

Justification –Part B of the Supporting Statement

Part B – This part must be completed for any information collection that includes surveys, research studies, or program evaluations in which the purpose is to make statistical generalizations beyond the particular respondents and to use the information for the description, estimation, or analysis of the characteristics of groups, segments, activities, or geographic areas. Surveys include both censuses (i.e., all members of the group of interest are asked to submit information) and sample surveys (i.e., only a subset of all members are asked to submit information). Research studies and program evaluations may involve the comparison of groups or testing of hypotheses about the impact or effectiveness of a program or the relation among variables, but the intention is to describe, estimate, or analyze the characteristics of groups or subgroups and draw inferences that can be generalized or applied beyond the particular observed sample. For more information, see OMB’s Standards and Guidelines for Statistical Surveys and Questions and Answers when Designing Surveys for Information Collections.¹

B1. Methods and Design.

The sample will be drawn from respondents to Waves 1 and 2 of data collection on this topic. These individuals are all self-identified small business operators. There are 3000 respondents (complete data collected in previous surveys) from which respondents to the current proposed Wave 3 may be drawn. In cases where respondents to Wave 1 and Wave 2 indicated that they would like to be contacted for additional data collection, they are eligible for recontact. We have the capacity to contact 2200 respondents across these earlier waves for potential participation in the current data collection.

Going from Wave 1 to Wave 2 for repeat respondents NIST had a 25 % response rate. We also had a refreshment sample of new respondents in Wave 2, which accounts for the additional respondents from which we can draw the current sample for this data collection. We offered no remuneration in those data collections. It is expected and supported in the literature that offering reasonable remuneration for time spent on the online data collection proposed here will increase response rates significantly. Those eligible for outreach indicated in the Wave 2 data collection that they want to be contacted and are thus already willing to engage. The use of remuneration has a high likelihood of moving the response rate to 60-80 % of those who will be contacted.

B2. Design of Data Collection Instruments.

This third wave of data collection is proposed to address the research goals as SMEs begin to recover from the pandemic. This effort addresses the gap in research on the experiences of SMEs dealing with complex events generally and those that arise during a pandemic, specifically. The longitudinal study accounts for SME vulnerabilities, which may further amplify the impacts of a singular or complex event.

This data collection will be comprised of two parts. The short collection instrument survey will gather data relevant to information related to the key longitudinal areas of study and will be formulated as a brief online structured survey to consider: (1) businesses' ongoing impacts from COVID-19 and (2) natural hazard experiences/impacts and future plans to cope with COVID-19 and natural hazard impacts. Some of these questions are repeated from Waves 1 and 2 to gauge changes to the circumstances of the business, such as limitations on openings and adaptation measures taken.

The longer survey will include the structured questions from the short survey questions and an additional open-ended section predicated around the understanding of business operators surrounding business interruptions and ways to mitigate and adapt to such interruptions. This is critical to understanding the systemic view of small business operators. This is a novel approach to collecting these data and understanding the perspectives of business operators and their experienced access to resources.

B3. Collection of Data.

A reminder email will be sent to respondents who do not engage. This reminder will be sent two weeks after initial contact. The universe of longitudinal respondents obtained in previous data collections (Wave 1 and Wave 2) show representativeness for the main area of inquiry.

The response rate will be maximized through the use of remuneration offered to operators for time spent completing the data collection. Given the importance of considering small business operators who have experienced natural hazards during the COVID-19 transmission period, there will be a stratified sampling approach employed. The strata will be: (1) businesses reporting natural hazard impact and (2) operators not reporting natural hazard impacts. These will be drawn from our existing sample. Within each strata, random sampling will occur based on the percent of total sample each strata represents. Emails will be sent out that offer respondents the opportunity to answer either the long or short survey version. When the desired 300 respondents to the long survey is obtained that option will be muted and the remaining respondents contacted will only have the option to complete the short survey.

B3. Procedures for Quality Assurance and Quality Control and Evaluation.

As with all publicly disseminated information, NIST has established administrative mechanisms allowing affected persons to seek and obtain correction of information maintained and disseminated by the operating unit that does not comply with these Department guidelines and the OMB guidelines. Concerns can be directed to infoqual@nist.gov

B4. Production of Estimates and Projections.

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B5. Data Analysis.

Qualitative survey responses will be appropriately coded and mapped within the quantitative dataset. The researchers will also augment this effort with 'big data' sources (e.g., Google trends identifying which news stories were most searched on a given date) as controls as SME-level data is analyzed. Both qualitative and quantitative analysis will be performed on the data, as a standalone data set, but also as a longitudinal dataset combined with responses from Waves 1 and 2.

B6. Review and Evaluation Procedures.

The collected data will be reviewed by multiple researchers within NIST across an interdisciplinary team. All NIST presentations, reports, and article are subject to careful NIST review, which includes approval by experts from within and outside of the originating operating unit at NIST.

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B7. Data Dissemination.

The intended direct audience for this research is NIST researchers addressing community resilience planning and recovery and the associated decisions made by SME operators. Furthermore, findings will be communicated in a manner that is applicable to Federal agencies that provide resilience-based assistance and guidance to SMEs. Specifically, NIST will work with counterparts at NOAA, FEMA, SBA, and EDA to ensure that the data collected concerning decision science is not replicated across agencies.

B8. Contact Person(s).

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