

Case Study-Live Traffic Monitoring

Upgrade of historic traffic monitoring to cloud based live data environment



OVERVIEW

This case study details how Worcestershire County Council were able to implement the following solutions:

- Cost effective asset refresh
- Cloud based analytics platform
- Live map (including Highways England stream)
- Congestion highlights
- Integrated emissions data

Worcestershire County Council evaluated the market for new technologies to assist in the management of their roads. Already having a large network of inductive loop based sites for historic data collection, CA Traffic recommended the upgrade of the 20 year old hardware to the latest

BlackCAT Compact inductive loop outstations to transform how they can use the existing data streams and much more.

Minimising the environmental impacts of procuring a new system by **utilising existing infrastructure**, such as roadside street furniture, solar panels/batteries, as well as the in ground inductive loops, the migration to a **live platform** was able to be carried out at a very low cost and breathed new life in to existing assets.

SOLUTION

The **BlackCAT Compact** allows **live data** to be used for the proactive management of traffic flow. The **cloud based** CA Traffic installation presents live speed and flow alerts on an interactive map interface, as well as continuing to input

data to the mature **cloud based** data analysis platform of **VDA-Net** (Vehicle Data Analyser).

The **SmartMap** (available through VDA-Net) highlights the behaviour of traffic under times of congestion or incidents in **real time**, however to complete the full picture of traffic movements in and around Worcestershire, CA Traffic subscribe to the **Highways England Datex2** feed to present Highways England and local authority live data on a single and seamless interface.

By including the **Datex2** live feed, Worcestershire can use the speed and flow alerts as an early warning system for unplanned demand on their road network, until this system went live, there was no visibility of why sudden impacts occurred on their road network from the two major junctions on the M5 that straddle Worcestershire.

*“The way in which CA Traffic software presents data, is unrivalled. Clear and intuitive live and historic data reporting makes working with large volumes of sites and data collections entirely **painless**”* Steve Ruff, Senior Technician Network Data and Analysis

Further to the assisted management of the road network, the integration of the **DEFRA Emissions Factors Toolkit** into the CA Traffic software suite means that the impact on **air quality** can be understood and monitored under certain traffic conditions and green light models. Consistent data enables educated decision making, whilst the clear visual presentation of data portrays real world situations for users at all levels.

IN SUMMARY

By supplying an intelligent hardware platform, Worcestershire were able to have a **cost effective** upgrade to their historic traffic monitoring network, evolve to working in a **cloud based live** data environment and benefit from the added value of inclusive **congestion** and **emissions** data.

This is the first step in the mobility revolution for Worcestershire. All made possible by choosing to work with a CA Traffic.

PRODUCTS USED

BlackCat Compact 010274
VDA-Pro R2 090076

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