



## DORSET COUNTY COUNCIL WORKS WITH CITI LOGIK TO PLAN FUTURE HOUSING DEVELOPMENTS

a Citi Logik Case Study

**Dorset Council's planning department is charged with establishing sites where new housing can be built to meet the growing demand. One of the areas of considerations for development locations is transport and travel where an accurate picture is required of how people move around the county, including their time of travel, origins and destinations.**

Understanding these patterns of movement can inform which sites are most practical for development in relation to critical infrastructure including road, rail and cycle routes and those that would have a detrimental impact.

Dorset's planning department engaged the help of the transport modelling team who used anonymised mobile data from Citi Logik to develop a more complete picture of traffic movement around the county. The reasons behind the decision were threefold:

Firstly, traditional methods, such as people counting vehicles on a road, only provides a snapshot in time and isn't necessarily a true reflection of a typical day. It also uses assumptions, such as the traffic travelling one way in the morning is likely to be the same going in the opposite direction in the evening.

Mobile data provides greater accuracy for these movements.

Secondly, traffic surveys that stop drivers to ask where and why they are travelling are disruptive and cause people to take other routes so they avoid being stopped so it's hard to get a representative picture of what's really happening. Surveys like this also only stop around 10% of the traffic making it hard to develop statistically valid assessments, despite it being an accepted methodology.

Finally, mobile data sets are much cheaper and are therefore a cost efficient and effective way to understand what's happening in an area, especially when applied to existing data available through the Department of Transport for example.



**“ The thing that is most striking about working with Citi Logik is just how affordable this source of data is compared to using people to run traffic surveys, yet there’s no compromise on quality. ”**

Phil Channer, who leads the transport modelling team at Dorset Council, says the data will be used to develop transport models: “Our ultimate goal is to create a transport model that can be used to consider potential development sites. In order to do this, we require a matrix of trip origins and destinations which can be developed from the mobile network data and other data sources, and used to make assumptions about where people get on and off the transport network – locally and nationally.”

“We can then map the destinations and make assumptions about the journey type, such as for leisure or work. This can then be used to model future journeys, peak traffic flows, destinations, and to a certain extent purpose, and all in relation to new housing proposals.”

“Ensuring the mobile data is valid is all part of the task too. So, while the data can’t always determine short journeys because cell sites are too far away to pick up movement, we can apply other data from national sources to make estimates on travel times and distance, and the frequency of those journeys. When this is done you can validate assumptions in the mobile data and have reasonable confidence that the models you produce are representative of reality.”

The models being developed by the modelling team will be used to make predictions, such as what happens to town centre traffic in Weymouth when the population in the surrounding area grows, as well as understand the pressure on roads or the rail network coming into and out of the town.

Phil adds that although it is early days there is great potential for mobile data use at Dorset Council: “The thing that is most striking about working with Citi Logik is just how affordable this source of data is compared to using people to undertake traffic surveys, yet there’s no compromise on quality. You can generate more accurate models with mobile data and use it alongside traditional methods, such as the national data sets the government departments provide, as necessary.”

“Although this project is all about housing, I can see there is potential to work with Citi Logik for other transport planning needs we will have in the future.”

The models developed by the transport planning team will be used to inform public consultations on recommended development sites in 2021.

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