



# I-95 Corridor Coalition

## Vehicle Probe Project

### *Acquiring Travel Times and Speeds Using Probe Technology*

The I-95 Corridor Coalition's Vehicle Probe project is a groundbreaking initiative and collaborative effort among the Coalition, University of Maryland and INRIX providing comprehensive and continuous real-time travel information to members. The contract was awarded in December 2007, and data for a core area from New Jersey through North Carolina, has been provided since July 1, 2008. The project area has been expanded to include South Carolina.



**Objective:** The objective of this project is to acquire travel times and speeds on freeways and arterials using probe technology. While the dominant source of data is obtained from fleet systems that use GPS to monitor vehicle location, speed, and trajectory, other data sources such as sensors may also be used. The INRIX system fuses data from various sources to present a comprehensive picture of traffic flow.

**Benefit to Members:** I-95 Corridor Coalition member agencies benefit from the Vehicle Probe project by receiving travel time and speed data to support the dissemination of travel information using 511 and websites; display of travel times on variable message signs, traffic management during incidents and performance measurement. Coalition members are able to use this contract to expand travel data coverage within their jurisdictions, develop websites and interface with existing traffic management systems.

**Coverage:** The initial core area (approximately 1500 centerline miles) from New Jersey through North Carolina has been expanded to over 4100 centerline miles and includes the entire limited access road network in New Jersey, and the entire interstate systems for North Carolina and South Carolina.

**Validation:** In the fall of 2008, the University of Maryland conducted a comprehensive ground truth testing of this traffic data. Over 100 miles of highways across Delaware, Maryland, New Jersey and Virginia were examined in detail over four months. Using innovative Bluetooth reader technology, the study compared observations of ground-truth vehicle speeds against real-time speed information provided by INRIX for the same segments. The initial validation concluded that INRIX is meeting the specifications of the contract to confidently develop applications to meet the needs of the Coalition and its members. The validation effort continues on a monthly basis for each state and is revealing similar results. To date over 11,000 hours of data have been validated. Contract payment is tied directly to the validation results. All data and analysis are made available to the transportation community for review.

**Funding:** Coalition funding is underway for the first three years of the contract. Additional funding will be considered for support of the applications with the data and additional expansion based on success of the project and support of the members.

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#### The I-95 Corridor Coalition:

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.