

AP000 (3)/ABJ00
Joint Subcommittee on Transformative Trends in Transit Data
MM, Chinatown (M3)
January 13, 2020
8:00 AM – 9:45 AM

- I. **Welcome and Introductions:** Dr. Lawson, Chair of the Joint Subcommittee on Transformative Trends in Transit Data (AP000(3)) welcomed the group and requested introductions from each attendee including name, affiliation and two research areas of interest.

- II. **Approval of the Minutes:** The Subcommittee Secretary, Michael Eichler, discussed the draft minutes from 2019 as they had not yet been distributed to the membership. The plan is to have members approve the minutes via email within the following month. Minutes are posted on the subcommittee website: <http://trb-transit-data.org>. Attendees were asked to sign-in via paper sign-in sheets, and in addition, the Subcommittee piloted an on-line sign-in using a scannable QR code on the screen. Next year all sign-ins will be electronic.

- III. **Report**
 - a. **Chair's Report**
 - i. Membership update: In MyTRB listed 12 members, with no provision for friends to be listed. The official Subcommittee spreadsheet indicated 27 members and 23 friends.
 - ii. Paper review: This year, 49 papers were submitted, and 19 were accepted for presentation. Topic areas included: GTFS, AVL/AFC/APC, smartphones, emerging (wifi, apps, video, etc.). Dr. Watkins noted she is a member of the TRR editorial board, noting she will likely be the editor for the papers coming through the subcommittee. The Subcommittee also co-sponsored this year's TRB Data Challenge: Innovations in Transit Performance Measurement.
 - iii. TransitData conference (details presented later in the meeting).
 - iv. TRB Update: Brendan Hemily, Public Transportation Executive Group Chair, shared a recap of the process of the proposal to transform AP000(3) into a Standing Committee AP090. TRB staff are "prune the tree to provide opportunities for growth" across the entire operation. As a result of the analysis and subsequent decisions, a number of committees have been eliminated. While necessary, these decisions have affected a number of TRB

activities (some view certain impacts as negative for various reasons). Resolution of the reorganization activities occurred mid-December. More details are available on the trb.org/newcommitteestructure website. There was a discussion on the best approach to nominating and approving the slate of members for AP090. Current members of AP000(3) will be given priority, while also paying attention to the diversity requirements for TRB Standing Committees. TRB Staff are responsible for nominating Standing Committee Chairs, and the Chair recommends the slate of members. A number of issues remain outstanding, including the designation between councils and standing committees, and particular issues (e.g., urban, rural, international designations). TRB will continue to examine these and other outstanding issues.

- v. The E-Circular for the Conference on Data Performance and Decision Making is nearly ready for publication. The Conference not only focused on data and analysis, but also what happens when this information is shared with decision-makers and the subsequent outcomes from the analysis. For example, while transportation planners are enthusiastic about Bus Rapid Transit (BRT) systems, local leadership wasn't interested in the service. The planners pivoted to a new approach: selling "fast transit" using traffic signal coordination (a key feature of a BRT system). Reframing helped decision-makers understand the advantage of including BRT in their community. The Conference also had a number of illustrations of making data visible, more understandable, and able to "tell the tale" through the data.

b. Liaison Reports

- i. *American Public Transportation Association (APTA)*. APTA is becoming more focused on data, including the technologies that produce transit data. More academics are indicating interest in the topic, with a steering committee planning a symposium on transit data. It was indicated that now is the right time for AP090 and APTA to work together to bring practitioners and researchers together around transit data issues. There are a number of pertinent shared issues including TCRP studies, demand responsive services, data standardization, the creating of data dictionaries for interoperability, etc. APTA is following a number of research efforts including the follow up to the TIDES activities, syntheses related topics and webinars on data visualization.
- ii. *Transit Data Workshop 2020* is planned to be in Toronto. Interested parties can access additional information from the website (<https://transitdata2020.ca/>).
- iii. Transit ITS Data exchange Specification (TIDES)
 - 1. TIDES was originally organized in 2014, and came to TRB in 2016. TIDES focuses on archived/historical data standard

format, avl, apc, afc, etc. Historical data is more challenging than schedule data (e.g., GTFS). TIDES has participated in the development of TCRP G-18, and the RFP has been awarded to a team with EBP and Foursquare ITP. They plan an outreach to the transit industry, including a workshop in the next year. The research has 2-phases. The first will explore data structure and tools around the data; and second phase will be defining specs and more tools. The team is hoping to early adopters of the outcomes of the research and promise many opportunities for involvement.

2. TIDES will hold their annual meeting on Wednesday afternoon, with the expectation that the TIDES initiative will defer to the TCRP project, with Cecelia Viggiano of EBP as the PI.
 3. The composition of panel was shared, along with a summary of the planned activities for the research. The first step will be outreach to the transit industry, followed by stakeholder engagement, interviews with agencies and vendors, and a workshop within the first year. TRB Staff is Larry Goldstein.
- iv. Updates from other Transit and Data Committees
1. Steve Yaffe provided an update for TCRP 210 that focuses on data specs for demand response. He indicated that there may be a possibility of obtaining grant money to facilitate implementation of the research findings. Other topic to future consideration include addressing issues with fixed route services to ease transfers.

IV. *Telling the Tale of Transit with Data Workshop Discussion*

- a. The Workshop was well-attended and covered a number of aspects of transit data. Census Transportation Planning Products (CTPP) data was not covered as another workshop was held that focused on using R with CTPP data. NCHRP 08-123 has been funded and includes a suite of R tools for use with CTPP and could be of interest to AP090 members and friends.
- b. Plans going forward to promote the telling of tales with transit data include keeping the dialogue going within and between transit agencies. The discussion on developing a data ecosystem exposed the risk of having silos that do not realize they are silos. A number of agencies are just one step away from integration across their agencies, making it possible to get more value from their data sets.

- c. There needs to be a way to get practical results discussed during the Workshop to the agency employees, analysts, etc. There is currently no clear way to accomplish this important step. The goal is to have a designated method for knowledge transfer! Start by getting the slide presentations used in the Workshop onto the github.
- d. Another important step is to identify the types of activities people are working on, literature review, incorporating into syntheses
- e. It would be great to move beyond sharing powerpoints, sharing code, etc., and be able to bring together individuals for real hands-on experiences (maybe a slack channel).
- f. A pressing concern is where does transit open source software live? Several agencies (e.g., Minneapolis, IDI, MDTA), have their own transit open source software, but where can other agencies or researchers find a comprehensive library? Github is overwhelmed with old archived code, dead ends, and is not likely to serve this important function.
- g. The Open Transit Software Foundation (<https://opentransitsoftwarefoundation.org/>) is ramping up, and might provide a good opportunity for a specific focus and curation process.
- h. Several attendees pointed out that Github is awesome for transit, and does have good list of transit projects. What is needed in the creation of a list of github resources.
- i. There was an expression of curiosity about the utility of open transit software group, and whether it provides services for both internal uses and public access. Agencies are trying to do cool things that the help others, and some are looking for tools that might be useful internally to agencies. It was mentioned that currently there is limited leadership from APTA for creating open source platform for sharing software and logic. There is an opportunity to offer outreach from AP090 to APTA.
- j. AASHTO has an open software group, and it was noted that some States support transit agencies, including making available some good tools.
- k. The discussion ended with whether we should be planning a workshop for next year, focusing on code sharing. Code world is changing with a focus on reuse.

V. Ad Hoc Webinar Series

- a. Eric Lind, Metro, has been leading an effort to produce a webinar series, originally on transit data visualization. The most recent webinar discussed the bridge between business side of transit and the IT side, including making data available for analysis.

- b. Currently, there is not another one scheduled, however, these opportunities serve an important function and provide a forum for sharing information about how to get involved.
- c. The question was asked on how do we link better to the data science community.
- d. It was suggested that we reach out to transportation “techie”, including through the transportation camp activities. Some believe there is an emerging network. Anyone interested in AASHTO’s role can contact Richard Price.
- e. Another emerging resource is the MobilityData.org website. This effort is focused on GTFS, additional forums and transit data communities, and potential workshops.
- f. It was suggested that AP090 use our committee website as a hub for research, practice, hobbyists, etc.

VI. New Business:

- a. There was a short discussion on the way forward now that AP000(3) has been designated as AP090

The meeting was adjourned at 9:45 AM.