

APTA Streetcar Subcommittee

The Hyatt Regency Hotel
1300 Nicollet Mall
Minneapolis, MN

Sunday November 15, 2015
8 - 9:30 AM

Location: Lake Minnetonka, Fourth Floor

Paul Grether, Chair
Timothy Borchers, Vice Chair
James Schantz, Secretary

MISSION STATEMENT: *The APTA Streetcar Subcommittee promotes streetcar services in urban centers and the exchange of information among individuals or organizations promoting, planning, funding, designing, building, operating, and maintaining such services. This is done by organizing forums for the dissemination of best practices and the experience of practitioners; by assisting in the development of appropriate safety and technical standards and by providing guidance to regulators in setting sensible and reasonable regulatory measures.*

Welcome & Introductions

Tim Borchers

As Chairman Paul Grether was unable to attend (due to his testing schedule with new streetcars in Cincinnati), Vice Chair Tim Borchers presided and called the meeting to order at 8:06 am. Approximately 40 APTA and TRB representatives were in attendance.

1. Previous Meeting Minutes (October 2015 in San Francisco, CA)

Jim Schantz

No one had comments or corrections in the minutes of the San Francisco meeting as prepared by Jim Schantz, so they were declared adopted.

2. Technical Work Program Activities

- Discussion of information exchange

Jim Graebner

Jim Graebner described formalizing a program under which subcommittee members would be available to answer questions *pro bono* as posed by cities planning streetcar lines. Queries could come from the groups sponsoring system plans, from consultants, carbuilders, or perhaps others. These could come to the subcommittee via APTA or through TRB as some have in the past. This could be operated as an open forum in which users could tap into expertise quickly on line. Possible subject areas could be off-wire technology (which is evolving rapidly) or the critical area of safety certification. The idea was well received and those wishing to volunteer to provide expertise are encouraged to contact Jim at carbarn@aol.com.

3. Updates

- TRB Streetcar Subcommittee Update

Monica Meade

Monica Meade, Chair of the TRB Streetcar Subcommittee was in attendance and noted that streetcar-related presentations are scheduled for 8:00-9:30 on Tuesday, January 12,

2016 at the APTA Annual Meeting.

- **APTA CSC 'MOU'** Charles Joseph

The status of the long-planned Memo of Understanding between the subcommittee and the Community Streetcar Coalition was described by Charles Joseph. A key benefit would be to have a broader voice when the combined groups approach federal agencies. APTA is continuing to review the proposed draft internally and hopes to have it complete in the first quarter of 2016.

- **Minneapolis Streetcar Museum tour (Sunday November 15, 2015)** Charles Joseph

Attendees were given directions to reach the Como-Harriet streetcar line and museum operated by the Minnesota Streetcar Museum. The museum, which is closed for the season, arranged specially to be open for the group and would offer tours and rides on authentically restored Twin Cities streetcars.

- **Streetcar website** Jim Schantz

The site at www.heritagetrolley.org and www.streetcarcommitte.org continues to be updated regularly with news and other resources that could be of use to groups planning or implementing modern or heritage streetcar systems. The latest draft of the off-wire status paper and the level boarding white paper are among recent postings in the Technical section.

- **Future work programs cost control** Jim Schantz

The subcommittee continually considers new work programs that would be of use to its members. One such program under consideration is to identify ways of holding down the cost of new streetcar systems. The Community Streetcar Coalition as described below is working on a related project, namely gathering specific actual costs for modern streetcar systems. Once this is complete it can be reviewed for potential areas of cost saving for the subcommittee to investigate.

4. Presentations

- **Community Streetcar Coalition (CSC) Compilation of Data** Jeff Boothe/David Vozzolo

Luke Olson and Mark Dorin are gathering data from various cities and developing a matrix comparing the same line items across different projects, including breakdowns of the figures and adjustment of the figures for inflation. The data collection phase is now complete and a summary report including the methodology used to ensure comparability is in preparation. A draft is likely in January 2016 which will be reviewed with data contributors before publishing. Data has been gathered from cities including Portland, Seattle, Tucson, Kansas City, Cincinnati, Detroit, and El Paso. The goal is to have the report complete by the spring meeting to be held in Kansas City in April.

- **Alternate Power for World Wide LRT/Streetcar** John Smatlak/John Swanson

John Smatlak presented the background paper that he and John Swanson have drafted describing the current status of off-wire streetcar systems around the world. A copy of the report can be found at <http://www.heritagetrolley.org/Technical.htm>.

Alstom presented progress in building an off-wire streetcar system in Rio de Janeiro. The system employs the APS surface contact system first installed in Bordeaux in 2003. The Rio installation includes onboard storage in supercapacitors and batteries to propel the cars in case of a fault in the APS system or on sections without APS. The model 402 Citadis is being used in Rio with 32 cars in lengths of 40 and 50 meters. The customer wanted an off-wire approach for aesthetic reasons and to avoid conflict with Carnival floats near the waterfront. 80% of the new system will be equipped with APS system while 20% will depend on on-board power. The latter can be recharged during 20 to 30 second pauses at station stops with via the car's pantograph being raised to a short section of overhead. The cars also use regeneration during braking to charge the supercaps and are equipped with an energy management system to reduce power consumption if necessary. Alstom is not only building the system but has a 30 year maintenance contract to reduce risk for the client. Alstom is taking advantage of advances in automobile battery systems for their off-wire propulsion systems.

Brookville's Mike White presented their first-in-the-U.S. off-wire installation in Dallas. Of the 1.6-mile Union Station to Oak Cliff route, one mile is on the historic Houston Viaduct where overhead wire was unacceptable. Brookville equipped the two Liberty model streetcars delivered to the line with batteries and a power management system to propel the cars over the bridge. The batteries are mounted at a low level under the front platform and are designed to help with crash management. Experience has shown that the battery charge is sufficient to propel the cars for two miles, so the pantograph is normally not raised at the Union Station terminal. The power management system will prevent a car from lowering the pantograph if the battery charge is below 80%. Dallas has ordered two more of the Liberty cars. Detroit has ordered six cars, also equipped with batteries. Milwaukee has ordered four equipped for overhead power only. An order for Oklahoma City is forthcoming.

5. **Old Business**

John Smatlak reported briefly on status of the revised Heritage Trolley Vehicle Standard (currently out for review by heritage trolley operators) and the Level Boarding memo which is still under revision.

6. **News from Current Projects**

Cincinnati – Testing of the first CAF car is underway. Businesses along the line have been supporters of the system and have not raised issues with construction disruption. Transdev has a staff of three working on labor relation issues. Most likely the operators will be in the same union as bus drivers. The agency is working to integrate the streetcars and buses closely.

Kansas City – Their first car arrived from CAF three days after the first Cincinnati car. The first powered tests have been undertaken. The mayor is urging inauguration of service before the NCAA basketball tournament in March.

Seattle – The First Hill line is also testing its first Inekon car and hoping to start service in the spring.

Washington, DC – The H-Street/Benning route is going through safety certification for the second time. The System Safety Oversight team is taping all personnel during training and operation. Opening of the line is some months in the future. All damage to the Inekon cars which occurred during their years of outdoor storage has been repaired and the cars are making

testing runs

Tempe, AZ – System sponsors are waiting for an FTA rating under the Small Starts process and are hoping funds will be included in the President’s budget. They hope to begin car procurement in early 2016.

7. Next Meeting

- **Joint APTA Streetcar Subcommittee & Community Streetcar ...** Tim Borchers
Coalition Annual Meeting
Kansas City, April 2016

8. Adjourn

Tim Borchers

The meeting was adjourned at 10:29 am.