

## **POLICY AND ORGANIZATION GROUP Committee Triennial Strategic Plan (TSP)**

**Committee Name and Number:** Travel Survey Methods, ABJ40

**Committee Chairperson:** Rebekah Straub Anderson, Ohio Dept. of Transportation

**TSP Three-Year Period:** April 2018 to April 2020

**Date Prepared:** January 10, 2018

### **Committee Future Outlook Statement:**

Current Committee Mission: The mission of the TRB Travel Survey Methods Committee is to advance the capabilities of public and private organizations and their leaders through the effective design and deployment of travel related surveys. This includes identifying effective sample frames and sampling techniques, question structure and format, supporting technologies, and opportunities for knowledge sharing across a wide range of transportation users and contexts.

Current Committee Scope: The Travel Survey Methods committee focuses on all types of transportation modes and customers, including motorized and non-motorized travel, personal and freight travel, household and business travel, private and public modes, short- and long-distance travel, workplace and recreational travel, visitor and other travel. The committee's scope encompasses survey design, sampling, instrument development, data collection, data processing, data analysis, and reporting of results to enhance the quality, usefulness and cost-effectiveness of survey products for policy and planning, including project evaluation and systems forecasting. It also includes surveys and data collection that measure activity patterns, including telecommunications, which allow people to fulfill needs without physical travel.

Factors and Influences that will shape the Committee's Activities: The following factors and influences are anticipated to shape the committee's activities:

- Fiscal constraints – cost of data collection, data transferability, cost-effective methods, and implications for sample size
- Sample frames and methods – emergence of new sampling frames, appropriateness of new sampling frames, and effectiveness of these frames, as well as self-selection bias.
- Technology – emerging technologies, influence on costs and survey participation, methods for translating data into traditional data formats, methods for mining secondary data (“big data”, cell phone location data, location aware data sets and social media)
- Respondents – respondent burden, survey fatigue, relevancy, identifying techniques to improve participation among hard-to-reach populations
- Data needs – models range from simple 3-step to advanced tour and activity-based models with similar core data needs but very different non-core data needs, question design; reliance on travel survey data to inform policy decisions; how to best capture freight movements within urban areas vs. long distance; understanding attributes beyond time and costs; advances in prospect theory;
- Survey administration – safety and privacy concerns, data ownership, maintaining confidentiality with location aware data
- Training and communication of latest research and state-of-the-art practices and standards, staying connected with survey research industry

### Committee Future Outlook:

Since its inception, the Committee on Travel Survey Methods has been at the forefront of defining and shaping the research agenda in travel surveys. The committee is poised to continue serving as a leader in the field and plans to continue to advance the capabilities of public and private organizations and their leaders through the effective design and deployment of travel related surveys.

The committee has four overarching goals for the future:

1. Methods: A longstanding committee goal remains improvements in the quality and usefulness of transportation surveys conducted at the local, state, and national levels. To this end, identification of current and future research needs within the field of travel survey methods is an important objective, particularly within the challenges of funding, respondent participation, modeling and policy data needs, and available technologies and sampling frames.
2. Data Needs: The committee is dedicated to developing an understanding of the types of questions and analytical problems that need to be addressed by the users of transportation survey data.
3. Communications: Given the current fiscal environment, there is a need to assist practitioners in developing approaches to better communicate the value of the travel survey data. In addition, the committee seeks to improve communications among data consumers, such that possible funding partnerships could be formed.
4. Training: To better ensure that the data are assembled, understood and put to good use, adequate training is imperative. The committee seeks to promote adequate opportunities for the continuing professional development of survey designers and data set users, as well as training of new persons in these roles.

### **Committee Plan:**

Emerging Issues inside and outside of the committee scope: The committee has a unique role in that it provides value to the transportation community through the identification of standards for state-of-the-practice surveys and guidelines for the development and evaluation of state-of-the-art surveys. In this role, the committee has to be aware of emerging questions and other issues from the modeling, policy, and other areas that rely on travel survey data. The committee also has to stay connected to the general survey research community, in order to ensure that standards and guidelines are consistent and reflective of best practices. It is critical for committee members to be aware of the emerging issues outside of the committee scope and to consider how the committee can respond to those issues.

Projects: The following list of projects will be used to accomplish the four main goals identified by the committee. Most of these projects move the committee forward on more than one goal.

1. Methods: the following research areas have been identified by the committee. These will be addressed through the development of research statements, calls for papers, committee presentations, and the organization of special sessions at appropriate conferences.
  - Household Travel Surveys or new technologies: Methods to improve respondent participation in travel surveys (using technology, social media, etc.)
  - Household Travel Surveys: Methods to obtain more representative travel survey samples (mitigating non-response)
  - Household Travel Surveys: Revisiting sampling approaches to mitigate coverage bias – how to effectively include cell samples, e-mail lists, and field address-based

- External Surveys: Evaluating alternative approaches to document trip movements into and through metropolitan areas (Bluetooth, secondary data from sources like INRIX/Streetlight and AirSage, etc.)
  - Freight surveys: defining freight and identifying the best methods to measure its movements
  - Freight surveys: identifying differences in freight movements within urban areas vs. the larger interstate movements and how these might inform appropriate survey design depending on modeling needs
  - Freight surveys: evaluating alternative sampling frames and identifying which is most appropriate based on the type of freight being surveyed
  - Stated-Preference surveys: understanding attributes beyond time and costs
  - Stated-Preference Surveys: research into the area of prospect theory
  - Stated-Preference surveys: research into the relationship between SP and behavioral economics
  - Workplace establishment surveys: identification of best practices for workplace surveys, including special generators (synthesis report?)
  - Airport surveys: identification of best practices (synthesis report?)
  - Long distance travel surveys: understanding state-of-the-practice and identifying research needs
2. Data Needs: Developing and maintaining strong partnerships with users of transportation survey data, including but not limited to TRB committees, data user communities, and groups like the International Association of Travel Behavior Researchers (IATBR) and the International Steering Committee on Travel Survey Conferences (ISCTSC).
  3. Communications:
    - Regular interaction with survey experts and data users from around the world, including committee members and friends, ensures active collaboration and dissemination of new techniques and opportunities. This includes partnership with members of groups like the American Statistical Association, International Association of Travel Behavior Researchers (IATBR), the International Steering Committee on Travel Survey Conferences (ISCTSC), and the American Association for Public Opinion Researchers (AAPOR). Interaction occurs through conference attendance, listserv participation, and other means. Useful information from these interactions is included in the committee's communications to members and friends and presentations at annual and other conferences and posted on the committee website ([www.travelsurveymethods.org](http://www.travelsurveymethods.org)).
    - Continued promotion of standards and guidelines through the Travel Survey Manual ([www.travelsurveymanual.org](http://www.travelsurveymanual.org) moving to [www.tfresource.org](http://www.tfresource.org)).
    - Identification of and increased presentation of best practices in (1) communicating the value of research to educate stakeholders on the importance of funding transportation surveys and (2) techniques to identify potential partners for sponsoring the collection of shared-use transportation survey data sets.
  4. Training: Training is accomplished through conference sessions and presentations, committee meetings, webinars, and participation at the conferences listed above. In addition, committee members and friends are actively involved in the development of new chapters and upkeep of existing chapters in the Travel Survey Manual. Moving forward, the committee will continue to conduct this type of training, as well as seek new opportunities for the continuing professional development of survey designers, data set users, and new persons in these roles.
  5. Membership Strategies: The committee membership consists of active survey experts from local, state, and national transportation agencies and businesses, from around the globe. The committee

is known for attracting large numbers of participants to its committee and subcommittee meetings, as well as its organized paper and poster sessions. Due to the nature of the committee's scope, we have no problems attracting a mix of young professionals and international members. We have good geographic, racial, and gender diversity, as well as a good mix of academic, government, and private sector participation.

6. Committee name and scope: no changes anticipated.

**Committee History:**

Committee Membership:

35 members (22 regular, 5 international, 4 young, 2 DOT, 1 emeritus)

Distribution:

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<b>Geographic Representation:</b>	
Northwest US	2
Southwest US	8
Central US	7
Northeast US	4
Southeast US	9
Outside US	5
<b>Total</b>	<b>35</b>

Organizational:

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<b>Employer Type:</b>	
Federal Government	2
State Government	3
Local/Regional Government	6
Academia	11
Consultant	10
Industry	2
Other	1
<b>Total</b>	<b>35</b>

Gender & Ethnicity Composition: 21 males, 14 females

Number of friends: 255

Liaisons with other committees: Travel Behavior, Urban Data, Transport. Planning Applications, Travel Demand Modeling

Subcommittees and their activities: Given the extensive scope, subcommittee activities facilitate focus while helping to ensure depth in committee contributions. Current subcommittees emphasize the following areas:

- Freight surveys – Chair Miguel Jaller (UC, Davis). Focus of this subcommittee is to understand goods movement, within and across regions, by industry sector and mode.
- Household travel surveys – co-chairs Jimmy Armoogum (IFSTTAR) and Stacey Bricka (MacroSys). Focus of this subcommittee is to appreciate trends and preferences, and anticipate urban futures for use in regional planning endeavors.

- New Technologies – Chairs Elizabeth Greene (RSG). Focus of this subcommittee is to determine how emerging technologies can improve survey quality (by reducing sample bias, respondent burden, and item non-response, while improving data accuracy).
- Stated response surveys – co-chairs Eric Molin and Matthew Beck. Focus of this subcommittee is to facilitate the use of complex choice scenarios for more reliable behavioral models and more accurate response forecasting.
- Transit surveys – co-chairs Mark McCourt and Kevin Tierney. Focus of this subcommittee is to enhance our understanding of existing and potential transit users, their behavior, attitudes, and opinions.

Papers: For TRB 2018, we received 34 papers – 8 for presentation only and 26 for both presentation and publication. We recommended that 18 be presented – 5 in a lectern session and 13 in a poster session and that we publish 5 of them (19.2% of those submitted for publication).