

## 21. Powered Two Wheeler Strategy

### 21.1 Introduction and Overview

This strategy concerns the use and promotion of Powered Two Wheelers (PTWs) in Warwickshire. The term 'PTW' is a nationally recognised phrase referring to motorcycles, scooters and mopeds. It should be noted that PTW does not refer to cyclemotors and that means of transport is not covered by this strategy. For ease of reference where the term motorcycle or motorcyclist has been used in this document it can be taken to include all forms of PTW or user.

The purpose of this strategy is to set out the vision, objectives and approach to:

- Encouraging new and existing PTW use;
- Meeting the needs of new and existing motorcyclists;
- Reducing the number of PTW casualties (KSIs) in Warwickshire
- Meeting the objectives of the Warwickshire Local Transport Plan 2011.

There are particular safety issues concerning motorcycle use, both nationally and within Warwickshire. Whilst a basic overview is provided in this chapter, motorcycle safety, as an issue will be tackled more specifically through Warwickshire's Road Safety Strategy.

The vision of Warwickshire County Council's Powered Two Wheeler Strategy is to provide:

'A motorcycle friendly highway network with good access to secure on and off-road parking and interchange with other modes, which is used by informed and safety conscious road users who are aware of other's needs'.

The strategy will contribute towards meeting both Local Transport Plan objectives and National Transport Goals and Challenges by promoting a Powered Two Wheeler friendly highway network with initiatives that:

- Tackle rural accessibility issues, particularly where public transport is not financially or commercially viable;
- Maximise access to affordable means of travel for employment, services and leisure activities, including integration with other modes of travel;
- Highlight the potential environmental benefits of Powered Two Wheeler use compared to private car use, particularly where walking, cycling or public transport is not a viable alternative;
- Encourage the safe and responsible behaviour of all road users, including tackling the vulnerability of Powered Two Wheelers to actions of other road users; and
- Consider the needs of Powered Two Wheeler users in the design and maintenance of the highway infrastructure.

### 21.2 The Policy Context

The Strategy has been developed in line with the National, Regional and Local policy environment and aims to be consistent with the wider framework.

The 1998 White Paper '*A New Deal for Transport: Better for Everyone*' outlined the potential benefits from increased motorcycle use on the environment and for reducing congestion, as well as recognising that motorcycles are an affordable alternative to cars. However, the paper also recognised that the use of PTWs raised some important and complex issues. Consequently an advisory group was set up to investigate how relevant policy could be developed, with particular focus on encouraging further improvements in road safety and minimising the impacts of transport on the environment. The advisory group submitted its final report in August 2004, which

made a full analysis of progress since the White Paper and was accompanied by some key recommendations. Many of these recommendations relate to issues that can only be progressed at a national level, however, wherever appropriate they have been incorporated into this strategy.

Following said report, the Government's published its *National Motorcycling Strategy* in 2005, with one of the key themes being:

'To facilitate motorcycling as a choice of travel within a safe and sustainable transport framework.'

The Strategy set out a comprehensive overview of national motorcycle issues and this was accompanied by a detailed action plan designed to address the issues over a 5-year period. In July 2008 a revised Strategy was published, based on a review of progress to date and containing within which an amended action plan.

In the same year the Institute of Highway Incorporated Engineers published their *Guidelines for Motorcycles*. This was intended to accompany the National Motorcycle Strategy and gave practical advice on how the different characteristics of motorcycles can be recognised and addressed in highway and traffic design and management. Wherever practicable these recommendations and guidelines have been incorporated into Warwickshire's Highway Design Standards and within this Strategy.

One of the biggest issues concerning PTWs and their use is the exceptionally high risk of being involved in a road traffic accident. Motorcycle use in Warwickshire constitutes 1% of all traffic but more than 20% of casualties. A number of policies and interventions aimed at addressing this issue have been developed for the third Local Transport Plan period; details of which can be found within the Road Safety Strategy.

The policies and interventions contained within this Strategy have therefore been developed to directly contribute towards and strengthen the links between Powered Two Wheeler use in Warwickshire and the National Transport Goals & Strategies.

## 21.3 Overview of the Current Situation

### 21.3.1 The National Situation

To understand motorcycle use in Warwickshire it is helpful to appreciate some national trends, as highlighted below:

- Motorcyclists represent only 1% of the traffic population but account for 18% of the fatalities on the national road network.
- The distance driven by motorcycles in 2008 was 5.1 billion vehicle kilometers. This was a drop of 8 per cent from 2007.
- The majority of motorcycle trips appear to be between 2 and 25 miles long.
- In 2007 there were 588 motorcyclist fatalities on national roads, of which:
- Roughly 40% involved a collision with one or more cars (60% of which were considered to be principally the responsibility of the motorcyclist)
- Roughly 30% only involved the motorcyclist (one third of which were associated with excessive speed)
- The main issue with car driver error was found to be carelessness & thoughtlessness, or failure to judge the actions of the motorcyclist.
- Accident liability appears to rise less than proportionately with mileage and falls rapidly with increasing age, but to a lesser extent with experience

- The overall casualty rate for motorcycles has improved since 1998. In 2008 the number of deaths or serious injuries was 1,131 per billion kilometers driven. A decade earlier it was 23 per cent higher.
- In 2008, just under 3 per cent of households had at least one motorcycle. The National Travel Survey and Family Expenditure Survey indicate that ownership of one motorcycle peaks at individuals aged 35-39 and that people more likely to own a motorcycle are:
  - Those living alone;
  - Those without children;
  - Males; and
  - Households with one car.

Nationally, nearly two thirds of motorcycle trips are for work, business or education purposes, compared with just 30 per cent of car trips (however for all other purposes more trips are made per week by car than motorcycle). Motorcycle trips for work, business or education purposes tend to be shorter than car trips but account for over half of all motorcycling mileage. Encouraging PTW use in this capacity therefore directly contributes to National Transport Challenges 2 & 3 as detailed in Table 1. For most other purposes, average motorcycle trip lengths are slightly longer than car trip lengths. The exceptions are visits to friends (where car trips are slightly longer) and other leisure, where the average motorcycle trip is twice as long as the average car trip. (Source: National Travel Survey, DfT)

### 21.3.2 The Regional Situation

A Department for Transport study; 'Road Safety Research Report No. 54 - In-depth Study of Motorcycle Accidents' looked at over 1700 motorcycle accident details, including over 1000 from the Midlands. The main findings were as follows:

- There seems to be a particular problem surrounding other road users' perception of motorcycles, particularly at junctions. Such accidents often seem to involve older drivers with relatively high levels of driving experience who nonetheless seem to have problems detecting approaching motorcycles;
- Motorcyclists themselves seem to have far more problems with other types of accident, such as those on bends, and overtaking or 'filtering' accidents; and
- There are two main groups of riders that interventions should be focused on. The first is young and inexperienced riders of smaller capacity machines such as scooters, and the second is older, more experienced riders of higher capacity machines. Both the skills and attitudes of these riders need to be addressed.

### 21.3.3 The Warwickshire Situation

There is a diversity of positive and negative issues concerning motorcycle use, which vary considerably across the country. In this section only the issues facing motorcycle use in Warwickshire are dealt with and these are broken down into perceived opportunities and observed problems.

### 21.3.4 Modal Share

In Warwickshire the mode share of motorcycle traffic entering the town centres during a 12-hour daytime period remained relatively constant between 2000 and 2004 with an average mode share of just under 1% of all traffic. By 2009 this figure had risen slightly to 1% of all traffic (but this could be explained by statistical variation). Motorcycle use also tends to be seasonal, with higher levels of use from March to October. In 2009, the overall number of motorcycle casualties on Warwickshire Roads had fallen by 32%, compared with 2000 levels. Of all motorcycle casualties:

- 44% resulted from crashes on rural roads; 66% from crashes on urban roads.
- 80% resulted from crashes which occurred on single carriageway 2 lane roads, 10% at roundabouts and 10% on 2 lane dual carriageways;
- 61% occurred in 60mph limits, 18% in 30mph limits and 8% in 70mph limits;
- 91% of riders were male;
- 42% of riders were non-Warwickshire residents;
- The peak age for motorcycle riders was spread from 16 to 39yrs (71%);
- 62% of machines involved were over 125cc (a drop of 11% since 2004);
- In 46% of incidents the motorcycle rider was attributed as being at fault in the initial report from Police Officers attending the incident (a significant decrease from 2004 levels where 65% of motorcycle riders were attributed as being at fault);
- 23% of crashes involved no other vehicle; and
- Common factors included; loss of control on bends (15%); rider inexperience (10%); failure to look properly (9.8%) and poor manoeuvring (7.5%).

### 21.3.5 Challenges

#### 21.3.6 Public Perception of PTW Image

Motorcyclists can be the subject of a poor public image and can be subject to negative attitudes from the public and other road users. This has adversely affected the willingness of some people to consider using a motorcycle or moped when it could provide a sustainable and viable alternative means of travel (particularly for short urban or inter-urban journeys). Reasons include:

- The effects of poor weather, including the incorrect perception that this can lead to the rider becoming wet or cold (good quality appropriate safety equipment can be warm, easily worn over normal clothing and completely weather proof);
- The limited ability to carry large loads;
- Occasional aggressive road behaviour from some riders, which can heighten the perception of user risk to observers;

#### 21.3.7 Public Perception of PTW Safety

Motorcycle use is of higher risk in terms of user safety than other modes of transport. This affects their attractiveness as an alternative mode and adversely contributes to Warwickshire's road casualty incidents. However, contributory factors appear to be:

- Inappropriate speed and rider behaviour leading to a loss of rider control;
- Hazards created by the physical layout or infrastructure of the highway network; and
- A lack of awareness and understanding of motorcyclist's needs by other road users, particularly by car drivers. This, combined with poor observation skills, appears to cause disproportionately high levels of right of way incidents, notably at 'T' & 'staggered' junctions.
- Inappropriate choice of rider clothing potentially leading to worse injuries the event of an incident than may otherwise have occurred;
- Poor vehicle maintenance and use of illegal tyres;

If Warwickshire is to directly contribute towards National Transport Goal no. 8 (*Reduce the risk of death or injury due to transport accidents*) then continued application of measures to mitigate against PTW accidents is required. For details of specific interventions and policies please refer to the Warwickshire Road Safety Strategy.

#### 21.3.8 PTW Security

- Motorcycles are particularly susceptible to theft, being high in value and easy to manhandle and transport. Indeed, motorcycle theft is prevalent across Warwickshire with

the highest proportion of thefts taking place in urban areas to the north of the County. During 2009, most crimes of this type took place in the towns of Nuneaton (133), Rugby (88) and Bedworth (70). Conversely, there were just 8 motorcycle thefts in Kenilworth, 23 in Warwick and 9 in Stratford;

- The risk of theft, combined with accident risks, can make insurance costs on larger machines prohibitively expensive;
- Many of the initiatives available to the County Council and its statutory partners to tackle safety and theft issues have financial implications. These are generally revenue based and as such face fierce competition for the limited available funding. It should be noted that actions to address this issue directly contribute to National Transport Goal no. 12 (Reducing crime...on transport networks); and
- Many of the issues faced by motorcyclists (e.g. licensing) are related to matters that require national or higher level intervention and Warwickshire's direct influence is therefore limited.

### 21.3.9 PTW use in Rural Areas

The rural areas of Warwickshire are subject to a range of accessibility issues where limited access to cars and public transport can restrict employment, education and social opportunities, particularly for the young and those on lower incomes. Consequently motorcycle use in the less economically buoyant and more rural north of the county tends to be marginally higher than in other areas. It has been suggested that this may be because motorcycles are often cheaper to buy and run than other types of private motor vehicle. Accordingly, motorcycles can improve accessibility in Warwickshire by:

- Providing high levels of flexibility as typified by private modes of travel, particularly at night and in rural areas where public transport is not always economically viable; and
- Providing relative cheapness of travel – initial purchase costs and subsequent running costs can be significantly less compared to car ownership and travel

Of particular importance in rural areas is the promotion of responsible riding practices and the reduction in the number of KSIs on Warwickshire roads. This key challenge will be addressed through targeted Safety Engineering measures, education and training initiatives (such as the 'Take Control' rider training programme) and a close working relationship with the motorcycle industry. It should be celebrated that there is a growing awareness and willingness to tackle issues of concern and promote the positive aspects of motorcycle use amongst users, the motorcycle industry and statutory authorities (such as the Police and local authorities) throughout the region.

### 21.3.10 Opportunities

#### 21.3.11 Reducing Congestion

The urban areas in Warwickshire are comparatively small, but are subject to peak hour congestion. Whilst there are currently no lengths of bus lane in Warwickshire open for use by motorcycles in order to assist their congestion beating characteristics, there remains significant advantage in motorcycle use for the urban commute, particularly from the rural to urban or inter-urban journeys. There is potential for a sustainable mode shift from private car use to motorcycles, so helping reduce congestion.

The lower physical space requirements for motorcycles can often help riders 'beat the queues' and thus decrease urban journey times. In addition on-street parking demands are reduced as PTWs occupy far less space than the average sized car; helping reduce street clutter and enabling reallocation of road space to other uses.

### 21.3.12 Environmental Benefits

There can be substantial environmental benefits from increased motorcycle use compared to car use, including:

- Low emissions – Overall compared to cars, motorcycles produce fewer emissions. Generally they perform better for carbon dioxide and oxides of nitrogen, but are worse in respect of hydrocarbons. The technological stage of motorcycle development, in terms of emissions standards, is currently behind cars but caught up considerably during the life of the previous Local Transport Plan;
- Fuel consumption - when considered per in terms of average occupancy, fuel consumption is far lower for motorcycles than cars. It should be noted however that for high capacity machines fuel consumption can be equivalent to or worse than that for the average cars;
- Natural resources - vehicle life tends to be longer for motorcycles and re-cycling levels are higher. This minimises the primary demand on natural resources and energy requirements for the manufacturing process; and
- Integration with other modes and policies can be relatively easily and cheaply delivered with often only limited requirements for specific dedicated infrastructure.

## 21.4 The Strategy

### **Policy PTW1: Consultation and Partnership working**

The County Council will consult with users, the motorcycle industry and other interested groups to deliver the objectives of the Local Transport Plan and related Powered Two Wheeler policies. It will particularly focus on the delivery of these through partnership working with other statutory bodies, neighbouring authorities and others in order to maximise the effectiveness of its actions.

### **Policy PTW2: Improved Facilities**

The County Council will, in consultation with users and other interest groups, develop proposals and deliver improvements to address Powered Two Wheeler concerns and issues relating to safety. Parking, theft and highway infrastructure.

**Safety** - Issues relating to Powered Two Wheeler safety will primarily be pursued through the development and implementation of a dedicated Motorcycle Casualty Reduction Plan as part of Warwickshire's Road Safety Strategy. This will tackle the education and promotion of safe riding and driving practices for Powered Two Wheeler users and other road users, as well as safety issues relating to the highway infrastructure.

**Parking** - Parking provision for Powered Two Wheelers should, as far as is reasonably possible, meet the standards set out in Traffic Advisory Leaflet 2/02, being centrally located near the journey destination and being well signed for ease of location. Consideration should also be given to the provision of convenient changing and storage facilities for equipment.

**Theft** - Best practice and information on minimising the risk of theft will be promoted. The provision of parking facilities within the highway should be secure, having locking points and CCTV wherever feasible. Other measures and initiatives to reduce Powered Two Wheeler theft will be investigated in liaison with the Police as well as other local authorities with responsibility for off-street parking provision.

**Highway infrastructure** - Consideration of the needs of Powered Two Wheelers will be incorporated in normal highway maintenance and design practices; this will particularly focus on dealing with spillages, the location of street furniture and equipment and assessing maintenance practices in relation PTW accident risk.

**Policy PTW3: Integration**  
 The County Council will encourage the sustainable use of Powered Two Wheelers and improve access to interchange with other modes. It will also, where appropriate, allow access to areas of the highway normally restricted to Powered Two Wheelers including bus lanes, Advanced Stop Lines and other areas subject to access control.

Sustainable motorcycle use can normally be considered to be where a motorcycle is used safely and responsibly for a journey when travel by foot, cycle or public transport is not viable.

**Policy PTW4: Promotion**  
 The County Council will promote improvements to facilities (Policy PTW 2) and integration (Policy PTW 3) of Powered Two Wheelers.

In support of Policy PTW4, the County Council will:

- Develop promotional campaigns to raise awareness and educate all road users;
- Demonstrate best practice via the County Council’s own Green Travel Plan;
- Provide advice on the development of Travel Plans for existing developments and when negotiating Travel Plans for new developments; and
- Continue to incorporate safe and sustainable Powered Two Wheeler use within the County Council’s sustainable travel initiative.

**21.5 Action Plan**

Table ? sets out the County Council’s actions in delivering the policies of the Powered Two Wheeler Strategy in a way that recognises the existing problems and opportunities outlined earlier in this document.

The delivery of some measures, particularly those related to safety and enforcement, involves a wide range of stakeholders and can often depend on strategic and policy decisions or actions taken at a national level. In these circumstances the nature and timescale of the actions set out below may need to vary.

Policy Link	Action	Schemes and Measures	Timescale
PTW1	Improve parking facilities & seek to reduce PTW theft	Continue to provide free secure facilities within the highway where a need is identified	Ongoing
		Review the signing and information provision for on and off-road PTW parking	Ongoing
		Seek opportunities to link PTW parking provision with CCTV coverage	Ongoing
		Promote good practice using principles set out in <a href="http://www.secureyourmotor.gov.uk">www.secureyourmotor.gov.uk</a>	Ongoing
PTW2 & PTW3	Improve PTW user safety	Support the actions of the Road Safety	

		<p>Strategy including:</p> <ul style="list-style-type: none"> <li>Action on key accident routes</li> <li>Safety education of PTW users</li> <li>Raise awareness of PTW needs for all road users</li> <li>Promotion of training and provision of information for training providers.</li> </ul>	
PTW2 & PTW3	Continued integration of PTWs into Warwickshire's transport system	Provision of secure parking and at lockers at public transport interchanges and where appropriate within the highway.	Medium
		Ensure that the needs of PTWs are considered in new developments and highway alterations.	Ongoing
PTW1, PTW3 & PTW4	Promote PTW use to reduce the impact of transport on the environment, minimise congestion and improve safety.	When negotiating or advising on the development of Travel Plans ensure the potential and benefits PTWs are highlighted particularly for urban and inter-urban journeys.	Ongoing
		Continue to support the Warwickshire Motorcycle User Group (with a view to widening the membership) and through the Group promote the sustainable use of PTWs	Ongoing
		Continue to support the PTW education and awareness promotion programmes	Ongoing
		Continue to work with other authorities, cross-boundary action groups, Warwickshire Casualty Reduction Partnership, training and assessment bodies to promote PTW policy	Ongoing
PTW2	Consider the needs of PTWs in the maintenance of existing and construction of new highway infrastructure	Ensure that the Institute of Highway Incorporated Engineers (IHIE) guidelines are always considered in the design of new highway infrastructure, with a particular focus on the consideration of PTW needs.	Ongoing
		Investigate the nature of sustainable motorcycle use with a view to promote sustainable travel behaviour.	Medium
		Promote targeted information to PTW users on reporting procedures for highway maintenance issues	Ongoing

## 21.6 Targets, Indicators and Monitoring

Monitoring the progress of delivery of the items outlined in the Action Plan will be an important part of the management and control process. Progress against the identified actions and standards will be reviewed on a regular basis (at least annually) to make certain that the Action Plan is achieving the desired outcomes.