

POLICY AND ORGANIZATION GROUP Committee Triennial Strategic Plan (TSP)

Committee Name and Number: ADB10, Traveler Behavior and Values

Committee Chairperson: Kouros Mohammadian, University of Illinois at Chicago (April 2015 -)

TSP Three-Year Period: ~~April 15, 2012 to April 15, 2015~~ Calendar Years 2016-2018

Date Prepared: December 2016

Committee Future Outlook Statement:

Current Committee Scope The committee will be concerned with promoting research and disseminating research results on traveler values, attitudes, and behavior. Traveler values and attitudes refer to motivational, cognitive, situation and disposition factors determining human behavior. Traveler behavior refers primarily to the modeling and analysis of travel demand, based on theories from a variety of scientific fields. These include but are not limited to time use and activity-based approaches, longitudinal methods, and spatial behavior at any level of aggregation (e.g., individual, household, community, and so forth). The committee will serve as a forum for the development, testing, and dissemination of new interdisciplinary methods of inquiry.

Factors and influences that will shape the committees activities Travel behavior is the study of how people plan their travels to accomplish their activity goals during the day. This understanding is used to evaluate how people will react to policies, pricing, infrastructure changes, technology, and other changes that have an effect on travel decisions. This area of study has become more critical as the country has sought to address congestion, environmental, and social concerns through transportation changes. For example, emerging technologies like connected and autonomous vehicles could totally change the way we travel that should be understood properly. In addition, with the emerging concern over global climate change, governments are trying to figure out how to encourage people to reduce their carbon output in a variety of ways. Deciding to drive less, share rides, purchase more energy efficient vehicles, make location decisions that minimize auto travel and enhance non-motorized travel all fundamentally involve travel behavior decisions. To move people in the reduced carbon direction, understanding the factors that influence these decisions will be critical. Other examples of policy or operational issues that can be illuminated by an understanding of travel behavior are –

- Travel behavior changes of emerging mobility services ~~and~~
- Effects of information technologies
- Behavioral responses to crisis and disaster situations
- Demographic changes
- Behavioral impacts of alternative pricing and funding
- Behavioral aspects of freight and logistics choices

The list above is an illustration of the issues that the committee will be addressing in the years to come. Appendix A contains a more complete listing of critical issues and topics.

Committee Future Outlook

The Committee on Traveler Behavior and Values has been at the forefront of defining and shaping the research agenda in travel behavior analysis for many years. The committee is poised to continue serving as a leader in the field and plans to further enhance its portfolio of activities in the years to come to ensure that the field continues to be marked by the inflow of new ideas, innovation, relevance to planning and policy, and methodological rigor.

The committee has four overarching goals for the future –

- Continue to engage new researchers and agency staff in the committee activities and travel behavior research more generally,
- Propose and advocate for new travel behavior research – both fundamental research and applied research,
- Reach out to decision makers and other interested communities to explain how travel behavior research can be used in policy, operations, environmental, and land use arenas, and finally
- Improve the committee’s use of communication tools throughout the year and to explore technologies to improve the transfer of travel behavior information.

The committee plan below contains specific actions to achieve these goals.

Committee Plan:

Emerging issues inside and outside the committee scope

The committee has a unique role due to the valuable insights it can provide to decision makers and other transportation communities. In this role the committee has to be aware of the emerging policy questions and other issues from a broad [array of \(?\)](#) committees and communities beyond its scope. It is critical for the committee members to be aware of emerging issues outside the committee scope and to consider how the committee can respond to those issues.

Within the committee scope, the fundamental and applied travel behavior research needs to continue. Understanding how that research can be applied to the “outside” issues identified above is an important task of the committee.

Projects

The list of projects below will be used in the coming years to accomplish the 4 main future goals identified by the committee. Most of these projects move the committee forward on more than one goal. In particular, the goals of continuing to engage new researchers and agency staff will only be accomplished if there is relevant work being accomplished by the committee. Other conditions are necessary to engage new members, but the opportunity to make a contribution is critical.

- Collaboration with other TRB committees - The Committee on Traveler Behavior and Values collaborates with many other standing committees across the TRB committee structure in addressing cross-cutting issues. A complete list of committees with which the Committee on Traveler Behavior and Values collaborates with is provided in Appendix B. Essentially, the committee will continue to develop and issue joint calls for papers, co-organize TRB Sunday Workshops and special and regular sessions dedicated to cross-cutting themes, and prepare research needs statements in collaboration with other committees on topics of mutual interest.
- Aid in the enhancing of the Travel Forecasting Resource - The Travel Behavior Committee, in cooperation with other committees within the Travel Analysis section, played a strong role in developing the on-line Travel Forecasting Resource. The resource is a community-developed source of information on Travel Forecasting – travel behavior is one of the building blocks of this type of modeling. We will continue collaborating with other committees to enhance the resource.
- Development of Research Problem Statements - The committee will be enhancing its influence on shaping and defining the research agenda by developing well-conceived research problem statements, in collaboration with other TRB Committees and other organizations. These research problem statements will be placed in the TRB Research Needs Statements database and made available to the broad community so that the field is continuously defining and updating the critical issues and needs.
- Develop NCHRP/TCRP project and Synthesis problem statements that are relevant to travel behavior research and then collaborate with TRB and state DOTs to advocate for those projects.
- Strengthen sub-committees - Streamlining the functions, scopes, and mission/goals of the subcommittees so as to keep a vibrant level of intellectual inquiry present in the committee structure.
- Collaborate on conferences and workshops - Initiating discussions and special organizational meetings with other TRB committees/task forces and national/international associations to conduct specialty conferences, workshops, and seminars on various topics.
- Frequently update the committee website - maintaining a full-fledged website for the committee that also acts as an umbrella for subcommittee websites.
- Reach out to organizations and groups beyond TRB - Developing new relationships with professional associations, the global community, and multidisciplinary groups of researchers.

Membership strategies

This committee is known for attracting huge numbers of participants to its committee and sub-committee meetings. Even with the largest committee meeting room available at the Annual Meeting, each year we have people sitting on the floor and spilling out the door. Due to the nature of the committee's scope, we have no problem attracting young members, academic members, consultants, software vendors, and international members. Geographic, racial, and gender diversity have also been fairly easy to achieve. The one special group that we struggle to attract is agency practitioners. Agency staff often have trouble obtaining travel support (a

problem shared by many TRB committees) but in our case the topic can also seem daunting to practitioners. With each rotation, in the planning of our Annual Meeting sessions, and during business meetings we strive to include the practitioner community.

Commented [WU1]: Curious. Does the practitioner community have the skillbase you need for paper reviews? Perhaps there can be advisory or specific roles that practitioners play to define research needs or products of interest to them. Just a thought.

Given the very high level of committee activities (we now handle over 200 papers for the Annual Meeting) we were permitted by TRB to add 5 additional members to our Committee roster. This permitted us to further broaden the diversity of the Committee. However, even though we are assigning eight paper reviews to each committee member, it is still very difficult to obtain required reviews for the assigned papers.

One of the key dimensions that the committee has tried to fulfill during membership rotation is that of inducting new blood, people who are not necessarily already members of several other TRB committees. The ADB10 roster of members at this time includes 12 members that are ONLY members of ADB10 and are not members of any other TRB Committee. Among the remaining 25 members on the roster, 19 are members of just one other TRB committee. Most of the individual who are members of more than one committee got their start in TRB membership with ADB10. Thus, this committee is replete with fresh faces, but has some experienced TRB hands to help guide the committee in strategically visionary ways. This committee will continue to be an entity that welcomes newcomers and fresh blood with open doors.

Communication

The committee will further develop its portfolio of outreach and technology transfer activities. While the committee has a very high level of activity at the TRB Annual Meeting each year, there are other venues where the committee will continue to maintain a presence and further expand its level of activity. The World Conference on Transport Research (WCTR) has a Special Interest Group (SIG) dedicated to travel behavior research and we collaborate with WCTR in organizing travel behavior sessions. The committee also collaborates with other TRB committees in the organization of the Innovations in Travel Modeling (ITM) conference series. The committee has a dedicated subcommittee to serve as the home of the International Association for Travel Behaviour Research (IATBR). Similarly a subcommittee is dedicated as the home of the World Society for Transportation and Land Use (WSTLUR). The committee will continue to use these venues as a way of engaging the international research community in meaningful ways.

Proposed changes in scope

No changes in the scope or title are needed now.

Appendix A - Critical and Cross-Cutting Issues

Long term and emerging issues

There are a host of emerging issues that the committee is tracking very closely. The various subcommittees of the committee are spearheading major initiatives on these issues:

- Understanding Behavioral Dimensions of new and emerging mobility services: Flexible new modes such as shared mobility, on-demand transport, automation, ubiquitous computing, and connected mobile-technology travel planners are impacting mobility patterns. Given the recent emergence of these modes and services, and lack of market data, there are significant challenges in understanding their impacts and effects on short-term mobility decisions (travel patterns and mode choice) and long-term choices (such as car ownership). The committee is interested in research addressing acceptance, learning and adaptation of behavior, impacts on associated travel choices (multi-modality, auto ownership, etc.), the inclusion of such new modes and services in transportation model systems and/or new data-sources informing models.
- Integration of public health and travel behavior: The committee is interested in the development of theoretical and conceptual frameworks, as well as innovative uses of theory in practical applications to improve our understanding of the links between travel behavior and public health. These include innovative use of data sources and information and quantification of health impacts of transportation policies, methods, and models, as well as effective approaches in incorporating health elements into transportation policies.
- Integration of Energy Use and Travel Behavior Models: The committee is going to work closely with other committees to foster research on the integration of energy and travel demand models so that there is consistency in model development and application, particularly in the context of activity-based microsimulation models.
- Activity-Travel Behavior and Time Use of Special Population Groups: Different population groups (young, elderly, immigrants, etc.) have different travel behavior. For example, their car-ownership behavior, car-sharing, lifestyle, ICT-use, social networking behavior, built-environment perception, immigration, and subjective well-being vary across different population groups. The committee is very interested in understanding activity-travel behavior patterns of special population segments, particularly, children, elderly, zero-car households, low income households, transit users, long-distance commuters, immigrants, minorities, women, and so on.
- Life-oriented Approach to Understanding Activity-Travel Behavior: Most transportation studies have only focused on people's travel behavior itself and ignored the role of life-related factors in determining their travel behavior or differentiating behaviors across generations. The life-oriented approach argues that people's life choices in various domains (e.g., residence, neighborhood, health, education, work, family life, leisure and recreation,

finance, and travel behavior) are interdependent. For travel behavior, it further argues that travel may not only result from various life choices, but also affect them, to which people's quality of life is largely attributable.

- Built Environment, Public Health, Active Living, and Travel Behavior: The committee is taking a major leadership role into the ongoing debate on the role of the built environment in influencing people's lifestyles, activity living patterns, travel choices, and public health/obesity.
- Technology, Time Use, and Travel Relationships: Information and communication technologies (ICT) continue to play a major role in shaping people's activity-travel patterns and time use. The committee is devoting considerable energy to this key issue and is striving to develop methodologies for representing time-space interactions, time-space prisms, and the influence of constraints on activity-travel patterns and how technology enables the loosening of constraints.
- Longitudinal Analysis of Activity-Travel Behavior: The committee continues to be very interested in the stability and changes of activity-travel behavior over time. Tracking changes in socio-economic characteristics and activity-travel patterns over time using repeated cross-sectional data and panel data continues to remain a major focus of the committee. After all, how can we begin to forecast unless we know how behavior is changing?
- Behavioral Processes and Theories of Behavior from an Interdisciplinary Perspective: The committee continues to be the major focal point for inter-disciplinary discussions regarding theories of activity scheduling, time use, and travel behavior. The committee is striving to bring behavioral theories from psychological and sociological sciences to the field of transportation to better inform activity-travel model specifications and structures and policy analyses.

Appendix B - Committee History

Membership gender and racial diversity.

At this time, the committee composition (excluding Emeritus Members) is as follows:

	Percentage	
White:	23	62%
Black:	0	0
Hispanic:	2	5%
Asian or Pacific Islander:	12	32%
American Indian	0	0
Unknown:	0	0
Male:	25	68%
Female:	12	32%

Geographic distribution of membership

Membership is distributed quite well from a geographic standpoint, including a strong international representation and a reasonable geographic balance within the US. Excluding Emeritus Members the geographic distribution is:

North West US	South West US	Central US	North East US	South East US
2	8	2	6	3
International: 16				
Canada:	2			
Europe:	9			
Asia:	2			
South America:	2			
Australia:	1			

Professional affiliation distribution of membership

The field of travel behavior research tends to be more theoretical and academic in nature, rather than practice-oriented. This is not to say that the research is not relevant or grounded in practice, but simply reflects that the field tends to look forward towards developing the next new theoretical methodology or behavioral paradigm that can enhance the state-of-the-art in travel demand modeling and transportation policy analysis. Much of the research reported in papers handled by this committee and presented each year at the TRB Annual Meeting is based on real-world projects sponsored by public and not-for-profit agencies. Given the theoretical and fundamental/basic research nature of the field, the committee is understandably biased towards an academic membership. Including the Young Members, 70% of the members are drawn from academia, with various other entities have some representation on the committee to ensure that the practical and policy perspective is reflected in the deliberations and activities of the committee.

State	0	Federal Government:	1
Education:	26	Private Sector:	9
Local	1	Nonprofit/Other:	0

Over the past decade, ADB10 has developed a long and comprehensive database of friends that includes individuals who have attended committee meetings, expressed an interest in the activities of the committee, have submitted a paper to the committee as a co-author, or have simply expressed a desire to be on the committee's e-mail list. The database currently has 800+ valid e-mail addresses of individuals across the world.

List of subcommittees and their chairs.

- ADB10(1): Subcommittee on Time Use and Activity Patterns, co-Chairs: Karthik Kunduri, Storrs, CT (2014-) and Juan Carrasco, Universidad de Concepcion, Chile (2014-)
- ADB10/ADB30 Joint Subcommittee on Route Choice and Spatial-Temporal Behavior, Chair: Song Gao, University of Massachusetts, Amherst, MA (2014-)
- ADB10(3): Subcommittee on International Travel Behavior, Chair: Yoram Shiftan, Technion, Israel (2013-2015), Patricia Mokhtarian, Georgia Tech, GA (2016-2018)
- ADB10(4): Subcommittee on Understanding Behavioral Processes, Chair: Maren Outwater, RSG (2014-)
- ADB10(5): WSTLUR Subcommittee, Chair: Corinne Mulley, The University of Sydney (2015-)

ADB10 maintains close formal and informal relationships with many different committees. They include, but are not limited to:

- ADB40: Transportation Demand Forecasting
- ADB30: Transportation Network Modeling
- ADB50: Transportation Planning Applications
- ADB20: Effects of Information and Communication Technologies (ICT) on Travel Choices
- ABJ10: National Transportation Data Requirements and Programs
- ABJ30: Urban Transportation Data and Information Systems
- ABJ40: Travel Survey Methods
- ABJ90: Freight Transportation Data
- ABJ80: Statistical Methodology and Statistical Computer Software for Transportation Research
- ABJ70: Artificial Intelligence and Advanced Computing Applications
- ABJ60: Spatial Data and Information Science
- AT015: Freight Transportation Planning and Logistics
- ABE90: Transportation in Developing Countries
- ABE25: Congestion Pricing
- ABE50: Transportation Demand Management
- ABE70: Women's Issues in Transportation
- ABG20: Transportation Education and Training

ANF20: Bicycle Transportation
AHB45: Traffic Flow Theory and Characteristics
ADA10: Statewide Multimodal Transportation Planning
ADC70: Transportation Energy Committee
ADD30: Transportation and Land Development
ADD50: Environmental Justice in Transportation

Outside organizations which your committee maintains ongoing liaison representation.

International Association for Travel Behaviour Research (IATBR)
World Conference on Transport Research Society (WCTRS)
American Society of Civil Engineers (ASCE)
Women's Transportation Seminar (WTS)
Institute of Transportation Engineers (ITE)
International Association for Time Use Research (IATUR)
European Transport Commission (ETC)
Institute for Operations Research and the Management Sciences (INFORMS)
American Association for State Highway and Transportation Officials (AASHTO)
Regional Science Association International (RSAI)
Hong Kong Society of Transportation Studies (HKSTS)
USDOT including FHWA, FTA, Office of the Secretary, RITA
National Institutes of Health (NIH)
Association of American Geographers (AAG)
Association of Transportation Professionals of Indian Origin (ATPIO)
World Society for Transportation and Land Use Research (WSTLUR)

Shared activities during the past year

TRB – Transportation (Springer) Annual Special Issue

2013: TRB Special Issue on Inter-Personal Interactions and Constraints in
Travel Behaviour within Households and Social Networks

Edited by Joshua Auld, Lei Zhang

2014: TRB Special Issue on Attitudes and Habits in highly effective travel
models

Edited by Caspar G. Chorus, Jeff Newman

2015: TRB Special Issue on Capturing, measuring and responding to
changes that influence travel behavior

Edited by Khandker Nurul Habib, Stacey G. Bricka

Formal and Informal Collaboration with various Associations in Organizing Sessions and
Disseminating Information about Activity-Travel Modeling/Simulation:

- International Association for Travel Behaviour Research (IATBR) Conference,
Windsor, UK, July 19-23, 2015

- World Conference on Transport Research, Rio de Janeiro, Brazil, July 15-18, 2013
- Time Use Observatory Workshops, 2014, Chile
- 10th International Conference on Transport Survey Methods, November 16-21, 2014, Leura, Australia.
- International Choice Modelling Conference, May 10-15, 2015, Austin, TX and July 3-5, 2013, Sydney, AU
- World Society for Transportation and Land Use Research (WSTLUR) Conference, Delft, the Netherlands, June 24–27, 2014

Business Meeting Attendance (information from the most recent meeting)

Annual business meeting: Members: 32 Guests: 95

Research Needs and Problem Statements (Of particular interest are problem statements for TRB Cooperative Research Programs, but please list related activities your committee is involved with as well.)

The committee is home to five subcommittees. The subcommittees are charged with discussing emerging research needs and topics of interest that could be translated into research needs statements. The subcommittee meetings conduct a research roundtable as part of their annual meeting agenda. During the research roundtable, technical issues of interest are identified for potential translation into research needs statements. Thus, research needs and problem statements are identified through community participation and engagement at the subcommittee level. On occasion, issues that cut across various topic areas are discussed at the full committee meeting as well.

Subcommittee has been charged with developing research problem statements (possibly in collaboration with other subcommittees or committees) and follow-up activities are underway to ensure that the subcommittees complete the development of the research needs statements.

The development of research problem statements has not been an area where the committee has traditionally contributed in a substantive way. Given the nature of the field (theoretical and fundamental/basic research), it is often difficult to develop research problem statements of practical significance and immediate agency relevance that would lend themselves to being funded. However, the committee is now collaborating with other committees (that have immediate practical implications) to develop research problem statements that might stand a good chance of being funded.