

# Transportation Research Board

## MINUTES

### Committee on Traffic Flow Theory and Characteristics (AHB45)

Summer Meeting

Saturday, July 2, 2016, 3:30pm – 5:00pm

Novotel Sydney on Darling Harbor

Sydney, Australia

#### Venue

The meeting took place in conjunction with the Traffic Flow Theory Summer Meeting in Sydney, the 2<sup>nd</sup> of July.

#### Attendance

Ludovic Leclercq, Jiwon Kim, Jing Dong, Meaad Saberi, Xiaobo Qu, Xiaopeng Li, Majid Sarvi, Zuduo Zheng, Serge Hoogendoorn, Rich Cunard, Chris Tampere, et al.  
Totally around 30 people.

#### Chair

Ludovic Leclercq

#### Contents

1. A short welcome from the chair Ludovic Leclercq.
2. A brief report about the Transportation Research Board (TRB) by Rich Cunard. The committee on traffic flow theory and characteristics has made contributions to science for more than 50 years, where a large number of papers is reviewed every year (the largest number goes to the TFTC and network committees). Special thanks to reviewers. The TRB annual meeting typically attracts large number of people in the field as well as speakers. Full paper should be submitted by August 1<sup>st</sup>. The reviewing process starts around the middle of August and feedbacks are given in the middle of September. Note that there will be a Highway Capacity Manual coming out next month.  
Questions & Comments: There is a “my TRB” portal available online where people can get involved in the community. Ludovic Leclercq gave thanks and inform that there will be 4 calls for papers. All information is available on the TRB website and also on the TFT facebook page and newsletter.
3. TFTC subcommittee reports.
  - SimSub: no material given, thus skipped.

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- Crowd Flow Dynamics by Majid Sarvi: there will be a call for papers and hope there will be many this year. The committee manages to get more people involved from different groups to have good discussions and feedbacks. We will have a workshop after the call for papers about emerging topics on crowd dynamics. We also try to get people from other disciplines into this field.  
Comment from Ludovic Leclercq: a great keynote today by Serge Hoogendoorn and a session dedicated to this topic on the second day of the 'TFT' symposium.
- Connected Automated Vehicles by Meead Saberi: activities of two subcommittees and 4 major events during 2016-2017 including the AVs symposium in San Francisco where a session will be launched on traffic flow of connected and automated vehicles (4 speakers), the TRB annual meeting where there will be a call for papers and two relevant workshops, the website and outreach platform where some information of industry people will be available (note that the newsletter is really important), the TGF conference and the ISTTT conference. Important dates for the TFG conference will be shared on the website. The scientific committee is formed and emails can be sent if there is any interest. The website is under construction and some topics are enlightened to submit papers. Special thanks to Xiaopeng Li et al.
- Greenshields prize and other awards subcommittee by Ludovic Leclercq: composed of 4 members whose main task is to nominate papers for TRB prizes. Ludovic Leclercq was not involved this year was not involved in the final selection of the Greenshields prize because of a conflict of interest (Monica Menendez thus chaired the last steps). The winner of the Greenshields prize is Ludovic Leclercq and three co-authors. The paper is about analytical analysis of capacity drop at merge with multilanes based on real data. It is recalled that to get an awards papers should be submitted to TRR.
- Outreach and Diversity by Meead Saberi: Alireza will take the lead in the future. We have newsletters, a YouTube channel. The list contact has been extend to include industry people. The Facebook page is still running. Special thanks to Xiaopeng Li for organizing ISTTT webinars. We have one industry person during the symposium, and it is important for the two communities to speak.
- MFD Dataset by Ludovic Leclercq: created last year. The idea is to share datasets to validate MFD for different networks especially for city-scale networks. We hope to make more people involved and willing to share datasets since the main problem is the difficulty on the agreement of datasets. Looking forward to significant achievements on the increasing number of shared datasets.  
Question from Serge Hoogendoorn: what type of datasets? Answer from Ludovic Leclercq: loop and probe vehicles data at the city scale including the presentation of the network (matching data to the network typology).

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Comment from Chris Tampere: have contact with people from the committee on network modeling (Natalia Ruiz from Texas University), who is working on a repository for traffic data. Chris also mentioned that Mark Minska (QUT) did work on sharing data in the past.

Comment from Serge Hoogendoorn: a connection has already been built in the Netherlands.

Question from Serge Hoogendoorn: how to proceed? Answer by Ludovic Leclercq: plans to manage a website where all datasets can be shared with network representations. This is a very good point as we have very few options to easily share worldwide a large amount of data.

## 4. Midyear Meeting

The 2017 summer meeting will hold during the ISTTT conference. Two choices are available on the conference location in 2018 (Woods Hole or Irvine), and a formal vote will be held in January.

## 5. Liaison with other committee

- Majid Sarvi: write a manual on network resilience with network/emergency evacuation committee.
- Meead Saberi: a common interest between traffic flow committee and visualization committee on large-scale data visualization. It is suggested to submit a joint call for papers between the two committees for 2018 (Ludovic Leclercq). It would be interesting to contact the Catt Lab (Maryland University) on this.

## 6. International Liaison

To share information outside US.

## 7. Announcements and Further Meetings

- hEART 2016 consisting of two weeks of workshops and conferences in September 2016.
- The TGF conference in 2017.
- The ISTTT symposium in 2017.
- The ITS world congress in Melbourne in October 2016.

## 8. New Business: Reproducible Research by Zuduo Zheng

- What is RR: publications to share data and codes. Share detailed instructions for a third person to produce the results of the paper.
- Why: people are puzzled and difficult to validate people's studies, hard to replicate results because of limited financial supports. Hence RR comes to rescue.

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- How: through email communications, and three suggestions: a call for papers in 2018, a website dedicated to archive RR papers, and possibly a long term independent committee.
- Comment from Chris Tampere: the same suggestion, i.e. upload data and tools to have full data and scripts available for the case study. Results should be reproducible, and it is good for citations. Note that the bench mark problem is important, and hence a criterion may be set up defining a useful research.
- Comment from Ludovic Leclercq: perfect idea, but not agree on the call for papers since a call for papers should serves to exchange knowledge in a certain field but the topics here are different. A short note can be written about the requirements for RR and present at the January TFTC meeting. Defining a sort of label and mentioning this label in the acknowledgements with the other relevant information may be a good way to proceed.
- Question from Serge Hoogendoorn: what is “reproducible”? Answer from Zuduo Zheng: we can treat the entire paper as a coding processing (R for example). It doesn’t matter which software is used but identical results should be produced under a specific computational environment. But note that unwillingness to share doesn’t mean inability to be reproduced.
- Comment from Jing Dong: call for papers is not a good idea, but this general topic can go to a general committee such as the education committee.  
Comment from Meead Saberi: google a reproducible project to gain some information.

Other new business:

- Question from Serge Hoogendoorn: any plan to a possibility of open access in TRB? Answer from Rich Cunard: TRB is a private organization and no agreement is made so far.

9. Ludovic Leclercq thanked for all and adjourned the meeting.