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Southeastern Transportation Research,
Innovation, Development and Education Center

2017 Project Abstract

Project Title: Impact of Smartphone Applications on Trip Routing and Congestion Management
(Project A)

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ABSTRACT: Proliferation of mobile devices with routing apps such as Google Maps, Waze, INRIX, TomTom, etc. has made possible congestion avoidance through real-time re-routing of vehicles for any mobile-enabled driver. However, to date, the real impacts of these routing apps on system and local traffic across the roadway infrastructure are largely unknown. There is a limited amount of research that has broadly investigated issues such as the impact of social media on transportation policy (Gal-Tzur et al., Bregman and Watkins), usage patterns of smartphone apps (Jones et al.), and use of gaming concepts to influence driver behavior (McCall and Koenig, Wang et al.). However, there is a dearth of research investigating the impact of routing apps on trip routing or travel behavior. This study attempts to fill this gap and gather evidence and quantify the relationship between routing app usage and propensity of alternative route choices by routing app users.