

Driving for work and the gig-economy

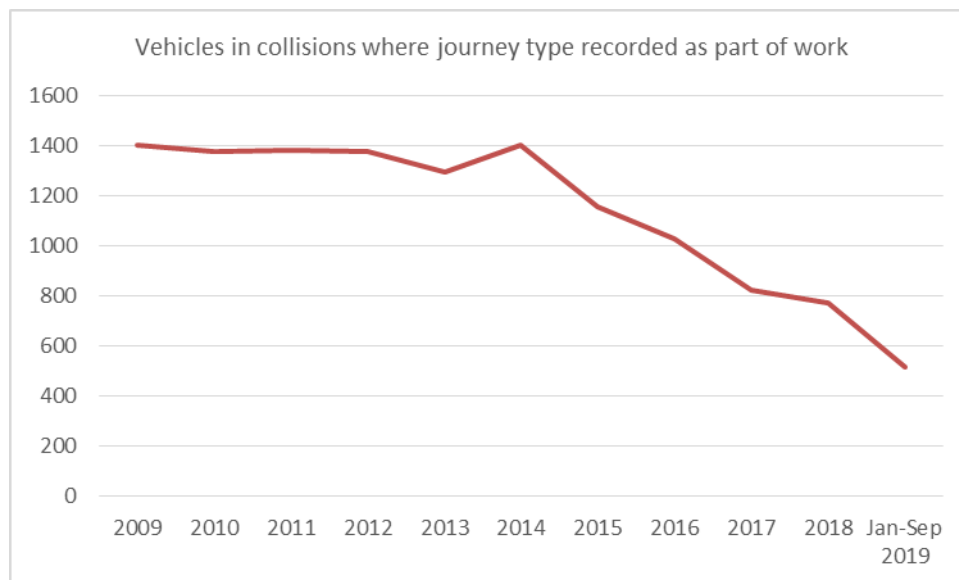
Aim

This document examines trends in data collected for vehicles in collisions, to determine if we can detect any trends related to 'the gig economy'. For the purpose of this document, the gig economy relates to an increase in the use of grey-fleet¹ vehicles for tasks such as online shopping parcel delivery (e.g. amazon) "ride sharing" (e.g. uber) and food delivery (e.g. deliveroo).

This type of work appears to be carried out in a mixture of private cars, vans, small capacity motorcycles and pedal cycles.

Data

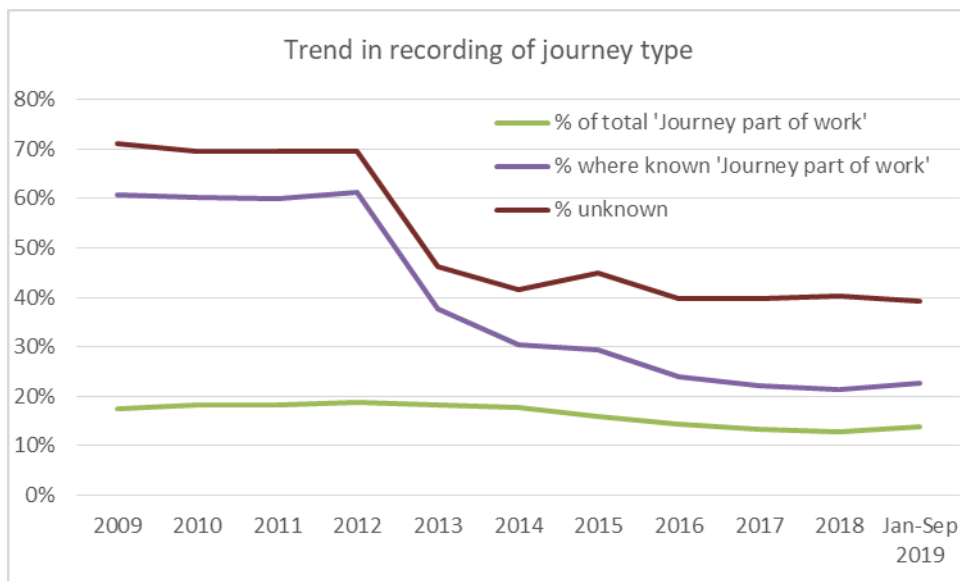
The graph below shows pure number of vehicles recorded in collisions as being on a 'Journey as part of work'. We would expect to see a gradual downward trend in total numbers as there has been a gradual downward trend in total collision numbers over the same period. However, the conspicuous change since 2015 is not what we would expect to see, especially at a time when the economy overall had started growing again following the post 2008 recession.



It would be tempting to link this drop to the November 2015 implementation of CRASH, but the relationship between CRASH and recording of journey type may not be so simple. The graph shows an ongoing reduction since 2015, but if it was a simple recording issue in CRASH we would see a sudden drop followed by the previous trend continuing at a lower level.

The next graph controls for collision volume, and to a smaller extent for data quality, as it shows the percentage of 'Journey as part of work' for all vehicles and for just those vehicle records where a journey type was recorded.

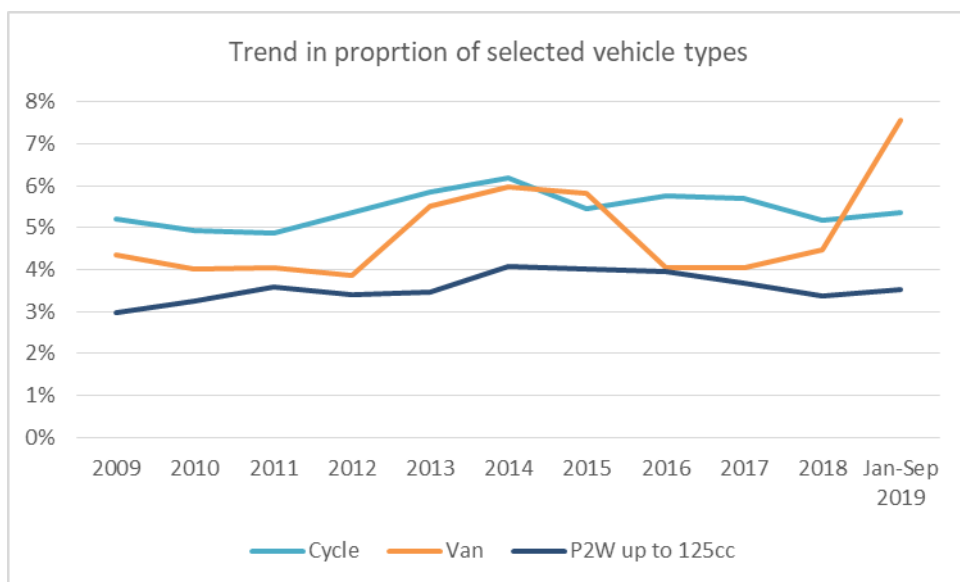
¹ Privately owned vehicles used by employees/contractors/casual labourers for business purposes



What this graph shows is that from 2013 onwards there was an improvement in the number of vehicle records where something other than 'Unknown' was recorded for the journey type. However the proportion of the total recorded as journey being part of work has not changed very much so is consequently a smaller proportion of the total for those records where this field is populated. Since 2015 there has been a slight reduction in the proportion where journey type is known that were recorded as 'Journey as part of work.'

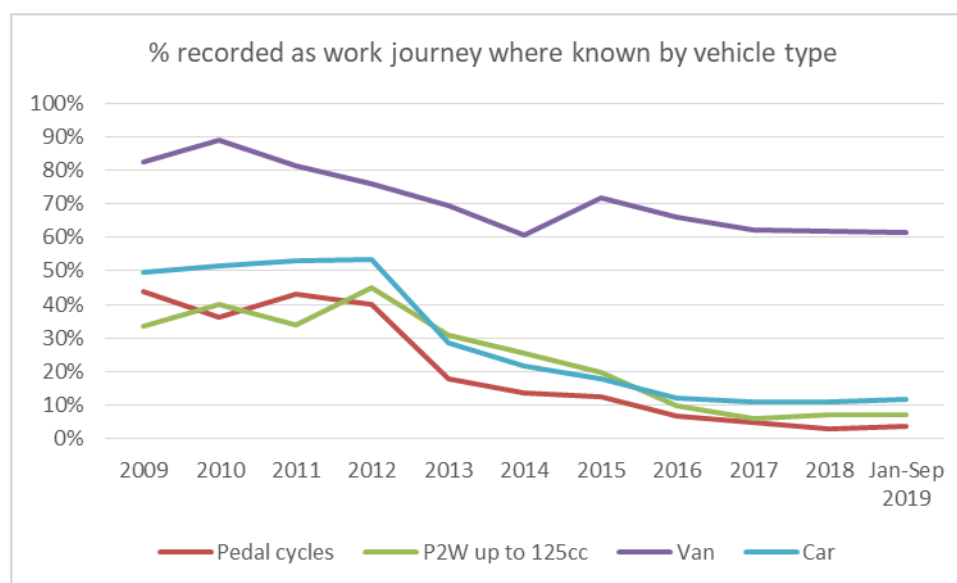
These data consistency issues limit what we can learn from journey type data. It is likely any impact from the gig-economy is lost in the inconsistent recording of the data.

Vehicle type is less ambiguous and easier to record consistently, so may give some clues as to the impact of the gig-economy. The following graph shows the proportion vehicles in collisions by selected vehicle types that could be linked to the gig-economy.



This shows a gradual increase in low-capacity P2Ws, and a fluctuation in cycle collisions between 5% and 6% of all vehicle involvements. Van involvement has been more erratic, and shows no clear trend. There has been a sudden upsurge in van involvements so far in 2019, however this is too recent to determine if it is a real trend or a random spike. It also does not correlate with the more gradual increase in the gig economy over the last 5 to 10 years.

The next graph shows selected vehicle types by the proportion recorded as 'Journey as part of work'.



This shows the inconsistency in journey type recording affects all vehicle types, but has affected vans to a much lesser extent. This is likely to be because assuming any given van is on a journey as part of work is a pretty safe bet. It does not indicate any measureable impact on collision involvement from the gig-economy

Conclusions

- Inconsistencies in recording make it difficult to detect any impact from the gig-economy.
- A small increase in the proportion of collisions involving low capacity P2Ws could conceivably be at least partially related to the gig-economy.
- Anecdotally the gig economy has undergone massive proportional growth in the last 5-10 years, however this is from a very tiny starting point in terms of its contribution to total road traffic. The gig economy may still be too small compared to the totality of traffic in Essex to have a detectable impact on overall collision statistics.

Recommendations

- 1) Examine CRASH recording process to ensure consistency in recording of journey type data.
- 2) Maintain a watching-brief on collisions where there may be gig-economy involvement to identify any characteristics that can be used for a more detailed analysis of the issue.
- 3) Consider people involved in the gig-economy when examining issues for small capacity P2Ws.