Title: Examining the Relationship Between Ride-hailing, Active Travel, and Health Status: Implications for Metropolitan Statistical Areas Served by Different Transit Systems

Abstract
The introduction of shared mobility can not only lead to the substitution of traditional transportation modes but can also affect people’s health. However, the adoption of shared mobility has impacted metropolitan statistical areas (MSAs) differently, especially when considering the other modes available in those areas. This study examines the relationship between travel behavior of frequent ride-hailing users and their health status, as well as other traits that may affect their choice of travel mode. To achieve this, the 2017 National Household Travel Survey (NHTS) data is analyzed to understand the relationship between self-reported health status, active travel (AT), and ride-hailing use in two midwestern MSAs: Indianapolis, IN, and Chicago, IL. While previous literature has analyzed the effects of shared mobility in large MSAs, which tend to have robust transportation systems, there is also a need for more research in areas served by medium-sized transit agencies. Results suggest that the Indianapolis MSA-based NHTS respondents who stated that they have “very good” health are less frequent users of ride-hailing services, but this was not the case in the Chicago MSA. In both MSAs, respondents in higher income brackets were more likely to be frequent ride-hailing users. Younger adults and respondents who claimed to have a “very good” or “excellent” health status seemed to favor AT modes in both MSAs. The results of this study are a first step towards informing policymakers of the health-related factors associated with ride-hailing services and, potentially, the expected outcomes associated with the adoption of future transportation services, such as autonomous vehicles.