

**Brennan Collins**

brennan@gsu.edu

Associate Director

Center for Instructional Innovation

Georgia State University

**Ben Miller**

bjmiller@mit.edu

Assistant Professor

Departments of English and Communication

Co-Director, New and Emerging Media Initiative

Georgia State University

**Deep Mapping a Metropolis: ATLmaps' Art, Planning, and Ice**

The concept of deep maps came from a literary tradition focused on densely documenting small rural areas; new technologies in geographic information systems (GIS) combine with database driven graphical user interfaces to allow for similarly dense interdisciplinary documentation of cities. Our paper explores the possibilities for GIS-based deep maps through case studies describing a map-based exploration of distributed art, problematic civic planning, and a weather and infrastructure-induced crisis in Atlanta.

Currently under development, Georgia State University's ATLmaps platform combines archival maps, geospatial data, and multimedia, to facilitate the exploration of interdisciplinary data. These layers can then be cross-compared in novel ways. Offering a framework incorporating storytelling reliant on geospatial data and normalizing input across a range of data sets about, allows users to make connections between data sources and ask questions that would not be apparent when only looking at one focused set of content.

Our presentation's case studies describe three sets of data on ATLmaps. The first documents an annual street art exhibition that turns blank walls across the city into canvases for internationally recognized muralists and graffiti artists. The second documents the transformation of a densely-populated, well-off neighborhood immediately south of the downtown capital into a low-population, low-income stadium complex cut off from downtown by major interstate arteries. And the third case examines the events and social media outpouring connected to Atlanta's 3-day shutdown due to an icestorm during the winter of 2013-14. This last movement echoes the more data-based approach to narratives of survival and loss that appears in the spreadsheets of crisis tracking and reporting. Contemporary geographers have turned to real-time web accessible data collection and projection to assess and respond to developing human and environmental crises. Known as crisis mapping, this endeavor links a variety of types of events under a particular methodological and technical response. The response is highly effective at directing resources, attention, and traffic to and from evolving events. This mode of data-based cartographic projection acts as a platform upon which the knowledge of the event is structured.

What emerges from these three distinct cases, are surprising overlaps: a high density of murals in one neighborhood can be understood as a consequence of low-population levels, itself a consequence of racially-biased planning processes. What emerges from the recent weather-related city shutdown is a marked dependence on interstate infrastructure and a population core living further away, relative to the proximity of populations to downtown cores in more northern metropolitan areas in the US. In part, that shifting of population took place because of the planning processes set in motion to create these low-population areas proximal to downtown. By combining these disparate types of data – mural photographs, census and demographic data, and archival material, a GIS-platform facilitates new discoveries. By supplementing this material with oral and literary histories, a deep map of a metropolis emerges.