



Improving the real-time management of major works, events and incidents

TfL Lane Rental Industry Publication



Introduction

The London road network is shared between Transport for London (TfL), Highways England, 32 London boroughs and the City of London. TfL manages the Transport for London Road Network (TLRN), widely recognised as the “red routes”, and is responsible for the maintenance, management and operation of 6,000+ sets of traffic signals.

The TLRN consists of 580km, which represents just five per cent of London’s roads, but it carries around a third of all London’s traffic. The Strategic Road Network (SRN) is made up of roads of significant importance, for which the London boroughs have highway responsibility, but TfL has oversight responsibility in terms of planned schemes and works that are likely to have an impact on highway performance.

TfL’s Network Management Control Centre (NMCC) works 24 hours a day, 365 days a year, managing the TLRN to make sure journeys are safe and reliable for all road users. With access CCTV cameras, they help monitor conditions and disruption by adjusting traffic signal timings, providing alerts to road users through a network of Variable Message Signs and social media channels: using enforcement officers, road works inspectors, bus network controllers and highways contractors to respond on the ground.

To expand the capabilities of the NMCC and build upon a collaborative approach to road and street works, the Integrated Utilities Network Hub (IUNH) was developed and implemented within TfL offices at Palestra providing a dedicated space for major utility providers who undertake works on London’s Roads and located in the Events Liaison Facility (PELF).



The Project

The IUNH allows for accredited staff from these utility companies to work with the NMCC, to manage the impact from their planned major schemes, unplanned emergency works which are having a severe or prolonged negative impact on the network or have the potential for reputational damage to either TfL or utility provider.

The IUNH has visibility of the extensive network of CCTV cameras available, as well as direct access to decision makers, who can look at traffic signal timings, liaise with TfL's highway contractor teams to provide logistical support and TfL's enforcement team who can deploy staff to site to assist in extreme circumstances.

To create this space, reorganisation of the floor space within the NMCC and associated works were required to provide the dedicated Hub and to realise the full benefits of this partnership working.

In addition, Windows 10 and Office 365 provided, all of which is supported in a secure 24/7 accessible environment with extensive essential power supply backup. Access to audio/visual and conference facilities have been made available, along with a collaborative space for valuable partnership working.

Outcomes

The project was implemented successfully and under budget, with benefits of the new IUNH facility including:

- Improved safety for vulnerable road users, through greater shared awareness of impacts from works and a further step towards achieving Vision Zero
- Quicker responses, through a collaborative real-time approach which is hoped will improve the speed at which interventions of the carriageway are completed
- Improved coordination of works and mitigation activities, to help reduce the overall impact, resulting in less congestion, better air quality and safer journeys
- Greater collaboration with the NMCC to manage the impact from planned major schemes/events, unplanned emergency works/events
- At times of Major Incidents, TfL and utilities have category 2 responsibilities under the Joint Emergency Services Interoperability Principles (JESSIP). The IUNH allows for shared situational awareness and any responses to be coordinated for the benefit of all.

Conclusion

The implementation of the IUNH, through the reconfiguration of the NMCC was completed in January 2019. This work is already enabling network management to be being dealt with more dynamically, with quicker collaborative response times to issues.

In the future, the NMCC will look to include other major infrastructure scheme providers such as HS2, Thames Tideway, etc. into this framework so that their works are managed in a similar collaborative fashion.



TfL Lane Rental Scheme

Optimising customer journeys through the delivery of safer, innovative and sustainable roadworks



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