

Project Information Form

Project Title	STUDENT PROJECT: Exploration of New Methods in Long Distance Transportation Data Collection and Tourism Travel in Vermont
University	University of Vermont
Principal Investigator	Ben Kaufman Advisor: Gillian Galford
PI Contact Information	Email: Gillian.Galford@uvm.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	National Center for Sustainable Transportation - \$90,000 University of Vermont - out-of-state tuition
Total Project Cost	\$90,000, plus out-of-state tuition
Agency ID or Contract Number	
Start and End Dates	July 1, 2015 through August 31, 2017
Brief Description of Research Project	<p>Master's Student: Ben Kaufman</p> <p>Human transportation patterns have continued to shift and increase in rate as technology has made travel between spatially disparate locations more feasible. These movements are responsible for approximately one third of global carbon emissions, and account for one half of Vermont's greenhouse gas output. Modeling transportation behaviors is difficult due to changing travel patterns and issues of surveying human participants. Long distance travel patterns are especially difficult and have not received the attention that urban mobility has within the literature.</p> <p>In his Masters thesis, Ben describes current methods of transportation data collection and propose new methods, as well as attempts to quantify the impact on Vermont's roadways of the transportation-based tourism sector. The first chapter of the thesis describes a GPS-based travel survey conducted over the course of one year, coupled with interview data of long distance trips undertaken by 10 participants. Long distance travel has historically been underrepresented in travel surveying due to its infrequency, resulting in decreased likelihood of capturing a long distance trip in a short travel study. By extracting points at intervals from the GPS dataset, it becomes possible to determine accuracy of trip matching between the two datasets with adjusted data collection</p>



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	<p>methods. The second chapter examines transportation related to tourism in Vermont. As one of Vermont's largest industry sectors, economic impact has been of particular interest to state planners. However, limited analyses of the transportation impacts of this sector are currently available. The research models route choice of drive through tourists, whom constitute 40% of visitors, attempting to begin quantifying tourist mileage and CO2 emissions within the state.</p> <p>Together, these studies expand knowledge on long distance transport data collection and the role of tourism in Vermont's transportation mileage.</p>
Describe Implementation of Research Outcomes (or why not implemented) (Attach Any Photos)	
Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links <ul style="list-style-type: none">• Reports• Project website	<p>https://ncst.ucdavis.edu/graduate-student-research/</p>