

# Cartographic Presentation as the Central Theme for Geospatial Education

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## Abstract:

North Carolina Central University is committed to student education and training in cartography and geospatial sciences. This paper demonstrates the importance of applying cartographic principles to train students to convert historical deed records into geospatial data. Students were required to take text information from the 1960s and input this information into a spatial database. The historical information was recorded on typed deeds in COGO (direction-distance) and the historic coordinate system of 1927 in the 1960s. Students applied cartographic principles that were used to identify contextual and spatial variations and anomalies to flag areas and records that didn't meet project specifications and to trouble shoot conflicting information.

This paper demonstrates the usefulness of using cartography as a tool to educate students in allied aspects of geospatial sciences such as creating and managing spatial data. For example, students used tools such as markers and color coding to identify areas of overlap and areas of mismatched records (Figure 1). The authors found that using cartography helped enhance the spatial understanding of the project for students.

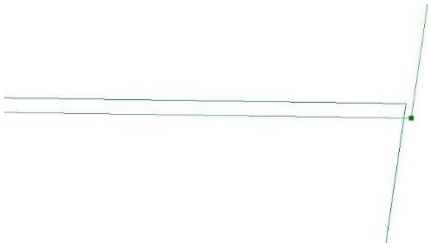


Figure 1. Parcel mismatches mapped cartographically to identify anomalies.

Education is the foundation of projects at North Carolina Central University and cartography has demonstrated appeal at the university level. Various geospatial aspects such as datums and projections, overlays, gaps, overlaps, and converting written information to spatial (geometric) information lend themselves well to cartographic principles. Cartography is an essential element that supports learning and teaching of spatial information as demonstrated by this project. Students were in a better position to understand and detect spatial anomalies with help from cartography than they were without using cartography and relying solely of written information. This enhanced their understanding and use of spatial data.