



U.S. Department of Justice

Office of Justice Programs

*Bureau of Justice Statistics*

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*Washington, D.C. 20531*

**MEMORANDUM**

To: Lynn Murray  
Clearance Officer  
Policy and Planning Staff  
Justice Management Division

Through: James P. Lynch  
Director

A handwritten signature in black ink, appearing to be "JPL", written over the name "James P. Lynch".

From: Michael Planty  
Statistician, Project Manager

Date: June 28, 2011

Re: BJS Request for OMB Clearance for Cognitive Testing under the National Crime Victimization Survey (NCVS) Redesign Generic Clearance, OMB Number 1121-0325.

The Bureau of Justice Statistics (BJS) requests clearance for cognitive interviewing tasks under the OMB generic clearance agreement (OMB Number 1121-0325) for activities related to the National Crime Victimization Survey Redesign Research (NCVS-RR) program. BJS, in consultation with Westat under a cooperative agreement (Award 2010-NV-CX-K077 *National Crime Victimization Survey on Sub-National Estimates*), has planned a low cost Companion Survey (CS) pilot to test two survey approaches. These approaches use an address-based sampling (ABS) design in an effort to produce small area estimates of criminal victimization. A comprehensive project summary can be found in Attachment 1 "*NATIONAL CRIME VICTIMIZATION SURVEY (NCVS) COMPANION SURVEY (CS)*."

In accordance with the generic agreement, BJS is submitting to OMB for clearance the materials for the pretesting activities associated with the companion survey. BJS wishes to use the approved generic clearance for cognitive interviewing to develop and test screener questionnaires for this collection. The overall goal of the cognitive tests is to ensure that the screeners function in a way that encourages sampled respondents to provide a telephone number and to generally respond to the screeners. This initial clearance will be followed by a request to field a pilot study to test the ABS survey approaches in 2012.

## **Overview**

Since 2008 BJS has initiated numerous research projects to assess and improve upon the core NCVS methodology. During 2009 BJS met with various stakeholders, including the Federal Committee on Statistical Methodology and representatives from state statistical analysis centers, state and local law enforcement agencies, the Office of Management and Budget, and Congressional staff to discuss the role of the NCVS. The discussions included the need for sub-national estimates and the challenges and potential methodologies for providing these estimates. The purpose of the current research is to develop and evaluate a cost effective sub-national companion survey of victimization.

BJS is currently researching a number of methods to produce estimates at the sub-national level. These methods include both direct and indirect estimation techniques. One option is to expand the core NCVS sample and to restructure the sampling plan to produce state-level estimates. Other options involve the production of indirect estimates using existing data. The current project is intended to determine whether a low-cost option is viable prior to the development and implementation of a large-scale effort to generate sub-national estimates.

BJS has planned an NCVS Companion Survey (CS) pilot to test two survey approaches that use address-based sampling. One approach, referred to as "Approach 2B" or a "telephone number harvest", will screen by mail only those addresses for which a valid telephone number from directory services is not available. The purpose of this mail screener is primarily to obtain a telephone number. The second approach, referred to as "Approach 2C" or the "two-phase ABS hybrid", will screen by mail all selected addresses with a goal of identifying households in which one or more adults were likely to have been the victim of a crime. In addition to obtaining a telephone number, the screener is designed to collect information to allow for oversampling of households with a reported victimization and other information that can be used to support model-based small-area estimates (SAE).

For both approaches, we will conduct a telephone version of the core NCVS interview with sampled households, including a household informant and one or two randomly selected adults. The goals of the pilot study are to assess each of the approaches in terms of cost, data quality, and effectiveness at supporting blended SAE.

## **Cognitive Testing**

For the current request, we are asking for clearance to conduct cognitive testing of the two screener options. In a broad sense, the goal of the cognitive interviews is to identify and correct features of the screeners that will encourage overall response. More specifically, the cognitive interviewing is designed to determine whether the draft screener items encourage sampled respondents to provide a telephone number. The cognitive test will assess the language used, the layout and design, and the impact of other questions. All cognitive interviews will be audio and video recorded for note-taking purposes only.

Both screeners will undergo cognitive testing by Westat survey methodologists. The testing protocol is included as Appendixes A.1 and A.2 and an informed consent form is provided in

Appendix B. Because these instruments are self-administered, we will use a retrospective debriefing approach. A retrospective debriefing consists of allowing the respondent to complete the questionnaire the way he/she would at home. The survey methodologist observes the respondent as he/she works through the questionnaire and notes any issues or potential issues. Once the respondent has completed the questionnaire, the methodologist reviews the answers and asks the respondent to explain what his/her answers mean. Any disconnect between the intended meaning of the question and the respondent's interpretation of the meaning often emerge at this point. The methodologist will review with the respondent any of the notes made while observing the respondent completing the questionnaire. Scripted probes are also delivered at this point.

We prefer a retrospective debriefing for self-administered instruments because there is some limited evidence that asking respondents to think aloud as they complete a self-administered instrument can lead to increased navigation errors for some groups of respondents (Dillman and Redline 2004). Correct navigation is crucial for the success of the screeners. It is also generally understood that reading aloud can heighten attention and the respondent could notice and attend to things that otherwise would have gone unnoticed. The screeners are short enough that respondents can remember what they were thinking when they answered the questions. If it seems that respondents to the 2C screener (i.e., the long screener) are not able to recall their thoughts when probed, then 2C can be divided into sections and debriefing and probing can be done on a section by section basis.

### *Goals of the Cognitive Testing*

One of the main goals of the cognitive testing is to determine whether the screener encourages or discourages the respondent in providing a telephone number. The language used, the layout and design, and the other questions asked could interact to encourage or discourage providing the telephone number. The cognitive sessions will also be designed to uncover any "red flags" that the screeners could trigger for the respondent, that is, whether the respondent thinks the screener is frightening, off-putting, generates suspicion, etc. Any articulated or unarticulated expression of discomfort or confounding is followed up with appropriate probes. These probes are by necessity unscripted and spontaneous. The cognitive interviewer will respond with a neutral and nonbiasing probe that elicits more information from the respondent. In this situation, the cognitive interviewer will collect two types of information: (1) information on the nature and cause of the issue and (2) information that can be used to redesign the question so that the issue at hand is solved.

If the respondent does not alert the interviewer to potential "red flags" through articulations or body language, the interviewer will probe about the respondent's level of comfort with the questions. These probes are scripted and are found in the cognitive interview protocol.

Another goal of the cognitive work is to determine the extent to which the screener can be improved in any respect. Any negative reaction to the overall design, the cover page, the informational flip-side of the cover page, the FAQs, or the questions themselves will be analyzed. If the analysis shows a problem with any of the survey components, the component

will be redesigned to more efficiently embody its measurement or communication goals. The nature of the redesign would depend entirely on the types of problems indicated.

## **Recruiting**

Westat will recruit 50 participants for these cognitive interviews: 25 to test approach 2B and 25 to test approach 2C. To adequately test each approach, it is our intention to recruit participants so that half are crime victims and half are non-crime victims.

Westat will advertise in a variety of advertising outlets, for instance, the Maryland Gazettes and the local Craig's List, for adults who have experienced a crime victimization during the past 12 months (Appendix C). We anticipate that the primary source of recruiting will be from the advertisements. If the advertisements are not successful then we might use flyers placed throughout the target community. Locations might include grocery store bulletin boards, community center bulletin boards, etc. The locations would be in public spaces designed for such materials. Westat is exploring using other venues than the Washington, DC Metro area to recruit respondents. For instance, Buffalo, New York has a different demographic profile than the Washington, DC area and adequate crime levels to test the screeners. Chicago will also be included as a testing site. Additional sites might be included, if appropriate.

All recruiting materials will explain that we are looking for adults, aged 18 and over, who have experienced a crime victimization during the past 12 months. The past 12 months will be defined as 12 months from the moment the Westat recruiter talks with the potential recruit. All potential respondents will be encouraged to contact the Westat recruiter, leaving their name and contact information on a voice messaging system. The Westat recruiter will then contact the potential respondent and conduct a screening interview. The focus of the recruitment screening interview (Attachment D) will be to identify individuals who are (1) aged 18 and older, (2) crime victims within the past 12 months, and (3) place the potential respondents into some basic demographic groups. Once eligible respondents have been identified, they will be offered time slots and scheduled for the interview at the venue where the cognitive interview is being held.

Respondents who experienced a crime victimization, but longer than 12 months ago or respondents who have never experienced a crime victimization ever could also be included in the cognitive interviews. The respondents who had experienced a crime victimization more than 12 months ago could report for that victimization and respondents who had never experienced a crime victimization could complete the cognitive interview based on a scenario.

To assist the non-crime victims in completing the usability test, we may use one of four different scenarios of crime victimizations (Attachment E). The scenarios will allow us to observe how these respondents answer the screener questions. Using scenarios as part of cognitive or usability testing is a standard method for providing information about how people react to the screener questions and how their answers map to the response options provided.

Westat will conduct these interviews iteratively – so that testing will continue until a significant flaw is identified. At that point, the testing will be halted, corrected, and then re-started. This method is common in usability testing. It stresses the conservation of resources and usually leads

to a series of flaws being discovered and corrected. Moreover, respondents in the cognitive lab tend to focus on the most obvious problems and not notice more subtle issues until the more glaring problems have been removed. The iterative testing approach allows these more obvious issues to be repaired early in the testing process so that more subtle and nuanced findings can be identified later in the process.

**Burden Hours for Usability Testing**

The estimated burden for the cognitive interviews is indicated below. We anticipate that screener burden will take no more than 2.5 minutes. The actual cognitive interviews will take no more than 90 minutes and respondents will be provided with a \$40 reimbursement for their time.

**Estimated Burden of Screening for the Cognitive Interview Task**

Maximum Number of respondents	Number of responses per respondent	Time per response	Total time across all respondents
100	1	2.5 minutes	4.17 hours

**Estimated Burden of the Cognitive Interview Task**

Maximum Number of respondents	Number of responses per respondent	Time per response	Total time across all respondents
50	1	1.5 hours	75 hours

The NCVS generic clearance allocated a predetermined combination of sample cases and burden hours that could be used for NCVS redesign efforts. The current sample size and burden hours in the cognitive testing fall within the remaining allocation.

Following an evaluation of the screeners described here, BJS will request a separate clearance to conduct a pilot test of the screener and collection protocol in 2012. Following an evaluation of the research conducted in this pilot test, BJS may request an additional clearance to conduct a larger test of the optimum approach identified in the initial lot test.