

# Nottingham City Transport

## Nottingham, UK

### Case Study



#### THE CUSTOMER

Nottingham has 640,000 residents with a journey-to-work population of about one million. More than 51 million annual passenger journeys are carried out on Nottingham City Transport's (NCT) fleet of 320 vehicles on 67 principal routes.

#### SITUATION

Like many British cities, Nottingham suffers from traffic congestion especially at peak periods. So the challenge for NCT is to have a radio system that will contribute to improving the reliability and punctuality of its fleet, ultimately giving their customers' confidence in public transport.

Traditionally NCT took a reactive stance to updating vehicle movements and timetabling. Drivers and control room staff used radios for one-to-one voice calls to update information during routes. The control room personnel were reliant on drivers calling in their location details and any possible delays.

The company needed a communications solution that would give them the ability to proactively adapt and deregulate services, and acquire data that would assist with long-term timetable scheduling.

#### RESPONSE

Tait provides the radio communications component of this complete transport solution which features Automatic Vehicle Location (AVL), an onboard integrated information system and capabilities for voice and data communication between vehicles and offices.

**“The benefit of AVL is that we are now able to see visually and diagrammatically where our vehicles are so our control room can predict where problems are going to be and take a more proactive stance.**

**Ultimately it's about giving customers confidence and predictability in their local bus service, which we know is what they want.”**

David Astill - Commercial Manager  
Nottingham City Transport

The backbone of the solution is the TaitNet MPT 1327 trunked radio network, which provides radio coverage throughout the city. The network has a channel for voice calls and a TDMA channel to enable the transmission of data acquired from the AVL system.

A Tait TM8235 mobile radio is installed on each bus to allow for an on-board information system to be integrated into the radio network. The radios are linked to the INIT on-board COPILOT via MAP27 interface allowing drivers to control the radio and parts of the AVL system with one tool.

### OUTCOME

With the AVL data supplied via the TDMA channel, NCT control room staff are able to receive current information and forewarn drivers of potential delays. Passengers are also updated with accurate information at stops via the 'real time' (RTPI) signage and on buses with the 'next stop' signage. The RTPI signage was implemented in partnership with the local authority, Nottingham City Council, who erected the bus stop infrastructure.

In addition, historical data can now be collected to illustrate delay trends and provide genuine insight into timetable scheduling.

### MORE INFORMATION

For news, product specifications, comprehensive technical information and contact details of your nearest Tait service facility, please visit [www.taitradio.com](http://www.taitradio.com)

### CUSTOMER PROFILE

With a fleet of 320 vehicles Nottingham City Transport (NCT) carries just over one million passengers covering 230,000 miles in a week.

### APPLICATIONS

- ▶ TaitNet MPT 1327 network
- ▶ Tait TM8200 mobile radio series
- ▶ TaitNet Data System (TNDS)

### BUSINESS BENEFITS

- ▶ NCT can capture data to adapt timetables and improve the reliability and punctuality of vehicles
- ▶ Passengers of NCT vehicles can receive real-time information of vehicle whereabouts at bus stops, via text messages and the internet
- ▶ An integrated on-board information system means drivers have the ability to control multiple features (including the radio) with a single tool
- ▶ Up-to-date and accurate information can be used to change services as incidents on the road occur
- ▶ Dedicated voice channel to ensure there are always individual call capabilities between the bus and control room

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