

TRB Committee on Pedestrians—Research Subcommittee

Summary of Activities for 2011

Prepared by Bob Schneider—January 2012

1. SUBCOMMITTEE BACKGROUND

Subcommittee Purpose

The Research Subcommittee has three main responsibilities:

1) Identify pedestrian research needs/topics and develop Pedestrian RNS

The Research Subcommittee is responsible for adding to and modifying the prioritized list of Pedestrian Research Needs Statements (RNS) for the full TRB Pedestrian Committee. The full Pedestrian Committee may review and revise subcommittee research recommendations.

2) Find organizations to fund and conduct necessary research and promote the RNS to these organizations

There are a wide variety of organizations that can fund pedestrian research, and they have different constituents and interests¹. The Research Subcommittee seeks to identify RNS that match the interests and resources of different groups.

3) Track previous, ongoing, and upcoming research in a RNS database

The Research Subcommittee tracks pedestrian projects in the TRB Research in Progress Database as well as other recently-completed, ongoing, and upcoming pedestrian research projects. It maintains a database of these pedestrian research projects that includes the project title, funding organization(s), researcher(s), and timeframe.

Subcommittee History

Between 2001 and 2004, the Pedestrian Research Subcommittee developed 16 Research Needs Statements. These RNS are included in *Transportation Research Circular E-C084: Pedestrians: Research Problem Statements* (2005): <http://onlinepubs.trb.org/onlinepubs/circulars/ec084.pdf>.

Between 2005 and 2011, the Subcommittee developed an additional 29 Research Needs Statements (approximately 18 of these topics are now being funded or researched in some form). Most of these RNS have been posted in the Online TRB RNS Database: <http://rns.trb.org/> and are available on the TRB Pedestrian Committee website: www.walkinginfo.org/trbped.

¹ Potential research organizations include: National Cooperative Highway Research Program (NCHRP), Transit Cooperative Research Program (TCRP), State DOT research divisions, University planning and engineering departments, University Transportation Centers (UTCs), World Bank, Federal Highway Administration (FHWA) Office of Safety and Office of Environment and Planning, City and County Agencies, League of Cities, Centers for Disease Control and Prevention, Public Health Agencies, Private sector companies, Non-profit organizations, Robert Wood Johnson Foundation, AARP, AAA Foundation for Traffic Safety, etc.

The Research Subcommittee is currently working on a new draft Pedestrian Research Circular for 2012.

Current Members

Current members of the Research Subcommittee include:

- Robert Schneider, UC Berkeley SafeTREC & UC Davis Sustainable Transportation Center (Research Subcommittee Chair)
- Shawn Turner, Texas Transportation Institute (Full Pedestrian Committee Chair)
- Ann Do, FHWA
- Arlie Atkins, Portland State University
- Brian Lee, University of Vermont
- Carl Sundstrom, UNC Highway Safety Research Center
- Charles Carmalt, City of Philadelphia
- Charles Rivasplata, San Francisco MTA
- Charlie Zegeer, UNC HSRC
- Christopher Kinzel, HDR Engineering
- Connor Semler, Kittelson & Associates
- Conor Semler, Kittelson Associates, Inc.
- Dan Burden, WALC Institute
- Dan Gelinne, UNC HSRC
- Daniel Rodriguez, UNC Chapel Hill
- David Gibson, FHWA
- David Guth, Western Michigan University
- David Levinger, Rails-to-Trails
- Dick Pratt, Consultant
- Dick Schaffer, Federal Highway Administration Office of Safety Design
- Dwight Kingsbury, Florida DOT
- Frank Markowitz, City of San Francisco
- Gabe Rousseau, Federal Highway Administration
- Ganesh Karkee, TTI/Texas A&M
- George Branyan, DC DOT
- George Lu, University of Wisconsin-Madison
- Holly Krambeck, World Bank
- Hyeon-Shic Shin, New York University
- Ilona Kastenhofer, Virginia DOT, Virginia Transportation Research Center
- Ingrid Potts, Midwest Research Institute
- Jake Pauls, Consultant
- Janet Barlow, Accessible Design for the Blind
- Jared Ye, Montana State University
- Jean-Michel Auberlet, INRETS
- Jeannette Montufar, University of Manitoba
- Jim McDonnell, AASHTO
- Jin Wang, Atkins Global
- Joe Fish, Mid-Ohio Regional Planning Commission
- Karim Ismail, University of British Columbia
- Kay Fitzpatrick, Texas Transportation Institute
- Lance Dougald, Virginia Transportation Research Council
- Levenson Boodlal, KLS Engineering

- Lynn Weigand, IBPI, Portland State University
- Malisa McCreedy, City of Charlotte
- Matthew Ridgway, Fehr & Peers, ITE Ped/Bike Council
- Max Bushell, UNC HSRC
- Megan Wier, San Francisco DPH
- Meghan Mitman, Fehr & Peers, ITE Ped/Bike Council
- Michael Houston, University of Washington
- Michelle Lee, Geostats LP
- Mike Cynecki
- Mike Monteleone, URS
- Nancy Lefler, VHB
- Natalie Villwock-Witte, Montana State University
- Nicolas Saunier, Ecole Polytechnique de Montreal
- Paula Reeves, Washington State DOT
- Pippa Brashear, Project for Public Spaces
- Ray Derr, National Academy of Sciences, NCHRP
- Ray Lewis, West Virginia DOT
- Rob Roy Poapst, University of Manitoba
- Ron Eck, West Virginia University
- Ruth Steiner, University of Florida
- Sagar Sonar, Multimodes Engineering
- Scott Bricker, America Walks
- Scott Windley, US Access Board
- Seth LaJeunesse, UNC Highway Safety Research Center
- Shaunna Burbidge, Metro Analytics
- Srinivas Pulugurtha, UNC Charlotte
- Tarek Sayed, University of British Columbia
- Theo Petritsch, Sprinkle Consulting
- Thomas Gotschi, UNIZH
- Tim Cox, Plastic Safety Systems
- Tom Bertulis, Northeastern University
- Tony Hull, Bike/Walk Twin Cities, Transit for Livable Communities
- Vagn Askjaer, Flint Trading
- Zohra Mutabanna, IBI Group

Subcommittee members include all individuals who participated in any subcommittee activities, such as meetings, conference calls, RNS development, or outreach to potential funding organizations during 2011.

Many thanks to all who contributed to Research Subcommittee activities in 2011!

2. SUBCOMMITTEE ACTIVITIES IN 2011

2.A. Progress on Pedestrian Research Needs Statements

- Lessons learned from successful (funded or supported) Pedestrian Research Needs Statements
 - Get specific topics on the agenda of a State DOT (talk to DOT research division members about topics)
 - Get other subcommittee members to review and help revise the statement
 - More people see the RNS than we know about
 - Don't give up—revise and resubmit each year
 - Collaborate with other TRB committee(s)
- Pedestrian RNS Developed or Updated in 2011
 - 1) “Best Practices for Sidewalk Maintenance” (Lead Author: Ron Eck; Reviewers: Ilona K., Joe F., Mike C., Lois T., Michael H., Dave B.)
 - 2) “Synthesis of Pedestrian Infrastructure Assessment Methods and Tools” (Lead Author: Joe Fish; Reviewers: Ilona K., Natalie V.)
 - 3) “Data Sources to Measure Pedestrian and Bicycle Safety in Parking Lots” (Lead Author: Nicolas Saunier; Reviewers: Ron E., Ilona K., David L., Dick S., Christopher K., Meghan M.)
 - 4) “Framework for National Pedestrian and Bicycle Performance Measures” (Lead Author: Bob Schneider; Reviewers: Gabe R., Joe F., Ilona K., David L., Ruth S., Connor S., Jamie P.)
 - 5) "Estimating the Benefits of a more Complete Pedestrian Injury Reporting System" (Lead Author: Bob Schneider; Reviewers: Charles C., Megan W., Christopher K., Dick P., David L.)
 - 6) “Evaluation of Automated Pedestrian Detection Technologies” (Lead Author: Frank Markowitz; Past Reviewers: Bob S., Jeannette M., George L., David N.; Possible New Reviewers: Dietmar B., Nicolas S., Karim I., David G., Richard W.)
 - 7) “Increasing the safety of interactions between pedestrians and large commercial vehicles in urban areas” (Lead Author: Jeannette Montafur; Reviewers: Dick S., Tamara R., Ron E., Christopher K.)
 - 8) “Developing Guidelines to Improve Pedestrian Access to Transit Stops” (Lead Author: Ilona Kastenhofer)
- Funded/Supported RNS from 2010 and 2011
 - NCHRP Project 17-56, “Development of Crash Reduction Factors for Uncontrolled Pedestrian Crossing Treatments” (Lead Author: Joe F.; Reviewer: Bob S.) (2011)
 - NCHRP Project 15-45, “Update of the AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities” (*Not generated directly by Pedestrian Research Subcommittee) (2011)
 - NCHRP Project 17-19, “Methods and Technologies for Collecting Pedestrian and Bicycle Volume Data” (*Not generated directly by Pedestrian Research Subcommittee) (2011)
 - NCHRP Synthesis 20-05/Topic 42-11, “Local Policies and Practices that Support Safe Pedestrian Environments” (Lead Author: Yolanda T.; Reviewers: Bob S.) (2010)

- NCHRP Project 07-17, “Pedestrian and Bicycle Transportation along Existing Roads” (Lead Author: Ilona K.; Reviewers: Meghan M., Ron E., Joe F., Dick K., and Ruth S.) (2010)
- FHWA Pedestrian Safety Strategic Research Plan (10 Pedestrian RNS) (2010)

2.B. Uploaded 2011 RNS into the TRB Research Needs Statements Database and Posted them on the TRB Pedestrian Committee Website

2.C. Modified the Pedestrians Research Needs Statement (RNS) Database

- Dan Gelinne and Max Bushell updated Pedestrian Research Database
- Database includes 177 total entries (51 from the Pedestrian Research Subcommittee and 126 from other sources). (Research topic/title, category, funding organization, researcher(s), year)

2.D. Held three Research Subcommittee conference calls (March, August, and December)

2.E. Held a Research Subcommittee Meeting yesterday (January 23rd) at TRB to gather input on pedestrian research topics, draft research circular, and strategic approach for 2012

- Provide updates on progress towards three main goals of Pedestrian Research Subcommittee: 1) Develop Pedestrian RNS, 2) Submit Pedestrian RNS to Funding Organizations, and 3) Track Progress on Pedestrian RNS and other Pedestrian Research through the RNS Database.
- Discuss State DOT survey and opportunities to submit more Pedestrian RNS to State DOT research divisions.
- Discuss our subcommittee strategic approach for the year. Should we continue to prioritize our existing RNS and target them towards particular funding organizations? Should we develop a Pedestrian Research Circular that contains all of the pedestrian RNS so that we can post it online and promote it to a wider audience?

2.F. Developed First Draft Pedestrian Research Circular

- Purposes:
 - Provide an overview of Research Needs Statements (RNSs) developed by the Pedestrian Committee’s Research Subcommittee’s (PRS) since the publication of the last TRB Pedestrian Research Circular in 2005.
 - Provide an overview of RNSs developed by other organizations.
 - Identify pedestrian-related goals of transportation and non-transportation organizations, based on which relating specific RNSs to these goals might be possible.
- This document does not make specific recommendations to organizations. However, it presents RNSs that could be adopted to help meet the goals of these organizations.

3. ADDITIONAL INFORMATION

More information about the Pedestrian Research Subcommittee is on the TRB Pedestrian Committee website: www.walkinginfo.org/trbped.

Do you have comments or questions about the work or products of the Pedestrian Research Subcommittee? Are you interested in joining or helping the Pedestrian Research Subcommittee? If so, please e-mail Bob Schneider at rschneider@berkeley.edu.