Higher Education Institutions (HEIs) are in a unique position to leverage the physical and social characteristics of campus to reduce greenhouse gas emissions from transportation. (Zhou et al., 2018) Existing literature highlights a critical gap in university travel behavior research, particularly in understanding student travel behavior in college towns in US. This study examines travel behavior and mode choice of Texas State University students account for over 50% of the local population and operate at a density of 83.2 students per acre, creating distinct opportunities for employing and assessing novel transportation intervention. With students generating approximately 20% more daily trips than the general public.

I examine how Texas State University can leverage its dense, compact nature and existing multimodal systems to reduce single-occupancy vehicle trips. By analyzing existing transportation data, I will evaluating how physical campus characteristics include compact design, infrastructure, and connectivity influence mode choice. Travel behavior is an action of habit that is significantly affected by both physical infrastructure and social factors, including personal perspective, satisfaction, and attitude, ultimately determining commuters' mode choice. (De Angelis et al., 2021) The study will provide insight on capitalizing on the "window of opportunity", a crucial transition period when students show increased likelihood of adopting sustainable travel behaviors. (De Angelis et al., 2021) Khattak et al., 2011) This research provides a rigorous assessment framework for Texas State University to evaluate and plan transportation systems that effectively reduce emissions while promoting active and alternative travel modes. The contribution of this research is practical strategies for other universities and college towns seeking to improve sustainable transportation options.