



Trip Generation for Mid-Long-Distance Travel in the U.S. Megaregions (Yang Li) (CM2-76)

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The U.S. transportation statistics show that long-distance travel (>50 miles oneway) took up less than one percent of total personal trips but accounted for more than a quarter of the total personal miles traveled (PMT). The large PMT share of long-distance travel attracts widespread research interest concerning transportation-related GHG emissions. This study focuses on a submarket of long-distance travel with trips in the distance range of 50 to 600 miles oneway, hence mid-long-distance (MLD) travel. MLD travel has about three-quarters of all long-distance travel. It takes place increasingly between cities in megaregions (a megaregion comprises multiple interconnected metropolitan areas and their interdependent rural hinterlands). Specifically, this study examines trip generation behavior for MLD travel in the U.S. megaregions. Personal trip rates will be regressed against a set of socioeconomic and spatial variables and calibrated to the SafeGraph data set. Weekly and seasonal trip generation patterns will be examined to gain insights into trip generation behavior beyond the daily-travel analysis framework that has been prevalently adopted for metropolitan transportation planning. The study's findings will help develop trip generation models targeting mid-long-distance travel, shed light on weekly and seasonal trip generation patterns, and inform transportation investments and policy deliberations on megaregional transportation planning.



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