



DAMEN

Bikeability assessment of edges and nodes

Project duration:
07. 2026 - 03. 2027

Involved staff:
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Role Z_GIS:
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Contracting agency: Eastern Switzerland University of Applied Sciences (contracted by canton Solothurn, agglomeration programme Basel)

Initial situation:

The planning and improvement of cycle networks require an objective assessment of infrastructure quality and the identification of particularly relevant and critical bottlenecks. Whilst established assessment methods already exist for road segments, there is a lack of suitable approaches for junctions. At the same time, variations in data availability and the complex digital mapping of junctions make a comprehensive analysis difficult.

Project goals:

- Development of a data-driven method for assessing the quality of road sections and junctions from the perspective of cyclists (bikeability).
- Identification of bottlenecks and priority gaps in the cycle network based on spatial network analysis.
- Assessment of the impact of planned infrastructure measures on network quality and accessibility.

Expected results:

- Comprehensive Bikeability assessment across the study area of the tri-national Basel agglomeration and the canton of Solothurn.
- New modelling approaches for assessing junctions.
- Identification and prioritisation of critical gaps in the network through systemic network analysis.
- Open-source publication of methods, scripts and software for reuse and further development.

Contribution Z_GIS:

- Method development and implementation.

