



The Impact of Navigation Apps on Travel Behavior

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BACKGROUND

- The majority of smartphone owners today regularly use navigation applications such as Google Maps and Waze.
- Potential impacts of these navigation apps include potential increased “cut-through” traffic, related congestion, and safety concerns.

OBJECTIVE

- Understanding the preference and behavior associated with route guidance apps is important for evaluating how drivers utilize use the directional information provided.

METHODS

- Intercept surveys were conducted at three festivals in the Atlanta area between June and November 2018.

PRELIMINARY FINDINGS

- Google Maps** is the most popular app used for directions.



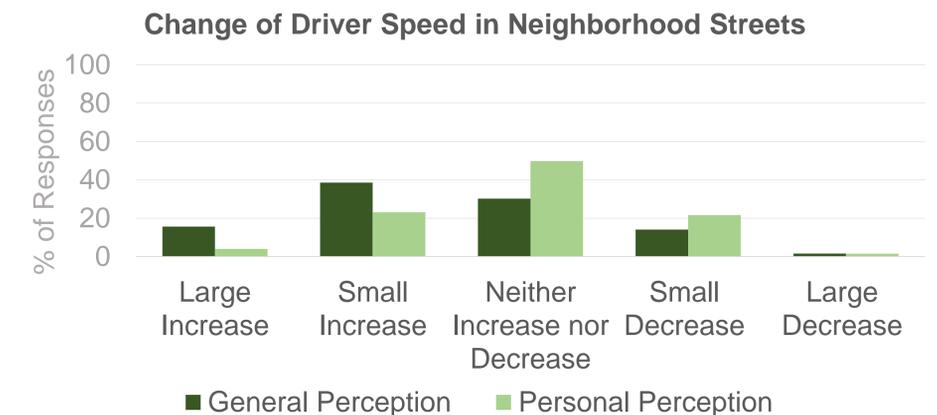
- Highest usage of navigation apps occurs during **first time trips** (77% of first time trips) and **regular commute trips** (72% of regular commute trips).

- When individuals do use navigation apps, a large majority of users follow the route suggested by the app **80-100%** of the time

- The primary reasons individuals do not follow the suggested route is because **they prefer their typical route** or the **route is too complicated**.

- The likelihood that users will accept a route change increases at the **3 to 5 minute** time-savings threshold.

- Although individuals reported that navigation apps **increase the speed** of other drivers in neighborhood streets, they did not perceived the slight increase in their personal speed.



- A similar outcome was seen with changes to driver alertness through neighborhood streets from navigation apps.

