



# King County, Washington, Brings Cradlepoint On Board to Deliver Passenger WiFi to Commuters

## SUMMARY

King County, Washington, has become one of America's major technology hubs. Large companies such as Microsoft, Amazon, and Google have major offices there, and hundreds of smaller technology companies have started up in the greater Seattle area. With so many hi-tech employees using public transportation, King County decided that it could serve its ridership better by providing WiFi access on its RapidRide commuter bus lines. After an extensive search and in-depth testing, the County's Metro Transit Division's System Development & Operations department implemented Cradlepoint LTE networking solutions in its fleet of high-end commuter buses.

## CUSTOMER PROFILE

In 2006, King County voters passed an initiative calling for the creation and continued funding of a new high-tech, high-speed commuter transportation system. RapidRide buses, which serve

### PRODUCT:

CRADLEPOINT COR IBR600  
WITH ENTERPRISE CLOUD  
MANAGER

### APPLICATION:

MOBILE WIRELESS  
NETWORKING THROUGH  
3G/4G WIRELESS

### MARKET:

PUBLIC TRANSPORTATION



approximately 30,000 passengers per day, have introduced a number of high-end features to the county's transit system. The buses send signals to traffic lights so green lights stay green longer and red lights switch to green faster. To provide convenient service, the buses are scheduled to run at least every 10 minutes during the busiest morning and evening travel hours. And bus passengers have access to real-time route information at stops and on board the buses.

By providing services that encourage residents to take advantage of this affordable, energy-efficient alternative to private vehicles, King County hopes to relieve road congestion and contribute to cleaner air.

## BUSINESS NEEDS

According to King County Department of Transportation (DOT) IT project manager Greg Debo, studies show that between 2000 and 2012, the percentage of adults who own cell phones increased from 53 percent to 88 percent. As such, the County knew that providing WiFi access on the buses would be well received by a highly "wired" ridership.

But the county had to be very cost conscious about providing WiFi access to these devices. They needed a solution that was affordable and "bullet-proof." Installing a system that did not provide a consistent, high level of service would only result in customer/rider complaints.

"We service an area that includes Seattle, Redmond, and Bellevue [the center of the Microsoft campus], so there's no question; it's a service a lot of people are taking advantage of," says Debo. "Whether it's just to socialize or check work email, now people can use the time they spend on their bus ride more productively."

## SOLUTION

The DOT's IT Department conducted extensive research to establish criteria for the solution it needed. Then it selected a small group of devices from various manufacturers that met baseline criteria. Criteria included durability, serviceability, compatibility, expandability, remote manageability, and cost.

The few devices that met the criteria were physically set up and configured to perform a road test. Based on the results, the System Development & Operations team selected Cradlepoint IBR600. The team concluded that Cradlepoint would give King County the greatest benefit in terms of time, cost, and quality.

The county's Vehicle Maintenance Electronics division installed the devices in 113 buses, and then implemented Cradlepoint Enterprise Cloud Manager so that the team could monitor and manage all the devices from one central location.

## BENEFITS

### REMOTE ACCESS

As a government entity answerable to tax payers, King County is continually trying to find ways to do more with less. IT project manager Debo's challenge was to find a way to oversee the county's mobile wireless network with a limited number of staff.

"A KEY ELEMENT IN OUR DECISION WAS THAT CRADLEPOINT HAS A METHOD TO REMOTELY MANAGE THE DEVICES THROUGH THE CLOUD. I NEEDED TO MAKE SURE THAT WE COULD EFFICIENTLY EXECUTE THE RIGHT FIRMWARE UPDATES, THE RIGHT PATCH UPDATES, AND HOT FIXES ON ALL 100-PLUS DEVICES—WITHOUT OUR STAFF HAVING TO PHYSICALLY TRAVEL TO EACH BUS."

### REAL-TIME CONTROL

Enterprise Cloud Manager also enables Debo to be proactive, to see problems as they develop, and to put solutions in place to keep the devices up and running.

"If a device has an issue, I can go in and stop it and restart it. Or I can remove it from a group, reconfigure it, and then push it back into service. And I can do all of this from my desk, instead of having to find the bus, physically remove the device, and make passengers go all day without having WiFi access. Enterprise Cloud Manager simplifies and streamlines our ability to manage our mobile wireless network."

### PEACE OF MIND

Part of King County's fiduciary responsibility is to protect its investments. By purchasing Cradlepoint CradleCare for its devices, the county benefitted from extended warranties as well as from enterprise support agreements, installations, and site surveys to optimize WiFi and 3G/4G signal strength to increase performance and uptime.

"We've invested a lot of money to provide WiFi access on our RapidRide buses. If something happens to the devices, we can just rest a little easier knowing that we've bought the CradleCare services."

### SMALL FOOTPRINT

Even on a large bus, space can be at a premium. The Cradlepoint COR IBR600 takes up very little space while still delivering WiFi to as many as 64 passengers at a time.

### PASSENGER SUPPORT

According to King County, recent customer surveys show that approximately half of all RapidRide riders have taken advantage of on-board WiFi. Twenty to thirty percent say that they use WiFi every time they travel on a RapidRide bus. The county's analytics show that passengers made more than 5,500 connections alone, and it expects this number to grow as RapidRide passengers become aware of this fast, Cradlepoint-enabled WiFi connection.

[GO TO CRADLEPOINT.COM/IN-VEHICLE TO LEARN MORE.](http://CRADLEPOINT.COM/IN-VEHICLE)