

AEP40: Transportation Network Modeling Committee

Wednesday, January 13 10:00 AM – 1:00 PM ET
Yanfeng Ouyang, University of Illinois, Urbana Champaign, presiding

Minutes¹

1. Welcome and Introductions

~140 attendees

2. Report from AEP00 Travel Analysis Methods Section Chairs

C. Bhat/R. Hazlett

C. Bhat: We as a community will highlight code of conduct, respect our difference, find common ground, and stay together; TRB has suspended paper awards this year, but will continue next year; The AEP00 section is planning to establish a section-level research and communication committee. Will work with this committee to seek opportunities to create section-level education committee.

R. Hazlett: The AEP00 section has brought in committees/sections on policy, data, environment issues into our community, and will look for opportunities to inform, engage and cooperate with other sections across TRB.

3. TRB Staff Report

J. Weeks / V. Fitzpatrick

J. Weeks:

- Highlight again TRB’s code of conduct: be kind and be open minded;
- Next year’s TRB Meeting’s new spotlight theme: “innovation”;
- This year’s TRB meeting has more than 18,000 participants, but there is a reduction of paper submitted; this year TRB recognizes COVID-19’s impact and gives free pass for committee meetings and exhibits;
- TRR now accept publication-only papers anytime during the year;
- This year, AEP40 committee will have a rotation, and TRB has become very strictive about the number of members;
- TRB now introduces coordination council and young members council; participation welcome;
- TRB introduces four committee blue-ribbon awards (research, implementation, renewal, diversity, inclusiveness); Most paper awards will back next year;
- TRB has many planning conferences in the coming year.

(See more detail in Appendix A - TRB Staff Report)

V. Fitzpatrick gave an update about TCRP research opportunities (see Appendix B).

4. Welcome to New Officers

- Thanks to Stephen Boyles for service as Chair of AEP40(a), and an Editorial Board Member.
- Welcome Stephen Boyles as New and Inaugural AEP40 Education Coordinator.
- Avinash Unnikrishnan – New Chair of AEP40(1), and an incoming Editorial Board Member.

5. 2021 AEP40 Paper Submissions, Review Details, and Sessions

(see Appendix C - slides)

6. Subcommittee Presentations and Reports

- AEP40(1): Transit, Freight, and Logistics Modeling *A. Unnikrishnan*
- AEP40(2): Network Equilibrium Modeling *J. Ban*
- AEP40(3): Route Choice and Spatio-Temporal Behavior *J. Chow*

¹ Based on notes from Leila Hajibabai (NCSU), Yining Liu and Jesus Osorio (UIUC).

- AEP40(4): Network Models in Practice
- AEP40(5): Emerging Technologies in Network Modeling
- ACP80(1): Traffic Simulation Models Joint Subcommittee

X. Zhou
L. Du
C. Melson/L. Shaw

(see Appendix C - slides)

7. Past and Ongoing Activities

- Membership rotation 2021
- AEP40 workshops
- AEP40 education coordinator update
- Opensource data efforts
- AEP40 impact factor update
- AEP40 website update
- AEP40 LinkedIn update
- Paper award update
- Student reviewer engagement
- Tracking submitted papers

K. Zhang
S. Boyles
X. Zhou
F. Fakhrmoosavi, A. Zockaie
M. Mehrabipour and R. Mohebifard
M. Hickman

(see Appendix C - slides)

8. Open Discussion

- Your experience with the new TRB/TRR review process

H. Mahmassani: Currently, review process is good for quality control, but the smooth handling is very important. For forwarded papers (for publication), the history of review should not be lost; this committee used to be underrepresented in the TRR editorial board, but now the situation has been fixed -- starting this past year, all AEP40 editorial board members are TRR editors. The AEP40 committee should send to TRR associate editors the papers that have been submitted to TRR, so that the papers will go back to the handling editor. Just checked and the 7500 word limit does NOT apply to papers submitted for publication only.

S. Guo: @Hani, agree. It is also very helpful and important if we could find the same reviewers from committees. There were a lot of efforts to address their comments; and it would be disappointed if it ends up with other reviewers from TRR to follow up on the paper.

S. Peeta: Currently, history of comments and reviews are lost after submitting to TRR. Continuity of review should be maintained.

L. Du: The authors have no information about the review process after submitting paper to TRR editorial board. Too many rounds of review process. Confused about the extra review process if submitted for presentation and publication. Why should authors still submit paper to the conference (and for publication)? If submitted to publication only after the TRB conference, there is only main review process.

J. Chow: The TRR revision/re-review papers are accepted rather soon after committee forwarding them to TRR.

S. Boyles (by email): Separate review process for TRR publications (after review for TRB presentation) delay the process and make it harder to attract high-quality papers. What

makes TRR attractive: reputation; impact factor; quick turnaround time? TR Parts B, C, E now have competitive review times.

- Trends of paper submission quantity and quality

J. Chow: The drop in numbers of submissions is not necessarily because there's less interest in submitting "network modeling papers", but even papers that have keywords like AI, machine learning, or a type of emerging mobility might automatically get shifted by TRB to other committees. I think that's partly why the numbers have gone down -- committees like AP020 have swelled in submission received (even if their members might not be as well-equipped to handle some of the submissions).

- Criteria and procedure for paper award

Y. Ouyang: About awards, should only the for-publication papers be considered for the award?

S. Peeta: not requiring both representation and publication? Some other committee(s) do not require this.

J. Chow: Second the idea of the extension of award eligibility. Keep track of the paper that committee submit to TRR. Right now, the TRR review process is similar to submitting to a new journal when forwarded.

S. Boyles: When considering the award for papers, it should be recognized that good versus bad is independent of methodological work versus practical work.

H. Mahmassani: applied doesn't mean it must not be rigorous and complete technically

S. Sharma (by email): Our freight planning committee (AT015) allows presentation only papers to be eligible for committee award. It has worked out well.

L. Du (by email): TRR papers should focus more on novel ideas and applications ...make this award have different flavors from those in Part B, C or other top journals.

C. Kwon (by email): We should always give out the award to the top paper among the all submissions in each year, based on their relative quality, regardless of their absolute quality.

M. Hickman (by email): My opinion is that we should continue to maintain the Stella Dafermos Best Paper award, and that it should be only for papers that are submitted for BOTH presentation and possible publication by TRB. Papers submitted for presentation only should NOT be eligible. When Elise created this award, the intent was to encourage people to support TRB and to enhance the strength of TRB as a potential publication outlet for good research. I strongly believe that the committee should do this by encouraging publication through TRB. To be more direct: we are not here to simply give prizes to good research that gets published elsewhere; we are here to declare the value of Network Modeling research WITHIN TRB.

- Ways to help TRB track papers to our committee

J. Chow: I support using CFP to direct paper to AEP40; this was discussed in the past as an option.

S. Peeta: It is a good idea to have a general CFP for the committee.

M. Zlatkovic: As I remember, TRB earlier had an option to select a committee when submitting a paper. Now you just select a list of topics. That might shift papers among committees, and they not necessarily end up with the right committee.

A. Hajbabaie: The name of committees will show up among the topics I believe.

9. Announcements on Conferences, Books/Publications, Special Issues, Other News

Conferences, Workshops, and Special Sessions:

M. Ameli and J.P. Lebacque: We are happy to share with you the information for the upcoming one-week 11th Triennial Symposium on Transportation Analysis (TRISTAN XI), Mauritius island, 20–24 June 2022. You can find the information in Appendix D.

E. Miller-Hooks:

I wanted to share with this community an announcement coming out shortly on a new Elsevier journal under IFORS (the International Federation of OR Societies)

<https://www.journals.elsevier.com/sustainability-analytics-and-modeling/>

J. Chow:

-- World Society for Transport and Land Use Research (WSTLUR), papers due 2/15/21 (<http://wstlur.org/symposium/2021/callforpapers/index.html>)

-- International Conference on Transport Survey Methods (ISCTSC) 2020 (postponed to 2021 in Portugal) (<https://www.isctsc2020.pt/>)

-- International Symposium On Transport Network Reliability (INSTR) 2021 (postponed to June 2021, Stockholm) (<https://www.instr2021.conf.kth.se/>)

L. Du:

-- “Emerging Technologies and Data Analytics in Network Modeling” Workshop at IEEE ITSC 2021, speaker registration due 3/15/2021 (Contact: Monika, monika.filipovska@u.northwestern.edu)

-- “Traveler Behavior and Network Impacts of Automated Vehicles Technologies and Services” AVS Special Session (Contact: Jiaqi Ma, JiaqiMa@ucla.edu)

-- IFORMS special sessions (Contact: Samitha Samaranyake, chair for the Urban Transportation SIG)

-- Workshop/session in ASCE-ICTD, 2021 (Contact: Lili Du and Xianfeng Yang, etc)

-- 2022 TRB workshop “AI in transportation” (Contact: Xiaopeng Li, Bo Zou, and Lili Du)

M. Hickman: The Conference on Advanced Systems in Public Transport (CASPT) 2021 and TransitData 2021 will be held in Tel-Aviv, Israel, on 3-7 October, 2021. More information on this premier international conference is available at <http://www.caspt.org/>. Extended abstracts are due 15 February 2021.

Information:

B. Stabler: Here's the Transportation Networks for Research repository I mentioned, <https://trb-adb30.org/test-data/>

X. Zhou: <https://zephyrtransport.org/> mentioned by Ben.

P. Camargo: A few updates on AequilibraE that are relevant to this committee:

- FW/CFW/BFW have been available for some time now and are quite mature:

https://aequilibrae.com/python/latest/traffic_assignment.html

- An Origin-Based algorithm is currently under development

<https://github.com/AequilibraE/aequilibrae/pull/197>

- New version is about to be released and documentation is already available

https://aequilibrae.com/python/dev/auto_examples/index.html

- Many opportunities for collaboration/contribution are available

S. Smith: Links to Zephyr and GMNS:

Zephyr: <https://zephyrtransport.org/>

GMNS: <https://github.com/zephyr-data-specs/GMNS>

B. Stabler: <https://zephyrtransport.org/projects/3-software-badging/>

F. Dandl: Florian.dandl@tum.de (AEP40(5) IEEE workshop record)

M. Hickman: I strongly recommend coordination with the new AP020 on new technologies with ridesharing and micromobility. that committee meeting had 240 attendees! (regarding AEP40(5))

C. Melson: Hi everyone! Please e-mail me if you are interested in being on the SimSub listserv -- or better yet --- interested in being involved. As mentioned, I hope to more formulize our role and identify activities to pursue (with our liaisons committees) shortly:

cmelson1@lsu.edu

J. Foster (MDOT, MD): Josh Foster, visitor, Senior Manager, Manager Climate Risk Management, MD DOT, jfoster@mdot.state.md.us (Member of AMR50/AASHTO CTSSR) - I have AASHTO proposal in play for NCHRP for "Identifying, understanding, and managing risks from multiple interacting crises and cascading failures in the context of improving transportation system resilience." Would be interested in AEP network modelling collaborators if it is recommended, or discussion partners if not. Thanks for a great meeting.

B. Stabler: Some additional good resources are linked here -

<https://github.com/bstabler/TransportationNetworks#other-related-projects>. Maybe some of these should be added to the educational resources site?

L. Du: I would like to have your attention that ASCE T&DI recently formed a committee on AI in transportation. Please see more information by the link

<https://sites.google.com/view/asce-ai>. If you are interested in joining this AI committee, please contact me by lilidu@ufl.edu.

S. Sharma: For anyone interested in freight planning, freight modeling & logistics please feel free to visit TRB's freight planning & logistics committee website at

<https://freightplanning.org/>. I am working with Avinash, Joe and Xuesong to seek synergy with my committee on freight planning and logistics, I think collaborating and cosponsoring

will help us build a strong community. If you have ideas for the committee, please contact me at s-sharma@tamu.edu. Thanks! Great work everyone!

10. Action Items

- Contact some of AEP40 members for rotation;
- Continue to construct committee website, e.g., updates, educational resources;
- Conduct a short survey among committee members on paper award eligibility;
- Further address the paper submission/allocation issue, e.g., AEP40 will prepare a general CFP for this committee at the 2022 Annual Meeting;
- Report TRB/TRR paper handling issues/feedback to TRB;
- To enhance the paper handling efficiency: AEP40 will send to TRR associate editors the papers that have been submitted to TRR, so that the papers will go back to the handling editor.

Adjourn