

## **Abstract**

The purpose of this thesis is to demonstrate how thematic mapping and GIS technology can enhance genealogical research for family history records in the United States of America from the 17th to the 21st century, using online resources from FamilySearch.org, the Newberry Library, and Google. Many genealogists have not had significant exposure to GIS and web GIS. The research focuses on the potential to infuse dynamic web GIS technology with online family history resources in a single application. To this end, an electronic, dynamic, and interactive map was designed that illustrates a more complete picture of family history with regard to data quality, cartography, and history than existing web resources provide. As a proof of concept for the potential to integrate web GIS and genealogy four electronic maps were developed on behalf of four ancestral lineage records. The maps were embedded in Google Earth's user interface and distributed to users. The GIS application map is a conglomerate of several hundred maps that can be manipulated in different ways. The maps are animated and controlled with inputs making them dynamic and interactive. Users were invited to take part in a survey regarding their experience with the application. User feedback indicated positive results regarding the impact of GIS infused genealogical activities with measurable increases in user knowledge and interest. Program successes indicate the potential for future development in the online web-enabled environment.