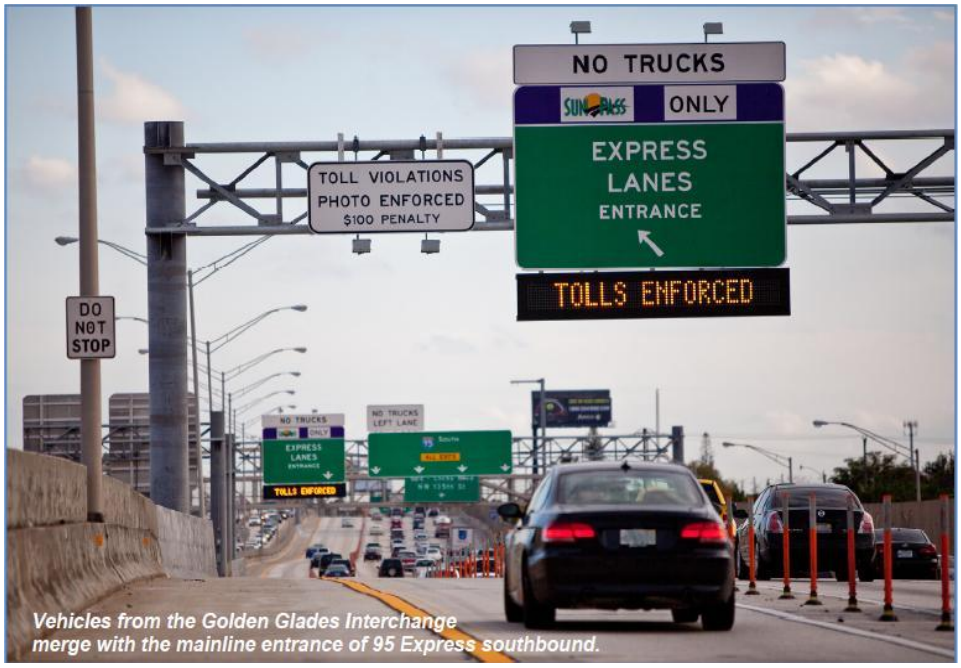
95 Express Evaluation Summary Brochure



Vehicles from the Golden Glades Interchange merge with the mainline entrance of 95 Express southbound.

The 95 Express Managed Lanes began operating Phase 1A in December 2008, providing travelers with an alternative to the congested general purpose travel lanes between downtown Miami and the Golden Glades Interchange seven miles to the north. The project was funded by USDOT's Urban Partnership Agreement Congestion Reduction Demonstration program.

The project involved replacing high occupancy vehicle (HOV) lane in each direction with two variable-priced managed lanes. Express bus vehicles, vanpools, three or more occupant carpools, motorcycles, and inherently low emission vehicles (ILEV) do not pay tolls if they register their vehicles with FDOT. It was completed in two phases – Phase 1a (northbound) opened in December 2008, with the southbound project (Phase 1B) completed 13 months later. The result was to improve the peak-period operations on this corridor through:

- ✓ Increased vehicle and person throughput
- ✓ Increased travel speeds
- ✓ Improved travel time reliability
- ✓ Enhanced transit service

Detailed performance results are shown in Table 1 below.

These improvements resulted largely from increased capacity due to the addition of one travel lane in each direction. This was accomplished within the existing right-of-way by relying on design variances for roadway lane and shoulder widths. However, the four peak hour express bus routes and accommodating registered vanpools and carpools have been a valuable contributor to the successful management of this corridor for reliable peak period travel.

Phase 2 is currently under construction and will extend the project north from Golden Glades to Broward Boulevard.

Table 1: 95 EXPRESS MANAGED LANES
Between Golden Glades Interchange and Downtown Miami
Before and After Performance Measures

PERFORMANCE MEASURE	TIME FRAME	BEFORE (2008)	AFTER (2010)	PERCENT DIFFERENCE
TRAVEL SPEED (MPH) MULs only[1] [2]	AM	20.3	61.4	+202%
	PM	18.1	59.1	+227%
TRAVEL SPEED (MPH) General Purpose Lanes[1] [2]	AM	15.2	50.0	+229%
	PM	18.8	44.0	+134%
VOLUME (VPH) All of I-95	AM	6,791	11,588	+71%
	PM	7,607	9,171	+21%
PERSON THROUGHPUT All of I-95	AM	8,471	14,134	+67%
	PM	9,858	12,746	+29%
TRANSIT RIDERSHIP	DAILY	1,746	4,286	+145%
NUMBER OF CARPOOL REGISTRATIONS[3]	AS OF APRIL, 2011	NA	2,255	NA
NUMBER OF VANPOOL REGISTRATIONS[3]	AS OF APRIL, 2011	NA	33	NA
NUMBER OF ILEV REGISTRATIONS[3]	AS OF APRIL, 2011	NA	3,492	NA

[1] Travel Speed information derived from Report (7) 95 Express Annual Report- Project Status for UPA
[2] Travel speed information derived from Report (11) 2010 I-95 High-Occupancy Vehicle Lane Monitoring Report
[3] Number of Carpool, vanpool, and ILEV registrations derived from Report (12) 95 Express Monthly Operations Report

95 Express before and after performance measure highlights:

- 229% increase in General Purpose travel speed (am peak)
- 202% increase in MUL travel speed (am peak)
- 67% increase in person throughput (am peak)
- 145% increase in transit ridership (daily) and continued growth

95 Express transit ridership continues to grow even after the MULs have been established.

- Feb 2008 average daily boardings (pre-MUL): 1,746
- Feb 2010 average daily boardings (MUL Phase 1A/1B opening): 2,638
- June 2011 average daily boardings: 4,286

A total of 12 reports were completed between August 2008 and March 2011 to document the performance of this new facility. These reports evaluate the performance of 95 Express Lanes and/or 95 HOV Lanes from different perspectives including highway and transit. They are described in detail in the technical memorandum accompanying this brochure. This brochure was developed to distill and consolidate the findings from this large group of reports in order to provide a consolidated picture of the outcome of the managed lanes implementation on I-95.

Table 2 presents an overview of performance measures each report provided – which were used as the data sources for this summary document. Different color codes are used to identity different report groups, noted in the legend and defined in the accompanying memorandum. A check mark (√) is used to indicate which performance measures are addressed in each report.

Table 2: Summary of Reports Used as Data Sources

Legend of I-95 Express Lanes Report Groups:

Group 1: I-95 High-Occupancy Vehicle (HOV) Lane Monitoring Reports	Group 4: I-95 Express Impact on Transit Services Reports for UPA
Group 2: Driver Survey on I-95 Managed Lanes in Miami Dade	Group 5: 95 Express Bus Survey on I-95 in Broward and Miami-Dade
Group 3: I-95 Express- FDOT Congestion Management Program Reports	Group 6: Transit Signal Priority Reports in Broward and Miami-Dade

	Reports	Traffic							Transit			
		Volume	Speed	Occupancy	Through-put	Travel Time	Delay Time	User Experience	Travel Time	Ridership	Delay Time	User Experience
1)	**2008 I-95 High Occupancy Vehicle Lane Monitoring Report** FDOT D4- Aug.2008	✓	✓	✓	✓	✓	✓			✓		
2)	**95 Express Survey Results Report for Phase 1A** SFCS- June 2009											✓
3)	**95 Express Mid-Year Repot** FDOT D6- Oct. 2009	✓	✓	✓	✓	✓	✓		✓	✓		✓
4)	**Miami UPA Project Phase 1A Transit Evaluation Report** CUTR- Nov. 2009		✓	✓	✓	✓			✓	✓		✓
5)	**Transit On-Board Survey Results** Kimley-Horn- June 2010									✓		✓
6)	**95 Express Survey Results Report for Phase 1A and 1B** SFCS- Nov. 2010											✓
7)	**95 Express Annual Report- Project Status for UPA** FDOT D6- Jan. 2011	✓	✓	✓	✓	✓			✓	✓		✓
8)	**Miami UPA Project Phase 1 Transit Evaluation** CUTR- Jan. 2011		✓	✓	✓	✓			✓	✓		✓
9)	**Hollywood Blvd Transit Signal Priority** Kimley-Horn- Jan. 2011						✓[1]					
10)	**Transit Signal Priority Evaluation** CUTR- Feb. 2011								✓		✓	
11)	**2010 I-95 High Occupancy Vehicle Lane Monitoring Report** FDOT D4- Mar. 2011	✓	✓	✓	✓	✓	✓			✓		
12)	**95 Express Monthly Operations Report** FDOT D6- May. 2011	✓	✓	✓								

[1] The delay time in this report measures the delay that the side street traffic experience when TSP is enacted.

2010 I-95 HOV/Managed Lanes

Traffic Volumes, Speeds and Throughput

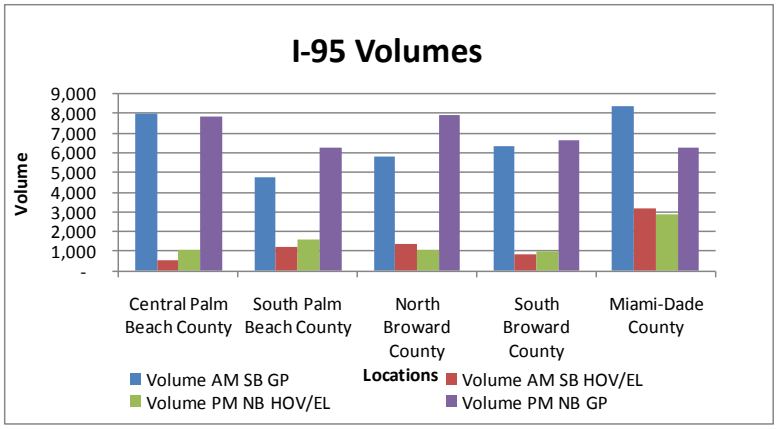
The graphs on this page display the traffic data results for five locations in the I-95 corridor from Miami north to Palm Beach County. The following data are presented:

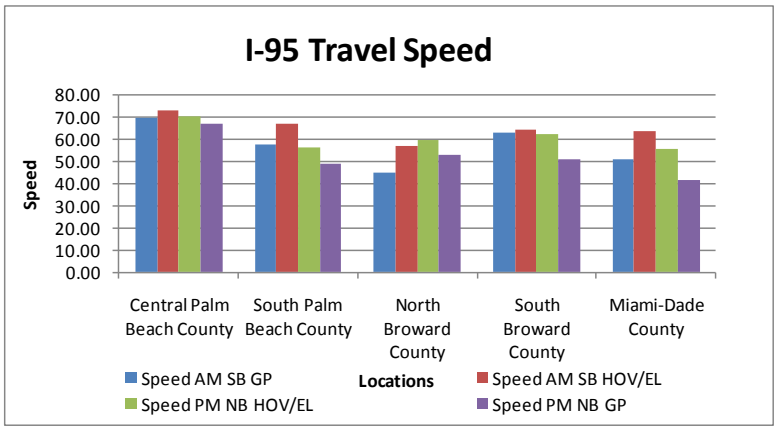
- Traffic Volumes
- Travel Speeds
- Vehicle Occupancy
- Person Throughput

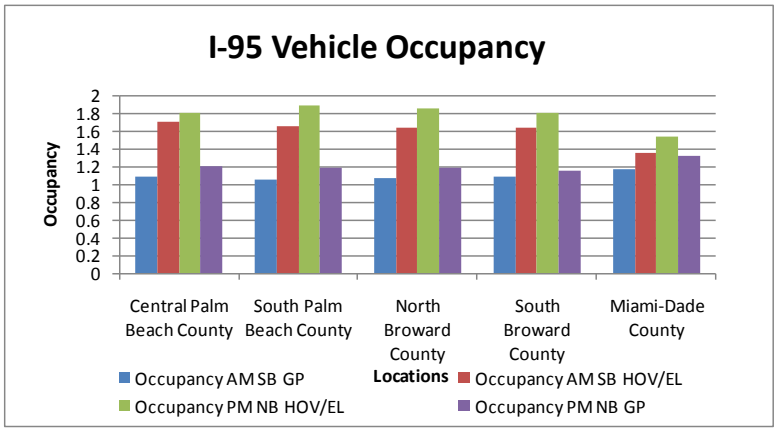
The graphs indicate:

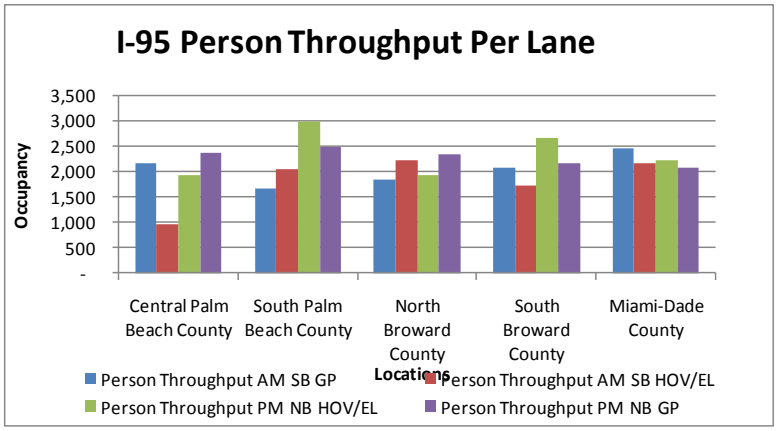
- Traffic volumes are highest in the south of the corridor, particularly in the managed lanes, although the general purpose lanes carry very high volumes in central Palm Beach County.
- Travel speeds generally increase as one moves north in the corridor. The managed lanes and HOV lanes provide higher travel speeds at all locations.
- HOV lanes carry measurably more occupants than general lanes. The managed lanes in Miami-Dade County also carry more occupants, but show a smaller premium (reflecting the fact that single occupant vehicles can pay to use the lanes.)
- Person throughput tends to be relatively consistent along the length of I-95, with the highest values indicated for the northbound HOV lane in Southern Palm Beach County.

Reference: (11) 2010 I-95 High-Occupancy Vehicle Lane Monitoring Report; FDOT District 4 & Cambridge Systematics, March 2011









2010 I-95 HOV/Managed Lanes

Express Bus User Experience

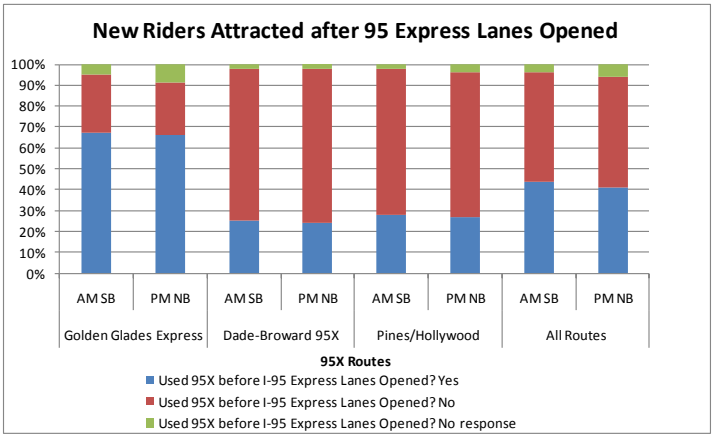
The graphs on this page reflect the experience of transit riders in the I-95 corridor on express bus services that serve Miami from Golden Glades Park-n-Ride facility and from Broward County The following data are presented:

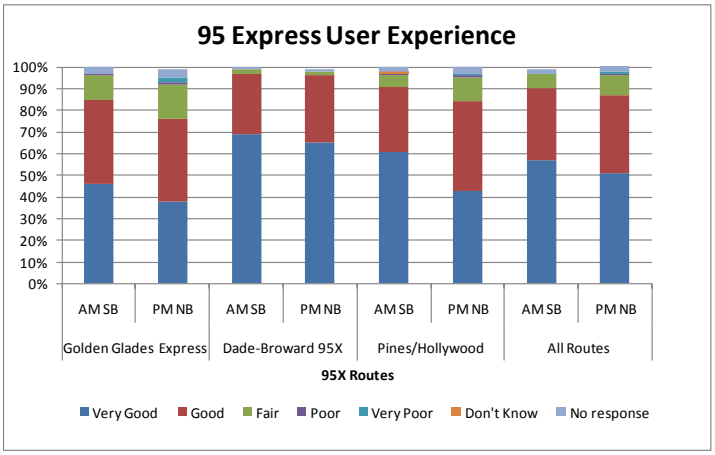
- New riders attracted to new express services
- Satisfaction based on user experience
- Travel Time
- Improvement in travel time following the opening of 95 Express

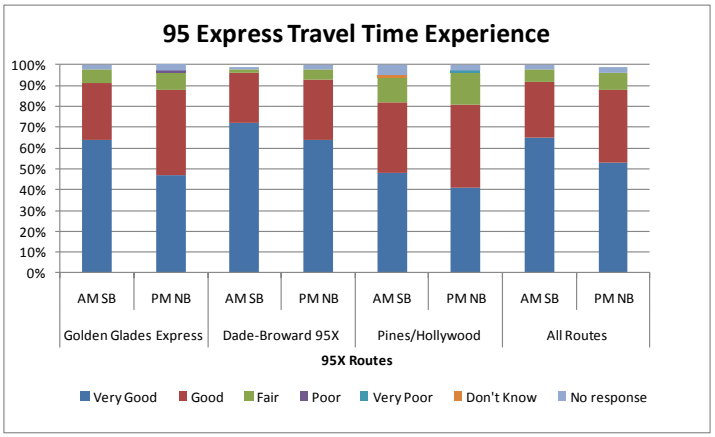
The graphs indicate:

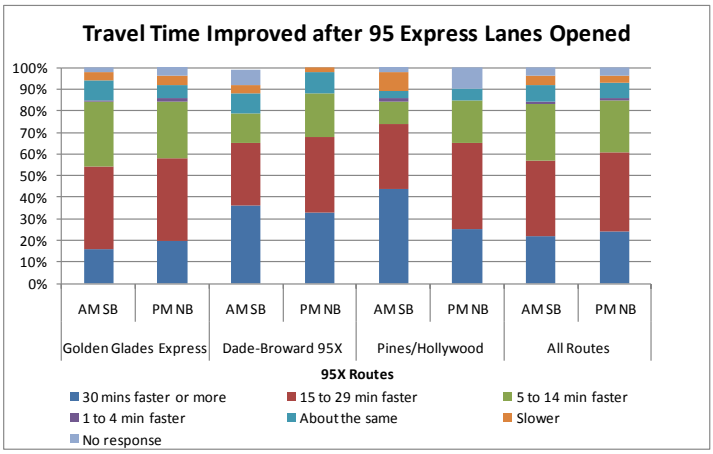
- The greatest number of new riders were attracted by the Broward routes – Dade-Broward 95X and Pines/Hollywood express
- At least 75% of respondents rated their experience as good or very good. The highest ranking was for the Dade-Broward express at 96%
- At least 60% of respondents rated their travel time experience as good or very good. 95 Express routes received far higher ratings with 95% of Dade-Broward express riders rating their travel time good or very good for southbound AM travel
- 50% to 70% of respondents reported 15 minutes or more of travel time savings. The Pines/Hollywood express reflected the greatest travel time savings – 45% saved 30 minutes or more southbound in the AM peak

Reference: (8) Miami UPA Phase 1 Transit Evaluation Report
Reference: (5) 95 Express On-Board Transit Survey Report- Phase 1A/1B

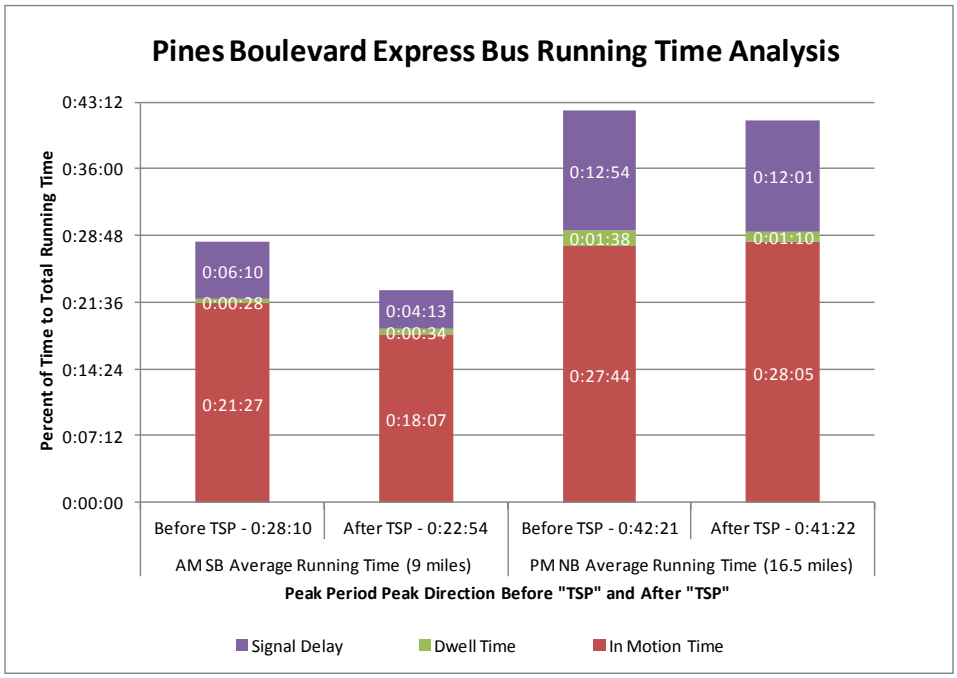








Pines Boulevard Express – Transit Signal Priority Impact Analysis

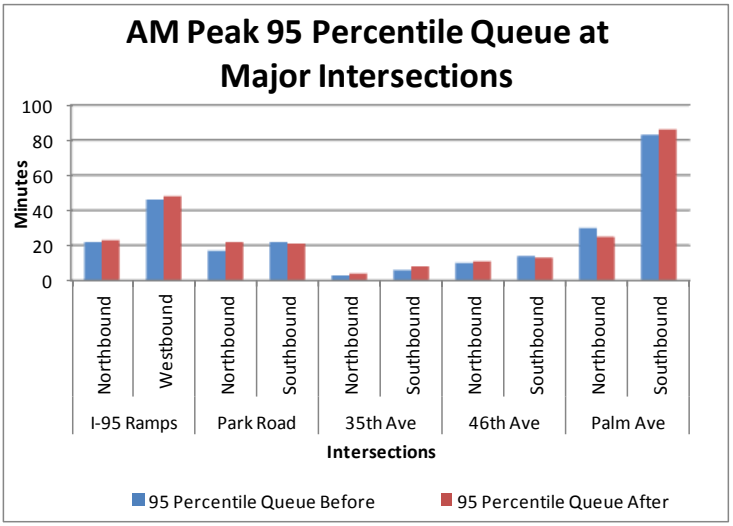


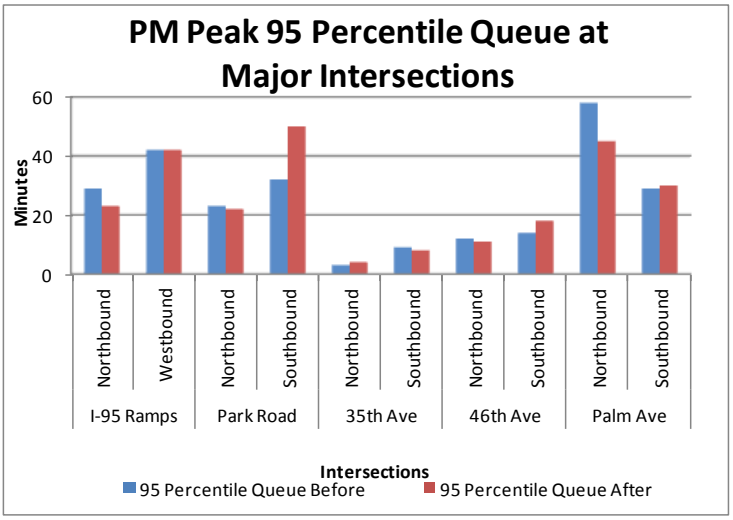
The graphs on this page reflect the performance of Transit Signal Priority (TSP) implemented along Hollywood-Pines Boulevard. The following data are presented:

- Bus running time analysis
- Traffic queues at major intersection side-street locations during the Morning and Afternoon peak periods

The graphs indicate:

- Running time decreased following TSP implementation in morning and afternoon peaks.
- Queues decreased at three of ten side-street approaches in the morning peak, and increased marginally at the remaining locations.
- Queues decreased at four of ten side-street approaches in the afternoon peak, and increased at the remaining locations





Reference: (9) Pines Boulevard Transit Signal Priority - Traffic Queue Data Analysis

Reference: (10) Pine Boulevard Transit Signal Priority Evaluation - Transit

Summary of 95 Express Lane

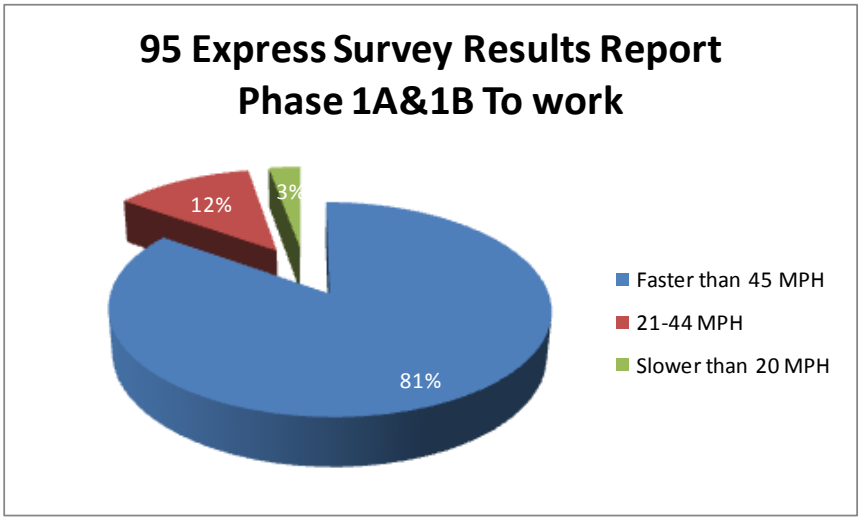
User Survey Results

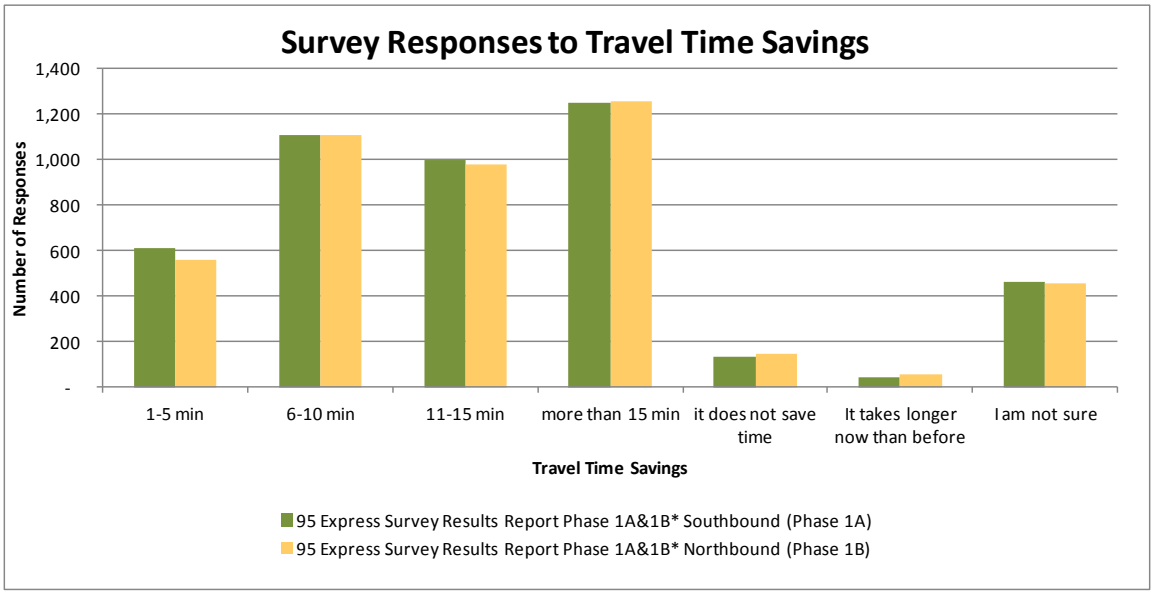
The graphs on this page reflect the results of a survey of users of the 95 Express managed lanes. The following data are presented:

- Travel speed to work
- Reported travel time savings

The graphs indicate:

- 81% reported a travel speed of greater than 45 mph
- More than 1,200 travelers reported a travel time savings of more than 15 minutes – roughly the same for both directions. More than 2,200 travelers reported saving 10 minutes or more.





Reference (6) 95 Express Survey Results Report for Phase 1A and 1B (South Florida Commuter Services and Florida's Turnpike, November 2010)