

UPA/CRD Annual Report

Miami, FL I-95 Express Lanes

LOCAL PARTNER:

■ Florida Department of Transportation

STRATEGIC OBJECTIVES:

The Miami-Ft. Lauderdale region is creating a 21-mile managed-lane facility, including HOT lanes on I-95, between I-395 and I-595, with a longer term goal of providing a network of managed lanes throughout the congested region. Free-flowing conditions on the managed-lane network will be maximized through the use of variable pricing based upon demand as well as other operational strategies. The network itself will be used as the back-bone of a bus rapid transit (BRT) system which will be subsidized through the toll revenues.

Miami, FL I-95 Express Lanes Project

TIMELINE

Phase 1A, the northbound segment of the HOT lane project was opened to traffic in early December 2008. Phase 1B, the southbound segment of the HOT lanes opened to toll paying customers January 15, 2010. Phase 2 is funded and the schedule for it will be established once a contact is let.



2010 ACCOMPLISHMENTS

Projects

- HOT lanes Approximately half of the ultimate 21 miles of dual-HOT lane facilities on I-95 from Fort Lauderdale to downtown Miami were operational in 2010. Key features include increasing the HOV occupancy from HOV-2+ to HOV-3+, requiring all carpools to preregister, and expanding the 10-lane highway with one HOV lane in each direction to a 12-lane highway, with two separated HOT lanes in each direction, by reducing the width of the existing lanes from 12 feet to 11 feet and using a portion of the shoulder.
- Transit Improvements Some additional peak hour transit service added to existing I-95 corridor routes during Phase 1 implementation. Five hundred extra parking spaces added to Golden Glades Interchange in late 2009. Three new transit routes began operating in late January 2010. Twenty-three new articulated buses are being phased in over the next 2 years. Three new transit routes began operating in late January 2010.
- Transit Signal Priority (TSP) TSP was added to Hollywood/Pines Blvd. and Broward Blvd. in Fall 2010.
- Additional Operational Improvements Fourteen ramp signaling locations added in April 2010, bringing the total to 22. Enhanced incident management also added.
- Marketing Extensive outreach was conducted, including project web sites, public meetings, media campaigns, and the production of videos, which were made available both on the web and at public meetings.

Independent Evaluation

- All evaluation plans completed.
- Baseline data collected. Postdeployment data collection started and is continuous with performance reports and early deployment results including surveys available at www.95express.com.

Miami, FL I-95 Express Lanes Project

 Presentations on evaluation results presented at ITS America Annual Meeting May 2010.

RESULTS TO DATE

Key Evaluation Findings

The program has considerably improved the overall operational performance of I-95. Customers, including transit riders, who elect to use the express lanes have significantly increased their travel speed during the AM peak (southbound) and PM peak (northbound) periods – from an average speed in the HOV lane of approximately 20 mph to a monthly average of 64 mph and 56 mph, respectively.

Drivers travelling via the general purpose lanes have also experienced a significant peak period increase in average travel speed since implementation of 95 Express – from an average of approximately 15 mph (southbound) and 20 mph (northbound) to a monthly average of 51 mph and 41 mph, respectively.

Average volume along the express lanes in the AM and PM peak periods were over 7,400 vehicles (approximately 28% of the total I-95 traffic). These vehicles traveled at speeds greater than 45 mph during peak periods, which exceeded the federal requirement for a minimal speed of 45 mph on HOV to HOT lane conversion facilities.

Since their initial opening, the I-95 Express Lanes:

- Had more than 20 million vehicle trips on the facility since its initial opening.
- Had estimated monthly toll revenue of \$1.19 million in September, bringing the total revenue to date to approximately \$15.1 million.
- Remained open to motorists 90.6% of the time, with only 1.3% resulting from unplanned incidents.

- The average monthly maximum toll charged was \$3.35 (southbound) and \$4.40 (northbound). Approximately 85% of the customers were charged \$1.75 and \$1.80 or less (southbound and northbound, respectively).
- Increased 95 Express Bus ridership by an average of 22% between the first three months of 2009 and the first three months of 2010, despite a decrease of 12% in overall Miami-Dade Transit ridership.
- 53% of new riders on the 95 Express
 Bus Service said the express lanes
 influenced their decision to use transit.
- 38% of new riders said they used to drive.

Lessons Learned

- Define a strong project vision –
 Expect the concept and design to be challenged and influenced throughout the project. Having a clear understanding of the project's purpose and goals will provide for consistent decision making throughout. As part of the vision, identify your target market. The regional long distance commuter is the target market for the 95 Express lanes.
- Establish a comprehensive schedule

 The UPA Application schedule and
 resultant project schedule was very
 aggressive. In response, aspects of
 planning, design criteria development,
 and operations were performed
 simultaneously rather than in an iterative manner.
- Develop a concept of operations early — A concept of operations for the corridor provided direction and guidance for the planning, design, and implementation of the managed lane system. Identifying operational challenges early and engineering solutions as early as possible provided for more seamless transition into implementation. Issues specific to this project included incident management, toll collection, and transit operations.

- Involve design/operations professionals in planning process
 - Given the project schedule and need for quick implementation, it was imperative that design/operations/construction professionals had opportunity for input in the planning process.
- Provide project manager with direct authority 95 Express involved professionals from numerous disciplines and agencies. In order to fast-track the project, it was important that team members were able to take direction directly from the project manager regardless of the decision making protocol of a particular agency.
- Consider using current contract consultants The managed lane project took advantage of current FDOT general engineering/general planning contracts to perform a majority of the efforts for this project. The use of these contracts reduced/eliminated time for specific scope development, advertising, and consultant contract selection/execution.
- Anticipate transit technical challenges The incorporation of transit added significant value to the project from a local and national perspective. Technical issues included terminal facility access and circulation, on-site bus operations, and the procurement of new transit vehicles. FDOT partnered with the local agencies by establishing task teams and roles early in the process.

- Ongoing Outreach/Media is critical Key elements that led to the success of the project include a clear project vision, a strong project manager supported by a qualified and knowledgeable team with an innovative and flexible approach, and a commitment to proactive outreach to the community.
- Keep public officials and public informed of project operations changes and challenges Fast-track schedule of this project made it a challenge to keep public officials up to date during implementation. Changes in design and operational plans occurred quickly in the process. Working with the media was vital in providing the public information on operational aspects of the facility.
- Be prepared for a shift in marketing approach to that of selling a product

 Transportation agencies developing a new facility of this type may need to make a paradigm shift from their typical approach of informing the public of a construction project which often is defensive to that of a corporation selling a product that the public will

value highly and want to purchase.

Recommendations on 95 Express improvements from the public and partnering agencies include:

- Additional dynamic message signs to let motorists know the current travel times on the local lanes through the corridor. These have recently been deployed to help motorists make more informed decisions about choosing 95 Express versus local lanes.
- Additional speed limit signs along the inside shoulder reminding motorists that the posted speed limit for the express lanes is the same as the general purpose lanes are being considered.

PLANS FOR 2011

Continue monitoring and adjustment of 95 Express operations. Develop Phase 2 operations.

For Further Information

95 Express website:

www.95express.com

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