Using Replication Methods to Analyze Survey Data in SAS Software - Continuing Education

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Increasingly, statisticians analyze data that come from probability-based sample surveys. This requires taking into account sample design to make statistically valid inference about the study population. Previously, SAS/STAT procedures designed for survey analysis used Taylor series expansion methods for variance estimation. Beginning with the 9.2 release, SAS software offers replication methods for variance estimation, including balanced repeated replication (BRR) and the jackknife. In this workshop, you will learn how to analyze survey data and perform variance estimation in the SURVEYFREQ, SURVEYLOGISTIC, SURVEYMEANS, and SURVEYREG procedures using the jackknife, BRR, and Fay's BRR method. You will also learn how to create appropriate replicate weights and estimate the variance for survey data when you have been supplied with a set of replicate weights. We will also discuss other variance estimation issues related to replication methods. The course is intended for a broad audience of statisticians who are interested in analyzing sample survey data. Familiarity with basic statistics, including regression analysis, is required.