

Ft. Lauderdale-Hollywood International

Prepared by:
Broward County Aviation

Third Quarter 2011
December 2011

Partnership for Quieter Skies Report



The *Partnership for Quieter Skies Report* provides an overview of progress of efforts to reduce the noise impacts of Fort Lauderdale - Hollywood International Airport (FLL). These efforts represent a partnership of several entities:

- **Broward County** owns and operates FLL, and is responsible for overseeing the airport's planning, development, and operation.
- The **Federal Aviation Administration (FAA)** is responsible for the efficient and safe navigation of aircraft. The FAA also oversees any federal actions at the airport, such as airport layout changes, installation of navigational aids, etc.
- **Air carriers** provide passenger and cargo service to and from FLL.
- **General aviation operators** operate in privately owned aircraft.

ELEMENTS OF THE PARTERSHIP FOR QUIETER SKIES PROGRAM

Broward County Aviation Department initiated this program in response to requests from the Board of County Commissioners for a more transparent reporting of objective information related to FLL's noise abatement efforts. The program includes the following elements, based on data collected by FLL's Airport Noise and Operations Monitoring System (ANOMS):

- **Fleet Noise Reports** summarize and compare the overall noisiness of the specific mix of aircraft types each airline operates at FLL.
- **High Noise Event Reports** compare the numbers of "high range" noise events created by major categories of aircraft operators at FLL
- **Runway Use Summary Reports** present graphical and tabular summaries of arrival and departure runway use at FLL.
- **Flight Track Density Plots** show the relative frequency that aircraft fly over geographic areas around FLL

FLEET NOISE REPORT

The Fleet Noise Report compares the noisiness of the specific fleet of aircraft that each airline operates at FLL, in relation to the current federal ("Stage 3") noise standards for airline jets, and also in relation to the fleets other airlines operate at FLL. The report lists the jet operations for

each carrier (that conducts at least 10 operations in the quarter) and a "Cumulative Below Stage 3 Limit" value for those operations. By focusing on the aircraft types that airlines actually use at FLL, rather than the airlines' overall fleets, it will assist individual airlines in making informed decisions regarding the aircraft models they schedule to fly into and out of FLL. This information will assist them to improve their overall Fleet Noise Score.

HIGH NOISE EVENT REPORTS

High Noise Event Reports for arrivals and departures summarize contributions major operator categories make to noise experienced in the FLL environs, by listing the number of aircraft noise measurements that exceed a Sound Exposure Level (SEL) of 85 dB (see definitions). 85 dB SEL is a significant threshold, because it is the level at which several adverse community impacts begin to be experienced

RUNWAY USE TRENDS

This report provides a tabular and graphical summary of overall runway use during the report period. These reports allow residents near the airport to understand, at a glance, the usage of runways that most affect them.

FLIGHT TRACK DENSITY PLOTS

Flight track density plots show the relative use of the airspace surrounding FLL. Color ranges are assigned based on the relative density of traffic (from low to high) for several categories:

- Air Carrier Jet Departures
- Air Carrier Jet Arrivals
- All Other Departures
- All Other Arrivals

DEFINITIONS

Decibel (dB): A logarithmic measurement of sound intensity.

Sound Exposure Level (SEL): A term used to describe the total sound energy from a single aircraft noise event. It takes into account both the noise level and the duration of the event.

Effective Perceived Noise Decibels (EPNdB): A noise metric FAA uses in setting noise standards that jet aircraft and larger propeller-driven aircraft must meet to operate in the U.S.

Fleet Noise Report

Average Decibels Above or Below Federal Noise Standard
Third Quarter 2011 (July 1 – September 30)

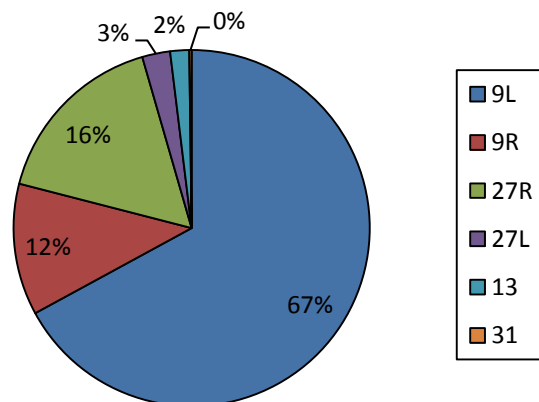
Airline	Total Jet Operations at FLL 7/1 - 9/30/2011	Average Difference from Federal Standard (Cum. EPNL)	Below Federal Standard	Above Federal Standard
Major				
Spirit Airlines Inc	8,640	-19.2		
Airtran Airways Inc	2,589	-18.4		
Frontier Airlines Inc	186	-16.9		
Southwest Airlines Co	7,854	-15.2		
Virgin America, Inc	716	-14.7		
jetBlue Airways Co	4,971	-14.7		
Continental Air Lines Inc	2,512	-13.9		
American Airlines Inc	1,878	-13.2		
Delta Air Lines Inc	4,791	-12.3		
US Airways Airlines	2,773	-11.5		
Allegiant Air Inc	317	-8.2		
Regional				
Atlantic Southeast Airlines	150	-27.7		
International & Charter				
Westjet Airlines Ltd	296	-16.3		
Air Canada	378	-14.5		
Canjet Airlines	52	-14.1		
Avianca	179	-13.6		
Sun Country Airlines	174	-12.6		
BWA West Indies Airways Limited	696	-11.3		
Miami Air International Inc	54	-11.3		
Condor Flugdienst GmbH	75	-9.9		
Vision Airlines, Inc	109	-8.3		
Bahamasair Holdings Ltd	473	-1.5		
Cargo				
United Parcel Service Co	128	-16.3		
Northern Air Cargo, Inc.	58	-14.2		
Federal Express Co	446	-8.9		
Capital Cargo International Airlines	10	-1.4		

Runway Use Summary Report

Arrivals Runway Use for All Aircraft Types
Third Quarter 2011 (July 1 – September 30)



Runway	Arrivals
9L - North Runway, east flow	19582
9R - South runway, east flow	3488
27R - North runway, west flow	4822
27L - South runway, west flow	740
13 - Diagonal runway, south flow	503
31 - Diagonal runway, north flow	62



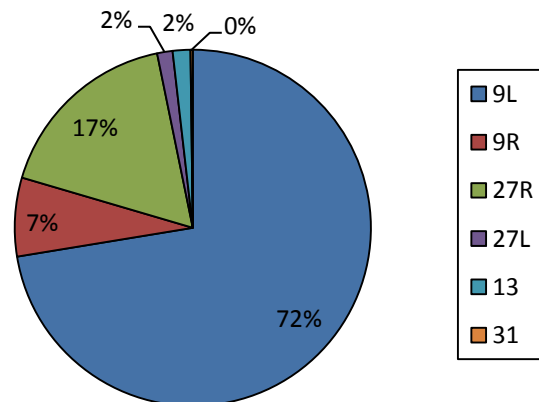
Runway Use Summary Report

Departures Runway Use for All Aircraft Types

Third Quarter 2011 (July 1 – September 30)



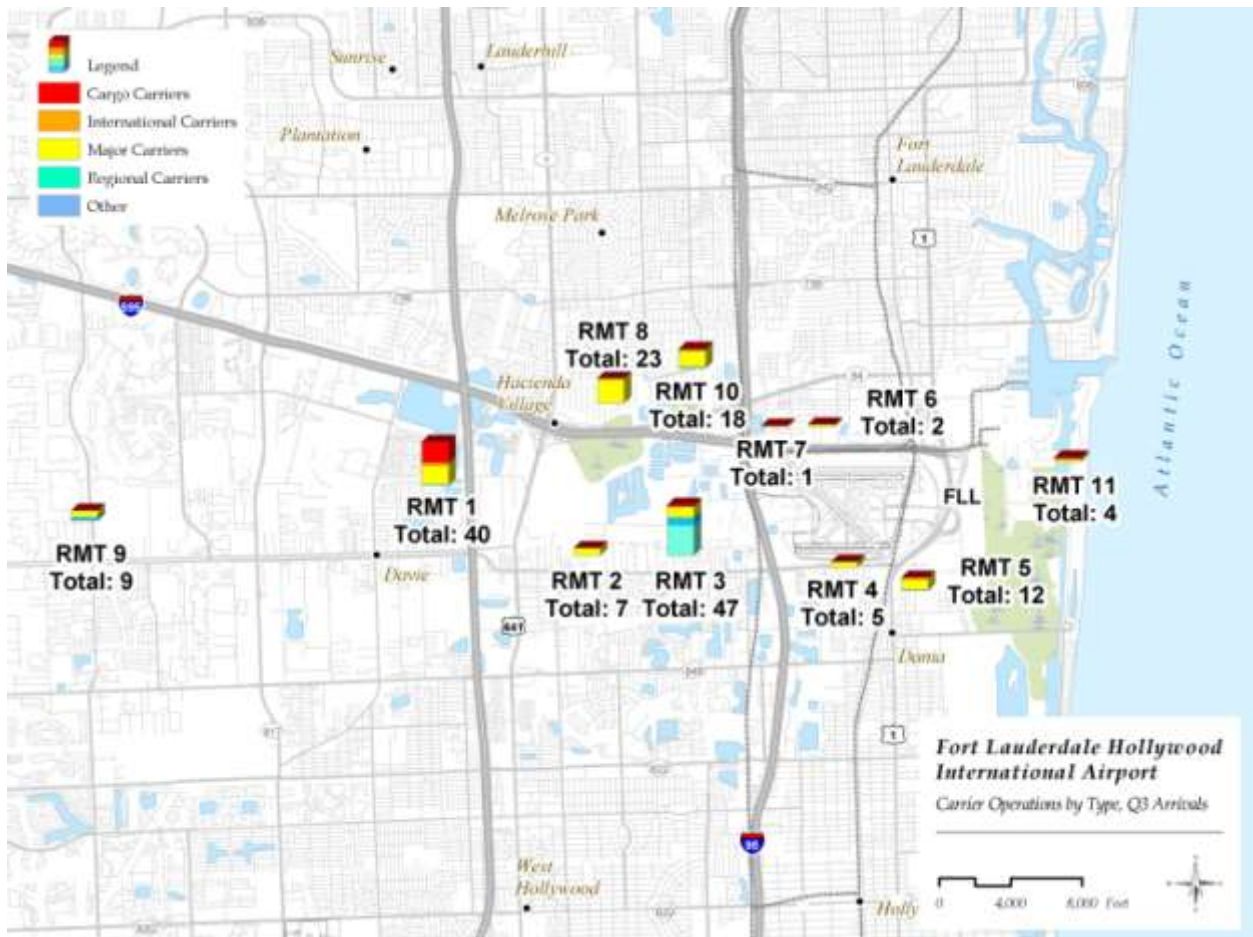
Runway	Departures
9L - North runway, east flow	20854
9R - South runway, east flow	2056
27R - North runway, west flow	4964
27L - South runway, west flow	403
13 - Diagonal runway, south flow	463
31 - Diagonal runway, north flow	60



High Noise Events- Arrivals

For Monitor Locations 1-11

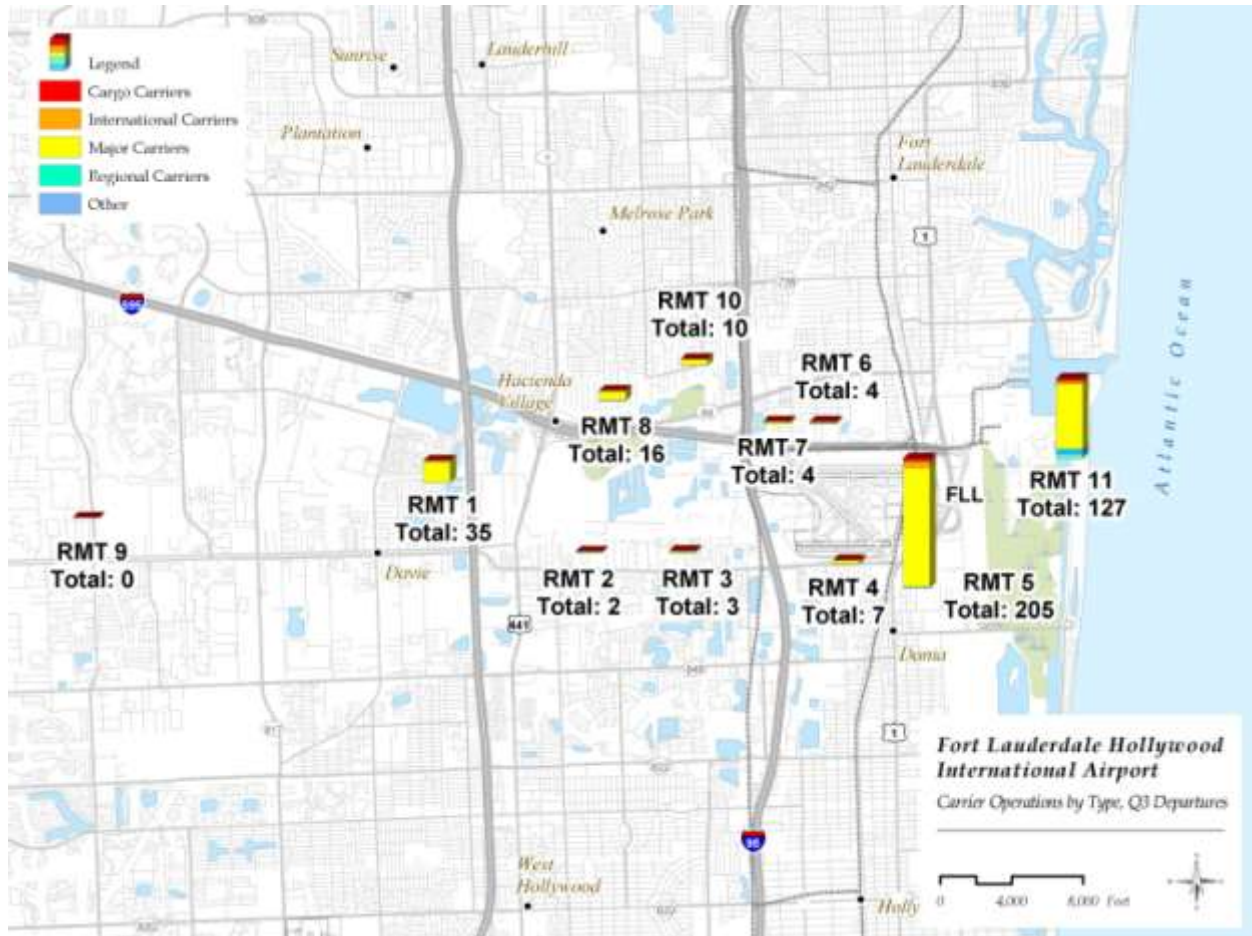
Third Quarter 2011 (July 1 – September 30)



High Noise Events- Departures

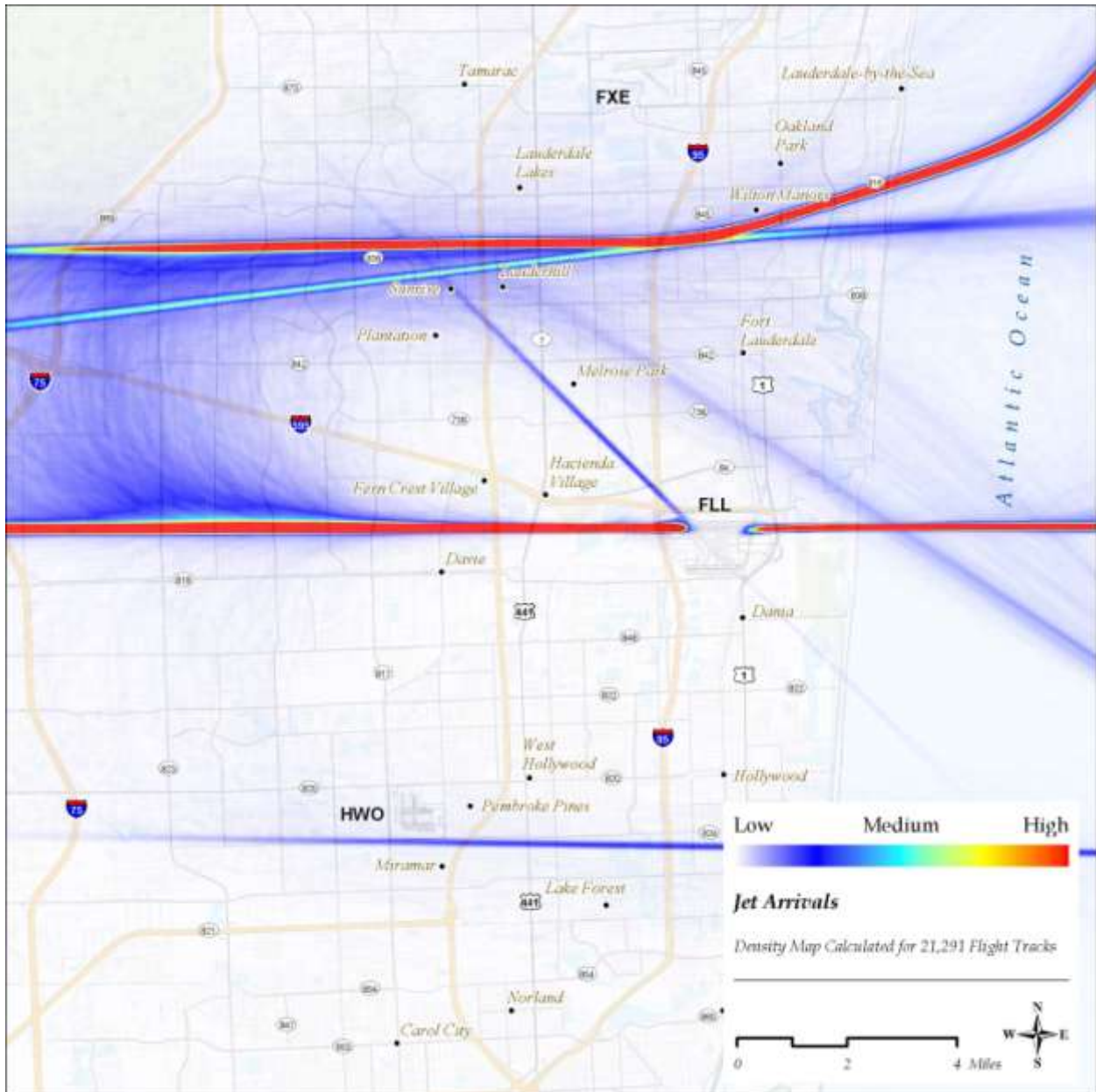
For Monitor Locations 1-11

Third Quarter 2011 (July 1 – September 30)



Relative Airspace Density

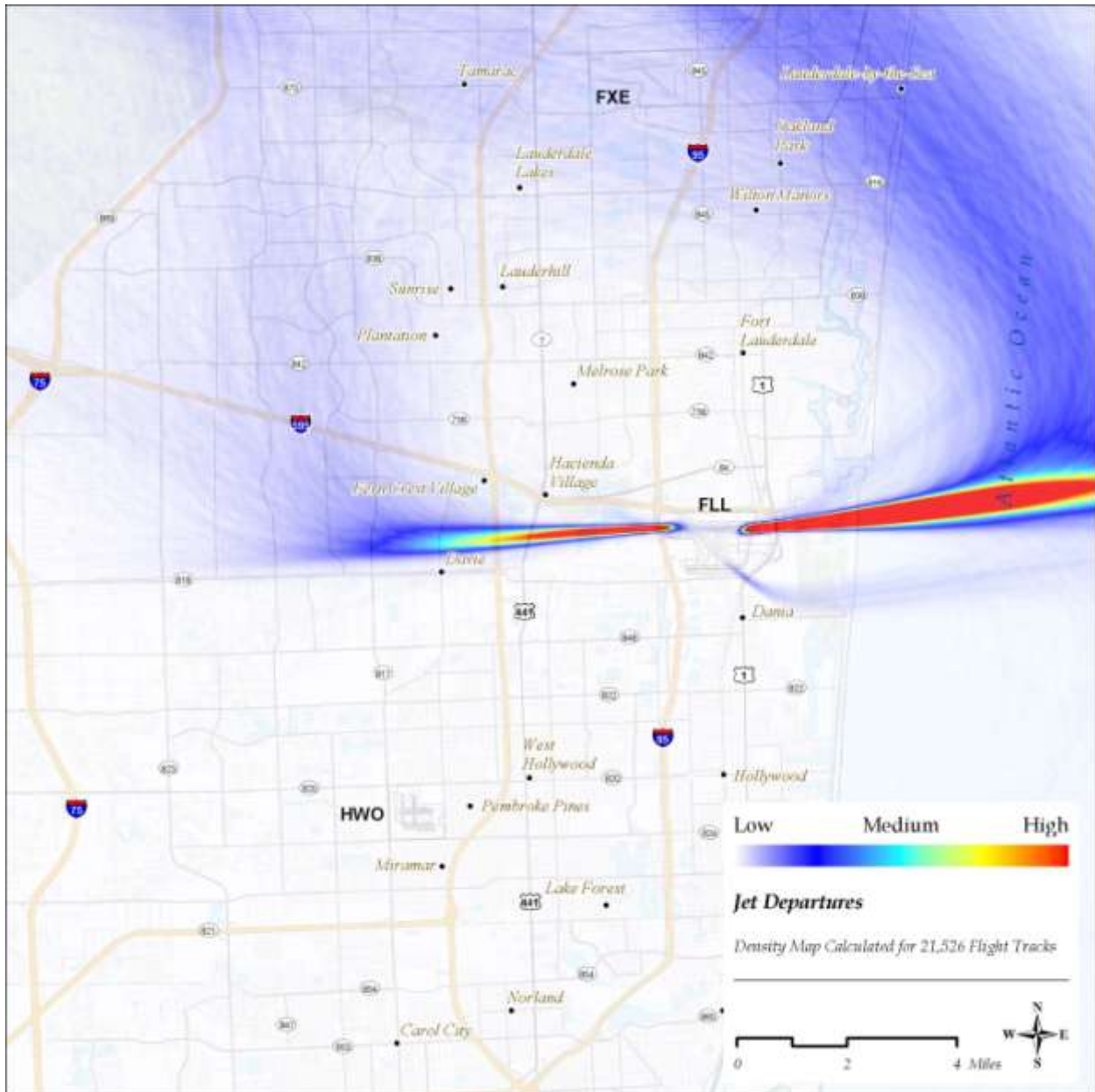
For All Scheduled Passenger and Cargo Jet Arrivals
Third Quarter 2011 (July 1 – September 30)



Relative Airspace Density

For All Scheduled Passenger and Cargo Jet Departures

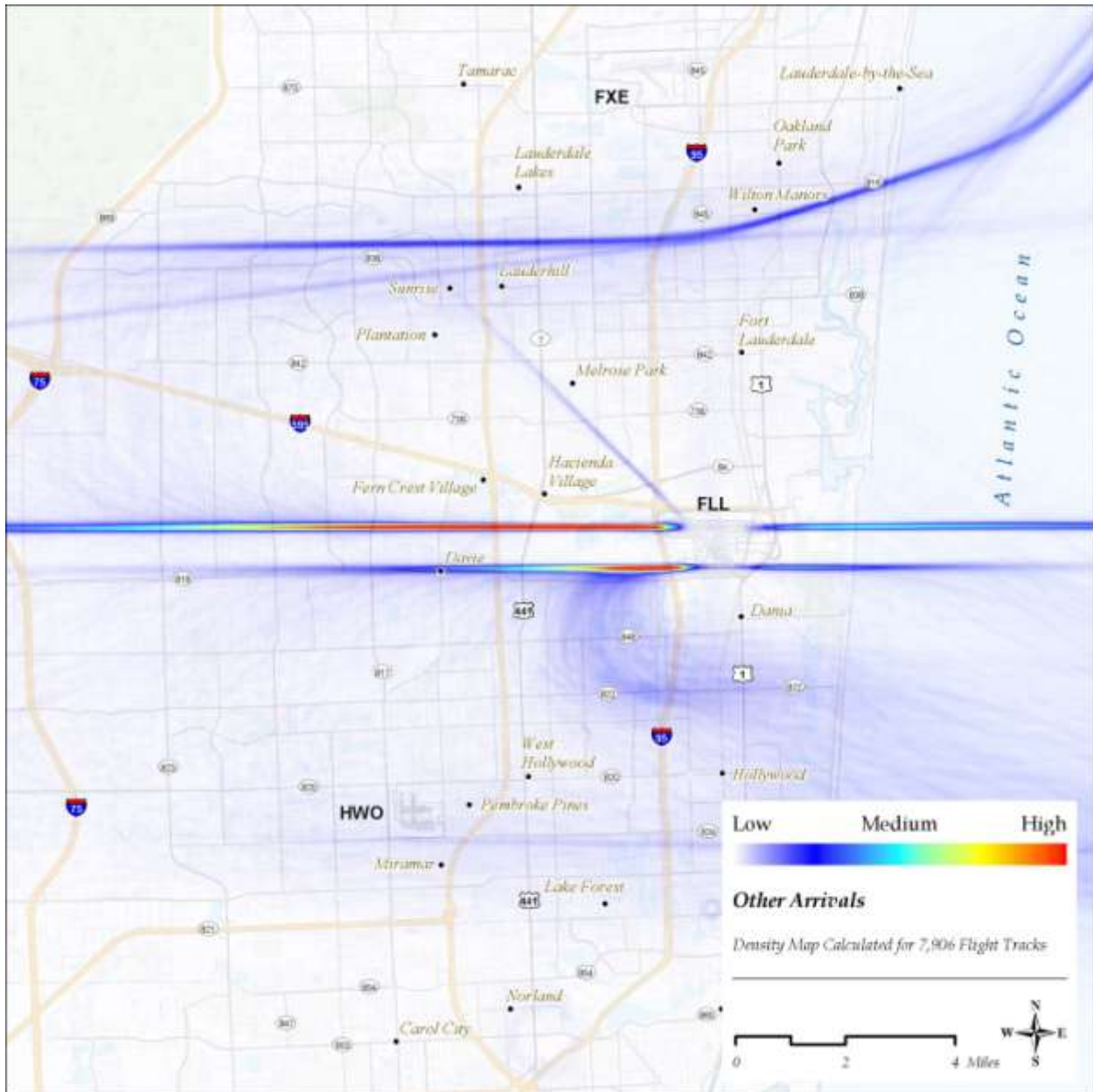
Third Quarter 2011 (July 1 – September 30)



Relative Airspace Density

For All Propeller and Non-Scheduled Jet Arrivals

Third Quarter 2011 (July 1 – September 30)



Relative Airspace Density

For All Propeller and Non-Scheduled Jet Departures

Third Quarter 2011 (July 1 – September 30)

