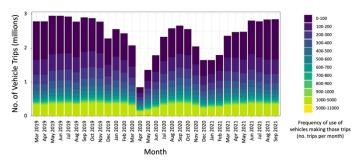




Discovery & Innovation Project Fact Sheet #1

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Characterising Changing Travel Patterns in the COVID-19 Era



The COVID-19 pandemic had a major impact on all our lives, including our travel choices. In the early pandemic phase, regular traffic levels in UK cities drastically reduced as people limited journeys to essential trips.

This study, undertaken by Dr Fiona Crawford at the University of the West of England, investigated pandemic impacts on traffic levels in Bristol, UK. These findings will shape future policies to improve air quality and pursue 'net zero' transport systems.

What did we do?

Information was used from 64 Automatic Number Plate Recognition cameras in the Bristol City Council area from 28th February 2019 to 30th September 2021.

Number plates were linked to an extract from the national Driver and Vehicle Licencing Authority (DVLA) database, which contained no personal information, to find out more, such as the type of vehicle (e.g., car, van, lorry) and the fuel used.

The travel time between camera sites was then used to identify vehicle trips. A total of 75 million trips were made by 3.2 million vehicles. The number and pattern of trips made were then compared in Spring (Apr-Jun) 2019, 2020 & 2021.

Key Messages

- Traffic levels decreased in Bristol by up to 70% during the early COVID-19 pandemic but returned to normal by late Summer 2021.
- People's travel patterns changed in different ways, Some people took the same number of vehicle trips, some fewer, and some travelled more often than they did previously.

Next Steps

- Linkage of air quality and traffic data, to understand how these changes in travel patterns affected pollutant levels in the city.
- In-depth analysis to understand the start and end point of trips, and how these routes were affected differently by the pandemic.
- Identification of groups of people who take fewer trips compared to before COVID-19.
 This can inform future net zero travel policies.

What did we learn?

- Over 80% of vehicle trips were made by car,
- Monthly trips reduced from over 2 million to less than 1 million between March and April 2020, as the country entered national lockdown
- Traffic levels rebounded to pre-pandemic baseline by Summer 2021.
- People changed their travel patterns in different ways. About half of those who used a vehicle regularly in Spring 2019 took the same number of trips in 2021. The other half took either more or fewer trips.

Full Report

https://transition-air.org.uk/di-crawford-report

Data

https://transition-air.org.uk/di-crawford-data

The TRANSITION Clean Air Network is a UK-wide network, led by the University of Birmingham in collaboration with nine universities and over 20 cross-sector partners, aiming to optimise the air quality and health outcomes of transport decarbonisation; it is funded by UKRI via the UK Clean Air Strategic Priorities Fund, administered by **NERC [NE/Voo2449/1]**.