FTA RESEARCH
FEDERAL TRANSIT ADMINISTRATION

REPORT SUMMARY

U.S. Department of Transportation
Federal Transit Administration

Miami Urban Partnership Agreement (UPA) Pines Boulevard Transit Signal Priority Evaluation

Background

Miami was one of six cities that were awarded funding from the United States Department of Transportation (USDOT) through the Urban Partnership Agreement/Congestion Reduction Demonstration (UPA/CRD) Program. The main element of the Miami UPA was the conversion of the high occupancy vehicle lanes on I-95 to managed lanes based on the high occupancy toll concept. A sub-component of the Miami UPA was the installation of transit signal priority (TSP) at 50 intersections on two arterials in Broward County to improve performance of the 95 Express Bus Service.

Objectives

The objective of the evaluation was to measure and compare bus travel times, on-time performance, and components of travel delay with and without the TSP. The evaluation relied on data from the bus's automated passenger counter (APC) system as well as manually collected data from personnel who rode the buses and recorded the times and locations of delay.

Findings and Conclusions

With the TSP activated, the 95 Express buses took 4 minutes less to travel the 10 mile distance on Pines Boulevard. This amounted to a 12.1 percent reduction in travel time. Without the TSP activated, buses spent 24 percent of their travel time stopped at traffic signals. With the TSP activated, signal delay was reduced to 20 percent. On-time performance improved from 66.7 percent to 75 percent. These findings were for the AM peak period. In the PM peak period, bus performance was similar with or without the TSP activated.

Benefits

This evaluation allows the impacts of the Miami UPA transit signal priority program to be assessed in a comprehensive and systematic way. The evaluation is also designed to generate information and technology transfer materials that could be used to support future deployments of similar strategies in other regions. This includes both operational data and lessons learned on technical and institutional issues. The evaluation also provides a means of supporting future federal policy development in the areas of mobility, congestion, and facility pricing.

Project Information

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