

Editorial: Special issue related to the 32nd ICTCT Conference in Warsaw, Poland on 24 and 25 October 2019

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ICTCT (International Co-operation on Theories and Concepts in Traffic Safety) held its 32nd annual conference on the 24th and 25th of October 2019 in Warsaw, Poland. This special issue presents a selection of papers that were presented at the conference and that were subsequently accepted for publication in Transactions on Transport Sciences following the journal's reviewing procedure. The aim of the conference was to discuss research questions and challenges related to a Vision zero for traffic fatalities and serious injuries. Keynote speeches were given by dr. Lars Ekman from the Swedish Transport Administration and professor Andrew Tarko from Purdue University in Indiana, USA.

First established in 1977, **ICTCT** was an initiative instigated by researchers who wanted to work together on developing traffic conflict techniques as a complement to injury and accident data for research, diagnosis and evaluation purposes. Later, ICTCT's focus widened to include theories and methods enabling researchers and practitioners to work on road safety without having to rely solely on scarce or insufficient accident and injury data. Since then, ICTCT has organised annual thematic conferences.

The papers selected for this special issue vary with respect to the topics dealt with and the approaches followed. What they have in common is that they aim to provide a better understanding of the traffic system, taking a user-centred perspective.

Three papers discuss road users responses to changes in the road environment. **Gitelman et al.** investigated how speed perception by drivers depends on urban street design. They developed multivariate regression models to examine the relationship between street characteristics, traffic exposure and travel speeds, as well as to explore the relationship between the driver characteristics, street design and "appropriate" speeds as reported by drivers. The results showed that road layout type was the most influential on selecting speeds. **Klos et al.** studied the effects of countdown timers on traffic safety at sig-

nalized intersections. Countdown timers show the time (in seconds) remaining before the displayed signal on the traffic light changes into another colour. They conclude that 22,65% to 32,03% less of the vehicles drove into the crossroads in a prohibited period with the enabled countdown timers. **Agerholm et al.** report about a large-scale study on the speed-calming effect of speed humps. Speeding remains common and speed humps are still an often-used speed calming measure. Available Floating Car Data in Denmark were used to observe speed behaviour in the neighbourhood of speed humps. The results can be used to decide upon the most appropriate interval between two speed humps.

In two other papers, road users are approached directly to understand their attitudes, behaviour or preferences. **Macioszek & Kurek** studied subjective safety of roundabout users based on data in two provinces (voivodeships) in Poland. They did a survey among 1800 respondents (sampled among roundabout users) in order to acquire information on drivers attention to horizontal and vertical markings, perceived safety of roundabouts and self-reported behaviour with respect to aspects such as lane choice and right of way. **Kaufmann** reports about a driving simulator study in which the moment in which first signs of tiredness became apparent was measured among drivers depending on the mode of driving (manual vs. automatic) and the driver status (awake or tired). First signs of tiredness were registered significantly earlier in automated driving than during the manually driven trips.

Soczówka & Żochowska focus on interactions between road users. They studied in a pilot study interactions between tram passengers and road vehicles at tram stops. They focused especially on interactions during the boarding and alighting from the tram between tram passengers and drivers of road vehicles at tram stops separated from the tram tracks by a roadway. The authors already provide four groups of recommendations to increase traffic safety at tram stop stations.

Finally, **Wagner et al.** adopt a methodological perspective and demonstrate - based on an extensive dataset from the city of Berlin - an approach to facilitate finding patterns in traffic crash databases and to specify their statistical significance. They use visualisation techniques to make complex information visible and to render it as much as possible intuitively understandable.