

Minutes ABE60 (2) 2013

**Subcommittee Meeting ABE60 (2)
Accessible Transportation Technology Subcommittee
92nd Annual Meeting of Transportation Research Board
Monday January 14, 2013
Hilton, Room Jay
8:00 am – 9:45 am**

In Attendance:

Daniel Blais, Co-Chair	Transport Canada
Uwe Rutenberg, Co-chair	Rutenberg Design Inc.

Members:

Betsy Buxer	MV Transportation, USA
Mary-Jane Gravelle	Canadian Transportation Agency
Claude Marin-Lamallet	IFSTTAR
Jim Marston	Atlanta VA
John Schoon	University of Southampton
Lalita Sen	Texas Southern University
Anabella Simoes	ISG/CIGEST
Ling Suen	International Centre for Accessible Transportation
Russell Thatcher	TranSystems Corporation
Karen Wolf-Branigin	Easter Seals Project Action, USA
Mohammed Yousuf	Federal Highway Administration

Friends:

Phoebe Chan	International Centre for Accessible Transportation
Nina Frid	Canadian Transportation Agency
Yehuda Gross	ITS/JPO
Kyunghwa Kim	Atlanta Regional Commission
Eileen Lu	Eden Social Welfare Foundation
Bill Orleans	Friend
Richard Schultze	RLS Associates, Inc.
Jana Sochor	KTH Royal Institute of Technology
Linda Van Roosmalen	LINC Design LLC
Joe Nien-Tsu Wang	Eden Social Welfare Foundation

AGENDA

1. Call to Order
2. Introduction of new members, current members and friends
3. Review of previous meeting minutes for 2012
4. **Jennifer Rosales:** TRB Staff Announcements
5. **Uwe Rutenberg:** TCRP, ACRP, NCHRP, Research Programs Overview
6. **Claude Marin-Lamellet:** The VOLHAND Project: Adaptation of Electric Powered Steering Wheel Native Laws to the Capacities of Older or Disabled Drivers
7. **Canadian Transportation Agency:** Boarding Technologies for Passengers with Wheelchairs at Unattended Stations
8. **Jim Marston:** Making Indoor Spaces Accessible Using Radio Frequency Identification (RFID) Floors (video presentation)
9. **Mohammed Yousuf:** Accessible Transportation Technologies Research Initiative (ATTRI)
10. **Yehuda Gross:** Next Generation Mobility Management Enabled by Connected Vehicle
11. **John Schoon:** Trajectory Analysis Using GPS: an Aid in Mobility Design
12. Other subcommittee business

MINUTES

1. Call to Order

Uwe Rutenberg called the meeting to order at 8:00 am and extended a warm welcome to all participants.

2. Introduction of new members, current members and friends

Participants introduced themselves provided their affiliations. Thirteen members participated, along with 9 friends of the committee for a total of 22 participants. Countries represented included the USA, Canada, France, Portugal, Taiwan, Sweden and the UK.

3. Review of previous meeting minutes for 2012

A motion to accept the minutes as prepared was put forward. Uwe Rutenberg moved and Jim Marston seconded. The minutes of the 2012 meeting were accepted as written.

4. TRB Staff Announcements

TRB representative Jennifer Rosales was unable to attend the meeting.

5. TCRP, ACRP, NCHRP, Research Programs Overview by **Uwe Rutenberg**

Uwe Rutenberg presented 3 research-funding programs. These programs are the Transit Cooperative Research Program (TCRP), the Airport Cooperative Research Program (ACRP) and the National Highway Cooperative Research Program (NHCRP). There are two types of submissions that can be made for each program, these are 1) submissions for Cooperative research (i.e.: Problem Statement) and, 2) submissions for Synthesis research. The Cooperative research program is an applied research program that develops near-term, practical solutions to problems. Typically the durations of projects is 18 to 24 months with a funding range of \$ 250 000 to \$ 400 000. Synthesis research reports on current knowledge and practice, in a compact format. Typically the durations of projects is 12 months with a funding range of \$ 30 000 to \$ 35 000. Information on both types of programs can be found at the following website:

Cooperative research:

<http://www.trb.org/AboutTRB/Public/AboutCooperativeResearchPrograms.aspx>

Synthesis research:

<http://www.trb.org/SynthesisPrograms/Public/SynthesisProgram.aspx>

Having multiple TRB committee support on research proposals is beneficial for the selection process as is being a member of a TRB committee; however, proposal submissions are open to everyone. State support is not a necessary requirement, but it is helpful.

Full proposals are due in the late spring / early summer. Bids are put out in the late summer with project usually starting in September / October.

Persons who submit problem statements are able to bid on projects.

Contact information for program submission questions is the following:

Mr. Crawford F. Jencks
Deputy Director, Cooperative Research Programs
Transportation Research Board
Cooperative Research Programs
202-334-2379 (PHONE)
202-334-2006 (FAX)
cjencks@nas.edu

Please refer to the presentations named Attachment #1 for more information.

6. The VOLHAND Project: Adaptation of Electric Powered Steering Wheel Native Laws to the Capacities of Older or Disabled Drivers by **Claude Marin-Lamellet**

Claude Marin-Lamellet presented information about the VOLHAND Project, whose objective is to provide knowledge in order to adapt the native laws used by an existing electric power steering to the capacities of older or disabled drivers. Drivers who are elderly or who have a disability can experience problems with the steering wheel task when they are driving. This can lead to earlier driving cessation. A combination of driving simulation and on road testing was used with 100 participants. Please refer to the presentations named Attachment #2 for more information.

7. A project on Boarding Technologies for Passengers using Wheelchairs at Unattended Stations was presented by **Mary-Jane Gravelle**
VIA Rail Canada's network includes approximately 450 stations. Of these only Montreal's Gare Central and Québec City's Gare du Palais have a raised platform level with the high-floor rail car entrance. This raised platform allows wheelchairs to board a train with the use of a bridge plateto bridge the gap between rail car entrance and the station platform. Most other stations along the network do not have raised platforms and the floor height of rail cars is quite high. This project will address the long standing issue of passengers who use mobility aids boarding trains at stations where the platform height does not meet the rail car floor. The project will investigate current both on-train and station based lift and ramp technologies, identify requirements for passengers who use mobility aids and VIA Rail operational requirements and propose a solution. Please refer to the presentations named Attachment #3 for more information.

8. Making Indoor Spaces Accessible Using Radio Frequency Identification (RFID) Floors video presentation by **Jim Marston**

Jim Marston presented a video about a new wayfinding technology pilot test being undertaken by the Atlanta VA Rehabilitation Research and Development Center of Excellence for Visual and Neurocognitive Rehabilitation. This project investigates the application of Radio Frequency Identification (RFID) tags in floor tiles that transmits location information to a receiver on cane used by a person with a visual impairment. The cane then transmits the information to the user via a Bluetooth equipped smart phone and ear piece. This system enhances the users with independent wayfinding.

9. Accessible Transportation Technologies Research Initiative (ATTRI) by **Mohammed Yousuf**

Mohammed Yousuf provided a presentation on a new 5 year research and development effort by the Federal Highway Administration on improving mobility of travelers with disabilities using Intelligent Transportation Systems (ITS) and technology. The presentation provided some figures on persons with disabilities in the USA and described the research initiative. The vision of the research initiative is to enhance the mobility of travelers with disabilities by providing the capability to safely, reliably, and independently plan and execute their travel. Timelines of the initiative were also presented. Please refer to the presentations named Attachment #4 for more information.

Ling Suen asked about which perspective this program was taken from, the operator, the user etc. Mohammed Yousuf responded that the program looks at the application of ITS to the transportation system.

10. Next Generation Mobility Management – Implications of USDOT Connected Vehicle Research by **Yehuda Gross**

Yehuda Gross gave a brief presentation that covered one aspect of the research being done as part of the Connected Vehicle Program, which is the “Integrated Dynamic Transit Operations” applications called Dynamic Transit Operations (T-DISP). He presented the next generation mobility managements and its implications and how its applications enable a coordinated technological approach to overcome the barriers to accessibility. Please refer to the presentations named Attachment #5 for more information.

Nina Frid asked about the standardization of the various technologies being used as some of this has US-Canada cross border implications. Yehuda Gross responded that they are working with Canada to harmonize.

11. Trajectory Analysis Using GPS: an Aid in Mobility Design by **John Schoon**

John Schoon provided a presentation on the use of GPS to aid in mobility design. The GPS can be applied to obtain accurate trajectory data that can be used to reveal unexpected route diversions. Please refer to the presentations named Attachment #6 for more information.

12. Other subcommittee business

There was no other business.

The meeting adjourned at 9:45 am.