



Cycle Routes

Introduction

The leaflet summarises the findings of the Cycle Routes Programme. This research was undertaken for the Department of Transport by the Transport Research Laboratory, over a period of 10 years.

Routes in Canterbury, Exeter, Kempston (Bedford), Nottingham and Stockton were studied. Routes in Cambridge and Southampton were added to the programme later, as they provided particular opportunities to investigate the safety benefits of cycle routes.

Project aims

- measure and evaluate the effect of providing a continuous cycle route or network, particularly on cyclists' safety and cycle use
- assess changes in demand and transfers from other transport modes; cyclists' routes and journey times; accident rates; and attitudes to cycling
- study the process of planning, installing and promoting the use of cycle routes and networks
- assess the value and practicality of such schemes for general application.

Design

Provision made for cyclists along the routes included:

- cycle tracks

- with-flow and contraflow cycle lanes
- use of lightly trafficked streets
- signalised cycle crossings
- shared pedestrian and cycle crossings
- shared use by pedestrians and cyclists
- cycle/pedestrian bridges
- direction signing

On the whole the cyclists who used the routes were satisfied with the facilities provided. The few cyclists who sought improvements mentioned better lighting, better segregation from pedestrians, improved drainage and more maintenance.

Implementation

Compared with road schemes, cycle routes are small scale projects, yet the mechanics of introducing a route from feasibility to implementation, can require considerable effort.

Progress was facilitated where local authorities were able to anticipate the likely line of the cycle route, planning other developments to leave room for the route or providing facilities useful as part of the route.

In all the schemes, the authorities had difficulty designing a good quality link into the central areas. Ideally the final cycle link should lead to cycle parking facilities close to the major attractions of the centre.

Conflicts between policies to provide for cyclists and other local policies often arose. Agreements were generally reached, but sometimes led to increased scheme costs.



partially sighted people to position themselves on the correct side of a segregated shared use route (Traffic Advisory Leaflet 4/90). Further work assessed the implications of allowing cyclists into pedestrianised areas (Traffic Advisory Leaflet 9/93).

There were also fears that opening up new routes could provide new opportunities for crime. Support from local cycling groups was valuable in smoothing the progress of schemes.

Funding

The package approach introduced by the Department of Transport for the funding of local transport infrastructure provides the opportunity for cycle routes and networks to be developed as part of an integrated traffic and transport strategy within TPP submissions. Funding arrangements in Scotland, through local authority finance settlements, remain unchanged.

Use of Cycle routes

In the main, existing cyclists reaped the benefits of the cycle routes. Significant numbers of cyclists transferred from the main roads to the new routes. Levels of use on the routes were fairly stable, even though cycle flows were falling at other locations in the towns studied.

Cycle flows on the routes have increased relative to flows at sites away from the routes and there has been a significant transfer of cyclists from main roads to the new routes. Constructing safe routes did not of itself encourage those who own cycles - but do not currently use them - to start cycling.

Most cyclists questioned would have walked or travelled by bus had they not cycled. Over the period of the experiment there was an increase in the proportion who would otherwise have travelled by car.

The age-sex distribution and journey purpose of the cyclists did not change significantly during the study period. The majority of cyclists were adults, male cyclists outnumbered female, and the predominant

Opposition to the routes was usually concentrated on the perceived danger to pedestrians (particularly to blind and partially sighted people) of allowing cyclists to share space previously allocated for pedestrians only. In the course of this project new tactile markings were developed to enable blind and

journey type was a home based journey to or from work.

Pedestrians questioned on the routes felt they were not adversely affected by the presence of cyclists. About three quarters favoured the introduction of more such routes.

Most of the cyclists who continued to use the carriageway for a journey which could utilise the cycle route said they preferred the carriageway as the surface was better and there were fewer obstacles. The off road facilities were favoured more by female cyclists, and those with less cycling experience.

Journey times

A number of journeys were identified where cyclists could divert to the cycle routes. For most, but not all, of the journeys considered, the construction of the new facilities reduced journey times.

Cyclist safety

In Exeter, Kempston, Stockton, and parts of Nottingham, the introduction of cycle routes led to a fall in the number of people who considered cycling to be dangerous. There was no correlation between the perception of the danger of cycling and the changes in observed cycle flows.

Overall there was no change in the number of cyclist casualties in the towns studied. Casualty numbers fell on most of the main roads in the areas served by the cycle routes, but increased on minor roads in some areas.

The results suggest that a combination of cycle route provision and area wide safety management should aid the reduction of cyclist casualties overall. Legislation introduced since the implementation of the routes allows a variety of traffic calming features to be installed, which can be effective in developing such a strategy.

Cambridge

This scheme aimed to provide a safe route through quieter streets as an alternative to 2 radial roads in the south east of the city. An unusual feature of this route was the new shared pedestrian and cyclist bridge across the railway line.

Canterbury

The proposal was for a network to the north, east and west, linking the residential districts to the city centre. Local political disagreement and opposition meant it was not possible to implement the proposals within the timetable of the project.

Exeter

This route is 6km long, connecting the city centre to residential areas to the north and south, and to a trading estate. It enables cyclists to divert from busy main roads.

Kempston (Bedford)

Two main routes were introduced, the first running from a local school to the west of the residential area of Kempston, through the village centre and on to the centre of Bedford, the second introducing a route to the south of Kempston, and linking to the first route, providing a total of 5km of cycle route.

Nottingham

12km of new routes were developed in the southwest of the city. They connect with existing cycle routes to provide links between residential areas, the city centre, industrial estates and the University.

Southampton

This involved the development of 8km of route alongside the Western Approach parallel to, but separate from, the main carriageway, in the light of the high numbers of accidents involving cyclists being recorded along this road.

Stockton

This 4km route runs along the line of a disused railway, linking residential districts with the town centre.



Further work

The Department of Transport is continuing its programme of research into the provision of safe, convenient and attractive cycle facilities. Work has been expanded to investigate initiatives which may encourage cycling as a viable alternative to the private car, particularly for short journeys.

Enquiries

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References

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- Traffic Advisory Leaflet 5/87: Totton to City Centre Cycle Route - Southampton
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- Traffic Advisory Leaflet 9/93: Cycling in Pedestrian Areas
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- Traffic Signs Regulations and General Directions 1994 (SI.1994 No.1519)



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