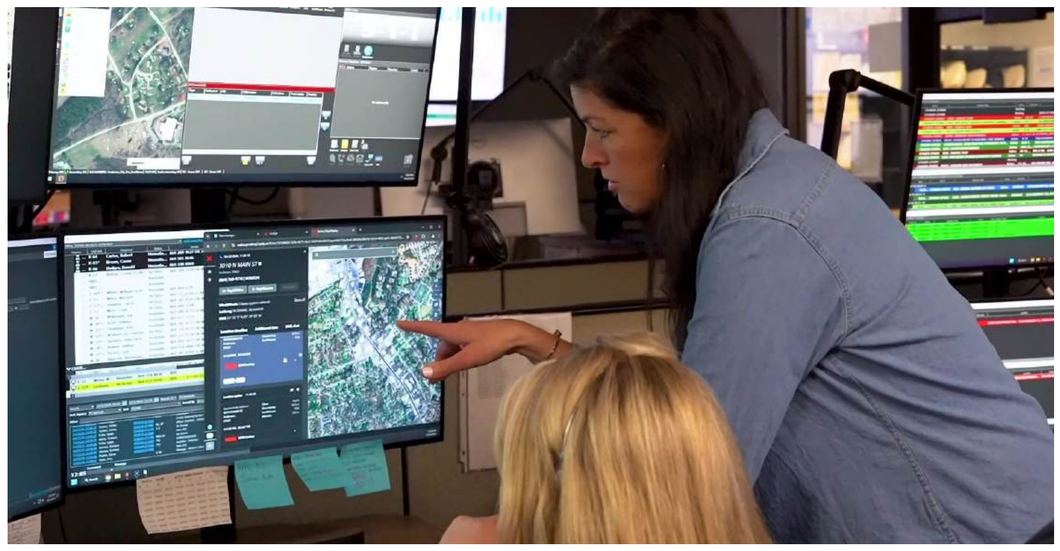
When selecting an emergency map provider for your school district as part of school safety software and emergency response solutions, consider this procurement framework and list of questions during your analysis.

Evaluate Operational Readiness

- Who are the maps built for?
- Where are they used during incidents?
- How fast can responders access them?

Map quality

- Are the maps field-validated via an on-site walkthrough? Who is doing the work of walking the school and verifying the information, you or the mapping provider? (It should be the provider)
- Are they including your public safety team as part of the map-building process or final review?
- Do they follow public safety standards for labeling, allowing for necessary information to be included, like AEDs, key boxes, trauma kits, fire access control panels, and utility shutoffs?



Interoperability

- Which CAD and 911 systems support the maps? Ask to see what maps look like in those systems.
- Which mobile responder platforms support them? Ask to see what maps look like in those systems.
- Which school safety platforms support them? Ask to see what maps look like in those systems.

Accessibility

- Are they platform-agnostic?
- Are they available offline or printable if needed?
- Does public safety lose access to the maps if we stop paying for the software?

When schools and the responding public safety teams work together, the schools start to better understand what public safety professionals need to know about their building during an emergency and can address those factors in their emergency maps. This can help improve overall incident communication and response times.

Common Procurement Pitfalls to Avoid

Don’t make these mistakes when evaluating emergency response mapping options.

You’re buying mapping as a software feature.

Vendors frequently bundle mapping with other safety products, which drives up cost and relegates emergency maps to a secondary feature rather than the core product they need to be.

> **Know this.**
> Emergency maps are the foundational layer on which everything else is built.

You’re letting schools self-edit maps, impacting life-safety data.

When individual schools rename rooms, relabel safety data, or change formatting, continuity breaks down. First responders need consistency to orient themselves, move with confidence, and communicate clearly during a critical incident.

> **Know this.**
> Emergency maps should be locked once finalized and reviewed by school safety and responder personnel. Use separate solutions for internal operational needs.

You’re locking maps into a single technology platform

Emergency maps shouldn’t live behind software licenses and special logins. When every second counts, access can’t depend on a vendor’s technology.

> **Know this.**
> The right emergency response mapping solution is content-driven and immediately accessible to all responding agencies.

You’re prioritizing facilities features over responders’ usability.

It’s important that schools have accurate layouts, clear labels, and site-specific details on internal planning maps that support daily operations, facilities management, and planning in school districts.

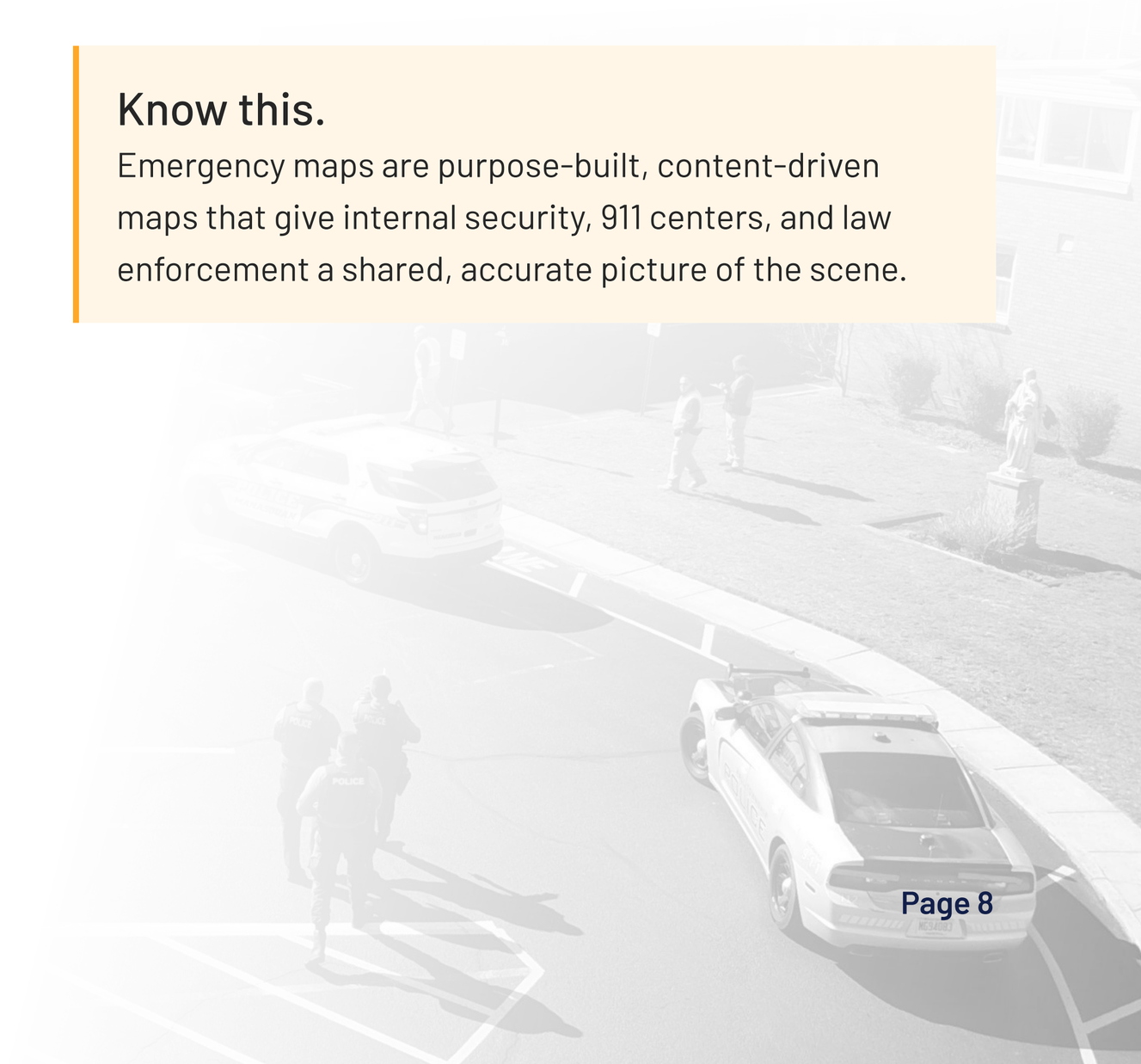
But emergency response maps are distinct safety tools, not facilities documents. They require specific standards and must be built for a multi-agency, time-sensitive response.

> **Know this.**
> Facility maps aren’t designed for the systems first responders rely on. Emergency maps are.

You’re treating emergency mapping as a facilities project.

Facility maps were never designed for emergency decision-making. Outdated layouts, irrelevant technical details, and labels that don’t match how spaces are actually used create confusion exactly when clarity matters most.

> **Know this.**
> Emergency maps are purpose-built, content-driven maps that give internal security, 911 centers, and law enforcement a shared, accurate picture of the scene.



A Model Emergency Mapping Procurement Framework

Use this step-by-step framework to guide your district's evaluation and selection process.

🚨 Needs Assessment

Audit your current state of emergency preparedness mapping across all campuses. Identify gaps in first responder access, map accuracy, and whether existing maps are field-validated and formatted for use during an active incident.

🏫 Stakeholder Alignment (School + Public Safety)

Bring together district leadership, school safety staff, and your local law enforcement, fire, and EMS partners before evaluating any vendor. First responders should have direct input into what they need from a map, and their buy-in is essential to ensuring maps are actually used when it counts.

🗺️ Operational Requirements

Define what your emergency maps must do in the field. Consider: Do maps need to work offline? Be printable? Include site-specific labeling like AEDs, key boxes, and utility shutoffs? Establish these non-negotiables before evaluating any solution.

💾 Tech. and Interoperability Requirements

Confirm that any mapping solution integrates with the CAD, 911, and mobile platforms your local responders already use without requiring new logins or licenses.

Maps that live inside a proprietary system are maps that may not be accessible when seconds matter. A content-driven emergency response map that works within your agencies' platforms is the right solution for your district.

📝 Governance and Update Standards

Establish who owns the maps, who can request changes, and how updates are triggered when a building layout changes. Emergency maps should be locked once finalized and only updated through a specific process. Uncontrolled edits create confusion and potentially dangerous inconsistencies across responding agencies

⛑️ Implementation Planning

Coordinate rollout with both school staff and public safety partners to ensure maps are distributed into responder systems before they're needed.

Confirm that maps are validated through an on-site walkthrough conducted by the vendor, loaded into local dispatch and command systems, and that all stakeholders know how to access them.

A tabletop planning exercise where key stakeholders review incident response plans and emergency maps is recommended.

05: GET IN TOUCH

Building the Foundation for Safer Schools

When school safety is built on the foundation of emergency response maps that have been designed for a first-responder incident response, verified with an on-site walk-through, are vendor and platform agnostic, and allow teams to act swiftly and effectively, other safety features can be added on.

The right emergency mapping solution becomes the foundation for a district's entire safety ecosystem. This life-safety infrastructure enables a common operating picture for emergency response teams and strengthens every additional school safety investment.

Before choosing an emergency mapping agency, review the brand's capabilities across the checklists and procurement framework outlined on previous pages to ensure it'll be an effective solution for your school district.

Critical Response Group, Inc., created Collaborative Response Graphics (CRGs), visual communication and collaboration tools usable under high-stress incident response situations, as high-quality emergency response maps that combine facility floor plans, high-resolution imagery, and gridded overlays into a single, operationally accurate map built for first responders.

Contact CRG

for a briefing session to learn how your school can benefit from emergency response maps.

CRG IN NUMBERS

The Nation's Leader on Critical Incident Mapping Data

Enabling better communication and navigation during an emergency response for schools, hospitals, office complexes, retail locations and other heavily populated structures.

70,000
Maps created nationwide

180+
Integration partners

Contact us for more information on how we can map your local critical infastructure.

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