



Noise Compatibility Report

**2021 Quarter 3
July - September**

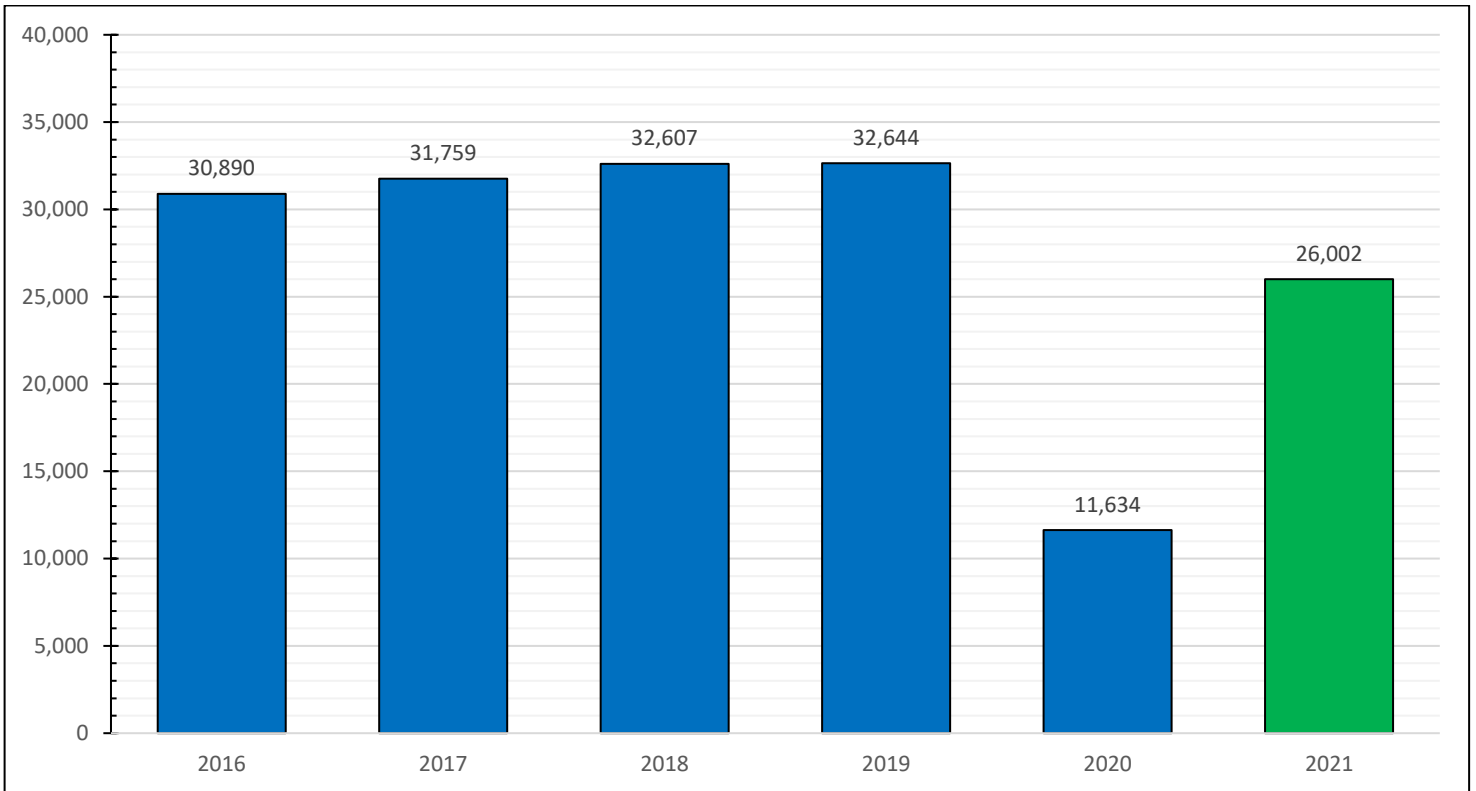
Disclaimer

- The Noise Compatibility Plan (NCP) at Cleveland Hopkins International Airport (CLE) combines the existing approved Part 150 Noise Compatibility Plan with Air Traffic Control Tower (ATCT) requirements to ensure the safe and expeditious handling of air traffic. While safety is paramount to any aircraft operation, noise sensitivity to the surrounding communities is also of key importance in airport operations.
- CLE is not directly responsible for changes made to flight plans or routes of aircraft.
- Adherence to approved noise abatement measures is voluntary and subject to change based on weather, efficiency, and safety.
- The contents of this report are for informational purposes only. The information cannot be used for enforcement of any Noise Abatement Measure.
- Due to the large volume of data when reporting noise, not all noise and flight information can be shown in this report.
- If more information is needed, please contact the airport via www.clevelandairport.com/contact and we will respond as soon as possible.

Aircraft Operations

Cleveland 3rd Quarter Operations 2016 – 2021

- There were **26,002** operations in the 3rd quarter 2021; this is a 55.3% increase over 3rd quarter 2020.



Source: FAA Operations Network (OPSNET) - <https://aspm.faa.gov/opsnet/sys/Main.asp?force=atads>
The Operations Network (OPSNET) is the official source of FAA air traffic operations and delay data.



Fleet Mix

Cleveland Hopkins had **26,002** operations in Quarter 3 of 2021. Here are some of the notable aircraft that CLE welcomes and sends off on a regular basis.

Aircraft	Q3 Total
Boeing 737 Series	6,917
Embraer ERJ 145	771
Bombardier CRJ-900	2,014
Airbus A320	4,780
MD-11	110



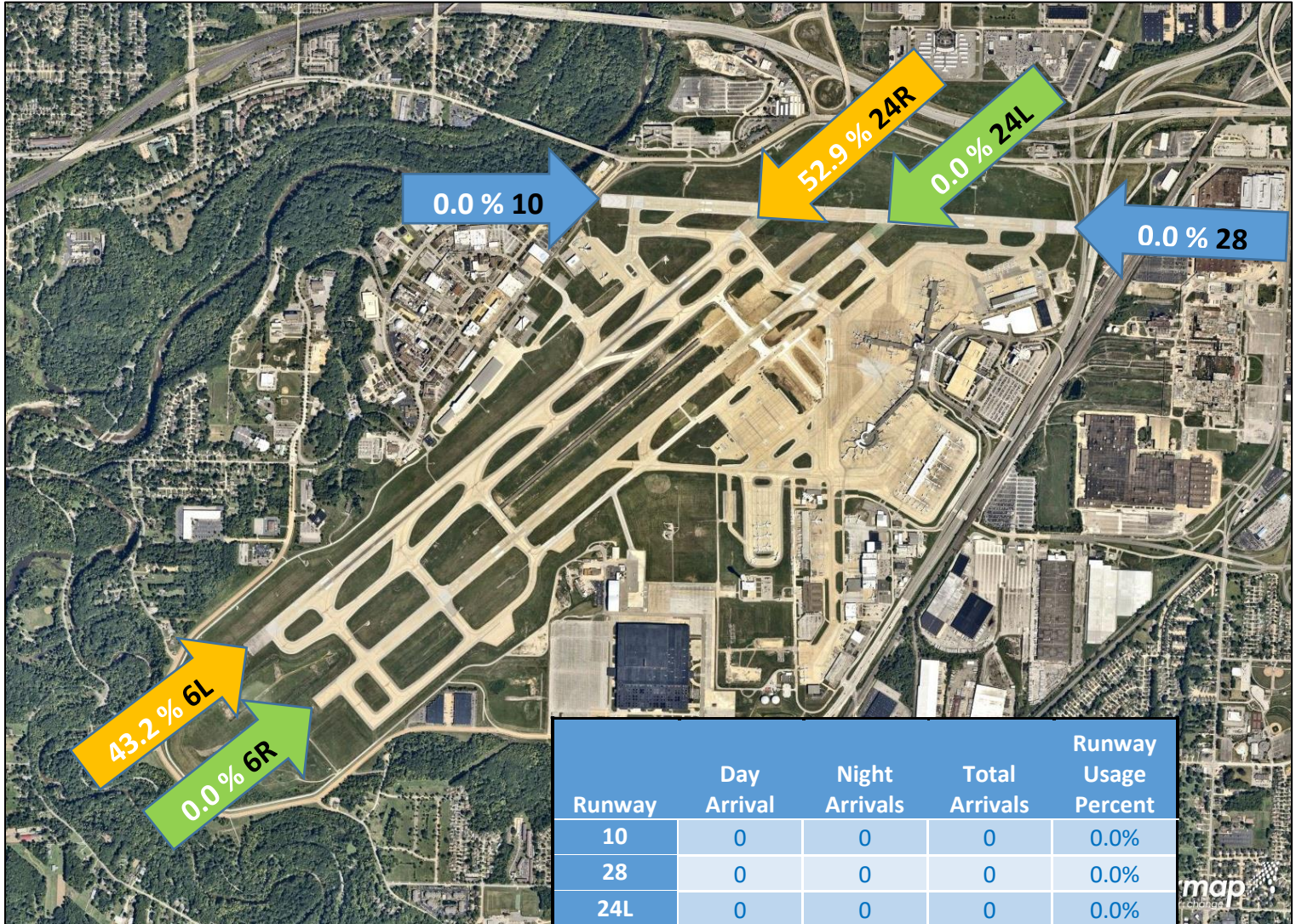
Other notable aircraft operations include:

Aircraft	Q3 Total
Air Carrier	20,280
Air Taxi	3,803
General Aviation	1,891
Military	48



Source: FAA Operations Network (OPSNET) - <https://aspm.faa.gov/opsnet/sys/Main.asp?force=atads>
 The Operations Network (OPSNET) is the official source of FAA air traffic operations and delay data.

Runway Use: 3rd Quarter, 2021 Arrivals

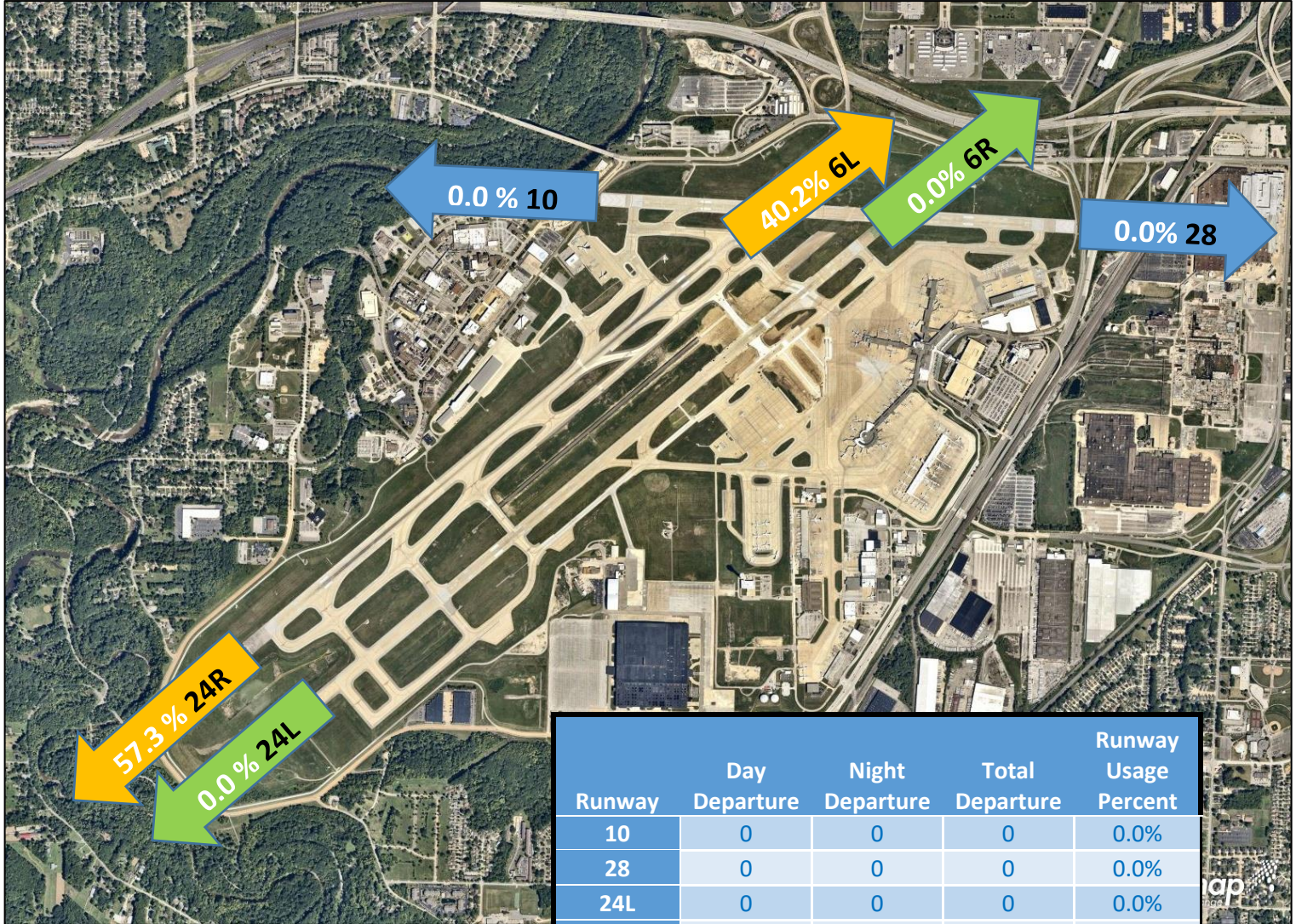


Runway	Day Arrival	Night Arrivals	Total Arrivals	Runway Usage Percent
10	0	0	0	0.0%
28	0	0	0	0.0%
24L	0	0	0	0.0%
24R	7,116	1167	8,283	52.9%
6L	5,875	889	6,764	43.2%
6R	0	0	0	0.0%
UNK	573	78	615	3.9%
Totals	13564	2134	15662	100.0%

NOTE: There were no runway operations on Runways 6R-24L and 10-28 due to the North Airfield Improvement Project.

Note: Runway usage totals may not match FAA operation totals due to different system tracking methods and potential duplicate data. Data is generated using L3 Harris Symphony EnvironmentalVue.

Runway Use: 3rd Quarter, 2021 Departures



Runway	Day Departure	Night Departure	Total Departure	Runway Usage Percent
10	0	0	0	0.0%
28	0	0	0	0.0%
24L	0	0	0	0.0%
24R	8,528	1216	9,744	57.3%
6L	6,292	548	6,840	40.2%
6R	0	0	0	0.0%
UNK	528	50	415	2.4%
Totals	15348	1814	16999	100.0%

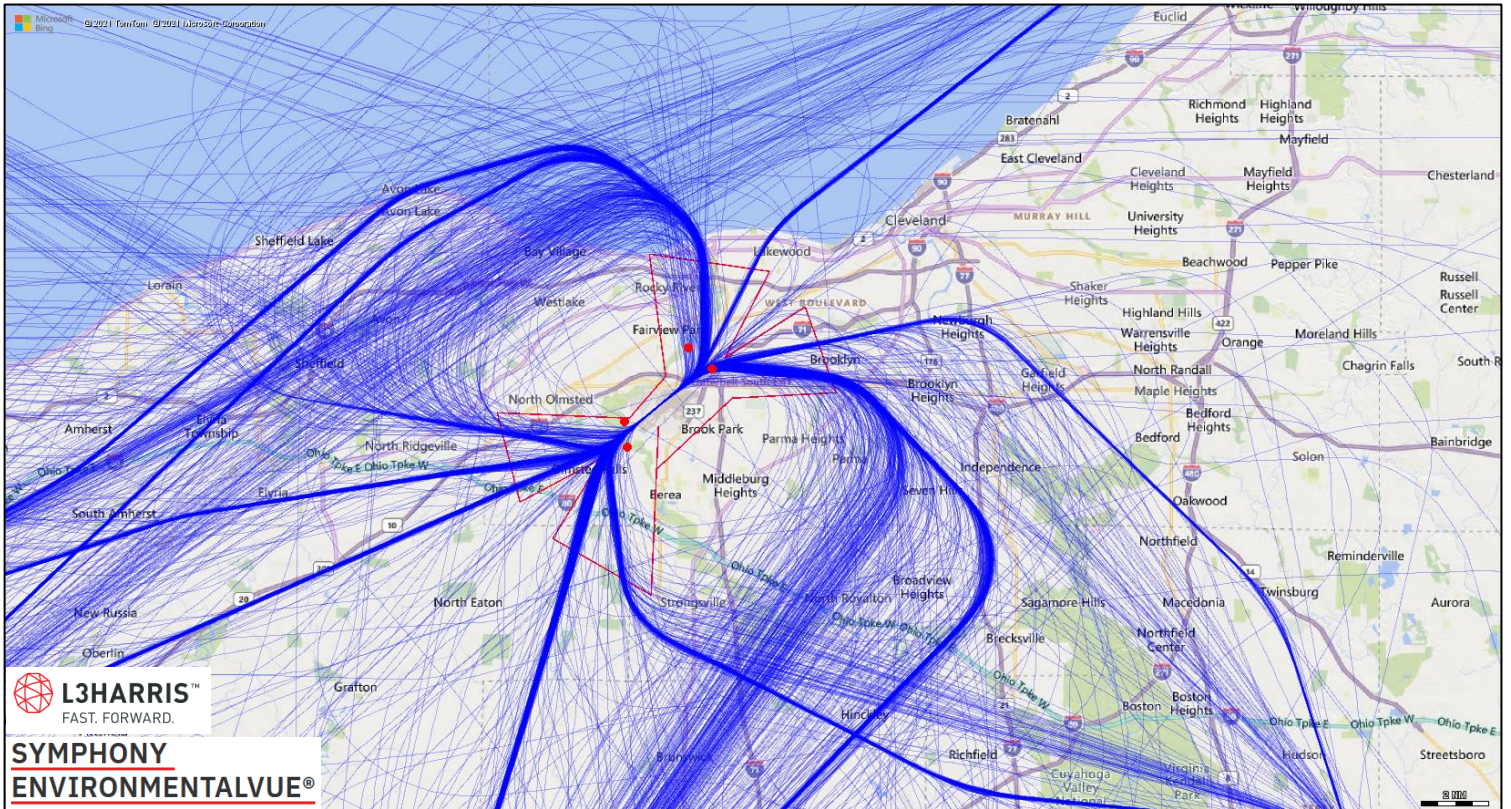
NOTE: There were no runway operations on Runways 6R-24L and 10-28 due to the North Airfield Improvement Project.

Note: Runway usage totals may not match FAA operation totals due to different system tracking methods and potential duplicate data. Data is generated using L3 Harris Symphony EnvironmentalVue.

Departure Headings, 3rd Quarter: Day-time

2021 3rd quarter day-time departure flight tracks (jet propulsion only). Day-time reflects 06:00 am to 11:00 pm.

Of **12,914** departure flights only **1,262 (9.7%)** were outside or too low for their respective departure corridor. These corridors represent the airspace through which aircraft depart and arrive. When an aircraft departs, it has a certain path it follows which is a function of altitude and heading.



Flight tracks generated using L3 Harris Symphony EnvironmentalVue

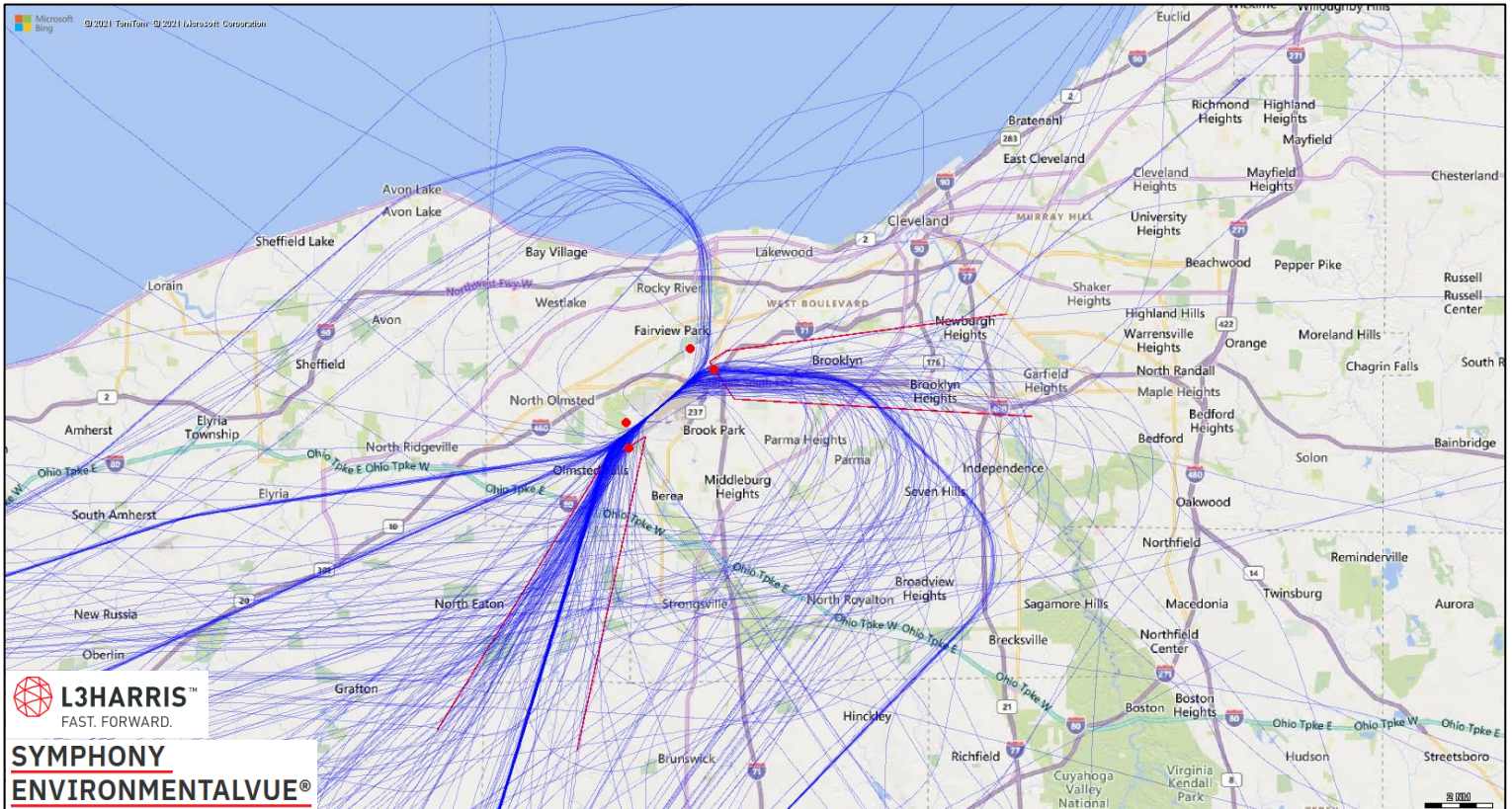
Key:

- Flight Tracks —
- Departure Gates —
- Noise Monitoring Station ●

Departure Headings, 3rd Quarter: Night-time

2021 3rd Quarter night-time departure flight tracks (jet propulsion only). Night-time reflects 11:00 pm to 06:00 am.

Of **354** departure flights only **19%** (69) were outside or too low for their respective departure corridor. These corridors represent the airspace through which aircraft depart and arrive. When an aircraft departs, it has a certain path it follows which is a function of altitude and heading.



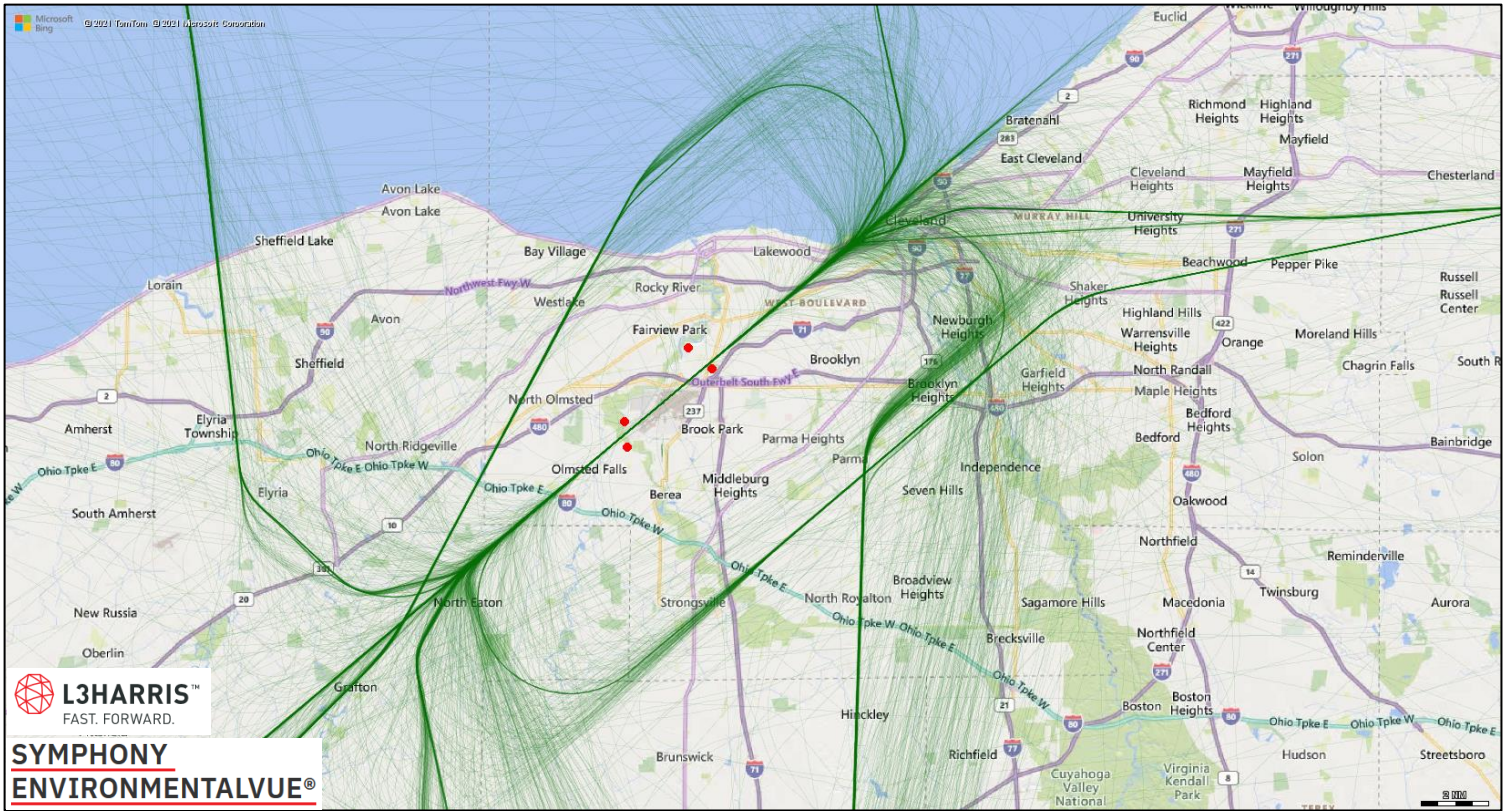
Flight tracks generated using L3 Harris Symphony EnvironmentalVue

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Arrival Headings, 3rd Quarter

Day-time and night-time arrivals for all of Quarter 3 are shown here (all propulsion types). Note that a voluntary measure or the Noise Compatibility Program calls for all aircraft arriving between 11:00 pm and 6:00 am, wind and weather permitting, to intercept final approach course no closer than four miles before touchdown.



Flight tracks generated using L3 Harris Symphony EnvironmentalVue

Flight Tracks —

Noise Monitoring Station ●

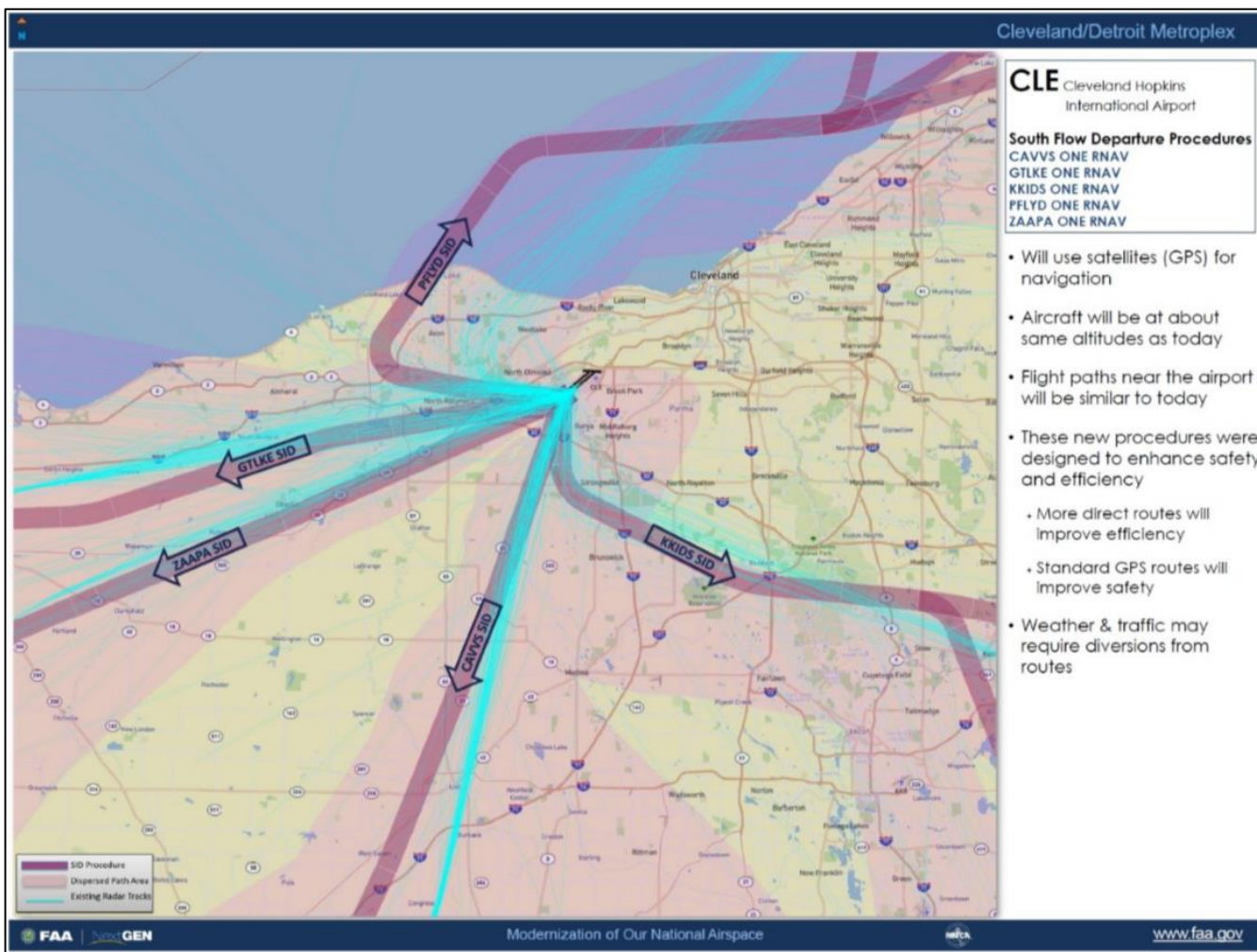
Metroplex: South Flow (Departures)

What is the Cleveland/Detroit Metroplex?

- Starting in mid-September 2018, the Federal Aviation Administration (FAA) made airspace changes in and around Cleveland and Detroit airports. These changes are part of the Cleveland-Detroit Metroplex project, which will bring updated satellite procedures to improve traffic flow.
- In most cases, aircraft will follow the same tracks that they do today. The difference is that aircraft will be using modernized procedures that replace dozens of decades-old conventional air traffic control procedures. In all, the Cleveland/Detroit Metroplex project includes 71 new satellite-based procedures. This project is a key component of the FAA's Next Generation Air Transportation System (NextGen) and a nationwide effort to build the foundation for future safety and efficiency improvements.

Source: <https://www.clevelandairport.com/faa-makes-airspace-changes-clevelanddetroit-metroplex-project>

South flow departures take off from Runway 24L and Runway 24R.

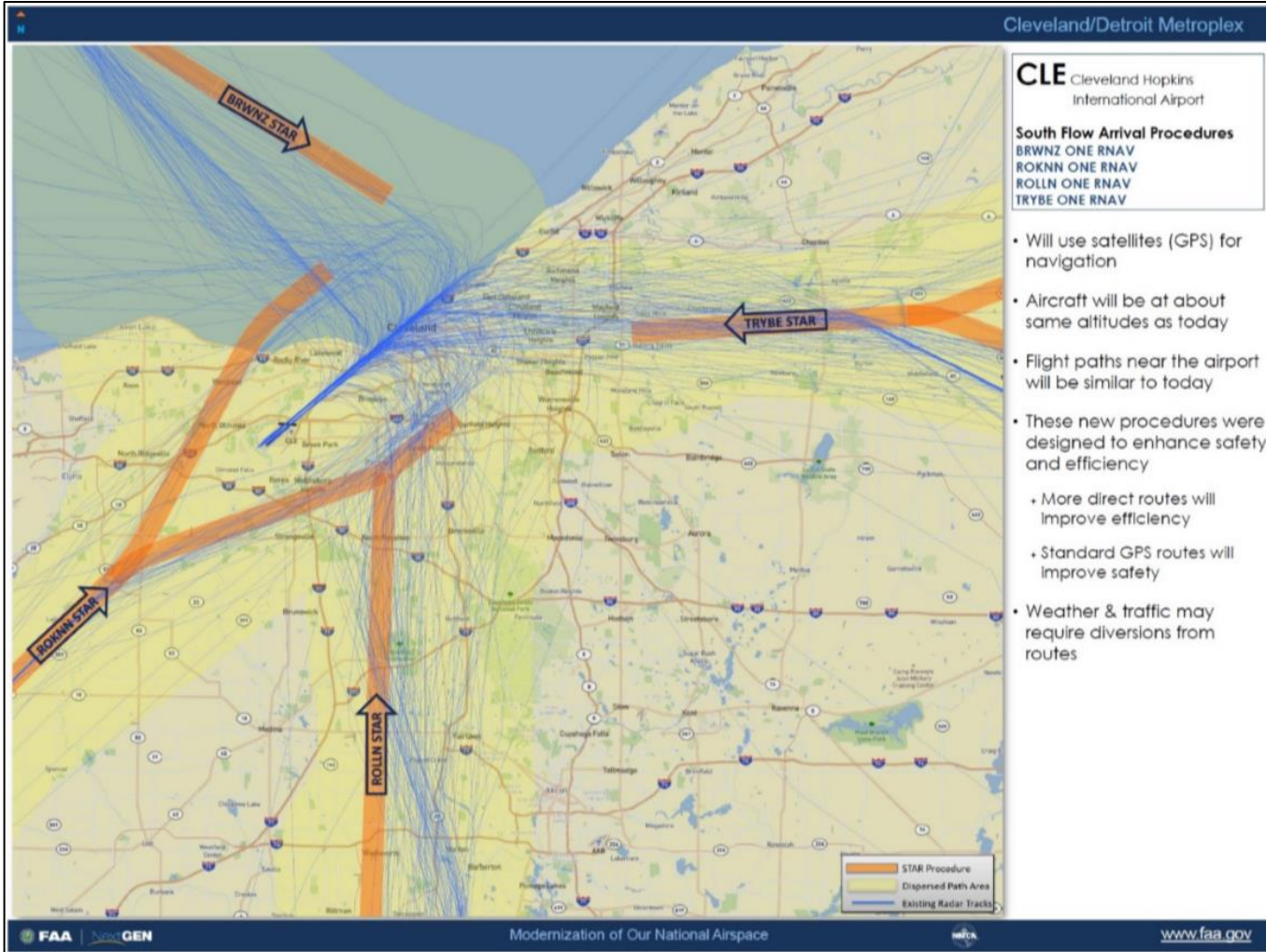


Note: Flight tracks are pre-metroplex and do not represent the current quarter.

Source: www.metroplexenvironmental.com

Metroplex: South Flow (Arrivals)

South flow arrivals land on Runway 24L and Runway 24R.

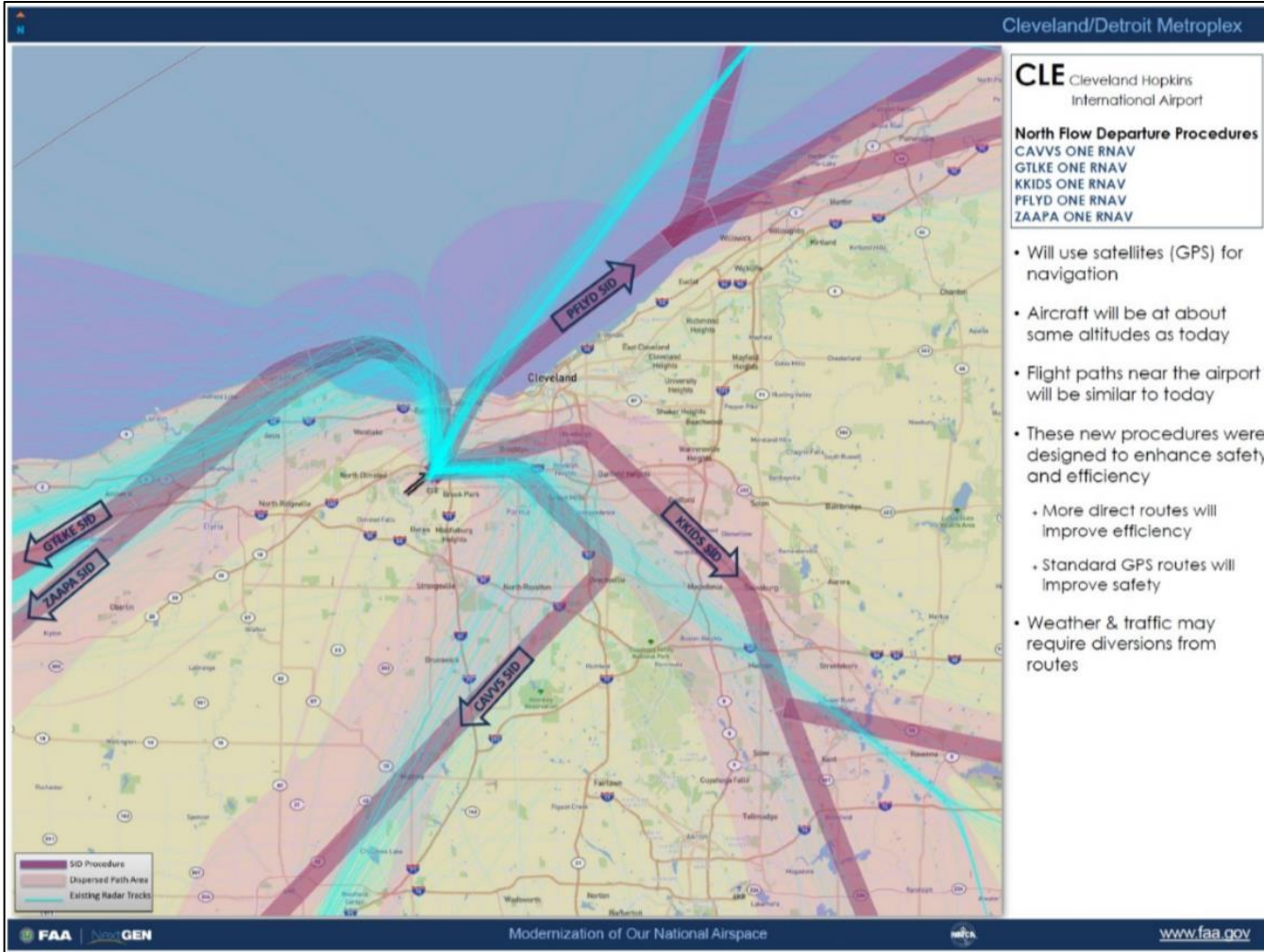


Note: Flight tracks are pre-metroplex and do not represent the current quarter.

Source: www.metroplexenvironmental.com

Metroplex: North Flow (Departures)

North flow departures take off from Runway 6L and Runway 6R.

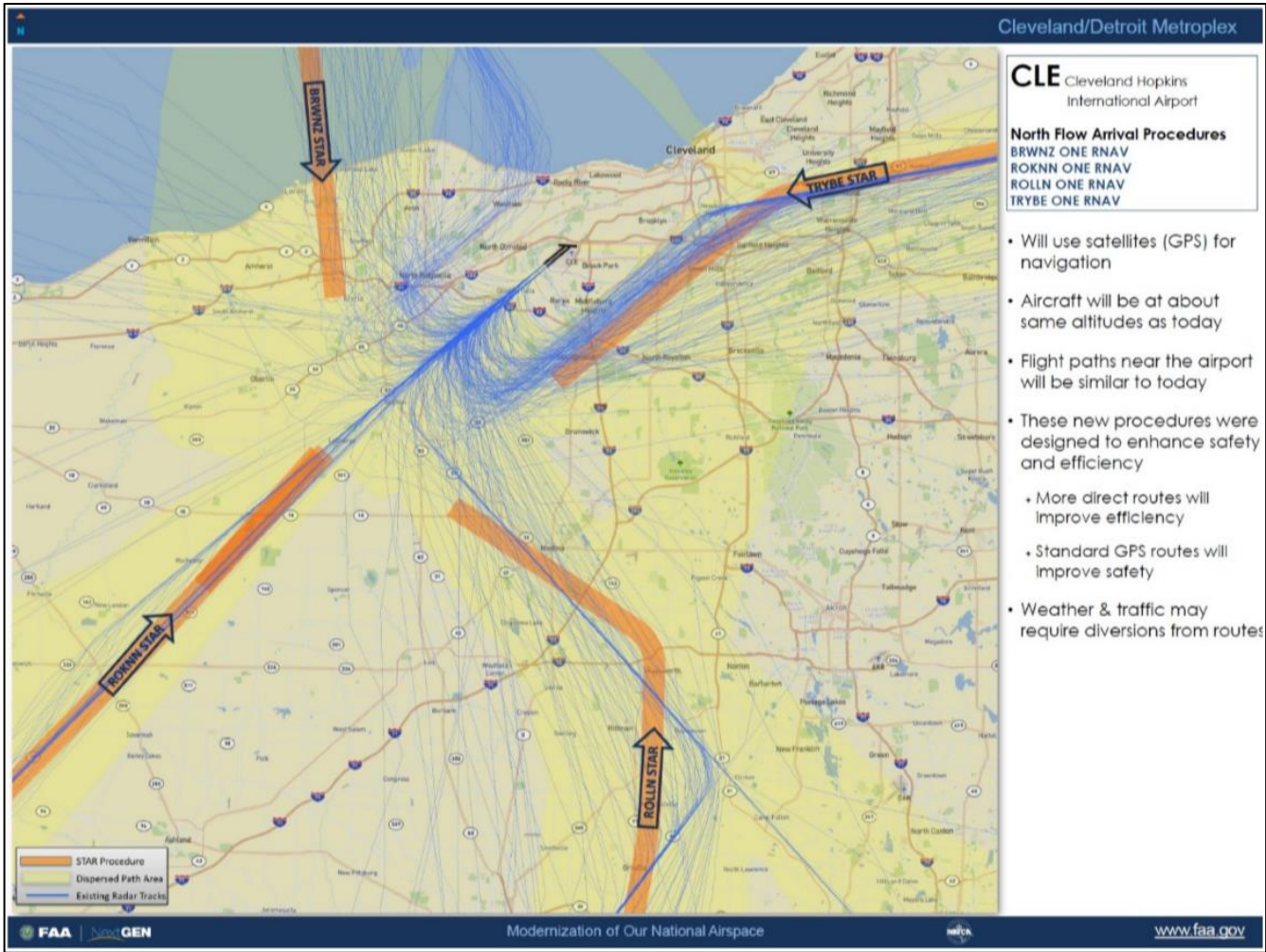


Note: Flight tracks are pre-metroplex and do not represent the current quarter.

Source: www.metroplexenvironmental.com

Metroplex: North Flow (Arrivals)

North flow arrivals land on Runway 6L and Runway 6R.



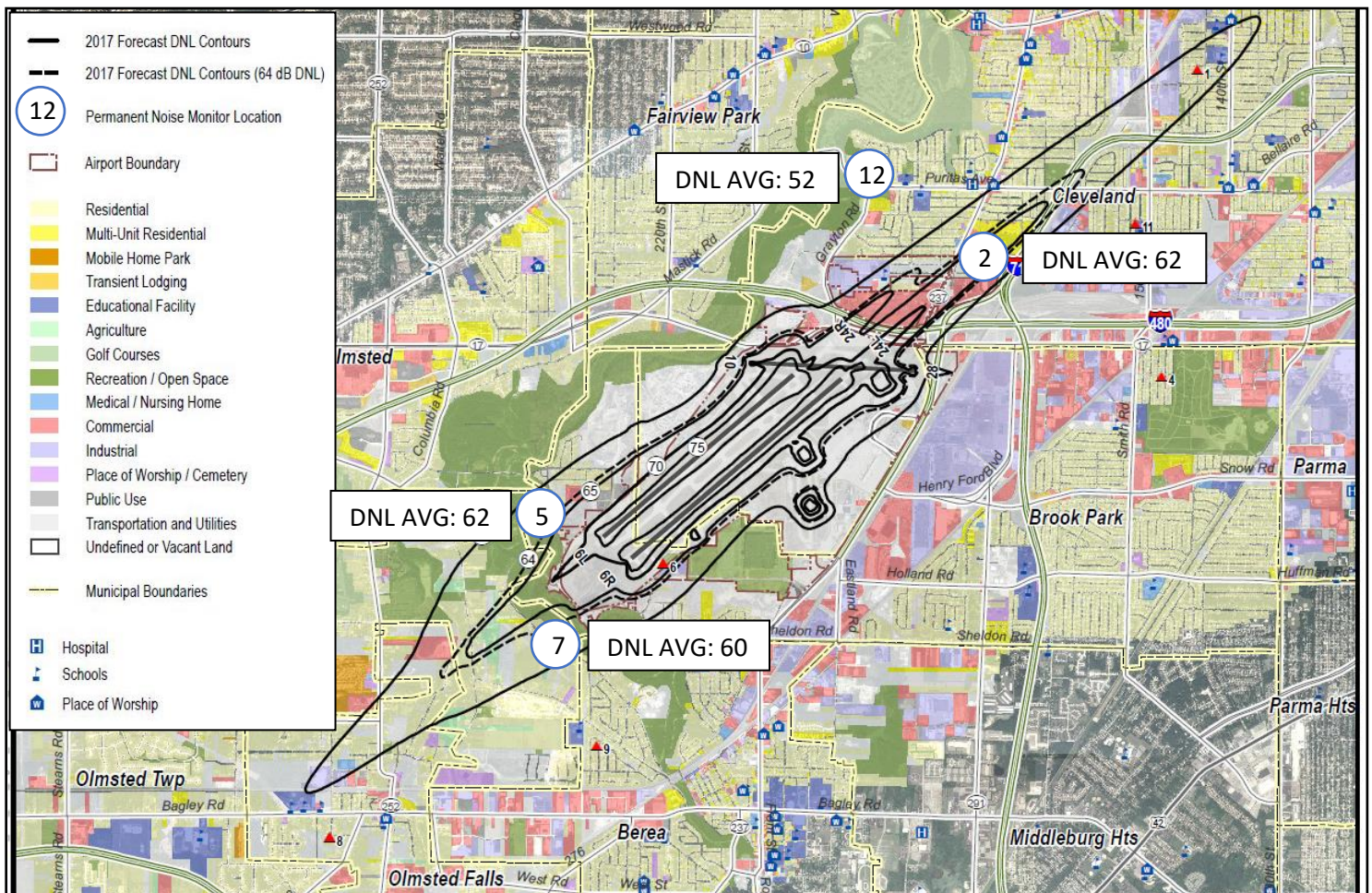
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Source: www.metroplexenvironmental.com

Aircraft Noise: Average DNL by Noise Monitoring Station (NMS)

What is DNL?

- As FAA's primary metric for aviation noise analysis, the FAA has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of the day-night average sound level (DNL) in decibels (dB). The 65 DNL is the Federal significance threshold for aircraft noise exposure.
- If interested in the Fundamentals of Noise and Sound, please visit: https://www.faa.gov/regulations_policies/policy_guidance/noise/basics/



Data generated using L3 Harris Symphony EnvironmentalVue

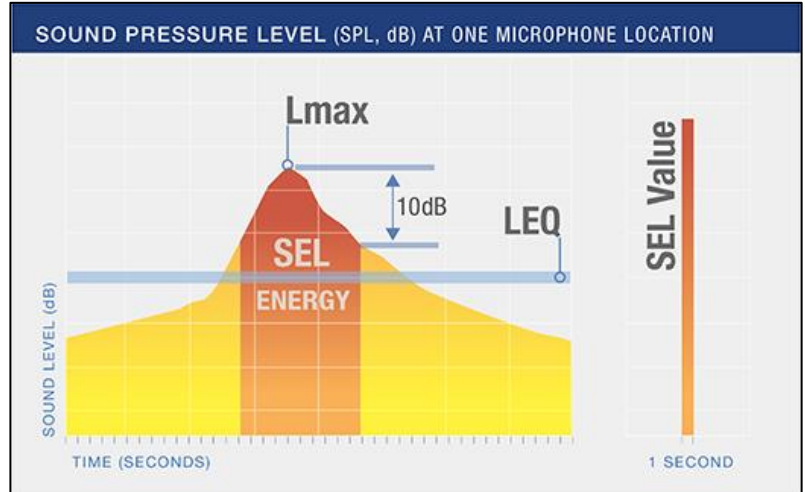
Top Three Lmax at Each NMS

Lmax is the single loudest point during a noise event.

Sounds Exposure Level (SEL) is a measure that takes into account all noises over the entire duration of the noise event.

Decibel (db) is the unit used to measure the intensity of a sound. The human ear hears sound pressures over a wide range. Decibels, which are measured on a logarithmic scale, correspond to the way our ears interpret sound pressures.

NMS – Noise Monitoring Station: For a map of these stations, refer to the previous page.



Source: www.faa.gov

Date and Time (24 hr)	NMS	Lmax (dB)	Sound Exposure Level (dB)	Duration (sec)	Operation	Aircraft
7/31/2021 11:38	NMS02	91.5	97.9	24	Departure 6L	Airbus A321
7/02/2021 21:53	NMS02	89.4	95.8	24	Departure 6L	MD-11
7/09/2021 11:31	NMS02	89.0	96.4	20	Departure 6L	Airbus A321
7/15/2021 17:46	NMS05	92.5	99.2	32	Departure 24R	Boeing 722
8/13/2021 22:13	NMS05	91.2	97.2	33	Departure 24R	Boeing 744
9/24/2021 11:33	NMS05	91.2	96.7	22	Departure 24R	Airbus A321
7/24/2021 09:28	NMS07	109.9	114.9	38	Departure 24R	F18H
9/05/2021 11:36	NMS07	95.6	97.7	16	Departure 6L	Boeing 737
8/08/2021 20:00	NMS07	94.0	96.4	22	Departure 24R	Airbus A320
7/23/2021 22:14	NMS12	87.7	94.7	25	Departure 6L	MD-11
9/02/2021 21:37	NMS12	86.4	94.2	25	Departure 6L	MD-11
7/21/2021 21:44	NMS12	85.6	94.3	30	Departure 6L	MD-11

Data generated using L3 Harris Symphony EnvironmentalVue

Do you have a noise complaint?

Please visit the [Symphony PublicVue](https://www.clevelandairport.com/contact) to submit a noise complaint. This site can also be found by going to <https://www.clevelandairport.com/contact> and click on “Learn More” under Noise Complaints. Please be patient while we take time to process your message and respond with the appropriate information.



CLE.
Going places.™

The advertisement features a blurred background of an airport terminal's structural beams and walkways. The text 'CLE. Going places.™' is centered in white. A blue curved banner at the bottom right contains the Cleveland Airport System logo.