

**PRESENTERS:**

**Alan Perez**  
 Urban Design Undergraduate and WLW-ECOS Research Fellow, FAU.  
**Dr. Serena Hoermann**  
 Director, Center for Urban and Environmental Solutions, FAU.  
**Mervett Hefyan**  
 Collaborator, MDRC.

# Pathways Without Obstacles For Students

Comparing Transportation Accessibility in South Florida (Palm Beach and Broward Counties), Northern New Mexico, and King County, WA.

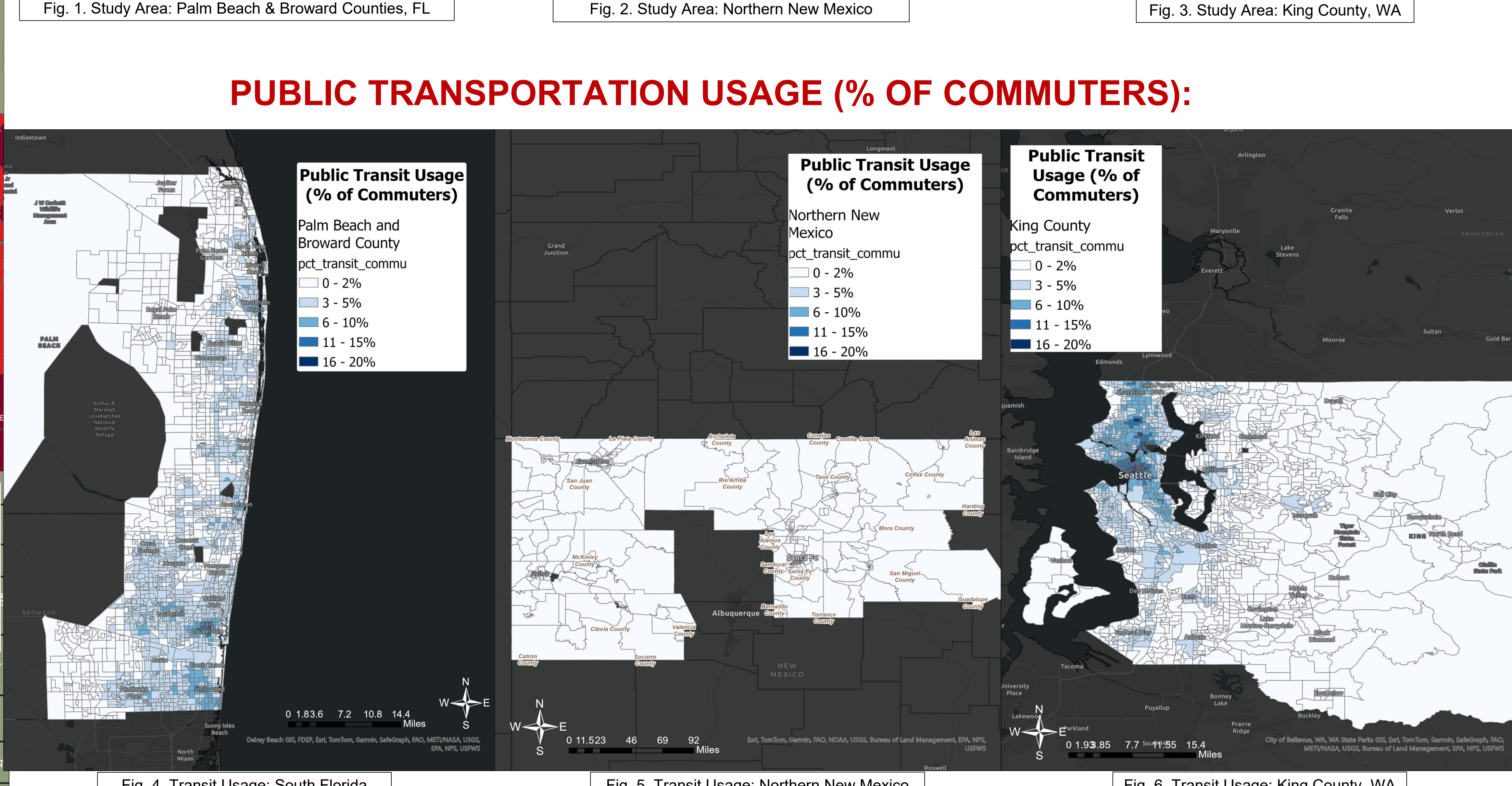
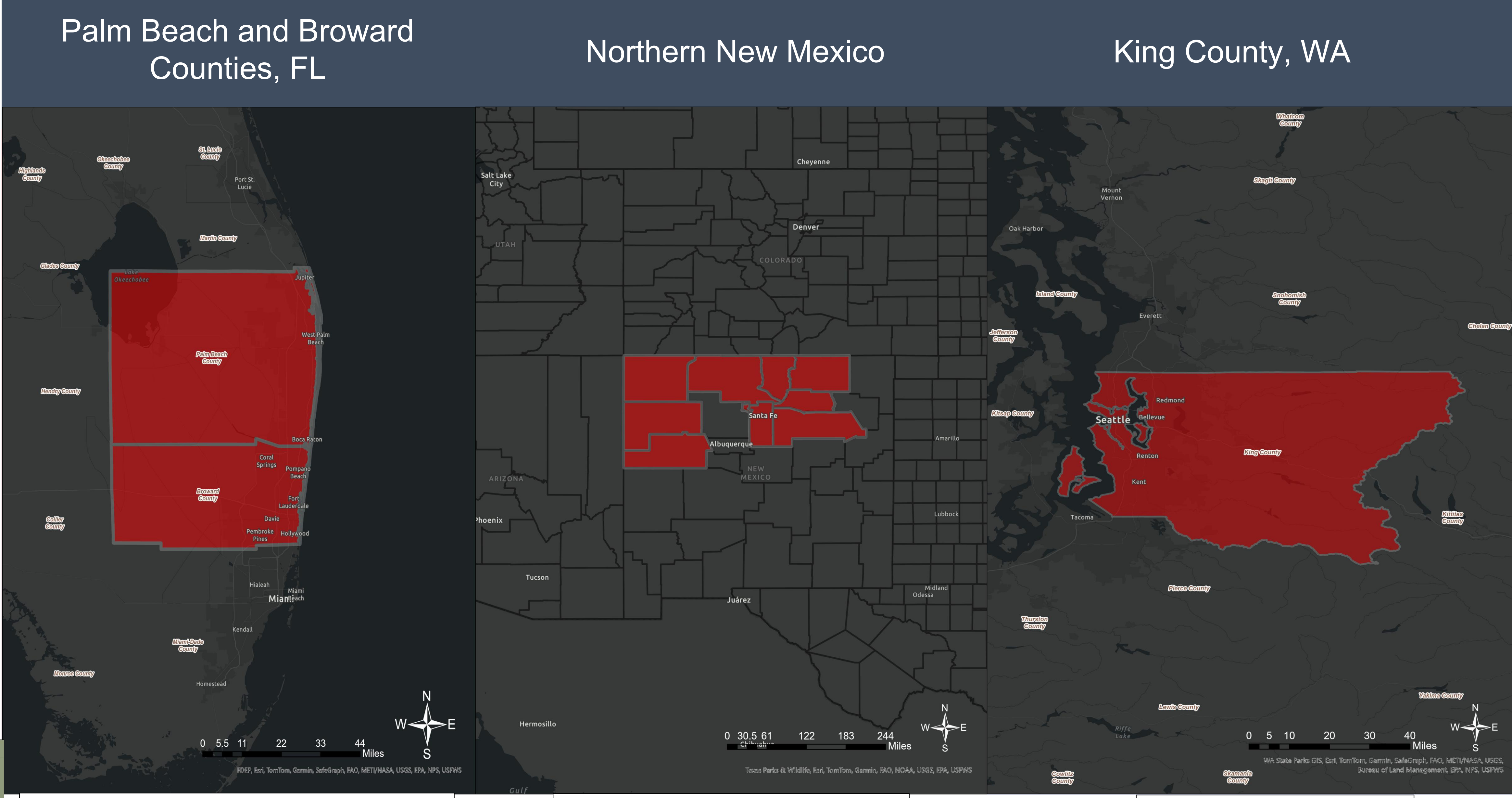
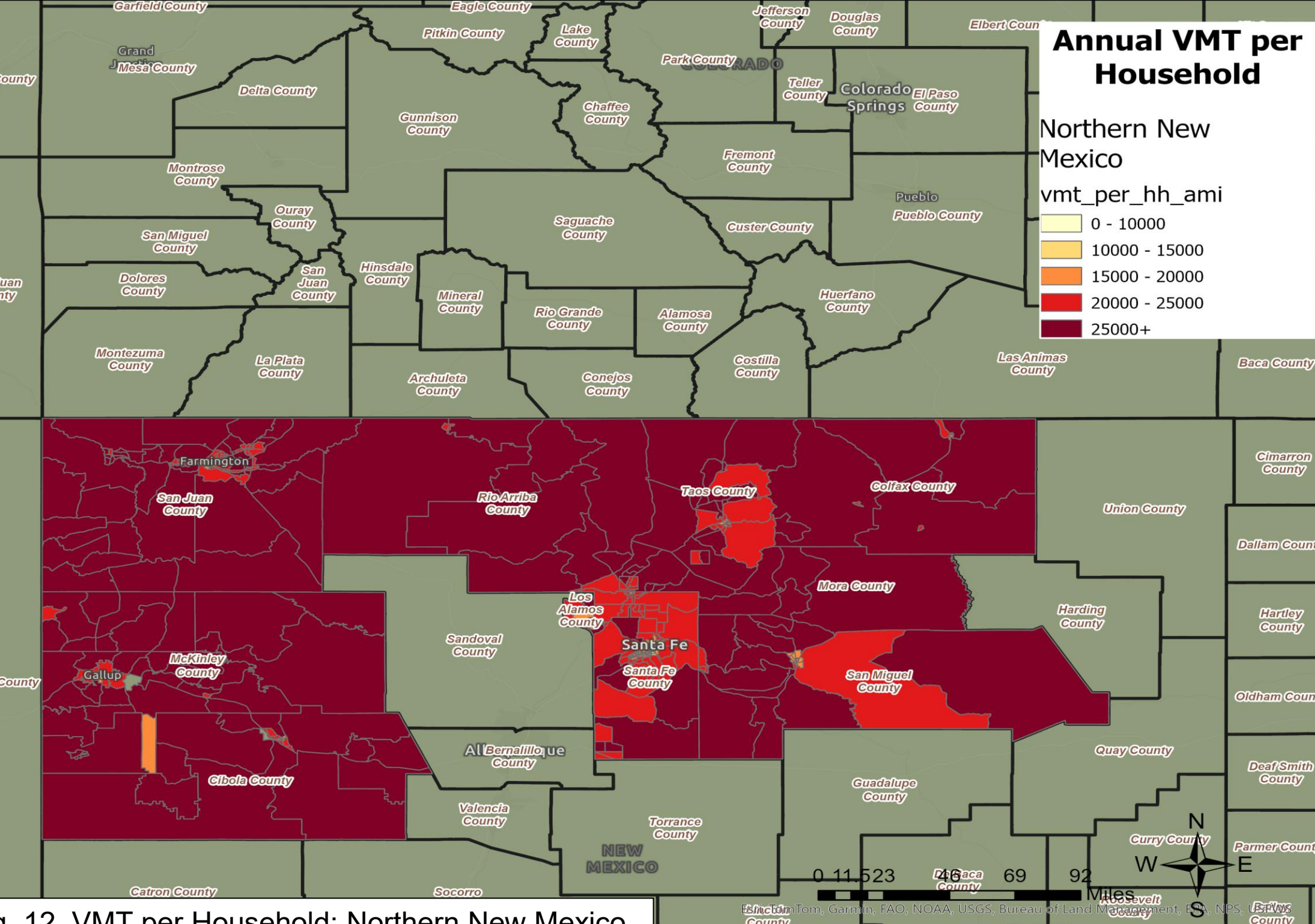
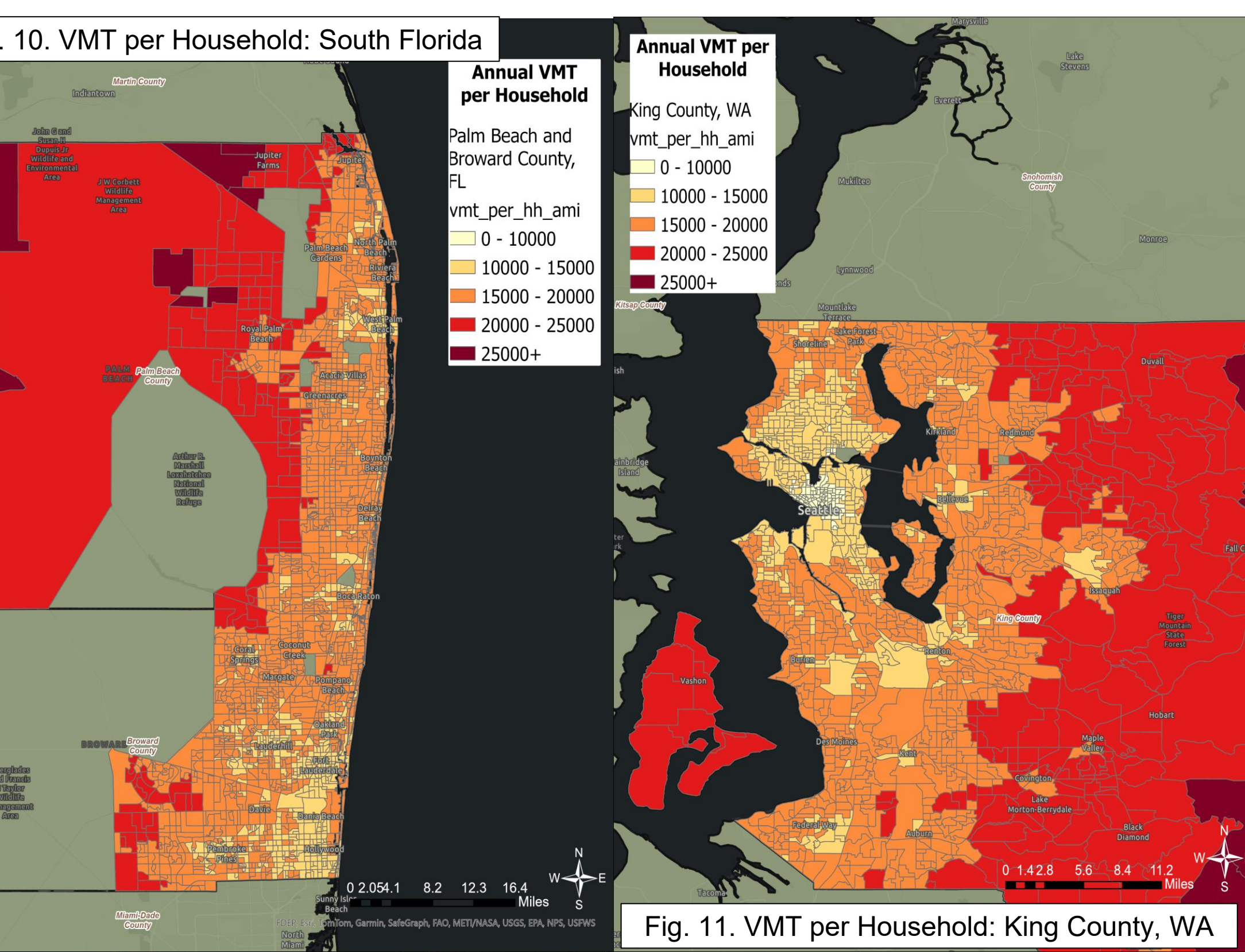
**BACKGROUND:**

This project aims to understand the transportation barriers university students face when commuting to their campuses across these three regions: Palm Beach and Broward County, FL, Northern New Mexico, and King County, WA.

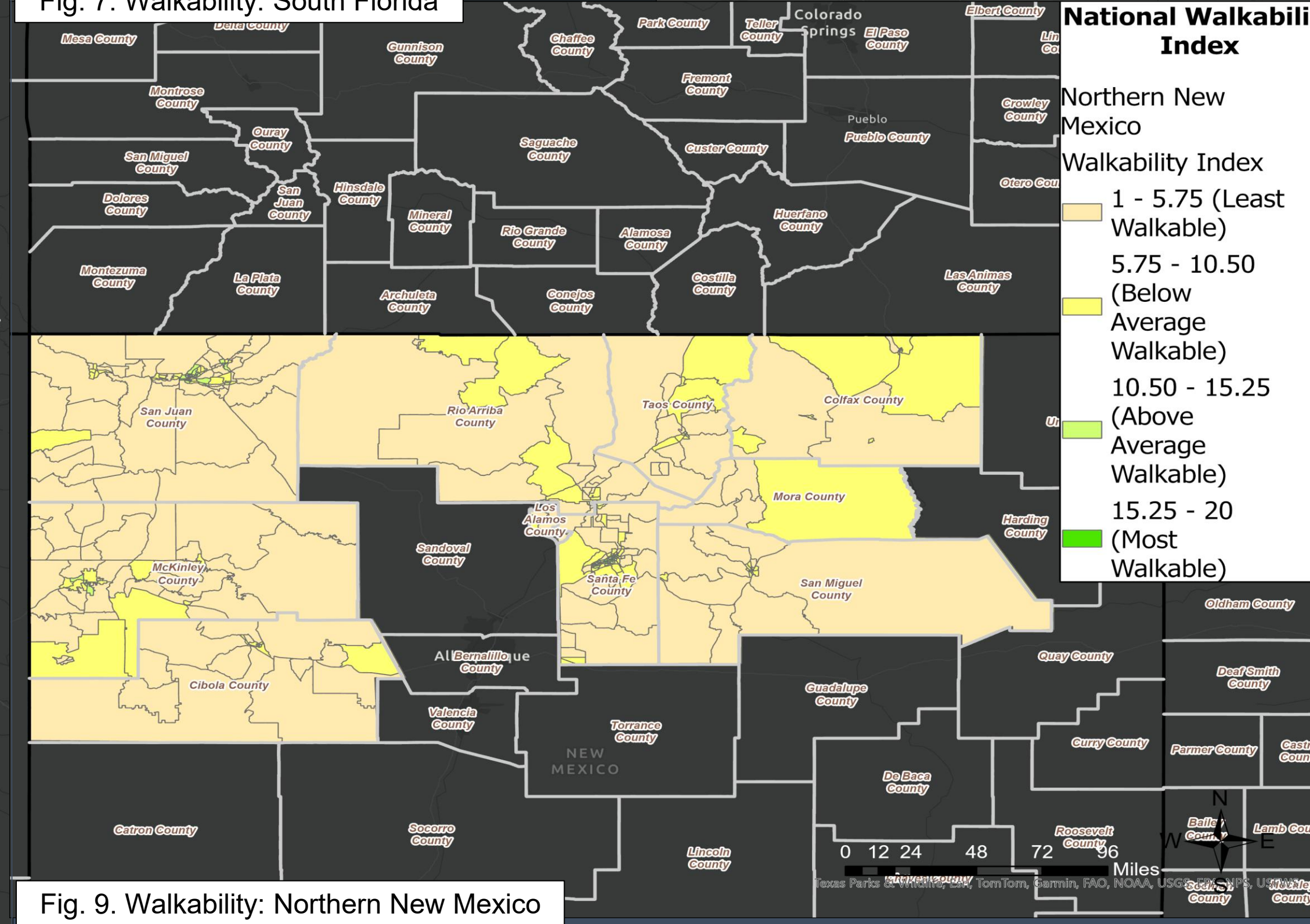
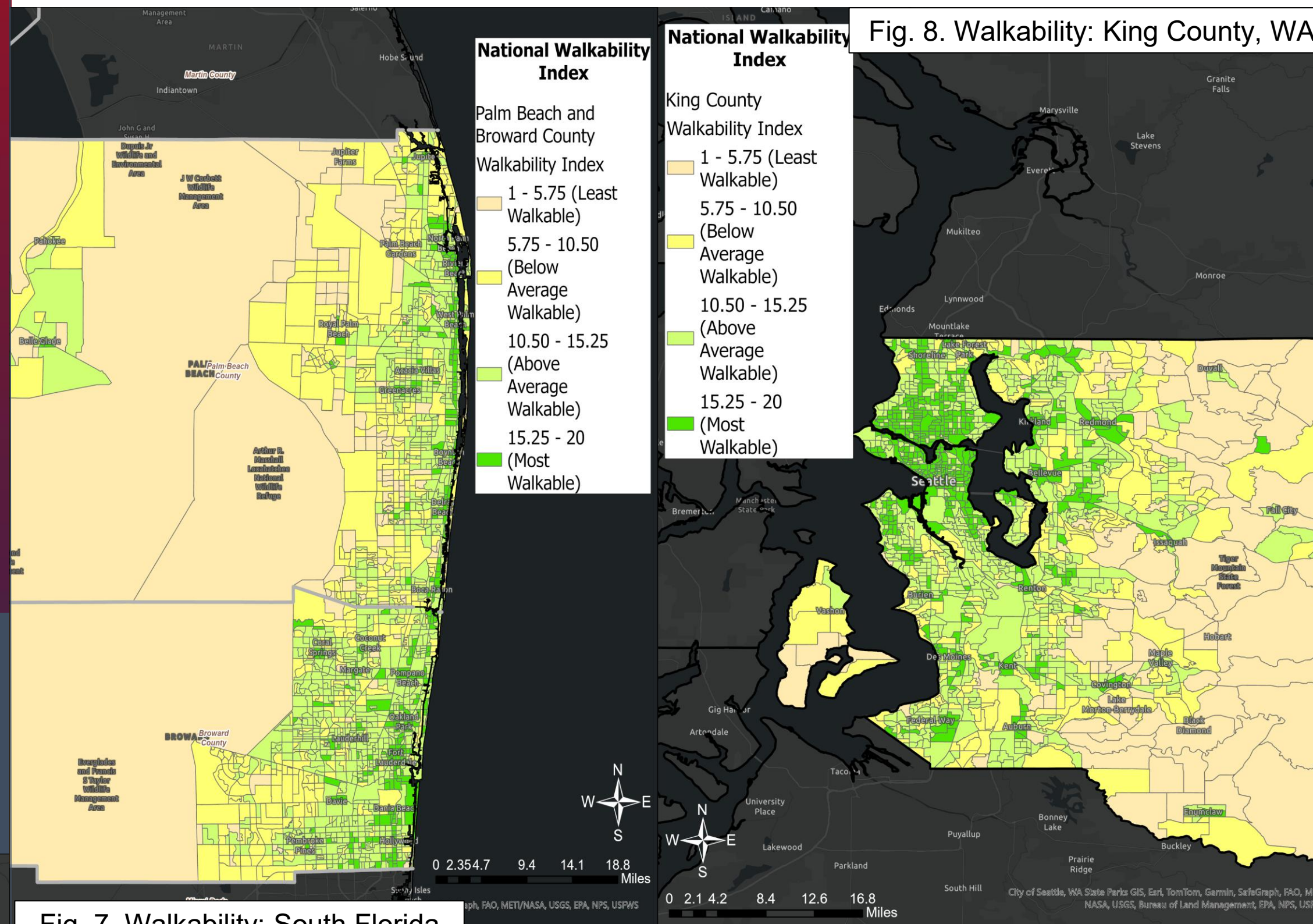
Factors such as public transportation efficiency, safety conditions, and car-oriented urban layouts can significantly impact accessibility.

By visualizing indicators such as walkability, vehicle miles traveled (VMT) per household, and public transit usage, this study visualizes how the built environment may influence mobility options and overall accessibility for students. These maps highlight differences in transportation conditions and levels of car dependency across the selected regions.

**ANNUAL VMT PER HOUSEHOLD MAPS:**



**WALKABILITY INDEX MAPS:**



**METHODS:**

This study uses GIS-based spatial analysis to visualize transportation conditions across the selected regions.

Three primary indicators were mapped: walkability, annual vehicle miles traveled (VMT) per household, and public transit usage. Walkability scores were used to assess pedestrian accessibility, while VMT data were used as a proxy for car dependency, and transit usage was included to evaluate the availability and reliance on alternative transportation options.

Additional indicators, such as safety and micromobility methods were identified for future analysis.

**RESULTS:**

South Florida shows moderate walkability but high VMT and low transit usage, suggesting continued car dependence and limited mobility for students without a vehicle. (Figs. 4, 7, 10). Northern New Mexico presents the highest VMT and minimal transit use, where rural conditions reduce connectivity and create significant barriers for students. (Figs. 5, 9, 12) King County demonstrates higher walkability and transit use, providing more multimodal options and fewer transportation barriers. (Figs. 6, 8, 11)