

TRB Committee on Pedestrians—Research Subcommittee
Summary of Activities for 2009
TRB Pedestrian Committee Meeting—January 2010
Prepared by Bob Schneider

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 2009, the Subcommittee developed an additional 37 Research Needs Statements (approximately 10 of these topics are now being funded or researched in some form).

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), 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.

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.

Current Members

- Robert Schneider, UC-Berkeley Dept. of City and Regional Planning (Subcommittee Chair)
- Shawn Turner, Texas Transportation Institute
- Dwight Kingsbury, Florida DOT
- Ilona Kastenhofer, Virginia Transportation Research Council
- Ray Derr, National Academy of Sciences, NCHRP
- Laura Sandt, UNC Highway Safety Research Center
- Yolanda Takesian, Kittleson & Associates, Inc.
- Jake Pauls, Consultant
- Sagar Sonar, Multimodes Engineering
- Ruth Steiner, University of Florida
- David Guth, Western Michigan University
- Jeannette Montufar, University of Manitoba
- Srinivas Pulugurtha, UNC Charlotte
- Ann Do, FHWA Office of Safety
- David Levinger, The Mobility Education Foundation
- Paula Reeves, Washington State DOT
- Ganesh Karkee, TTI/Texas A&M University System
- Meghan Mitman, Fehr & Peers/ITE Pedestrian & Bicycle Council
- Nancy Lefler, VHB
- Martin Guttenplan
- Mike Monteleone, Louis Berger Group
- Joe Fish, City of Bloomington, IN
- Ron Eck, West Virginia University
- George Branyan, DC DOT
- Scott Windley, US Access Board
- Seleta Reynolds, Fehr & Peers
- Gabe Rousseau, Federal Highway Administration
- Mike Cynecki, City of Phoenix, AZ
- Kay Fitzpatrick, Texas Transportation Institute
- Tony Hull, Bike/Walk Twin Cities, Transit for Livable Communities
- George Lu, University of Wisconsin-Madison
- Karim Ismail, University of British Columbia
- Lance Dougald, Virginia Transportation Research Council
- Lynn Weigand, Portland State University
- Carol Kachadoorian, Toole Design Group
- Karen Giese, PTV America
- Lin Lin, University of Washington
- Frank Markowitz, City of San Francisco
- Tarek Sayed, University of British Columbia
- Dick Schaffer, Federal Highway Administration Office of Safety Design
- Richard Knoblauch
- Hyeon-Shic Shin, New York University

- Holly Krambeck, World Bank
- Eunyoung Lim, National Highway Traffic Safety Administration
- Dan Gelinne, UNC Highway Safety Research Center
- Nicolas Saunier, University of British Columbia
- Kit Keller, Association of Pedestrian and Bicycle Professionals
- David Patton, Arlington County, VA

Many thanks to all who contributed to Research Subcommittee activities in 2009!

2. SUBCOMMITTEE ACTIVITIES IN 2009

2.A. Developed new Research Needs Statements

1) Planning and Policy (Current Topic Area Leader: David Levinger)

- Pedestrian Environment Improvements to Increase Transit Ridership (Lead Author: Joe F.; Reviewers: David L., Dwight K., Holly K., Bob S.)
- Institutional issues blocking pedestrian improvements (Lead Author: Ilona K.; Reviewers: Meghan M., Ron E., Joe F., Dick K., and Ruth S.)

2) Design, Operations, and Safety Analysis (Current Topic Area Leader: Nancy Lefler)

- Automated Pedestrian Safety Analysis Using Video Data (Lead Authors: Tarek S., Karim I., Nicholas S.; Reviewers: Laura S., Nancy L., Lance D.)
- Improving the service for all users at a signalized intersection through developing a detection-based traffic signal system (Lead Authors: George L., David Noyce; Reviewers: John LaPlante, Lois Thibault, Tarek S., Sagar S., Frank M.)
- Evaluation of Automated Pedestrian Detection Technologies (Lead Author: Frank M.)
- Best Practices for Pedestrian Facility Maintenance (Synthesis Statement) (Lead Author: Ron E.; Reviewers: Ilona K., Joe F., Mike C.)
- Platform for the Simulation of Pedestrians (Lead Authors: Nicolas Saunier, Jean-Michel Auberlet, Karim Ismail)

3) Human Capacity & Sensitivity to Environment (Current Topic Area Leader: Srinivas Pulugurtha)

- Improvements for Pedestrians with Low Vision (David L.)

4) Society, Culture & Behavior (Current Topic Area Leader: Laura Sandt)

- Effect of Hand-Held Communication Device Use on Pedestrian Safety (Lead Authors: Ron E., Srinivas P.; Reviewers: Mike C., George L., Bob S.)
- Best Practices for Evaluating the Effectiveness of Safe Routes to School Programs (Lead Author: Lynn W.; Reviewers: Karim I., Bob S.)

2.B. Promoted RNS for Funding and Implementation

- Submitted three RNS to AASHTO Committee on Non-Motorized Transportation for NCHRP consideration (Institutional barriers to pedestrian improvements; Automated pedestrian safety analysis using video data; Detection-based traffic signal system...2010: integrated version of Improving automated pedestrian detection at intersections)
- Submitted two RNS to TCRP for consideration (Pedestrian environment improvements to improve transit ridership; Improvements for pedestrians with low vision)
- Will submit four RNS to NCHRP synthesis program (Best practices for improving pedestrian safety in automobile parking lots; Best practices for pedestrian facility maintenance; Best practices for pedestrian infrastructure assessment; Best practices for evaluating the effectiveness of Safe Routes to Schools Programs)
- Will promote several RNS to State DOTs for state research projects or possible multi-state, pooled funding studies (Effect of hand-held communication devices on pedestrian safety; Platform for the simulation of pedestrian movements; Best practices for Safe Routes for Seniors initiatives)
- Uploaded RNS from 2009 into the TRB Research Needs Statements Database

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

- Updated Pedestrian Research Database (**160** total records) (Dan Gelline)

2.D. Held three Research Subcommittee conference calls (February, June, and November)

2.E. Will hold a Research Subcommittee Meeting at TRB to gather input on pedestrian research topics (1:30 to 3:30 p.m. TODAY in the Marriott, Taylor Room)

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.