

Case study

Location Insights help Network Rail understand travel patterns

Detailed location data is helping Network Rail understand how travel patterns are changing and supporting in their data driven decision making.



The shift towards hybrid work arrangements and changes in commuter behaviour towards the workplace have caused significant changes in how the GB railway is utilized. Therefore, Network Rail needed better, consistent, comprehensive information on rail demand and the evolving journey patterns, to continue delivering a great experience for passengers, while optimising their resources.

BT Active Intelligence has created a new data solution that turns anonymised raw data from the EE network into actionable insights. With this data we are helping Network Rail improve the way it plans, provides and measures its performance. This will be achieved by maximising aggregated insight around local, regional, and national travel patterns of UK rail passengers and road users.

By leveraging aggregated insights, we are assisting Network Rail with over 50 areas of insight. These include understanding the 1.8 billion trips made on the UK rail network each year, assessing the number of passengers traveling on 24,000 daily railway services, and identifying instances where road journeys could have been replaced by rail travel.

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We're excited about working with Network Rail and the positive impact this will offer UK travellers. Active Intelligence's insights will unlock new ways to improve the passenger experience in the months and years ahead. Insight like this will prove critical in enabling Network Rail to achieve its goal to get people and goods where they need to be, to offer excellent customer experience and to ensure the UK railway plays its ever more critical role in supporting a low-carbon UK economy.

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Chris Withers

Data and AI Solutions Director for BT Group's Digital unit

Active Intelligence is uniquely placed to safely share and analyse billions of responsibly sourced, anonymised and aggregated data points from mobile phone activity.



Over 24 million mobile customers



~50 device pings every hour - data at a 50m grid level



10bn+ daily data events



24/7 always on dynamic data



Active Intelligence won the 2023 award for **Data and Analytics project of the year** at the National Technology Award for the work that is being done with Network Rail.

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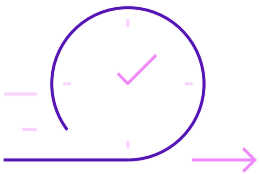
The pandemic and a rise in hybrid working have prompted major changes in how passengers use the UK railway. It was therefore critical that we reviewed how we measure rail demand and understand journey patterns so that we can continue to deliver a great experience for passengers. In looking for the right partner, BT Group stood out as providing the most accurate insight and complete picture of passenger demand, while meeting the critical need to handle data in a secure and responsible way. Since working directly with them in December 2022 we have been impressed with BT's openness regarding their methodology and have developed a close partnership. They are transparent about how they process their data, open to improvement and we have access to their entire supply chain.

David Harding | Head of Analysis and Economics, Network Rail

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In 2022 the Elizabeth line opened. Through our platform, we analysed journeys before and after the Elizabeth line opened:



Will save more than **24,000 hours** of travelling time per week



For journeys from Abbey Wood, Woolwich, Custom House and Canary Wharf it offers an alternative to a route that is currently made by **101,000 vehicles per week**

This is approximately 3.7 million kg of Co2 a week

Why Active Intelligence for Transport?

When you understand how people are moving from place to place, you'll know how to optimise transport infrastructure and routes.

We offer you invaluable insights into people's movements, enabling optimization of infrastructure, routes, and operations, and reduction of congestion. Our solution provides robust analysis of millions of journeys per day and offers details on population movements to and from a destination, behaviors, and more. Say goodbye to the limitations of traditional transport forecasting and hello to a smarter way of doing transport with Active Intelligence.

Do you want to know you more about how our data can help you make informed decisions?

Allow us to understand the problem you are looking to solve, and our team will identify the best solution to support your needs. **Get in touch ; active.intelligence@bt.com**

