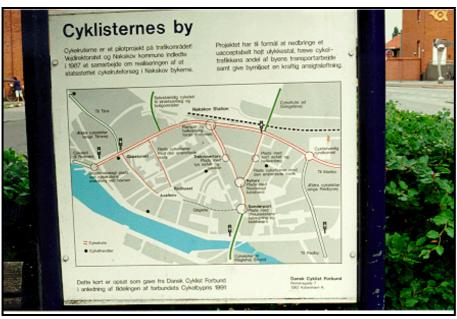
# C-3 Bicycle Route and Signposting

# Town: Nakskov (Denmark)

Year of implementation: 1989-1991

# General photo or drawing



The bicycle route Photo: The Danish Road Directorate



Signs for cyclists Photo: The Danish Road Directorate

# Description

*Road-type:* Roads with 1 or 2 lanes

Posted speed limit along the bicycle route: Between 30 and 50 km/h

#### Bicycle route with special signing for bicycle traffic

Nakskov is a provincial town with approximately 15,000 inhabitants. The bicycle traffics share of the total transport volume is considerably larger than in many other comparable provincial towns. This is because the city structure is "tight", the distances are short, and the terrain is essentially flat.

Besides establishing the cycle-route itself, the Cycle-route project entails thorough rebuilding of the cities important roads. In total, six junctions on the bicycle route have been completely rebuilt. One of the junctions was rebuilt as a roundabout. In addition, the town squares were completely rebuilt, and a new design program for the cities road inventory. Light poles, benches, and pavilions were given a user friendly and functioning design throughout in a cobalt-blue colour.

The bicycle route in Nakskov is one of six bicycle route projects in Denmark. The Nakskov project consists of 2 bicycle routes: A route going east-west, and a route going north-south. The two routes intersect each other in the centre of town. The route is 1.3 km long and connects bicycle tracks to the surrounding residential areas. Emphasis has been placed on creating a coherent net with an aesthetic and characteristic overall impression.

Cycle tracks are established on both sides of the ring road, whereas in the towns centre, generally dual tracks or lanes are made, permitting cycle traffic against the otherwise one-way traffic.

As a continuous element of the bicycle route, the bicycle tracks are painted red, not only on stretches of bicycle tracks, but also at junctions. The colour suits the many red brick houses and tile roofs in the town, and makes cyclist areas stand out from the other road users.

While road signs for car traffic have not been changed in connection with the project, special signing for cyclists was established for the first time in the town. The blue signs with white writing were made specifically for the bicycle route project, as there are as yet no rules for road signing for cyclists along local bicycle routes in Denmark. There are bicycle symbols, naming the destination, and distances in kilometres on every sign. The sign is placed on a pole which suits the towns new street layout in terms of colour and design /6/, /7/, /24/.

# Dimensions

Width of bicycle tracks : 1.8 - 2.0 metres. Width of bicycle lanes : 1.1 - 1.4 metres.

Normally, it is not permitted to demarcate a bicycle area through a junction in colours other than blue or the same colour as the surface of the vehicle lane. But there are exceptions: to emphasize the structure of a path system, the colour of the cycle area through junctions can be the same as for the rest of the path system.

# Different aspects for cyclists

# Positive

# Cyclist friendly :

- After construction of the bicycle routes, there are more people who ride bicycles, and fewer people who drive cars.
- Almost 80% of interviewed cyclists have experienced that their bicycle rides through the town have seemed markedly safer and more accessible than before the bicycle route was constructed.
- The thorough rebuilding of roads has resulted in lowering the average speed of cars /7/.
- The signs along the bicycle routes are placed primarily for the benefit of tourists; Danish as well as foreign. Therefore, as well as information about the surrounding residential areas, the signs include information about the recreative facilities such as; camping sites, information centres, theatres, youth hostels, etc.

# Safety for cyclists and non-cyclists:

- Inspection of accident statistics 3 years prior to, and 3 years after the construction of the bicycle route project shows that the total number of accidents resulting in personal injury in the town zone has decreased from 81 prior to construction to 71 after construction.
- The number of personal injuries has also decreased, from 100 prior to construction to 77 after construction. An analysis of the severity of the personal injuries shows that the number of cyclists killed and less severely injured is generally unchanged, while the decrease in personal injuries mainly concerns the seriously injured.

# Different aspects for non-cyclists

# Positive

• As mentioned above, the total number of personal injury accidents, and the number of personal injuries has decreased after construction of the bicycle route - see *Different aspects for cyclists*.

# Negative

• More streets have been rebuilt as one-way streets because of construction of the bicycle route.

# Other comments

# Degree of implementation:

During the 1970s, the number of traffic accidents causing personal injuries was halved in Denmark. Cyclists, however, enjoyed a relatively small share of this improvement and in the beginning of the 1980s, it was approximately 5 times as dangerous to travel 1 km by bike than by car. Against this background, from 1984 onwards, experiments supported by the Danish Road Directorate were started concerning the establishment of bicycle routes in 6 Danish towns: Herning, Aarhus, Odense, Helsingør, Odder and Nakskov.

Local bicycle route signs for cyclists are found in several other towns and municipalities around the country.

In 1993, a total of 3,500 km of national and regional signed bicycle routes were opened. The national

routes are placed across the whole country, while the regional routes connect towns within a limited area. Together with bicycle tracks along the highways, the national and regional bicycle routes connect provinces, tourist attractions, and nature sites. In total, there are about 10,000 km of signed bicycle routes in Denmark.

In 1991, Nakskov was awarded the Associations Town-for-Cyclists prize.

# Campaign/Information:

The people of Nakskov and its neighbours are being informed about the bicycle route project via an information campaign about the project. The campaign was launched in the autumn of 1990 partly by a door-to-door newsletter about the bicycle route and its purpose, and partly by posters along the ring road. The campaign was repeated in 1991, when the streets of the central town were involved.

# Costs

The bicycle route project, including rebuilding, and new road equipment: Approximately 20 millions DKK (2,700,000 ECU).

Cost per sign (prototype): Approximately 4000 DKK (550 ECU).

# Other information enclosed





All photos: The Danish Road Directorate

# Other information enclosed





All photos: The Danish Road Directorate

# Contact person

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