Motorcycles:

Note: This topic paper was updated on 21\textsuperscript{th} April 2020, including ensuring relevant reference to background data and information used

Motorcycles/motorbikes are a fully motorised individual transport mode. They are used for less than 1\% of journeys nationally, whilst ownership sits at around 1.2million motorbikes in the UK. \footnote{https://www.gov.uk/government/statistics/transport-statistics-great-britain-2019 and https://www.gov.uk/government/statistical-data-sets/veh03} Whilst a well-used mode of transport across Oxfordshire, data shows motorbikes as having the highest number of fatalities per million miles travelled compared to any other modes.\footnote{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/834585/reported-road-casualties-annual-report-2018.pdf}

Motorbikes are regulated by the Department for Transport (DfT) and require a test to be passed in order to hold a licence. There are four types, by engine size, of motorbikes recognised by the DfT, which are:

- 50cc & under
- between 50cc and 125cc
- between 125cc and 500cc
- 500cc & over

However, electric motorbikes are a rapidly advancing technology that is becoming more accessible and competitive. Improvements in battery technologies are seeing high speed electric motorcycles capable of 60mph and beyond, making them more suited for commutes on national speed A roads.

As part of the Local Transport and Connectivity Plan there are arguments for and against promoting motorbikes as part of a transport solution for the county.

For

- Excluding electric vehicles, motorbikes generally use less fuel than cars.
- Motorbikes take up less space on the highway than cars; so swapping cars for motorbikes would reduce congestion and take up less parking space
- Motorbikes are substantially smaller than cars, so they take less land space to park in busy urban environments
- Motorbikes are faster than bicycles; they are perhaps more suited to longer journeys, or longer commutes, than an active mode of travel

Against

- As with cars, motorbikes are mostly still using fossil fuels to run, meaning they have environmental impacts, including contributing to air pollution
- Levels of accidents involving motorcycles is high relative to their use compared with other modes of transport, with statistical evidence and research suggesting motorcyclist behaviour, such as speed or loss of control contributes to many accidents involving motorcycles\footnote{https://trl.co.uk/sites/default/files/TRL492.pdf}
Motorbikes are substantially larger than bicycles, so they take more land space to park in busy urban environments.

What evidence can we draw upon?

There are very few electric motorbikes on the market, although this number is increasing, which means most motorbikes rely on fossil fuel for their propulsion. In 2013 regulations, the EU required motorcycles to improve pollutant emissions. This will allow matching of 2012 car emission controls by the end of the decade although motorcycles lag behind the car industry in creating less polluting, smaller engines, and electric bikes have been slow to the market to date.4

It is relevant to review other local authority policies for Powered Two Wheel riders. Where Transport for London has permitted access to bus lanes for motorbike riders, research has shown that the number of road incidents involving powered two wheelers has increased at busy locations.5 Injury data from the NHS relating to those attending A&E/Hospital show that twice as many powered two-wheeler riders attend hospital, compared to reporting to the police. One reason could be that of those who attend hospital – but not report to Police – are most likely to have been the only ones involved.

The causation factors (i.e. factors that may have played a part in the accident occurring) differ between the different motorbike types. Information on motorcycle accidents from 2009 to 2014 in Oxfordshire gives a summary of the ‘top 5’ (i.e. those appearing most often) causation factors6:

<table>
<thead>
<tr>
<th>RANK</th>
<th>PTW Type/Size</th>
<th>50cc &amp; under</th>
<th>50cc to 125cc</th>
<th>125cc to 500cc</th>
<th>500cc &amp; over</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inexperienced or learner driver/rider</td>
<td>(605)</td>
<td>(605)</td>
<td>(410) Loss of control</td>
<td>(410) Loss of control</td>
</tr>
<tr>
<td>2</td>
<td>Slippery road (due to weather)</td>
<td>(103)</td>
<td>(103)</td>
<td>(103) Slippery road (due to weather)</td>
<td>(403) Poor turn or manoeuvre</td>
</tr>
<tr>
<td>3</td>
<td>Loss of control</td>
<td>(410)</td>
<td>(410)</td>
<td>(602) Careless/Reckless/In a hurry</td>
<td>(307) Travelling too fast for conditions</td>
</tr>
<tr>
<td>4</td>
<td>Deposit on road (eg oil, mud, chippings)</td>
<td>(102)</td>
<td>(408) Sudden braking</td>
<td>(403) Poor turn or manoeuvre</td>
<td>(102) Deposit on road (eg oil, mud, chippings)</td>
</tr>
</tbody>
</table>

5 https://trl.co.uk/reports/PPR365
6 Oxfordshire accident statistics, 2009-2014 as held by Oxfordshire County Council
Poor turn or manoeuvre
Deposit on road (eg oil, mud, chippings)
Inexperienced or learner driver/rider
Careless/Reckless/In a hurry

The following pattern can be seen:

- lower powered PTW’ers lack of experience/road conditions seems to be an issue
- higher powered PTW’ers a loss of control and speed/being in a hurry are issues

Standard police practice when compiling accident reports is to assign the primarily ‘at fault’ vehicle as vehicle 1 (with any other vehicles assigned vehicle 2, vehicle 3 etc.). In Oxfordshire, in 2014-2018 the following proportion of motorcycle accidents had the motorcyclist as vehicle 1: Fatal: 71%, Serious: 59%, Slight 51%. This suggests that the higher severity incidents were more frequently the result of errors on the part of the motorcyclist than the other parties involved. 7

Question 28

Motorcycles - What do you think?

How should the approach to motorbikes and motorbike riders in the new Local Transport and Connectivity Plan be reviewed? How could any approach affect active and healthy travel opportunities?

Could there be better and clearer parking, as distinct from cycle parking and car parking?

Could road safety campaigns on motorcycles be extended? What angle/s should this cover?

To respond please use the online consultation form.

7 Oxfordshire accident statistics, 2014-2018 as held by Oxfordshire County Council