



**EJTIR**

ISSN: 1567-7141  
<http://ejtir.tudelft.nl/>

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## BIVEC 2021 Special Issue Editorial Note

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This Special Issue has its basis in the BIVEC-GIBET Transport Research Days 2021. The three papers reflect the broad scope of the BIVEC-GIBET, including several disciplines, all transport modes, and many research methods. What the research of BIVEC-GIBET has in common, is a focus on societally and policy relevant research.

### *Publishing history*

Submitted: 17 January 2023

Accepted: 19 January 2023

Published: 23 January 2023

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### *Cite as*

Van Wee, B. (2023). BIVEC 2021 Special Issue Editorial Note. *European Journal of Transport and Infrastructure Research*, 23(1), 30-32.

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### **1. BIVEC-GIBET Transport Research Days 2021**

This Special Issue has its basis in the BIVEC-GIBET Transport Research Days 2021. The BIVEC-GIBET is a Benelux transport researchers network. Citing its website (derived 17-1-2023) it 'presently unites both academic staff and professional people qualified in fields such as transport economics, transport geography, urban and spatial planning, logistics and operations research, regional economics, transport law, engineering, and other related social sciences. Today our organisation has about 100 individual members (professors, lecturers, pre-/post-docs, researchers) from all major universities, university colleges, knowledge centres and profession transport organisations located in Belgium, the Netherlands and Luxembourg.'

Every two years the BIVEC-GIBET organizes a two-day conference, called the Transport Research Days. In 2021 the Transport Research Days were organized online because of the COVID-19

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Pandemic, by Delft University of Technology, and TRAIL Research School, both Dutch organizations.

Of the papers selected and reviewed, three papers made it to this special issue. Eva Van Eeno, Koos Fransen and Kobe Boussauw wrote a paper entitled: 'Perceived car dependence and multimodality in urban areas in Flanders (Belgium)' (Van Eeno et al., 2022). They studied to what extent a sample of 898 Flemish people consider themselves as car-dependent, and link this perceived car-dependency to land use and transport system characteristics. Based on a cluster analyses including car use frequency, the frequency of bicycle use, vehicle kilometers travelled, and the perceived need for a car they distinguished four groups of car owners. They found that perceived car dependence was not always correlated with high levels of car use (trips, distance) and multimodal behaviour does not necessarily lead to less VKT. These findings show that car dependency is not a straightforward concept and that levels of car-dependency cannot easily be measure, and that calculated levels of car dependency do not necessarily match with perceived levels of car-dependency. This conclusion is in line with the finding of Pot et al. (2020) who found that perceived and calculated levels of accessibility are not very strongly correlated. In addition the findings of Eeno et al. means a high level of car dependency is not strongly related with travel behaviour indicators.

Laurent Franckx wrote a paper entitled 'The impact of self-driving cars on the national transport system: an assessment for Belgium' (Franckx 2022). The paper presents the result of a scenario study exploring potential impacts of self-driving cars on societally relevant outcomes of interest: Generalized Transport Costs (GTC) (as an important driver), car use, fuel consumption and total travel time. The study assumes SAE level 5 (full automation, all roads), private cars only, and has 2030 as the year for which the scenarios are developed. He makes use of the so called PLANET model, a more or less traditional four step multimodal transport model. The scenarios depart from changes in road capacity, the Value of Time, and monetary costs (acquisition, fuel and insurance costs). The scenarios reveal an increase in car use of 21 to 26%. This increase more than compensates improvements in fuel efficiency, leading to an increase of fuel of 5-10 percent. The impact of the self-driving car scenarios on speeds of motorized vehicles is highly location specific. If policymakers would prefer to counteract the effects of the introduction of self-driving cars on car use, they would have to implement a charge on car use of 20 euro cents per kilometre. The important conclusion of the study that the indirect effects via increased car use on fuel consumption more than compensate the direct effects of a reduced fuel use per kilometre, is in line with several other papers, emphasizing the importance of indirect effects of self-driving cars (e.g. Milakis et al., 2017).

Yuting Chen, Kurt Fuellhart, Shengrun Zhang and Frank Witlox wrote a paper entitled 'Airport classification in Chinese multi-airport regions' (Chen et al. 2022). In the research on airport classifications the integration of aviation and high-speed rail (HSR) has largely been overlooked. This paper aims to reduce this gap, classifying Chinese airport regions. Making use of data for 2014 and agglomerative hierarchical clustering (AHC) they classify airports along several dimensions, three of those being including 'competitive concentrations', the 'interaction between air transport and HSR', and 'airport community structure'. The results show that due to the integration of aviation and HSR the airport clusters expanded. In addition, two special airport clusters appeared: Air-HSR hubs and competitive air hubs. Although the authors emphasize that the results are context specific, the overall approach and methodology are certainly of interest in general, and thus also in the European context.

The three papers reflect the broad scope of the BIVFC-GIBET, including several disciplines, all transport modes, and many research methods. What the research of BIVFC-GIBET has in common, is a focus on societally and policy relevant research.

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