

SERVICE UPDATE

<u>Name of Function:</u>	Operations
<u>Date:</u>	04/09/24
<u>Title of Update:</u>	ITS Unit
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UPDATE:

What Does Aberdeen City Councils ITS unit do?

The Intelligent Transport Systems Unit is responsible for the installation and maintenance of various types of Technology for the management and regulation of intermodal traffic located within the bounds of Aberdeen City.

What are Intelligent Transport Systems?

Intelligent Transport Systems are where transport meets technology. It's the app on your phone directing you or the radar system monitoring traffic. It ranges from data tools informing town planners, ticketing systems, traffic lights, enforcement cameras, and visual displays. This is just a sample of what can be used in various cities across Scotland.

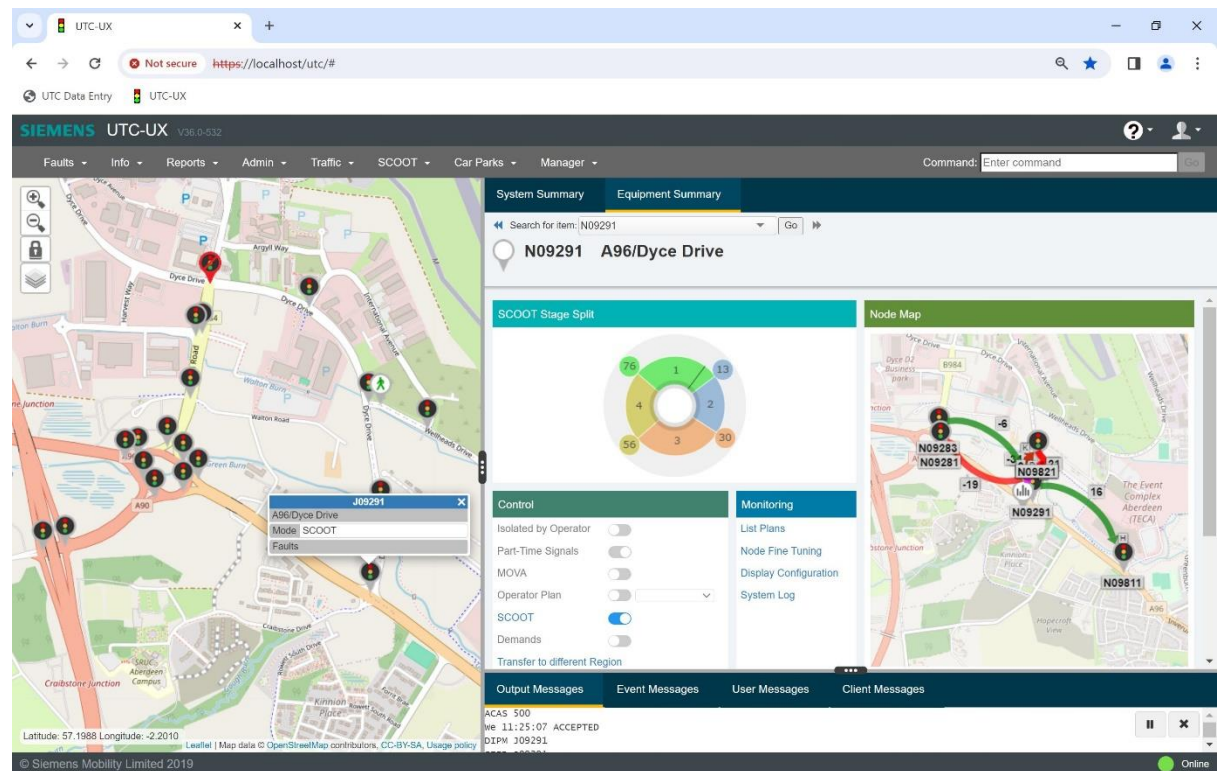
Who are the ITS team

Created from the combination of the Traffic Signal and Street Lighting Units in 2019 the ITS unit consists of 12 team members who are based at either Marischal College in the combined Operations Control Room or work from our Tullos Roads depot.

The Tullos team are led by George Collie and are responsible for the design assessment of any street lighting / traffic signal designs submitted by developers. They are also responsible for the design and project management of both the street lighting and traffic signal yearly refurbishment programmes, that ensures the city's electrical on street electrical equipment are fit for purpose and operating to current guidelines.

Ensuring the city's street lighting and traffic signals are refurbished in a timely manner reduces power consumption and improves efficiency, this in turn reduces the risk of failure improving safety for all road users and pedestrians throughout the city.

The Marischal College team are led by Iain Moffat and Paul Silver and deal with the day to day running of the city's road network analysing and manipulating data to keep the city's traffic flowing and avoiding congestion. This is achieved through the Urban Traffic Control (UTC) system that is constantly monitored and evaluated to ensure optimal performance. UTC has been demonstrated to yield improvements in traffic performance of the order of 15% compared to fixed timing systems, which is widely deployed across Aberdeen.



This team has access to various data sources including CCTV, Real Time traffic information and other inputs such as Automatic Number Plate Recognition (ANPR) and Variable Message Signs (VMS). These data sources allow the team to react to network incidents and make changes to the operation of the traffic signals where necessary to maximising road capacity, reducing delays, and therefore reducing levels of air pollution.



Using a computer system called the Common Database these various data sources can be brought together, and automatic strategies can be configured, using triggers from the various sources, to implement changes to the traffic signals with the aim of maximising the road network potential. Through the VMS, information can be provided that allows road users to alter their route if required based on the network information provided diverting users from areas of congestion. The open standards protocol of the Common Database allows for a wide range of data sources to be integrated and are always looking for opportunities to incorporate new sources of data where possible and are keen to speak to other departments about opportunities.

