

Case Study | Orangeburg County School District



MCA Radio Solutions Help Ensure Safe Student Transport County-Wide

Case Overview

When the four school districts in Orangeburg County, SC consolidated in 2019, with the district growing to 31 public schools—elementary schools, middle schools, high schools, along with three career academies—serving more than 13,000 students, Orangeburg administrators faced a number of logistical challenges. Namely, Orangeburg County School District (OCSD) faced a problem coordinating its fleet of school buses and communicating with administrators, safety personnel, and parents when delays or incidents occurred on its buses.

Located to southeast of Columbia, South Carolina, Orangeburg County is spread across a large geographic expanse — with the county and its schools covering over 75 miles from east to west.

A bond referendum of \$4 million dollars in 2020, which experienced overwhelming support from voters, enabled OCSD to make much needed technology upgrades in the classroom and in the field by upgrading their communications devices and infrastructure.

The Challenge | Improving Coverage, Clarity, and Capacity

Many of their school buses either didn't have radios, or had outdated radios with limited coverage and capacity. After an evaluation of the current state of the districts mobile communications, OCSD Administrators knew that outfitting their buses with new mobile radios was a top priority. Especially after learning that, prior to their partnership with the team at MCA, their bus drivers had been using cell phones to communicate critical messages to school administrators.

Dr. Foster and many other administrators believed that their current dependence upon personal cell phones for mission-critical communications was not only inefficient, but, more importantly, could jeopardize student safety overall.

Simply put, OCSD needed a better way to ensure the safety of students on their buses as they traveled across the county.

"Turning around a school academically is something I had familiarity with, and something I felt we could achieve, but students who aren't safe — whether that be on the playground or on buses — can't be expected to learn. As educators, we need to take a holistic approach to our students' learning and safety."

*Dr. Shawn Foster
County Superintendent*

In addition to the in-vehicle communications issues they identified, they also realized the number of base stations their mobile and handheld radios use to effectively communicate weren't optimally spaced to accommodate their newly consolidated district.

Many community residents expressed that OCSD Administrators demonstrated great foresight and fiscal prudence in allocating a large portion of the money raised in their bond issue to update the communications infrastructure for all 31 schools and the 13,000 students under their care.

With the funding allotted, and the problem identified, all they needed now was a trusted advisor in the communications space to see their vision become a reality.

Industry Overview

- Public School District
- 31 Individual Schools
- 13,000+ Students
- 76 Mile Area

Featured Solutions

- MotoTRBO XPR 5550e Radios
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- CapacityMax™ Radio Network

Benefits Observed

- Improved Clarity & Coverage for Voice, Video, & Data
- Enhanced Wi-Fi & Bluetooth Communications
- Direct Connection to Public Safety & Emergency Services
- PTT Functionality with Increased Capacity and Enhanced Features



The Solution | MOTOTRBO™ Radios and Capacity Max Systems

The main improvements to their mobile communications came in the form of improved equipment for their drivers and fleet managers to use for everyday operations as they transported Orangeburg County's most precious cargo over hundreds of miles of rural roads. After consulting the team at MCA, we were able to help them select mobile and handheld radios from our MOTOTRBO™ line.

For communications within each school bus, we deployed MOTOTRBO 5550e Mobile Radios. These devices offered several features that make them the preferred option for school bus fleets across the nation. Fully equipped with integrated Wi-Fi and Bluetooth 4.0, each radio enables their bus drivers to communicate with school administrators, security officers, local law enforcement officials, and first responders at the push of a button.

For administrative communications (fleet managers, faculty, and security teams), we recommended the MOTOTRBO XPR7550e. Versatile and powerful, MOTOTRBO combines the best of two-way radio functionality with the latest digital technology. Each of these handheld radios integrate voice and data seamlessly, offer enhanced easy-to-use features, and deliver business-critical advantages like integrated Bluetooth® and Intelligent Audio.

To tie both the mobile and handheld solutions together, and boost communications coverage, we further helped OCS D deploy additional base stations to fill in major gaps in existing coverage across the district. MOTOTRBO™ Capacity Max (sometimes referred to as CapMax) architecture is optimized for high performance, high efficiency and graceful scalability, enabling instant, reliable voice and data communications, better decision-making, and seamless coordination across the entire county.

Part of Motorola's TRBOMAX radio system, their radio technology provides the largest coverage area in South Carolina (up to 95%) with its CapMax network. Taken together, their MOTOTRBO XPR 5550e mobile radios, base stations, and MOTOTRBO XPR 7550e two-way devices, MCA's solutions provided the OCS D with a comprehensive communications ecosystem, that increased the safety of all their students while allowing them to instantaneously initiate responses from first responders should an emergency situation arise.

The Results | Expanded Coverage and Capacity for Student Safety

OCS D bus drivers are now empowered to report incidents quickly, from garden-variety bullying to vehicle breakdowns to more serious disturbances. These enhanced capabilities have paid enormous dividends in safely ferrying students from their school to their homes, as well as on field trips. Given that CapacityMax™ provides comprehensive coverage from the Upstate to Hilton Head, parents and school personnel can rest assured that their children and students will never be out of contact.

MCA is proud to have worked with such a diligent team of administrators and faculty from the OCS D and praise them for recognizing the gaps in their communications system and assembling plans that drove much-needed change. By selecting MCA to solve their communications problems, the Orangeburg County School District received solutions that provided the clearest signal coverage on the market, along with the most robust communications network.

As a result, the parents of students attending schools in Orangeburg County today can rest assured that their children will be safe and protected wherever OCS D school buses may roam.

"Parents can now rest assured that their children are safe not only at school, but as they travel to and from school as well."

Dr. Shawn Foster
County Superintendent



About MCA

We are the trusted advisor for a safe, secure, and efficient workplace. MCA offers a carefully researched portfolio of voice, data, and security solutions. As your trusted advisor, we reduce the time and effort needed to research, install, and maintain the right solutions to make your workplace better.

When you choose MCA, you're also connecting to our Service-First DNA. With our Managed Technology-as-a-Service (MTaaS) offering, you'll never be surprised by hidden costs or fees. We offer a flat, budget-friendly recurring cost without additional finance charges. Our team of experts will manage your solution from start to finish, giving you the best return on your investment. When combined with our SecurePlan™ suite of tools and services, we proactively support our customers by ensuring compliance with SLA terms — remotely troubleshooting and capturing information, monitoring for predictive signals such as drive failure alerts, thermal conditions, and network loads — to address them prior to failure, maximizing the uptime of your critical security systems.

Avoid training employees on how to use our solutions: when you partner with MCA, we shoulder the burden of managing system upgrades and creating road maps for future technology upgrades, while maintaining and supporting your solution throughout its life-cycle.

CONTACT US TODAY TO FULFILL ALL YOUR RADIO COMMUNICATIONS NEEDS



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