

Workshop B7 - Data Fusion: Needs and Challenges in a New Transportation Data Landscape

Workshop chair:

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This workshop will examine data capture mechanisms and methods to fuse data as we enter into an era of active as well as passive survey data collection mechanisms. The emphasis will be on how different data sources can be merged to fill “holes” in individual data sources as well as address concerns of representativeness in individual data sources. Examples of multiple-source data collections in the actual field will be reviewed. The workshop will harness the collective experience of leading survey analysts to forge a pathway forward in this fast-developing and exciting area of multiple, mixed, and heterogeneous data sources.

Papers for oral presentation

- Richard Ellison and Robin Lovelace.
Augmenting travel surveys with Big Data
- Sirui Zhu and Matthew Roorda.
Data fusion of commercial vehicle GPS and roadside intercept survey data

Papers for poster presentation related to workshop

- Gunnhild Beate Antonsen Svaboe, María Díez Gutiérrez, Trude Tørset and Arild Blekesaune.
Can new technologies replace traditional methods for collecting travel data? The case of commercial trips in Norway.
- Tim Hilgert, Martin Kagerbauer and Peter Vortisch.
Does travel behavior of people using mobility apps differ? Findings from a market analysis in Germany
- Tobias Kuhnimhof and Christine Weiss.
Vehicle cost imputation in travel surveys: Gaining insight into the fundamentals of (auto-) mobility choices
- Pierre-Leo Bourbonnais and Catherine Morency.
A Robust Datawarehouse as a Requirement to the Increasing Quantity and Complexity of Travel Survey Data
- Byron Chigoy, Ed Hard, Michael Martin and Lisa Green.
Passive Data: The Other 50% of the Work
- Mehdi Katranji, Guilhem Sanmarty, Sami Kraiem and Fouad Hadj Selem.
Inferring human mobility patterns from census data