

LIVERPOOL BUS PRIORITY SYSTEM & JOURNEY TIME MONITORING — LIVERPOOL, ENGLAND



2020 Liverpool asked Q-Free to provide a low-cost and efficient solution that could accurately detect buses and had the ability to communicate with a traffic signal controller.

In response, Q-Free installed the HI-TRAC® UTC in traffic signal controller cabinets, which use inductive loops installed in the bus lane prior to the bus stop. The advanced algorithm detects a bus as it approaches and then communicates with the traffic light junction controller to extend the green light to allow the bus through or to provide a 'hurry call'.

Recent studies in Liverpool have found that the bus-profiling technology implemented by Q-Free can be used as an effective way of profiling buses and reducing delays, and 2020 Liverpool has now implemented more than 20 of Q-Free's Bus Profiling Systems and is committed to undertaking further bus delay impact studies with a view to expanding the Bus Priority Network.

THE KINGSWAY AND QUEENSWAY TUNNELS

The Kingsway tunnel, which is 1.5 miles (2.41km), and the Queensway tunnel, 2.01 miles (3.24 km) long have a combined average daily traffic flow of 80,000 vehicles. To provide optimal journey time monitoring, Q-Free supplied and installed HI-TRAC® BLUE2's in both tunnels to detect Bluetooth signals transmitted by visible Bluetooth devices located inside vehicles. This data is then used to calculate traffic journey times and movements. Its reliable design, ultra-low power consumption and extended battery life make it the preferred Bluetooth traffic survey tool for the leading traffic survey companies. We provide a real-time web based journey time interface that allows Mersey travel to monitor the routes through the tunnels and predict or react to any delays or incidents. Q-Free is currently contracted to provide on-going maintenance and fault response services.

