Researchers at the University of South Florida have developed a technology that run on mobile devices and utilize knowledge of where the device is geographically located in real-time using GPS, to aid transit riders, travelers and public safety officials.

Recent advances in cell phones and mobile technology provide opportunities for innovative, real-time, and location-aware transportation applications. Rudimentary online mapping programs and other software systems allow users to view maps and get textual directions using their cell phones; however, much user input is still required to get around in unfamiliar areas. Specifically, cognitively disabled transit riders and their care-givers often find it difficult to navigate such a system. Therefore, a user-friendly system that guides users of public transportation and law enforcement officials in real-time has yet to be achieved.

This particular system recognizes patterns for real time LBS. It implements a neural network to predict the mobile device’s position during periods of unavailability of GPS services.

Our inventors have devised a system which is user friendly and very efficient in notifying the user of any traffic safety problems based on current location and travel patterns.