CASE STUDY: REMOVING ROAD CENTRE-LINES AND CENTRE-HATCHING

Partners: Various UK Local authorities, TRL.

Region: UK-wide.

Type of scheme: re-allocating road space to create a safer environment for all road users.

Who benefits?: all road users, particularly cyclists.

Noteworthy features:

- road centre-lines removed on urban roads
- reduction in average vehicle speeds and accidents throughout the route (i.e. is not localised)
- cycle route continuity easier to achieve
- very cost-effective, often facilitated through maintenance budgets
- well-specified on-road routes are popular with most cyclists

Description

A growing number of LAs are dispensing with centre-lines (and also centre-hatching) on urban roads used by cyclists. This takes advantage of drivers' perceptions about the available width of carriageway by creating a central, two-way lane, with centre-line removed, bounded by advisory cycle lanes.

Behavioural theory suggests that drivers respond to the perceived risk when their road environment is made more complex or apparently less safe, creating uncertainty in drivers' minds. Following trials in Wiltshire in 2002, the approach has contributed to a reduction in injury collisions and traffic speeds. Remember too that this effect is sustained over the entire link (unlike cameras or 'flashing' signs).

Many requests for cycle lanes are refused – 'lack of space' is often cited – or they are put in at substandard widths. The 'extra road space' generated means that good width cycle lanes can be introduced. Examples on urban roads show that significant traffic flows (up to about 15,000 vpd) are possible along a single 5.5m – 6.0m wide central two-way lane, bounded by advisory cycle lanes. Politically, this approach is likely to be more acceptable than more physical measures to reduce vehicle speeds. Some LAs do not reinstate centre-lines after resurfacing or other changes.

Bristol Road, Scunthorpe: 4.3m two-way central lane bounded by 1.5m wide advisory cycle lanes

Outcomes

Removing centre lines and narrowing the perceived width of the carriageway:

- aids speed reduction for the length of the route (up to 6% in Wiltshire trial)
- reduces accidents over the route (reduced by 35% in Wiltshire trial)
- creates more width for cycle lanes
- cost-effective
- 'politically' more acceptable than other more physical, traffic calming techniques
- creates a more cycle-friendly environment, encouraging more cycling

Further information:

Psychological traffic calming, TRL.
http://217.118.128.203/files/newsletters/TRLNews_04july.pdf

Photo examples of this treatment can be found the Cycling England Website
http://www.cyclingengland.co.uk/gallery.php?id=9

This case study has been prepared by the Cycling England Local Authority Professional Support Team