

Cycling innovations - Best Practice by EIT Climate-KIC

City of Malmö: Elevated bicycle crossings

In 2014, elevated bicycle crossings were included in Swedish road legislation. These bicycle crossings give bicycles rights-of-way over cars when a cycle path crosses a road.

In order to ensure a safe passage for the cyclist, the construction of the crossing is such that it reduces the speed of the cars to 30 km/h. The municipality of Malmö has specific criteria (e.g. narrowing of road and speed bumps) when constructing the car ramps facing the crossing that will ensure the speed limit. Since the bicycle path is on a higher level compared to the car road, the speed bump for cars also makes the crossing more even for cyclists, and at the same time, car drivers are more likely to keep the speed limit which then increases the chances for safe bicycle crossings. The crossings can either be next to a pedestrian crossing or by separately.



Foto: Bicycle crossing schematic



Foto: Sign indicating bicycle crossing

The signage for the bicycle crossing looks similar to the pedestrian crossing sign but pictures a bicycle instead of a pedestrian (see Figure 2). In Malmö, 39 bicycle crossings have been built so far (in January 2018).

Even though the legislation had been in place for three years, the municipality of Malmö felt that the public had little awareness of it. The municipality decided to do their own campaign which included posters and a commercial featuring a local celebrity which was shown at all cinemas in the city and on social media. This created a large media follow-up both in traditional and social media.

The cost of implementing the bicycle crossings has been quite low so far, because the junctions were already in place before, and in most cases, the main difference is the introduction of the signage which has legal ramifications – making it illegal for car drivers to not cede to cyclists. The introduction of the legislation has made it possible for the municipality to prioritise cyclists more clearly. The campaign that was run is about the new bicycle crossings, but also sends a message about the importance of cycling as a mode of transport in the city.

During the spring 2018, the new crossings will be evaluated by the municipality in collaboration with academic partners from both Malmö University and Lund University who will measure speed, reaction towards right-of-way, mobility of cyclists and public transport and incidents.

Context

The municipality has recently reduced the speed limit in built-up areas from 50 to 40km/h, and the speed limit around schools is 30km/h.

The municipality has decided that bicycle traffic should be prioritised, and this is also stated in the city's SUMP (Sustainable Urban Mobility Plan which is a politically-approved document) which also includes the goal of increasing bicycle traffic. The new legislation and the implementation of the new bicycle crossings is thus very much in line with the already existing goals of the municipality.

The traffic culture in Sweden is generally very allowing, while at the same time, people are in general very law-abiding. That the traffic culture is very allowing is reflected in the fact that people make an effort to make eye contact with each other in situations where conflicts can arise. This might make road users more flexible and responsive towards changes.

Driving forces

The infrastructure of the bicycle crossings with the ramps were to a large extent already in place when the new legislation came in 2014. However, together with the SUMP, the legislation has led to a change in prioritisation in favour of cyclists. The driving forces behind implementation of the ramps before the legislation was in place were rather road safety, statistics on accidents, and the need to regulate speed of cars.

Barriers

Some of the crossings still feel quite unsafe for cyclists and there is still a problem with not all car drivers stopping for cyclists. There is a certain difficulty in introducing a totally new concept, which can require some time to be understood and accepted by all.

Even though car drivers are breaking the law if they do not stop for a cyclist at these crossings, no fine has yet been given, and the police do not really have time for enforcement.

Today there is a need for evaluating the sites of the crossings on the year-around conditions. This would generate safer usage.



Success factors

Foto: Junction in Malmö with a bicycle crossing.

The design of the infrastructure to encourage lower car traffic speeds is an important element in getting this solution to work. It is important that the visual cues are in place to make it clear to both car drivers and cyclists what is going on and who has priority.

Performing an awareness campaign to support the understanding of the infrastructure was an important element in getting car drivers and cyclists to be aware of the new legislation, and type of crossing. Making it humorous and playful, and involving a local celebrity was a key element in getting the campaign spread widely in social and traditional media.

Scaling potential

The elevated bicycle crossings have already been implemented in several Swedish cities and have potential to be successful in other locations as well. There needs to be a reasonably high level of bicycle traffic as well as acceptance from car drivers for these crossings to work. In cities or countries where there is only a small existing bicycle culture this type of crossing might be difficult to implement.

These types of crossings are much more efficient if there is legislation in place that ensures who should yield the right of way to whom. To implement this in other locations one should look into the current legislation to ensure that there is a harmonisation between legislation and infrastructure.

Find out more?

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