

# JOURNEY TIME AND QUEUE MONITORING— M6 TOLL, ENGLAND



Since going into operation December 2003, the M6 Toll has provided a solution for the most congested section of the M6, which passes through Birmingham, England's second largest city.

Yearly use of the road has increased steadily to 60,000 vehicles per day, and although the road's operator issues toll tags, cash and card payments at plazas remain valid and current. This creates a need to monitor and manage the queues at the two 10-lane mainline tolling stations.

Q-Free's HI-TRAC® BLUE2, which detects anonymous Bluetooth™ signals transmitted by visibly enabled devices located inside vehicles, are used to monitor the journey times of vehicles approaching the toll booths and the exit barriers after payment has been made. In addition, Q-Free was asked to replace the original automatic traffic counting equipment located a number of miles upstream of the tolling plazas. 11 HI-TRAC® EMU3's now undertake this task of monitoring the flow along various sections of the route.

The new integrated solution supports the M6 Toll operators in planning for traffic volumes, allocating manpower resources at the toll booths and opening additional automatic card or tag lanes to avoid queues and ensure stress-free travel. This is of particular use when there are incidents on the surrounding network.

Q-Free has also provided a real-time web-hosted system within the control room to show journey times through the tolls, traffic count and classification with historic trend information to use for future planning.

