Application of cellular network signalling data in the field of traffic planning

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Abstract

This paper describes techniques that are developed for traffic planning applications based on cellular network signalling data. The data consists of millions of events that are created by mobile devices communicating with the cellular network of an Austrian mobile network provider. The processing of these events can be used for various use cases such as estimation of traffic volumes and origin-destination matrices. Furthermore different modes of transport can be identified for rural regions as well as urban areas. A tool is described for exporting the cellular data into traffic modelling systems. In terms of quality assurance the data is checked against reference traffic counts and additional statistics. The techniques developed have great potential to increase the wide accessibility of traffic data. In addition costs for data collection can be reduced.

Acknowledgements

References

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