Protective bicycle lanes outside built-up areas (SVI 2000/388)
Kernfahrbahnen auf Ausserortsstrecken

Funding: National (Switzerland)
Duration: Feb 2004 - Aug 2007
Status: Complete with results

Background & policy context:
Core traffic lanes in towns, cities and villages have proved their worth in certain situations. In what circumstances can core traffic lanes also be used out in the country?

Objectives:
In this research project studies were made of 15 road sections in total, largely with the aid of video recordings. More than 200 hours were spent filming and these video films have not only been used to make observations of a qualitative nature, but, and in particular, to obtain quantitative readings. Special software makes it possible to take readings like distance and speed directly from the video image and to evaluate them in terms of statistics.

Methodology:
Comprehensive “before and after” studies were made of five roads with core traffic lanes, making it possible to make direct comparisons of the situation with and without advisory cycle lanes.

Related Projects:
SVI1999/135 Strassen mit Gemischtverkehr; Anforderungen aus der Sicht der Zweiradfahrer

Parent Programmes:
SVI - Swiss Association of Transportation Engineers (various projects)
Institute type: Private foundation
Institute name: Association of Transportation Engineers
Funding type: Public (national/regional/local)

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Key Results:
Motorists make extensive use of advisory cycle lanes when country roads are narrow. It is only where there is a carriageway width of 7.50 m that they are paid proper respect - from the point of view of
traffic safety.
"Before and after" comparisons have shown that marking core traffic lanes only very slightly reduces the speed of motor vehicle traffic. It can therefore be said with certainty that core traffic lanes are not suitable for encouraging compliance with speed limits and not even for reducing speed.

Cyclists usually take a positive view of core traffic lanes. Measurements have shown that after the introduction of core traffic lanes cyclists travel further away from the edge of the road than they formerly did, probably because they feel safer. Unfortunately this does not mean that they actually are safer.

The illusion of safety is a general problem in road traffic and becomes particularly acute in connection with core traffic lanes out in the country. The high speeds of the motor vehicles travelling along these roads are dangerous for cyclists and advisory cycle lanes give them a false feeling of security when traffic is travelling at high speeds. For this reason core traffic lanes on country roads can only come into question where the speed limit at the time of evaluation is 60 km/h.

However, core traffic lanes where the limit of 7.50 m for the width of the carriageway and a speed limit of 60 km/h are complied with are no safer than traditionally marked roads with the same features. On the contrary: the lack of a marking line leads to greater fluctuations in the extent to which motorists keep their distance from the side of the carriageway and the advisory cycle lanes can give cyclists the illusion of safety. It does not therefore make sense to mark core traffic lanes on country roads simply because the said limits are complied with.

Core traffic lanes on country roads are not generally suitable for increasing road safety for cyclists. Although this research project has succeeded in finding special cases where core traffic lanes on country roads can be advocated, this does not generally allow a positive assessment of core traffic lanes on country roads.

Documents:
- Final Report (Final report)

STRIA Roadmaps: Network and traffic management systems
Transport mode: Road transport
Transport sectors: Passenger transport, Freight transport
Transport policies: Safety/Security
Geo-spatial type: Other