

SUPPORTING STATEMENT
U.S. Department of Commerce
National Institute of Standards and Technology
Evacuation Movement and Behavior Questionnaire
OMB CONTROL NO. 0693-0051

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Even though we are not collecting the data through statistical sampling methods, we are interested in performing simple statistical analyses on our data to determine inter- and intra-building similarities and differences. We are looking to use basic analysis techniques such as simple difference of means tests and basic regression analysis.

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g. establishments, State and local governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.

Over the last three years, buildings (including building managers or owners) have self-identified themselves to NIST/EL as willing to allow NIST to observe an already-scheduled evacuation drill; and to distribute a survey to building occupants after a fire emergency has occurred. After the event, we have distributed the questionnaire either to all individuals who participated in the evacuation (if distributed via paper that day) or all persons in the building (if distributed via email to all building occupants by the building managers/owners). Therefore, the number of potential respondents for each building evacuation varies. More specifically, the number of potential respondents varies based upon the building height, the building floor plan (the space allotted for individuals on each floor), and the type of occupancy (in that an office building floor plan may hold more individuals than a hotel floor plan). Since this type of data collection effort has been conducted before, it is possible to report response rates for a specific building. The response rates for this project are approximately 10 to 20%.

2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.

An email will likely be sent to all building occupants by building management. The email will include either the attached electronic version of the questionnaire or the website link to the questionnaire, asking building occupants to fill out the questionnaire by a certain deadline and return it to them (to eventually provide to NIST/EL).

3. Describe the methods used to maximize response rates and to deal with nonresponse. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.

If necessary, additional email reminders will be sent and follow-up phone calls will be made by building management to the occupants to increase the response rate. The information will not be used for generalization.

4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB must give prior approval.

Basic analysis will be performed on this dataset to describe how people respond to emergency evacuations, including evacuation drills and real fire emergencies, in buildings in the US. Even though statistical sampling methods are not being used, NIST is interested in performing simple statistical analyses on the data to determine inter- and intra-building similarities and differences. NIST may use basic analysis techniques such as simple difference of means tests and basic regression analysis.

5. Provide the name and telephone number of individuals consulted on the statistical aspects of the design, and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

Data collection and Analysis

Erica Kuligowski

NIST

Engineering Laboratory

(301) 975-2309

No additional individuals were consulted on statistical design.