

## SUPPORTING STATEMENT

### ASSESSMENT OF TRANSPORTATION PLANNING AGENCY NEEDS, CAPABILITIES AND CAPACITY

#### **Part B. Collections of Information Employing Statistical Methods.**

No statistical methods are being used in this survey

Following the survey effort, survey results will be analyzed to:

- Describe technical in-house capabilities and tools, as well as intentions to build in-house capacity, products, and tools as opposed to retain consultant assistance. This summary will categorize practitioners by the complexity of the analysis conducted.
- Determine the intensity of need for new tools, products, training, and technical assistance needed for FHWA to develop to support agencies' efforts in mitigating risk (such as cataloging commonly-used analytical tools). Other types of models, tools, spreadsheets being used by agencies to conduct analysis and research will also be included.
- Provide a detailed review and categorization of the open ended responses to the survey to categorize respondents by the complexity of the analysis they are required to perform and/or to develop more detailed information regarding specific tools, products, or services that might benefit other agencies in mitigating risk.

**Complete Part B of the supporting statement only if the IC contains statistical methods. The following five questions must be answered if the IC involves statistical methods. You must also request a review and concurrence from the Bureau of Transportation Statistics before sending it forward to OMB.**

1. Describe potential respondent universe and any sampling selection method to be used.

We will survey state DOTs, RPOs, MPOs, stakeholders, and toll authorities across the country, focusing on their current quantitative methods and their related challenges. The survey will be conducted to better understand the state of the practice in transportation planning analysis and common risks in planning analysis, including both technical (e.g., deficient methodology) and non-technical (e.g., deficient communication) risks.

Personnel at MPOs/COGs, state DOTs, RPOs, not-for-profit organizations, and toll authorities will be invited to complete the survey. The entire population of MPOs and DOTs, as well as the 62 US tolling authorities will be invited, which indicates a potential of approximately 500 agencies invited to complete the survey.

2. Describe procedures for collecting information, including statistical methodology for stratification and sample selection, estimation procedures, degree of accuracy needed, and less than annual periodic data cycles.

For each agency, one individual at the agency will be designated as the contact person and sent a survey invitation. That contact person will have the opportunity (if desired) to assign sections of the survey to different staff within the agency. Alternatively the contact person will be able to decide to complete the entire survey themselves. This preference will likely vary by agency size and level of knowledge.

The survey will be a web-based instrument and utilize the same branding instrument (such as the TMIP website and logo and the TPCB website and logo). From a data validation standpoint, the innovative web-based survey instrument offers superior logic-checking and automation over other methods of data collection. This includes:

- Automated skip patterns: The survey (rather than the respondent) manages skip patterns and question logic. This eliminates errors and translates to a lower burden on the respondent(s) to take and complete the survey.
- Automatically validated input (where possible and desired): This logical check of a respondent's answers is based on specifications set in the questionnaire design process which then improves data quality and saves time in data preparation and review. For example, a respondent cannot select both "none of the above" and one or more of the other answer choice options in a "select all that apply" question.

3. Describe methods to maximize response rate.

Survey invitations and reminders will be sent to the email address of the contact person at each agency. The contact person will receive up to a total of four emails over three to four weeks. The notifications proceed as follows: an initial email invitation, a reminder email, a second reminder email, and a final email reminder. After the initial invitation email, reminders are only sent to agencies that have not yet completed the survey. The content of each email includes brief context on the purpose and goals of the survey, as well as the study sponsor. The email also includes the weblink to take the survey and the contact email address (or the respondent can reply to the email). At this time it is anticipated the study email address will be: [survey@tmip.org](mailto:survey@tmip.org) and [hepp@dot.gov](mailto:hepp@dot.gov). It is anticipated that the survey will be available to respondents for approximately three to four weeks in total. This timeframe allows an adequate number of days to send reminders, to account for vacations and holiday periods, and to allow the responding agency to locate or research responses for specific answers. Recognizing that the length and difficulty of the survey will impact response rates, it is estimated that the survey will have an overall response rate of approximately 20-30%. This means it is anticipated that approximately 100-150 agencies will complete the survey. Because the survey will be administered to public agencies, there will be no incentives offered, and no personal information will be collected.

4. Describe tests of procedures or methods.

Survey Administration Process:

The survey will be a web-based instrument compatible with desktop computers, laptop computers, tablets, and smartphones. One person from each agency will be invited by email to participate in the study. Communication is conducted by email with a telephone option. No incentives are being offered for this study

**Statistical Methods:**

Straight tabulations of each question will be reviewed during analysis  
Cross-tabulations of each question will also be reviewed during analysis  
The answer choices for continuous question variables will be grouped for analysis. An example of a continuous question is asking a respondent to type in their commute distance to work. A categorical variable is rather asking a respondent which answer choice best represents their commute distance (0-5 miles, 5-10 miles, etc.)

Given the expected small sample size (less than 500) for this study, advanced statistical methods such as cluster analysis or regression testing will not be conducted. Rather the focus will be on benchmarking the state of the industry and reviewing qualitative data provided in the survey (open-end comments, etc).

**Respondents:**

State DOTs, RPOs, MPOs, and toll authorities across the country will be invited.  
Based on agency size, it is anticipated that 1-3 personnel at each agency will participate in the survey. The entire population to be invited to the survey is therefore approximately 500 agencies across the US

**Estimated Average Burden per Response:**

It is estimated that it will take approximately 20 minutes for each agency to complete the survey

**Pilot (Test of Procedure):**

A similar survey was conducted in Spring 2013 to the same population (of agencies) for an FHWA MOVES Air Quality. Feedback from the pilot and main survey effort for that study have been incorporated into the questionnaire and administration designs for this study

An informal pilot to 3-6 agencies will be conducted whereby feedback is requested for ways to make it easier for agencies to participate. These pilot agencies will complete the online survey and be invited to provide feedback by email or over the telephone. Any agency that participates in the pilot will be given the option of participating in the main data collection effort (or not).

5. Provide name and telephone number of individuals who were consulted on statistical aspects of the IC and who will actually collect and/or analyze the information.

Elizabeth R. Greene, Senior Consultant

Phone: 801-736-4100 x4907

Kenneth Petty, Senior Transportation Planning  
Phone: 202-366-6654 Email: [kenneth.petty@dot.gov](mailto:kenneth.petty@dot.gov)