A Comparative Analysis of Micro-Mobility Services in Atlanta, GA and Washington, D.C.

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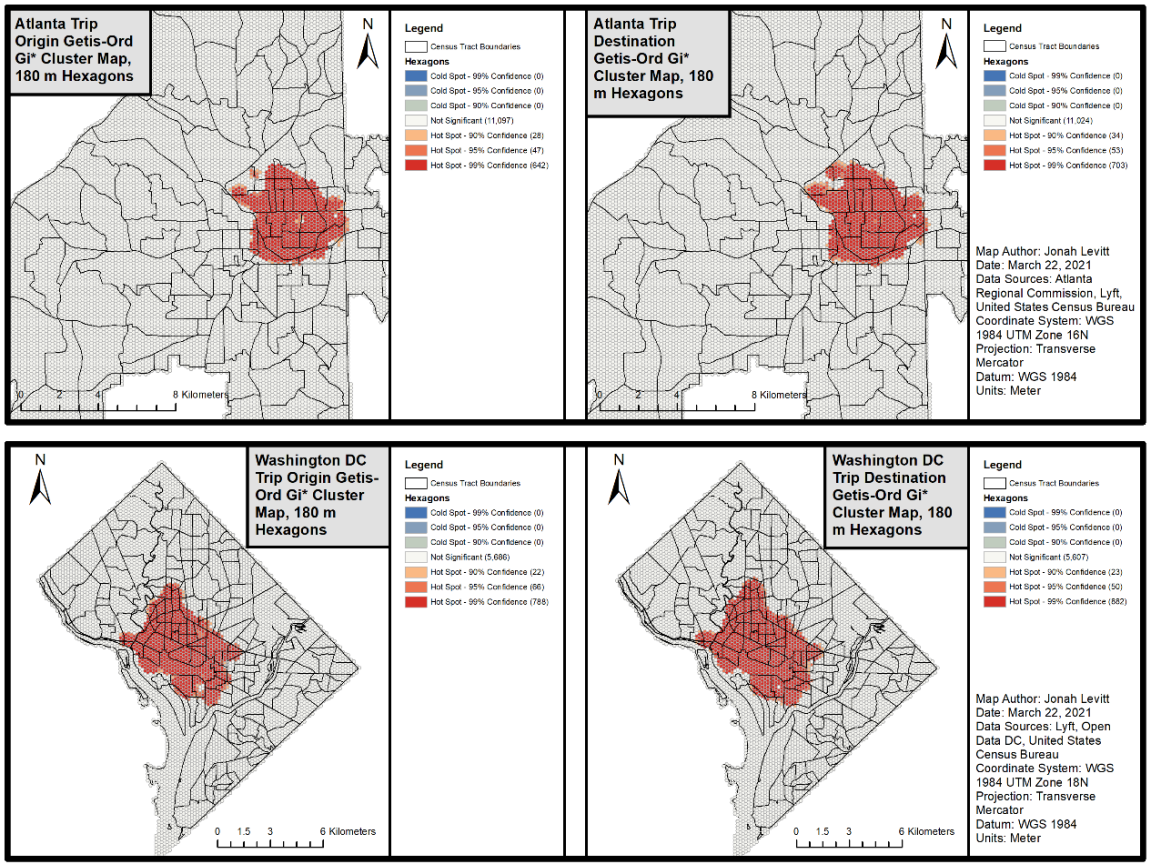
Micro-mobility vehicles, or self-driven, lightweight transportation devices such as bicycles and scooters, are becoming increasingly popular modes of transport in urban areas. Since 2017, several private companies have introduced dockless micro-mobility sharing services to various American cities. In this thesis, I compare the usage patterns of shared dockless electric scooters in Atlanta, Georgia, and Washington, D.C., in the summer of 2019 to identify which populations use micro-mobility services in each city. I incorporate descriptive statistics, spatial lag & negative binomial regression models, and the results of a participant survey to demonstrate that there are notable differences in scooter usage characteristics between the cities. Simultaneously, I show that the clustering patterns and specific scooter usage predictors are similar in Atlanta and Washington. These findings will help urban planners assess the impact of shared micro-mobility services on existing transportation systems and evaluate their role in serving different populations.

Keywords: Micro-mobility, shared dockless electric scooters, transport equity, free-floating mobility, Atlanta, Washington



Map of Getis Ord Gi* scooter clusters in Atlanta & Washington, June 20-July 16, 2019 (Source: Author)