



## Encouraging Cycling in Rural Municipalities

### Challenges and opportunities

In rural areas, car use is far more dominant than in bigger cities thus making cycle use lower in rural areas. However, in large parts of Europe cycling has a long tradition, especially in rural structures of villages and small towns. This is in part due to the weak local public transport infrastructure in these areas. In Germany's rural areas, unlike in urban locations, almost all segments of the population use the bicycle. People covering long distances for their everyday trips without their own car find it hard to do so due to the increasing spatial concentration of public and private institutions. Moreover, rural roads often lack safe cycling paths. As a result, cycling levels continue to drop in some rural areas in Germany, contrary to the overall trend across the country.

In addition, organisational options at municipal level are limited. In smaller municipalities, urban and transport planners cover a broad range of relevant expertise and rarely specialise in cycling issues, contrary to administrative staff working in big cities. In order to develop a coherent cycle route network, often several municipalities have to collaborate. These municipalities, however, might have varying acceptance levels of cycling. Road networks in rural areas often have tiered ownership structures with national, regional and local responsibilities and sponsors making more coordination necessary for cycle route network planning.

### Planning demand

In rural regions, tourism often gives a positive push for cycling and encourages communities to develop a co-

herent high-quality cycle route network for cycling tourists. Often numerous municipalities and regional entities collaborate to offer a common gapless cycling tourism product. In Germany such collaboration is seen, for example, in river valleys with the use of forest and agricultural roads as well as car-free riverside paths.

Additional planning is needed to integrate the tourist cycling links and the cycle route network for day-to-day travel used by residents, such as routes to school and shopping areas. Regional public transport also plays a role; cycling to the railway station or bus stop may contribute to the success of the local public transport offer. It is thus helpful to combine, at the supra-local level (the district level in Germany), local public transport management regarding transport planning and policies with cycling coordination (see also CyE O-2 Municipal Cooperation to Promote Cycling). The use of electric bikes, known as pedelecs, has great potential for mid-

*Rural cycle path near Arnhem, Netherlands*

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Community bicycle garage at Miltenberg station (Bavaria) for out-commuters and also in-commuters (secondary bike for last mile from station to work)

range distance trips to work or the railway station; their use significantly increases the distances covered by bicycle, especially in mountainous regions.

Finally, rural municipalities have an advantage over the complex and large urban structures: In rural areas people tend to know each other well and are able to cooperate more effectively. Without reliable structures for cycling promotion, however, success often depends on individual, often charismatic, personalities who play an active role at the local level.

## Rural regions – a new priority of cycling policies in Germany

The new National Cycling Plan for Germany (NRVP 2020), which has been adopted by the federal government in 2012, considers an overall national cycling level of 15% to be attainable for 2020 (2008: 10%). In order to achieve this, trends in favour of cycling have to continue not only in the big cities, but also in rural regions, where cycling levels have to increase from 8 to 13%.

Capacity building has already been identified in the previous National Cycling Plan as one of the major factors on the way to success. In this regard, the nationwide training programme of the Fahrradakademie (cycling academy) provides stakeholders in rural regions with crucial knowledge about cycle planning. The annual municipal cycling conference (Fahrradkommunalkonferenz) brings together interested administrative staff and elected officials from municipalities across Germany. Municipalities in several individual Länder have established associations of bike-friendly municipalities

(Arbeitsgemeinschaften Fahrradfreundlicher Kommunen) to collaborate and support each other.

In the Hanover region one planning authority is in charge of the central city of Hanover with a population of half a million, as well as the rural areas surrounding it. Cycle planning is coordinated at the regional level in close cooperation with local public transport. The new 'pro Klima' transport development plan promotes walking and cycling as mobility options in conjunction with reduced traffic settlement development to reduce CO2 emissions by 11% until 2020 as a contribution to achieving the climate targets. The cycle mode share is already above average, in urban as well as rural areas. The plan is to make provisions for faster cycle traffic and to improve cycle parking in order to replace car traffic with cycling, i.e. increasing cycling levels from 12 to 16% between 2008 and 2020 in the region's rural areas (from 13 to 23% in the region's central city). The local authority of Hanover has developed an overall concept of regional policy and a planning scheme in collaboration with the neighbouring regions around Hanover – Metropolregion (metropolitan region) – to integrate cycling into spatial planning.



Expanding network of greenways on former railtracks is boosting a cycling culture in the Wuppertal region

## Challenge: rural roads

In sections of the road where no cycle path is provided, high speeds of motor-vehicle traffic pose a risk to on-carriageway cycling traffic. While in Germany in 2011 most accidents involving cyclists happened on urban roads (91% of these accidents according to the German Federal Statistical Office), accidents on rural roads are especially severe, with 40% being fatal. Special care must be taken to provide for safe cycling where rural roads are a direct connection between localities. Forest and agricultural roads running parallel to the main road are more attractive to recreational cyclists; but due to the surface of the roads and the lack of social control,

### Sources

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FGSV (2008): Richtlinien für die Anlage von Landstraßen (RAL), Köln (German)

CROW (Hrsg.) (2008): Plattelandswegen Mooi en Veilig – een Beeldenboek, Publikation Nr. 259, Ede (Dutch)

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these roads are often not suitable for day-to-day work or education trips by bike requiring direct links.

In Germany, the provision of cycle facilities outside urban areas varies greatly between regions. Some Länder, especially in northern Germany, have consistently implemented new cycle facilities along Bundesstraßen (national roads that cross the boundary of one or more Länder) and Landesstraßen (roads that cross the boundary of a rural or urban district). Thanks to this development, there are many areas where cyclists can use an almost gapless cycle route network along main roads. Such facilities are lacking, however, in many areas in East Germany and in those Länder with low mountain ranges. Given the current funding situation, it will take decades for these regions to build a network of cycle facilities along rural roads. In Germany it is thus currently being debated whether less expensive measures are also acceptable, such as road markings; these are used in some of Germany's neighbouring countries. Until now these options were simply considered to be too dangerous.

The new German National Cycling Plan (NRVP 2020) places high importance on cycling promotion in rural regions. In the plan, the federal government announces a model project to study areas where protection lanes can provide an alternative solution. The project is to help better assess the possibilities for safe cycle facilities on rural roads with light traffic and no cycle path. For roads without cycle facilities and with high cycle traffic volume, NRVP recommends considering a speed limit according to the road traffic regulations (StVO). This is to increase the level of safety for cyclists as well as other road users.

The Land Brandenburg has developed an exemplary, systematic approach where priorities for cycle paths along Landstraßen are derived from the settlement structures. In 2012 a pilot project for testing cycle lanes on rural roads was launched on the initiative of the German National Cycling Plan. It includes 15 test routes in five different Länder. Before and after comparisons will show, how those new facilities affect cycling and other road traffic

According to the German technical regulations (Recommendations for Cycle Facilities, ERA; Guidelines for Rural Roads, RAL), segregated two-way cycle paths are normally provided along one side of the road for two-

way cycle traffic; cycle path width is normally 2.5 metres. If possible, cycle paths are provided on the side of the road where pedestrians and cyclists need to cross as little as possible regarding the surrounding development. The distance between separated cycle facilities and the edge of the road should at least be 1.75 metres; they should have high visibility and adequate glare and splash water protection. Cycle paths should be designed for cycle speeds of 30 km/h (18 mph) to allow cyclists to travel speedily also off the carriageway.



*Pilot project: cycle lane on a rural road in the Landkreis Ludwigslust-Parchim (Mecklenburg-West Pommern). © Urbanus GbR*

Safe crossings with splitter islands must be provided where cyclists have to cross the main road at junctions and side roads. In sections of the road where transitions are provided from two-way cycle paths on one side of the road to separated one-way cycle paths at the entrance of cities/towns, it is vital to reduce motor-vehicle speeds to an acceptable level (through road bending or roundabouts) and give cyclists a clear and safe passage crossing the road.

## New approaches in the Netherlands

In its technical guidelines, the Netherlands follow the approach of 'self-explanatory roads' where the street furniture indicates the character of the road, also implying the appropriate driving speed. Providing a clear and recognisable design to ensure the readability of roads and junctions in terms of road behaviour offers lasting safety benefits.

Bicycle-friendly designs are planned for all connecting roads. For the last of the three types of roads, mainly access and distributor roads, no separated cycle facilities are to be provided; however, motor-vehicle speeds will be reduced significantly. On many of these roads the provision of separated cycle facilities is not planned any

Images unless stated otherwise by Jörg Thiemann-Linden



*Dutch impressions, from top to bottom:  
Traffic-calming junction design in the province of Friesland;  
60km/h (37 mph) rural road in the province of Friesland;  
cycling facilities indicated by road markings near Nijmegen*

time soon. Planners therefore use a landscape approach as a new design option especially in the Dutch regions of Friesland, Gelderland and Brabant. This is a partly experimental approach that uses elements of landscape and cultural history to influence road users' travel speeds: narrow bridges, designated water access areas along the road, and large boulders are used to make driving at low speeds more plausible. Simultaneously elements that might encourage fast driving are avoided (for example: road markings, crash barriers and traffic

panels, over-sized signs). Traffic-calmed areas in villages have a speed limit of 30 km/h (18 mph); in rural areas a speed limit of 60 km/h (37 mph) applies. Ways to enable the smooth interaction of road users include:

- narrow carriageways, 4–5 metres wide.
- soft shoulders for oncoming motor vehicles to pass each other driving slowly
- partly zoning of the carriageway through the use of different surface material in order to make the road appear narrower than it is
- tree lines or hedges close to the edge of the road
- passing places indicated with signs or, better, with a grove of trees
- speed tables (flat-topped plateaus with ramps) to slow cars on long straight stretches of the road
- rural junctions with a curvy design, not indicating priority to one link or the other
- the size of general road signs must not exceed the size of cycle signs

## Conclusion

Compared to big cities, rural areas pose different and greater challenges when it comes to cycling promotion. The different stakeholders have different responsibilities and thus a large amount of coordination is needed; there is a general lack of cycling knowledge in the municipalities that depend very much on individual people for the necessary cycling expertise. With car use being the dominant mode of transport, cycling levels are typically lower than in big bicycle-friendly cities. On the other hand, cycling tourism and cycling in combination with public transport offer great potential for the development of cycling.

Providing safe cycle facilities in rural areas depends first and foremost on the planning of cycle paths along the main roads – even if links already exist that are for recreational purposes and not suitable for everyday trips. It is essential to enable cyclists to cross the road safely given the high motor-vehicle speeds. Measures to reduce vehicle speeds are increasingly tested also on rural roads with low motor-vehicle flows, particularly in the Netherlands.



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More information can be found in  
CyE I-1 State of the Art for Cycling Facilities  
CyE O-2 Municipal Cooperation to Promote Cycling

“Cycling Expertise“ is available online:  
[www.nrvp.de/cye](http://www.nrvp.de/cye)

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