




**BP2: Highway Features and Policy**

<p><b>Reference:</b> BP2 001</p>	<p><b>Title of Project:</b></p>	<p><b>PTWs in Bus Lanes</b></p>
<p><b>Version:</b> 1</p>	<p><b>Website:</b></p>	<p>TfL article: <a href="http://www.tfl.gov.uk/roadusers/finesandregulations/10151.aspx">http://www.tfl.gov.uk/roadusers/finesandregulations/10151.aspx</a> Hull City Council: <a href="http://www.hullcc.gov.uk">www.hullcc.gov.uk</a> DfT Traffic Advisory Leaflet (TAL): <a href="http://www.dft.gov.uk/pgr/roads/tpm/tal/trafficmanagement/trafficadvisoryleaflet207.pdf">http://www.dft.gov.uk/pgr/roads/tpm/tal/trafficmanagement/trafficadvisoryleaflet207.pdf</a></p>
<p><b>Brief Description of Project:</b></p>	<p>Although several cities already allowed their use, in September and October 2002, TfL introduced three pilot schemes on the Transport for London Road Network (TLRN) whereby PTWs were permitted to use bus lanes along the three routes (A41, A23 and A13) during the hours of operation.</p> <p>The primary objective for the study was to investigate and offer evidence to show whether the safety of P2W users could be enhanced by allowing them access to bus lanes, The assessment was to involve comparing the casualty history of all vulnerable road users (VRUs) to ensure the measure does not create a negative impact on other road users.</p> <div style="display: flex; align-items: center; margin-top: 10px;">  <div style="margin-left: 10px;"> <p>Analysis of the casualty history on the trial routes for a 36 month period before and after implementation of the measure was compared with two different control methods, the original control route data and a statistically more robust “Tanner control” method introduced after 18 months.</p> </div> </div>	



The casualty history on each trial route was compared to both controls using four different scenarios (two during all hours and two during bus lane operating hours). This resulted in eight comparison analyses for each VRU group.

The results were seen as inconclusive and a further trial has begun. PTWs will be permitted to use bus lanes on the TfL network for 18 months at which time the scheme will be reviewed.

The new trial covers nearly 123kms of the total of 330kms of Bus Lanes in London;

- P2Ws will be allowed in the designated Bus Lanes at all times;
- Only Bus Lanes on the TLRN (red routes operated by TfL) will be affected; no contra-flow Bus Lanes are included in this trial;
- The normal road speed limit will apply (i.e. 30mph);
- Police and use of TfL's Bus Lane Enforcement Cameras;
- The experiment will last for 18 months, and began on 5<sup>th</sup> January 2009;
- A voluntary 'code of practice' for motorcyclists using the TfL bus lanes has been introduced:

[http://www.mcia.co.uk/downloads\\_temp/189e054c-0e5b-45ac-883a-0bfaef951b7b\\_Imported\\_File.PDF](http://www.mcia.co.uk/downloads_temp/189e054c-0e5b-45ac-883a-0bfaef951b7b_Imported_File.PDF)

The links below give details of the latest experiment as shown on the TfL Website:-

<http://www.tfl.gov.uk/roadusers/finesandregulations/10151.aspx>

<http://www.tfl.gov.uk/assets/downloads/motorcycles-in-red-route-bus-lanes-q-and-a-october2008.pdf>

Other cities, including several in the UK, have permitted bus lane use for some time. Bristol allows PTWs access to their entire bus network with the exception of two limited areas.



Hull City Council undertook a trial scheme to monitor the effects of allowing motorcycles to use operational bus lanes so that an informed decision could be made regarding the Council's future policy.

Before and after data was collated for:

**Collisions/Casualties;**

**Pedal cyclist opinions;**

**Journey times;**

**Lane usage.**

	<p>The project monitored the collisions involving pedestrian/ pedal cycles/PTW/buses that occurred during the operation of the bus lane.</p> <p>The 'before' period was January 1996 to June 1998; and the 'after' period was August 1998 to Sept 1999.</p> <p>The trial was undertaken to resolve traffic management rather than road safety issues.</p>
<p><b>Monitoring Data:</b></p>	<p>The monitoring data for the two schemes is described below.</p>
<p><b>Results:</b></p>	<p>In <b>London</b> the assessment of <b>P2W collision numbers</b> showed six of the eight analyses as being beneficial to the safety of P2W riders and two of the eight showed a disbenefit to this group. All four assessments during operational hours showed a safety benefit.</p> <p>The <b>pedal cycle casualty numbers</b> showed three of the eight analyses as being beneficial to the safety of pedal cyclists and five of the eight showed a disbenefit to this group. Two of the four assessments during operational hours showed a safety benefit.</p> <p>The <b>pedestrian casualty numbers</b> showed two of the eight analyses as being beneficial to the safety of pedestrians, five returned a disbenefit and one showed no change.</p> <p>However, none of the differences are statistically significant.</p> <p>In <b>Hull</b> cyclists supporting PTW use of the bus lane increased from 60% to 77%.</p> <p>PTW use of the bus lane did not lead to an increase in collisions.</p> <p>PTWs in bus lanes did not appear to have significantly affected the journey time of buses.</p> <p>The number of PTWs using the route during bus lane operation times. increased 200-400%. The number of pedal cycles using the route reduced by 5-10%.</p> <p>Continuing monitoring shows these results maintained.</p> <p>In the UK the Department for transport has produced an advisory leaflets providing guidance for highway authorities considering PTW use of bus lanes:</p> <p><a href="http://www.dft.gov.uk/pgr/roads/tpm/tal/trafficmanagement/trafficadvisoryleaflet207.pdf">http://www.dft.gov.uk/pgr/roads/tpm/tal/trafficmanagement/trafficadvisoryleaflet207.pdf</a></p>

<p><b>Key Effective Conclusions:</b></p>	<p>The evidence from the trials in London and Hull offers more information about the impact of allowing P2W access to bus lanes than any study to date. Nevertheless, it is vital to recognise the scope and limitations of these trials as a potential enhancement to road safety in a live experiment with several significant other variables; one of the most important being changes in highway usage by different modes during the investigation.</p>
<p><b>Projects for Comparison:</b></p>	<p><b>Bus Lane trials in London – M4 motorway</b></p> <p>In July 2002 the eastbound carriageway speed limit was increased to 60mph from 50mph and motorcycles were allowed to use the offside bus lane. The site was monitored by TfL’s London Road Safety Unit who undertook a 36 month before and after study.</p> <p>The study showed that the number of collisions involving injury decreased from 44 in the 36 months to July 2002 to 28 in the 36 months after. This decrease of 36% was found to be statistically significant at the 10% level using the K test. Collisions involving P2Ws reduced from 12 to 4.</p> <p><b>Other London borough schemes</b></p> <p>There have been other trials in three London boroughs, Westminster, Kingston and Richmond. Table 8 gives a summary of the performance of each scheme.</p> <p>In September 2005 the City of Westminster introduced the measure in the form of a trial on a total of ten lengths of bus lane. The overall impact suggests that there are safety benefits for all vulnerable road users. In the 14 months of the measure, the figures have returned a 24% reduction in pedestrian casualties, and 17% reduction for both pedal cycles and P2Ws.</p> <p>There are four schemes introduced in the Royal Borough of Kingston, with two having collected 36 months after data sets and two with 31 months data sets. The collective casualty figures have shown reductions for all vulnerable road users with pedestrian casualties down by 17%, P2Ws down by 29% and pedal cycle casualties down by 50%.</p> <p>Two schemes have been introduced in Richmond. These schemes have been operating for 31 months and have seen a 33% reduction in pedestrian casualties, and 67% reduction in P2W casualties. There has, however, been an increase from 0 to 3 in pedal cycle injuries.</p> <p>None of these schemes, however, have been assessed against a control, so comparisons cannot be made of the statistical significance of the results. Any casualty changes should be seen against an overall KSI casualty reduction of over 30% between 2002 and 2006 in London.</p>

	<p><b>UK schemes outside London</b></p> <p>There has not been a trial of the measure in the UK that has undertaken such a comprehensive “before and after” casualty analysis using control sites as the TfL trial. The majority of studies failed to introduce control routes and supplement the data with vehicle usage surveys and journey times. However, some useful studies have been undertaken which have been assessed using differing methodologies over the last decade.</p> <p>Avon County Council first resolved to introduce motorcycles to bus lanes in Bristol using an Experimental Order on 14<sup>th</sup> February 1995. The experimental order came into effect in June of that year and was confirmed as a Permanent Order on 12th March 1996 when the Committee, anticipating the imminent Local Government Re-organisation, strongly recommended that its four successor Unitary Authorities should extend the scheme to their areas (which each has subsequently done).</p> <p>There has been much written on the Bristol scheme but the evidence recently given to the UK Transport Select Committee by the Motorcycle Industry Association (MCI) probably sums the results most succinctly.</p> <p><i>“During the 36 months prior to the implementation, accidents involving motorcyclists averaged 1.1 per month, compared to 0.8 during the six-months of the experiment, suggesting a 25% decrease, and that no motorcycle accidents were recorded in the bus lanes and no collisions with pedestrians or cyclists were recorded”.</i></p> <p>The same evidence also stated that <i>“an 18-month experiment by Sheffield City Council during 2003/04 which also reported a 25% decrease in monthly average motorcycle accidents.”</i></p> <p><b>European towns and cities</b></p> <p>A growing number of European towns and cities deploy the ‘P2W access to bus lanes’ measure for road safety purposes. Motorcycles have been allowed in the bus lanes of Sweden’s capital, Stockholm, since 1986, and the same approach has been adopted in Barcelona and some Italian cities.</p> <p>As far as could be established by the authors of the TfL study report, no trial of P2W in bus lanes has resulted in a rejection of the measure for safety reasons. Similarly, in all known trials to date, once P2W access to bus lanes has been granted, such access has never been subsequently rescinded.</p>
<b>Justification:</b>	<p>Allowing P2W access to bus lanes may be worthwhile, but will depend upon environmental and social/cultural/legislative conditions specific to a particular site at a particular time. The experience set out above could be used by a designer bearing in mind the above limitations. The approach detailed above could potentially contribute to eSUM WP3, BP2 objectives.</p>