

AP000 (3)
Subcommittee on Transformative Trends in Transit Data
MM, L'Enfant Plaza (M3)
January 12, 2016
10:15AM – 12:00PM

- I. **Welcome and Introductions** - Dr. Lawson, Chair of the Joint Subcommittee on Transformative Trends in Transit Data (AP000(3)), opened the Subcommittee meeting and asked everyone to introduce themselves and to indicate their interest in transit data topic areas. Twenty-six persons attended the meeting.
- II. **Approval of the Minutes** - The minutes of the 2015 Subcommittee were approved.

- III. **Reports**
 - a. **Chair's Report** –
 - i. The Chair shared a Powerpoint (see attached) provided information the number of members and friends and asked about the use of MyTRB. The Subcommittee sponsored a Call for Paper (see Appendix Y) and received 44 direct submittals. In total, forty-eight (plus one additional paper from a standing committee) were reviewed by teams of domain experts (e.g., published authors on the topics), statisticians, and practitioners. It was noted that TRB staff have commented that any papers accepted for presentation need to be suitable for the on-line paper distribution system in its original form. Although authors are requested to make changes and edits as per the reviewer comments, TRB staff have no mechanism to require changes be made before papers are made available on-line. Four of the 49 papers were presented in a Podium Session 701. 11 papers were presented in the Poster Session 657 plus one additional. Going forward, we plan to form paper review task teams listed in MyTRB based on expertise and willingness.

 - b. **APTA Update** – Brendon Hemily gave a brief update on transit data activities, including the publication of his recent report on archived ITS data.

From the earliest days of the development of Transit Intelligent Transportation Systems (ITS), there was a recognition among the most progressive transit systems that the data that would be created by Transit ITS (e.g. Automatic Vehicle Location, Automatic Passenger Counting, Advanced Fare Collection) would be an incredibly valuable resource, which could be used to create information to enhance planning and management, and support business processes and decision-making. This can greatly enhance the ability for managers to improve the effectiveness and efficiency of the services provided by transit systems.

However, transit agency staff often remain perplexed by the volume and complexity of the data and the challenges in using it. The challenge of how to use Transit ITS data remains one of the most often heard concerns expressed by transit agency staff at Transit ITS meetings.

The objectives of this discussion paper are to:

1. Provide a high-level overview of the potential uses of Transit ITS data for planning and management purposes,
2. Identify the various challenges in using the data, and
3. Recommend research and other initiatives that would enable transit agencies to make more effective use of the data, and position the transit industry for a future of ubiquitous data and data-driven decision-making.

- IV. GTFS Workshop Debriefing** – Holly Krambeck, from the World Bank, gave a brief overview of the GTFS Bonanza Workshop
- a. Workshop Ideas
 - i. More focus on GTFS-RT
 - ii. Introduction to tools for pulling transit service data from existing databases and systems and transforming into GTFS.
 - iii. Focus on challenges faced by transit agencies (creating, maintaining, and sharing feeds, etc.)
 - iv. General challenges – deficiencies in the standard (e.g, fares), highly variable quality of feeds
 - b. Mini-GTFS Conference
 - i. Consider creating “tracks” for different levels/interests of participants (e.g., policy vs. technical; consumer application vs. planning)
 - ii. Consider partnership with APTA to reach more technical practitioners
 - iii. Consider including a session on issues in less-advanced economies

- c. Training and Materials
 - i. Consider on-line platforms for delivering full curriculum to reach the target audience
 - ii. Develop materials for transit agency management and legal teams (advocacy)
 - iii. Materials are beginning to converge here: transitwiki.org

V. Introducing Transit ITS Data Exchange *Specification* (TIDES) – John Levin, Metro Transit, presented a status report on the new initiative to establish standards for archived transit ITS data (**see attached**)

- a. The *Opportunity*: Archived transit ITS data is an extremely valuable resource for transit service planning and management
- b. The *Challenges*: Access, size, data matching, quality, and integration.
- c. The *Solution*: TIDES, or Transit ITS Data Exchange *Specification*
 - i. To date: informal collaboration of staff from transit agencies, academic/research institutions and private sector
 - ii. Define the challenges, scope out a solution, collaborate on design, promote implementation
 - iii. Committed to open source, shared solutions
- d. Next Steps
 - i. Define Data and Web APIs
 - ii. Define reference database structures for Integrated and Aggregated data sources
 - iii. Define functionality of processors
 - iv. Implement APIs against source data systems
 - v. Implement APIs against reference databases
 - vi. Program processors

VI. Connected Transit Vehicles – NYCDOT Project – Dr. Lawson made a short presentation on the recently granted Connected Vehicles program in New York City. This project will be generating data which will be housed at the University Transportation Research Center (UTRC) at CUNY. Connected vehicle applications show broad potential for improving pedestrian and driver safety along high-risk corridors in New York City.

VII. New Business – There was a discussion on the need for on-line training with GTFS. Holly Krambeck shared information on projects currently underway at the World Bank.