



University of Utah

UNDERGRADUATE RESEARCH JOURNAL

MAPPING VITALITY IN UTAH'S SALT LAKE COUNTY

Savannah Mailloux (Monisha Pasupathi, Timothy Collins)

Department of Geography

The term vitality within the field of psychology is related to someone's energy or spirit as they move through different experiences in life. Most often, the term is associated with a sense of liveliness if someone were to possess high vitality, or a sense of dullness if someone were to possess low vitality.

Geographic information science affords the opportunity to visualize where high and low vitality experiences occur. The goals of this research into vitality are to use geographic information science in order to spatially determine high and low vitality areas identified by residents in Utah's Salt Lake County as well as determine if spatial clustering exists based on responses from participants in a survey administered online through Amazon Mechanical Turk.

Analysis of the survey data utilizing the hot spot analysis tool in ArcGIS Pro showed that there are areas of statistical significance, known as hot spots, in the downtown area of Salt Lake City as well as on the eastern canyons of Salt Lake County. Understanding where participants experience high and low vitality can aid local policymakers and key stakeholders in addressing potential barriers in terms of access to high vitality locations.