Proposed Dissertation Research Summary

My dissertation will explore recent shifts in mapping practices, and the ways these shifts influence institutions' urban redevelopment strategies and decision-making processes following natural disasters. Specifically, I am interested in the 'geoweb' (Scharl and Tochtermann 2007), an emerging set of webbased practices, artifacts, and software/hardware configurations that have an explicitly geographic element. An important component of the geoweb is the mode of mapping and data production it enables, characterized by low barriers to entry, dynamic collection and display of data, and commonly the generation of spatial data by laypeople or non-experts (Goodchild 2007a; Elwood 2010). It is exemplified in websites such as OpenStreetMap, a base map of the world generated by volunteers (Haklay and P. Weber 2008), and Ushahidi, a web service that maps georeferenced (containing locational data) SMS messages for use in disaster-struck areas (Okolloh 2009).

In recent years disasters have cast light on the geoweb as a useful response tool, since crowdsourcing spatial data production – that is, opening spatial data production to large numbers of uncoordinated contributors – is touted to be quicker, cheaper, and more egalitarian than traditional modes of mapping (Zuckerman 2009; Liu and Palen 2010; Zook, M. Graham, Shelton, and Gorman 2010; Starbird and Palen 2011; Poblet 2011). Furthermore, popular accounts of geoweb use in disaster contexts are growing rapidly, building on the academic hype (Currion 2010; Hesse 2010; Talbot 2011). These discourses center on claims of "participation", "equality", and "democracy" that suggest an equalizing force inherent in this mode of mapping.

My research will answer recent calls for more engagement with the "societal implications of the geoweb" (Elwood 2010, 350, also: Elwood 2008; Sui 2008; Gerlach 2010). It will explore the ways urban inequalities may be (re)produced through the geoweb in moments of crisis mapping and disaster relief.

Beginning from the assumption that technologies' implications are never evenly distributed, in my research my goal will be to nuance and unpack the common discourses of the geoweb, a reconsideration of the inter-relations between the geoweb and society. With this concern in mind, I am most interested in three bodies of literature: critical geographies of spatial technologies, urban geography, and poverty and inequality. Three research questions will guide my dissertation:

- 1)What kinds of digital spatial data are relief and redevelopment actors using, and from what sources are they gathering these data?
- 2)How do geoweb modes of mapping influence the assessment of where resources are needed, the allocation of resources, and the decision-making processes that lead to such resource allocations within cities?
- 3)How are problems, places and people represented in the emerging digital spatial data, and what inclusions or exclusions are implied?

The following sections detail the three literatures above, as they inform my approaches to the three research questions. Within each broad section I will identify my specific primary areas of interest.