

STRIDE

Southeastern Transportation Research,
Innovation, Development and Education Center

2017 Project Abstract

Project Title: Performance Measurement and Management Using Connected and Automated Vehicle Data (Project C)

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ABSTRACT: Transportation system performance is a key component in congestion management as well as in setting agency priorities and making policy decisions. Fusing data from existing sources such as point sensors, automatic vehicle matching technologies, third party vendors, incident and work zone databases, weather data, video analytics, high resolution controller data, and management and control sources can provide important information for making such decisions. Emerging connected and automated vehicle technologies, shared autonomy, and shared mobility will significantly affect demand and supply. They will also increase data quantity and quality and produce new performance measures (door-to-door travel times, queue locations, vehicle trajectories) that cannot be obtained using existing data sources. The objective of this project is to develop novel performance measurement alternatives considering the availability of emerging vehicle technologies through Dedicated Short Range Communications (DSRC) and/or wide area cellular technology. These advances will improve policy decision making, optimize operations, and improve outcomes.