

# CYCLE INFRASTRUCTURE DESIGN

## HEIRARCHY OF PROVISION

## FACT SHEET 04/09

[www.cyclingscotland.org](http://www.cyclingscotland.org)

Recent publications Cycle Action Plan for Scotland, LTN 2/08 Cycle Infrastructure Design and Designing Streets promote the following Hierarchy of Provision in the design of cycle infrastructure.

- 1 TRAFFIC REDUCTION
- 2 CALM THE REMAINING TRAFFIC
- 3 JUNCTION TREATMENT
- 4 REDISTRIBUTION OF THE CARRIAGEWAY
- 5 SEGREGATED FACILITIES / SHARED FOOTWAYS

### Summary

Hierarchy of Provision for cycle infrastructure is a central tenet of the design philosophy followed in many of the commonly used approaches to providing cycle facilities. It outlines the sorts of provision that should be considered when improving cyclability and resolving specific questions of cycle infrastructure in the order that they should be given that consideration.

#### 1) Reducing the traffic

Reducing traffic can aid cyclists as the main barrier to promoting cycling is the concept of interacting with motor vehicles.

Measures which will reduce traffic are:

- Congestion charging**
- Physical measures (Bollards etc)**
- Parking charges**



#### 2) Traffic Calming

Calming the motor vehicles will also enhance the cyclists environment. This can be achieved utilising different techniques and measures. These are:

- Road humps (Sinusoidal)**
- Speed cushions**
- Shared space / Home zones**
- 20mph zones**



#### 3) Junction Treatment

Over 70% of accidents involving cyclists occur at junctions. Therefore it is very important to consider cyclists within the design and redesign of junctions. Recent measures to promote the improvement of junctions are:

- Advanced Stop Lines (ASL)**
- European style design of Roundabouts**
- Lower corner radii**



#### 4) Redistribution of the Carriageway

As cycle routes are often being fitted within an existing carriageway the redistribution of the space requires to be considered from a cyclists requirements. Measures used to change the carriageways widths are:

- Cycle lanes**
- Bike/Bus lanes**
- Contra flow measures**
- Cycle lanes with the removal of the centre line**
- Installation of build outs, parking bays and other road narrowing measures**



#### 5) Segregated Facilities / Shared Footways

Although a popular request by new users segregated facilities can be expensive to install and will not provide for all users as facilities will not be in place to join up trip origins and destinations. Facilities are:

- Off road path networks**
- Old railway lines**
- Shared use Footways**



If you wish to know more about the above information or would like to share information with Cycling Scotland please contact **Peter Leslie** on **0141 229 5352** or [peterleslie@cyclingscotland.org](mailto:peterleslie@cyclingscotland.org)