

Gone in Sixty Seconds: Thought Piece on Communicating Travel Demand Modeling to Survey Respondents

Stacey Bricka and Sudeshna Sen, NuStats

sbricka@nustats.com, ssen@nustats.com

512-306-9065, ext 2240 (Stacey) or ext 2247 (Sudeshna)

In addition to the challenges of communicating travel demand forecasting models and their resulting forecasts to the general public is the challenge of concisely, and at an appropriate literacy level, communicating to survey respondents the ultimate purpose of the travel surveys which produce the data to support these models. The need for a clear, concise, and informative message of the importance of the survey effort is essential for maximizing participation rates and securing the data needed to develop regional travel demand models (and ultimately communicate them/their results to the general public). However, unlike the general communication process of what modeling is and the resulting forecasts, which might take place in public meetings lasting at least an hour or via a passive web site, the survey environment allows only a brief, one to two minute window to perform this communication (for telephone surveys) and one to two brief paragraphs in survey materials. The objectives of this thought piece are (1) to review the importance of this communication from a theoretical and practical point of view, (2) to present alternative wording currently used to communicate this information, and (3) to surmise the underlying challenges associated with communication of information effectively.

The main theory used to explain why people participate in surveys is the Social Exchange Theory. First applied to the survey research context by University of Washington researchers in the 1970s, this theory is based on a “central premise that the exchange of social and material resources is a fundamental form of human interaction.”¹ Essentially, when invited to participate in a survey, potential respondents decide to participate only after evaluating the costs and benefits of doing so. The costs in the case of household travel surveys include the time (about an hour on average) as well as the disclosure of personal information. The benefits of participating are clear to practitioners, but are difficult to concisely communicate to respondents in the opening statement and invitation of telephone surveys or survey materials. However, per the social exchange theory, the weight of these opening statements is critical in the decision-making process of potential respondents. Thus the challenge is how to explain in sixty seconds the importance of the survey in developing long-range transportation plans for the region. This is compounded because unlike some surveys, the results of participating are not immediate: reporting your household travel patterns will not result in immediate improvement in a commute trip or how much time the household members spend traveling to their desired activities but will instead be realized in twenty years (the planning horizon).

Table 1 summarizes the opening statements (both by telephone as well as written materials) for four recent travel surveys. These surveys were selected to represent a cross-section of approaches across three different firms: the recent 2007 large-scale household travel surveys in Chicago and Washington DC, the 2001 Bay Area Travel Survey (BATS), and the 2001 National Household Travel Survey (NHTS). In addition to providing variation by firm, the NHTS survey

¹ <http://www.washington.edu/research/pathbreakers/1978a.html>

required approval by the Federal Office of Management and Budget, whose main concern is respondent burden and not the technical application of the data to support the modeling process.

The opening statements used in the telephone mode of all four household travel surveys are short and emphasize in a concise manner the ‘purpose of the study’ and ‘what the information will be used for’, while assuring the potential respondent that their personal information will be kept confidential (see Table 1). These opening statements are critical to solicit the participation of potential respondents and hence need to communicate the primary purpose and the most important benefit of participating in the survey that will appeal to the potential respondents immediately and interest them to participate in the survey.

As compared to the opening statements used in the telephone mode of the surveys, the written materials i.e. advance letter and brochure used in the surveys are more elaborate with more information on the objectives of the survey and benefits of participating in the survey (as indicated in Table 1). However, written materials face similar time constraints in addition to space and literacy constraints. In particular, the visual presentation of the concise information within the limited space of letter, brochure or postcard needs to raise sufficient interest in the potential respondent within a few seconds of reading the material to convince the potential respondent to participate in the survey.

Table 1. Opening Statements of Communication with the Potential Respondents

	Telephone Mode	Written Materials	
		Advance Letter	Brochure
2007 Chicago Household Travel Survey	Hi my name is _____, and I'm calling on behalf of the Chicago Metropolitan Agency for Planning. This is not a sales call. We are conducting a research study known as the 'travel tracker' survey and it involves collecting information about people's transportation habits. Your participation will help Chicago plan future transportation improvements to better meet your needs and the needs of other Chicago area residents.	We need your help to plan for transportation improvements in «MUNIC». The Chicago Metropolitan Agency for Planning (CMAP) is putting together a new plan for guiding future growth and transportation investment in the greater Chicago region. As part of this plan's development, CMAP is reaching out to residents of «MUNIC» to participate in our Travel Tracker Survey. By sharing your household's travel characteristics with us, we can better plan for transportation improvements to meet your needs.	<p>"Help the Greater Chicago region prepare for its future transportation needs! Find out how to participate inside"</p> <p><i>What is the Travel Tracker Survey?</i></p> <ul style="list-style-type: none"> - Collects information on travel patterns – when, where, how and why. - Results will be used to show travel patterns throughout the region. - Provides information necessary to determine future transportation investments and priorities. <p><i>Why is my participation so important?</i></p> <ul style="list-style-type: none"> - Our last survey was done fifteen years ago and we need to understand changes in travel behavior since then. <p><i>Why do you need detailed personal information?</i></p> <ul style="list-style-type: none"> - Your information, combined with that of other participating households, will be used to provide a general profile of everyone in the greater Chicago area. - Personal characteristics are good predictors of household travel patterns. With this information, we can help identify where future transportation investment is needed.
2007 DC Household Travel Survey	Hi, my name is INTERVIEWER'S NAME and I'm calling on behalf of the Metropolitan Washington Council of Governments. We're interviewing families in [jurisdiction] about their travel. The information collected through this study will benefit your community by helping transportation planners more accurately identify transportation needs. We're conducting a household travel survey to understand why and how people travel as part of planning for future transportation needs. You may have received a letter in the mail with information about this study. The study is purely a research effort, your participation is voluntary, and your answers will be completely confidential.	<p>Regional transportation planners need your help to ensure that local road and public transport networks meet demand. This is why your household has been randomly selected to be part of a special focus group for a survey of daily travel in the Greater Washington Metropolitan area.</p> <p>Why should you participate?</p> <p>Transportation improvements are essential for your household's access to jobs, schools, health care, and other important daily activities. As transportation planners for the region, we need data on how, when, where, and why people travel. This information will support important transportation decisions including improving Metrorail and local bus services as well as improving or building new roads, sidewalks, and bike routes.</p>	NA
2001 Bay Area Travel Survey	Hello, I'm _____ calling from MORPACE International on behalf of	NA	NA

	<p>the Bay Area Metropolitan Transportation Commission (MTC). MTC is conducting an important activity and travel survey within the region. We are not selling anything.</p> <p>May I please talk with someone who can speak for your household, who is over 18 years old?</p> <p>The results of the survey will be used to determine regional road and transit needs for the next decade. Your cooperation is important.</p>		
2001 National Household Travel Survey	<p>Hello, this is {INTERVIEWER'S NAME} and I'm calling for the U.S. Department of Transportation. We are conducting the National Household Travel Survey. The purpose of this survey is to understand your travel and to help improve transportation in {Wisconsin/New York/your area}. Your participation is voluntary, and your answers will be completely confidential.</p>	<p>Are you concerned about traffic? Travel and traffic have increased everywhere. The U.S. Department of Transportation is conducting a survey of people all across the nation to better understand travel and evaluate plans for the future. The National Household Travel Survey is about how we travel in our daily lives. We are interested in all of the ways that you travel from one place to another, including trips by car, bus, train, airplane and boat, as well as walking and bicycling trips.</p>	<p><i>We need YOU...</i></p> <p>Your participation helps us make the right decisions about future improvements.</p> <p><i>What is it all about?</i></p> <p>The U.S. Department of Transportation collects information about your travel to understand how well the roads and highways, bus, and rail system are working, and to plan for the future. We are asking you to help us by taking part in the survey. Your answers help us build a snapshot of how, when, and why people travel in their daily lives.</p> <p><i>What's in it for You?</i></p> <p>Satisfaction: Good decisions need good information, You make a difference!</p> <p>Importance: We picked You to represent 4,000 others. Your travel information is very important.</p> <p>Enjoyment: Our telephone interviewers are well-trained and courteous. We hope you will enjoy talking to them.</p> <p>Security: Your name, address, telephone number, and other personal information WILL NOT be released to anyone. We respect and protect your privacy!</p> <p>Appreciation: On behalf of the project team, we thank you for your time, trust, and participation!</p>

Clearly, it is a challenge to effectively communicate with potential respondents within a one-to-two-minute time constraint. As part of the development of the Chicago statements, community group meetings were held to review the survey materials and identify activities necessary to support stronger respondent participation. Latino residents were looking for information regarding how participation in the survey would increase community well-being. African American participants indicated they needed to hear about community leader support for the survey effort. Younger citizens (ages 18 to 24) wanted to hear about the survey process itself and “and how the data requested today will result in improved transportation infrastructure in the future.”² This input shows the diversity of what is needed in those first one to two minutes to convince residents to participate in household travel surveys. While it is possible to develop tailored statements, typically, these statements are read prior to the questions which obtain the

² NuStats. Chicago Regional Household Travel Inventory White Paper on Maximizing Participation (2006). www.nustats.com/chicago (see “survey instruments” tab).

demographic details needed to determine which statement should be offered to the potential respondent.

It is interesting to note that a common expectation of household travel survey participants is that they should be asked for their route of travel. For them, the fulfillment of the study's purposes as described in the various phrases above requires the provision of details regarding route choice. However, from a modeling standpoint, this information is not required as the traffic is assigned to the network using origin and destination flows provided by the respondents. So while respondents appear to understand the task being asked of them, and by agreeing to participate, appear to understand sufficiently the benefits of participating, their lack of understanding about the modeling process leads to this common mis-expectation.

In sum, in order to combat declining participation rates, it is critical that the first minute or two of the surveys are able to concisely and clearly explain the reason for the survey and the benefits of participating to the respondents. This paper reviews different phrasing used to introduce the concept of the survey to respondents and request their participation. The focus clearly varies across survey firms, and leaves the respondents with an expectation regarding the data they will be providing as part of this effort, which is not exactly correct. In order to improve survey participation, practitioners must focus on statements that are concise enough to be presented within one to two minutes, yet non-technical enough that the general population can understand the purpose of the survey and the benefits realized from participating. In today's busy society, we only have one chance and need to make every word count. The challenge is in identifying what these words are and getting the most out of each survey contact. To a large extent, this can be identified through the general discussions regarding communicating this information via public meetings, but requires taking the key concepts and arranging them for a powerful opening survey statement.