

The US Census Bureau's Economic Programs are conducting a series of experiments in order to evaluate the effectiveness of various contact strategies for the re-engineered Economic Census data collection in 2017. In particular, the Center for Adaptive Design at the Census Bureau analyzed the results of experiments conducted on the Annual Wholesale Trade Survey (AWTS) and the Annual Retail Trade Survey (ARTS). The sample establishments for the AWTS were randomized into two groups, where the treatment group received an envelope with a preprinted message in red ink, while the control group received the standard black ink. Separately, the sample establishments for the ARTS were randomly divided into four groups based on a two-level factorial design. The two treatments being tested were a pre-due-date reminder letter and an accelerated follow-up letter. The sample establishments in both experiments were randomly assigned to different treatment groups, with blockings for certain subgroups such as industry and company size, to reduce known sources of variation and to ensure that valid statistical inference can be drawn at a subgroup level. Our analysis focused on two outcomes of interest, response rate and response time. We examined the response propensities using a logistic regression model and the response timeliness using a survival model, both considering covariates that are known confounders. This presentation will discuss experimental design details, data collection procedures, analysis results, and our contact strategy recommendations to the data collection for 2017 Economic Census.