



METADATA

Title: Cycling Infrastructure - Quality Indicators

Other Titles: In-depth literature review about bicycle network evaluation criteria

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Abstract

The factors affecting the quality of a cycling network are complex. Firstly, it is important to evaluate the geography of the cycling network, namely its density and city coverage. However, it is important to pay also attention to infrastructure characteristics. There are several studies that correlate parameters of infrastructure with the number of accidents. Nevertheless, more important for the success of a cycling network is measuring the sense of security that the network offers to cyclists. Another measure of the quality of a cycling network are stated preference surveys, in which cyclists assess what they consider to be the best cycling infrastructure. A fourth category of research that has dealt with the quality parameters of cycling networks are revealed preference surveys, in which the routes of cyclists are correlated with the infrastructure offered. In many cases what cyclists say they prefer is not actually what they really choose. Finally,

papers are also important, which correlate the number of cyclists with the infrastructure offered or papers that evaluate the exposure of cyclists to pollutants or measure uncomfortable vertical vibrations and associate them with the cycling infrastructure. The book collects the above researches, categorizes them and presents them, and exports the factors that are proven to affect the use of a cycling network and should be evaluated. The work is important for students and engineers guiding them when designing a cycling network. In addition, every citizen has to evaluate the quality of infrastructure offered by his city. The evaluation variables that through the above process were extracted for the evaluation of a cycling network are: Connectivity – Density, Continuity, Directness, Slopes, Stops, Dangerous Crossings, Dangerous segments, Night time safety, Surface quality, Infrastructure width, Separation, Guidance Signage, Quality of environment.

