Around 10 billion trips were made on local public transportation in North America in 2019, with commuters clocking up a total of almost 60 billion miles. Around half of that involved travel by bus. Things changed dramatically in March 2020: After the global Covid-19 pandemic reached the United States in January, many states decided to go into lockdown – a decision that had a severe impact on the some 920 municipal transportation companies. With T-Systems’ help, one transportation provider responded to the fears of its passengers and employees. A fast IT solution helped restore confidence in public transportation.

“Our thermal scanners helped a public transportation company restore commuter confidence in bus travel.”

Matthew Oaks, T-Systems project manager

At a glance
- Local public transportation company in the U.S. – dramatic drop in passenger numbers due to Covid-19
- Restoring confidence with temperature scanners
- Easy and efficient solution
- The project was completed in around 40 days
The challenge

Due to the lockdown, utilization rates for buses and trains dropped to a minimum. But transportation companies continued to feel the effects even after lockdowns were lifted. Commuters were cautious about using public transportation because of the potential risk of infection. For many companies it was a critical situation: if unable to cover the operating costs for their fleets and personnel, they would experience financial difficulties and even face insolvency. That made restoring confidence in public transportation an economic necessity. In May 2020, an American public transportation company asked T-Systems to develop a solution to make travel by bus safer – one that could be deployed quickly.

The solution

T-Systems’ proposal was to install scanners at the access points to every bus to check the temperature of passengers wanting to board. The scanners are 8-inch tablets running on the Android operating system. As they are operated locally without a cloud back-end, they do not require connectivity. A camera and thermal scanner are standard equipment. The body temperature of passengers boarding is measured within seconds and checked using an app. If the temperature is below a certain threshold, the display gives positive feedback and allows the person to board. But if it is above the threshold, the passenger is refused entry. The transportation company placed an order for 200 such devices for its bus fleet.

A number of stationary devices were also installed at the entrances to the company’s office buildings to protect employees against infection. The project was completed in around 40 days.

Customer benefit

With the aid of thermal scanners, the public transportation company was able to restore confidence in travel by bus and send a strong signal to its customers and employees alike. Rising passenger numbers are key to avoiding dramatic financial consequences. T-Systems implemented the robust, easy-to-use solution within a short space of time.

Thanks to the devices, the transportation company not only overcame an acute challenge to its business, but also readied itself for the “new normal.” The devices offer the customer an optimum price/performance ratio. If detailed analyses are required, the devices can be expanded to create an IoT solution via additional connectivity and a cloud-based management portal.

Further advantages:

• Pragmatic out-of-the-box solution
• No customizing required
• Minimal maintenance and follow-up costs