How TSOG Improved Travel, Energy and Future Readiness in Rotherham

Introduction

Rotherham is a small town with big ambitions!

Located in South Yorkshire, sandwiched between The city of Sheffield to the West, and Doncaster to the East with Barnsley to the North.

In the Autumn of 2023, the UK Government announced it's 'Plan for Drivers' and the Department for Transport (DfT) invited local authorities to bid for a share of £20m worth of additional capital funding called the Traffic Signals Obsolescence Grant (TSOG).

Our presentation will cover:

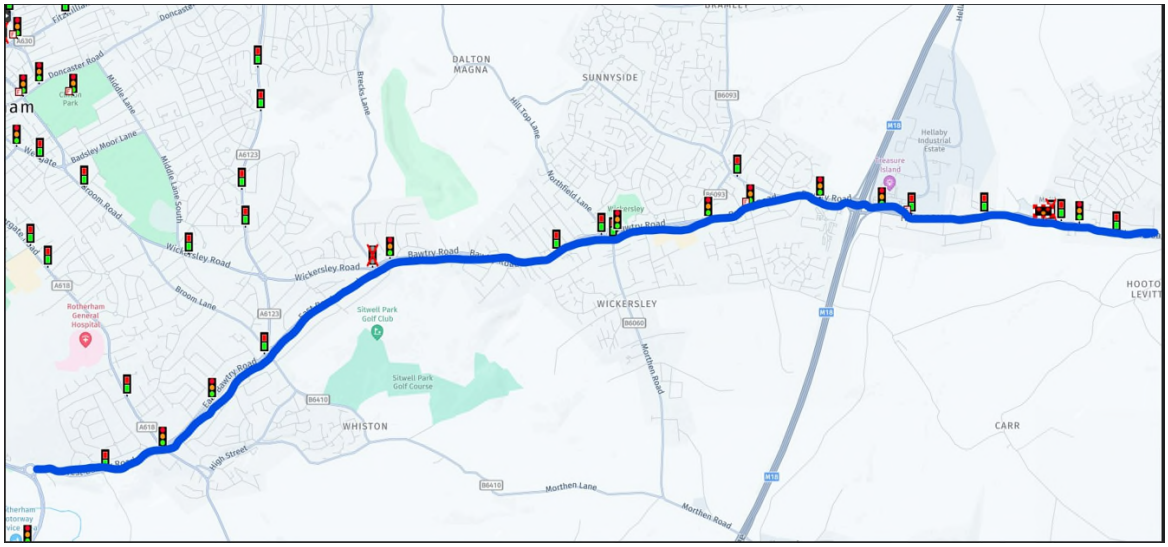
- how we approached the bid
- our vision and objectives
- how the funding was assigned
- project delivery
- the benefits
- our aspirations for future

The bid

The key elements of our bid were:

- Focus on the assets along the nationally strategic route A631.
- Incorporating improved infrastructure to support the application and development of new and emerging technologies
- Ambitious 6 month rolling programme.

We were awarded £500,000 as a result of our bid, along with a further allocation of £96000 from the South Yorkshire Mayoral Combined Authority (SYMCA).



Planning and Delivery

As soon as our bid was submitted, we started speaking with Swarco. They were actively involved in the planning and development of the works programme from an early stage. They gave their input and advice on all aspects of the project including resources, costs and delivery timescales, resulting from the significantly increased volume of activity and orders to be realised from a successful bid.

We set up an ambitious programme to upgrade 24 sites all together. 14 sites along the A631, 9 funded by the Traffic Signals Obsolescence Grant, the rest funded by RMBC capital. The A631 programme would run for 6 months with a completion date of November 2024.

Swarco's early engagement was essential so we could carry out duct surveys, engage traffic management companies and work with RMBC's highways to ensure permits were in place when needed.

We also secured resources to work continuously in Rotherham on our upgrades programme.

Summary

We fulfilled our objective and commissioned the last TSOG funded upgrade on the 29th November 2024!

We brought the project in on budget despite a few unforeseen and costly challenges such as having to replace collapsed carriageway ducts, increased traffic management for site and public safety and acquiring roadspace permits for works on the strategically important A631 corridor.

We now have an entire route where each site is fitted with Extra Low Voltage, low energy, low carbon, LED signals, each controlled using more dynamic and efficient MOVA system.

We consider Rotherham to be a ‘blank canvas’ for testing new technologies and methods of control.

Benefits

From our Imtrac asset management system, we found that –

1. We have saved over £11.5k in energy costs per year.
2. Reduced carbon production by nearly 9500kg (probably should change it to tons, but that sounds more impressive).

At the time of writing, we have seen a 4% improvement in journey times along the corridor. Even before fully validating MOVA.

Have we Inspired

One of our favourite pictures from this whole project is of Mick and his granddaughter. He wanted her to be the first to use the crossing.

We have also had schools visit new sites and learn about what goes into them.

As a result of the guaranteed workload resulting from TSOG investment, our contractor SWARCO were able to take on an apprentice and develop the skills of other personnel to help deliver the TSOG programme. This is huge for our industry as it is well known that we are an aging work force with not many young people coming into the industry.

We hope that we have shown and demonstrated that targeted investment in the latest technology to improve the performance of existing and new traffic signals infrastructure, can realise significant long term and sustainable benefits. Proving that we don't necessarily need to invest in hard engineering to achieve our traffic and transportation objectives.

These sites should be good for the next 20 to 25 years! What a legacy to leave.