OMB CONTROL NUMBER 0693-0043
NIST GENERIC CLEARANCE FOR USABILITY DATA COLLECTIONS

NIST, Information Technology Laboratory (ITL)
Public Safety Communications Interview

Survey Questionnaires for: Questions for public safety Communications personnel about their communications and technology usage

1. **Explain who will be surveyed and why the group is appropriate to survey.**

   As part of an in-depth interview study of Public Safety Communications user groups, the Visualization and Usability Group (VUG), of the Information Technology Laboratory (ITL), of the National Institute of Standards and Technology (NIST) intends to recruit 120 participants. Participants will be individuals who have first-hand experience in communications and/or dispatch. Participants will be recruited from several different sources: public safety organizations such as the Public Safety Advisory Committee (PSAC), APCO (the Association for Public Safety Communications Officials), NIST partner mailing lists, and recommendations from NIST personnel.

   The purpose of this project is to understand users and user needs, as well as how the system can function to help them achieve their goals in order to inform new technology development and standardization. The project will investigate users, user experience, and user needs by understanding:

   - The public safety incident response process from the perspectives of call-takers, dispatchers, and communications supervisors

   - Public safety information and communication content and medium/form/modality, including context and sequencing

   - Public safety technology usage and user interaction with technology, including medium/form/modality

   - Public safety views on technology and communications (current and future looking)

   - Human capacity and limitations during call-taking and dispatching

2. **Explain how the survey was developed including consultation with interested parties, pretesting, and responses to suggestions for improvement.**

   The interview questions were developed and refined based on discussions with Public Safety First Responders at NIST and the PSAC.

3. **Explain how the survey will be conducted, how customers will be sampled if fewer than all customers will be surveyed, expected response rate, and actions your agency plans to take to improve the response rate.**

   There are approximately five million workers in the public safety community in the United States, comprised of fire fighters, law enforcement, emergency medical services (EMS) and 911 call center workers. They differ organizationally, jurisdictionally, and geographically (Visiting Committee on Advanced Technology [VCAT], 2012), and have a variety of needs related to communication.

Since cultural and geographic regions influence public safety roles and communication needs, the sampling strategy focused on regions of the country. The 8 geographic areas for this phase include:

1. Northeast Coast

2. Southeast Coast

3. Midwest/Northeast

4. Midwest/Southeast

5. Midwest/Northwest

6. Midwest/Southwest

7. Northwest Coast

8. Southwest Coast

Within each region sites were identified based on convenience, public safety data on existing public safety infrastructures and adoption of technology. Each site will be further divided into urban, suburban and rural areas. Data collection in this new "Comms" phase will focus on public safety personnel from Communications (911 Call Centers, Dispatch, etc.), with the goal of collecting data with representation from various jurisdictional levels in the Communications space.

- Northeast Coast
    - o   District of Columbia, which will include urban and suburban areas
- Southeast Coast
    - o   Atlanta, which will include urban, suburban, and rural areas
    - o   Miami, which will include urban areas
- Midwest/Southeast
    - o   New Orleans, which will include urban, suburban, and rural areas
    - o   Tennessee, which will include rural areas
- Midwest/Southwest
    - o   Oklahoma, which will include urban, suburban, and rural and tribal
- Midwest/Northwest
    - o   Idaho, which will include rural and tribal areas (and possibly some urban areas)

For each site/area we anticipate up to 10 "Comms" interviews. Additionally, NIST will go to five (5) more cities which will be coordinated with other events (conferences) to include the federal and state perspectives. A total of up to 120 Communications interviews will be conducted: (10 people x 7 cities) + (10 people x 5 events/conferences)

Participants will be identified by local PSAC members. Once an individual agrees to participate, an interview appointment will be scheduled at a particular location agreed upon by both the participant and researchers. The data will be collected through semi-structured interviews. The interview includes 15 questions and takes an estimated 45 minutes to complete. The demographic questionnaire will take 1 minute per response.

The audio of the interview will be recorded and transcribed.

4. Describe how the results of the survey will be analyzed and used to generalize the results to the entire customer population.

We intend to use the qualitative data analysis technique of grounded theory to create a list of technology and communications issues, problems, and opportunities for research and development. We will compare the qualitative responses across different types of public safety Communications personnel (e.g., call-takers, dispatchers, supervisors) and different geographical regions of the country. From these results, we plan to develop an online quantitative survey to reach a much broader cross section of the public safety Communications population.

There will be no collection, storage, access, use, or dissemination of personally identifiable information from the interviews. As stated in the provided Information Sheet, participants will be assigned a participant reference code that will be associated with their responses. Data will not be linked back to a respondent. NIST will not create or keep a list that links the participant reference code to a participant.