

Title

Fietssnelwegen (Bicycle Highways)

Short description

There are both speed cycle roads and cycle highways in the Netherlands. A cycle highway is different as it has its own recognizable infrastructure, with a good flow, meaning no cross overs with motorized traffic, better asphalt, no traffic lights. This way, cyclists can quickly travel larger distances. The concept of cycle highways has developed some years ago, in the 1970s there were already local pilot projects for cycle highways. In 2006, Cycle Congestion Free started as one of the forty projects of the FileProof (Congestion proof) programme of the Ministry of Transport, Public Works and Water Management (now the Ministry of Infrastructure and Environment) to reduce congestions. The goal was to stimulate car drivers who lived within 15 kilometers from work to instead bike to work. Cycle Congestion Free implements this by intersectoral cooperation with multiple road managers, proactive process management and a strong communication strategy. Currently, Cycle Congestion Free has grown to be a platform around bicycle stimulation. The ambition is to realise a network of cycle highways that connect living and working areas with each other. This project is subsidized by about 1.3 million Euro per route. In total, 21 million Euros was spent for 16 routes and around 5 million Euros was spent constructing the Leiden-Den Haag and Arnhem-Nijmegen routes.

Topic

Moving – cycling

Characteristics (type, level)

Intervention, Product, Policy, National

Country/Countries of implementation

The Netherlands

Aims and Objectives

Originally to stimulate car users who live at a distance from work that can be travelled by bike (up to 15 kilometres) to take the bike to work, to reduce congestion. Now, the focus has widened to improving accessibility in the broad sense. Ambition is to create a network of speed cycle routes that connect living and working areas with each other.

Currently, the Netherlands has 300 kilometres of cycling highways. For the coming years, about 600 kilometres are planned to be developed.

Target Group

Car users who now use their car to go to work, while they could be travelling by bike.

Status

Ongoing (new bicycle highways are developed) and completed (existing bicycle highways)

Start and Completion dates

The concept of bicycle highways was developed in 2006 and is still being used.

Lifestyle and Behavior Change

By making the bicycle a more attractive option, by offering better cycle infrastructure, people are stimulated to take the bicycle to work or school instead of the car.

Effects on:

Health and Wellbeing	When these former car users start cycling to work, they get more physical activity while commuting, which is good for health. Reduced car use also results in less health effects of environmental impacts of cars (air pollution, noise).
Vulnerable populations	By making sure that also these groups are reached, and stimulating these groups specifically to take the bicycle to work or school. By living in an area with good cycle infrastructure, people who do not currently have a job can still profit from the improved travel arrangements. If these groups are reached, money that would normally have to be spent on car fuel can be saved, which is something especially valuable for those with lower incomes. In addition, lower income groups often use cars for travelling (64 to 71%, Bakker & Zwaneveld, 2009). By increasing the attractiveness of cycling infrastructure, mobility by other means could be stimulated especially among them.
Environment	Reducing car use for commuting will reduce levels of particulate matter, NO ₂ or CO ₂ and lower noise levels.

Initiated and/or implemented by

The Dutch government developed the concept of bicycle highways in the context of traffic jam reduction approaches.

Stakeholders and sectors involved

- The first generation of 'snelfietsroutes' (speed cycling routes) was realised thanks to a financial support by the National Government in 2010. Currently the Dutch ministerial

project 'Better Use' ('Beter Benutten') is also involved with bicycle highways. More recently, decentralized governments more often take the lead. The initiative 'Tour de Force', in which CROW/Fietsberaad and decentralized and centralized governments work together, are an example of the broader (more integral) movement around cycling highways and cycling promotion.

- 'Fiets Filevrij' (Cycle Congestion Free) is a collaboration between the Dutch Ministry of Infrastructure and the Environment, 'Fietsersbond' (Cyclists' Union), and decentralized governments. It aims at both stimulating development and experience and knowledge exchange. Their main focus has been to improve existing cycle routes, which lie beside congestion points in the Netherlands, in order to stimulate car users who live at a distance from work which could be travelled by bike, to take the bike.

- 'Tour de Force' is the Agenda Cycle 2020 of collaborating governments in the Netherlands, which the aim to support initiatives and create conditions needed to stimulate cycling. One of their themes is the development of (quick) regional cycling routes.

Financial support

There has been a one-time financial impulse to enable realization of Cycle Congestion Free roads. Currently, financial support is given by Provincial States and subsidies come from the Dutch ministerial project 'Beter Benutten'. The costs of maintenance need to be paid by other regional and local parties.

Evidence-base

Quick, direct, comfortable, attractive and safe cycle routes stimulate people to take the bike, by shortening travel time and perception of travel time. TNO research (2009) showed that employees who cycle to work on a regular basis, on average have one less sick leave days a year compared to their non-cycling colleagues. Scientific literature used in INHERIT's baseline review also suggests an important role of good cycle infrastructure.

Main activities

In the past years, this has been the development of new cycle infrastructure and the improvement of existing cycle infrastructure, which lie besides car congestion points. By taking away barriers, improving quality and safety of the infrastructure, and active communication about the cycle routes. Twenty-five cycle highways have been developed or are being developed, thanks to a financial impulse by the national Government of 31 million Euros. By regional government efforts, together with Cycle Congestion Free, there are now regional networks of cycle highways, the start of a national network of cycle highways. For the coming years, the physical challenge will be to develop missing links to enable improving the quality of the cycle infrastructure network and the connection on underlying (urban) networks and to safeguard maintenance (responsibility for regional and local authorities). In addition, the national cycle highway structure must be on the 'mental map' as well, so people are aware of its existence.

Evaluation

An evaluation on F35 (a bicycle highway in Twente) in 2015 showed that users rate the highway very positively, but that effects on the modal split and congestion are limited. Depending on location and distance, 2 – 11 % of daily highway cyclists take the car less often

due to the bicycle highway. Other evaluations SOAB 2013 and MuConsult 2010a show that users rate the new infrastructure very high.

A cost benefit analysis was done on investments on cycle highways in the Netherlands.

Main results

Bicycle highways offer time gains and more comfort, something users rate very highly (van Ginkel 2014), and about 8% of highway cyclists used to use the car for the same ride. The effect on intensity and congestion on car freeways are relatively limited. For the F35, costs for the total way of 63 kilometres are about 73 million Euros. If gains in welfare (more comfort and less travel time) are large enough to make these investments costs worth it, is unknown (CLB, 2016).

Goudappel Coffeng (2011) conducted a cost benefit analysis of cycle highways when 100 million Euros would be invested, and found that this would result in 144 million worth of benefits (economic in terms of less congestion, health, more vitality, climate, less CO2 emissions). Several cycle highways have been monitored, and first results are promising: for example in Hengelo: more cyclists, of which 80% are commuters, of which 30% e-bikes, of which 2-7% are former car drivers, people are satisfied.

Key success factors and barriers

Success factors:

Collaboration between different stakeholders, with financial injections by the Government.

Barriers:

Financial: sometimes budgets are too low to implement all ambitions and goals. Changing and improving cycle infrastructure involves expensive measures. Convincing all those different government levels that cycling and cycling highways are an important aspect to stimulate and invest in, takes time and endurance.

INHERIT Perspective

This project has a potential triple win. By offering a better biking infrastructure, people are stimulated to take the bicycle to work instead of the car. When these former car users start cycling to work, they get more physical activity. Employees who cycle to work on a regular basis, have less sick leave compared to their non-cycling colleagues. It also contributes to a reduction in greenhouse gas emissions, air pollution and noise. Bicycle highways are freely accessible to all, so people who do not currently have a job and low incomes can still profit from the improved travel arrangements.

More information

<https://bicycledutch.wordpress.com/tag/cycle-superhighways/>

<http://www.fietsfilevrij.nl/wp-content/uploads/Netwerken-van-regionale-fietsroutes.pdf>

Contact

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