Historical Geographic Information Systems and the 1896 St. Louis Tornado: Transforming Historic Narrative into Spatial Format

UCA College of Liberal Arts Undergraduate Research Symposium
Spring, 2014

Faculty Mentor: Stephen O’Connell

Historical Geographic Information Systems (HGIS) is a tool of relatively recent development that employs both geographic knowledge and historical information for its creation. It visually displays historic data, and can show one point in time or change of an area over any number of years. HGIS can utilize data for quantitative analysis of traditionally qualitative historical studies. Examples of use are wide-ranging, and the disciplines in which HGIS can be utilized are numerous. This particular study uses HGIS to analyze St. Louis and East St. Louis in 1896, the year of a devastating tornado, for the purpose of tracking local environmental changes, the path of the tornado, tornado damage, and loss of life. The process of creation included choosing a historic base map to digitize, digitizing the historic city roads, tracking the path of the tornado, and plotting damage and loss of life using a compilation of narrative information published soon after the tornado. This is only the start of a database of information about St. Louis at the time of the tornado and the completed product can be used for research regarding St. Louis at the turn of the century, or for research regarding the 1896 tornado.