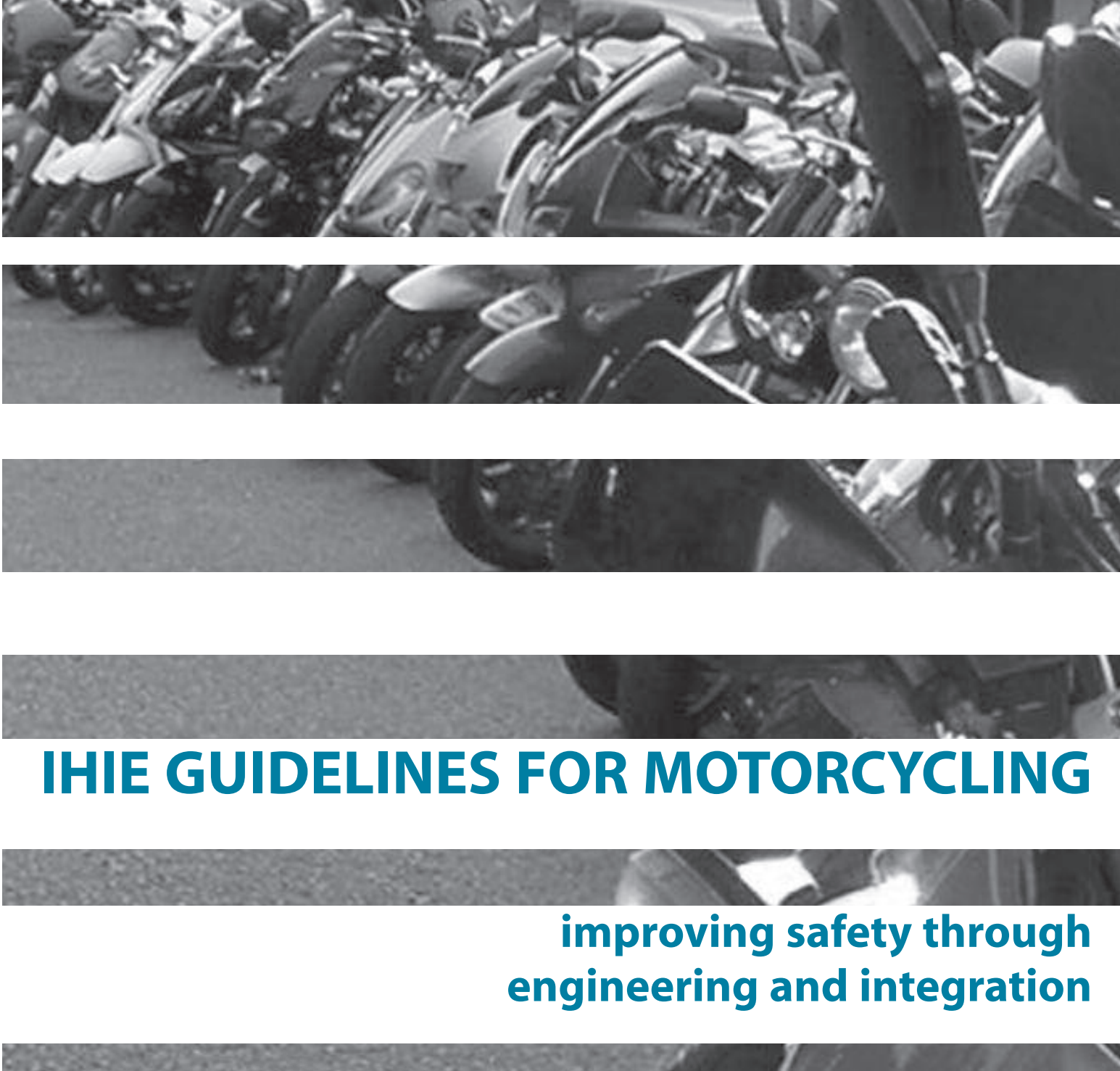




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**I H I E**

**INSTITUTE OF HIGHWAY  
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# **IHIE GUIDELINES FOR MOTORCYCLING**

**improving safety through  
engineering and integration**

**version 1.1**

## 2.1 Key Points

### 2.1.1

- ▼ Local Transport Plans should refer to the role that motorcycles can play, focusing on the strengths of the mode and containing strategies to mitigate their weaknesses, including reducing their accident involvement rate. These strategies should cover both engineering and non-engineering activities.
- ▼ Consultation with riders is essential to ensure that strategies and initiatives meet the needs of the users.
- ▼ Good practice in including motorcycling as an integral part of Travel Plans should be followed where appropriate.
- ▼ Secure parking facilities should be provided at transport interchanges and journey ends to mitigate the likelihood of theft and minimise “unofficial” parking. The public sector should set good examples in this area.

## 2.2 Context



Motorcycles are part of traffic mix.  
*Keith Sharples Photography.*

**2.2.1** All modes of transport have strengths and weaknesses; good practice demands the framing and implementation of policies that maximise the strengths and minimise the weaknesses. Motorcycles have long provided a legitimate, cost-effective and relatively low-polluting form of transport, for commuting, work or leisure purposes. NTS data shows 63% of motorcycle trips are for work, business or education, compared to 30% for cars (DfT 2004). There has been an increase of 45% in the number of licensed motorcycles in the ten years from 1993 to 2002 (DfT 2003) and, if the experience seen in London following the introduction of congestion charging is repeated in other cities, coupled with increasing fuel costs, this growth can be expected to continue. It also appears that increasing affluence, particularly among 30-45 year old men has resulted in them buying motorcycles for leisure purposes. Increased interest in the development of Travel Plans provides opportunities for influencing the role that motorcycles can play (Chapter 3).

**2.2.2** Riders of motorcycles are susceptible to serious injury even in low-speed collisions yet the specific safety needs of motorcycles with their reliance on an adequate and consistent friction between their tyres and the road surface, have sometimes been overlooked by policy makers, planners, road designers and maintenance engineers. Raising awareness among these professionals will help redress the balance in providing for motorcycles. These Guidelines are a step in that direction.

**2.2.3** Road Safety Audits need to encompass a greater awareness of motorcycle behaviour and hazards. It would be helpful if the audit team and the project manager have a sound knowledge of single-tracked vehicle stability and safety needs, or have access to such knowledge via an appropriate “expert” (Chapter 9).

**2.2.4** Access to accurate and detailed local accident data containing real-life causation factors is fundamental to policy decisions, at political or professional level. National statistics in *Road Casualties in Great Britain* are valuable in providing benchmarking, but local data can be found in reported injury accidents (STATS19) and even data collected by local hospital Accident and Emergency units.

**2.2.5** The Government set challenging casualty reduction targets for the year 2010 that have been adopted by virtually all local authorities (DfT 2004a). Although the national road safety strategy does not require it, many local authorities have disaggregated the main casualty reduction target by travel mode, thus highlighting the relative vulnerability of cyclists and motorcyclists. The level of motorcycling has steadily increased since the 1994 to 1998 period on which the targets are based, so the simple measure of casualties is misleading - the more realistic rate per unit of travel shows an 18% improvement (DfT 2004b). It is essential to give motorcycles appropriate and serious attention if the overall casualty reduction targets are to be met. Many of the required measures will also benefit cyclists.

## **2.3 Integrating Motorcycling into Transport Policies and Strategies**

**2.3.1** The Department for Transport (DfT) requires local authorities to prioritise transport modes in their Local Transport Plan (LTP). Motorcycles figure above cars in such priority lists in recognition of their relative efficiency; both in road-space occupancy terms and their overall lower polluting effect (AGoM 2004). The space required for parking twin-track vehicles is often un-costed in LTPs. Motorcycles can substantially reduce this urban overhead cost.

### **Specific issues to cover in an LTP**

**2.3.2** The revised LTP guidance from the DfT is quite brief compared to that given in 2000 and should be considered as additional to the earlier advice. The revised guidance specifically mentions the advantages and disadvantages of motorcycling and how to deal with them:

“The use of motorcycles and other powered two-wheelers is on the increase; greater use of this mode could potentially deliver congestion, accessibility and air quality benefits. However, the potential of this mode has been undermined by a continued association with poor road safety outcomes...[i]nterventions should aim to reduce vulnerability at the same time as improving accessibility for motorcyclists.” (DfT 2004c)

**2.3.3** Local authorities may use the guidance to make a convincing case for motorcycle-related transport policies and planning. There is now less distinction between bicycles and motorcycles, mobility scooters for the disabled, and other parts of the widening range of light mobility options. A sound strategy for sustainable mobility requires that the full spectrum is handled consistently, allowing road space, on-street and off-street parking provision, movement and access to be considered in a balanced manner. Other specific issues the LTP should address include:

- ▼ The need to raise awareness of motorcycles as a legitimate transport mode. This should be based on the principle that motorcycle use has increased without local or central government advocacy or encouragement, and may continue to do so. There is a difference between “encouragement” and “making provision”. Ignoring any vulnerable mode is unacceptable.

- ▼ Recognition of the benefits of motorcycle use, tied to specific local land use and transport planning issues.
- ▼ Recognition of the wide spectrum covered by the term “motorcycle” (or Powered Two-Wheeler), from mopeds to large sports and touring machines, and their equally diverse trip purposes.
- ▼ Frank examination of the drawbacks to motorcycling - the most obvious being safety, including serious, data-led analysis of the local situation. Other drawbacks include: security, noise and vehicle pollution concerns. The LTP should contain the kernels of positive actions to address these drawbacks.
- ▼ Specific undertakings to include the good practice identified in other chapters of these Guidelines into the operational practice of the local authority.
- ▼ The role that motorcycling can play in the local rural transport policy.

**2.3.4** More detail on motorcycles and LTPs can be found in *The IHIE Briefing Note On Motorcycling Issues and “LTP2” Second Edition Full Guidance on Local Transport Plans* (IHIE 2005).

### Congestion charging



Parking demand exceeding supply.  
*BMF.*

**2.3.5** The introduction of London’s congestion charging scheme has seen an increase in the use of motorcycles and a reduction in casualty rates for riders within the charging zone (TfL 2004). This suggests that exempting motorcycles from congestion charges has economic and safety benefits, offering the possibility of larger benefits as pilot schemes are rolled out in the UK. To maximise the environmental benefits of a switch from cars to motorcycles in London or any other conurbation there should be a commensurate increase in convenient and secure parking provision.

### Social inclusion



Motorcycles are part of rural transport.  
*Keith Sharples Photography.*

**2.3.6** Motorcycles can reduce social, educational and economic exclusion for people that do not have easy access to efficient public transport or to a car - this is especially true in rural areas. In some areas low-cost, low-powered motorcycles are made available to disadvantaged rural dwellers through the *Wheels to Work* scheme so that they can access education and work opportunities (Chapter 3). In some other areas, local authorities have chosen not to encourage motorcycle use in view of the perceived risk and the anti-social use of motorcycles by a minority.

### Government initiatives

**2.3.7** The Government is introducing or involved with a variety of measures to improve the safety record of motorcycles. These include:

- ▼ The Advisory Group on Motorcycling, which reported in August 2004.
- ▼ *The Government’s National Motorcycling Strategy*, published February 2005.
- ▼ The Driving Standards Agency’s (DSA) role in training and testing.
- ▼ Support for national and local publicity initiatives.

- ▼ Sponsorship for the British Super Bike race series - raising the profile of the Government's "Think" campaign.
- ▼ The Motorcycle Casualty Reduction Group - led by the Association of Chief Police Officers (ACPO). ACPO have recently published their Motorcycle Enforcement Strategy.

## 2.4 Consulting with Riders

### Wide spectrum

**2.4.1** It is essential that the safety and security needs of all motorcycle riders are met and not just those of organised rider groups. The two main rider organisations, the British Motorcyclists' Federation (BMF) and Motorcycle Action Group (MAG) are well-respected and organised, but their membership does not necessarily represent a true cross-section of all riders, despite their best endeavours. The range of motorcycles available and the use to which they are put is very wide indeed - from restricted mopeds and scooters used as fashionable, basic, transport, through commuting and at-work use, to leisure riding and touring. Even this last category covers everything from classic machines to sports bikes - all requiring different riding styles and used by riders with different attitudes and behaviour. A full understanding of the needs of diverse users is necessary in order to provide a safer riding environment.

### Rider forums

**2.4.2** Local authorities may find it useful to establish a motorcycle forum in order to facilitate information gathering to help identify motorcyclists' needs. Authorities with experience in this field include; Sandwell Metropolitan Borough Council, Devon County Council, Bedfordshire County Council and Cornwall County Council (see example below). The forum should be as representative as possible of riders in the community or those who use the area's roads, as well as including appropriate officers, representing road safety engineering, road safety education, the police, tourism and economic development. Other bodies that may be able to help include regional groups of the Institute of Advanced Motorists (IAM) - they are not only concerned with car driving - and the Royal Society for the Prevention of Accidents (RoSPA). It is advisable to supplement a forum by other methods of gathering views in order to ensure that a wide variety of users are consulted. Examples of

- ▼ Focus groups.
- ▼ Consumer research at retail outlets.
- ▼ Requests for feedback via local newspapers, colleges and businesses.
- ▼ Internet-based information collection.

other methods are:

#### **Example: Cornwall County Council**

**2.4.3** Cornwall County Council, working with the Transport Research Laboratory (TRL), established a motorcyclist forum to examine issues affecting local riders. A web-based survey form was

used to gain wider views. The Cornwall Motorcyclists' Forum has had a significant input to the Cornwall Strategy for Powered Two Wheelers and just as importantly continues to meet to monitor and develop this strategy.

## 2.5 Travel Plans and Motorcycles

**2.5.1** Motorcycles should figure in all Travel Plans, including those for sixth form colleges and adult or late-teen educational establishments, with the lead being set by local authorities. Any approach to educational establishments must present information carefully and must not be seen as encouraging a move to motorcycles from other modes such as walking, cycling, trains or buses.

**2.5.2** The drafting and delivery of Travel Plans (Chapter 3) is often a condition of planning approval for any type of development. Where there are two-tier local government arrangements, this will mean liaison between authorities responsible for roads and those responsible for planning functions. All modes of travel should be considered within the Travel Plan, including motorcycles. Convenient and secure parking for motorcycles should be provided, together with changing facilities and equipment lockers.

## 2.6 Motorcycle Security

**2.6.1** Security of motorcycles at journey's end is an important policy consideration, given the relative ease with which motorcycles can be stolen. The absence of convenient and secure parking can be a severe barrier to motorcycle use or lead to inappropriate or illegal parking. This needs to be considered for private parking at business premises as well as for on-street or off-street parking (Chapter 5).

## 2.7 Policy is Vital

**2.7.1** Motorcycles can reduce congestion, reduce parking space requirements and improve accessibility, especially at places and times when public transport is limited. Motorcycles also provide a cost-effective mode of transport for those with limited resources. In view of their vulnerability, the specific safety needs of motorcyclists need to be carefully considered by road designers and traffic engineers in the design, implementation and maintenance of any works on public roads. However, it is unlikely that professionals on the operational side of road infrastructure provision will make a step change in their approach to catering for motorcyclists if the lead has not been set by policymakers at local, regional and national level.



Security is key.  
*Keith Sharples Photography.*



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