

New Jersey Department of Transportation  
Bureau of Research

## Technical Brief

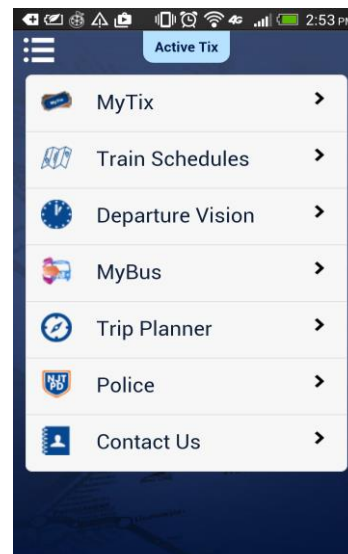


### Assessing NJ TRANSIT's Mobile App for Users' Receptiveness to Geotargeting

*This report examines the receptiveness of NJ TRANSIT mobile application ("app") users to geotargeting, which is the practice of providing customized content based on a user's location. Feedback from NJ TRANSIT app users was collected in focus groups and an online survey. The results suggest that many NJ TRANSIT app users are receptive to geotargeting, particularly for providing targeted transit information.*

#### Background

NJ TRANSIT customers can use a smartphone application ("app") to purchase tickets directly on their phone and access transit information (see figure on the right). Most smartphones are equipped with technology that can determine a user's location; however, this feature is currently used in a limited capacity in NJ TRANSIT's app. By knowing a passenger's location, NJ TRANSIT could potentially provide customized information directly to riders based on their location, which is referred to as geotargeting.



*NJ TRANSIT's Mobile App*

#### Research Objective and Approach

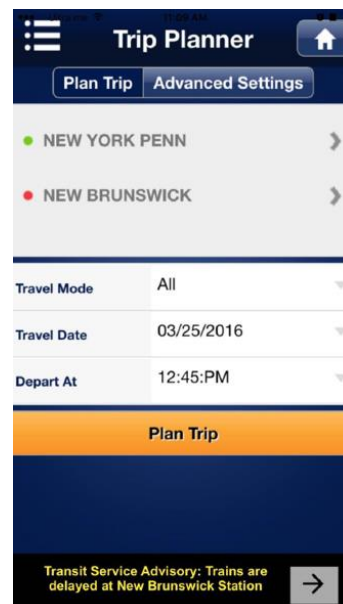
The objective of this research project is to assess NJ TRANSIT passenger receptiveness to geotargeting in NJ TRANSIT's mobile app.

A three-part approach was used to fulfill this objective. In the first part of the project, an industry scan of transit smartphone apps was conducted by downloading publicly available apps from four peer agencies to NJ TRANSIT. In the second part, two focus groups of NJ TRANSIT passengers were conducted with a total of eighteen participants who use NJ TRANSIT's app. The results of this qualitative research were used to guide the third part of the research, which was an online survey of more than five thousand NJ TRANSIT app users.

#### Findings

In the first part of the project, comparable transit smartphone apps were downloaded, and each app included the capability to purchase a transit ticket. The results reveal that most transit ticketing apps have the capability to detect a user's location; however, this functionality appears to be used in a limited number of features within the apps, such as detecting a user's location when they request nearby real-time vehicle arrival information.

Second, focus groups were conducted. The focus groups began with a structured discussion, and based on this discussion, it was concluded that most participants were aware that their smartphone can detect their location. Next, focus group subjects participated in an exercise in which they provided feedback on mock-up screenshots of NJ TRANSIT's app with potential geotargeting features. A key finding from this exercise was that the most desired potential feature in NJ TRANSIT's app is targeted transit service alerts, such as in the event of a train delay (see figure on the right).



*Mock-up Screenshot with Transit Service Alert*

Third, more than five thousand NJ TRANSIT passengers participated in an online survey about NJ TRANSIT's mobile app. The results of the survey reveal that most customers understand that their smartphone can detect their location, and most respondents find it acceptable for NJ TRANSIT's app to detect their location. After providing specific examples of potential geotargeted features in NJ TRANSIT's app to survey respondents, the following conclusions can be drawn:

- The most desired feature was **transit service alerts**. About 92% of survey participants responded favorably to mock-up screenshots of transit service alerts (see figure above).
- Most survey respondents (about 80%) were receptive to receiving **special event information** when it could affect their transit trip.
- Survey participants expressed less interest in **coupons and advertisements**. Less than half of respondents were receptive to receiving coupons for nearby restaurants and only about one quarter of participants responded favorably to ads for local businesses.

In summary, the results suggest that NJ TRANSIT customers find it acceptable for NJ TRANSIT's app to know their location, and they are particularly receptive to receiving targeted transit information relevant to their NJ TRANSIT trips.

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A final report is available online at: <http://www.state.nj.us/transportation/refdata/research/>. If you would like a copy of the full report, send an e-mail to: [Research.Bureau@dot.state.nj.us](mailto:Research.Bureau@dot.state.nj.us).

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