Enhancing Emergency Response in Charleston County, SC

Integrated Technology with RapidDeploy, Skyline, and TRAINFO

Overcoming Charleston's Emergency Response Challenges

Charleston County, South Carolina, is a historic coastal area with a complex emergency response landscape. Charleston's vast geography includes extensive waterways, requiring careful coordination of maritime, roadway, and rail-based emergency response efforts. With limited ingress and egress routes, the county frequently experiences traffic congestion and transportation bottlenecks that can significantly delay first responders.

A Historic County with Modern Emergency Response Challenges

Aging infrastructure, coastal geography, and reliance on key transit routes further complicate emergency response efforts. Even minor roadway incidents can cause major disruptions, while daily commutes, large-scale events, and weather-related conditions add to the county's traffic challenges.

Rail Crossings: An Obstacle for First Responders

Rail crossings pose an additional obstacle for first responders, as frequent train blockages create bottlenecks along already congested routes. On average, *emergency vehicles in Charleston face delays of more than three minutes at blocked crossings,* a critical issue when every second counts. Traditional crossing signals, such as flashing lights and gates, provide too little advance notice, leaving responders without the ability to reroute efficiently.

TRAINFO

SKYLINE
TECHNOLOGYSOLUTIONS

RapidDeploy
a Motorola Solutions Company

The Need for a Smarter, More Efficient Emergency Response Solution

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Given these challenges, Charleston's emergency response agencies require a comprehensive, technology-driven solution to improve situational awareness and optimize response times. Charleston County partnered with RapidDeploy, Skyline, and TRAINFO to create a real-time, data-driven approach to emergency response.

Enhanced Traffic Visibility with Skyline & RapidDeploy

Charleston utilizes Skyline's real-time video sharing platform, providing live streaming South Carolina Department of Transportation (DOT) traffic cameras integrated directly into RapidDeploy's Radius Mapping application.

This allows emergency responders to monitor live roadway conditions across the entire state of South Carolina —including high-risk congestion areas and major entry/exit points into the county. These camera feeds are viewable inside of Radius Mapping alongside all of the other critical data feeds and layers utilized by Operators, eliminating the need to login to separate applications or swivel to another screen.

With perpetual access to those real-time camera feeds and that data, responders can immediately assess roadway incidents and adjust their routes before delays impact emergency response times.

Predictive Train Blockage Data with TRAINFO & RapidDeploy

To reduce train-related delays, TRAINFO's sensor-based technology was integrated into RapidDeploy's Next Generation 911 mapping technology.

TRAINFO's sensors, placed near Charleston's rail crossings, detect approaching trains and predict blockages up to 10 minutes in advance. This allows 911 call-takers to reroute emergency vehicles in real time, ensuring that responders avoid blocked crossings and maintain the fastest possible route to an emergency scene.
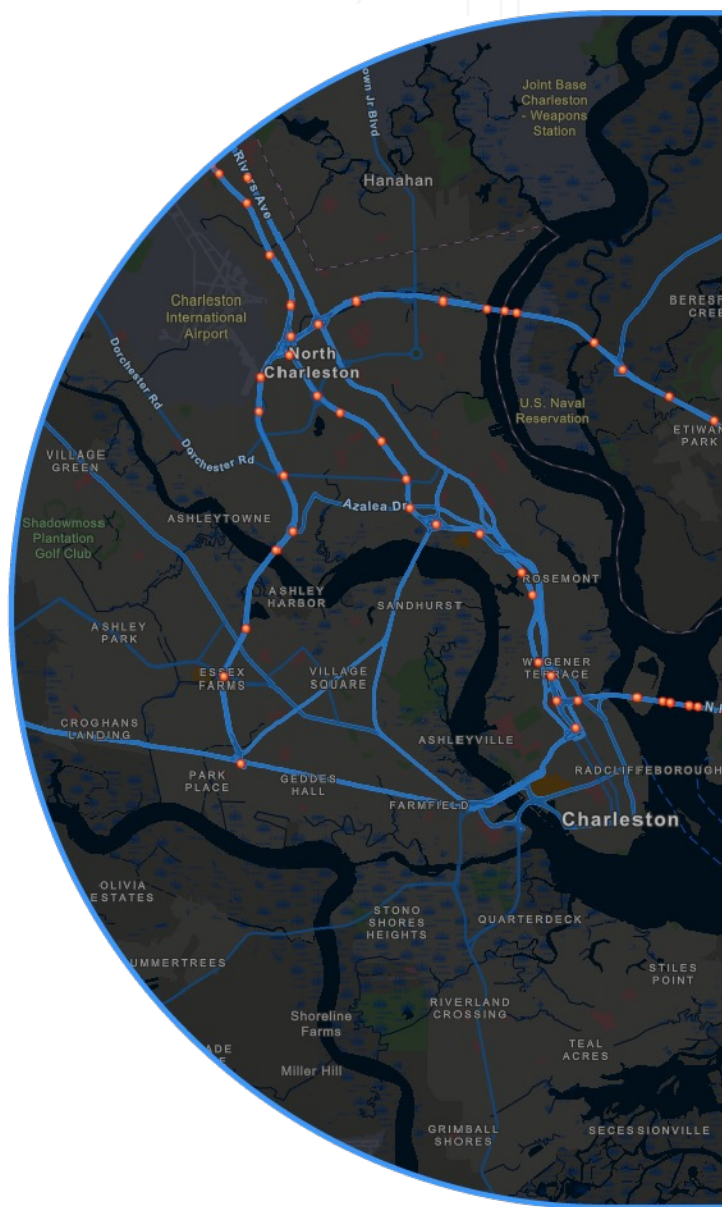
Smarter, Faster, Safer: How Charleston County Transformed Emergency Response with Real-Time Technology

The integration of Skyline's real-time video sharing platform, and TRAINFO's predictive train monitoring with RapidDeploy's technology, has led to significant improvements in Charleston County's emergency response capabilities:

→ **Real-Time Traffic Monitoring**
First responders now have live access to road conditions statewide inside of Radius, allowing them to adapt to congestion and roadway incidents instantly.

→ **Reduced Train Blockage Delays**
The implementation of TRAINFO's system in North Charleston has led to a *91% reduction in first responder delays caused by train crossings*, with at least one emergency unit rerouted per day to avoid blocked crossings.

→ **Optimized Emergency Response**
With increased situational awareness and smarter routing decisions, North Charleston's emergency services have improved response times, reduced congestion, and enhanced overall public safety operations.

" By leveraging RapidDeploy's interoperable mapping technology alongside Skyline's real-time traffic monitoring and TRAINFO's predictive rail data, we have transformed Charleston's emergency response system—ensuring that critical services reach those in need without unnecessary delays. "

MATTHEW HIBLER
9-1-1 Technology Manager
Charleston County Public Safety, SC

About RapidDeploy

RapidDeploy is a leading cloud-native emergency response platform that enhances situational awareness and improves response times through real-time data integration and mapping technology.
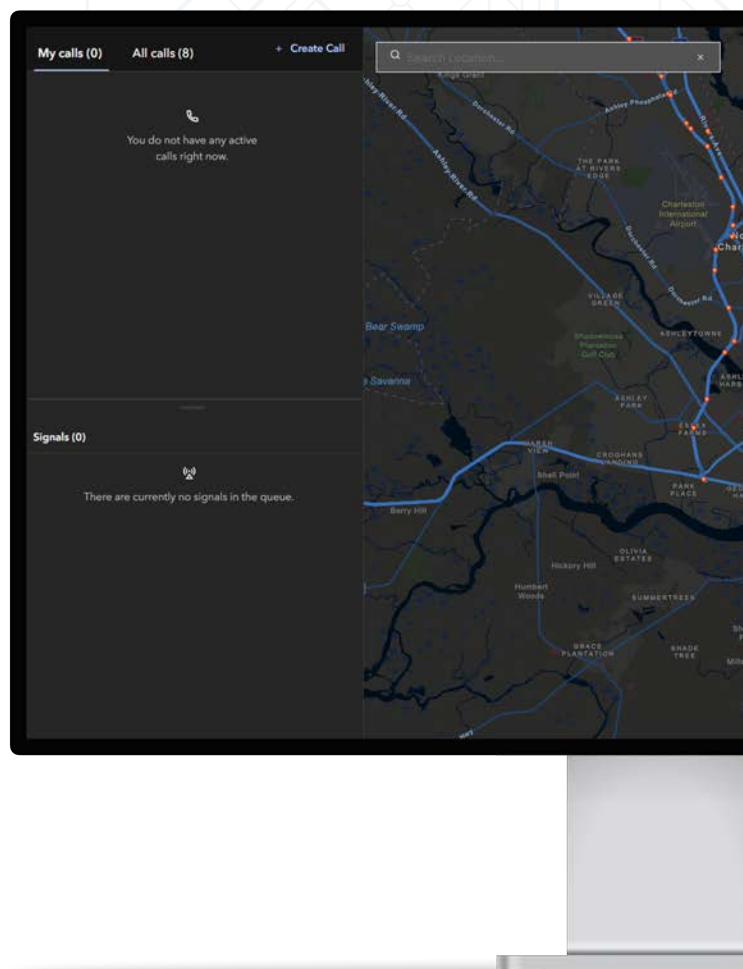
www.rapiddeploy.com

About Skyline

Skyline's industry leading video sharing platform enables real-time video sharing from unlimited trusted partners and camera sources into RapidDeploy and other endpoints, increasing situational awareness and enabling first responders and emergency management to make better and faster public safety decisions.

www.skyline.net

About TRAINFO

TRAINFO delivers predictive rail crossing data using sensor-based technology, helping emergency responders avoid train-related delays and improve overall response efficiency.

www.trainfo.ca

Get a demo:

info@rapiddeploy.com

www.rapiddeploy.com