

## School Buses Provide Mobile Hot Spots Connecting Students to Home-Learning Opportunities

### INTRODUCTION

With most of the nation's schools closed due to social distancing initiatives, the rapid development and expansion of distance learning programs are underway. Unfortunately, due to poor connectivity, not all students will be able to take advantage of these learning opportunities. Many children in both rural and urban areas do not have access to hardwired and wireless internet connections. Additionally, many that do have access suffer from slow or intermittent connections.

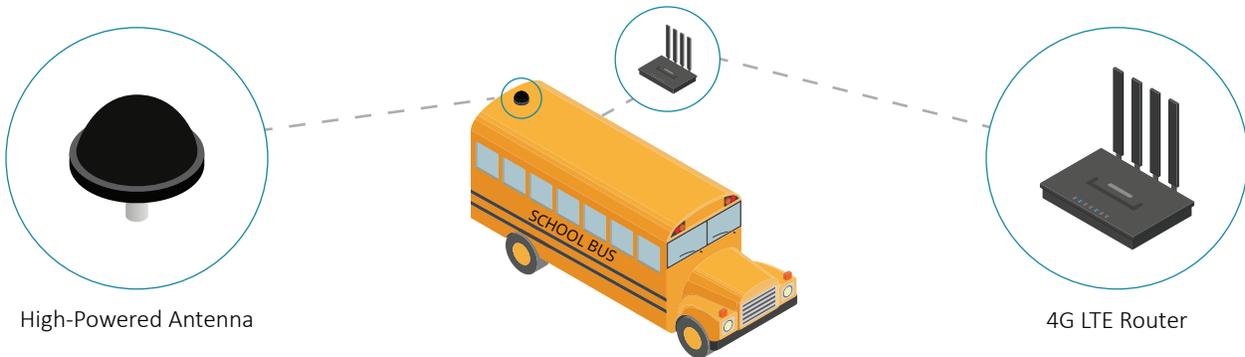
### CURRENT CHALLENGE

As unprepared as educators were to coordinate switching to a 100% home-based learning curriculum, administrators weren't prepared to coordinate the logistics of providing reliable internet access to students. Without that access, many students will be unable to benefit from the internet-based curriculum currently being deployed.

### IMMEDIATE NEEDS

School systems need a way to provide internet access to as many students as possible, as quickly as possible, until the end of the current health crisis.

Therefore, they need quick and cost-effective solutions that benefit the most significant number of students possible.



### RECOMMENDED SOLUTION

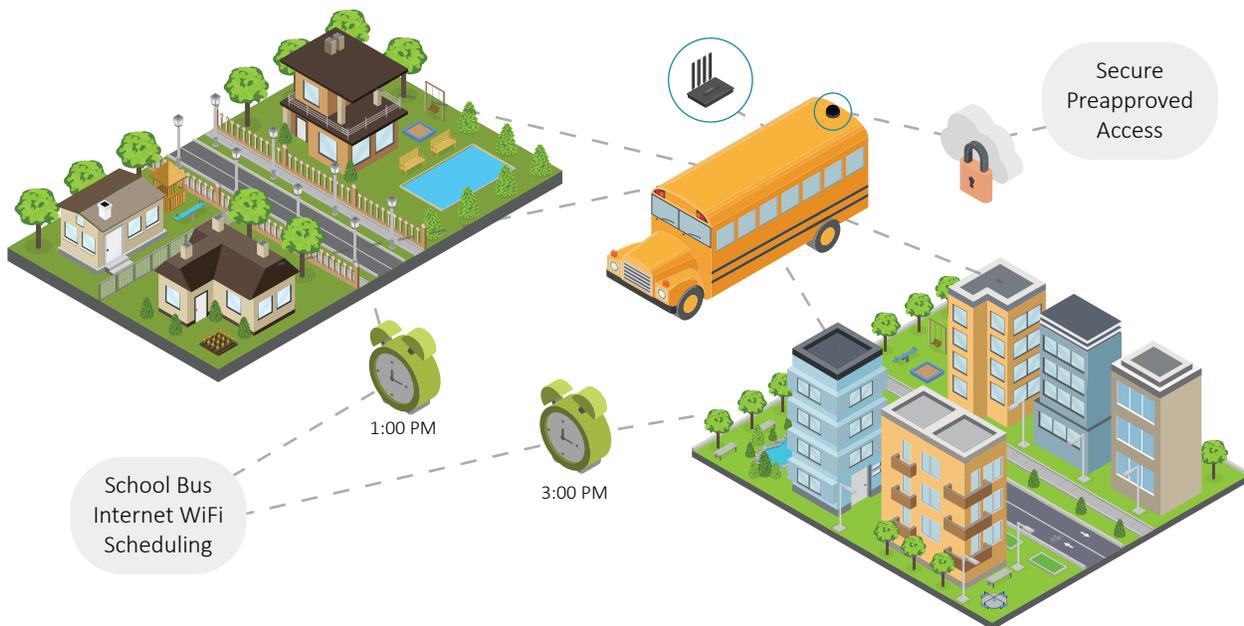
Luckily for students and educators nationwide, those of us in the wireless communications industry have put our heads together to develop solutions for this and many other problems caused by the current health crisis. School buses pose a solution to the connectivity problem. Most school buses are currently gathering dust in school parking lots. However, those same buses could be providing internet access to those in your school districts who need it most.

## ACTIONS FOR TODAY

USAT will help each school equip their bus fleets with wireless routers and gateways and range-extending antenna systems. Afterward, those buses can be deployed to urban and rural communities to broadcast free public wireless internet to students in need. Bus drivers never need to leave the vehicle, and students never need to gather too closely.

## ACTIONS FOR TOMORROW

School systems can keep those same connectivity devices in play even after the world returns to normal. As a result, student bus riders with unreliable internet connections at home will benefit greatly. Because of the bus WiFi, they will be able to study and download materials they need while in transit to and from their homes (especially helpful on long rides).



## RESOURCE SCHEDULING

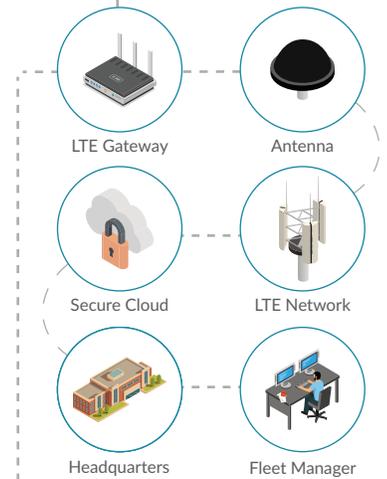
For widely dispersed student bodies or limited vehicle availability, scheduling is the answer. School systems can plan routes for their buses with stops in different neighborhoods for set periods. Also, schools can send notifications to parents. Administrators can inform families as to when WiFi will be broadcasted in their communities to schedule their children's learning activities accordingly.

## SECURE ACCESS

Schools want to limit bus WiFi access to just students. With USAT's help schools can apply security and network access controls to restrict access accordingly. Further, school systems can provide limited access to preapproved websites and learning materials. In doing so, they can prevent WiFi abuse by non-students in the communities each bus visits.

## KEY HIGHLIGHTS

- Students can gain access to free public school-provided WiFi to access lesson plans and other school-provided educational resources.
- This access provides education tools while still adhering to government mandated social distancing guidelines.
- You can dispatch school buses to community parking lots, apartment complexes, or other areas easily accessible to the student body.
- Scheduling can help mitigate scarce resources and support a more significant number of students over more dispersed areas.
- Controls set on the WiFi can limit where the students navigate to “school provided educational resources.”
- Deployed communications assets will provide students with valuable connectivity well beyond the current health crisis.
- For schools that do not currently have the budget to WiFi technology on their buses, USAT offers other types of deployable units.
- Once equipped with IoT networking devices, schools gain the ability to access hundreds of router, network, and vehicle parameters in real-time such as:
  - Creating custom alerts
  - Event triggers
  - Automatic data dumps
  - Automated reporting
  - Vehicle GPS and telemetry
  - Automatic vehicle location (AVL)



## IN SUMMARY

The bookmobiles of the past brought generations of Americans reading materials when they could not get to a library or otherwise access the books their studies required. The school bus can now go down in the history books for bringing students their internet lessons when they needed them most.



## CONTACT USAT

If your school needs a solution quickly, USAT has the equipment in stock and can provide installation services. Our installation technicians are ready to install hot-spots into school buses rapidly. We have installation teams in Alabama, Florida, Tennessee, Georgia, North Carolina, South Carolina, Virginia, and some regions in Texas and Colorado. USAT has broadband, secure, WiFi hot-spots and high-powered antenna assemblies designed to cover broad areas. USAT offers solutions from top-tier providers like Cradlepoint and Sierra Wireless.

Contact us today to equip your school buses with WiFi-enabled cellular routers

