



GPS-basierte Radverkehrsdaten - Analyse von Datenquellen für die Radverkehrsplanung und -forschung

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Abstract

Cycling is becoming increasingly important. Both society and the federal government are therefore calling for the expansion and improvement of the infrastructure. In order to plan measures that meet the needs of cyclists, data on the behavior of cyclists must be collected.

With the current survey methods, it is only possible to collect the number of cyclists at a specific point in the cycling network. GPS-based cycling data offer the potential to collect route data. Therefore, GPS-based cycling data are presented in this paper. For this purpose, the functionality of GPS is explained and different aspects of GPS-based cycling data are discussed. First, it is explained that the large amount of data that is generated when recording the locations can lead to problems. It also looks at the issue of data protection and explains what data providers must include in their terms of use in order to be allowed to share their data. Furthermore, it will be discussed how GPS-based cycling data has to be processed in order to be usable. In addition, various use cases are explained to highlight why GPS-based cycling data is needed for cycling planning and research.

In the main part of this thesis, different data sources that provide GPS-based cycling data are searched. For this purpose, an internet search and an expert interview were conducted. With the help of the 16 found data sources, different questions were formulated, with which these data sources can be compared. With the help of these questions, the data sources were compared and the results were summarized in a results table.

This paper gives an overview of different data sources for GPS-based cycling data and describes the differences between them.

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