

Cycle superhighways

Sidsel Birk Hjuler, Head of office for the Cycle Superhighways of the Capital Region in Denmark

Planning for cycling is seen in most Nordic countries as a municipal responsibility, and therefore causes difficulties in planning regional cycle routes. One common belief is that it is not necessary for a regional or national authority to work with cycle planning, since people will not go by cycle over long distances. For this reason, the issue is seen solely as a municipal responsibility, but the cycle superhighways are in fact regional routes. The idea behind the cycle superhighways is in principle to offer a regional transport network in the same way as regional transport systems are offered for trains, cars and other vehicles.

An important observation is that people are willing to ride quite a long way, the average travel length of cycle superhighways is 11 km, which is much longer than the 4-5 km which is considered maximum for cycle routes. The reason why they are interested in cycling so far is that they want to squeeze in physical training in their daily schedule, so you try to be time-efficient even during their daily trips. This also explains why many people are willing to spend longer time on the bicycle, considering that a 11 km cycling is not necessarily the fastest travel mode.

The observed effects of the cycle superhighways so far in the Copenhagen area are that cycle traffic increases by 23% after the opening. Among the new cyclists, 14% drove a car earlier, and if everyone stopped cycling in the region, there would be 30% more car commuters. The cycle superhighways thus have great importance for the city's traffic situation and the risk of congestion. The conclusion is that regional planning is very important, but when it comes to Denmark, for example, there are no regions other than Copenhagen that have a coordinated regional cooperation on the issue. Instead, Copenhagen is looking at other Nordic neighbors, such as the Skåne region, Stockholm and Helsinki.

The cycle routes in Greater Copenhagen are a collaboration between 26 municipalities and supported by the region. It has opened eight cycle superhighways and another eight are on the way, the plan is to create a network of a total of 750 km of cycle superhighways. Every other person in Greater Copenhagen has 10 km or less to work, which clarifies the potential for cycling.

Recommendations:

- Important to focus on cycling regionally, for cycling is a serious mode of transport even at longer commuting distances.
- In the Nordic countries we should stand together and strengthen the regional cycle development: The new Nordic way!

Teppo Pasanen, City of Helsinki, Finland

The planning for cycling in Helsinki has left its obsolete perspective on cycling and is currently working actively on new cycle superhighways. Cycling is today regarded as its own mode of transport, and other Nordic countries, as well as the Netherlands, are studying how they work with the new cycle routes.

The traffic planning for cycling in Helsinki has been strengthened through the *Action Plan for Bicycle Traffic 2014* and the *Design Guidelines 2016*¹. The most important projects are the Target Network 2025 for the city center, and the cycling highway plan (Baana -network) 2013. Helsinki focuses on the target network because it has the highest rated potential. The goal is to create a uniform network for cycle routes that already has many cyclists or a high (hidden) cycle potential.

¹ <http://pyoraliikenne.fi/>

The Baana network is the name of a 130 km long cycle superhighway network (partly built), and when the development is finished, it will reach most parts of Helsinki. The plan is a high-quality cycling infrastructure that is specifically aimed at longer (5- 20 km) trips and connects large residential areas and workplace areas in the Helsinki region. The network consists of both new and existing routes, and it will be possible to cycle at different speeds. The track network today runs from the port to the city center and has become very popular. The old route was poorly maintained, and the idea was to create a straight route with a high standard. With the new road, the number of cyclists has doubled, and the cycle potential is assumed to be great when the entire network is in place. To follow up the results of the renovation, the number of daily cyclists is automatically counted with sensors. The Baana's network plan is included in Helsinki's new city plan. The Helsinki Railway Station's cycle tunnel is another route that is planned to open in 2023. It will run below the railway tracks which today have a strong barrier effect for cyclists. There are quality guidelines that support the expansion of the cycle routes. The principle is the right solution at the right place, and factors such as curves, smoothness, width, continuity, recognizability, number of paths and maintenance are considered. The cycle superhighways are marked according to a system where each route has its own name and identity.

People are expected to cycle an average of about 7 km, but the high-quality infrastructure will make people cycle longer, about 5- 20 km. After 20 km, the cycle is deemed to lose its potential as a mode of transport. The transfer from cars to bicycles due to cycle superhighways is unknown, but today only 22% of trips in Helsinki are made by car, 11% by cycle, 30% on foot and the rest by public transport. The goal is 15% cycling. There is no financing for cycle superhighways from the Finnish state.

Experience says that success factors for the cycle superhighways are mainly good signposting, bicycle parking with pumps and high technical standard on the track.

Jonas Hedlund, Skåne Region, Sweden

In Skåne, cycle superhighways aim is to take you come from one place to another, but not focus on the track itself as a road section. A common mistake in the concept is that it is easy to miss that the cycle superhighways should go all the way, some "nice" kilometers are not enough, but the new line must reach the destination.

In Skåne there are several coherent routes, meanwhile on the west coast of Sweden there will be a cycling network where cyclists from different directions are mixed. Several cities are linked with the routes and some become longer when travels accumulate. The routes mostly aim to commute into Lund, Malmö and Helsingborg where the cyclists will go in different directions, which differs from Copenhagen where most cycles travel in the same direction.

The cycle superhighways should not reach the center, instead central located guidance should lead to the routes, so you are directed to the cycle superhighways from the city's central parts. In Copenhagen, the routes go all the way to the destination, but it is relatively diffuse if one is on a cycle superhighway or not. Important aspects are all conflict points such as intersections. There will still be conflict points on the cycle superhighway, but the criteria are not yet set, and they are also looking at the design of these superhighways in other cities. Probably there will be a priority regarding crossing transportation modes. Some aspects, e.g. rules on the obligation to give way, road user priorities and traffic lights will probably not be possible to avoid. Opportunities are investigated about using radar or detection around conflict points so that different road users are seen. To "push the button" at a crossing for instance, should preferably be avoided.

There are uncertainties still on the design, even whether the routes are to be multiple-lanes or not. Oncoming traffic is not considered in a determined way, walking on the routes should be avoided and overtaking must be possible. But, the width of the cycle track is not the cause for

people to cycle and the requirements must be reasonable, e.g. two cargo bikes abreast will not be possible, this is not seen as a reasonable requirement. Hence, there should be reasonable balance of quality between the needs and the demands, as well as the secure available financial resources. Contacts between municipalities show that they are in agreement on where they stand and where they want to reach, and that cycle superhighway is a good investment. But it is still difficult to find agreement on set criteria and details.

In Skåne, it is almost only refurbishment of existing cycle routes, about 40 out of 45 of the designated routes are already built. But there is much to improve, such as e.g. signposting, barriers and bollards in the road, unclear rules of obligation to give way, unclear crossings. It is mainly to improve the lowest standard, but not a question of certification of cycle routes. It is important that the projects reach their set goals, then they may increase the capacity gradually when more people start cycling. The more difficult measures must wait.

There is not much evaluation in Skåne yet regarding increased cycling, transfer from cars, and bicycle accidents. Travel surveys with data on how far people normally cycle is available, but the data is at a different level of detail than what is needed for the evaluation of the cycle superhighways. However, more surveys will be conducted. There is no basis for cyclists in rural areas to build cycle superhighways, the focus is on urban areas and then on commuting into big cities, not inside the cities. The financing is assured available in the cycle routes plan for 2018-2029. There is an ongoing dialogue between the municipalities along the routes and a Trafikverket (Swedish Transport Administration).

Recommendations;

- Choose the most important regional routes, not the best exciting ones.
- Put the requirement level reasonably so that the routes can be implemented. Too high a level can paralyze the whole investment.
- Both national and local road managers must be involved and agree on the importance of the investment.
- Have an idea of the financing early in the project. As a suggestion, the County transport plan.

Experiences from Uppsala, Björn Sigurdsson, Climate Strategist, Uppsala Municipality, Sweden

Today, Uppsala has about 60% share of cycling in the urban area. Throughout the municipality, the travel shares according to the travel survey from 2015, are that trips are made to 37 % by car, 33 % by cycle, 14 % on foot and 13 % using bus². In other words, on the local level, the Swedish governmental milestone target of 25 % share of public transport, cycling and pedestrians in the year 2025 is already reached. To achieve such a high share of bicycle traffic in Uppsala, the municipality has actively worked with cycling. They have implemented a cycling action plan, including four priority areas: safety and security, accessibility, cycling culture and comfort and inclusiveness. Also, within the Uppsala climate protocol there is a focus group for sustainable travel addressing e.g. bicycle-friendly workplaces; how to get car commuters to switch to public transport; winter cyclists as well as active travel among children and youth.

They are working on increasing the share of sustainable travelling even more and in their scenario analyzes, Uppsala works with four different policy instruments. These are; 1) parking fee (+ 18SEK), 2) car pools (25%), 3) mileage cost, 4) ABC public transport tariff (the county's common public transport tariff). The implementation of these would provide 75% sustainable transports. According to them the mileage cost for car has the greatest impact, but it is something that must be changed on a national level since the municipality has no influence on e.g. the fuel cost.

² <https://www.uppsala.se/organisation-och-styrning/publikationer/resvaneundersokning/> , 2019-06-20.