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## Larimer County, Colorado: A Dasymetric Analysis of Population Density

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## **Social Science**

### **Poster**

Title: Larimer County, Colorado: A Dasymetric Analysis of Population Density

Presenter: Penrod, Nathaniel

Faculty Sponsor: Salo, Jessica

#### **Abstract:**

This project is a dasymetric analysis of population density in Larimer County, Colorado. While the general practice for mapping population density is to use a choropleth map with arbitrary boundaries such as county lines or census block groups to generalize conditions across the surface, the goal of this dasymetric analysis was to produce a map that more accurately reflected the distribution of population density across Larimer County. Using a traditional choropleth mapping method with census block groups as the aggregation level for data, the population density of Larimer County in 2010 was determined to be 112.50 people per square mile. Dasymetric techniques were then employed, taking into consideration factors, such as national parks and proximity to highways, that make areas of Larimer County uninhabitable. These areas classified as uninhabitable were then subtracted from the total square mileage of the county, and a new population density of 342.22 people per square mile was calculated. This new number reflects a more accurate depiction of the concentrated areas where people reside within Larimer County.