UTC Project Information	
Project Title	Measuring Temporal and Spatial Exposure of Urban Cyclists to Air Pollutants Using an Instrumented Bike
University	Georgia Institute of Technology
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Funding Source(s) and Amounts Provided (by each agency or organization)	CARTEEH: $50,000 Georgia Tech's Institute for People and Technology (IPAT) $25,000
Total Project Cost	$75,000
Agency ID or Contract Number	Grant #69A3551747128 (GT-01-09)
Start and End Dates	Jan 1, 2018 – Dec 31, 2018
Brief Description of Research Project	Increased use of active transportation can make direct and indirect contributions toward addressing both the health concerns arising from sedentary lifestyles and other societal transportation issues including congestion, environmental, and equity problems. However, in the process of cycling for transportation, cyclists themselves are exposed to multiple pollutants that could adversely impact their health. Although it has been found that the health benefits of cycling on an individual basis outweigh air pollution and safety impacts, pollutant exposure during a typical trip can be almost double depending on the mode of transport and specific route. The goal of this study is to better understand local cyclist exposure to air pollutants, specifically PM2.5. This mapping of pollutant exposure along cyclist routes at different times of day and with varying traffic volumes, can allow better planning of cyclist infrastructure and routing of cyclists in trip planners to minimize pollutant exposure while cycling. The project team seeks to understand the variation in air quality exposure of a cyclist depending on the time that they bike and the route that they take during their trip. This research project refines the use of an instrumented bicycle for air quality data collection to map pollutant exposure by cyclists on parallel routes between major origin-destination pairs.

Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	None yet
Impacts/Benefits of Implementation (actual, not anticipated)	None yet
Web Links • Reports • Project website	None yet