EXPRESS LANES PERFORMANCE MEASURES

Develop and Test Travel-Time Reliability Performance Measures on Express Lanes

Purpose

As Florida constructs new express lanes and converts existing high-occupancy vehicle (HOV) lanes into express lanes, there is a need to evaluate and monitor their performance. The effectiveness of express lanes is dependent on a number of factors, including travel-time reliability, throughput, and customer satisfaction. Achieving mobility on express lanes is one part of the overall throughput for an entire freeway facility. The evaluation of express lanes assesses the usage and performance of the lanes and the adjacent general purpose lanes.

The purpose of this task was to determine methods, procedures, and criteria for measuring the travel-time reliability and operational effectiveness of express lane facilities.

Results

This project studied existing monitoring efforts and resulted in a report on findings and recommendations for the following:

- Performance metrics for monitoring;
- Methodology for calculating speeds;
- Granularity of data;
- Time periods for evaluation;
- Segmentation;
- Revenue; and
- Performance metrics for reporting.

Applicability to Mobility Performance Measures (MPM) Program and FDOT

The MPM Program provides guidance and direction on assessing mobility performance for all roadways in Florida, including express lanes. Recommendations resulting from this project are focused on measuring the utilization and quality of travel. As more express lanes are planned, FDOT should pursue a uniform means of accounting for their performance.

Next Steps

Work with express lanes stakeholders and management will continue. The primary objective is to build consensus on how to report on express lane performance and establish consistent calculation methodologies within FDOT.