

Partnership for Quieter Skies Report

> Third Quarter 2021 December 2021





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 PARTNERSHIP 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 measure 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

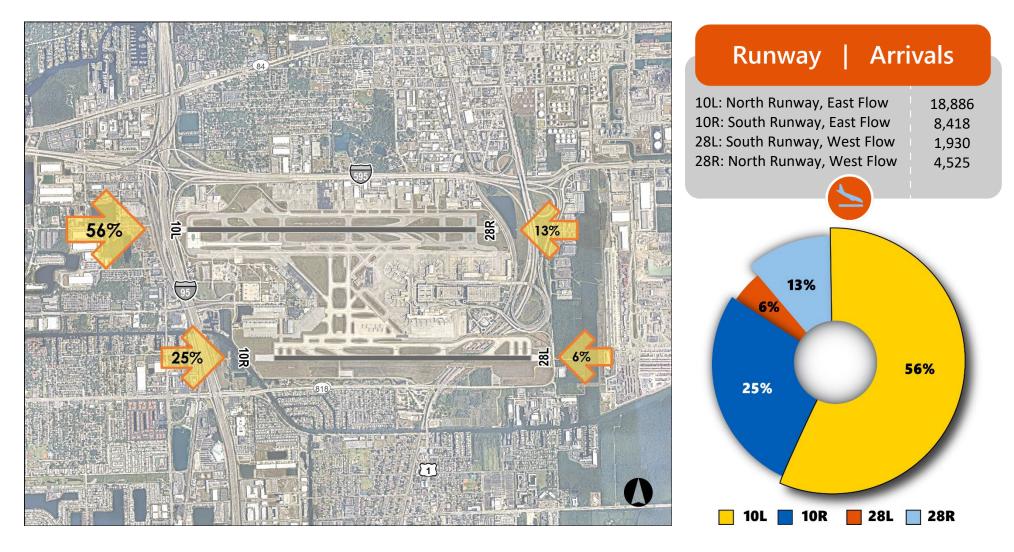
Average Decibels Above or Below Federal Noise Standard Third Quarter 2021 (July 1 – September 30)

| Total Jet Operations at FLL (7/1/21 - 9/30/21) | Average Distance m Federal Standard (Cum. EPNL) Standard | Above Federal Standard | Operations at FLL from | erage D Federal (Cum. E | Standard F | Below ederal andard | Above Federal Standard |
|---|---|------------------------------|-------------------------|-------------------------------|--------------|---------------------------|------------------------------|
| Major | -40.0 -30.0 -20.0 - | 10.0 0.0 10.0 | International & Charter | + | -40.0 - | 30.0 -20.0 -10.0 | 0.0 10.0 |
| Allegiant Air, Inc. | 1,525 -18.9 | | Contour Aviation | 104 | -28.6 | | |
| Spirit Airlines Inc. | 12,627 -17.6 | | IBC Airways, Inc. | 16 | -22.8 | | |
| Delta Air Lines, Inc. | 5,541 -17.0 | | Avianca | 81 | -19.4 | | |
| JetBlue Airways Co. | 8,179 -16.2 | | Azul Brazilian Airlines | 132 | -19.0 | | |
| Southwest Airlines Co. | 8,211 -15.9 | | Air Canada | 377 | -16.7 | | |
| American Airlines Inc. | 4,128 -15.0 | | Westjet Airlines Ltd | 14 | -15.7 | | |
| United Air Lines Inc. | 3,388 -14.3 | | Sun Country Airlines | 37 | -15.4 | | |
| Alaska Airlines Inc. | 194 -14.3 | | Copa Airlines | 310 | -15.4 | | |
| Total Jet A | Average Distance Below | | Bahamasair Holdings Ltd | 445 | -11.2 | - | |
| | m Federal Standard (Cum. EPNL) | Above Federal | Swift Air | 53 | -8.7 | | |
| | | Standard | | | | | |
| Cargo | -40.0 -30.0 -20.0 -10 | 0.0 0.0 10.0 | | | | | |
| United Parcel Service Co. | 192 -20.5 | | | - | - | The second | |
| Federal Express Co. | 853 -17.5 | | | | Frank Street | | |
| Atlas Air, Inc. | 16 -13.9 | | and the second second | | 1200 | | |
| Kalitta Air Llc. | 10 -1.8 | | | | | | |
| Total Jet Operations at FLL (7/1/21 - 9/30/21) Regional Republic Airlines, Inc. | Average Distance m Federal Standard (Cum. EPNL) -40.0 -30.0 -20.0 -10 172 -10.3 | Above Federal Standard | | | | | |



Runway Use Summary Report

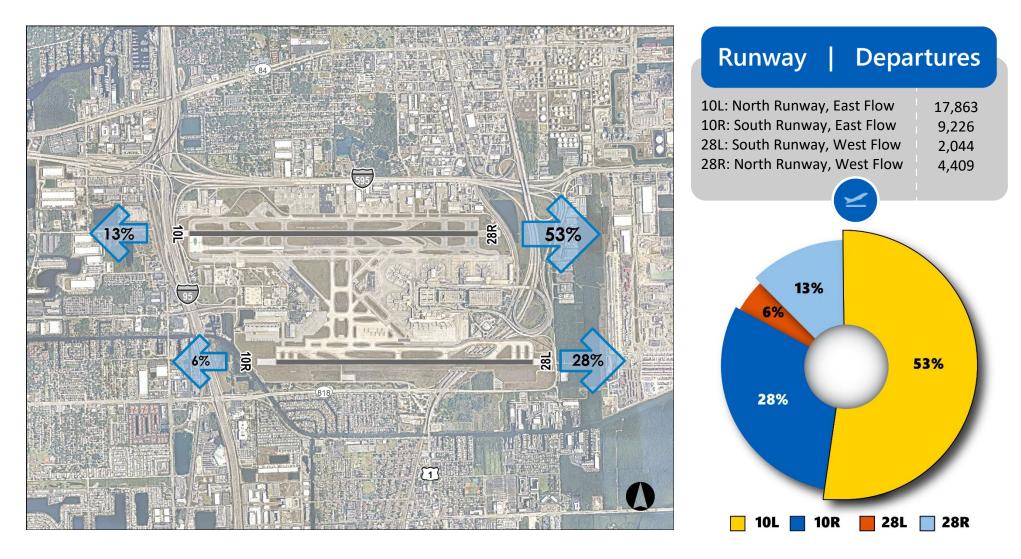
Arrivals Runway Use for All Aircraft Types Third Quarter 2021 (July 1 – September 30)





Runway Use Summary Report 🛫

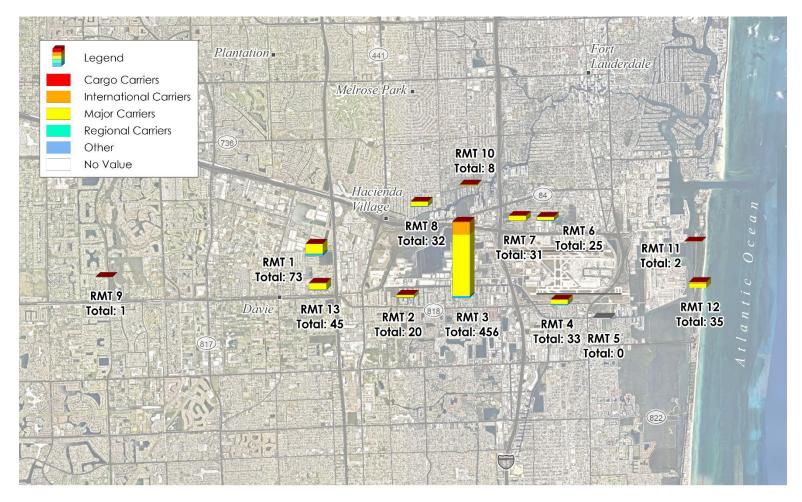
Departures Runway Use for All Aircraft Types Third Quarter 2021 (July 1 – September 30)

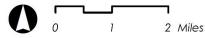




High Noise Events – Arrivals 🚿

For Monitor Locations 1-13 Third Quarter 2021 (July 1 – September 30)



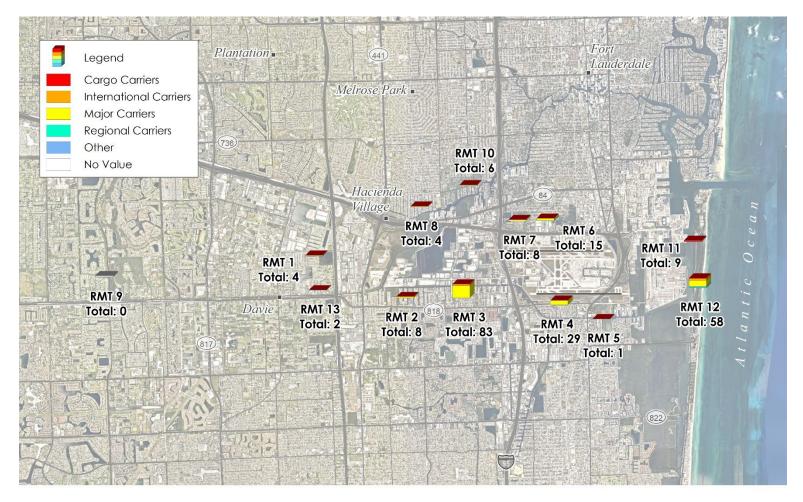


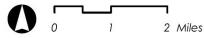
3rd Quarter 2021 Arrivals



High Noise Events – Departures 🚿

For Monitor Locations 1-13 Third Quarter 2021 (July 1 – September 30)



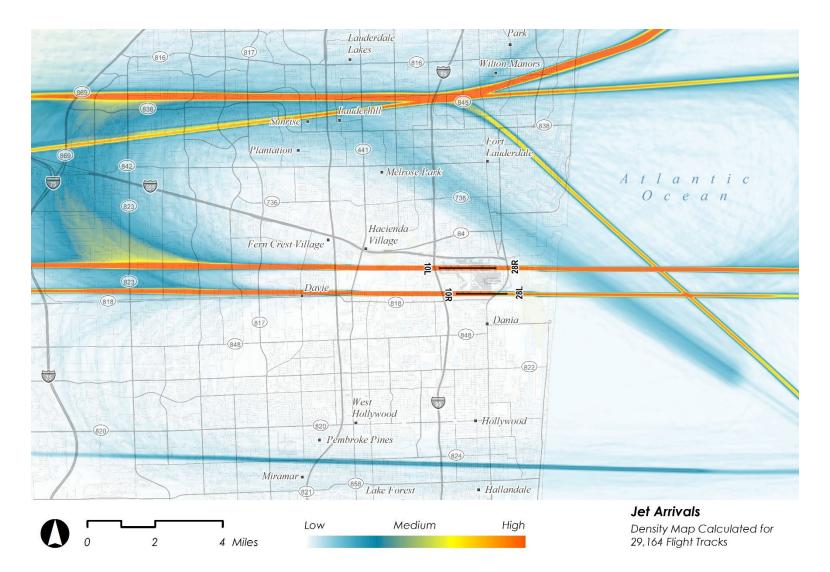






Relative Airspace Density \circlearrowleft

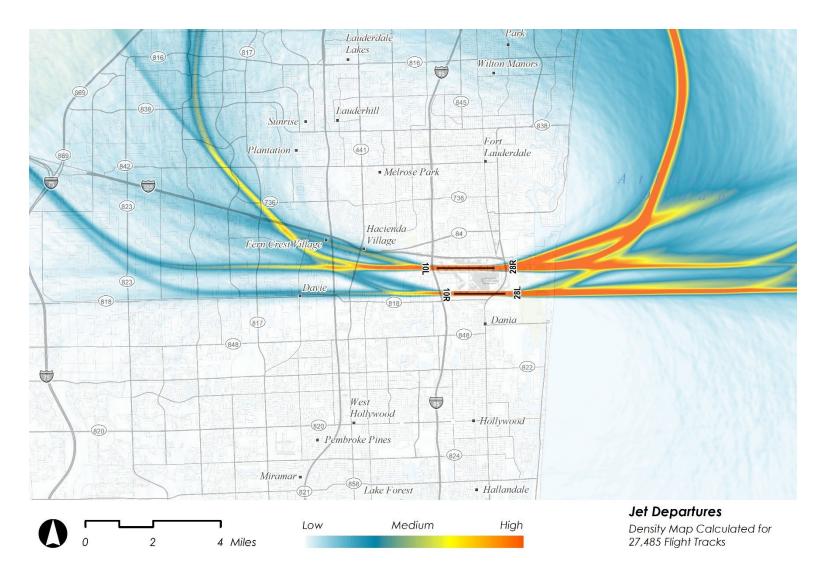
For All Scheduled Passenger and Cargo Jet Arrivals Third Quarter 2021 (July 1 – September 30)





Relative Airspace Density \circlearrowleft

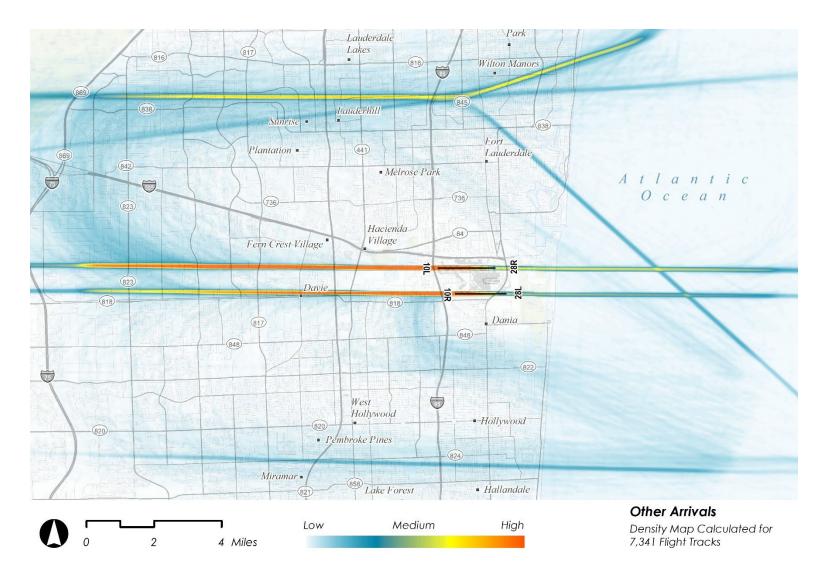
For All Scheduled Passenger and Cargo Jet Departures Third Quarter 2021 (July 1 – September 30)





Relative Airspace Density \circlearrowleft

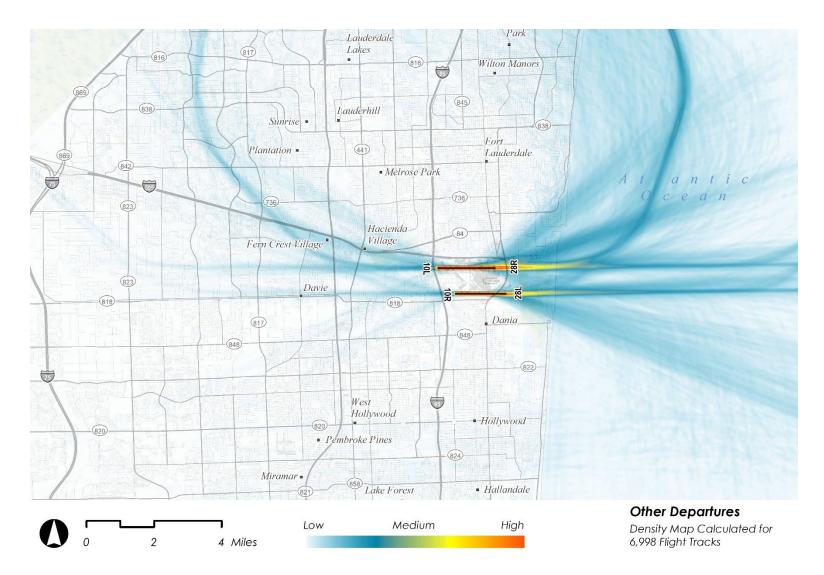
For All Propeller and Non-Scheduled Jet Arrivals Third Quarter 2021 (July 1 – September 30)





Relative Airspace Density \circlearrowleft

For All Propeller and Non-Scheduled Jet Departures Third Quarter 2021 (July 1 – September 30)





Noise Information

Ways to File an Aircraft Noise Comment

To file a formal aircraft noise comment, choose one of the following options:

Online: Complete the <u>Noise Comment Form</u> then select the Submit button.

By Phone: Call the Noise Comment Hotline at 954-359-2366

Download the new Noise Comment Web App and use this platform to file a complaint.

Using the New Noise Comment Web App to file a noise complaint.

From a mobile phone, click this link <u>Noise Comment Web App</u> and download to an iPhone or Android phone.

The link is only accessible from a mobile phone. It is not available in the iOS or Google Play App stores. It is only available from the webpage.

Noise Comment Web App Instructions:

Save the app to your home screen using the link above.

From an iPhone: Tap the box with the vertical arrow and select add to the home screen.

From an Android phone: Tap the 3 Menu dots and select add to the homepage.

Go to your home screen and open the new noise comment web app.

Enter your comment information following Steps 1-5 and click Submit.

Note: After using the noise comment web app the first time, user information is saved and does not need to be re-entered. You can submit additional comments by tapping "Submit Comment."

If you have questions or comments about the app, please contact the Aviation Department at 954-359-6181

Prepared by Harris Miller Miller & Hanson Inc. on behalf of Broward County Aviation Department.