

Grant Deliverables and Reporting Requirements for UTC Grants

UTC Project Information	
Project Title	Immersive, highly realistic in-lab experiments of cycling route choices
University	Cornell University
Principal Investigator	Ricardo Daziano So-Yeon Yoon
PI Contact Information	daziano@cornell.edu 607-255-2018 sy492@cornell.edu 607-255-8467
Funding Source(s) and Amounts Provided (by each agency or organization)	USDOT: \$80,000 Cornell: \$40,000
Total Project Cost	\$120,000
Agency ID or Contract Number	Sponsor Source: Federal Government CFDA #: 20.701 Agreement ID: 69A3551747119
Start and End Dates	 Start date: 09/30/2019  End date: 03/31/2021
Brief Description of Research Project	This project aimed to understand how self-assessed health status relates to preferences for cycling infrastructure. An integrated latent class and latent variable choice model was fitted using responses to a stated preference experiment from a panel of New York City residents (N = 801). Estimates showed that people with stated good physical health tend to have preference parameters similar to those of experienced cyclists. This result means that the provision of cycling infrastructure with the purpose of attracting non-cyclists also has the potential of attracting those with worse health outcomes. This result suggests a double benefit coming from car use reduction and lower health spending.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	One of the outcomes of this research was improved techniques for discrete choice experiment to gain increased understanding of the link between health and cycling demand. The new technique regards the use of immersive cycling scenarios to describe the alternatives in discrete choice experiments. Adding to this outcome, this project is also enlarging the pool of trained

transportation professionals, as a PhD student designed and used the following set of immersive cycling scenarios in the online survey that was used in the reported research.

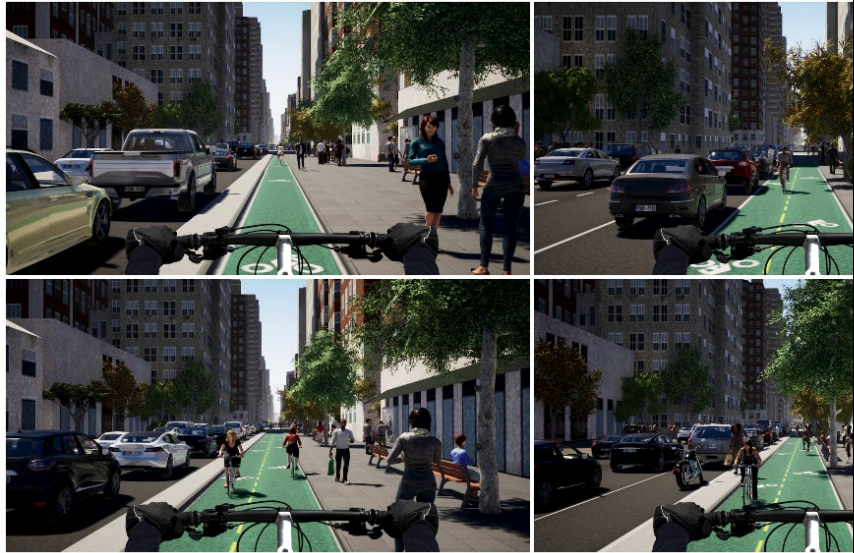


Figure 1: Examples of choice scenarios presented to respondents

Impacts/Benefits of Implementation (actual, not anticipated)

As described above, this project is enlarging the pool of transportation science professionals, by training a PhD student at Cornell University in the new technique developed in this project to utilize immersive cycling scenarios to better understand the link between health and cycling choices. This latter benefit (improved understanding) is also enriching the body of scientific knowledge around cycling demand.

Web Links

- Reports
- Project website

<http://ctech.cee.cornell.edu/final-project-reports/>