



| Kanawha County School District

**Zonar and Kidde: partnering to improve
school bus fire safety**



Organization

Kanawha County School District

Website

kcs.kana.k12.wv.us

Industry

Pupil

Location

Charleston, West Virginia

Operation

200 school buses

22,000+ student riders daily

Solutions

- Kidde Technologies Student Transport Automatic Fire Sensing and Suppression Systems (AFSS)
- Zonar Ground Traffic Control®
- Zonar V4® TCU

Benefits

- Provides more time for bus fire evacuation
- Lower emergency response time
- Safer, more efficient fleet operations overall

West Virginia's Kanawha County School District, located in the state's most populous county, transports more than 22,000 students a day. In light of the NTSB's guidance, Kanawha leadership wanted to be proactive about taking their fleet's fire protection to new heights.

To increase transportation safety, the school district sought an economical way to add advanced fire protection to their school bus fleet management system. Kanawha found the answer in a combination of Kidde Technologies Student Transport Automatic Fire Sensing and Suppression Systems (AFSS) and the district's existing Zonar smart fleet management system.

"First and foremost, we're concerned about human life," says Brette Fraley, Kanawha's executive director of transportation. "We want fire safety systems that can keep our kids safe, our drivers safe and the public safe. There's nothing more important."

According to Fraley, cost and brand reputation were strong factors in choosing a fire suppression system. Kidde Technologies, part of Collins Aerospace, has been a leader in fire-safety technology for more than 100 years.

"Zonar brought Kidde to us with the opportunity to integrate the fire suppression system into the Zonar box," Fraley explains. "To me, that's an automatic 'yes'. If you can get a notification that you had a discharge in your fire suppression system while your bus is on the road, you can be proactive and see if they need help."

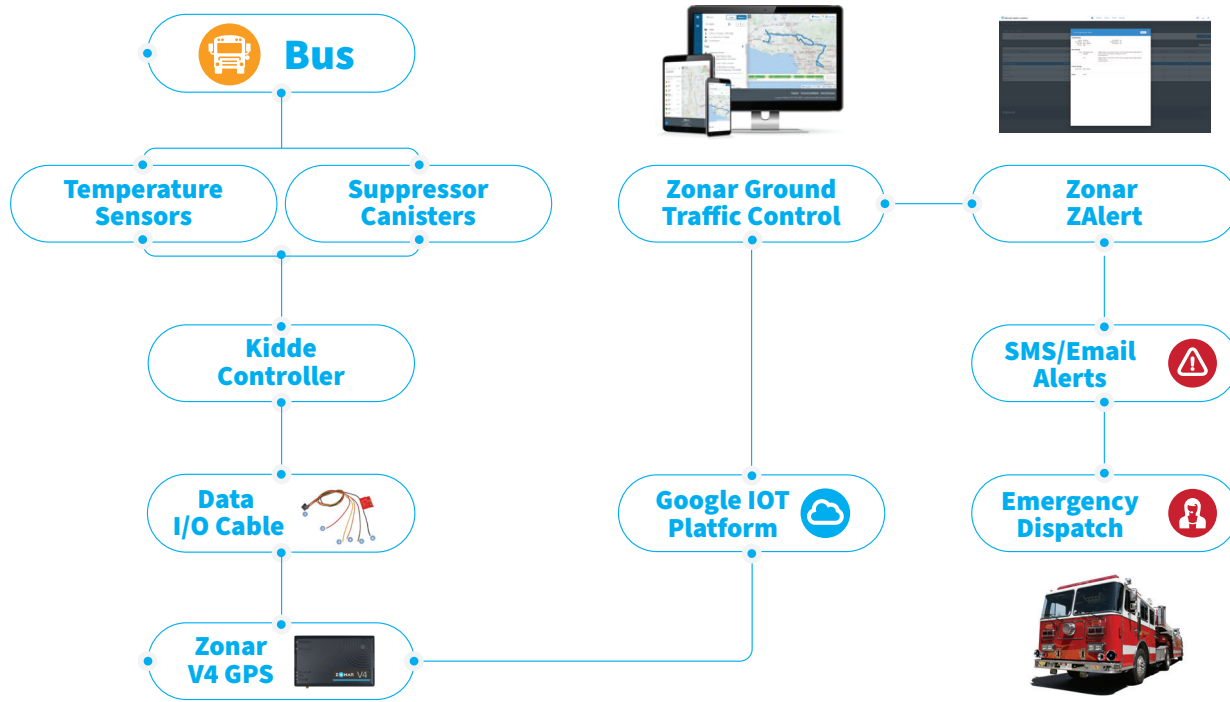
He and his team liked how seamlessly the Kidde system integrated with the existing Zonar solution. They knew this would speed up installation and bring cost efficiencies—a benefit for any school district reliant on taxpayer support.

*"We want fire safety systems that can keep
our kids safe, our drivers safe and the public safe.
There's nothing more important."*

► Brette Fraley, Executive Director of Transportation, Kanawha

Keeping school bus passengers safe

School buses represent the largest mass transit program in the U.S., with an estimated 25 million+ children riding approximately 600,000 buses to and from school every day.+ Trusting that those children arrive at their destination safely, day after day, is a priority for parents, drivers, school administrators, bus manufacturers and suppliers. And



advanced fire protection for school buses is at the top of the list of safety concerns.

In a 2019 study, the National Transportation Safety Board (NTSB) cited two municipal-led demonstrations of simulated school bus engine fires.

On both occasions, the entire vehicle became engulfed in flames or smoke in less than three minutes. The data led the agency to recommend that all in-service school buses in the U.S. be equipped with fire suppression systems.*

An integrated solution

Together, Kidde and Zonar provide a robust school bus fire emergency alert and response system.

Kidde AFSS is a fully automatic system, with no manual input required. Plus, the extinguishing package can be mounted up to 20 feet (6.1 m) from the nozzles, maximizing fire suppression coverage.

The system is also ideal for rural bus routes, where fire department support may not be readily available.

Our advanced GPS positioning capabilities complement the Kidde system by providing detailed bus location information. This makes it easier and faster for first responders to locate a bus in an emergency, adding critical minutes to bus fire evacuation time.

"The extra 2-3 minutes that you're going to get out of the suppression process could save a child's life."

► Brette Fraley

Our technologies also enable the Kanawha transportation department to deliver a proactive approach to delays and route changes. They use it every day to track buses and alert the parents, which has improved their customer service and operational efficiency.

Parents can locate their child's bus on a mobile app that will notify them when the child was dropped off or if there will be a delay. The school bus tracking app reduces a parent's need to call, cutting down on dispatcher workload.

Increased safety and efficiency

By combining Kidde and Zonar systems, Kanawha has accomplished what they set out to do: Provide more time for bus fire evacuation, reduce emergency response time and provide safer, more efficient fleet operations overall.

Fraley believes that the value of student safety and peace of mind for the parents far outweigh the cost of implementing the system.

Even so, he feels lucky to have had funding support from the Kanawha School Board and Superintendent and hopes other school systems follow suit.

“Fleet fire protection should be a standard safety investment,” he says, adding that these preparations are especially important when transporting students with unique mobility needs. “In an emergency evacuation situation, every second counts—having more time makes all the difference when it comes to avoiding a tragedy.”

With Kidde AFSS and Zonar, Kanawha is being proactive, rather than reactive, to the challenge of school bus safety.

[What would you like to track or monitor?](#)

[Contact us](#)

* From “Examining the Federal Role in Improving School Bus Safety.”
published in 2019 by the National Transportation Safety Board (NTSB).

About Zonar

Zonar exists because you and your student riders deserve the best. We're the trusted leader who helps protect our nation's children every day. And we're the clear choice for small to mid-sized businesses, enterprise fleets, and public sector organizations across the Americas. To some, you're a sale to make. To us, you're a partner to stand by. Our proven fleet management solutions help you run better, safer and more efficiently. We help you save more of everything. We work late, push harder and deliver what's really needed, faster—for you.

Zonar has been here for you, for more than 20 years and counting. You call? We answer, 24/7. Because you have the most important responsibility a fleet can have: transporting schoolchildren safely. Whatever your fleet's size, rely on us to help solve real-world problems.

Zonar HQ: Seattle, WA. Other locations: Cincinnati, OH, West Chicago, IL & Lakeland, FL. Top priority: You.

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