



## Florida Department of Transportation Research

Testing the Impact of Personalized Feedback on Household Travel Behavior  
(TRAC-IT Phase 2)  
BD549-24

Transportation demand management (TDM) strategies seek to influence travel behavior by mode (method of travel), time, location, and route selection. Providing travelers with their household's travel patterns and with practical ways to improve their trip planning or eliminate trips can allow them to find new opportunities to choose transit, bicycling or walking over automobile travel. This research focuses on using innovative technology to pattern household travel behavior for the purposes of educating, promoting, and encouraging households to utilize alternatives to driving, in general, and to driving alone, in particular. This project is the second phase of a three-part study on the use of GPS-enabled cell phones to collect personal trip data, analyze it, and suggest alternative or more efficient travel choices that could save the traveler time and money.

In the first phase of study (BD549-02), the researchers developed a travel data collection tool dubbed TRAC-IT, short for Transit Ridership Automated Collection of Individual Travel. While TRAC-IT was initially developed and tested on a personal digital assistant (PDA), it is a non-proprietary application that can be added to a broad range of electronic devices. The researchers demonstrated that TRAC-IT can successfully collect comprehensive individual trip data, including start time, end time, origin, destination, travel speed, trip route, and trip distance, with minimal input from participants.

This second phase of study increased the functionality of TRAC-IT to allow enhanced, long-term data recording and in-depth analysis of travel behavior history. TRAC-IT also now

includes a real-time path prediction prototype that calculates a probable route based on past trip data. The predictor then uses its Global Information System (GIS) capability to identify traffic problems along the predicted route and provides to travelers text or audio alerts concerning incidents along their paths. After the trip, TRAC-IT sends, via email or text message, tailored feedback advice that suggests options for trip reduction or elimination.



*The TRAC-IT program will give immediate travel feedback via cell phone.*

The next phase of the study will focus on TRAC-IT applications for cell phones. When the TRAC-IT system is complete, it will be a valuable aid for people who are interested in making their travel routines more effective. Encouraging sustainable changes in travel behavior can lead to fewer solo car trips, increased use of public transit and other travel modes, and improved traffic conditions, thus enhancing Florida's travel safety and economy.

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For more information, visit: <http://www.dot.state.fl.us/research-center>