Title: Moving from paper to GIS: operationalizing sketch map data for analysis

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Duration: 90 minutes

Background/objectives/expectations:

I have worked on a number of projects where we have collected data on paper maps, called sketch maps (see Boschmann & Cubbon 2014). The projects have usually involved students and researchers collecting data on maps in the field. For instance, I worked on a research team where we collected spatial data on perceptions of safety in city parks (Morgan et al. 2018; Morgan 2017). In a more recent case we collected data on spatial accessibility on public beaches. Once the fun part of collecting sketch map is done, the hard part begins which is how to operationalize this data for analysis.

I have come up with a process to operationalize the results from these surveys. This process involves data management/organization, digitizing, and scripting with Python (within ArcGIS) and R. After presenting the process and theory behind it, this workshop will take participants through a case study sample data. Participants should bring laptops and will be asked (ahead of time) to have ArcGIS Pro and R installed so that they can participate in the classroom exercise.

References:

Boschmann, E. E., & Cubbon, E. (2014). Sketch maps and qualitative GIS: Using cartographies of individual spatial narratives in geographic research. The Professional Geographer, 66(2), 236-248.

Morgan, J. D., Snyder, J. A., Evans, S. Z., Evans, J., & Greller, R. (2018). Mapping Perceptions of Safety in Parks. The Florida Geographer, 49.

Morgan, J.D. (2017). Mapping Public Perceptions of Safety in City Parks. orth American Cartographic Information Society (NACIS) 2017 in Montréal. Retrived from https://www.youtube.com/watch?v=tmn1pwh18A0