

**Countermeasures That Work (9<sup>th</sup> and 10<sup>th</sup> Editions) and Countermeasures At Work (1<sup>st</sup> and 2<sup>nd</sup> Editions)**

**SUPPORTING STATEMENT**

**Part B.**

**COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS**

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## **B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

This National Highway Traffic Safety Administration (NHTSA) proposed information collection will not employ statistical methods to analyze the data collected from respondents. This is qualitative data, which will be analyzed by breaking out the responses to interview questions into themes based on the content.

The objective of this study is to collect end-user feedback about updates to the *Countermeasures That Work* guide and to collect countermeasure use information for the *Countermeasures At Work* guide from representatives from the SHSOs and/or local jurisdictions, representatives from the Governors Highway Safety Association (GHSA), State Coordinators from across the United States, and other important stakeholders. The goal is to obtain a group of respondents with representation from each state across the United States or at the minimum one representative from one of the states under the 10 NHTSA regional offices. The respondent sample is not meant to be a random or representative sample of the United States.

The interview questions will focus on key information needs for the document, opinions on document structure, format, and content, opinions about alternative presentation formats, opinions about how the *Countermeasure At Work* guide would be used, what information should be included, and if respondents have information about good locality examples. The data collected in this study will help us update the current *Countermeasures That Work* and assist in the development of *Countermeasures At Work* guide.

**All surveys and survey questions were developed specifically for the guides' information collection to capture information relevant to the updating and developing the guides.**

### **B.1. DESCRIBE THE POTENTIAL RESPONDENT UNIVERSE AND ANY SAMPLING OR OTHER RESPONDENT SELECTION TO BE USED.**

Participants in this study will be a sample of representatives from the SHSOs and/or local jurisdictions, representatives from the Governors Highway Safety Association (GHSA), State Coordinators from across the United States, and other important stakeholders. The potential respondent universe is all state and local practitioners who are end-users/readers of the *Countermeasures That Work* guide as well as practitioners in localities that are contacted for countermeasure specific information for the *Countermeasures At Work* guide. The respondents for these surveys will be selected based on job position, knowledge of domain, scan of literature for countermeasure implementations, and recommendation from NHTSA or GHSA Subject Matter Experts.

The results from the data collected from the end-user interviews conducted for *Countermeasures That Work* will not be published, and will only be used for internal purposes--i.e. to plan the update and development of next edition of the *Countermeasures That Work* guide.

A maximum of 50 respondents will be surveyed for the *Countermeasures That Work* guide. For these types of user-feedback interviews, the Contractors experience is that saturation of new information typically occurs with around 20-30 interviewees. However, one objective for the *Countermeasures That Work* guide is to engage interviewees from the 10 NHTSA regions and a variety of different States, so the additional number of respondents included in the estimate are intended to capture some of these regional differences.

For the *Countermeasures At Work*, a maximum of 200 respondents will be interviewed: 100 for the 1<sup>st</sup> edition, and 100 for the 2<sup>nd</sup> edition. The *Countermeasures At Work* guide will provide detailed information about localities that implemented the 40 countermeasures (20 localities added in each edition) with 4- and 5-star ratings. The *Countermeasures That Work* guide will provide real world examples and details on localities where specific countermeasures were put into place. For each of the 40 countermeasures, a set of 3 to 5 localities will be selected that together provide a variety of perspectives on implementation, funding, stakeholder involvement, public perception, evaluation outcomes, locality size, etc. This will mean that we will have to interview up to 5 respondents for each of the 20 countermeasures. Therefore, we expect to interview 100 respondents for each edition.

## **B.2. DESCRIBE THE PROCEDURES FOR THE COLLECTION OF INFORMATION.**

### **B.2.1. PROCEDURE**

End users will be identified with help from the NHTSA program specialist at the 10 NHTSA regional offices. The program specialist will recommend a list of potential end users that will then be approached by the contractor (Battelle) to schedule a formal interview. Along with scheduling the interview, Battelle will also send out read-ahead materials and interview guides so that the interviewee is familiar with the objectives of the interview as well as informed about the questions that will be asked in the interview.

End user data will primarily be collected in telephone interviews using interview booklets provided to participants in advance of the interview. Some interviews may be conducted in person, if it is possible to schedule meetings at convenient locations (e.g., during the annual Governors Highway Safety Association (GHSA) meeting, or within driving distance of Battelle's Seattle Research Center).

Each approach will start with a brief presentation that will provide background information and illustrate the issues that we are trying to address. This will be followed by structured discussions and include opportunities for the participants to ask questions and provide suggestions. To analyze the data, we will use qualitative data analysis techniques such as content analysis to identify persistent themes in the responses. Other more structured data, such as categorical data, will be tabulated. The same basic interview and analysis approach will be used for the interviews for both guides— *Countermeasures That Work* and *Countermeasures At Work* – just the specific questions asked will differ.

### **B.2.2. SAMPLE SIZE**

This will be an opportunistic sample. The goal will be to get SHSO, state, or local representatives from all fifty States from across the United States; however, if this does not materialize, the aim will be to get enough of a sample size to obtain saturation of common opinions. At the minimum, the sampling goal is to get representation from each of the 10

NHTSA regions covering multiple States within each, which would capture some of the regional differences and challenges. The respondents for these surveys will be selected based on job position, knowledge of domain, scan of literature for countermeasure implementations, and recommendation from NHTSA regional specialist or Governors Highway Safety Association Office Subject Matter Experts.

**B.3. DESCRIBE METHODS TO MAXIMIZE RESPONSE RATES AND TO DEAL WITH ISSUES OF NON-RESPONSE.**

The participants for each state or locality will be identified based on recommendations from the NHTSA program specialist in each of the 10 NHTSA regional offices. Battelle will coordinate with the NHTSA regional offices to identify and coordinate interviews with suitable representatives for each locality of interest. If representatives are unable to participate (i.e., key personnel are no longer with the department), then the Contractor will work with NHTSA to find a suitable “stand-in” within the locality. If that is not possible, then representatives from other candidate localities for that countermeasure approached for an interview. The respondents for these surveys will be selected based on job position, knowledge of domain, scan of literature for countermeasure implementations, and recommendation from NHTSA or GHSA Subject Matter Experts.

**B.4. DESCRIBE ANY TESTS OF PROCEDURE OR METHODS TO BE UNDERTAKEN.**

No test of procedures or methods will be conducted for the interviews. The contractor has previously used a structured interview process to obtain similar information from transportation professionals in similar studies conducted for the Department of Transportation (Lichty, Bacon, & Richard, 2014; Cluett et al., 2012; Lichty, Campbell, & Richard, 2012; Brown et al., 2010). In addition, the survey of end users for *Countermeasures That Work* has been used previously on a smaller scale and produced informative comments and suggestions.

**B.5 PROVIDE THE NAMES AND TELEPHONE NUMBERS OF INDIVIDUALS CONSULTED ON STATISTICAL ASPECTS OF THE DESIGN.**

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## REFERENCES

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- Lichty, M. G., Campbell, J. L., and Richard, C. M. (2012). *Connected vehicle DVI design research and distraction assessment. Activity 3: Human factors design guidelines development. Task 13: Conduct a stakeholder and end-user feedback study* (Report to Virginia Tech Transportation Institute). Seattle, WA: Battelle Center for Human Performance & Safety.
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