

M6 TOLL - WINDOWS 7 UPGRADE

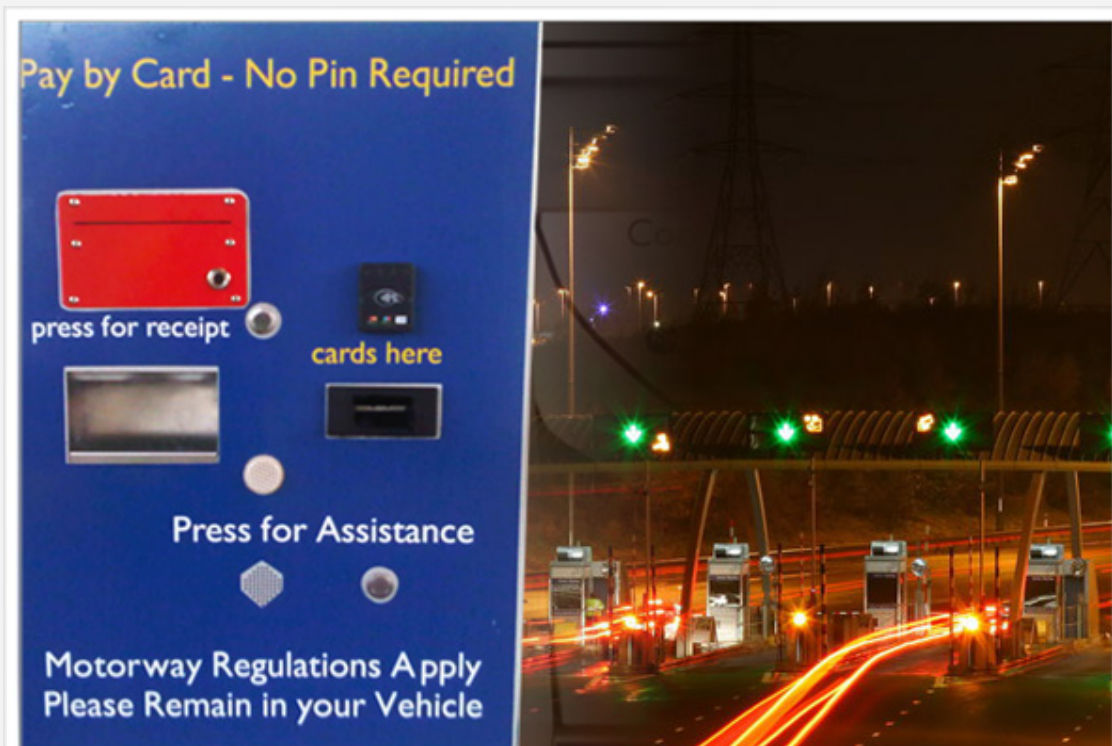
Midlands Expressway is responsible for the building, operation and maintenance of the M6 toll road. Since its opening in December 2003 Midland Expressway have been responsible for the maintenance of the 27 mile stretch road; and they will continue with this contract until 2054 when the road will be handed back to the Government.

THE REQUIREMENT & SOLUTION

One of the main goals of the project was to provide the best service experience for the users of the M6 toll road; it was clear that one of the main ways to improve this was to simplify and ease the way road users made payment to access the road.

The method of using contactless cards as a way of paying small amounts without the need for cash seemed to provide the preferred method and the M6 toll road provided an ideal opportunity to see the benefits from this new payment solution at first hand.

In order to implement contactless payment and become PCIDSS Compliant, Midland Expressway had to upgrade all its computing hardware, in the road lanes, the back office and data centre. This involved a software and hardware upgrade from Windows 2000 to Windows 7 in the lanes and on the Servers a change from Server 2000 to Server 2008, and SQL 2000 to SQL 2008 plus all the hardware necessary to run the upgraded Operating Systems. The Server upgrades proved to be relatively straight forward; however the road lane computers were more problematic.



The lane computer was based on an embedded PCMIG daughterboard, housed in a custom case, with various IO cards and serial controllers; capture cards were required to operate and control the toll lane and associated equipment. The existing system was based on a PIII platform running Windows 2000. Midland Expressway had another problem; the custom cases were in use and situated in the toll booths.

The Amplicon industrial computing specialists offered a simple solution to the issue of the site based custom housing. They were able to source a new motherboard, CPU card, IO card, capture card, power supply that met the space constraints of the existing case. All component parts were then assembled by the Amplicon configuration team and completely tested for full operational competence; this working part assembly was then shipped directly to site.

The assembly and time saving for the Midland Expressway technicians was considerable, and allowed for a simple final assembly to be made into the site based custom with the knowledge that the components were fully tested and working.

THE RESULTS ▾

The Amplicon industrial computing specialists offered a simple solution to the issue of the site based custom housing. They were able to source a new motherboard, CPU card, IO card, capture card, power supply that met the space constraints of the existing case. All component parts were then assembled by the Amplicon configuration team and completely tested for full operational competence; this working part assembly was then shipped directly to site.

The assembly and time saving for the Midland Expressway technicians was considerable, and allowed for a simple final assembly to be made into the site based custom with the knowledge that the components were fully tested and working.

Midlands Expressway is now in the process of rolling out all of their new Windows 7 lane computers, and installing contactless card readers.

WHY AMPLICON? ▾

Amplicon was selected as the preferred supplier as they gave a high level of technical assistance complemented with effective build and test facilities; and this enabled Midland Expressway to choose the correct hardware for their project.

Paul Parry, systems maintenance manager for Midland Expressway commented *"whilst initially the project seemed complex with valued assistance from the Amplicon industrial computing team, the changeover and roll-out have been successful".*