

# TRAFFIC ADVISORY LEAFLET

2/07

## The Use of Bus Lanes by Motorcycles



## INTRODUCTION

The Government's Motorcycling Strategy<sup>1</sup>, published in February 2005, seeks to facilitate motorcycling as a choice of travel within a safe and sustainable transport framework. The strategy recognises that motorcycling has become increasingly popular and offers a number of benefits, by:

- offering a cheaper alternative to the car;
- providing independence and mobility;
- widening employment opportunities, especially where public transport is limited;
- providing a shorter journey time in congested traffic conditions; and

• reducing overall congestion as motorcycles generally occupy less space than cars.

Since 1995, several authorities have made permanent a number of experimental Traffic Regulation Orders allowing motorcyclists to use bus lanes. Various monitoring and research projects have been carried out to determine the effects of these schemes on both motorcyclists and other road users. The research does not lead to clear conclusions, but suggests both potential benefits and disbenefits. As with any scheme, the decision to allow motorcycle access to bus lanes should be taken with care to mitigate foreseeable and avoidable risks.

The Strategy¹ gave an undertaking to review the advice given in Local Transport Note (LTN) 1/97², on the use of bus lanes by motorcycles. Local highway authorities are able to permit classes of vehicles other than buses into bus lanes. However, because of concerns about safety and lack of any evidence at the time, LTN 1/97² recommended that motorcycles should not normally be permitted to use them. This Traffic Advisory Leaflet now revises the guidance on that point in LTN 1/97² and encourages a more objective assessment to be made.

The local highway or traffic authority is best placed to decide whether or not to allow motorcycles into with-flow bus lanes. Each case needs to be examined on its own merits, taking into account the positive and negative aspects in reaching a balanced view.

For the purpose of this leaflet, the term motorcycles refers to solo powered two-wheelers including mopeds and scooters.



## ISSUES TO CONSIDER

Some of the factors which should be taken into consideration are listed below. This is not an exhaustive list, but these are the factors identified through workshops and consultations with stakeholders and a number of local highway authorities that have been involved in implementing similar schemes.

## **Policy**

The general purpose of bus lanes is to improve the reliability of bus services by giving priority to buses over other vehicles on congested parts of the road network.

Pedal cycles are also normally allowed to use bus lanes for safety reasons. However, highway authorities often allow other vehicles into bus lanes, such as taxis and more recently motorcycles, in line with their wider local transport policies. In relation to motorcycles, policy considerations may include:

- 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. Ideally, once legitimately in a bus lane, motorcyclists



should not have to check each subsequent section of bus lane to see if they are allowed to use it. A route which allows the intermittent use of bus lanes by motorcycles can be confusing to users and may pose enforcement difficulties for the highway authority and police. Highway authorities should aim to ensure that, as far as practicable, policies over the use of bus lanes are consistent where routes cross boundaries.

### Safety Assessments and Audits

Road safety audits are intended to identify road safety problems, with the objective of minimising the number and severity of casualties. Road safety audits are not mandatory for local authorities. However, when allowing motorcycles into bus lanes, authorities should consider undertaking appropriate levels of safety assessment as part of their decision processes. Although it will be possible to identify some safety issues, for example those relating to highway layout, the mix and flow of traffic, queuing characteristics,

and pedestrian activity, others may not be evident until the lane is used by motorcycles. Monitoring, particularly in the early days of operation of the lane, will be essential in confirming safe operation.

Guidance on safety audits is given in:

- 1. Road Safety Audit, HD 19/03<sup>3</sup>
- 2. Guidelines for The Safety Audit of Highways.<sup>4</sup>

#### Visibility

Other road users can have greater difficulty discerning motorcyclists because of their relatively small combined frontal area compared to a bus. The presence of other road vehicles and roadside obstructions, such as street furniture and vegetation can add to this difficulty. Remedial design work may be required to ensure the maximum intervisibility, especially at junctions. A high proportion of collisions between motorcycles and cars in urban situations are thought to be due to poor intervisibility. Where motorcycles



are allowed into bus lanes, this may improve intervisibility due to the lack of other general traffic in that lane.

#### Pedestrians

Pedestrians are also vulnerable road users and the following should be considered:

- Special note should be made of major generators of pedestrian traffic such as schools and hospitals. This information can be used to establish pedestrian desire lines so that additional informal, or formal crossing facilities can be considered;
- Pedestrians should be actively encouraged to use proper crossing places by siting crossings on or close to desire lines. Where this is not practicable, footway design features can help encourage them to cross in safer places;
- Pedestrians may expect only clearly visible or slowmoving vehicles to be using a bus lane. The introduction into the lane of highly mobile motorcycles with a small

- front profile, possibly overtaking a bus and then reentering the lane, could introduce new conflicts; and
- Bus stops are also a possible source of problems, as pedestrians crossing between traffic to board or alight a bus may not expect to have to take into account an overtaking motorcycle in a bus lane.

## **Pedal Cycles**

Pedal cyclists are allowed to use with-flow bus lanes because they are more likely to be involved in a collision if required to ride in the main traffic lane with buses passing on their nearside. Any potential conflict between motorcycles and pedal cycles should be considered.

### **Turning vehicles**

Turning vehicles are a general risk at junctions, both to other vehicles and to pedestrians who are crossing. Examining accident records will show collision types and probable causes. This information will help to assess



whether there will be a change if motorcyclists are to be allowed into the bus lane.

For example, a motorcyclist in a general traffic lane has to cross a bus lane to turn left into a side road. If this type of collision is listed in the accident record, a benefit may be expected by allowing motorcycles into the bus lane. However, there may be an increased risk of vehicles turning across the path of motorcycles in the bus lane. If the information points towards an intervisibility problem remedial measures should be considered, such as moving a bus stop to the downstream side of a junction; or implementing a Traffic Regulation Order (TRO) to ban turning movements, parking or loading.

## Bus Access Control and Bus Gates

Certain layouts may preclude permitting motorcycles to use a bus lane. Examples of this are bus lanes with access control that pass through a pedestrianised area or those provided with a bus gate facility or bus pre-signals. At sites such as these, buses equipped with a transponder pass over detectors in the carriageway causing bollards to retract or the traffic signals to change to or stay on green.

Motorcyclists attempting to gain access through an access control or bus gate will not be given a green signal as the signals will not detect them. This could result in motorcyclists having to make potentially dangerous manoeuvres to continue their journey.

#### Narrow bus lanes

Bus lanes should be at least the minimum preferred width of 4 metres, or more wherever possible<sup>2</sup>. Narrower lanes, say 3 metres wide, may not allow buses to pass cyclists safely without encroaching into the general traffic lane.

A narrow bus lane with high bus flow rate increases this problem. The introduction of motorcyclists into such a bus lane could make the situation worse and increase the



possibility of a motorcyclist moving into the general traffic lane to pass a bus, thus increasing the potential for conflict.

### Frequent Bus Stops

Frequent bus stops can encourage last minute lane-changing by motorcyclists, resulting in a potential conflict with moving traffic in the general traffic lane. An assessment of bus stop positions should be carried out if this is a problem. Consideration should be given to bus stop lay bys and the potential conflict caused by some bus drivers pulling out of these without seeing a vehicle in the bus lane.

#### **TRAFFIC REGULATION ORDERS**

TROs are required for bus lanes and form the legal basis for enforcement. Where solo motorcycles are to be allowed to use bus lanes, this must be explicitly stated in the Order. Introducing motorcycles into an existing bus lane will require the TRO to be amended.

The TRO specifies the vehicle types permitted to use a bus lane and the times of operation of the lanes. Experimental Orders can be used where an authority wishes to review a scheme before deciding whether or not to make it permanent.

### **SIGNING**

Traffic Signs Regulations and General Directions<sup>5</sup> (TSRGD) diagrams 958 and 959 show both the bus and cycle symbols. Cycles are included as a matter of course for safety reasons and taxis can be included if desired. But to add any other class of vehicle to the sign, special authorisation is needed.

Department for Transport (DfT) working drawings NP 958.4 and 959.4 give sign design details. The motorcycle symbol is for a solo machine and it is not envisaged that motorcycle combinations would be allowed into a bus lane. Special authorisation for signs will continue to be required until the



additional variants are prescribed in any update to TSRGD<sup>5</sup>. The road markings used will be the standard with-flow bus lane markings and no special authorisation is needed.

The Traffic Signs Policy Branch of the DfT should be contacted for advice. Detailed information on bus lane layouts and signing can be found in the Traffic Signs Manual, Chapters 3<sup>6</sup> and 5<sup>7</sup>.

Requests for special authorisation, to use signs to diagrams NP 958.4 and 959.4 on schemes allowing motorcycles to use bus lanes, should be sent to the Traffic Signs Policy Branch, with a copy to the relevant Government Office. The application letter should describe the location and extent of the relevant bus lanes.

#### **C**ONSULTATION

Consultation with all those likely to be affected by a traffic scheme generally results in better acceptance and fewer problems with implementation. When considering introducing motorcycles into a bus lane, consultation with those representing motorcyclists, bus and freight operators, taxi drivers, pedestrians, equestrians, cyclists and disabled people is recommended. It is also recommended that the local police are consulted early on in the development of any proposals. TRO advertisement and statutory consultation procedures will also apply.

#### **MONITORING**

Authorities are encouraged to monitor new schemes. Advice is given in The Road Safety Good Practice Guide<sup>8</sup> and the IHIE Guidelines for Motorcycling<sup>9</sup>.

The table below summarises the various survey tools that may be used to collect monitoring data.

#### **ENFORCEMENT**

Solo motorcycles are easily distinguishable from other vehicle types using present detection techniques, so technical issues with enforcement are unlikely. Further general guidance on the civil enforcement of bus lanes by traffic authorities has been published by the DfT<sup>10</sup>, and separate arrangements apply within London<sup>11</sup>.

#### **M**AINTENANCE

Motorcycles typically require surfaces similar to that for cyclists, with smooth and non-slippery surfaces free of debris. 'Well-Maintained Highways'<sup>12</sup>, and the IHIE Guidelines for Motorcycling' offer general guidance on issues relating to motorcycling and road maintenance.

Observation	Road Users Observed	Main Survey Tools
Interactions with other road users	Motorcycles Pedal cycles Pedestrians Buses	Video – Roadside or On-Board Buses
	Motorcyclists Cyclists Pedestrians Bus passengers	Questionnaire
Safety Concerns with non-priority Traffic	All vehicles All Motorcyclists	Video – Roadside or On-Board Buses Collision Statistics Analysis Questionnaire
Speed	Motorcycles, buses	Speed Gun or other methods
Extent of Use	Motorcycles (classified by lanes used) Motorcycles	Roadside Video/ Manual Roadside Count Questionnaire
Impact on Bus Services	Buses Buses Bus passengers	Video – Roadside or On-Board Buses Bus Journey Time Surveys Questionnaire

#### **ENQUIRIES**

#### Technical:

Traffic Management Division, Department for Transport, Zone 3/25 Great Minster House, 76 Marsham Street, London SW1P 4DR Tel. 020 7944 2599 Fax. 020 7944 2469

#### Administrative:

Traffic Management Division, Department for Transport, Zone 3/23 Great Minster House, 76 Marsham Street, London SW1P 4DR Tel. 020 7944 2974

#### REFERENCES

- 1. The Government's Motorcycling Strategy.
- 2. Local Transport Note 1/97, Keeping Buses Moving A guide to traffic management to assist buses in urban areas.
- 3. Design Manual for Roads and Bridges. Volume 5, Section 2, Part 2, HD 19/03, Road Safety Audit. Highways Agency.
- 4. The Institution of Highways and Transportation. Guidelines for The Safety Audit of Highways.
- 5. The Traffic Signs Regulations and General Directions 2002.
- 6. Traffic Signs Manual Chapter 3 Regulatory Signs.
- 7. Traffic Signs Manual Chapter 5 Road Markings.
- 8. Road Safety Good Practice Guide.

- 9. IHIE Guidelines for Motorcycling Improving safety through engineering and integration. Institute of Highway Incorporated Engineers. (www.ihie.org.uk)
- 10. Provisional guidance on bus lane (including tramway) enforcement in England outside London.
- 11. The Transport for London (Bus Lanes) Order 2001.
- 12. Well-Maintained Highways code of practice for highway maintenance management.

Reference	Publication available from	
1, 8, 10	DfT Free Literature Tel: 0870 122 6236	
2, 3, 4, 5, 6 7, 9, 11, 12	The Stationery Office Contact: www.tso.co.uk Tel. 0870 600 5522	

## Traffic Advisory Leaflets are available to download free of charge on the DFT website www.dft.gov.uk

The Department for Transport sponsors a wide range of research into traffic management issues. The results published in Traffic Advisory Leaflets are applicable to England, Wales and Scotland. Attention is drawn to variations in statutory provisions or administrative practices between the countries.

#### **Llywodrath Cynulliad Cymru Department for Transport Scottish Executive Welsh Assembly Government** Requests for unpriced publications to: Within Scotland enquiries should be made to: Within Wales, enquiries should be made to: Charging and Local Transport Division, Scottish Executive, Development Welsh Assembly Government, Zone 3/17, Great Minster House Department, Transport Division 3, Zone 2-F, Transport Wales, 2nd Floor, Cathays Park, 76 Marsham Street, London, SW1P 4DR. Victoria Quay, Edinburgh, EH6 6QQ, Cardiff, CF10 3NO Telephone 020 7944 2478 Telephone 0131 244 0847 Telephone 029 2082 6502 e-mail: tal@dft.gsi.gov.uk e-mail: meryl.james@wales.gsi.gov.uk e-mail: roadsafety2@scotland.gsi.gov.uk













