



WHAT YOU MIGHT NOT KNOW ABOUT CRITICAL FIRST RESPONDER COMMUNICATION IN YOUR SCHOOL & 5 STEPS TO IMPROVE IT.

***This resource is for educational purposes only and shall not be considered specific, professional advice for your organization.**

INTRODUCTION

As someone responsible for student & staff safety, you likely wonder if you're doing all you can to minimize risk in the event of an emergency requiring clear radio communications for fire, police, sheriff, and EMT personnel. Aspects of this include fire code compliance and radio communications coverage networks.

All of which helps ensure that safety and security personnel have adequate coverage for operations and in case of emergency.

You might not know that, unfortunately, many schools lack sufficient radio communication coverage to work for first responders in an emergency. That means that when efficiency and communication are absolutely critical, first responders may be unable to communicate.

To better understand your building's coverage, and what actions may be appropriate to improve first responder communications, get started with the list below.

Are you covered?



Emergency responders communicate over a dedicated 2-way radio system operated by a local public safety agency and not the cellular telephone network. Measure your building's emergency responder radio signal coverage and dead zones. This involves having a **team from a professional system integrator** on site for roughly one hour to measure gaps in communication coverage. Based on the assessment, you'll have actionable information on addressing the issues and what to do next. At Castle Rock Microwave, we use state-of-the-art equipment to identify your building's dead zones and work with you on customized steps to address them. You can book a **complimentary expert consultation.**

Understand your building's unique needs.



Every school has the same needs when it comes to radio communications for first responders: reliable and clear audio. However, every school building is different -- from layout to the surrounding geography -- and common building materials such as concrete, steel, and low-E glass can significantly impact in-building radio coverage provided by surrounding radio towers. A **signal coverage measurement**, paired with recommendations from professionals, can help you determine the appropriate equipment and solutions to enhance first responder radio coverage.

Keep up with the current fire code.



Staying compliant with your local fire code's radio coverage requirement is important to student and staff safety. In addition, it can impact funding depending on your local mandates. Connect with official agencies, such as the Fire Department, and your School Resource Officer, to learn more about your school's compliance status. Consider, too, that audio quality reading requirements change over time and dictate new acceptable standards. Remember that most local code requires annual inspections of these systems. Not sure what jurisdictional agencies you're required to comply with or what your compliance requirements are? **Get in touch with our team & we'd be happy to help.**

Assess your technology.



If you already have a radio enhancement system in place, your technology may have been best-in-class when it was installed. However, older systems are often susceptible to newly installed public safety radios, which could cause interference issues for emergency responders. Make sure that you're aware of what's adequate and have a plan to regularly assess the communication technology you use. Keep in mind the lowest-cost solution may not be the best. Choosing low-quality providers and solutions can lead to significant issues, including future costs when built incorrectly.

Monitor the health of your system.



Communication systems should not be built and then forgotten. Real-time network health and status updates help prevent outages because you can be made aware of issues before they become critical or take down a network. This helps technical support stay on top of problems and take the necessary steps to get your network running smoothly again. Also, keep in mind that systems can develop issues that may go unchecked such as bad backup power, damaged components, and human error. If you don't currently have monitoring in place, **complimentary expert consultation**

While these actions are a good starting place to shed light on your building's communication system, nothing replaces professional, customized information specific to your situation.



WHAT'S NEXT: YOUR ACTION PLAN

All students and staff deserve the highest level of safety and security. At Castle Rock Microwave, a systems integrator headquartered in Colorado and serving the Western United States, we help building safety leadership keep people and systems safe and connected.

If you'd like to schedule a complimentary expert consultation for your school, request to [book here](#) or call 720-798-4520. Not ready for a signal measurement, but still have questions? [Get in touch](#) with a member of our team & we'd be glad to help.



In-building Emergency Communication Assessment Calculator

Use the calculator below as a starting point to address your school's communication infrastructure and possible next steps to improve in-building communication for day-to-day operations and first responders.

Question 1:

Does your school already have a signal enhancement system for first responder radios?

- Yes = 1
- No = 10
- Unsure = 10

Question 2:

How large is your school?

- Up to 100 students = 1
- 100 to 1,000 students = 5
- 1,000+ students = 10

Question 3:

Is your system being monitored in real-time by an operations center or partner for problems or outages?

- Yes = 1
- No = 10
- We don't have a system or are unsure if we have one = 10

Question 4:

Is your system being inspected annually for problems or outages?

- Yes = 1
- No = 10
- We don't have a system or are unsure if we have one or if it's inspected = 10

Question 5:

If your school has a signal enhancement system for first responder radios, when was it installed?

- Less than 2 years ago = 1
- 2-5 years ago = 5
- More than 5 years ago = 10
- We don't have a system/unsure if we have a system = 10

Question 6:

If your school has a signal enhancement system for first responder radios, is it inspected yearly?

- Yes = 1
- No = 10
- Unsure = 10

Question 7:

How well does cellular service work in your building (often times, poor signal for cellular service is a good indicator of public safety radio service)?

- Poor = 10
- OK = 5
- Great = 1

Question 8:

Have you recently had, or soon have plans for major renovations (i.e. new gym, theater, windows, additions)?

- Yes = 10
- No = 1
- Unsure = 5

Calculate your results on the next page!

CALCULATING YOUR SCORE

If you scored:

50+ POINTS

Based on your replies, it looks like your situation could have issues with first responder communication problems. It likely makes sense to connect with professionals about your in-building communication and possible dead zones. You can **request a complimentary expert consultation** or next steps.

15-49 POINTS

Glad you have a communication system, but it sounds like it may be outdated or insufficient for your needs, and an inspection can ensure proper performance. If you're interested in learning about a complimentary expert consultation for your school, **reach out to us here.**

LESS THAN 14 POINTS

Sounds like you're prioritizing in-building communication – way to go! It may still be worthwhile to get a complimentary expert consultation as a check-in, or if you don't currently have a solution in place for monitoring and inspecting. If that would be helpful to you, you can **contact our team.** Great work on fostering a safe and secure environment for your students and staff.

Want to learn more about in-building communication? Get in touch with our team today.



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