

**Census 2010 IVR Customer Satisfaction Survey Evaluation**  
**Individual Request for Clearance**  
**April 13, 2009**

The Census Bureau plans to conduct Census 2010 Interactive Voice Recognition (IVR) Customer Satisfaction Survey Evaluation under the 2010 Census Program for Evaluations and Experiments (CPEX) generic clearance (OMB approval number 0607-XXXX). The goal of the 2010 IVR Customer Satisfaction Survey (CSS) Evaluation is to collect voluntary feedback from respondents who use the Telephone Questionnaire Assistance (TQA) help lines to assess the quality of service provided to respondents and to guide the development of future census questionnaire assistance help lines.

The purpose of the Customer Satisfaction Survey is to gather information from the public on how well the IVR application and the web-based TQA application addressed their questions and other census-related assistance needs.

**Updates/Clarifications to the IVR appearing in 2010 Census Program for Evaluations and Experiments (CPEX) generic clearance (OMB approval number 0607-XXXX)**

Since the 2010 CPEX generic OMB clearance, there have been a few updates to the design of the IVR Customer Satisfaction Survey. These updates are provided in the following sections.

- **Universe and Respondent Selection**

Calls coming into the IVR platform are routed to the English or Spanish IVR application based on the toll-free number dialed. If the call is routed to the English or Spanish IVR application, the application randomly decides, on a call by call basis, if the call will be flagged for a customer satisfaction survey. The application is currently set to select survey candidates for 1% of the calls via a random selection process using the European Computer Manufacturers Association (ECMA) Script random number generator `Math.random()`. This function returns a random number between 0 and 1. It will be used with the test: `Math.random() < iSurveyPercent/99.999` If the test is true then the call is a survey candidate. (The default is `iSurveyPercent=1`.) The factor 99.999 is used to ensure that `iSurveyPercent=100` yields that every call is a survey candidate, even in case `Math.random()` can return 1.0; the test also ensures that `iSurveyPercent=0` yields that no call is a survey candidate

- **Procedures for collecting information**

Customer satisfaction survey responses are being collected via an automated interactive voice response system.

- **Methods to Maximize Response**

To increase response rates, the announcement to “hold for the customer satisfaction survey” is read first rather than last when presenting respondents a series of IVR choices. Usability testing results have confirmed that callers are more likely to complete the survey when this approach is used. For example, the following is an extract of an IVR dialog module: “If that’s all the information you needed, please hold for our Customer Satisfaction Survey. Otherwise, to hear the topic information again say ‘repeat that’ or for help on another general question say ‘Census information’. You can also say ‘questionnaire help’, ‘request census materials’, or ‘representative’.”

- **Tests of Procedures or Measures**

The 2010 customer satisfaction survey (CSS) design is based in part on the redesign of certain 2000 survey questions and on questions newly developed since 2000 that have been used during inter-censal tests throughout the decade. The goal of these questions is to improve response/self-service rates, and to address the recommendations found in the 2000 Telephone Questionnaire Assistance Customer Satisfaction Survey, Final Report; page vi (see <http://www.census.gov/pred/www/rpts/A.1.b.pdf>).

The 2010 CSS is designed to determine, in a statistically valid manner, a caller’s satisfaction with their IVR and TQA experience in terms of getting answers to their questions; ease of understanding words and phrases used in the IVR system; usefulness of the information received; help with their participation in Census 2010; and overall satisfaction with the Census 2010 help line.

### **Estimate of Burden Hours**

<b>Experiment/Evaluation</b>	<b>Total # of Respondents</b>	<b>Estimated Response Time</b>	<b>Estimated Burden Hours</b>
IVR	5,016	Varies (see below)	130
IVR only	2,006	75 seconds	42
IVR & TQA	3,010	105 seconds	88

### **Project Schedule**

Data collection will take place between February 25, 2010 and July 30, 2010.

### **Costs To Federal Government**

The estimated cost to the Federal Government for the IVR CSS is \$600,000. This is a very rough estimate that cannot be parsed out to a more exact figure, since the IVR is a very small module within a much

larger Telephone Questionnaire Assistance (TQA) support program.  
The Census Bureau is the only agency bearing this cost.

**Contact(s) for Statistical Aspects and Data Collection**

For questions on statistical methods or the data collection described above, please contact Jason Machowski of the Decennial Management Division at the Census Bureau (Phone: 301-763-4173 or email [jason.d.machowski@census.gov](mailto:jason.d.machowski@census.gov)).