

Travel Survey Methods

TRB Committee A1D10

2004 Summer Events

Joint Summer Meeting of the Planning, Economics, Environmental, Finance, Freight and Management Committees, Park City, UT. July 25-27. Register at <http://www.trb.org/Conferences/Midyear/>

Mid-Year Meeting of Travel Survey Methods Committee, Park City, UT, in association with the TRB joint summer meeting, Park City, UT. Tuesday, July 27, 6pm.

Post-Meeting Workshop, *Recommending Standards for Personal Travel Surveys*. Park City, UT. Tuesday, July 27, 2 - 6pm, Wednesday, July 28, 8 - 5pm. Register at <http://www.trb.org/Conferences/Midyear/>

Seventh International Conference on Travel Survey Methods, Los Suenos Marriott Hotel, Costa Rica, August 1-6. Register at <http://www.its.usyd.edu.au/isctsc/costaricaconference.htm>

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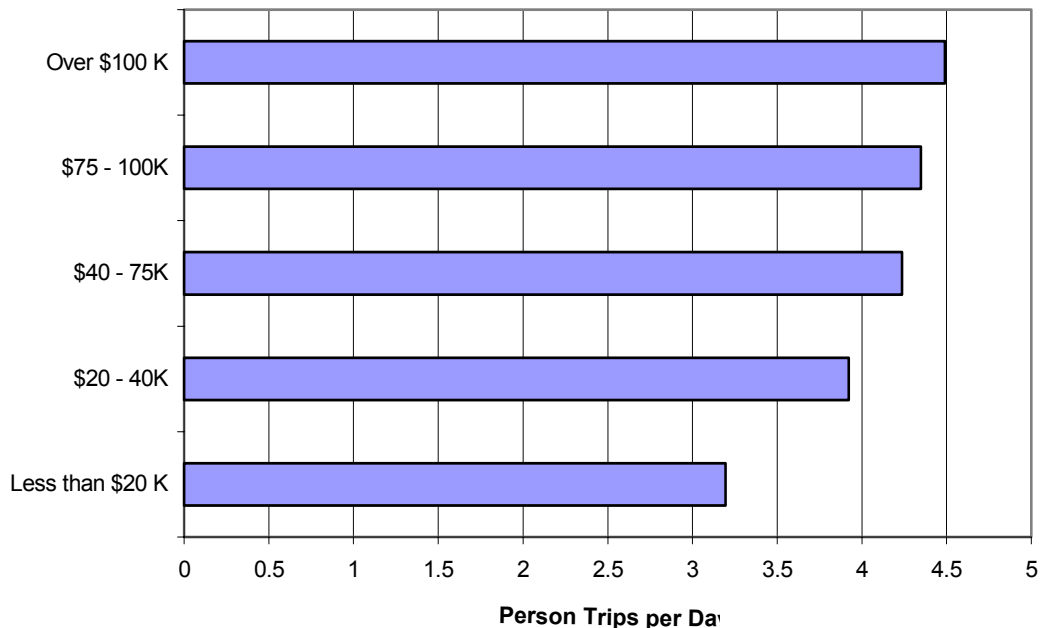
Focus on Transportation Data



Did you know?

We tend to think that richer households make a lot more trips than poorer, and that's true—but often because poorer households are also smaller. The average person in a household earning 40,000 dollars a year makes a quarter of a trip less per day than a person in a household earning over \$100,000 a year.

Average Trips per Day per Person by Household Income



Source: 2001 National Household Travel Survey

Focus on Methods Research: New Studies from *Public Opinion Quarterly*, Spring 2004

The Role of Topic Interest in Survey Participation, *Robert Groves, Stanley Presser, Sarah Dipko.*

Response rates have traditionally been used as indicators of survey quality, based on the fact that nonresponse error is partially a function of the response rate. Three recent studies have challenged this practice having found little relation between variation in response rates and changes in nonresponse error. These studies suggest that respondents and nonrespondents often do not differ on commonly estimated statistics. Thus, research is needed to identify the circumstances under which nonresponse produces nonresponse error.

One effort along these lines is leverage-salience theory which posits that people vary in the importance they assign to different aspects of a survey request. One of the many features thought to be highly significant is topic (or subject matter). This article presents findings from a randomized factorial experimental design that exposed different populations with known characteristics to telephone survey questions on different topics. The authors hypothesized that when the topic of the survey was related to known characteristics of sample persons, their response rates would be higher than when a topic of the survey was not directly related to those characteristics. Persons cooperated at higher rates to surveys on topics of likely interest to them—roughly 40 percent higher cooperation was found for topics of likely interest than for other topics. The authors noted that the overall effects on total response rates were dampened by noncontact nonresponse.

Did the effects of survey topic interest impact survey estimates? No. The effects were mitigated by the relative size of the subpopulation interested in the survey topic and the degree to which the survey request highlights the topic.



Methods for Testing and Evaluation Survey Questions. *Stanley Presser, Mick Couper, Judith Lessler, Elizabeth Martin, Jean Martin, Jennifer Rothgeb, and Eleanor Singer.*

This thought-provoking article (worth reading in its entirety) examines the role of pre-testing for improving questionnaires. Conventional pretests are based on the assumption that questionnaire problems will be found out either by the answers elicited (don't know and refusals) or through interviewer debriefing. As awareness of the limitations of conventional pre-testing has grown, there has been a subtle shift in the goals of testing. Rather than an exclusive focus on identifying and fixing overt problems, survey designers want to improve data quality so that measurement matches the survey objectives. New testing methods have been adapted from other uses, including cognitive interviewing, behavior coding, formal respondent debriefings, experiments and statistical modeling.

Computerized modes of administration pose different challenges, as do surveys in more than one language and of special populations. Methods must be developed to test the architecture and logic, visual presentation, and protocols developed for translation and assessment.

Focus on Methods Research (cont.)



A Comparison of Web and Mail Survey Response Rates. *Michael Kaplowitz, Timothy Hadlock and Ralph Levine.*

This research measured the response rates to a survey conducted via post or e-mail to a large population that had full Web access—students at Michigan State University (MSU), and whether postal pre-notice and/or reminders had a significant impact on e-mail responses. The positive effect of postal pre-notification on both mail-out and telephone surveys has been demonstrated.

A tailored design included four groups with different treatments. Group 1 received four contacts: a preliminary postcard, a hard copy survey with a cover letter explaining the purpose of the survey, a follow-up/reminder postcard, and a replacement hard copy and letter to non-respondents. Group 2 received two contacts: a preliminary postcard and an e-mail with the same explanation of the survey and a hyperlink to the web-version of the questionnaire. Group 3 received three contacts: the preliminary postcard, the e-mail as described for Group 2, and a follow-up reminder/postcard. Group 4 received an e-mail with no pre-contact and a follow-up postcard, and Group 5 received only one contact: the e-mail containing the explanation and the link to the survey.

There was a clear statistical separation in response rates between the groups that received pre-notification (Groups 1, 2, and 3) and those that did not. There was no statistically significant difference in the response to the web-survey and response to the mail-out survey (29.7% and 31.5% respectively) when both were preceded by a pre-notification postcard. The mail-out survey however cost \$10.97 per response compared to \$1.31 for the web survey (including only the direct costs of printing, postage, envelopes, programming and hosting). The findings suggest that a web survey can achieve comparable response rates to a surface mail survey if the web survey is preceded by a post-card pre-notification.

An interesting caveat was that a significant age difference in respondents to the web version and mail-out version of the questionnaire was found. Further research examining possible demographic differences in response would be enlightening.



Progress in Sampling Cell-Phone Numbers?

Survey agencies face the challenge of including cell phone numbers in RDD samples. One barrier to doing so with any type of accuracy is the fact that there is no directory (or database) that can be used to generate “seed numbers” for RDD samples of cell phones. *Fortune* magazine (June 28, 2004) reported that a group of wireless companies—including Cingular, Nextel, Sprint, T-Mobile, and Alltel—are cooperating to compile a national database. The consortium (named Wireless Directory Assistance) hopes that the service could be launched later this year. This is not yet the boon it could be to survey industry. Verizon Wireless, the largest cellular provider in the U.S., has already indicated that it will not participate in the directory. Also, wireless companies will let customers decide whether they want to be listed in the database. (It will cost up to \$60 a year for the privilege of being unlisted.) A similar “opt in” initiative in Australia has drawn only 10% of wireless numbers.

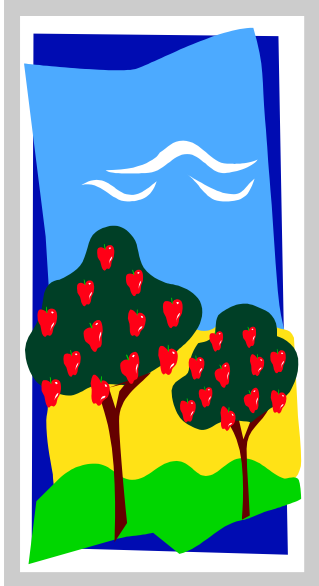
2004 Fall Events

National Household Travel Survey: Understanding our Nation's Travel, sponsored by Transportation Research Board and Bureau of Transportation Statistics (BTS), Washington, DC, November 1-2. Register at <http://trb.org/calendar/event.asp?id=125>.

This National Household Travel Survey (NHTS) Data Users Conference will provide a forum for users of this national dataset to discuss and learn about methodological issues, analysis and estimation applications, and findings related to transportation policy, planning, and modeling. The conference is being held approximately one year after the release of the final 2001 data, and coincides with the planning of future Department of Transportation household travel behavior surveys. Users new to the NHTS or those who are seasoned experts are encouraged to attend this conference. Bringing together a diverse set of data users will develop a community of users who better understand the utility and analytic capability of the data and who then will be able to provide feedback to inform the design of future national travel behavior surveys.

Research on Women's Issues in Transportation Conference, sponsored by Transportation Research Board, Chicago, November 18-20. Register at <http://www.trb.org/Conferences/Women/>

The Research on Women's Issues in Transportation Conference will review in a comparative context the state of the art in a variety of topics related to women's travel patterns, needs, and behavior. The Conference is designed to identify the additional research and data needed to inform public and private policies that directly or indirectly address women's mobility, security, and safety concerns. The Conference will focus on data-driven comparative analyses of 1) men and women's travel patterns or safety or security risks currently and over time, 2) different sub-groups of women, and 3) women internationally.



Opportunity for Committee Member Involvement . . .

Under sponsorship of the Travel Survey Methods committee, The Bureau of Transportation Statistics (BTS) will hold a four-hour workshop at the 2005 Annual Meeting for data users who have been analyzing or plan to analyze data from the 2001 National Household Travel Survey (NHTS). The workshop is titled, **Nuts and Bolts of the 2001 National Household Travel Survey Data**. In addition to covering survey methods and content issues, the workshop will focus on technical aspects of working with the data, including dataset structures, identifying the appropriate level of analysis, selecting and using weights, statistical procedures, and variance estimation using SUDANN and Wes Var.

Committee members who are interesting in assisting with the planning or conduct of the workshop are encouraged to contact: Joy Sharp at BTS, joy.sharp@bts.org.