

YOUR GUIDE TO OUR DIGITAL SERVICES







ChevronTMS protect workers and the travelling public during the maintenance, repair and renewals of our roads, railway and utilities infrastructure.

This includes:

- ➤ Digitally enabled traffic management equipment allows remote road closure monitoring
- ➤ Advance warning systems that provide an instant alert to the workforce in the case of a breach via road closure and works access points
- ➤ Intuitive customer facing systems to inform and deter the traveling public from entering restricted work zones, significantly reducing unauthorised incursions into worksites

All our services are connected via secure cloud-based systems, that are repent and that have been operating for many years in harsh environmental and working conditions.

Our work-zones are digitally mapped and can be made visible on any internet conjected device, giving authorised individuals real time information 24/7, 365 days a year; showing location, working windows, alarm states and enabling the safe and efficient delivery of works.







Smart osure

Intellicone Smart Closure System is proven to create safer and more efficient road closures. It enables the remote monitoring of closure points whilst providing a deterrent to road users attempting to breach the closure.

Where local residents are affected by road closures and require access, Smart Closure provides an easy to use Customer Support Terminal. This enables instant two-way communication with the traffic management crew, significantly improving customer experience.

Where traffic management personnel are present to manage work access points, Smart Closure provides them the politic to instantly warn the workforce in case of incursion. Being able to remove traffer management personnel from areas of potential confrontation enhances site safety as well as operational efficiency.

gitally monitoring the integrity of work zones enables them to be viewed on a live operations map through a portal. This platform enables live and

historic views across all locations. All incursion data is subsequently available and may be used to generate historical incursion maps and site-specific safety information prior to the works taking place.



Intellicone enabled road closures provide a great deterrent to people attempting to enter the closure"

Kier Highways



In a single month, we reduced incursions by 50%, which proves that by introducing Safelane, we were moving in the right direction to combat errant vehicles"

Chevron TM







Remote Road Closure Monitoring

Digitally alarming road closures has proven to be an **effective deterrent to opportunistic road users** attempting unauthorised entry into road closures, as well as warning the workforce of potential danger.

With road worker abuse on the increase being able to safely remove Traffic Manager t Personnel from potential areas of confrontation is also a major benefit. Intellicone enabled cone lamps digitally monitor the work- zone for incursions whilst transferring real time data relating to the work site via a portal. This not one enables incursion alerts to be provided to the workforce and client, it also enables automated working window reporting and remote closure management.



On a number of occasions, the alarms were triggered by vehicles attempting to enter the site, once the alarm sounded, the flashing light was triggered and deterred the vehicle from accessing the site"

Balfour Beatty



CHEVRON > TMS
TRAFFIC MANAGEMENT SERVICES



Works Access Points

The Intellicone Smart Closure System enables operatives situated at road closures to instantly warn the workforce in the case of a vehicle incursion.

With the simple press of a button, the workforce can be alerted via audio-visual Portable Site Alarms (PSA's). The system is intuitive and ideally suited to every manned works access or closure point regardless of distance. It can be used to warn of errant vehicle incursions as well as access required by emergency services, non-works vehicles or escorted vehicles.



Our operatives report feeling more confident working on the network, knowing that there is an early warning system in place"



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Work Zone Safety

With Intellicone enabled road closure points in place and incursion buttons provided to TM personnel manning works access points, the workforce can be provide an instant warning in case of an incursion. On larger sites the system can be zoned to ensure that only workers in real potential danger are warned.







Incursion Warning is provided via a Portable Site Alarm (PSA) situated in the work are. The PSA is equipped with audio-visual alarm technology designed to cut through background noise. Green means the system is live and OK, blue with single tone siren indicates access by engency or authorised non-works vehicles, red with 3-tone siren signifies an errant vehicle.





Without Safelane who knows what would have happened with regards to injuries or even fatalities"

Balfour Beatty Skanska



The Warning functionality of the HRS incursion warningsystem provides a much faster and more reliable means of warning the workforce compared to traditional methods. The benefits of this type of system provide significant benefit to the mitigation of all types of incursion risks",

Atkins & ERM on behalf of Highways England





Customer Support

Smart Closure Customer Support Terminals can be set up to operate as a two-way Portable Intercom or as a Talking Sign in order to provide relay information to road users about works via the simple push of a button.

The Customer Support Terminal is geo- located and self-configures when placed in the perimeter of a predefined worksite. The terminal is fully rechargeable and may be combined with external battery packs for long lasting operation.

The terminal can be quickly assembled by traffic management operatives and the information boards may be customised accordingly.



The intercom is a useful security feature allowing members of the public to speak directly with contractors, before being escorted safely through the work site."

TSO, Highways England





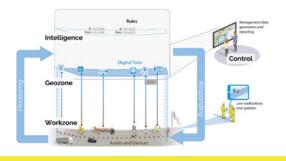


Digital Platform

Chevron TMS utilise the robust Integrated Safety Management (ISM) Internet of Things (IoT) platform provided by Highways Resource Solutions (HRS) which delivers real-time information on temporary worksites by linking smart devices to an easy to use device management system.

This enables the creation of Smart Geozones around work-zones on a mapping interface. Equipment requires zero set-up and is guided by the requirements set to a specific road closure via the Geozone drawn around it within ISM Studio. Custom alerts can be programmed, and bespoke reports generated.

- ➤ All our services are connected and provide transparency of all works and real-time data, accessed via secure cloud-based systems, that are resilient and that have been operating for many years in harsh environmental and working conditions.
- ➤ Instant access to historical GPS and time stamped data.
- ➤ Ability to link to sensors integrated within existing traffic management equipment to provide remote condition monitoring of work zones, providing instant safety alerts
- ➤ Automated working window and incident reporting.





"An amazing tool that provides valuable data on working windows. It can tell me the exact times of all road closure installations and removals."

Manager Area 9 (Kier Highways)



CIHT Innovation Awards 2018

"The judges were impressed by the entry's well thought through proven practical applications - enhancing safety for road users and road workers, especially through early alert systems. It addresses the riskiest elements of working on the highway by reducing human error throughout the traffic management cycle - deployment, operations and removal. It also potentially automates notifications, enabling rapid response to changing situations. There is clear potential for much wider application across highway related works. It also provides auditable assurance to clients, CDM holders and management."

