



PTW ACCESS TO BUS LANES

ABSTRACT

Motorcycles are a legal mode of transport and as such, their riders are entitled to expect that measures be taken to improve their safety. With over 75 UK transport authorities recognising the sense of PTW access to bus lanes, the momentum of the policy is undeniable.

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Introduction

Motorcycle access to with-flow bus lanes is now in operation in 50 transport authority areas in the UK. Additionally, moves are in process for at least a further 25 authorities to follow suit with all remaining London Boroughs, all remaining authorities in the West Midlands Combined Authority, Northamptonshire and others planning to harmonise the access for PTWs in bus lanes. With over 75 UK transport authorities recognising the sense of PTW access to bus lanes, the momentum of the policy is undeniable.

From initial trials in the mid-1990s there has been a general trend towards adoption of the policy to the point where there is currently little argument against a default position for access. Throughout the intervening period there has been only one example (in the London Borough of Ealing) of a trial for motorcycle access to end in anything other than full adoption of the policy. Whilst research into the safety benefits for motorcyclists has been characterised by inconclusive results due to low sample sizes, all results have been neutral or leaning towards confirmation of the safety benefit. By contrast the research has failed to highlight any detrimental effect on the safety of other road users or the efficiency of bus services.

London Mayor, Sadiq Khan's Transport Strategy [1] **“[will seek to improve motorcycle safety by] calling on all boroughs to allow motorcycle access to their bus lanes, to end the inconsistency between highway authorities that causes unnecessary confusion and risk to motorcyclists”**

The West Midlands Combined Authority Movement for Growth Transport Strategy [2] states **“safety initiatives will supplement initiatives to facilitate motorcycling as a choice of travel within a safe and sustainable transport framework. These include provision of more, secure parking for PTWs, allowing PTWs in bus lanes, as is the case in Birmingham and London, and ensuring traffic management scheme design takes into account the requirements of PTWs”**

Northamptonshire County Council are the first in the UK to fully adopt a policy to promote modal shift to motorcycles. **“As part of our modal shift strategy Northamptonshire County Council embraces motorcycles and scooters as a sustainable transport mode within the countywide transport programme.”** [3] Phase 2 of their motorcycling strategy states **“We are looking at road infrastructure including the use of bus lanes for motorcycles, road furniture and facilities for motorcyclists including on street motorcycle parking which is handy and secure.”**

The West Yorkshire Combined Authority (WYCA) commissioned a report from AECOM in 2016 which recommended that motorcycles are permitted to use bus lanes across the WYCA region. This recommendation was then written into the Transport Strategy 2040 [4] which states: **“We will improve road conditions and facilities for motorcyclists, designing our infrastructure to remove issues that could affect motorcycle safety, introducing, where possible, a phased programme of allowing motorcycles to use bus lanes; providing more and secure motorcycle parking provision; and adopting a standardised approach to local authority controlled motorcycle parking”**

Motorcyclists are accepted as the 3rd vulnerable road user (VRU) group. Killed and Seriously Injured (KSI) statistics for riders are widely accepted to be the worst for all three groups, and yet perversely it seems that they are the group that attract the lowest level of funding for safety interventions. The principle of shared responsibility for road safety between road user and system designer seems to be particularly skewed, when it comes to PTWs, towards education and enforcement for the user as opposed to interventions from system designers that would include segregating a VRU from general traffic. In the case of cycling, by contrast, the skew is in the opposite direction where vast sums are spent on segregated road space, but very little on enforcement or regulation for cyclists. A consistent approach to allowing motorcycles to access bus lanes would be a move in the right direction in terms of redressing this imbalance.

This report looks at the current national position with respect to motorcycle access in bus lanes. It reviews how Department for Transport (DfT) guidance has developed over time, and studies by local authorities and other organisations into schemes around the UK. These examine the policy of allowing PTWs in bus lanes in respect of motorcyclist safety, journey times, and impact on other road users, emissions and modal shift.

Locations currently allowing PTW access

This list is as comprehensive as possible at the time that this report was written. The difficulty in clarifying access reflects the claims of confusion amongst PTW riders with respect to which bus lanes they are permitted to access.

Locations are listed by date of initial trial/introduction of the policy.

Reading	1994
Bath	1995
Bristol	1996
South Gloucestershire	1996
North Somerset	1996
Hull City Council	1998
Colchester	1999
M4 Bus Lane	2000
Swindon	2002
Kingston	2003
London TLRN	2003
North East Lincolnshire	2003
Sheffield	2003
Belfast	2004
Northern Ireland	2004
Sunderland	2004
Essex	2005
Derby	2006
Westminster	2006
Aylesbury	2007
Birmingham	2007
Plymouth	2007
Buckinghamshire	2008
Hammersmith & Fulham	2009
Bedford	2010
Solihull	2010
Walsall	2010
Leicester	2011
York	2011
Bromley	2012
North Lincolnshire	2012

Merton	2013
Peterborough	2013
Newport (SW)	2013
Coventry	2014
Durham	2014
East Sussex	2014
Edinburgh	2014
Newcastle on Tyne	2014
Darlington	2014
Brighton & Hove	2014
Doncaster	2015
Cardiff	2015
Wakefield	2016
Richmond	2017
Sutton	2017
Waltham Forest	2017
Wandsworth	2017
Calderdale	2018
Newham	2018

Note: For some locations the introduction date is not confirmed – these dates are shown in grey, once again demonstrating the difficulties found when confirming the basic fact of whether motorcycles can use any specific bus lane.

Guidance/Views

Central Government

In 1997 the DfT issued local transport note LTN 1/97 “Keeping buses moving” [5]. This discouraged permitting PTW access to bus lanes: “Because there is, as yet, insufficient evidence from the Bristol experiment, and because there is likely to be a greater risk to pedestrians if motorcycles were able to use bus lanes, the Department recommends that motorcycles should not normally be permitted to use bus lanes.”

In 1998 the Government's White Paper on the Future of Transport, “A New deal for Transport: Better for everyone” [6] welcomed trials for PTW access: **“We would welcome proposals from local authorities interested in conducting properly monitored pilot studies of the use of bus lanes by motorcycles, to help inform decisions on whether there is a case for motorcyclists to be allowed to use bus lanes.”**

The Government's Motorcycling Strategy [7], published in February 2005, stated: “the evidence so far suggests that there are no apparent safety disbenefits from allowing motorcycles to use bus lanes.”

In 2007 The DfT revised its position in Traffic Advisory Leaflet TAL 2/07 “The Use of Bus Lanes by Motorcycles” [8]. This reversed previous advice against the practice and now recommends that local authorities actively consider it.

The leaflet encourages authorities to consider the following points:

- The safety implications involved in restricting motorcyclists to general traffic lanes, against the possible problems of allowing motorcyclists into the bus lane;
- The effect on other vulnerable road users, especially pedestrians and cyclists;
- The possible impact on bus journey time reliability due to additional traffic in the bus lane;
- The reduction in congestion for other traffic on routes currently used by motorcyclists;
- The potential for modal shift if motorcycling is seen as a more convenient means of transport;
- The potential for overall improvements in transport efficiency;
- Local publicity to help advise road users of a policy change; and
- Continuity of bus lane routes which admit motorcycles.

MAG is lobbying the DfT to review its guidance on PTW access to bus lanes. We believe that there is a solid case for making access the default position unless there are specific reasons identified to deny access to any particular scheme.

Institute of Highways Engineers

The Institute of Highways Engineers (IHE), in their guidelines for motorcycles [9], first published in 2005, state the potential safety benefits for motorcyclists and conclude “Local authorities are best placed to decide whether to allow motorcycles into with-flow bus lanes. Each case must be examined on its merits and fully consider published research, case studies and all potential advantages and disadvantages.”

Motorcycle Safety and Transport Policy Framework

The Motorcycle Safety and Transport Framework [10], published in 2016, co-written by the Motorcycle Industry Association (MCIA), National Police Chiefs Council (NPCC) and Highways England, states “Access to shared facilities with cyclists has historically been a vexed issue. In particular, sharing facilities such as bus lanes and advanced stop lines have been the subject of campaigns by both cycle groups and motorcycle groups. The MCIA has supported access to facilities such as bus lanes where appropriate and continues to do so.”

Easy Rider Report

The Greater London Assembly Transport Committee’s report into motorcycle safety in London, “Easy Rider: Improving motorcycle safety on London’s roads” [11] published in 2016 stated: **“The design of London’s roads is detrimental to motorcyclists in some respects. As competition for road space increases, there is a risk that motorcyclists are forced into closer contact with other vehicles. TfL’s decision to open up bus lanes to motorcyclists on major roads has helped to rectify this situation in some areas, but the failure to convince many London boroughs to do the same has created confusion and inconsistency. It is time TfL finished what it started seven years ago, and secured motorcyclist access to all bus lanes. But access to London’s bus lanes is a privilege and with it should be a reinforced call to motorcyclists to ensure they drive responsibly, staying within safe speed limits, for their own sake and for the sake of other vulnerable road users like cyclists.”**

Transport for London P2W in bus lanes study 2007

TfL carried out a study [13] 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 rate of all vulnerable road users (VRUs) to ensure the measure does not create a negative impact on other road users. The report concluded that:

- The comparisons of collisions involving VRUs using the Tanner control showed neither a benefit nor disbenefits from the introduction of the measure. None of the results from any of the user group comparisons were statistically significant.
- When the VRU collisions were assessed against the original control routes, a net benefit to all groups was returned. However, included in this reduction were localised increases in pedestrian casualties on the A41. None of the results were statistically significant.
- When the collision rates were analysed (i.e. taking into consideration the increase in usage of P2Ws) there was a safety benefit to all VRUs with no localised increases in collisions.

Transport for London research into attitudes 2008

In 2008 TfL carried out large-scale attitudinal surveys with respect to its bus lane trials [14]. The conclusions of the report stated:

“The trial has been well received by P2W riders, with 93% supporting motorcycles use of red route bus lanes. Almost half of P2W riders say they have increased their P2W use (even more on use of red routes) and 72% say they feel safer travelling on red routes as a result of the trial.

Overall, just over half of Londoners support the idea of motorcyclists using red route bus lanes (54% support it compared with 18% oppose). There is a minority of other road users who have a negative response to the use of bus lanes by motorcycles. However, nine in ten motorcyclists and over half of users of buses, bicycles and cars/vans say they support motorcycles using bus lanes.”

Transport for London studies & their impact – 2010 and 2011

Prior to these studies, earlier monitoring had produced no statistically robust conclusions. No major concerns emerged, but motorcyclist behaviour (e.g. lane discipline) and certain site characteristics (high flows and a large number of side roads) were identified as potential problems. Roads with high numbers of junctions and high numbers of bus and taxi movements to the kerb were identified as potential issues by the study “Impacts of motorcycles in Westminster bus lanes” [15].

An observational study of the use of Bus lanes by motorcycles and cycles (Motorcycle Industry Association 2004) looked at one bus lane in South London prior to the first trial allowing PTWs to use it. Most cyclists used the bus lane, and approximately 42% of PTWs were doing so illegally. Conflicts between cyclists and motorcyclists were not observed. Conflicts between buses and cyclists were identified as being the most frequent, with about 30% of buses leaving the lane to pass slow moving cyclists.

First TRL study (for TfL) 2010

The first study [16] 10 months into the London scheme was extremely detailed, with the primary objective of assessing changes on trial and control routes, but also on the wider TLRN bus lane network. Findings included:

- A migration of PTWs to main routes.
- Modal share appeared to remain relatively consistent.
- Bus and general traffic lane speeds were largely unaffected.
- PTW speeds had increased. On 30mph routes, the number of PTWs travelling at or exceeding the speed limit increased from 37% before the change to 46.7%.
- Motorcycle collision rates appeared to rise significantly. The increase in PTW collisions generally involved cars turning left into and out of side roads.
- The severity level of PTW collisions increased.

The study was conducted with great care taken to produce statistically robust data. However, it included just 10 months of collision data, the minimum required to accurately assess any reasonably large effects. TfL responded to this study with an enforcement and publicity campaign.

London Borough of Ealing

Following the first TfL report, Ealing took the decision not to continue their scheme on the basis of the motorcyclist collision findings, and a numerically small but statistically significant rise in cyclist casualties (173%). Despite the fact that Ealing's report [17] revealed no direct collisions between a motorcycle and pedal cycle, officers suggested that the most likely reason for the increase is that cyclists were riding closer to the kerb (because of motorcycles passing fast and close), making them less visible to other road users. It was felt this situation would put the borough's challenging cycling objectives at risk. Ealing's road safety campaign on bus

lanes had not been evaluated, but it was felt it may not have been successful (and may need to be repeated and enhanced), and that there would be ongoing revenue cost implications. Other London boroughs did not follow suit.

Second TFL study 2011

The second TFL study [18] in 2011 took great care to be comparable to the first study, using a further 10 months of data to compare with the original study's findings. The most significant findings of this study were:

- Collision rates for motorcyclists had not changed significantly from the first trial, suggesting those findings were reliable.
- Collision rates of cyclists with motorcyclists on TLRN bus lane roads increased significantly compared to elsewhere, though numbers were small.
- Motorcycle collision rates had also increased significantly on enforcement corridor sites.
- Cyclist & pedestrian collisions had not changed significantly.
- PTW collisions predominantly involved cars and over 80% of injuries were slight.
- 40-50% of motorcyclists were exceeding speed limits, consistent with the previous trial.

London Emissions study, 2010

London Transport Projects Ltd carried out an evaluation of journey times and emissions of PTWs in Bus Lanes for the TfL Motorcycle Policy Unit [19]. The report investigated possible journey time savings and emissions reductions arising from allowing PTWs in bus lanes.

Journeys of PTWs and cars were timed and videoed, and average journey speeds were then used to estimate emissions and fuel consumption using the DfT Road Vehicle emissions database. The study found that over a comparable route length:

- PTWs in bus lanes emit between 0.5 and 9% less CO₂ and 0.5 to 10% less Nitrogen Oxides, depending on their engine size. The largest engines demonstrate the greatest NO₂ savings.
- PTWs in bus lanes use between 0.4 and 9% less fuel than those in general lanes. The largest engines demonstrate the greatest fuel savings.

The study found that journeys of PTWs using bus lanes take an average of 33% less time per km than PTWs in general lanes.

Comparisons are made between the emissions produced by petrol cars of different sizes and PTWs with different engine sizes. Savings were shown in terms of NO₂, CO₂ and fuel consumption, with the greatest savings delivered by comparing the largest cars with the smallest PTWs. Occupancy rate was not factored in, but the average UK commuting car has occupancy of 1.2 persons.

Other UK Cities

Bristol

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.

Bristol's 2006 report looked at the general safety of its entire bus lane network, which has been open to PTWs since June 1995, and is the most comprehensive available of UK authorities outside London.

The study concluded that an inconsistency of part-time bus lanes seems to have an adverse impact on safety. The study compared 12 and 36 months' worth of data, in contrast to 10 months' worth in the TfL studies. The findings included the following points:

- Accident data showed mixed results with casualties increasing in some lanes and decreasing in others.
- 24-hour lanes appeared much safer for cyclists and motorcyclists.
- Accident data shows motorcyclists and cyclists are vulnerable to left turns across their paths from general traffic lanes.

Sheffield

Sheffield began a trial on one bus route in 2003. Motorcycle safety was stated as the primary motivator for trialling the policy: **"Motorcycles are a legal mode of transport and as such, their riders are entitled to expect that measures be taken to improve their safety. This is the principal reason behind this trial."** The report issued in October 2005 demonstrated a slight decrease in PTW collisions during the two-year period, but accepted that the quantity of data was insufficient to be meaningful. The report therefore recommended an extension of the trial for a further three years and also an extension of the trial to all other bus lanes.

In 2009 the final report which led to the trial becoming permanent access concluded that:

- There was a reduction in both rate and severity of PTW collisions during the five-year trial compared to the five years prior to the trial.
- No collisions occurred between cycles and PTWs.
- No evidence was found of cyclist safety concerns reducing modal shift to active travel.
- No collisions occurred between PTWs and pedestrians.
- No impact was noted on bus or car journey times as a result of PTW access to the bus lanes.

Birmingham

Birmingham City Council carried out a trial in 2008/9 focused on three routes. The study findings included:

- Traffic volumes are lower than the 'before' situation.
- PTW numbers were unchanged and remained relatively low.
- PTW use of bus lanes is dependent on perceived journey time benefits.
- No change in bus or taxi journey time/reliability attributable to the introduction of PTWs in bus lanes.
- No significant change in the levels of accidents for all users in the vicinity of bus lanes, with no PTW accidents being connected with the use of bus lanes.
- Allowing PTWs into bus lanes reduces the number of potential conflicts with other road users and provides an overall safety benefit.

Recent communication with Birmingham City Council Officers has confirmed that: **“as far as we are aware, there have been no recorded incidents between PTWs and cyclists in bus lanes.”**

Reading

Reading Borough Council officers have not been able to produce any studies of their scheme, which covers all bus lanes outside the central area (see below). They pointed out that left-turning traffic from the general traffic lane across the bus lane with the potential of conflict needed consideration. In such situations Reading have used a contrasting coloured surface that seems to have mitigated the risk of such collisions. In the last year, the central area has been restricted to bus, cycle and taxi only with limited goods vehicle access due to the high number of pedestrian casualties. However, the A & B arterial routes remain open to PTWs. No casualty data analysis of PTWs on these routes has been undertaken.

Derby

The city trialled PTWs in a handful of bus lanes during 2005-6. During the study period there were no injury collisions before or after. They then made these permanent and waited for a longer period before considering extending across the City. No injury collisions were recorded in the extended period, although the number of PTWs using these bus lanes is relatively low and the report points out that the data collected on the two bus lanes involved is far from robust. No further extension of the scheme to other bus lanes has occurred, mainly because there has been no political pressure to do so.

Brighton & Hove

In October 2014, following pressure from MAG, the Environment and Transport Committee of Brighton & Hove City Council approved the creation of two Experimental Traffic Regulation Orders to allow PTWs to use the bus lanes on both the A23 and A259, these being main arteries into the city; north-south from London and east-west along the coast road.

One year later, following a successful trial, these arrangements were made permanent. One small part of the A259 scheme fell in East Sussex so a precedent was also set in that authority.

A further ETRO, following further pressure from MAG, came into force in May 2017 that allowed, on a trial basis, PTWs to use the bus lanes on the Lewes Road, another main route into and out of the city. The trial has been successful with a slight reduction in accident rates. On 10th October 2018 the Environment and Transport Committee voted to make the Lewes Road arrangement permanent.

The local MAG Political Liaison Officer pointed out: “A success story but ideally I would like the Brighton & Hove Council to adopt a position where PTWs in bus lanes is the default position. We are not there yet however, and I find myself arguing on behalf of MAG on a case by case basis. The city centre is getting a major redesign over the next two years and I fear that riders are being overlooked. Public consultation will begin soon and I hope MAG can get organised to make a strong response.”

Conclusions

Returning to the current DfT guidance on factors to consider, we will explore:

- Safety implications for motorcyclists.
- Impact on other vulnerable road users.
- Impact on bus journey time reliability.
- Impact on congestion for other traffic.
- The potential for modal shift.
- The potential for overall improvements in transport efficiency.
- Local publicity to advise road users of any policy change.
- Continuity of bus lane routes which admit motorcycles.

PTW Safety

Measurement of statistically significant safety implications of a single policy change is very difficult due to the small numbers involved. Many studies have shown varying results, but overall the best that can be claimed is a marginal benefit in terms of reducing KSIs for PTW riders. It can be seen that some reports show an increase in collisions whilst others show a decrease, but even the larger London based trials have not produced compelling evidence. It should be noted however that reports such as Easy Rider consistently show support for the safety benefits claimed for PTW riders. One factor often raised is that the lack of consistency of access across the country leads to under-utilisation and confusion amongst riders, which in turn reduces the realisation of any safety benefit.

Safety considerations can also be seen to be enhanced in cases where there is a genuine will to enhance rider safety. For example Reading Council took steps to change surface colour at locations where left turn conflicts were an issue, safety guidance leaflets and etiquette for riders have been developed to educate riders in areas with new schemes, and more recently Cardiff council introduced a programme from the start where all trainers were set up to provide one day's free bus lane use and general safety training.

Impact on other Vulnerable Road Users

There is clearly a strong objection to PTW access from the cycle lobby. The claims are based on a perceived increase in risk for cyclists and the impact this has on encouraging the uptake of cycling. The dire safety concerns do not appear to have been borne out in any of the trials with respect to recorded KSIs, and there is some evidence that the attitude of some cyclists does not align with the views of the lobbies.

Impact on pedestrians has not been raised as a significant issue, and there is some evidence of improved safety for pedestrians as a result of PTW access.

Bus journey time and reliability

Again there has been no significant evidence produced of impact on bus services. Some reports noting slight delays in bus services during trials have pointed to factors beyond the policy for the impacted journey times, such as congestion on parts of bus routes not benefiting from bus lanes.

Impact on congestion for other traffic

Allowing motorcycles to access bus lanes is likely to have minimal effects on overall congestion for other traffic due to the fact that motorcycles' impact on congestion is very limited due to their ability to filter past stationary traffic. The effect may be greater in locations where there is insufficient lane width outside bus lanes to enable safe filtering by motorcyclists.

The potential for modal shift

As a stand-alone policy PTW access to bus lanes will have minimal impact on encouraging modal shift to that form of transport, but as part of a package of measures is likely to encourage increased take-up of motorcycling. Concerns that the policy may reduce modal shift to public transport or active travel seem unfounded. Similarly, concerns that the policy will encourage bus users to take up motorcycling seem unlikely.

The potential for overall improvements in transport efficiency

Transport efficiency can be seen to improve by promoting more efficient use of available space whilst not impacting public transport. The fact that introducing motorcycle access to bus lanes has never been claimed to impact bus services indicates that there can only be a positive outcome in terms of traffic flow rates by allowing extra road users to access otherwise empty road space.

Local publicity to advise road users of any policy change

Reports from a number of schemes demonstrate that publicity of the policy, combined with safety advice for motorcyclists using bus lanes, will have a positive impact on both safety and acceptance of the policy by encouraging greater understanding of the needs of other road user groups.

Continuity of bus lane routes which admit motorcycles

Reports, surveys and comment can be seen to support the need for continuity of approach to bus lane access. The reduction of confusion and a consistent approach are claimed to increase uptake and safety for both riders and other users of bus lanes.

One very clear example of the need for consistency, which has now thankfully been rectified, came from Cardiff where new riders had no test centre in their home town and had to travel to Newport to take their test. At the time Newport permitted access whilst Cardiff did not. Yet a rider from Cardiff, where using bus lanes was not permitted, could fail his test in Newport for not using the bus lanes there.

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