



**ADEPT Presidents Awards Entry**  
**Category 2: Deploying digital innovation and technology**

**Brief Summary**

Delivering live road closure information to sat nav devices and providing real time roadworks monitoring across Hertfordshire and Essex

**Project Outline**

Ringway and Ringway Jacobs, working with Hertfordshire and Essex County Councils respectively, along with technology partners Elgin, have developed and implemented a software application that is designed to assist with the planning, monitoring and communication of the disruption caused by roadworks and incidents. The application also possesses the unique capability to influence journeys through live sat-nav updates from the roadside.

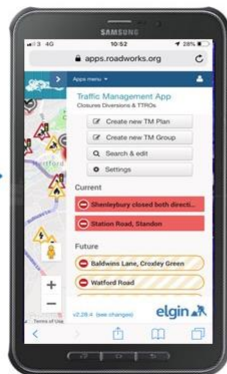
Roadworks and road closures can contribute significantly to traffic congestion, but the ability of Local Authorities to proactively influence journey planning around them is limited and largely reliant on drivers checking websites, or twitter, in advance of travel. Communicating roadworks information to drivers on the network is traditionally limited to local radio or via limited and expensive Variable Message Signs.

Elgin operate roadworks.org, a subscription-based service, where highways authorities publish roadworks and traffic management plans. Prior to recent Elgin software developments sat nav providers received this data but were only able to help redirect drivers based on the planned information, as no live data showing what was happening on the ground existed.

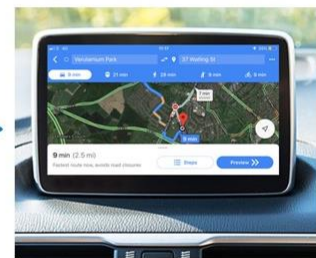
Working with contacts in Hertfordshire and Essex, Elgin’s map-based software applications capabilities have been extended to provide the unique ability for Traffic Management operatives that set out and remove road closures to communicate direct to sat nav services (including Google, TomTom, and Apple) from the roadside in real time. Through a unique tie-up with these services the information operatives input (via a smartphone or tablet device) is auto trusted as a verified source and ensures that sat nav devices only divert drivers when a closure is actually in force, not simply when it was planned.

...confirmed  
from the roadside...

Road closures...



...delivered to Sat Nav!



Through the application's development road closures across Hertfordshire and Essex have been monitored to identify savings to the local economy. Of the 257 road closures communicated live to sat nav, on average the actual time the closure was in force was 70 minutes less than originally planned. This equates to over 300 hours where roads would have been displayed as closed on sat nav devices and drivers would have been unnecessarily diverted, had live information not been communicated.

Elgin's software platform also uses floating vehicle data to display live traffic conditions and can associate delays with roadworks in real time. This enables Local Authorities to monitor and communicate roadworks impacts to the public and those undertaking the works, to minimise delays.

Using floating vehicle data via Elgin's platform has increased live traffic monitoring capability across Hertfordshire and Essex from 5% of the network to 40% without the need to deploy and maintain expensive roadside monitoring equipment to obtain the data.

This solution offers:

- The ability to influence vehicle routing by avoiding current roadworks and unnecessary diversions through live communication of what is happening from resources on the ground.
- Visualisation and interrogation of live congestion data, mapped against roadworks, enabling the most disruptive works to be easily identified and managed.
- A proven approach that can drive a step change in how live roadworks information can be exchanged and monitored across the industry.

Delivering Real Time Roadworks Information Across Hertfordshire and Essex - video  
<https://www.youtube.com/watch?v=mSJPgSpt3NQ&feature=youtu.be>