



I-95 Corridor Coalition

Vehicle Probe Project

Acquiring Travel Times and Speeds Using Probe Technology

This groundbreaking initiative and collaborative effort among the Coalition, University of Maryland and INRIX has been providing comprehensive and continuous real-time travel information for two years. South Carolina and Florida have recently been added to the core area of New Jersey through North Carolina.

Objective: The objective is to create a seamless traffic monitoring system that spans the eastern seaboard delivering travel times and speeds on freeways and arterials using probe technology. The INRIX system fuses data from various sources to present a comprehensive picture of traffic flow. Member agencies have found numerous uses for the data beyond simply travel information (the original use at the project inception).



Applications in Use: Several agencies are using the probe data for their **511**, web and phone service. In addition, other agencies are using the vehicle probe data to **calculate travel times and post them on message signs**. **Performance measures and travel time reliability**, particularly in congestion prone areas, are being calculated using real-time and archived Vehicle Probe Project (VPP) data. I-95 Corridor Coalition member agencies use the project monitoring site to **observe traffic patterns** within its boundaries, but especially across state lines to anticipate incidents and congestion. VPP data is being used as input to the Coalition's **long-distance trip planner website** at www.i95travelinfo.net, as well as variable message signs and kiosks **at airports, welcome centers and regional malls** to enhance traveler information.

Coverage: The initial core area (approximately 1,500 centerline freeway miles) from New Jersey through North Carolina has been expanded to more than 4,700 centerline miles and includes the entire limited access road network in New Jersey, and the entire interstate systems for North Carolina and South Carolina and parts of Florida.

Data Validation: A comprehensive ground truth testing of this traffic data was conducted in the fall of 2008 by the University of Maryland. Ongoing validation is conducted monthly in various states throughout the Corridor to ensure data quality. Using innovative Bluetooth reader technology, the validation studies compare observations of ground-truth vehicle speeds against real-time speed information provided by INRIX for the same segments. Approximately 1,200 hours of data are collected each month. Between October 2008 and April 2010, almost 19,000 hours of data were collected and validated. Contract payment is tied directly to the validation results and all specifications for data quality have been exceeded throughout the project. All data and analysis are made available to the transportation community for review.

The Future: Plans are being developed to provide expanded coverage for all states along the I-95 Corridor. This presents a unique opportunity for continuous roadway monitoring coverage along I-95 and other important routes from Maine to Florida and for all Coalition states to benefit from the Vehicle Probe data. For additional information or to join the project, please contact William Stoeckert at 774.207.0367 or wstoeckert@yahoo.com.

The I-95 Corridor Coalition is a partnership of the Departments of Transportation and related authorities and organizations, from Maine to Florida, working together to accelerate improvements in long-distance freight movement and passenger travel.