

Cradlepoint 4G LTE In-Vehicle Network Solutions for K-12

CHALLENGE: EXTENDING CONNECTIVITY FROM THE CLASSROOM TO THE ROAD

With the increased need to provide WiFi to students during long commutes on school buses, whether for a school sponsored activity or as part of a student's regular, daily commute to attend classes, the ability to bring the classroom to the road is a necessity to achieve academic excellence. However, deploying network connectivity within school buses can involve a number of challenges:

- + Terrain – navigating urban and rural roads
- + Carrier selection – choosing the best carrier for constant coverage
- + Secure, reliable connectivity – dependable WiFi connection with content filtering

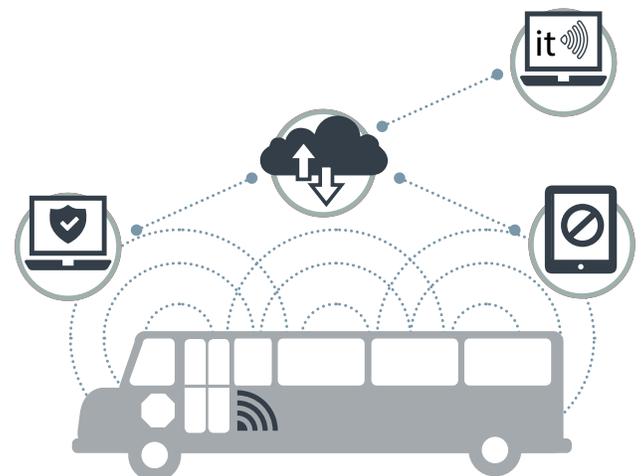
SOLUTION: CLOUD MANAGED 3G/4G NETWORKING

- + Best-in-Class WiFi: Today's students require WiFi connectivity inside and outside the classroom. Cradlepoint's high-speed, highly available connectivity allows students to continue to stay productive while on the go.
- + Real-Time, Security Monitoring: Cradlepoint's COR Series enables administrators to monitor student safety with onboard video surveillance and track bus routes in real-time.
- + Ease-of-Use with Cloud Management: Monitor, configure, and upgrade geographically dispersed systems without requiring on-site technical resources. Improve productivity, reduce costs, and enhance the intelligence of your network. Cradlepoint solutions allow you to maximize the benefits of the cloud without losing your connection when you need it most.

MARKET OVERVIEW: SCHOOL BUSES

- 480,000 school buses nationwide
- Transport 25+ million children per day
- Largest form of mass transit in the United States

(Credit: American School Bus Council)



SECURITY

When the operators of conveyances offer WiFi to passengers, the need for content filtering and the policies that govern such filtering invariably arise. Educational agencies can block sites not approved by school administration, while transit authorities may wish to prevent downloads, streaming, and inappropriate content. Cloud based software, such as Zscaler, enables IT managers to customize content preferences and be alerted to security breaches immediately.

NORTH KANSAS CITY SCHOOL BUSES ADD WIFI

Recapturing lost instructional time had been a major conversation topic for North Kansas City Schools for a few years. Lon Waterman, Assistant Director of Transportation for the school district, came up with



the idea of putting WiFi on buses so that students could access Internet resources for homework, research, online classes, the district's Blackboard system, video tutorials, etc. while they're on the bus.

"WE FEEL COMFORTABLE THAT KIDS ARE NOT GOING TO BE ABLE TO ACCESS ANYTHING THEY SHOULDN'T."

- LON WATERMAN,
ASSISTANT DIRECTOR OF
TRANSPORTATION

While researching how they could make WiFi work on buses, the district discovered the perfect solution: Cradlepoint's COR IBR600 with integrated 4G LTE.

The Cradlepoint solution meshed perfectly with other technologies implemented in the school district. Every high school student receives a MacBook Air with security features and Internet filters already integrated into the laptop. Only those district-issued devices can connect to the WiFi on the buses, and everything on the network has to go through the district servers. Also, the buses are equipped with extra security features including video surveillance.