US Census Spatial and Demographic Data in R: the UScensus2000-suite of packages

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The US Decennial Census is arguably the most important data set for social science research in the United States. The UScensus2000-suite of packages allows for convenient handling of the 2000 US Census spatial and demographic data. The goal of this presentation is to showcase the UScensus2000-suite of packages for R, to describe the data contained within these packages, and to demonstrate the helper-functions provided for handling this data. The UScensus2000-suite is comprised of spatial and demographic data for the 50 states and Washington DC at four different geographic levels (Block, Block Group, Tract, and Census Designated Place (CDP)). The UScensus2000-suite also contains a number of functions for selecting and aggregating specific geographies or demographic information such as Metropolitan Statistical Areas (MSA), Counties, etc. These packages rely heavily on the spatial tools developed by Bivand et al. (2008) (i.e., the sp and maptools packages). This presentation will provide the necessary background for working with this data set, helper-functions, and finish with an applied spatial statistics example.

References

Bivand, Roger S., Edzer J. Pebesma, and Virgilio Gómez-Rubio. 2008. Applied Spatial Data Analysis with R. New York, NY: Springer.