

# CASE STUDY:

## Informing policy decisions on transport projects

***"TRACC analysis has been invaluable for making informed local and central policy decisions on transport projects"***

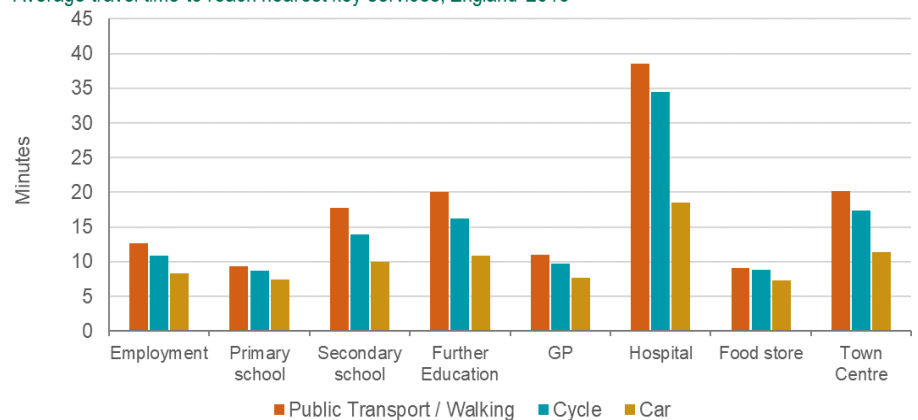
Bethan Grinham, Head of Vehicle & Administrative Statistics, DfT

The UK Department for Transport (DfT) have been developing and publishing journey time statistics for over 10 years giving a unique annual view of how accessibility in England has changed, and how population and transport changes have affected this. These present estimates of travel time from where people live to eight categories of key local services including schools. They show journey times to these services by walking, cycling, driving and public transport. These are supplemented with connectivity reports to access major transport hubs and networks, including airports and train stations adding further value to these statistics. Since 2015, the DfT have been using TRACC to produce these statistics and they have been extending their analysis on journey times to help aid policy decision making at a local and central government level and for some innovative future projects.

### Heathrow Expansion & High Speed Two Projects

By using connectivity statistics as a baseline it has been easy for DfT to view journey times to key sites such as airports and trains stations. This can help give an underlying business case for the need for change. The journey time statistics produced by the DfT have provided essential intelligence for the recent proposals to expand Heathrow Airport and the High Speed Two (HS2) railway linking London, Birmingham, the East Midlands, Leeds and Manchester.

Average travel time to reach nearest key services, England 2015



DfT, Journey Time Statistics, 2015



Heathrow airport is the busiest airport in the UK handling around 76 million passengers each year and is currently looking to expand its capacity by adding a third runway increasing annual passengers to 130 million. The aim is to decrease the reliance on the car for accessing the airport with a pledge that by 2030 at least 50% of journeys will be made by public transport. It is essential that the review must consider not only the impact on numbers of people accessing the airport but their journey times and the mode of transport they use. Colleagues from a different part of DfT put in a policy request to look at the possible expansion as they wanted information on current journey times and how these could be improved going forward.

The journey time statistics were able to provide vital information on current passenger journeys as well as data to help with considerations of the road network and surface transport capacity to ensure adequate changes are made to support the airport expansion. The analysis for this high level project was carried out using TRACC and has enabled informed policy decisions to be made as well as providing information for comparison over time.

Journey time statistics have also been used as a source of information for the High Speed Two (HS2) proposal to provide a new high speed railway aimed to be the new backbone of the national rail network. This project has been ongoing for a number of years but recently the DfT were asked to look at the impact of this proposal on journey times to demonstrate that this new railway would deliver improved journey times into London. The TRACC software was used for this analysis and allowed the DfT to model connected journeys and onwards travel from the station via bus which provided a view of the complete passenger journeys. TRACC also allows users to model new timetables which was essential for this project as they could test multiple 'what if' scenarios.

## Future use of TRACC

TRACC is already used far more regularly now than just for the annual publication but Bethan can see further use of the software. Many other government departments are showing an interest in this type of data including the Department for Work and Pensions. Bethan explains that they can see future value with using TRACC for modelling routes, developing strategies and data comparisons over time. *"It would be great to still be using TRACC and the same methodology in 10 years time to be able to compare routes and see how journey times have changed"*. They are also planning to use the software to look at how adding stops and services would impact journey times. This could be done for projects such as the Elizabeth line when defining the route and understanding where the stops should be. *"This would be very helpful to use as we could model before and after snapshots using TRACC"* Bethan said.

TRACC is constantly being updated and improved and Rachel Moyce, a Higher Statistical Officer at the DfT, has seen the benefits of these new releases, *"We've been using TRACC since the first Beta release, and it has definitely improved with each new release – batch calculations and faster run times are two improvements that have made a big difference for us. With the latest release there's the ability to store several sets of traffic speeds for a road network for different times of day, which will definitely be useful in the future."*