
Using Passively Collected Data to Investigate Social Travel

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May 2018

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thibaut.dubernet@ivt.baug.ethz.ch

Institute for Transport Planning and Systems

(IVT)

ETH Zurich

CH-8093 Zurich

phone: +41-44-633 68 65

email: +41-44-633 10 57

May 2018

Abstract

In the last decades, a growing body of evidences of the influence of the need for social contacts on mobility, and in particular *leisure* mobility, has been accumulated. The idea that explicitly considering those motives in transport models could improve forecasts is making progress. However, the actual implementation of those ideas is still difficult, in particular due to the lack of data on how do individuals plan joint activities.

This paper will report on analysis performed in this context, using data from the SensibleDTU data collection effort (Stopczynski et al., 2014), where smartphones with GPS tracking were provided to 1000 bachelor students over one year. This dataset is unique in the sense that it tracks mobility of a densely connected social network of substantial size over a long period of time. Using a anonymized extract of this data, the paper will focus on the properties of travel for meeting friends, focusing on the properties of the travel patterns of the participants. In particular, the hypothesis that party composition have a significant impact on the properties of travel will be tested.

1 References

Stopczynski, A., V. Sekara, P. Sapiezynski, A. Cuttone, M. M. Madsen, J. E. Larsen and S. Lehmann (2014) Measuring large-scale social networks with high resolution, *PLoS ONE*, **9** (4) e95978.