Recommendations

Since the research conducted had a really small scale, it is recommended to conduct a larger scale similar study. The work was very limited in terms of amounts of data as data for only one day were used. What is more, the number of routes was also very small due to limited amount of sensors. The future research should use data for a much longer period of time and more OD pairs. Thanks to using data from a longer period of time it would be possible to examine the behaviour of drivers in the past to see if there is some point in time when the route choice decisions changed. The date-specific network conditions due to weather or accidents could also be investigated and incorporated into the research into drivers’ rationality.

It would be worth considering more conditions that would influence route choice decisions. Examining not only distance but also travel time and conditions or type of a road would also be recommended for future research. It can be expected that some routes, despite being the shortest can be suitable for lower speeds or be more usually more congested. That can influence driver’s perceived generalised travel cost and therefore their decision as shown by previous research. Then, we can expect that a driver can decide to choose a longer route, even if the distance is larger than on some alternative route .

Investigating travel time and especially differences in travel time and route choices made would also be recommended. That would allow to check how much the conditions in the network need to change in order for drivers to change their behaviour, i.e. if they prefer to use the same route as usually or decide to use some alternative route because of increased perceived or actual travel time on their usually preferred route. That way it would also be possible to check if behaviour of drivers that are accustomed to the network, i.e. commuters and locals differs from the behaviour of drivers that use the Chesterfield’s network less frequently, i.e. tourists.

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