

ABSTRACT

Progress in information and communications technology (ICT) has enabled members of the general public to contribute to data collection that has traditionally been reserved for trained professionals. Volunteered Geographic Information (VGI), user-generated content with a geographic component, is becoming more widely available with an ever increasing range of data types (Fast 2014). This study extends previous analyses of VGI by investigating a first-of-its-kind dataset, known as Fatal Encounters (FE), which seeks to collect information on incidents involving police use of deadly force on citizens within the United States. Geographers recognize the potential for VGI to enrich existing forms of authoritative data or produce new data, but the consensus is that VGI can be highly variable in quality. Relevant quality components are used to build a framework for validating the FE dataset. The main components include completeness, spatial accuracy and precision, and attribute accuracy. Once these components are assessed, the overall fitness of the FE dataset is determined with an evaluation of its strengths and weaknesses. The resulting analysis showed that the dataset was sufficiently complete for initial spatial analysis, but lacked fitness for specific attributes. Based on fitness of the data, the study also conducts a preliminary hotspot analysis for these incidents in New York City, including an overlay of hot spots on population density and a race-based dot density maps. Before further analysis can be done, recommendations for improving the weak portions of the data are discussed.