Improving Operations via the LondonWorks2 Map

TfL Lane Rental Industry Publication

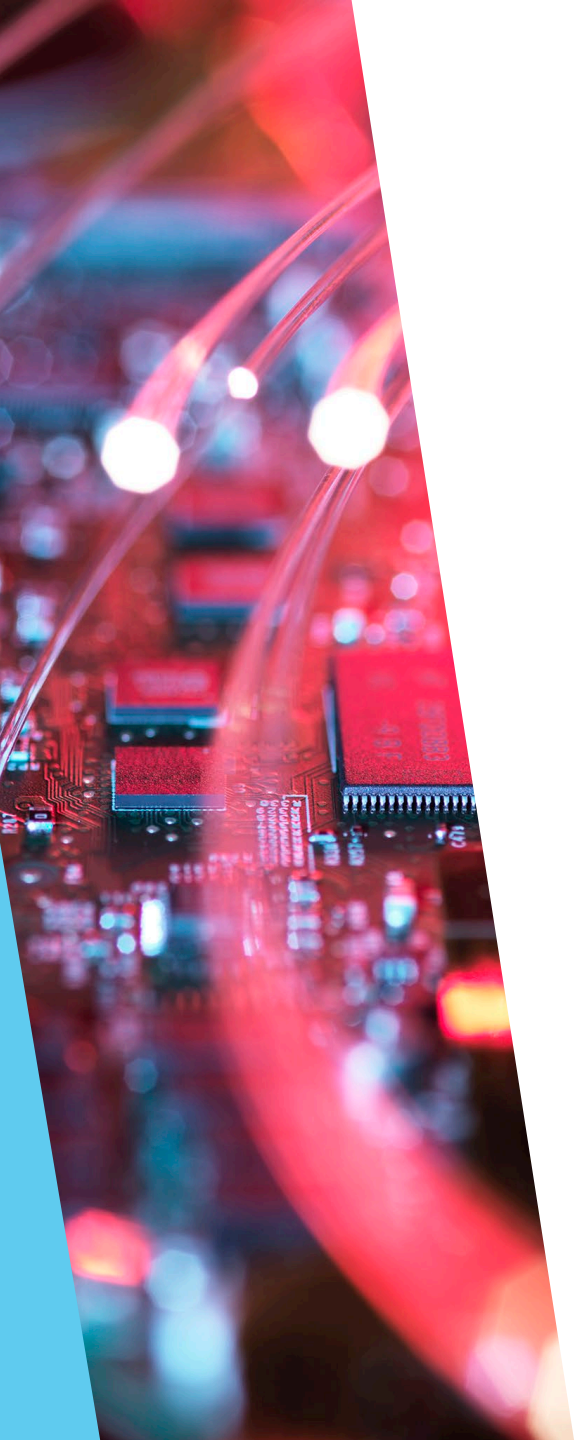
TRANSPORT FOR LONDON

Introduction

The LondonWorks system is a suite of applications that provide several operational and planning capabilities to London's street works community: The Central Register enables a city-wide view of all works on London's roads, as well as providing a range of operational filters, alerts and network management tools. The TMAN system helps to ensure that major works and schemes are mitigated and assured across all modes of transport. The Forward Planning Tool allows all works promoters in London an opportunity to share early plans of their works. All this information feeds into the Public Register, as well as numerous third parties (e.g. sat-nav companies). These integrated products ensure that traffic disruption is minimised across the capital, as well as facilitating coordination and collaboration opportunities.

Following the successful launch of the LondonWorks2 (LW2) application suite in July 2017, an increased uptake in usage and ongoing consultation with internal and external stakeholders identified opportunities to introduce targeted improvements and efficiencies.

The Department for Transport (DfT) is currently in the process of transitioning from the national specification which is used by works management systems, known as EToN (Electronic Transfer of Notifications) to a new central system, Street Manager. This is very significant change to current practices across street and road works promoters. EToN also provides the current data source for LW2, so an additional element of exploratory work was included within the project scope to ensure LW2 remains fit for it's users.



The Project

The aim of the project was to improve the way notifications could be produced, managed, assessed and approved. Through agile methodologies and user stories, alterations were made to the application suite focusing on;

- reducing the time taken to search and identify information;
- improving the quantity and quality of data available; and
- enhancing alerts and reducing the system processing time, particularly for emergency and urgent works.

Throughout delivery, stakeholders were consulted on planned releases, requested to provide feedback on the changes delivered and given the opportunity to identify additional requirements.

Outcomes

A total of II major releases were achieved, typically comprising from a mixture of bug fixes, new functionality and improvements to existing features. A successful Proof of Concept (PoC) was also produced with the aim of developing and testing a means of consuming Street Manager data and displaying it within LW2. improvements included;

- Rapid Filter Tool

This new feature allows the user to enter a works reference number into the search and based on permit dates a filter will provide a 'one-week look-ahead' and a '500m radius', This functionality is a significant improvement for decisions making for works with short durations as the interest is in a limited area, and timeframe, as the requirement to create a bespoke filter for each decision is no longer necessary.

- Alerting

The project delivered improvements to the existing processes for emergency and urgent permit alerts by reducing the number of alerts associated with each permit. This also improved overall system performance as alerts are received almost instantly.

- System Performance

One of the main features of LW2 is the visualisation of road and street works data on a map. Prior to enhancement, it typically took 2 hours for data to be displayed once created or updated. This has been significantly reduced to around 2 minutes, providing vital information for decision making.

Lessons Learnt

The project was delivered using agile scrum methodology through 10-day fixed term development sprints. As part of each sprint, work was planned by selecting the user stories, estimating delivery time and the potential tasks required. These were then refined, and the user stories agreed. Prior to a release, a demonstration or user acceptance testing (UAT) was held with stakeholders so that feedback could be given. Upon release, a 'Retrospective' exercise was undertaken to learn from mistakes, establish what worked/went well and if improvements could be made to the efficiency of the delivery team by continually learning during the project rather than at the end.

Conclusion

The improved processing speed of the application suite has enabled the display of notifications to be more reactive and the refined search/filtering functionality has made handling time faster, with better quality of data being made available for decision making. These improved capabilities will subsequently improve the ability to coordinate road and street works; minimising disruption.

In addition, the Street Manager PoC will now allow live data to be displayed (once available from DfT) along with EToN data, ensuring maximum information is available to users during the transition between reduced services.

It is recommended that future development projects are delivered in a similar way and that consultation with stakeholders continues as BAU activity to inform the future roadmap for LW2.

TfL Lane Rental Scheme

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

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