

Ft. Lauderdale-Hollywood International

Prepared by:
Broward County Aviation

Second Quarter 2011
November 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
Second Quarter 2011 (April 1 – June 30)**

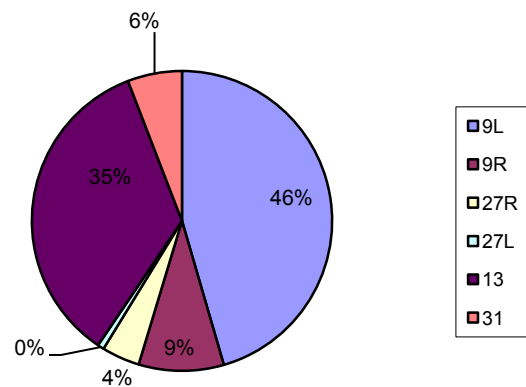
Airline	Total Jet Operations at FLL 4/1 - 6/30/2011	Average Difference from Federal Standard (Cum. EPNL)	Average Difference from Federal Standard (Cum. EPNL)					
			-40.0	-30.0	-20.0	-10.0	0.0	10.0
Major								
Airtran Airways Inc	2,636	-18.9						
Frontier Airlines Inc	258	-16.8						
Delta Air Lines Inc	4,844	-16.4						
American Airlines Inc	1,974	-16.2						
Continental Air Lines Inc	2,777	-16.2						
Spirit Airlines Inc	8,485	-16.0						
Southwest Airlines Co	8,229	-15.9						
Virgin America, Inc	689	-14.6						
US Airways Airlines	2,965	-13.2						
jetBlue Airways Co	5,461	-12.7						
Allegiant Air Inc	384	-7.0						
Regional								
Atlantic Southeast Airlines	160	-26.9						
International & Charter								
Sunwing Airlines Inc	14	-16.3						
Westjet Airlines Ltd	402	-16.3						
Canjet Airlines	143	-16.3						
BWA Airways Limited	139	-16.3						
Sun Country Airlines	21	-16.3						
Air Jamaica	584	-15.4						
Miami Air International Inc	40	-14.3						
Vision Airlines, Inc	86	-13.2						
Avianca	170	-13.1						
Air Canada	673	-12.9						
Air Transat	28	-9.8						
Condor Flugdienst GmbH	37	-9.2						
Bahamasair Holdings Ltd	418	-0.6						
Cargo								
United Parcel Service Co	148	-19.5						
Northern Air Cargo, Inc.	66	-13.4						
Federal Express Co	438	-9.2						
Capital Cargo International Airlines	30	-2.2						

Runway Use Summary Report

Arrivals Runway Use for All Aircraft Types
Second Quarter 2011 (April 1 – June 30)



Runway	Arrivals
9L - North Runway, east flow	14619
9R - South runway, east flow	2948
27R - North runway, west flow	1315
27L - South runway, west flow	221
13 - Diagonal runway, south flow	11145
31 - Diagonal runway, north flow	1884

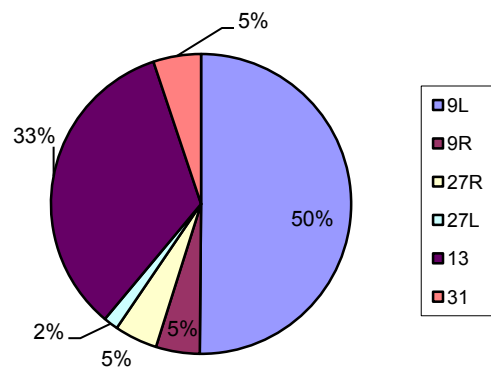


Runway Use Summary Report

Departures Runway Use for All Aircraft Types
Second Quarter 2011 (April 1 – June 30)



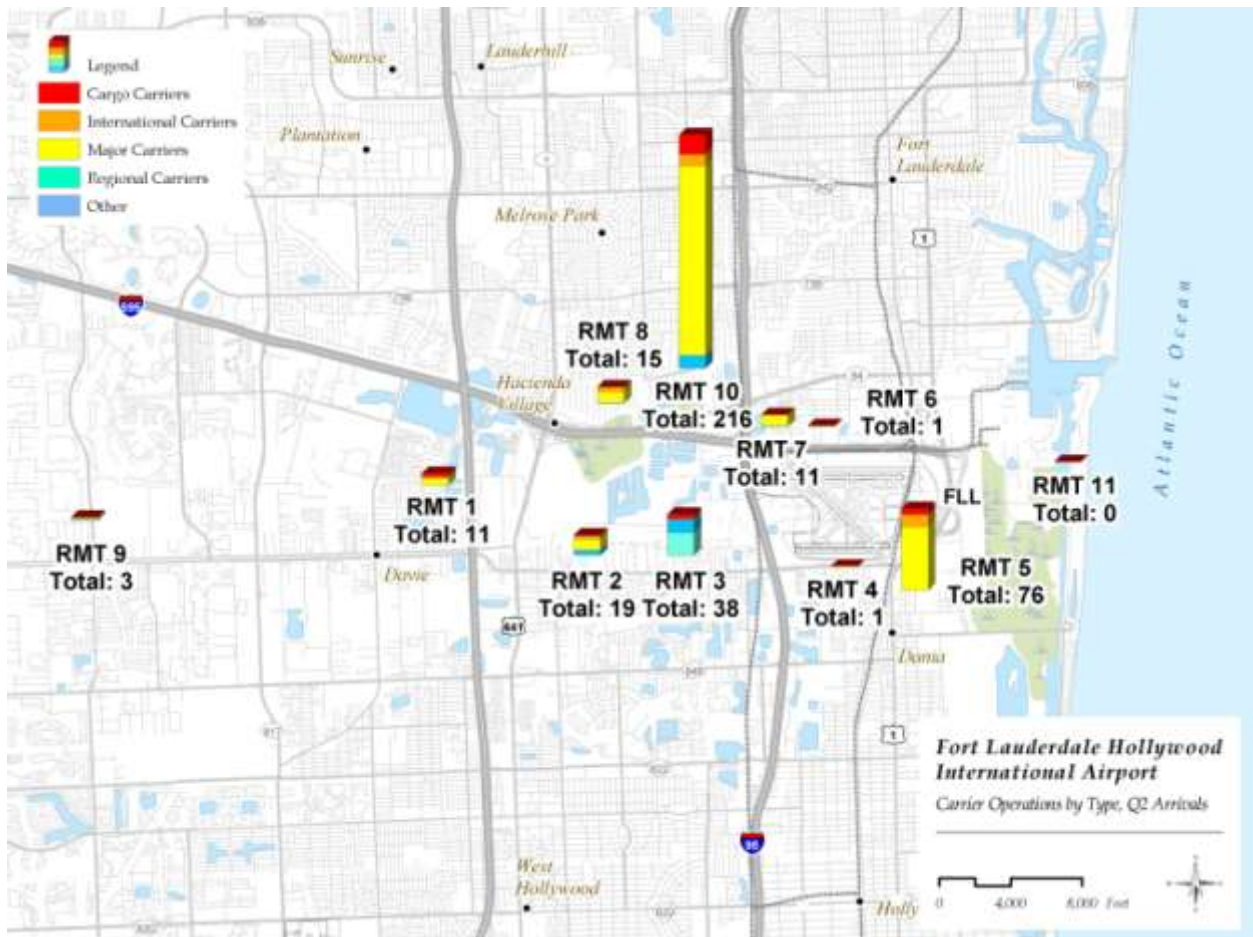
Runway	Departures
9L - North runway, east flow	15840
9R - South runway, east flow	1493
27R - North runway, west flow	1465
27L - South runway, west flow	499
13 - Diagonal runway, south flow	10671
31 - Diagonal runway, north flow	1625



High Noise Events- Arrivals

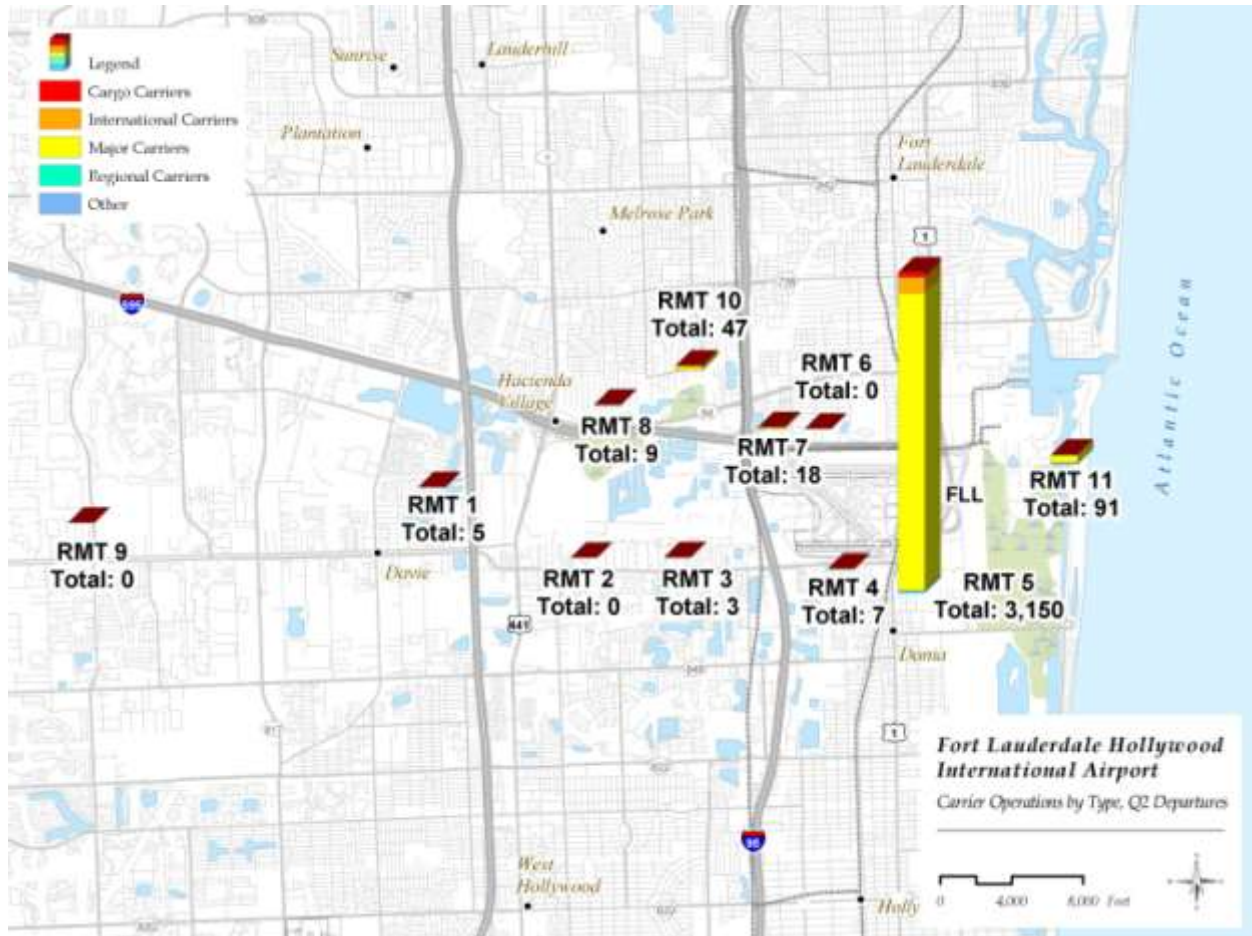
For Monitor Locations 1-11

Second Quarter 2011 (April 1 – June 30)



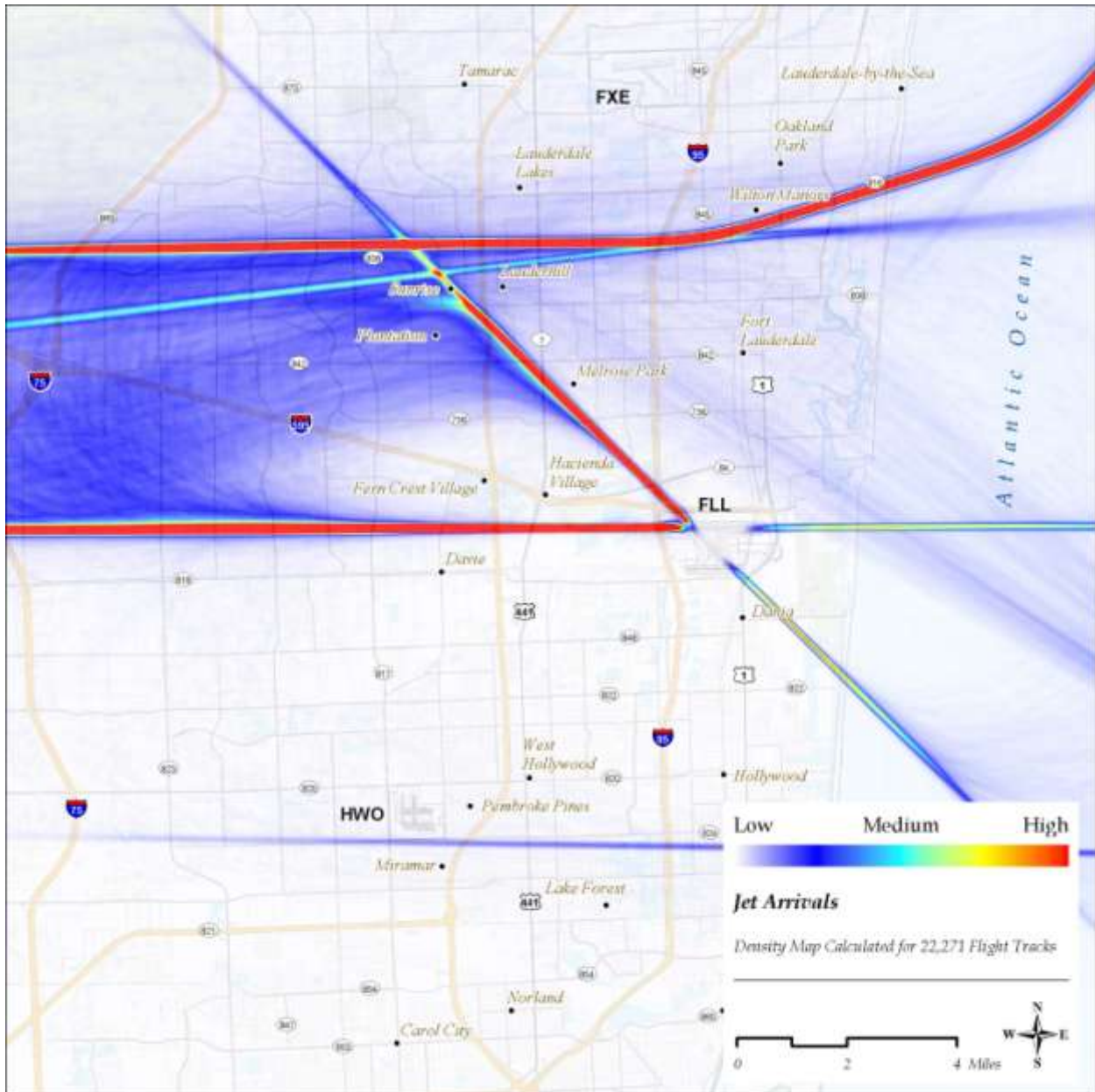
High Noise Events- Departures

For Monitor Locations 1-11
Second Quarter 2011 (April 1 – June 30)



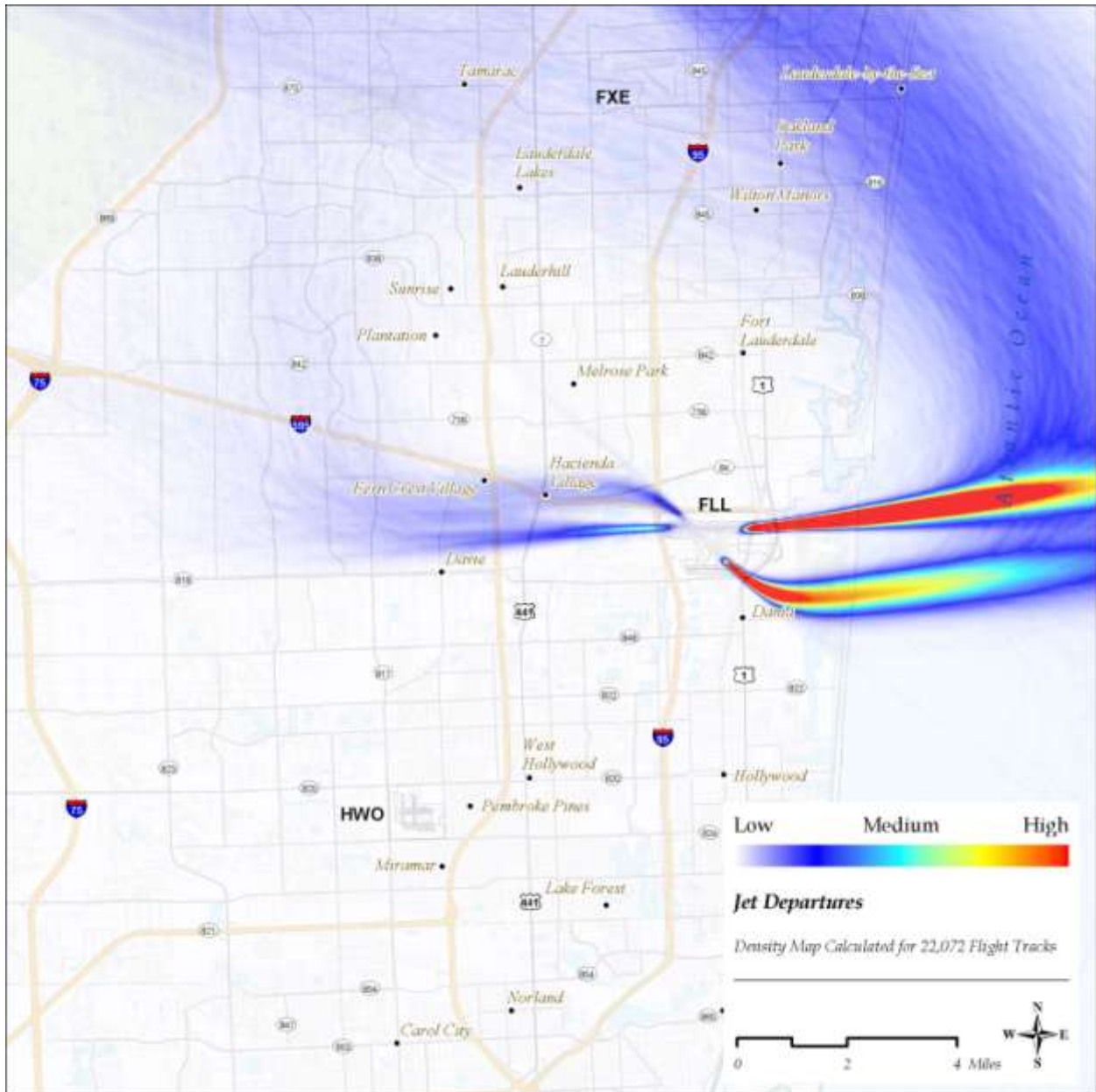
Relative Airspace Density

For All Scheduled Passenger and Cargo Jet Arrivals
Second Quarter 2011 (April 1 – June 30)



Relative Airspace Density

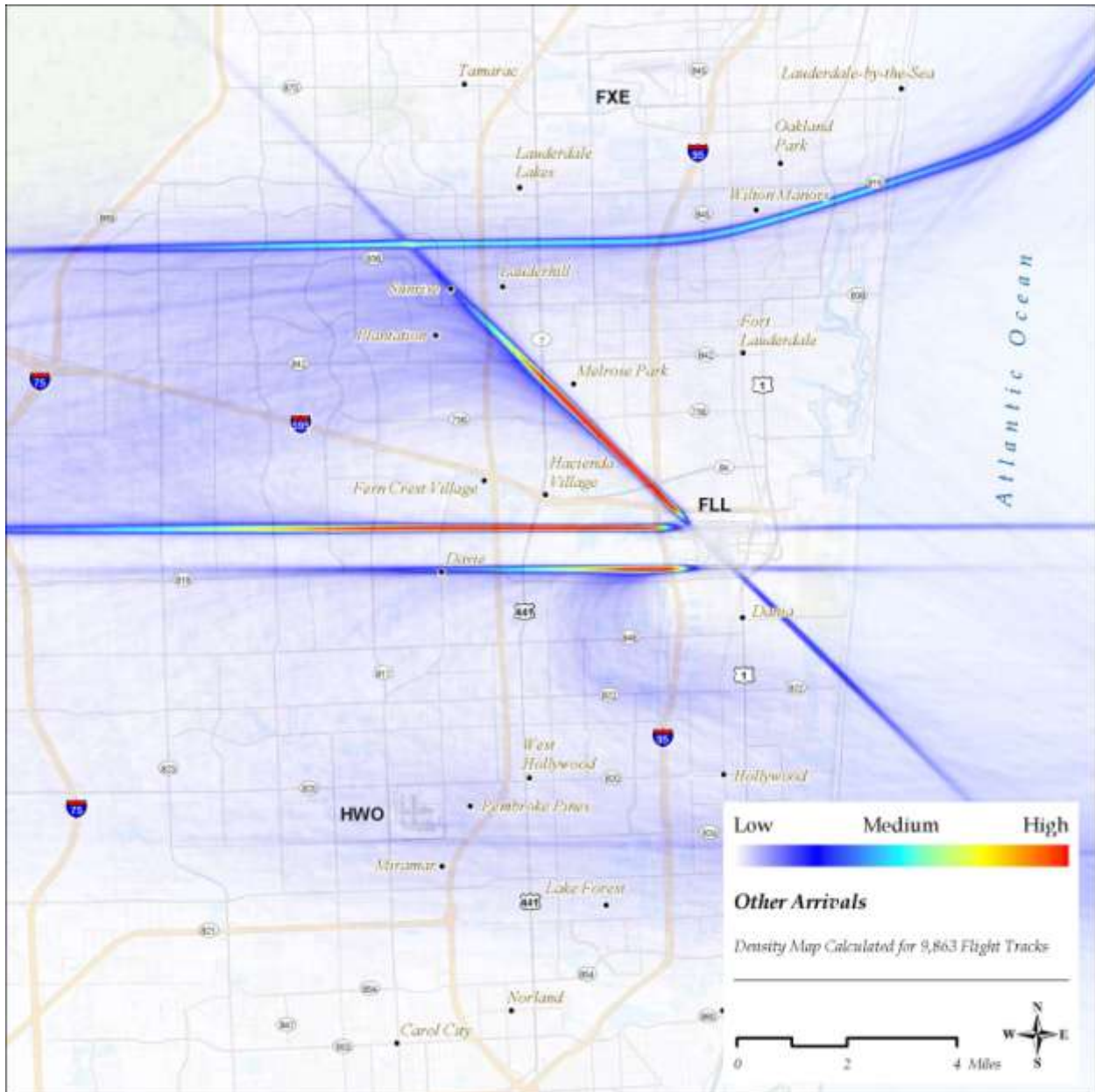
For All Scheduled Passenger and Cargo Jet Departures
Second Quarter 2011 (April 1 – June 30)



Relative Airspace Density

For All Propeller and Non-Scheduled Jet Arrivals

Second Quarter 2011 (April 1 – June 30)



Relative Airspace Density

For All Propeller and Non-Scheduled Jet Departures

Second Quarter 2011 (April 1 – June 30)

