

Meeting Minutes

Committee on Traffic Flow Theory and Characteristics (AHB45)

Wednesday, August 8th, 2018, 9:00am – 10:15am
Woods Hole, MA

Chair: Sue Ahn

Minutes prepared by: Anupam Srivastava

Welcome and Call to Order

Sue Ahn

Introductions – Members and Friends

All Attendees

Complete list of attendees on signup sheet

TRB Report

Rich Cunard, Robert Bertini

- TRB 2019 – Jan 13-17
 - 6200+ papers submitted this year, roughly 3% increase from last year.
 - ~200 papers submitted to TFTC
 - 14k attendees expected (same as last year)
 - Poster session moved to Hall A, Convention Center (near Marriot)
 - New smoother submission process introduced.
- Changes to submission include:
 - LaTeX submissions are now accepted.
 - Figures would need to be embedded in text.
 - Line numbering will be mandatory (restart numbering each new page).
 - Figures are excluded from word limit.
- High ratio of submissions for presentation only is still a concern.
- 2020-2021 will be TRB's 100th year.

FHWA Report

Jim Sturrock

- Projects finishing soon
 - Traffic analysis toolbar Vol 3
 - Traveler behavior study – motivation for traveler behavior and changes
 - Trajectory validation project – tools for macroscopic level validation
- Ongoing projects
 - Trade-off analysis tool (analyzing multi-objective functions for stake holders, e.g. balancing safety vs. mobility vs. operations objectives)
 - CAV analysis framework (micro / meso / macro)
 - Microscopic CAV analysis toolset

- Calibration process (calibrate for future conditions based on future changes to conditions etc for specific goals) (with Hani).
- Potential future projects being considered
 - CAV data bank
 - Management support system (using data sources to gain business intelligence)
 - 3-day data analysis workshop: raising data analysis skillsets; post project evaluations

Membership

Sue Ahn

- 2019 Member rotation is due.
- **Volunteers are needed** to be rotated out of membership (recommended duration is 3 years).
- Structure: 25 regular members, 5 international members, 4 young members, 2 DOT members, 2 emeritus members.

Chair Report

Sue Ahn

- 3 Calls for Papers announced
 - Crowd dynamics: empirical analyses, modeling, simulation and management
 - Big data and machine learning methods in a connected traffic environment: From empirical experimentation to analytical modeling
 - Large scale urban traffic network modelling and control
- 2 Workshops planned for TRB 2019
 - SimSub Subcommittee – Modelling uncertainty in CAVs
 - CAV Subcommittee – Real and virtual data collection platforms for CAV modeling, calibration and validation.

SUBCOMMITTEE REPORTS

SimSub

Mohammad Hadi

- Workshop: Modeling uncertainties in Cooperative Automated Vehicles
- Website update in progress. New site modeler David Hale.
- Simulation Manual - Suggested **having formal cross-membership from TFTC in SimSub** to have representation and voice. 20-25 candidate names have been recommended by SimSub.
- Produce centennial paper.
- Collaboration with SimCap on multiple joint activities. Representation from TFTC would be beneficial.
- **Volunteers needed for SimSub**

CAV

Sue Ahn (for Samer Hamdar)

- One call for paper for TRB:
 - Big Data and Machine Learning methods in a connected traffic environment: From empirical experimentation to analytical modeling
- One workshop planned for TRB:
 - Real and virtual data collection platforms for connected and automated vehicles modeling, calibration and validation
- There was no active participation in AVS 2018. Break-out sessions is planned for AVS 2019.
- AVS 2020 is proposed as a candidate venue for TFTC mid-year meeting.
- Two active special issue / call for papers:
 - Traffic and Granular Flow 2017: The role of technology in the understanding and the evolution of traffic dynamics
 - Modeling and detecting traffic dynamics: Granular, pedestrian and vehicular flow.

Research Problem Statement

Sue Ahn

- **Need volunteer to replace Mohammad Hadi.**

Paper Review

Sue Ahn

- Suggestion: Require 3+ reviewers for papers submitted for presentation and publication, 2+ for presentation only. Waiting to hear back from TRB (TRB policy is to require 3+ for all submissions, so likely to not be accepted).
- Timeline for review process (attempting to make early decisions):
 - 1st Round Decisions: Sep 30 – Oct 15
 - 2nd Round Decisions: Dec 01 – Dec 15
 - Final Decisions: Jan 31

TFTC Awards

Monica Menendez

- Ludovic will step down as chair and Monica will become the chair for the group.
- TFTC recommended nominations for D. Grant Mickle, Fred Burggraf and Cunard awards this year.
- Greenshields' Prize for best paper, 2018 was awarded to "*Resurrecting the Lost Vehicle Trajectories of Treiterer and Myers with New Insights into a Controversial Hysteresis*" by B. Coifman et al.
- A new award for 'Best paper with reproducible results' under the operations section was suggested by Christine Buisson.

Diversity and Outreach

Sue Ahn

- Newsletter: 4 so far in 2018 (8 expected in total)
- Youtube and FB channels continuing to showcase TFTC
- Thanked all volunteers and contributors for all avenues

Summer Meeting

Sue Ahn

- Sue thanked Christine and Danjue for helping organize the summer meeting and the sponsors: UMTC, Amherst, Aimsun, Caliper and INRO for their support on behalf of the committee.
- Sue also thanked TRB staff members Rich Cunard and Freda Morgan for their presence at the meeting.
- Traffic Flow Modeling – Call for papers – Part C – “Traffic flow modeling: new data, new problems, new methods, and new models/theories”
 - Call for papers: Aug 15, Submission deadline Feb 15, 2019 (early submission encouraged)
 - Review completion Apr 1, 2019, Final decisions Jul 31, 2019
- 2019 Summer Meeting will be held at ISTTT 23 in Lausanne, Switzerland. **Action Item:** Submit information about meeting to Rich Cunard for TRB sponsorship.
- 2020 Summer Meeting location not decided. **Proposals are welcome.** Possible candidates: AVS 2020, TRB venue in Newport Beach / Irvine, Europe. To be voted on and finalized in Jan (TRB 2019).

Liaisons

Sue Ahn

- AHB40 – Highway Capacity and Quality of Service (HCQS) J. Sturrock, M. Hadi
 - Met on June 20-23, Austin TX.
 - New chapter for 2 lane highways
 - Rework ramp interchange components + update to FreeVAL and STREETVAL (L. Elefteriadou)
 - In co-ordination with Oregon DOT, planning level methodologies for capacity adjustments in presence of CAVs
- AHB80T – Task Force on System Simulations R. Bertini, J. Sturrock, R. Cunard
 - No longer in effect (as ownership of Simulation Manual moved to SimSub).

Centennial Paper

Sue Ahn

- Volunteers: Hani Mahmassani, Michael Zhang, Vikash Gayah
- Compose a ‘Then and Now’ themed piece for TFTC.
- Due by Feb 1st 2019

Recognition

- Sue Ahn and Monica Menendez were recognized for being elected into ISTTT International Advisory Committee (IAC).

Adjourned